Compilation of Changes to the CPC Scheme Between 2018.08 and 2019.01

Presentation Details

Entries for new symbols and headings: *Black text in italics*

Entries for existing symbols and headings
 —text insertions: *Green text in italics with yellow background*
 —text deletions: ~~Red strikethrough text with grey background~~
Entries for deleted symbols and headings: ~~Black strikethrough text~~

- Entries arranged by project. Duplicate entries may appear where multiple projects impact the same symbol
- In cases when the originating project cannot be found, "N/A" is given for the Project information (e.g. the change could be due to an Editorial Correction).
- Projects ending in "-F" indicate finalisation after reclassification was completed.

Project: MP0146 (H01H)

U	H01H 53/00	**Relays using the dynamo-electric effect, i.e. relays in which contacts are opened or closed due to relative movement of current-carrying conductor and magnetic field caused by force of interaction between them**
M	H01H 53/14	· Contacts actuated by an electric motor through fluid-pressure transmission, e.g. using a motor-driven pump {(switches using dynamo-electric motor H01H 3/26)}

~~WARNING~~

~~Not complete, see also H01H 9/00~~

U	H01H 85/00	**Protective devices in which the current flows through a part of fusible material and this current is interrupted by displacement of the fusible material when this current becomes excessive (switches actuated by melting of fusible material H01H 37/76; automatic release of protective switches due to fusion of a mass H01H 73/00 - H01H 83/00; disposition or arrangement of fuses on boards H02B 1/18)**
U	H01H 85/02	· Details (electrical connections in general H01R)
U	H01H 85/04	· · Fuses, i.e. expendable parts of the protective device, e.g. cartridges
U	H01H 85/041	· · · characterised by the type
U	H01H 85/044	· · · · General constructions or structure of low voltage fuses, i.e. below 1000 V, or of fuses where the applicable voltage is not specified (H01H 85/046 - H01H 85/048 take precedence)
M	H01H 85/0445	· · · · · fast or slow type (H01H 85/045 - H01H 85/048 take precedence)

~~WARNING~~

~~Not complete, see also H01H 85/044~~

Project: MP0146 (H01L)

U	H01L 21/00	**Processes or apparatus adapted for the manufacture or treatment of semiconductor or solid state devices or of parts thereof ({testing or measuring during manufacture or treatment, or reliability measurements H01L 22/00; multistep manufacturing processes for passive two-terminal components without a potential-jump or surface barrier for integrated circuits H01L 28/00; } processes or apparatus peculiar to the manufacture or treatment of devices provided for in groups H01L 31/00 - H01L 51/00 or of parts thereof, see these groups; single-step processes covered by other subclasses, see the relevant subclasses, e.g. C23C, C30B; photomechanical production of textured or patterned surfaces, materials or originals therefor, apparatus specially adapted therefor, in general G03F)**
U	H01L 21/02	· Manufacture or treatment of semiconductor devices or of parts thereof

U	H01L 21/04	· · the devices having at least one potential-jump barrier or surface barrier, e.g. PN junction, depletion layer, carrier concentration layer {(multistep processes specially adapted for the manufacture of said devices H01L 29/66007, H01L 29/401; details of semiconductor bodies H01L 29/02)}
U	H01L 21/48	· · · Manufacture or treatment of parts, e.g. containers, prior to assembly of the devices, using processes not provided for in a single one of the subgroups H01L 21/06 - H01L 21/326 ({apparatus therefor H01L 21/67005; insulative sealing of leads in bases H01L 21/50} ; containers, encapsulations, fillings, mountings <u>per se</u> H01L 23/00; {marking of parts H01L 23/544})

> NOTE
>
> In this group, the expression "treatment" covers also the removal of leads from parts

U	H01L 21/4814	· · · · {Conductive parts}
M	H01L 21/4885	· · · · · {Wire-like parts or pins (wire ball formation B23K 20/00; methods related to connecting semiconductor or other solid state bodies H01L 24/00)}

> ~~WARNING~~
>
> ~~The documents of this group and subgroups dealing with methods for connecting semiconductor or other solid state bodies are being continuously reclassified to H01L 24/43~~

U	H01L 21/67	· Apparatus specially adapted for handling semiconductor or electric solid state devices during manufacture or treatment thereof; Apparatus specially adapted for handling wafers during manufacture or treatment of semiconductor or electric solid state devices or components {; Apparatus not specifically provided for elsewhere (processes <u>per se</u> H01L 21/30, H01L 21/46, H01L 23/00; simple temporary support means, e.g. using adhesives, electric or magnetic means H01L 21/68, H01L 21/302; apparatus for manufacturing arrangements for connecting or disconnecting semiconductor or solid-state bodies and for methods related thereto H01L 24/74;)}

> NOTE
>
> In this subgroup the term substrate designates a semiconductor or electric solid state device or component, or a wafer

M	H01L 21/68	· · for positioning, orientation or alignment (for conveying H01L 21/677)

> ~~WARNING~~
>
> ~~This group is in reorganisation. See provisionally also group H01L 21/6835~~

U	**H01L 24/00**	**{Arrangements for connecting or disconnecting semiconductor or solid-state bodies; Methods or apparatus related thereto}**

> NOTES
>
> 1. This group <u>does not cover</u>:
> - details of semiconductor bodies or of electrodes of devices provided for in group H01L 29/00, which details are covered by that group;
> - details peculiar to devices provided for in a single main group of groups H01L 31/00 - H01L 51/00, which details are covered by those groups.
> - printed circuits, which are covered by groups H05K 1/00 - H05K 1/189;
> - apparatus or manufacturing processes for printed circuits, which are covered by groups H05K 3/00 - H05K 3/4685;
> - manufacture or treatment of parts, which are covered by group H01L 21/48 and subgroups except H01L 21/4885 - H01L 21/4896;
> - assemblies of semiconductor devices, which are covered by groups H01L 21/50 - H01L 21/568;

- applying interconnections to be used for carrying current between separate components within a device, which is covered by group H01L 21/768 and subgroups;
- containers or seals, which are covered by groups H01L 23/02 - H01L 23/10;
- mountings, which are covered by groups H01L 23/12 - H01L 23/15 and subgroups;
- arrangements for cooling, heating, ventilating or temperature compensation, which are covered by groups H01L 23/34 - H01L 23/4735;
- arrangements for conducting electric current, which are covered by groups H01L 23/48 - H01L 23/50, and by groups H01L 23/52 - H01L 23/5389;
- structural electrical arrangements, which are covered by groups H01L 24/80 - H01L 23/66;
- assemblies of semiconductor or other solid state devices, which are covered by groups H01L 25/00 - H01L 25/18.

2. In this group the following indexing codes are used : H01L 24/00, H01L 2224/00, H01L 2924/00, and subgroups thereof

U	H01L 24/01	· {Means for bonding being attached to, or being formed on, the surface to be connected, e.g. chip-to-package, die-attach, "first-level" interconnects; Manufacturing methods related thereto}
U	H01L 24/42	· · {Wire connectors; Manufacturing methods related thereto}
M	H01L 24/43	· · · {Manufacturing methods}

WARNING

Group H01L 24/43 is incomplete pending reclassification of documents from groups H01L 21/4885 and H01L 24/42, ~~and~~ H01L 24/85.
Groups H01L 24/43 ~~and H01L 21/4885~~, H01L 24/42, *and* H01L 24/85 should be considered in order to perform a complete search.

Project: MP0146 (H02M)

U	**H02M 1/00**	**Details of apparatus for conversion**
M	H02M 1/32	· Means for protecting converters other than automatic disconnection (emergency protective circuit arrangements specially adapted for converters with automatic disconnection H02H 7/10)

WARNING

Group H02M 1/32 and its subgroup are not complete, see provisionally also H02M 1/32, H02M 3/00 and subgroups, H02M 7/00 and subgroups

M	H02M 1/36	· Means for starting or stopping converters

WARNING

Group H02M 1/36 is not complete, see provisionally also H02M 3/00 and subgroups, H02M 7/00 and subgroups

M	H02M 1/38	· Means for preventing simultaneous conduction of switches

WARNING

Group H02M 1/38 is not complete, see provisionally also H02M 3/337 and subgroups, H02M 7/538 and subgroups

M	H02M 1/40	· Means for preventing magnetic saturation

WARNING

Group H02M 1/40 is not complete, see provisionally also H02M 3/335

M	H02M 1/42	· Circuits or arrangements for compensating for or adjusting power factor in converters or inverters

> WARNING
>
> Group H02M 1/42 is not complete, see provisionally also H02M 1/32 and subgroups

M	H02M 1/44	· Circuits or arrangements for compensating for electromagnetic interference in converters or inverters

> WARNING
>
> Group H02M 1/44 is not complete, see provisionally also H02M 7/00 and subgroups

U	**H02M 7/00**	**Conversion of ac power input into dc power output; Conversion of dc power input into ac power output**
U	H02M 7/42	· Conversion of dc power input into ac power output without possibility of reversal
U	H02M 7/44	· · by static converters
U	H02M 7/48	· · · using discharge tubes with control electrode or semiconductor devices with control electrode
U	H02M 7/53	· · · · using devices of a triode or transistor type requiring continuous application of a control signal {(H02M 7/4807, H02M 7/493 and H02M 7/4826 take precedence)}
U	H02M 7/537	· · · · · using semiconductor devices only, e.g. single switched pulse inverters
M	H02M 7/5375	· · · · · · with special starting equipment

> WARNING
>
> Incomplete, see also H02M 1/36

Project: MP0146 (H02N)

M	**H02N 2/00**	**Electric machines in general using piezo-electric effect, electrostriction or magnetostriction (generating mechanical vibrations in general B06B; piezo-electric, electrostrictive or magnetostrictive devices in general H01L 41/00)**

> WARNING
>
> This group is not complete pending reorganisation; see provisionally also H01L 41/00

Project: MP0146 (H02P)

M	**H02P 15/00**	**Arrangements for controlling dynamo-electric brakes or clutches (controlling speed of dynamo-electric motors by means of a separate brake H02P 29/04, vector control H02P 21/00 {see provisionally also H02K 49/00 and H02P 29/0022})**

> WARNING
>
> Not complete, see also H02K 49/00 and H02P 29/0022

Project: MP0146 (H03B)

U	**H03B 5/00**	**Generation of oscillations using amplifier with regenerative feedback from output to input (H03B 9/00, H03B 15/00 take precedence)**
U	H03B 5/08	· with frequency-determining element comprising lumped inductance and capacitance

M	H03B 5/12	· · active element in amplifier being semiconductor device ([H03B 5/14](#) takes precedence)

> ~~WARNING~~
>
> ~~Subgroups H03B 5/1203 - H03B 5/1296 are incomplete pending reclassification; see also the other subgroups of H03B 5/12~~

Project: MP0146 (H03D)

U	**H03D 7/00**	**Transference of modulation from one carrier to another, e.g. frequency-changing ([H03D 9/00](#), [H03D 11/00](#) take precedence; dielectric amplifiers, magnetic amplifiers, parametric amplifiers used as a frequency-changers [H03F](#))**
U	H03D 7/14	· Balanced arrangements
M	H03D 7/1425	· · {with transistors}

> ~~WARNING~~
>
> ~~Subgroups H03D 7/1433 - H03D 7/1491 are incomplete pending reclassification; see also this group and its other subgroups~~

Project: MP0146 (H03F)

U	**H03F 1/00**	**Details of amplifiers with only discharge tubes, only semiconductor devices or only unspecified devices as amplifying elements**
U	H03F 1/30	· Modifications of amplifiers to reduce influence of variations of temperature or supply voltage {or other physical parameters (in differential amplifiers [H03F 3/45479](#))}
U	H03F 1/307	· · {in push-pull amplifiers}
M	H03F 1/308	· · · {using MOSFET}

> ~~WARNING~~
>
> ~~Not complete, see also H03F 1/301~~

M	H03F 1/309	· · · {using junction-FET}

> ~~WARNING~~
>
> ~~Not complete, see also H03F 1/306~~

U	H03F 1/32	· Modifications of amplifiers to reduce non-linear distortion (by negative feedback [H03F 1/34](#))
U	H03F 1/3223	· · {using feed-forward ([H03F 1/3211](#) takes precedence)}
U	H03F 1/3229	· · · {using a loop for error extraction and another loop for error subtraction}
M	H03F 1/3235	· · · · {using a pilot signal}

> ~~WARNING~~
>
> ~~Not complete, see also H03F 1/3229~~

U	H03F 1/3241	· · {using predistortion circuits ([H03F 1/3211](#), [H03F 1/3217](#) take precedence)}
M	H03F 1/3247	· · · {using feedback acting on predistortion circuits ([H03F 1/3264](#) takes precedence)}

> ~~WARNING~~
>
> ~~Not complete, see also H03F 1/3241 for non patent literature~~

M	H03F 1/3252	· · · {using multiple parallel paths between input and output (H03F 1/3258, H03F 1/3282, H03F 1/3294 take precedence)}

> ~~WARNING~~
> ~~Not complete, see also H03F 1/3241 for non patent literature~~

U	H03F 1/34	· Negative-feedback-circuit arrangements with or without positive feedback (H03F 1/02 - H03F 1/30, H03F 1/38 - H03F 1/50, H03F 3/50 take precedence; {for rejection of common mode signals H03F 3/45479})
M	H03F 1/345	· · {using hybrid or directional couplers}

> ~~WARNING~~
> ~~Not complete, see also H03F 1/34~~

U	H03F 1/52	· Circuit arrangements for protecting such amplifiers {(monitoring arrangements G01R 31/28; increasing reliability in communication systems, e.g. using redundancy H04B 1/74)}
M	H03F 1/526	· · {protecting by using redundant amplifiers}

> ~~WARNING~~
> ~~Not complete, see also H03F 1/523~~

U	**H03F 3/00**	**Amplifiers with only discharge tubes or only semiconductor devices as amplifying elements**
M	H03F 3/005	· {using switched capacitors, e.g. dynamic amplifiers; using switched capacitors as resistors in differential amplifiers (H03F 3/45 takes precedence)}

> NOTE
> Groups H03F 3/20 - H03F 3/72 take precedence over groups H03F 3/02 - H03F 3/195

> ~~WARNING~~
> ~~Not complete, see also H03F 1/02, H03F 3/70, H03F 3/72~~

U	H03F 3/20	· Power amplifiers, e.g. Class B amplifiers, Class C amplifiers (H03F 3/26 - H03F 3/30 take precedence)
U	H03F 3/21	· · with semiconductor devices only {(H03F 3/245 takes precedence)}
M	H03F 3/211	· · · {using a combination of several amplifiers (H03F 3/60 takes precedence)}

> ~~WARNING~~
> ~~Not complete, see also H03F 3/21, H03F 3/68~~

U	H03F 3/60	· Amplifiers in which coupling networks have distributed constants, e.g. with waveguide resonators (H03F 3/54 takes precedence)
M	H03F 3/601	· · {using FET's, e.g. GaAs FET's (H03F 3/607, H03F 3/608 take precedence)}

> ~~WARNING~~
> ~~Not complete, see also H03F 3/16~~

M	H03F 3/602	· · {Combinations of several amplifiers}

> ~~WARNING~~
> ~~Not complete, see also H03F 3/68~~

M	H03F 3/604	· · · {using FET's}

> ~~WARNING~~
> ~~Not complete, see also H03F 3/16, H03F 3/68~~

M	H03F 3/605	· · {Distributed amplifiers}

> WARNING
>
> Not complete, see also H03F 1/18

M	H03F 3/607	· · · {using FET's}

> WARNING
>
> Not complete, see also H03F 1/18

M	H03F 3/608	· · {Reflection amplifiers, i.e. amplifiers using a one-port amplifying element and a multiport coupler (H03F 7/00 takes precedence)}

> WARNING
>
> Not complete, see also H03F 3/46

Project: MP0146 (H03H)

U	**H03H 7/00**	**Multiple-port networks comprising only passive electrical elements as network components (receiver input circuits H04B 1/18; networks simulating a length of communication cable H04B 3/40)**
U	H03H 7/01	· Frequency selective two-port networks
M	H03H 7/17	· · {Structural details of sub-circuits of frequency selective networks}

> WARNING
>
> not complete, pending reorganisation, see provisionally also H03H 7/0107, H03H 7/0123 - H03H 7/07, H03H 7/09 - H03H 7/13 and H03H 7/42

U	H03H 7/42	· Balance/unbalance networks
M	H03H 7/425	· · {Balance-balance networks}

> WARNING
>
> not complete, pending reorganisation, see provisionally also H03H 1/00 - H03H 1/0007, H03H 7/0107, H03H 7/0123 - H03H 7/07, H03H 7/09 - H03H 7/13, H03H 7/42 and H03H 7/422

M	H03H 7/427	· · · {Common-mode filters (H02J 3/01 and H02M 1/126 takes precedence)}

> WARNING
>
> not complete, pending reorganisation, see provisionally also H03H 1/00 - H03H 1/0007, H03H 7/0107, H03H 7/0123 - H03H 7/07, H03H 7/09 - H03H 7/13 and H03H 7/42

Project: MP0146 (H03K)

U	**H03K 3/00**	**Circuits for generating electric pulses; Monostable, bistable or multistable circuits (H03K 4/00 takes precedence; for digital computers G06F 1/025, {G06F 1/04})**
U	H03K 3/02	· Generators characterised by the type of circuit or by the means used for producing pulses (H03K 3/64 - H03K 3/84 take precedence)
M	H03K 3/35	· · by the use, as active elements, of bipolar semiconductor devices with more than two PN junctions, or more than three electrodes, or more than one electrode connected to the same conductivity region (H03K 3/023, H03K 3/027 take precedence)

> WARNING
>
> Not complete; for four layer diodes see also H03K 3/313

U	H03K 3/353	· · by the use, as active elements, of field-effect transistors with internal or external positive feedback (H03K 3/023, H03K 3/027 take precedence)

U	H03K 3/356	· · · Bistable circuits
M	H03K 3/356104	· · · · {using complementary field-effect transistors (H03K 3/35625 takes precedence)}

> ~~WARNING~~
> ~~Subgroups of H03K 3/356104 are not complete.~~

M	**H03K 12/00**	**Producing pulses by distorting or combining sinusoidal waveforms (combining sinewaves using elements operating in a non-switching manner H03B; {limiting or clipping, e.g. H03G 11/00})**

> ~~WARNING~~
> ~~Not complete, see also H03K 5/08, H03K 5/12~~

U	**H03K 17/00**	**Electronic switching or gating, i.e. not by contact-making or -braking (selection of the stylus or auxiliary electrode in electric printing B41J 2/405; sample-and-hold arrangements G11C 27/02; switching or interrupting devices in waveguides H01P; gated amplifiers H03F 3/72; switching arrangements for exchange systems using static devices H04Q 3/52)**
U	H03K 17/51	· characterised by the components used (H03K 17/04 - H03K 17/30, H03K 17/94 take precedence)
U	H03K 17/56	· · using semiconductor devices (using diodes H03K 17/74)
U	H03K 17/72	· · · having more than two PN junctions; having more than three electrodes; having more than one electrode connected to the same conductivity region
U	H03K 17/73	· · · · for dc voltages or currents (H03K 17/722, H03K 17/735 take precedence)
M	H03K 17/731	· · · · · {with inductive load}

> ~~WARNING~~
> ~~Not complete, see also H03K 17/73~~

U	**H03K 19/00**	**Logic circuits, i.e. having at least two inputs acting on one output; Inverting circuits {(inverting circuits used as delay elements H03K 5/13)}**
M	H03K 19/0005	· {Modifications of input or output impedance}

> ~~WARNING~~
> ~~Not complete, see also H03K 19/017545~~

U	H03K 19/003	· Modifications for increasing the reliability {for protection}
M	H03K 19/00369	· · {Modifications for compensating variations of temperature, supply voltage or other physical parameters}

> ~~WARNING~~
> ~~Not complete, see also H03K 19/00~~

U	H03K 19/0175	· Coupling arrangements; Interface arrangements (interface arrangements for digital computers G06F 3/00, G06F 13/00)
U	H03K 19/017509	· · {Interface arrangements}
M	H03K 19/017518	· · · {using a combination of bipolar and field effect transistors [BIFET]}

> ~~WARNING~~
> ~~Not complete, see also H03K 19/018, H03K 19/0185~~

U	H03K 19/017545	· · {Coupling arrangements; Impedance matching circuits}
M	H03K 19/017554	· · · {using a combination of bipolar and field effect transistors [BIFET]}

> ~~WARNING~~
> ~~Not complete, see also H03K 19/01806, H03K 19/018507~~

U	H03K 19/018	· · using bipolar transistors only
U	H03K 19/01806	· · · {Interface arrangements}
M	H03K 19/01812	· · · · {with at least one differential stage}

> WARNING
>
> Not complete, see also H03K 19/01806

U	H03K 19/0185	· · using field effect transistors only
U	H03K 19/018507	· · · {Interface arrangements}
M	H03K 19/018521	· · · · {of complementary type, e.g. CMOS}

> WARNING
>
> Not complete, see also H03K 19/018507

M	H03K 19/018535	· · · · {of Schottky barrier type [MESFET]}

> WARNING
>
> Not complete, see also H03K 19/018507

U	**H03K 25/00**	**Pulse counters with step-by-step integration and static storage; Analogous frequency dividers**
U	H03K 25/02	· comprising charge storage, e.g. capacitor without polarisation hysteresis
M	H03K 25/04	· · using auxiliary pulse generator triggered by the incoming pulses

> WARNING
>
> Not complete, see also H03K 25/02

Project: MP0146 (H03L)

U	**H03L 7/00**	**Automatic control of frequency or phase; Synchronisation (tuning of resonant circuits in general H03J; synchronising in digital communication systems, see the relevant groups in class H04)**
U	H03L 7/06	· using a reference signal applied to a frequency- or phase-locked loop
U	H03L 7/08	· · Details of the phase-locked loop
U	H03L 7/099	· · · concerning mainly the controlled oscillator of the loop
U	H03L 7/0995	· · · · {the oscillator comprising a ring oscillator}
M	H03L 7/0998	· · · · · {using phase interpolation}

> WARNING
>
> Not complete, see also H03L 7/0995

Project: MP0146 (H04B)

U	**H04B 1/00**	**Details of transmission systems, not covered by a single one of groups H04B 3/00 - H04B 13/00; Details of transmission systems not characterised by the medium used for transmission (tuning resonant circuits H03J)**

NOTE

In this group, group H04B 1/0003 takes precedence over groups
H04B 1/005 - H04B 1/76

M	H04B 1/0003	· {Software-defined radio [SDR] systems, i.e. systems wherein components typically implemented in hardware, e.g. filters or modulators/demodulators, are implented using software, e.g. by involving an AD or DA conversion stage such that at least part of the signal processing is performed in the digital domain (digital baseband systems H04L 25/00; digital modulation/demodulation H04L 27/00; CDMA H04B 1/707; TDMA H04B 7/2643; image transmission H04N 5/00)}

> WARNING
> Groups H04B 1/0003 and subgroups are not complete pending a reorganisation. See also group H04B 1/406

M	H04B 1/59	· Responders; Transponders (relay systems H04B 7/14)

> WARNING
> contains no documents, see provisionally G01S 13/74

U	H04B 1/69	· Spread spectrum techniques
M	H04B 1/692	· · Hybrid techniques using combinations of two or more spread spectrum techniques

> WARNING
> Not complete pending the completion of reclassification; see also group H04B 1/69

M	H04B 1/7163	· · using impulse radio

> WARNING
> As from 01/04/2011 documents relating to pulse-related aspects are classified in H04B 1/717 and the backlog for such documents is continuously being reclassified from H04B 1/7163

M	H04B 1/717	· · · Pulse-related aspects

> WARNING
> Not complete pending the completion of reclassification; see also group H04B 1/7163

M	H04B 1/72	· Circuits or components for simulating antennas, e.g. dummy antennas

> WARNING
> contains no documents, see H03H, e.g. H03H 7/38, H03H 11/28

U	**H04B 3/00**	**Line transmission systems (combined with near-field transmission systems H04B 5/00; constructional features of cables H01B 11/00)**
U	H04B 3/02	· Details
M	H04B 3/03	· · Hybrid circuits (for transceivers H04B 1/52, H04B 1/58; hybrid junctions of the waveguide type H01P 5/16)

> WARNING
> not used, see H04B 1/52, H04B 1/58

U	**H04B 7/00**	**Radio transmission systems, i.e. using radiation field (H04B 10/00, H04B 15/00 take precedence)**
U	H04B 7/02	· Diversity systems; Multi-antenna system, i.e. transmission or reception using multiple antennas (RAKE receivers H04B 1/7115)

> WARNING
> Group H04B 7/02 is impacted by reclassification into group H04B 1/7115.

Groups H04B 7/02 and H04B 1/7115 should be considered in order to perform a complete search.

U	H04B 7/04	· · using two or more spaced independent antennas
M	H04B 7/0413	· · · MIMO systems

> WARNING
>
> ~~Group H04B 7/0413 and subgroups are not complete pending reorganisation. See also H04W 52/42~~

U	**H04B 10/00**	**Transmission systems employing electromagnetic waves other than radio-waves, e.g. infrared, visible or ultraviolet light, or employing corpuscular radiation, e.g. quantum communication**

NOTE

Groups H04B 10/03, H04B 10/07, H04B 10/11, H04B 10/25, H04B 10/27, H04B 10/29 and H04B 10/40 - H04B 10/90, and their subgroups are based on IPC2013.01

U	H04B 10/11	· Arrangements specific to free-space transmission, i.e. transmission through air or vacuum
U	H04B 10/114	· · Indoor or close-range type systems
M	H04B 10/116	· · · Visible light communication

> WARNING
>
> ~~This group is not complete pending reclassification; see also H04B 10/114 and its other subgroups~~

M	H04B 10/70	· Photonic quantum communication

> WARNING
>
> ~~This group is not complete pending reclassification; see also H04B 10/30~~

M	H04B 10/90	· Non-optical transmission systems, e.g. transmission systems employing non-photonic corpuscular radiation

> WARNING
>
> ~~This group is not complete pending reclassification; see also H04B 10/30~~

Project: MP0146 (H04M)

U	**H04M 1/00**	**Substation equipment, e.g. for use by subscribers; Analogous equipment at exchanges (prepayment telephone coin boxes H04M 17/00; current supply arrangements H04M 19/00; {telephone sets particularly adapted for data transmission H04M 11/066; network interface devices H04Q 1/028})**
U	H04M 1/02	· Constructional features of telephone sets
M	H04M 1/0202	· · {Portable telephone sets, e.g. cordless phones, mobile phones or bar type handsets (constructional features of telephone transmitters or receivers, e.g. of speakers or microphones H04M 1/03; mounting of the dialing module H04M 1/23; with protection against RF exposure H04B 1/3838)}

> WARNING
>
> ~~Groups H04M 1/0249 - H04M 1/0285 are not complete pending a reorganisation. See also group H04M 1/0202~~

U	**H04M 7/00**	**Interconnection arrangements between switching centres (transmission arrangements in general H04B; {interconnection arrangements between PSTN/ISDN switching centres H04Q 3/00})**

M	H04M 7/06	· using auxiliary connections for control or supervision {, e.g. where the auxiliary connection is a signalling system number 7 link}

WARNING

Not complete, see also other subgroups of H04M 7/00

M	H04M 7/12	· for working between exchanges having different types of switching equipment, e.g. power-driven and step by step, decimal and non-decimal, {circuit-switched and packet-switched, i.e. gateway arrangements}

WARNING

Not complete, see also other subgroups of H04M 7/00

M	H04M 7/14	· in systems involving main and subordinate switching centres

WARNING

Not complete, see also other subgroups of H04M 7/00

U	**H04M 2242/00**	**Special services or facilities**
M	H04M 2242/22	· Automatic class or number identification arrangements

WARNING

This group is no longer used for classification of new documents as from November 20, 2009. The backlog of this group is being continuously reclassified to H04M 3/42034 and H04M 3/42085

Project: MP0146 (H04N)

M	H04N 3/14	· · by means of electrically scanned solid-state devices (for picture generation H04N 5/335)

WARNING

Constructional details **97DP12C2B**

U	H04N 5/78	· · using magnetic recording (H04N 5/91 takes precedence {; mechanical details in so far as non typical for television circuitry G11B 5/00})
U	H04N 5/782	· · · on tape
M	H04N 5/7824	· · · · with rotating magnetic heads

WARNING

Not complete, see also H04N 5/782

M	H04N 5/7828	· · · · · involving transversal scanning of the magnetic tape

WARNING

Not complete, see also H04N 5/782

M	H04N 5/89	· · using holographic recording (H04N 5/91 takes precedence)

WARNING

Not complete, see also H04N 5/76, H04N 5/7605, H04N 5/84, H04N 5/85

M	H04N 5/903	· · using variable electrical capacitive recording (H04N 5/91 takes precedence)

WARNING

Not complete, see also H04N 5/7605

Project: MP0146 (H04R)

U	**H04R 25/00**	**Deaf-aid sets {providing an auditory perception; Electric tinnitus maskers providing an auditory perception}(constructions of transducers per se H04R 9/00 - H04R 23/00; {non-electric hearing aids A61F 11/008; replacing direct auditory perception by another kind of perception A61F 11/04; electrical stimulation of auditory nerves to promote the auditory function A61N 1/36036}; structural combination with spectacle frames G02C 11/06; processing of speech signals G10L 21/00)**

NOTE

Classification should be directed to groups H04R 25/02, H04R 25/04 or H04R 25/50 and its subgroups, if and only if the technical subject in consideration cannot be classified elsewhere under the main group H04R 25/00

M	H04R 25/43	· {Electronic input selection or mixing based on input signal analysis, e.g. mixing or selection between microphone and telecoil or between microphones with different directivity characteristics (H04R 25/407 takes precedence)}

WARNING

Not complete pending a reorganization, see also H04R 25/00

U	H04R 25/60	· {Mounting or interconnection of hearing aid parts, e.g. inside tips or housing. to ossicles (ear wax retarders, e.g. their mounting H04R 25/654)}
M	H04R 25/608	· · {Apparatus or processes specially adapted for mounting, assembling or interconnecting hearing aid parts inside tips, moulds or housings}

WARNING

Not complete pending a reorganization, see also H04R 25/60 or its other subgroups

U	H04R 25/65	· {Housing parts, e.g. shells, tips or moulds, or their manufacture}
U	H04R 25/652	· · {Ear tips; Ear moulds}
M	H04R 25/656	· · · {Non-customized, universal ear tips, i.e. ear tips which are not specifically adapted to the size or shape of the ear or ear canal}

WARNING

Not complete pending a reorganization, see also H04R 25/652

M	H04R 25/658	· · {Manufacture of housing parts}

WARNING

Not complete pending a reorganization, see also H04R 25/65 or its other subgroups

Project: MP0146 in addition to MP0380 (H04R)

M	H04R 25/75	· {Electric tinnitus maskers providing an auditory perception (evaluating tinnitus A61B 5/128; devices or methods to cause a change in the state of consciousness A61M 21/00; masking sound in general G10K 11/175)}

WARNING

Not complete pending a reorganization, see also H04R 25/00

Project: MP0146 (H04W)

M	H04W 80/02	· Data link layer protocols

> WARNING
>
> This group is used only for indicating additional information when it is of interest for search

M	H04W 80/04	· Network layer protocols, e.g. mobile IP [Internet Protocol]

> WARNING
>
> This group is used only for indicating additional information when it is of interest for search

M	H04W 80/045	· · {involving different protocol versions, e.g. MIPv4 and MIPv6}

> WARNING
>
> This group is used only for indicating additional information when it is of interest for search

Project: MP0149 (H03M)

M	H03M	**CODING; DECODING; CODE CONVERSION IN GENERAL (using fluidic means F15C 4/00; optical analogue/digital converters G02F 7/00; coding, decoding or code conversion, specially adapted for particular applications, see the relevant subclasses, e.g. G01D, G01R, G06F, G06T, G09G, G10L, G11B, G11C, H04B, H04L, H04M, H04N; ciphering or deciphering for cryptography or other purposes involving the need for secrecy G09C)**

WARNINGS

1. The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:

H03M 7/32	covered by	H03M 7/3002, H03M 7/3004, H03M 7/3006, H03M 7/3008, H03M 7/3011, H03M 7/3013, H03M 7/3015, H03M 7/3017, H03M 7/302, H03M 7/3024, H03M 7/3028, H03M 7/3031, H03M 7/3033, H03M 7/3035, H03M 7/3037, H03M 7/304, H03M 7/3042, H03M 7/3048
H03M 7/34	covered by	H03M 7/3004, H03M 7/3051
H03M 7/36	covered by	H03M 7/3004 H03M 7/3022, H03M 7/3026, H03M 7/3044
H03M 7/38	covered by	H03M 7/3004, H03M 7/3046
H03M 7/44	covered by	H03M 7/40

2. In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

M	H03M 1/00	**Analogue/digital conversion; Digital/analogue conversion (conversion of analogue values to or from differential modulation H03M 3/00)**

> NOTES
>
> 1. {Documents published prior to 1990 have been classified using the indexing scheme of group H03M 2201/00; these documents have not been classified in groups H03M 1/001 - H03M 1/88.}
>
> 2. {In this main group, additional information has been classified systematically for documents published from 01-01-1990 on.}

M	H03M 1/002	· {~~with means~~ *Provisions or arrangements* for saving power*, e.g. by allowing a sleep mode, using lower supply voltage for downstream stages, using multiple clock domains or by selectively turning on stages when needed*}
U	H03M 1/06	· Continuously compensating for, or preventing, undesired influence of physical parameters (periodically, {e.g. by using stored correction values,} H03M 1/10)
U	H03M 1/0617	· · {characterised by the use of methods or means not specific to a particular type of detrimental influence}
U	H03M 1/0634	· · · {by averaging out the errors, e.g. using sliding scale}
U	H03M 1/0636	· · · · {in the amplitude domain}
M	H03M 1/0639	· · · · · {using dither~~,~~ *, e.g. using triangular or sawtooth waveforms* (for increasing resolution H03M 1/201)}
M	H03M 1/0656	· · · · {in the time domain*, e.g. using intended jitter as a dither signal*}
U	H03M 1/0675	· · · {using redundancy}
U	H03M 1/069	· · · · {by range overlap between successive stages or steps}
M	H03M 1/0695	· · · · · {using less than the maximum number of output states per stage *or step*, e.g. 1.5 *per stage or less than 1.5* bit per stage type}
U	H03M 1/08	· · of noise {(H03M 1/0617 takes precedence)}
M	H03M 1/0827	· · · {of electromagnetic or electrostatic field noise, e.g. *preventing crosstalk* by shielding~~, by~~ *or* optical isolation}
M	H03M 1/12	· Analogue/digital converters ({H03M 1/001 ~~- – H03M 1/004,~~} ~~H03M 1/02 -~~ H03M 1/10 take precedence)
U	H03M 1/1205	· · {Multiplexed conversion systems}
M	H03M 1/122	· · · {Shared~~, i.e.~~ using a single converter *or a part thereof* for multiple channels*, e.g. a residue amplifier for multiple stages*}
M	H03M 1/124	· · {Sampling or signal conditioning arrangements specially adapted for A/D converters ~~(S/H circuits G11C 27/02; sample rate conversion H03H 17/0416, H03H 17/0621)~~}
U	H03M 1/1245	· · · {Details of sampling arrangements or methods}
M	H03M 1/125	· · · · {Asynchronous~~,~~ *, i.e. free-running* operation *within each conversion cycle*}
U	H03M 1/22	· · pattern-reading type
U	H03M 1/24	· · · using relatively movable reader and disc or strip
M	H03M 1/245	· · · · {Constructional details of parts relevant to the encoding mechanism, e.g. pattern carriers, pattern sensors ~~(for details of other parts, e.g. housings, casings or the like, see the relevant application subclasses of G01, H01)~~}
U	H03M 1/28	· · · · with non-weighted coding
U	H03M 1/30	· · · · · incremental
M	H03M 1/301	· · · · · · {Constructional details of parts relevant to the encoding mechanism, e.g. pattern carriers, pattern sensors ~~(details of housings, casings or the like, see the relevant application subclasses of G01, H01)~~}
U	H03M 1/34	· · Analogue value compared with reference values (H03M 1/48 takes precedence)
M	H03M 1/36	· · · simultaneously only, i.e. parallel type ~~((thermometer to binary encoders H03M 7/165))~~
M	H03M 1/50	· · with intermediate conversion to time interval (H03M 1/64 takes precedence~~, time-to-digital converters G04F 10/005~~)
M	H03M 1/66	· Digital/analogue converters ({H03M 1/001 ~~- – H03M 1/004,~~} ~~H03M 1/02 -~~ H03M 1/10 take precedence)
U	**H03M 3/00**	**Conversion of analogue values to or from differential modulation**

M	H03M 3/04	· Differential modulation with several bits {, e.g. differential pulse code modulation [DPCM] {(H03M 3/30 takes precedence; voice coding G10L 19/00; image coding H04N 19/00)}
M	H03M 3/30	· {Delta-sigma modulation}

NOTE

{In this group branch *H03M 3/30*, in the absence of an indication ~~of~~*to* the contrary, classification is made in the first appropriate place*.}*

U	H03M 3/322	· · {Continuously compensating for, or preventing, undesired influence of physical parameters (periodically, e.g. by using stored correction values, H03M 3/378)}
U	H03M 3/352	· · · {of deviations from the desired transfer characteristic}
M	H03M 3/354	· · · · {at one point, i.e. by adjusting a single reference value, e.g. bias or gain error (gain setting for range control H03M 3/478)}
U	H03M 3/38	· · {Calibration}
M	H03M 3/382	· · · {at one point of the transfer characteristic, i.e. by adjusting a single reference value, e.g. bias or gain error (gain setting for range control H03M 3/478)}
U	H03M 3/458	· · {Analogue/digital converters using delta-sigma modulation as an intermediate step}
M	H03M 3/494	· · · {Sampling or signal conditioning arrangements specially adapted for delta-sigma type analogue/digital conversion systems (sample/hold circuits G11C 27/02; sample rate conversion H03H 17/0416, H03H 17/0621)}
U	H03M 3/50	· · {Digital/analogue converters using delta-sigma modulation as an intermediate step (digital delta-sigma modulators per se H03M 7/3004)}
M	H03M 3/508	· · · {Details relating to the interpolation process (interpolation filters in general H03H 17/0416, H03H 17/0621)}
M	**H03M 5/00**	**Conversion of the form of the representation of individual digits**

NOTE

1. ~~In~~ groups H03M 5/02 - H03M 5/22, ~~the last place priority rule is applied, i.e. at each hierarchical level,~~ in the absence of an indication to the contrary, ~~classification~~ *an invention* is ~~made~~*classified* in the last appropriate place.

2. {In this main group, additional information has been classified systematically for documents published from 01-04-2004 onwards.}

M	**H03M 7/00**	**Conversion of a code where information is represented by a given sequence or number of digits to a code where the same ~~information~~ {or, similar ~~information~~ or ~~a~~ subset of} information} is represented by a different sequence or number of digits**

NOTE

1. In groups H03M 7/001 - H03M 7/50, the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, classification is made in the last appropriate place.

2. In groups H03M 7/02 – H03M 7/50, in the absence of an indication to the contrary, an invention is classified in the last appropriate place.

3. {In this main group, in the absence of an indication to the contrary, additional information has been classified systematically for documents published from 01-04-2004 onwards.}

U	H03M 7/001	· {characterised by the elements used}
M	H03M 7/005	· · {using semiconductor devices (H03M 7/006 takes precedence)}
U	H03M 7/14	· Conversion to or from non-weighted codes

M	H03M 7/20	·· Conversion to or from n-out-of-m codes ~~{(number-of-one counters G06F 7/607)}~~
M	H03M 7/30	· Compression (speech analysis-synthesis for redundancy reduction G10L 19/00; for image communication H04N); Expansion; Suppression of unnecessary data, e.g. redundancy reduction ~~{(for data acquisition G06F 17/40; for image data processing G06T 9/00; redundancy reduction in data recording G11B 20/14; for transmission H04B 1/66)}~~
M	H03M 7/3002	·· {Conversion to or from differential modulation}

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NOTE

{In group branch H03M 7/3002, additional information has been systematically classified for all documents.}

</div>

U	H03M 7/3004	··· {Digital delta-sigma modulation}
M	H03M 7/3015	···· {Structural details of digital delta-sigma modulators ~~(H03M 7/3006, H03M 7/3013 take precedence)~~}
U	H03M 7/60	·· {General implementation details not specific to a particular type of compression}
U	H03M 7/6064	··· {Selection of Compressor}
U	H03M 7/6082	···· {Selection strategies}
M	H03M 7/6094	····· {according to reasons other than compression rate ~~and~~*or* data type}
U	H03M 7/70	·· {Type of the data to be coded, other than image and sound}
M	H03M 7/707	··· {Structured documents, *e.g.* XML}
M	**H03M 11/00**	**Coding in connection with keyboards or like devices, i.e. coding of the position of operated keys (keyboard switch arrangements, structural association of coders and keyboards H01H 13/70, H03K 17/94)**

<div style="background:yellow">

NOTE

{In this main group additional information has been classified systematically for documents published from 01-01-2013 onwards.}

</div>

U	H03M 11/22	· Static coding (H03M 11/26 takes precedence)
M	H03M 11/24	·· using analogue means *{, e.g. by coding the states of multiple switches into a single multi-level analogue signal or by indicating the type of a device using the voltage level at a specific tap of a resistive divider}*
M	**H03M 13/00**	**Coding, decoding or code conversion, for error detection or error correction; Coding theory basic assumptions; Coding bounds; Error probability evaluation methods; Channel models; Simulation or testing of codes (error detection or error correction for analogue/digital, digital/analogue or code conversion H03M 1/00 ~~- -~~ H03M 11/00 *specially adapted for digital computers G06F 11/08, for information storage based on relative movement between record carrier and transducer G11B, e.g. G11B 20/18, for static stores G11C*~~; specially adapted for digital computers G06F 11/08, for information storage based on relative movement between record carrier and transducer G11B, e.g. G11B 20/18, for static stores G11C; {use of error detection or error correction in transmission systems H04L 1/004, in television systems H04N 7/0357}~~)**
U	H03M 13/01	· Coding theory basic assumptions; Coding bounds; Error probability evaluation methods; Channel models; Simulation or testing of codes
M	H03M 13/015	·· {Simulation or testing of codes, e.g. bit error rate [BER] measurements}

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~~WARNING~~

~~H03M 13/015 and H03M 13/036 are not complete, see provisionally also H03M 13/01~~

</div>

U	H03M 13/03	· Error detection or forward error correction by redundancy in data representation, i.e. code words containing more digits than the source words
U	H03M 13/05	· · using block codes, i.e. a predetermined number of check bits joined to a predetermined number of information bits {(H03M 13/2906 takes precedence)}
M	H03M 13/07	· · · Arithmetic codes

> WARNING
>
> Not complete, see also G06F 11/104

M	H03M 13/09	· · · Error detection only, e.g. using cyclic redundancy check [CRC] codes or single parity bit ~~{(error detection or correction by redundancy in data representation G06F 11/08)}~~

> WARNING
>
> Not complete, see also **G06F11/10B**

U	H03M 13/13	· · · Linear codes
M	H03M 13/132	· · · · {Algebraic geometric codes, e.g. Goppa codes}

> WARNING
>
> H03M 13/132 - H03M 13/138 are not complete, see provisionally also H03M 13/13

U	H03M 13/15	· · · · Cyclic codes, i.e. cyclic shifts of codewords produce other codewords, e.g. codes defined by a generator polynomial, Bose-Chaudhuri-Hocquenghem [BCH] codes (H03M 13/17 takes precedence)
M	H03M 13/1505	· · · · · {Golay Codes}

> WARNING
>
> H03M 13/1505 is not complete, see provisionally also H03M 13/15

U	H03M 13/151	· · · · · {using error location or error correction polynomials}
M	H03M 13/1515	· · · · · · {Reed-Solomon codes}

> WARNING
>
> H03M 13/1515 - H03M 13/1585 are not complete, see provisionally also H03M 13/15

M	H03M 13/158	· · · · · · {Finite field arithmetic processing ~~(methods or arrangements for finite field arithmetic G06F 7/72)~~}
M	H03M 13/159	· · · · · {Remainder calculation, e.g. for encoding and syndrome calculation}

> WARNING
>
> H03M 13/159 and H03M 13/1595 are not complete, see provisionally also H03M 13/15

U	H03M 13/17	· · · · Burst error correction, e.g. error trapping, Fire codes
M	H03M 13/175	· · · · · {Error trapping or Fire codes}

> WARNING
>
> H03M 13/175 is not complete, see provisionally also H03M 13/17

M	H03M 13/19	· · · Single error correction without using particular properties of the cyclic codes, e.g. Hamming codes, extended or generalised Hamming codes

> WARNING
>
> Not complete, see also G06F 11/1008

U	H03M 13/23	· · using convolutional codes, e.g. unit memory codes

M	H03M 13/235	· · · {Encoding of convolutional codes, e.g. methods or arrangements for parallel or block-wise encoding}

> WARNING
>
> ~~H03M 13/235 is not complete, see provisionally also H03M 13/23~~

U	H03M 13/29	· combining two or more codes or code structures, e.g. product codes, generalised product codes, concatenated codes, inner and outer codes
M	H03M 13/2903	· · {Methods and arrangements specifically for encoding, e.g. parallel encoding of a plurality of constituent codes}

> WARNING
>
> ~~H03M 13/2903 is not complete, see provisionally also H03M 13/29~~

U	H03M 13/2906	· · {using block codes (<u>H03M 13/2957</u> takes precedence)}
M	H03M 13/2909	· · · {Product codes}

> WARNING
>
> ~~H03M 13/2909 - H03M 13/293 are not complete, see provisionally also H03M 13/29~~

M	H03M 13/2933	· · {using a block and a convolutional code (<u>H03M 13/2957</u> takes precedence)}

> WARNING
>
> ~~H03M 13/2933 - H03M 13/2954 are not complete, see provisionally also H03M 13/29~~

U	H03M 13/2957	· · {Turbo codes and decoding}

> NOTE
>
> This group <u>covers</u> also aspects when a component code is replaced by a non-coded constraint, e.g. like in joint turbo decoding and detection

M	H03M 13/2975	· · · {Judging correct decoding, e.g. iteration stopping criteria ~~(stopping criteria for iterative decoding, see also H04L 1/0051)~~}
M	H03M 13/33	· Synchronisation based on error coding or decoding ~~((for transmission H04L 7/048))~~

> WARNING
>
> Groups <u>H03M 13/333</u> - <u>H03M 13/336</u> are not complete pending reclassification; see also this group

M	H03M 13/333	· · {Synchronisation on a multi-bit block basis, e.g. frame synchronisation}

> WARNING
>
> ~~H03M 13/333 - H03M 13/336 are not complete, see provisionally also H03M 13/33~~

U	H03M 13/35	· Unequal or adaptive error protection, e.g. by providing a different level of protection according to significance of source information or by adapting the coding according to the change of transmission channel characteristics
M	H03M 13/353	· · {Adaptation to the channel}

> WARNING
>
> ~~H03M 13/353 and H03M 13/356 are not complete, see provisionally also H03M 13/35~~

U	H03M 13/37	· Decoding methods or techniques, not specific to the particular type of coding provided for in groups <u>H03M 13/03</u> - <u>H03M 13/35</u>

M	H03M 13/3707	· · {Adaptive decoding and hybrid decoding, e.g. decoding methods or techniques providing more than one decoding algorithm for one code}

WARNING

H03M 13/3707 - H03M 13/3792 are not complete, see provisionally also H03M 13/37

U	H03M 13/39	· · Sequence estimation, i.e. using statistical methods for the reconstruction of the original codes
M	H03M 13/3905	· · · {Maximum a posteriori probability [MAP] decoding and*or* approximations thereof based on trellis or lattice decoding, e.g. forward-backward algorithm, log-MAP decoding, max-log-MAP decoding*}; MAP decoding also to be found in H04L 1/0055}*
M	H03M 13/3944	· · · {for block codes, especially trellis or lattice decoding thereof}

WARNING

H03M 13/3944 - H03M 13/3994 are not complete, see provisionally also H03M 13/39

M	H03M 13/42	· · · {MAP decoding or approximations thereof based on trellis or lattice decoding, e.g. forward-backward algorithm, log-MAP decoding, max-log-MAP decoding (see also H04L 1/0055)}
U	H03M 13/45	· · Soft decoding, i.e. using symbol reliability information (H03M 13/41 takes precedence)
M	H03M 13/451	· · · {using a set of candidate code words, e.g. ordered statistics decoding [OSD]}

WARNING

H03M 13/451 - H03M 13/458 are not complete, see provisionally also H03M 13/45

M	H03M 13/61	· {Aspects and characteristics of methods and arrangements for error correction or error detection, not provided for otherwise}

WARNING

H03M 13/61 - H03M 13/6597 are not complete, see provisionally also H03M 13/61, H03M 13/63 and H03M 13/65

U	H03M 13/63	· {Joint error correction and other techniques (H03M 13/31 and H03M 13/33 take precedence)}
M	H03M 13/6306	· · {Error control coding in combination with Automatic Repeat reQuest [ARQ] and diversity transmission, e.g. coding schemes for the multiple transmission of the same information or the transmission of incremental redundancy (H03M 13/3761, H03M 13/3769 and H03M 13/635 take precedence; ARQ schemes in general H04L 1/18)}
U	H03M 13/65	· {Purpose and implementation aspects}
M	H03M 13/6575	· · {Implementations based on combinatorial logic, e.g. boolean*Boolean* circuits}
M	**H03M 2201/00**	**Indexing scheme relating to A/D or D/A conversion**

NOTE

As this scheme is obtained by conversion from the former deep indexing system RM03 it reflects the several editions of that system in the following way:
  • code symbols added at subsequent editions are indicated by numbers [2] or [3] in square brackets, the code symbols present from the first edition on having no indication;
  • headers which did not have a code symbol in the RM03 system and thus could not be assigned to documents, but which need a code symbol in the

> ~~ICO system for the purpose of a correct hierarchical order, are indicated by the symbol [H];~~
> - ~~the edition according to which a document has been indexed is indicated by the assignment of one of code symbols H03M 2201/01 through H03M 2201/03 to that document. In principle, therefore, a search should include a separate combination of appropriate code symbols for each edition, each combination including one of codes H03M 2201/01 through H03M 2201/03. On an incidental base, however, code symbols from later editions have been assigned to documents indexed according to an earlier edition.~~
>
> ~~WARNING~~
>
> ~~The use of this indexing scheme has been discontinued for all documents published later than 1989.~~

M H03M 2201/80   · Components, circuits or devices used with or within A/D or D/A converters but not disclosed in detail and not provided for elsewhere [H]

> NOTE
>
> ~~The codes of this subgroup should be assigned only insofar as the component, circuit or device concerned is not usual for the type of converter concerned, e.g. an intermediate time interval type A/D converter usually has a counter which therefore need not be indexed in this subgroup.~~

> *The indexing codes of group branch H03M 2201/80 have been allocated only insofar as the component, circuit or device concerned is not usual for the type of converter concerned, e.g. an intermediate time interval type A/D converter usually has a counter which therefore has not separately been indexed in this group branch.*

Project: MP0244 (G01T)

U **G01T 1/00**   **Measuring X-radiation, gamma radiation, corpuscular radiation, or cosmic radiation (G01T 3/00, G01T 5/00 take precedence)**

U G01T 1/16   · Measuring radiation intensity (G01T 1/29 takes precedence {; self-powered detectors G01T 3/006; using an ionisation chamber filled with a liquid or solid, e.g. frozen liquid, dielectric G01T 3/008})

U G01T 1/20   · · with scintillation detectors

M G01T 1/2002   · · · {Optical details, e.g. ~~refecting~~*reflecting* or diffusing layers}

Project: MP0244 (G06K)

U **G06K 19/00**   **Record carriers for use with machines and with at least a part designed to carry digital markings (record carriers adapted for controlling specific machines, see the appropriate subclass for the machine, e.g. B23Q, D03C, G10F, H04L; form printing B41; file cards B42F 19/00; record carriers in general G11)**

U G06K 19/06   · characterised by the kind of the digital marking, e.g. shape, nature, code

U G06K 19/067   · · Record carriers with conductive marks, printed circuits or semiconductor circuit elements, e.g. credit or identity cards {also with resonating or responding marks without active components}

U G06K 19/07   · · · with integrated circuit chips

U G06K 19/073   · · · · Special arrangements for circuits, e.g. for protecting identification code in memory (protection against unauthorised use of computer memories G06F 12/14)

U G06K 19/07309   · · · · · {Means for preventing undesired reading or writing from or onto record carriers}

M   G06K 19/07372   · · · · · {by detecting tampering with the circuit ~~(tampering detection for semi-conductor circuits in general H01L 23/58)~~}

Project: MP0247 (A61G)

M   A61G 7/00   Beds specially adapted for nursing; Devices for lifting patients or disabled persons (~~equipment for beds, treatment tables, floor frames or the like for extending or stretching A61F5/045 {takes precedence} ;~~ stretchers with facilities for picking up patients or disabled persons A61G 1/003)

Project: MP0247 (A61Q)

M   A61Q 7/00   Preparations for affecting hair growth ~~(preparations with therapeutic activity A61P 17/14)~~

Project: MP0247 (B23C)

U   B23C 3/00   Milling particular work; Special milling operations; Machines therefor (milling gear-teeth B23F, {heat assisted machining B23P 25/00})

M   B23C 3/10   · ~~Relief milling~~ *Relieving by milling* ~~(lathes or turning devices for relieving B23B5/42)~~

Project: MP0306 (B01J)

U   B01J 31/00   Catalysts comprising hydrides, coordination complexes or organic compounds (catalyst compositions used only in polymerisation reactions C08 {; catalytic antibodies C12N 9/0002})

NOTES

1. Group B01J 31/003 takes precedence over groups B01J 31/02 - B01J 31/24 (catalytic antibodies C12N 9/0002)

2. In this group, the following terms or expressions are used with the meanings indicated:
- "Organic compound" a compound in which carbon is bonded to
      (1) a second carbon;
      (2) at least one atom of hydrogen or halogen; or
      (3) nitrogen by a single or double bond; except cyanic acid (HOCN), cyanogen (NCCN), cyanamide (H2NCN), cyanogen halide (HalCN), hydrocyanic acid (HCN) isocyanic acid (HNCO) fulminic acid (HCNO) and metal carbides (MCCM) (catalysts comprising any of these exceptions or their salts B01J 27/20 - B01J 27/26.
- "Organometallic compounds" includes all organic compounds wherein a metal or metalloid atom is bonded directly to a carbon fragment, the latter being formally anionic, no further neutral ligands being coordinated to the metal and the compound requiring no further cations for charge balance; e.g. M(1-CR3)n with M= main group metal, n= valency of metal and R= H or hydrocarbyl. (Compounds comprising anionic organonitrogen, organooxygen and organosulfur fragments, excluding carboxylates, with a metal bonded to these heteroatoms B01J 31/02 - B01J 31/0254; unsaturated carbon fragments in combination with transition metals B01J 31/2282.
- "Coordination complexes" includes any donor-acceptor compounds or complex ions comprising organic or inorganic, anionic or neutral Lewis basic ligands, attached to a Lewis acid central metal or metal ion through one or several complexing donor atoms with at least one lone-pair of electrons, e.g. N, O, S, P, to provide at least a Sigma-bond. Typically the maximum number of same or different ligands according to the coordination number, spatial requirements of the ligand and electronic configuration of the metal is bound in a predictable geometry. Complexes of neutral, cationic or anionic hydrocarbon ligands with delocalised charge and/or bonding site,

e.g. Pd-olefin complexes or metallocenes, are also included (the following groups take precedence: simple hydrocarbyl metal compounds, e.g. of main group metal(loids) B01J 31/12; oxoacid salts B01J 31/04 - B01J 31/10; other compounds comprising anionic organonitrogen, organooxygen and organosulfur fragments with a metal bonded to these heteroatoms B01J 31/02 - B01J 31/0254.

- "Organometallic complexes" includes all coordination complexes comprising a M-C bond, e.g. metal carbonyls (complex cyanides such as M4[Fe(CN)6] B01J 27/26).Included are furthermore complexes which are not strictly organometallic per se, e.g. comprising only N, O, S and/or P coordinated ligands, but are described as involving, or known to involve, organometallic intermediates and/or transition states during use, e.g. Group 8-10 metal complexes for a variety of catalytic reactions or steps thereof, such as oxidative addition, e.g. of ArX, hydrogenation, carbonylation, epoxidation, etc.
- "Organic complexes" includes all coordination complexes comprising organic ligands (groups B01J 31/1608 - B01J 31/1895 take precedence).
- "Polymer" includes any macromolecular substance (typically M>10000 g/mol), which comprises repeating units made up of one or several kinds of atoms or groups of atoms, which are identically connected to one another. Oligomers, i.e. more than two identical repeating units connected to one another and typically 500<M<10000 g/mol, are grouped with the respective polymers (polymers per se C08).

3. In this group, if two or more aspects are of equal importance, these are each classified, e.g. two components in a catalyst system such as:
- support and pendant or otherwise immobilised coordination complex; or
- coordination complex and essential additive.

However, if two components, even if separately added, are described as forming, or known to form, a coordination complex, only the latter is classified, e.g. phosphine and Group 8-10 metal such as rhodium. The groups B01J 31/26 - B01J 31/38 are not to be used for the central metals in coordination complexes but rather for separately added further inorganic ingredients. Each specifically disclosed alternative is separately classified, i.e. specifically disclosed by ways of worked examples, specific claims and/or explicit alternatives therein.

4. {When classifying in B01J 31/00, additional information for the catalysts is provided as follows:
(4-1) the specifically disclosed intended uses are indexed in B01J 2231/00;
(4-2) general aspects of the complexes of group B01J 31/16 and the specifically disclosed central metal(s) therein, as well as additional information regarding any special solvents used for any catalyst system of this group are indexed in B01J 2531/00.
(4-3) conceptual articles, e.g. reviews, are separately indexed in B01J 2231/005 and B01J 2531/001;
(4-4) additional information regarding the complexes or ligands classified in B01J 31/16 - B01J 31/24 and indexed in B01J 2531/00 is indexed in B01J 2540/00, e.g. non-coordinating substituents on the ligand periphery
}

U	B01J 31/02	· containing organic compounds or metal hydrides
U	B01J 31/0234	· · {Nitrogen-, phosphorus-, arsenic- or antimony-containing compounds}
U	B01J 31/0255	· · · {Phosphorus containing compounds}
M	B01J 31/0267	· · · · {Phosphines or phosphonium compounds, i.e. phosphorus bonded to at least one carbon atom, including *e.g.* sp2-hybridised phosphorus compounds such as phosphabenzene, the other atoms bonded to phosphorus being either carbon or hydrogen}

U	B01J 31/16	· containing coordination complexes
U	B01J 31/18	· · containing nitrogen, phosphorus, arsenic or antimony {as complexing atoms, e.g. in pyridine ligands, or in resonance therewith, e.g. in isocyanide ligands C=N-R or as complexed central atoms (double metal cyanides B01J 27/26; N-heterocyclic carbenes B01J 31/2265)}
U	B01J 31/1805	· · · {the ligands containing nitrogen}
M	B01J 31/181	· · · · {Cyclic ligands, including *e.g.* non-condensed polycyclic ligands, comprising at least one complexing nitrogen atom as ring member, e.g. pyridine}
M	B01J 31/189	· · · {containing both nitrogen and phosphorus as complexing atoms, including *e.g.* phosphino moieties, in one at least bidentate *or bridging* ligand}
M	B01J 31/24	· · Phosphines {, i.e. phosphorus bonded to only carbon atoms, or to both carbon and hydrogen atoms, including *e.g.* sp2-hybridised phosphorus compounds such as phosphabenzene, phosphole or anionic phospholide ligands (complexes with parent phosphine PH₃ B01J 31/1845)}
M	B01J 31/2404	· · · {Cyclic ligands, including *e.g.* non-condensed polycyclic ligands, the phosphine-P atom being a ring member or a substituent on the ring}
U	**B01J 2231/00**	**Catalytic reactions performed with catalysts classified in B01J 31/00**

NOTE

In this group indexing is done according to the specific catalytic reaction. In case of multiple catalytic activities only those are indexed which are specifically exemplified, i.e. by ways of worked examples, specific claims or explicit alternatives therein.

U	B01J 2231/30	· Addition reactions at carbon centres, i.e. to either C-C or C-X multiple bonds
M	B01J 2231/34	· · Other additions, e.g. Monsanto-type carbonylations, *addition to* 1,2-C=X~~1,2-C~~=X or *1,2*-C-X ~~triple bonds~~*triplebonds*, *additions to* 1,4-C=C-C=X or *1,4*-C=-*C*-X triple bonds with X=~~,~~ *, e.g.* O, S, NH/N ~~or analogues~~
U	B01J 2231/70	· Oxidation reactions, e.g. epoxidation, (di)hydroxylation, dehydrogenation and analogues
U	B01J 2231/76	· · Dehydrogenation (transfer-dehydrogenation of CH-XH B01J 2231/641; transfer-dehydrogenation of -CHRCHR- via C-H activation B01J 2231/46)
M	B01J 2231/763	· · · ~~m~~*of* -CH-XH (X= O, NH/N, S) to -C=X or -~~C-X~~*CX* triple bond species
U	**B01J 2531/00**	**Additional information regarding catalytic systems classified in B01J 31/00**

NOTE

In this group the term "Metals" refers to the central metal in the coordination complexes (B01J 31/16 - B01J 31/24), as used for the respective catalytic reaction, excluding carboxylates (see B01J 31/04) and other simple salts or organometallic compounds (see B01J 31/12). As to components, only those metals or solvents are indexed which are explicitly mentioned in the claims or the worked examples. As to compositional aspects, only those are provided for in the scheme below and are intended to be indexed, which provide additional information regarding the complexes and/or ligands classified in B01J 31/16 - B01J 31/24; indexing codes B01J 2531/0286 - B01J 2531/0297 are only used if these aspects are described as essential. Indexing codes B01J 2531/0213 - B01J 2531/0277 characterise the complexes on the basis of bond-type (linkage-type) thereby specifying the structural geometry of the complexes, while classification entries B01J 31/16 - B01J 31/24 are purely compositional subdivisions. The individual metals, the compositional aspects of complexes used and the solvents are indexed for each explicit alternative, according to the guideline above

U	B01J 2531/02	· Compositional aspects of complexes used, e.g. polynuclearity

U   B01J 2531/0269   · · Complexes comprising ligands derived from the natural chiral pool or otherwise having a characteristic structure or geometry

M   B01J 2531/0272   · · · derived from carbohydrates, including ~~tartrates,~~ e.g. *tartrates or* DIOP

Project: MP0308 (B65H)

U   B65H 3/46   · Supplementary devices or measures to assist separation or prevent double feed (control means comprising detectors responsive to double feed B65H 7/12)

U   B65H 3/52   · · Friction retainers acting on under or rear side of article being separated

U   B65H 3/5207   · · · {Non-driven retainers, e.g. movable retainers being moved by the motion of the article}

M   B65H 3/5215   · · · · {~~for separation~~ *the retainers positioned under articles separated* from the top of the pile}

M   B65H 3/523   · · · · {~~for separation~~ *the retainers positioned over articles separated* from the bottom of the pile}

U   B65H 3/5246   · · · {Driven retainers, i.e. the motion thereof being provided by a dedicated drive}

M   B65H 3/5253   · · · · {~~for separation~~ *the retainers positioned under articles separated* from the top of the pile}

M   B65H 3/5261   · · · · · {*Retainers* of the roller type, e.g. rollers}

M   B65H 3/5269   · · · · · {*Retainers* of the belt type, e.g. belts}

M   B65H 3/5276   · · · · {~~for separation~~ *the retainers positioned over articles separated* from the bottom of the pile}

M   B65H 3/5284   · · · · · {*Retainers* of the roller type, e.g. rollers}

M   B65H 3/5292   · · · · · {*Retainers* of the belt type, e.g. belts}

Project: MP0311 (F01N)

U   **F01N 2900/00**   **Details of electrical control or of the monitoring of the exhaust gas treating apparatus**

U   F01N 2900/06   · Parameters used for exhaust control or diagnosing

U   F01N 2900/14   · · said parameters being related to the exhaust gas

M   F01N 2900/1411   · · · Exhaust gas ~~velocity~~*flow rate, e.g. mass flow rate or volumetric flow rate*

Project: MP0313 (H05B)

M   **H05B 35/00**   **Electric light sources using a combination of different types of light generation ~~(combinations of dissimilar light sources F21, H01J 61/96)~~**

Project: MP0351 (B05B)

U   B05B 1/30   · designed to control volume of flow, e.g. with adjustable passages {(B05B 11/0094 takes precedence)}

                           WARNING
                           Group B05B 1/30 is impacted by reclassification into group B05B 11/0094. Groups B05B 1/30 and B05B 11/0094 should be considered to perform a complete search.

U   B05B 1/3033   · · {the control being effected by relative coaxial longitudinal movement of the controlling element and the spray head (B05B 1/3026 takes precedence)}

U   B05B 1/304   · · · {the controlling element being a lift valve}

U	B05B 1/3046	· · · · {the valve element, e.g. a needle, co-operating with a valve seat located downstream of the valve element and its actuating means, generally in the proximity of the outlet orifice (B05B 1/308 takes precedence)}
M	B05B 1/306	· · · · · {the actuating means being a fluid}

> WARNING
>
> ~~Not complete, see B05B 1/3046~~

U	**B05B 5/00**	**Electrostatic spraying apparatus; Spraying apparatus with means for charging the spray electrically; Apparatus for spraying liquids or other fluent materials by other electric means**
U	B05B 5/08	· Plant for applying liquids or other fluent materials to objects
U	B05B 5/082	· · {characterised by means for supporting, holding or conveying the objects}
M	B05B 5/084	· · · {the objects lying on, or being supported above conveying means, e.g. conveyor belts}

> WARNING
>
> ~~not complete, see B05B 5/08 and subgroups~~

Project: MP0351 (F16D)

M	**F16D 48/00**	**External control of clutches**

> WARNING
>
> ~~Groups F16D 48/00, F16D 48/06, F16D 48/08, F16D 48/10, introduced in September 1998, are not complete. Documents from the groups F16D 48/062 - F16D 48/066 are in the process of being reorganised to F16D 48/00, F16D 48/08, F16D 48/10~~

Project: MP0351 (G06F)

U	**G06F 3/00**	**Input arrangements for transferring data to be processed into a form capable of being handled by the computer; Output arrangements for transferring data from processing unit to output unit, e.g. interface arrangements (typewriters B41J; conversion of physical variables F15B 5/00, G01; image acquisition G06T 1/00, G06F 9/00; coding, decoding or code conversion in general H03M; transmission of digital information H04L; {in regulating or control systems G05B})**
U	G06F 3/01	· Input arrangements or combined input and output arrangements for interaction between user and computer (G06F 3/16 takes precedence)
U	G06F 3/03	· · Arrangements for converting the position or the displacement of a member into a coded form

> NOTE
>
> In this group, the first place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, classification is made in the first appropriate place.

M	G06F 3/0304	· · · {Detection arrangements using opto-electronic means (constructional details of pointing devices not related to the detection arrangement using opto-electronic means G06F 3/033 and subgroups; optical digitisers G06F 3/042)}

> WARNING
>
> ~~Groups G06F 3/0304 and G06F 3/0317 are not complete, pending a reorganisation. See also G06F 3/042 and subgroups~~

Project: MP0351 (H04L)

U   H04L 12/2854   · · {Wide area networks, e.g. public data networks}

M   H04L 12/2856   · · · {Access arrangements, e.g. Internet access (asynchronous transfer mode networks H04L 12/5601; broadband local area networks H04L 12/2801; optical access or distribution networks H04Q 11/0067; access to open networks H04L 12/5691; digital subscriber line end-user equipment and bit-level processing of data on a PSTN-based network H04M 11/00; home network gateways H04L 12/2834; wireless access networks H04W)}

NOTES

1. This group covers:
   - access to a public data network, such as an IP network, for subscribers, i.e. customers of a network service provider, over a wired network.
   - communication of generic types of data between end-user equipments, located typically at the subscriber premises, and an access server, which acts as interface between the access network and the public data network.

2. This group does not cover:
   - wireless access networks, which are covered by H04W
   - optical distribution networks, which are covered by H04Q 11/0067
   - bit-level, or PHY layer, processing of data between digital subscriber line equipments, which is covered by H04M 11/06
   - design of DSL, digital subscriber line, modems, which is covered by H04M 11/06
   - exchange of data related to functionalities of home network appliances between a home network and an external network, which is covered by H04L 12/2803
   - management of WDM parameters in optical multiplex systems, which is covered by H04J 14/02
   - circuit-switched access networks, which are covered by H04M 7/1205
   - access arrangements for providing telephone service in networks other than PSTN/ISDN, which are covered by H04M 7/0066

3. In this group the following terms or expressions are used with the meaning indicated:
   - ATM means Asynchronous Transfer Mode
   - LAN means Local Area Network
   - BRAS means Broadband Remote Access Server
   - DSLAM means Digital Subscriber Line Access Multiplexer
   - MSAN means MultiService Access Node
   - DSL means Digital Subscriber Line
   - IP means Internet Protocol
   - WDM means Wavelength Division Multiplexing
   - SDH means Synchronous Digital Hierarchy
   - OTN means Optical Transport Network
   - PSTN means Public Switched Telephone Network
   - ISDN means Integrated Services Digital Network
   - TDM means Time-Division Multiplexing
   - TDMA means Time Division Multiple Access

WARNING

~~Subgroups of H04L 12/2856 are not complete pending reorganisation. See also H04L 12/5691~~

Project: MP0352 (C07D)

C07D	**HETEROCYCLIC COMPOUNDS**

NOTES

1. This subclass <u>does not cover</u> compounds containing saccharide radicals as defined in Note (3) following the title of subclass <u>C07H</u>, which are covered by subclass <u>C07H</u>.

2. In this subclass, in compounds containing a hetero ring covered by group <u>C07D 295/00</u> and at least one other hetero ring, the hetero ring covered by group <u>C07D 295/00</u> is considered as an acyclic chain containing nitrogen atoms.

3. In this subclass, the following terms or expressions are used with the meaning indicated:
- *"hetero ring" is a ring having at least one halogen, nitrogen, oxygen, sulfur, selenium or tellurium atom as a ring member;*
- *"bridged" means the presence of at least one fusion other than ortho, peri or spiro;*
- *two rings are "condensed" if they share at least one ring member, i.e. "spiro" and "bridged" are considered as condensed;*
- *"condensed ring system" is a ring system in which all rings are condensed among themselves;*
- *"number of relevant rings" in a condensed ring system equals the number of scissions necessary to convert the ring system into one acyclic chain;*
- *"relevant rings" in a condensed ring system, i.e. the rings which taken together describe all the links between every atom of the ring system, are chosen according to the following criteria consecutively:*
    - *a. lowest number of ring members;*
    - *b. highest number of hetero atoms as ring members;*
    - *c. lowest number of members shared with other rings;*
    - *d. last place in the classification scheme.*

4. Attention is drawn to Note (3) after class <u>C07</u>, which defines the last place priority rule applied in the range of subclasses <u>C07C</u> - <u>C07K</u> and within these subclasses.

5. Therapeutic activity of compounds is further classified in subclass <u>A61P</u>.

6. In this subclass, the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary:
- *a. compounds having only one hetero ring are classified in the last appropriate place in one of the groups <u>C07D 203/00</u> - <u>C07D 347/00</u>. The same applies for compounds having more hetero rings covered by the same main group, neither condensed among themselves nor condensed with a common carbocyclic ring system;*
- *b. compounds having two or more hetero rings covered by different main groups neither condensed among themselves nor condensed with a common carbocyclic ring system are classified in the last appropriate place in one of the groups <u>C07D 401/00</u> - <u>C07D 421/00</u>;*
- *c. compounds having two or more relevant hetero rings, covered by the same or by different main groups, which are condensed among themselves or condensed with a common carbocyclic ring system, are classified in the last appropriate place in one of the groups <u>C07D 451/00</u> - <u>C07D 519/00</u>.*

7. In this subclass:
- *where a compound may exist in tautomeric forms, it is classified as though existing in the form which is classified last in the system. Therefore, double bonds between ring members and non-ring members and double bonds between ring members themselves are considered equivalent in determining the degree of hydrogenation of the ring. Formulae are considered to be written in Kekule form;*
- *hydrocarbon radicals containing a carbocyclic ring and an acyclic chain by which it is linked to the hetero ring and being substituted on both the*

carbocyclic ring and the acyclic chain by hetero atoms or by carbon atoms having three bonds to hetero atoms with at the most one bond to halogen, are classified according to the substituents on the acyclic chain. For example, the compound
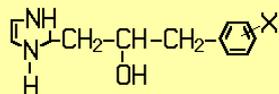
is classified in group C07D 233/22,
and the compound
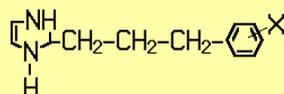
is classified in groups C07D 233/24 and C07D 233/26, where X —NH₂, —NHCOCH₃, or —COOCH₃.

WARNING

In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

D	C07D 203/00 - C07D 259/00	~~Heterocyclic compounds having only nitrogen as ring hetero atom~~
	C07D 401/00	**Heterocyclic compounds containing two or more hetero rings, having nitrogen atoms as the only ring hetero atoms, at least one ring being a six-membered ring with only one nitrogen atom**

NOTE

Groups C07D 401/00-C07D 421/00 cover compounds containing two or more relevant hetero rings at least two of which are covered by different main groups of groups C07D 203/00-C07D 347/00, neither condensed among themselves nor condensed with a common carbocyclic ring or ring system.

Project: MP0364 (E02F)

U	E02F 3/00	**Dredgers; Soil-shifting machines (for special purposes E02F 5/00; other machines or apparatus for mining E21C; tunnelling E21D)**
U	E02F 3/04	· mechanically-driven
M	E02F 3/08	· · with digging elements on an endless chain ~~, {e.g. bucket-type chains~~ (for ~~digging trenches or ditches E02F 5/06; cutting machines for mining or quarrying E21C 25/22~~ conveyors B65G)~~}~~
U	E02F 7/00	**Equipment for conveying or separating excavated material (barges adapted for carrying-away material from floating dredgers B63B 35/28)**
M	E02F 7/02	· Conveying equipment mounted on ~~dredgers or excavators~~ *a dredger* (conveyors in general B65G ~~)~~ ~~{(in combination with graders or bulldozers E02F 3/7695; in combination with rotating digging wheels E02F 3/181; in combination with bucket-arms E02F 3/348; in combination with digging elements mounted on an endless chain E02F 3/082, E02F 3/083)}~~

Project: MP0371 (A47H)

M	A47H 23/00	**Curtains; Draperies** *(shower curtain arrangements A47K 3/38)*

Project: MP0375 (A61K)

M A61K

PREPARATIONS FOR MEDICAL, DENTAL, OR TOILET PURPOSES (devices or methods specially adapted for bringing pharmaceutical products into particular physical or administering forms A61J 3/00; chemical aspects of, or use of materials for deodorisation of air, for disinfection or sterilisation, or for bandages, dressings, absorbent pads or surgical articles A61L ~~{; compounds per se C01, C07, C08, C12N~~*; soap compositions C11D~~;}~~* ~~soap compositions C11D {; microorganisms per se C12N})~~

NOTES

1. This subclass <u>covers</u> the following subject matter, whether set forth as a composition (mixture), process of preparing the composition or process of treating using the composition:

  a. Drug or other biological compositions which are capable of:
    • preventing, alleviating, treating or curing abnormal or pathological conditions of the living body by such means as destroying a parasitic organism, or limiting the effect of the disease or abnormality by chemically altering the physiology of the host or parasite (biocides A01N 25/00 - A01N 65/00);
    • maintaining, increasing, decreasing, limiting, or destroying a physiological body function, e.g. vitamin compositions, sex sterilants, fertility inhibitors, growth promotors, or the like (sex sterilants for invertebrates, e.g. insects, A01N; plant growth regulators A01N 25/00 - A01N 65/00);
    • diagnosing a physiological condition or state by an <u>in vivo</u> test, e.g. X-ray contrast or skin patch test compositions (measuring or testing processes involving enzymes or microorganisms C12Q; <u>in vitro</u> testing of biological material, e.g. blood, urine, G01N, e.g. G01N 33/48)
  b. Body treating compositions generally intended for deodorising, protecting, adorning or grooming the body, e.g. cosmetics, dentifrices, tooth filling materials.

2. Attention is drawn to the definitions of groups of chemical elements following the title of section C.

3. Attention is drawn to the notes in class C07, for example the notes following the title of the subclass C07D, setting forth the rules for classifying organic compounds in that class, which rules are also applicable, if not otherwise indicated, to the classification of organic compounds in A61K.

4. In this subclass, with the exception of group A61K 8/00, the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, classification is made in the last appropriate place.

WARNINGS

1. The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:

A61K 9/133	covered by	A61K 9/127
A61K 9/18	covered by	A61K 9/14
A61K 9/22	covered by	A61K 9/20
A61K 9/24	covered by	A61K 9/209
A61K 9/26	covered by	A61K 9/2077, A61K 9/2081
A61K 9/30	covered by	A61K 9/28
A61K 9/32	covered by	A61K 9/28
A61K 9/34	covered by	A61K 9/28
A61K 9/36	covered by	A61K 9/28
A61K 9/38	covered by	A61K 9/28

A61K 9/40	covered by	A61K 9/28
A61K 9/42	covered by	A61K 9/28
A61K 9/44	covered by	A61K 9/2072
A61K 9/46	covered by	A61K 9/0007
A61K 9/52	covered by	A61K 9/50
A61K 9/54	covered by	A61K 9/5073, A61K 9/5078, A61K 9/5084
A61K 9/56	covered by	A61K 9/50
A61K 9/58	covered by	A61K 9/50
A61K 9/60	covered by	A61K 9/50
A61K 9/62	covered by	A61K 9/50
A61K 9/64	covered by	A61K 9/50
A61K 9/66	covered by	A61K 9/48
A61K 9/68	covered by	A61K 9/0058
A61K 9/72	covered by	A61K 9/0073
A61K 39/108	covered by	
A61K 39/112	covered by	
A61K 45/08	covered by	A61K 31/00, A61K 47/00
A61K 47/04	covered by	A61K 47/02
A61K 50/00	covered by	A61K 9/0009, C09J 9/02

The following IPC indexing codes are not used in the CPC scheme:
A61K 101/00 - A61K 135/00

2. Subgroups of A61K 48/00 are incomplete (Jan. 2003). Documents are being reclassified from A61K 48/00 to its subgroups

3. In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

M   A61K 6/00   **Preparations for dentistry (teeth cleaning preparations A61K 8/00, A61Q 11/00; {dental prostheses A61C 13/00; fastening dental prostheses in the mouth using adhesive foils or adhesive compositions {A61C 13/0025}; apparatus or methods for oral or dental hygiene A61C})**

NOTE

In groups A61K 6/00 - A61K 6/0044 and A61K 6/083 - A61K 6/10, the use of specific polymers is indicated by addition of classification symbols of the subclass C08L preceded by the sign "+", e.g. compositions for taking dental impressions containing alginates are classified in A61K 6/10 + C08L 5/04

Project: MP0376 (A61M)

U   A61M 1/00   **Suction or pumping devices for medical purposes; Devices for carrying-off, for treatment of, or for carrying-over, body-liquids; Drainage systems ({A61M 3/00 - A61M 5/00, A61M 11/00 - A61M 16/00, A61M 27/00 - A61M 35/00 take precedence } ; catheters A61M 25/00; tube connectors, tube couplings, valves or branch units specially adapted for medical use A61M 39/00; devices for taking samples of blood A61B 5/14; implements for holding wounds open A61B 17/02; {saliva removers for dentists A61C 17/04} ; filters implantable into blood vessels A61F 2/01; pumps in general F04)**

WARNING

Groups A61M 1/0007, A61M 1/0015, A61M 1/0017, A61M 1/0025 - A61M 1/0029, A61M 1/0033, A61M 1/0035, A61M 1/0045, A61M 1/005 - A61M 1/0054, A61M 1/006, A61M 1/0068 - A61M 1/0072, A61M 1/0082, A61M 1/0086, A61M 1/009 - A61M 1/0098, A61M 1/0204, A61M 1/0213 - A61M 1/0236, A61M 1/0254, A61M 1/0277, A61M 1/0286, A61M 1/0295, A61M 1/062 -

A61M 1/068, A61M 1/1001 - A61M 1/1008, A61M 1/1012 - A61M 1/1036, A61M 1/1039 - A61M 1/1044, A61M 1/1048 - A61M 1/1051, A61M 1/1055 - A61M 1/1058, A61M 1/1062 - A61M 1/1065, A61M 1/1074 - A61M 1/1075, A61M 1/1082, A61M 1/1084, A61M 1/1087 - A61M 1/1089, A61M 1/1096 - A61M 1/1098, A61M 1/122 - A61M 1/125, A61M 1/1601 - A61M 1/1652, A61M 1/166 - A61M 1/1676, A61M 1/1682 - A61M 1/1684, A61M 1/1688, A61M 1/262 - A61M 1/267, A61M 1/281 - A61M 1/284, A61M 1/288, A61M 1/301 - A61M 1/309, A61M 1/322 - A61M 1/327, A61M 1/3403 - A61M 1/341, A61M 1/3417, A61M 1/3424 - A61M 1/3437, A61M 1/3444 - A61M 1/3451, A61M 1/3458, A61M 1/3465, A61M 1/3468, A61M 1/3475 - A61M 1/3493, A61M 1/3601 - A61M 1/362, A61M 1/3629 - A61M 1/3632, A61M 1/3635 - A61M 1/3638, A61M 1/3641, A61M 1/3644 - A61M 1/3652, A61M 1/3656 - A61M 1/3661, A61M 1/3667, A61M 1/3673, A61M 1/3676, A61M 1/3678, A61M 1/3683, A61M 1/3686, A61M 1/3689, A61M 1/3692, A61M 1/3695 - A61M 1/3698 are incomplete pending reclassification of documents from group A61M 1/00 or respective subgroup.

Until reclassification is complete, groups A61M 1/00 or respective subgroup and A61M 1/0007, A61M 1/0015, A61M 1/0017, A61M 1/0025 - A61M 1/0029, A61M 1/0033, A61M 1/0035, A61M 1/0045, A61M 1/005 - A61M 1/0054, A61M 1/006, A61M 1/0068 - A61M 1/0072, A61M 1/0082, A61M 1/0086, A61M 1/009 - A61M 1/0098, A61M 1/0204, A61M 1/0213 - A61M 1/0236, A61M 1/0254, A61M 1/0277, A61M 1/0286, A61M 1/0295, A61M 1/062 - A61M 1/068, A61M 1/1001 - A61M 1/1008, A61M 1/1012 - A61M 1/1036, A61M 1/1039 - A61M 1/1044, A61M 1/1048 - A61M 1/1051, A61M 1/1055 - A61M 1/1058, A61M 1/1062 - A61M 1/1065, A61M 1/1074 - A61M 1/1075, A61M 1/1082, A61M 1/1084, A61M 1/1087 - A61M 1/1089, A61M 1/1096 - A61M 1/1098, A61M 1/122 - A61M 1/125, A61M 1/1601 - A61M 1/1652, A61M 1/166 - A61M 1/1676, A61M 1/1682 - A61M 1/1684, A61M 1/1688, A61M 1/262 - A61M 1/267, A61M 1/281 - A61M 1/284, A61M 1/288, A61M 1/301 - A61M 1/309, A61M 1/322 - A61M 1/327, A61M 1/3403 - A61M 1/341, A61M 1/3417, A61M 1/3424 - A61M 1/3437, A61M 1/3444 - A61M 1/3451, A61M 1/3458, A61M 1/3465, A61M 1/3468, A61M 1/3475 - A61M 1/3493, A61M 1/3601 - A61M 1/362, A61M 1/3629 - A61M 1/3632, A61M 1/3635 - A61M 1/3638, A61M 1/3641, A61M 1/3644 - A61M 1/3652, A61M 1/3656 - A61M 1/3661, A61M 1/3667, A61M 1/3673, A61M 1/3676, A61M 1/3678, A61M 1/3683, A61M 1/3686, A61M 1/3689, A61M 1/3692, A61M 1/3695 - A61M 1/3698 should be considered in order to perform a complete search.

U	A61M 1/10	· Blood pumps; Artificial hearts; Devices for mechanical circulatory assistance, e.g. intra-aortic balloon pumps (artificial heart valves A61F 2/24; heart stimulation A61H 31/00)
M	A61M 1/1037	· · {Pumps having flexible elements, e.g. with membranes, diaphragms, or bladder pumps *(Moving membranes in blood filters used for pumping A61M 1/267)*}
U	A61M 1/107	· · · {Pulsating membrane pumps without valves, e.g. for counter pulsation, extra-arterial balloon pumps}
M	A61M 1/1072	· · · · {Intra-arterial balloon pumps, e.g. intra-aortic *(intravascular pumps A61M 1/125)*}
U	**A61M 16/00**	**Devices for influencing the respiratory system of patients by gas treatment, e.g. mouth-to-mouth respiration; Tracheal tubes (stimulating the respiratory movement by mechanical, pneumatic or electrical means, iron lungs combined with gas breathing means A61H 31/00)**

WARNINGS

1. Groups A61M 16/0003 - A61M 16/0012, A61M 16/006 - A61M 16/0063, A61M 16/0069, A61M 16/0081 - A61M 16/0084, A61M 16/0093, A61M 16/0402 -

A61M 16/0431, A61M 16/0436 - A61M 16/0438, A61M 16/0443 - A61M 16/0459, A61M 16/0475 - A61M 16/0486, A61M 16/049 - A61M 16/0495, A61M 16/0605 - A61M 16/0655, A61M 16/0672 - A61M 16/0677, A61M 16/0688 - A61M 16/0694, A61M 16/0825 - A61M 16/0866, A61M 16/0883 - A61M 16/0891, A61M 16/1005 - A61M 16/1015, A61M 16/106 - A61M 16/107, A61M 16/108 - A61M 16/1095, A61M 16/122 - A61M 16/127, A61M 16/142 - A61M 16/147, A61M 16/161, A61M 16/164 - A61M 16/168, A61M 16/201 - A61M 16/207, A61M 16/209 are incomplete pending reclassification of documents from group A61M 16/00 or respective subgroup.

Until reclassification is complete, groups A61M 16/00 or respective subgroup and A61M 16/0003 - A61M 16/0012, A61M 16/006 - A61M 16/0063, A61M 16/0069, A61M 16/0081 - A61M 16/0084, A61M 16/0093, A61M 16/0402 - A61M 16/0431, A61M 16/0436 - A61M 16/0438, A61M 16/0443 - A61M 16/0459, A61M 16/0475 - A61M 16/0486, A61M 16/049 - A61M 16/0495, A61M 16/0605 - A61M 16/0655, A61M 16/0672 - A61M 16/0677, A61M 16/0688 - A61M 16/0694, A61M 16/0825 - A61M 16/0866, A61M 16/0883 - A61M 16/0891, A61M 16/1005 - A61M 16/1015, A61M 16/106 - A61M 16/107, A61M 16/108 - A61M 16/1095, A61M 16/122 - A61M 16/127, A61M 16/142 - A61M 16/147, A61M 16/161, A61M 16/164 - A61M 16/168, A61M 16/201 - A61M 16/207, A61M 16/209 should be considered in order to perform a complete search.

2. Group A61M 16/00 is impacted by reclassification into groups A61M 16/021, A61M 16/022, A61M 16/024 and A61M 16/026.
All groups listed in this Warning should be considered in order to perform a complete search.

U	A61M 16/0087	· {Environmental safety or protection means, e.g. preventing explosion}
M	A61M 16/009	· · {Removing used or expired gases or anaesthetic vapours *(Filtering, sterilising or disinfecting the exhaust air in drainage systems A61M 1/0052; Bacterial filters in the expiratory path A61M 16/1065)*}
U	**A61M 25/00**	**Catheters; Hollow probes (dilators A61M 29/00; {peritoneal catheters A61M 1/285; tracheal tubes A61M 16/04; for drainage A61M 27/00; for uterus, vagina or rectum A61M 31/00} ; for measuring or testing A61B; {materials for catheters A61L 29/00})**
U	A61M 25/10	· Balloon catheters ({A61M 25/0125 takes precedence; embolectomy A61B 17/22032; retractors A61B 17/02;} inflatable balloons for placing stents or stent-grafts A61F 2/958 {; stomach balloons for treatment of obesity A61F 5/0003; oesophagal tubes A61J 15/00})
U	A61M 2025/1043	· · {with special features or adapted for special applications (not used)}
M	A61M 2025/1081	· · · {having sheaths or the like for covering the balloon but not forming a permanent part of the balloon, e.g. retractable, dissolvable or tearable sheaths (for balloon length adjustment A61M 2025/1068)}
U	**A61M 2202/00**	**Special media to be introduced, removed or treated (applying radioactive material A61N 5/1028)**

NOTE
The classification symbols A61M 2202/0007 - A61M 2202/0092 are not listed first when assigned to patent documents.
They are used only when associated to other subgroups of A61M 2202/00 in combination sets
Example:
A61M 2202/0417, A61M 2202/0057

M   A61M 2202/04   · Liquids

NOTE

The codes can be followed by additional symbols. The symbols have the meaning as listed below:

+A	fluid entering a filter;
+B	fluid leaving the cross-flow filter without having passed through the filtering element ;
+C	filtrate, i.e. the fluid passing through the filter;
+D	residue retained by the filter due to size;
+E	retained by adsorption;
+F	changed by biological action;
+H	product to be retained or harvested, e.g. by pheresis;
+K	changed by chemical action:
+W	product washed out;
+Z	starting product created by centrifuging.

Project: MP0378 (D02G)

M   D02G 3/00   **Yarns or threads, e.g. fancy yarns; Processes or apparatus for the production thereof, not otherwise provided for (for producing crimped or curled yarns D02G 1/00)**

NOTE

In this main group, further classification in indexing scheme D10B for aspects relating to yarns is required.

Project: MP0378 (D03D)

M   D03D   **WOVEN FABRICS; METHODS OF WEAVING; LOOMS**

NOTES

1. Class D06 takes precedence over this subclass in respect of processes involving both weaving and finishing steps and in respect of the finished fabrics.

2. A method of weaving is classified in the group designating the fabric woven unless the method is characterised by the operation of a particular loom rather than by the production of a particular fabric. In this case, the method is classified in the group for the loom.

3. In this subclass, further classification in indexing scheme D10B for aspects relating to textiles is required.

3. 4.In this subclass, if there is any doubt as to which of the essential features is the most important (this is usually the most restrictive feature), the groups designating woven fabrics should be considered in the order in which they appear at each level of indentation, except that groups designating woven pile fabrics are to be considered as taking precedence over groups designating other woven fabrics.

WARNING

In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

Project: MP0378 (D04B)

M	**D04B**	**KNITTING**

NOTES

1. In this subclass, the groups designating machines, apparatus, devices, or implements include processes characterised by, or dependent on, their use and the products of such processes

2. Knitted products, i.e. fabrics, articles, are classified in this subclass only if they have constructional features which are of interest from the knitting aspect

3. In this subclass, further classification in indexing scheme D10B for aspects relating to textiles is required.

WARNING

In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

Project: MP0380 in addition to MP0146 (H04R)

M	H04R 25/75	• {Electric tinnitus maskers providing an auditory perception ~~(evaluating tinnitus A61B 5/128; devices or methods to cause a change in the state of consciousness A61M 21/00; masking sound in general G10K 11/175)~~}

~~WARNING~~

~~Not complete pending a reorganization, see also H04R 25/00~~

Project: MP0383 (G03H)

M	**G03H 2210/00**	**Object characteristics ~~(not used, see subgroups)~~**
M	**G03H 2222/00**	**Light sources or light beam properties ~~(not used, see subgroups)~~**
M	**G03H 2223/00**	**Optical components ~~(not used, see subgroups)~~**
M	**G03H 2224/00**	**Writing means other than actinic light wave ~~(not used, see subgroups)~~**
M	**G03H 2225/00**	**Active addressable light modulator ~~(not used, see subgroups)~~**
M	**G03H 2226/00**	**Electro-optic or electronic components relating to digital holography ~~(not used, see subgroups)~~**
M	**G03H 2227/00**	**Mechanical components or mechanical aspects not otherwise provided for ~~(not used, see subgroups)~~**
M	**G03H 2230/00**	**Form or shape of the hologram when not registered to the substrate ~~(not used, see subgroups)~~**
M	**G03H 2240/00**	**Hologram nature or properties ~~(not used, see subgroups)~~**
M	**G03H 2250/00**	**Laminate comprising a hologram layer ~~(not used, see subgroups)~~**
M	**G03H 2260/00**	**Recording materials or recording processes ~~(not used, see subgroups)~~**
M	**G03H 2270/00**	**Substrate bearing the hologram ~~(not used, see subgroups)~~**

Project: MP0384 (C08L)

U	C08L 83/00	**Compositions of macromolecular compounds obtained by reactions forming in the main chain of the macromolecule a linkage containing silicon with or without sulfur, nitrogen, oxygen or carbon only; Compositions of derivatives of such polymers**

NOTE

In this main group, from 01.09.2010 onwards, new documents are classified according to the following system.The composition is identified with the C-Set, e.g. (**C0L83/04**, C08L 83/04) (for a composition containing two or more siloxanes), while the info

U	C08L 83/14	· in which at least two but not all the silicon atoms are connected by linkages other than oxygen atoms (C08L 83/10 takes precedence)
M	C08L 83/16	· · in which all the silicon atoms are connected by linkages other than oxygen atoms

Project: MP0399 (F16G)

U	F16G 5/00	**V-belts, i.e. belts of tapered cross-section**
U	F16G 5/16	· consisting of several parts
M	F16G 5/163	· · {with means allowing lubrication (F16G 5/18 takes precedence)}

> WARNING
>
> this group is not complete pending a reorganisation, see also F16G 5/16

M	F16G 5/166	· · {with non-metallic rings (F16G 5/18 takes precedence)}

> WARNING
>
> this group is not complete pending a reorganisation, see also F16G 5/16

U	F16G 11/00	**Means for fastening cables or ropes to one another or to other objects; Caps or sleeves for fixing on cables or ropes (attaching ropes or cables to lift cars or cages B66B 7/08, to winch drums or barrels B66D 1/34; ground anchors E02D 5/00; anchoring devices for prestressed members E04C 5/00; rope clamps in earth drilling E21B 19/12)**
U	F16G 11/02	· with parts deformable to grip the cable or cables; Fastening means which engage a sleeve or the like fixed on the cable
M	F16G 11/025	· · {Fastening means which engage a sleeve or the like fixed on the cable, e.g. caps (F16G 11/143 and F16G 11/146 take precedence)}

> WARNING
>
> this group is not complete pending a reorganisation, see also F16G 11/00

M	F16G 11/04	· with wedging action, e.g. friction clamps (F16G 11/02, {F16G 11/10} take precedence; {eyes for grommet-thimble type fastenings F16G 11/146})

> WARNING
>
> Subgroups of F16G 11/04 pending a reorganisation, see also F16G 11/04

M	F16G 11/10	· Quick-acting fastenings; Clamps holding in one direction only

> WARNING
>
> Subgroups of F16G 11/10 pending a reorganisation, see also F16G 11/10

U	F16G 11/14	· Devices or coupling-pieces designed for easy formation of adjustable loops, e.g. choker hooks; Hooks or eyes with integral parts designed to facilitate quick attachment to cables or ropes at any point, e.g. by forming loops (crane hooks B66C 1/34; hooks or eyes in general F16B 45/00)

M	F16G 11/143	· · {Hooks}

> WARNING
>
> This group is not complete pending a reorganisation, see also F16G 11/14

M	F16G 11/146	· · {Eyes}

> WARNING
>
> This group is not complete pending a reorganisation, see also F16G 11/14

Project: MP0399 (F16M)

U	**F16M 11/00**	**Stands or trestles as supports for apparatus or articles placed thereon {Stands for scientific apparatus such as gravitational force meters}(without heads F16K 13/00; easels or stands for blackboards or the like A47B 97/04; show-stands A47F 7/00; for workmen E04G 1/32; {sockets or holders for poles or posts E04H 12/22} ; supporting, suspending for lighting devices F21V 21/00; special modifications for particular apparatus or articles, see the appropriate subclasses)**
U	F16M 11/02	· Heads
U	F16M 11/04	· · Means for attachment of apparatus; Means allowing adjustment of the apparatus relatively to the stand
M	F16M 11/041	· · · {Allowing quick release of the apparatus}

> WARNING
>
> This group is not complete pending reclassification; see also group F16M 11/04

M	F16M 11/043	· · · {Allowing translations}

> WARNING
>
> This group is not complete pending reclassification; see also group F16M 11/04

M	F16M 11/045	· · · · {adapted to left-right translation movement}

> WARNING
>
> This group is not complete pending reclassification; see also group F16M 11/04

M	F16M 11/046	· · · · {adapted to upward-downward translation movement}

> WARNING
>
> This group is not complete pending reclassification; see also group F16M 11/04 and F16M 11/24

M	F16M 11/048	· · · · {adapted to forward-backward translation movement}

> WARNING
>
> This group is not complete pending reclassification; see also group F16M 11/04 and F16M 11/38

U	F16M 11/06	· · · allowing pivoting
U	F16M 11/10	· · · around a horizontal axis {(F16M 11/12 takes precedence)}
M	F16M 11/105	· · · · · {the horizontal axis being the roll axis, e.g. for creating a landscape-portrait rotation}

> WARNING
>
> Not complete; see also F16M 11/10

U	F16M 11/12	· · · · in more than one direction

M	F16M 11/121	· · · · {constituted of several dependent joints}

> ~~WARNING~~
> ~~This group is not complete pending reclassification; see also group F16M 11/12~~

M	F16M 11/123	· · · · · {the axis of rotation intersecting in a single point, e.g. by using gimbals}

> ~~WARNING~~
> ~~This group is not complete pending reclassification; see also group F16M 11/12~~

M	F16M 11/125	· · · · {for tilting and rolling (F16M 11/14 takes precedence)}

> ~~WARNING~~
> ~~This group is not complete pending reclassification; see also group F16M 11/12~~

M	F16M 11/126	· · · · {for tilting and panning (F16M 11/14 takes precedence)}

> ~~WARNING~~
> ~~This group is not complete pending reclassification; see also group F16M 11/12~~

M	F16M 11/128	· · · · {for panning and rolling (F16M 11/14 takes precedence)}

> ~~WARNING~~
> ~~This group is not complete pending reclassification; see also group F16M 11/12~~

U	F16M 11/20	· Undercarriages with or without wheels
M	F16M 11/2007	· · {comprising means allowing pivoting adjustment}

> ~~WARNING~~
> ~~This group is not complete pending reclassification; see also group F16M 11/06, F16M 11/08, F16M 11/10, F16M 11/12, F16M 11/14 depending on the type of movement allowed~~

M	F16M 11/2014	· · · {around a vertical axis (F16M 11/2035 takes precedence)}

> ~~WARNING~~
> ~~This group is not complete pending reclassification; see also group F16M 11/08~~

M	F16M 11/2021	· · · {around a horizontal axis (F16M 11/2035 takes precedence)}

> ~~WARNING~~
> ~~This group is not complete pending reclassification; see also group F16M 11/10~~

M	F16M 11/2028	· · · · {for rolling, i.e. for creating a landscape-portrait rotation}

> ~~WARNING~~
> ~~Not complete; see also F16M 11/10~~

M	F16M 11/2035	· · · {in more than one direction}

> ~~WARNING~~
> ~~This group is not complete pending reclassification; see also group F16M 11/12~~

M   F16M 11/2042   · · · · {constituted of several dependent joints}

> WARNING
>
> ~~This group is not complete pending reclassification; see also group F16M 11/12~~

M   F16M 11/205   · · · · · {the axis of rotation intersecting in a single point, e.g. gimbals}

> WARNING
>
> ~~This group is not complete pending reclassification; see also group F16M 11/12~~

M   F16M 11/2057   · · · · {for tilting and rolling (F16M 11/2078 takes precedence)}

> WARNING
>
> ~~This group is not complete pending reclassification; see also group F16M 11/12~~

M   F16M 11/2064   · · · · {for tilting and panning (F16M 11/2078 takes precedence)}

> WARNING
>
> ~~This group is not complete pending reclassification; see also group F16M 11/12~~

M   F16M 11/2071   · · · · {for panning and rolling (F16M 11/2078 takes precedence)}

> WARNING
>
> ~~This group is not complete pending reclassification; see also group F16M 11/12~~

M   F16M 11/2078   · · · · {with ball-joint (ball-jointed hinges F16C 11/06)}

> WARNING
>
> ~~This group is not complete pending reclassification; see also group F16M 11/14~~

M   F16M 11/2085   · · {comprising means allowing sideward adjustment, i.e. left-right translation of the head relatively to the undercarriage}

> WARNING
>
> ~~This group is not complete pending reclassification; see also group F16M 11/04~~

M   F16M 11/2092   · · {comprising means allowing depth adjustment, i.e. forward-backward translation of the head relatively to the undercarriage}

> WARNING
>
> ~~This group is not complete pending reclassification; see also group F16M 11/04 and F16M 11/38~~

U   F16M 11/24   · · changeable in height or length of legs, also for transport only, {e.g. by means of tubes screwed into each other}(F16M 11/42 takes precedence)

M   F16M 11/242   · · · {by spreading of the legs (F16M 11/32 takes precedence)}

> WARNING
>
> ~~This group is not complete pending reclassification; see also group F16M 11/24 or F16M 11/32~~

M	F16M 11/245	· · · · {Members limiting spreading of legs, e.g. "umbrella legs" (for supports with three or more telescoping legs F16M 11/34)}

> ~~WARNING~~
>
> ~~this group is not complete pending a reorganisation, see also F16M 11/24 and F16M 11/34~~

M	F16M 11/247	· · · · {Members preventing slipping of the feet (for supports with three or more telescoping legs F16M 11/36)}

> ~~WARNING~~
>
> ~~this group is not complete pending a reorganisation, see also F16M 11/24 and F16M 11/36~~

U	F16M 11/42	· with arrangement for propelling the support {stands on wheels}
M	F16M 11/425	· · {along guiding means}

> ~~WARNING~~
>
> ~~This group is not complete pending reclassification; see also group F16M 11/42~~

U	**F16M 13/00**	**Other supports for positioning apparatus or articles (heads thereof F16M 11/02 {; undercarriages thereof F16M 11/20} ; adapted to be stuck in the ground A45F 3/44 {; sockets or holders for poles or posts E04H 12/22}); Means for steadying hand-held apparatus or articles {(supports for measuring instruments G01D 11/30; supports for casings of remote control switching devices H01H 9/025)}**
M	F16M 13/005	· {integral with the apparatus or articles to be supported}

> ~~WARNING~~
>
> ~~This group is not complete pending reclassification; see also group F16M 13/00~~

U	F16M 13/02	· for supporting on, or attaching to, an object, e.g. tree, gate, window-frame, cycle
M	F16M 13/022	· · {repositionable}

> ~~WARNING~~
>
> ~~This group is not complete pending reclassification; see also group F16M 13/02~~

M	F16M 13/025	· · {Corner supports}

> ~~WARNING~~
>
> ~~This group is not complete pending reclassification; see also group F16M 13/02~~

M	F16M 13/027	· · {Ceiling supports}

> ~~WARNING~~
>
> ~~this group is not complete pending a reorganisation, see also F16M 13/02~~

Project: MP0400 (H01L)

U	**H01L 51/00**	**Solid state devices using organic materials as the active part, or using a combination of organic materials with other materials as the active part; Processes or apparatus specially adapted for the manufacture or treatment of such devices, or of parts thereof (devices consisting of a plurality of components formed in or on a common substrate H01L 27/28; thermoelectric devices using organic material H01L 35/00, H01L 37/00; piezoelectric, electrostrictive or magnetostrictive elements using organic material H01L 41/00)**
U	H01L 51/50	· specially adapted for light emission, e.g. organic light emitting diodes [OLED] or polymer light emitting devices [PLED]; (organic semiconductor lasers H01S 5/36; {circuit arrangements for OLED or PLED H05B 33/0896; control arrangements for organic electroluminescent displays G09G 3/3208})
U	H01L 51/52	· · Details of devices
U	H01L 51/5203	· · · {Electrodes}
M	H01L 51/5206	· · · · {Anodes, i.e. with high work-function material}

> WARNING
> Groups H01L 51/5209 – H01L 51/5218 are incomplete pending reclassification of documents from group H01L 51/5206.
> Groups H01L 51/5209 – H01L 51/5218 and H01L 51/5206 should be considered in order to perform a complete search.

M	H01L 51/5221	· · · · {Cathodes, i.e. with low work-function material}

> WARNING
> Groups H01L 51/5225 – H01L 51/5234 are incomplete pending reclassification of documents from group H01L 51/5221.
> Groups H01L 51/5225 – H01L 51/5234 and H01L 51/5221 should be considered in order to perform a complete search.

M	H01L 51/5237	· · · {Passivation; Containers; Encapsulation, e.g. against humidity}

> WARNING
> Groups H01L 51/524 – H01L 51/5259 are incomplete pending reclassification of documents from group H01L 51/5237.
> Groups H01L 51/524 –H01L 51/5259 and H01L 51/5237 should be considered in order to perform a complete search.

Project: MP0401 (G03C)

M	**G03C 2200/00**	**Details (not used)**

Project: MP0401 (G03G)

U	**G03G 2221/00**	**Processes not provided for by group G03G 2215/00, e.g. cleaning or residual charge elimination**
U	G03G 2221/0026	· Cleaning of foreign matter, e.g. paper powder, from imaging member
M	G03G 2221/0031	· · Type of foreign matter (not used)

Project: MP0416 (H04W)

U	**H04W 52/00**	**Power management, e.g. TPC [Transmission Power Control], power saving or power classes {(gain control in transmitters or power amplifiers H03G 3/3042)}**
M	H04W 52/04	· TPC [Transmission power control]

Project: MP0417 in addition to RP0355 (A61F)

M   A61F   **FILTERS IMPLANTABLE INTO BLOOD VESSELS; PROSTHESES; DEVICES PROVIDING PATENCY TO, OR PREVENTING COLLAPSING OF, TUBULAR STRUCTURES OF THE BODY, ~~E.G~~*e.g*. STENTS; ORTHOPAEDIC, NURSING OR CONTRACEPTIVE DEVICES; FOMENTATION; TREATMENT OR PROTECTION OF EYES OR EARS; BANDAGES, DRESSINGS OR ABSORBENT PADS; FIRST-AID KITS (dental prosthetics A61C)**

WARNINGS

1. The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:

A61F 2/48	covered by	A61F 2/02
A61F 2/56	covered by	A61F 2/54
A61F 2/62	covered by	A61F 2/60
~~A61F 2/70~~	~~covered by~~	~~A61F 2/68, A61F 2/72~~
A61F 2/74	covered by	A61F 2/68
A61F 5/045	covered by	A61G 13/12
A61F 5/052	covered by	A61F 5/05
A61F 5/447	covered by	A61F 5/445
A61F 5/452	covered by	A61F 5/451
A61F 5/457	covered by	A61F 5/451
A61F 5/458	covered by	A61F 5/451
A61F 6/10	covered by	A61F 6/08
A61F 9/01	covered by	A61F 9/00802 - A61F 9/00825
A61F 9/011	covered by	A61F 9/00802 - A61F 9/00825
A61F 13/22	covered by	A61F 13/206
A61F 13/24	covered by	A61F 13/2037
A61F 13/30	covered by	A61F 13/26
A61F 13/32	covered by	A61F 13/26
A61F 13/40	covered by	A61M 35/006

2. In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

Project: MP0417 (A63D)

M   A63D 13/00   ~~Bagatelle~~*Bagatelles* or similar games ~~{(pinball games A63F 7/025; pachinko A63F 7/022; apparatus for projecting or rolling-off the balls A63F 7/2409)}~~

Project: MP0417 (H02S)

M   H02S   **GENERATION OF ELECTRIC POWER BY CONVERSION OF INFRA-RED RADIATION, VISIBLE LIGHT OR ULTRAVIOLET LIGHT, ~~E.G~~*e.g*. USING PHOTOVOLTAIC [PV] MODULES (obtaining electrical energy from radioactive sources G21H 1/12; light sensitive inorganic semiconductor devices H01L 31/00; thermoelectric devices H01L 35/00; pyroelectric devices H01L 37/00; light sensitive organic semiconductor devices H01L 51/42)**

Project: MP0418 (H01S)

M	**H01S**	**DEVICES USING** *THE PROCESS OF LIGHT AMPLIFICATION BY* **STIMULATED EMISSION** *OF RADIATION [LASER] TO AMPLIFY OR GENERATE LIGHT; DEVICES USING STIMULATED EMISSION OF ELECTROMAGNETIC RADIATION IN WAVE RANGES OTHER THAN OPTICAL*

NOTE

This subclass <u>covers</u>:

    a. devices ~~for~~*using* the ~~generation or amplification, by using~~ stimulated emission~~,~~ of ~~coherent electromagnetic waves~~ *radiation by excited atoms* or ~~other forms of wave energy~~*molecules to amplify or generate coherent monochromatic electromagnetic radiation*;

    b. ~~such~~ functions as modulating, demodulating, controlling~~,~~ or stabilising such ~~waves~~*coherent monochromatic electromagnetic radiation*.

WARNINGS

1. The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:

    H01S 3/098   covered by   H01S 3/08018, H01S 3/11 and s.gr.

2. In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

M	**H01S 1/00**	~~**Lasers**~~***Masers***, **i.e. devices** ~~**for generation, amplification, modulation, demodulation, or frequency-changing,**~~ **using stimulated emission**~~**,**~~ **of electromagnetic** ~~**waves of wavelength longer than that of infra-red waves**~~***radiation in the microwave range***
M	H01S 1/06	· ~~gaseous~~*Gaseous* {, i.e. beam masers ~~(atomic clocks G04F 5/14; circuits using beam masers as a reference frequency for regulating frequency of oscillators H03L 7/26; molecular or atomic beam generation H05H 3/02)~~}
M	**H01S 3/00**	**Lasers, i.e. devices** ~~**for generation, amplification, modulation, demodulation, or frequency-changing,**~~ **using stimulated emission**~~**,**~~ **of** ~~**infra-red**~~***electromagnetic radiation in the infrared***, **visible**~~**,**~~ **or** ~~**ultra-violet waves**~~ ***ultraviolet wave range*** **(**~~**{stimulated Brillouin or Raman effects H01S 3/30}** ;~~ ~~**semiconductor lasers H01S 5/00**~~*semiconductors lasers* *H01S 5/00***)**
U	H01S 3/02	· Constructional details {(housings or packages of fibre lasers H01S 3/06704)}
M	H01S 3/03	· · of gas laser discharge tubes ~~{(gas discharge tubes in general H01J 17/00, H01J 61/00)}~~
M	H01S 3/036	· · · Means for obtaining or maintaining the desired gas pressure within the tube, e.g. by gettering, replenishing; Means for circulating the gas, e.g. for equalising the pressure within the tube {(H01S 3/031 takes precedence~~; cooling arrangements for gas lasers H01S 3/041; gas dynamic lasers H01S 3/0979; in general H01J 17/22, H01J 61/24~~)}
U	H01S 3/05	· Construction or shape of optical resonators; Accommodation of active medium therein; Shape of active medium
U	H01S 3/06	· · Construction or shape of active medium
U	H01S 3/063	· · · Waveguide lasers, {i.e. whereby the dimensions of the waveguide are of the order of the light wavelength (waveguide gas lasers H01S 3/0315)}
M	H01S 3/067	· · · · Fibre lasers ~~{(optical pumping thereof H01S 3/094003; controlling the output parameters H01S 3/10; stabilisation of the output parameters H01S 3/13; characterised by scattering effects, i.e. stimulated Brillouin or Raman effects, H01S 3/302)}~~

M	H01S 3/08	· · Construction or shape of optical resonators or components thereof {(waveguide lasers H01S 3/063; ~~controlling the laser output H01S 3/10; stabilising H01S 3/13~~)}
U	H01S 3/081	· · · comprising more than two reflectors {(folded-path gas lasers H01S 3/076)}
M	H01S 3/083	· · · · Ring lasers *{(~~ring laser gyrometers G01C 19/66;~~ {fibre ring lasers H01S 3/06791})}*
U	H01S 3/09	· Processes or apparatus for excitation, e.g. pumping
M	H01S 3/095	· · using chemical or thermal pumping ~~{(generating plasma, e.g. by combustion H02K 44/00, H05H 1/24)}~~
M	H01S 3/10	· Controlling the intensity, frequency, phase, polarisation or direction of the emitted radiation, e.g. switching, gating, modulating or demodulating ~~(mode locking {H01S 3/1106}; controlling of light beams, frequency-changing, non-linear optics, optical logic elements, in general G02F)~~
		NOTE
		Group H01S 3/10007 takes precedence over groups H01S 3/102 - H01S 3/104
M	H01S 3/101	· · Lasers provided with means to change the location from which, or the direction in which, laser radiation is emitted ~~(optical-mechanical scanning systems in general G02B 26/10; electro-, magneto- or acousto-optical deflection G02F 1/29; {control of position or direction of light beam generating device in general G05D 3/00})~~
U	H01S 3/14	· characterised by the material used as the active medium
U	H01S 3/16	· · Solid materials
M	H01S 3/17	· · · amorphous, e.g. glass ~~{(glass manufacture, shaping or supplementary processes C03B; compositions for laserable glass C03C 4/0071)}~~
M	**H01S 4/00**	**Devices using stimulated emission ~~or~~ *of electromagnetic radiation in* wave ~~energy~~*ranges* other than those covered by groups H01S 1/00 ~~or~~ *,* H01S 3/00 *or H01S 5/00*, e.g. phonon ~~maser~~*masers*, *X-ray lasers or* gamma ~~maser~~ *-ray lasers***
M	**H01S 5/00**	**Semiconductor lasers {(superluminescent diodes {H01L 33/0045})}**
		NOTE
		Attention is drawn to Special Rules of classification at C07F, which Special Rules indicate to which version of the periodic table of chemical elements CPC refers. In this group, the Periodic System used is the 8 group system indicated by Roman numerals in the Periodic Table thereunder.
U	H01S 5/02	· Structural details or components not essential to laser action
M	H01S 5/022	· · Mountings; Housings ~~{(packaging and electrical lead-through per se H01L 23/00)}~~
M	H01S 5/024	· · Cooling arrangements {(~~cooling solid state junction devices H01L 23/34; heating arrangements;~~ H01S 5/0261 takes precedence)}
M	H01S 5/026	· · Monolithically integrated components, e.g. waveguides, monitoring photo-detectors, drivers (stabilisation of output H01S 5/06~~; coupling light guides with opto-electronic elements G02B 6/42; devices consisting of a plurality of semiconductor or other solid state components formed in or on a common substrate, adapted for light emission H01L 27/15~~)
M	H01S 5/06	· Arrangements for controlling the laser output parameters, e.g. by operating on the active medium ~~(transmission systems employing light H04B 10/00)~~
M	H01S 5/50	· Amplifier structures not provided for in groups H01S 5/02 - H01S 5/30 ~~(as repeaters in transmission systems H04B 10/291)~~

Project: MP0419 (A63D)

M	A63D	**BOWLING ~~ALLEYS~~ *GAMES, e.g. SKITTLES, BOCCE OR BOWLS*; ~~BOWLING GAMES~~*INSTALLATIONS THEREFOR; BOCCIA; BOWLS*; BAGATELLE *OR SIMILAR GAMES*; BILLIARDS (balls ~~A63B~~*A63B 37/00*~~; indoor games using small moving playing bodies, e.g. balls, A63F 7/00~~)**
M	A63D 1/00	**~~Bowling-alleys; Boccia~~ *Installations for bowling games, e.g. bowling-alleys or bocce* courts (bowling greens <u>A63C 19/00</u>)**
M	A63D 3/00	**Table ~~alleys~~*bowling games*; Miniature bowling-alleys; Bowling games (~~coin-freed G07F~~*games of pins A63D 7/00*)**
M	A63D 15/00	**Billiards, {e.g. carom billiards} *or pocket billiards*; Billiard tables *(bagatelle A63D 13/00)*~~; Pocket billiards, {i.e. pool}~~**
M	A63D 15/20	· Scoring or registering devices ~~({scoring devices for other games or sports A63B 71/06}; counting mechanisms in general G06M; {time counting G07C; displaying in general G09F})~~

Project: MP0432 (H05K)

M	H05K	**PRINTED CIRCUITS; CASINGS OR CONSTRUCTIONAL DETAILS OF ELECTRIC APPARATUS; MANUFACTURE OF ASSEMBLAGES OF ELECTRICAL COMPONENTS ~~(details of instruments or comparable details of other apparatus not otherwise provided for G12B; thin-film or thick-film circuits H01L 27/01, H01L 27/13; non-printed means for electric connections to or between printed circuits {, electric connections or line connectors, apparatus or processes for manufacturing, assembling, maintaining or repairing such connections or connectors} H01R; casings for, or constructional details of, particular types of apparatus, see the relevant subclasses; processes involving only a single technical art, e.g. heating, spraying, for which provision exists elsewhere, see the relevant classes)~~**

<u>NOTES</u>

1. This subclass <u>covers</u>:
   - combinations of a radio or television receiver with ~~apparatus~~*apparatus* having a different main function;
   - printed circuits structurally associated with non-printed electric components~~;~~*.*
   - ~~{printed connectors (non printed connectors H01R)}~~
2. In this subclass, the following expression is used with the meaning indicated:
   - "printed circuits" covers all kinds of mechanical constructions of circuits that consist of an insulating base or support carrying the conductor and are combined structurally with the conductor throughout their length, especially in a two-dimensional plane, the conductors of which are secured to the base in a non-dismountable manner, and also covers the processes or ~~apparatus~~*apparatus* for manufacturing such constructions, e.g. forming the circuit by mechanical or chemical ~~treatment~~*treatment* of a conductive foil, paste, or film on an insulating support.

<u>WARNING</u>

In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

M	H05K 1/00	**Printed circuits ~~(assemblies of a plurality of individual semiconductor or solid state devices H01L 25/00; devices consisting of a plurality of solid state components formed in or on a common substrate, e.g. integrated circuits, thin-film or thick-film circuits, H01L 27/00)~~**
U	H05K 1/02	· Details

M	H05K 1/0213	· · {Electrical arrangements not otherwise provided for ~~(screening H05K 9/00; emergency protective circuits H02H)~~}
M	H05K 1/0216	· · · {Reduction of cross-talk, ~~and~~ noise or electromagnetic interference (grounding <u>H05K 1/0215</u>)}
U	H05K 1/0218	· · · · {by printed shielding conductors, ground planes or power plane (<u>H05K 1/0236</u> takes precedence)}
U	H05K 1/0219	· · · · · {Printed shielding conductors for shielding around or between signal conductors, e.g. coplanar or coaxial printed shielding conductors}
M	H05K 1/0221	· · · · · · {Coaxially shielded signal lines comprising a continuous shielding layer partially or wholly surrounding the signal lines ~~(coaxially shielded vias H05K 1/0222)~~}
M	H05K 1/0236	· · · · {Electromagnetic band-gap structures ~~(conductive planes with an opening or a split H05K 1/0225, H05K 1/0227)~~}
U	H05K 1/0254	· · · {High voltage adaptations; Electrical insulation details; Overvoltage or electrostatic discharge protection (electrostatic discharge protection for electric apparatus in general <u>H05K 9/0067</u>, <u>H05K 9/0079</u>); Arrangements for regulating voltages or for using plural voltages}
U	H05K 1/0257	· · · · {Overvoltage protection}
M	H05K 1/026	· · · · · {Spark gaps ~~(spark gaps per se H01T)~~}
M	H05K 1/0275	· · {Security details, e.g. tampering prevention or detection ~~(security details of computer components G06F 21/70)~~}
M	H05K 1/03	· · Use of materials for the substrate ~~((substrates for semiconductor chips H01L 23/00))~~
M	H05K 1/05	· · · Insulated ~~metal substrate {or other~~ *{conductive substrates, e.g.* insulated ~~electrically conductive }~~ *metal* substrate ~~(thermal coupling of mounted components and metal substrate H05K 1/0204, H05K 1/021)~~}
M	H05K 1/09	· · Use of materials for the ~~metallic pattern {or other conductive~~ *{conductive, e.g. } metallic* pattern ~~(materials for conductors H01B 1/00)~~
M	H05K 1/092	· · · {Dispersed materials, e.g. conductive pastes or inks ~~(conductive material dispersed in non-conductive material in general H01B 1/14 - H01B 1/24; conductive inks in general C09D 11/52)~~}
M	H05K 1/14	· · Structural association of two or more printed circuits (providing electric connection to or between printed circuits <u>H05K 1/11</u>, ~~H01R 9/09~~*H01R 12/00*~~, H01R 23/68~~)
M	H05K 1/16	· incorporating printed electric components, e.g. printed resistor, capacitor, inductor ~~((thick-film or thin-film circuits H01L 27/01, H01L 27/13))~~
M	**H05K 3/00**	**Apparatus or processes for manufacturing printed circuits ~~(photomechanical production of textured or patterned surfaces, materials or originals therefor, apparatus specially adapted therefor, in general G03F; involving the manufacture of semiconductor devices H01L)~~**
M	H05K 3/0011	· {Working of insulating substrates or insulating layers ~~(making copper-clad substrates H05K 3/022; surface treatment for improvement of adhesion H05K 3/381)~~}
U	H05K 3/02	· in which the conductive material is applied to the surface of the insulating support and is thereafter removed from such areas of the surface which are not intended for current conducting or shielding
M	H05K 3/022	· · {Processes for manufacturing precursors of printed circuits, i.e. copper-clad substrates ~~(laminates in general B32B)~~}
M	H05K 3/027	· · {the conductive material being removed by irradiation, e.g. by photons, alpha~~,~~ *or* beta particles ~~(machining by laser in general B23K 26/00; electron - or ion beam tubes therefor H01J 37/00)~~}

M	H05K 3/06	· · the conductive material being removed chemically or electrolytically, e.g. by photo-etch process {(~~non-mechanical removal of metallic material from surfaces C23F;~~ semi-additive methods H05K 3/108)}
M	H05K 3/061	· · · {Etching masks ~~(local etching C23F 1/02)~~}
M	H05K 3/065	· · · · {applied by electrographic, electrophotographic or magnetographic methods ~~(in general G03G)~~}
M	H05K 3/067	· · · {Etchants ~~(in general C23F 1/10 - C23F 1/46)~~}
M	H05K 3/068	· · · {Apparatus for etching printed circuits ~~(in general C23F 1/08)~~}
M	H05K 3/08	· · the conductive material being removed by electric discharge, e.g. by spark erosion ~~{(working of metal by electro-erosion per se B23H)}~~
U	H05K 3/10	· in which conductive material is applied to the insulating support in such a manner as to form the desired conductive pattern
U	H05K 3/105	· · {by conversion of non-conductive material on or in the support into conductive material, e.g. by using an energy beam}
M	H05K 3/106	· · · {by photographic methods ~~(in general G03C)~~}
M	H05K 3/12	· · using {thick film techniques, e.g.} printing techniques to apply the conductive material {or similar techniques for applying conductive paste or ink patterns ~~(printing techniques in general B41M, printing apparatus B41F)~~}
U	H05K 3/1216	· · · {by screen printing or stencil printing}
M	H05K 3/1225	· · · · {Screens or stencils ~~(in general B41N 1/24; manufacturing of screens or stencils B41C 1/14)~~; Holders therefor ~~(stencil holders for applying liquids B05C 17/08)~~}
U	H05K 3/1241	· · · {by ink-jet printing or drawing by dispensing}
M	H05K 3/125	· · · · {by ink-jet printing ~~(in general B41J)~~}
M	H05K 3/1266	· · · {by electrographic or magnetographic printing ~~(in general G03G)~~}
M	H05K 3/14	· · using spraying techniques to apply the conductive material {~~including~~ *, e.g.* vapour evaporation~~}~~; ~~(covering metals by metal spraying C23C 4/00; coating by vacuum evaporation C23C 14/00)~~}
M	H05K 3/16	· · · by cathodic sputtering ~~{(covering materials by cathodic sputtering C23C 14/34; discharge devices therefor H01J 37/34)}~~
M	H05K 3/18	· · using precipitation techniques to apply the conductive material ~~{(chemical coating of a substrate by decomposition C23C 18/00)}~~
M	H05K 3/181	· · · {by electroless plating (adhesives therefor H05K 3/387~~; electroless plating in general C23C 18/16~~)}
U	H05K 3/22	· Secondary treatment of printed circuits {(H05K 3/1283 takes precedence; embedding circuits in grooves by pressure H05K 3/107)}
U	H05K 3/24	· · Reinforcing the conductive pattern {(by solder coating H05K 3/3457)}
M	H05K 3/241	· · · {characterised by the electroplating method; means therefor, e.g. baths~~,~~ *or* apparatus ~~(electroplating in general C25D)~~}
U	H05K 3/30	· Assembling printed circuits with electric components, e.g. with resistor
U	H05K 3/32	· · electrically connecting electric components or wires to printed circuits
M	H05K 3/321	· · · {by conductive ~~adhesive~~ *adhesives}* (in general H01R 4/04)}
M	H05K 3/34	· · · by soldering ~~{(soldering or desoldering apparatus H05K 13/04, B23K 1/00, B23K 3/00)}~~
M	H05K 3/3457	· · · · {Solder materials or compositions ~~(solder compositions per se B23K 35/24)~~; Methods of application thereof}
M	H05K 3/38	· Improvement of the adhesion between the insulating substrate and the metal ~~(Laminates per se B32B)~~

U	H05K 3/40	· Forming printed elements for providing electric connections to or between printed circuits
M	H05K 3/4038	· · {Through-connections; {Through-connections or via Vertical interconnect access [VIA] connections (H05K 3/403 and , H05K 3/42 take precedence)}
M	H05K 3/46	· Manufacturing multilayer circuits {(incorporating non-printed electric components in internal layers H05K 1/185)}
M	**H05K 5/00**	**Casings, cabinets or drawers for electric apparatus (in general A47B; radio receiver cabinets H04B 1/08; television receiver cabinets H04N 5/64 {; constructional details or arrangements for computers G06F 1/16})**
U	**H05K 7/00**	**Constructional details common to different types of electric apparatus (casings, cabinets, drawers H05K 5/00)**
U	H05K 7/02	· Arrangements of circuit components or wiring on supporting structure
M	H05K 7/10	· · Plug-in assemblages of components {, e.g. IC sockets (for connection on printed circuit board H01R 23/6806)}
M	H05K 7/12	· · Resilient or clamping means for holding component to structure (holding two-part couplings together H01R 13/00)
M	H05K 7/14	· Mounting supporting structure in casing or on frame or rack {(H05K 7/18 takes precedence; test adapters G01R 31/2808)}
M	H05K 7/1462	· · {for programmable logic controllers [PLC] for automation and/or industrial process control (programmable logic controllers per se G05B 19/05)}
U	H05K 7/1468	· · · {Mechanical features of input/output (I/O) modules}
M	H05K 7/1469	· · · · {Terminal blocks for connecting sensors (terminal blocks in general H01R 9/24)}
M	H05K 7/20	· Modifications to facilitate cooling, ventilating, or heating {(of printed circuits H05K 1/0201; of resistors H01C; of capacitors H01G; of individual semiconductor components H01L 23/34, H01L 31/024; of LEDs H01L 33/64; of personal computers G06F 1/20)}
U	H05K 7/20009	· · {using a gaseous coolant in electronic enclosures (in cabinets of standardized dimensions H05K 7/20536; in server cabinets H05K 7/20709; in vehicle electronic casings H05K 7/20845; in power control electronics H05K 7/2089; in displays H05K 7/20954)}
U	H05K 7/20136	· · · {Forced ventilation, e.g. by fans (H05K 7/202 takes precedence)}
M	H05K 7/20172	· · · · {Fan mounting or fan specifications (blowers in general F04D 29/601)}
M	H05K 7/20181	· · · · {Filters; Louvers (filters in general B01D 46/00)}
M	H05K 7/20954	· · {for display panels (cooling means for computer displays G06F 1/20; heating or cooling of liquid crystal cells G02F 1/133382; cooling for projectors G03B 21/16; plasma display panels per se H01J 17/49)}
U	**H05K 9/00**	**Screening of apparatus or components against electric or magnetic fields (devices for absorbing radiation from an antenna H01Q 17/00)**
M	H05K 9/0001	· {Rooms, or chambers (building construction in general E04B; anechoic room chambers G01R 29/0821; nuclear magnetic resonance G01R 33/42)}
M	H05K 9/0005	· · {Shielded windows (window for building construction in general E06B 5/00)}
M	H05K 9/0066	· {Constructional details of transient suppressor (protective circuit H02H)}
M	H05K 9/0067	· {Devices for protecting against damage from electrostatic discharge (materials see H05K 9/0079)}
U	H05K 9/0073	· {Shielding materials (H05K 9/0003 takes precedence)}
M	H05K 9/0075	· · {Magnetic shielding materials (magnetic material in general H01F 1/00; for electrical motor H02K 11/00; for transformer H01F 27/28)}
M	H05K 9/0077	· · · {comprising superconductors (superconductors in general H01L 39/00)}

U	H05K 9/0081	· · {Electromagnetic shielding materials, e.g. EMI, RFI shielding (H05K 9/0003 takes precedence)}
M	H05K 9/009	· · · {comprising electro-conductive fibres, e.g. metal fibres, carbon fibres~~,~~ *,* metallised textile fibres, electro-conductive mesh, woven, non-woven mat, fleece, cross-linked ~~(screening during electrotherapy A61N 1/16)~~}

U	**H05K 13/00**	**Apparatus or processes specially adapted for manufacturing or adjusting assemblages of electric components**
M	H05K 13/0053	· {~~Means~~*Arrangements* for ~~helping with~~ *assisting* the manual mounting of components, e.g. special tables~~,~~ *or* light spots indicating the place for mounting ~~(handtools H05K 13/0447)~~}
M	H05K 13/02	· Feeding of components ~~(in general B65G)~~

Project: MP0434 (G06F)

U	**G06F 1/00**	**Details not covered by groups G06F 3/00 – G06F 13/00 and G06F 21/00 (architectures of general purpose stored program computers G06F 15/76)**
U	G06F 1/26	· Power supply means, e.g. regulation thereof (for memories G11C)
U	G06F 1/32	· · Means for saving power
M	G06F 1/3203	· · · {Power ~~Management~~*management*, i.e. event-based initiation of power-saving mode~~}~~
M	G06F 1/3206	· · · · {Monitoring ~~a parameter~~*of events*, ~~a device~~ *devices* or ~~an event triggering~~*parameters that trigger* a change in power modality}
M	G06F 1/3209	· · · · · {Monitoring remote activity, e.g. over telephone ~~line,~~ *lines or* network ~~connection}~~*connections*
M	G06F 1/3212	· · · · · {Monitoring battery ~~level~~*levels*, ~~i.e~~*e.g*. power saving ~~action~~ *mode being* initiated when battery voltage goes below a certain level}
M	G06F 1/3215	· · · · · {Monitoring of peripheral devices}
M	G06F 1/3218	· · · · · · {of display devices}
M	G06F 1/3221	· · · · · · {of disk drive devices}
M	G06F 1/3225	· · · · · · {of memory devices}
M	G06F 1/3228	· · · · · {Monitoring task completion, e.g. by use of idle ~~timer~~*timers*, ~~STOP command, WAIT command}~~*stop commands or wait commands*
M	G06F 1/3231	· · · · · {Monitoring ~~user~~*the* presence~~,~~*, absence* or ~~absence}~~*movement of users*
M	G06F 1/3234	· · · · ~~{Action, measure or step performed to reduce power consumption}~~*Power saving characterised by the action undertaken*
M	G06F 1/3237	· · · · · {~~Power saving~~ by disabling clock generation or distribution}
M	G06F 1/324	· · · · · {~~Power saving~~ by lowering clock frequency}
M	G06F 1/3246	· · · · · {~~Power saving~~ by software initiated power-off}
M	G06F 1/3287	· · · · · {~~Power saving~~ by switching off individual functional units in ~~a~~*the* computer system~~, i.e. selective power distribution}~~
M	G06F 1/329	· · · · · {~~Power saving~~ by task scheduling}
M	G06F 1/3293	· · · · · {~~Power saving~~ by switching to a less power~~-~~-consuming processor, e.g. sub-CPU}
M	G06F 1/3296	· · · · · {~~Power saving~~ by lowering *the* supply or operating voltage}

Project: MP0435 (B05B)

U **B05B 1/00** **Nozzles, spray heads or other outlets, with or without auxiliary devices such as valves, heating means (B05B 3/00, B05B 5/00, B05B 7/00 take precedence; {nozzles for baths with water or gas jets A61H 33/00, e.g. A61H 33/6063, A61H 33/6021, A61H 33/026 or A61H 33/027; Nozzles specially adapted for fire-extinguishing A62C 31/02; Nozzles for generating high velocity abrasive fluid jets B24C 5/04;} nozzles for jet-ink printing mechanisms B41J 2/135; {nozzles for filling containers B65B 39/00;} nozzles for liquid-dispensing, e.g. in vehicle service stations B67D 7/42)**

WARNING

Group B05B 1/00 is impacted by reclassification into group B05B 1/002. Groups B05B 1/00 and B05B 1/002 should be considered to perform a complete search.

M B05B 1/12 · capable of producing different kinds of discharge, e.g. either jet or spray (B05B 1/16 takes precedence *having selectively-effective outlets B05B 1/16*)

M B05B 1/34 · designed to influence the nature of flow of the liquid or other fluent material, e.g. to produce swirl (B05B 1/30 takes precedence *designed to control volume of flow B05B 1/30*)

WARNING

Group B05B 1/34 is impacted by reclassification into group B05B 1/3402. Groups B05B 1/34 and B05B 1/3402 should be considered to perform a complete search.

M **B05B 3/00** **Spraying or sprinkling apparatus with moving outlet elements or moving deflecting elements *(B05B 5/00 takes precedence){*; {Spraying or sprinkling heads with rotating elements located upstream the outlet}**

M B05B 5/10 · · Arrangements for supplying power, e.g. charging power (B05B 5/053 takes precedence *in discharge apparatus B05B 5/053*)

U **B05B 7/00** **Spraying apparatus for discharge of liquids or other fluent materials from two or more sources, e.g. of liquid and air, of powder and gas (B05B 3/00, B05B 5/00 {, B05B 11/06} take precedence)**

M B05B 7/02 · Spray pistols; Apparatus for discharge (B05B 7/14, B05B 7/16, B05B 7/24 take precedence *for spraying particulate material B05B 7/14; with means for heating the material to be sprayed B05B 7/16; with means for supplying fluent material to a discharge device B05B 7/24*)

Project: MP0436 (F22D)

M **F22D** **PREHEATING, OR ACCUMULATING PREHEATED, FEED-WATER *FOR STEAM GENERATION*; FEED-WATER SUPPLY *FOR STEAM GENERATION*; CONTROLLING WATER LEVEL *FOR STEAM GENERATION*; AUXILIARY DEVICES FOR PROMOTING WATER CIRCULATION WITHIN BOILERS *STEAM BOILERS*(chemical treatment of water, e.g. purification, C02F; enclosed heat-exchange apparatus in general F28D; controlling in general G05)**

WARNING

In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

Project: MP0437 (F21L)

M   F21L 2/00   **Systems of *electric* lighting devices (systems employing both electric and non-electric light sources or exchangeable light sources F21L 27/00)**

WARNING

Group F21L 2/00 is incomplete pending reclassification of documents from groups F21L 15/00 - F21L 15/14, F21L 2001/00, F21L 2003/00, F21L 2005/00 and F21L 25/00.
All groups listed in this Warning should be considered in order to perform a complete search.

M   F21L 27/00   **Lighting devices or systems, employing combinations of electric and non-electric light sources; Replacing or exchanging electric light sources with non-electric light sources or vice versa in lighting devices or systems**

Project: MP0437 (F41G)

U   F41G 1/00   **Sighting devices (for indirect laying of fire F41G 3/16; bombsights F41G 3/24 {; structurally associated with laser telemeters F41G 3/065; mounting tubular or beam shaped aiming devices on firearms F41G 11/001})**

U   F41G 1/32   · Night sights, e.g. luminescent {(optical aspects of sighting devices G02B 23/00, G02B 27/00)}

M   F41G 1/34   · · combined with light source, e.g. spot light

Project: MP0437 (G02B)

M   G02B 26/00   **Optical devices or arrangements using movable or deformable optical elements for controlling the intensity, colour, phase, polarisation or direction of light, e.g. switching, gating, modulating (*mechanically operable parts of lighting devices for the control of light order F21V;* specially adapted for measuring characteristics of light G01J; using devices or arrangements the optical operation of which is modified by changing the optical properties of the medium of the devices or the arrangements G02F 1/00; *devices or arrangements, the optical operation of which is modified by changing the optical properties of the medium of the devices or arrangements G02F 1/00*; control of light in general G05D 25/00; control of light sources H01S 3/10, H05B 37/00 - H05B 43/00; mechanically operable parts of lighting devices for the control of light F21V)**

Project: MP0437 (G03B)

U   G03B 27/00   **Photographic printing apparatus**

U   G03B 27/02   · Exposure apparatus for contact printing

M   G03B 27/04   · · Copying apparatus without a relative movement between the original and the light source during exposure, e.g. printing frame, or printing box

Project: MP0437 (G09F)

U   G09F 13/00   **Illuminated signs; Luminous advertising (G09F 9/00, G09F 11/00 take precedence; control of displays in general using static means to present variable information G09G)**

M   G09F 13/44   · with gas as a lighting source

Project: MP0437 (H01J)

U	H01J 61/00	**Gas- or vapour-discharge lamps (use for sterilising milk products A23C; use for medical purposes A61N 5/00; use for disinfecting water C02F; use for lighting F21; {use for advertising G09F} ; circuits therefor H05B; arc lamps with consumable electrodes H05B; electroluminescent lamps H05B)**
M	H01J 61/96	· Lamps with light-emitting discharge path and separately-heated incandescent body within a common envelope, e.g. for simulating daylight ~~(lamps with filament heated only by non-luminous discharge H01K)~~

Project: MP0437 (H01K)

M	H01K	**ELECTRIC INCANDESCENT LAMPS (details ~~or~~ , apparatus or processes for manufacture applicable to both discharge devices and incandescent lamps H01J; light sources using a combination of incandescent and other types of light generation H01J 61/96, H05B 35/00~~; circuits therefor H05B~~)**

NOTE

In this subclass, the following term is used with the meaning indicated:
  • "lamp" includes tubes emitting ultra-violet or infra-red light.

WARNING

In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

U	H01K 7/00	**Lamps for purposes other than general lighting (H01K 9/00 - H01K 13/00 take precedence)**
M	H01K 7/02	· for producing a narrow beam of light; for approximating a point--like source of light, e.g. for searchlight, for cinematographic projector (~~producing narrow beams by optical means external to lamp F21~~ *producing narrow beams by optical means external to lamp F21V*)

Project: MP0437 (H01L)

M	H01L	**SEMICONDUCTOR DEVICES; ELECTRIC SOLID STATE DEVICES NOT OTHERWISE PROVIDED FOR (use of semiconductor devices for measuring G01; resistors in general H01C; magnets, inductors ~~(in general)~~ , transformers H01F; capacitors in general H01G; electrolytic devices H01G 9/00; batteries, accumulators H01M; waveguides, resonators, or lines of the waveguide type H01P; line connectors, current collectors H01R~~; stimulated emission devices H01S~~ *; stimulated-emission devices H01S*; electromechanical resonators H03H; loudspeakers, microphones, gramophone pick-ups or like acoustic electromechanical transducers H04R; electric light sources in general H05B; printed circuits, hybrid circuits, casings or constructional details of ~~electric~~ *electrical* apparatus, manufacture of assemblages of electrical components H05K; use of semiconductor devices in circuits having a particular application, see the subclass for the application)**

NOTES

1. This subclass covers:
  • electric solid state devices which are not covered by any other subclass and details thereof, and includes: semiconductor devices adapted for rectifying, amplifying, oscillating or switching; semiconductor devices sensitive to radiation; electric solid state devices using thermoelectric, superconductive, piezo-electric, electrostrictive, magnetostrictive, galvano-magnetic or bulk negative resistance effects and integrated circuit devices;
  • photoresistors, magnetic field dependent resistors, field effect resistors, capacitors with potential-jump barrier, resistors with potential-jump barrier

or surface barrier, incoherent light emitting diodes and thin-film or thick-film circuits;

- processes and apparatus adapted for the manufacture or treatment of such devices, except where such processes relate to single-step processes for which provision exists elsewhere.

2. In this subclass, the following terms or expressions are used with the meaning indicated:

- "wafer" means a slice of semiconductor or crystalline substrate material, which can be modified by impurity diffusion (doping), ion implantation or epitaxy, and whose active surface can be processed into arrays of discrete components or integrated circuits;
- "solid state body" means the body of material within which, or at the surface of which, the physical effects characteristic of the device occur. In thermoelectric devices, it includes all materials in the current path. Regions in or on the body of the device (other than the solid state body itself), which exert an influence on the solid state body electrically, are considered to be "electrodes" whether or not an external electrical connection is made thereto. An electrode may include several portions and the term includes metallic regions which exert influence on the solid state body through an insulating region (e.g. capacitive coupling) and inductive coupling arrangements to the body. The dielectric region in a capacitive arrangement is regarded as part of the electrode. In arrangements including several portions, only those portions which exert an influence on the solid state body by virtue of their shape, size, or disposition or the material of which they are formed are considered to be part of the electrode. The other portions are considered to be "arrangements for conducting electric current to or from the solid state body" or "interconnections between solid state components formed in or on a common substrate", i .e. leads;
- "device" means an electric circuit element; where an electric circuit element is one of a plurality of elements formed in or on a common substrate it is referred to as a "component";
- "complete device" is a device in its fully assembled state which may or may not require further treatment, e.g. electroforming, before it is ready for use but which does not require the addition of further structural units;
- "parts" includes all structural units which are included in a complete device;
- "container" is an enclosure forming part of the complete device and is essentially a solid construction in which the body of the device is placed, or which is formed around the body without forming an intimate layer thereon. An enclosure which consists of one or more layers formed on the body and in intimate contact therewith is referred to as an "encapsulation";
- "integrated circuit" is a device where all components, e.g. diodes, resistors, are built up on a common substrate and form the device including interconnections between the components;
- "assembly" of a device is the building up of the device from its component constructional units and includes the provision of fillings in containers.

3. In this subclass, both the process or apparatus for the manufacture or treatment of a device and the device itself are classified, whenever both of these are described sufficiently to be of interest.

4. Attention is drawn to Note (3) after the title of section C, which Note indicates to which version of the periodic table of chemical elements the IPC refers. In this subclass, the Periodic System used is the 8 group system indicated by Roman numerals in the Periodic Table thereunder.

<u>WARNINGS</u>

1. The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:

H01L 21/301   covered by   H01L 21/30

H01L 21/328	covered by	H01L 29/66075
H01L 21/329	covered by	H01L 29/66083
H01L 21/33	covered by	H01L 29/66227
H01L 21/331	covered by	H01L 29/66234
H01L 21/332	covered by	H01L 29/66363
H01L 21/334	covered by	H01L 29/66075
H01L 21/335	covered by	H01L 29/66409
H01L 21/336	covered by	H01L 29/66477
H01L 21/337	covered by	H01L 29/66893
H01L 21/338	covered by	H01L 29/66848
H01L 21/339	covered by	H01L 29/66946
H01L 21/36-H01L 21/368	covered by	
H01L 21/58	covered by	H01L 24/80
H01L 21/60	covered by	H01L 24/80
H01L 21/66	covered by	H01L 22/00
H01L 21/603	covered by	H01L 24/80
H01L 21/607	covered by	H01L 24/80
H01L 21/8242	covered by	H01L 27/10844
H01L 21/8244	covered by	H01L 27/11
H01L 21/8246	covered by	H01L 27/112
H01L 21/98	covered by	H01L 25/50
H01L 29/38	covered by	H01L 29/04-H01L 29/365
H01L 29/96	covered by	H01L 29/68-H01L 29/945
H01L 51/30	covered by	H01L 51/0032
H01L 51/40	covered by	H01L 51/0001
H01L 51/46	covered by	H01L 51/0032
H01L 51/48	covered by	H01L 51/0001
H01L 51/54	covered by	H01L 51/0032

2. In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

U　H01L 27/00　　**Devices consisting of a plurality of semiconductor or other solid-state components formed in or on a common substrate (details thereof H01L 23/00, H01L 29/00 - H01L 51/00; assemblies consisting of a plurality of individual solid state devices H01L 25/00)**

NOTES

1. In this group, with the exception of groups H01L 27/115 - H01L 27/11597, the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, classification is made in the last appropriate place.

2. When classifying in this group, subject matter relating to electrically programmable read-only memories is classified in group H01L 27/115, irrespective of the last place priority rule.

M　H01L 27/14　　· including semiconductor components sensitive to infra-red radiation, light, electromagnetic radiation of shorter wavelength, or corpuscular radiation and specially adapted either for the conversion of the energy of such radiation into electrical energy or for the control of electrical energy by such radiation (radiation-sensitive components structurally associated with one or more electric light sources only H01L 31/14; couplings of light guides with optoelectronic elements G02B 6/42)

U	H01L 31/00	**Semiconductor devices sensitive to infra-red radiation, light, electromagnetic radiation of shorter wavelength or corpuscular radiation and adapted either for the conversion of the energy of such radiation into electrical energy or for the control of electrical energy by such radiation; Processes or apparatus peculiar to the manufacture or treatment thereof or of parts thereof; Details thereof (H01L 51/42 takes precedence; devices consisting of a plurality of solid state components formed in, or on, a common substrate, other than combinations of radiation-sensitive components with one or more electric light sources, H01L 27/00; measurement of X-radiation, gamma radiation, corpuscular radiation or cosmic radiation with semiconductor detectors G01T 1/24, with resistance detectors G01T 1/26; measurement of neutron radiation with semiconductor detectors G01T 3/08; couplings of light guides with optoelectronic elements G02B 6/42; obtaining energy from radioactive sources G21H)**
U	H01L 31/12	· structurally associated with, e.g. formed in or on a common substrate with, one or more electric light sources, e.g. electroluminescent light sources, and electrically or optically coupled thereto (semiconductor devices with at least one potential barrier or surface barrier adapted for light emission H01L 33/00; amplifiers using electroluminescent element and photocell H03F 17/00; electroluminescent light sources per se H05B 33/00)
M	H01L 31/14	· · the light source or sources being controlled by the semiconductor device sensitive to radiation, e.g. image converters, image amplifiers, or image storage devices

Project: RP0058-F (A47B)

M	A47B 65/00	**Book-troughs; Accessories specially adapted for book-storing, e.g. book-ends**

WARNING

Groups A47B 65/10 - A47B 65/20 are incomplete pending reclassification of documents from group A47B 65/00.

Until reclassification is complete, groups A47B 65/00 and A47B 65/10 - A47B 65/20 should be considered in order to perform a complete search.

Project: RP0134 (B29K)

M	B29K	**INDEXING SCHEME ASSOCIATED WITH SUBCLASSES B29B, B29C OR B29D, RELATING TO MOULDING MATERIALS *OR TO MATERIALS FOR {MOULDS, } REINFORCEMENTS, FILLERS OR PREFORMED PARTS, e.g. INSERTS***

NOTES

1. This subclass constitutes an indexing scheme associated with subclasses B29B, B29C or B29D.

2. In this subclass, the following term is used with the meaning indicated:
"rubber" covers: natural or conjugated diene rubbers; rubber in general (for a specific rubber, other than a natural rubber or a conjugated diene rubber, see the group provided for such macromolecular compounds)

- "rubber" covers:
  - a. natural or conjugated diene rubbers;
  - b. rubber in general (for a specific rubber, other than a natural rubber or a conjugated diene rubber, see the group provided for such macromolecular compounds

3. Documents relating to compositions or properties of the materials to be shaped, said compositions having a particular influence on the shaping technique, should be classified in the shaping technique, e.g. B29C 39/003,

B29C 41/003, B29C 43/003, B29C 45/0001, B29C 47/0004, B29C 49/0005, B29C 51/002, B29C 53/005, B29C 55/005, B29C 61/003, B29C 63/0017 and B29C 66/70.

3. 4. Documents relating to compositions or properties of the materials to be shaped, said compositions having a particular influence on the shaping technique, should be classified in the shaping technique, e.g. B29C 39/003, B29C 41/003, B29C 43/003, B29C 45/0001, B29C 47/0004, B29C 49/0005, B29C 51/002, B29C 53/005, B29C 55/005, B29C 61/003, B29C 63/0017 and **B2965/00S**

Copolymers are indexed with the same indexing code as the majority polymers

5. Compositions for moulding materials, condition, form or state of moulded material: B29K 2001/00 - B29K 2105/00

6. Compositions for reinforcements: B29K 2201/00 - B29K 2313/00

7. Compositions for fillers: B29K 2401/00 - B29K 2511/00

8. Compositions for preformed parts: B29K 2601/00 - B29K 2713/00

9. Compositions for moulds: B29K 2801/00 - B29K 2913/00

10. Properties of moulding materials, reinforcements, fillers, preformed parts or moulds: B29K 2995/00

WARNING

1. The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:

B29K 105/02	covered by	B29K 2995/0064
B29K 105/22	covered by	B29K 2705/00
B29K 105/28	covered by	B29K 2995/0025
B29K 105/30	covered by	B29K 2995/003
B29K 105/32	covered by	B29K 2995/0026
B29K 105/34	covered by	B29K 2995/002, B29K 2995/0007, and B29K 2995/0015

Subclass indexes
Compositions for moulding materials, condition, form or state of moulded material: **B29K1/00 - B29K105/00**
Compositions for reinforcements: **B29K201/00 - B29K313/00**
Compositions for fillers: **B29K401/00 - B29K511/00**
Compositions for preformed parts: **B29K601/00 - B29K713/00**
Compositions for moulds: **B29K801/00 - B29K913/00**
Properties of moulding materials, reinforcements, fillers, preformed parts or moulds: **B29K995/00**
Compositions for moulding materials;
Condition, form or state of moulded material

2. From the date indicated below, the following groups have been deleted from the classification scheme. The documents of these groups have been transferred to the new groups as follows :
B29K105/28 transferred to B29K 2995/0025
B29K105/30 transferred to B29K 2995/003
B29K105/32 transferred to B29K 2995/0026
B29K105/34 transferred to B29K 2995/002, B29K 2995/0007, **B29K00D4**

M	**B29K 2001/00**	**Use of cellulose, modified cellulose or cellulose derivatives, e.g. viscose, as moulding material ((as such C08L 1/00))**
M	B29K 2001/08	· {Cellulose derivatives (as such C08L 1/08)}
M	B29K 2001/12	· · {Cellulose acetate (as such C08L 1/12)}
M	B29K 2001/14	· · {Cellulose acetate-butyrate (as such C08L 1/14)}

M	B29K 2001/18	· · {Cellulose nitrate ~~(as such C08L 1/18)~~}
M	**B29K 2003/00**	**Use of {starch or derivatives as moulding material ~~(as such C08L 3/00)~~}**
M	**B29K 2005/00**	**~~Polysaccharides~~ *Use of polysaccharides* or derivatives *as moulding material*~~(as such C08L 5/00)~~**
M	**B29K 2007/00**	**Use of natural rubber as moulding material ~~{(as such C08L 7/00)}~~**
M	**B29K 2009/00**	**Use of rubber derived from conjugated dienes, as moulding material ~~{(as such C08L 9/00)}~~**
M	B29K 2009/06	· {~~SBR}~~*SB polymers*, i.e. butadiene-styrene {~~rubbers~~ *polymers*~~(as such C08L 9/06)}~~}
M	**B29K 2011/00**	**Use of {rubber derived from chloroprene as moulding material ~~(as such C08L 11/00)}~~**
M	**B29K 2019/00**	**Use of rubber not provided for in a single one of main groups {B29K 2007/00 - {B29K 2011/00},} as moulding material**
M	**B29K 2021/00**	**Use of {unspecified rubbers as moulding material ~~(as such C08L 21/00)}~~**
M	**B29K 2023/00**	**Use of polyalkenes {or derivatives thereof} as moulding material ~~{(as such C08L 23/00)}~~**
M	B29K 2023/04	· {Polymers of ethylene ~~(as such C08L 23/04)~~}
M	B29K 2023/06	· · {PE, i.e. polyethylene ~~(as such C08L 23/06)~~}
M	B29K 2023/08	· · {~~Use~~*Copolymers* of ~~copolymers of~~ ethylene ~~as moulding material~~ (~~as such C08L 23/08;~~ B29K 2023/16 takes precedence)}
M	B29K 2023/10	· {Polymers of propylene ~~(as such C08L 23/10)~~}
M	B29K 2023/12	· · {PP, i.e. polypropylene ~~(as such C08L 23/12)~~}
M	B29K 2023/14	· · {Copolymers of polypropylene (~~as such C08L 23/14;~~ B29K 2023/16 takes precedence)}
M	B29K 2023/16	· {EPM, i.e. ethylene-propylene copolymers; EPDM, i.e. ethylene-propylene-diene copolymers; EPT, i.e. ethylene-propylene terpolymers ~~(as such C08L 23/16)~~}
M	B29K 2023/18	· {Polymers of hydrocarbons having four or more carbon atoms, e.g. polymers of butylene ~~(,~~ e.g. PB, i.e. polybutylene) ~~(as such C08L 23/18)~~}
M	B29K 2023/22	· · {Copolymers of isobutene, e.g. butyl rubber ~~(as such C08L 23/22)~~}
M	B29K 2023/38	· {Polymers of cycloalkenes, e.g. norbornene~~,~~ *or* cyclopentene}
M	**B29K 2025/00**	**Use of polymers of vinyl-aromatic compounds {or derivatives thereof} as moulding material ~~{(as such C08L 25/00)}~~**
M	B29K 2025/04	· {Polymers of styrene ~~(as such C08L 25/04)~~}
M	B29K 2025/06	· · {PS, i.e. polystyrene ~~(as such C08L 25/06)~~}
M	B29K 2025/08	· · {Copolymers of styrene, e.g. AS or SAN, i.e. acrylonitrile styrene (~~as such C08L 25/08;~~ B29K 2055/02 takes precedence)}
M	**B29K 2027/00**	**Use of polyvinylhalogenides {or derivatives thereof} as moulding material ~~{(as such C08L 27/00)}~~**
M	B29K 2027/06	· {PVC, i.e. polyvinylchloride ~~(as such C08L 27/06)}~~}
M	B29K 2027/08	· {PVDC, i.e. polyvinylidene chloride ~~(as such C08L 27/08)~~}
M	B29K 2027/12	· containing fluorine ~~{(as such C08L 27/12)}~~
M	B29K 2027/14	· · {PVF, i.e. polyvinyl fluoride ~~(as such C08L 27/14)~~}
M	B29K 2027/16	· · {PVDF, i.e. polyvinylidene fluoride ~~(as such C08L 27/16)~~}

M   B29K 2027/18   · · ~~PTFE, i.e. polytetrafluorethene ((as such C08L 27/18)~~ *PTFE, i.e. polytetrafluorethene {,* e.g. ePTFE, i.e. expanded polytetrafluorethene~~, Gore Tex (R)~~}

M   B29K 2029/00   Use of polyvinylalcohols, polyvinylethers, polyvinylaldehydes, polyvinylketones or polyvinylketals {or derivatives thereof} as moulding material ~~((as such C08L 29/00))~~

M   B29K 2029/04   · {PVOH, i.e. polyvinyl alcohol (~~as such C08L 29/04;~~ B29K 2031/04 takes precedence)}

M   B29K 2031/00   Use of polyvinylesters {or derivatives thereof} as moulding material ~~((as such C08L 31/00))~~

M   B29K 2031/04   · {Polymers of vinyl acetate, e.g. PVAc, i.e. polyvinyl acetate ~~(as such C08L 31/04)~~}

M   B29K 2033/00   Use of polymers of unsaturated acids or derivatives thereof as moulding material *{B29K 2035/00 takes precedence}*~~((as such C08L 33/00;) B29K 2035/00 takes precedence)~~

M   B29K 2033/04   · Polymers of esters ~~((as such C08L 33/04))~~
M   B29K 2033/08   · · {Polymers of acrylic acid esters, e.g. PMA, i.e. polymethylacrylate ~~(as such C08L 33/08)~~}
M   B29K 2033/12   · · {Polymers of methacrylic acid esters, e.g. PMMA, i.e. polymethylmethacrylate ~~(as such C08L 33/12)~~}
M   B29K 2033/18   · Polymers of nitriles ~~((as such C08L 33/18))~~
M   B29K 2033/20   · · PAN, i.e. polyacrylonitrile ~~((as such C08L 33/20))~~
M   B29K 2033/26   · {Polymers of acrylamide or methacrylamide ~~(as such C08L 33/26)~~}

M   B29K 2035/00   Use of polymers of unsaturated polycarboxylic acids {or derivatives thereof} as moulding material ~~((as such C08L 35/00))~~

M   B29K 2039/00   Use of polymers with unsaturated aliphatic radicals and with a nitrogen or a heterocyclic ring containing nitrogen in a side chain or derivatives thereof as moulding material ~~(as such C08L 39/00)~~

M   B29K 2039/06   · Polymers of N-vinyl-pyrrolidones ~~(as such C08L 39/06)~~
M   B29K 2039/08   · Polymers of vinyl-pyridine ~~(as such C08L 39/08)~~

M   B29K 2045/00   Use of polymers of unsaturated cyclic compounds having no unsaturated aliphatic groups in a side-chain, e.g. coumarone-indene resins {or derivatives thereof}, as moulding material ~~((as such C08L 45/00))~~

M   B29K 2049/00   Use of polyacetylene or cyanic ester resins, i.e. polymers having one or more carbon-to -carbon triple bonds or derivatives thereof, as moulding material ~~(as such C08L 49/00)~~

M   B29K 2055/00   Use of specific polymers obtained by polymerisation reactions only involving carbon-to-carbon unsaturated bonds, not provided for in a single one of main groups {B29K 2023/00 - {B29K 2049/00, e.g. having a vinyl group}, as moulding material ~~((as such C08L 55/00))~~

M   B29K 2055/02   · ABS polymers, i.e. acrylonitrile-butadiene-styrene polymers ~~((as such C08L 55/02))~~

M   B29K 2059/00   Use of polyacetals {, e.g. POM, i.e. polyoxymethylene *or derivatives thereof}, as moulding material*~~; or derivatives thereof), as moulding material ((as such C08L 59/00))~~

M   B29K 2061/00   Use of condensation polymers of aldehydes or ketones {or derivatives thereof}*,* as moulding material ~~((as such C08L 61/00))~~

M	B29K 2061/04	· Phenoplasts ~~{(as such C08L 61/04)}~~
M	B29K 2061/20	· Aminoplasts ~~{(as such C08L 61/20)}~~

M B29K 2063/00 Use of {EP, i.e.} epoxy resins {or derivatives thereof}**,** as moulding material ~~{(as such C08L 63/00)}~~

M B29K 2065/00 Use of polyphenylenes *or polyxylylenes as moulding material*~~(as such C08L 65/02)or polyxylylenes (as such C08L 65/04)as moulding material~~

M B29K 2067/00 Use of polyesters {or derivatives thereof}**,** as moulding material ~~{(as such C08L 67/00)}~~

M	B29K 2067/04	· {Polyesters derived from hydroxycarboxylic acids ~~(as such C08L 67/04)~~}
M	B29K 2067/06	· {Unsaturated polyesters ~~(as such C08L 67/06)~~}

M B29K 2069/00 Use of {PC, i.e.} polycarbonates {or derivatives thereof}**,** as moulding material ~~{(as such C08L 69/00)}~~

M B29K 2071/00 Use of polyethers~~,~~ {**,** e.g. PEEK, i.e. polyether-etherketone or PEK, i.e. polyetherketone or derivatives thereof}**,** as moulding material ~~{(as such C08L 71/00)}~~

M	B29K 2071/02	· {Polyalkylene oxides, e.g. PEO, i.e. polyethylene oxide**,** or derivatives thereof ~~(as such C08L 71/02)~~}
M	B29K 2071/12	· {PPO, i.e. polyphenylene oxide ~~(as such C08L 71/12)~~; PPE, i.e. polyphenylene ether}

M B29K 2073/00 Use of other polymers having oxygen as the only hetero atom in the main chain**,** as moulding material ~~{(as such C08L 73/00)}~~

M B29K 2075/00 Use of {PU, i.e.} polyureas or polyurethanes {or derivatives thereof}**,** as moulding material ~~{(as such C08L 75/00)}~~

M	B29K 2075/02	· {Polyureas ~~(as such C08L 75/02)~~}

M B29K 2077/00 Use of {PA, i.e.} polyamides, e.g. polyesteramides {or derivatives thereof}**,** as moulding material ~~{(as such C08L 77/00)}~~

M	B29K 2077/10	· {Aromatic polyamides ~~(Polyaramides)~~*[polyaramides]* or derivatives thereof ~~(such as C08L 77/10)~~}

M B29K 2079/00 Use of polymers having nitrogen, with or without oxygen~~,~~ or carbon only, in the main chain {**,** not provided for in groups **B29K 2061/00** - **B29K 2077/00**}**,** as moulding material ~~{(as such C08L 79/00)}~~

M	B29K 2079/08	· {PI, i.e. polyimides or derivatives thereof ~~(as such C08L 79/08)~~}
M	B29K 2079/085	· · {Thermoplastic polyimides, e.g. polyesterimides, ~~polyetherimides~~ [PEI], *i.e. polyetherimides, or* polyamideimides; Derivatives thereof}

M B29K 2081/00 Use of polymers having sulfur, with or without nitrogen, oxygen~~,~~ or carbon only, in the main chain, as moulding material ~~{(as such C08L 81/00)}~~

M	B29K 2081/04	· {Polysulfides, e.g. PPS, i.e. polyphenylene sulfide or derivatives thereof ~~(as such C08L 81/04)~~}
M	B29K 2081/06	· {PSU, i.e. polysulfones; PES, i.e. polyethersulfones or derivatives thereof ~~(as such C08L 81/06)~~}

M B29K 2083/00 Use of polymers having silicon, with or without sulfur, nitrogen, oxygen, or carbon only, in the main chain, as moulding material ~~{(as such C08L 83/00)}~~

M	B29K 2083/005	· {~~Liquid Silicone Rubbers [LSR]~~ *LSR, i.e. liquid silicone rubbers,* or derivatives thereof}

M	**B29K 2085/00**	**Use of polymers having ~~other~~ elements {*other* than silicon, {sulfur,} nitrogen, oxygen, ~~and~~ *or* carbon} *only* in the main chain, as moulding material ~~{(as such C08L 85/00)}~~**
M	**B29K 2086/00**	**Use of specific polymers obtained by polycondensation or polyaddition, not provided for in a single one of main groups {B29K 2059/00 - B29K 2085/00}, as moulding material**
M	**B29K 2089/00**	**Use of proteins, e.g. casein, gelatine or derivatives thereof, as moulding material ~~(as such C08L 89/00)~~**
M	**B29K 2091/00**	**Use of waxes as moulding material ~~{(as such C08L 91/06)}~~**
M	**B29K 2093/00**	**~~Use of natural resins (as such C08L 93/00), e.g. shellac (as such C08L 93/02)~~*Use of natural resins, e.g. shellac,* or derivatives thereof, as moulding material (B29K 2001/00, B29K 2003/00, B29K 2005/00, B29K 2007/00 and B29K 2089/00 take precedence)**
M	**B29K 2095/00**	**Use of bituminous materials as moulding material ~~{(as such C08L 95/00)}~~**
U	**B29K 2096/00**	**Use of specified macromolecular materials not provided for in a single one of main groups B29K 2001/00 - B29K 2095/00, as moulding material**
M	B29K 2096/02	· Graft polymers ~~(B29K 2055/02 takes precedence)~~
M	B29K 2096/04	· Block polymers ~~(B29K 2055/02 takes precedence)~~
M	**B29K 2101/00**	**Use of unspecified macromolecular compounds as moulding material {(~~unspecified rubbers B29K 2021/00 {; as such C08L 101/00}~~*use of unspecified rubbers B29K 2021/00*)}**
U	**B29K 2105/00**	**Condition, form or state of moulded material {or of the material to be shaped}**
U	B29K 2105/0005	· {containing compounding ingredients (releasing, lubricating or separating agents B29C 33/56, fibers B29K 2105/08, B29K 2105/12; fillers B29K 2105/16, recycled material B29K 2105/26)}
M	B29K 2105/0044	· · {Stabilisers, e.g. against oxydation, light, *or* heat}
M	B29K 2105/0097	· {Glues, *or* adhesives, e.g. hot melts, *or* thermofusible adhesives}
C	B29K 2105/02	· heat- shrinkable *{(B29K 2995/0049 takes precedence)}*
		WARNING
		Group B29K 2105/02 is impacted by reclassification into group B29K 2995/0049.
		Groups B29K 2105/02 and B29K 2995/0049 should be considered in order to perform a complete search.
U	B29K 2105/06	· containing reinforcements, fillers or inserts
M	B29K 2105/08	· · of continuous length, e.g. cords, rovings, mats, fabrics, strands, *or* yarns
U	B29K 2105/0854	· · · {in the form of a non-woven mat}
M	B29K 2105/0863	· · · · {~~Sheet~~ *SMC, i.e. sheet* moulding compound ~~[SMC]~~}
U	B29K 2105/10	· · · {Cords, strands or rovings, e.g.} oriented {cords, strands or rovings}
M	B29K 2105/101	· · · · {~~oriented~~*Oriented*}
M	B29K 2105/102	· · · · · {~~circonferentially~~*circumferentially*}
M	B29K 2105/12	· · of short lengths, e.g. chopped filaments, staple fibres, *or* bristles
M	B29K 2105/122	· · · {microfibres, ~~nanofibres~~ *or nanofibers*}
M	B29K 2105/124	· · · · {~~nanofibres~~*Nanofibers*}
U	B29K 2105/16	· · Fillers

M	B29K 2105/165	· · · {Hollow fillers, e.g. microballoons~~, or~~ expanded particles}
U	B29K 2105/20	· · Inserts
M	B29K 2105/206	· · · {Meshes, lattices~~, or~~ nets}
U	B29K 2105/25	· {Solid}
M	B29K 2105/251	· · {Particles, powder~~, or~~ granules (expandable particles B29K 2105/046)}
U	B29K 2105/253	· · {Preform}
M	B29K 2105/255	· · · {~~Block, tablet~~*Blocks or tablets*}
M	B29K 2105/256	· · · {~~Sheet~~*Sheets*, ~~plate~~*plates*, ~~blank, film~~*blanks or films*}
M	B29K 2105/258	· · · {~~tubular~~*Tubular*}
M	B29K 2105/26	· Scrap {*or* recycled material}

M	**B29K 2201/00**	**Use of cellulose, modified cellulose or cellulose derivatives, e.g. viscose, as reinforcement** ~~{(as such C08L 1/00)}~~
		~~NOTE~~ ~~Copolymers are indexed with the same indexing code as the majority polymers~~
M	B29K 2201/08	· {Cellulose derivatives ~~(as such C08L 1/08)~~}
M	B29K 2201/12	· · {Cellulose acetate ~~(as such C08L 1/12)~~}
M	B29K 2201/14	· · {Cellulose acetate-butyrate ~~(as such C08L 1/14)~~}
M	B29K 2201/18	· · {Cellulose nitrate ~~(as such C08L 1/18)~~}
M	**B29K 2203/00**	**Use of {starch or derivatives as reinforcement ~~(as such C08L 3/00)}~~**
M	**B29K 2205/00**	**~~Polysaccharides~~ *Use of polysaccharides* or derivatives *as reinforcement*~~(as such C08L 5/00)~~**
M	**B29K 2207/00**	**Use of natural rubber as reinforcement** ~~{(as such C08L 7/00)}~~
M	**B29K 2209/00**	**Use of rubber derived from conjugated dienes as reinforcement** ~~{(as such C08L 9/00)}~~
M	B29K 2209/06	· {~~SBR~~}*SB polymers*, i.e. butadiene-styrene {~~rubbers~~ *polymers*~~(as such C08L 9/06)}~~
M	**B29K 2211/00**	**Use of {rubber derived from chloroprene as reinforcement ~~(as such C08L 11/00)}~~**
M	**B29K 2219/00**	**Use of rubber not provided for in a single one of main groups {B29K 2207/00 - {B29K 2211/00}, as reinforcement**
M	**B29K 2221/00**	**Use of {unspecified rubbers as reinforcement ~~(as such C08L 21/00)}~~**
M	**B29K 2223/00**	**Use of polyalkenes {or derivatives thereof} as reinforcement** ~~{(as such C08L 23/00)}~~
M	B29K 2223/04	· {Polymers of ethylene ~~(as such C08L 23/04)~~}
M	B29K 2223/06	· · {PE, i.e. polyethylene ~~(as such C08L 23/06)~~}
M	B29K 2223/08	· · {Use of copolymers of ethylene as reinforcement (~~as such C08L 23/08;~~ B29K 2223/16 takes precedence)}
M	B29K 2223/10	· {Polymers of propylene ~~(as such C08L 23/10)~~}
M	B29K 2223/12	· · {PP, i.e. polypropylene ~~(as such C08L 23/12)~~}
M	B29K 2223/14	· · {Copolymers of polypropylene (~~as such C08L 23/14;~~ B29K 2023/16 takes precedence)}
M	B29K 2223/16	· {EPM, i.e. ethylene-propylene copolymers; EPDM, i.e. ethylene-propylene-diene copolymers; EPT, i.e. ethylene-propylene terpolymers ~~(as such C08L 23/16)~~}

M	B29K 2223/18	· {Polymers of hydrocarbons having four or more carbon atoms, e.g. polymers of butylene ~~(,~~ e.g. PB, i.e. polybutylene~~) (as such C08L 23/18)~~}
M	B29K 2223/22	· · {Copolymers of isobutene, e.g. butyl rubber ~~(as such C08L 23/22)~~}
M	B29K 2223/38	· {Polymers of cycloalkenes, e.g. norbornene~~,~~ *or* cyclopentene}

M	**B29K 2225/00**	**Use of polymers of vinyl-aromatic compounds {or derivatives thereof} as reinforcement ~~{(as such C08L 25/00)}~~**
M	B29K 2225/04	· {Polymers of styrene ~~(as such C08L 25/04)~~}
M	B29K 2225/06	· · {PS, i.e. polystyrene ~~(as such C08L 25/06)~~}
M	B29K 2225/08	· · {Copolymers of styrene, e.g. AS or SAN, i.e. acrylonitrile styrene (~~as such C08L 25/08;~~ B29K 2255/02 takes precedence)}

M	**B29K 2227/00**	**Use of polyvinylhalogenides {or derivatives thereof} as reinforcement ~~{(as such C08L 27/00)}~~**
M	B29K 2227/06	· PVC, i.e. polyvinylchloride ~~{(as such C08L 27/06)}~~
M	B29K 2227/08	· {PVDC, i.e. polyvinylidene chloride ~~(as such C08L 27/08)~~}
M	B29K 2227/12	· containing fluorine ~~{(as such C08L 27/12)}~~
M	B29K 2227/14	· · {PVF, i.e. polyvinyl fluoride ~~(as such C08L 27/14)~~}
M	B29K 2227/16	· · {PVDF, i.e. polyvinylidene fluoride ~~(as such C08L 27/16)~~}
M	B29K 2227/18	· · ~~PTFE, i.e. polytetrafluorethene {(as such C08L 27/18)~~ *PTFE, i.e. polytetrafluorethene {,* e.g. ePTFE, i.e. expanded polytetrafluorethene~~, Gore Tex (R)~~}

M	**B29K 2229/00**	**Use of polyvinylalcohols, polyvinylethers, polyvinylaldehydes, polyvinylketones or polyvinylketals {or derivatives thereof~~}~~*,}* as reinforcement ~~{(as such C08L 29/00)}~~**
M	B29K 2229/04	· {PVOH, i.e. polyvinyl alcohol (~~as such C08L 29/04;~~ B29K 2231/04 takes precedence)}

M	**B29K 2231/00**	**Use of polyvinylesters {or derivatives thereof} as reinforcement ~~{(as such C08L 31/00)}~~**
M	B29K 2231/04	· {Polymers of vinyl acetate, e.g. PVAc, i.e. polyvinyl acetate ~~(as such C08L 31/04)~~}

M	**B29K 2233/00**	**Use of polymers of unsaturated acids or derivatives thereof*,* as reinforcement {(~~as such C08L 33/00~~*B29K 2235/00 takes precedence*)} ~~(B29K 2035/00 takes precedence)~~**
M	B29K 2233/04	· Polymers of esters ~~{(as such C08L 33/04)}~~
M	B29K 2233/08	· · {Polymers of acrylic acid esters, e.g. PMA, i.e. polymethylacrylate ~~(as such C08L 33/08)~~}
M	B29K 2233/12	· · {Polymers of methacrylic acid esters, e.g. PMMA, i.e. polymethylmethacrylate ~~(as such C08L 33/12)~~}
M	B29K 2233/18	· Polymers of nitriles ~~{(as such C08L 33/18)}~~
M	B29K 2233/20	· · PAN, i.e. polyacrylonitrile ~~{(as such C08L 33/20)}~~
M	B29K 2233/26	· {Polymers of acrylamide or methacrylamide ~~(as such C08L 33/26)~~}

M	**B29K 2235/00**	**Use of polymers of unsaturated polycarboxylic acids {or derivatives thereof} as reinforcement ~~{(as such C08L 35/00)}~~**

M	**B29K 2239/00**	**Use of polymers with unsaturated aliphatic radicals and with a nitrogen or a heterocyclic ring containing nitrogen in a side chain or derivatives thereof, as reinforcement ~~(as such C08L 39/00)~~**
M	B29K 2239/06	· Polymers of N-vinyl-pyrrolidones ~~(as such C08L 39/06)~~

M	B29K 2239/08	· Polymers of vinyl-pyridine ~~(as such C08L 39/08)~~
M	**B29K 2245/00**	**Use of polymers of unsaturated cyclic compounds having no unsaturated aliphatic groups in a side-chain, e.g. coumarone-indene resins {or derivatives thereof }, as reinforcement ~~{(as such C08L 45/00)}~~**
M	**B29K 2249/00**	**Use of polyacetylene or cyanic ester resins, i.e. polymers having one or more carbon-to carbon triple bonds or derivatives thereof, as reinforcement ~~(as such C08L 49/00)~~**
M	**B29K 2255/00**	**Use of specific polymers obtained by polymerisation reactions only involving carbon-to-carbon unsaturated bonds, not provided for in a single one of main groups {B29K 2223/00 - {B29K 2249/00}, e.g. having a vinyl group}, as reinforcement ~~{(as such C08L 55/00)}~~**
M	B29K 2255/02	· ABS polymers, i.e. acrylonitrile-butadiene-styrene polymers ~~{(as such C08L 55/02)}~~
M	**B29K 2259/00**	**Use of polyacetals {, e.g. POM, i.e. polyoxymethylene *or derivatives thereof}, as reinforcement*; ~~or derivatives thereof}, as reinforcement {(as such C08L 59/00)}~~**
M	**B29K 2261/00**	**Use of condensation polymers of aldehydes or ketones {or derivatives thereof}, as reinforcement ~~{(as such C08L 61/00)}~~**
M	B29K 2261/04	· Phenoplasts ~~{(as such C08L 61/04)}~~
M	B29K 2261/20	· Aminoplasts ~~{(as such C08L 61/20)}~~
M	**B29K 2263/00**	**Use of {EP, i.e.} epoxy resins {or derivatives thereof} as reinforcement ~~{(as such C08L 63/00)}~~**
M	**B29K 2265/00**	**Use of polyphenylenes *or polyxylylenes, as reinforcement*~~(as such C08L 65/02)or polyxylylenes (as such C08L 65/04), as reinforcement~~**
M	**B29K 2267/00**	**Use of polyesters {or derivatives thereof} as reinforcement ~~{(as such C08L 67/00)}~~**
M	B29K 2267/04	· {Polyesters derived from hydroxycarboxylic acids ~~(as such C08L 67/04)~~}
M	B29K 2267/06	· {Unsaturated polyesters ~~(as such C08L 67/06)~~}
M	**B29K 2269/00**	**Use of {PC, i.e.} polycarbonates {or derivatives thereof} as reinforcement ~~{(as such C08L 69/00)}~~**
M	**B29K 2271/00**	**Use of polyethers~~,~~ {*,* e.g. PEEK, i.e. polyether-etherketone or PEK, i.e. polyetherketone or derivatives thereof}*,}* as reinforcement ~~{(as such C08L 71/00)}~~**
M	B29K 2271/02	· {Polyalkylene oxides, e.g. PEO, i.e. polyethylene oxide or derivatives thereof ~~(as such C08L 71/02)~~}
M	B29K 2271/12	· {PPO, i.e. polyphenylene oxide ~~(as such C08L 71/12)~~; PPE, i.e. polyphenylene ether}
M	**B29K 2273/00**	**Use of other polymers having oxygen as the only hetero atom in the main chain, as reinforcement ~~{(as such C08L 73/00)}~~**
M	**B29K 2275/00**	**Use of {PU, i.e.} polyureas or polyurethanes {or derivatives thereof}*,}* as reinforcement ~~{(as such C08L 75/00)}~~**
M	B29K 2275/02	· {Polyureas ~~{(as such C08L 75/02)}~~}
M	**B29K 2277/00**	**Use of {PA, i.e.} polyamides, e.g. polyesteramides {or derivatives thereof}*,}* as reinforcement ~~{(as such C08L 77/00)}~~**
M	B29K 2277/10	· {Aromatic polyamides ([Polyaramides]) or derivatives thereof ~~(as such C08L 77/10)~~}

M	**B29K 2279/00**	**Use of polymers having nitrogen, with or without oxygen~~,~~ or carbon only, in the main chain {not provided for in groups B29K 2261/00 - B29K 2277/00~~}~~,*}* as reinforcement** ~~{(as such C08L 79/00)}~~
M	B29K 2279/08	· {PI, i.e. polyimides or derivatives thereof ~~(as such C08L 79/08)~~}
M	B29K 2279/085	· · {Thermoplastic polyimides, e.g. polyesterimides, ~~polyetherimides~~ [PEI], *i.e. polyetherimides, or* polyamideimides; Derivatives thereof}
M	**B29K 2281/00**	**Use of polymers having sulfur, with or without nitrogen, oxygen~~,~~ or carbon only, in the main chain, as reinforcement** ~~{(as such C08L 81/00)}~~
M	B29K 2281/04	· {Polysulfides, e.g. PPS, i.e. polyphenylene sulfide*,* or derivatives thereof ~~(as such C08L 81/04)~~}
M	B29K 2281/06	· {PSU, i.e. polysulfones *or derivatives thereof*; PES, i.e. polyethersulfones*,* or derivatives thereof ~~(as such C08L 81/06)~~}
M	**B29K 2283/00**	**Use of polymers having silicon, with or without sulfur, nitrogen, oxygen~~,~~ or carbon only, in the main chain, as reinforcement** ~~{(as such C08L 83/00)}~~
M	B29K 2283/005	· {~~Liquid Silicone Rubbers [LSR]~~ *LSR, i.e. liquid silicone rubbers,* or derivatives thereof}
M	**B29K 2285/00**	**Use of polymers having other elements {than silicon, sulfur, nitrogen, oxygen~~, and~~ *or* carbon} *only* in the main chain, as reinforcement** ~~{(as such C08L 85/00)}~~
M	**B29K 2286/00**	**Use of specific polymers obtained by polycondensation or polyaddition, not provided for in a single one of main groups *{*B29K 2259/00 - B29K 2285/00,*}* as reinforcement**
M	**B29K 2289/00**	**Use of proteins, e.g. casein, gelatine or derivatives thereof, as reinforcement** ~~(as such C08L 89/00)~~
M	**B29K 2291/00**	**Use of waxes as reinforcement** ~~{(as such C08L 91/06)}~~
M	**B29K 2293/00**	~~**Use of natural resins (as such C08L 93/00), e.g. shellac (as such C08L 93/02)**~~***Use of natural resins, e.g. shellac,* or derivatives thereof, as reinforcement (B29K 2201/00, B29K 2203/00, B29K 2205/00, B29K 2207/00 ~~and~~ *,* B29K 2289/00 take precedence)**
M	**B29K 2295/00**	**Use of bituminous materials, as reinforcement** ~~{(as such C08L 95/00)}~~
M	**B29K 2296/00**	**Use of specified macromolecular materials not provided for in a single one of main groups *{*B29K 2201/00 - B29K 2295/00,*}* as reinforcement**
M	**B29K 2301/00**	**Use of unspecified macromolecular compounds as reinforcement (~~unspecified rubbers B29K 2221/00~~ *use of unspecified rubbers {B29K 2221/00})*~~{(as such C08L 101/00)}~~**
U	**B29K 2305/00**	**Use of metals, their alloys or their compounds, as reinforcement**
		NOTE
		Alloys or compounds of specified metals are indexed with the same code as the specified metals.
U	B29K 2305/08	· Transition metals
M	B29K 2305/14	· · {Noble metals, e.g. ~~Silver~~*silver*, ~~Gold, Platinum~~*gold or platinum*}
U	**B29K 2311/00**	**Use of natural products or their composites, not provided for in groups B29K 2201/00 - B29K 2309/00, as reinforcement**
M	B29K 2311/06	· Bone, horn~~,~~ *or* ivory
M	B29K 2311/10	· Natural fibres, e.g. wool~~,~~ *or* cotton

M	B29K 2311/14	· Wood, e.g. woodboard~~, or~~ fibreboard
M	**B29K 2313/00**	~~**Textile**~~ ***Use of textile*** **products~~, or~~ fabrics** ***as reinforcement*** **(**B29K 2105/06 **takes precedence)**
M	**B29K 2401/00**	**Use of cellulose, modified cellulose or cellulose derivatives, e.g. viscose, as filler** ~~**{(as such C08L 1/00)}**~~

~~NOTE~~
~~Copolymers are indexed with the same indexing code as the majority polymers~~

M	B29K 2401/08	· {Cellulose derivatives ~~(as such C08L 1/08)~~}
M	B29K 2401/12	· · {Cellulose acetate ~~(as such C08L 1/12)~~}
M	B29K 2401/14	· · {Cellulose acetate-butyrate ~~(as such C08L 1/14)~~}
M	B29K 2401/18	· · {Cellulose nitrate ~~(as such C08L 1/18)~~}
M	**B29K 2403/00**	**Use of {starch or derivatives as filler ~~(as such C08L 3/00)}~~**
M	**B29K 2405/00**	~~**Polysaccharides**~~ ***Use of polysaccharides*** **or derivatives** ***as filler***~~**(as such C08L 5/00)**~~
M	**B29K 2407/00**	**Use of natural rubber as filler ~~{(as such C08L 7/00)}~~**
M	**B29K 2409/00**	**Use of rubber derived from conjugated dienes~~,~~ as filler ~~{(as such C08L 9/00)}~~**
M	B29K 2409/06	· ~~{SBR}~~*SB polymers*, i.e. butadiene-styrene ~~{rubbers~~ *polymers*~~(as such C08L 9/06)}~~
M	**B29K 2411/00**	**Use of {rubber derived from chloroprene as filler ~~(as such C08L 11/00)}~~**
M	**B29K 2419/00**	**Use of rubber not provided for in a single one of main groups {**B29K 2407/00 **- {**B29K 2411/00**}, as filler**
M	**B29K 2421/00**	**Use of {unspecified rubbers as filler ~~(as such C08L 21/00)}~~**
M	**B29K 2423/00**	**Use of polyalkenes {or derivatives thereof} as filler ~~{(as such C08L 23/00)}~~**
M	B29K 2423/04	· {Polymers of ethylene ~~(as such C08L 23/04)~~}
M	B29K 2423/06	· · {PE, i.e. polyethylene ~~(as such C08L 23/06)~~}
M	B29K 2423/08	· · {Use of copolymers of ethylene as filler (~~as such C08L 23/08;~~ B29K 2423/16 takes precedence)}
M	B29K 2423/10	· {Polymers of propylene ~~(as such C08L 23/10)~~}
M	B29K 2423/12	· · {PP, i.e. polypropylene ~~(as such C08L 23/12)~~}
M	B29K 2423/14	· · {Copolymers of polypropylene (~~as such C08L 23/14;~~ B29K 2423/16 takes precedence)}
M	B29K 2423/16	· {EPM, i.e. ethylene-propylene copolymers; EPDM, i.e. ethylene-propylene-diene copolymers; EPT, i.e. ethylene-propylene terpolymers ~~(as such C08L 23/16)~~}
M	B29K 2423/18	· {Polymers of hydrocarbons having four or more carbon atoms, e.g. polymers of butylene ~~(, e~~.g. PB, i.e. polybutylene) ~~(as such C08L 23/18)~~}
M	B29K 2423/22	· · {Copolymers of isobutene, e.g. butyl rubber ~~(as such C08L 23/22)~~}
M	B29K 2423/38	· {Polymers of cycloalkenes, e.g. norbornene~~, or~~ cyclopentene}
M	**B29K 2425/00**	**Use of polymers of vinyl-aromatic compounds {or derivatives thereof} as filler ~~{(as such C08L 25/00)}~~**
M	B29K 2425/04	· {Polymers of styrene ~~(as such C08L 25/04)~~}
M	B29K 2425/06	· · {PS, i.e. polystyrene ~~(as such C08L 25/06)~~}

M	B29K 2425/08	· · {Copolymers of styrene, e.g. AS or SAN, i.e. acrylonitrile styrene (~~as such C08L 25/08;~~ B29K 2455/02 takes precedence)}
M	**B29K 2427/00**	**Use of polyvinylhalogenides {or derivatives thereof} as filler ~~{(as such C08L 27/00)}~~**
M	B29K 2427/06	· PVC, i.e. polyvinylchloride ~~{(as such C08L 27/06)}~~
M	B29K 2427/08	· {PVDC, i.e. polyvinylidene chloride ~~(as such C08L 27/08)~~}
M	B29K 2427/12	· containing fluorine ~~{(as such C08L 27/12)}~~
M	B29K 2427/14	· · {PVF, i.e. polyvinyl fluoride ~~(as such C08L 27/14)~~}
M	B29K 2427/16	· · {PVDF, i.e. polyvinylidene fluoride ~~(as such C08L 27/16)~~}
M	B29K 2427/18	· · ~~PTFE, i.e. polytetrafluorethene {(as such C08L 27/18)~~*PTFE*, *i.e. polytetrafluorethene {,* e.g. ePTFE, i.e. expanded polytetrafluorethene~~, Gore Tex (R)~~}
M	**B29K 2429/00**	**Use of polyvinylalcohols, polyvinylethers, polyvinylaldehydes, polyvinylketones or polyvinylketals {or derivatives thereof},*}* as filler ~~{(as such C08L 29/00)}~~**
M	B29K 2429/04	· {PVOH, i.e. polyvinyl alcohol (~~as such C08L 29/04;~~ B29K 2431/04 takes precedence)}
M	**B29K 2431/00**	**Use of polyvinylesters {or derivatives thereof} as filler ~~{(as such C08L 31/00)}~~**
M	B29K 2431/04	· {Polymers of vinyl acetate, e.g. PVAc, i.e. polyvinyl acetate ~~(as such C08L 31/04)~~}
M	**B29K 2433/00**	**Use of polymers of unsaturated acids or derivatives thereof*,* as filler ~~{(as such C08L 33/00)}~~ (B29K 2435/00 takes precedence)**
M	B29K 2433/04	· Polymers of esters ~~{(as such C08L 33/04)}~~
M	B29K 2433/08	· · {Polymers of acrylic acid esters, e.g. PMA, i.e. polymethylacrylate ~~(as such C08L 33/08)~~}
M	B29K 2433/12	· · {Polymers of methacrylic acid esters, e.g. PMMA, i.e. polymethylmethacrylate ~~(as such C08L 33/12)~~}
M	B29K 2433/18	· Polymers of nitriles ~~{(as such C08L 33/18)}~~
M	B29K 2433/20	· · PAN, i.e. polyacrylonitrile ~~{(as such C08L 33/20)}~~
M	**B29K 2435/00**	**Use of polymers of unsaturated polycarboxylic acids {or derivatives thereof} as filler ~~{(as such C08L 35/00)}~~**
M	**B29K 2439/00**	**Use of polymers with unsaturated aliphatic radicals and with a nitrogen or a heterocyclic ring containing nitrogen in a side chain or derivatives thereof, as filler ~~(as such C08L 39/00)~~**
M	B29K 2439/06	· Polymers of N-vinyl-pyrrolidones ~~(as such C08L 39/06)~~
M	B29K 2439/08	· Polymers of vinyl-pyridine ~~(as such C08L 39/08)~~
M	**B29K 2445/00**	**Use of polymers of unsaturated cyclic compounds having no unsaturated aliphatic groups in a side-chain, e.g. coumarone-indene resins {or derivatives thereof}, as filler ~~{(as such C08L 45/00)}~~**
M	**B29K 2449/00**	**Use of polyacetylene or cyanic ester resins, i.e. polymers having one or more carbon-to~~ -~~carbon triple bonds or derivatives thereof, as filler ~~(as such C08L 49/00)~~**
M	**B29K 2455/00**	**Use of specific polymers obtained by polymerisation reactions only involving carbon-to-carbon unsaturated bonds, not provided for in a single one of main groups ~~B29K 2023/00~~*{B29K 2423/00* - *{B29K 2449/00*~~B29K49/00~~, e.g. having a vinyl group}, as filler ~~{(as such C08L 55/00)}~~**

M	B29K 2455/02	· ABS polymers, i.e. acrylonitrile-butadiene-styrene polymers ~~{(as such C08L 55/02)}~~
M	**B29K 2459/00**	**Use of polyacetals {, e.g. POM, i.e. polyoxymethylene *or derivatives thereof}, as filler*~~; or derivatives thereof}, as filler {(as such C08L 59/00)}~~**
M	**B29K 2461/00**	**Use of condensation polymers of aldehydes or ketones {or derivatives thereof}, as filler ~~{(as such C08L 61/00)}~~**
M	B29K 2461/04	· Phenoplasts ~~{(as such C08L 61/04)}~~
M	B29K 2461/20	· Aminoplasts ~~{(as such C08L 61/20)}~~
M	**B29K 2463/00**	**Use of {EP, i.e.} epoxy resins {or derivatives thereof} as filler ~~{(as such C08L 63/00)}~~**
M	**B29K 2465/00**	**Use of polyphenylenes *or polyxylylenes as filler*~~(as such C08L 65/02)or polyxylylenes (as such C08L 65/04), as filler~~**
M	**B29K 2467/00**	**Use of polyesters {or derivatives thereof} as filler ~~{(as such C08L 67/00)}~~**
M	B29K 2467/003	· {PET, i.e. ~~poylethylene~~*polyethylene* terephthalate}
M	B29K 2467/04	· {Polyesters derived from hydroxycarboxylic acids ~~(as such C08L 67/04)~~}
M	B29K 2467/06	· {Unsaturated polyesters ~~(as such C08L 67/06)~~}
M	**B29K 2469/00**	**Use of {PC, i.e.} polycarbonates {or derivatives thereof} as filler ~~{(as such C08L 69/00)}~~**
M	**B29K 2471/00**	**Use of polyethers~~,~~ {*,* e.g. PEEK, i.e. polyether-etherketone or PEK, i.e. polyetherketone or derivatives thereof}*,}* as filler ~~{(as such C08L 71/00)}~~**
M	B29K 2471/02	· {Polyalkylene oxides, e.g. PEO, i.e. polyethylene oxide or derivatives thereof ~~(as such C08L 71/02)~~}
M	B29K 2471/12	· {PPO, i.e. polyphenylene oxide ~~(as such C08L 71/12)~~; PPE, i.e. polyphenylene ether}
M	**B29K 2473/00**	**Use of other polymers having oxygen as the only hetero atom in the main chain, as filler ~~{(as such C08L 73/00)}~~**
M	**B29K 2475/00**	**Use of {PU, i.e.} polyureas or polyurethanes {or derivatives thereof}*,}* as filler ~~{(as such C08L 75/00)}~~**
M	B29K 2475/02	· {Polyureas ~~{(as such C08L 75/02)}~~}
M	**B29K 2477/00**	**Use of {PA, i.e.} polyamides, e.g. polyesteramides {or derivatives thereof }, as filler ~~{(as such C08L 77/00)}~~**
M	B29K 2477/10	· {Aromatic polyamides ~~(Polyaramides)~~*[polyaramides]* or derivatives thereof ~~(as such C08L 77/10)~~}
M	**B29K 2479/00**	**Use of polymers having nitrogen, with or without oxygen~~,~~ or carbon only, in the main chain {not provided for in groups B29K 2461/00 - B29K 2477/00}, as filler ~~{(as such C08L 79/00)}~~**
M	B29K 2479/08	· {PI, i.e. polyimides or derivatives thereof ~~(as such C08L 79/08)~~}
M	B29K 2479/085	· · {Thermoplastic polyimides, e.g. polyesterimides, ~~polyetherimides~~ [PEI], *i.e. polyetherimides, or* polyamideimides; Derivatives thereof}
M	**B29K 2481/00**	**Use of polymers having sulfur, with or without nitrogen, oxygen~~,~~ or carbon only, in the main chain, as filler ~~{(as such C08L 81/00)}~~**
M	B29K 2481/04	· {Polysulfides, e.g. PPS, i.e. polyphenylene sulfide or derivatives thereof ~~(as such C08L 81/04)~~}
M	B29K 2481/06	· {PSU, i.e. polysulfones; PES, i.e. polyethersulfones or derivatives thereof ~~(as such C08L 81/06)~~}

M **B29K 2483/00** **Use of polymers having silicon, with or without sulfur, nitrogen, oxygen, or carbon only, in the main chain, as filler {(as such C08L 83/00)}**

M B29K 2483/005 · {Liquid Silicone Rubbers [LSR] *LSR, i.e. liquid silicone rubbers* or derivatives thereof}

M **B29K 2485/00** **Use of polymers having other elements {than silicon, {sulfur,} nitrogen, oxygen, and or carbon} only in the main chain, as filler {(as such C08L 85/00)}**

M **B29K 2486/00** **Use of specific polymers obtained by polycondensation or polyaddition, not provided for in a single one of main groups {B29K 2459/00 - B29K 2485/00,} as filler**

M **B29K 2489/00** **Use of proteins, e.g. casein, or gelatine or derivatives thereof, as filler (as such C08L 89/00)**

M **B29K 2491/00** **Use of waxes as filler {(as such C08L 91/06)}**

M **B29K 2493/00** **Use of natural resins (as such C08L 93/00), e.g. shellac (as such C08L 93/02)Use of natural resins, e.g. shellac, or derivatives thereof, as filler (B29K 2401/00, B29K 2403/00, B29K 2405/00, B29K 2407/00 and , B29K 2489/00 take precedence)**

M **B29K 2495/00** **Use of bituminous materials, as filler {(as such C08L 95/00)}**

M **B29K 2496/00** **Use of specified macromolecular materials not provided for in a single one of main groups {B29K 2401/00 - B29K 2495/00,} as filler**

M B29K 2496/02 · Graft polymers (B29K 2455/02 takes precedence)
M B29K 2496/04 · Block polymers (B29K 2455/02 takes precedence)

M **B29K 2501/00** **Use of unspecified macromolecular compounds as filler (unspecified rubbers B29K 2421/00 use of unspecified rubbers {B29K 2421/00}){(as such C08L 101/00)}**

U **B29K 2505/00** **Use of metals, their alloys or their compounds, as filler**

NOTE

Alloys or compounds of specified metals are indexed with the same code as the specified metals.

U B29K 2505/08 · Transition metals
M B29K 2505/14 · · Noble metals, e.g. silver, Gold, Platinum*gold or platinum*

M **B29K 2509/00** **Use of inorganic materials not provided for in groups {B29K 2503/00 - B29K 2507/00,} as filler**

M **B29K 2511/00** **Use of natural products or their composites, not provided for in groups {B29K 2401/00 - B29K 2509/00,} as filler**

M B29K 2511/06 · Bone, horn, or ivory
M B29K 2511/10 · Natural fibres, e.g. wool, or cotton
M B29K 2511/14 · Wood, e.g. woodboard, or fibreboard

M **B29K 2601/00** **Use of cellulose, modified cellulose or cellulose derivatives, e.g. viscose, for preformed parts, e.g. inserts {for inserts(as such C08L 1/00)}**

NOTE

Copolymers are indexed with the same indexing code as the majority polymers

M B29K 2601/08 · {Cellulose derivatives (as such C08L 1/08)}
M B29K 2601/12 · · {Cellulose acetate (as such C08L 1/12)}

M	B29K 2601/14	· · {Cellulose acetate-butyrate ~~(as such C08L 1/14)~~}
M	B29K 2601/18	· · {Cellulose nitrate ~~(as such C08L 1/18)~~}
M	**B29K 2603/00**	**Use of {starch or derivatives for preformed parts, e.g. ~~inserts~~ *for inserts* ~~(as such C08L 3/00)~~}**
M	**B29K 2605/00**	**~~Polysaccharides~~ *Use of polysaccharides* or derivatives *for preformed parts, e.g. for inserts* ~~(as such C08L 5/00)~~**
M	**B29K 2607/00**	**Use of natural rubber for preformed parts, e.g. ~~inserts~~ {*for inserts* ~~(as such C08L 7/00)~~}**
M	**B29K 2609/00**	**Use of rubber derived from conjugated dienes for preformed parts, e.g. ~~inserts~~ {*for inserts* ~~(as such C08L 9/00)~~}**
M	B29K 2609/06	· ~~{SBR}~~*SB polymers*, i.e. butadiene-styrene ~~{rubbers~~ *polymers* ~~(as such C08L 9/06)}~~
M	**B29K 2611/00**	**Use of {rubber derived from chloroprene for preformed parts, e.g. ~~inserts~~ *for inserts* ~~(as such C08L 11/00)~~}**
M	**B29K 2619/00**	**Use of rubber not provided for in a single one of main groups {B29K 2607/00 - {B29K 2611/00}~~,~~} for preformed parts, e.g. *for* inserts**
M	**B29K 2621/00**	**Use of {unspecified rubbers for preformed parts, e.g. ~~inserts~~ *for inserts* ~~(as such C08L 21/00)~~}**
M	**B29K 2623/00**	**Use of polyalkenes {or derivatives thereof} for preformed parts, e.g. ~~inserts~~ {*for inserts* ~~(as such C08L 23/00)~~}**
M	B29K 2623/04	· {Polymers of ethylene ~~(as such C08L 23/04)~~}
M	B29K 2623/06	· · {PE, i.e. polyethylene ~~(as such C08L 23/06)~~}
M	B29K 2623/08	· · {~~Use~~*Copolymers* of ~~copolymers of~~ ethylene ~~for preformed parts, e.g. inserts~~ (~~as such C08L 23/08;~~ B29K 2623/16 takes precedence)}
M	B29K 2623/10	· {Polymers of propylene ~~(as such C08L 23/10)~~}
M	B29K 2623/12	· · {PP, i.e. polypropylene ~~(as such C08L 23/12)~~}
M	B29K 2623/14	· · {Copolymers of polypropylene (~~as such C08L 23/14;~~ B29K 2623/16 takes precedence)}
M	B29K 2623/16	· {EPM, i.e. ethylene-propylene copolymers; EPDM, i.e. ethylene-propylene-diene copolymers; EPT, i.e. ethylene-propylene terpolymers ~~(as such C08L 23/16)~~}
M	B29K 2623/18	· {Polymers of hydrocarbons having four or more carbon atoms, e.g. polymers of butylene ~~(,~~ e.g. PB, i.e. polybutylene~~)~~ ~~(as such C08L 23/18)~~}
M	B29K 2623/22	· · {Copolymers of isobutene, e.g. butyl rubber ~~(as such C08L 23/22)~~}
M	B29K 2623/38	· {Polymers of cycloalkenes, e.g. norbornene~~,~~ *or* cyclopentene}
M	**B29K 2625/00**	**Use of polymers of vinyl-aromatic compounds {or derivatives thereof} for preformed parts, e.g. ~~inserts~~ {*for inserts* ~~(as such C08L 25/00)~~}**
M	B29K 2625/04	· {Polymers of styrene ~~(as such C08L 25/04)~~}
M	B29K 2625/06	· · {PS, i.e. polystyrene ~~(as such C08L 25/06)~~}
M	B29K 2625/08	· · {Copolymers of styrene, e.g. AS or SAN, i.e. acrylonitrile styrene (~~as such C08L 25/08;~~ B29K 2655/02 takes precedence)}
M	**B29K 2627/00**	**Use of polyvinylhalogenides {or derivatives thereof} for preformed parts, e.g. ~~inserts~~ {*for inserts* ~~(as such C08L 27/00)~~}**
M	B29K 2627/06	· PVC, i.e. polyvinylchloride ~~{(as such C08L 27/06)}~~
M	B29K 2627/08	· {PVDC, i.e. polyvinylidene chloride ~~(as such C08L 27/08)~~}

M	B29K 2627/12	· containing fluorine ~~{(as such C08L 27/12)}~~
M	B29K 2627/14	· · {PVF, i.e. polyvinyl fluoride ~~(as such C08L 27/14)~~}
M	B29K 2627/16	· · {PVDF, i.e. polyvinylidene fluoride ~~(as such C08L 27/16)~~}
M	B29K 2627/18	· · ~~PTFE, i.e. polytetrafluorethene {(as such C08L 27/18)~~ *PTFE, i.e. polytetrafluorethene {,* e.g. ePTFE, i.e. expanded polytetrafluorethene~~, Gore Tex (R)~~}

M　B29K 2629/00　Use of polyvinylalcohols, polyvinylethers, polyvinylaldehydes, polyvinylketones or polyvinylketals {or derivatives thereof}, for preformed parts, e.g. ~~inserts {~~*for inserts*~~(as such C08L 29/00)}~~

M	B29K 2629/04	· {PVOH, i.e. polyvinyl alcohol (~~as such C08L 29/04;~~ B29K 2631/04 takes precedence)}

M　B29K 2631/00　Use of polyvinylesters {or derivatives thereof} for preformed parts, e.g. ~~inserts {~~*for inserts*~~(as such C08L 31/00)}~~

M	B29K 2631/04	· {Polymers of vinyl acetate, e.g. PVAc, i.e. polyvinyl acetate ~~(as such C08L 31/04)~~}

M　B29K 2633/00　Use of polymers of unsaturated acids or derivatives thereof for preformed parts, e.g. *for* inserts ~~{(as such C08L 33/00)}~~ ({B29K 2635/00} takes precedence)

M	B29K 2633/04	· Polymers of esters ~~{(as such C08L 33/04)}~~
M	B29K 2633/08	· · {Polymers of acrylic acid esters, e.g. PMA, i.e. polymethylacrylate ~~(as such C08L 33/08)~~}
M	B29K 2633/12	· · {Polymers of methacrylic acid esters, e.g. PMMA, i.e. polymethylmethacrylate ~~(as such C08L 33/12)~~}
M	B29K 2633/18	· Polymers of nitriles ~~{(as such C08L 33/18)}~~
M	B29K 2633/20	· · PAN, i.e. polyacrylonitrile ~~{(as such C08L 33/20)}~~
M	B29K 2633/26	· {Polymers of acrylamide or methacrylamide ~~(as such C08L 33/26)~~}

M　B29K 2635/00　Use of polymers of unsaturated polycarboxylic acids {or derivatives thereof} for preformed parts, e.g. ~~inserts {~~*for inserts*~~(as such C08L 35/00)}~~

M　B29K 2639/00　Use of polymers with unsaturated aliphatic radicals and with a nitrogen or a heterocyclic ring containing nitrogen in a side chain or derivatives thereof, for preformed parts, e.g. ~~inserts~~ *for inserts*~~(as such C08L 39/00)~~

M	B29K 2639/06	· Polymers of N-vinyl-pyrrolidones ~~(as such C08L 39/06)~~
M	B29K 2639/08	· Polymers of vinyl-pyridine ~~(as such C08L 39/08)~~

M　B29K 2645/00　Use of polymers of unsaturated cyclic compounds having no unsaturated aliphatic groups in a side-chain, e.g. coumarone-indene resins {or derivatives thereof}, for preformed parts, e.g. ~~inserts {~~*for inserts*~~(as such C08L 45/00)}~~

M　B29K 2649/00　Use of polyacetylene or cyanic ester resins, i.e. polymers having one or more carbon-to carbon triple bonds or derivatives thereof, for preformed parts, e.g. ~~inserts~~ *for inserts*~~(as such C08L 49/00)~~

M　B29K 2655/00　Use of specific polymers obtained by polymerisation reactions only involving carbon-to-carbon unsaturated bonds, not provided for in a single one of main groups {B29K 2623/00 - {B29K 2649/00, e.g. having a vinyl group},} for preformed parts, e.g. ~~inserts {~~*for inserts*~~(as such C08L 55/00)}~~

M	B29K 2655/02	· ABS polymers, i.e. acrylonitrile-butadiene-styrene polymers ~~{(as such C08L 55/02)}~~

M	B29K 2659/00	**Use of polyacetals {, e.g. POM, i.e. polyoxymethylene*, or derivatives thereof} for preformed parts, e.g. for inserts*; ~~or derivatives thereof}, for preformed parts, e.g. inserts {~~(as such C08L 59/00)}**
M	B29K 2661/00	**Use of condensation polymers of aldehydes or ketones {or derivatives thereof}, for preformed parts, e.g. ~~inserts {~~*for inserts*~~(as such C08L 61/00)}~~**
M	B29K 2661/04	· Phenoplasts ~~{(as such C08L 61/04)}~~
M	B29K 2661/20	· Aminoplasts ~~{(as such C08L 61/20)}~~
M	B29K 2663/00	**Use of {EP, i.e.} epoxy resins {or derivatives thereof} for preformed parts, e.g. ~~inserts {~~*for inserts*~~(as such C08L 63/00)}~~**
M	B29K 2665/00	**~~Use of polyphenylenes (as such C08L 65/02)or polyxylylenes (as such C08L 65/04)~~*Use of polyphenylenes or polyxylylenes*, for preformed parts, e.g. *for* inserts**
M	B29K 2667/00	**Use of polyesters {or derivatives thereof} for preformed parts, e.g. ~~inserts {~~*for inserts*~~(as such C08L 67/00)}~~**
M	B29K 2667/04	· {Polyesters derived from hydroxycarboxylic acids ~~(as such C08L 67/04)~~}
M	B29K 2667/06	· {Unsaturated polyesters ~~(as such C08L 67/06)~~}
M	B29K 2669/00	**Use of {PC, i.e.} polycarbonates {or derivatives thereof} for preformed parts, e.g. ~~inserts {~~*for inserts*~~(as such C08L 69/00)}~~**
M	B29K 2671/00	**Use of polyethers~~,~~ {*,* e.g. PEEK, i.e. polyether-etherketone or PEK, i.e. polyetherketone*,* or derivatives thereof}*,}* for preformed parts, e.g. ~~inserts {~~*for inserts*~~(as such C08L 71/00)}~~**
M	B29K 2671/02	· {Polyalkylene oxides, e.g. PEO, i.e. polyethylene oxide*,* or derivatives thereof ~~(as such C08L 71/02)~~}
M	B29K 2671/12	· {PPO, i.e. polyphenylene oxide ~~(as such C08L 71/12)~~; PPE, i.e. polyphenylene ether}
M	B29K 2673/00	**Use of other polymers having oxygen as the only hetero atom in the main chain, for preformed parts, e.g. ~~inserts {~~*for inserts*~~(as such C08L 73/00)}~~**
M	B29K 2675/00	**Use of {PU, i.e.} polyureas or polyurethanes {or derivatives thereof}*,}* for preformed parts, e.g. ~~inserts {~~*for inserts*~~(as such C08L 75/00)}~~**
M	B29K 2675/02	· {Polyureas ~~{(as such C08L 75/02)}~~}
M	B29K 2677/00	**Use of {PA, i.e.} polyamides, e.g. polyesteramides {or derivatives thereof}*,}* for preformed parts, e.g. ~~inserts {~~*for inserts*~~(as such C08L 77/00)}~~**
M	B29K 2677/10	· {Aromatic polyamides ~~(Polyaramides)~~*[polyaramides]* or derivatives thereof ~~(as such C08L 77/10)~~}
M	B29K 2679/00	**Use of polymers having nitrogen, with or without oxygen~~,~~ or carbon only, in the main chain {not provided for in groups B29K 2661/00 - B29K 2677/00}, for preformed parts, e.g. ~~inserts {~~*for inserts*~~(as such C08L 79/00)}~~**
M	B29K 2679/08	· {PI, i.e. polyimides or derivatives thereof ~~(as such C08L 79/08)~~}
M	B29K 2679/085	· · {Thermoplastic polyimides, e.g. polyesterimides, *PEI, i.e.* polyetherimides ~~[PEI],~~*or* polyamideimides; Derivatives thereof}
M	B29K 2681/00	**Use of polymers having sulfur, with or without nitrogen, oxygen~~,~~ or carbon only, in the main chain, for preformed parts, e.g. ~~inserts {~~*for inserts*~~(as such C08L 81/00)}~~**
M	B29K 2681/04	· {Polysulfides, e.g. PPS, i.e. polyphenylene sulfide*,* or derivatives thereof ~~(as such C08L 81/04)~~}

M	B29K 2681/06	· {PSU, i.e. polysulfones; PES, i.e. polyethersulfones or derivatives thereof ~~(as such C08L 81/06)~~}
M	**B29K 2683/00**	**Use of polymers having silicon, with or without sulfur, nitrogen, oxygen~~,~~ or carbon only, in the main chain, for preformed parts, e.g.** ~~**inserts**~~ **{*for inserts*(as such C08L 83/00)}**
M	B29K 2683/005	· {~~Liquid Silicone Rubbers [LSR]~~ *LSR, i.e. liquid silicone rubbers* or derivatives thereof}
M	**B29K 2685/00**	**Use of polymers having ~~other~~ elements {*other* than silicon, {sulfur,} nitrogen, oxygen~~, and~~ *or* carbon}~~ only~~ in the main chain, for preformed parts, e.g.** ~~**inserts**~~ **{*for inserts*(as such C08L 85/00)}**
M	**B29K 2686/00**	**Use of specific polymers obtained by polycondensation or polyaddition, not provided for in a single one of main groups {B29K 2659/00 - B29K 2685/00,}** for preformed parts, e.g. *for* inserts
M	**B29K 2689/00**	**Use of proteins, e.g. casein, gelatine or derivatives thereof, for preformed parts, e.g.** ~~**inserts**~~ ***for inserts*(as such C08L 89/00)**
M	**B29K 2691/00**	**Use of waxes for preformed parts, e.g.** ~~**inserts**~~ **{*for inserts*(as such C08L 91/06)}**
M	**B29K 2693/00**	~~**Use of natural resins (as such C08L 93/00), e.g. shellac (as such C08L 93/02)**~~ ***Use of natural resins, e.g. shellac,*** **or derivatives thereof, for preformed parts, e.g.** *for* **inserts (B29K 2601/00, B29K 2603/00, B29K 2605/00, B29K 2607/00** ~~**and**~~ **, B29K 2689/00 take precedence)**
M	**B29K 2695/00**	**Use of bituminous materials, for preformed parts, e.g.** ~~**inserts**~~ **{*for inserts*(as such C08L 95/00)}**
M	**B29K 2696/00**	**Use of specified macromolecular materials not provided for in a single one of main groups B29K 2601/00 ~~-~~ – B29K 2695/00, for preformed parts, e.g. *for* inserts**
M	**B29K 2701/00**	**Use of unspecified macromolecular compounds for preformed parts, e.g. *for* inserts (~~unspecified rubbers B29K 2621/00~~ *use of unspecified rubbers {B29K 2621/00}*)~~{(as such C08L 101/00)}~~**
U	**B29K 2705/00**	**Use of metals, their alloys or their compounds, for preformed parts, e.g. for inserts**
		NOTE
		Alloys or compounds of specified metals are indexed with the same code as the specified metals.
U	B29K 2705/08	· Transition metals
M	B29K 2705/14	· · Noble metals, e.g. silver, ~~Gold, Platinum~~*gold or platinum*
M	**B29K 2709/00**	**Use of inorganic materials not provided for in groups ~~B29K 2603/00~~{*B29K 2703/00* - ~~B29K 2607/00~~*B29K 2707/00*}, for preformed parts, e.g. for inserts**
M	**B29K 2711/00**	**Use of natural products or their composites, not provided for in groups {B29K 2601/00 - B29K 2709/00,} for preformed parts, e.g. for inserts**
M	B29K 2711/06	· Bone, horn~~,~~ *or* ivory
M	B29K 2711/10	· Natural fibres, e.g. wool~~,~~ *or* cotton
M	B29K 2711/14	· Wood, e.g. woodboard~~,~~ *or* fibreboard
M	**B29K 2713/00**	~~**Textile**~~ ***Use of textile* products *or fabrics for preformed parts*, ~~fabrics~~*e.g. for inserts* (B29K 2105/06 takes precedence)**

M	B29K 2713/02	· coated

> NOTE
> Copolymers are indexed with the same indexing code as the majority polymers

U	**B29K 2715/00**	**Condition, form or state of preformed parts, e.g. inserts**
M	B29K 2715/006	· Glues, *or* adhesives, e.g. hot melts, *or* thermofusible adhesives
M	**B29K 2801/00**	**Use of cellulose, modified cellulose or cellulose derivatives, e.g. viscose, as mould material (as such C08L 1/00)**
M	B29K 2801/08	· Cellulose derivatives (as such C08L 1/08)
M	B29K 2801/12	· · Cellulose acetate (as such C08L 1/12)
M	B29K 2801/14	· · Cellulose acetate-butyrate (as such C08L 1/14)
M	B29K 2801/18	· · Cellulose nitrate (as such C08L 1/18)
M	**B29K 2803/00**	**Use of starch or derivatives as mould material (as such C08L 3/00)**
M	**B29K 2805/00**	**Polysaccharides *Use of polysaccharides* or derivatives *as mould material*(as such C08L 5/00)**
M	**B29K 2807/00**	**Use of natural rubber as mould material (as such C08L 7/00)**
M	**B29K 2809/00**	**Use of rubber derived from conjugated dienes as mould material (as such C08L 9/00)**
M	B29K 2809/06	· {SBR}, i.e. butadiene-styrene {rubbers (as such C08L 9/06)}
M	**B29K 2811/00**	**Use of rubber derived from chloroprene as mould material (as such C08L 11/00)**
M	**B29K 2819/00**	**Use of rubber not provided for in a single one of main groups B29K 2807/00 - B29K 2811/00, as mould material**
M	**B29K 2821/00**	**Use of unspecified rubbers as mould material (as such C08L 21/00)**
M	**B29K 2823/00**	**Use of polyalkenes or derivatives thereof as mould material (as such C08L 23/00)**
M	B29K 2823/04	· Polymers of ethylene (as such C08L 23/04)
M	B29K 2823/06	· · PE, i.e. polyethylene (as such C08L 23/06)
M	B29K 2823/08	· · Use*Copolymers* of copolymers of ethylene as mould material (as such C08L 23/08; B29K 2823/16 takes precedence)
M	B29K 2823/10	· Polymers of propylene (as such C08L 23/10)
M	B29K 2823/12	· · PP, i.e. polypropylene (as such C08L 23/12)
M	B29K 2823/14	· · Copolymers of polypropylene (as such C08L 23/14; B29K 2823/16 takes precedence)
M	B29K 2823/16	· EPM, i.e. ethylene-propylene copolymers; EPDM, i.e. ethylene-propylene-diene copolymers; EPT, i.e. ethylene-propylene terpolymers (as such C08L 23/16)
M	B29K 2823/18	· Polymers of hydrocarbons having four or more carbon atoms, e.g. polymers of butylene (, e.g. PB, i.e. polybutylene) (as such C08L 23/18)
M	B29K 2823/22	· · Copolymers of isobutene, e.g. butyl rubber (as such C08L 23/22)
M	B29K 2823/38	· Polymers of cycloalkenes, e.g. norbornene, *or* cyclopentene
M	**B29K 2825/00**	**Use of polymers of vinyl-aromatic compounds or derivatives thereof as mould material (as such C08L 25/00)**
M	B29K 2825/04	· Polymers of styrene (as such C08L 25/04)
M	B29K 2825/06	· · PS, i.e. polystyrene (as such C08L 25/06)

M	B29K 2825/08	· · Copolymers of styrene, e.g. AS or SAN, i.e. acrylonitrile styrene ~~(as such C08L 25/08; B29K 2855/02 takes precedence)~~
M	**B29K 2827/00**	**Use of polyvinylhalogenides or derivatives thereof as mould material ~~(as such C08L 27/00)~~**
M	B29K 2827/06	· PVC, i.e. polyvinylchloride ~~(as such C08L 27/06)~~
M	B29K 2827/08	· PVDC, i.e. polyvinylidene chloride ~~(as such C08L 27/08)~~
M	B29K 2827/12	· containing fluorine ~~(as such C08L 27/12)~~
M	B29K 2827/14	· · PVF, i.e. polyvinyl fluoride ~~(as such C08L 27/14)~~
M	B29K 2827/16	· · PVDF, i.e. polyvinylidene fluoride ~~(as such C08L 27/16)~~
M	B29K 2827/18	· · ~~PTFE, i.e. polytetrafluorethene (as such C08L 27/18)~~ *PTFE*, *i.e. polytetrafluorethene,* e.g. ePTFE, i.e. expanded polytetrafluorethene~~, Gore Tex (R)~~
M	**B29K 2829/00**	**Use of polyvinylalcohols, polyvinylethers, polyvinylaldehydes, polyvinylketones or polyvinylketals or derivatives thereof, as mould material ~~(as such C08L 29/00)~~**
M	B29K 2829/04	· PVOH, i.e. polyvinyl alcohol (~~as such C08L 29/04;~~ B29K 2831/04 takes precedence)
M	**B29K 2831/00**	**Use of polyvinylesters or derivatives thereof as mould material ~~(as such C08L 31/00)~~**
M	B29K 2831/04	· Polymers of vinyl acetate, e.g. PVAc, i.e. polyvinyl acetate ~~(as such C08L 31/04)~~
M	**B29K 2833/00**	**Use of polymers of unsaturated acids or derivatives thereof as mould material (~~as such C08L 33/00;~~ B29K 2835/00 takes precedence)**
M	B29K 2833/04	· Polymers of esters ~~(as such C08L 33/04)~~
M	B29K 2833/08	· · Polymers of acrylic acid esters, e.g. PMA, i.e. polymethylacrylate ~~(as such C08L 33/08)~~
M	B29K 2833/12	· · Polymers of methacrylic acid esters, e.g. PMMA, i.e. polymethylmethacrylate ~~(as such C08L 33/12)~~
M	B29K 2833/18	· Polymers of nitriles ~~(as such C08L 33/18)~~
M	B29K 2833/20	· · PAN, i.e. polyacrylonitrile ~~(as such C08L 33/20)~~
M	B29K 2833/26	· Polymers of acrylamide or methacrylamide ~~(as such C08L 33/26)~~
M	**B29K 2835/00**	~~**use**~~ ***Use*** **of polymers of unsaturated polycarboxylic acids or derivatives thereof as mould material ~~(as such C08L 35/00)~~**
M	**B29K 2839/00**	**Use of polymers with unsaturated aliphatic radicals and with a nitrogen or a heterocyclic ring containing nitrogen in a side chain or derivatives thereof, as mould material ~~(as such C08L 39/00)~~**
M	B29K 2839/06	· Polymers of N-vinyl-pyrrolidones ~~(as such C08L 39/06)~~
M	B29K 2839/08	· Polymers of vinyl-pyridine ~~(as such C08L 39/08)~~
M	**B29K 2845/00**	**Use of polymers of unsaturated cyclic compounds having no unsaturated aliphatic groups in a side-chain, e.g. coumarone-indene resins or derivatives thereof, as mould material ~~(as such C08L 45/00)~~**
M	**B29K 2849/00**	**Use of polyacetylene or cyanic ester resins, i.e. polymers having one or more carbon-to-~~-~~carbon triple bonds or derivatives thereof, as mould material ~~(as such C08L 49/00)~~**

M   **B29K 2855/00**   **Use of specific polymers obtained by polymerisation reactions only involving carbon-to-carbon unsaturated bonds, not provided for in a single one of main groups B29K 2823/00 - B29K 2849/00, e.g. having a vinyl group, as mould material ~~(as such C08L 55/00)~~**

M   B29K 2855/02   · ABS polymers, i.e. acrylonitrile-butadiene-styrene polymers ~~(as such C08L 55/02)~~

M   **B29K 2859/00**   **Use of polyacetals, e.g. POM, i.e. polyoxymethylene*, or derivatives thereof as mould material*; ~~or derivatives thereof, as mould material (as such C08L 59/00)~~**

M   **B29K 2861/00**   **Use of condensation polymers of aldehydes or ketones or derivatives thereof, as mould material ~~(as such C08L 61/00)~~**

M   M B29K 2861/04   · Phenoplasts ~~(as such C08L 61/04)~~

M   M B29K 2861/20   · Aminoplasts ~~(as such C08L 61/20)~~

M   **B29K 2863/00**   **Use of EP, i.e. epoxy resins or derivatives thereof as mould material ~~(as such C08L 63/00)~~**

M   **B29K 2865/00**   **Use of polyphenylenes *or polyxylylenes as mould material* ~~(as such C08L 65/02)or polyxylylenes (as such C08L 65/04), as mould material~~**

M   **B29K 2867/00**   **Use of polyesters or derivatives thereof as mould material ~~(as such C08L 67/00)~~**

M   B29K 2867/003   · PET, i.e. ~~poylethylene~~*polyethylene* terephthalate

M   B29K 2867/04   · Polyesters derived from hydroxycarboxylic acids ~~(as such C08L 67/04)~~

M   B29K 2867/046   · · PLA, i.e. ~~polylactic~~*, polyactic* acid or ~~polylactide~~*polyactide*

M   B29K 2867/06   · Unsaturated polyesters ~~(as such C08L 67/06)~~

M   **B29K 2869/00**   **Use of PC, i.e. polycarbonates or derivatives thereof as mould material ~~(as such C08L 69/00)~~**

M   **B29K 2871/00**   **{Use of polyethers, e.g. PEEK, i.e. polyether-etherketone or PEK, i.e. polyetherketone or derivatives thereof}, as mould material ~~(as such C08L 71/00)]~~**

M   B29K 2871/02   · Polyalkylene oxides, e.g. PEO, i.e. polyethylene oxide*,* or derivatives thereof ~~(as such C08L 71/02)~~

M   B29K 2871/12   · PPO, i.e. polyphenylene oxide ~~(as such C08L 71/12)~~; PPE, i.e. polyphenylene ether

M   **B29K 2873/00**   **~~use~~*Use* of other polymers having oxygen as the only hetero atom in the main chain, as mould material ~~(as such C08L 73/00)~~**

M   **B29K 2875/00**   **Use of PU, i.e. polyureas or polyurethanes or derivatives thereof, as mould material ~~(as such C08L 75/00)~~**

M   M B29K 2875/02   · Polyureas ~~(as such C08L 75/02)~~

M   **B29K 2877/00**   **{Use of PA, i.e.} polyamides, e.g. polyesteramides or derivatives thereof, as mould material ~~[(as such C08L 77/00)]~~**

M   B29K 2877/10   · Aromatic polyamides ~~(Polyaramides)~~*[polyaramides]* or derivatives thereof ~~(as such C08L 77/10)~~

M   **B29K 2879/00**   **{Use of polymers having nitrogen, with or without oxygen, or carbon only, in the main chain not provided for in groups B29K 2861/00 - B29K 2877/00},as mould material ~~((as such C08L 79/00))~~**

M   M B29K 2879/08   · PI, i.e. polyimides or derivatives thereof ~~(as such C08L 79/08)~~

M	B29K 2879/085	· · Thermoplastic polyimides, e.g. polyesterimides, ~~polyetherimides~~ [PEI], *i.e. polyetherimides, or* polyamideimides; Derivatives thereof
M	**B29K 2881/00**	**Use of polymers having sulfur, with or without nitrogen, oxygen, or carbon only, in the main chain, as mould material ~~(as such C08L 81/00)~~**
M	B29K 2881/04	· Polysulfides, e.g. PPS, i.e. polyphenylene sulfide or derivatives thereof ~~(as such C08L 81/04)~~
M	B29K 2881/06	· PSU, i.e. polysulfones; PES, i.e. polyethersulfones or derivatives thereof ~~(as such C08L 81/06)~~
M	**B29K 2883/00**	**Use of polymers having silicon, with or without sulfur, nitrogen, oxygen, or carbon only, in the main chain, as mould material ~~(as such C08L 83/00)~~**
M	B29K 2883/005	· ~~Liquid Silicone Rubbers [LSR]~~ *LSR, i.e. liquid silicone rubbers,* or derivatives thereof
M	**B29K 2885/00**	**Use of polymers having other elements than silicon, sulfur, nitrogen, oxygen, and carbon in the main chain, as mould material ~~(as such C08L 85/00)~~**
M	**B29K 2889/00**	**Use of proteins, e.g. casein~~,~~ *or* gelatine or derivatives thereof, as mould material ~~(as such C08L 89/00)~~**
M	**B29K 2891/00**	**Use of waxes as mould material ~~(as such C08L 91/06)~~**
M	**B29K 2893/00**	**~~Use of natural resins (as such C08L 93/00), e.g. shellac (as such C08L 93/02)~~*Use of natural resins, e.g. shellac,* or derivatives thereof, as mould material (B29K 2801/00, B29K 2803/00, B29K 2805/00, B29K 2807/00 ~~and~~ , B29K 2889/00 take precedence)**
M	**B29K 2895/00**	**Use of bituminous materials, as mould material ~~(as such C08L 95/00)~~**
M	**B29K 2901/00**	**Use of unspecified macromolecular compounds as mould material (~~unspecified rubbers B29K 2821/00; as such C08L 101/00~~*use of unspecified rubbers B29K 2821/00*)**
U	**B29K 2905/00**	**Use of metals, their alloys or their compounds, as mould material**
		NOTE
		Alloys or compounds of specified metals are indexed with the same code as the specified metals.
U	B29K 2905/08	· Transition metals
M	B29K 2905/12	· · ~~iron~~*Iron*
M	B29K 2905/14	· · Noble metals, e.g. ~~Silver~~*silver*, ~~Gold, Platinum~~*gold or platinum*
U	**B29K 2911/00**	**Use of natural products or their composites, not provided for in groups B29K 2801/00 - B29K 2809/00, as mould material**
M	B29K 2911/06	· Bone, horn~~,~~ *or* ivory
M	B29K 2911/10	· Natural fibres, e.g. wool~~,~~ *or* cotton
M	B29K 2911/14	· Wood, e.g. woodboard~~,~~ *or* fibreboard
M	**B29K 2913/00**	**~~Textile~~ *Use of textile* products~~,~~ *or* fabrics *as mould materials***
U	**B29K 2995/00**	**Properties of moulding materials, reinforcements, fillers, preformed parts or moulds**
M	B29K 2995/0001	· having particular ~~accoustical~~*acoustical* properties
U	B29K 2995/0003	· having particular electrical or magnetic properties, e.g. piezoelectric
M	B29K 2995/0008	· · Magnetic~~,~~ *or* paramagnetic

U	B29K 2995/0012	· having particular thermal properties
M	B29K 2995/0016	· · Non-~~inflammable,~~ *flammable or* resistant to heat
M	B29K 2995/0018	· having particular optical properties, e.g. fluorescent~~,~~ *or* phosphorescent
M	B29K 2995/0022	· · Bright, glossy~~, or~~ *or* shiny surface
U	B29K 2995/0037	· Other properties
E	B29K 2995/0049	· · Heat shrinkable

> *WARNING*
> *Group B29K 2995/0049 is incomplete pending reclassification of documents from group B29K 2105/02.*
> *Groups B29K 2995/0049 and B29K 2105/02 should be considered in order to perform a complete search.*

M	B29K 2995/0056	· · Biocompatible, e.g. biopolymers~~, bioelastomers~~ *or bioelastomers* ~~(biodegradable B29K 2995/006)~~
M	B29K 2995/0068	· · Permeability to liquids~~, adsorption~~*; Adsorption*
M	B29K 2995/0089	· · Impact strength~~, or~~ *or* toughness
M	B29K 2995/0098	· · Peel strength~~, peelable~~*; Peelability*

Project: RP0254 (G05D)

M	**G05D 1/00**	**Control of position, course or altitude of land, water, air, or space vehicles, e.g. automatic pilot (~~steering applicable only to other than landborne vehicles, e.g. three-dimensional steering applicable to both aircraft and submarines B60K ; construction or disposition of steering means on land vehicles B62, on waterborne vessels B63 ; manual or automatic control of aircraft, e.g. using automatic pilot or radiated signal B64C ;~~ radio navigation systems or analogous systems using other waves G01S)**
M	**G05D 7/00**	**Control of flow (level control G05D 9/00 ~~;~~ ratio control G05D 11/00 ~~; of media to the human body A61M 5/168~~ ; weighing apparatus G01G)**
C	**G05D 16/00**	**Control of fluid pressure ~~(control of pressure in electric discharge tubes or lamps H01J, e.g. H01J 7/14 ; control of pressure in electric incandescent lamps H01K 1/52)~~**

> *NOTE*
> *{Note: In this group, multi-aspect classification is applied, so that subject matter characterised by aspects covered by more than one of its subgroups, which is considered to represent information of interest for search, should be classified in each of those subgroups.}*

> *WARNING*
> *Group G05D 16/00 is impacted by reclassification into groups G05D 16/024 and G05D 16/028.*
> *Groups G05D 16/00, G05D 16/024, and G05D 16/028 should be considered in order to perform a complete search.*

M	G05D 16/02	· Modifications to reduce the effects of instability, e.g. due to vibrations, friction, abnormal temperature, overloading, unbalance (~~vibration dampers F16F 7/00~~vibration-dampers F16F 7/00)
N	*G05D 16/024*	· *{Controlling the inlet pressure, e.g. back-pressure regulator}*

> *WARNING*
> *Group G05D 16/024 is incomplete pending reclassification of documents from group G05D 16/00.*
> *Groups G05D 16/00 and G05D 16/024 should be considered in order to perform a complete search.*

N   *G05D 16/028*   ▪ *{Controlling a pressure difference (control of flow G05D 7/00)}*

> *WARNING*
>
> *Group G05D 16/028 is incomplete pending reclassification of documents from group G05D 16/00.*
> *Groups G05D 16/00 and G05D 16/028 should be considered in order to perform a complete search.*

C   G05D 16/04   ▪ without auxiliary power

> *WARNING*
>
> *Group G05D 16/04 is impacted by reclassification into groups G05D 16/0402 and G05D 16/0404.*
> *Groups G05D 16/04, G05D 16/0402, and G05D 16/0404 should be considered in order to perform a complete search.*

N   *G05D 16/0402*   ▪ ▪ *{with two or more controllers mounted in series}*

> *WARNING*
>
> *Group G05D 16/0402 is incomplete pending reclassification of documents from groups G05D 16/04 and G05D 16/10.*
> *Groups G05D 16/04, G05D 16/10, and G05D 16/0402 should be considered in order to perform a complete search.*

N   *G05D 16/0404*   ▪ ▪ *{with two or more controllers mounted in parallel}*

> *WARNING*
>
> *Group G05D 16/0404 is incomplete pending reclassification of documents from groups G05D 16/04 and G05D 16/10.*
> *Groups G05D 16/04, G05D 16/10 and G05D 16/0404 should be considered in order to perform a complete search.*

U   G05D 16/06   ▪ ▪ the sensing element being a flexible membrane, yielding to pressure, e.g. diaphragm, bellows, capsule

D   G05D 16/0602   ▪ ▪ ▪ ~~{two controllers being mounted in series}~~
                         <administratively transferred to G05D 16/0402>

D   G05D 16/0605   ▪ ▪ ▪ ~~{two controllers being mounted in parallel}~~
                         <administratively transferred to G05D 16/0404>

C   G05D 16/10   ▪ ▪ the sensing element being a piston or plunger

> *WARNING*
>
> *Group G05D 16/10 is impacted by reclassification into groups G05D 16/101, G05D 16/107, G05D 16/109, G05D 16/0402, and G05D 16/0404.*
> *All groups listed in this Warning should be considered in order to perform a complete search.*

N   *G05D 16/101*   ▪ ▪ ▪ *{the controller being arranged as a multiple-way valve}*

> *WARNING*
>
> *Group G05D 16/101 is incomplete pending reclassification of documents from groups G05D 16/10 and G05D 16/103.*
> *Groups G05D 16/10, G05D 16/103 and G05D 16/101 should be considered in order to perform a complete search.*

C   G05D 16/103   ▪ ▪ ▪ {~~with~~*the* sensing element placed ~~within~~*between* the ~~flow-path}~~*inlet and outlet (multiple-way valve G05D 16/101)}*

> *WARNING*
>
> *Group G05D 16/103 is impacted by reclassification into group G05D 16/101.*

		Groups G05D 16/103 and G05D 16/101 should be considered in order to perform a complete search.
M	G05D 16/106	· · · · {~~using sliding~~*Sleeve-like sensing* elements~~}~~*; Sensing elements surrounded by the flow path}*
N	G05D 16/107	· · · {with a spring-loaded piston in combination with a spring-loaded slideable obturator that move together over range of motion during normal operation}
		WARNING
		Group G05D 16/107 is incomplete pending reclassification of documents from group G05D 16/10.
		Groups G05D 16/10 and G05D 16/107 should be considered in order to perform a complete search.
N	G05D 16/109	· · · {with two or more pistons acting as a single pressure controller that move together over range of motion during normal operations (controllers mounted in series G05D 16/0402, controller mounted in parallel G05D 16/0404)}
		WARNING
		Group G05D 16/109 is incomplete pending reclassification of documents from group G05D 16/10.
		Groups G05D 16/10 and G05D 16/109 should be considered in order to perform a complete search.
U	G05D 16/14	· with auxiliary non-electric power
U	G05D 16/16	· · derived from the controlled fluid
M	G05D 16/163	· · · {using ~~one or several membranes~~*membranes within the main valve*}
M	G05D 16/166	· · · {using ~~one or several pistons~~*pistons within the main valve*}
C	G05D 16/18	· · derived from an external source
		WARNING
		Group G05D 16/18 is impacted by reclassification into group G05D 16/187.
		Groups G05D 16/18 and G05D 16/187 should be considered in order to perform a complete search.
M	G05D 16/185	· · · {using ~~one or several membranes~~*membranes within the main valve*}
N	G05D 16/187	· · · {using pistons within the main valve}
		WARNING
		Group G05D 16/187 is incomplete pending reclassification of documents from group G05D 16/18.
		Groups G05D 16/18 and G05D 16/187 should be considered in order to perform a complete search.
U	G05D 16/20	· characterised by the use of electric means
M	G05D 16/2006	· · {with direct action of electric energy on controlling means (~~G05D 16/2093 takes precedence~~*combination of electric and non-electric auxiliary G05D 16/2093*)}
C	G05D 16/2013	· · · {using throttling means *as controlling means*}
		WARNING
		Group G05D 16/2013 is impacted by reclassification into groups G05D 16/2022 and G05D 16/2024.
		Groups G05D 16/2013, G05D 16/2022, and G05D 16/2024 should be considered in order to perform a complete search.
U	G05D 16/202	· · · · {actuated by an electric motor}

N   *G05D 16/2022*   · · · · *{actuated by a proportional solenoid (throttling means G05D 16/2024)}*

> *WARNING*
>
> *Group G05D 16/2022 is incomplete pending reclassification of documents from group G05D 16/2013.*
> *Groups G05D 16/2013 and G05D 16/2022 should be considered in order to perform a complete search.*

N   *G05D 16/2024*   · · · *{the throttling means being a multiple-way valve}*

> *WARNING*
>
> *Group G05D 16/2024 is incomplete pending reclassification of documents from group G05D 16/2013.*
> *Groups G05D 16/2013 and G05D 16/2024 should be considered in order to perform a complete search.*

M   G05D 16/2066   · · · {using ~~control~~*controlling* means acting on the pressure source}

M   G05D 16/2086   · · {without direct action of electric energy on the controlling means (~~G05D 16/2093 takes precedence~~*combination of electric and non-electric auxiliary G05D 16/2093*)}

C   G05D 16/2093   · · {with combination of electric and non-electric auxiliary power}

> *WARNING*
>
> *Group G05D 16/2093 is impacted by reclassification into groups G05D 16/2095 and G05D 16/2097.*
> *Groups G05D 16/2093, G05D 16/2095, and G05D 16/2097 should be considered in order to perform a complete search.*

N   *G05D 16/2095*   · · · *{using membranes within the main valve}*

> *WARNING*
>
> *Group G05D 16/2095 is incomplete pending reclassification of documents from group G05D 16/2093.*
> *Groups G05D 16/2093 and G05D 16/2095 should be considered in order to perform a complete search.*

N   *G05D 16/2097*   · · · *{using pistons within the main valve}*

> *WARNING*
>
> *Group G05D 16/2097 is incomplete pending reclassification of documents from group G05D 16/2093.*
> *Groups G05D 16/2093 and G05D 16/2097 should be considered in order to perform a complete search.*

M   **G05D 23/00**   **Control of temperature (automatic switching arrangements for electric heating apparatus H05B 1/02 ~~; controlling induction heating H05B 6/06 ; regulating temperature of anode of X-ray tube H05G 1/36~~)**

> NOTE
>
> Within groups G05D 23/01 - G05D 23/32, an invention is classified in the last appropriate place in the absence of an indication of the contrary

Project: RP0254 (H05B)

U   **H05B 1/00**   **Details of electric heating devices**

M   H05B 1/02   · Automatic switching arrangements specially adapted to apparatus *{; {*Control of heating devices} (~~control of temperature in general G05D 23/00;~~ thermally-actuated switches H01H 37/00)

Project: RP0317 (H04N)

M   H04N   **PICTORIAL COMMUNICATION, e.g. TELEVISION ~~(measuring, testing G01; systems for autographic writing, e.g. writing telegraphy, which involve following an outline {G08C 21/00}; information storage based on relative movement between record carrier and transducer G11B; coding, decoding or code conversion, in general H03M; broadcast distribution or the recording of use made thereof H04H)~~**

NOTES

1. This subclass <u>covers</u> :
    - transmission of pictures or their transient or permanent reproduction either locally or remotely {and the corresponding electronic image capture and reproduction process employing image representative electric signals}, by methods involving both of {or at least one of} the following steps:
        a. the {electronic acquisition or} scanning of a picture {or scene}, i.e. resolving the whole picture-containing area into individual picture-elements and the derivation of picture-representative electric signals related thereto, simultaneously or in sequence {, e.g. by reading an electronic solid-state image sensor [SSIS] pickup device, e.g. CCD or CMOS image sensor, as electronic image sensor converting optical image information into said electrical signals};
        b. the reproduction of the whole picture-containing area {or scene} by the reproduction of individual picture -elements into which the picture is resolved by means of picture -representative electric signals derived therefrom, simultaneously or in sequence;
    - in group H04N 1/00, systems for the transmission or the reproduction of arbitrarily composed pictures or patterns in which the local light variations composing a picture are not subject to variation with time, e.g. documents, maps, charts, photographs other than cinematograph films;
    - circuits specially designed for dealing with pictorial communication signals, e.g. television signals, as distinct from merely signals of a particular frequency range.

2. This subclass <u>does not cover</u> :
    - circuits or other parts of systems which form the subject of other subclasses, which are covered by the corresponding subclasses, e.g. H03C, H03F, H03J, H04B, H04H;
    - systems in which legible alphanumeric or like character forms are analysed according to step (a) of Note (1) to derive an electric signal from which the character is recognised by comparison with stored information, which are covered by subclass G06K;
    - systems for the direct photographic copying of an original picture in which an electric signal representative of the picture is derived according to the said step (a) and employed to modify the operation of the system, e.g. to control exposure, which are covered by class G03;
    - systems for the reproduction according to step (b) of Note (1) of pictures comprising alphanumeric or like character forms but involving the production of the equivalent of a signal which would be derived according to the above -mentioned step (a), e.g. by cams, punched card or tape, coded control signal, or other means, which are covered by the subclass for the application, e.g. G01D, G06T, H04L;
    - systems for the reproduction according to the above-mentioned step (b) of pictures comprising alphanumeric or like character forms and involving the generation according to the above -mentioned step (a) of picture-representative electric signals from a pre-arranged assembly of such characters, or records thereof, forming an integral part of the systems, which are covered by the subclass for the application, e.g. B41B, G06K, subject to those applications which are covered by this subclass;

- printing, duplication or marking processes , or materials or processes therefor, which are covered by the relevant subclasses, e.g. B41C, B41J, B41M, G03C, G03F, G03G;
- {apparatus or methods for taking photographs using light sensitive film for image capture, apparatus/methods for printing, for projecting or viewing images using film stock, photographic film or slides by optical means, e.g. mounting of optical elements, flashes, and their related controls, e.g. exposure, focus, (opto-)mechanical motion blur (anti-shake), cooling, beam shaping;}
- {aspects of apparatus or methods for taking photographs using an electronic image sensor [EIS] for image capture, insofar as they correspond to those of said apparatus methods for taking photographs using light sensitive film, i.e. insofar as not peculiar to the presence of the EIS, e.g. mounting of optical elements or flashes not peculiar to the presence of the EIS, and their related controls insofar as they are not peculiar to the presence or use of the EIS, e.g. exposure, focus, (opto-)mechanical motion blur (anti-shake);}
- {aspects of apparatus or methods for projecting or viewing images using an electronic spatial light modulator [ESLM], insofar as they correspond to those of said apparatus/ methods for projecting or viewing images using film stock, photographic film or slides, i.e. insofar as not peculiar to the presence of the ESLM, e.g. mounting of optical elements not peculiar to the presence of the ESLM, and their related controls not peculiar to the presence of the ESLM, e.g. cooling, beam shaping, optical keystone correction;}
- {(opto-)mechanical image enhancement in printers or projectors, e.g. keystone correction;}
- {optical viewfinders;}
- {remote control of cameras and projectors insofar not peculiar to the EIS or ESLM, e.g. not affecting their operation, or being based on a generated image signal;}
- { optical aspects of camera modules using electronic image sensors and related constructional details (optical elements or arrangements associated with solid state imager structures H01L 27/14625); }
- {constructional aspects of projectors, e.g. cooling, beam shaping, light integrating means not peculiar to the ESLM;}

3. In this subclass, the following expression is used with the meaning indicated:
- "television systems" means those systems for the {electronic generation,} transmission and reproduction of arbitrarily composed pictures in which the local light variations composing a picture may change with time, e.g. natural "live" scenes, {electronic} recordings of such scenes such as cinematograph films.

4. {In this subclass, as in subclass G03B, the following terms are used with the meaning indicated:
- "camera": a device capturing image information represented by light patterns reflected or emitted from objects, and exposing a light sensitive film or a main electronic image sensor during a timed exposure, usually through a photographic lens, and producing an image on a light sensitive film or an electrical image information signal respectively;
- "projector": a device displaying image information by projection of light patterns, usually through an optical lens, wherein the light patterns are generated by illuminating an image, e.g. film or slide, or by converting an electric image signal into an optical signal using an electronic spatial light modulator;
- "electronic image sensor [EIS]": optoelectronic transducer, converting optical image information into an electrical signal susceptible of being processed, stored, transmitted or displayed;
- "additional sensor": a sensor, other than the main electronic image sensor, used for controlling a camera;

       • "electronic spatial light modulator [ESLM]": optoelectronic transducer converting electric signals representing image information into optical image information.

}

WARNINGS

1. The following IPC groups are not in the CPC scheme. Subject matter for these IPC groups is classified in the following CPC groups:

H04N 5/761	covered by	H04N 5/782
H04N 5/7613	covered by	H04N 5/782
H04N 5/7617	covered by	H04N 5/782
H04N 5/922	covered by	H04N 5/92
H04N 5/924	covered by	H04N 5/92
H04N 9/815	covered by	H04N 9/81
~~H04N 11/24~~	~~covered by~~	~~H04N 11/002~~
~~H04N 15/00~~	~~covered by~~	~~H04N 13/00~~

2. In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

M	H04N 1/00	**Scanning, transmission or reproduction of documents or the like, e.g. facsimile transmission; Details thereof** ~~**{(recording arrangements for measuring instruments G01D; sensing record carriers G06K 7/00; character or pattern recognition G06K 9/00; mosaïc printer telegraph systems H04L 21/00)}**~~
M	H04N 1/024	· Details of scanning heads {; Means for illuminating the original ~~(circuit details thereof H04N 1/40)~~}
U	H04N 1/028	· · for picture information pick-up
M	H04N 1/0281	· · · {with means for collecting light from a line or an area of the original and for guiding it to only one or a relatively low number of picture element detectors ~~(light-guides per se G02B 6/00)~~}
M	H04N 1/03	· · · with photodetectors arranged in a substantially linear array ~~(scanning of linear arrays H04N 1/19)~~
M	H04N 1/04	· Scanning arrangements~~,~~ {, i.e. arrangements for the displacement of active reading or reproducing elements relative to the original or reproducing medium, or <u>vice versa</u>}(H04N 1/387 takes precedence~~; {scanning by varying the direction of light in general G02B 26/10}~~)
M	H04N 1/06	· · using cylindrical picture-bearing surfaces {, i.e. scanning a main-scanning line substantially perpendicular to the axis and lying in a curved cylindrical surface ~~(for feeding a sheet in the subscanning direction by rotation about its axis only H04N 1/12)~~}
M	H04N 1/10	· · using flat picture-bearing surfaces {(H04N 1/113, H04N 1/195 take precedence~~; arrangements for the main-scanning H04N 1/12~~)}
U	H04N 1/19	· · using multi-element arrays
U	H04N 1/191	· · · the array comprising a one-dimensional array {, or a combination of one-dimensional arrays, or a substantially one-dimensional array, e.g. an array of staggered elements}
M	H04N 1/192	· · · · Simultaneously {or substantially simultaneously} scanning picture elements on one main scanning line ~~{(details of the sub-scanning H04N 1/10, H04N 1/12)}~~
M	H04N 1/21	· Intermediate information storage (H04N 1/387, H04N 1/41 take precedence {; {for control between transmitter and receiver or between image input and image output device H04N 1/32358~~) ; information storage in general G11~~; {indexing, editing G11B 27/00})

M	H04N 1/23	· Reproducing arrangements ~~(details of scanning heads H04N 1/024; scanning arrangements therefor H04N 1/04 {perforating or marking objects by electrical discharge B26F 1/28})~~
U	H04N 1/32	· Circuits or arrangements for control or supervision between transmitter and receiver {or between image input and image output device (H04N 1/38, H04N 1/387 take precedence)}
M	H04N 1/34	· · for coin-freed systems {; ~~pay~~*Pay* systems ~~(telephonic metering H04M 15/00, coin-freed or like apparatus per se G07F)~~}
M	H04N 1/387	· Composing, repositioning or otherwise {geometrically} modifying originals ~~(photoelectronic composing of characters B41B 19/00; {image data processing or generation, in general G06T})~~
U	H04N 1/40	· Picture signal circuits (H04N 1/387 takes precedence)
M	H04N 1/403	· · Discrimination between the two tones in the picture signal of a two-tone original ~~(shaping pulses by limiting or thresholding, in general H03K 5/08)~~
M	H04N 1/46	· Colour picture communication systems ~~{(colorimetry G01J 3/46)}~~
M	**H04N 3/00**	**Scanning details of television systems**==*; Combination thereof with generation of supply voltages*==
M	H04N 3/02	· by optical-mechanical means only (H04N 3/36 takes precedence~~; optical scanning systems in general G02B 26/10~~)
M	H04N 3/10	· by means not exclusively optical-mechanical (H04N 3/36 takes precedence~~; electro-, magneto- or acousto-optical modulation or deflection of light beams G02F 1/00~~)
M	H04N 3/16	· · by deflecting electron beam in cathode-ray tube {~~also~~ *, e.g.* scanning corrections}~~(producing saw-tooth wave forms H03K 4/00 {for scanning and focusing devices H01J; cathode ray oscillographs G01R 13/20})~~
U	H04N 3/18	· · · Generation of supply voltages, in combination with electron beam deflecting
M	H04N 3/185	· · · · Maintaining dc voltage constant ~~(regulation of dc voltage in general G05F)~~
M	H04N 3/26	· · · Modifications of scanning arrangements to improve focusing ~~(focusing circuits in general H01J)~~
M	H04N 3/27	· · · Circuits special to multi-standard receivers ~~(circuitry of multi-standard receivers in general H04N 5/46)~~
M	**H04N 5/00**	**Details of television systems (scanning details or combination thereof with generation of supply voltages** H04N 3/00~~; specially adapted for colour television H04N 9/00; {servers specially adapted for the distribution of content H04N 21/20; client devices specially adapted for the reception of or interaction with content H04N 21/40}~~**)**
		~~NOTE~~
		~~Groups H04N 5/341 - H04N 5/378 are based on IPC2012.01~~
M	H04N 5/04	· Synchronising (for television systems using pulse code modulation ~~H04N 7/24~~H04N 7/56~~;~~ in general H03L 7/00)
U	H04N 5/14	· Picture signal circuitry for video frequency region (H04N 5/222 takes precedence)
M	H04N 5/21	· · Circuitry for suppressing or minimising disturbance, e.g. moiré~~, halo, {even if the automatic gain control is involved}~~ *or halo*~~(suppression of noise in television recording H04N 5/911)~~
M	H04N 5/217	· · · in picture signal generation {in cameras comprising an electronic image sensor, e.g. *in* digital cameras, TV cameras, video cameras, camcorders, webcams, *or* to be embedded in other devices, e.g. in mobile phones, computers or vehicles ~~(noise reduction or noise suppression involving solid-state image sensors H04N 5/357)~~}

U	H04N 5/222	· Studio circuitry; Studio devices; Studio equipment {; Cameras comprising an electronic image sensor, e.g. digital cameras, video cameras, TV cameras, video cameras, camcorders, webcams, camera modules for embedding in other devices, e.g. mobile phones, computers or vehicles}
U	H04N 5/262	· · Studio circuits, e.g. for mixing, switching-over, change of character of image, other special effects {; Cameras specially adapted for the electronic generation of special effects}
M	H04N 5/268	· · · Signal distribution or switching ~~(for broadcasting H04H 20/00)~~
M	H04N 5/30	· Transforming light or analogous information into electric information (H04N 5/222 takes precedence; scanning details H04N 3/00~~, light transforming elements H01J, H01L~~)
M	H04N 5/335	· · using solid-state image sensors [SSIS] (H04N 5/32, H04N 5/33 take precedence)

NOTE

In this group, the first place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, classification is made in the first appropriate place.
~~Groups H04N 5/341 - H04N 5/378 are based on IPC2012.01~~

M	H04N 5/351	· · · Control of the SSIS depending on the scene, e.g. brightness or motion in the scene ~~{(circuitry for evaluating the brightness variations of the object H04N 5/2351)}~~
U	H04N 5/369	· · · SSIS architecture; Circuitry associated therewith

WARNING

Group H04N 5/369 is impacted by reclassification into group H04N 5/379. Groups H04N 5/369 and H04N 5/379 should be considered in order to perform a complete search.

M	H04N 5/374	· · · · Addressed sensors, e.g. MOS or CMOS sensors ~~{(MOS imager structure H01L 27/14643)}~~
U	H04N 5/38	· Transmitter circuitry (H04N 5/14 takes precedence)
M	H04N 5/40	· · Modulation circuits ~~{(in general H03C 1/00, H03C 3/00, H03C 5/00)}~~
U	H04N 5/44	· Receiver circuitry (H04N 5/14 takes precedence)
M	H04N 5/455	· · Demodulation-circuits ~~(demodulation in general H03D)~~
M	H04N 5/50	· · Tuning indicators; Automatic tuning control ~~(tuning control in general H03J)~~
M	H04N 5/52	· · Automatic gain control ~~{(in general H03G)}~~
M	H04N 5/63	· Generation or supply of power specially adapted for television receivers ~~(generation of supply voltages in combination with electron beam deflecting H04N 3/18; regulating of voltage or current in general G05F; transformers H01F; supplying or distributing electric power, in general H02J; static converters H02M)~~
M	H04N 5/64	· Constructional details of receivers, e.g. cabinets~~,~~ *or* dust covers (furniture aspects ~~A47B, e.g.~~ *{of television cabinets}* A47B 81/06)
M	H04N 5/66	· Transforming electric information into light information (scanning details H04N 3/00 ~~{; electro- or magneto optic devices G02F 1/00; CRT's H01J}~~)
M	H04N 5/68	· · Circuit details for cathode-ray display tubes {(deviation circuits H04N 3/16~~, H03K 4/00~~)}
M	H04N 5/72	· Modifying the appearance of television pictures by optical filters or diffusing screens ~~(optical filters or diffusing screens per se G02B 5/00)~~

M	H04N 5/74	· Projection arrangements for image reproduction, e.g. using eidophor ~~(optical systems in general G02B)~~
		<u>WARNING</u> <u>H04N 5/74</u> and subgroups are no longer used for the classification of new documents as from October 1, 2008. The backlog is being continuously reclassified to subgroups of <u>H04N 9/31</u>
M	H04N 5/76	· Television signal recording ~~(diagnosis, testing or measuring for television signal recorders H04N 17/06; recording in connection with measuring G01D; information storage {in which the television signal is not involved, driving, starting, stopping, head switching, editing, indexing} in general G11, e.g. G11B)~~
M	H04N 5/765	· · Interface circuits between an apparatus for recording and another apparatus ~~(associated working of recording or reproducing apparatus with a television camera or receiver in which the television signal is not significantly involved G11B 31/00)~~
U	H04N 5/84	· · using optical recording (<u>H04N 5/80</u>, <u>H04N 5/89</u>, <u>H04N 5/91</u> take precedence)
M	H04N 5/87	· · · Producing a motion picture film from a television signal {(~~scanning of motion picture films for television signal generation H04N 3/36; television signal generation by scanning a motion picture film H04N 5/253 H04N 9/11;~~ {standard conversion therefor <u>H04N 7/0112</u>})}
M	H04N 5/907	· · using static stores, e.g. storage tubes~~,~~ *or* semiconductor memories (<u>H04N 5/91</u> takes precedence~~; based on relative movement between record carrier and transducer H04N 5/78 - H04N 5/903~~)
M	H04N 5/91	· · Television signal processing therefor ~~(of colour signals H04N 9/79)~~
M	H04N 5/913	· · · for scrambling {; for copy protection} ~~(scrambling of a television signal for transmission H04N 7/167)~~
M	H04N 5/917	· · · for bandwidth reduction ~~(bandwidth reduction H04N 7/12; using pulse code modulation H04N 7/24)~~
M	H04N 5/92	· · · Transformation of the television signal for recording, e.g. modulation, frequency changing; Inverse transformation for playback ~~{(transmitter circuitry H04N 5/38; receiver circuitry H04N 5/44)}~~
U	H04N 5/93	· · · Regeneration of the television signal or of selected parts thereof
U	H04N 5/94	· · · · Signal drop-out compensation
M	H04N 5/945	· · · · · for signals recorded by pulse code modulation ~~(error detection or correction of digital signals for recording in general G11B 20/18)~~
U	**H04N 7/00**	**Television systems (details <u>H04N 3/00</u>, <u>H04N 5/00</u>; methods or arrangements, for coding, decoding, compressing or decompressing digital video signals <u>H04N 19/00</u>; selective content distribution <u>H04N 21/00</u>)**
M	H04N 7/01	· Conversion of standards {, *e.g.* involving analogue television standards or digital television standards processed at pixel level ~~(video transcoding H04N 19/40; image scaling in general G06T 3/40; adapting incoming signals to the display format of the display terminal G09G 5/005)~~}
M	H04N 7/10	· Adaptations for transmission by ~~electric~~*electrical* cable (<u>H04N 7/12</u> takes precedence~~; {transmission by lines H04B 3/00; wired broadcast systems H04H 20/76; CATV [Community Antenna Television] systems H04H 20/78}~~)
M	H04N 7/12	· Systems in which the television signal is transmitted via one channel or a plurality of parallel channels, the bandwidth of each channel being less than the bandwidth of the television signal (<u>H04N 7/24</u> takes precedence~~; {by special scanning H04N 3/00} ; high definition television systems H04N 7/015~~)
U	H04N 7/14	· Systems for two-way working ({<u>H04N 7/12</u>, } <u>H04N 7/173</u> take precedence)

M	H04N 7/15	· · Conference systems ~~({video terminal details H04N 7/141} ; telephonic conference arrangements H04M 3/56; {computer conferencing H04L 12/1813})~~
U	H04N 7/16	· Analogue secrecy systems; Analogue subscription systems
M	H04N 7/161	· · {Constructional details of the subscriber equipment (H04N 7/164 takes precedence~~; coin-freed and like apparatus in general G07F~~)}
M	H04N 7/167	· · Systems rendering the television signal unintelligible and subsequently intelligible ~~{(secret communication in general H04K 1/00)}~~
U	**H04N 9/00**	**Details of colour television systems**
U	H04N 9/04	· Picture signal generators
U	H04N 9/09	· · with more than one pick-up device
M	H04N 9/097	· · · Optical arrangements associated therewith, e.g. for beam-splitting, for colour correction ~~(beam-splitting in general G02B 27/10)~~
M	H04N 9/10	· · using optical-mechanical scanning means only (H04N 9/11 takes precedence~~; optical scanning systems in general G02B 26/10~~)
M	H04N 9/12	· Picture reproducers (~~devices or arrangements for the electro-, magneto- or acousto-optical modulation or deflection of light beams G02F~~ *H04N 9/11 takes precedence*)
M	H04N 9/14	· · using optical-mechanical scanning means only ~~(H04N 9/11 takes precedence; optical scanning systems in general G02B 26/10)~~
M	H04N 9/16	· · using cathode ray tubes (H04N 9/11 takes precedence~~; cathode-ray tubes H01J 31/00~~)
U	H04N 9/28	· · · Arrangements for convergence or focusing
M	H04N 9/285	· · · · using quadrupole lenses ~~(quadrupole lenses per se G21K 1/08, H01J 3/14, H01J 29/58, H01J 37/10)~~
M	H04N 9/30	· · using solid-state colour display devices ~~{(indicating devices using static means to present variable information G09G)}~~
M	H04N 9/31	· · Projection devices for colour picture display {, e.g. using electronic spatial light modulators [ESLM] ~~(projection devices using film stock, photographic film or slides, G03B 21/00 and subgroups)~~}
U	H04N 9/79	· Processing of colour television signals in connection with recording
U	H04N 9/87	· · Regeneration of colour television signals (H04N 9/80 takes precedence)
U	H04N 9/88	· · · Signal drop-out compensation
M	H04N 9/888	· · · · for signals recorded by pulse code modulation ~~(error detection or correction of digital signals for recording in general G11B 20/18)~~
U	**H04N 11/00**	**Colour television systems (details H04N 9/00)**
D	H04N 11/002	· ~~{High definition systems}~~ <administratively transferred to H04N 11/24>
D	H04N 11/004	· · ~~{involving two-channel transmission}~~ <administratively transferred to H04N 11/26>
D	H04N 11/006	· · ~~{involving bandwidth reduction, e.g. subsampling}~~ <administratively transferred to H04N 11/28>
D	H04N 11/008	· · ~~{with transmission of the extra information by means of quadrature modulation}~~ <administratively transferred to H04N 11/30>
M	H04N 11/02	· with bandwidth reduction (~~{H04N 11/002, }~~ H04N 11/04 ~~takes~~ *{, H04N 11/24} take* precedence)
M	H04N 11/04	· using pulse code modulation {(~~H04N 11/002~~ *H04N 11/24* takes precedence~~; pulse code modulation in general H03K, H03M~~)}

U	H04N 11/06	· Transmission systems characterised by the manner in which the individual colour picture signal components are combined
U	H04N 11/20	· · Conversion of the manner in which the individual colour picture signal components are combined, e.g. conversion of colour television standards
U	H04N 11/22	· · · in which simultaneous signals are converted into sequential signals or <u>vice versa</u>
N	*H04N 11/24*	· *High-definition television systems*
N	*H04N 11/26*	· · *{involving two-channel transmission}*
N	*H04N 11/28*	· · *{involving bandwidth reduction, e.g. subsampling}*
N	*H04N 11/30*	· · *{with transmission of the extra information by means of quadrature modulation}*

| M | **H04N 21/00** | **Selective content distribution, e.g. interactive television~~, VOD [Video On Demand~~ *or video on demand [VOD]* (~~broadcast communication H04H~~*real-time bi-directional transmission of motion video data H04N 7/14* *{;* ~~;~~ ~~arrangements, apparatus, circuits or systems for communication control or processing being characterised by a protocol H04L 29/06; {~~broadcast or conference over packet~~-~~ switching networks H04L 12/18~~,~~ *}* ~~real-time bi-directional transmission of motion video data H04N 7/14~~)** |

NOTES

1. This group <u>covers</u> :
- interactive video distribution processes, systems, or elements thereof, which are characterised by point-to-multipoint system configurations, and which are mainly used for motion video data unidirectional distribution or delivery resulting from interactions between systems operators, e.g. access or service providers, or users e.g. subscribers, and system elements.
- such systems include dedicated communication systems, such as television distribution systems, which primarily distribute or deliver motion video data in the manner indicated, which may, in addition, provide a framework for further, diverse data communications or services in either unidirectional or bi-directional form. However, video will occupy most of the downlink bandwidth in the distribution process.
- typically, system operators interface with transmitter-side elements or users' interface with receiver-side elements in order to facilitate, through interaction with such elements, the dynamic control of data processing or data flow at various points in the system. This interaction is typically occasional or intermittent in nature.
- processes, systems or elements thereof specially adapted to the generation, distribution and processing of data, which is either associated with video content, e.g. metadata, ratings, or related to the user or his environment and which has been actively or passively gathered. This data is either used to facilitate interaction or to alter or target the content.

2. In this main group, the first place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, classification is made in the first appropriate place.

3. In this main group, the following terms and expressions are used with the meaning indicated:
additional data - designates still pictures, textual, graphical or executable data such as software. It is used to convey supplemental information and can be generated prior to or during the distribution process itself, e.g. metadata, keys.
content designates video or audio streams, which may be combined with additional data. Video data will always be present and occupy most of the downlink bandwidth in the distribution process
server - designates an apparatus designed for adapting the content received from the content provider to the distribution network. It also

manages the distribution to client devices or intermediate components over a network. Further servers may also be present for gathering or generating additional data, e.g. rights management server

additional data server - designates a server, which sole purpose is the distribution or management of additional data. It is not in charge of the distribution of video or audio data

client - designates an apparatus such as a TV receiver, a set-top-box, a PC-TV, a mobile appliance (e.g. mobile phone or receiver in a vehicle), for receiving video, audio and possibly additional data from one or several servers or intermediate components via a network for further processing, storing or displaying. It can also transmit this data on a home-based local network to further devices, e.g. a home server transmitting video to PCs and set-top-boxes within a home.

local network - pertains to a restricted area, e.g. a home or a vehicle, and designates the link between a client and its peripheral devices

network - is to be distinguished from "local network": "network" designates the link between the server and the clients, or between the server and the intermediate components, or between the intermediate components and the clients, or between remotely located clients

distribution - encompasses broadcasting, multicasting and unicasting techniques for transmitting content from one or more sources to one or more receiving stations. The distribution follows a request by a receiving station to the source, e.g. VOD or from a customization of the content by the source, e.g. targeting advertisements to a demographic group in a unidirectional or bidirectional system. Additionally, distribution encompasses techniques where the client acts as a source and another client acts as a receiving station, e.g. a peer-to-peer system for sharing video among client devices

end-user - designates a physical person, e.g. a TV viewer, who consumes the content using the client device. He is the final recipient of the content distributed by the server

interaction - covers actions occurring between or among two or more objects that have an effect upon one another, wherein objects comprise users, system operators, system elements, or content. The user may interact with content locally at the client device, e.g. for requesting additional data stored within the client device. The user may interact with content remotely through a server e.g. for VOD playback control or for uploading video to a server. The client device may interact with the content e.g. selecting content based upon the user profile. The client device may interact with a server using a return channel, e.g. for authenticating client or uploading client hardware capabilities. The server may interact with a client device, e.g. to force a client to tune to an advertisement channel

upstream - designates the direction of data flow towards the source, e.g. a server receiving a request via a mobile phone network.

downstream - designates the direction of data flow towards a client, e.g. a client receiving data originating from a server elementary stream An elementary stream (ES) as defined by the MPEG system layer designates the output of an audio or video encoder.

M	H04N 21/233	· · · Processing of audio elementary streams {(~~details of formatting and decoding of an encoded audio signal representation into a data stream for transmission or storage purposes G10L 19/167; arrangements characterised by components specially adapted for monitoring, identification or recognition of audio in broadcast systems H04H 60/58~~ *monitoring, identification or recognition of audio in broadcast systems H04H 60/58*)}
M	H04N 21/234	· · · Processing of video elementary streams, e.g. splicing of ~~{content}~~ *video* streams, manipulating MPEG-4 scene graphs ~~{(video encoding or transcoding processes per se H04N 19/00)}~~

M	H04N 21/2347	· · · · involving video stream encryption ~~(arrangements for secret or secure communication H04L 9/00, analogue secrecy systems H04N 7/16 {; arrangements using cryptography for the use of broadcast information or broadcast-related information H04H 60/23; arrangements for preventing the taking of data from a data transmission channel without authorisation H04L 12/22; security arrangements in wireless networks H04W 12/00})~~
M	H04N 21/235	· · · Processing of additional data, e.g. scrambling of additional data~~,~~ *or* processing content descriptors ~~{(arrangements for simultaneous broadcast of plural pieces of information H04H 20/28)}~~
M	H04N 21/236	· · · Assembling of a multiplex stream, e.g. transport stream, by combining a video stream with other content or additional data, e.g. inserting a *URL [*Uniform Resource Locator ~~[URL]~~] into a video stream, multiplexing software data into a video stream; Remultiplexing of multiplex streams; Insertion of stuffing bits into the multiplex stream, e.g. to obtain a constant bit-rate; Assembling of a packetised elementary stream {(multiplexing of data packets for data networks, e.g. RTP/UDP H04L 65/00)}
M	H04N 21/241	· · · Operating ~~System~~*system* [OS] processes, e.g. server setup ~~(arrangements for programme control G06F 9/00 {; program loading or initiating in general G06F 9/445; multiprogramming arrangements G06F 9/46})~~
M	H04N 21/242	· · · Synchronization processes, e.g. processing of *PCR [*Program Clock References ~~[PCR]~~] {(~~synchronisation arrangements in time-division multiplex systems H04J 3/06;~~ arrangements for synchronising broadcast or distribution via plural systems in broadcast distribution systems H04H 20/18~~; arrangements for synchronising receiver with transmitter H04L 7/00; synchronising circuits with arrangements for extending range of synchronisation at the transmitter end H04N 5/067~~)}
U	H04N 21/254	· · · Management at additional data server, e.g. shopping server, rights management server {(protocols involving third party service providers for network applications in communication control or processing H04L 29/08666; arrangements for maintenance or administration in data networks H04L 41/00)}
M	H04N 21/2543	· · · · Billing {, e.g. for subscription services (payment schemes, architectures or protocols G06Q 20/00; e-commerce G06Q 30/00; arrangements for billing for the use of broadcast information or broadcast-related information H04H 60/21~~; charging arrangements in data networks H04L 12/14~~)}
U	H04N 21/40	· Client devices specifically adapted for the reception of or interaction with content, e.g. set-top-box [STB]; Operations thereof {(arrangements for distribution where lower stations, e.g. receivers, interact with the broadcast H04H 20/38; arrangements specially adapted for receiving broadcast information H04H 40/00)}
U	H04N 21/41	· · Structure of client; Structure of client peripherals
U	H04N 21/414	· · · Specialised client platforms, e.g. receiver in car or embedded in a mobile appliance
M	H04N 21/4147	· · · · *PVR [*Personal Video Recorder ~~[PVR]~~] (H04N 5/76 takes precedence {; arrangements for broadcast ~~specially adapted for~~ *with* accumulation-type receivers H04H 20/40})
U	H04N 21/418	· · · External card to be used in combination with the client device, e.g. for conditional access
M	H04N 21/4185	· · · · for payment ~~{(mechanisms actuated by coded identity card or credit card to free or to actuate vending, hiring, coin or paper currency dispensing or refunding apparatus G07F 7/08; payment schemes, architectures or protocols G06Q 20/00; e-commerce G06Q 30/00; charging arrangements in data networks H04L 12/14)}~~

M	H04N 21/422	· · · ~~{using}~~ Input-only peripherals {, i.e. input devices connected to specially adapted client devices ~~-~~ *}, e.g. global positioning system [GPS] {*(input devices also receiving signals from specially adapted client devices H04N 21/4104)}~~, e.g. Global Positioning System [GPS] (input arrangements or combined input and output arrangements for interaction between user and computer G06F 3/01)~~
U	H04N 21/43	· · Processing of content or additional data, e.g. demultiplexing additional data from a digital video stream; Elementary client operations, e.g. monitoring of home network, synchronizing decoder's clock; Client middleware {(demultiplexing of data packets for data networks, e.g. RTP/UDP H04L 29/06176)}
M	H04N 21/431	· · · Generation of visual interfaces {for content selection or interaction}; Content or additional data rendering ~~(receiver circuitry for displaying additional information H04N 5/445; interaction techniques for graphical user interfaces G06F 3/048)~~
M	H04N 21/436	· · · Interfacing a local distribution network, e.g. communicating with another STB~~,~~ *or* inside the home {; Interfacing an external card to be used in combination with the client device} (arrangements specially adapted plural spots in a confined site in broadcast systems H04H 20/63)*}*
M	H04N 21/4367	· · · · Establishing a secure communication between the client and a peripheral device or smart card ~~(arrangements for secret or secure communication H04L 9/00; security arrangements for protecting computers or computer systems against unauthorised activity G06F 21/00 {; security arrangements in wireless networks H04W 12/00})~~
U	H04N 21/44	· · · Processing of video elementary streams, e.g. splicing a video clip retrieved from local storage with an incoming video stream, rendering scenes according to MPEG-4 scene graphs
M	H04N 21/4405	· · · · involving video stream decryption ~~(arrangements for secret or secure communication H04L 9/00 {; arrangements using cryptography for the use of broadcast information or broadcast-related information H04H 60/23})~~
M	H04N 21/4408	· · · · involving video stream encryption, e.g. re-encrypting a decrypted video stream for redistribution in a home network ~~(arrangements for secret or secure communication H04L 9/00 {; arrangements using cryptography for the use of broadcast information or broadcast-related information H04H 60/23})~~
M	H04N 21/441	· · · ~~Acquiring end-user identification ((authentication in wireless communication networks H04W 12/06)~~ *Acquiring end-user identification {,* e.g. using personal code sent by the remote control or by inserting a card ~~(restricting access to computer systems by authenticating users using a predetermined code G06F 21/33)~~}
M	H04N 21/4415	· · · · using biometric characteristics of the user, e.g. by voice recognition or fingerprint scanning {(~~methods or arrangements for recognising patterns G06K 9/00; restricting access to computer systems by authenticating users using biometric data G06F 21/32;~~ authentication mechanisms using biometrical features for network security H04L 29/06809~~; authentication in wireless network security H04W 12/06~~)}
M	H04N 21/4425	· · · · Monitoring of client processing errors or hardware failure ~~(monitoring in electrical digital data processing G06F 11/00 {; error detection in general G06F 11/07; monitoring in general G06F 11/30})~~
M	H04N 21/443	· · · OS processes, e.g. booting an STB, implementing a Java virtual machine in an STB~~,~~ *or* power management in an STB ~~(arrangements for program loading or initiating G06F 9/445 {; boot device selection; loading of operating system G06F 9/4406; program loading or initiating in general using non-volatile memory from which the program can be directly executed G06F 9/44568})~~

M	H04N 21/454	· · · Content {or additional data} filtering, e.g. blocking advertisements ((filtering and selective blocking of messages over packet-switching networks H04L 51/12)}
M	H04N 21/4545	· · · · Input to filtering algorithms, e.g. filtering a region of the image ((filtering for image enhancement or restoration G06T 5/00)}
M	H04N 21/4623	· · · · Processing of entitlement messages, e.g. *ECM [*Entitlement Control Message [ECM], *] or EMM [*Entitlement Management Message [EMM] {(arrangements for conditional access to broadcast information or to broadcast-related services H04H 60/14)}
M	H04N 21/4627	· · · · Rights management {associated to the content (protecting software against unauthorised usage in a vending or licensing environment G06F 21/10; security management or policies for network security H04L 29/06986; security in data switching network management H04L 41/28; access security in wireless networks H04W 12/08)}
M	H04N 21/466	· · · Learning process for intelligent management, e.g. learning user preferences for recommending movies {(monitoring of user activities for profile generation for accessing a video database G06F 17/30843; computer systems using learning methods G06N 3/08; services using the results of monitoring in broadcast systems H04H 60/61)}
M	H04N 21/47	· · End-user applications {(interaction techniques for graphical user interfaces G06F 3/048; receiver circuitry for displaying additional information H04N 5/445 {; software engineering for user interfaces G06F 8/20; services or applications for real-time multimedia communications H04L 29/06387})}
U	H04N 21/478	· · · Supplemental services, e.g. displaying phone caller identification, shopping application
M	H04N 21/4782	· · · · Web browsing {, e.g. WebTV (information retrieval from the Internet G06F 17/30861; protocols for network applications involving the use of web-based technology H04L 29/0809)}
M	H04N 21/4784	· · · · receiving rewards ((payment schemes, architectures or protocols G06Q 20/00; e-commerce G06Q 30/00; charging arrangements in data networks H04L 12/14)}
M	H04N 21/482	· · · End-user interface for program selection {(systems specially adapted for using EPGs in broadcast systems H04H 60/72*broadcast systems using EPGs H04H 60/72*)}
U	H04N 21/488	· · · Data services, e.g. news ticker {(systems specially adapted for using meteorological information in broadcast systems H04H 60/71)}
M	H04N 21/60	· {using} Network structure or processes {specifically adapted} for video distribution between server and client or between remote clients (data switching networks H04L 12/00; wireless communication networks H04W); Control signaling {specific to video distribution} *signalling* between clients, server and network components {, e.g. to video encoder or decoder}; Transmission of management data between server and client {, e.g. sending from server to client commands for recording incoming content stream}; Communication details between server and client (Protocols for communication control and processing in data networks H04L 29/06; Protocols for client-server architecture H04L 67/42)
U	H04N 21/63	· · Control signaling {related to video distribution} between client, server and network components; Network processes for video distribution between server and clients {or between remote clients}, e.g. transmitting basic layer and enhancement layers over different transmission paths, setting up a peer-to-peer communication via Internet between remote STB's; Communication protocols; Addressing (signalling, control or architecture for real-time multimedia communications H04L 29/06183; arrangements for peer-to-peer communications H04L 29/08306)

U	H04N 21/633	· · · Control signals issued by server directed to the network components or client {(management of faults, events, alarms in data networks H04L 41/06)}
U	H04N 21/6332	· · · · directed to client
M	H04N 21/6334	· · · · · for authorisation, e.g. by transmitting a key *{(~~arrangements for secret or secure communication H04L 9/00 {;~~ wireless communications network key management H04W 12/04; wireless communications network access security H04W 12/08~~}~~)}*
M	H04N 21/643	· · · ~~{using dedicated}~~ Communication protocols *{(streaming protocols for real-time multimedia communications H04L 29/06517)}*

Project: RP0355 (A61B)

U	**A61B 5/00**	**Detecting, measuring or recording for diagnostic purposes (radiation diagnosis A61B 6/00; diagnosis by ultrasonic, sonic or infrasonic waves A61B 8/00); Identification of persons**
M	A61B 5/04	· ~~Detecting, measuring or recording~~ *Measuring* bioelectric signals of the body or parts thereof
E	A61B 5/0488	· · Electromyography

> *WARNING*
> *Group A61B 5/0488 is incomplete pending reclassification of documents from group A61B 5/04888.*
> *Groups A61B 5/0488 and A61B 5/04888 should be considered in order to perform a complete search.*

U	A61B 5/04882	· · · {of genito-urinary organs}
U	A61B 5/04884	· · · {Detecting gastro-intestinal contractions}
U	A61B 5/04886	· · · {specially adapted for electroglottography or electropalatography}
F	A61B 5/04888 *(Frozen)*	· · · {Control of prosthetics}

> *WARNING*
> *Group A61B 5/04888 is no longer used for the classification of documents as of January 1, 2019.*
> *The content of this groups is being reclassified into groups A61B 5/0488, A61B 5/4851, A61F 2002/482 and A61F 2/72.*
> *All groups listed in this Warning should be considered in order to perform a complete search.*

U	A61B 5/48	· {Other medical applications}
E	A61B 5/4851	· · {Prosthesis assessment or monitoring ~~(A61B 5/04888 takes precedence)~~}

> *WARNING*
> *Group A61B 5/4851 is incomplete pending reclassification of documents from group A61B 5/04888.*
> *Groups A61B 5/4851 and A61B 5/04888 should be considered in order to perform a complete search.*

Project: RP0355 in addition to MP0417 (A61F)

M	**A61F**	**FILTERS IMPLANTABLE INTO BLOOD VESSELS; PROSTHESES; DEVICES PROVIDING PATENCY TO, OR PREVENTING COLLAPSING OF, TUBULAR STRUCTURES OF THE BODY, ~~E.G~~*e.g*. STENTS; ORTHOPAEDIC, NURSING OR CONTRACEPTIVE DEVICES; FOMENTATION; TREATMENT OR PROTECTION OF EYES OR EARS; BANDAGES, DRESSINGS OR ABSORBENT PADS; FIRST-AID KITS (dental prosthetics A61C)**

WARNINGS

1. The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:

A61F 2/48	covered by	A61F 2/02
A61F 2/56	covered by	A61F 2/54
A61F 2/62	covered by	A61F 2/60
~~A61F 2/70~~	~~covered by~~	~~A61F 2/68, A61F 2/72~~
A61F 2/74	covered by	A61F 2/68
A61F 5/045	covered by	A61G 13/12
A61F 5/052	covered by	A61F 5/05
A61F 5/447	covered by	A61F 5/445
A61F 5/452	covered by	A61F 5/451
A61F 5/457	covered by	A61F 5/451
A61F 5/458	covered by	A61F 5/451
A61F 6/10	covered by	A61F 6/08
A61F 9/01	covered by	A61F 9/00802 - A61F 9/00825
A61F 9/011	covered by	A61F 9/00802 - A61F 9/00825
A61F 13/22	covered by	A61F 13/206
A61F 13/24	covered by	A61F 13/2037
A61F 13/30	covered by	A61F 13/26
A61F 13/32	covered by	A61F 13/26
A61F 13/40	covered by	A61M 35/006

2. In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

Project: RP0355 (A61F)

U	**A61F 2/00**	**Filters implantable into blood vessels; Prostheses, i.e. artificial substitutes or replacements for parts of the body; Appliances for connecting them with the body; Devices providing patency to, or preventing collapsing of, tubular structures of the body, e.g. stents (as cosmetic articles, see the relevant subclasses, e.g. wigs, hair pieces, A41G 3/00, A41G 5/00, artificial nails A45D 31/00; dental prostheses A61C 13/00; materials for prostheses A61L 27/00; artificial hearts A61M 1/10; artificial kidneys A61M 1/14)**
U	A61F 2/02	· Prostheses implantable into the body {(closure means for urethra or rectum or for artificial body openings therefor A61F 2/0004)}
U	A61F 2002/48	· · {Operating or control means}
E	A61F 2002/482	· · · {electrical}

WARNING
Group A61F 2002/482 is incomplete pending reclassification of documents from group A61B 5/04888.
Groups A61B 5/04888 and A61F 2002/482 should be considered in order to perform a complete search.

U   A61F 2/50   · Prostheses not implantable in the body {(closure means for urethra or rectum or for artificial body openings therefor A61F 2/0004)}

C   A61F 2/68   · · Operating or control means

> *WARNING*
>
> *Group A61F 2/68 is impacted by reclassification into group A61F 2/70. Groups A61F 2/68 and A61F 2/70 should be considered in order to perform a complete search.*

E   A61F 2/70   · · · electrical {(not used, see A61F 2/68 and A61F 2/72)}

> *WARNING*
>
> *Group A61F 2/70 is incomplete pending reclassification of documents from group A61F 2/68.*
> *Groups A61F 2/70 and A61F 2/68 should be considered in order to perform a complete search.*

E   A61F 2/72   · · · · Bioelectrical control, e.g. myoelectric

> *WARNING*
>
> *Group A61F 2/72 is incomplete pending reclassification of documents from group A61B 5/04888.*
> *Groups A61B 5/04888 and A61F 2/72 should be considered in order to perform a complete search.*

Project: RP0361 (H04W)

C   **H04W 12/00**   **Security arrangements, e.g. access security or fraud detection; Authentication, e.g. verifying user identity or authorisation; Protecting privacy or anonymity *{; Protecting confidentiality; Key management; Integrity; Mobile application security; Using identity modules; Secure pairing of devices; Context aware security; Lawful interception}***

> *WARNING*
>
> *Group H04W 12/00 is impacted by reclassification into groups H04W 12/00, H04W 12/001, H04W 12/0013, H04W 12/0017, H04W 12/002, H04W 12/0023, H04W 12/0027, H04W 12/003, H04W 12/00305, H04W 12/004, H04W 12/00401, H04W 12/00403, H04W 12/00405, H04W 12/00407, H04W 12/00409, H04W 12/005, H04W 12/0051, H04W 12/00502, H04W 12/00503, H04W 12/00504, H04W 12/00505, H04W 12/00506, H04W 12/00508, H04W 12/0051, H04W 12/00512, H04W 12/00514, H04W 12/00516, H04W 12/00518, H04W 12/0052, H04W 12/00522, H04W 12/00524, H04W 12/007, H04W 12/009, H04W 12/0401, H04W 12/0403, H04W 12/04031, H04W 12/04033, H04W 12/0407, H04W 12/04071, H04W 12/0602, H04W 12/0605, H04W 12/0608, H04W 12/0609, H04W 12/0802, H04W 12/0804, H04W 12/0806, H04W 12/0808, H04W 12/1002, H04W 12/1004, H04W 12/1006, H04W 12/1008, H04W 12/12, H04W 12/1201, H04W 12/1202, H04W 12/1204, H04W 12/1205, H04W 12/1206, H04W 12/1208.*
> *All groups listed in this warning should be considered in order to perform a complete search.*

N   H04W 12/001   · {Protecting confidentiality, e.g. by encryption or ciphering}

> *WARNING*
>
> *Group H04W 12/001 is incomplete pending reclassification of documents from groups H04W 12/00 and H04W 12/02.*
> *Groups H04W 12/00, H04W 12/02, and H04W 12/001 should be considered in order to perform a complete search.*

N   H04W 12/0013   · · {of user plane, e.g. user traffic}

> *WARNING*
>
> *Group H04W 12/0013 is incomplete pending reclassification of documents from group H04W 12/00.*
> *Groups H04W 12/00 and H04W 12/0013 should be considered in order to perform a complete search.*

N   H04W 12/0017   · · {of control plane, e.g. signalling traffic}

> *WARNING*
>
> *Group H04W 12/0017 is incomplete pending reclassification of documents from group H04W 12/00.*
> *Groups H04W 12/00 and H04W 12/0017 should be considered in order to perform a complete search.*

N   H04W 12/002   · {Mobile device security; Mobile application security}

> *WARNING*
>
> *Group H04W 12/002 is incomplete pending reclassification of documents from group H04W 12/00.*
> *Groups H04W 12/00 and H04W 12/002 should be considered in order to perform a complete search.*

N   H04W 12/0023   · · {Protecting application or service provisioning, e.g. securing SIM application provisioning}

> *WARNING*
>
> *Group H04W 12/0023 is incomplete pending reclassification of documents from group H04W 12/00.*
> *Groups H04W 12/00 and H04W 12/0023 should be considered in order to perform a complete search.*

N   H04W 12/0027   · · {Managing security policies for mobile device or applications control, e.g. mobile application permission management or mobile device security settings}

> *WARNING*
>
> *Group H04W 12/0027 is incomplete pending reclassification of documents from group H04W 12/00.*
> *Groups H04W 12/00 and H04W 12/0027 should be considered in order to perform a complete search.*

N   H04W 12/003   · {Secure pairing of devices, e.g. bootstrapping a secure communication link between pairing terminals; Secure socializing}

> *WARNING*
>
> *Group H04W 12/003 is incomplete pending reclassification of documents from group H04W 12/00.*
> *Groups H04W 12/00 and H04W 12/003 should be considered in order to perform a complete search.*

N   H04W 12/00305   · · {involving three or more devices, e.g. group pairing}

> *WARNING*
>
> *Group H04W 12/00305 is incomplete pending reclassification of documents from group H04W 12/00.*
> *Groups H04W 12/00 and H04W 12/00305 should be considered in order to perform a complete search.*

N   H04W 12/004   · {using identity modules}

WARNING

Group H04W 12/004 is incomplete pending reclassification of documents from group H04W 12/00.
Groups H04W 12/00 and H04W 12/004 should be considered in order to perform a complete search.

N   H04W 12/00401   · · {using virtual identity modules}

WARNING

Group H04W 12/00401 is incomplete pending reclassification of documents from group H04W 12/00.
Groups H04W 12/00 and H04W 12/00401 should be considered in order to perform a complete search.

N   H04W 12/00403   · · {using shared identity modules, e.g. SIM sharing}

WARNING

Group H04W 12/00403 is incomplete pending reclassification of documents from group H04W 12/00.
Groups H04W 12/00 and H04W 12/00403 should be considered in order to perform a complete search.

N   H04W 12/00405   · · {using multiple identity modules}

WARNING

Group H04W 12/00405 is incomplete pending reclassification of documents from group H04W 12/00.
Groups H04W 12/00 and H04W 12/00405 should be considered in order to perform a complete search.

N   H04W 12/00407   · · {using near field communication [NFC], e.g. NFC tag, smart tag or radio frequency identification [RFID] module}

WARNING

Group H04W 12/00407 is incomplete pending reclassification of documents from group H04W 12/00.
Groups H04W 12/00 and H04W 12/00407 should be considered in order to perform a complete search.

N   H04W 12/00409   · · {using secure binding, e.g. securely binding identity modules to devices, services or applications}

WARNING

Group H04W 12/00409 is incomplete pending reclassification of documents from group H04W 12/00.
Groups H04W 12/00 and H04W 12/00409 should be considered in order to perform a complete search.

N   H04W 12/005   · {Context aware security}

WARNING

Group H04W 12/005 is incomplete pending reclassification of documents from group H04W 12/00.
Groups H04W 12/00 and H04W 12/005 should be considered in order to perform a complete search.

N   H04W 12/00502   · · {Time aware}

WARNING

Group H04W 12/00502 is incomplete pending reclassification of documents from group H04W 12/00.

Groups H04W 12/00 and H04W 12/00502 should be considered in order to perform a complete search.

N   H04W 12/00503   · · *{Location or proximity aware, e.g. using proximity to other devices}*

     WARNING

     Group H04W 12/00503 is incomplete pending reclassification of documents from group H04W 12/00.
     Groups H04W 12/00 and H04W 12/00503 should be considered in order to perform a complete search.

N   H04W 12/00504   · · *{Ambient aware, e.g. using captured environmental data}*

     WARNING

     Group H04W 12/00504 is incomplete pending reclassification of documents from group H04W 12/00.
     Groups H04W 12/00 and H04W 12/00504 should be considered in order to perform a complete search.

N   H04W 12/00505   · · *{Risk aware, e.g. selecting security levels depending on risk profiles}*

     WARNING

     Group H04W 12/00505 is incomplete pending reclassification of documents from group H04W 12/00.
     Groups H04W 12/00 and H04W 12/00505 should be considered in order to perform a complete search.

N   H04W 12/00506   · · *{Trust aware, e.g. using trust scores or trust relationships}*

     WARNING

     Group H04W 12/00506 is incomplete pending reclassification of documents from group H04W 12/00.
     Groups H04W 12/00 and H04W 12/00506 should be considered in order to perform a complete search.

N   H04W 12/00508   · · *{Gesture or behaviour aware, e.g. device movements or behaviometrics}*

     WARNING

     Group H04W 12/00508 is incomplete pending reclassification of documents from group H04W 12/00.
     Groups H04W 12/00 and H04W 12/00508 should be considered in order to perform a complete search.

N   H04W 12/0051   · · *{Identity aware}*

     WARNING

     Group H04W 12/0051 is incomplete pending reclassification of documents from group H04W 12/00.
     Groups H04W 12/00 and H04W 12/0051 should be considered in order to perform a complete search.

N   H04W 12/00512   · · · *{Hardware identity}*

     WARNING

     Group H04W 12/00512 is incomplete pending reclassification of documents from group H04W 12/00.
     Groups H04W 12/00 and H04W 12/00512 should be considered in order to perform a complete search.

N   H04W 12/00514   · · · {Subscriber identity}

> *WARNING*
>
> *Group H04W 12/00514 is incomplete pending reclassification of documents from group H04W 12/00.*
> *Groups H04W 12/00 and H04W 12/00514 should be considered in order to perform a complete search.*

N   H04W 12/00516   · · · {Access point logical identity}

> *WARNING*
>
> *Group H04W 12/00516 is incomplete pending reclassification of documents from group H04W 12/00.*
> *Groups H04W 12/00 and H04W 12/00516 should be considered in order to perform a complete search.*

N   H04W 12/00518   · · · {Temporary identity}

> *WARNING*
>
> *Group H04W 12/00518 is incomplete pending reclassification of documents from group H04W 12/00.*
> *Groups H04W 12/00 and H04W 12/00518 should be considered in order to perform a complete search.*

N   H04W 12/0052   · · · {Group identity}

> *WARNING*
>
> *Group H04W 12/0052 is incomplete pending reclassification of documents from group H04W 12/00.*
> *Groups H04W 12/00 and H04W 12/0052 should be considered in order to perform a complete search.*

N   H04W 12/00522   · · · {Graphical identity}

> *WARNING*
>
> *Group H04W 12/00522 is incomplete pending reclassification of documents from group H04W 12/00.*
> *Groups H04W 12/00 and H04W 12/00522 should be considered in order to perform a complete search.*

N   H04W 12/00524   · · · {Radio fingerprint}

> *WARNING*
>
> *Group H04W 12/00524 is incomplete pending reclassification of documents from group H04W 12/00.*
> *Groups H04W 12/00 and H04W 12/00524 should be considered in order to perform a complete search.*

N   H04W 12/007   · {Lawful interception}

> *WARNING*
>
> *Group H04W 12/007 is incomplete pending reclassification of documents from group H04W 12/00.*
> *Groups H04W 12/00, H04W 12/02, and H04W 12/007 should be considered in order to perform a complete search.*

N   H04W 12/009   · {specially adapted for networks, e.g. wireless sensor networks, ad-hoc networks, RFID networks or cloud networks}

> *WARNING*
>
> *Group H04W 12/009 is incomplete pending reclassification of documents from group H04W 12/00.*

Groups H04W 12/00 and H04W 12/009 should be considered in order to perform a complete search.

C	H04W 12/02	· Protecting privacy or anonymity *{, e.g. protecting personally identifiable information [PII]}*

WARNING
Group H04W 12/02 is impacted by reclassification into groups H04W 12/02, H04W 12/001, H04W 12/007.
All groups listed in this Warning should be considered in order to perform a complete search.

C	H04W 12/04	· Key management *{, e.g. by generic bootstrapping architecture [GBA]}*

WARNING
Group H04W 12/04 is impacted by reclassification into groups H04W 12/04, H04W 12/0401, H04W 12/0403, H04W 12/04031, H04W 12/04033, H04W 12/0407, H04W 12/04071.
All groups listed in this Warning should be considered in order to perform a complete search.

N	H04W 12/0401	· · {Key generation or derivation}

WARNING
Group H04W 12/0401 is incomplete pending reclassification of documents from groups H04W 12/00 and H04W 12/04.
Groups H04W 12/00, H04W 12/04, and H04W 12/0401 should be considered in order to perform a complete search.

N	H04W 12/0403	· · {using a trusted network node as anchor}

WARNING
Group H04W 12/0403 is incomplete pending reclassification of documents from groups H04W 12/00 and H04W 12/04.
Groups H04W 12/00, H04W 12/04, and H04W 12/0403 should be considered in order to perform a complete search.

N	H04W 12/04031	· · · {Key distribution, e.g. key pre-distribution or key agreement}

WARNING
Group H04W 12/04031 is incomplete pending reclassification of documents from groups H04W 12/00 and H04W 12/04.
Groups H04W 12/00, H04W 12/04, and H04W 12/04031 should be considered in order to perform a complete search.

N	H04W 12/04033	· · · {Key management protocols, e.g. managing shared keys, group keys, multicast keys or rekeying}

WARNING
Group H04W 12/04033 is incomplete pending reclassification of documents from groups H04W 12/00 and H04W 12/04.
Groups H04W 12/00, H04W 12/04, and H04W 12/04033 should be considered in order to perform a complete search.

N	H04W 12/0407	· · {without using a trusted network node as anchor}

WARNING
Group H04W 12/0407 is incomplete pending reclassification of documents from groups H04W 12/00 and H04W 12/04.
Groups H04W 12/00, H04W 12/04, and H04W 12/0407 should be considered in order to perform a complete search.

N   *H04W 12/04071*   · · · *{Key exchange, e.g. between nodes}*

> *WARNING*
>
> *Group H04W 12/04071 is incomplete pending reclassification of documents from groups H04W 12/00 and H04W 12/04.*
> *Groups H04W 12/00, H04W 12/04, and H04W 12/04071 should be considered in order to perform a complete search.*

C   H04W 12/06   · Authentication

> *WARNING*
>
> *Group H04W 12/06 is impacted by reclassification into groups H04W 12/06, H04W 12/0602, H04W 12/0605, H04W 12/0608, H04W 12/0609.*
> *All groups listed in this Warning should be considered in order to perform a complete search.*

N   *H04W 12/0602*   · · *{Pre-authentication}*

> *WARNING*
>
> *Group H04W 12/0602 is incomplete pending reclassification of documents from groups H04W 12/00 and H04W 12/06.*
> *Groups H04W 12/00, H04W 12/06, and H04W 12/0602 should be considered in order to perform a complete search.*

N   *H04W 12/0605*   · · *{Continuous authentication}*

> *WARNING*
>
> *Group H04W 12/0605 is incomplete pending reclassification of documents from groups H04W 12/00 and H04W 12/06.*
> *Groups H04W 12/00, H04W 12/06, and H04W 12/0605 should be considered in order to perform a complete search.*

N   *H04W 12/0608*   · · *{using credential vaults, e.g. password manager applications or one time password [OTP] applications}*

> *WARNING*
>
> *Group H04W 12/0608 is incomplete pending reclassification of documents from groups H04W 12/00 and H04W 12/06.*
> *Groups H04W 12/00, H04W 12/06, and H04W 12/0608 should be considered in order to perform a complete search.*

N   *H04W 12/0609*   · · *{using certificates or pre-shared keys}*

> *WARNING*
>
> *Group H04W 12/0609 is incomplete pending reclassification of documents from groups H04W 12/00 and H04W 12/06.*
> *Groups H04W 12/00, H04W 12/06, and H04W 12/0609 should be considered in order to perform a complete search.*

C   H04W 12/08   · Access security

> *WARNING*
>
> *Group H04W 12/08 is impacted by reclassification into groups H04W 12/08, H04W 12/0802, H04W 12/0804, H04W 12/0806, H04W 12/0808.*
> *All groups listed in this Warning should be considered in order to perform a complete search.*

N   *H04W 12/0802*   · · *{using revocation of authorisation}*

> *WARNING*
>
> *Group H04W 12/0802 is incomplete pending reclassification of documents from groups H04W 12/00 and H04W 12/08.*

Groups H04W 12/00, H04W 12/08, and H04W 12/0802 should be considered in order to perform a complete search.

N   H04W 12/0804   · · *{using delegated authorisation, e.g. Open Authorisation [OAuth] protocol, user centric management of access rights or user consent}*

WARNING
Group H04W 12/0804 is incomplete pending reclassification of documents from groups H04W 12/00 and H04W 12/08.
Groups H04W 12/00, H04W 12/08, and H04W 12/0804 should be considered in order to perform a complete search.

N   H04W 12/0806   · · *{using security domains, e.g. separating enterprise and private data domains, building machine-to-machine [M2M] domains or global platform domains}*

WARNING
Group H04W 12/0806 is incomplete pending reclassification of documents from groups H04W 12/00 and H04W 12/08.
Groups H04W 12/00, H04W 12/08, and H04W 12/0806 should be considered in order to perform a complete search.

N   H04W 12/0808   · · *{using packet filters or firewalls}*

WARNING
Group H04W 12/0808 is incomplete pending reclassification of documents from groups H04W 12/00 and H04W 12/08.
Groups H04W 12/00, H04W 12/08, and H04W 12/0808 should be considered in order to perform a complete search.

C   H04W 12/10   · Integrity

WARNING
Group H04W 12/10 is impacted by reclassification into groups H04W 12/10, H04W 12/1002, H04W 12/1004, H04W 12/1006, H04W 12/1008.
All groups listed in this Warning should be considered in order to perform a complete search.

N   H04W 12/1002   · · *{Route integrity, e.g. using trusted paths}*

WARNING
Group H04W 12/1002 is incomplete pending reclassification of documents from groups H04W 12/00 and H04W 12/10.
Groups H04W 12/00, H04W 12/10, and H04W 12/1002 should be considered in order to perform a complete search.

N   H04W 12/1004   · · *{Location integrity, e.g. secure geo-tagging or trusted cell tagging}*

WARNING
Group H04W 12/1004 is incomplete pending reclassification of documents from groups H04W 12/00 and H04W 12/10.
Groups H04W 12/00, H04W 12/10, and H04W 12/1004 should be considered in order to perform a complete search.

N   H04W 12/1006   · · *{Packet or message integrity}*

WARNING
Group H04W 12/1006 is incomplete pending reclassification of documents from groups H04W 12/00 and H04W 12/10.
Groups H04W 12/00, H04W 12/10, and H04W 12/1006 should be considered in order to perform a complete search.

N   *H04W 12/1008*   · · *{Source integrity}*

                                 WARNING
                                 Group H04W 12/1008 is incomplete pending reclassification of documents from groups H04W 12/00 and H04W 12/10.
Groups H04W 12/00, H04W 12/10, and H04W 12/1008 should be considered in order to perform a complete search.

C   H04W 12/12   · Fraud detection {or prevention}

WARNING
Group H04W 12/12 is incomplete pending reclassification of documents from group H04W 12/00.
Group H04W 12/12 is also impacted by reclassification into groups H04W 12/12, H04W 12/1201, H04W 12/1202, H04W 12/1204, H04W 12/1205, H04W 12/1206, H04W 12/1208.
All groups listed in this Warning should be considered in order to perform a complete search.

N   *H04W 12/1201*   · · *{Wireless intrusion detection system [WIDS]; Wireless intrusion prevention system [WIPS]}*

WARNING
Group H04W 12/1201 is incomplete pending reclassification of documents from groups H04W 12/00 and H04W 12/12.
Groups H04W 12/00, H04W 12/12, and H04W 12/1201 should be considered in order to perform a complete search.

N   *H04W 12/1202*   · · · *{Protecting against rogue devices}*

WARNING
Group H04W 12/1202 is incomplete pending reclassification of documents from groups H04W 12/00 and H04W 12/12.
Groups H04W 12/00, H04W 12/12, and H04W 12/1202 should be considered in order to perform a complete search.

N   *H04W 12/1204*   · · · *{Countermeasures against attacks}*

WARNING
Group H04W 12/1204 is incomplete pending reclassification of documents from groups H04W 12/00 and H04W 12/12.
Groups H04W 12/00, H04W 12/12, and H04W 12/1204 should be considered in order to perform a complete search.

N   *H04W 12/1205*   · · *{Protecting against power exhaustion attacks, e.g. power depletion, starvation attack or sleep deprivation attack}*

WARNING
Group H04W 12/1205 is incomplete pending reclassification of documents from groups H04W 12/00 and H04W 12/12.
Groups H04W 12/00, H04W 12/12, and H04W 12/1205 should be considered in order to perform a complete search.

N   *H04W 12/1206*   · · *{Anti-theft arrangements, e.g. protecting against device theft, subscriber identity module [SIM] cloning or machine-to-machine [M2M] displacement}*

WARNING
Group H04W 12/1206 is incomplete pending reclassification of documents from groups H04W 12/00 and H04W 12/12.
Groups H04W 12/00, H04W 12/12, and H04W 12/1206 should be considered in order to perform a complete search.

N   *H04W 12/1208*   · · *{Anti-malware arrangements, e.g. protecting against SMS fraud or mobile malware}*

WARNING
Group H04W 12/1208 is incomplete pending reclassification of documents from groups H04W 12/00 and H04W 12/12.
Groups H04W 12/00, H04W 12/12, and H04W 12/1208 should be considered in order to perform a complete search.

Project: RP0368 (G01N)

U   G01N 33/574   · · · · for cancer

NOTE
In this group:
- relevant features relating to a specifically defined cancer are only classified in groups G01N 33/57407 - G01N 33/57449
- relevant features describing cancer markers related to multiple forms of cancer are classified in groups G01N 33/57484 - G01N 33/57496

D   G01N 2033/57403   · · · · · {of breast}
<administratively transferred to G01N 33/57415>

U   G01N 33/57407   · · · · · {Specifically defined cancers}

E   G01N 33/57415   · · · · · · {of breast}

E   G01N 33/57423   · · · · · · {of lung}

E   G01N 33/5743   · · · · · · {of skin, *e.g.* melanoma}

E   G01N 33/57438   · · · · · · {of liver, pancreas or kidney}

E   G01N 33/57446   · · · · · · {of stomach or intestine}

D   G01N 2033/57453   · · · · · {of lung}
<administratively transferred to G01N 33/57423>

D   G01N 2033/57457   · · · · · {of skin}
<administratively transferred to G01N 33/5743>

D   G01N 2033/57461   · · · · · {of liver, pancreas or kidney}
<administratively transferred to G01N 33/57438>

D   G01N 2033/57465   · · · · · {of stomach or intestine}
<administratively transferred to G01N 33/57446>

Project: RP0370 (B31F)

U   **B31F 2201/00**   **Mechanical deformation of paper or cardboard without removing material**

M   B31F 2201/07   · Embossing (not used)

E   B31F 2201/0707   · · by tools working continuously

D   B31F 2201/071   · · · Type and charactristics of the embossing toools (not used)
<administratively transferred to B31F 2201/0707 ADD>

D   B31F 2201/0712   · · · Other than rollers, e.g. belts, plates
<administratively transferred to B31F 2201/0754 ADD>

M   B31F 2201/0715   · · · Rollers *The tools being rollers*

M   B31F 2201/0717   · · · · Methods and means for forming the embossments

M   B31F 2201/072   · · · · · Laser engraving

M   B31F 2201/0723   · · · · · Characteristics of the rollers

M   B31F 2201/0725   · · · · · · Hardness

M   B31F 2201/0728   · · · · · · Material

M	B31F 2201/073	· · · · · · Rollers having a multilayered structure
M	B31F 2201/0733	· · · · · · Pattern
M	B31F 2201/0735	· · · · · · Pattern inclined with respect to the axis of the roller
M	B31F 2201/0738	· · · · · · Cross sectional profile of the embossments
M	B31F 2201/0741	· · · · · Roller cooperating with a non-even counter roller
M	B31F 2201/0743	· · · · · having a matching profile
M	B31F 2201/0746	· · · · · · and having a self-centering profile
M	B31F 2201/0748	· · · · · having a dissimilar profile
M	B31F 2201/0751	· · · · · · and having a self-centering profile
M	B31F 2201/0753	· · · · Roller supporting, positioning, driving means
N	*B31F 2201/0754*	· · · *The tools being other than rollers, e.g. belts or plates*

Project: RP0371 (D07B)

M	**D07B 2801/00**	**Linked indexing codes associated with indexing codes or classes of D07B** ~~**(not used)**~~

NOTE

The following indexing codes are applied as linked indexing codes associated to other indexing codes or classes of D07B, with the following restrictions:
- D07B 2801/10, D07B 2801/14 -D07B 2801/22 are only to be used as linked indexing codes with D07B 2205/00 and lower hierarchy
- D07B 2801/12 and D07B 2801/24 are only to be used as linked indexing codes with D07B 2205/00 and lower hierarchy or D07B 2201/2047 and lower hierarchy
- D07B 2801/60 and D07B 2801/62 are only to be used as linked indexing codes with D07B 2207/404 and lower hierarchy
- D07B 2801/90 is only used as linked indexing code with any class or indexing code of D07B and defines that the classified feature belongs to the general knowledge.

Project: RP0372 (C08G)

U	**C08G 61/00**	**Macromolecular compounds obtained by reactions forming a carbon-to-carbon link in the main chain of the macromolecule (C08G 2/00 - C08G 16/00 take precedence)**

NOTE

In this group, it is desirable to add the indexing codes C08G 2261/00 - C08G 2261/964

E	C08G 61/12	· Macromolecular compounds containing atoms other than carbon in the main chain of the macromolecule
D	C08G 61/128	· · ~~{derived from other compounds}~~ <administratively transferred to C08G 61/12>

Project: RP0385 (G03G)

M	**G03G 2215/00**	**Apparatus for electrophotographic processes** ~~**(not used)**~~
M	G03G 2215/00025	· Machine control, e.g. regulating different parts of the machine ~~(not used)~~
M	G03G 2215/00071	· · by measuring the photoconductor or its environmental characteristics ~~(not used)~~
M	G03G 2215/00088	· · by using information from an external support ~~(not used)~~
U	G03G 2215/00172	· relative to the original handling
U	G03G 2215/00177	· · for scanning

M	G03G 2215/00181	· · · concerning the original's state of motion (not used)
M	G03G 2215/00206	· · Original medium (not used)
M	G03G 2215/00354	· · Specific document handling machines (not used)
M	G03G 2215/00362	· relating to the copy medium handling (not used)
M	G03G 2215/00367	· · The feeding path segment where particular handling of the copy medium occurs, segments being adjacent and non-overlapping. Each segment is identified by the most downstream point in the segment, so that for instance the segment labelled "Fixing device" is referring to the path between the "Transfer device" and the "Fixing device" (not used)
M	G03G 2215/00379	· · · Copy medium holder (not used)
M	G03G 2215/00417	· · · Post-fixing device (not used)
M	G03G 2215/00443	· · Copy medium (not used)
M	G03G 2215/00535	· · Stable handling of copy medium (not used)
M	G03G 2215/00687	· · · Handling details (not used)
M	G03G 2215/00717	· · · Detection of physical properties (not used)
M	G03G 2215/00886	· · Sorting or discharging (not used)
M	G03G 2215/00919	· · Special copy medium handling apparatus (not used)
M	G03G 2215/00953	· Electrographic recording members (not used)
M	G03G 2215/00978	· Details relating to power supplies (not used)
M	G03G 2215/01	· for producing multicoloured copies (not used)
M	G03G 2215/0151	· · characterised by the technical problem (not used)
M	G03G 2215/019	· · Structural features of the multicolour image forming apparatus (not used)
U	G03G 2215/04	· Arrangements for exposing and producing an image
U	G03G 2215/0429	· · Changing or enhancing the image
U	G03G 2215/0431	· · · Producing a clean non-image area, i.e. avoiding show-around effects
M	G03G 2215/0434	· · · · Parameters defining the non-image area to be cleaned (not used)
M	G03G 2215/08	· Details of powder developing device not concerning the development directly (not used)
U	G03G 2215/0802	· · Arrangements for agitating or circulating developer material
M	G03G 2215/0808	· · · Donor member rotation direction (not used)
M	G03G 2215/0816	· · · Agitator type (not used)
M	G03G 2215/0836	· · · Way of functioning of agitator means (not used)
U	G03G 2215/0855	· · Materials and manufacturing of the developing device
M	G03G 2215/0858	· · · Donor member (not used)
U	G03G 2215/16	· Transferring device, details
M	G03G 2215/1604	· · Main transfer electrode (not used)
U	G03G 2215/20	· Details of the fixing device or porcess

NOTE

Indexing codes of group G03G 2215/20 can be followed by additional symbols preceded by a "+" sign and relating to additional characteristics. The indexing codes have the meaning as indicated below.

```
+H Using heat to fix
+P Using pressure to fix
+P1 where the pressure is changed
+P1A being adapted to the current toner-
carrying
```

```
medium treated (e.g. duplex copy, colour
copy,
OHP sheet, envelope)
+P1B compensating for temperature or other
technical
condition variations (e.g. sheet skewing)
occurring
+P1C when being in a non-fixing or waiting
mode
+P1M for maintenance purpose or abnormal
situations
(e.g. power cut-off)
```

| M | G03G 2215/2003 | · · Structural features of the fixing device (not used) |
| M | G03G 2215/207 | · · Type of toner image to be fixed (not used) |

Project: RP0387 (A45D)

U	A45D 27/00	**Shaving accessories (containers for handling shaving soap A45D 40/00; shaving mirrors A45D 42/08)**
E	A45D 27/003	· {Devices for softening beards, e.g. face steamers (shaving masks A45D 27/42)}
D	A45D 2027/006	· {Devices for softening beards, e.g. face steamers} <administratively transferred to A45D 27/003>

Project: RP0397 (G06K)

D	G06K 2017/0035	· {Aspects not covered by other subgroups}
D	G06K 2017/0038	· · {Processing documents, e.g. checks, formulars}
D	G06K 2017/0041	· · {Personalising cards or checks, issuing personal tickets, passbooks or the like}
D	G06K 2017/0045	· · {Tracking objects or persons}
D	G06K 2017/0048	· · {Grouping, sorting, transporting, distributing documents or goods}
D	G06K 2017/0051	· · {Stock management, inventory systems}
D	G06K 2017/0054	· · {for collecting waste}
D	G06K 2017/0058	· · {for collecting milk}
D	G06K 2017/0061	· · {for processing photo orders}
D	G06K 2017/0064	· · {for fraud control purposes}
D	G06K 2017/0067	· · {for commercial purposes, e.g. transactions, payments, ordering, games}
D	G06K 2017/007	· · {for multiple use or various applications}
D	G06K 2017/0074	· · {for use in library or the like systems}
D	G06K 2017/0077	· · {for checking, inspecting or history purposes, e.g. histograms}
D	G06K 2017/008	· · {for use in word processing or the like systems}
D	G06K 2017/0083	· · {Generating labels}
D	G06K 2017/0087	· · {for automatic, e.g. process, control purposes}
D	G06K 2017/009	· · {for use in medical applications}
D	G06K 2017/0093	· · {Information-providing systems}
D	G06K 2017/0096	· · {Information-recording systems, e.g. data logging}

Project: RP0403-F (B60Q)

M	**B60Q 3/00**	**Arrangement of lighting devices for vehicle interiors; Lighting devices specially adapted for vehicle interiors**

WARNING

Group B60Q 3/00 is impacted by reclassification into groups B60Q 3/40, B60Q 3/50, B60Q 3/54, B60Q 3/60, and B60Q 3/70.
All groups listed in this Warning should be considered in order to perform a complete search.

M	B60Q 3/20	・for lighting specific fittings of passenger or driving compartments; mounted on specific fittings of passenger or driving compartments (lighting for dashboards B60Q 3/10)

WARNING

Group B60Q 3/20 is impacted by reclassification into groups B60Q 3/242 and B60Q 3/292.
All groups listed in this Warning should be considered in order to perform a complete search.

M	B60Q 3/242	・・Safety belts; Body harnesses

WARNING

Group B60Q 3/242 is incomplete pending reclassification of documents from group B60Q 3/20.
Groups B60Q 3/20 and B60Q 3/242 should be considered in order to perform a complete search.

M	B60Q 3/292	・・Ignition locks

WARNING

Group B60Q 3/292 is incomplete pending reclassification of documents from group B60Q 3/20.
Groups B60Q 3/20 and B60Q 3/292 should be considered in order to perform a complete search.

M	B60Q 3/40	・specially adapted for specific vehicle types

WARNING

Group B60Q 3/40 is incomplete pending reclassification of documents from group B60Q 3/00.
Groups B60Q 3/00 and B60Q 3/40 should be considered in order to perform a complete search.

M	B60Q 3/50	・Mounting arrangements (for compartments other than passenger or driving compartments B60Q 3/30; specially adapted for specific vehicle types B60Q 3/40)

WARNING

Group B60Q 3/50 is incomplete pending reclassification of documents from group B60Q 3/00.
Groups B60Q 3/00 and B60Q 3/50 should be considered in order to perform a complete search.

M	B60Q 3/54	・・Lighting devices embedded in interior trim, e.g. in roof liners

WARNING

Group B60Q 3/54 is incomplete pending reclassification of documents from group B60Q 3/00.
Groups B60Q 3/00 and B60Q 3/54 should be considered in order to perform a complete search.

M	B60Q 3/60	· characterised by optical aspects

> ~~WARNING~~
> ~~Group B60Q 3/60 is incomplete pending reclassification of documents from group B60Q 3/00.~~
> ~~Groups B60Q 3/00 and B60Q 3/60 should be considered in order to perform a complete search.~~

M	B60Q 3/70	· characterised by the purpose

> ~~WARNING~~
> ~~Group B60Q 3/70 is incomplete pending reclassification of documents from group B60Q 3/00.~~
> ~~Groups B60Q 3/00 and B60Q 3/70 should be considered in order to perform a complete search.~~

Project: RP0419 (B62J)

D	**B62J 2700/00**	**~~Bicycle seats and accessories; Alarm, signaling or lighting devices in so far as there is a connection with the construction of the cycle; Luggage carriers, chain guards; other accessories for bicycles~~** <administratively transferred to **B62J 1/00**>
D	B62J 2700/63	· ~~To-be-deteled with administrative transfer to parent group~~ <administratively transferred to B62J 1/00>
D	B62J 2700/632	· · ~~To-be-deleted with administrative transfer to parent group~~ <administratively transferred to B62J 1/00>
D	B62J 2700/634	· · · ~~Bicycle seats~~ <administratively transferred to B62J 1/00>
D	B62J 2700/636	· · · ~~Signaling devices, e.g. operated by the wheel, connected to the brakes or electric; Constructions of bells specially adapted for cycles; Attachment devices therefor~~ <administratively transferred to B62J 3/00>
D	B62J 2700/638	· · · ~~Chain guards as a detachable piece; Devices for cleaning the chain~~ <administratively transferred to B62J 13/00>

Project: RP0421 (H01G)

M	**H01G 11/00**	**Hybrid capacitors, i.e. capacitors having different positive and negative electrodes; Electric double-layer [EDL] capacitors [EDLCs]; Processes specially adapted for the manufacture thereof or of parts thereof**

NOTE
Group H01G 11/02 takes precedence over groups H01G 11/04 - H01G 11/14

> *WARNING*
> *Groups H01G 11/00 - H01G 11/86 are incomplete pending reclassification of documents from groups H01M 12/00 and H01M 12/005.*
> *All groups listed in this Warning should be considered in order to perform a complete search.*

Project: RP0421 (H01M)

M	**H01M**	**PROCESSES OR MEANS, e.g. BATTERIES, FOR THE DIRECT CONVERSION OF CHEMICAL _ENERGY_ INTO ELECTRICAL ENERGY** ~~(electrochemical processes or apparatus in general C25; semiconductor or other solid state devices for converting light or heat into electrical energy H01L, e.g. H01L 31/00, H01L 35/00, H01L 37/00)~~

NOTE

This subclass <u>covers</u> galvanic primary or secondary cells or batteries, fuel cells or ~~batteries~~_stacks_.

WARNING

In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

U	**H01M 2/00**	**Constructional details or processes of manufacture of the non-active parts**
M	H01M 2/02	· Cases, jackets or wrappings ~~(working of plastics or substances in plastic state B29)~~
M	**H01M 4/00**	**Electrodes** ~~(electrodes for electrolytic processes C25, {electrodes for hybrid or electric double capacitor H01G 11/22})~~
U	H01M 4/02	· Electrodes composed of or comprising active material
U	H01M 4/36	· · Selection of substances as active materials, active masses, active liquids {(electrode materials of hybrid or double layer capacitors H01G 11/30-H01G 11/50)}
M	H01M 4/58	· · · of inorganic compounds other than oxides or hydroxides, e.g. sulfides, selenides, tellurides, halogenides or $LiCoF_y$_; of polyanionic structures, e.g. phosphates, silicates or borates_
U	H01M 4/64	· · Carriers or collectors {(current collector for hybrid or electric double layer capacitors H01G 11/66)}
M	H01M 4/82	· · · Multi-step processes for manufacturing carriers for lead-acid accumulators ~~(single step processes see the relevant subclasses, e.g. B21D; B22D)~~
U	**H01M 6/00**	**Primary cells; Manufacture thereof**

NOTE

In this group, primary cells are electrochemical generators in which the cell energy is present in chemical form and is not regenerated.

U	H01M 6/30	· Deferred-action cells
M	H01M 6/36	· · containing electrolyte and made operational by physical means, e.g. thermal cells ~~(thermoelectric solid state devices H01L 35/00, H01L 37/00)~~
U	**H01M 10/00**	**Secondary cells; Manufacture thereof**

NOTE

Secondary cells are accumulators receiving and supplying electrical energy by means of reversible electrochemical reactions.

C	H01M 10/04	· Construction or manufacture in general (_H01M 10/058,_ H01M 10/12, H01M 10/28, H01M 10/38 take precedence)

WARNING

Group H01M 10/04 is impacted by reclassification into group H01M 10/058. Groups H01M 10/04 and H01M 10/058 should be considered in order to perform a complete search.

U	H01M 10/05	· Accumulators with non-aqueous electrolyte (H01M 10/39 takes precedence)

E	H01M 10/058	· · Construction or manufacture

WARNING
Group H01M 10/058 is incomplete pending reclassification of documents from group H01M 10/04.
Groups H01M 10/04 and H01M 10/058 should be considered in order to perform a complete search.

U	H01M 10/42	· Methods or arrangements for servicing or maintenance of secondary cells or secondary half-cells (H01M 10/60 takes precedence)
M	H01M 10/48	· · Accumulators combined with arrangements for measuring, testing or indicating condition, e.g. level or density of the electrolyte ~~({H01M 10/44 takes precedence); indicating or measuring level of liquid in general G01F 23/00; measuring density G01N, e.g. G01N 9/00; measuring electric variables G01R)~~

C	**H01M 12/00**	**Hybrid cells; Manufacture thereof** *(hybrid capacitors H01G 11/00)*

NOTE

1. This group does not cover hybrid cells comprising capacitor electrodes and battery electrodes, which are covered by group H01G 11/00

~~1.~~ *2.* ~~Hybrid~~ *In this group, hybrid* cells are electrochemical generators having two different types of half-cells, the half-cell being an electrode-electrolyte combination of either a primary, a secondary or a fuel cell.

WARNING
Group H01M 12/00 is impacted by reclassification into group H01G 11/00 – H01G 11/86.
All groups listed in this Warning should be considered in order to perform a complete search.

F	H01M 12/005 *(Frozen)*	· {composed of a half-cell of the capacitor type and of a half-cell of the primary or secondary battery type (hybrid capacitors H01G 9/155)}

WARNING
Group H01M 12/005 is no longer used for the classification of documents as of January 1, 2019.
The content of this groups is being reclassified into H01G 11/00 - H01G 11/86.
All groups listed in this Warning should be considered in order to perform a complete search.

M	H01M 12/04	· composed of a half-cell of the fuel-cell type and of a half-cell of the primary-cell type ~~(methods or arrangements for servicing or maintenance H01M 6/50)~~
M	H01M 12/08	· composed of a half-cell of a fuel-cell type and a half-cell of the secondary-cell type ~~(methods or arrangements for servicing or maintenance, e.g. for charging, H01M 10/42)~~

M	**H01M 14/00**	**Electrochemical current or voltage generators not provided for in groups H01M 6/00 - H01M 12/00; Manufacture thereof**

NOTE
This group does not cover solar cells, photocells, photoelectrochemical cells or photovoltaic cells, which are covered by the following groups:
- *semiconductor devices sensitive to light and adapted for the conversion of the energy of such radiation into electrical energy are covered by group H01L 31/00;*
- *solid-state devices using organic materials as active part specially adapted for sensing light and adapted for the conversion of the energy of such radiation into electrical energy are covered by group H01L 51/42;*
- *electrolytic light-sensitive devices, e.g. dye-sensitised solar cells, are covered by group H01G 9/20;*

> • *photovoltaic modules structurally associated with energy storage means, e.g. batteries, are covered by group H02S 40/38.*

Project: RP0429 (B29C)

U	**B29C 39/00**	**Shaping by casting, i.e. introducing the moulding material into a mould or between confining surfaces without significant moulding pressure; Apparatus therefor (B29C 41/00 takes precedence)**
U	B29C 39/02	· for making articles of definite length, i.e. discrete articles
M	B29C 39/021	· · {by casting in several steps}

> *WARNING*
> *Group B29C 39/021 is incomplete pending reclassification of documents from group B29D 2009/00.*
> *Groups B29D 2009/00 and B29C 39/021 should be considered in order to perform a complete search.*

M	B29C 39/023	· · · {for making multicoloured articles}

> *WARNING*
> *Group B29C 39/023 is incomplete pending reclassification of documents from group B29D 2009/00.*
> *Groups B29D 2009/00 and B29C 39/023 should be considered in order to perform a complete search.*

M	B29C 39/025	· · · {for making multilayered articles}

> *WARNING*
> *Group B29C 39/025 is incomplete pending reclassification of documents from group B29D 2009/00.*
> *Groups B29D 2009/00 and B29C 39/025 should be considered in order to perform a complete search.*

M	B29C 39/12	· · Making multilayered or multicoloured articles {(B29C 39/021 takes precedence)}

> *WARNING*
> *Group B29C 39/12 is incomplete pending reclassification of documents from group B29D 2009/00.*
> *Groups B29D 2009/00 and B29C 39/12 should be considered in order to perform a complete search.*

M	B29C 39/123	· · · {Making multilayered articles}

> *WARNING*
> *Group B29C 39/123 is incomplete pending reclassification of documents from group B29D 2009/00.*
> *Groups B29D 2009/00 and B29C 39/123 should be considered in order to perform a complete search.*

M	B29C 39/126	· · · · {by casting between two preformed layers, e.g. deformable layers (between two glass layers B32B 17/10917)}

> *WARNING*
> *Group B29C 39/126 is incomplete pending reclassification of documents from group B29D 2009/00.*
> *Groups B29D 2009/00 and B29C 39/126 should be considered in order to perform a complete search.*

Project: RP0429 (B29D)

F	**B29D 2009/00** *(Frozen)*	**IPC7 Producing layered products**

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WARNING

Group B29D 2009/00 is no longer used for classification of documents as January 1, 2019.
The content of this group is being reclassified into groups B29C 39/021, B29C 39/023, B29C 39/025, B29C 39/12, B29C 39/123, B29C 39/126, B32B 3/00 and B32B 33/00.
All groups listed in this Warning should be considered in order to perform a complete search.

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Project: RP0429 (B32B)

M	**B32B 3/00**	**Layered products comprising a layer with external or internal discontinuities or unevennesses, or a layer of non-planar form {(fibrous or filamentary layers B32B 5/02; particulate layers B32B 5/16; foamed layers B32B 5/18); Layered products having particular features of form (receptacles or tubular products B32B 1/00)}**

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WARNING

Group B32B 3/00 is incomplete pending reclassification of documents from group B29D 2009/00.
Groups B29D 2009/00 and B32B 3/00 should be considered in order to perform a complete search.

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U	**B32B 17/00**	**Layered products essentially comprising sheet glass, or glass, slag, or like fibres**
U	B32B 17/06	· comprising glass as the main or only constituent of a layer, next to another layer of a specific {material (coating on glass C03C 17/00; safety glazings B32B 17/08 or B32B 17/10; fire protective glazing with intumescent layers B32B 17/069)}
U	B32B 17/10	· · of synthetic resin {(producing optical elements from plastics B29D 11/00; constructional form of optical elements G02B)}

NOTES

1. In this group a layer of organic glass is not considered as a glass layer but as a synthetic resin layer];

2. [N: Inventions related to safety glazings (laminated glazings) are classified in all appropriate subgroups B32B 17/10009 - B32B 17/10807, whereby transparent polymeric layers other than the interlayer (B32B 17/1055) are classified using indexing codes

U	B32B 17/10807	· · · {Making layered products containing glass and synthetic resin layers; apparatus therefor}
U	B32B 17/10899	· · · · {by introducing interlayers of synthetic resin}
U	B32B 17/10908	· · · · · {in liquid form}
	B32B 17/10917	· · · · · · {between two pre-positioned glass layers (~~between preformed layers in general B29C 39/126;~~ spacing elements for window units comprising two or more parallel panes E06B 3/663)}

| M | B32B 33/00 | **Layered products characterised by particular properties or particular surface features, e.g. particular surface coatings (surface unevenesses or non-uniformities B32B 3/00); Layered products designed for particular purposes not covered by another single class** |

> *WARNING*
> *Group B32B 33/00 is incomplete pending reclassification of documents from group B29D 2009/00.*
> *Groups B29D 2009/00 and B32B 33/00 should be considered in order to perform a complete search.*

Project: RP0449 (A61H)

M	A61H 9/00	**Pneumatic or hydraulic massage ~~{, e.g. sprays (A61H 13/00 takes precedence; underwater massage, spraying systems acting on a body or body part immersed in water A61H 33/00, A61H 35/00; brushes with fluid supply A46B 11/00; nozzles per se B05B)}~~**
M	A61H 9/0007	· {Pulsating ~~(percussion massage A61H 23/006; nozzles for pulsating streams in bathing devices A61H 33/6057)~~}
C	A61H 9/0021	· {~~Hand-held devices for spraying and removing liquid while moved on the skin~~*Hydraulic massage*}

> *WARNING*
> *Group A61H 9/0021 is incomplete pending reclassification of documents from group A61H 9/0028.*
> *Group A61H 9/0021 is also impacted by reclassification into group A61H 9/0028.*
> *Groups A61H 9/0021 and A61H 9/0028 should be considered in order to perform a complete search.*

| C | A61H 9/0028 | · · {~~Hydraulic massage~~*Hand-held devices for spraying and removing liquid while moved on the skin*} |

> *WARNING*
> *Group A61H 9/0028 is incomplete pending reclassification of documents from group A61H 9/0021.*
> *Group A61H 9/0028 is also impacted by reclassification into group A61H 9/0021.*
> *Groups A61H 9/0028 and A61H 9/0021 should be considered in order to perform a complete search.*

| U | A61H 9/005 | · {Pneumatic massage} |
| M | A61H 9/0078 | · · {~~With~~*with* intermittent or alternately inflated bladders or cuffs (~~beds with inflatable chambers A61G 7/05769~~*mattresses for preventing bed-sores with alternated pressurized chambers A61G 7/05776*)} |

| U | **A61H 13/00** | **Gum massage** |
| M | A61H 13/005 | · {Hydraulic gum massage ~~(instruments or machines for rinsing the teeth A61C 17/02)~~} |

Project: RP0454 (G21C)

U	**G21C 1/00**	**Reactor types**
U	G21C 1/04	· Thermal reactors {; Epithermal reactors}
U	G21C 1/06	· · Heterogeneous reactors, i.e. in which fuel and moderator are separated
U	G21C 1/08	· · · moderator being highly pressurised, e.g. boiling water reactor, integral super-heat reactor, pressurised water reactor (G21C 1/22 takes precedence)

D	G21C 2001/088	· · · · ~~{Inherently safe boiling water reactors}~~ <administratively transferred to G21C 1/088>
N	*G21C 1/088*	· · · · *{Inherently safe boiling water reactors}*
U	**G21C 3/00**	**Reactor fuel elements and their assemblies; Selection of substances for use as reactor fuel elements**
U	G21C 3/02	· Fuel elements {(manufacture thereof G21C 21/02)}
U	G21C 3/04	· · Constructional details
D	G21C 2003/045	· · · ~~{Pellets}~~ <administratively transferred to G21C 3/045>
N	*G21C 3/045*	· · · *{Pellets}*
D	G21C 2003/047	· · · · ~~{Pellet-clad interaction}~~ <administratively transferred to G21C 3/047>
N	*G21C 3/047*	· · · · *{Pellet-clad interaction}*
D	G21C 2003/048	· · · · ~~{Shape of pellets}~~ <administratively transferred to G21C 3/048>
N	*G21C 3/048*	· · · · *{Shape of pellets}*
U	G21C 3/30	· Assemblies of a number of fuel elements in the form of a rigid unit
U	G21C 3/32	· · Bundles of parallel pin-, rod-, or tube-shaped fuel elements
U	G21C 3/322	· · · Means to influence the coolant flow through or around the bundles
D	G21C 2003/3225	· · · · ~~{by waterrods}~~ <administratively transferred to G21C 3/3225>
N	*G21C 3/3225*	· · · · *{by waterrods}*
U	G21C 3/326	· · · comprising fuel elements of different composition; comprising, in addition to the fuel elements, other pin-, rod-, or tube-shaped elements, e.g. control rods, grid support rods, fertile rods, poison rods or dummy rods
D	G21C 2003/3262	· · · · ~~{Enrichment distribution in zones}~~ <administratively transferred to G21C 3/3262>
N	*G21C 3/3262*	· · · · *{Enrichment distribution in zones}*
D	G21C 2003/3265	· · · · · ~~{Radial distribution}~~ <administratively transferred to G21C 3/3265>
N	*G21C 3/3265*	· · · · · *{Radial distribution}*
D	G21C 2003/3267	· · · · · ~~{Axial distribution}~~ <administratively transferred to G21C 3/3267>
N	*G21C 3/3267*	· · · · · *{Axial distribution}*
U	G21C 3/34	· · · Spacer grids
D	G21C 2003/3432	· · · · ~~{Grids designed to influence the coolant, i.e. coolant mixing function}~~ <administratively transferred to G21C 3/3432>
N	*G21C 3/3432*	· · · · *{Grids designed to influence the coolant, i.e. coolant mixing function}*
U	**G21C 13/00**	**Pressure vessels; Containment vessels; Containment in general (for chemical or physical processes B01J 3/00; pressure vessels in general F16J 12/00)**
U	G21C 13/02	· Details
U	G21C 13/06	· · Sealing-plugs (for pressure vessels in general F16J 13/00)
D	G21C 2013/063	· · · ~~{Seals for closures or for rotatable closures}~~ <administratively transferred to G21C 13/063>
N	*G21C 13/063*	· · · *{Seals for closures or for rotatable closures}*

U	**G21C 15/00**	**Cooling arrangements within the pressure vessel containing the core; Selection of specific coolants**
U	G21C 15/18	· Emergency cooling arrangements; Removing shut-down heat
U	G21C 15/182	· · {comprising powered means, e.g. pumps}
D	G21C 2015/185	· · · {using energy stored in reactor system} <administratively transferred to G21C 15/185>
N	G21C 15/185	· · · {using energy stored in reactor system}
D	G21C 2015/187	· · · {using energy from the electric grid} <administratively transferred to G21C 15/187>
N	G21C 15/187	· · · {using energy from the electric grid}

Project: RP0454 (G21D)

M	**G21D**	**NUCLEAR POWER PLANT (electric or magnetic analogue computers, e.g. simulators, for nuclear physics G06G 7/54)**
U	**G21D 3/00**	**Control of nuclear power plant (control of nuclear reaction in general G21C 7/00)**
U	G21D 3/001	· {Computer implemented control}
D	G21D 2003/002	· · {Core design; Core simulations} <administratively transferred to G21D 3/002>
N	G21D 3/002	· · {Core design; core simulations; core optimisation}
D	G21D 2003/004	· · {Fuel shuffle simulations} <administratively transferred to G21D 3/004>
N	G21D 3/004	· · {Fuel shuffle simulation; fuel shuffle optimisation}
D	G21D 2003/005	· · {Thermo-hydraulic simulations} <administratively transferred to G21D 3/005>
N	G21D 3/005	· · {Thermo-hydraulic simulations}
D	G21D 2003/007	· {Expert systems} <administratively transferred to G21D 3/007>
N	G21D 3/007	· {Expert systems}
D	**G21D 2010/00**	**Protection of plant or environment from mutual hazards : means for monitoring the effects of plant or environment upon each other <administratively transferred to G21D 1/00>**

Project: RP0454 (G21F)

M	**G21F**	**PROTECTION AGAINST X-RADIATION, GAMMA RADIATION, CORPUSCULAR RADIATION OR PARTICLE BOMBARDMENT; TREATING RADIOACTIVELY CONTAMINATED MATERIAL; DECONTAMINATION ARRANGEMENTS THEREFOR (radiation protection by pharmaceutical means A61K 8/00, A61Q 17/04; in cosmonautic vehicles B64G B64G 1/54; combined with a reactor G21C 11/00; combined with X-ray tubes H01J 35/16; combined with X-ray apparatus H05G 1/02)**

WARNING

In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

U	**G21F 5/00**	**Transportable or portable shielded containers**
U	G21F 5/06	· Details of, or accessories to, the containers
U	G21F 5/12	· · Closures for containers; Sealing arrangements

D	G21F 2005/125	· · · {Means to monitor or detect the leak-tightness of the closure} <administratively transferred to G21F 5/125>
N	*G21F 5/125*	· · · *{Means to monitor or detect the leak-tightness of the closure}*

Project: RP0454 (G21Y)

D	**G21Y**	**INDEXING SCHEME RELATING TO NUCLEAR REACTORS, POWER PLANTS AND EXPLOSIVES, TO PROTECTION AGAINST RADIATION, TO THE TREATMENT OF RADIOACTIVELY CONTAMINATED MATERIAL, TO APPLICATIONS OF RADIOACTIVE SOURCES AND TO THE UTILISATION OF COSMIC RADIATION**
		NOTE
		This subclass constitutes an internal scheme for indexing only, relating to problems (G21Y 2002/00) or solutions (G21Y 2004/00).

D	**G21Y 2002/00**	**PROBLEM**
D	G21Y 2002/10	· Shortcomings in materials
D	G21Y 2002/101	· Wear
D	G21Y 2002/102	· Embrittlement
D	G21Y 2002/103	· Corrosion
D	G21Y 2002/104	· Inadequate performance, deformation, cracks, rupture
D	G21Y 2002/20	· Operational shortcomings
D	G21Y 2002/201	· Inadequate efficiency
D	G21Y 2002/202	· Slowness of a process or function
D	G21Y 2002/203	· Lack of manoeuvrability
D	G21Y 2002/204	· Imprecision (measuring, positioning, guiding)
D	G21Y 2002/205	· Lack of Automation
D	G21Y 2002/206	· Insufficient reliability (durability)
D	G21Y 2002/207	· Abnormal conditions
D	G21Y 2002/208	· Risk of human error
D	G21Y 2002/30	· Design and construction shortcomings
D	G21Y 2002/301	· Heavy, bulky, cumbersome constructions, shape
D	G21Y 2002/302	· Fabricating, assembling, replacing, dismantling
D	G21Y 2002/303	· Risk of damage
D	G21Y 2002/304	· Lack of versatility, compatibility
D	G21Y 2002/305	· Inadequate transportation
D	G21Y 2002/306	· Non-compliance with regulations
D	G21Y 2002/40	· Maintenance shortcomings (Servicing)
D	G21Y 2002/401	· Inconvenient access
D	G21Y 2002/402	· Complicated assembling, disassembling, replacing, dismantling
D	G21Y 2002/50	· Safety, security and safeguard shortcomings
D	G21Y 2002/501	· Radiation exposure
D	G21Y 2002/502	· Lack of monitoring
D	G21Y 2002/60	· Disposal shortcomings
D	G21Y 2002/601	· Excess of irradiated inventory

D	**G21Y 2004/00**	**SOLUTION**
D	G21Y 2004/10	· Compositions

D	G21Y 2004/101	· ~~Inherent characteristics~~
D	G21Y 2004/20	· ~~Obtaining improvement by treatment~~
D	G21Y 2004/201	· ~~Heat treatment~~
D	G21Y 2004/202	· ~~Cold working~~
D	G21Y 2004/30	· ~~Improving a design~~
D	G21Y 2004/301	· ~~Joints, fixing devices~~
D	G21Y 2004/302	· ~~Fluid mechanics, thermodynamics~~
D	G21Y 2004/303	· ~~Protection cover, catching devices~~
D	G21Y 2004/304	· ~~Redundancy, adding material or parts~~
D	G21Y 2004/305	· ~~Reducing size, material or number of parts~~
D	G21Y 2004/40	· ~~Improving a procedure~~
D	G21Y 2004/401	· ~~Automation~~
D	G21Y 2004/402	· ~~Inherent action~~
D	G21Y 2004/403	· ~~Tuning, adjustment~~
D	G21Y 2004/50	· ~~Repair, replacement~~
D	G21Y 2004/501	· ~~Improving a tool~~
D	G21Y 2004/502	· ~~Remote operation~~
D	G21Y 2004/503	· ~~in factory~~
D	G21Y 2004/504	· ~~on site~~
D	G21Y 2004/60	· ~~Reusing items, recycling~~
D	G21Y 2004/601	· ~~Discarding, Repository~~

Project: RP0534 (G10B)

M	G10B	~~ORGANS;~~ *ORGANS,* HARMONIUMS OR ~~LIKE~~*SIMILAR* WIND ~~ACTUATED~~ MUSICAL INSTRUMENTS *WITH ASSOCIATED BLOWING APPARATUS* (~~mouth organs G10D 7/12;~~ accordions *, concertinas or the like or keyboards therefor* G10D 11/00~~; aspects of automatic actuation G10F 1/12~~*; automatic wind instruments* G10F 1/12~~; combinations of microphones, pick-ups or amplifiers with musical instruments G10H; electronic organs G10H 7/00~~)

> *NOTES*
>
> *1. In this subclass, multi-aspect classification is applied, so that subject matter characterised by aspects covered by more than one of its groups should be classified in each of those groups.*
>
> *2. In this subclass, the type of instrument is classified in group G10B 1/00, while details or accessories thereof are classified in group G10B 3/00.*

WARNING

In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

M	G10B 1/00	**General design** *of organs, harmoniums or similar wind musical instruments with associated blowing apparatus*
M	G10B 1/02	· of organs*, i.e. pipe organs*
M	G10B 1/04	· · ~~electrically operated~~*with electric action*
M	G10B 1/06	· · ~~fluid operated~~*with pneumatic action*
M	G10B 1/08	· of harmoniums*, i.e. reed organs*

C	G10B 3/00	**Details or accessories**

M	G10B 3/02	· Blowers ~~(compressors, blowers, per se~~ ~~F04)~~
M	G10B 3/10	· Actions, e.g. *key actions,* couplers *or stops*
M	G10B 3/12	· Keys or keyboards; Manuals ~~(keyboards for musical instruments in general~~ ~~G10C 3/12)~~
M	G10B 3/22	· Details ~~peculiar to electrically-operated~~ *of electric action systems for* organs, e.g. contacts therein
N	G10B 3/24	· *Cases*

Project: RP0535 (A61K)

U	**A61K 33/00**	**Medicinal preparations containing inorganic active ingredients**
	A61K 33/24	· Heavy metals; Compounds thereof

	A61K 33/245	· · {Bismuth; ~~Derivatives~~*Compounds* thereof}
	A61K 51/00	**Preparations containing radioactive substances for use in therapy or testing <u>in vivo</u>**

Project: RP0536 (F02M)

U	**F02M 37/00**	**Apparatus or systems for feeding liquid fuel from storage containers to carburettors or fuel-injection apparatus (F02M 69/00 takes precedence {; fuel injection apparatus characterised by their conduits and venting means F02M 55/00; fuel injection apparatus having a common rail F02M 63/0225; control of fuel feeding F02D 33/003}; feeding liquid fuel to combustion apparatus, in general F23K 5/00; fuel supply to apparatus for generating combustion products of high pressure or high velocity F23R 3/28); Arrangements for purifying liquid fuel specially adapted for, or arranged on, internal-combustion engines (separating apparatus, filters <u>per se</u> B01D; centrifuges B04B)**

C	F02M 37/22	· Arrangements for purifying liquid fuel specially adapted for, or arranged on, internal-combustion engines, e.g. ~~arrangement~~*arrangements* in the feeding system

> *WARNING*
> *Group F02M 37/22 is impacted by reclassification into groups F02M 37/24, F02M 37/26, F02M 37/28, F02M 37/30, F02M 37/32, F02M 37/34, F02M 37/36, F02M 37/38, F02M 37/40, F02M 37/42, F02M 37/44, F02M 37/46, F02M 37/48, F02M 37/50, F02M 37/52, and F02M 37/54.*
> *All groups listed in this Warning should be considered in order to perform a complete search.*

D	F02M 37/221	· · ~~{having water separator means}~~ <administratively transferred to F02M 37/24>
D	F02M 37/223	· · ~~{having heating means (F02M 37/221 takes precedence)}~~ <administratively transferred to F02M 37/30>
D	F02M 2037/225	· · ~~{having pump means in the filter housing}~~ <administratively transferred to F02M 37/44 INV>
D	F02M 2037/226	· · ~~{having pressure regulator means in the filter housing}~~ <administratively transferred to F02M 37/46 INV>
D	F02M 2037/228	· · ~~{Fuel tank strainers}~~ <administratively transferred to F02M 37/50 INV>
Q	*F02M 37/24*	· · *characterised by water separating means*

> *WARNING*
> *Group F02M 37/24 is impacted by reclassification into groups F02M 37/24 – F02M 37/30.*
> *All groups listed above should be considered in order to perform a complete search.*

N	*F02M 37/26*	· · · *with water detection means*

> *WARNING*
> *Group F02M 37/26 is incomplete pending reclassification of documents from groups F02M 37/22 and F02M 37/24.*
> *Groups F02M 37/22, F02M 37/24, and F02M 37/26 should be considered in order to perform a complete search.*

N	*F02M 37/28*	· · · · *with means activated by the presence of water, e.g. alarms or means for automatic drainage*

> *WARNING*
> *Group F02M 37/28 is incomplete pending reclassification of documents from groups F02M 37/22 and F02M 37/24.*
> *Groups F02M 37/22, F02M 37/24, and F02M 37/28 should be considered in order to perform a complete search.*

N	*F02M 37/30*	· · *characterised by heating means*

> *WARNING*
> *Group F02M 37/30 is incomplete pending reclassification of documents from groups F02M 37/22 and F02M 37/24.*
> *Groups F02M 37/22, F02M 37/24, and F02M 37/30 should be considered in order to perform a complete search.*

N	*F02M 37/32*	· · *characterised by filters or filter arrangements*

> *WARNING*
> *Group F02M 37/32 is incomplete pending reclassification of documents from group F02M 37/22.*

Groups F02M 37/22 and F02M 37/32 should be considered in order to perform a complete search.

| N | F02M 37/34 | · · · *by the filter structure, e.g. honeycomb, mesh or fibrous* |

WARNING

Group F02M 37/34 is incomplete pending reclassification of documents from group F02M 37/22.
Groups F02M 37/22 and F02M 37/34 should be considered in order to perform a complete search.

| N | F02M 37/36 | · · · *with bypass means* |

WARNING

Group F02M 37/36 is incomplete pending reclassification of documents from group F02M 37/22.
Groups F02M 37/22 and F02M 37/36 should be considered in order to perform a complete search.

| N | F02M 37/38 | · · · *with regeneration means* |

WARNING

Group F02M 37/38 is incomplete pending reclassification of documents from group F02M 37/22.
Groups F02M 37/22 and F02M 37/38 should be considered in order to perform a complete search.

| N | F02M 37/40 | · · · *with means for detection of clogging* |

WARNING

Group F02M 37/40 is incomplete pending reclassification of documents from group F02M 37/22.
Groups F02M 37/22 and F02M 37/40 should be considered in order to perform a complete search.

| N | F02M 37/42 | · · · *Installation or removal of filters* |

WARNING

Group F02M 37/42 is incomplete pending reclassification of documents from group F02M 37/22.
Groups F02M 37/22 and F02M 37/42 should be considered in order to perform a complete search.

| N | F02M 37/44 | · · · *Filters structurally associated with pumps* |

WARNING

Group F02M 37/44 is incomplete pending reclassification of documents from group F02M 37/22.
Groups F02M 37/22 and F02M 37/44 should be considered in order to perform a complete search.

| N | F02M 37/46 | · · · *Filters structurally associated with pressure regulators* |

WARNING

Group F02M 37/46 is incomplete pending reclassification of documents from group F02M 37/22.
Groups F02M 37/22 and F02M 37/46 should be considered in order to perform a complete search.

N	F02M 37/48	· · · *Filters structurally associated with fuel valves*

> *WARNING*
>
> *Group F02M 37/48 is incomplete pending reclassification of documents from group F02M 37/22.*
> *Groups F02M 37/22 and F02M 37/48 should be considered in order to perform a complete search.*

N	F02M 37/50	· · · *Filters arranged in or on fuel tanks*

> *WARNING*
>
> *Group F02M 37/50 is incomplete pending reclassification of documents from group F02M 37/22.*
> *Groups F02M 37/22 and F02M 37/50 should be considered in order to perform a complete search.*

N	F02M 37/52	· · · *using magnetic means*

> *WARNING*
>
> *Group F02M 37/52 is incomplete pending reclassification of documents from group F02M 37/22.*
> *Groups F02M 37/22 and F02M 37/52 should be considered in order to perform a complete search.*

N	F02M 37/54	· · *characterised by air purging means (having priming pumps F02M 37/16)*

> *WARNING*
>
> *Group F02M 37/54 is incomplete pending reclassification of documents from group F02M 37/22.*
> *Groups F02M 37/22 and F02M 37/54 should be considered in order to perform a complete search.*

Project: RP0537 (F15B)

M	F15B	**SYSTEMS ACTING BY MEANS OF FLUIDS IN GENERAL; FLUID-PRESSURE ACTUATORS, e.g.** ~~SERVO-MOTORS~~*SERVOMOTORS***; DETAILS OF FLUID-PRESSURE SYSTEMS, NOT OTHERWISE PROVIDED FOR** ~~({hydraulically or pneumatically operated lifting devices for soil-working machines A01B 63/10; hydraulic drawing presses B21D; hydraulic or pneumatic manipulators B25J; hydraulic or pneumatic tipping devices for vehicles B60P 1/00; hydraulic or pneumatic remote control for railway signals B61L 7/04; hydraulic or pneumatic mine supports E21D 15/44}; motors, turbines, compressors, blowers, pumps F01 - F04; {fluid signal amplifiers, relays F15C} ; fluid dynamics F15D; fluid clutches or brakes F16D; fluid springs F16F; fluid gearing F16H; pistons, cylinders packing F16J; valves, taps, cocks, actuating-floats F16K; safety valves with auxiliary fluid operation of the main valve F16K 17/10; fluid-operating means for valves F16K 31/12; pipes, pipe joints F16L; lubricating F16N)~~

NOTE

In this subclass, the following terms are used with the meaning stated:
- "Telemotor" means a system or device in which a substantially constant amount of fluid is trapped between an input member and an output member to act as a fluid link;
- "Servomotor" means a fluid-pressure actuator, e.g. a piston and cylinder, directly controlled by a valve or other device which is responsive to operation of an initial controlling member; "Servomotor" does not cover

a telemotor. The initial controlling member may be adjacent to the servomotor or at a distance, and may be, for example a hand lever.

WARNING

In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

U	**F15B 1/00**	**Installations or systems with accumulators; Supply reservoir or sump assemblies**
M	F15B 1/02	· Installations or systems with accumulators ((energy recuperation means F15B 21/14) ; devices damping pulsations or vibrations for fluids for use in, or connection with, pipes or pipe systems F16L 55/04)
M	F15B 1/027	· · having accumulator charging devices (control of fluid pressure in general G05D 16/00)
M	F15B 1/04	· · Accumulators (connection of valves to inflatable elastic bodies B60C 29/00)
U	F15B 1/08	· · · using a gas cushion; Gas charging devices; Indicators or floats therefor
U	F15B 1/10	· · · · with flexible separating means
M	F15B 1/12	· · · · · attached at their periphery (F15B 1/16 takes precedence *flexible separating means in the form of a tube F15B 1/16*)
U	F15B 1/26	· Supply reservoir or sump assemblies
M	F15B 1/265	· · {with pressurised main reservoir (systems with accumulators F15B 1/02)}
M	**F15B 5/00**	**Transducers converting variations of physical quantities, e.g. expressed by variations in positions of members, into fluid-pressure variations or vice versa; Varying fluid pressure as a function of variations of a plurality of fluid pressures or variations of other quantities (F15B 9/00 takes precedence; for measuring or controlling G01, G05)**
M	**F15B 7/00**	**Systems in which the movement produced is definitely related to the output of a volumetric pump; Telemotors ((for control in motor vehicles B60K; in ships B63H 25/00; in aircraft B64C 13/00; combinations of telemotor and servomotor systems F15B 17/00))**
M	F15B 7/001	· {with *With* multiple inputs, e.g. for dual control} (input units F15B 7/08, e.g. for dual control)}
M	F15B 7/005	· {with *With* rotary or crank input (input units F15B 7/08)}
M	F15B 7/04	· in *In* which the ratio between pump stroke and motor stroke varies with the resistance against the motor (in brake-actuating systems for motor vehicles B60T)
U	F15B 7/06	· Details (F15B 15/00 takes precedence)
M	F15B 7/10	· · Compensation of the liquid content in a system (F15B 7/08 takes precedence; pressure-maintaining arrangements for brake master cylinders B60T 11/228)
M	**F15B 9/00**	**Servomotors with follow-up action, {, e.g. obtained by feed-back control,} i.e. in which the position of the actuated member conforms with that of the controlling member ((F15B 11/10 takes precedence))**
M	F15B 9/16	· Systems essentially having two or more interacting servomotors {, e.g. multi-stage (F15B 18/00, F15B 20/00 take precedence; servo-operated pilot valves for the following stage F15B 13/042)}
U	**F15B 11/00**	**Servomotor systems without provision for follow-up action; {Circuits therefor}(F15B 3/00 takes precedence)**
M	F15B 11/003	· {Systems with load-holding valves (locking valve details F15B 13/01)}
U	F15B 11/02	· Systems essentially incorporating special features for controlling the speed or actuating force of an output member

M	F15B 11/024	· · by means of differential connection of the servomotor lines, e.g. regenerative circuits ~~{(interconnecting valve details F15B 13/021)}~~
U	F15B 11/028	· · for controlling the actuating force (F15B 11/024 takes precedence)
M	F15B 11/032	· · · by means of fluid-pressure converters ~~(fluid-pressure converters per se F15B 3/00)~~
M	F15B 11/036	· · · by means of servomotors having a plurality of working chambers ~~(servomotors per se F15B 15/00)~~
U	F15B 11/04	· · for controlling the speed (F15B 11/024 takes precedence)
U	F15B 11/042	· · · by means in the feed line {, i.e. "meter in"}(F15B 11/046, F15B 11/05 take precedence)
M	F15B 11/0423	· · · · {by controlling pump output or bypass, other than to maintain constant speed ~~(adjusting pump output or bypass to maintain constant speed F15B 11/055)~~}
M	F15B 11/05	· · · specially adapted to maintain constant speed, e.g. pressure-compensated, load-responsive {(F15B 11/161 takes precedence~~; counterbalance valves F15B 11/0445; valves for load sensing F15B 13/0416~~)}
M	F15B 11/055	· · · · {by adjusting the pump output or bypass ~~(pump control F04B 49/00)~~}
U	F15B 11/08	· with only one servomotor
M	F15B 11/12	· · providing distinct intermediate positions; with step-by-step action ~~{(with a number of pistons in a single cylinder step-by-step action obtained by combining two or more servomotors F15B 11/18; (for restricting the stroke F15B 15/24)}~~
M	F15B 11/15	· · with special provision for automatic return ~~{(fluid gearing with oscillating input or output F16H 43/00)}~~
M	F15B 11/16	· ~~with~~ *With* two or more servomotors ~~{(for soil-shifting machines E02F 9/22)}~~
U	F15B 11/161	· · {with sensing of servomotor demand or load}
M	F15B 11/162	· · · {for giving priority to particular servomotors or users ~~(priority valve details F15B 13/022; for power steering B62D 5/07)~~}
M	F15B 11/20	· · controlling several interacting or sequentially-operating members ~~(fluid distribution or supply devices for the control of two or more servomotors F15B 13/06)~~
M	F15B 11/205	· · · {the position of the actuator controlling the fluid flow to the subsequent actuator ~~(telescopic booms B66C 23/70)~~}
U	**F15B 13/00**	**Details of servomotor systems ({F15B 1/04, F15B 1/26, F15B 3/00, F15B 7/08, F15B 11/02, F15B 11/10,} F15B 15/00 take precedence){; Valves for servomotor systems}**
M	F15B 13/01	· Locking-valves or other detent~~,~~ {i.e. load-holding}~~,~~ devices ~~(associated with the actuator F15B 15/26; {systems with load-holding valves F15B 11/003})~~
M	F15B 13/02	· Fluid distribution or supply devices characterised by their adaptation to the control of servomotors ~~({F15B 11/15 takes precedence } ; multiple-way valves F16K 11/00)~~
M	F15B 13/021	· · {Valves for interconnecting the fluid chambers of an actuator ~~(regenerative circuits F15B 11/024)~~}
M	F15B 13/022	· · {Flow-dividers; Priority valves ~~(circuits for giving priority to particular servomotors F15B 11/162; priority valves for power steering B62D 5/07)~~}
U	F15B 13/04	· · for use with a single servomotor
M	F15B 13/0416	· · · {with means or adapted for load sensing ~~(fluid systems with load sensing F15B 11/05, F15B 11/161)~~}
U	F15B 13/042	· · · operated by fluid pressure {(F15B 13/0401, F15B 13/0416 take precedence)}

M	F15B 13/0422	· · · · {with manually-operated pilot valves, e.g. joysticks ~~(arrangements of handles or pedals for cranes B66C 13/54; control levers for dredgers and soil shifting machines E02F 9/2004; similar mechanical control actuators G05G 9/047)~~}
M	F15B 13/043	· · · · with electrically-controlled pilot valves ~~((electrically-operated main valves F15B 13/044))~~
M	F15B 13/044	· · · operated by electrically-controlled means, e.g. solenoids, torque-motors ~~((electrically-controlled pilot valves F15B 13/043))~~
M	F15B 13/16	· Special measures for feedback {, e.g. by a follow-up device ~~(servomotors with follow-up action F15B 9/00; devices with means or adapted for load sensing F15B 13/0416)~~}
M	**F15B 15/00**	**Fluid-actuated devices for displacing a member from one position to another ~~(motors for continuous movement F01 - F03)~~; Gearing associated therewith**
M	F15B 15/08	· ~~characterised~~ *Characterised* by the construction of the motor unit ~~(pistons, cylinders, packing F16J)~~
M	F15B 15/082	· · {the motor being of the slotted cylinder type ~~(locking mechanisms therefor F15B 15/265)~~}
M	F15B 15/084	· · {the motor being of the rodless piston type, e.g. with cable, belt or chain ~~(locking mechanisms therefor F15B 15/265)~~}
M	F15B 15/10	· · the motor being of diaphragm type ~~(connection of valves to inflatable elastic bodies B60C 29/00; diaphragms, bellows F16J 3/00 {; clutches with a fluid-actuated elastic clutching member F16D 25/04})~~
U	F15B 15/14	· · of the straight-cylinder type
M	F15B 15/1404	· · · {in clusters, e.g. multiple cylinders in one block ~~(servomotors having a plurality of working chambers F15B 11/036; motors with two or more independently movable working pistons F15B 15/1409)~~}
M	F15B 15/1409	· · · {with two or more independently movable working pistons ~~(systems F15B 11/12, F15B 11/18)~~}
U	F15B 15/1423	· · · {Component parts; Constructional details}
M	F15B 15/1466	· · · · {Hollow piston sliding over a stationary rod inside the cylinder ~~(systems for controlling the actuator force F15B 11/036)~~}
M	F15B 15/18	· Combined units comprising both motor and pump ~~((telemotors F15B 7/00))~~
U	F15B 15/20	· Other details {, e.g. assembly with regulating devices}
M	F15B 15/26	· · Locking mechanisms ~~((locking valves not combined with the actuator F15B 13/01))~~
M	**F15B 20/00**	**Safety arrangements *for fluid actuator systems*; Applications of safety devices *in fluid actuator systems* ~~(safety devices in general F16P, {F16P 3/22})~~; Emergency measures *for fluid actuator systems***
M	F15B 20/008	· {Valve failure ~~(F15B 18/00 takes precedence)~~}
M	**F15B 21/00**	**Common features *of fluid actuator systems*; Fluid-pressure *actuator* systems~~,~~ or details thereof, not covered by any ~~preceding~~*other* group *of this subclass***
M	F15B 21/006	· {Compensation or avoidance of ambient pressure variation ~~(systems with a pressurised main reservoir F15B 1/265)~~}
M	F15B 21/02	· Servomotor systems with programme control derived from a store or timing device; Control devices therefor ~~((programme control in washing-machines D06F 33/04) ; programme control in general G05B 19/00)~~

M	F15B 21/04	· Special measures taken in connection with the properties of the fluid~~, e.g. for venting, compensating for changes of viscosity, cooling, filtering, preventing churning~~
M	F15B 21/041	· · ~~{Filtering; {~~Removal or measurement of solid or liquid contamination*, e.g. filtering*}
C	F15B 21/042	· · {~~Cooling or heating~~*Controlling the temperature* of the fluid~~}; Warming up fluid systems}~~

> **WARNING**
> Group F15B 21/042 is impacted by reclassification into groups F15B 21/0423 and F15B 21/0427.
> Groups F15B 21/042, F15B 21/0423, and F15B 21/0427 should be considered in order to perform a complete search.

N	*F15B 21/0423*	· · · *{Cooling}*

> *WARNING*
> Group F15B 21/0423 is incomplete pending reclassification of documents from group F15B 21/042.
> Groups F15B 21/042 and F15B 21/0423 should be considered in order to perform a complete search.

N	*F15B 21/0427*	· · · *{Heating}*

> *WARNING*
> Group F15B 21/0427 is incomplete pending reclassification of documents from group F15B 21/042.
> Groups F15B 21/042 and F15B 21/0427 should be considered in order to perform a complete search.

M	F15B 21/044	· · {~~Deaeration, venting, bleeding; {~~Removal or measurement of undissolved gas~~-~~*, e.g. de-aeration, venting or bleeding*}~~(preventing cavitation F15B 21/047)}~~
M	F15B 21/045	· · {~~Viscosity~~ *Compensating for variations in viscosity* ~~or temperature compensation (warming up fluid systems F15B 21/042)~~}
M	F15B 21/047	· · {Preventing foaming, churning or cavitation~~ (supply reservoir or sump assemblies F15B 1/26)~~}
M	F15B 21/048	· · {~~Compressed~~ *Arrangements for compressed* air preparation~~ units~~, e.g. comprising air driers~~ or~~*, air* condensers, filters, ~~oilers~~*lubricators* or ~~lubricators,~~ pressure regulators~~ (for steam traps F16T; for mist lubrication F16N 7/32; for air conditioning F24F)~~}
M	F15B 21/10	· Delay devices or arrangements~~ ({hydraulic braking F15B 11/076} ; associated with fluid motors or actuators F15B 15/22)~~
M	F15B 21/12	· Fluid oscillators or pulse generators~~ (fluid oscillators predominantly used for computing or control purposes F15C 1/22, F15C 3/16)~~
M	F15B 21/14	· Energy-~~-~~recuperation means~~ (for vehicles B60T 1/10); {Means for reducing energy consumption (regenerative circuits F15B 11/024)}~~

Project: RP0538 (G06T)

M	**G06T 3/00**	**Geometric image transformation in the plane of the image~~, e.g. from bit-mapped to bit-mapped creating a different image~~**
M	**G06T 5/00**	**Image enhancement or restoration~~, e.g. from bit-mapped to bit-mapped creating a similar image~~**

M	G06T 9/00	**Image coding~~, e.g. from bit-mapped to non bit-mapped~~ (bandwidth or redundancy reduction for static pictures H04N 1/41; coding or decoding of static colour picture signals H04N 1/64; methods or arrangements for coding, decoding, compressing or decompressing digital video signals H04N 19/00)**

Project: RP0539 (H04W)

M	H04W	**WIRELESS ~~COMMUNICATIONS~~*COMMUNICATION* NETWORKS (~~radio transmission systems H04B 7/00~~*broadcast communication H04H;* ~~;transmission systems using electromagnetic waves other than radio waves, e.g. light, infrared H04B 10/00;~~ communication selection systems using wireless ~~extensions, i.e. wireless~~ links ~~without~~ *for non-*selective communication, e.g. ~~cordless telephones~~ *wireless extensions* H04M 1/72~~; broadcast communication H04H~~)**

NOTES
1. This subclass covers :
   - communication networks for selectively establishing one or a plurality of wireless communication links between a desired number of users or between users and network equipment, for the purpose of transferring information via these wireless communication links;
   - networks deploying an infrastructure for mobility management of wireless users connected thereto, e.g. cellular networks, WLAN [Wireless Local Area Network], wireless access networks, e.g. WLL [Wireless Local Loop] or self-organising wireless communication networks, e.g. ad hoc networks;
   - planning or deployment specially adapted for the above-mentioned wireless networks;
   - services or facilities specially adapted for the above-mentioned wireless networks;
   - arrangements or techniques specially adapted for the operation of the above-mentioned wireless networks.
2. This subclass does not cover :
   - communication systems using wireless extensions, i.e. wireless links without selective communication, e.g. cordless telephones, which are covered by group H04M 1/72;
   - broadcast communication, which is covered by subclass H04H.
3. In this subclass, the first place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, classification is made in the first appropriate place.

U	**H04W 28/00**	**Network traffic or resource management**
M	H04W 28/16	· Central resource management; Negotiation of resources ~~{~~or communication parameters~~}~~, e.g. negotiating bandwidth or QoS [Quality of Service]
M	**H04W 48/00**	**Access restriction *(access security to prevent unauthorised access H04W 12/08)*; Network selection; Access point selection**
M	H04W 48/08	· Access restriction or access information delivery, e.g. discovery data delivery *(signalling during connection H04W 76/00)*
M	**H04W 60/00**	**~~Registration~~*Affiliation to network*, e.g. ~~affiliation to network~~*registration*; ~~De-registration~~*Terminating affiliation with the network*, e.g. ~~terminating affiliation~~*de-registration***
M	**H04W 68/00**	**~~Notification of users~~*User notification*, e.g. alerting *and paging,* for incoming communication ~~or~~*,* change of service *or the like***
U	**H04W 74/00**	**Wireless channel access, e.g. scheduled or random access**

M	H04W 74/04	· Scheduled {or contention-free} access *(H04W 74/02 takes precedence)*
M	H04W 74/08	· Non-scheduled {or contention based} access, e.g. random access, ALOHA, CSMA [Carrier Sense Multiple Access] *(H04W 74/02 takes precedence)*
M	**H04W 80/00**	**Wireless network protocols or protocol adaptations to wireless operation, ~~e.g. WAP [Wireless Application Protocol]~~**
U	H04W 80/08	· Upper layer protocols {(network arrangements or communication protocols for networked applications H04L 67/00)}
M	H04W 80/12	· · Application layer protocols, e.g. WAP *[Wireless Application Protocol]*
U	**H04W 84/00**	**Network topologies**

NOTE

In this group, local priority rules supersede the first-place priority rule (FPPR) applying throughout H04W

U	H04W 84/02	· Hierarchically pre-organised networks, e.g. paging networks, cellular networks, WLAN [Wireless Local Area Network] or WLL [Wireless Local Loop]
U	H04W 84/04	· · Large scale networks; Deep hierarchical networks
M	H04W 84/06	· · · Airborne or Satellite Networks *(space-based or airborne stations H04B 7/185)*
U	**H04W 88/00**	**Devices specially adapted for wireless communication networks, e.g. terminals, base stations or access point devices**
M	H04W 88/18	· Service support *devices*; Network management devices

Project: RP0540 (A01N)

M	**A01N**	**PRESERVATION OF BODIES OF HUMANS OR ANIMALS OR PLANTS OR PARTS THEREOF; BIOCIDES, e.g. AS DISINFECTANTS, AS PESTICIDES, AS HERBICIDES (preparations for medical, dental or toilet purposes A61K; methods or apparatus for disinfection or sterilisation in general, or for deodorising of air A61L); PEST REPELLANTS OR ATTRACTANTS (decoys A01M 1/06; medicinal preparations A61K); PLANT GROWTH REGULATORS (compounds in general C01, C07, C08; fertilisers C05; soil conditioners or stabilisers C09K 17/00)**

NOTES

1. This subclass covers:
   • compositions, physical forms, methods of application of specific materials or the use of single compounds or compositions
   • chemosterilants for the sexual sterilisation of invertebrates, e.g. insects ~~(,~~ *whereas* sex sterilants for other purposes *are covered by* A61K~~)~~.

2. This subclass does not cover materials which affect the growth of a plant solely by supplying nutrients, i.e. plant food, ordinarily required for growth or materials which are used to prevent or cure mineral deficiencies in plants, e.g. addition of iron chelates to cure iron chlorosis, which materials are covered by class C05.

3. In this subclass, the following expression is used with the meaning indicated:
   • "plant growth regulators" are those materials which alter the plant through a chemical modification of the plant metabolism, such as auxins.

WARNINGS

1. The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:

A01N 43/824	covered by	A01N 43/82
A01N 43/828	covered by	A01N 43/82
A01N 43/832	covered by	A01N 43/82

A01N 43/836	covered by	A01N 43/82
A01N 53/02	covered by	A01N 53/00
A01N 53/04	covered by	A01N 53/00
A01N 53/06	covered by	A01N 53/00
A01N 53/08	covered by	A01N 53/00
A01N 53/10	covered by	A01N 53/00
A01N 53/12	covered by	A01N 53/00
A01N 53/14	covered by	A01N 53/00
A01N 55/10	covered by	A01N 55/00

2. In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

Project: RP0540 (B01D)

M   B01D   **SEPARATION (separating solids from solids by wet methods B03B, B03D; by pneumatic jigs or tables B03B; by other dry methods B07; magnetic or electrostatic separation of solid materials from solid materials or fluids, separation by high-voltage electric fields B03C; centrifuges, vortex apparatus B04; presses _per se_ for squeezing-out liquid from liquid-containing material B30B 9/02; treatment of water C02F, e.g. softening by ion-exchange C02F 1/42; {arrangements of air intake cleaners in gas turbine plants F02C 7/05} ; arrangements or mounting of filters in air-conditioning, air-humidification or ventilation F24F 13/28)**

NOTES
1. This subclass covers:
    *   evaporation, distillation, crystallisation, filtration, dust precipitation, gas cleaning, absorption, adsorption;
    *   similar processes which are not concerned with, or limited to, separation (, except in the case of absorption or adsorption).

2. In this subclass the terms or expressions are used with the meaning indicated:
    *   "filtration" and analogous terms include straining solids from fluids. *Filtration is a process that normally uses a filter medium*;
    *   "filter medium" is a porous material or porous arrangement of material used to filter solids from fluids;
    *   "filtering element" is a section of filter medium in addition to parts to which the medium is demountably or permanently fixed, including other sections of medium, end caps, peripheral frames or edge strips, but excluding housings;
    *   "filter housing" is the fluid-constraining impervious vessel, whether open or closed, which contains, or is adapted to contain, one or more filtering elements or filter media;
    *   "filter chamber" is the space within a housing, where filtering elements or filter media are located. Partitions may divide a single housing into a plurality of chambers;
    *   "filtering apparatus" consists of filtering elements combined with housings, cleaning arrangements, motor or the like parts, which are characteristic of the particular type of apparatus. Ancillary devices such as pumps or valves are considered part of a filtering apparatus when inside the apparatus. Ancillary devices performing similar or different unit operation such as comminutors, mixers or non-filtering separators, whether or not inside the apparatus, are not considered part of a filtering apparatus. The term does

not extend to apparatus, e.g. washing machines, of which the filter forms only a part.

3. For apparatus used in drying or evaporation, *class* F26 takes precedence over ~~B01D~~*this subclass* .

4. Group B01D 59/00 takes precedence over the other groups of this subclass and over other subclasses in class B01.

WARNINGS

1. The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:

B01D 15/04	covered by	B01J 39/00 - B01J 49/90
B01D 17/022	covered by	B01D 17/0202
B01D 17/025	covered by	B01D 17/0208
B01D 17/028	covered by	B01D 17/0211
B01D 17/032	covered by	B01D 17/0214
B01D 17/035	covered by	B01D 17/0205
B01D 17/038	covered by	B01D 17/0217
B01D 17/05	covered by	B01D 17/047
B01D 17/09	covered by	B01D 17/005
B01D 25/133	covered by	B01D 25/285
B01D 25/168	covered by	B01D 25/285
B01D 29/075	covered by	B01D 29/01, B01D 29/64
B01D 29/37	covered by	B01D 29/336, B01D 29/356
B01D 33/052	covered by	B01D 33/042, B01D 33/048
B01D 35/01	covered by	B01D 36/001
B01D 61/26	covered by	A61M 1/1656
B01D 61/34	covered by	A61M 1/16

2. In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

M   B01D 71/00   **Semi-permeable membranes for separation processes or apparatus characterised by the material; Manufacturing processes specially adapted therefor**

NOTES

1. In this group, if the material is a composition it is classified according to the constituent present in ~~the~~ highest proportion. This constituent is classified according to the last place rule ~~(, *see*~~see Note before group B01D 61/00 ~~)~~. If there is more than one constituent present in equal highest proportions, then each of these constituents is classified according to the last place rule .

2. Manufacturing processes, if considered of interest, are also classified in group B01D 67/00.

Project: RP0540 (C07)

M   C07   **ORGANIC CHEMISTRY (such compounds as the oxides, sulfides, or oxysulfides of carbon, cyanogen, phosgene, hydrocyanic acid or salts thereof C01; products obtained from layered base-exchange silicates by ion-exchange with organic compounds such as ammonium, phosphonium or sulfonium compounds or by intercalation of organic compounds C01B 33/44; macromolecular compounds C08; dyes C09; fermentation products C12; fermentation or enzyme-using processes to synthesise a desired chemical compound or composition or to separate optical isomers from a racemic mixture C12P; production of organic compounds by electrolysis or electrophoresis C25B 3/00, C25B 7/00)**

NOTES

1. In this class, the following term is used with the meaning indicated:
   - "preparation" covers purification, separation, stabilisation or use of additives, unless a separate place is provided therefor.

2. *Biocidal, pest repellant, pest attractant or plant growth regulatory activity of compounds or preparations is further classified within IPC.* {This IPC Note does not apply in CPC.}

3. In subclasses C07C-C07K, the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, and with the exception referred to below, a compound is classified in the last appropriate place. For example, 2-butyl- pyridine, which contains an acyclic chain and a heterocyclic ring, is classified only as a heterocyclic compound, in subclass C07D. In general, and in the absence of an indication to the contrary, *such as mentioned in groups C07C 59/58, C07C 59/70,*the terms "acyclic" and "aliphatic" are used to describe compounds in which there is no ring; and, if a ring were present, the compound would be taken by the "last place" rule to a later group for cycloaliphatic or aromatic compounds, if such a group exists. Where a compound or an entire group of compounds exists in tautomeric forms, it is classified as though existing in the form which is classified last in the system, unless the other form is specifically mentioned earlier in the system.

4. Chemical compounds and their preparation are classified in the groups for the type of compound prepared. The processes of preparation are also classified in the groups *places* for the types of reaction employed, if of interest. Examples of such places outside this class are:

C12P	Fermentation or enzyme-using processes to synthesise a desired chemical compound or composition or to separate optical isomers from a racemic mixture
C25B 3/00	Electrolytic production of organic compounds
C25B 7/00	Electrophoretic production of compounds

5. General processes for the preparation of a class of compounds falling into more than one main group are classified in the groups for the processes employed, when such groups exist. The compounds prepared are also classified in the groups for the types of compound prepared, if of interest.

6. In this class, in the absence of an indication to the contrary, the compounds containing carboxyl or thiocarboxyl groups are classified as the relevant carboxylic or thiocarboxylic acids, unless the "last place rule" (see Note (3), above) dictates otherwise; a carboxyl group being a carbon atom having three bonds, and no more than three, to hetero atoms, other than nitrogen atoms of nitro or nitroso groups, with at least one multiple bond to the same hetero atom and a thiocarboxyl group being a carboxyl group having at least one bond to a sulfur atom, e.g. amides or nitriles of carboxylic acids, are classified with the corresponding acids {unless the "last place rule" (see Note (3), above) dictates otherwise}.

7. {Anhydrides and halides of carboxylic acids are classified as the relevant acids unless otherwise indicated.} Salts of a compound, unless specifically

provided for, are classified as that compound, e.g. aniline hydrochloride is classified as containing carbon, hydrogen and nitrogen only ~~(in *group* C07C 211/46)~~, sodium malonate is classified as malonic acid ~~(in C07C 55/08)~~, and a mercaptide is classified as the mercaptan. Metal chelates are dealt with in the same way. Similarly, metal alcoholates and metal phenates are ~~{generally}~~ classified in subclass C07C and not in subclass C07F, the alcoholates ~~{for instance}~~ in groups C07C 31/28 - C07C 31/32 and the phenates ~~as the corresponding phenols~~ in group C07C 39/235 or C07C 39/44. Salts, adducts or complexes formed between two or more organic compounds are classified according to all compounds forming the salts, adducts or complexes.

Project: RP0540 (C08C)

M   C08C   **TREATMENT OR CHEMICAL MODIFICATION OF RUBBERS**

NOTE

~~This subclass includes:~~
- ~~processes directed to natural rubber or to conjugated diene rubber (synthesis thereof C08F)~~
- ~~processes directed to rubbers in general (to a specified rubber, other than provided for by (a) above, C08F - C08H)~~

This subclass covers:
- *processes directed to natural rubber or to conjugated diene rubbers*
- *processes directed to rubbers in general.*

WARNING

The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:

| C08C 1/16 | covered by | C08C 1/14 |

Project: RP0540 (C08F)

M   C08F   **MACROMOLECULAR COMPOUNDS OBTAINED BY REACTIONS ONLY INVOLVING CARBON-TO-CARBON UNSATURATED BONDS**

NOTES

1. In this subclass, boron or silicon are considered as metals.

2. In this subclass, the following expression is used with the meaning indicated:
   - "aliphatic radical" means an acyclic or a non-aromatic carbocyclic carbon skeleton which is considered to be terminated by every bond to:
     a. an element other than carbon ~~;~~
     b. a carbon atom having a double bond to one atom other than carbon ~~;~~
     c. an aromatic carbocyclic ring or a heterocyclic ring.
        Examples: Polymers of
        a. CH_2 =CH-—O-—CH_2-—CH_2-—NH-~~C(=O)O~~-—*COO*—CH_2-CH_2- —OH are classified in group C08F 16/28*;*
        b. CH_2=CH-C(=O)-CH=CH_2 are classified in group C08F 16/36
        c. para-$C_6H_4Cl(CH=CH_2)$ are classified in group C08F 12/18.

3. Therapeutic activity of compounds is further classified in subclass A61P.

~~3.~~ *4.* In this subclass*, the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, a catalyst or a polymer is classified in the last appropriate place.* ~~:~~
- ~~a. in the absence of an indication to the contrary, a catalyst or a polymer is classified in the last appropriate place .~~
- ~~b. {From April 2012 onwards, in a copolymer, the monomer in majority is given an Indexing Code and the monomer(s) in minority are given Indexing Code(s) in the form of a C-Set. The Indexing Codes are linked. The monomer in majority is always indicated first in the C-set. Example: a~~

> copolymer having ethylene in majority and styrene in minority is classified in (C08F 210/02, C08F 212/08).}

4. *5.* In this subclass:
   a. macromolecular compounds and their preparation are classified in the groups for the type of compound prepared. General processes for the preparation of macromolecular compounds according to more than one main group are classified in the groups for the processes employed (C08F 2/00 - C08F 8/00)*for the processes employed*. Processes for the preparation of macromolecular compounds are also classified in the groups for the types of reactions employed, if of interest;
   b. subject matter relating to both homopolymers and copolymers is classified in groups C08F 10/00 - C08F 38/00;
   c. subject matter limited to homopolymers is classified only in groups C08F 110/00 - C08F 138/00;
   d. subject matter limited to copolymers is classified only in groups C08F 210/00 - C08F 246/00;
   e. in groups C08F 210/00 - C08F 238/00, in the absence of an indication to the contrary, a copolymer is classified according to the major monomeric component.

5. *6.* This subclass covers*covers* also compositions based on monomers which form macromolecular compounds classifiable in this subclass (paints C09D 4/00 ; adhesives C09J 4/00). In this subclass:
   a. if the monomers are defined, classification is made according to the polymer to be formed:
      - in groups C08F 10/00 - C08F 246/00 if no preformed polymer is present;
      - in groups C08F 251/00 - C08F 291/00 if a preformed polymer is present, considering the reaction to take place as a graft or cross-linking reaction;
   b. if the presence of compounding ingredients is of interest, classification is made in group C08F 2/44 (sensitising agents C08F 2/50; catalysts C08F 4/00);
   c. if the compounding ingredients are of interest per se , classification is also made in subclass C08K.

7. {In this subclass, combination sets [C-Sets] are used. The detailed information about the C-Sets construction and the associated syntax rules are found in the Definitions}

WARNING

In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

U   C08F 4/00   Polymerisation catalysts (catalysts in general B01J)

NOTES

1. Group C08F 4/00 and subgroups can be incomplete according to the following classification rules:
   - if a catalyst is specifically used for only one type of polymer, it is not classified in C08F 4/00;
   - in such a case, the classification symbol of C08F 4/00 providing for the catalyst may be used as a symbol for a C-Set in the groups providing for the polymer, e.g. (C08F 12/04, C08F 4/62)
   - this method of classification is applied only when a note after the group providing for the polymer explicitly indicates which symbols of C08F 4/00 may be used for forming the C-set.

2. When classifying in group C08F 4/00, the type of catalyst can be further indexed by using indexing codes chosen from C08F 2410/00, C08F 2420/00 or their subgroups

U	C08F 4/42	· Metals; Metal hydrides; Metallo-organic compounds; Use thereof as catalyst precursors
U	C08F 4/44	· · selected from light metals, zinc, cadmium, mercury, copper, silver, gold, boron, gallium, indium, thallium, rare earths or actinides
M	C08F 4/60	· · · together with refractory metals, iron group metals, platinum group metals, manganese, rhenium {technetium} or compounds thereof

NOTE

1. In groups C08F 4/60 - C08F 4/64, the term "component" comprises the transition metal or a compound thereof, pretreated or not { (pretreating per se C08F 4/61, C08F 4/63 and C08F 4/65) }

1. In groups C08F 4/602-C08F 4/62, the following term is used with the meaning indicated: "component" comprises a transition metal or a compound thereof, pretreated or not.

2. Group {In groups C08F 4/602-C08F 4/619, the group C08F 4/60003 takes precedence over groups C08F 4/602 - }C08F 4/619

Project: RP0540 (C08G)

M	C08G 63/00	**Macromolecular compounds obtained by reactions forming a carboxylic ester link in the main chain of the macromolecule (polyester-amides C08G 69/44; polyester-imides C08G 73/16)**

NOTE

Compounds characterised by the chemical constitution of the polyesters are classified in the groups for the type of polyester compound. Compounds characterised by the preparation process of the polyesters are classified in the groups for the process employed (groups C08G 63/78 - C08G 63/87) for the process employed. Compounds characterised both by the chemical constitution and by the preparation process are classified according to each of these aspects.

Project: RP0540 (C10M)

M	C10M 113/00 - C10M 123/00	**Thickeners**

NOTE

A thickener is an agent which solidifies other liquid components to form a grease (solid lubricants consisting of solid components C10M 101/00 - C10M 111/00).

In groups C10M 113/00-C10M 123/00, the following term is used with the meaning indicated:
  • "thickener" is an agent which solidifies other liquid components to form a grease. Solid lubricants consisting of solid components are classified in groups C10M 103/00 - C10M 111/00.

Project: RP0540 (C10N)

M	C10N	**INDEXING SCHEME ASSOCIATED WITH SUBCLASS C10M RELATING TO LUBRICATING COMPOSITIONS**

NOTES

1. This subclass constitutes an indexing scheme associated with subclass C10M, relating to:
  • metals and the metal of a compound in group C10N 2010/00;
  • the properties of the lubricant composition or constituents thereof in groups C10N 2020/00, C10N 2030/00;
  • the use or application of the lubricant composition in group C10N 2040/00;
  • the form in which the lubricant composition is applied in group C10N 2050/00;

- *chemical modification by after-treatment of lubricant constituents in group C10N 2060/00;*
- *special methods of preparation in group C10N 2070/00;*
- *special pretreatment of the material to be lubricated in group C10N 2080/00.*

2. In this subclass, the following terms or expressions are used with the meanings indicated:
- *"lubricant" or "lubricating composition" includes cutting oils, hydraulic fluids, metal drawing compositions, flushing oils, slushing oils, or the like;*
- *"aliphatic" includes "cycloaliphatic".*

Project: RP0540 (C21B)

M   C21B   **MANUFACTURE OF IRON OR STEEL (preliminary treatment of ferrous ores or scrap C22B 1/00; electric heating H05B)**

NOTE

~~This subclass covers the production of iron or steel from source materials, e.g. the production of pig-iron, and apparatus specially adapted therefor, e.g. blast furnaces, air heaters (furnaces in general F27).~~

This subclass covers:
- *the production of iron or steel from source materials, e.g. the production of pig-iron;*
- *apparatus specially adapted therefor, e.g. blast furnaces or air heaters.*

WARNING

In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

Project: RP0540 (C23)

M   C23   **COATING METALLIC MATERIAL; COATING MATERIAL WITH METALLIC MATERIAL (by metallising textiles D06M 11/83; decorating textiles by locally metallising D06Q 1/04); CHEMICAL SURFACE TREATMENT; DIFFUSION TREATMENT OF METALLIC MATERIAL; COATING BY VACUUM EVAPORATION, BY SPUTTERING, BY ION IMPLANTATION OR BY CHEMICAL VAPOUR DEPOSITION, IN GENERAL (for specific applications, see the relevant places, e.g. for manufacturing resistors H01C 17/06); INHIBITING CORROSION OF METALLIC MATERIAL OR INCRUSTATION IN GENERAL (treating metal surfaces or coating of metals by electrolysis or electrophoresis C25D, C25F)**

NOTE

1. In this class, the following expression is used with the meaning indicated:
   - "metallic material" covers:
     a. metals;
     b. alloys ~~(attention is drawn to the Note following the title of subclass C22C):~~
        ~~alloys containing at least 50 % by weight of one or more of borides, carbides, nitrides, oxides or silicides and binding metal; non-ferrous alloys containing at least 5 % by weight but less than 50 % by weight of borides, carbides, nitrides, oxides or silicides of refractory metals, whether added as such or formed in situ.~~

2. Attention is drawn to the Note following the title of subclass C22C. {
   - *C22C 29/00 concerns alloys containing at least 50 % by weight of one or more of borides, carbides, nitrides, oxides or silicides and binding metal;*

> • *C22C 32/00 concerns non-ferrous alloys containing at least 5 % by weight but less than 50 % by weight of borides, carbides, nitrides, oxides or silicides of refractory metals, whether added as such or formed in situ.*
> *}*

Project: RP0541 (G02B)

M   G02B   **OPTICAL ELEMENTS, SYSTEMS, OR APPARATUS (G02F takes precedence; measuring-instruments, <u>see</u> the relevant subclass of G01, e.g. optical rangefinders G01C; testing of optical elements, systems, or apparatus G01M 11/00; spectacles G02C; sound lenses G10K 11/30; electron and ion "optics" H01J; X-ray "optics" H01J, H05G 1/00; optical elements structurally combined with electric discharge tubes H01J 5/16, H01J 29/89, H01J 37/22; microwave "optics" H01Q; combination of optical elements with television receivers H04N 5/72; heating arrangements specially adapted for transparent or reflecting areas H05B 3/84; {optical apparatus 42H})**

<u>NOTE</u>

~~In this subclass,~~ *Attention is drawn to* the *Notes* following ~~terms are used with~~ the *titles of class B81 and subclass B81B relating to "microstructural devices" and "microstructural systems".* ~~meanings indicated :~~

- ~~"simple lens or prism" means a single lens or prism;~~
- ~~"compound lens or prism" means an optical member, the constituents of which either are close together without air-space or (except in group) are "in broken contact", i.e. with the air-space between the constituents having no essential optical influence;~~
- ~~"objective" means a lens or an optical system designed to produce a real image of a real object;~~
- ~~"eyepiece" means a lens or an optical system designed to produce a virtual image for viewing by the eye or by another optical system;~~
- ~~"front" or "rear" is determined by looking from the more distant conjugate.~~

<u>WARNINGS</u>

1. The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:~~-~~

G02B 11/00 ~~-~~ – G02B 11/34	covered by	G02B 9/00 and ~~subgroups and~~ G02B 13/00 ~~and subgroups~~

2. In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

Project: RP0541 (G05B)

M   G05B   **CONTROL OR REGULATING SYSTEMS IN GENERAL; FUNCTIONAL ELEMENTS OF SUCH SYSTEMS; MONITORING OR TESTING ARRANGEMENTS FOR SUCH SYSTEMS OR ELEMENTS (fluid-pressure actuators or systems acting by means of fluids in general F15B; valves <u>per se</u> F16K; characterised by mechanical features only G05G; sensitive elements, <u>see</u> the appropriate subclass, e.g. G12B, subclass of G01, H01; correcting units, <u>see</u> the appropriate subclass, e.g. H02K)**

<u>NOTES</u>

1. This subclass <u>covers</u> features of control systems or elements for regulating specific variables, which are clearly more generally applicable.

~~2. This subclass <u>does not cover</u> applications of such systems or elements, which are covered by subclass G05D or G05F.~~

2. This subclass <u>does not cover</u>:

a. systems for controlling or regulating non-electric variables in general, which are covered by subclass G05D;

b. systems for regulating electric or magnetic variables in general, which are covered by subclass G05F;

c. systems specially adapted for the control of particular machines or apparatus provided for in a single other subclass, which are classified in the relevant subclass for such machines or apparatus, provided that there is specific provision for control or regulation relevant to the special adaptation. Otherwise, classification is made in the most appropriate place in this subclass.

3. In this subclass, the following terms or expressions are used with the meanings indicated :
- "automatic controller" means a system, circuit, or device in which a signal from the detecting element is compared with a signal representing the desired value and which operates in such a way as to reduce the deviation. The automatic controller generally does not include the sensitive element, i.e. that element which measures the value of the condition to be corrected, or the correcting element, i.e. that element which adjusts the condition to be corrected;
- "electric" includes "electromechanical", "electrohydraulic" or "electropneumatic".

3. IIn this subclass, the following terms or expressions are used with the meanings indicated:
- *"automatic controller" means a system, circuit, or device in which a signal from the detecting element is compared with a signal representing the desired value and which operates in such a way as to reduce the deviation. The automatic controller generally does not include the sensitive element, i.e. that element which measures the value of the condition to be corrected, or the correcting element, i.e. that element which adjusts the condition to be corrected;*
- *"electric" includes "electromechanical", "electrohydraulic" or "electropneumatic".*

4. In this subclass, details or specific control systems are classified in the group relevant to that system, if not otherwise provided for.

WARNING

In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

Project: RP0541 (G05D)

M   G05D   **SYSTEMS FOR CONTROLLING OR REGULATING NON-ELECTRIC VARIABLES (for continuous casting of metals B22D 11/16; valves per se F16K; sensing non-electric variables, see the relevant subclasses of G01; for regulating electric or magnetic variables G05F)**

NOTES

1. This subclass does not cover features of general applicability to regulating systems, e.g. anti-hunting arrangements, which are covered by subclass G05B.

2. In this subclass, the following term is used with the meaning indicated:
- "systems" includes self-contained devices such as speed governors, pressure regulators.

3. Control systems specially adapted for particular apparatus, machines or processes are classified in the subclasses for the apparatus, machines or processes, provided that there is specific provision for control or regulation relevant to the special adaptation, either at a detailed level, (e.g. A21B 1/40 : "for regulating temperature in bakers' ovens"), or at a general level, (e.g. B23K 9/095 : "for automatic control of welding parameters in arc welding").

Otherwise, classification is ~~madein~~ *made in* the most appropriate place in this subclass.

~~The following are lists of places where there is specific provision of the kind referred to above. Where such provision is at a detailed level, the places have been grouped according to the main groups of this subclass. Where the provision is at a general level (e.g. of a kind appropriate to more than one of the main groups specified in the lists, or to main groups G05D 27/00 or G05D 29/00), the places are listed under the title "General References".~~

~~Places related to G05D 1/00~~

~~A01B 69/00~~	~~Agricultural machines or implements~~
~~A63H 17/36~~	~~Toy vehicles~~
~~B60V 1/11~~	~~Air-cushion vehicles~~
~~B62D 1/00~~	~~Steering controls of motor vehicles or trailers,i.e. means for initiating a change of direction~~
~~B62D 6/00~~	~~Arrangements for automatically controlling thesteering depending on driving conditions~~
~~B62D 55/116~~	~~Chassis of endless-tracked vehicles~~
~~B63H 25/00~~	~~Marine steering; control of waterborne vessels~~
~~B64C 13/00 - B64C 15/00~~	~~Controlling aircraft~~
~~B64D 25/10~~	~~Controlling attitude or direction of aircraftejector seats~~
~~B64G 1/24~~	~~Cosmonautic vehicles~~
~~F41G 7/00~~	~~Self-propelled missiles~~
~~F42B 15/01~~	~~Guided missiles~~
~~F42B 19/01~~	~~Marine torpedoes~~

~~Places related to G05D 3/00~~

~~A43D 119/00~~	~~Footwear manufacture~~
~~B21K 31/00~~	~~Tool carriers in forging or pressing~~
~~B23B 39/26~~	~~Pattern-controlled boring or drilling tools~~
~~B23D 1/30, B23D 3/06, B23D 5/04~~	~~Planing or slotting machines controlled by copying device~~
~~B23H 7/18~~	~~Electrode to workpiece spacing in electric discharge and electrochemical machining~~
~~B23K 26/02~~	~~Workpiece in laser welding or cutting~~
~~B23K 37/04~~	~~Workpiece in welding~~
~~B23K 37/06~~	~~Molten metal in welding~~
~~B23Q 5/20~~	~~Spindles in machine tools~~
~~B23Q 15/00, B23Q 16/00~~	~~Tool or work position in machine tools~~
~~B23Q 35/00~~	~~Tools controlled by pattern or master model~~
~~B24B 17/00~~	~~Grinding controlled by patterns, drawings,magnetic tape or the like~~
~~B24B 47/22~~	~~Starting position in grinding~~
~~B30B 15/24~~	~~Actuating members in presses~~
~~B62D 55/116~~	~~Chassis of tracked vehicles~~
~~B65H 23/18~~	~~Web-advancing mechanisms~~
~~E02F 3/43~~	~~Dippers or buckets in dredgers~~
~~F15B 9/00~~	~~Fluid-pressure servomotors with follow-up action~~
~~F24S 50/20~~	~~Tracking of solar haet collectors~~
~~G03F 9/00~~	~~Photomechanical production of patterned or textured surfaces~~

| G11B 5/588 | Rotating heads in information storage systems |
| G21C 7/12 | Movement of control elements in nuclear reactors |

Places related to G05D 5/00
A24B 7/14	Tobacco cutting
B05C 11/02	Thickness of coating of fluent material onsurface
B21B 37/16	Thickness, width, diameter or othertransverse dimensions of the products ofmetal-rolling mills
C03B 18/04	Dimension of glass ribbon
D21F 7/06	Thickness of layer in paper making

Places related to G05D 7/00
A45D 20/26	Air in hair drying helmets
A61M 5/168	Flow of media to the human body
B03C 3/36	Gases or vapour in electrostatic separators
B05C 11/10	Fluent material in coating devices
B67D 1/12	Dispensing beverages on draught
B67D 7/28	Transferring liquids
C10K 1/28	Gas purifiers
E21B 21/08	Flushing boreholes
E21B 43/12	Obtaining liquids from wells
F01D 17/00	Flow in non-positive-displacement machinesor systems
F01M 1/16	Lubrication arrangements
F01P 7/00	Coolant flow in cooling devices
F02C 9/16, F02C 9/50	Gas-turbine working fluid
F16L 55/027	Throttle passages in pipes
F24F 11/00	Air-flow or supply of heating or cooling fluids in air treatment arrangements
F26B 21/12	Air or gas flow in dryers
G01G 11/08	Continuous flow weighing apparatus
G21D 3/14	Coolant in nuclear power plant

Places related to G05D 9/00
B01D 21/34	Liquid level in sedimentation arrangements
B41L 27/04	Ink level in printing, manifolding orduplicating arrangements
F22D 5/00	Feed water for boilers
H01J 1/10, H01J 13/14	Liquid pool electrodes in electric dischargetubes or lamps

Places related to G05D 11/00
B01D 21/32	Density in sedimentation arrangements
B01F 15/04	Mixers
B24C 7/00	Abrasive blasts
B28C 7/00	Mixtures of clays or cements
B65G 53/66	Bulk material conveyors
F02K 3/075	Flow ratio in jet-propulsion plants

Places related to G05D 13/00
B21C 1/12	Drum speed in metal drawing
B23Q 15/00	Cutting velocity of tool or work
B30B 15/20	Ram speed in presses

B60K 31/00	Setting or limiting speed of vehicles
B60L 15/00	Electrically-propelled vehicles
B64D 31/08	Cruising speed of aircraft
D01D 1/09	Feed rate in manufacture of artificialfilaments, threads, fibres, bristles orribbons
D01G 15/36	Carding machines
D02H 13/14	Warping, beaming or leasing machines
D03D 51/16	Cyclically varying speed of looms
G01N 30/32	Speed of fluid carrier in chemical analysis
G11B 15/46	Filamentary or web record carriers or headsfor such carriers in information storagesystems
G11B 19/28	Non-filamentary, non-web record carriers, orheads for such carriers in information storagesystems

Places related to G05D 15/00

B25D 9/26	Portable percussive tools
B30B 15/22	Ram pressure in presses
B65H 59/00	Tension in filamentary material
{B65H 23/00, B65H 59/00}	Tension in webs, tapes, filamentary material
B66D 1/50	Rope, cable or chain tension
D03D 49/04	Tension in looms
D05B 47/04	Tension in sewing machines
D21F 3/06	Pressure in paper-making machines
F26B 13/12	Drying fabrics
F26B 21/10	Pressure in dryers
G11B 15/43	Record carrier tension in informationstorage arrangements

Places related to G05D 16/00

B60C 23/00	Tyre pressure
B63C 11/08	Air within diving suit
B64D 13/00	Aircraft air-pressure
B65G 53/66	Bulk material conveyors
D01D 1/09	Manufacture of artificial filaments, threads,fibres, bristles or ribbons
E21B 21/08	Flushing boreholes
F01M 1/16	Lubrication arrangements
G01N 30/32	Pressure of fluid carrier in chemical analysis
H01J 7/14	Pressure in electric discharge tubes or lamps
H01K 1/52	Pressure in electric incandescent lamps

Places related to G05D 19/00

B25D 9/26	Portable percussion tools
B65G 27/32	Jigging conveyors

Places related to G05D 21/00

B01D 21/32	Density in sedimentation arrangements
B01D 53/30	Treating gases or vapours
G01N 30/34	Composition of fluid carrier in chemicalanalysis

Places related to G05D 22/00

A01G 25/16	Watering gardens, fields, sports groundsor the like
A01K 41/04	Poultry incubators

A24B 9/00	Tobacco products
F24F 11/00	Air conditioning
F26B 21/08	Dryers

Places related to G05D 23/00

A21B 1/40	Bakers' ovens
A45D 6/20	Hair curlers
B21C 31/00	Metal extruding
B60C 23/00	Tyre temperature
B64G 1/50	Cosmonautic vehicles
C03B 18/18, C03B 18/22	Float baths in glass making
D01D 1/09	Manufacture of artificial filaments,threads, fibres, bristles or ribbons
D04B 35/30	Knitting machines
D06F 75/26	Hand irons
D21F 5/06	Paper-making machines
F01M 5/00	Lubricant in lubrication arrangements
F16N 7/08	Arrangements for supplying oil or unspecifiedlubricant from a reservoir
F22G 5/00	Steam superheat
F26B 21/10	Dryers
G01N 30/30	Temperature of fluid carrier in chemicalanalysis
H01M 10/60	Electric storage cells
H05B 6/06, H05B 6/50, H05B 6/68	Dielectric, induction or microwave heating
H05G 1/36	Anode of X-ray tube

Places related to G05D 25/00

| B41B 21/08 | Photographic composing machines |
| H01S 3/10, H05B 33/08, H05B 35/00 to H05B 43/00 | Lasers and other light sources |

General references

A01J 5/007	Milking machines
B23K 9/095	Welding parameters
B23Q 35/00	Copying
B24B 17/00, B24B 49/00	Grinding or polishing
B24C 7/00	Abrasive blasts
B67D 1/12	Dispensing beverages on draught
G03G 21/20	Electrographic, electrophotographic ormagnetographic processes
H02P 5/00 - H02P 9/00	Dynamo-electric motors or generators

WARNING

In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

Project: RP0541 (G05G)

M   G05G   **CONTROL DEVICES OR SYSTEMS INSOFAR AS CHARACTERISED BY MECHANICAL FEATURES ONLY ("Bowden" or like mechanisms F16C 1/10; gearings or mechanisms not peculiar to this purpose F16H; speed changing or reversing mechanisms for gearings conveying rotary motion F16H 59/00 - F16H 63/00)**

NOTES

1. This subclass covers:
   - members of general applicability for mechanical control;
   - mechanical systems for moving members to one or more definite settings.

2. Systems peculiar to the control of particular machines or apparatus provided for in a single other class are classified in the relevant class for such machines or apparatus., for example:

A61G 13/02	Controls for adjusting operating tables
A61G 15/02	Controls for adjusting operating chairs
A63F 13/20, A63F 13/98	Accessories for games using an electronically generated display
B25J	Manipulators, e.g. controls therefor
B60K 26/00	Arrangement or mounting of propulsion-unit control devices in vehicles
B60T 7/00	Vehicle brake-action initiating means
B62D 33/073	Adaptations of control devices for movable vehicle cabs
B62K 21/00	Cycle-steering devices
B62K 23/00	Rider-operated controls specially adapted for cycles
B62L 3/00	Brake-actuating mechanisms specially adapted for cycles
B63H 25/02	Marine steering initiating means
B66B 1/00	Controls for elevators
B66C 13/18	Control systems or devices for cranes
B66C 13/56	Arrangements of handles or pedals for crane operation
E02F 9/20	Control devices for dredging or soil shifting machines
F16C 3/28	Adjustable cranks or eccentrics
F16D 43/00	Automatic clutches
F16K 31/00, F16K 33/00	Controls for valves
F16P 3/00	Safety devices acting in conjunction with the control or operation of a machine
F16P 7/02	Stopping machines on occurrence of dangerous conditions therein
G02B 21/32	Micromanipulators structurally combined with microscopes
G04B 1/00 - G04B 18/00	Driving mechanisms in clocks or watches
G06C	Digital computers in which all the computation is effected mechanically
G06F 3/02	Manual computer input arrangements
G06K 11/00	Converting a pattern of mechanical parameters into electric signals
G21C 7/08	Displacement of solid control elements in nuclear reactors
H01H	Mechanisms for operating switch contacts

| H03J 1/00 | ~~Mechanical control of resonant circuits.~~ |

WARNING

In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

Project: RP0544 (F16L)

M   F16L   **PIPES; JOINTS OR FITTINGS FOR PIPES; SUPPORTS FOR PIPES, CABLES OR PROTECTIVE TUBING; MEANS FOR THERMAL INSULATION IN GENERAL**

NOTES

1. In this subclass, the following terms are used with the meanings indicated:
   - "pipe" means a conduit of closed cross-section, which is specially adapted to convey fluids, materials or objects;
   - "hose" means a pipe, as defined above, which has flexibility as an essential characteristic.

2. Attention is drawn to the following places:

A61M 39/00	Tube connectors, tube couplings or branch units, specially adapted for medical use
B05B 1/20	Perforated pipes
{B60T 17/04}	{Arrangement of piping or air hoses in brake systems}
B63B 35/03	Pipe-laying vessels
B64D 39/04	Adaptation of hose constructions for refuelling aircraft during flight
{B65G 51/00}	{Conveying articles through pipes or tubes by fluid flow or pressure}
{B65G 53/00}	{Conveying materials in bulk through pipes or tubes}
B67D 7/38	Arrangements of hoses in apparatus for transferring liquids, e.g. fuel, from bulk to vehicles or portable containers
E01D 19/10	Fastening of pipes or cables to bridges
E03B	Water supply installations
E03D 11/17	Means for connecting water-closet bowls to the flushing pipe
E03D 11/18	Siphons for water-closets
E03F 3/04	Pipes or fittings specially adapted to sewers
E04D 13/08	Down pipes for roof drainage; Clamping means therefor
E04F 17/00	Vertical ducts, channels in buildings, e.g. chimneys
E21F 1/04	Air ducts for ventilation of mines or tunnels; Connections therefor
E21F 17/02	Suspension devices for tubes or the like in mines or tunnels
F01N	Gas flow silencers or exhaust apparatus for machines or engines
{F16B 7/00}	{Connections of rods or tubes}
F16N 21/00	Conduits, junctions for lubrication systems
F17C 3/02	Thermal insulation of vessels not under pressure for storing liquefied or solidified gases, e.g. Dewar flask
{F17D}	{Pipe-line systems, pipe-lines}
F22B 37/10	Water tubes of steam boilers
F23J 13/04	Joints, connections for chimneys or flues
F24H 9/12	Connecting circulation pipes to heaters
F28F 9/04	Arrangements for sealing elements into header boxes or end plates of heat-exchangers

G21C 15/22	Structural association of coolant tubes with headers or other pipes in nuclear reactors
H02G 3/04	Protective tubing or conduits for electric cables
H02G 3/26	Installations of electric cables or lines, or protective tubing on or in walls, ceilings or floors.

WARNINGS

1. The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:

F16L 3/21	covered by	F16L 3/2053, F16L 3/2056;
F16L 13/013	covered by	F16L 13/007;
F16L 19/03	covered by	F16L 19/0212;
F16L 59/05	covered by	F16L 59/021.
F16L 101/14	covered by	

2. {In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.}

M	**F16L 1/00**	**Laying or reclaiming pipes; Repairing or joining pipes on or under water (soldering or welding B23K; lifting-gear and load-engaging elements B66; hydraulic installations, soil drainage E02B; excavations or underwater constructions E02D; {conduits made of concrete in situ E02D 29/10}; machines for digging trenches in combination with pipe-assembly E02F; laying sewer pipes E03F 3/06; in earth boreholes or wells E21B; tunnelling E21D; laying electric, or combined optical and electric, cables H02G; making special pipes joint, see the relevant groups for the joints)**
M	F16L 1/12	· Laying or reclaiming pipes on or under water (buoyant hoses F16L 11/133)
M	F16L 1/123	· · {Devices for the protection of pipes under water (in general F16L 57/00)}
M	F16L 1/20	· · Accessories therefor, e.g. floats, weights (buoys B63B 22/00)
M	F16L 1/24	· · · Floats; Weights ((salvaging sunken vessels or other underwater objects B63C 7/00; floats per se B63B 22/00))
M	F16L 1/26	· Repairing or joining pipes on or under water (buoyant hoses F16L 11/133; joints per se F16L 13/00 - F16L 49/00; {Joining pipes to underwater installations E21B})
U	**F16L 3/00**	**Supports for pipes, cables or protective tubing, e.g. hangers, holders, clamps, cleats, clips, brackets (anchors for holding pipes on or under the ground F16L 1/06; {sound-damping supports F16L 55/035; supports for insulated pipes F16L 59/135})**
M	F16L 3/01	· for supporting or guiding the pipes, cables or protective tubing, between relatively movable points, e.g. movable channels (hauling- or hoisting-chains with arrangements for holding electric cables, hoses or the like F16G 13/16)
M	F16L 3/015	· · using articulated- or supple-guiding elements (arrangements for cranes of means for transmitting pneumatic, hydraulic or electric power to movable parts or devices B66C 13/12)
U	F16L 3/02	· partly surrounding the pipes, cables or protective tubing (bands or chains F16L 3/14)
M	F16L 3/04	· · and pressing it against a wall or other support ((staples F16B 15/00))
M	**F16L 5/00**	**Devices for use where pipes, cables or protective tubing pass through walls or partitions ({joining pipes to walls F16L 41/00; joining plastic pipes to walls F16L 47/26; {passing insulated pipes through walls F16L 59/121; for steam boilers F22B 37/105};} *arrangements for leading electric cables or lines through walls, floors or ceilings H02G 3/22*; arrangements for leading electric cables or lines through walls, floors or ceilings H02G 3/22)**

M	**F16L 9/00**	**Rigid pipes** ~~{(steam boiler tubes F22B 37/10)}~~
M	F16L 9/02	· of metal (F16L 9/16 - F16L 9/22 take precedence~~; finned pipes F28F~~)
M	F16L 9/06	· · Corrugated pipes ~~{(flexible F16L 11/15)}~~
M	F16L 9/08	· of concrete, cement, or asbestos cement, with or without reinforcement (F16L 9/16 - F16L 9/22 take precedence~~; {shaping clay or other ceramic compositions, slag or mixtures containing cementitious material B28B}~~)
M	F16L 9/16	· wound from sheets or strips, with or without reinforcement ~~{(making wound paper articles B31C)}~~
M	F16L 9/18	· Double-walled pipes; Multi-channel pipes or pipe assemblies ~~(joints therefor F16L 39/00)~~

M	**F16L 11/00**	**Hoses, i.e. flexible pipes** ~~(hose-like supports for pipes, cables or protective tubing, between relatively movable points F16L 3/01; suction-cleaner hoses A47L 9/24)~~

U	**F16L 13/00**	**Non-disconnectible pipe-joints, e.g. soldered, adhesive or caulked joints (joints for rigid pipes of plastics F16L 47/00; {non-disconnectible pipe-joints to walls or other pipes, the joined pipe axis being perpendicular to the plane of the wall or to the axis of the other pipe F16L 41/082})**
M	F16L 13/007	· specially adapted for joining pipes of dissimilar materials {(~~disconnectible joints for pipes of dissimilar materials F16L 25/0072;~~ joints between metal and plastic pipes F16L 47/24)}
M	F16L 13/02	· Welded joints ~~{(arc welding curved planar seams B23K 9/028)}~~
M	F16L 13/08	· Soldered joints {(specially adapted for connecting metal hoses to rigid members F16L 33/26~~; soldering metal B23K 1/00~~)}
M	F16L 13/14	· made by plastically deforming the material of the pipe, e.g. by flanging, rolling ~~{(working of metal tubes without essentially removing material B21D)}~~

M	**F16L 15/00**	**Screw-threaded joints** *{(*{hose connections with parts screwed directly on or into the hose F16L 33/24; joining pipes to wall F16L 41/00~~}; casing joints used in deep-drilling E21B 17/08; joints sealed primarily by means other than engagement of screw-threads, see the relevant groups characterised by the sealing arrangements~~)*}*; **Forms of screw-threads for such joints**

M	**F16L 17/00**	**Joints with packing adapted to sealing by fluid pressure (**~~{for universal joints with partly spherical engaging surfaces F16L 27/067; joints allowing adjustment or movement only about the axis of one pipe F16L 27/08; joints comprising a flexible connection only F16L 27/10; joints allowing substantial longitudinal adjustment or movement F16L 27/12;~~ *{*for hoses F16L 33/16*}* *compensating devices F16L 51/00*~~; couplings of the quick acting type F16L 37/00;} compensating devices F16L 51/00; sealings tightened by external pressure, inflatable packings F16J 15/00~~**)**
M	F16L 17/10	· the packing being sealed by the pressure of a fluid other than the fluid in or surrounding the pipe ~~(expansion-compensation arrangements for pipe-lines F16L 51/00)~~

M	**F16L 21/00**	**Joints with sleeve or socket (F16L 13/00, {F16L 15/00}, F16L 17/00, F16L 19/00, {F16L 25/0027, F16L 27/00, F16L 37/00} take precedence** *{*; **{specially adapted to be made of plastics or to be used with pipes made of plastics F16L 47/06; specially adapted for pipes of brittle material** ~~F16L 49/08~~*F16L 49/02* *}*~~; devices for covering leaks in pipes or hoses F16L 55/16}~~**)**

M	F16L 23/00	**Flanged joints (F16L 13/00, F16L 17/00, F16L 19/00 take precedence; adjustable joints F16L 27/00; for hoses F16L 33/00; couplings of the quick-acting type F16L 37/00; for double-walled or multi-channel pipes or assemblies F16L 39/00*; connecting arrangements or other fittings specially adapted to be made of plastics or to be used with pipes made of plastics F16L 47/00*; specially adapted for pipes of brittle material pipe F16L 49/00)**
M	F16L 25/00	**Constructive types of pipe joints not provided for in groups F16L 13/00 - F16L 23/00 (adjustable ~~joints~~ *or allowing movement* F16L 27/00~~; couplings of the quick-acting type F16L 37/00~~*; with fluid cut-off means F16L 29/00*~~; specially adapted to be made of plastics or to be used with pipes made of plastics F16L 47/00~~ *; quick-acting F16L 37/00; for double-walled or multi-channel pipes F16L 39/00; connecting arrangements or other fittings specially adapted to be made of plastics or to be used with pipes made of plastics F16L 47/00; specially adapted for pipes of brittle material F16L 49/00*){; Details of pipe joints not otherwise provided for, e.g. electrically conducting or insulating means}**
M	F16L 25/01	· specially adapted for realising electrical conduction between the two pipe ends of the joint or between parts thereof ~~(electrically-conductive connections between or with tubular conductors H01R 4/60)~~
M	F16L 25/02	· Electrically insulating joints or couplings ~~(F16L 47/00 takes precedence; insulating bodies in general H01B)~~
U	F16L 27/00	**Adjustable joints, Joints allowing movement (of the quick-acting type F16L 37/50; for double-walled or multi-channel pipe assemblies F16L 39/04; {connecting arrangements or other fittings specially adapted to be made of plastics or to be used with pipes made of plastics F16L 47/00; connecting arrangements specially adapted for pipes of brittle material F16L 49/00})**
M	F16L 27/02	· Universal joints, i.e. with mechanical connection allowing angular movement or adjustment of the axes of the parts in any direction ~~{(articulated hoses made of rigid material F16L 11/18)}~~
M	F16L 27/04	· · with partly spherical engaging surfaces ~~{(with, between the surfaces, a flexible element which undergoes shear and flexure F16L 27/103)}~~
M	F16L 27/08	· allowing adjustment or movement only about the axis of one pipe ~~{(swivel joints in hose lines for flushing boreholes E21B 21/02)}~~
M	F16L 29/00	**Joints with fluid cut-off means (quick-acting joints with cut-off means F16L 37/28 ~~{; valves, taps or cocks in general F16K}~~)**
M	F16L 29/02	· with a cut-off device in one of the two pipe ends, the cut-off device being automatically opened when the coupling is applied ~~{(screw joints without cut-off devices F16L 19/00)}~~
M	F16L 29/04	· with a cut-off device in each of the two pipe ends, the cut-off devices being automatically opened when the coupling is applied ~~{(screw joints without cut-off devices F16L 19/00)}~~
M	F16L 33/00	**Arrangements for connecting hoses to rigid members ~~(hand tools for inserting fittings into hoses B25B 27/10)~~; Rigid hose connectors, i.e. single members engaging both hoses ~~{(hoses or hose couplings specially adapted for suction cleaners A47L 9/24)}~~**
M	F16L 33/02	· Hose-clips ~~{(covering leaks in pipes or hoses F16L 55/16)}~~
U	F16L 37/00	**Couplings of the quick-acting type (radially binding sleeves F16L 17/04, F16L 21/06; connecting hoses to rigid members F16L 33/00; connections made automatically when vehicles are brought together B60D, B61G; specially adapted for lubricating devices F16N 21/00)**
U	F16L 37/08	· in which the connection between abutting or axially overlapping ends is maintained by locking members (F16L 37/22 - F16L 37/26 take precedence)

M F16L 37/084   · · combined with automatic locking ~~{(F16L 37/22 takes precedence)}~~

M F16L 37/12   · · using hooks, pawls or other movable or insertable locking members {(~~F16L 37/084~~ takes precedence)~~}~~

M F16L 37/50   · adjustable; allowing movement of the parts joined ~~{(adjustable joints in general F16L 27/00; for double-walled or multi-channel pipes or pipe assemblies F16L 39/04)}~~

U F16L 39/00   Joints or fittings for double-walled or multi-channel pipes or pipe assemblies

M F16L 39/04   · allowing adjustment or movement {(~~in general F16L 27/00;~~ of the multiline swivel type F16L 39/06)}

M F16L 41/00   Branching pipes; Joining pipes to walls (F16L 39/00 takes precedence *~~{; joints suitable for connecting together pipe-ends see the relevant groups {specially adapted to be made of plastics or to be used with pipes made of plastics F16L 47/26; characterised by couplings of the quick-acting type F16L 37/008;} connections not designed for conveying fluid F16B 9/00~~*; *specially adapted to be made of plastics or to be used with pipes made of plastics F16L 47/26* **})**

M F16L 41/04   · Tapping pipe walls, i.e. making connections through the walls of pipes while they are carrying fluids; Fittings therefor ~~(apparatus or operations relating to metal-working steps, see the relevant classes for metal-working)~~

U F16L 41/08   · Joining pipes to walls or pipes, the joined pipe axis being perpendicular to the plane of the wall or to the axis of another pipe (F16L 41/02 takes precedence)

M F16L 41/082   · · {Non-disconnectible joints, e.g. soldered, adhesive or caulked joints ~~(non-disconnectible pipe joints in general F16L 13/00)~~}

M F16L 43/00   Bends; Siphons (with cleaning apertures F16L 45/00 ~~{; expansion-compensation arrangements making use of bends F16L 51/04}; siphons for water-closets E03D 11/18; siphons in general F04F 10/00~~**)**

M F16L 47/00   Connecting arrangements or other fittings specially adapted to be made of plastics or to be used with pipes made of plastics {(~~rigid pipes of plastics F16L 9/12;~~ connections for hoses of plastics F16L 33/006~~; bends or siphons F16L 43/008~~)}

M F16L 47/02   · Welded joints; Adhesive joints ~~{(in general F16L 13/00)}~~

M F16L 47/04   · with a swivel nut or collar engaging the pipe ~~{(in general F16L 19/00)}~~

M F16L 47/06   · with sleeve or socket formed by or in the pipe end ~~{(in general F16L 21/00)}~~

U F16L 47/20   · based principally on specific properties of plastics

M F16L 47/22   · · using shrink-down material ~~{(in other than plastic F16L 13/004)}~~

M F16L 49/00   Connecting arrangements, e.g. joints, specially adapted for pipes of brittle material, e.g. glass, earthenware ~~{(sleeves, nipples or reduction pieces made of elastic material F16L 21/005)}~~

M F16L 49/06   · Joints in which sealing surfaces are pressed together by means of a member, e.g. swivel nut, screwed on, or into, one of the joint parts ~~{(in general F16L 19/00)}~~

M F16L 49/08   · Adjustable joints; Joints allowing movement ~~{(in general F16L 27/00)}~~

M F16L 51/00   Expansion-compensation arrangements for pipe-lines (~~{hangers or supports for pipes with special provision allowing movement of the pipes F16L 3/16;} telescopic pipes F16L 27/12~~ *telescopic pipes F16L 27/12***)**

M F16L 51/02   · making use of bellows or an expansible folded or corrugated tube ~~{(rigid corrugated pipes F16L 9/06; corrugated hoses made of rigid material F16L 11/15)}~~

U	**F16L 55/00**	**Devices or appurtenances for use in, or in connection with, pipes or pipe systems (the preceding groups and groups F16L 57/00, F16L 59/00 take precedence; repairing or joining pipes on or under water F16L 1/26; nozzles B05B; cleaning of pipes B08B 9/02; {arrangements of draining devices for water main or service pipe systems E03B 7/08;} devices for preventing bursting of water pipes by freezing E03B 7/10; {draining devices for hydrants E03B 9/14;} for domestic plumbing installations E03C 1/00; {steam traps for draining of liquids from enclosures containing gases or vapours F16T}; arrangements for sealing leaky tubes or conduits of heat-exchangers F28F 11/00)**
M	F16L 55/02	· Energy absorbers; Noise absorbers (in valves F16K 47/00 ~~(; springs, shock absorbers, means for damping vibration in general F16F)~~)
M	F16L 55/027	· · Throttle passages ~~(influencing fluid flow F15D 1/00; control of fluid flow G05D 7/00)~~
M	F16L 55/04	· Devices damping pulsations or vibrations in fluids {(F16L 55/02 takes precedence ~~; counter-acting cavitation in pumps F04B 39/00; springs, shock absorbers, means for damping vibration in general F16F; means in valves for absorbing fluid energy F16K 47/00)~~)}
U	F16L 55/045	· · specially adapted to prevent or minimise the effects of water hammer
M	F16L 55/05	· · · Buffers therefor ~~(accumulators F15B 1/04)~~
M	F16L 55/07	· Arrangement or mounting of devices, e.g. valves, for venting or aerating or draining (~~arrangement of draining devices in water supply systems E03B 7/08; apparatus for draining F16K, F16T; venting or aerating devices per se F16K 24/00~~ *apparatus for draining F16T*)
M	F16L 55/09	· Air conditioning, e.g. de-watering, in pneumatic systems ~~(in general F24)~~
U	F16L 55/16	· Devices for covering leaks in pipes or hoses, e.g. hose-menders
U	F16L 55/162	· · from inside the pipe {(F16L 55/1612 takes precedence)}
M	F16L 55/164	· · · a sealing fluid being introduced in the pipe *(F16L 55/1645 takes precedence)*
M	F16L 55/165	· · · a pipe {or flexible liner} being inserted in the damaged section ~~{(protection against corrosion: F16L 58/10)}~~
U	F16L 55/168	· · from outside the pipe
M	F16L 55/17	· · · by means of rings, bands or sleeves pressed against the outside surface of the pipe or hose ~~(hose-clips for connecting hoses to rigid members F16L 33/02)~~
M	F16L 55/179	· · specially adapted for bends, branch units, branching pipes or the like ~~{(tools F16L 55/265)}~~
M	F16L 55/18	· Appliances for use in repairing pipes (F16L 55/10 takes precedence ~~{; pigs or moles F16L 55/26}~~)
M	F16L 55/24	· Preventing accumulation of dirt or other matter in the pipes, e.g. by traps, by strainers ~~{(preventing accumulation in pneumatic conveyors B65G 53/521)}~~
M	F16L 55/26	· Pigs or moles, i.e. devices movable in a pipe or conduit with or without self-contained propulsion means ~~(tunnel railway systems B61B 13/10; conveying articles through pipes or tubes, e.g. tube mail systems, B65G 51/00)~~

NOTES

1. Pigs or moles specially adapted for particular applications are classified in the relevant places for the applications, e.g.
- *stopping flow from or in pipes or hoses F16L 55/12*
- *repairing pipes F16L 55/18*
- *applying liquids or other fluent materials to the inside of tubes B05C 7/08*
- *cleaning pipes or tubes or systems of pipes or tubes B08B 9/02*
- *welding or cutting B23K 37/02*

> - *earth drilling E21B*
> - *{separating products F17D 3/08;}*
> - *cleaning chimneys F23J 3/02*
> - *cleaning internal or external surfaces of heat-exchange or heat-transfer conduits F28G*
> - *measuring, testing G01*
> - *inspection of vessels in nuclear reactors G21C 17/003*
> - *inspection or maintenance of pipe-lines or tubes in nuclear installations G21C 17/017 installing electric, or combined optical and electric, cables or lines H02G*
>
> *2. In this group, it is desirable to add the indexing codes of group F16L 2101/00.*

M	F16L 55/265	· · {specially adapted for work at or near a junction between a main and a lateral pipe}

> NOTES
>
> 1. Pigs or moles specially adapted for particular applications are classified in the relevant places for the applications, e.g.
> - stopping flow from or in pipes or hoses F16L 55/12
> - repairing pipes F16L 55/18
> - applying liquids or other fluent materials to the inside of tubes B05C 7/08
> - cleaning pipes or tubes or systems of pipes or tubes B08B 9/02
> - welding or cutting B23K 37/02
> - earth drilling E21B
> - {separating products F17D 3/08;}
> - cleaning chimneys F23J 3/02
> - cleaning internal or external surfaces of heat-exchange or heat-transfer conduits F28G
> - measuring, testing G01
> - inspection of vessels in nuclear reactors G21C 17/003
> - inspection or maintenance of pipe-lines or tubes in nuclear installations G21C 17/017
> - installing electric, or combined optical and electric, cables or lines H02G
>
> 2. In groups F16L 55/26 - F16L 55/48, the indexing codes of F16L 2101/00 - F16L 2101/70 are added

M	**F16L 57/00**	**Protection of pipes or objects of similar shape against external or internal damage or wear ({protection under water F16L 1/123;} supporting of pipes inside other pipes or sleeves F16L 7/00; used in connection with end fittings of hoses F16L 35/00; protection thereof during transport B65D, e.g. B65D 59/00; {for steam boilers F22B 37/107})**
M	**F16L 58/00**	**Protection of pipes or pipe fittings against corrosion or incrustation (supporting of pipes inside other pipes or sleeves F16L 7/00; compound tubes F16L 9/14; cleaning pipes or tubes B08B 9/02)**
M	F16L 58/02	· by means of internal or external coatings (coatings for thermal insulation F16L 59/00; methods or machines for applying coatings see the relevant classes, e.g. B28B 21/00)
M	F16L 58/04	· · Coatings characterised by the materials used (F16L 58/16 takes precedence; compositions, see the relevant classes, e.g. C04B)
M	F16L 58/16	· · the coating being in the form of a bandage (apparatus for covering cores by winding B65H 81/00)
M	F16L 58/18	· specially adapted for pipe fittings {(non-disconnectible joints of coated pipes F16L 13/0254; screw joints for coated pipes comprising pipes with collars or flanges F16L 19/0243)}

M	F16L 59/00	**Thermal insulation in general** ~~(heat, sound insulation in buildings E04B; heat insulation of steam engines F01B 31/08; {thermal or acoustic isolation for combustion engines F02B 77/11}; heat insulation in rotary piston machines F01C 21/06; heat insulation of pumps F04C 29/04; thermal insulation of pressure vessels F17C 1/12; vessels not under pressure, with provision for insulation F17C 3/02)~~
M	F16L 59/12	· Arrangements for supporting insulation from the wall or body insulated, e.g. by means of spacers between pipe and heat-insulating material; Arrangements specially adapted for supporting insulated bodies ~~{(pipe supports allowing movement in axial direction F16L 3/18)}~~
M	F16L 59/121	· · {for pipes passing through walls or partitions ~~(in general F16L 5/00)~~}
U	F16L 59/14	· Arrangements for the insulation of pipes or pipe systems (F16L 59/02 - F16L 59/12 take precedence)
M	F16L 59/16	· · Arrangements specially adapted to local requirements at flanges, junctions, valves or the like ~~(means in or on valves for heating or cooling F16K 49/00)~~
M	F16L 59/21	· · · adapted for expansion-compensation devices ~~{(in general F16L 51/00)}~~

Project: RP0545 (B60N)

M	B60N	**SEATS SPECIALLY ADAPTED FOR VEHICLES; VEHICLE PASSENGER ACCOMMODATION NOT OTHERWISE PROVIDED FOR**
		NOTES
		1. Attention is drawn to the Explanatory Note following the class title B60
		2. In this subclass the following term is used with the meaning indicated: • "cushion": seating part of a seat distinguished from the back-rest
		~~WARNING~~ ~~In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.~~
M	B60N 2/00	*Seats specially adapted for vehicles;* ~~Seats specially adapted for~~ *Arrangement or mounting of seats in* vehicles **(**~~for facilitating access of invalids to, or exit of invalids from, vehicles A61G 3/02;~~ **railway seats B61D 33/00; cycle seats B62J 1/00; aircraft seats B64D 11/06, B64D 25/04, B64D 25/10)**
M	B60N 2/002	· {Passenger detection systems ~~(weighing apparatus, e.g. for airbag systems G01G 19/4142)~~}
U	B60N 2/005	· Arrangement or mounting of seats in vehicles {, e.g. dismountable auxiliary seats}(B60N 2/02 takes precedence {; for railway vehicles B61D 1/04})
U	B60N 2/015	· · Attaching seats directly to vehicle chassis
U	B60N 2/01508	· · · {using quick release attachments}
U	B60N 2/01516	· · · · {with locking mechanisms}
U	B60N 2/01525	· · · · · {with locking elements expanding inside or under the vehicle floor or rail}
M	B60N 2/01533	· · · · · · {using balls interlocking with notches ~~(interlocking balls in general E05B 63/121)~~}
U	B60N 2/02	· the seat or part thereof being movable, e.g. adjustable (adjustable arm-rests B60N 2/75; adjustable head-rests B60N 2/806)
U	B60N 2/04	· · the whole seat being movable
M	B60N 2/06	· · · slidable (B60N 2/12 {, B60N 2/2209} ~~takes~~*take* precedence)
M	B60N 2/10	· · · tiltable {(*B60N 2/12* {, B60N 2/2875 ~~takes~~} *take* precedence)}

M	B60N 2/14	· · · rotatable, e.g. to permit easy access {(*B60N 2/10* {, B60N 2/2869 ~~takes~~} *take* precedence)~~}~~
U	B60N 2/16	· · · height-adjustable
M	B60N 2/169	· · · · {Stepwise movement mechanisms, e.g. ratchets (B60N 2/167 takes precedence~~; ratchets in general G05G 7/06~~)}
U	B60N 2/18	· · · · the front or the rear portion of the seat being adjustable, e.g. independently of each other
M	B60N 2/1896	· · · · · {Stepwise movement mechanisms, e.g. ratchets (B60N 2/1882 takes precedence~~; ratchets in general G05G 7/06~~)}
M	B60N 2/20	· · the back-rest being tiltable, e.g. to permit easy access (~~{B60N 2/0224} ,~~ B60N 2/04, B60N 2/22~~,~~ {, B60N 2/3002} take precedence)
U	B60N 2/22	· · the back-rest being adjustable {(B60N 2/2878 takes precedence)}
M	B60N 2/224	· · · {Stepwise movement mechanisms, e.g. ratchets ~~(ratchets in general G05G 7/06)~~}
M	B60N 2/225	· · · by cycloidal or planetary mechanisms ~~((transmissions with orbital motion in general F16H 1/28, F16H 1/32)~~}
M	B60N 2/2251	· · · · {with gears having orbital motion, e.g. sun and planet gears ~~(in general F16H 1/28)~~}
M	B60N 2/2252	· · · · {in which the central axis of the gearing lies inside the periphery of an orbital gear, e.g. one gear without sun gear ~~(in general F16H 1/32)~~}
U	B60N 2/24	· for particular purposes or particular vehicles
M	B60N 2/245	· · {for handicapped persons ~~(facilitating access or loading of wheelchairs in ambulances A61G 3/00)~~}
U	B60N 2/26	· · for children (B60N 2/30 takes precedence)
U	B60N 2/28	· · · Seats readily mountable on, and dismountable from, existing seats {or other parts} of the vehicle
M	B60N 2/2803	· · · · {Adaptations for seat belts ~~(seat belts for children in general B60R 22/105)~~}
U	B60N 2/2842	· · · · {adapted to carry the child, when dismounted from the vehicle}
M	B60N 2/2848	· · · · · {being convertible or adaptable ~~ro~~ *to* a preambulator, e.g. a baby-carriage or a push-chair ~~(preambulators in general B62B 7/14)~~}
M	B60N 2/2854	· · · · {Children's cots; Hammocks ~~(children's chairs in general A47D 1/00)~~}
M	B60N 2/30	· · Non-dismountable {or dismountable} seats storable in a non-use position, e.g. foldable spare seats ~~(convertible for other use B60N 2/32)~~
U	B60N 2/32	· · convertible for other use
M	B60N 2/34	· · · into a bed ~~(sleeping arrangements in caravans B60P 3/38)~~
M	B60N 2/36	· · · into a loading platform {(~~ski-bags in B60R 5/006,~~ B60N 2/065 takes precedence)}
U	**B60N 3/00**	**Arrangements or adaptations of other passenger fittings, not otherwise provided for (of radio sets, television sets, telephones, {stowing or holding appliances} , safety belts or the like B60R)**
M	B60N 3/001	· {of tables or trays ~~(detachable tables in general with provisions for use in vehicles A47B 31/06)~~}
M	B60N 3/008	· {of beds ~~(travelling or camp beds adapted to be used in, or connected to, a vehicle A47C 17/80)~~}
M	B60N 3/06	· of footrests ~~(floors of road vehicles {B62D 25/20})~~
M	B60N 3/08	· of receptacles for refuse, e.g. ash-trays ~~(ashtrays per se A24F)~~
M	B60N 3/10	· of receptacles for food or beverages, e.g. refrigerated ~~(picnic sets A45F {; cup holders in general A47G 23/02})~~

M	B60N 3/12	· of receptacles for cigarettes or the like ~~({B60N 2/793 takes precedence;} receptacles for cigarettes or the like A24F)~~
M	B60N 3/14	· of electrically-heated lighters ~~{(arrangements of lighting devices for vehicle interiors for lighting passenger or driving compartment B60Q 3/20; igniters using electrically-produced heat F23Q 7/00)}~~
M	B60N 3/16	· of cooking or boiling devices ~~(cooking of boiling devices per se A47, F24C)~~
M	**B60N 5/00**	**Arrangements or devices on vehicles for entrance or exit control of passengers, e.g. turnstiles ~~(turnstiles in general E06B 11/08)~~**

Project: RP0555 (G01R)

U	G01R 1/00	**Details of instruments or arrangements of the types included in groups G01R 5/00 - G01R 13/00 and G01R 31/00 (constructional details particular to {electromechanical} arrangements for measuring the electric consumption G01R 11/02)**
U	G01R 1/02	· General constructional details (details of a kind applicable to measuring arrangements not specially adapted for a specific variable G01D 7/00)
U	G01R 1/04	· · Housings; Supporting members; Arrangements of terminals ("burn-in" aspects G01R 31/286; terminals H01R; terminal strips or boards H02B; housings for electrical apparatus H05K)
U	G01R 1/0408	· · · {Test fixtures or contact fields; Connectors or connecting adaptors; Test clips; Test sockets (G01R 1/067 takes precedence; mass production testing systems G01R 31/01; testing of connections G01R 31/04; for testing printed circuit boards G01R 31/2808)}
M	G01R 1/0416	· · · · {Connectors, terminals (G01R 1/0425 and G01R 1/0433 take precedence; with measurement function for battery poles ~~G01R 31/3696~~ *G01R 31/364*; ~~in general H01R)}~~
U	**G01R 31/00**	**Arrangements for testing electric properties; Arrangements for locating electric faults; Arrangements for electrical testing characterised by what is being tested not provided for elsewhere ({measuring superconductive properties G01R 33/1238;} testing or measuring semiconductors or solid state devices during manufacture {H01L 22/00}; testing line transmission systems H04B 3/46)**
U	G01R 31/02	· Testing of electric apparatus, lines or components, for short-circuits, discontinuities, leakage {of current}, or incorrect line connection {(G01R 31/001, G01R 31/005, G01R 31/01, G01R 31/08, G01R 31/12, G01R 31/24, G01R 31/26, G01R 31/28, G01R 31/327, G01R 31/34, G01R 31/36, G01R 31/40, G01R 31/44 take precedence; measuring electromagnetic field leakage G01R 29/0821; testing of sparking plugs H01T 13/58)}
M	G01R 31/07	· · Testing of fuses ~~(means for indicating condition of fuse structurally associated with the fuse H01H 85/30)~~
M	G01R 31/08	· Locating faults in cables, transmission lines, or networks ~~(emergency protective circuit arrangements H02H {; installing, maintaining, repairing or dismantling electric cables or lines H02G 1/00; testing LAN's H04L 43/50})~~
U	G01R 31/28	· Testing of electronic circuits, e.g. by signal tracer ({EMC, EMP or similar testing of electronic circuits G01R 31/002} ; testing for short-circuits, discontinuities, leakage or incorrect line connection G01R 31/02; checking computers {or computer components} G06F 11/00; checking static stores for correct operation G11C 29/00; {testing receivers or transmitters of transmission systems H04B 17/00})
M	G01R 31/30	· · Marginal testing, e.g. *by* varying supply voltage (~~marginal testing of computers G06~~*testing computers during standby operation or idle time G06F 11/22*)

M	G01R 31/327	· Testing of circuit interrupters, switches or circuit-breakers ~~(structural association with switches H01H; {detecting faults in encased switchgear H02B 13/065; monitoring in addition to disconnection by a protective circuit H02H 3/04})~~
M	G01R 31/333	· · Testing of the switching capacity of high-voltage circuit-breakers ==*{*== ; {Testing of breaking capacity or related variables, e.g. post arc current or transient recovery voltage} ~~(means for detecting the presence of an arc or discharge in switching devices H01H 9/50, H01H 33/26)~~
E	G01R 31/36	· ~~Apparatus~~ *Arrangements* for testing ~~,~~ *, measuring or monitoring the* electrical condition of accumulators or electric batteries, e.g. capacity or *state of* charge ~~condition~~ *[SoC]* ~~(accumulators combined with arrangements for measuring, testing or indicating condition H01M 10/48; circuit arrangements for charging, or depolarising batteries or for supplying loads from batteries H02J 7/00; {Coulomb meters G01R 22/00; indicating the condition of the power supply in clocks or watches G04C 10/04; methods for controlling fuel cells H01M 8/04298})~~

<u>NOTE</u>

{This group <u>covers</u> arrangements for measuring, testing or indicating electrical conditions or variables of accumulators or electric batteries. ~~Accumulators combined with arrangements~~ *Arrangements* for *monitoring,* measuring, testing or indicating condition, ~~or arrangements for measuring, testing or indicating conditions or variables other than electrical, e.g. level or density of~~ *structurally associated with the* battery ~~electrolyte,~~ are covered by ~~the~~ *H01M* ~~,~~ *, e.g. by* group H01M 10/48 ~~and subgroups~~ }

D	G01R 2031/3603	· · ~~{Deleted}~~ <administratively transferred to <u>G01R 31/36</u>>
D	G01R 31/3606	· · ~~{Monitoring, i.e. measuring or determining some variables continuously or repeatedly over time, e.g. current, voltage, temperature, state-of-charge [SoC] or state-of-health [SoH] (G01R 31/3627, G01R 31/3644 take precedence)}~~ <administratively transferred to <u>G01R 31/382</u>>
D	G01R 31/361	· · · ~~{using current integration}~~ <administratively transferred to <u>G01R 31/3828</u>>
D	G01R 31/3613	· · · · ~~{without voltage measurement}~~ <administratively transferred to <u>G01R 31/3832</u>>
D	G01R 31/3617	· · · · · ~~{using analog integrators, e.g. coulomb-meters}~~ <administratively transferred to <u>G01R 31/3833</u>>
D	G01R 31/362	· · · ~~{based on measuring voltage only (by comparing voltage with a reference value G01R 19/16542)}~~ <administratively transferred to <u>G01R 31/3835</u>>
D	G01R 31/3624	· · · ~~{based on combined voltage and current measurement (G01R 31/361 takes precedence)}~~ <administratively transferred to <u>G01R 31/3842</u>>
D	G01R 31/3627	· · ~~{Testing, i.e. making a one-time determination of some variables, e.g. testing ampere-hour charge capacity (G01R 31/3644 takes precedence)}~~ <administratively transferred to <u>G01R 31/385</u>>
D	G01R 31/3631	· · · ~~{based on the use of test loads}~~ <administratively transferred to <u>G01R 31/386</u>>
D	G01R 31/3634	· · · ~~{for determining the ampere-hour charge capacity or state-of-charge (SoC) (G01R 31/3631 takes precedence)}~~ <administratively transferred to <u>G01R 31/387</u>>
D	G01R 31/3637	· · · · ~~{based on voltage measurements}~~ <administratively transferred to <u>G01R 31/388</u>>
N	*G01R 31/364*	· · *Battery terminal connectors with integrated measuring arrangements*

D	G01R 31/3641	· · · {related to manufacture, e.g. testing after manufacture} <administratively transferred to G01R 31/3865>
M	G01R 31/3644	· · {Various constructional *Constructional* arrangements}
N	*G01R 31/3646*	· · · *{for indicating electrical conditions or variables, e.g. visual or audible indicators}*
N	*G01R 31/3647*	· · · *{for determining the ability of a battery to perform a critical function, e.g. cranking}*
U	G01R 31/3648	· · · {comprising digital calculation means, e.g. for performing an algorithm}
D	G01R 31/3651	· · · · {Software aspects, e.g. battery modeling, using look-up tables, neural networks} <administratively transferred to G01R 31/367>
D	G01R 31/3655	· · · · {the digital calculation means being combined with the battery or battery pack} <administratively transferred to H01M 10/48>
D	G01R 31/3658	· · · {for testing or monitoring individual cells or groups of cells in a battery} <administratively transferred to G01R 31/396>
D	G01R 31/3662	· · · {involving measuring the internal battery impedance, conductance or related variables} <administratively transferred to G01R 31/389>
D	G01R 31/3665	· · · {whereby the type of battery is of primary emphasis, e.g. determining the type of battery} <administratively transferred to G01R 31/378>
D	G01R 31/3668	· · · · {Lead-acid batteries} <administratively transferred to G01R 31/379>
N	*G01R 31/367*	· · *Software therefor, e.g. for battery testing using modelling or look-up tables*
D	G01R 31/3672	· · · · {Primary cells, i.e. not rechargeable} <administratively transferred to G01R 31/38>
D	G01R 31/3675	· · · {for compensating for temperature or ageing} <administratively transferred to G01R 31/374>
D	G01R 31/3679	· · · {for determining battery ageing or deterioration, e.g. state-of-health (SoH), state-of-life (SoL)} <administratively transferred to G01R 31/392>
D	G01R 31/3682	· · · {for indicating electrical conditions or variables, e.g. visual or audible indicators} <administratively transferred to G01R 31/3646>
D	G01R 31/3686	· · · · {the indicator being combined with the battery} <administratively transferred to H01M 10/48>
D	G01R 31/3689	· · · · {the indication being remote from the battery} <administratively transferred to G01R 31/371>
D	G01R 31/3693	· · · {for determining the ability of a battery to perform a critical function, e.g. cranking} <administratively transferred to G01R 31/3647>
D	G01R 31/3696	· · · {Battery pole connectors combined with measurement function (end pieces for connections to batteries H01R 11/281)} <administratively transferred to G01R 31/364>
N	*G01R 31/371*	· · *with remote indication, e.g. on external chargers*
N	*G01R 31/374*	· · *with means for correcting the measurement for temperature or ageing*
N	*G01R 31/378*	· · *specially adapted for the type of battery or accumulator*
N	*G01R 31/379*	· · · *for lead-acid batteries*
N	*G01R 31/38*	· · · *{Primary cells, i.e. not rechargeable}*

N	*G01R 31/382*	· · *Arrangements for monitoring battery or accumulator variables, e.g. SoC*
N	*G01R 31/3828*	· · · *using current integration*
N	*G01R 31/3832*	· · · · *without measurement of battery voltage*
N	*G01R 31/3833*	· · · · · *{using analog integrators, e.g. coulomb-meters}*
N	*G01R 31/3835*	· · · *involving only voltage measurements*
N	*G01R 31/3842*	· · · *combining voltage and current measurements*
N	*G01R 31/385*	· · *Arrangements for measuring battery or accumulator variables (for monitoring G01R 31/382)*
N	*G01R 31/386*	· · · *{using test-loads}*
N	*G01R 31/3865*	· · · *{related to manufacture, e.g. testing after manufacture}*
N	*G01R 31/387*	· · · *Determining ampere-hour charge capacity or SoC*
N	*G01R 31/388*	· · · · *involving voltage measurements*
N	*G01R 31/389*	· · *Measuring internal impedance, internal conductance or related variables*
N	*G01R 31/392*	· · *Determining battery ageing or deterioration, e.g. state of health*
N	*G01R 31/396*	· · *Acquisition or processing of data for testing or for monitoring individual cells or groups of cells within a battery*
U	G01R 31/40	· Testing power supplies (testing photovoltaic devices <u>H02S 50/10</u>)
M	G01R 31/42	· · AC power supplies ~~((testing photovoltaic modules after manfucture H02S 50/10))~~
M	G01R 31/44	· Testing lamps ~~(discharge lamps G01R 31/24; structurally associated with light source circuit arrangements for detecting lamp failure H05B 37/03)~~

Project: RP0556 (G02F)

U	**G02F 1/00**	**Devices or arrangements for the control of the intensity, colour, phase, polarisation or direction of light arriving from an independent light source, e.g. switching, gating, or modulating; Non-linear optics (thermometers using change of colour or translucency <u>G01K 11/12</u>; using changes in fluorescence <u>G01K 11/32</u>; light guide devices <u>G02B 6/00</u>; optical devices or arrangements using movable or deformable elements for controlling light independent of the light source <u>G02B 26/00</u>; control of light in general <u>G05D 25/00</u>; visible signalling systems <u>G08B 5/00</u>; indicating arrangements for variable information by selection or combination of individual elements <u>G09F 9/00</u>; control arrangements or circuits for visual indicators other than cathode-ray tubes <u>G09G 3/00</u>; control of light sources <u>H01S 3/10</u>, <u>H05B 33/08</u>, <u>H05B 35/00</u> - <u>H05B 43/00</u>; {photochromic filters <u>G02B 5/23</u>; optical logic elements <u>G02F 3/00</u>})**

<u>NOTE</u>
This group <u>covers</u> only :
- devices or arrangements, e.g. cells, the optical operation of which is modified by changing the optical properties of the medium of the devices or arrangements by the influence or control of physical parameters, e.g. electric fields, electric current, magnetic fields, sound or mechanical vibrations, stress or thermal effects;
- devices or arrangements in which the electric or magnetic field component of the light beams influences the optical properties of the medium, i.e. non-linear optics;
- control of light by electromagnetic waves, e.g. radio waves, or by electrons or other elementary particles.

C	G02F 1/01	· for the control of the intensity, phase, polarisation or colour (G02F 1/29, G02F 1/35 take precedence~~; polarising elements per se G02B 5/30; static storage per se G11C; image tube screens acting as light valves by shutter operation H01J 29/12; such screens acting by discoloration H01J 29/14; {projection arrangements for television image reproduction, e.g. using eidophor H04N 5/74; recording by light G11B 7/00 - G11B 11/00}~~)
		WARNING *Group G02F 1/01 is impacted by reclassification into groups G02F 1/165, G02F 1/166, G02F 1/1673, and G02F 1/169.* *All groups listed in this Warning should be considered in order to perform a complete search.*
U	G02F 1/13	· · based on liquid crystals, e.g. single liquid crystal display cells (liquid crystal materials C09K 19/00)
U	G02F 1/133	· · · Constructional arrangements; Operation of liquid crystal cells; Circuit arrangements (arrangements or circuits for control of liquid crystal elements in a {segment display or a} matrix, not structurally associated with these elements, {respectively G09G 3/18 and } G09G 3/36)
U	G02F 1/1333	· · · · Constructional arrangements; {Manufacturing methods}(G02F 1/135, G02F 1/136 take precedence)
M	G02F 1/1335	· · · · · Structural association of *cells with* optical devices, e.g. polarisers~~, reflectors~~ or ~~illuminating devices, with the cell~~*reflectors*
M	G02F 1/1339	· · · · · Gaskets; Spacers ~~{, also spacers with conducting properties (electric line connectors H01R)}~~; Sealing of ~~the cell~~*cells*
M	G02F 1/1341	· · · · · Filling or closing of ~~the cell {~~*cells*~~(G02F 1/133365, G02F 1/1334 take precedence)}~~
M	G02F 1/137	· · · characterised by ~~a particular~~ *the* electro-*optical* or magneto-optical effect, e.g. field-induced phase transition, orientation effect, guest-host interaction~~,~~ *or* dynamic scattering
C	G02F 1/15	· · based on *an* electrochromic ~~elements {~~*effect*~~(electrochromic materials C09K 9/00)}~~
		WARNING *Group G02F 1/15 is impacted by reclassification into groups G02F 1/1514 and G02F 1/1516.* *All groups listed in this Warning should be considered in order to perform a complete search.*
U	G02F 2001/1502	· · · {complementary cell}
N	*G02F 2001/15025*	· · · · {having an inorganic electrochromic layer and a second solid organic electrochromic layer}
N	*G02F 1/1503*	· · · caused by oxidation-reduction reactions in organic liquid solutions, e.g. viologen solutions
D	G02F 2001/1504	· · · · ~~{having an inorganic electrochromic layer and a second solid organic electrochromic layer}~~ <administratively transferred to G02F 2001/15025 ADD>
M	G02F 1/1506	· · · ~~{based on~~ *caused by electrodeposition, e.g.* electrolytic deposition of ~~a non-organic~~*an inorganic* material on or ~~in the vicinity of~~ *close to* an electrode~~}~~
D	G02F 2001/151	· · · ~~{the electrochromic material comprises ferrocene compounds}~~ <administratively transferred to G02F 2001/1518 ADD>
D	G02F 2001/1512	· · · ~~{the electrochromic layer comprises a mixture of anodic and cathodic compounds}~~ <administratively transferred to G02F 2001/15145 ADD>

N	G02F 1/1514	· · · *characterised by the electrochromic material, e.g. by the electrodeposited material*

> *WARNING*
>
> *Group G02F 1/1514 is incomplete pending reclassification of documents from group G02F 1/15.*
> *Groups G02F 1/15 and G02F 1/1514 should be considered in order to perform a complete search.*

N	G02F 2001/15145	· · · · {the electrochromic layer comprises a mixture of anodic and cathodic compounds}
D	G02F 2001/1515	· · · {the electrochromic material is made of polymer} <administratively transferred to G02F 1/15165>
N	G02F 1/1516	· · · · *comprising organic material*

> *WARNING*
>
> *Group G02F 1/1516 is incomplete pending reclassification of documents from group G02F 1/15.*
> *Groups G02F 1/15 and G02F 1/1516 should be considered in order to perform a complete search.*

N	G02F 1/15165	· · · · · {Polymers}
M	G02F 2001/1517	· · · · {based on cyano *Cyano* complex compound*compounds*, e.g. Prussian blue}
N	G02F 2001/1518	· · · · · {Ferrocene compounds}
D	G02F 2001/1519	· · · {the electrolyte is made of polymer} <administratively transferred to G02F 2001/164 ADD>
D	G02F 1/1521	· · · {based on oxidation reduction in organic liquid solutions, e.g. viologens solutions} <administratively transferred to G02F 1/1503>
C	G02F 1/1523	· · · *:* {based on solid *comprising* inorganic materials, e.g. transition metal compounds, e.g. in combination with a liquid or solid electrolyte material(G02F 1/1506 takes precedence)}

> *WARNING*
>
> *Group G02F 1/1523 is impacted by reclassification into group G02F 1/1524.*
> *Groups G02F 1/1523 and G02F 1/1524 should be considered in order to perform a complete search.*

N	G02F 1/1524	· · · · · *Transition metal compounds*

> *WARNING*
>
> *Group G02F 1/1524 is incomplete pending reclassification of documents from group G02F 1/1523.*
> *Groups G02F 1/1523 and G02F 1/1524 should be considered in order to perform a complete search.*

N	G02F 1/15245	· · · · · · {based on iridium oxide or hydroxide}
M	G02F 1/1525	· · · · *:* {characterised by a particular ion transporting layer, e.g. electrolyte (H01M 6/18, H01M 10/08 take precedence)}
D	G02F 1/1527	· · · {based on iridium oxide or hydroxide} <administratively transferred to G02F 1/15245>
M	G02F 1/153	· · Constructional arrangements*details*
M	G02F 1/157	· · · Structural association of *cells with* optical devices, e.g. reflectors or illuminating devices, with the cell
M	G02F 1/161	· · · Gaskets; Spacers; Sealing of the cell*cells*; Filling or closing of the cell*cells*

M	G02F 1/163	· · · Operation of electrochromic cells*, e.g. electrodeposition cells*; Circuit arrangements *therefor*
U	G02F 2001/1635	· · · · {the pixel comprises active switching elements, e.g. TFT}
N	*G02F 2001/164*	· · · *{the electrolyte is made of polymers}*
N	*G02F 1/165*	· · *based on translational movement of particles in a fluid under the influence of an applied field*

> WARNING
> Group G02F 1/165 is incomplete pending reclassification of documents from groups G02F 1/01, G02F 1/17, and G02F 1/19.
> All groups listed above should be considered in order to perform a complete search.

N	*G02F 1/166*	· · · *characterised by the electro-optical or magneto-optical effect*

> WARNING
> Group G02F 1/166 is incomplete pending reclassification of documents from group G02F 1/01, G02F 1/17, and G02F 1/19.
> All groups listed above should be considered in order to perform a complete search.

C	G02F 1/167	· · · *· ·* ~~based on~~ *by* electrophoresis

> WARNING
> Group G02F 1/167 is impacted by reclassification into groups G02F 1/1675, G02F 1/16753, G02F 1/16755, G02F 1/16756, G02F 1/16757, G02F 1/1677, G02F 1/1679, and G02F 1/1685.
> All groups listed in this Warning should be considered in order to perform a complete search.

N	*G02F 1/1671*	· · · · *involving dry toners*
D	G02F 2001/1672	· · · {of the microcup type} <administratively transferred to G02F 1/1681>
N	*G02F 1/1673*	· · · · *by magnetophoresis*

> WARNING
> Group G02F 1/1673 is incomplete pending reclassification of documents from group G02F 1/01, G02F 1/17, and G02F 1/19.
> All groups listed above should be considered in order to perform a complete search.

D	G02F 2001/1674	· · · {comprising a dry toner particle} <administratively transferred to G02F 1/1671>
N	*G02F 1/1675*	· · · *Constructional details*

> WARNING
> Group G02F 1/1675 is incomplete pending reclassification of documents from group G02F 1/167, G02F 1/17, and G02F 1/19.
> All groups listed above should be considered in order to perform a complete search.

N	*G02F 1/16753*	· · · *Structures for supporting or mounting cells, e.g. frames or bezels*

> WARNING
> Group G02F 1/16753 is incomplete pending reclassification of documents from group G02F 1/167, G02F 1/17, and G02F 1/19.
> All groups listed above should be considered in order to perform a complete search.

N   G02F 1/16755   · · · · *Substrates*

> *WARNING*
>
> *Group G02F 1/16755 is incomplete pending reclassification of documents from group G02F 1/167, G02F 1/17, and G02F 1/19.*
> *All groups listed above should be considered in order to perform a complete search.*

N   G02F 1/16756   · · · · *Insulating layers*

> *WARNING*
>
> *Group G02F 1/16756 is incomplete pending reclassification of documents from group G02F 1/167, G02F 1/17, and G02F 1/19.*
> *All groups listed above should be considered in order to perform a complete search.*

N   G02F 1/16757   · · · · *Microcapsules*

> *WARNING*
>
> *Group G02F 1/16757 is incomplete pending reclassification of documents from group G02F 1/167, G02F 1/17, and G02F 1/19.*
> *All groups listed above should be considered in order to perform a complete search.*

D   G02F 2001/1676   · · · ~~{having a particular electrode}~~
> <administratively transferred to G02F 1/1676>

Q   G02F 1/1676   · · · · *Electrodes*

> *WARNING*
>
> *Group G02F 1/1676 is impacted by reclassification into groups G02F 1/16761, G02F 1/16762, and G02F 1/16766.*
> *All groups listed in this Warning should be considered in order to perform a complete search.*

N   G02F 1/16761   · · · · · *Side-by-side arrangement of working electrodes and counter-electrodes*

> *WARNING*
>
> *Group G02F 1/16761 is incomplete pending reclassification of documents from group G02F 1/1676.*
> *All groups listed above should be considered in order to perform a complete search.*

N   G02F 1/16762   · · · · · *having three or more electrodes per pixel*

> *WARNING*
>
> *Group G02F 1/16762 is incomplete pending reclassification of documents from group G02F 1/1676.*
> *All groups listed above should be considered in order to perform a complete search.*

N   G02F 1/16766   · · · · · *for active matrices*

> *WARNING*
>
> *Group G02F 1/16766 is incomplete pending reclassification of documents from group G02F 1/1676.*
> *All groups listed above should be considered in order to perform a complete search.*

N	*G02F 1/1677*	· · · · *Structural association of cells with optical devices, e.g. reflectors or illuminating devices*

> *WARNING*
>
> *Group G02F 1/1677 is incomplete pending reclassification of documents from group G02F 1/167, G02F 1/17, and G02F 1/19.*
> *All groups listed above should be considered in order to perform a complete search.*

M	G02F 2001/1678	· · · **·** {~~having a particular~~*characterised by the* composition or particle type}
N	*G02F 1/1679*	· · · *Gaskets; Spacers; Sealing of cells; Filling or closing of cells*

> *WARNING*
>
> *Group G02F 1/1679 is incomplete pending reclassification of documents from group G02F 1/167, G02F 1/17, and G02F 1/19.*
> *All groups listed above should be considered in order to perform a complete search.*

N	*G02F 1/1681*	· · · · · *having two or more microcells partitioned by walls, e.g. of microcup type*
N	*G02F 1/1685*	· · · *Operation of cells; Circuit arrangements affecting the entire cell*

> *WARNING*
>
> *Group G02F 1/1685 is incomplete pending reclassification of documents from group G02F 1/167, G02F 1/17, and G02F 1/19.*
> *All groups listed above should be considered in order to perform a complete search.*

N	*G02F 1/169*	· · *based on orientable non-spherical particles having a common optical characteristic, e.g. suspended particles of reflective metal flakes*

> *WARNING*
>
> *Group G02F 1/169 is incomplete pending reclassification of documents from groups G02F 1/17 and G02F 1/19.*
> *All groups listed above should be considered in order to perform a complete search.*

C	G02F 1/17	· · based on variable~~-~~-absorption elements *not provided for in groups G02F 1/015 - G02F 1/169*~~(G02F 1/015 - G02F 1/167 take precedence; {tenebrescent compositions C09K 9/00})~~

> *WARNING*
>
> *Group G02F 1/17 is impacted by reclassification into group G02F 1/165, G02F 1/166, G02F 1/1673, G02F 1/1675, G02F 1/16753, G02F 1/16755, G02F 1/16756, G02F 1/16757, G02F 1/1677, G02F 1/1679, G02F 1/1685, G02F 1/169.*
> *All groups listed above should be considered in order to perform a complete search.*

C	G02F 1/19	· · based on variable~~-~~-reflection or *variable-*refraction elements *not provided for in groups G02F 1/015 - G02F 1/169*~~(G02F 1/015 - G02F 1/167 take precedence)~~

> *WARNING*
>
> *Group G02F 1/19 is impacted by reclassification into group G02F 1/165, G02F 1/166, G02F 1/1673, G02F 1/1675, G02F 1/16753, G02F 1/16755, G02F 1/16756, G02F 1/16757, G02F 1/1677, G02F 1/1679, G02F 1/1685, G02F 1/169.*
> *All groups listed above should be considered in order to perform a complete search.*

Project: RP0558 (G10C)

M	**G10C**	**PIANOS, HARPSICHORDS, SPINETS OR SIMILAR STRINGED MUSICAL INSTRUMENTS WITH ONE OR MORE ~~KEYBOARD~~ *KEYBOARDS* (~~non-musical aspects of toy pianos A63H 5/00; aspects of automatic actuation G10F; combinations of microphones, pick-ups or amplifiers with musical instruments G10H~~*automatic musical instruments G10F*)**

> *NOTES*
>
> *1. In groups G10C 1/00, G10C 3/00 and G10C 9/00, multi-aspect classification is applied, so that subject matter characterised by aspects covered by more than one of their subgroups should be classified in each of those subgroups.*
>
> *2. In this subclass, the specific types of musical instruments are covered by group G10C 1/00, while aspects relevant to the details thereof or the accessories therefor are covered by groups G10C 3/00-G10C 9/00.*

M	**G10C 1/00**	**General design *of pianos, harpsichords, spinets or similar stringed musical instruments with one or more keyboards***
M	G10C 1/02	· of upright ~~pianofortes~~*pianos*
M	G10C 1/04	· of grand ~~pianofortes~~*pianos*
M	G10C 1/06	· of ~~cembaloes,~~*harpsichords* spinets~~,~~ or similar stringed ~~instruments {~~*musical instruments*~~(keyboard-operated zithers G10D 3/085)}~~
C	**G10C 3/00**	**Details or accessories**

> *WARNING*
>
> *Group G10C 3/00 is impacted by reclassification into group G10C 3/07. Groups G10C 3/00 and G10C 3/07 should be considered in order to perform a complete search.*

M	G10C 3/06	· Resonating means, e.g. *soundboards or* resonant strings~~, soundboards~~; Fastenings ~~of the resonating means~~*thereof*
N	G10C 3/07	· *Strings (resonant strings G10C 3/06)*

> *WARNING*
>
> *Group G10C 3/07 is incomplete pending reclassification of documents from group G10C 3/00.*
> *Groups G10C 3/00 and G10C 3/07 should be considered in order to perform a complete search.*

M	G10C 3/08	· ~~·~~ Arrangements ~~of strings~~*thereof*
M	G10C 3/10	· Tuning pins~~ or straining devices~~*; Tensioning devices*
M	G10C 3/103	· · {the axis of the pins being parallel to the ~~string}~~*strings*
M	G10C 3/106	· · {the axis of the pins being perpendicular to the ~~string}~~*strings*
U	G10C 3/12	· Keyboards; Keys
E	G10C 3/14	· · for ~~actuation~~*playing* by the feet

> *WARNING*
>
> *Group G10C 3/14 is incomplete pending reclassification of documents from group G10C 3/26.*
> *Groups G10C 3/26 and G10C 3/14 should be considered in order to perform a complete search.*

U	G10C 3/16	· Actions

C	G10C 3/161	· · {specially adapted for upright pianos}

WARNING
Group G10C 3/161 is impacted by reclassification into groups G10C 3/166 and G10C 3/24.
Groups G10C 3/161, G10C 3/166, and G10C 3/24 should be considered in order to perform a complete search.

M	G10C 3/163	· · · {the ~~actions~~*action* being mounted in a plane below the keyboard}
M	G10C 3/165	· · {for plucking the strings~~, i.e. for instruments covered by group G10C 1/06 (plucking mechanisms for keyboard-operated zithers G10D 3/085)~~}
E	G10C 3/166	· · {for damping ~~a string~~ *the strings* (~~G10C 3/161, G10C 3/168, G10C 3/20, G10C 3/22,~~ G10C 3/26 ~~take~~ *takes* precedence)}

WARNING
Group G10C 3/166 is incomplete pending reclassification of documents from groups G10C 3/161, G10C 3/168, G10C 3/20, and G10C 3/22.
All groups listed in this Warning should be considered in order to perform a complete search.

C	G10C 3/168	· · {with ~~a~~ hanging ~~jack~~*jacks*, i.e. ~~jack~~*jacks* connected to hammer-~~butt~~*butts* or hammer-~~shank}~~*shanks*

WARNING
Group G10C 3/168 is impacted by reclassification into groups G10C 3/166 and G10C 3/24.
Groups G10C 3/168, G10C 3/166, and G10C 3/24 should be considered in order to perform a complete search.

U	G10C 3/18	· · Hammers
C	G10C 3/20	· · involving the use of hydraulic, pneumatic~~,~~ or electromagnetic means

WARNING
Group G10C 3/20 is impacted by reclassification into groups G10C 3/166 and G10C 3/24.
Groups G10C 3/20, G10C 3/166, and G10C 3/24 should be considered in order to perform a complete search.

C	G10C 3/22	· · {specially adapted} for grand ~~pianofortes~~*pianos*

WARNING
Group G10C 3/22 is impacted by reclassification into groups G10C 3/166 and G10C 3/24.
Groups G10C 3/22, G10C 3/166, and G10C 3/24 should be considered in order to perform a complete search.

D	G10C 3/225	· · · ~~{the actions, in particular the hammers, being mounted above the strings, i.e. hammers hitting downwards}~~ <administratively transferred to G10C 3/23>
N	*G10C 3/23*	· · · *with hammers mounted above the strings, striking downwards*
E	G10C 3/24	· · ~~for reciprocating of~~ *Repetition [*~~tremolo~~ ~~{~~*] mechanisms* ~~(G10C 3/161, G10C 3/168, G10C 3/20, G10C 3/22 take precedence)}~~

WARNING
Group G10C 3/24 is incomplete pending reclassification of documents from groups G10C 3/161, G10C 3/168, G10C 3/20, and G10C 3/22.
All groups listed in this Warning should be considered in order to perform a complete search.

C	G10C 3/26	· Pedals or pedal mechanisms ~~for half-blow or similar means for modifying the sound~~*(G10C 3/14 takes precedence); Manually operated sound modification means*

> *WARNING*
> *Group G10C 3/26 is impacted by reclassification into group G10C 3/14. Groups G10C 3/26 and G10C 3/14 should be considered in order to perform a complete search.*

U	**G10C 5/00**	**Combinations with other musical instruments, e.g. with bells or xylophones**
D	G10C 5/005	· {~~Switching the keyboard from piano playing to playing another instrument~~} <administratively transferred to G10C 5/10>
N	*G10C 5/10*	· *Switching musical instruments to a keyboard, e.g. switching a piano mechanism or an electrophonic instrument to a keyboard; Switching musical instruments to a silent mode*
M	**G10C 9/00**	**Methods~~,~~ *, tools* or ~~tools~~*materials* specially adapted for the manufacture or maintenance of musical instruments covered by this subclass**

Project: RP0559 (B65H)

	B65H 3/00	**Separating articles from piles (associating, collating, or gathering articles B65H 39/00; machines for separating superposed webs B65H 41/00; unpiling thin material combined with folding B65H 45/26; combinations of piling and depiling operations, of interest apart from the single operation of piling or depiling B65H 83/00 {, B07C 1/02, ~~G07D 11/0084~~*G07D 11/50* })**

Project: RP0559 (G07B)

M	**G07B 15/00**	**Arrangements or apparatus for collecting fares, tolls or entrance fees at one or more control points (handling coins or ~~paper currency~~ *valuable papers, e.g. banknotes,* G07D; apparatus for vending or hiring articles or services activated by coins, credit cards, paper currency or the like G07F 7/00, G07F 17/00)**

NOTES

1. Data processing aspects of payment systems or protocols relating to toll, entrance fee or fare collection, e.g. in road pricing or congestion charging, are also classified in G06Q 20/00.

2. { This group covers also:
   • car rental systems;
   • systems for reserving and using access tickets, e.g. check-in systems
}

Project: RP0559 (G07D)

M	**G07D**	**HANDLING OF COINS OR ~~OF PAPER CURRENCY OR SIMILAR~~ VALUABLE PAPERS, e.g. TESTING, SORTING BY DENOMINATIONS, COUNTING, DISPENSING, CHANGING OR DEPOSITING**

NOTE

1. In this subclass, the following terms or expressions are used with the meaning indicated:
   • "coins" also covers tokens of similar nature;
   • "~~paper currency or similar~~ valuable papers" covers *paper currency,* banknotes, bills, cheques, vouchers, securities, bonds or *similar valuable*

papers, irrespective of the ~~like~~*material used for these, which represent monetary value that can be measured or verified*.

~~2. This suclass covers handling of "coins" or "paper currency" insofar as they carry distinctive value features representative of money or the like.~~
~~Informative references:~~
  - ~~sorting in general B07C~~
  - ~~handling paper sheets in general B65H~~
  - ~~counting by weighing G01G~~
  - ~~counting of objects in general, i.e. without discriminating of denominations, G06M~~

~~WARNING~~

~~The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:~~
~~G07D 13/00   covered by   G07D 11/00 and subgroup.~~

M	**G07D 3/00**	**Sorting a mixed bulk of coins into denominations** ~~**{(sorting paper currency G07D 11/0084; sorting by coin weight G01G)}**~~

M	**G07D 7/00**	**Testing specially adapted to determine the identity or genuineness of** ~~**paper currency or similar**~~ **valuable papers or for segregating those which are** *unacceptable, e.g. banknotes that are* **alien to a currency** ~~**or otherwise unacceptable**~~

NOTE
In this group, groups G07D 7/16 - G07D 7/20 take precedence over groups G07D 7/02 - G07D 7/14.

WARNING
Group G07D 7/00 is impacted by reclassification into group G07D 7/15. Groups G07D 7/00 and G07D 7/15 should be considered in order to perform a complete search.

M	**G07D 9/00**	**Counting coins (in combination with coin-sorting G07D 3/16); Handling of coins not provided for in the other groups of this subclass**

~~NOTE~~
~~Informative references~~
  - ~~handling of paper currency G07D 11/0021~~
  - ~~counting paper currency G07D 11/0084~~

C	**G07D 11/00**	*Devices accepting coins;* **Devices accepting** ~~**coins or {accepting or**~~ *,* **dispensing**~~**) paper currency**~~**,** ~~**e.g. depositing machines**~~ *sorting or counting valuable papers*~~**(apparatus freed or actuated by coins or the like G07F; apparatus freed or actuated by paper currency G07F 7/04; complete banking systems G07F 19/00 {; arrangements actuated by a coded-card for receiving or dispensing monies or the like and posting such transactions to existing accounts, e.g. automatic teller machines [ATMs] G07F 19/20})**~~

~~NOTES~~
~~1. This group covers constructional or functioning aspects of devices handling paper currency, including of so-called Automatic Teller Machines [ATMs]; other aspects of ATMs, e.g. posting transactions to existing accounts or aspects related to the interaction with users, are covered by group G07F 19/20~~
~~2. Informative reference:~~
~~3. - devices dispensing coins G07D 1/00~~

WARNING
Group G07D 11/00 is impacted by reclassification into group G07D 11/60.

Groups G07D 11/00 and G07D 11/60 should be considered in order to perform a complete search.

D	G07D 11/0003	· {Mechanical details} <administratively transferred to G07D 11/10>
D	G07D 11/0006	· · {Note containers} <administratively transferred to G07D 11/12>
D	G07D 11/0009	· · · {Secure note containers, e.g. for transport (coin boxes G07F 9/06; locking means E05B; safes E05G; currency invalidating means E05G 1/14)} <administratively transferred to G07D 11/125>
D	G07D 11/0012	· · · {incorporating note handling devices within the containers} <administratively transferred to G07D 11/13>
D	G07D 11/0015	· · · {Remote note containers} <administratively transferred to G07D 11/135>
D	G07D 11/0018	· · {Inlet or outlet ports} <administratively transferred to G07D 11/14>
D	G07D 11/0021	· · {Handling paper currency, e.g. banknotes (handling paper sheets in general B65H)} NOTE Informative reference- handling paper sheets in general B65H <administratively transferred to G07D 11/16>
D	G07D 11/0024	· · · {Note picking} <administratively transferred to G07D 11/165>
D	G07D 11/0027	· · · {Aligning (apparatus characterised by positioning means or by means responsive to positioning G07D 7/17)} <administratively transferred to G07D 11/17>
D	G07D 11/003	· · · {Flattening, e.g. straightening out folds} <administratively transferred to G07D 11/175>
D	G07D 11/0033	· · · {Diverting} <administratively transferred to G07D 11/18>
D	G07D 11/0036	· {Electronic and sensing details} <administratively transferred to G07D 11/22>
D	G07D 11/0039	· · {for detection of transport malfunction, e.g. jams, misfeeds} <administratively transferred to G07D 11/237>
D	G07D 11/0042	· · {for tamper detection and indication} <administratively transferred to G07D 11/225>
D	G07D 11/0045	· · {for cassette fill-level sensing} <administratively transferred to G07D 11/23>
D	G07D 11/0048	· · {for checking and indicating machine condition, fault detection (registering or indicating the working of machines in general G07C 3/00)} <administratively transferred to G07D 11/235>
D	G07D 11/0051	· {Means for managing operation, e.g. data handling with apparatus} <administratively transferred to G07D 11/20>
D	G07D 11/0054	· · {for managing stock of banknotes} <administratively transferred to G07D 11/24>
D	G07D 11/0057	· · · {Replenishment} <administratively transferred to G07D 11/245>
D	G07D 11/006	· · · {Relocation of banknotes within apparatus} <administratively transferred to G07D 11/25>

D	G07D 11/0063	· · {for servicing, repairing or coping with irregularities, e.g. power failure, vandalism} <administratively transferred to G07D 11/26>
D	G07D 11/0066	· · {for tracking or tracing banknotes or cassettes} <administratively transferred to G07D 11/30>
D	G07D 11/0069	· · {for record keeping (indicating machine condition G07D 11/0048; transaction aspects G07F 19/00)} <administratively transferred to G07D 11/32>
D	G07D 11/0072	· · · {Contents of apparatus, e.g. number of stored banknotes} <administratively transferred to G07D 11/34>
D	G07D 11/0075	· · · {Audit trail of performed activities} <administratively transferred to G07D 11/36>
D	G07D 11/0078	· · {for transmitting data, e.g. software updates, parameter settings} <administratively transferred to G07D 11/28>
D	G07D 11/0081	· {Device architecture, e.g. modular construction} <administratively transferred to G07D 11/40>
D	G07D 11/0084	· {Sorting or counting paper currency (sorting coins G07D 3/00 - counting coins G07D 9/00)} <administratively transferred to G07D 11/50>
U	G07D 11/0087	· {Banknote changing devices}
M	G07D 11/009	· {Depositing devices (safes E05G)}
U	G07D 11/0093	· · {Drop boxes}
U	G07D 11/0096	· · {Accepting paper currency or other valuables in containers, e.g. in code-marked envelopes}
N	G07D 11/10	· Mechanical details
N	G07D 11/12	· · Containers for valuable papers
N	G07D 11/125	· · · Secure containers
N	G07D 11/13	· · · with internal means for handling valuable papers
N	G07D 11/135	· · · {Remote note containers}
N	G07D 11/14	· · Inlet or outlet ports
N	G07D 11/16	· · Handling of valuable papers (within containers G07D 11/13)
N	G07D 11/165	· · · Picking
N	G07D 11/17	· · · Aligning
N	G07D 11/175	· · · Flattening, e.g. straightening out folds
N	G07D 11/18	· · · Diverting into different paths or containers
N	G07D 11/20	· Controlling or monitoring the operation of devices; Data handling
N	G07D 11/22	· · Means for sensing or detection
N	G07D 11/225	· · · for detecting or indicating tampering
N	G07D 11/23	· · · for sensing the quantity of valuable papers in containers
N	G07D 11/235	· · · for monitoring or indicating operating conditions; for detecting malfunctions
N	G07D 11/237	· · · · for detecting transport malfunctions, e.g. jams or misfeeds
N	G07D 11/24	· · Managing the stock of valuable papers
N	G07D 11/245	· · · Replenishment
N	G07D 11/25	· · · Relocation of valuable papers within devices
N	G07D 11/26	· · Servicing, repairing or coping with irregularities, e.g. power failure or vandalism
N	G07D 11/28	· · Setting of parameters; Software updates

N	*G07D 11/30*	· · *Tracking or tracing valuable papers or cassettes*
N	*G07D 11/32*	· · *Record keeping (transaction aspects G07F 19/00)*
N	*G07D 11/34*	· · · *Monitoring the contents of devices, e.g. the number of stored valuable papers*
N	*G07D 11/36*	· · · *Auditing of activities*
N	*G07D 11/40*	· *Device architecture, e.g. modular construction*
N	*G07D 11/50*	· *Sorting or counting valuable papers*
N	*G07D 11/60*	· *User-interface arrangements*

> *WARNING*
>
> *Group G07D 11/60 is incomplete pending reclassification of documents from group   G07D 11/00.*
> *Groups G07D 11/00 and G07D 11/60 should be considered in order to perform a complete search.*

M	**G07D 13/00**	**Handling of coins or of ~~paper currency or similar~~ valuable papers, characterised by a combination of mechanisms not covered by a single one of groups G07D 1/00 - G07D 11/00**

Project: RP0560 (G01M)

M	**G01M**	**TESTING STATIC OR DYNAMIC BALANCE OF MACHINES OR STRUCTURES; TESTING *OF* STRUCTURES OR APPARATUS, NOT OTHERWISE PROVIDED FOR ~~{(devices for testing the performance of portable percussive tools with fluid-pressure drive B25D 9/005)}~~**

NOTE
Attention is drawn to the Note following the title of Class G01.

WARNINGS
1. The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:

G01M 1/38	covered by	G01M 1/14 and G01M 1/30 and subgroups

2. In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

M	**G01M 1/00**	**Testing static or dynamic balance of machines or structures ~~(balancing rotary bowls of centrifuges B04B 9/14; apparatus characterised by the means for holding wheels or parts thereof B60B 30/00; determining the stability factors of ships B63B; stabilising of aircraft B64C 17/00; control systems for balancing automatically in operation G05; balancing rotors of dynamo-electric machines H02K 15/16)~~**
U	G01M 1/02	· Details of balancing machines or devices
M	G01M 1/04	· · Adaptation of bearing support assemblies for receiving the body to be tested ~~{(tyre chucks in general G01M 17/021)}~~
M	G01M 1/08	· · Instruments for indicating directly the magnitude and phase of the unbalance ~~(measuring electrical variables in general G01R)~~
U	G01M 1/14	· Determining unbalance (G01M 1/30 takes precedence)
U	G01M 1/16	· · by oscillating or rotating the body to be tested
M	G01M 1/22	· · · and converting vibrations due to unbalance into electric variables ~~(measuring vibrations in general G01H; microphones or like acoustic electromechanical transducers H04R)~~
M	G01M 1/30	· Compensating unbalance ~~(G01M1/38 takes precedence; counterweights F16F 15/28)~~

M	G01M 1/32	· · by adding material to the body to be tested, e.g. by correcting-weights (correcting-weights per se F16F 15/32)
M	**G01M 3/00**	**Investigating fluid-tightness of structures (investigating permeability of porous material, investigating the presence of flaws in general G01N {membrane leak detection in blood dialysis A61M 1/1692; detecting infusion flow leakage A61M 5/16831})**
U	G01M 3/02	· by using fluid or vacuum
M	G01M 3/022	· · {Test plugs for closing off the end of a pipe (means for stopping flow from pipes F16L 55/10)}
U	G01M 3/04	· · by detecting the presence of fluid at the leakage point
M	G01M 3/16	· · · using electric detection means ({G01M 3/045,} G01M 3/06, G01M 3/12, G01M 3/20, G01M 3/24, G01M 3/26 take precedence {G01M 3/045 takes precedence})
M	G01M 3/165	· · · · {by means of cables or similar elongated devices, e.g. tapes (construction of cables in general H01B)}
U	G01M 3/20	· · · using special tracer materials, e.g. dye, fluorescent material, radioactive material
M	G01M 3/202	· · · · {using mass spectrometer detection systems (mass spectrometers H01J 49/26)}
M	G01M 3/205	· · · · · {accessories and Accessories or associated equipment, pump constructions (pumps F04)}; Pump constructions}
U	G01M 3/22	· · · · for pipes, cables or tubes; for pipe joints or seals; for valves; {for welds; for containers, e.g. radiators}
U	G01M 3/226	· · · · · {for containers, e.g. radiators}
M	G01M 3/229	· · · · · · {removably mounted in a test cell (test cells also in G01M 3/3281 and G01M 3/363)}
U	G01M 3/26	· · by measuring rate of loss or gain of fluid, e.g. by pressure-responsive devices, by flow detectors
M	G01M 3/28	· · · for pipes, cables or tubes; for pipe joints or seals; for valves {for welds (not used)}
M	**G01M 5/00**	**Investigating the elasticity of structures, e.g. deflection of bridges, or air-craft wings (G01M 9/00 takes precedence; strain gauges G01B)**
M	**G01M 7/00**	**Vibration-testing of structures; Shock-testing of structures (G01M 9/00 takes precedence {; generating vibrations B06, G10, H04R; vibration measurement G01H; material testing G01N 3/00})**
M	**G01M 9/00**	**Aerodynamic testing; Arrangements in or on wind tunnels (building aspects Section E; investigating properties of materials in general G01N)**
U	G01M 9/06	· Measuring arrangements specially adapted for aerodynamic testing
M	G01M 9/062	· · {Wind tunnel balances; Holding devices combined with measuring arrangements (measuring components of force in general G01L 5/16)}
M	G01M 9/065	· · {dealing with flow (measuring volume flow G01F; measuring speed of fluids G01P 5/00)}
M	**G01M 10/00**	**Hydrodynamic testing; Arrangements in or on ship-testing tanks or water tunnels (building aspects Section E; investigating properties of materials in general G01N; {methods for designing, building, maintaining, converting, refitting, repairing or determining properties of vessels, not otherwise provided for and using towing tanks or model basins for designing B63B 9/02; for determining vessel properties with respect to stability or balance B63B 9/08; apparatus for indicating vessel attitude, e.g. inclination or duration of roll B63B 39/00})**

U	G01M 11/00	**Testing of optical apparatus; Testing structures by optical methods not otherwise provided for**
U	G01M 11/005	· {Testing of reflective surfaces, e.g. mirrors}
M	G01M 11/02	· Testing ~~of~~ optical properties ~~{of lenses}~~
M	G01M 11/04	· · Optical benches *therefor*
M	G01M 11/06	· · Testing ~~of~~*the* alignment of vehicle ~~head-light~~*headlight* devices
M	G01M 11/08	· Testing ~~of~~ mechanical properties {([G01M 11/005](#) takes precedence)}
M	G01M 11/088	· · {of optical fibres; Mechanical features associated with the optical testing of optical fibres ~~(material testing in general G01N)~~}
M	G01M 11/30	· {Testing of optical devices, constituted by fibre optics or optical waveguides ~~(measuring a given physical parameter of optical fibres, see the relevant subclasses, e.g. G01B, G01N; equipment for monitoring, testing or fault measuring in optical transmission systems H04B 10/07)~~}
C	G01M 13/00	**Testing of machine parts ~~(investigating the cutting power of tools, G01N, e.g. G01N 3/58)~~**

> *WARNING*
> *Group [G01M 13/00](#) is impacted by reclassification into group [G01M 13/003](#). Groups [G01M 13/00](#) and [G01M 13/003](#) should be considered in order to perform a complete search.*

N	G01M 13/003	· *Machine valves (testing valves for fluid tightness [G01M 3/00](#))*

> *WARNING*
> *Group [G01M 13/003](#) is incomplete pending reclassification of documents from group [G01M 13/00](#).*
> *Groups [G01M 13/00](#) and [G01M 13/003](#) should be considered in order to perform a complete search.*

M	G01M 13/005	· {~~Testing of sealing~~ *Sealing* rings}
M	G01M 13/02	· *Gearings;* ~~Testing of gearing or of transmission~~ *Transmission* mechanisms ~~(measuring efficiency G01L)~~
M	G01M 13/021	· · {~~of gearings~~}*Gearings*
M	G01M 13/022	· · {~~of power~~*Power*-transmitting couplings or clutches}
M	G01M 13/023	· · {~~of power~~*Power*-transmitting endless elements, e.g. belts~~,~~ *or* chains}
M	G01M 13/025	· · {Test-benches ~~using a~~ *with* rotational drive *means* and loading means; Load~~/~~ *or* drive simulation}
M	G01M 13/026	· · · {*Test-benches* of the mechanical closed-loop type}*, i.e. having a gear system constituting a closed-loop in combination with the object under test*
M	G01M 13/027	· · {Test-benches ~~using~~*with* force ~~-~~applying means, e.g. loading of drive shafts along several directions}
M	G01M 13/028	· · {Acoustic or vibration analysis}
M	G01M 13/04	· ~~Testing of bearings~~*Bearings*
M	G01M 13/045	· · {~~by acoustic~~ *Acoustic* or vibration analysis}
M	G01M 15/00	**Testing of engines**

> ~~NOTE~~
> ~~Informative note~~
> ~~References listed below indicate IPC places which could also be of interest when carrying out a search in respect of the subject matter covered by the preceding group:~~
> ~~Measurement of mechanical vibrations in general G01H~~
> ~~Analysing gases in general G01N~~

		Arrangements for testing electrical properties; Arrangements for locating electric faults; Arrangements for electrical testing characterised by what is being tested not provided for elsewhere G01R 31/00.
M	G01M 15/04	· Testing ~~of~~ internal-combustion engines~~, e.g. diagnostic testing of piston engines~~

NOTE

~~1. Informative note~~
~~References listed below indicate IPC places which could also be of interest when carrying out a search in respect of the subject matter covered by the preceding group:~~
~~Monitoring or diagnostic devices for exhaust-gas treatment apparatus F01N 11/00~~
~~Indicating or supervising devices of internal-combustion engines F02B 77/08~~
~~Running in of internal-combustion engines F02B 79/00~~
~~Controlling combustion engines F02D~~
~~Apparatus for testing, tuning or synchronising carburettors, e.g. carburettor flow stands F02M 19/01~~
~~Testing fuel-injection apparatus F02M 65/00~~
~~Testing internal-combustion engine ignition, e.g. timing F02P 17/00~~
~~Devices for determining the value of power, e.g. by measuring and simultaneously multiplying the values of torque and revolutions per unit of time, by multiplying the values of tractive or propulsive force and velocity G01L 3/24~~
~~Determining the characteristic of torque in relation to revolutions per unit of time G01L 5/26~~
~~Devices for detecting or indicating knocks in internal-combustion engines G01L 23/22~~
~~Devices for measuring pressure in inlet or exhaust ducts of internal combustion engines G01L 23/24~~
~~Means for indicating positions of pistons or cranks of internal-combustion engines by measuring pressure G01L 23/30.~~

~~2.~~ *1.* Group G01M 15/05 takes precedence over groups G01M 15/042 and G01M 15/06 - G01M 15/12.

M	G01M 15/10	· · by monitoring exhaust gases {or combustion flame ~~(analyses of gases per se G01N)~~}
M	G01M 15/14	· Testing ~~of~~ gas-turbine ~~plants~~*engines* or jet-propulsion ~~plants~~*engines*

NOTE
~~Informative note~~
~~References listed below indicate IPC places which could also be of interest when carrying out a search in respect of the subject matter covered by the preceding group:~~
~~Rocket-engine plants characterised by specially adapted arrangements for testing or measuring F02K 9/96.~~

M	**G01M 17/00**	**Testing of vehicles (~~G01M 15/00 takes precedence;~~ testing fluid tightness G01M 3/00; testing elastic properties of bodies or chassis, e.g. torsion ~~-~~testing ~~,~~ *,* G01M 5/00; testing alignment of vehicle ~~head-lighting~~*headlight* devices G01M 11/06~~; {testing brakes G01L 5/28}~~*; testing of engines G01M 15/00*)**
M	G01M 17/007	· ~~of wheeled~~ *Wheeled* or endless-tracked vehicles (G01M 17/08 takes precedence)
U	G01M 17/0072	· · {the wheels of the vehicle co-operating with rotatable rolls (G01M 17/022, G01M 17/045, G01M 17/065 take precedence)}
M	G01M 17/0076	· · · {~~for two~~*Two*-wheeled vehicles}
M	G01M 17/0078	· · {Shock-testing of vehicles ~~(shock-testing of structures in general G01M 7/08, G01N 3/30)~~}

M	G01M 17/013	· · ~~of wheels~~*Wheels*
M	G01M 17/02	· · ~~of tyres~~*Tyres*
M	G01M 17/022	· · · {the tyre co-~~operates~~*operating* with rotatable rolls}
M	G01M 17/024	· · · · {combined with tyre surface correcting or marking means ~~(compensating unbalance G01M 1/30; marking location of unbalance G01M 1/26)~~}
M	G01M 17/025	· · · {using infrasonic, sonic or ultrasonic vibrations ~~(for material testing in general G01N 29/00)~~}
M	G01M 17/027	· · · {using light, e.g. infra-red, ultra-violet~~,~~ *or* holographic techniques ~~(for material testing in general G01N 21/00)~~}
M	G01M 17/028	· · · {using X-rays ~~(for material testing in general G01N 23/00)~~}
M	G01M 17/03	· · ~~of endless~~*Endless*-tracks
M	G01M 17/04	· · ~~of suspension~~*Suspension* or ~~of~~ damping
M	G01M 17/06	· · ~~of steering~~*Steering* behaviour; ~~of rolling~~*Rolling* behaviour ~~(measuring steering angles G01B; measuring steering forces G01L)~~
M	G01M 17/08	· ~~of railway~~*Railway* vehicles
M	G01M 17/10	· · ~~of suspensions~~*Suspensions*, axles or wheels

Project: RP0561 (G01N)

M	**G01N 33/00**	**Investigating or analysing materials by specific methods not covered by ~~the preceding~~*groups G01N 1/00* ~~groups~~ *- G01N 31/00***
M	G01N 33/15	· Medicinal preparations {; Physical properties thereof, e.g. dissolubility (drug screening with animal cells G01N 33/5008~~, drug screening with microorganisms C12Q 1/025~~)}
M	G01N 33/18	· Water ~~{(treatment of water C02F)}~~
C	G01N 33/20	· Metals

> *WARNING*
> *Group G01N 33/20 is impacted by reclassification into groups G01N 33/202, G01N 33/2022, G01N 33/2028, G01N 33/204, G01N 33/2045, G01N 33/207, and G01N 33/208.*
> *All groups listed in this Warning should be considered in order to perform a complete search.*

N	*G01N 33/202*	· · *Constituents thereof*

> *WARNING*
> *Group G01N 33/202 is incomplete pending reclassification of documents from group G01N 33/20.*
> *Groups G01N 33/20 and G01N 33/202 should be considered in order to perform a complete search.*

N	*G01N 33/2022*	· · · *Non-metallic constituents*

> *WARNING*
> *Group G01N 33/2022 is incomplete pending reclassification of documents from group G01N 33/20.*
> *Groups G01N 33/20 and G01N 33/2022 should be considered in order to perform a complete search.*

N	*G01N 33/2025*	· · · · *Gaseous constituents*
N	*G01N 33/2028*	· · · *Metallic constituents*

> *WARNING*
> *Group G01N 33/2028 is incomplete pending reclassification of documents from group G01N 33/20.*

		Groups G01N 33/20 and G01N 33/2028 should be considered in order to perform a complete search.
D	G01N 33/203	· · {for the presence of a volatilizable, e.g. gaseous component} <administratively transferred to G01N 33/2025>
N	*G01N 33/204*	· · *Structure thereof, e.g. crystal structure*

WARNING

Group G01N 33/204 is incomplete pending reclassification of documents from group G01N 33/20.
Groups G01N 33/20 and G01N 33/204 should be considered in order to perform a complete search.

N	*G01N 33/2045*	· · · *Defects*

WARNING

Group G01N 33/2045 is incomplete pending reclassification of documents from group G01N 33/20.
Groups G01N 33/20 and G01N 33/2045 should be considered in order to perform a complete search.

N	*G01N 33/205*	· · *in liquid state, e.g. molten metals*
D	G01N 33/206	· · {in molten state, e.g. after local fusion} <administratively transferred to G01N 33/205>
N	*G01N 33/207*	· · *Welded or soldered joints; Solderability*

WARNING

Group G01N 33/207 is incomplete pending reclassification of documents from group G01N 33/20.
Groups G01N 33/20 and G01N 33/207 should be considered in order to perform a complete search.

N	*G01N 33/208*	· · *Coatings, e.g. platings*

WARNING

Group G01N 33/208 is incomplete pending reclassification of documents from group G01N 33/20.
Groups G01N 33/20 and G01N 33/208 should be considered in order to perform a complete search.

M	G01N 33/24	· Earth materials (G01N 33/42 takes precedence {; testing the nature of borehole walls, formation testing E21B 49/00; investigation of foundation soil in situ E02D 1/00; geophysics, e.g. prospecting G01V})
M	G01N 33/48	· Biological material, e.g. blood, urine (G01N 33/02 - G01N 33/14, G01N 33/26, G01N 33/44, G01N 33/46 take precedence; determining the germinating capacity of seeds A01C 1/02); Haemocytometers (counting blood corpuscules distributed over a surface by scanning the surface G06M 11/02)
U	G01N 33/483	· · Physical analysis of biological material
U	G01N 33/487	· · · of liquid biological material
M	G01N 33/49	· · · · Blood {(taking blood samples A61B 5/15; chemical methods for determining blood cell populations G01N 33/5094; chemical analysis of blood groups or blood types G01N 33/80)}
M	G01N 33/497	· · · of gaseous biological material, e.g. breath {(for evaluating respiratory organs A61B 5/08)}

U	G01N 33/50	· · Chemical analysis of biological material, e.g. blood, urine; Testing involving biospecific ligand binding methods; Immunological testing (measuring or testing processes involving enzymes or microorganisms, compositions or test papers therefor; processes for forming such compositions, condition responsive control in microbiological or enzymological processes C12Q)

NOTES

1. In this group, the following expression is used with the meaning indicated: "involving", when used in relation to a material, includes the testing for the material as well as employing the material as a determinant or reactant in a test for a different material.

2. In groups G01N 33/52 – G01N 33/98, the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, classification is made in the last appropriate place.

3. Documents relating to new peptides or new DNA or its corresponding mRNA, encoding for the peptides, and their use in measuring or testing processes are classified in subclass C07K or in group C12N 9/00 according to the peptides, with the appropriate indexing codes relating to their use in diagnostics. However, if the investigating or analysing aspects are of interest, the documents are classified in this group.

U	G01N 33/53	· · · Immunoassay; Biospecific binding assay; Materials therefor
U	G01N 33/543	· · · · with an insoluble carrier for immobilising immunochemicals
U	G01N 33/544	· · · · · the carrier being organic
U	G01N 33/545	· · · · · · Synthetic resin
M	G01N 33/546	· · · · · · · as water suspendable particles {(~~not used, see G01N 33/54313~~ *insoluble carriers for immobilising immunochemicals G01N 33/54313*)}
M	G01N 33/547	· · · · · · · with antigen or antibody attached to the carrier via a bridging agent {(~~not used, see G01N 33/54353~~ *ligands attached to the carrier via a chemical coupling agent G01N 33/54353*)}
M	G01N 33/549	· · · · · · with antigen or antibody entrapped within the carrier {(~~not used, see G01N 33/5436~~ *with ligand physically entrapped within the solid phase G01N 33/5436*)}
M	G01N 33/563	· · · · involving antibody fragments {(~~not used, see G01N 33/6857~~ *G01N 33/6857 takes precedence*)}

Project: RP0564 (B32B)

M	**B32B 7/00**	***Layered products characterised by the relation between layers;*** **Layered products characterised by the ~~relation~~ *relative orientation of features* between layers, *or by the relative values of a measurable parameter between layers,* i.e. products comprising layers having different physical ~~properties and products characterised by the interconnection of layers~~*, chemical or physicochemical properties; Layered products characterised by the interconnection of layers*
D	B32B 7/005	· ~~{in respect of orientation of features (B32B 5/12 takes precedence)}~~ <administratively transferred to B32B 7/03>
C	B32B 7/02	· ~~in respect of physical properties~~*Physical*, ~~e.g. hardness~~*chemical or physicochemical properties*

WARNING
Group B32B 7/02 is impacted by reclassification into groups B32B 7/022, B32B 7/023, B32B 7/025, B32B 7/027, and B32B 7/028.
All groups listed in this Warning should be considered in order to perform a complete search.

N	B32B 7/022	· · *Mechanical properties*

WARNING

Groups B32B 7/022, B32B 7/023, B32B 7/025, B32B 7/027, and B32B 7/028 are incomplete pending reclassification of documents from group B32B 7/02. All groups listed in this Warning should be considered in order to perform a complete search.

N	B32B 7/023	· · *Optical properties*
N	B32B 7/025	· · *Electric or magnetic properties*
N	B32B 7/027	· · *Thermal properties*
N	B32B 7/028	· · · *Heat-shrinkability*
Q	B32B 7/03	· *with respect to the orientation of features (direction of fibres or filaments B32B 5/12)*

WARNING

Group B32B 7/03 is impacted by reclassification into group B32B 7/035. Groups B32B 7/03 and B32B 7/035 should be considered in order to perform a complete search.

N	B32B 7/035	· · *using arrangements of stretched films, e.g. of mono-axially stretched films arranged alternately*

WARNING

Group B32B 7/035 is incomplete pending reclassification of documents from group B32B 7/03.
Groups B32B 7/03 and B32B 7/035 should be considered in order to perform a complete search.

M	B32B 7/04	· ~~characterised by the connection~~ *Interconnection* of layers
D	B32B 7/045	· · ~~{the layers being not connected over the whole surface, e.g. discontinuous connection, patterned connection (B32B 7/14 takes precedence)}~~ <administratively transferred to B32B 7/05>
N	B32B 7/05	· · *the layers not being connected over the whole surface, e.g. discontinuous connection or patterned connection (using interposed adhesives or bonding materials applied in spaced arrangements B32B 7/14)*
M	B32B 7/06	· · permitting easy separation ~~{, e.g. releasable layer}~~
C	B32B 7/08	· · by mechanical ~~connection, e.g. stitching {~~ *means* ~~(B32B 5/06 takes precedence)}~~

WARNING

Group B32B 7/08 is impacted by reclassification into group B32B 7/09. Groups B32B 7/08 and B32B 7/09 should be considered in order to perform a complete search.

N	B32B 7/09	· · · *by stitching, needling or sewing (by needling fibrous layers B32B 5/06)*

WARNING

Group B32B 7/09 is incomplete pending reclassification of documents from group B32B 7/08.
Groups B32B 7/08 and B32B 7/09 should be considered in order to perform a complete search.

M	B32B 7/10	· · *at least* one ~~or both of the layers~~ *layer* having inter-reactive properties
M	B32B 7/12	· · using ~~an adhesive {, i.e. any~~ interposed ~~material having adhesive or~~ *adhesives or interposed materials with* bonding properties~~}~~
M	B32B 7/14	· · · applied in ~~strips or other spaced arrangement~~ *spaced arrangements, e.g. in stripes*

Project: RP0570 (C02F)

U	**C02F 11/00**	**Treatment of sludge; Devices therefor**
U	C02F 11/10	· by pyrolysis
C	C02F 11/12	· by de-watering, drying~~,~~ or thickening

> *WARNING*
>
> *Group C02F 11/12 is impacted by reclassification into groups C02F 11/13, C02F 11/131, and C02F 11/15.*
> *All groups listed in this Warning should be considered in order to perform a complete search.*

M	C02F 11/121	· · {~~Processes for~~ *by* mechanical ~~dehydration of sludge, e.g. by filters~~}*de-watering*
M	C02F 11/122	· · · {using ~~press filters~~ *filter presses* (C02F 11/123 takes precedence)}
M	C02F 11/123	· · · {using belt or band filters}
M	C02F 11/125	· · · {using screw filters}
M	C02F 11/126	· · · {using drum filters}
M	C02F 11/127	· · · {by centrifugation}
M	C02F 11/128	· · · {~~Batch~~ *using batch* processes}
N	*C02F 11/13*	· · *by heating*

> *WARNING*
>
> *Group C02F 11/13 is incomplete pending reclassification of documents from group C02F 11/12.*
> *Groups C02F 11/12 and C02F 11/13 should be considered in order to perform a complete search.*

N	*C02F 11/131*	· · · *using electromagnetic or ultrasonic waves*

> *WARNING*
>
> *Group C02F 11/131 is incomplete pending reclassification of documents from group C02F 11/12.*
> *Groups C02F 11/12 and C02F 11/131 should be considered in order to perform a complete search.*

C	C02F 11/14	· · with addition of chemical agents

> *WARNING*
>
> *Group C02F 11/14 is impacted by reclassification into groups C02F 11/143, C02F 11/145, C02F 11/147, and C02F 11/148.*
> *All groups listed in this Warning should be considered in order to perform a complete search.*

N	*C02F 11/143*	· · · *using inorganic substances (C02F 11/148 takes precedence)*

> *WARNING*
>
> *Group C02F 11/143 is incomplete pending reclassification of documents from group C02F 11/14.*
> *Groups C02F 11/14 and C02F 11/143 should be considered in order to perform a complete search.*

N	*C02F 11/145*	· · · · *using calcium compounds*

> *WARNING*
>
> *Group C02F 11/145 is incomplete pending reclassification of documents from group C02F 11/14.*
> *Groups C02F 11/14 and C02F 11/145 should be considered in order to perform a complete search.*

N	*C02F 11/147*	· · · *using organic substances (C02F 11/148 takes precedence)*

WARNING

Group C02F 11/147 is incomplete pending reclassification of documents from group C02F 11/14.
Groups C02F 11/14 and C02F 11/147 should be considered in order to perform a complete search.

N	*C02F 11/148*	· · · *Combined use of inorganic and organic substances, being added in the same treatment step*

WARNING

Group C02F 11/148 is incomplete pending reclassification of documents from group C02F 11/14.
Groups C02F 11/14 and C02F 11/148 should be considered in order to perform a complete search.

N	*C02F 11/15*	· · *By treatment with electric, magnetic or electromagnetic fields; by treatment with ultrasonic waves (for the purpose of heating C02F 11/131)*

WARNING

Group C02F 11/15 is incomplete pending reclassification of documents from group C02F 11/12.
Groups C02F 11/12 and C02F 11/15 should be considered in order to perform a complete search.

Project: RP0575 (G05B)

M	**G05B 13/00**	**Adaptive control systems, i.e. systems automatically adjusting themselves to have a performance which is optimum according to some preassigned criterion (G05B 19/00 takes precedence~~; details of the computer G06F 15/18~~*; machine learning G06N 20/00*)**

Project: RP0575 (G06F)

U	**G06F 15/00**	**Digital computers in general (details G06F 1/00 – G06F 13/00); Data processing equipment in general**
D	G06F 15/18	· ~~in which a program is changed according to experience gained by the computer itself during a complete run; Learning machines (adaptive control systems G05B 13/00; artificial intelligence G06N)~~ <administratively transferred to G06N 20/00>

Project: RP0575 (G06K)

	G06K 9/62	· Methods or arrangements for recognition using electronic means (~~learning machines G06F 15/18;~~ *machine learning G06N 20/00;* digital correlation G06F 17/15; analogue correlation G06G 7/19)

Project: RP0575 (G06N)

M	**G06N 3/00**	**Computer systems based on biological models ~~(analogue computers simulating functional aspects of living beings G06G 7/60)~~**
U	G06N 3/004	· {Artificial life, i.e. computers simulating life}
M	G06N 3/006	· · {based on simulated virtual individual or collective life forms, e.g. single "avatar", social simulations, virtual worlds *or particle swarm optimisation*} ~~{computer games A63F 13/00; medical simulations G06F 19/00; information retrieval G06F 17/30873; image processing G06T; telecommunication protocols H04L 29/06034)}~~

M	G06N 3/008	· · {based on physical entities controlled by simulated intelligence so as to replicate intelligent life forms, e.g. robots replicating pets or humans in their appearance or behavior ~~(toys or dolls A63H 3/00; industrial robot control G05B 19/00, B25J 9/00; artificial neural networks G06N 3/00; rule based artificial intelligence G06N 5/00)~~}
M	G06N 3/02	· using neural network models ~~(for adaptive control G05B 13/00; for image pattern matching G06K 9/00; for image data processing G06T 1/20; for phonetic pattern matching G10L 15/16)~~
U	G06N 3/04	· · Architectures, e.g. interconnection topology
M	G06N 3/0409	· · · {Adaptive ~~Resonance Theory~~*resonance theory* [ART] networks}
M	**G06N 5/00**	**Computer systems ~~utilising~~*using* knowledge -based models**
M	G06N 5/003	· *{Dynamic search techniques; Heuristics; Dynamic trees;* {~~Dynamic search techniques, heuristics, branch~~*Branch*-and-bound ~~(G06N 5/046 take precedence; for optimisation G06Q 10/04)~~}
U	G06N 5/006	· · {Automatic theorem proving}
M	G06N 5/02	· Knowledge representation ~~{(G06N 5/04 takes precedence)}~~
M	G06N 5/022	· · {Knowledge engineering~~, knowledge acquisition}~~*; Knowledge acquisition}*
M	G06N 5/025	· · · {Extracting rules from data ~~(learning in general G06F 15/18)~~}
U	G06N 5/04	· Inference methods or devices
M	G06N 5/043	· · {Distributed expert systems~~, blackboards}~~*; Blackboards}*
M	G06N 5/046	· · {Forward inferencing~~, production systems}~~*; Production systems}*
M	G06N 5/047	· · · {Pattern matching networks~~, RETE}~~*; RETE networks}*
U	**G06N 7/00**	**Computer systems based on specific mathematical models**
M	G06N 7/02	· using fuzzy logic (~~G06N 3/00, G06N 5/00 take precedence; for adaptive control G05B 13/00~~*computer systems based on biological models G06N 3/00; computer systems using knowledge-based models G06N 5/00*)
U	G06N 7/08	· using chaos models or non-linear system models
N	***G06N 10/00***	***Quantum computers, i.e. computer systems based on quantum-mechanical phenomena***
Q	***G06N 20/00***	***Machine learning***

        WARNING

        Group G06N 20/00 is impacted by reclassification into groups G06N 20/10 and G06N 20/20.
        All groups listed in this Warning should be considered in order to perform a complete search.

N	*G06N 20/10*	· *using kernel methods, e.g. support vector machines [SVM]*

        WARNING

        Group G06N 20/10 is incomplete pending reclassification of documents from group G06N 20/00.
        Groups G06N 20/00 and G06N 20/10 should be considered in order to perform a complete search.

N	*G06N 20/20*	· *Ensemble learning*

        WARNING

        Group G06N 20/20 is incomplete pending reclassification of documents from group G06N 20/00.
        Groups G06N 20/00 and G06N 20/20 should be considered in order to perform a complete search.

U	**G06N 99/00**	**Subject matter not provided for in other groups of this subclass**
D	G06N 99/002	· {Quantum computers, i.e. information processing by using quantum superposition, coherence, decoherence, entanglement, nonlocality, teleportation} <administratively transferred to G06N 10/00>
D	G06N 99/005	· {Learning machines, i.e. computer in which a programme is changed according to experience gained by the machine itself during a complete run (neural networks G06N 3/02; knowledge based models G06N 5/00; fuzzy logic systems G06N 7/02; adaptive control systems G05B 13/00)} <administratively transferred to G06N 20/00>

Project: RP0576 (A47J)

U	**A47J 47/00**	**Miscellaneous kitchen containers, stands, or the like ({bowls for food processors A47J 43/0727}; containers in general B65D); Cutting-boards, e.g. for bread (with slicing devices B26D)**
C	A47J 47/20	· Grids, racks, or other supports removably mounted in, on, or over sinks *(splash guards for sinks E03C 1/181, E03C 1/186)*; Splash guards for sinks

> *WARNING*
> *Group A47J 47/20 is impacted by reclassification into groups E03C 1/181 and E03C 1/186.*
> *Groups A47J 47/20, E03C 1/181, and E03C 1/186 should be considered in order to perform a complete search.*

Project: RP0576 (E03C)

U	**E03C 1/00**	**Domestic plumbing installations for fresh water or waste water; Sinks {(work tops A47B 77/022)}**
U	E03C 1/12	· Plumbing installations for waste water; Basins or fountains connected thereto (drainage devices in floors E03F 5/04); Sinks {(wash-basins not connected to the waste-pipe A47K 1/04)}
U	E03C 1/18	· · Sinks, whether or not connected to the waste-pipe
E	E03C 1/181	· · · Anti-splash devices in sinks, *e.g. splash guards* (jet regulators E03C 1/08)

> *WARNING*
> *Group E03C 1/181 is incomplete pending reclassification of documents from group A47J 47/20.*
> *Groups A47J 47/20 and E03C 1/181 should be considered in order to perform a complete search.*

E	E03C 1/186	· · · Separate partition walls, lids, protecting borders, or the like, for sinks

> *WARNING*
> *Group E03C 1/186 is incomplete pending reclassification of documents from group A47J 47/20.*
> *Groups A47J 47/20 and E03C 1/186 should be considered in order to perform a complete search.*

Project: RP0577 (A61K)

U	A61K 38/00	**Medicinal preparations containing peptides (peptides containing beta-lactam rings A61K 31/00; cyclic dipeptides not having in their molecule any other peptide link than those which form their ring, e.g. piperazine-2,5-diones, A61K 31/00; ergot alkaloids of the cyclic peptide type A61K 31/48; containing macromolecular compounds having statistically distributed amino acid units A61K 31/74; medicinal preparations containing antigens or antibodies A61K 39/00; medicinal preparations characterised by the non-active ingredients, e.g. peptides as drug carriers, A61K 47/00)**

NOTES

1. The terms or expressions used in this group follow exactly the definitions given in Note (1) following the title of subclass C07K.

2. Preparations containing fragments of peptides or peptides modified by removal or addition of amino acids, by substitution of amino acids by others, or by combination of these modifications are classified as the preparations containing parent peptides. However, preparations containing fragments of peptides having only four or less amino acids are also classified in groups A61K 38/05 - A61K 38/07.

3. Preparations containing peptides prepared by recombinant DNA technology are not classified according to the host, but according to the original peptide expressed, e.g. preparations containing HIV peptide expressed in E. coli are classified with the preparations containing HIV peptides.

4. This group covers also medicinal preparation containing DNA or RNA encoding for peptides as active ingredient.

5. Documents relating to new peptides, e.g. enzymes, or new DNA or RNA encoding for peptides and their use in medicinal preparations are classified in subclass C07K or in group C12N 9/00 according to the peptides, with the appropriate indexing codes relating to their medical uses.

U	A61K 38/04	· Peptides having up to 20 amino acids in a fully defined sequence; Derivatives thereof ({enzyme inhibitors A61K 38/005}; gastrins {A61K 38/2207} somatostatins A61K 38/31, melanotropins A61K 38/34; {protease inhibitors A61K 38/55})
C	A61K 38/08	· · Peptides having 5 to 11 amino acids {(A61K 38/043 - A61K 38/046 take precedence)}

> *WARNING*
> *Group A61K 38/08 is impacted by reclassification into group A61K 38/095. All groups listed in this Warning should be considered in order to perform a complete search.*

U	A61K 38/085	· · · {Angiotensins}
U	A61K 38/09	· · · Luteinising hormone-releasing hormone [LHRH] {, i.e. Gonadotropin-releasing hormone [GnRH]}; Related peptides
N	*A61K 38/095*	· · · *Oxytocins; Vasopressins; Related peptides*

> *WARNING*
> *Group A61K 38/095 is incomplete pending reclassification of documents from group A61K 38/08.*
> *Groups A61K 38/095 and A61K 38/08 should be considered in order to perform a complete search.*

U	A61K 38/10	· · Peptides having 12 to 20 amino acids {(A61K 38/043 - A61K 38/046 take precedence)}
U	A61K 38/105	· · · {Bombesin; Related peptides}

D	A61K 38/11	· · ~~Oxytocins; Vasopressins; Related peptides~~ <administratively transferred to A61K 38/095>
U	A61K 38/16	· Peptides having more than 20 amino acids; Gastrins; Somatostatins; Melanotropins; Derivatives thereof {(enzyme inhibitors A61K 38/005)}
U	A61K 38/17	· · from animals; from humans {(enzyme inhibitors A61K 38/005)}
U	A61K 38/22	· · Hormones (derived from pro-opiomelanocortin, pro-enkephalin or pro-dynorphin A61K 38/33, e.g. corticotropin A61K 38/35)
M	A61K 38/25	· · · Growth hormone-releasing factor ~~([~~GH-RF~~)]~~ (Somatoliberin)

Project: RP0580 (G06F)

	G06F 3/06	· Digital input from or digital output to record carriers, {e.g. RAID, emulated record carriers, networked record carriers (recording or reproducing devices <u>per se</u> G11B; error detection, error correction, monitoring <u>per se</u> regarding storage systems G06F 11/00; accessing or addressing within memory systems or architectures G06F 12/00; information retrieval ~~G06F 17/30~~*G06F 16/00*)}
U	**G06F 7/00**	**Methods or arrangements for processing data by operating upon the order or content of the data handled (logic circuits H03K 19/00)**
	G06F 7/02	· Comparing digital values (G06F 7/06, {G06F 7/22, } G06F 7/38 take precedence; information retrieval ~~G06F 17/30~~*G06F 16/00*; comparing pulses H03K 5/22)
U	**G06F 11/00**	**Error detection; Error correction; Monitoring (error detection, correction or monitoring in information storage based on relative movement between record carrier and transducer G11B 20/18; monitoring, i.e. supervising the progress of recording or reproducing G11B 27/36; in static stores G11C 29/00)**
		NOTE
		In this group the indexing codes of G06F 1/00 - G06F 15/00 are added
U	G06F 11/07	· Responding to the occurrence of a fault, e.g. fault tolerance
U	G06F 11/14	· · Error detection or correction of the data by redundancy in operation (G06F 11/16 takes precedence)
U	G06F 11/1402	· · · {Saving, restoring, recovering or retrying}
	G06F 11/1474	· · · · {in transactions (~~G06F 17/30286~~*G06F 16/20* takes precedence)}
N	*G06F 16/00*	*Information retrieval; Database structures therefor; File system structures therefor*
N	*G06F 16/10*	· *File systems; File servers*
N	*G06F 16/11*	· · *File system administration, e.g. details of archiving or snapshots (file system backup G06F 11/14)*
N	*G06F 16/113*	· · · *{Details of archiving (lifecycle management in storage systems G06F 3/0649; backup systems G06F 11/1446)}*
N	*G06F 16/116*	· · · *{Details of conversion of file system types or formats}*
N	*G06F 16/119*	· · · *{Details of migration of file systems (migration mechanisms in storage systems G06F 3/0647)}*
N	*G06F 16/122*	· · · *{using management policies (backup systems G06F 11/1446; file migration policies for HSM systems G06F 16/185)}*
N	*G06F 16/125*	· · · · *{characterised by the use of retention policies (retention policies for HSM systems G06F 16/185)}*
N	*G06F 16/128*	· · · *{Details of file system snapshots on the file-level, e.g. snapshot creation, administration, deletion (use of snapshots for error detection or correction G06F 11/14, G06F 11/16)}*

N	*G06F 16/13*	· · *File access structures, e.g. distributed indices (arrangements of input from, or output to, record carriers G06F 3/06)*
N	*G06F 16/134*	· · · *{Distributed indices}*
N	*G06F 16/137*	· · · *{Hash-based (content-based indexing of textual data G06F 16/31)}*
N	*G06F 16/14*	· · *Details of searching files based on file metadata*
N	*G06F 16/144*	· · · *{Query formulation}*
N	*G06F 16/148*	· · · *{File search processing}*
N	*G06F 16/152*	· · · · *{using file content signatures, e.g. hash values}*
N	*G06F 16/156*	· · · *{Query results presentation}*
N	*G06F 16/16*	· · *File or folder operations, e.g. details of user interfaces specifically adapted to file systems*
N	*G06F 16/162*	· · · *{Delete operations (erasing in storage systems G06F 3/0652)}*
N	*G06F 16/164*	· · · *{File meta data generation}*
N	*G06F 16/166*	· · · · *{File name conversion}*
N	*G06F 16/168*	· · · *{Details of user interfaces specifically adapted to file systems, e.g. browsing and visualisation, 2d or 3d GUIs (query results presentation G06F 16/156)}*
N	*G06F 16/17*	· · *Details of further file system functions*
N	*G06F 16/172*	· · · *Caching, prefetching or hoarding of files*
N	*G06F 16/1724*	· · · *{Details of de-fragmentation performed by the file system (saving storage space on storage systems G06F 3/0608; management of blocks in storage devices G06F 3/064)}*
N	*G06F 16/1727*	· · · *{Details of free space management performed by the file system (saving storage space on storage systems G06F 3/0608; management of blocks in storage devices G06F 3/064)}*
N	*G06F 16/173*	· · · *{Customisation support for file systems, e.g. localisation, multi-language support, personalisation}*
N	*G06F 16/1734*	· · · *{Details of monitoring file system events, e.g. by the use of hooks, filter drivers, logs}*
N	*G06F 16/1737*	· · · *{for reducing power consumption or coping with limited storage space, e.g. in mobile devices (saving storage space on storage devices G06F 3/0608; power saving in storage systems G06F 3/0625)}*
N	*G06F 16/174*	· · · *Redundancy elimination performed by the file system (management of the data involved in backup or backup restore using de-duplication of the data G06F 11/14)*
N	*G06F 16/1744*	· · · · *{using compression, e.g. sparse files}*
N	*G06F 16/1748*	· · · · *{De-duplication implemented within the file system, e.g. based on file segments (de-duplication techniques in storage systems for the management of data blocks G06F 3/0641)}*
N	*G06F 16/1752*	· · · · · *{based on file chunks}*
N	*G06F 16/1756*	· · · · · *{based on delta files}*
N	*G06F 16/176*	· · · *Support for shared access to files; File sharing support*
N	*G06F 16/1767*	· · · · *{Concurrency control, e.g. optimistic or pessimistic approaches}*
N	*G06F 16/1774*	· · · · · *{Locking methods, e.g. locking methods for file systems allowing shared and concurrent access to files}*
N	*G06F 16/178*	· · · *Techniques for file synchronisation in file systems*
N	*G06F 16/1787*	· · · · *{Details of non-transparently synchronising file systems}*

Q	G06F 16/1794	· · · · *{Details of file format conversion}*

N	G06F 16/18	· · *File system types*
N	G06F 16/1805	· · · *{Append-only file systems, e.g. using logs or journals to store data}*
N	G06F 16/181	· · · · *{providing write once read many [WORM] semantics}*
N	G06F 16/1815	· · · · *{Journaling file systems}*
N	G06F 16/182	· · · *Distributed file systems*
N	G06F 16/1824	· · · · *{implemented using Network-attached Storage [NAS] architecture (distributed or networked storage systems G06F 3/067; protocols for distributed storage of data in a network H04L 67/1097)}*
N	G06F 16/1827	· · · · · *{Management specifically adapted to NAS (management of storage area networks [SAN] G06F 3/067)}*
N	G06F 16/183	· · · · · *{Provision of network file services by network file servers, e.g. by using NFS, CIFS (network file access protocols H04L 67/1097)}*
N	G06F 16/1834	· · · · *{implemented based on peer-to-peer networks, e.g. gnutella (p2p communication protocols H04L 67/104)}*
N	G06F 16/1837	· · · · · *{Management specially adapted to peer-to-peer storage networks (topology management mechanisms of peer-to-peer networks H04L 67/1042)}*
N	G06F 16/184	· · · · *{implemented as replicated file system}*
N	G06F 16/1844	· · · · · *{Management specifically adapted to replicated file systems}*
N	G06F 16/1847	· · · *{specifically adapted to static storage, e.g. adapted to flash memory or SSD}*
N	G06F 16/185	· · · *Hierarchical storage management [HSM] systems, e.g. file migration or policies thereof (details of archiving G06F 16/11)*
N	G06F 16/1858	· · · *{Parallel file systems, i.e. file systems supporting multiple processors}*
N	G06F 16/1865	· · · *{Transactional file systems}*
N	G06F 16/1873	· · · *{Versioning file systems, temporal file systems, e.g. file system supporting different historic versions of files}*
N	G06F 16/188	· · · *Virtual file systems*
N	G06F 16/192	· · · · *{Implementing virtual folder structures}*
N	G06F 16/196	· · · · *{Specific adaptations of the file system to access devices and non-file objects via standard file system access operations, e.g. pseudo file systems (dedicated interfaces to storage systems G06F 3/0601)}*
N	G06F 16/20	· *of structured data, e.g. relational data*
N	G06F 16/21	· · *Design, administration or maintenance of databases*
N	G06F 16/211	· · · *{Schema design and management}*
N	G06F 16/212	· · · · *{with details for data modelling support}*
N	G06F 16/213	· · · · *{with details for schema evolution support}*
N	G06F 16/214	· · · *{Database migration support}*
N	G06F 16/215	· · · *Improving data quality; Data cleansing, e.g. de-duplication, removing invalid entries or correcting typographical errors*
N	G06F 16/217	· · · *{Database tuning (G06F 16/2282 takes precedence; database performance monitoring G06F 11/3409)}*

N	G06F 16/219	· · · {Managing data history or versioning (querying versioned data G06F 16/2474; querying temporal data G06F 16/2477)}
N	G06F 16/22	· · Indexing; Data structures therefor; Storage structures
N	G06F 16/221	· · · {Column-oriented storage; Management thereof}
N	G06F 16/2219	· · · {Large Object storage; Management thereof}
N	G06F 16/2228	· · · {Indexing structures}
N	G06F 16/2237	· · · · {Vectors, bitmaps or matrices}
N	G06F 16/2246	· · · · {Trees, e.g. B+trees}
N	G06F 16/2255	· · · · {Hash tables}
N	G06F 16/2264	· · · · {Multidimensional index structures}
N	G06F 16/2272	· · · · {Management thereof}
N	G06F 16/2282	· · · {Tablespace storage structures; Management thereof}
N	G06F 16/2291	· · · {User-Defined Types; Storage management thereof}
Q	G06F 16/23	· · Updating

WARNING

Group G06F 16/23 is impacted by reclassification into group G06F 16/25. Groups G06F 16/23 and G06F 16/25 should be considered in order to perform a complete search.

Q	G06F 16/2308	· · · {Concurrency control (transaction processing G06F 9/466)}

WARNING

Group G06F 16/2308 is impacted by reclassification into groups G06F 16/2315, G06F 16/2322, G06F 16/2329, G06F 16/2336, and G06F 16/2343.
All groups listed in this Warning should be considered in order to perform a complete search.

N	G06F 16/2315	· · · · {Optimistic concurrency control}

WARNING

Groups G06F 16/2315 - G06F 16/2329 are incomplete pending reclassification of documents from group G06F 16/2308. Groups G06F 16/2308 and G06F 16/2315 - G06F 16/2329 should be considered in order to perform a complete search.

N	G06F 16/2322	· · · · · {using timestamps}
N	G06F 16/2329	· · · · · {using versioning}
N	G06F 16/2336	· · · · {Pessimistic concurrency control approaches, e.g. locking or multiple versions without time stamps}

WARNING

Groups G06F 16/2336 and G06F 16/2343 are incomplete pending reclassification of documents from group G06F 16/2308. Groups G06F 16/2308, G06F 16/2336, and G06F 16/2343 should be considered in order to perform a complete search.

N	G06F 16/2343	· · · · · {Locking methods, e.g. distributed locking or locking implementation details}
N	G06F 16/235	· · · {Update request formulation}
N	G06F 16/2358	· · · {Change logging, detection, and notification (replication G06F 16/27)}
N	G06F 16/2365	· · · {Ensuring data consistency and integrity}
N	G06F 16/2372	· · · {Updates performed during offline database operations}

N	G06F 16/2379	· · · {Updates performed during online database operations; commit processing}
N	G06F 16/2386	· · · · {Bulk updating operations (data conversion details G06F 16/258)}
N	G06F 16/2393	· · · {Updating materialised views}
N	G06F 16/24	· · Querying
N	G06F 16/242	· · · Query formulation
N	G06F 16/2423	· · · · {Interactive query statement specification based on a database schema}
N	G06F 16/2425	· · · · {Iterative querying; Query formulation based on the results of a preceding query}
N	G06F 16/2428	· · · · {Query predicate definition using graphical user interfaces, including menus and forms (G06F 16/2423 takes precedence)}
N	G06F 16/243	· · · · {Natural language query formulation}
N	G06F 16/2433	· · · · {Query languages}
N	G06F 16/2435	· · · · · {Active constructs}
N	G06F 16/2438	· · · · · {Embedded query languages}
N	G06F 16/244	· · · · · {Grouping and aggregation}
N	G06F 16/2443	· · · · · {Stored procedures}
N	G06F 16/2445	· · · · · {Data retrieval commands; View definitions}
N	G06F 16/2448	· · · · · {for particular applications; for extensibility, e.g. user defined types}
N	G06F 16/245	· · · Query processing
N	G06F 16/2452	· · · · Query translation
N	G06F 16/24522	· · · · · {Translation of natural language queries to structured queries}
N	G06F 16/24524	· · · · · {Access plan code generation and invalidation; Reuse of access plans}
N	G06F 16/24526	· · · · · {Internal representations for queries}
N	G06F 16/24528	· · · · · {Standardisation; Simplification}
N	G06F 16/2453	· · · · Query optimisation
N	G06F 16/24532	· · · · · {of parallel queries}
N	G06F 16/24534	· · · · · {Query rewriting; Transformation}
N	G06F 16/24535	· · · · · · {of sub-queries or views}
N	G06F 16/24537	· · · · · · {of operators}
N	G06F 16/24539	· · · · · · {using cached or materialised query results}
N	G06F 16/2454	· · · · · · {Optimisation of common expressions}
N	G06F 16/24542	· · · · · · {Plan optimisation}
N	G06F 16/24544	· · · · · · · {Join order optimisation}
N	G06F 16/24545	· · · · · · · {Selectivity estimation or determination}
N	G06F 16/24547	· · · · · · · {Optimisations to support specific applications; Extensibility of optimisers}
N	G06F 16/24549	· · · · · · {Run-time optimisation}
N	G06F 16/2455	· · · · Query execution
N	G06F 16/24552	· · · · · {Database cache management}
N	G06F 16/24553	· · · · · {of query operations}
N	G06F 16/24554	· · · · · · {Unary operations; Data partitioning operations}
N	G06F 16/24556	· · · · · · {Aggregation; Duplicate elimination}
N	G06F 16/24557	· · · · · · · {Efficient disk access during query execution}
N	G06F 16/24558	· · · · · · {Binary matching operations}
N	G06F 16/2456	· · · · · · · {Join operations}

N	G06F 16/24561	· · · · · · {Intermediate data storage techniques for performance improvement}
N	G06F 16/24562	· · · · · · {Pointer or reference processing operations}
N	G06F 16/24564	· · · · · {Applying rules; Deductive queries}
N	G06F 16/24565	· · · · · · {Triggers; Constraints}
N	G06F 16/24566	· · · · · · {Recursive queries}
N	G06F 16/24568	· · · · · {Data stream processing; Continuous queries}
N	G06F 16/24569	· · · · {Query processing with adaptation to specific hardware, e.g. adapted for using GPUs or SSDs}
N	G06F 16/2457	· · · · with adaptation to user needs
N	G06F 16/24573	· · · · · {using data annotations, e.g. user-defined metadata}
N	G06F 16/24575	· · · · · {using context}
N	G06F 16/24578	· · · · · {using ranking}
N	G06F 16/2458	· · · · Special types of queries, e.g. statistical queries, fuzzy queries or distributed queries
N	G06F 16/2462	· · · · · {Approximate or statistical queries}
N	G06F 16/2465	· · · · · {Query processing support for facilitating data mining operations in structured databases}
N	G06F 16/2468	· · · · · {Fuzzy queries}
N	G06F 16/2471	· · · · · {Distributed queries}
N	G06F 16/2474	· · · · · {Sequence data queries, e.g. querying versioned data}
N	G06F 16/2477	· · · · · {Temporal data queries}
N	G06F 16/248	· · · Presentation of query results
N	G06F 16/25	· · Integrating or interfacing systems involving database management systems

> *WARNING*
>
> *Group G06F 16/25 is incomplete pending reclassification of documents from group G06F 16/23.*
> *Groups G06F 16/23 and G06F 16/25 should be considered in order to perform a complete search.*

N	G06F 16/252	· · · {between a Database Management System and a front-end application}
N	G06F 16/254	· · · {Extract, transform and load [ETL] procedures, e.g. ETL data flows in data warehouses}
N	G06F 16/256	· · · {in federated or virtual databases}
N	G06F 16/258	· · · {Data format conversion from or to a database}

> *WARNING*
>
> *Groups G06F 16/258 is incomplete pending reclassification of documents from group G06F 16/1794.*
> *Groups G06F 16/1794 and G06F 16/258 should be considered in order to perform a complete search.*

N	G06F 16/26	· · Visual data mining; Browsing structured data
Q	G06F 16/27	· · Replication, distribution or synchronisation of data between databases or within a distributed database system; Distributed database system architectures therefor

> *WARNING*
>
> *Group G06F 16/27 is impacted by reclassification into groups G06F 16/273, G06F 16/275, and G06F 16/278.*
> *All groups listed in this Warning should be considered in order to perform a complete search.*

N   G06F 16/273   · · · {Asynchronous replication or reconciliation}

> *WARNING*
>
> *Groups G06F 16/273 is incomplete pending reclassification of documents from group G06F 16/27.*
> *Groups G06F 16/27 and G06F 16/273 should be considered in order to perform a complete search.*

N   G06F 16/275   · · · {Synchronous replication}

> *WARNING*
>
> *Groups G06F 16/275 is incomplete pending reclassification of documents from group G06F 16/27.*
> *Groups G06F 16/27 and G06F 16/275 should be considered in order to perform a complete search.*

N   G06F 16/278   · · · {Data partitioning, e.g. horizontal or vertical partitioning}

> *WARNING*
>
> *Groups G06F 16/278 is incomplete pending reclassification of documents from group G06F 16/27.*
> *Groups G06F 16/27 and G06F 16/278 should be considered in order to perform a complete search.*

N   G06F 16/28   · · Databases characterised by their database models, e.g. relational or object models

N   G06F 16/282   · · · {Hierarchical databases, e.g. IMS, LDAP data stores or Lotus Notes}

N   G06F 16/283   · · · {Multi-dimensional databases or data warehouses, e.g. MOLAP or ROLAP}

N   G06F 16/284   · · · {Relational databases}

N   G06F 16/285   · · · · {Clustering or classification}

N   G06F 16/287   · · · · · {Visualization; Browsing}

N   G06F 16/288   · · · · {Entity relationship models}

N   G06F 16/289   · · · {Object oriented databases}

N   G06F 16/29   · · Geographical information databases

N   G06F 16/30   · of unstructured textual data (document management systems G06F 16/93)

> *NOTE*
>
> *In groups G06F 16/30, G06F 16/31, G06F 16/313, G06F 16/316, G06F 16/319, G06F 16/322, G06F 16/325, G06F 16/328, G06F 16/33, G06F 16/332, G06F 16/3322, G06F 16/3323, G06F 16/3325, G06F 16/3326, G06F 16/3328, G06F 16/3329, G06F 16/3331, G06F 16/3332, G06F 16/3334, G06F 16/3335, G06F 16/3337, G06F 16/3338, G06F 16/334, G06F 16/3341, G06F 16/3343, G06F 16/3344, G06F 16/3346, G06F 16/3347, G06F 16/3349, G06F 16/335, G06F 16/337, G06F 16/338, G06F 16/34, G06F 16/345, G06F 16/35, G06F 16/353, G06F 16/355, G06F 16/358, G06F 16/36, G06F 16/367 and G06F 16/374, subject matter relevant to retrieval characterised by using metadata, when it is determined to be novel and non-obvious, must also be classified in groups G06F 16/38, G06F 16/381, G06F 16/382, G06F 16/383, and G06F 16/387.*

N   G06F 16/31   · · Indexing; Data structures therefor; Storage structures

N   G06F 16/313   · · · {Selection or weighting of terms for indexing}

N   G06F 16/316   · · · {Indexing structures}

N   G06F 16/319   · · · · {Inverted lists}

N   G06F 16/322   · · · · {Trees}

N   G06F 16/325   · · · · {Hash tables}

N	G06F 16/328	· · · · {Management therefor}
N	G06F 16/33	· · Querying
N	G06F 16/332	· · · Query formulation
N	G06F 16/3322	· · · · {using system suggestions (*G06F 16/3325* takes precedence)}
N	G06F 16/3323	· · · · · {using document space presentation or visualization, e.g. category, hierarchy or range presentation and selection}
N	G06F 16/3325	· · · · {Reformulation based on results of preceding query}
N	G06F 16/3326	· · · · · {using relevance feedback from the user, e.g. relevance feedback on documents, documents sets, document terms or passages}
N	G06F 16/3328	· · · · · · {using graphical result space presentation or visualisation}
N	G06F 16/3329	· · · · {Natural language query formulation or dialogue systems}
N	G06F 16/3331	· · · {Query processing}
N	G06F 16/3332	· · · · {Query translation}
N	G06F 16/3334	· · · · · {Selection or weighting of terms from queries, including natural language queries}
N	G06F 16/3335	· · · · · {Syntactic pre-processing, e.g. stopword elimination, stemming}
N	G06F 16/3337	· · · · · {Translation of the query language, e.g. Chinese to English}
N	G06F 16/3338	· · · · · {Query expansion}
N	G06F 16/334	· · · · {Query execution (*G06F 16/335* takes precedence)}
N	G06F 16/3341	· · · · · {using boolean model}
N	G06F 16/3343	· · · · · {using phonetics}
N	G06F 16/3344	· · · · · {using natural language analysis}
N	G06F 16/3346	· · · · · {using probabilistic model}
N	G06F 16/3347	· · · · · {using vector based model}
N	G06F 16/3349	· · · · {Reuse of stored results of previous queries}
N	G06F 16/335	· · · Filtering based on additional data, e.g. user or group profiles (filtering in web context *G06F 16/9535*, *G06F 16/9536*)
N	G06F 16/337	· · · · {Profile generation, learning or modification}
N	G06F 16/338	· · · Presentation of query results
N	G06F 16/34	· · Browsing; Visualisation therefor
N	G06F 16/345	· · · {Summarisation for human users}
N	G06F 16/35	· · Clustering; Classification
N	G06F 16/353	· · · {into predefined classes}
N	G06F 16/355	· · · {Class or cluster creation or modification}
N	G06F 16/358	· · · {Browsing; Visualisation therefor}
N	G06F 16/36	· · Creation of semantic tools, e.g. ontology or thesauri
N	G06F 16/367	· · · {Ontology}
N	G06F 16/374	· · · {Thesaurus}
Q	G06F 16/38	· · Retrieval characterised by using metadata, e.g. metadata not derived from the content or metadata generated manually

         WARNING

         Group *G06F 16/38* is impacted by reclassification into groups *G06F 16/383* and *G06F 16/387*.
         All groups listed in this Warning should be considered in order to perform a complete search.

N	G06F 16/381	· · · {using identifiers, e.g. barcodes, RFIDs (for URLs *G06F 16/9554*)}

N   *G06F 16/382*   · · · *{using citations (hypermedia G06F 16/94)}*

N   *G06F 16/383*   · · · *using metadata automatically derived from the content*

> *WARNING*
>
> *Group G06F 16/383 is incomplete pending reclassification of documents from group G06F 16/38.*
> *Groups G06F 16/38 and G06F 16/383 should be considered in order to perform a complete search.*

N   *G06F 16/387*   · · · *using geographical or spatial information, e.g. location*

> *WARNING*
>
> *Group G06F 16/387 is incomplete pending reclassification of documents from group G06F 16/38.*
> *Groups G06F 16/38 and G06F 16/387 should be considered in order to perform a complete search.*

Q   *G06F 16/40*   · *of multimedia data, e.g. slideshows comprising image and additional audio data (retrieval of still image data G06F 16/50; retrieval of audio data G06F 16/60; retrieval of video data G06F 16/70)*

> *NOTE*
>
> *In groups G06F 16/40, G06F 16/41, G06F 16/43, G06F 16/432, G06F 16/433, G06F 16/434, G06F 16/435, G06F 16/436, G06F 16/437, G06F 16/438, G06F 16/4387, G06F 16/4393, G06F 16/44, G06F 16/444, G06F 16/447 and G06F 16/45, subject matter relevant to retrieval characterised by using metadata, when it is determined to be novel and non-obvious, must also be classified in groups G06F 16/48, G06F 16/483, G06F 16/487 and G06F 16/489.*

> *WARNING*
>
> *Group G06F 16/40 is impacted by reclassification into groups G06F 16/45, G06F 16/48, G06F 16/483, G06F 16/487, and G06F 16/489.*
> *All groups listed in this Warning should be considered in order to perform a complete search.*

N   *G06F 16/41*   · · *Indexing; Data structures therefor; Storage structures*

Q   *G06F 16/43*   · · *Querying*

> *WARNING*
>
> *Group G06F 16/43 is impacted by reclassification into groups G06F 16/432, G06F 16/48, G06F 16/483, G06F 16/487, and G06F 16/489.*
> *All groups listed in this Warning should be considered in order to perform a complete search.*

N   *G06F 16/432*   · · · *Query formulation*

> *WARNING*
>
> *Group G06F 16/432 is incomplete pending reclassification of documents from group G06F 16/43.*
> *Groups G06F 16/43 and G06F 16/432 should be considered in order to perform a complete search.*

N   *G06F 16/433*   · · · · *{using audio data}*

N   *G06F 16/434*   · · · · *{using image data, e.g. images, photos, pictures taken by a user}*

N   *G06F 16/435*   · · · *Filtering based on additional data, e.g. user or group profiles*

N   *G06F 16/436*   · · · · *{using biological or physiological data of a human being, e.g. blood pressure, facial expression, gestures}*

N	G06F 16/437	· · · · {Administration of user profiles, e.g. generation, initialisation, adaptation, distribution}
N	G06F 16/438	· · · Presentation of query results
N	G06F 16/4387	· · · · {by the use of playlists}
N	G06F 16/4393	· · · · · {Multimedia presentations, e.g. slide shows, multimedia albums}
N	G06F 16/44	· · Browsing; Visualisation therefor
N	G06F 16/444	· · · {Spatial browsing, e.g. 2D maps, 3D or virtual spaces}
N	G06F 16/447	· · · {Temporal browsing, e.g. timeline}
N	G06F 16/45	· · Clustering; Classification

> *WARNING*
>
> *Group G06F 16/45 is incomplete pending reclassification of documents from group G06F 16/40.*
> *Groups G06F 16/40 and G06F 16/45 should be considered in order to perform a complete search.*

N	G06F 16/48	· · Retrieval characterised by using metadata, e.g. metadata not derived from the content or metadata generated manually

> *WARNING*
>
> *Group G06F 16/48 is incomplete pending reclassification of documents from groups G06F 16/40 and G06F 16/43.*
> *Groups G06F 16/40, G06F 16/43, and G06F 16/48 should be considered in order to perform a complete search.*

N	G06F 16/483	· · · using metadata automatically derived from the content

> *WARNING*
>
> *Group G06F 16/483 is incomplete pending reclassification of documents from groups G06F 16/40 and G06F 16/43.*
> *Groups G06F 16/40, G06F 16/43, and G06F 16/483 should be considered in order to perform a complete search.*

N	G06F 16/487	· · · using geographical or spatial information, e.g. location

> *WARNING*
>
> *Group G06F 16/487 is incomplete pending reclassification of documents from groups G06F 16/40 and G06F 16/43.*
> *Groups G06F 16/40, G06F 16/43, and G06F 16/487 should be considered in order to perform a complete search.*

N	G06F 16/489	· · · {using time information}

> *WARNING*
>
> *Group G06F 16/489 is incomplete pending reclassification of documents from groups G06F 16/40 and G06F 16/43.*
> *Groups G06F 16/40, G06F 16/43, and G06F 16/489 should be considered in order to perform a complete search.*

Q	G06F 16/50	· of still image data

> *NOTE*
>
> *In groups G06F 16/50, G06F 16/51, G06F 16/53, G06F 16/532, G06F 16/535, G06F 16/538, G06F 16/54, G06F 16/55 and G06F 16/56, subject matter relevant to retrieval characterised by using metadata, when it is determined to be novel and non-obvious, must also be classified in groups*

G06F 16/58, G06F 16/583, G06F 16/5838, G06F 16/5846, G06F 16/5854, G06F 16/5862 and G06F 16/587.

WARNING

Group G06F 16/50 is impacted by reclassification into groups G06F 16/53, G06F 16/532, G06F 16/535, G06F 16/538, and G06F 16/55.
All groups listed in this Warning should be considered in order to perform a complete search.

N	G06F 16/51	· · *Indexing; Data structures therefor; Storage structures*
N	G06F 16/53	· · *Querying*

WARNING

Group G06F 16/53 is incomplete pending reclassification of documents from group G06F 16/50.
Groups G06F 16/50 and G06F 16/53 should be considered in order to perform a complete search.

N	G06F 16/532	· · · *Query formulation, e.g. graphical querying*

WARNING

Group G06F 16/532 is incomplete pending reclassification of documents from group G06F 16/50.
Groups G06F 16/50 and G06F 16/532 should be considered in order to perform a complete search.

N	G06F 16/535	· · · *Filtering based on additional data, e.g. user or group profiles*

WARNING

Group G06F 16/535 is incomplete pending reclassification of documents from group G06F 16/50.
Groups G06F 16/50 and G06F 16/535 should be considered in order to perform a complete search.

N	G06F 16/538	· · · *Presentation of query results*

WARNING

Group G06F 16/538 is incomplete pending reclassification of documents from group G06F 16/50.
Groups G06F 16/50 and G06F 16/538 should be considered in order to perform a complete search.

N	G06F 16/54	· · *Browsing; Visualisation therefor*
N	G06F 16/55	· · *Clustering; Classification*

WARNING

Group G06F 16/55 is incomplete pending reclassification of documents from group G06F 16/50.
Groups G06F 16/50 and G06F 16/55 should be considered in order to perform a complete search.

N	G06F 16/56	· · *having vectorial format*
Q	G06F 16/58	· · *Retrieval characterised by using metadata, e.g. metadata not derived from the content or metadata generated manually*

WARNING

Group G06F 16/58 is impacted by reclassification into group G06F 16/587.
Groups G06F 16/58 and G06F 16/587 should be considered in order to perform a complete search.

N	G06F 16/583	· · · *using metadata automatically derived from the content*

Q	G06F 16/5838	· · · · {using colour}

> WARNING
>
> Group G06F 16/5838 is impacted by reclassification into groups G06F 16/5846, G06F 16/5854, and G06F 16/5862. All groups listed in this Warning should be considered in order to perform a complete search.

N	G06F 16/5846	· · · · {using extracted text}

> WARNING
>
> Group G06F 16/5846 is incomplete pending reclassification of documents from group G06F 16/5838. Groups G06F 16/5838 and G06F 16/5846 should be considered in order to perform a complete search.

N	G06F 16/5854	· · · · {using shape and object relationship}

> WARNING
>
> Group G06F 16/5854 is incomplete pending reclassification of documents from group G06F 16/5838. Groups G06F 16/5838 and G06F 16/5854 should be considered in order to perform a complete search.

N	G06F 16/5862	· · · · {using texture}

> WARNING
>
> Group G06F 16/5862 is incomplete pending reclassification of documents from group G06F 16/5838. Groups G06F 16/5838 and G06F 16/5862 should be considered in order to perform a complete search.

Q	G06F 16/5866	· · · {using information manually generated, e.g. tags, keywords, comments, manually generated location and time information}

> WARNING
>
> Group G06F 16/5866 is impacted by reclassification into group G06F 16/587. Groups G06F 16/5866 and G06F 16/587 should be considered in order to perform a complete search.

N	G06F 16/587	· · · using geographical or spatial information, e.g. location

> WARNING
>
> Group G06F 16/587 is incomplete pending reclassification of documents from groups G06F 16/58 and G06F 16/5866. Groups G06F 16/58, G06F 16/5866, and G06F 16/587 should be considered in order to perform a complete search.

Q	G06F 16/60	· of audio data

> NOTE
>
> In groups G06F 16/60, G06F 16/61, G06F 16/63, G06F 16/632, G06F 16/634, G06F 16/635, G06F 16/636, G06F 16/637, G06F 16/638, G06F 16/639, G06F 16/64, and G06F 16/65, subject matter relevant to retrieval characterised by using metadata, when it is determined to be novel and non-obvious, must also be classified in groups G06F 16/68, G06F 16/683, G06F 16/685, G06F 16/686 and G06F 16/687.

> WARNING
>
> Group G06F 16/60 is impacted by reclassification into groups G06F 16/63 and G06F 16/65.

		Groups *G06F 16/60*, *G06F 16/63*, and *G06F 16/65* should be considered in order to perform a complete search.
N	*G06F 16/61*	· · *Indexing; Data structures therefor; Storage structures*
N	*G06F 16/63*	· · *Querying*

WARNING

Group G06F 16/63 is incomplete pending reclassification of documents from group G06F 16/60.
Groups G06F 16/60 and G06F 16/63 should be considered in order to perform a complete search.

N	*G06F 16/632*	· · · *Query formulation*
N	*G06F 16/634*	· · · · *{Query by example, e.g. query by humming}*
N	*G06F 16/635*	· · · *Filtering based on additional data, e.g. user or group profiles*
N	*G06F 16/636*	· · · · *{by using biological or physiological data}*
N	*G06F 16/637*	· · · · *{Administration of user profiles, e.g. generation, initialization, adaptation or distribution}*
N	*G06F 16/638*	· · · *Presentation of query results*
N	*G06F 16/639*	· · · · *{using playlists}*
N	*G06F 16/64*	· · *Browsing; Visualisation therefor (generation of a list or set of audio data G06F 16/638)*
N	*G06F 16/65*	· · *Clustering; Classification*

WARNING

Group G06F 16/65 is incomplete pending reclassification of documents from group G06F 16/60.
Groups G06F 16/60 and G06F 16/65 should be considered in order to perform a complete search.

Q	*G06F 16/68*	· · *Retrieval characterised by using metadata, e.g. metadata not derived from the content or metadata generated manually*

WARNING

Group G06F 16/68 is impacted by reclassification into group G06F 16/687.
Groups G06F 16/68 and G06F 16/687 should be considered in order to perform a complete search.

N	*G06F 16/683*	· · · *using metadata automatically derived from the content*
N	*G06F 16/685*	· · · · *{using automatically derived transcript of audio data, e.g. lyrics (speech recognition G10L 15/00)}*
Q	*G06F 16/686*	· · · *{using information manually generated, e.g. tags, keywords, comments, title or artist information, time, location or usage information, user ratings}*

WARNING

Group G06F 16/686 is impacted by reclassification into group G06F 16/687.
Groups G06F 16/686 and G06F 16/687 should be considered in order to perform a complete search.

N	*G06F 16/687*	· · · *using geographical or spatial information, e.g. location*

WARNING

Group G06F 16/687 is incomplete pending reclassification of documents from groups G06F 16/68 and G06F 16/686.
Groups G06F 16/68, G06F 16/686, and G06F 16/687 should be considered in order to perform a complete search.

Q	G06F 16/70	· *of video data*

> *NOTE*
>
> *In groups* G06F 16/70, G06F 16/71, G06F 16/73, G06F 16/732, G06F 16/7328, G06F 16/7335, G06F 16/7343, G06F 16/735, G06F 16/738, G06F 16/739, G06F 16/74, G06F 16/743, G06F 16/745, G06F 16/78 *and* G06F 16/75, *subject matter relevant to retrieval characterised by using metadata, when it is determined to be novel and non-obvious, must also be classified in groups* G06F 16/78, G06F 16/783, G06F 16/7834, G06F 16/7837, G06F 16/784, G06F 16/7844, G06F 16/7847, G06F 16/785, G06F 16/7854, G06F 16/7857, G06F 16/786, G06F 16/7864, G06F 16/7867 *and* G06F 16/787.
>
> *WARNING*
>
> *Group* G06F 16/70 *is impacted by reclassification into group* G06F 16/75. *Groups* G06F 16/70 *and* G06F 16/75 *should be considered in order to perform a complete search.*

N	G06F 16/71	· · *Indexing; Data structures therefor; Storage structures*
Q	G06F 16/73	· · *Querying*

> *WARNING*
>
> *Group* G06F 16/73 *is impacted by reclassification into group* G06F 16/732. *Groups* G06F 16/73 *and* G06F 16/732 *should be considered in order to perform a complete search.*

N	G06F 16/732	· · · *Query formulation*

> *WARNING*
>
> *Group* G06F 16/732 *is incomplete pending reclassification of documents from group* G06F 16/73. *Groups* G06F 16/73 *and* G06F 16/732 *should be considered in order to perform a complete search.*

N	G06F 16/7328	· · · · *{Query by example, e.g. a complete video frame or video sequence (graphical querying* G06F 16/7335*)}*
N	G06F 16/7335	· · · · *{Graphical querying, e.g. query-by-region, query-by-sketch, query-by-trajectory, GUIs for designating a person/face/object as a query predicate (end-user interface involving hot spots associated with the video* H04N 21/4725*; end-user interface for selecting a Region of Interest* H04N 21/4728*)}*
N	G06F 16/7343	· · · · *{Query language or query format}*
N	G06F 16/735	· · · *Filtering based on additional data, e.g. user or group profiles*
N	G06F 16/738	· · · *Presentation of query results*
N	G06F 16/739	· · · · *{in form of a video summary, e.g. the video summary being a video sequence, a composite still image or having synthesized frames}*
N	G06F 16/74	· · *Browsing; Visualisation therefor (end-user interfaces for requesting or interacting with video content, e.g. video on demand interfaces or electronic program guides,* H04N 21/472*)*
N	G06F 16/743	· · · *{a collection of video files or sequences}*
N	G06F 16/745	· · · *{the internal structure of a single video sequence}*
N	G06F 16/748	· · · *{Hypervideo (linking data to content, e.g. by linking an URL to a video object in the context of video distribution systems* H04N 21/858*)}*

N	G06F 16/75	· · *Clustering; Classification*

> *WARNING*
>
> *Group G06F 16/75 is incomplete pending reclassification of documents from group G06F 16/70.*
> *Groups G06F 16/70 and G06F 16/75 should be considered in order to perform a complete search.*

Q	G06F 16/78	· · *Retrieval characterised by using metadata, e.g. metadata not derived from the content or metadata generated manually*

> *WARNING*
>
> *Group G06F 16/78 is impacted by reclassification into group G06F 16/787.*
> *Groups G06F 16/78 and G06F 16/787 should be considered in order to perform a complete search.*

N	G06F 16/783	· · · *using metadata automatically derived from the content*
N	G06F 16/7834	· · · · *{using audio features}*
N	G06F 16/7837	· · · · *{using objects detected or recognised in the video content}*
N	G06F 16/784	· · · · · *{the detected or recognised objects being people}*
N	G06F 16/7844	· · · · *{using original textual content or text extracted from visual content or transcript of audio data}*
N	G06F 16/7847	· · · · *{using low-level visual features of the video content}*
N	G06F 16/785	· · · · · *{using colour or luminescence}*
N	G06F 16/7854	· · · · · *{using shape (G06F 16/7837 takes precedence)}*
N	G06F 16/7857	· · · · · *{using texture (G06F 16/7837 takes precedence)}*
N	G06F 16/786	· · · · · *{using motion, e.g. object motion or camera motion}*
N	G06F 16/7864	· · · · · *{using domain-transform features, e.g. DCT or wavelet transform coefficients}*
Q	G06F 16/7867	· · · *{using information manually generated, e.g. tags, keywords, comments, title and artist information, manually generated time, location and usage information, user ratings}*

> *WARNING*
>
> *Group G06F 16/7867 is impacted by reclassification into group G06F 16/787.*
> *Groups G06F 16/7867 and G06F 16/787 should be considered in order to perform a complete search.*

N	G06F 16/787	· · · *using geographical or spatial information, e.g. location*

> *WARNING*
>
> *Group G06F 16/787 is incomplete pending reclassification of documents from groups G06F 16/78 and G06F 16/7867.*
> *Groups G06F 16/78, G06F 16/7867, and G06F 16/787 should be considered in order to perform a complete search.*

N	G06F 16/80	· *of semi-structured data, e.g. markup language structured data such as SGML, XML or HTML (content-based retrieval of web data G06F 16/95)*
N	G06F 16/81	· · *Indexing, e.g. XML tags; Data structures therefor; Storage structures*

> *WARNING*
>
> *Group G06F 16/81 is incomplete pending reclassification of documents from group G06F 16/83.*
> *Groups G06F 16/83 and G06F 16/81 should be considered in order to perform a complete search.*

Q	G06F 16/83	· · Querying

> WARNING
>
> Group G06F 16/83 is impacted by reclassification into groups G06F 16/81 and G06F 16/835.
> Groups G06F 16/83, G06F 16/81, and G06F 16/835 should be considered in order to perform a complete search.

N	G06F 16/832	· · · Query formulation
N	G06F 16/835	· · · Query processing

> WARNING
>
> Group G06F 16/835 is incomplete pending reclassification of documents from group G06F 16/83.
> Groups G06F 16/83 and G06F 16/835 should be considered in order to perform a complete search.

N	G06F 16/8358	· · · · {Query translation}
N	G06F 16/8365	· · · · {Query optimisation}
N	G06F 16/8373	· · · · {Query execution}
N	G06F 16/838	· · · Presentation of query results
N	G06F 16/84	· · Mapping; Conversion
N	G06F 16/86	· · · {Mapping to a database}
N	G06F 16/88	· · · {Mark-up to mark-up conversion (conversion for visualization in web browsing G06F 16/9577)}
Q	G06F 16/90	· Details of database functions independent of the retrieved data types

> NOTE
>
> In groups G06F 16/90, G06F 16/901, G06F 16/9014, G06F 16/9017, G06F 16/902, G06F 16/9024, G06F 16/9027, G06F 16/903, G06F 16/9032, G06F 16/90324, G06F 16/90328, G06F 16/90332, G06F 16/90335, G06F 16/90339, G06F 16/90344, G06F 16/90348, G06F 16/9035, G06F 16/9038, G06F 16/904, and G06F 16/906, subject matter relevant to retrieval characterised by using metadata, when it is determined to be novel and non-obvious, must also be classified in groups G06F 16/907, G06F 16/907, and G06F 16/909.

> WARNING
>
> Group G06F 16/90 is impacted by reclassification into group G06F 16/906.
> Groups G06F 16/90 and G06F 16/906 should be considered in order to perform a complete search.

N	G06F 16/901	· · Indexing; Data structures therefor; Storage structures (for retrieval from the web G06F 16/951)
N	G06F 16/9014	· · · {hash tables}
N	G06F 16/9017	· · · {using directory or table look-up (use of a directory or look-up table in file systems G06F 16/13)}
N	G06F 16/902	· · · · {using more than one table in sequence, i.e. systems with three or more layers}
N	G06F 16/9024	· · · {Graphs; Linked lists (G06F 16/9027 takes precedence)}
N	G06F 16/9027	· · · {Trees}
Q	G06F 16/903	· · Querying (for retrieval from the web G06F 16/953)

> WARNING
>
> Group G06F 16/903 is impacted by reclassification into group G06F 16/9035.

> *Groups G06F 16/903 and G06F 16/9035 should be considered in order to perform a complete search.*

N	G06F 16/9032	· · · *Query formulation*
N	G06F 16/90324	· · · · *{using system suggestions}*
N	G06F 16/90328	· · · · · *{using search space presentation or visualization, e.g. category or range presentation and selection}*
N	G06F 16/90332	· · · · *{Natural language query formulation or dialogue systems}*
N	G06F 16/90335	· · · *{Query processing}*
N	G06F 16/90339	· · · · *{by using parallel associative memories or content-addressable memories}*
N	G06F 16/90344	· · · · *{by using string matching techniques}*
N	G06F 16/90348	· · · · *{by searching ordered data, e.g. alpha-numerically ordered data}*
N	G06F 16/9035	· · · *Filtering based on additional data, e.g. user or group profiles*

> *WARNING*
>
> *Group G06F 16/9035 is incomplete pending reclassification of documents from group G06F 16/903.*
> *Groups G06F 16/903 and G06F 16/9035 should be considered in order to perform a complete search.*

N	G06F 16/9038	· · · *Presentation of query results*
N	G06F 16/904	· · *Browsing; Visualisation therefor (for navigating the web G06F 16/954; browsing optimisation for the web G06F 16/957)*
N	G06F 16/906	· · *Clustering; Classification*

> *WARNING*
>
> *Group G06F 16/906 is incomplete pending reclassification of documents from group G06F 16/90.*
> *Groups G06F 16/90 and G06F 16/906 should be considered in order to perform a complete search.*

Q	G06F 16/907	· · *Retrieval characterised by using metadata, e.g. metadata not derived from the content or metadata generated manually*

> *WARNING*
>
> *Group G06F 16/907 is impacted by reclassification into groups G06F 16/908 and G06F 16/909.*
> *Groups G06F 16/907, G06F 16/908, and G06F 16/909 should be considered in order to perform a complete search.*

N	G06F 16/908	· · · *using metadata automatically derived from the content*

> *WARNING*
>
> *Group G06F 16/908 is incomplete pending reclassification of documents from group G06F 16/907.*
> *Groups G06F 16/907 and G06F 16/908 should be considered in order to perform a complete search.*

N	G06F 16/909	· · · *using geographical or spatial information, e.g. location (spatiotemporally dependent retrieval from the web G06F 16/9537)*

> *WARNING*
>
> *Group G06F 16/909 is incomplete pending reclassification of documents from group G06F 16/907.*
> *Groups G06F 16/907 and G06F 16/909 should be considered in order to perform a complete search.*

N	G06F 16/93	· · Document management systems
N	G06F 16/94	· · · {Hypermedia (hyperlinking within text processing G06F 17/2235)}
N	G06F 16/95	· · Retrieval from the web
Q	G06F 16/951	· · · Indexing; Web crawling techniques

> WARNING
>
> Group G06F 16/951 is impacted by reclassification into groups
> G06F 16/953, G06F 16/9532 and G06F 16/9538.
> All groups listed in this Warning should be considered in order to perform a
> complete search.

N	G06F 16/953	· · · Querying, e.g. by the use of web search engines

> WARNING
>
> Group G06F 16/953 is incomplete pending reclassification of documents
> from group G06F 16/951.
> Groups G06F 16/951 and G06F 16/953 should be considered in order to
> perform a complete search.

N	G06F 16/9532	· · · · Query formulation

> WARNING
>
> Group G06F 16/9532 is incomplete pending reclassification of documents
> from group G06F 16/951.
> Groups G06F 16/951 and G06F 16/9532 should be considered in order to
> perform a complete search.

Q	G06F 16/9535	· · · · Search customisation based on user profiles and personalisation

> WARNING
>
> Group G06F 16/9535 is impacted by reclassification into groups
> G06F 16/9536 and G06F 16/9538.
> Groups G06F 16/9535, G06F 16/9536, and G06F 16/9538 should be
> considered in order to perform a complete search.

N	G06F 16/9536	· · · · Search customisation based on social or collaborative filtering

> WARNING
>
> Group G06F 16/9536 is incomplete pending reclassification of documents
> from group G06F 16/9535.
> Groups G06F 16/9535 and G06F 16/9536 should be considered in order
> to perform a complete search.

N	G06F 16/9537	· · · · Spatial or temporal dependent retrieval, e.g. spatiotemporal queries
N	G06F 16/9538	· · · · Presentation of query results

> WARNING
>
> Group G06F 16/9538 is incomplete pending reclassification of documents
> from groups G06F 16/951 and G06F 16/9535.
> Groups G06F 16/951, G06F 16/9535, and G06F 16/9538 should be
> considered in order to perform a complete search.

N	G06F 16/954	· · · Navigation, e.g. using categorised browsing
N	G06F 16/955	· · · using information identifiers, e.g. uniform resource locators [URL]
N	G06F 16/9554	· · · · {by using bar codes}
N	G06F 16/9558	· · · · {Details of hyperlinks; Management of linked annotations}
N	G06F 16/9562	· · · · {Bookmark management}
N	G06F 16/9566	· · · · {URL specific, e.g. using aliases, detecting broken or misspelled links}

N	*G06F 16/957*	· · · *Browsing optimisation, e.g. caching or content distillation*
N	*G06F 16/9574*	· · · · *{of access to content, e.g. by caching}*
N	*G06F 16/9577*	· · · · *{Optimising the visualization of content, e.g. distillation of HTML documents}*
N	*G06F 16/958*	· · · *Organisation or management of web site content, e.g. publishing, maintaining pages or automatic linking*
N	*G06F 16/972*	· · · · *{Access to data in other repository systems, e.g. legacy data or dynamic Web page generation}*
N	*G06F 16/986*	· · · · *{Document structures and storage, e.g. HTML extensions}*
M	**G06F 17/00**	**Digital computing or data processing equipment or methods, specially adapted for specific functions** *(information retrieval, database structures or file system structures therefor G06F 16/00)*
U	G06F 17/20	· Handling natural language data (speech analysis or synthesis G10L)
U	G06F 17/21	· · Text processing (G06F 17/27, G06F 17/28 take precedence; systems for composing machines B41B 27/00)
U	G06F 17/22	· · · Manipulating or registering by use of codes, e.g. in sequence of text characters {(compression H03M 7/30)}
	G06F 17/2235	· · · · {Hyperlinking (information retrieval based on hyperlinks ~~G06F 17/30014~~*G06F 16/94*)}
	G06F 17/2247	· · · · {Tree structured documents; Markup, e.g. Standard Generalized Markup Language [SGML], Document Type Definition [DTD] (validation and parsing G06F 17/2705; data retrieval ~~G06F 17/30~~*G06F 16/00*; coding and compression H03M 7/30)}
U	G06F 17/24	· · · Editing, e.g. insert/delete {(G06F 17/22 takes precedence)}
	G06F 17/246	· · · · {Spreadsheets (relational data bases ~~G06F 17/30595~~*G06F 16/284*; form-filling G06F 17/243)}
U	G06F 17/28	· · Processing or translating of natural language (G06F 17/27 takes precedence)
	G06F 17/289	· · · {Use of machine translation, e.g. multi-lingual retrieval, server side translation for client devices, real-time translation (data retrieval ~~G06F 17/30~~*G06F 16/00*, administrative and business methods G06Q 10/00, G06Q 30/00)}
D	G06F 17/30	· ~~Information retrieval; Database structures therefor {; File system structures therefor (data processing systems or methods specially adapted for administrative, commercial, financial managerial, supervisory or forecasting purposes G06Q)}~~ <administratively transferred to G06F 16/00>
D	G06F 17/30002	· · ~~{Interfaces; Database management systems; Updating}~~ <administratively transferred to G06F 16/23>
D	G06F 17/30005	· · · ~~{File format conversion (code conversion circuits or methods H03M 5/00, H03M 7/00)}~~ <administratively transferred to G06F 16/1794>
D	G06F 17/30008	· · ~~{Concurrency control and recovery (G06F 11/1402 takes precedence; transaction processing G06F 9/466)}~~ <administratively transferred to G06F 16/2308>
D	G06F 17/30011	· · ~~{Document retrieval systems}~~ <administratively transferred to G06F 16/93>
D	G06F 17/30014	· · · ~~{Hypermedia (hyperlinking within text processing G06F 17/2235)}~~ <administratively transferred to G06F 16/94>

D   G06F 17/30017   · · {Multimedia data retrieval; Retrieval of more than one type of audiovisual media (retrieval of image data G06F 17/30244; retrieval of video data G06F 17/30781; retrieval of audio data G06F 17/3074; editing or indexing of data stored based on relative movement between record carrier and transducer G11B 27/00)}
<administratively transferred to G06F 16/40>

D   G06F 17/3002   · · · {Indexing (indexing by using information signals detectable on the record carrier and recorded by the same method as the main recording G11B 27/28)}
<administratively transferred to G06F 16/41>

D   G06F 17/30023   · · · {Querying (programmed access in sequence to addressed parts of tracks of operating discs G11B 27/105)}
<administratively transferred to G06F 16/43>

D   G06F 17/30026   · · · · {using audio data (details of audio retrieval G06F 17/3074; general determination or detection of speech characteristics G10L 25/00; speech recognition G10L 15/00; speaker recognition G10L 17/00; electrophonic musical instruments G10H)}
<administratively transferred to G06F 16/433>

D   G06F 17/30029   · · · · {by filtering; by personalisation, e.g. querying making use of user profiles}
<administratively transferred to G06F 16/435>

D   G06F 17/30032   · · · · · {using biological or physiological data of a human being, e.g. blood pressure, facial expression, gestures}
<administratively transferred to G06F 16/436>

D   G06F 17/30035   · · · · · {Administration of user profiles, e.g. generation, initialisation, adaptation, distribution}
<administratively transferred to G06F 16/437>

D   G06F 17/30038   · · · · {based on information manually generated or based on information not derived from the media content, e.g. tags, keywords, comments, usage information, user ratings}
<administratively transferred to G06F 16/48>

D   G06F 17/30041   · · · · · {using location information}
<administratively transferred to G06F 16/487>

D   G06F 17/30044   · · · · · {using time information}
<administratively transferred to G06F 16/489>

D   G06F 17/30047   · · · · {using image data, e.g. images, photos, pictures taken by a user}
<administratively transferred to G06F 16/434>

D   G06F 17/3005   · · · {Presentation of query results (menu, index or table of content presentation of record carriers G11B 27/32, G11B 27/34)}
<administratively transferred to G06F 16/438>

D   G06F 17/30053   · · · · {by the use of playlists}
<administratively transferred to G06F 16/4387>

D   G06F 17/30056   · · · · · {Multimedia presentations, e.g. slide shows, multimedia albums}
<administratively transferred to G06F 16/4393>

D   G06F 17/30058   · · · {Retrieval by browsing and visualisation of multimedia data (trick modes G11B 27/005; browsing through video recorded on operating discs G11B 27/105)}
<administratively transferred to G06F 16/44>

D   G06F 17/30061   · · · · {Spatial browsing, e.g. 2D maps, 3D or virtual spaces (interaction with 3D GUI environments in general G06F 3/04815)}
<administratively transferred to G06F 16/444>

D   G06F 17/30064   · · · · {Temporal browsing, e.g. timeline}
<administratively transferred to G06F 16/447>

D   G06F 17/30067   · · {File systems; File servers (G06F 17/3061, G06F 17/30017, G06F 17/30244, G06F 17/3074, G06F 17/30781 take precedence; dedicated interfaces to storage systems G06F 3/0601; error detection, correction or monitoring G06F 11/00)}
<administratively transferred to G06F 16/10>

D   G06F 17/3007   · · · {File system administration (file or folder operations G06F 17/30115)}
<administratively transferred to G06F 16/11>

D   G06F 17/30073   · · · · {Details of archiving (details of hierarchical storage management [HSM] systems G06F 17/30221; lifecycle management in storage systems G06F 3/0649; backup systems G06F 11/1446)}
<administratively transferred to G06F 16/113>

D   G06F 17/30076   · · · · {Details of conversion of file system types or formats (management of the data involved in backup or backup restore G06F 11/1448)}
<administratively transferred to G06F 16/116>

D   G06F 17/30079   · · · · {Details of migration of file systems (migration mechanisms in storage systems G06F 3/0647)}
<administratively transferred to G06F 16/119>

D   G06F 17/30082   · · · · {Use of management policies (file migration policies for HSM systems G06F 17/30221; backup systems G06F 11/1446)}
<administratively transferred to G06F 16/122>

D   G06F 17/30085   · · · · · {characterised by the use of retention policies (retention policies for HSM systems G06F 17/30221)}
<administratively transferred to G06F 16/125>

D   G06F 17/30088   · · · · {Details of file system snapshots on the file-level, e.g. snapshot creation, administration, deletion (use of snapshots for error detection or correction G06F 11/14, G06F 11/16)}
<administratively transferred to G06F 16/128>

D   G06F 17/30091   · · · {File storage and access structures (management of files in storage systems G06F 3/0643)}
<administratively transferred to G06F 16/13>

D   G06F 17/30094   · · · · {Distributed indices}
<administratively transferred to G06F 16/134>

D   G06F 17/30097   · · · · {Hash-based (content-based indexing of textual data G06F 17/30613)}
<administratively transferred to G06F 16/137>

D   G06F 17/301   · · · {Details of searching files based on file metadata}
<administratively transferred to G06F 16/14>

D   G06F 17/30103   · · · · {Query formulation}
<administratively transferred to G06F 16/144>

D   G06F 17/30106   · · · · {File search processing}
<administratively transferred to G06F 16/148>

D   G06F 17/30109   · · · · · {using file content signatures, e.g. hash values}
<administratively transferred to G06F 16/152>

D   G06F 17/30112   · · · · {Query results presentation}
<administratively transferred to G06F 16/156>

D   G06F 17/30115   · · · {File and folder operations}
<administratively transferred to G06F 16/16>

D   G06F 17/30117   · · · {Delete operations (erasing in storage systems G06F 3/0652)}
<administratively transferred to G06F 16/162>

D   G06F 17/3012   · · · {File meta data generation}
<administratively transferred to G06F 16/164>

D	G06F 17/30123	· · · · · ~~{File name conversion (management of the data involved in backup or backup restore G06F 11/1448)}~~ <administratively transferred to [G06F 16/166](#)>
D	G06F 17/30126	· · · · ~~{Details of user interfaces specifically adapted to file systems, e.g. browsing and visualisation, 2d or 3d GUIs (query results presentation G06F 17/30112; interaction techniques for graphical user interfaces G06F 3/048)}~~ <administratively transferred to [G06F 16/168](#)>
D	G06F 17/30129	· · · ~~{Details of further file system functionalities}~~ <administratively transferred to [G06F 16/17](#)>
D	G06F 17/30132	· · · · ~~{Caching or prefetching or hoarding of files (caching for data retrieval from the Internet G06F 17/30902; caching for peripheral storage systems, e.g. disk cache G06F 12/0866; network-specific arrangements or communication protocols for caching H04L 67/2842)}~~ <administratively transferred to [G06F 16/172](#)>
D	G06F 17/30135	· · · · ~~{Details of de-fragmentation performed by the file system (management of blocks in storage devices G06F 3/064; saving storage space on storage systems G06F 3/0608)}~~ <administratively transferred to [G06F 16/1724](#)>
D	G06F 17/30138	· · · · ~~{Details of free space management performed by the file system (management of blocks in storage devices G06F 3/064; saving storage space on storage systems G06F 3/0608)}~~ <administratively transferred to [G06F 16/1727](#)>
D	G06F 17/30141	· · · · ~~{Customisation support for file systems, e.g. localisation, multi-language support, personalisation}~~ <administratively transferred to [G06F 16/173](#)>
D	G06F 17/30144	· · · · ~~{Details of monitoring file system events, e.g. by the use of hooks, filter drivers, logs}~~ <administratively transferred to [G06F 16/1734](#)>
D	G06F 17/30147	· · · ~~{for reducing power consumption or coping with limited storage space, e.g. in mobile devices (saving storage space on storage devices G06F 3/0608; power saving in storage systems G06F 3/0625)}~~ <administratively transferred to [G06F 16/1737](#)>
D	G06F 17/3015	· · · ~~{Redundancy elimination performed by the file system (management of the data involved in backup or backup restore using de-duplication of the data G06F 11/1453)}~~ <administratively transferred to [G06F 16/174](#)>
D	G06F 17/30153	· · · · ~~{using compression, e.g. sparse files (details of compression H03M 7/30; protocols for data compression H04L 69/04)}~~ <administratively transferred to [G06F 16/1744](#)>
D	G06F 17/30156	· · · · ~~{De-duplication implemented within the file system, e.g. based on file segments (de-duplication techniques in storage systems for the management of data blocks G06F 3/0641)}~~ <administratively transferred to [G06F 16/1748](#)>
D	G06F 17/30159	· · · · · ~~{based on file chunks}~~ <administratively transferred to [G06F 16/1752](#)>
D	G06F 17/30162	· · · · · ~~{based on delta files}~~ <administratively transferred to [G06F 16/1756](#)>
D	G06F 17/30165	· · · · ~~{Support for shared access to files, file-sharing support}~~ <administratively transferred to [G06F 16/176](#)>
D	G06F 17/30168	· · · · ~~{Concurrency control, e.g. optimistic or pessimistic approaches}~~ <administratively transferred to [G06F 16/1767](#)>

D	G06F 17/30171	· · · · · · {Locking methods, e.g. locking methods for file systems allowing shared and concurrent access to files} <administratively transferred to G06F 16/1774>
D	G06F 17/30174	· · · · {Techniques for file synchronisation in file systems (change detection G06F 17/30144; file management policies in general G06F 17/30082; distributed file systems G06F 17/30194; synchronisation of structured data G06F 17/30575; protocols for data synchronisation between network nodes H04L 67/1095)} <administratively transferred to G06F 16/178>
D	G06F 17/30176	· · · · · {Details of non-transparently synchronising file systems} <administratively transferred to G06F 16/1787>
D	G06F 17/30179	· · · · · {Details of file format conversion} <administratively transferred to G06F 16/1794>
D	G06F 17/30182	· · · {File system types} <administratively transferred to G06F 16/18>
D	G06F 17/30185	· · · · {Append-only file systems, e.g. using logs or journals to store data} <administratively transferred to G06F 16/1805>
D	G06F 17/30188	· · · · · {providing write once read many [WORM] semantics} <administratively transferred to G06F 16/181>
D	G06F 17/30191	· · · · · {Journaling file systems} <administratively transferred to G06F 16/1815>
D	G06F 17/30194	· · · · {Distributed file systems} <administratively transferred to G06F 16/182>
D	G06F 17/30197	· · · · · {implemented using NAS architecture (distributed or networked storage systems G06F 3/067; protocols for distributed storage of data in a network H04L 67/1097)} <administratively transferred to G06F 16/1824>
D	G06F 17/302	· · · · · · {Details of management specifically adapted to network area storage [NAS] (management of NAS or SAN G06F 3/067)} <administratively transferred to G06F 16/1827>
D	G06F 17/30203	· · · · · · {Details of providing network file services by network file servers, e.g. by using NFS, CIFS (network file access protocols H04L 67/1097)} <administratively transferred to G06F 16/183>
D	G06F 17/30206	· · · · · {implemented based on peer-to-peer networks, e.g. gnutella (p2p communication protocols H04L 67/104)} <administratively transferred to G06F 16/1834>
D	G06F 17/30209	· · · · · · {Details of management specifically adapted to peer-to-peer storage networks (topology management mechanisms of peer-to-peer networks H04L 67/1042)} <administratively transferred to G06F 16/1837>
D	G06F 17/30212	· · · · · {implemented as replicated file system} <administratively transferred to G06F 16/184>
D	G06F 17/30215	· · · · · · {Details of management specifically adapted to replicated file systems} <administratively transferred to G06F 16/1844>
D	G06F 17/30218	· · · {specifically adapted to static storage, e.g. adapted to flash memory, SSD (dedicated interfaces to non-volatile semiconductor memory device G06F 3/0679; dedicated interfaces to non-volatile semiconductor memory arrays G06F 3/0688)} <administratively transferred to G06F 16/1847>

D	G06F 17/30221	· · · · {Details of hierarchical storage management [HSM] systems, e.g. file migration and policies thereof (details of archiving G06F 17/30073; life cycle management G06F 3/0649; hybrid storage combining heterogeneous device types G06F 3/0685)} <administratively transferred to [G06F 16/185](#)>
D	G06F 17/30224	· · · · {Parallel file systems, i.e. file systems supporting multiple processors} <administratively transferred to [G06F 16/1858](#)>
D	G06F 17/30227	· · · · {Transactional file systems (commit processing in structured data stores G06F 17/30377)} <administratively transferred to [G06F 16/1865](#)>
D	G06F 17/3023	· · · · {Versioning file systems, temporal file systems, e.g. file system supporting different historic versions of, e.g. files} <administratively transferred to [G06F 16/1873](#)>
D	G06F 17/30233	· · · · {Virtual file systems} <administratively transferred to [G06F 16/188](#)>
D	G06F 17/30235	· · · · · {Implementing virtual folder structures} <administratively transferred to [G06F 16/192](#)>
D	G06F 17/30238	· · · · · {Specific adaptations of the file system to access devices and non-file objects via standard file system access operations, e.g. pseudo file systems (dedicated interfaces to storage systems G06F 3/0601)} <administratively transferred to [G06F 16/196](#)>
D	G06F 17/30241	· · {in geographical information databases (instruments for geographical navigation G01C 21/00; three dimensional geographic models G06T 17/05)} <administratively transferred to [G06F 16/29](#)>
D	G06F 17/30244	· · {in image databases} <administratively transferred to [G06F 16/50](#)>
D	G06F 17/30247	· · · {based on features automatically derived from the image data (pattern recognition G06K 9/00)} <administratively transferred to [G06F 16/583](#)>
D	G06F 17/3025	· · · · {using colour} <administratively transferred to [G06F 16/5838](#)>
D	G06F 17/30253	· · · · {using extracted text} <administratively transferred to [G06F 16/5846](#)>
D	G06F 17/30256	· · · · {using a combination of image content features} <administratively transferred to [G06F 16/5838](#)>
D	G06F 17/30259	· · · · {using shape and object relationship} <administratively transferred to [G06F 16/5854](#)>
D	G06F 17/30262	· · · · {using texture} <administratively transferred to [G06F 16/5862](#)>
D	G06F 17/30265	· · · {based on information manually generated or based on information not derived from the image data} <administratively transferred to [G06F 16/58](#)>
D	G06F 17/30268	· · · {using information manually generated, e.g. tags, keywords, comments, manually generated location and time information} <administratively transferred to [G06F 16/5866](#)>
D	G06F 17/30271	· · · {the images having vectorial formats} <administratively transferred to [G06F 16/56](#)>
D	G06F 17/30274	· · · {by browsing} <administratively transferred to [G06F 16/54](#)>
D	G06F 17/30277	· · · {by graphical querying} <administratively transferred to [G06F 16/532](#)>

D   G06F 17/3028   · · · {data organisation and access thereof}
                          <administratively transferred to G06F 16/51>

D   G06F 17/30283   · · {using distributed data base systems, e.g. networks}
                          <administratively transferred to G06F 16/27>

D   G06F 17/30286   · · {in structured data stores}
                          <administratively transferred to G06F 16/20>

D   G06F 17/30289   · · · {Database design, administration or maintenance}
                          <administratively transferred to G06F 16/21>

D   G06F 17/30292   · · · · {Schema design and management}
                          <administratively transferred to G06F 16/211>

D   G06F 17/30294   · · · · · {with details for data modelling support}
                          <administratively transferred to G06F 16/212>

D   G06F 17/30297   · · · · · {with details for schema evolution support}
                          <administratively transferred to G06F 16/213>

D   G06F 17/303   · · · · {Database migration support}
                          <administratively transferred to G06F 16/214>

D   G06F 17/30303   · · · · {Improving data quality; Data cleansing}
                          <administratively transferred to G06F 16/215>

D   G06F 17/30306   · · · · {Database tuning (G06F 17/30339 takes precedence; database
                          performance monitoring G06F 11/3409)}
                          <administratively transferred to G06F 16/217>

D   G06F 17/30309   · · · · {Managing data history or versioning (querying temporal data
                          G06F 17/30551; querying versioned data G06F 17/30548)}
                          <administratively transferred to G06F 16/219>

D   G06F 17/30312   · · · {Storage and indexing structures; Management thereof}
                          <administratively transferred to G06F 16/22>

D   G06F 17/30315   · · · · {Column-oriented storage; Management thereof}
                          <administratively transferred to G06F 16/221>

D   G06F 17/30318   · · · · {Details of Large Object storage; Management thereof}
                          <administratively transferred to G06F 16/2219>

D   G06F 17/30321   · · · · {Indexing structures (indexing structures for unstructured textual data
                          G06F 17/30619)}
                          <administratively transferred to G06F 16/2228>

D   G06F 17/30324   · · · · · {Vectors, bitmaps or matrices}
                          <administratively transferred to G06F 16/2237>

D   G06F 17/30327   · · · · · {Trees, e.g. B+trees}
                          <administratively transferred to G06F 16/2246>

D   G06F 17/3033   · · · · · {Hash tables}
                          <administratively transferred to G06F 16/2255>

D   G06F 17/30333   · · · · · {Multidimensional index structures}
                          <administratively transferred to G06F 16/2264>

D   G06F 17/30336   · · · · · {indexing structure managing details}
                          <administratively transferred to G06F 16/2272>

D   G06F 17/30339   · · · · {Tablespace storage structures; Management thereof}
                          <administratively transferred to G06F 16/2282>

D   G06F 17/30342   · · · {Details of User-Defined Types; Storage management thereof}
                          <administratively transferred to G06F 16/2291>

D   G06F 17/30345   · · · {Update requests}
                          <administratively transferred to G06F 16/23>

D   G06F 17/30348   · · · · {Concurrency control (transaction processing G06F 9/466)}
                          <administratively transferred to G06F 16/2308>

D   G06F 17/30351   · · · · · {Optimistic concurrency control}
<administratively transferred to G06F 16/2315>

D   G06F 17/30353   · · · · · · {using timestamps}
<administratively transferred to G06F 16/2322>

D   G06F 17/30356   · · · · · · {using versioning}
<administratively transferred to G06F 16/2329>

D   G06F 17/30359   · · · · · {Pessimistic concurrency control approaches, e.g. locking, multiple versions without time stamps}
<administratively transferred to G06F 16/2336>

D   G06F 17/30362   · · · · · · {Locking methods, e.g. distributed locking, locking implementation details}
<administratively transferred to G06F 16/2343>

D   G06F 17/30365   · · · · {Update request formulation}
<administratively transferred to G06F 16/235>

D   G06F 17/30368   · · · · {Change logging, detection, and notification (replication G06F 17/30575)}
<administratively transferred to G06F 16/2358>

D   G06F 17/30371   · · · · {Ensuring data consistency and integrity}
<administratively transferred to G06F 16/2365>

D   G06F 17/30374   · · · · {Details of updates performed during offline database operations}
<administratively transferred to G06F 16/2372>

D   G06F 17/30377   · · · · {Details of updates performed during online database operations; commit processing}
<administratively transferred to G06F 16/2379>

D   G06F 17/3038   · · · · · {Details of bulk updating operations (data conversion details G06F 17/30569)}
<administratively transferred to G06F 16/2386>

D   G06F 17/30383   · · · · {Updating materialised views}
<administratively transferred to G06F 16/2393>

D   G06F 17/30386   · · · {Retrieval requests}
<administratively transferred to G06F 16/24>

D   G06F 17/30389   · · · · {Query formulation (interaction techniques for graphical user interfaces G06F 3/048)}
<administratively transferred to G06F 16/242>

D   G06F 17/30392   · · · · · {Interactive query statement specification based on a database schema}
<administratively transferred to G06F 16/2423>

D   G06F 17/30395   · · · · · {Iterative querying; query formulation based on the results of a preceding query}
<administratively transferred to G06F 16/2425>

D   G06F 17/30398   · · · · · {Query predicate definition using graphical user interfaces, including menus and forms (G06F 17/30392 takes precedence)}
<administratively transferred to G06F 16/2428>

D   G06F 17/30401   · · · · · {Natural language query formulation (natural language analysis, translation, semantics G06F 17/27, G06F 17/28)}
<administratively transferred to G06F 16/243>

D   G06F 17/30404   · · · · · {Query languages}
<administratively transferred to G06F 16/2433>

D   G06F 17/30407   · · · · · · {Active constructs}
<administratively transferred to G06F 16/2435>

D   G06F 17/3041   · · · · · · {Embedded query languages}
<administratively transferred to G06F 16/2438>

D   G06F 17/30412   · · · · · · {Grouping and aggregation}
<administratively transferred to G06F 16/244>

D   G06F 17/30415   · · · · · · {Stored procedures}
<administratively transferred to G06F 16/2443>

D   G06F 17/30418   · · · · · · {Data retrieval commands; view definitions}
<administratively transferred to G06F 16/2445>

D   G06F 17/30421   · · · · · · {for particular applications; for extensibility, e.g. user defined types}
<administratively transferred to G06F 16/2448>

D   G06F 17/30424   · · · · {Query processing}
<administratively transferred to G06F 16/245>

D   G06F 17/30427   · · · · · {Query translation}
<administratively transferred to G06F 16/2452>

D   G06F 17/3043   · · · · · · {Translation of natural language queries to structured queries (natural language analysis, translation, semantics G06F 17/27, G06F 17/28)}
<administratively transferred to G06F 16/24522>

D   G06F 17/30433   · · · · · · {Access plan code generation and invalidation; reuse of access plans}
<administratively transferred to G06F 16/24524>

D   G06F 17/30436   · · · · · · {Internal representations for queries}
<administratively transferred to G06F 16/24526>

D   G06F 17/30439   · · · · · · {Standardisation and Simplification}
<administratively transferred to G06F 16/24528>

D   G06F 17/30442   · · · · · {Query optimisation}
<administratively transferred to G06F 16/2453>

D   G06F 17/30445   · · · · · · {for parallel queries}
<administratively transferred to G06F 16/24532>

D   G06F 17/30448   · · · · · · {Query rewriting and transformation}
<administratively transferred to G06F 16/24534>

D   G06F 17/30451   · · · · · · · {of sub-queries or views}
<administratively transferred to G06F 16/24535>

D   G06F 17/30454   · · · · · · · {of operators}
<administratively transferred to G06F 16/24537>

D   G06F 17/30457   · · · · · · · {to use cached/materialised query results}
<administratively transferred to G06F 16/24539>

D   G06F 17/3046   · · · · · · · {Optimising common expressions}
<administratively transferred to G06F 16/2454>

D   G06F 17/30463   · · · · · · · {Plan optimisation}
<administratively transferred to G06F 16/24542>

D   G06F 17/30466   · · · · · · · · {Join order optimisation}
<administratively transferred to G06F 16/24544>

D   G06F 17/30469   · · · · · · · · {Selectivity estimation or determination}
<administratively transferred to G06F 16/24545>

D   G06F 17/30471   · · · · · · · {Optimisations to support specific applications; extensibility of optimisers}
<administratively transferred to G06F 16/24547>

D   G06F 17/30474   · · · · · · · {Run-time optimisation}
<administratively transferred to G06F 16/24549>

D   G06F 17/30477   · · · · · {Query execution}
<administratively transferred to G06F 16/2455>

D   G06F 17/3048   · · · · · {Database cache management}
<administratively transferred to G06F 16/24552>

D   G06F 17/30483   · · · · · · {of query operations}
                              <administratively transferred to G06F 16/24553>

D   G06F 17/30486   · · · · · · · {Unary operations; data partitioning operations}
                              <administratively transferred to G06F 16/24554>

D   G06F 17/30489   · · · · · · · · {Aggregation and duplicate elimination}
                              <administratively transferred to G06F 16/24556>

D   G06F 17/30492   · · · · · · · · {Efficient disk access during query execution}
                              <administratively transferred to G06F 16/24557>

D   G06F 17/30495   · · · · · · · {Binary matching operations}
                              <administratively transferred to G06F 16/24558>

D   G06F 17/30498   · · · · · · · {Join operations}
                              <administratively transferred to G06F 16/2456>

D   G06F 17/30501   · · · · · · · {Intermediate data storage techniques for performance
                              improvement}
                              <administratively transferred to G06F 16/24561>

D   G06F 17/30504   · · · · · · · {Pointer and reference processing operations}
                              <administratively transferred to G06F 16/24562>

D   G06F 17/30507   · · · · · · {Applying rules; deductive queries}
                              <administratively transferred to G06F 16/24564>

D   G06F 17/3051   · · · · · · {Triggers and constraints}
                              <administratively transferred to G06F 16/24565>

D   G06F 17/30513   · · · · · · · {Recursive queries}
                              <administratively transferred to G06F 16/24566>

D   G06F 17/30516   · · · · · {Data stream processing; continuous queries}
                              <administratively transferred to G06F 16/24568>

D   G06F 17/30519   · · · · {Query processing with adaptation to specific hardware, e.g. adapted
                              for using GPUs or SSDs}
                              <administratively transferred to G06F 16/24569>

D   G06F 17/30522   · · · · {Query processing with adaptation to user needs}
                              <administratively transferred to G06F 16/2457>

D   G06F 17/30525   · · · · · {using data annotations (user-defined metadata)}
                              <administratively transferred to G06F 16/24573>

D   G06F 17/30528   · · · · · {using context}
                              <administratively transferred to G06F 16/24575>

D   G06F 17/3053   · · · · · {using ranking}
                              <administratively transferred to G06F 16/24578>

D   G06F 17/30533   · · · · {Other types of queries}
                              <administratively transferred to G06F 16/2458>

D   G06F 17/30536   · · · · · {Approximate and statistical query processing}
                              <administratively transferred to G06F 16/2462>

D   G06F 17/30539   · · · · · {Query processing support for facilitating data mining operations in
                              structured databases}
                              <administratively transferred to G06F 16/2465>

D   G06F 17/30542   · · · · · {Fuzzy query processing}
                              <administratively transferred to G06F 16/2468>

D   G06F 17/30545   · · · · · {Distributed queries}
                              <administratively transferred to G06F 16/2471>

D   G06F 17/30548   · · · · · {Querying sequence data, e.g. querying versioned data}
                              <administratively transferred to G06F 16/2474>

D   G06F 17/30551   · · · · · {Querying temporal data}
                              <administratively transferred to G06F 16/2477>

D   G06F 17/30554   · · · · {Query result display and visualisation}
<administratively transferred to G06F 16/248>

D   G06F 17/30557   · · · {Details of integrating or interfacing systems involving at least one database management system}
<administratively transferred to G06F 16/25>

D   G06F 17/3056   · · · · {between a Database Management System and a front-end application}
<administratively transferred to G06F 16/252>

D   G06F 17/30563   · · · · {Details for extract, transform and load [ETL] procedures, e.g. ETL data flows in data warehouses}
<administratively transferred to G06F 16/254>

D   G06F 17/30566   · · · · {in federated and virtual databases (distributed queries G06F 17/30545)}
<administratively transferred to G06F 16/256>

D   G06F 17/30569   · · · · {Details of data format conversion from or to a database}
<administratively transferred to G06F 16/258>

D   G06F 17/30572   · · · {Visual data mining and browsing structured data}
<administratively transferred to G06F 16/26>

D   G06F 17/30575   · · · {Replication, distribution or synchronisation of data between databases or within a distributed database; Distributed database system architectures therefor}
<administratively transferred to G06F 16/27>

D   G06F 17/30578   · · · · {Details of asynchronous replication and data reconciliation}
<administratively transferred to G06F 16/273>

D   G06F 17/30581   · · · · {Details of synchronous replication}
<administratively transferred to G06F 16/275>

D   G06F 17/30584   · · · · {Details of data partitioning, e.g. horizontal or vertical partitioning}
<administratively transferred to G06F 16/278>

D   G06F 17/30587   · · · {Details of specialised database models}
<administratively transferred to G06F 16/28>

D   G06F 17/30589   · · · · {Hierarchical databases, e.g. IMS, LDAP data stores, Lotus Notes}
<administratively transferred to G06F 16/282>

D   G06F 17/30592   · · · · {Multi-dimensional databases and data warehouses, e.g. MOLAP, ROLAP}
<administratively transferred to G06F 16/283>

D   G06F 17/30595   · · · · {Relational databases}
<administratively transferred to G06F 16/284>

D   G06F 17/30598   · · · · · {Clustering or classification (for textual data G06F 17/30705)}
<administratively transferred to G06F 16/285>

D   G06F 17/30601   · · · · · · {including cluster or class visualization or browsing (for textual data G06F 17/30713)}
<administratively transferred to G06F 16/287>

D   G06F 17/30604   · · · · · {Entity relationship models}
<administratively transferred to G06F 16/288>

D   G06F 17/30607   · · · · {Object oriented databases}
<administratively transferred to G06F 16/289>

D   G06F 17/3061   · · {of unstructured textual data (document management systems G06F 17/30011)}
<administratively transferred to G06F 16/30>

D   G06F 17/30613   · · · {Indexing}
<administratively transferred to G06F 16/31>

D   G06F 17/30616   · · · · {Selection or weighting of terms for indexing (G06F 17/30663 takes precedence; for summarization G06F 17/30719)}
<administratively transferred to G06F 16/313>

D	G06F 17/30619	· · · · {indexing structures (indexing structures for structured data stores G06F 17/30321)} <administratively transferred to [G06F 16/316](#)>
D	G06F 17/30622	· · · · · {Inverted lists} <administratively transferred to [G06F 16/319](#)>
D	G06F 17/30625	· · · · · {Trees} <administratively transferred to [G06F 16/322](#)>
D	G06F 17/30628	· · · · · {Hash tables} <administratively transferred to [G06F 16/325](#)>
D	G06F 17/30631	· · · · · {Index managing details} <administratively transferred to [G06F 16/328](#)>
D	G06F 17/30634	· · · {Querying} <administratively transferred to [G06F 16/33](#)>
D	G06F 17/30637	· · · · {Query formulation} <administratively transferred to [G06F 16/332](#)>
D	G06F 17/3064	· · · · · {using system suggestions (G06F 17/30646 takes precedence)} <administratively transferred to [G06F 16/3322](#)>
D	G06F 17/30643	· · · · · · {using document space presentation or visualization, e.g. category, hierarchy or range presentation and selection} <administratively transferred to [G06F 16/3323](#)>
D	G06F 17/30646	· · · · · {reformulation based on results of preceding query} <administratively transferred to [G06F 16/3325](#)>
D	G06F 17/30648	· · · · · · {using relevance feedback from the user, e.g. relevance feedback on documents, documents sets, document terms or passages} <administratively transferred to [G06F 16/3326](#)>
D	G06F 17/30651	· · · · · · · {using graphical result space presentation or visualisation} <administratively transferred to [G06F 16/3328](#)>
D	G06F 17/30654	· · · · · {Natural language query formulation or dialogue systems} <administratively transferred to [G06F 16/3329](#)>
D	G06F 17/30657	· · · · {Query processing} <administratively transferred to [G06F 16/3331](#)>
D	G06F 17/3066	· · · · · {Query translation} <administratively transferred to [G06F 16/3332](#)>
D	G06F 17/30663	· · · · · · {Selection or weighting of terms from queries, including natural language queries} <administratively transferred to [G06F 16/3334](#)>
D	G06F 17/30666	· · · · · · {Syntactic pre-processing steps, e.g. stopword elimination, stemming (lexical analysis G06F 17/277, G06F 8/425)} <administratively transferred to [G06F 16/3335](#)>
D	G06F 17/30669	· · · · · · {Translation of the query language, e.g. Chinese to English (language translation G06F 17/28)} <administratively transferred to [G06F 16/3337](#)>
D	G06F 17/30672	· · · · · · {Query expansion} <administratively transferred to [G06F 16/3338](#)>
D	G06F 17/30675	· · · · · {Query execution (G06F 17/30699 takes precedence)} <administratively transferred to [G06F 16/334](#)>
D	G06F 17/30678	· · · · · · {using boolean model} <administratively transferred to [G06F 16/3341](#)>
D	G06F 17/30681	· · · · · · {using phonetics} <administratively transferred to [G06F 16/3343](#)>

D	G06F 17/30684	· · · · · · {using natural language analysis} <administratively transferred to G06F 16/3344>
D	G06F 17/30687	· · · · · · {using probabilistic model} <administratively transferred to G06F 16/3346>
D	G06F 17/3069	· · · · · · {using vector based model} <administratively transferred to G06F 16/3347>
D	G06F 17/30693	· · · · · {Reuse of stored results of previous queries (for formulation of new queries G06F 17/30646)} <administratively transferred to G06F 16/3349>
D	G06F 17/30696	· · · · {Presentation or visualization of query results (G06F 17/30651 takes precedence; browsing or visualization of document space G06F 17/30716)} <administratively transferred to G06F 16/338>
D	G06F 17/30699	· · · {Filtering based on additional data, e.g. user or group profiles (filtering in web context G06F 17/30867)} <administratively transferred to G06F 16/335>
D	G06F 17/30702	· · · {Profile generation, learning or modification} <administratively transferred to G06F 16/337>
D	G06F 17/30705	· · · {Clustering or classification (manual classification G06F 17/30722)} <administratively transferred to G06F 16/35>
D	G06F 17/30707	· · · · {into predefined classes} <administratively transferred to G06F 16/353>
D	G06F 17/3071	· · · · {including class or cluster creation or modification} <administratively transferred to G06F 16/355>
D	G06F 17/30713	· · · · {including cluster or class visualization or browsing} <administratively transferred to G06F 16/358>
D	G06F 17/30716	· · · {Browsing or visualization} <administratively transferred to G06F 16/34>
D	G06F 17/30719	· · · · {Summarization for human users} <administratively transferred to G06F 16/345>
D	G06F 17/30722	· · · {based on associated metadata or manual classification, e.g. bibliographic data} <administratively transferred to G06F 16/38>
D	G06F 17/30725	· · · · {using identifiers, e.g. barcodes, RFIDs (for URLs G06F 17/30879)} <administratively transferred to G06F 16/381>
D	G06F 17/30728	· · · · {using citations (hypermedia G06F 17/30014)} <administratively transferred to G06F 16/382>
D	G06F 17/30731	· · · {Creation of semantic tools} <administratively transferred to G06F 16/36>
D	G06F 17/30734	· · · · {Ontology} <administratively transferred to G06F 16/367>
D	G06F 17/30737	· · · · {Thesaurus} <administratively transferred to G06F 16/374>
D	G06F 17/3074	· · {Audio data retrieval (retrieval of video data G06F 17/30781; retrieval of multimedia data G06F 17/30017; general determination or detection of speech characteristics G10L 25/00; speech recognition G10L 15/00; speaker recognition G10L 17/00; electrophonic musical instruments G10H; editing or indexing of data stored based on relative movement between record carrier and transducer G11B 27/00)} <administratively transferred to G06F 16/60>

D	G06F 17/30743	· · · {using features automatically derived from the audio content, e.g. descriptors, fingerprints, signatures, MEP-cepstral coefficients, musical score, tempo (content oriented musical parameter indexing, e.g. tempo G10H; determination or detection of speech characteristics G10L 25/00; audio watermarking, e.g. by inserting fingerprints G10L 19/018; indexing by using information signals detectable on the record carrier and recorded by the same method as the main recording G11B 27/28)} <administratively transferred to <u>G06F 16/683</u>>
D	G06F 17/30746	· · · · {using automatically derived transcript of audio data, e.g. lyrics (speech recognition G10L 15/00)} <administratively transferred to <u>G06F 16/685</u>>
D	G06F 17/30749	· · · {using information manually generated or using information not derived from the audio data, e.g. title and artist information, time and location information, usage information, user ratings (programmed access in sequence to addressed parts of tracks of operating discs G11B 27/105)} <administratively transferred to <u>G06F 16/68</u>>
D	G06F 17/30752	· · · · {using information manually generated, e.g. tags, keywords, comments, title or artist information, time, location or usage information, user ratings} <administratively transferred to <u>G06F 16/686</u>>
D	G06F 17/30755	· · · {Query formulation specially adapted for audio data retrieval} <administratively transferred to <u>G06F 16/632</u>>
D	G06F 17/30758	· · · · {Query by example, e.g. query by humming} <administratively transferred to <u>G06F 16/634</u>>
D	G06F 17/30761	· · · · {Filtering; personalisation, e.g. querying making use of user profiles} <administratively transferred to <u>G06F 16/635</u>>
D	G06F 17/30764	· · · · · {by using biological or physiological data} <administratively transferred to <u>G06F 16/636</u>>
D	G06F 17/30766	· · · · · {Administration of user profiles, e.g. generation, initialization, adaptation, distribution} <administratively transferred to <u>G06F 16/637</u>>
D	G06F 17/30769	· · · {Presentation of query results (menu, index or table of content presentation of record carriers G11B 27/32, G11B 27/34)} <administratively transferred to <u>G06F 16/638</u>>
D	G06F 17/30772	· · · · {making use of playlists} <administratively transferred to <u>G06F 16/639</u>>
D	G06F 17/30775	· · · {Browsing (generation of a list or set of audio data G06F 17/30772; trick modes G11B 27/005; browsing through audio recorded on operating discs G11B 27/105)} <administratively transferred to <u>G06F 16/64</u>>
D	G06F 17/30778	· · · {Audio database index structures and management thereof} <administratively transferred to <u>G06F 16/61</u>>
D	G06F 17/30781	· · {of video data (recognising patterns G06K 9/00; image analysis G06T 7/00; editing or indexing information signals on a record carrier in which information is recorded and accessed based on relative movement between record carrier and transducer G11B 27/00; source coding or decoding of digital video signal H04N 19/00; selective content distribution, e.g. interactive television, video on demand H04N 21/00)} <administratively transferred to <u>G06F 16/70</u>>
D	G06F 17/30784	· · · {using features automatically derived from the video content, e.g. descriptors, fingerprints, signatures, genre (recognising video content G06K 9/00711; extraction of features or characteristics for pattern recognition of the image G06K 9/46)} <administratively transferred to <u>G06F 16/783</u>>

D G06F 17/30787   · · · · {using audio features (general determination or detection of speech ~~characteristics G10L 25/00; speech recognition G10L 15/00; speaker recognition G10L 17/00; contents oriented musical parameter indexing, e.g. tempo G10H)}~~
                                       <administratively transferred to [G06F 16/7834](#)>

D G06F 17/3079   · · · · {using objects detected or recognised in the video content ~~(methods for image acquisition of a pattern to be recognized involving target detection G06K 9/3241)}~~
                                       <administratively transferred to [G06F 16/7837](#)>

D G06F 17/30793   · · · · · {the detected or recognised objects being people ~~(face recognition G06K 9/00221; human body recognition G06K 9/00369; speaker recognition G10L 17/00)}~~
                                       <administratively transferred to [G06F 16/784](#)>

D G06F 17/30796   · · · · {using original textual content or text extracted from visual content or ~~transcript of audio data (extraction of overlay text G06K 9/3266)}~~
                                       <administratively transferred to [G06F 16/7844](#)>

D G06F 17/30799   · · · · {using low-level visual features of the video content ~~(methods for preprocessing an image in order to extract features of a pattern to be recognized G06K 9/46; image processing involving image features extraction in general G06T)}~~
                                       <administratively transferred to [G06F 16/7847](#)>

D G06F 17/30802   · · · · · {using colour or luminescence ~~(colour analysis on image data G06T 7/90)}~~
                                       <administratively transferred to [G06F 16/785](#)>

D G06F 17/30805   · · · · · {using shape ~~(G06F 17/3079 takes precedence; segmentation or edge detection on image data G06T 7/10; analysis of geometric attributes on image data G06T 7/60)}~~
                                       <administratively transferred to [G06F 16/7854](#)>

D G06F 17/30808   · · · · · {using texture ~~(G06F 17/3079 takes precedence; texture analysis on image data G06T 7/41, G06T 7/49)}~~
                                       <administratively transferred to [G06F 16/7857](#)>

D G06F 17/30811   · · · · · {using motion, e.g. object motion, camera motion ~~(motion analysis on image data G06T 7/20)}~~
                                       <administratively transferred to [G06F 16/786](#)>

D G06F 17/30814   · · · · · {using domain-transform features, e.g. DCT, wavelet transform ~~coefficients}~~
                                       <administratively transferred to [G06F 16/7864](#)>

D G06F 17/30817   · · · {using information manually generated or using information not derived from ~~the video content, e.g. time and location information, usage information, user ratings}~~
                                       <administratively transferred to [G06F 16/78](#)>

D G06F 17/3082   · · · · {using information manually generated, e.g. tags, keywords, comments, ~~title and artist information, manually generated time, location and usage information, user ratings}~~
                                       <administratively transferred to [G06F 16/7867](#)>

D G06F 17/30823   · · · {Query formulation and processing specifically adapted for the retrieval of ~~video data}~~
                                       <administratively transferred to [G06F 16/73](#)>

D G06F 17/30825   · · · · {Query by example, e.g. a complete video frame or video sequence ~~(graphical querying G06F 17/30831)}~~
                                       <administratively transferred to [G06F 16/7328](#)>

D G06F 17/30828   · · · · {Filtering and personalisation; User profiles}
                                       <administratively transferred to [G06F 16/735](#)>

D   G06F 17/30831   · · · · {Graphical querying, e.g. query-by-region, query-by-sketch, query-by-trajectory, GUIs for designating a person/face/object as a query predicate (end-user interface involving hot spots associated with the video H04N 21/4725; end-user interface for selecting a Region of Interest H04N 21/4728)}
                          <administratively transferred to G06F 16/7335>

D   G06F 17/30834   · · · · {Query language or query format}
                          <administratively transferred to G06F 16/7343>

D   G06F 17/30837   · · · {Query results presentation or summarisation specifically adapted for the retrieval of video data (end-user interface for requesting or interacting with video content, e.g. video on demand interface or electronic program guide H04N 21/472)}
                          <administratively transferred to G06F 16/738>

D   G06F 17/3084   · · · · {Presentation of query results (G06F 17/30843 takes precedence; browsing a video collection G06F 17/30849)}
                          <administratively transferred to G06F 16/738>

D   G06F 17/30843   · · · · {Presentation in form of a video summary, e.g. the video summary being a video sequence, a composite still image or having synthesized frames}
                          <administratively transferred to G06F 16/739>

D   G06F 17/30846   · · · {Browsing of video data (end-user interface for requesting or interacting with video content, e.g. video on demand interface or electronic program guide H04N 21/472; indicating arrangements in the context of indexing and addressing recorded information G11B 27/34)}
                          <administratively transferred to G06F 16/74>

D   G06F 17/30849   · · · · {Browsing a collection of video files or sequences}
                          <administratively transferred to G06F 16/743>

D   G06F 17/30852   · · · · {Browsing the internal structure of a single video sequence}
                          <administratively transferred to G06F 16/745>

D   G06F 17/30855   · · · · {Hypervideo (linking data to content, e.g. by linking an URL to a video object in the context of video distribution systems H04N 21/858)}
                          <administratively transferred to G06F 16/748>

D   G06F 17/30858   · · · {Video database index structures or management thereof (table of contents on a record carrier G11B 27/327)}
                          <administratively transferred to G06F 16/71>

D   G06F 17/30861   · · {Retrieval from the Internet, e.g. browsers (internet protocol H04L 29/06095)}
                          <administratively transferred to G06F 16/95>

D   G06F 17/30864   · · · {by querying, e.g. search engines or meta-search engines, crawling techniques, push systems}
                          <administratively transferred to G06F 16/951>

D   G06F 17/30867   · · · · {with filtering and personalisation}
                          <administratively transferred to G06F 16/9535>

D   G06F 17/3087   · · · · {Spatially dependent indexing and retrieval, e.g. location dependent results to queries}
                          <administratively transferred to G06F 16/9537>

D   G06F 17/30873   · · · {by navigation, e.g. using categorized browsing, portals, synchronized browsing, visual networks of documents, virtual worlds or tours}
                          <administratively transferred to G06F 16/954>

D   G06F 17/30876   · · · {by using information identifiers, e.g. encoding URL in specific indicia, browsing history}
                          <administratively transferred to G06F 16/955>

D   G06F 17/30879   · · · · {by using bar codes}
                          <administratively transferred to G06F 16/9554>

D	G06F 17/30882	· · · · {details of hyperlinks; management of linked annotations} <administratively transferred to [G06F 16/9558]>
D	G06F 17/30884	· · · · {Bookmark management} <administratively transferred to [G06F 16/9562]>
D	G06F 17/30887	· · · · {URL specific, e.g. using aliases, detecting broken or misspelled links (address allocation to terminals or nodes connected to a network H04L 29/12009)} <administratively transferred to [G06F 16/9566]>
D	G06F 17/3089	· · · {Web site content organization and management, e.g. publishing, automatic linking or maintaining pages} <administratively transferred to [G06F 16/958]>
D	G06F 17/30893	· · · · {Access to data in other repository systems, e.g. legacy data or dynamic Web page generation} <administratively transferred to [G06F 16/972]>
D	G06F 17/30896	· · · · {Document structures and storage, e.g. HTML extensions} <administratively transferred to [G06F 16/986]>
D	G06F 17/30899	· · · {Browsing optimisation} <administratively transferred to [G06F 16/957]>
D	G06F 17/30902	· · · · {of access to content, e.g. by caching (accessing, addressing or allocating within memory systems and caches G06F 12/08)} <administratively transferred to [G06F 16/9574]>
D	G06F 17/30905	· · · · {Optimising the visualization of content, e.g. distillation of HTML documents} <administratively transferred to [G06F 16/9577]>
D	G06F 17/30908	· · {of semistructured data, the undelying structure being taken into account, e.g. mark-up language structure data} <administratively transferred to [G06F 16/80]>
D	G06F 17/30911	· · · {Indexing, e.g. of XML tags} <administratively transferred to [G06F 16/81]>
D	G06F 17/30914	· · · {Mapping or conversion} <administratively transferred to [G06F 16/84]>
D	G06F 17/30917	· · · · {Mapping to a database} <administratively transferred to [G06F 16/86]>
D	G06F 17/3092	· · · · {Mark-up to mark-up conversion (conversion for visualization in web browsing G06F 17/30905)} <administratively transferred to [G06F 16/88]>
D	G06F 17/30923	· · · {XML native databases, structures and querying} <administratively transferred to [G06F 16/83]>
D	G06F 17/30926	· · · · {Query formulation} <administratively transferred to [G06F 16/832]>
D	G06F 17/30929	· · · · {Query processing} <administratively transferred to [G06F 16/835]>
D	G06F 17/30932	· · · · · {Query translation} <administratively transferred to [G06F 16/8358]>
D	G06F 17/30935	· · · · · {Query optimisation} <administratively transferred to [G06F 16/8365]>
D	G06F 17/30938	· · · · · {Query execution} <administratively transferred to [G06F 16/8373]>
D	G06F 17/30941	· · · · {Results presentation} <administratively transferred to [G06F 16/838]>
D	G06F 17/30943	· · {details of database functions independent of the retrieved data type} <administratively transferred to [G06F 16/90]>

D G06F 17/30946 · · · {indexing structures (indexing structures for specific data types G06F 17/30067, G06F 17/30619, G06F 17/30321)}
        <administratively transferred to <u>G06F 16/901</u>>

D G06F 17/30949 · · · · {hash tables (hashing functions for network address lookup or routing in networks H04L 45/00)}
        <administratively transferred to <u>G06F 16/9014</u>>

D G06F 17/30952 · · · · {using directory or table look-up (use of a directory or look-up table in file systems G06F 17/30067)}
        <administratively transferred to <u>G06F 16/9017</u>>

D G06F 17/30955 · · · · · {using more than one table in sequence, i.e. systems with three or more layers}
        <administratively transferred to <u>G06F 16/902</u>>

D G06F 17/30958 · · · · {Graphs; Linked lists (G06F 17/30961 takes precedence)}
        <administratively transferred to <u>G06F 16/9024</u>>

D G06F 17/30961 · · · · {Trees}
        <administratively transferred to <u>G06F 16/9027</u>>

D G06F 17/30964 · · · {Querying}
        <administratively transferred to <u>G06F 16/903</u>>

D G06F 17/30967 · · · · {Query formulation}
        <administratively transferred to <u>G06F 16/9032</u>>

D G06F 17/3097 · · · · · {using system suggestions}
        <administratively transferred to <u>G06F 16/90324</u>>

D G06F 17/30973 · · · · · · {using search space presentation or visualization, e.g. category or range presentation and selection}
        <administratively transferred to <u>G06F 16/90328</u>>

D G06F 17/30976 · · · · · {Natural language query formulation or dialogue systems}
        <administratively transferred to <u>G06F 16/90332</u>>

D G06F 17/30979 · · · · {Query processing}
        <administratively transferred to <u>G06F 16/90335</u>>

D G06F 17/30982 · · · · · {by using parallel associative memories or content-addressable memories}
        <administratively transferred to <u>G06F 16/90339</u>>

D G06F 17/30985 · · · · · {by using string matching techniques (sequence comparison in bioinformatics G06F 19/22; string matching used for packet routing in packet switching systems H04L 45/00)}
        <administratively transferred to <u>G06F 16/90344</u>>

D G06F 17/30988 · · · · · {by searching ordered data, e.g. alpha-numerically ordered data (sequence comparison in bioinformatics G06F 19/22)}
        <administratively transferred to <u>G06F 16/90348</u>>

D G06F 17/30991 · · · · {Presentation or visualization of query results}
        <administratively transferred to <u>G06F 16/9038</u>>

D G06F 17/30994 · · · {Browsing or visualization}
        <administratively transferred to <u>G06F 16/904</u>>

D G06F 17/30997 · · · {Retrieval based on associated metadata}
        <administratively transferred to <u>G06F 16/907</u>>

U   G06F 19/00   **Digital computing or data processing equipment or methods, specially adapted for specific applications (specially adapted for specific functions G06F 17/00; data processing systems or methods specially adapted for administrative, commercial, financial, managerial, supervisory or forecasting purposes G06Q; healthcare informatics G16H)**

NOTE

This group only <u>covers</u> specific applications related to the fields of healthcare or life sciences, e.g. bioinformatics (G09F 19/10), medical informatics (G06F 19/30), or chemoinformatics (G06F 19/70).

U   G06F 19/30
   (Frozen)   · {Medical informatics, i.e. computer-based analysis or dissemination of patient or disease data (bioinformatics G06F 19/10; measuring for diagnostic purposes A61B 5/00; recognising patterns in biomedical signals G06K 9/00496; data processing systems or methods specially adapted for administrative or managerial aspects of healthcare or welfare G06Q 50/22)}

WARNING

Group G06F 19/30 is no longer used for the classification of documents as of January 1, 2018. The content of this group is being reclassified into groups G16H 10/00 – G16H 80/00.
Groups G06F 19/30 and G16H 10/00 – G16H 80/00 should should be considered in order to perform a complete search.

G06F 19/32
   (Frozen)   · · {Medical data management, e.g. systems or protocols for archival or communication of medical images, computerised patient records or computerised general medical references (information retrieval or databases per se ~~G06F 17/30~~ *G06F 16/00*; data security aspects G06F 21/00)}

WARNING

Group G06F 19/32 is no longer used for the classification of documents as of January 1, 2018. The content of this group is being reclassified into groups G16H 10/00 – G16H 80/00.
Groups G06F 19/32 and G16H 10/00 – G16H 80/00 should be considered in order to perform a complete search.

G06F 2216/00   **Indexing scheme relating to additional aspects of information retrieval not explicitly covered by ~~G06F 17/30~~ *G06F 16/00* and subgroups**

Project: RP0580 (G06K)

G06K 9/00   **Methods or arrangements for reading or recognising printed or written characters or for recognising patterns, e.g. fingerprints (processing or analysis of tracks of nuclear particles G01T 5/02 {; information retrieval ~~G06F 17/30~~ *G06F 16/00*; recognition of molecular sequences G06F 19/70; radio frequency identification G06K 7/00; recognition of barcodes and similar code images G06K 7/10; computer systems based on specific computational models G06N; image analysis, inspection, positioning or tracking G06T 7/00; recognition of acoustic speech signals G10L 15/00; acoustic speaker identification G10L 17/00})**

NOTES

1. In this group, the following term is used with the meaning indicated:
   • "recognising" includes several functions such as extracting features, clustering, classifying or matching.

2. IPC subgroups G06K 9/20, G06K 9/36, G06K 9/62 and G06K 9/74 refer to methods or arrangements that can be applied to a pattern independently of its nature or to that are applied to specific patterns not included in the subgroups in the range G06K 9/00006 - G06K 9/00852. The CPC subgroups in the range G06K 9/00006 - G06K 9/00852 refer to the same methods or arrangements when

applied or specially adapted to the specific patterns to which these subgroups relate.

3. The present group does not cover the use of recognised patterns in specific applications, e.g. the use of traced gestures recognised as commands to be input to a computer is covered by the groups under G06F 3/00

	G06K 9/00624	· {Recognising scenes, i.e. recognition of a whole field of perception; recognising scene-specific objects (image retrieval ~~G06F 17/30244~~ *G06F 16/50*; video retrieval ~~G06F 17/30781~~ *G06F 16/70*; image analysis and image segmentation, e.g. pixel labelling G06T 7/00; alarm systems G08B; traffic control G08G; pictorial communication H04N)}
	G06K 9/00711	· · {Recognising video content, e.g. extracting audiovisual features from movies, extracting representative key-frames, discriminating news vs. sport content (information retrieval in video databases ~~G06F 17/30781~~ *G06F 16/70*; recognition of movements or behaviour G06K 9/00335; extracting overlay text G06K 9/3266; fusion techniques G06K 9/6288; speech recognition G10L 15/00; indexing of audio and video or audiovisual data on record media using extracted features or characteristics G11B 27/28)}
	G06K 9/00744	· · · {Extracting features from the video content, e.g. video "fingerprints", or characteristics, e.g. by automatic extraction of representative shots or key frames (segmentation for general image processing G06T 7/10; use of extracted content features in video information retrieval ~~G06F 17/30784~~ *G06F 16/783*; automated annotation of image based on image contents G06K 9/00671; determination of region of interest for recognition G06K 9/3233; extraction of image features or characteristics G06K 9/46; determining representative patterns G06K 9/6255)}
	G06K 9/00751	· · · · {Detecting suitable features for summarising video content (presentation in the form of a video summary ~~G06F 17/30843~~ *G06F 16/739*; editing video summary G11B 27/034; programmed access to video content G11B 27/105)}
U	G06K 9/6217	· · {Design or setup of recognition systems and techniques; Extraction of features in feature space; Clustering techniques; Blind source separation (regression analysis G06F 17/18)}
U	G06K 9/6262	· · · {Validation, performance evaluation or active pattern learning techniques}
	G06K 9/6263	· · · · {based on the feedback of a supervisor (relevance feedback in information retrieval ~~G06F 17/30~~ *G06F 16/00*)}
U	**G06K 17/00**	**Methods or arrangements for effecting co-operative working between equipments covered by two or more of the preceding main groups, e.g. automatic card files incorporating conveying and reading operations**
	G06K 17/0016	· {Selecting or retrieving of images by means of their associated code-marks, e.g. coded microfilm or microfiche (microfilm reading G03B 21/11; computers therefor ~~G06F 17/30~~ *G06F 16/00*; teaching devices G09B 5/02; accessing record carriers G11B 27/002; static digital stores using optical elements G11C 13/04; intermediate storage of facsimile picture signals H04N 1/21)}

Project: RP0580 (G10H)

U	**G10H 2240/00**	**Data organisation or data communication aspects, specifically adapted for electrophonic musical tools or instruments**
	G10H 2240/005	· Data structures for use in electrophonic musical devices; Data structures including musical parameters derived from musical analysis (audio retrieval ~~G06F 17/3074~~ *G06F 16/60*)
	G10H 2240/075	· Musical metadata derived from musical analysis or for use in electrophonic musical instruments (additional information unrelated to its juxtaposed musical file data G10H 2240/091; audio retrieval ~~G06F 17/3074~~ *G06F 16/60*)

G10H 2240/121   · Musical libraries, i.e. musical databases indexed by musical parameters, wavetables, indexing schemes using musical parameters, musical rule bases or knowledge bases, e.g. for automatic composing methods *(audio retrieval G06F 16/60)*; (audio retrieval G06F 17/3074)

Project: RP0580 (G11C)

G11C 15/00   **Digital stores in which information comprising one or more characteristic parts is written into the store and in which information is read-out by searching for one or more of these characteristic parts, i.e. associative or content-addressed stores (in which information is addressed to a specific location G11C 11/00 {; selection information using addressing means, e.g. hashing, tree addressing, chaining G06F 11/22; information retrieval systems using a computer G06F 17/30G06F 16/00 })**

Project: RP0580 (H04L)

U   **H04L 12/00**   **Data switching networks (interconnection of, or transfer of information or other signals between, memories, input/output devices or central processing units G06F 13/00)**

U   H04L 12/28   · characterised by path configuration, e.g. local area networks [LAN], wide area networks [WAN]

U   H04L 12/2803   · · {Home automation networks}

U   H04L 12/2807   · · · {Exchanging configuration information on appliance services in a home automation network (adress allocation H04L 29/12207; arrangements for maintenance or administration involving network analysis for automatically determining the actual topology of a network H04L 41/12; hardware or software tools for network management using graphical user interfaces H04L 41/22)}

H04L 12/2812   · · · · {describing content present in a home automation network, e.g. audio video content (retrieval from the Internet G06F 17/30861G06F 16/95)}

U   **H04L 29/00**   **Arrangements, apparatus, circuits or systems, not covered by a single one of groups H04L 1/00 - H04L 27/00 (interconnection of, or transfer of information or other signals between, memories, input/output devices or central processing units G06F 13/00){contains provisionally no documents}**

U   H04L 29/02   · Communication control (in satellite networks H04B 7/185); Communication processing (H04L 29/12, H04L 29/14 take precedence){contains provisionally no documents}

U   H04L 29/06   · · characterised by a protocol

U   H04L 29/08   · · · Transmission control procedure, e.g. data link level control procedure

U   H04L 29/08081   · · · · {Protocols for network applications (protocols for multimedia communication H04L 29/06027; protocols for telewriting H04L 29/06034; message switching systems H04L 51/00)}

H04L 29/0809   · · · · · {involving the use of web-based technology, e.g. Hyper Text Transfer Protocol [HTTP], (information retrieval from the Internet G06F 17/30861G06F 16/95)}

U   H04L 29/08135   · · · · · {in which application tasks are distributed across nodes in the network (multiprogramming arrangements G06F 9/46)}

	H04L 29/08306	· · · · · · {Arrangements for peer-to-peer networking [P2P]; functionalities, architectural details or applications of P2P networks (provisions for file transfer, upload, download H04L 29/08117; provisions for accessing replicated servers H04L 29/08144; security provisions H04L 29/06551; addressing provisions H04L 29/12009; scheduling provisions H04L 29/08945; presence management provisions H04L 29/08684; multimedia provisions H04L 29/06176; information retrieval provisions, file indexing, file systems ~~G06F 17/30~~*G06F 16/00*; wireless interfaces between terminal devices H04W 92/18; small scale hierarchical wireless network topologies H04W 84/10; peer-to-peer connection between video clients H04N 21/632; peer-to-peer connection between video game machines A63F 13/34)}
U	H04L 29/08702	· · · · · {involving intermediate processing or storage in the network, e.g. proxy (billing provisions H04L 12/14; multimedia network architectures, gateways and control entities H04L 29/0621; multimedia handling, encoding and conversion H04L 29/06476; security provisions H04L 29/06551; addressing provisions H04L 29/12009; network management provisions H04L 41/00; monitoring provisions H04L 43/00)}

WARNING

The subgroups H04L 29/08711, H04L 29/08738 - H04L 29/08783, and H04L 29/08801 - H04L 29/08855 are not complete pending reorganisation. See also H04L 29/0872, H04L 29/08729 and H04L 29/08792)

	H04L 29/08729	· · · · · {Arrangements for intermediate storage, e.g. caching (browsing optimisation of access to content ~~G06F 17/30902~~*G06F 16/9574*)}

WARNING

This group is no longer used for the classification of new documents as from December 1, 2009. The backlog of this group is being continuously reclassified to the subgroups H04L 29/08711 - H04L 29/08909

	H04L 29/08783	· · · · · · {Arrangements for reducing the amount or size of exchanged application data (protocols for header compression H04L 29/0604; optimizing visualization of content ~~G06F 17/30905~~*G06F 16/9577*; digital video compression H04N 19/00)}
	H04L 29/08792	· · · · · · {Arrangements for data reduction and/or adaptation (protocols for data compression H04L 29/0604; optimising the visualization of content ~~G06F 17/30905~~*G06F 16/9577*; digital video signal compression H04N 19/00)}

WARNING

This group is no longer used for the classification of new documents as from December 1, 2009. The backlog of this group is being continuously reclassified to the subgroups H04L 29/08711 - H04L 29/08909

	H04L 29/08801	· · · · · · {Arrangements for storing temporarily data at an intermediate stage, e.g. caching (browsing optimization of access to content by caching ~~G06F 17/30902~~*G06F 16/9574*)}
U	H04L 29/12	· characterised by the data terminal {contains provisionally no documents}

U	H04L 29/12009	·· {Arrangements for addressing and naming in data networks}

NOTES

1. H04L 61/00 covers aspects of data networks, excluding pure telephone solutions (H04M 7/00) or addressing within a device, e.g. process, memory etc. (G06F 13/42 or G06F 12/00) .

2. Aspects relating to switching and routing are classified in H04L 12/56.

3. Main aspects covered by this groups are:
　　address resolution;
　　directories and name-to-address resolution;
　　allocation of addresses;
　　conversion of addresses;
　　logical names and non-standard use of addresses

WARNING

This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/00

U	H04L 29/12047	··· {Directories; name-to-address mapping (telephone directories in user terminals H04M 1/27)}

WARNING

This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/15

	H04L 29/12132	···· {Mechanisms for table lookup, also between directories; Directory data structures; Synchronization of directories (information retrieval in file systems ~~G06F 17/30067~~ *G06F 16/10*; information retrieval in structured data stores ~~G06F 17/30286~~ *G06F 16/20*)}

WARNING

This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/1552

	H04L 29/12594	··· {Arrangements for managing names, e.g. use of aliases or nicknames (retrieval from the Internet by using information identifiers, e.g. URLs ~~G06F 17/30876~~ *G06F 16/955*; name-to-address mapping H04L 29/12047)}

WARNING

This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/30

U	**H04L 41/00**	**{Arrangements for maintenance or administration or management of packet switching networks}**
U	H04L 41/02	· {involving integration or standardization}
	H04L 41/024	·· {using relational databases for representation of network management data, e.g. managing via structured query language [SQL] (information retrieval in structured data stores ~~G06F 17/30286~~ *G06F 16/20*)}
	H04L 41/0246	·· {exchanging or transporting network management information using Internet, e.g. aspects relating to embedding network management web servers in network elements, web service for network management purposes, aspects related to Internet applications or services or web-based protocols, simple object access protocol [SOAP] (web-based network application protocols H04L 67/02; web-based network application protocols for remote control of end-devices or monitoring of remote application data H04L 67/025; proprietary application protocols for remote control of end-devices in special networking environments H04L 67/125; retrieval from the Internet ~~G06F 17/30861~~ *G06F 16/95*)}

U	H04L 41/50	· {Network service management, i.e. ensuring proper service fulfillment according to an agreement or contract between two parties, e.g. between an IT-provider and a customer}
U	H04L 41/508	· · {based on type of value added network service under agreement}
	H04L 41/5083	· · · {wherein the managed service relates to web hosting (web-based network application protocols H04L 67/02; web site content organization and management ~~G06F 17/3089~~ *G06F 16/958*; video-hosting H04N 21/2743)}
	H04L 41/5096	· · · {wherein the managed service relates to distributed or central networked applications (management of file systems ~~G06F 17/30067~~ *G06F 16/10*; management of structured data stores ~~G06F 17/30286~~ *G06F 16/20*)}

U   **H04L 61/00**   **{Network arrangements or network protocols for addressing or naming}**

NOTE

This group does not cover:
- aspects relating to switching or routing which are covered by groups H04L 45/00 or H04L 49/00;
- aspects relating to configuration management of data networks or network elements in general, which are covered by group H04L 41/08
- aspects of addressing in telephony which are covered by group H04M 7/00;
- aspects of addressing within devices, e.g. process or memory, which are covered by groups G06F 13/42 or G06F 12/00.

U	H04L 61/15	· {Directories; Name-to-address mapping (telephone directories in user terminals H04M 1/27)}
	H04L 61/1552	· · {Mechanisms for table lookup, e.g. between directories; Directory data structures; Synchronization of directories (information retrieval in file systems ~~G06F 17/30067~~ *G06F 16/10*; information retrieval in structured data stores ~~G06F 17/30286~~ *G06F 16/20*)}
	H04L 61/30	· {Arrangements for managing names, e.g. use of aliases or nicknames (retrieval from the Internet by using information identifiers, e.g. uniform resource locators [URLs] ~~G06F 17/30876~~ *G06F 16/955*; name-to-address mapping H04L 61/15)}

H04L 67/00   **{Network-specific arrangements or communication protocols supporting networked applications (message switching systems H04L 51/00; network management protocols H04L 41/00; routing or path finding of packets in data switching networks H04L 45/00; protocols for real-time multimedia communication H04L 65/00; information retrieval ~~G06F 17/30~~ G06F 16/00; services or facilities specially adapted for wireless communication networks H04W 4/00; network structures or processes for video distribution between server and client or between remote clients H04N 21/00; exchange systems providing special services or facilities to subscribers involving telephonic communications H04M 3/42; distributed information systems G06F 9/00, G06F 17/00; lower layer network functionalities which support application layer provisions H04L 12/00)}**

NOTES

1. This group covers:
   1. Networking arrangements or communication protocols to support networked applications which occur at the abstract network layers 5 to 7 of the OSI layer model. The higher layers constitute the interface between the network and the computer applications that use the network to communicate.
   2. Network-specific aspects of client-server applications as well as of networking arrangements supporting networked/distributed applications, e.g. data transport, scheduling. This group also covers specific networked application layer protocols, e.g. FTP, WAP, HTTP.

2. This group does not cover:

1. Distributed applications which are network-agnostic, i.e. distributed information systems for which the network functions are transparent. These field are covered, e.g. by G06F 9/00, G06F 17/00. Data switching network provisions in general and the lower layer network functionalities which support application layer provisions are covered by H04L 12/00

	H04L 67/02	· {involving the use of web-based technology, e.g. hyper text transfer protocol [HTTP] (information retrieval from the Internet ~~G06F 17/30861~~ *G06F 16/95*)}
U	H04L 67/10	· {in which an application is distributed across nodes in the network (multiprogramming arrangements G06F 9/46)}
U	H04L 67/1002	· · {for accessing one among a plurality of replicated servers, e.g. load balancing (arrangements or protocols for peer-to-peer networking H04L 67/104; protocols for client-server architectures H04L 67/42; allocation of processing resources to service requests in a distributed system G06F 9/5027; rebalancing the processing load in a distributed system G06F 9/5083; wireless network traffic load balancing H04W 28/08; network load balancing, traffic engineering H04L 47/125; video servers using load balancing strategies H04N 21/23103; error detection or correction of the data by redundancy in hardware G06F 11/16)}
	H04L 67/1029	· · · {using data related to the state of servers by a load balancer (server selection based on server parameters H04L 67/1008; performance measurement for load balancing G06F 11/3433; information retrieval in structured data stores ~~G06F 17/30286~~ *G06F 16/20*)}
	H04L 67/104	· · {for peer-to-peer [P2P] networking; Functionalities or architectural details of P2P networks (file transfer, upload, download H04L 67/06; accessing replicated servers H04L 67/1002; presence management H04L 67/24; scheduling provisions H04L 67/32; real-time communications H04L 65/00; information retrieval using distributed database systems ~~G06F 17/30283~~ *G06F 16/27*; small scale hierarchical wireless network topologies H04W 84/10; wireless interfaces between terminal devices H04W 92/18; P2P connections between video clients H04N 21/632; P2P connections between video game machines A63F 13/34)}
	H04L 67/1061	· · · {involving node-based peer discovery mechanisms (access to replicated servers H04L 67/1002; service discovery H04L 67/16; topology discovery for routing H04L 45/02; information retrieval in distributed file systems ~~G06F 17/30067~~ *G06F 16/10*; information retrieval in structured data stores, indexing, querying ~~G06F 17/30286~~ *G06F 16/20*)}
	H04L 67/1095	· · {for supporting replication or mirroring of data, e.g. scheduling or transport for data synchronisation between network nodes or user terminals or syncML (synchronisation in information retrieval in file systems ~~G06F 17/30067~~ *G06F 16/10*; synchronisation in structured data stores ~~G06F 17/30575~~ *G06F 16/27*; mass storage redundancy by mirroring for error detection or correction of data G06F 11/2056)}
	H04L 67/18	· {in which the network application is adapted for the location of the user terminal (wireless application services making use of the location of users or terminals H04W 4/02 takes precedence; location based Web retrieval ~~G06F 17/3087~~ *G06F 16/9537*)}
U	H04L 67/28	· {for the provision of proxy services, e.g. intermediate processing or storage in the network (network management provisions H04L 41/00; network monitoring provisions H04L 43/00; proxies for network security H04L 63/0281; media manipulation, adaptation or conversion in real-time communications H04L 65/601; protocol conversion H04L 69/08)}

	H04L 67/2823	·· {for conversion or adaptation of application content or format (message adaptation based on network or terminal capabilities H04L 51/06; media manipulation, adaptation or conversion in real-time communications H04L 65/601; protocol conversion H04L 69/08; optimising visualization of content for web browsing ~~G06F 17/30905~~*G06F 16/9577*)}
	H04L 67/2838	·· {for integrating service provisioning from a plurality of service providers (web site content organization and management ~~G06F 17/3089~~*G06F 16/958*)}
	H04L 67/2842	·· {for storing data temporarily at an intermediate stage, e.g. caching (distributed storage of data in a network H04L 67/1097; browsing optimization of access to content by caching ~~G06F 17/30902~~*G06F 16/9574*; addressing of a cache within a hierarchically structured memory system G06F 12/0802; disk caching G06F 12/0866)}
	H04L 67/2861	·· {for providing operational support to end devices by emulation, e.g. when they are unavailable, or by off-loading in the network (techniques for recovering from a failure of a protocol instance or entity H04L 69/40; reactions to server failures by a load balancer H04L 67/1034; departure or maintenance mechanisms in peer-to-peer networks H04L 67/1048; terminal emulation H04L 67/08; disconnected operation in file systems ~~G06F 17/30067~~*G06F 16/10*; emulation or software simulation G06F 9/455; input/output emulation function for peripheral devices G06F 13/105)}
U	H04L 67/30	· {involving profiles}
	H04L 67/306	·· {User profiles (configuring for programme initiating G06F 9/44505; information retrieval by personalized querying ~~G06F 17/30867~~*G06F 16/9535*)}

Project: RP0580 (H04N)

U	H04N 1/00127	· {Connection or combination of a still picture apparatus with another apparatus, e.g. for storage, processing or transmission of still picture signals or of information associated with a still picture}
U	H04N 1/00132	·· {in a digital photofinishing system, i.e. a system where digital photographic images undergo typical photofinishing processing, e.g. printing ordering}
	H04N 1/00148	··· {Storage (information retrieval ~~G06F 17/30~~*G06F 16/00*)}
	H04N 1/2166	·· {for mass storage, e.g. in document filing systems (information retrieval ~~G06F 17/30~~*G06F 16/00*)}
U	H04N 21/20	· Servers specifically adapted for the distribution of content, e.g. VOD servers; Operations thereof
U	H04N 21/21	·· Server components or server architectures
	H04N 21/218	··· Source of audio or video content {, e.g. local disk arrays (details of retrieval in video databases ~~G06F 17/30843~~*G06F 16/739*)}
	H04N 21/2183	···· Cache memory {(caches in web servers or browsers ~~G06F 17/30902~~*G06F 16/9574*; intermediate storage and caching in data networks H04L 29/08801)}
U	H04N 21/23	·· Processing of content or additional data; Elementary server operations; Server middleware
U	H04N 21/231	··· Content storage operation, e.g. caching movies for short term storage, replicating data over plural servers, prioritizing data for deletion
	H04N 21/23109	···· {by placing content in organized collections, e.g. EPG data repository (details of retrieval of video data and associated meta data in video databases ~~G06F 17/30843~~*G06F 16/739*)}

	H04N 21/23113	· · · · {involving housekeeping operations for stored content, e.g. prioritizing content for deletion because of storage space restrictions (storage management, e.g. defragmentation G06F 3/0604; snloading stored programs G06F 9/445; housekeeping operations in file systems, e.g. deletion policies ~~G06F 17/30067~~ *G06F 16/10*; buffering arrangements in a network node or in an end terminal in packet networks H04L 49/90)}
	H04N 21/23116	· · · · {involving data replication, e.g. over plural servers (synchronization of replicated data G06F 11/1658; error detection or correction by means of data replication G06F 11/2053; replication in distributed file systems ~~G06F 17/30067~~ *G06F 16/10*; replication in distributed file systems ~~G06F 17/30283~~ *G06F 16/27*; replication or mirroring of data in data networks H04L 29/0854)}
	H04N 21/232	· · · Content retrieval operation {locally} within server, e.g. reading video streams from disk arrays {(storage management G06F 3/0604; details of querying and searching of video data from a database ~~G06F 17/30843~~ *G06F 16/739*)}
	H04N 21/2355	· · · · {involving reformatting operations of additional data, e.g. HTML pages (optimising the visualization of content for information retrieval from the Internet ~~G06F 17/30905~~ *G06F 16/9577*; media manipulation, adaptation or conversion at the source in one way streaming for real-time multimedia communications H04L 29/06489; message adaptation based on network or terminal capabilities in stored and forward packet switching H04L 51/34)}
U	H04N 21/25	· · Management operations performed by the server for facilitating the content distribution or administrating data related to end-users or client devices, e.g. end-user or client device authentication, learning user preferences for recommending movies {(maintenance or administration in data networks H04L 41/00)}
	H04N 21/251	· · · {Learning process for intelligent management, e.g. learning user preferences for recommending movies (details of learning user preferences for the retrieval of video data in a video database ~~G06F 17/30843~~ *G06F 16/739*; computer systems using learning methods G06N 3/08)}
U	H04N 21/258	· · · Client or end-user data management, e.g. managing client capabilities, user preferences or demographics, processing of multiple end-users preferences to derive collaborative data {(arrangements for services using the result on the distributing side of broadcast systems H04H 60/66; data switching network applications involving user or terminal profiles H04L 29/08918)}
U	H04N 21/25808	· · · · {Management of client data (protocols involving terminal profiles for network applications in communication control or processing H04L 29/08927)}
	H04N 21/25825	· · · · · {involving client display capabilities, e.g. screen resolution of a mobile phone (optimising the visualisation of content during browsing in the Internet ~~G06F 17/30905~~ *G06F 16/9577*; processing of terminal status or physical abilities in wireless networks H04W 8/22; authentication in wireless network security H04W 12/06)}
	H04N 21/25841	· · · · · {involving the geographical location of the client (retrieval from the Internet by querying based on geographical locations ~~G06F 17/3087~~ *G06F 16/9537*; arrangements for identifying locations of receiving stations in broadcast systems H04H 60/51; protocols in which the network application is adapted for the location of the user terminal in communication control or processing H04L 29/08657; services making use of the location of users or terminals in wireless networks H04W 4/02; locating users or terminals in wireless networks H04W 64/00)}

U	H04N 21/25866	· · · · {Management of end-user data (customer care in data networks H04L 41/5077)}
	H04N 21/25891	· · · · · {being end-user preferences (retrieval of video data in a video database based on user preferences G06F 17/30843 *G06F 16/739*; arrangements for recognizing users' preferences H04H 60/46; protocols involving user profiles for network applications in communication control or processing H04L 29/08936; processing of user preferences or user profiles in wireless networks H04W 8/18)}
U	H04N 21/262	· · · Content or additional data distribution scheduling, e.g. sending additional data at off-peak times, updating software modules, calculating the carousel transmission frequency, delaying a video stream transmission, generating play-lists {(scheduling strategies for dispatcher in multiprogramming arrangements G06F 9/4881; arrangements for scheduling broadcast services or broadcast-related services H04H 60/06; protocols for scheduling and organising the servicing of requests, whereby a time schedule is established for servicing the requests in network applications in communication control or processing H04L 29/08963; flow control in packet networks H04L 47/10)}
	H04N 21/26258	· · · · {for generating a list of items to be played back in a given order, e.g. playlist, or scheduling item distribution according to such list (retrieval of multimedia data based on playlists G06F 17/30017 *G06F 16/40*)}
U	H04N 21/266	· · · Channel or content management, e.g. generation and management of keys and entitlement messages in a conditional access system, merging a VOD unicast channel into a multicast channel
	H04N 21/2668	· · · · Creating a channel for a dedicated end-user group, e.g. insertion of targeted commercials based on end-user profiles {(information retrieval from the Internet by querying with filtering and personalisation G06F 17/30867 *G06F 16/9535*; arrangements for replacing or switching information during the broadcast H04H 20/10; push services over packet-switching network H04L 12/1859; adaptation of message content in packet-switching networks H04L 51/063)}
U	H04N 21/27	· · Server based end-user applications
	H04N 21/278	· · · Content descriptor database or directory service for end-user access {(details of content or meta data based information retrieval of video data in video databases G06F 17/30843 *G06F 16/739*)}
	H04N 21/432	· · · Content retrieval operation from a local storage medium, e.g. hard-disk {(details of retrieval of video data and associated meta data in video databases G06F 17/30843 *G06F 16/739*)}
U	H04N 21/433	· · · Content storage operation, e.g. storage operation in response to a pause request, caching operations
	H04N 21/4332	· · · · {by placing content in organized collections, e.g. local EPG data repository (interfaces, Database management systems or updating for information retrieval G06F 17/30002 *G06F 16/23*; details of retrieval of video data and associated meta data in video database G06F 17/30843 *G06F 16/739*)}
	H04N 21/4335	· · · · Housekeeping operations, e.g. prioritizing content for deletion because of storage space restrictions {(storage management, e.g. defragmentation G06F 3/0604; unloading stored programs G06F 9/445; storage management in file systems G06F 17/30067 *G06F 16/10*; buffering arrangements in a network node or in an end terminal in packet networks H04L 49/90)}
U	H04N 21/435	· · · Processing of additional data, e.g. decrypting of additional data, reconstructing software from modules extracted from the transport stream

	H04N 21/4355	· · · · {involving reformatting operations of additional data, e.g. HTML pages on a television screen (optimising the visualization of content for information retrieval from the Internet ~~G06F 17/30905~~ *G06F 16/9577*; media manipulation, adaptation or conversion at the destination in one way streaming for real-time multimedia communications H04L 29/06496; adaptation of message content in packet-switching networks H04L 51/066)}
	H04N 21/442	· · · Monitoring of processes or resources, e.g. detecting the failure of a recording device, monitoring the downstream bandwidth, the number of times a movie has been viewed, the storage space available from the internal hard disk {(arrangements for monitoring broadcast services or broadcast-related services H04H 60/29; arrangements for identifying or recognising characteristics with a direct linkage to broadcast information H04H 60/35; monitoring of user activities for profile generation for accessing a video database ~~G06F 17/30843~~ *G06F 16/739*; monitoring in wireless networks H04W 24/00)}
	H04N 21/44204	· · · · {Monitoring of content usage, e.g. the number of times a movie has been viewed, copied or the amount which has been watched (monitoring of user activities for profile generation for accessing a video database ~~G06F 17/30843~~ *G06F 16/739*; protecting generic digital content where the protection is independent of the precise nature of the content G06F 21/10; arrangements for monitoring the use made of the broadcast services in broadcast systems H04H 60/31)}
U	H04N 21/44213	· · · · {Monitoring of end-user related data (arrangements for monitoring the users' behaviour or opinions in broadcast systems H04H 60/33)}
	H04N 21/44222	· · · · · {Monitoring of user selections, e.g. selection of programs, purchase activity (monitoring of user selections in data processing systems G06F 11/34; monitoring of user activities for profile generation for accessing a video database ~~G06F 17/30843~~ *G06F 16/739*; tracking the activity of the end-user H04L 29/08675; arrangements for monitoring the user's behaviour or opinions in broadcast systems H04H 60/33)}
U	H04N 21/45	· · Management operations performed by the client for facilitating the reception of or the interaction with the content or administrating data related to the end-user or to the client device itself, e.g. learning user preferences for recommending movies, resolving scheduling conflicts
U	H04N 21/4508	· · · {Management of client or end-user data}
	H04N 21/4524	· · · · {involving the geographical location of the client (retrieval from the Internet by querying based on geographical locations ~~G06F 17/3087~~ *G06F 16/9537*; systems specially adapted for using geographical information in broadcast systems H04H 60/70; protocols in which the network application is adapted for the location of the user terminal in communication control or processing H04L 29/08657; services making use of the location of users or terminals in wireless networks H04W 4/02; locating users or terminals in wireless networks H04W 64/00)}
	H04N 21/4532	· · · · {involving end-user characteristics, e.g. viewer profile, preferences (monitoring of user activities for profile generation for accessing a video database ~~G06F 17/30843~~ *G06F 16/739*; protocols involving user profiles for network applications in communication control or processing H04L 29/08936; processing of user preferences or user profiles in wireless networks H04W 8/18)}
U	H04N 21/462	· · · Content or additional data management, e.g. creating a master electronic program guide from data received from the Internet and a Head-end, controlling the complexity of a video stream by scaling the resolution or bit-rate based on the client capabilities

	H04N 21/4622	· · · · {Retrieving content or additional data from different sources, e.g. from a broadcast channel and the Internet (web site content organization and management for information retrieval from the Internet G06F 17/3089*G06F 16/958*; transmission by internet of broadcast information H04H 60/82; stock exchange data over packet-switching network H04L 12/1804; push services including data channel over packet-switching network H04L 12/1859)}
	H04N 21/472	· · · End-user interface for requesting content, additional data or services; End-user interface for interacting with content, e.g. for content reservation or setting reminders, for requesting event notification, for manipulating displayed content {(end-user interfaces for retrieving video data from a database G06F 17/30843*G06F 16/739*; content on demand in one way streaming for real-time multimedia communications H04L 29/06462)}
U	H04N 21/4722	· · · · for requesting additional data associated with the content
	H04N 21/4725	· · · · · using interactive regions of the image, e.g. hot spots {(details of information retrieval from the Internet by using URLs G06F 17/30876*G06F 16/955*; processing chained hypermedia data for information retrieval G06F 17/30014*G06F 16/94*)}
U	H04N 21/475	· · · End-user interface for inputting end-user data, e.g. personal identification number [PIN], preference data
	H04N 21/4755	· · · · {for defining user preferences, e.g. favourite actors or genre (retrieval personalisation and generation of user profiles for the retrieval of video data G06F 17/30843*G06F 16/739*; data switching network applications using user profiles H04L 29/08936)}
	H04N 21/4828	· · · · {for searching program descriptors (retrieval of video data G06F 17/30843*G06F 16/739*)}
U	H04N 21/80	· Generation or processing of content or additional data by content creator independently of the distribution process; Content <u>per se</u> {(arrangements for generating broadcast information H04H 60/02)}
U	H04N 21/85	· · Assembly of content; Generation of multimedia applications
U	H04N 21/854	· · · Content authoring
	H04N 21/8543	· · · · using a description language, e.g. Multimedia and Hypermedia information coding Expert Group [MHEG], eXtensible Markup Language [XML] {(information retrieval of semistructured data, the underlying structure being taken into account, e.g. mark-up language structure data G06F 17/30908*G06F 16/80*)}
	H04N 21/8549	· · · · Creating video summaries, e.g. movie trailer {(retrieval in video databases by using presentations in form of a video summary G06F 17/30843*G06F 16/739*)}
U	H04N 21/858	· · · Linking data to content, e.g. by linking an URL to a video object, by creating a hotspot
	H04N 21/8586	· · · · {by using a URL (processing chained hypermedia data for information retrieval G06F 17/30014*G06F 16/94*; information retrieval from the Internet by using URLs G06F 17/30876*G06F 16/955*; URL in broadcast information H04H 20/93; protocols for network applications involving the use of web-based technology H04L 29/0809)}

Project: N/A (A61K)

N	*A61K 33/241*	· · *Lead; Compounds thereof*
		WARNING
		Group A61K 33/241 is incomplete pending reclassification of documents from group A61K 33/24.

Groups A61K 33/24 and A61K 33/241 should be considered in order to perform a complete search.

N	A61K 33/242	·· *Gold; Compounds thereof*

> *WARNING*
>
> *Group A61K 33/242 is incomplete pending reclassification of documents from group A61K 33/24.*
> *Groups A61K 33/24 and A61K 33/242 should be considered in order to perform a complete search.*

N	A61K 33/243	·· *Platinum; Compounds thereof*

> *WARNING*
>
> *Group A61K 33/243 is incomplete pending reclassification of documents from group A61K 33/24.*
> *Groups A61K 33/24 and A61K 33/243 should be considered in order to perform a complete search.*

N	A61K 33/244	·· *Lanthanides; Compounds thereof (medicinal preparations containing radioactive lanthanides for use in therapy or testing in vivo A61K 51/00)*

> *WARNING*
>
> *Group A61K 33/244 is incomplete pending reclassification of documents from group A61K 33/24.*
> *Groups A61K 33/24 and A61K 33/244 should be considered in order to perform a complete search.*

U	**A61K 39/00**	**Medicinal preparations containing antigens or antibodies (materials for immunoassay G01N 33/53)**

NOTES

1. Groups A61K 39/002 - A61K 39/295 cover preparations containing protozoa, bacteria, viruses, or subunits thereof, e.g. membrane parts.

2. Preparation of antigen or antibody compositions is also classified in subclass C12N, if the step of cultivating the microorganism is of interest.

3. Documents relating to new peptides, e.g. enzymes, or new DNA or RNA encoding for peptides and their use in medicinal preparations are classified in subclass C07K or in group C12N 9/00 according to the peptides, with the appropriate indexing codes relating to their medical uses.

4. Documents relating to antibodies or DNA or RNA encoding for antibodies and their use in medicinal preparations are classified in group C07K 16/00 or in group C12N 9/0002 according to the antibodies, with the appropriate indexing codes relating to their medical uses.

5. Documents relating to new therapeutical uses of antibodies or DNA or RNA encoding for antibodies are classified in group C07K 16/00 or in group C12N 9/0002 according to the antibodies, with the appropriate indexing codes relating to their medical uses.

6. Documents relating to medicinal preparations containing different antibodies as active ingredients are classified in group C07K 16/00 according to the different active antibodies, with the appropriate indexing codes relating to their medical uses. However, documents relating to medicinal preparations containing antibodies and other compounds as active ingredients are classified in groups A61K 39/395 - A61K 39/42, in association with symbol A61K 2300/00 in Combination Sets.

U	A61K 39/0005	· {Vertebrate antigens (from snakes A61K 39/38)}

U	A61K 39/0011	· · {Cancer antigens}

WARNING

Group A61K 39/0011 is incomplete pending reclassification of documents from group A61K 38/1764. Group A61K 39/0011 is also impacted by reclassification into groups A61K 39/001102, A61K 39/001103, A61K 39/001104, A61K 39/001106, A61K 39/001107, A61K 39/001108, A61K 39/001109, A61K 39/00111, A61K 39/001111, A61K 39/001112, A61K 39/001113, A61K 39/001114, A61K 39/001116, A61K 39/001117, A61K 39/001118, A61K 39/001119, A61K 39/00112, A61K 39/001121, A61K 39/001122, A61K 39/001124, A61K 39/001126, A61K 39/001128, A61K 39/001129, A61K 39/00113, A61K 39/001131, A61K 39/001132, A61K 39/001133, A61K 39/001134, A61K 39/001135, A61K 39/001136, A61K 39/001138, A61K 39/001139, A61K 39/00114, A61K 39/001141, A61K 39/001142, A61K 39/001144, A61K 39/001148, A61K 39/001149, A61K 39/00115, A61K 39/001151, A61K 39/001152, A61K 39/001153, A61K 39/001154, A61K 39/001156, A61K 39/001157, A61K 39/001158, A61K 39/001159, A61K 39/00116, A61K 39/001161, A61K 39/001162, A61K 39/001163, A61K 39/001164, A61K 39/001166, A61K 39/001168, A61K 39/001169, A61K 39/00117, A61K 39/001171, A61K 39/001172, A61K 39/001173, A61K 39/001174, A61K 39/001176, A61K 39/001178, A61K 39/00118, A61K 39/001181, A61K 39/001182, A61K 39/001184, A61K 39/001186, A61K 39/001188, A61K 39/001189, A61K 39/00119, A61K 39/001191, A61K 39/001192, A61K 39/001193, A61K 39/001194, A61K 39/001195, A61K 39/001196, A61K 39/001197, A61K 39/001198, A61K 2039/80, A61K 2039/804, A61K 2039/812, A61K 2039/82, A61K 2039/828, A61K 2039/836, A61K 2039/844, A61K 2039/852, A61K 2039/86, A61K 2039/868, A61K 2039/876, A61K 2039/884, and A61K 2039/892.
All groups listed in this Warning should be considered in order to perform a complete search.

U	A61K 39/001102	· · · {Receptors, cell surface antigens or cell surface determinants}

WARNING

Groups A61K 39/001102 -A61K 39/001198 are incomplete pending reclassification of documents from group A61K 39/0011.
Groups A61K 38/1764, A61K 39/0011, and A61K 39/001102-A61K 39/001198 and A61K 39/001102 should be considered in order to perform a complete search.

U	A61K 39/001111	· · · · {Immunoglobulin superfamily}
	A61K 39/001113	· · · · · {CD22, BL-CAM, siglec-2, sialic acid- binding Ig-related lectin 2 }
	A61K 39/001116	· · · · {Receptors for cytokines }
	A61K 39/001126	· · · · {CD38 not IgG}
	A61K 39/001128	· · · · {CD44 not IgG}
U	A61K 39/001154	· · · {Enzymes}
	A61K 39/001163	· · · · {Phosphatases }
	A61K 39/001164	· · · · {GTPases, e.g. Ras, Rho }
	A61K 39/00119	· · · {Melanoma antigens }

Project: N/A (A62D)

A62D 3/00   **Processes for making harmful chemical substances harmless or less harmful, by effecting a chemical change in the substances (consuming noxious gases by combustion F23G 7/06)**

NOTES

1. This group does not cover:
  - chemical or physico-chemical type processes where eradicating or diminishing the dangerousness of harmful chemical substances produces useful products, e.g. cement. These types of processes are covered by the appropriate subclass for making the specific product. However, in situations where processes for making products include a subset of process steps with eradicating or diminishing the dangerousness of a harmful chemical substance as its fundamental goal, and this subset is in itself novel and unobvious, this subset is covered by group A62D 3/00.

{
  - This group does not cover:
  - Chemical or biological purification of smoke or fumes, covered by B01D 53/34
  - Disposal of solid waste, destroying solid waste or transforming solid waste into something useful or harmless, covered by B09B
  - Chemical reclamation of contaminated soil, covered by B09C 1/08
  - Treatment of waste water, sewage or sludge, covered by C02F
  - Incorporating waste or residues in a glass or vitreous matrix covered by C03C 1/00
  - Incorporating waste or residues in cement or cementitious compositions, covered by C04B 7/24
  - Use of waste materials as filler for mortars, concrete or the like covered by C04B 18/04
  - Destructive distillation, covered by C10B 53/00
  - Obtaining metals from residues or scrap, covered by C22B
  - Consuming waste by combustion, covered by F23G
  - Treatment of radioactively-contaminated waste, covered by G21F 9/00
}

2. In this group the following term is used with the meaning indicated: "harmful chemical substances" are chemical waste substances which are too hazardous or toxic to be discarded in an ordinary municipal landfill.

3. In this group, the first place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, classification is made in the first appropriate place.

4. In this group, it is desirable to add the indexing code(s) of group A62D 2101/00 relating to the nature of the harmful chemical substance.

5. {This group covers
  - Processes for combatting harmful chemical substances or agents or materials containing harmful chemical agents. These processes can be chemical or physico-chemical, e.g. use of special chemical reagents for chemical fixing, and result in the decomposition or transformation of the agents in harmless or less harmful substances, because of the change in its chemical constitution. These processes can comprise the step of dissolving or dispersing the hazardous substances in water for the purpose of treating them or the step of producing a gaseous product from a non-gaseous hazardous substance.
  - Treatment of specific hazardous substances in sludge, e.g. residue from industrial processes, with the exception of sludge from (municipal) sewage treatment.
}

6. {This group does not cover:

- Chemical or biological purification of smoke or fumes, covered by B01D 53/34
- Disposal of solid waste, destroying solid waste or transforming solid waste into something useful or harmless, covered by B09B
- Chemical reclamation of contaminated soil, covered by B09C 1/08
- Treatment of waste water, sewage or sludge, covered by C02F
- Incorporating waste or residues in a glass or vitreous matrix covered by C03C 1/00
- Incorporating waste or residues in cement or cementitious compositions, covered by C04B 7/24
- Use of waste materials as filler for mortars, concrete or the like covered by C04B 18/04
- Destructive distillation, covered by C10B 53/00
- Obtaining metals from residues or scrap, covered by C22B
- Consuming waste by combustion, covered by F23G
- Treatment of radioactively-contaminated waste, covered by G21F 9/00

}

Project: N/A (A63F)

U **A63F 7/00** **Indoor games using small moving playing bodies, e.g. balls, discs or blocks (board games, raffle games A63F 3/00; roulette games A63F 5/00; miniature bowling games A63D 3/00; bagatelle or similar games A63D 13/00; billiards, pocket billiards A63D 15/00)**

A63F 7/22 · ~~in which the playing bodies are projected through the air {~~*Accessories* ~~(not used, see subgroups of A63F 7/06)}~~*; Details*

Project: N/A (B08B)

U **B08B 9/00** **Cleaning hollow articles by methods or apparatus specially adapted thereto (B08B 3/12, B08B 6/00 take precedence)**

U B08B 9/08 · Cleaning containers, e.g. tanks

U B08B 9/0839 · · {Cleaning milk churns (B08B 9/0804, B08B 9/20 take precedence)}

B08B 9/0843 · · · {for large numbers of milk ~~chruns~~*churns*}

Project: N/A (F16B)

F16B 5/00 **Joining sheets or plates {, e.g. panels,~~,~~} to one another or to strips or bars parallel to them ({F16B 17/00 takes precedence;} by sticking together F16B 11/00; dowel connections F16B 13/00; pins, including deformable elements F16B 19/00; covering of walls E04F 13/00; fastening signs, plates, panels or boards to a supporting structure, fastening readily-detachable elements, e.g. letters to signs, plates, panels, or boards, G09F 7/00)**

Project: N/A (G06F)

U G06F 19/70 · {Chemoinformatics, i.e. data processing methods or systems for the retrieval, analysis, visualisation, or storage of physicochemical or structural data of chemical compounds (in silico methods of screening virtual chemical libraries C40B 30/02; in silico or mathematical methods of creating virtual chemical libraries C40B 50/02; computer-aided design per se G06F 17/50; bioinformatics G06F 19/10; processing of 2D or 3D images G06T)}

G06F 19/705 · · {for database search of chemical structures, e.g. full structure search, substructure search, similarity search, pharmacophore search, 3D structure search (information retrieval in general ~~G06F 17/30~~*G06F17/30*)}