Compilation of Changes to the CPC Scheme Between 2017.02 and 2017.05

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~~

- 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: N/A (A01B)

U	**A01B 51/00**	**Undercarriages specially adapted for mounting-on various kinds of agricultural tools or apparatus (general vehicle aspects, <u>see</u> the relevant subclass of class B60 or B62)**
U	A01B 51/02	· propelled by a motor
	A01B 51/026	· · {of the automotive vehicle type, e.g. including driver ~~accomodation~~*accommodation* (A01B 51/023 takes precedence)}

Project: N/A (A41D)

U	**A41D 1/00**	**Garments (for children A41D 11/00)**
	A41D 1/002	· {adapted to ~~accomodate~~*accommodate* electronic equipment (patients' garments for medical monitoring A41D 13/1281; luminous ornaments A41D 27/085)}

Project: N/A (A47B)

U	**A47B 77/00**	**Kitchen cabinets (tops specially designed for working on A47B 96/18)**
U	A47B 77/04	· Provision for particular uses of compartments or other parts; {Compartments moving up and down, revolving parts (cabinets in general A47B 49/00, A47B 51/00)}
	A47B 77/18	· · by special arrangements for ~~accomodating~~*accommodating* removable containers

Project: RP0074 (A47D)

U	**A47D 1/00**	**Children's chairs (chairs generally A47C)**
U	A47D 1/006	· {dismountable}
C	A47D 1/008	· {with trays *(combinations of chairs and tables A47B 83/02; children's chairs combined with tables A47D 3/00)*}

> *WARNING*
> *Group A47D 1/008 is impacted by reclassification into groups A47D 1/0081, A47D 1/0083 and A47D 1/0085.*
> *Groups A47D 1/008 and A47D 1/0081, A47D 1/0083 and A47D 1/0085 should be considered in order to perform a complete search.*

N	*A47D 1/0081*	· · *{adjustable}*

> *WARNING*
> *Group A47D 1/0081 is incomplete pending reclassification of documents from group A47D 1/008.*
> *Groups A47D 1/008 and A47D 1/0081 should be considered in order to perform a complete search.*

N	*A47D 1/0083*	· · *{movable to inoperative position}*

> *WARNING*
>
> *Group A47D 1/0083 is incomplete pending reclassification of documents from group A47D 1/008.*
> *Groups A47D 1/008 and A47D 1/0083 should be considered in order to perform a complete search.*

N	*A47D 1/0085*	· · *{removable}*

> *WARNING*
>
> *Group A47D 1/0085 is incomplete pending reclassification of documents from group A47D 1/008.*
> *Groups A47D 1/008 and A47D 1/0085 should be considered in order to perform a complete search.*

C	A47D 1/02	· Foldable chairs {(foldable rocking-chairs A47D 13/10)}

> *WARNING*
> *Group A47D 1/02 is impacted by reclassification into group A47D 1/023.*
> *Groups A47D 1/02 and A47D 1/023 should be considered in order to perform a complete search.*

N	*A47D 1/023*	· · *{of high chair type}*

> *WARNING*
>
> *Group A47D 1/023 is incomplete pending reclassification of documents from group A47D 1/02.*
> *Groups A47D 1/02 and A47D 1/023 should be considered in order to perform a complete search.*

M	A47D 1/04	· convertible from a high chair to a low one *{, e.g.}* by reversing
C	**A47D 3/00**	**Children's tables {(~~school desks or tables A47B 41/00;~~ school forms A47B 39/00*; school desks or tables A47B 41/00*)}**

> *WARNING*
> *Group A47D 3/00 is impacted by reclassification into group A47D 3/001.*
> *Group A47D 3/00 and A47D 3/001 should be considered in order to perform a complete search.*

N	*A47D 3/001*	· *{surrounding the seat}*

> *WARNING*
>
> *Group A47D 3/001 is incomplete pending reclassification of documents from group A47D 3/00.*
> *Groups A47D 3/00 and A47D 3/001 should be considered in order to perform a complete search.*

Project: RP0018 (A61B)

U	**A61B 18/00**	**Surgical instruments, devices or methods for transferring non-mechanical forms of energy to or from the body (eye surgery A61F 9/007; ear surgery A61F 11/00)**
U	A61B 18/18	· by applying electromagnetic radiation, e.g. microwaves (radiation therapy A61N 5/00)
U	A61B 18/20	· · using laser
U	A61B 2018/2005	· · · {with beam delivery through an interstitially insertable device, e.g. needle}

M	A61B 18/201	· · · {~~the~~*with* beam ~~being delivered~~*delivery* through a hollow tube, e.g. forming an articulated arm (through a flexible conduit A61B 18/22); Hand-pieces therefor}
U	A61B 2018/2015	· · · {Miscellaneous features}
C	A61B 2018/202	· · · · {Laser *enclosed* in ~~handpiece~~*a hand-piece*}

> WARNING
> Group A61B 2018/202 is impacted by reclassification into group A61B 2018/2023.
> Groups A61B 2018/202 and A61B 2018/2023 should be considered in order to perform a complete search.

N	A61B 2018/2023	· · · · · {Self-contained devices, i.e. with power supply in the hand-piece}

> WARNING
> Group A61B 2018/2023 is incomplete pending reclassification of documents from group A61B 2018/202.
> Groups A61B 2018/202 and A61B 2018/2023 should be considered in order to perform a complete search.

U	A61B 2018/2025	· · · {with a pilot laser}
U	A61B 18/203	· · · {applying laser energy to the outside of the body}
C	A61B 2018/2035	· · · {Beam shaping *or redirecting*; Optical components therefor (A61B 2018/2255 takes precedence)}

> WARNING
> Group A61B 2018/2035 is impacted by reclassification into groups A61B 2018/20361, A61B 2018/20553, A61B 2018/20554, A61B 2018/205545, and A61B 2018/205547.
> Groups A61B 2018/2035, A61B 2018/20361, A61B 2018/20553, A61B 2018/20554, A61B 2018/205545, and A61B 2018/205547 should be considered in order to perform a complete search.

Q	A61B 2018/20351	· · · · {Scanning mechanisms}

> WARNING
> Group A61B 2018/20351 is impacted by reclassification into groups A61B 2018/20353 and A61B 2018/20355.
> Groups A61B 2018/20351, A61B 2018/20353 and A61B 2018/20355 should be considered in order to perform a complete search.

N	A61B 2018/20353	· · · · · {Scanning in three dimensions [3D]}

> WARNING
> Group A61B 2018/20353 is incomplete pending reclassification of documents from group A61B 2018/20351.
> Groups A61B 2018/20353 and A61B 2018/20351 should be considered in order to perform a complete search.

N	A61B 2018/20355	· · · · · {Special scanning path or conditions, e.g. spiral, raster or providing spot overlap}

> WARNING
> Group A61B 2018/20355 is incomplete pending reclassification of documents from group A61B 2018/20351.
> Groups A61B 2018/20355 and A61B 2018/20351 should be considered in order to perform a complete search.

N	A61B 2018/20357	· · · · · {by movable optical fibre end}
N	A61B 2018/20359	· · · · · {by movable mirrors, e.g. galvanometric}

N   A61B 2018/20361   · · · · {with redirecting based on sensed condition, e.g. tissue analysis or tissue movement}

> *WARNING*
>
> *Group A61B 2018/20361 is incomplete pending reclassification of documents from group A61B 2018/2035.*
> *Groups A61B 2018/20361 and A61B 2018/2035 should be considered in order to perform a complete search.*

M   A61B 2018/204   · · · · {~~Attenuator~~ *Attenuators*}

M   A61B 2018/2045   · · · · {~~Chopper~~ *Choppers*}

U   A61B 2018/205   · · · · · {with electronic means, e.g. acousto-optic}

U   A61B 2018/2055   · · · · · {with mechanical means}

N   A61B 2018/20553   · · · · {with special lens or reflector arrangement (A61B 2018/2255, A61B 2018/2261, A61B 2018/2266, A61B 2018/2272, A61B 2018/2277, A61B 2018/2283 take precedence)}

> *WARNING*
>
> *Group A61B 2018/20553 is incomplete pending reclassification of documents from group A61B 2018/2035.*
> *Groups A61B 2018/20553 and A61B 2018/2035 should be considered in order to perform a complete search.*

N   A61B 2018/20554   · · · · {Arrangements for particular intensity distribution, e.g. tophat}

> *WARNING*
>
> *Group A61B 2018/20554 is incomplete pending reclassification of documents from group A61B 2018/2035.*
> *Groups A61B 2018/20554 and A61B 2018/2035 should be considered in order to perform a complete search.*

N   A61B 2018/205545   · · · · {Arrangements for particular spot shape, e.g. square or annular}

> *WARNING*
>
> *Group A61B 2018/205545 is incomplete pending reclassification of documents from group A61B 2018/2035.*
> *Groups A61B 2018/205545 and A61B 2018/2035 should be considered in order to perform a complete search.*

N   A61B 2018/205547   · · · · {Controller with specific architecture or programmatic algorithm for directing scan path, spot size or shape, or spot intensity, fluence or irradiance}

> *WARNING*
>
> *Group A61B 2018/205547 is incomplete pending reclassification of documents from group A61B 2018/2035.*
> *Groups A61B 2018/205547 and A61B 2018/2035 should be considered in order to perform a complete search.*

U   A61B 2018/206   · · · {the laser light passing along a liquid-filled conduit}

U   A61B 2018/2065   · · · {Multiwave; Wavelength mixing, e.g. using four or more wavelengths (pilot laser A61B 2018/2025)}

U   A61B 2018/207   · · · · {mixing two wavelengths}

U   A61B 2018/2075   · · · · {mixing three wavelengths}

U   A61B 2018/208   · · · {with multiple treatment beams not sharing a common path, e.g. non-axial or parallel}

D   A61B 2018/2085   · · · {~~Scanning mechanisms~~}

> <administratively transferred to A61B 2018/20351>

D	A61B 2018/209	· · · · {by movable optical fibre end}
		<administratively transferred to A61B 2018/20357>
D	A61B 2018/2095	· · · · {by movable mirror, e.g. galvanometric}
		<administratively transferred to A61B 2018/20359>
C	A61B 18/22	· · · the beam being directed along or through a flexible conduit, e.g. an optical fibre; {Couplings *or*, hand-pieces therefor

> *WARNING*
> *Group A61B 18/22 is impacted by reclassification into groups A61B 18/22 and A61B 2018/2247.*
> *Groups A61B 18/22 and A61B 2018/2247 should be considered in order to perform a complete search.*

U	A61B 2018/2205	· · · · {Characteristics of fibres}
U	A61B 2018/2211	· · · · · {Plurality of fibres}
M	A61B 2018/2216	· · · · · · {braided,*Braided or* helically wound}
U	A61B 2018/2222	· · · · · {Fibre material or composition}
M	A61B 2018/2227	· · · · · · {hollow fibre*Hollow fibres*}
M	A61B 2018/2233	· · · · · · {solid*Solid* transparent for far infrared light}
M	A61B 2018/2238	· · · · {with means for selectively laterally deflecting the tip of the fibre (with balloon A61B 2017/22051)}
U	A61B 2018/2244	· · · · {Features of optical fibre cables, e.g. claddings}
N	*A61B 2018/2247*	· · · · {*Fibre breakage detection*}

> *WARNING*
> *Group A61B 2018/2247 is incomplete pending reclassification of documents from group A61B 18/22.*
> *Groups A61B 18/22 and A61B 2018/2247 should be considered in order to perform a complete search.*

C	A61B 2018/225	· · · · {Features of handpieces*hand-pieces* (A61B 2018/2255 takes precedence)}

> *WARNING*
> *Group A61B 2018/225 is impacted by reclassification into group A61B 2018/2253.*
> *Groups A61B 2018/225 and A61B 2018/2253 should be considered in order to perform a complete search.*

N	*A61B 2018/2253*	· · · · · {*characterised by additional functions, e.g. surface cooling or detecting pathological tissue*}

> *WARNING*
> *Group A61B 2018/2253 is incomplete pending reclassification of documents from group A61B 2018/225.*
> *Groups A61B 2018/2253 and A61B 2018/225 should be considered in order to perform a complete search.*

C	A61B 2018/2255	· · · · {Optical elements at the distal end of probe tips}

> *WARNING*
> *Group A61B 2018/2255 is impacted by reclassification into groups A61B 2018/2285 and A61B 2018/22853.*
> *Groups A61B 2018/2255, A61B 2018/2285 and A61B 2018/22853 should be considered in order to perform a complete search.*

M	A61B 2018/2261	· · · · · {with scattering, diffusing*diffusion* or dispersing*dispersion* of light}

U	A61B 2018/2266	· · · · · {with a lens, e.g. ball tipped}
M	A61B 2018/2272	· · · · · {with ~~a~~ reflective or refractive ~~surface~~*surfaces* for deflecting the beam (A61B 2018/2261, A61B 2018/2266 take precedence)}
M	A61B 2018/2277	· · · · · · {with ~~a~~ refractive ~~surface~~*surfaces*}
M	A61B 2018/2283	· · · · · · {with ~~a~~ pivotable ~~mirror~~*mirrors*}
N	*A61B 2018/2285*	· · · · · {with removable, replacable, or exchangable tips}

> *WARNING*
>
> *Group A61B 2018/2285 is incomplete pending reclassification of documents from group A61B 2018/2255.*
> *Groups A61B 2018/2285 and A61B 2018/2255 should be considered in order to perform a complete search.*

N	*A61B 2018/22853*	· · · · · · {Means to identify tip configuration}

> *WARNING*
>
> *Group A61B 2018/22853 is incomplete pending reclassification of documents from group A61B 2018/2255.*
> *Groups A61B 2018/22853 and A61B 2018/2255 should be considered in order to perform a complete search.*

U	A61B 2018/2288	· · · · {the optical fibre cable having a curved distal end}
U	A61B 2018/2294	· · · · · {with a diffraction grating}
U	A61B 18/24	· · · with a catheter (A61B 18/26, A61B 18/28 take precedence)
U	A61B 18/245	· · · · · {for removing obstructions in blood vessels or calculi}
U	A61B 18/26	· · · for producing a shock wave, e.g. laser lithotripsy
U	A61B 2018/263	· · · · · {the conversion of laser energy into mechanical shockwaves taking place in a liquid}
U	A61B 2018/266	· · · · · {the conversion of laser energy into mechanical shockwaves taking place in a part of the probe}
U	A61B 18/28	· · · for heating a thermal probe or absorber

Project: RP0235 (A61G)

C	**A61G 17/00**	**Coffins; Funeral wrappings; Funeral urns**

> *WARNING*
> *Group A61G 17/00 is impacted by reclassification into group A61G 17/001.*
> *Groups A61G 17/00 and A61G 17/001 should be considered in order to perform a complete search.*

N	*A61G 17/001*	· {Reusable}

> *WARNING*
>
> *Group A61G 17/001 is incomplete pending reclassification of documents from group A61G 17/00.*
> *Groups A61G 17/00 and A61G 17/001 should be considered in order to perform a complete search.*

C	A61G 17/007	· characterised by the construction material used, e.g. biodegradable material; Use of several materials

> WARNING
>
> ~~This group and its subgroups are not complete pending reclassification; see also group A61G 17/00~~
>
> *Group A61G 17/007 is impacted by reclassification into groups A61G 17/007, A61G 17/0106, A61G 17/0136 and A61G 17/0166.*

> *All groups listed in this Warning should be considered in order to perform a complete search.*

U	A61G 17/0076	· · {Metal}
N	A61G 17/0106	· · {Wood}

> *WARNING*
>
> *Group A61G 17/0106 is incomplete pending reclassification of documents from group A61G 17/007.*
> *Groups A61G 17/0106 and A61G 17/007 should be considered in order to perform a complete search.*

N	A61G 17/0136	· · {Plastic material}

> *WARNING*
>
> *Group A61G 17/0136 is incomplete pending reclassification of documents from group A61G 17/007.*
> *Groups A61G 17/007 and A61G 17/0136 should be considered in order to perform a complete search.*

N	A61G 17/0166	· · {Glass}

> *WARNING*
>
> *Group A61G 17/0166 is incomplete pending reclassification of documents from group A61G 17/007.*
> *Groups A61G 17/007 and A61G 17/0166 should be considered in order to perform a complete search.*

C	A61G 17/02	· Coffin closures; Packings therefor

> *WARNING*
>
> *Group A61G 17/02 is impacted by reclassification into groups A61G 17/02, A61G 17/024, A61G 17/028, A61G 17/032, A61G 17/034 and A61G 17/036.*
> *All groups listed in this Warning should be considered in order to perform a complete search.*

N	A61G 17/024	· · {Sliding closures}

> *WARNING*
>
> *Group A61G 17/024 is incomplete pending reclassification of documents from group A61G 17/02.*
> *Groups A61G 17/02 and A61G 17/024 should be considered in order to perform a complete search.*

N	A61G 17/028	· · {Swinging closures}

> *WARNING*
>
> *Group A61G 17/028 is incomplete pending reclassification of documents from group A61G 17/02.*
> *Groups A61G 17/02 and A61G 17/028 should be considered in order to perform a complete search.*

N	A61G 17/032	· · {Support for closures (support for whole coffin A61G 19/00)}

> *WARNING*
>
> *Group A61G 17/032 is incomplete pending reclassification of documents from group A61G 17/02.*
> *Groups A61G 17/02 and A61G 17/032 should be considered in order to perform a complete search.*

N	A61G 17/034	· · {Foldable, pliable or separable closures}

> *WARNING*
>
> *Group A61G 17/034 is incomplete pending reclassification of documents from group A61G 17/02.*
> *Groups A61G 17/02 and A61G 17/034 should be considered in order to perform a complete search.*

N	A61G 17/036	· · {Packings and seals}

> *WARNING*
>
> *Group A61G 17/036 is incomplete pending reclassification of documents from group A61G 17/02.*
> *Groups A61G 17/02 and A61G 17/036 should be considered in order to perform a complete search.*

C	A61G 17/04	· Fittings for coffins

> *WARNING*
>
> *Group A61G 17/04 is impacted by reclassification into groups A61G 17/04, A61G 17/0405 and A61G 17/0407.*
> *All groups listed in this Warning should be considered in order to perform a complete search.*

N	A61G 17/0405	· · {Joints, e.g. hinges}

> *WARNING*
>
> *Group A61G 17/0405 is incomplete pending reclassification of documents from group A61G 17/04.*
> *Groups A61G 17/04 and A61G 17/0405 should be considered in order to perform a complete search.*

N	A61G 17/0407	· · {Corner structures}

> *WARNING*
>
> *Group A61G 17/0407 is incomplete pending reclassification of documents from group A61G 17/04.*
> *Groups A61G 17/04 and A61G 17/0407 should be considered in order to perform a complete search.*

Project: N/A (A61K)

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; {micro-organisms per se C12N})**

NOTES

1. This subclass covers 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 in vivo test, e.g. X-ray contrast or skin patch test compositions (measuring or testing processes involving enzymes or micro-organisms C12Q; in vitro 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 used in the CPC scheme. Subject matter covered by these 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

Project: N/A (A61L)

A61L   **METHODS OR APPARATUS FOR STERILISING MATERIALS OR OBJECTS IN GENERAL; DISINFECTION, STERILISATION, OR DEODORISATION OF AIR; CHEMICAL ASPECTS OF BANDAGES, DRESSINGS, ABSORBENT PADS, OR SURGICAL ARTICLES; MATERIALS FOR BANDAGES, DRESSINGS, ABSORBENT PADS, OR SURGICAL ARTICLES (preservation of bodies or disinfecting characterised by the agent employed A01N; preserving, e.g. sterilising, food or foodstuffs A23; preparations for medical, dental or toilet purposes A61K; preparation of ozone C01B 13/10)**

WARNINGS

1. The following IPC groups are not used in the CPC system. Subject matter covered by these groups is classified in the following CPC groups:

A61L 33/10	covered by	A61L 33/0011
A61L 33/14	covered by	A61L 33/0011
A61L 33/16	covered by	A61L 33/0047
A61L 101/00-A61L 101/56	*covered by*	

2. IPC7 groups A61L 2/07 and subgroups, and A61L 9/012 - A61L 9/014 might be incomplete as relevant documents might still be classified in the hierarchical higher groups

Project: N/A (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 1/36	· Other treatment of blood in a by-pass of the natural circulatory system, e.g. temperature adaptation, irradiation; {Extra-corporeal blood circuits}
U	A61M 1/3621	· · {Extra-corporeal blood circuits (single-needle circuits A61M 1/30)}
	A61M 1/367	· · · {Circuit parts not covered by the ~~preceeding~~ *preceding* subgroups of group A61M 1/3621}

Project: RP0143 (A61M)

U	**A61M 5/00**	**Devices for bringing media into the body in a subcutaneous, intra-vascular or intramuscular way; Accessories therefor, e.g. filling or cleaning devices, arm-rests ({vaccination appliances for veterinary use A61D 1/025} ; tube connectors, tube couplings, valves or branch units specially adapted for medical use A61M 39/00; containers specially adapted for medical or pharmaceutical purposes A61J 1/00; {combinations of vial and syringe for mixing or transferring their contents A61J 1/20; holders for containers for collecting, storing or administering blood or medical fluids A61J 1/16})**
U	A61M 5/178	· Syringes
U	A61M 5/31	· · Details
U	A61M 5/315	· · · Pistons; Piston-rods; Guiding, blocking or restricting the movement of the rod {or piston}; Appliances on the rod for facilitating dosing; {Dosing mechanisms}
E	A61M 5/31501	· · · · {Means for blocking or restricting the movement of the rod or piston (A61M 5/5013 takes precedence)}
D	A61M 5/31503	· · · · ·

<administratively transferred to A61M 5/31501>

| M | A61M 5/31505 | · · · · · · {Integral with the syringe barrel, i.e. connected to the barrel so as to make up a single complete piece or unit} |

M	A61M 2005/31506	· · · · · · ~~-~~ {formed as a single piece, e.g. ~~molded~~*moulded*}
M	A61M 2005/31508	· · · · · ~~-~~ {provided on the piston-rod}
M	A61M 2005/3151	· · · · · ~~-~~ {by friction}
U	A61M 5/31511	· · · · {Piston or piston-rod constructions, e.g. connection of piston with piston-rod (A61M 5/5066 takes precedence)}

Project: N/A (A63B)

A63B **APPARATUS FOR PHYSICAL TRAINING, GYMNASTICS, SWIMMING, CLIMBING, OR FENCING; BALL GAMES; TRAINING EQUIPMENT (apparatus for passive exercising, massage A61H)**

WARNING

The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:

A63B 7/06	covered by	A63G 1/00
A63B 21/075	covered by	A63B 21/072
A63B 22/10	covered by	A63B 22/0605 in combination with A63B 22/0002
A63B 22/12	covered by	A63B 22/0605 in combination with A63B 22/001
A63B 22/08	*covered by*	
A63B 29/04	covered by	A63B 29/00
A63B 31/16	covered by	A63B 31/14 - A63B 31/18
A63B 63/02	covered by	A63B 63/00
A63B 63/04	covered by	A63B 63/00
A63B 69/22	covered by	A63B 69/20
A63B 69/28	covered by	A63B 69/20
A63B 69/30	covered by	A63B 69/20
A63B 71/16	covered by	A63B 71/14 - A63B 71/148

Project: MP0140 (B01D)

U	**B01D 39/00**	**Filtering material for liquid or gaseous fluids**
M	B01D 39/08	· Filter cloth, i.e. woven, knitted or interlaced material (metallic B01D 39/10)

> ~~WARNING~~
> ~~Groups B01D 39/083 and B01D 39/086 are incomplete pending a reorganisation, see also B01D 39/08~~

U	**B01D 47/00**	**Separating dispersed particles from gases, air or vapours by liquid as separating agent (B01D 45/10 takes precedence; fractionating columns or parts thereof B01D 3/16)**
M	B01D 47/02	· by passing the gas or air or vapour over or through a liquid bath

> ~~WARNING~~
> ~~Groups B01D 47/021 - B01D 47/028 are not complete pending reclassification; see also this group~~

M	B01D 47/06	· Spray cleaning

> ~~WARNING~~
> ~~Groups B01D 47/063 and B01D 47/066 are not complete pending reclassification, see also B01D 47/06~~

M	B01D 47/08	· · with rotary nozzles

> WARNING
> Group B01D 47/085 is not complete pending reclassification, see also B01D 47/08

U	**B01D 53/00**	**Separation of gases or vapours; Recovering vapours of volatile solvents from gases; Chemical or biological purification of waste gases, e.g. engine exhaust gases, smoke, fumes, flue gases, aerosols, (recovery of volatile solvents by condensation B01D 5/00; sublimation B01D 7/00; cold traps, cold baffles B01D 8/00; working-up undefined gaseous mixtures obtained by cracking hydrocarbon oils C10G 70/00; cleaning coal gas C10K; working-up of natural gas, or synthetic natural gas, C10L 3/10; separation of difficult-to-condense gases or air by liquefaction F25J; for investigating materials G01N 30/00)**

NOTE
Group B01D 53/34 takes precedence over groups B01D 53/02 - B01D 53/32

U	B01D 53/34	· Chemical or biological purification of waste gases
U	B01D 53/92	· · of engine exhaust gases (exhaust {or silencing} apparatus {for internal combustion engines, machines or engines in general}, having means for purifying, {rendering innocuous} or otherwise treating exhaust gases F01N 3/00)
U	B01D 53/94	· · · by catalytic processes
U	B01D 53/9404	· · · · {Removing only nitrogen compounds}
U	B01D 53/9409	· · · · · {Nitrogen oxides}
M	B01D 53/9413	· · · · · · {Processes characterised by a specific catalyst}

> WARNING
> Groups B01D 53/9418 - B01D 53/9427 are not complete pending a reorganisation. See also B01D 53/9413

M	B01D 53/9445	· · · · {Simultaneously removing carbon monoxide, hydrocarbons or nitrogen oxides making use of three-way catalysts [TWC] or four-way-catalysts [FWC]}

> WARNING
> Groups B01D 53/945 and B01D 53/9454 are not complete pending a reorganisation. See also B01D 53/9445

M	B01D 53/9459	· · · · {Removing one or more of nitrogen oxides, carbon monoxide, or hydrocarbons by multiple successive catalytic functions; systems with more than one different function, e.g. zone coated catalysts (layered catalysts with only one function B01D 53/9413, B01D 53/944 or B01D 53/945)}

> WARNING
> Groups B01D 53/9459 - B01D 53/9477 are not complete pending a reorganisation. See also B01D 53/9459

M	B01D 53/9481	· · · · {Catalyst preceded by an adsorption device without catalytic function for temporary storage of contaminants, e.g. during cold start}

> WARNING
> Groups B01D 53/9486 and B01D 53/949 are not complete pending a reorganisation. See also B01D 53/9481

M	**B01D 69/00**	**Semi-permeable membranes for separation processes or apparatus characterised by their form, structure or properties; Manufacturing processes specially adapted therefor**

NOTES

1. In this group, the following term is used with the meaning indicated:
   - "properties" covers those of a mechanical, physical or chemical nature

2. Manufacturing processes, if considered of interest, are also classified in group B01D 67/00

~~WARNING~~

~~The following sub-groups of B01D 69/00 are incomplete. Documents presently classified in the hierarchically higher groups are in the process of reclassification~~
~~B01D 69/043~~
~~B01D 69/046~~
~~B01D 69/081~~
~~B01D 69/082~~
~~B01D 69/084~~
~~B01D 69/085~~
~~B01D 69/087~~
~~B01D 69/088~~
~~B01D 69/105~~
~~B01D 69/141~~
~~B01D 69/144~~
~~B01D 69/145~~
~~B01D 69/147~~
~~B01D 69/148~~

U	**B01D 2239/00**	**Aspects relating to filtering material for liquid or gaseous fluids**
U	B01D 2239/06	· Filter cloth, e.g. knitted, woven non-woven; self-supported material
U	B01D 2239/069	· · Special geometry of layers
M	B01D 2239/0695	· · · Wound layers (apparatus incorporating such gas filtering material B01D 2275/105)

~~WARNING~~

~~This group is not complete, see also B01D 39/1684~~

Project: RP0094 (B01F)

U	**B01F 13/00**	**Other mixers; Mixing plant, including combinations of {mixers, e.g. of} dissimilar mixers**
U	B01F 13/10	· Mixing plant, including combinations of {mixers, e.g. of} dissimilar mixers {(B01F 13/0294 takes precedence)}
U	B01F 13/1055	· · {Mixing plant with mixing receptacles receiving material dispended from several component receptacles, e.g. paint tins}
U	B01F 13/1061	· · · {with means for customizing the mixture on the point of sale, e.g. by sensing, receiving, analysing information about the characteristics of the mixture to be made}
	B01F 13/1063	· · · · {using a computer for controlling information and converting it in a formula and a set of operation instructions, e.g. on the point of sale ~~(data processing in buying-selling transactions G06F 17/602)~~}

Project: MP0140 (B01J)

U	**B01J 20/00**	**Solid sorbent compositions or filter aid compositions; Sorbents for chromatography; Processes for preparing, regenerating or reactivating thereof** (use of sorbent compositions in liquid separation **B01D 15/00**, use of filter aid compositions **B01D 37/02**; use of sorbent compositions in gas separation **B01D 53/02**, **B01D 53/14**)
U	B01J 20/02	· comprising inorganic material
M	B01J 20/04	· · comprising compounds of alkali metals, alkaline earth metals or magnesium

> WARNING
>
> Groups B01J 20/041 - B01J 20/048 are not complete, pending a reorganisation. See also B01J 20/04

M	B01J 20/22	· comprising organic material

> WARNING
>
> Groups B01J 20/223 and B01J 20/226 are not complete, pending a reorganisation. See also B01J 20/22

M	B01J 20/26	· · Synthetic macromolecular compounds

> WARNING
>
> Groups B01J 20/261 - B01J 20/268 are not complete, pending a reorganisation. See also this group

M	B01J 20/28	· characterised by their form or physical properties

> WARNING
>
> Groups B01J 20/281 - B01J 20/29 might be incomplete. A number of documents presently classified in G01N 30/48 and G01N 30/482 still need reclassification to one or more of these groups

M	B01J 20/30	· Processes for preparing, regenerating, or reactivating

> WARNING
>
> Groups B01J 20/3007 - B01J 20/3092 are not complete, pending a reorganisation. See also B01J 20/30

M	B01J 20/32	· · Impregnating or coating; {Solid sorbent compositions obtained from processes involving impregnating or coating}

> WARNING
>
> Groups B01J 20/3202 - B01J 20/3297 are not complete, pending a reorganization. See also B01J 20/32

U	B01J 20/34	· · Regenerating or reactivating
M	B01J 20/3408	· · · {of aluminosilicate molecular sieves}

> WARNING
>
> Groups B01J 20/3416 - B01J 20/3491 are not complete, pending a reorganisation. See also B01J 20/34

U	**B01J 35/00**	**Catalysts, in general, characterised by their form or physical properties**
U	B01J 35/002	· {Catalysts characterised by their physical properties}

M	B01J 35/004	· · {Photocatalysts}

> WARNING
>
> ~~Groups B01J 35/0046 - B01J 35/0093 are not complete, see also B01J 35/002~~

U	B01J 35/02	· Solids
M	B01J 35/10	· · characterised by their surface properties or porosity

> WARNING
>
> ~~Groups B01J 35/1004 - B01J 35/1095 are not complete, see also B01J 35/10~~

Project: N/A (B03D)

B03D **FLOTATION; DIFFERENTIAL SEDIMENTATION (sedimentation in general B01D 21/00; in combination with other separation of solids B03B; sink-float separation B03B 5/28; detergents, soaps C11D)**

WARNING

1. The following groups are not complete:
B03D 1/023, see also B03D 1/02
B03D 1/025, see also B03D 1/02
B03D 1/026, see also B03D 1/02
B03D 1/028, see also B03D 1/02
B03D 1/082, see also B03D 1/08
B03D 1/085, see also B03D 1/08
B03D 1/087, see also B03D 1/08
B03D 1/1406, see also B03D 1/14
B03D 1/1443, see also B03D 1/14
B03D 1/145, see also B03D 1/14
B03D 1/1456, see also B03D 1/14
B03D 1/1462, see also B03D 1/14
B03D 1/1468, see also B03D 1/14
B03D 1/1475, see also B03D 1/14
B03D 1/1487, see also B03D 1/14
B03D 1/1493, see also B03D 1/14
B03D 1/242, see also B03D 1/24
B03D 1/247, see also B03D 1/24

2. The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:
B03D 101/00-B03D 103/10   covered by

Project: N/A (B07B)

B07B **SEPERATING SOLIDS FROM SOLIDS BY SIEVING, SCREENING, OR SIFTING OR BY USING GAS CURRENTS; OTHER SEPARATING BY DRY METHODS APPLICABLE TO BULK MATERIAL, e.g. LOOSE ARTICLES FIT TO BE HANDLED LIKE BULK MATERIAL (combinations of dry separating apparatus with wet separating apparatus B03B; hand sorting, postal sorting, sorting by switching or other devices actuated in response to detection or measurement of some feature of articles or samples of material B07C)**

NOTE

In this subclass any sorting or grading of bulk material or loose articles fit to be handled like bulk material results automatically from the construction of the apparatus and properties of the material, e.g. by a trap opening under an object of a certain minimum weight, by an aperture of graduated size. Sorting of articles is included in so far as the same conditions apply, e.g. sorting of timber

by passing it over successively longer openings; the articles may or may not be orientated for the purpose of sorting.

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WARNING

The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:
B07B 1/32   covered by

</div>

Project: MP0140 (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 9/02	· Cleaning pipes or tubes or systems of pipes or tubes (apparatus for cleaning metal pipes by chemical methods C23G 3/04; {removing obstructions in waste pipes or sinks E03C 1/30; cleaning sewer pipes E03F 9/00; cleaning boreholes or wells E21B 37/00; cleaning furnace tubes, flues, chimneys F23J 3/02; cleaning heat-transfer conduits, e.g. water tubes of boilers F28G})
U	B08B 9/027	· · Cleaning the internal surfaces; Removal of blockages
M	B08B 9/04	· · · using cleaning devices introduced into and moved along the pipes

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~~WARNING~~

~~Group B08B 9/04 and subgroups are not complete. See also B08B 9/02 and subgroups~~

</div>

Project: MP0140 (B21B)

U	**B21B 1/00**	**Metal-rolling methods or mills for making semi-finished products of solid or profiled cross-section (B21B 17/00 - B21B 23/00 take precedence; with respect to composition of material to be rolled B21B 3/00; extending closed shapes of metal bands by simultaneous rolling at two or more zones B21B 5/00; metal-rolling stands as units B21B 13/00; continuous casting into moulds having walls formed by moving rolls B22D 11/06); Sequence of operations in milling trains; Layout of rolling-mill plant, e.g. grouping of stands; Succession of passes or of sectional pass alternations**
U	B21B 1/08	· for rolling {structural sections, i.e.} work of special cross-section, e.g. angle steel (rolling metal of indefinite length in repetitive shapes specially designed for the manufacture of particular objects B21H 8/00)
M	B21B 1/098	· · · Z-sections

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~~WARNING~~

~~Groups B21B 1/098 is not complete. See also other subgroups of B21B 1/08~~

</div>

Project: MP0140 (B23K)

U	**B23K 20/00**	**Non-electric welding by applying impact or other pressure, with or without the application of heat, e.g. cladding or plating**
U	B23K 20/12	· the heat being generated by friction; Friction welding
U	B23K 20/122	· · {using a non-consumable tool, e.g. friction stir welding}
M	B23K 20/1225	· · · {Particular aspects of welding with a non-consumable tool}

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~~WARNING~~

~~This group only contains recent documents which are in the process of being reclassified into groups B23K 20/123 - B23K 20/1265~~

</div>

M   B23K 20/123   · · · {Controlling or monitoring the welding process}

> WARNING
>
> This group and its subgroups are incomplete. For recent documents see also B23K 20/1225

M   B23K 20/1245   · · · {characterised by the apparatus}

> WARNING
>
> This group and its subgroups are incomplete. For recent documents see also B23K 20/1225

M   B23K 20/1265   · · · {Non-butt welded joints, e.g. overlap-joints, T-joints or spot welds}

> WARNING
>
> This group is incomplete. For recent documents see also B23K 20/1225

Project: N/A (B23P)

U   **B23P 25/00**   **Auxiliary treatment of workpieces, before or during machining operations, to facilitate the action of the tool or the attainment of a desired final condition of the work, e.g. relief of internal stress**

    B23P 25/003   · {immediately ~~preceeding~~*preceding* a cutting tool}

Project: MP0140 (B23Q)

U   **B23Q 3/00**   **Devices holding, supporting, or positioning work or tools, of a kind normally removable from the machine (work-tables or other parts, e.g. faceplates, normally not incorporating means for securing work B23Q 1/00; automatic position control B23Q 15/00 {; food cutting boards A47J 47/00; workpiece support for dies B21D 37/02}; rotary tool heads for turning-machines B23B 3/24, B23B 3/26; non-driven tool holders B23B 29/00; general features of turrets B23B 29/24 {; drawbars in spindles B23B 31/261; for electrical discharge machining B23H 11/003; for welding B23K 37/04; means for securing grinding wheels B24B 45/00; mountings for abrasive wheels B24D 5/16}; tools or bench devices for fastening, connecting, disengaging or holding B25B {; chucks for percussive tools B25D 17/084; work benches for manual work B25H 1/00; devices for securing circular saw blades B27B 5/32; for assembling or manufacturing aircrafts B64F 5/10; for holding semiconductors or wafers H01L 21/67; devices for holding circuit boards H05K 13/0061})**

U   B23Q 3/02   · for mounting on a work-table, tool-slide, or analogous part (B23Q 3/15 takes precedence)

U   B23Q 3/06   · · Work-clamping means

M   B23Q 3/062   · · · {adapted for holding workpieces having a special form or being made from a special material}

> WARNING
>
> Subgroups B23Q 3/063 - B23Q 3/065 are not complete, due to a reorganisation in progress; see also B23Q 3/062

Project: N/A (B23Q)

U   **B23Q 11/00**   **Accessories fitted to machine tools for keeping tools or parts of the machine in good working condition or for cooling work {(accessories specially designed for sawing machines or sawing devices B23D 59/00)}; Safety devices specially combined with or arranged in, or specially adapted for use in connection with, machine tools (in respect of boring or drilling machines B23B 47/32 takes precedence; safety devices in general F16P)**

U   B23Q 11/0003   · {Arrangements for preventing undesired thermal effects on tools or parts of the machine ([B23Q 11/10](), [B23Q 11/12]() and [B23Q 11/14]() take precedence)}

      B23Q 11/0007   · · {by compensating ~~occuring~~ *occurring* thermal dilations ([B23Q 15/18]() takes precedence)}

Project: MP0140 (B23Q)

U   B23Q 11/001   · {Arrangements compensating weight or flexion on parts of the machine (adjustment of the fluid layer in fluid bearings or cushions depending upon the position of a weight [B23Q 1/385]())}

M   B23Q 11/0017   · · {compensating the weight of vertically moving elements, e.g. by balancing liftable machine parts ([B23B 47/26]() takes precedence)}

> WARNING
>
> ~~Subgroups B23Q 11/0017 and B23Q 11/0021 are not complete, due to a reorganisation in progress; see also B23Q 11/001~~

M   B23Q 11/0078   · {Safety devices protecting the operator, e.g. against accident or noise (protecting the machine tool [B23Q 5/58](); protecting people, in general [F16P 1/00](), [F16P 3/00]())}

> WARNING
>
> ~~Subgroups B23Q 11/0082 - B23Q 11/0089 are not complete, due to a reorganisation in progress; see also B23Q 11/0078~~

U   B23Q 11/08   · Protective coverings for parts of machine tools; Splash guards

M   B23Q 11/0891   · · {arranged between the working area and the operator}

> WARNING
>
> ~~Subgroup B23Q 11/0891 is not complete, due to a reorganisation in progress; see also B23Q 11/08~~

U   B23Q 11/10   · Arrangements for cooling or lubricating tools or work (incorporated in tools, <u>see</u> the relevant subclass for the tool, {e.g. [B23B 27/10](), [B23B 51/06](), [B23C 5/28](), [B23D 77/006](); for circular saw blades [B23D 59/02](), for cooling grinding surfaces [B24B 55/02]()})

M   B23Q 11/1015   · · {by supplying a cutting liquid through the spindle}

> WARNING
>
> ~~Subgroups B23Q 11/1015 - B23Q 11/103 are not complete, due to a reorganisation in progress; see also B23Q 11/10~~

M   B23Q 11/1038   · · {using cutting liquids with special characteristics, e.g. flow rate, quality}

> WARNING
>
> ~~Subgroups B23Q 11/1038 - B23Q 11/1061 are not complete, due to a reorganisation in progress; see also B23Q 11/10~~

M   B23Q 11/1076   · · {with a cutting liquid nozzle specially adaptable to different kinds of machining operations}

> WARNING
>
> ~~Subgroup B23Q 11/1076 is not complete, due to a reorganisation in progress; see also B23Q 11/10~~

U   B23Q 11/12   · Arrangements for cooling or lubricating parts of the machine ([B23Q 11/14]() takes precedence; {movable work or tool supports using fluid bearings or fluid cushion supports [B23Q 1/38](); cooling or lubricating means used in the working area [B23Q 11/10]()})

M	B23Q 11/121	· · {with lubricating effect for reducing friction ([F16C 33/66](#) and [F16H 57/04](#) take precedence)}

WARNING

Subgroups B23Q 11/121 - B23Q 11/125 are not complete, due to a reorganisation in progress; see also B23Q 11/12

M	B23Q 11/126	· · {for cooling only}

WARNING

Subgroups B23Q 11/121 - B23Q 11/128 are not complete, due to a reorganisation in progress; see also B23Q 11/12

M	B23Q 11/14	· Methods or arrangements for maintaining a constant temperature in parts of machine tools

WARNING

Subgroups B23Q 11/141 - B23Q 11/148 are not complete, due to a reorganisation in progress; see also B23Q 11/14

U	**B23Q 17/00**	**Arrangements for {observing,} indicating or measuring on machine tools (for automatic control or regulation of feed movement, cutting velocity or position of tool or work [B23Q 15/00](#))**
M	B23Q 17/007	· {for managing machine functions not concerning the tool}

WARNING

Subgroups B23Q 17/007 and B23Q 17/008 are not complete, due to a reorganisation in progress; see also B23Q 17/00

U	B23Q 17/09	· for indicating or measuring cutting pressure or {for determining} cutting-tool condition, e.g. cutting ability, load on tool (arrangements preventing overload of tools [B23Q 11/04](#); devices for indicating failure of drills during boring [B23B 49/00](#))
M	B23Q 17/0904	· · {before or after machining}

WARNING

Subgroups B23Q 17/0904 - B23Q 17/0923 are not complete, due to a reorganisation in progress; see also B23Q 17/09

M	B23Q 17/0952	· · {during machining}

WARNING

Subgroups B23Q 17/0952 - B23Q 17/099 are not complete, due to a reorganisation in progress; see also B23Q 17/09

M	B23Q 17/0995	· · {Tool life management}

WARNING

This subgroup is not complete, due to a reorganisation in progress; see also B23Q 17/09

U	B23Q 17/24	· using optics {or electromagnetic waves}
M	B23Q 17/2409	· · {Arrangements for indirect observation of the working space using image recording means, e.g. a camera}

WARNING

This subgroup is not complete, due to a reorganisation in progress; see also B23Q 17/24

M	B23Q 17/2414	· · {for indicating desired positions guiding the positioning of tools or workpieces (B25H 1/0092 takes precedence)}

~~WARNING~~
~~Subgroups B23Q 17/2414 - B23Q 17/2423 are not complete, due to a reorganisation in progress; see also B23Q 17/24~~

M	B23Q 17/2428	· · {for measuring existing positions of tools or workpieces}

~~WARNING~~
~~This subgroup is not complete, due to a reorganisation in progress; see also B23Q 17/24~~

M	B23Q 17/2433	· · {Detection of presence or absence}

~~WARNING~~
~~Subgroups B23Q 17/2438 - B23Q 17/2447 are not complete, due to a reorganisation in progress; see also B23Q 17/24~~

M	B23Q 17/2452	· · {for measuring features or for detecting a condition of machine parts, tools or workpieces (B23Q 17/2428, B23Q 17/2433 take precedence)}

~~WARNING~~
~~Subgroups B23Q 17/2452 - B23Q 17/2476 are not complete, due to a reorganisation in progress; see also B23Q 17/24~~

M	B23Q 17/248	· · {using special electromagnetic means or methods}

~~WARNING~~
~~Subgroups B23Q 17/248 - B23Q 17/2495 are not complete, due to a reorganisation in progress; see also B23Q 17/24~~

Project: N/A (B27B)

B27B	**SAWS FOR WOOD OR SIMILAR MATERIAL; COMPONENTS OR ACCESSORIES THEREFOR (saws specially adapted for pruning or debranching A01G 3/08; sawing apparatus specially adapted for felling trees A01G 23/091; features not restricted to a particular type of wood saw B23D, e.g. attaching saw blades B23D 51/00; machine tool frames, beds, pillars or like members, in general B23Q 1/01)**

WARNING
The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:
B27B 33/18   covered by

Project: N/A (B29C)

B29C	**SHAPING OR JOINING OF PLASTICS; SHAPING OF MATERIAL IN A PLASTIC STATE, NOT OTHERWISE PROVIDED FOR; AFTER-TREATMENT OF THE SHAPED PRODUCTS, e.g. REPAIRING (making preforms B29B 11/00; making laminated products by combining previously unconnected layers which become one product whose layers will remain together B32B 37/00 - B32B 41/00)**

NOTES
1. This subclass covers:
   • shaping or joining of plastics;
   • shaping of material in a plastic state when a specific material is not identified;

- shaping of material in a plastic state, not otherwise provided for.

2. This subclass <u>does not cover</u>:
  - working of plastics sheet material in a manner analogous to the working of paper, which is covered by class B31;
  - shaping of materials provided for elsewhere, e.g. of metal, clay or foodstuffs.

3. Attention is drawn to Note (3) following the title of class B29.

4. In this subclass:
  - repairing of articles made from plastics or materials in a plastic state, e.g. of articles shaped or produced by using techniques covered by this subclass or subclass B29D, is classified in group B29C 73/00;
  - component parts, details, accessories or auxiliary operations which are applicable to more than one moulding technique are classified in groups B29C 31/00 - B29C 37/00;
  - component parts, details, accessories or auxiliary operations which are only applicable or only of use for one specific shaping technique are classified only in the relevant subgroups of groups B29C 39/00-B29C 71/00.

5. In this subclass, it is desirable to add the indexing codes of subclasses B29K and B29L.

> *WARNING*
> *The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:*
> *B29C 64/00-B29C 64/40   covered by*

U	**B29C 43/00**	**Compression moulding, i.e. applying external pressure to flow the moulding material; Apparatus therefor ({by libertion of internal stresses B29C 61/006} ; shaping or impregnating by compression composites comprising reinforcements other than fibres of short length { B29C 70/12}; presses in general B30B)**
U	B29C 43/32	ᐧ Component parts, details or accessories; Auxiliary operations
U	B29C 43/58	ᐧ ᐧ Measuring, controlling or regulating {(for bank adjustment in calendering B29C 43/245)}
U	B29C 2043/5833	ᐧ ᐧ ᐧ {movement of moulds or mould parts, e.g. opening or closing, actuating}
	B29C 2043/5841	ᐧ ᐧ ᐧ ᐧ {for ~~accomodating~~ *accommodating* variation in mould spacing or cavity volume during moulding (compensating shrinkage B29C 43/54)}

Project: MP0140 (B29C)

U	**B29C 65/00**	**Joining {or sealing} of preformed parts, {e.g. welding of plastics materials}; Apparatus therefor ({general aspects of processes or apparatus for joining preformed parts B29C 66/00; using porous material formed by internal pressure generated therein for joining preformed parts B29C 44/1228, B29C 44/326; } for making boxes, cartons, envelopes or bags B31B; for sealing or securing package folds or closures B65B 51/00; joining constructional elements in general F16B; splicing of light guides G02B 6/255)**

<u>WARNING</u>

Groups B29C 65/00 - B29C 65/70 are not complete, mainly for documents published before the year 1995, pending reclassification; see also B29C 65/74 and its subgroups

U	B29C 65/02	· by heating, with or without pressure

WARNING

Group B29C 65/02 and subgroups are not complete, pending a reorganisation; see also B29C 65/48 and its subgroups

M	B29C 65/06	· · using friction, e.g. spin welding {(non-plastics elements to plastic elements B29C 65/645)}

WARNING

Subgroups of B29C 65/06 are not complete, pending a reorganisation; see also this group and its subgroups

M	B29C 65/08	· · using ultrasonic vibrations {(non-plastics element to plastics elements B29C 65/645)}

WARNING

Subgroups of B29C 65/08 are not complete pending reclassification; see also this group and its other subgroups

U	B29C 65/10	· · using hot gases {(e.g. combustion gases) or flames coming in contact with at least one of the parts to be joined}
M	B29C 65/103	· · · {direct heating both surfaces to be joined}

WARNING

Not complete, pending a reorganisation; see also B29C 65/10 and B29C 65/106

U	B29C 65/12	· · · and welding bar
M	B29C 65/125	· · · · {characterised by the composition of the welding bar}

WARNING

Not complete, pending a reorganisation; see also B29C 65/12

M	B29C 65/14	· · using wave energy {, i.e. electromagnetic radiation,} or particle radiation {(using mechanical waves B29C 65/06; using ultrasonic waves B29C 65/08; pressing means transparent to electromagnetic radiation B29C 66/81267)}

WARNING

Subgroups B29C 65/1403 - B29C 65/1496 are not complete pending a reorganisation; see also this group and its subgroups

M	B29C 65/16	· · · Laser beams

WARNING

Subgroups of B29C 65/16 are not complete, pending a reorganisation; see also this group and its subgroups

U	B29C 65/18	· · using heated tools
M	B29C 65/20	· · · with direct contact, e.g. using "mirror"

WARNING

Subgroups of B29C 65/20 are not complete, pending a reorganisation; see also this group and B29C 65/2046

M	B29C 65/22	· · · Heated wire {resistive ribbon, resistive band or resistive strip (electrical insulating support therefor B29C 66/81871)}

WARNING

Subgroups of B29C 65/22 are not complete, pending reclassification; see also this group

U	B29C 65/24	· · · characterised by the means for heating the tool {(by impulse heating B29C 65/38)}

NOTES

1. Classification is made in groups B29C 65/24 - B29C 65/32 only if the details or adaptations of the heating means are of interest.

2. When classifying in this group, heated tools are additionally classified in groups B29C 65/18, B29C 65/20 or B29C 65/22

M	B29C 65/242	· · · · {the heat transfer being achieved by contact, i.e. a heated tool being brought into contact with the welding tool and afterwards withdrawn from it}

WARNING

Not complete, pending a reorganisation; see also B29C 65/24

M	B29C 65/245	· · · · {the heat transfer being achieved contactless, e.g. by radiation (B29C 65/32 takes precedence)}

WARNING

Not complete, pending a reorganisation; see also B29C 65/24

M	B29C 65/247	· · · · {the heat resulting from a chemical reaction}

WARNING

Not complete, pending a reorganisation; see also B29C 65/24

U	B29C 65/30	· · · · Electrical means {(B29C 65/38 takes precedence)}
M	B29C 65/305	· · · · · {involving the use of cartridge heaters}

WARNING

Not complete, pending a reorganisation; see also B29C 65/18 - B29C 65/2092

M	B29C 65/34	· · using heated elements which remain in the joint, e.g. "verlorenes Schweisselement"

WARNING

Subgroups B29C 65/3404 - B29C 65/3472 are not complete, pending a reorganisation; see also B29C 65/34

M	B29C 65/36	· · · heated by induction

WARNING

Subgroups of B29C 65/36 are not complete, pending a reorganisation; see also B29C 65/36

U	B29C 65/40	· · Applying molten plastics, e.g. hot melt (using welding bar {combined with hot gases} B29C 65/12; by moulding B29C 65/70)
M	B29C 65/405	· · · {characterised by the composition of the applied molten plastics (B29C 65/425 takes precedence)}

WARNING

Not complete, pending a reorganisation; see also B29C 65/40

U	B29C 65/42	· · · between pre-assembled parts {(B29C 65/605 takes precedence)}
M	B29C 65/425	· · · · {characterised by the composition of the molten plastics applied between pre-assembled parts}

WARNING

Not complete, pending a reorganisation; see also B29C 65/42

M	B29C 65/48	· using adhesives {, i.e. using supplementary joining material} (heat-activated {to be additionally classified in} B29C 65/02 {and subgroups}; {applying molten plastics, e.g.} hot melts {to be additionally classified in} B29C 65/40; non-mechanical parts of adhesive processes, in general C09J 5/00); {solvent bonding}

NOTE
When classifying in this group, heat-activated adhesives are further classified in group B29C 65/02. When classifying in this group, applying molten plastics is further classified in group B29C 65/40.

WARNING
Subgroups B29C 65/4805 - B29C 65/4895 are not complete, pending a reorganisation; see also this group and B29C 65/4895

U	B29C 65/50	· · using adhesive tape {, e.g. thermoplastic tape; using threads or the like (B29C 65/3444 takes precedence)}
M	B29C 65/5007	· · · {characterised by the structure of said adhesive tape, threads or the like}

WARNING
Group B29C 65/5007 and subgroups are not complete, pending a reorganisation; see also B29C 65/50 and its subgroups

M	B29C 65/5064	· · · {of particular form, e.g. being C-shaped, T-shaped}

WARNING
Subgroups of B29C 65/5064 are not complete, pending a reorganisation; see also this group

M	B29C 65/5092	· · · {characterised by the tape handling mechanisms, e.g. using vacuum}

WARNING
Not complete, pending a reorganisation; see also B29C 65/50 and its subgroups

M	B29C 65/52	· · {characterised by the way of} applying the adhesive {(B29C 65/50 takes precedence; apparatus for applying liquids in general B05C; processes for applying liquids in general B05D)}

WARNING
Subgroups B29C 65/521 - B29C 65/528 are not complete, pending a reorganisation; see also this group

M	B29C 65/54	· · · between pre-assembled parts

WARNING
Subgroups of B29C 65/54 are not complete, pending a reorganisation; see also this group

M	B29C 65/56	· using mechanical means {or mechanical connections, e.g. form-fits}

WARNING
Subgroups B29C 65/561 - B29C 65/568 are not complete, pending a reorganisation; see also this group and its subgroups

M	B29C 65/60	· · Riveting {or staking}

WARNING
Subgroups of B29C 65/60 are not complete, pending a reorganisation; see also this group

M   B29C 65/82   · Testing the joint

> WARNING
> Subgroups of B29C 65/82 are not complete, pending a reorganisation; see also this group

M   B29C 73/00   Repairing of articles made from plastics or substances in a plastic state, e.g. of articles shaped or produced by using techniques covered by this subclass or subclass B29D (retreading tyres B29D 30/54; {linings for tyres acting locally B60C5/145; } devices for covering leaks in pipes or hoses F16L 55/16)

> WARNINGS
> 1. This group was introduced on 24 June, 1987
> 2. Documents from the backlog of B60C21/00 - B60C21/08B, B60C 25/16 are in the process of being systematically transferred to B29C 73/00

Project: N/A (B29C)

U   B29C 2945/00   Indexing scheme relating to injection moulding, i.e. forcing the required volume of moulding material through a nozzle into a closed mould

U   B29C 2945/76   · Measuring, controlling or regulating

U   B29C 2945/76929   · · Controlling method (not used)

U   B29C 2945/76939   · · · Using stored or historical data sets

    B29C 2945/76949   · · · · using a learning system, i.e. the system accumulates experience from previous ~~occurences~~ *occurrences*, e.g. adaptive control

Project: N/A (B29K)

B29K 2019/00   Use of rubber not provided for in a single one of main groups ~~B29K7/00~~ *B29K 2007/00* - {B29K 2011/00}, as moulding material

U   B29K 2025/00   Use of polymers of vinyl-aromatic compounds {or derivatives thereof} as moulding material {(as such C08L 25/00)}

U   B29K 2025/04   · {Polymers of styrene (as such C08L 25/04)}

    B29K 2025/08   · · {Copolymers of styrene, e.g. AS or SAN, i.e. acrylonitrile styrene (as such C08L 25/08; ~~B29K55/02~~ *B29K 2055/02* takes precedence)}

B29K 2033/00   Use of polymers of unsaturated acids or derivatives thereof as moulding material ({as such C08L 33/00;} ~~B29K35/00~~ *B29K 2035/00* takes precedence)

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 ~~B29K23/00~~ *B29K 2023/00* - {B29K49/00, e.g. having a vinyl group}, as moulding material {(as such C08L 55/00)}

B29K 2079/00   Use of polymers having nitrogen, with or without oxygen, or carbon only, in the main chain {not provided for in groups ~~B29K61/00~~ *B29K 2061/00* - ~~B29K77/00~~ *B29K 2077/00*}, as moulding material {(as such C08L 79/00)}

B29K 2086/00   Use of specific polymers obtained by polycondensation or polyaddition, not provided for in a single one of main groups ~~B29K59/00~~ *B29K 2059/00* - ~~B29K85/00~~ *B29K 2085/00*, as moulding material

B29K 2093/00   {Use of natural resins (as such C08L 93/00), e.g. shellac (as such C08L 93/02)or derivatives thereof, as moulding material (~~B29K1/00~~ *B29K 2001/00*, B29K 2003/00, B29K 2005/00, ~~B29K7/00~~ *B29K 2007/00* and B29K 2089/00 take precedence)}

B29K 2096/00   **Use of specified macromolecular materials not provided for in a single one of main groups** ~~B29K1/00~~ *B29K 2001/00* - ~~B29K95/00~~ *B29K 2095/00*, **as moulding material**

B29K 2096/02   · Graft polymers (~~B29K55/02~~ *B29K 2055/02* takes precedence)

B29K 2096/04   · Block polymers (~~B29K55/02~~ *B29K 2055/02* takes precedence)

B29K 2101/00   **Use of unspecified macromolecular compounds as moulding material (unspecified rubbers** ~~B29K21/00~~ *B29K 2021/00* **{as such** C08L 101/00**})**

U   **B29K 2105/00**   **Condition, form or state of moulded material {or of the material to be shaped}**

B29K 2105/0005   · {containing compounding ingredients (releasing, lubricating or separating agents B29C 33/56, fibers ~~B29K105/08~~ *B29K 2105/08*, ~~B29K105/12~~ *B29K 2105/12*; fillers ~~B29K105/16~~ *B29K 2105/16*, recycled material ~~B29K105/26~~ *B29K 2105/26*)}

B29K 2219/00   **Use of rubber not provided for in a single one of main groups** ~~B29K207/00~~ *B29K 2207/00* - **{**B29K 2211/00**}, as reinforcement**

U   **B29K 2225/00**   **Use of polymers of vinyl-aromatic compounds {or derivatives thereof} as reinforcement {(as such** C08L 25/00**)}**

U   B29K 2225/04   · {Polymers of styrene (as such C08L 25/04)}

B29K 2225/08   · · {Copolymers of styrene, e.g. AS or SAN, i.e. acrylonitrile styrene (as such C08L 25/08; ~~B29K255/02~~ *B29K 2255/02* takes precedence)}

B29K 2233/00   **Use of polymers of unsaturated acids or derivatives thereof as reinforcement {(as such** C08L 33/00**)} (**~~B29K35/00~~ *B29K 2035/00* **takes precedence)**

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** ~~B29K223/00~~ *B29K 2223/00* - **{**B29K 2249/00**, e.g. having a vinyl group}, as reinforcement {(as such** C08L 55/00**)}**

B29K 2279/00   **Use of polymers having nitrogen, with or without oxygen, or carbon only, in the main chain {not provided for in groups** ~~B29K261/00~~ *B29K 2261/00* - ~~B29K277/00~~ *B29K 2277/00***}, as reinforcement {(as such** C08L 79/00**)}**

B29K 2286/00   **Use of specific polymers obtained by polycondensation or polyaddition, not provided for in a single one of main groups** ~~B29K259/00~~ *B29K 2259/00* - ~~B29K285/00~~ *B29K 2285/00*, **as reinforcement**

B29K 2293/00   **{Use of natural resins (as such** C08L 93/00**), e.g. shellac (as such** C08L 93/02**)or derivatives thereof, as reinforcement (**~~B29K201/00~~ *B29K 2201/00*, B29K 2203/00, B29K 2205/00, ~~B29K207/00~~ *B29K 2207/00* **and** B29K 2289/00 **take precedence)}**

B29K 2296/00   **Use of specified macromolecular materials not provided for in a single one of main groups** ~~B29K201/00~~ *B29K 2201/00* - ~~B29K295/00~~ *B29K 2295/00*, **as reinforcement**

B29K 2296/02   · Graft polymers (~~B29K255/02~~ *B29K 2255/02* takes precedence)

B29K 2296/04   · Block polymers (~~B29K255/02~~ *B29K 2255/02* takes precedence)

B29K 2301/00   **Use of unspecified macromolecular compounds as reinforcement (unspecified rubbers** ~~B29K221/00~~ *B29K 2221/00* **){(as such** C08L 101/00**)}**

B29K 2309/00   **Use of inorganic materials not provided for in groups** ~~B29K303/00~~ *B29K 2303/00* - ~~B29K307/00~~ *B29K 2307/00*, **as reinforcement**

B29K 2311/00 **Use of natural products or their composites, not provided for in groups** ~~B29K201/00~~ *B29K 2201/00* - ~~B29K309/00~~ *B29K 2309/00*, **as reinforcement**

B29K 2313/00 **{Textile products, fabrics (**~~B29K105/06~~ *B29K 2105/06* **takes precedence)}**

B29K 2419/00 **Use of rubber not provided for in a single one of main groups** ~~B29K407/00~~ *B29K 2407/00* - **{B29K 2411/00}, as filler**

U **B29K 2425/00** **Use of polymers of vinyl-aromatic compounds {or derivatives thereof} as filler {(as such C08L 25/00)}**

U B29K 2425/04 · {Polymers of styrene (as such C08L 25/04)}

B29K 2425/08 · · {Copolymers of styrene, e.g. AS or SAN, i.e. acrylonitrile styrene (as such C08L 25/08; ~~B29K455/02~~ *B29K 2455/02* takes precedence)}

B29K 2433/00 **Use of polymers of unsaturated acids or derivatives thereof as filler {(as such C08L 33/00)} (**~~B29K435/00~~ *B29K 2435/00* **takes precedence)**

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** ~~B29K23/00~~ *B29K 2023/00* - **{B29K49/00, e.g. having a vinyl group}, as filler {(as such C08L 55/00)}**

B29K 2479/00 **Use of polymers having nitrogen, with or without oxygen, or carbon only, in the main chain {not provided for in groups** ~~B29K461/00~~ *B29K 2461/00* - ~~B29K477/00~~ *B29K 2477/00*}, **as filler {(as such C08L 79/00)}**

B29K 2486/00 **Use of specific polymers obtained by polycondensation or polyaddition, not provided for in a single one of main groups** ~~B29K459/00~~ *B29K 2459/00* - ~~B29K485/00~~ *B29K 2485/00*, **as filler**

B29K 2493/00 **{Use of natural resins (as such C08L 93/00), e.g. shellac (as such C08L 93/02) or derivatives thereof, as filler (**~~B29K401/00~~ *B29K 2401/00*, **B29K 2403/00, B29K 2405/00,** ~~B29K407/00~~ *B29K 2407/00* **and B29K 2489/00 take precedence)}**

B29K 2496/00 **Use of specified macromolecular materials not provided for in a single one of main groups** ~~B29K401/00~~ *B29K 2401/00* - ~~B29K495/00~~ *B29K 2495/00*, **as filler**

B29K 2496/02 · Graft polymers (~~B29K455/02~~ *B29K 2455/02* takes precedence)

B29K 2496/04 · Block polymers (~~B29K455/02~~ *B29K 2455/02* takes precedence)

B29K 2501/00 **Use of unspecified macromolecular compounds as filler (unspecified rubbers** ~~B29K421/00~~ *B29K 2421/00* **){(as such C08L 101/00)}**

B29K 2509/00 **Use of inorganic materials not provided for in groups** ~~B29K503/00~~ *B29K 2503/00* - ~~B29K507/00~~ *B29K 2507/00*, **as filler**

B29K 2511/00 **Use of natural products or their composites, not provided for in groups** ~~B29K401/00~~ *B29K 2401/00* - ~~B29K509/00~~ *B29K 2509/00*, **as filler**

B29K 2619/00 **Use of rubber not provided for in a single one of main groups** ~~B29K607/00~~ *B29K 2607/00* - **{B29K 2611/00}, for preformed parts, e.g. inserts**

U **B29K 2625/00** **Use of polymers of vinyl-aromatic compounds {or derivatives thereof} for preformed parts, e.g. inserts {(as such C08L 25/00)}**

U B29K 2625/04 · {Polymers of styrene (as such C08L 25/04)}

B29K 2625/08 · · {Copolymers of styrene, e.g. AS or SAN, i.e. acrylonitrile styrene (as such C08L 25/08; ~~B29K655/02~~ *B29K 2655/02* takes precedence)}

B29K 2633/00		**Use of polymers of unsaturated acids or derivatives thereof for preformed parts, e.g. inserts {(as such C08L 33/00)} (B29K635/00 B29K 2635/00 takes precedence)**

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 B29K623/00 B29K 2623/00 - {B29K 2649/00, e.g. having a vinyl group}, for preformed parts, e.g. inserts {(as such C08L 55/00)}**

B29K 2679/00 — **Use of polymers having nitrogen, with or without oxygen, or carbon only, in the main chain {not provided for in groups B29K661/00 B29K 2661/00 - B29K677/00 B29K 2677/00}, for preformed parts, e.g. inserts {(as such C08L 79/00)}**

B29K 2686/00 — **Use of specific polymers obtained by polycondensation or polyaddition, not provided for in a single one of main groups B29K659/00 B29K 2659/00 - B29K685/00 B29K 2685/00, for preformed parts, e.g. inserts**

B29K 2693/00 — **{Use of natural resins (as such C08L 93/00), e.g. shellac (as such C08L 93/02)or derivatives thereof, for preformed parts, e.g. inserts (B29K601/00 B29K 2601/00, B29K 2603/00, B29K 2605/00, B29K607/00 B29K 2607/00 and B29K 2689/00 take precedence)}**

B29K 2696/00 — **Use of specified macromolecular materials not provided for in a single one of main groups B29K601/00 B29K 2601/00 - B29K695/00 B29K 2695/00, for preformed parts, e.g. inserts**

B29K 2696/02 — · Graft polymers (B29K655/02 B29K 2655/02 takes precedence)

B29K 2696/04 — · Block polymers (B29K655/02 B29K 2655/02 takes precedence)

B29K 2701/00 — **Use of unspecified macromolecular compounds for preformed parts, e.g. inserts (unspecified rubbers B29K621/00 B29K 2621/00){(as such C08L 101/00)}**

B29K 2709/00 — **Use of inorganic materials not provided for in groups B29K 2603/00 - B29K607/00 B29K 2607/00, for preformed parts, e.g. for inserts**

B29K 2711/00 — **Use of natural products or their composites, not provided for in groups B29K601/00 B29K 2601/00 - B29K709/00 B29K 2709/00, for preformed parts, e.g. for inserts**

B29K 2713/00 — **{Textile products, fabrics (B29K105/06 B29K 2105/06 takes precedence)}**

Project: MP0264 (B32B)

M	**B32B 38/00**	**Ancillary operations in connection with laminating processes**

> *NOTE*
>
> *{In this group, the following expression is used with the meaning indicated:*
> - *"in connection with laminating processes" means ancillary operations are carried out either*
>   - a. *as steps of the lamination processes, or*
>   - b. *in line with the lamination processes, just before or immediately after.*
> *}*

Project: N/A (B32B)

	B32B 2323/00 - ~~B32B 2410/00~~ *B32B 2398/00*	**Organic materials used for the layers, laminate or apparatus components**
N	*B32B 2405/00 - B32B 2607/00*	*Particular articles*

NOTE

Parts of specific articles are indexed with the same indexing codes as the articles

D	**B32B 2419/00 - B32B 2607/00**	~~Particular articles~~

~~NOTE~~

~~Parts of specific articles are indexed with the same indexing codes as the articles~~

Project: N/A (B41F)

U	**B41F 13/00**	**Common details of rotary presses or machines**
	B41F 13/44	· Arrangements to ~~accomodate~~*accommodate* interchangeable cylinders of different sizes to enable machine to print on areas of different sizes

Project: MP0140 (B41J)

U	**B41J 25/00**	**Actions or mechanisms not otherwise provided for**
M	B41J 25/001	· {Mechanisms for bodily moving print heads or carriages parallel to the paper surface (character- or line-spacing mechanisms B41J 19/00)}

~~WARNING~~
~~This group and subgroups B41J 25/003 and B41J 25/005 are not complete pending a reorganisation. See also B41J 2/512~~

Project: MP0140 (B60C)

U	**B60C 25/00**	**Apparatus or tools adapted for mounting, removing, repairing or inspecting pneumatic or solid tyres (apparatus or tools for mounting or dismounting wheels B60B 29/00; apparatus or tools characterised by the means for holding wheels or parts thereof B60B 30/00)**
U	B60C 25/01	· for manually removing tyres from or mounting tyres on wheels
U	B60C 25/05	· · Machines, {i.e. motorized devices, e.g. for mounting, demounting (matching of tyres with rims, i.e. conjoint balancing G01M)}
M	B60C 25/12	· · · for only seating the beads

~~WARNING~~
~~Not complete pending reclassification; see also groups B60C 25/05, B60C 25/145~~

M	B60C 25/122	· · · · acting on the tyre tread

~~WARNING~~
~~Not complete pending reclassification; see also groups B60C 25/05, B60C 25/145~~

Project: N/A (B60K)

B60K 41/00 **{Conjoint control of drive units; Conjoint control of at least two sub-units thereof (arrangement of plural diverse prime-movers for mutual or common propulsion B60K 6/00)}**

NOTES

1. The control of a single sub-unit is classified in the relevant class for the sub-unit. Where a single sub-unit is controlled by means of signals or commands from other sub-units the control of this single sub-unit is classified in the relevant class for this sub-unit. For instance, the control of variable-ratio gearing by means of signals from the engine or { from another sub-unit influenced by} the accelerator is classified in subclass F16H

2. Conjoint control of drive units, e.g. propulsion units, and variable-ratio gearing ~~occuring~~ *occurring* only transiently during ratio shift and being also characterised by the control of the gearing is classified in subclass F16H

WARNING

This group and its subgroups are no longer used for the classification of new documents as from January 1st, 2006. The backlog of thse groups is being continuosly reclassified to the relevant groups of B60W.

Project: MP0271 (B60R)

U	**B60R 11/00**	**Arrangements for holding or mounting articles, not otherwise provided for**
M	B60R 11/04	· Mounting of cameras operative during drive; Arrangement of controls thereof relative to the vehicle ~~(cameras per se G03B)~~

Project: MP0140 (B60R)

U	**B60R 21/00**	**Arrangements or fittings on vehicles for protecting or preventing injuries to occupants or pedestrians in case of accidents or other traffic risks (safety belts or body harnesses in vehicles B60R 22/00; devices, apparatus or methods for life-saving in general A62B; safety devices for propulsion unit control specially adapted for, or arranged in, vehicles B60K 28/00; seats constructed to protect the occupant from the effect of abnormal g-forces, e.g. crash or safety seats, B60N 2/42; energy-absorbing arrangements for hand wheels for steering vehicles B62D 1/11; energy-absorbing arrangements for vehicle steering columns B62D 1/19; harnessing in aircraft B64D 25/00)**
U	B60R 21/02	· Occupant safety arrangements or fittings, {e.g. crash pads (seat belts with crash pads B60R 22/14; removable children's seats having a front guard or barrier B60N 2/2839)}
U	B60R 21/16	· · Inflatable occupant restraints or confinements designed to inflate upon impact or impending impact, e.g. air bags ({protective garments with automatically inflatable shock-absorbing means A41D 13/018; } connection of valves to inflatable elastic bodies B60C 29/00)
U	B60R 21/23	· · · Inflatable members (B60R 21/18 takes precedence; connection to inflation fluid source retainers B60R 21/217)
M	B60R 21/231	· · · · characterised by their shape, construction or spatial configuration

> WARNING
>
> ~~Groups B60R 21/2334 - B60R 21/2346 are not complete, pending a reorganisation; see provisionally also group B60R 21/233~~

| M | B60R 21/26 | · · · characterised by the inflation fluid source or means to control inflation fluid flow {(arrangement or mounting thereof to the vehicle B60R 21/20; blasting cartridges for producing gas under pressure in general F42B 3/04; Initiators or igniters therefor F42B 3/10)} |

| U | B60R 21/268 | · · · · using instantaneous release of stored pressurized gas {(B60R 21/26005 takes precedence)} |
| M | B60R 21/274 | · · · · · characterised by means to rupture or open the fluid source |

| **M** | **B60R 25/00** | **Fittings or systems for preventing or indicating unauthorised use or theft of vehicles (locks for vehicles E05B 77/00-E05B 85/00)** |

U	B60R 25/01	· operating on vehicle systems or fittings, e.g. on doors, seats or windscreens
U	B60R 25/04	· · operating on the propulsion system, e.g. engine or drive motor
M	B60R 2025/0415	· · · {with safe immobilisation}

Project: N/A (B61D)

U	**B61D 3/00**	**Wagons or vans (tank wagons B61D 5/00; hopper wagons B61D 7/00; tipping wagons B61D 9/00; mine cars B61D 11/00; vehicles specially adapted for animal transportation B60P 3/04; {container traffic B65G})**
U	B61D 3/16	· adapted for carrying special loads
U	B61D 3/18	· · for vehicles {(Vehicles adapted to carry other vehicles, in general, B60P 3/06)}
	B61D 3/181	· · · {with special ~~accomodation~~*accommodation* for the motor vehicle driver or passengers (B61D 1/06 takes precedence)}
	B61D 31/00	**Sleeping ~~accomodation~~*accommodation***

Project: N/A (B61L)

U	**B61L 5/00**	**Local operating mechanisms for points or track-mounted scotch-blocks (track-mounted scotch-blocks per se B61K); Visible or audible signals; Local operating mechanisms for visible or audible signals (B61L 11/00 takes precedence)**
U	B61L 5/12	· Visible signals {(signalling means on the vehicle B61L 15/00; signalling means for classification yards, or the like, with multiple indicating means B61L 17/023; signalling means for road crossings B61L 29/24; lighting in general F21; visible signalling arrangements in general G08B 5/00)}
U	B61L 5/18	· · Light signals; Mechanisms associated therewith, e.g. blinders

U	B61L 5/1809	· · · {Daylight signals}
	B61L 5/1836	· · · · {using light sources of different colours and ~~seperate~~ *separate* optical systems}

Project: N/A (B62B)

B62B	**HAND-PROPELLED VEHICLES, e.g. HAND CARTS, PERAMBULATORS; SLEDGES**

NOTES

1. In this subclass, the term "hand carts" also embraces hand-propelled wheeled devices in so far as the features thereof are generic to hand carts. This term also embraces pedestrian-controlled power-driven vehicles in so far as the features thereof are generic to hand carts

2. Rollers are taken as being equivalent to wheels

WARNING

The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:
B62B 3/065　　　　　　　　　covered by

Project: MP0140 (B62B)

U	**B62B 9/00**	**Accessories or details specially adapted for children's carriages or perambulators (providing for travelling on snow B62B 19/00)**
M	B62B 9/005	· {Safety means for traffic, e.g. lights, reflectors, mirrors etc. (Signaling means for cycles B62J)}

~~WARNING~~

~~Not complete, see also B62B 9/00~~

U	**B62B 13/00**	**Sledges with runners (ice boats or sailing sledges B62B 15/00)**
U	B62B 13/02	· characterised by arrangement of runners
U	B62B 13/04	· · arranged in a single line
M	B62B 13/043	· · · {having one single runner (Monoski A63C 5/03)}

~~WARNING~~

~~Not complete, see B62B 13/04~~

Project: N/A (B62D)

B62D   **MOTOR VEHICLES; TRAILERS (steering, or guiding on a desired track, of agricultural machines or implements A01B 69/00; wheels, castors, axles, increasing wheel adhesion B60B; vehicle tyres, tyre inflation or tyre changing B60C; connections between vehicles of a train or the like B60D; vehicles for use on rail and road, amphibious or convertible vehicles B60F; suspension arrangements B60G; heating, cooling, ventilating or other air treating devices B60H; windows, windscreens, non-fixed roofs, doors or similar devices, protective coverings for vehicles not in use B60J; propulsion plant arrangements, auxiliary drives, transmissions, controls, instrumentation or dashboards B60K; electric equipment or propulsion of electrically-propelled vehicles B60L; power supply for electrically-propelled vehicles B60M; passenger accommodation not otherwise provided for B60N; adaptations for load transportation or to carry special loads or objects B60P; arrangement of signalling or lighting devices, the mounting or supporting thereof or circuits therefor, for vehicles in general B60Q; vehicles, vehicle fittings or vehicle parts not otherwise provided for B60R; servicing, cleaning, repairing, supporting, lifting, or manoeuvring, not otherwise provided for, B60S; brake arrangements, brake control systems or parts thereof B60T; air-cushion vehicles B60V; motor-cycles, accessories therefor B62J, B62K; testing of vehicles G01M)**

NOTE

In this subclass, the following terms are used with the meanings indicated:
- "vehicles" include motor vehicles and trailers;
- "trailers" include forecars or sidecars.

WARNING

The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:

B62D 25/13	covered by	B60J 1/20, B60R 13/07
B62D 25/22	covered by	B60R 3/00
B62D 65/08	covered by	B60J 10/45
B62D 101/00-B62D 137/00	*covered by*	

U   **B62D 1/00**   **Steering controls, i.e. means for initiating a change of direction of the vehicle**

U   B62D 1/02   · vehicle-mounted

U   B62D 1/04   · · Hand wheels

    B62D 1/046   · · · {Adaptations on rotatable parts of the steering wheel for ~~accomodation~~ *accommodation* of switches}

Project: MP0140 (B62D)

U   **B62D 6/00**   **Arrangements for automatically controlling steering depending on driving conditions sensed and responded to, e.g. control circuits (means for initiating a change in direction B62D 1/00; steering valves B62D 5/06; combined with means for inclining the vehicle body or wheels on bends B62D 9/00)**

NOTE

When classifying in this group, classification is also made in the appropriate one of groups B62D 1/00 - B62D 5/00 or B62D 7/00 - B62D 19/00 if other aspects of the steering system are of interest

M	B62D 6/08	· responsive only to {driver} input torque

> WARNING
>
> ~~Group B62D 6/08 is not complete. See also B62D 5/04~~

U	**B62D 9/00**	**Steering deflectable wheels not otherwise provided for (steering positon indicators B62D 15/02)**
M	B62D 9/04	· combined with means for {inwardly} inclining wheels on bends (B62D 9/02 takes precedence)

> WARNING
>
> ~~Group B62D 9/04 is not complete. See also B62D 9/02~~

Project: N/A (B62D)

U	**B62D 21/00**	**Understructures, i.e. chassis frame on which a vehicle body may be mounted (combined frame and vehicle body B62D 23/00; {characterised by the material thereof B62D 29/00})**
	B62D 21/17	· forming fluid or electrical conduit means or having other means to ~~accomodate~~ ==accommodate== the transmission of a force or signal

Project: MP0140 (B62K)

M	**B62K 5/00**	**Cycles with handlebars, equipped with three or more main road wheels (cycle supports or stands equipped with additional wheels for ride stabilisation B62H 1/12)**

> WARNING
>
> ~~Groups B62K 5/003 - B62K 5/10 correspond to IPC2013.01~~

U	**B62K 27/00**	**Sidecars; Forecars; {Trailers or the like specially adapted to be attached to cycles}(trailers B60P; B62D; characterised by carrying propulsion engine {B62M 7/14})**
M	B62K 27/003	· {Trailers}

> WARNING
>
> ~~This group and its subgroups are not complete pending a reclassification; see also B62K 27/00 and subgroups~~

Project: MP0140 (B63B)

U	**B63B 1/00**	**Hydrodynamic or hydrostatic features of hulls or of hydrofoils (keels B63B 3/38; determining hydrodynamic or hydrostatic features B63B 9/00; hulls peculiar to submarines B63B 3/13; decreasing pitch, roll or like unwanted vessel movements by using foils or acting on ambient water B63B 39/06)**
U	B63B 1/02	· deriving lift mainly from water displacement (B63B 1/16 takes precedence)
U	B63B 1/10	· · with multiple hulls
M	B63B 1/107	· · · {Semi-submersibles; Small waterline area multiple hull vessels and the like, e.g. SWATH}

> WARNING
>
> ~~Not complete, see B63B 1/12 and subgroups~~

M	B63B 1/14	· · · the hulls being interconnected resiliently {or having means for actively varying hull shape or configuration (collapsible, foldable, inflatable or like vessels B63B 7/00)}

WARNING

~~Not complete, pending a reorganisation, see B63B 1/12 and subgroups~~

U	B63B 1/16	· deriving additional lift from hydrodynamic forces
U	B63B 1/18	· · of hydroplane type
M	B63B 1/20	· · · having more than one planing surface (B63B 1/22 takes precedence)

WARNING

~~Not complete, pending a reorganisation, see B63B 1/042~~

M	B63B 1/24	· · of hydrofoil type {(controlling attitude or depth of underwater vessels by hydrofoils or the like B63G 8/18)}

WARNING

~~This group is pending a reorganisation, also documents covered by group B63B 1/26 are within this group~~

M	B63B 1/26	· · · having more than one hydrofoil (B63B 1/28 takes precedence)

WARNING

~~Not complete, pending a reorganisation, see B63B 1/24 and subgroups~~

U	**B63B 9/00**	**Methods of designing, building, maintaining, converting, refitting, repairing, or determining properties of vessels, not otherwise provided for (shuttering for building concrete vessels E04G)**
M	B63B 9/001	· {Methods of designing, or determining properties of vessels by means of analytical modelling, e.g. computational}

WARNING

~~Not complete pending a reorganisation, see B63B 9/00 and G06F 17/50~~

M	B63B 9/002	· · {using fluid dynamics analysis, e.g. computational fluid dynamics}

WARNING

~~Not complete pending a reorganisation, see B63B 9/00 and G06F 17/50~~

M	B63B 9/003	· · {using structure analysis, e.g. finite elements}

WARNING

~~Not complete pending a reorganisation, see B63B 9/00 and G06F 17/5018~~

U	B63B 9/06	· Methods of building hulls
M	B63B 9/065	· · {for floating offshore platforms (grounded platforms E02B 17/00)}

WARNING

~~Not complete, see B63B 21/50, B63B 35/003, B63B 35/44~~

U	**B63B 11/00**	**Interior subdivision of hulls (bulkhead space construction B63B 3/56)**
M	B63B 11/04	· Constructional features of bunkers, {e.g. structural fuel tanks,} or ballast tanks, e.g. with elastic walls ({tanks for fuel or the like not forming subdivisions of the hull B63B 17/0027; } cleaning of tanks B63B 57/00)

WARNING

~~Not complete pending reclassification; see also B63B 25/08 and subgroups~~

M	**B63B 17/00**	**Vessel parts, details, or accessories, not otherwise provided for {(vehicle fittings for preventing or indicating unauthorised use or theft of vehicles in general B60R 25/00; propeller guards, line cutters or other means for protecting propellers or rudders B63H 5/165; protection of power legs of outboard propulsion units B63H 20/36; locking devices for boats, surfboards or parts or accessories thereof E05B 73/007)}**

WARNING

~~Not complete pending a reorganisation; for documents concerning protective caps, or anti-theft devices other than using keys, see B63J 99/00~~

M	B63B 17/0018	· {Arrangements or devices specially adapted for facilitating access to underwater elements, e.g. to propellers (retractable propellers B63H 5/125; tilting outboard propulsion units B63H 20/08); Externally attached cofferdams or the like (caissons adapted to laying foundations E02D 23/00 - E02D 27/00)}

WARNING

~~Documents concerning "externally attached cofferdams or the like" are not complete, pending a reorganisation; see also B63B 9/00~~

M	B63B 17/0027	· {Tanks for fuel or the like (constructional features of bunkers B63B 11/04); Accessories therefor, e.g. tank filler caps (fuel tanks for vehicles in general B60K 15/03; cargo tanks B63B 25/08; cleaning of tanks B63B 57/00; handling of liquids for use in power plants B63H 21/38)}

WARNING

~~Not complete pending reclassification; see also B63B 25/08 and subgroups~~

U	**B63B 21/00**	**Tying-up; Shifting, towing, or pushing equipment; Anchoring ({of buoys B63B 22/04} ; dynamic anchoring B63H 25/00; equipment for shipping on coasts, in harbours or on other fixed marine structures, e.g. for landing purposes, E02B)**

WARNING

Group B63H 21/00 is no longer used for classification of adaptations of ropes, hawsers, or the like, or parts thereof. Documents are in the process of being reorganised to B63B 21/20

M	B63B 21/20	· Adaptations of chains, ropes, hawsers, or the like, or of parts thereof chains, ropes or hawsers in general, see the relevant subclasses, e.g. F16G {or D07B}

WARNING

~~Not complete pending a reorganisation, see B63B 21/00~~

U	B63B 21/24	· Anchors
M	B63B 21/243	· · {foldable or capable of being disassembled}

WARNING

~~this group is pending a reorganisation, also documents covered by group B63B 21/36 are within this group~~

U	B63B 21/30	· · rigid when in use {(B63B 21/28 takes precedence)}
U	B63B 21/34	· · · with two or more flukes
M	B63B 21/36	· · · · foldable

WARNING

~~Not complete, pending a reorganisation, see B63B 21/243~~

U	B63B 21/50	· Anchoring arrangements {or methods} for special vessels, e.g. for floating drilling platforms or dredgers

37

M   B63B 21/507   · · {with mooring turrets}

> WARNING
>
> this group and its subgroup are pending a reorganisation, also documents covered by group B63B 21/34 are within this group, and its subgroups

U   **B63B 22/00**   **Buoys ({floating decoys, e.g. for waterfowl A01M 31/06;} means for indicating the location of underwater objects B63C 7/26; life-buoys, e.g. rings B63C 9/08; {mountings of acoustic transducer in underwater equipment, e.g. sonobuoys G10K 11/006; electric cables supported on or from floats H02G 9/12})**

U   B63B 22/02   · specially adapted for mooring a vessel

M   B63B 22/021   · · {and for transferring fluids, e.g. liquids (container type buoys having means to selectively release contents, not adapted for mooring a vessel B63B 22/26)}

> WARNINGS
>
> 1. Documents concerning container type buoys having means to selectively release contents and not being adapted for mooring a vessel are in the process of being reorganised to B63B 22/26.
>
> 2. This group and its subgroups are pending a reorganisation, also documents covered by groups B63B 27/30 and B63B 27/34 are within this group and its subgroups.

M   B63B 22/023   · · · {submerged when not in use (container type buoys submerged when not in use, not adapted for mooring a vessel B63B 22/28; connected to turret B63B 21/508)}

> WARNING
>
> Documents concerning container type buoys submerged when not in use and not being adapted for mooring a vessel are in the process of being reorganised to B63B 22/28

U   B63B 22/24   · container type, i.e. having provision for the storage of material

M   B63B 22/26   · · having means to selectively release contents, e.g. swivel couplings ({B63B 22/021 takes precedence; } arrangements between ships and off-shore structures for loading or unloading, using pipe lines B63B 27/34; pipe joints or couplings, in general F16L)

> WARNING
>
> Not complete, pending a reorganisation; see B63B 22/021 and B63B 22/24

M   B63B 22/28   · · submerged when not in use {(B63B 22/023 takes precedence)}

> WARNING
>
> Not complete, pending a reorganisation; see B63B 22/023 and B63B 22/24

U   **B63B 23/00**   **Equipment for handling lifeboats or the like**

U   B63B 23/40   · Use of lowering or hoisting gear

M   B63B 23/58   · · with tackle engaging or release gear

> WARNING
>
> this group is pending a reorganisation, also documents covered by group B63B 23/70 are within this group

M   B63B 23/70   · Condition-responsive handling equipment, e.g. automatic release of boat from lowering tackle upon contact with water

> WARNING
>
> Not complete, pending a reorganisation, see B63B 23/58

Project: N/A (B63B)

	B63B 25/00	**Load-~~accomodating~~ *accommodating* arrangements, e.g. stowing, trimming; Vessels characterised thereby (trimming otherwise than by cargo division, e.g. by use of ballast B63B 43/06, B63B 43/08; constructive aspects of cargo spaces B63B 11/00; hatches, hatchways B63B 19/12)**

Project: MP0140 (B63B)

U	B63B 25/02	• for bulk goods
M	B63B 25/08	• • fluid {(constructional features of bunkers B63B 11/04; tanks for fuel or the like not forming bunkers B63B 17/0027)}

> ~~WARNING~~
>
> ~~Documents in B63B 25/08 and subgroups concerning bunkers and other tanks for fuel or the like are in the process of being reclassified to B63B 11/04 and B63B 17/0027~~

M	**B63B 27/00**	**Loading or unloading cargo or passengers (self-discharging barges or lighters B63B 35/30; shore-based B65G {elevators, escalators or moving walkways per se B66B; floating cranes B66C 23/52; loading or unloading devices per se, see the relevant subclasses, e.g. B65G, B66C, B67D})**

> ~~WARNING~~
>
> ~~The scope of this group is broader than the scope of the corresponding IPC group, and includes the scope of the IPC2 subgroups B63B 27/02, B63B 27/06, and B63B 27/20~~

U	B63B 27/02	• {with intermittent action}
M	B63B 27/18	• • using cableways, e.g. with breeches-buoys (cableways per se B65G)

> ~~WARNING~~
>
> ~~this group is pending a reorganisation, also documents covered by group B63B 27/32 are within this group~~

U	B63B 27/20	• {with continuous action}
M	B63B 27/24	• • Loading or unloading fluids

> ~~WARNING~~
>
> ~~this group is pending a reorganisation, also documents covered by group B63B 27/25 are within this group~~

M	B63B 27/25	• • • {Arrangement of ship-based loading or unloading equipment} for fluidised bulk material

> ~~WARNING~~
>
> ~~Not complete, pending a reorganisation, see B63B 27/24~~

M	B63B 27/30	• {Arrangement of ship-based loading or unloading equipment} for transfer at sea between ships or between ships and off-shore structures

> ~~WARNING~~
>
> ~~Not complete, pending a reorganisation, see B63B 22/021, B63B 35/44, and subgroups~~

M	B63B 27/32	• • using cableways

> ~~WARNING~~
>
> ~~Not complete, pending a reorganisation, see B63B 27/18~~

M   B63B 27/34   · · using pipe-lines {(Anchoring arrangements for special vessels with mooring turrets B63B 21/507; Buoys specially adapted for mooring a vessel and for transferring fluids, e.g. liquids B63B 22/021)}

WARNING
Not complete, pending a reorganisation, see B63B 21/507, B63B 22/021, B63B 35/44 and subgroups

Project: N/A (B63B)

B63B 29/00   ~~Accomodation~~*Accommodation* **for crew or passengers not otherwise provided for**

Project: MP0140 (B63B)

U   B63B 29/02   · Cabins or other living spaces; Construction or arrangement thereof
U   B63B 29/04   · · Furniture peculiar to vessels (floatable furniture B63C 9/30)
M   B63B 29/12   · · · Self-levelling mountings

WARNING
this group is pending a reorganisation, also documents covered by group B63B 35/50 and subgroups are in this group

U   **B63B 35/00**   **Vessels or like floating structures adapted for special purposes (vessels characterised by load-accommodating arrangements B63B 25/00; fire-fighting vessels A62C 29/00; submarines, mine-layers or mine-sweepers B63G; large containers for use in or under water B65D 88/78; {Advertising on ships or other floating means G09F 21/18})**

M   B63B 35/08   · Ice-breakers, or other vessels or floating structures for operation in ice-infested waters; Ice-breakers, or other vessels or floating structures having equipment specially adapted therefor

NOTE
{Documents concerning vessels, or floating structures adapted at the same time for an other particular purpose are also classified in the respective other particular groups of B63B 35/00, e.g. floating buildings, stores, drilling platforms or workshops for operation in ice infested waters are also classified in B63B 35/44}

WARNINGS
1. Not complete, pending a reclassification, see also B63B 35/00 and subgroups, e.g. B63B 35/44.
2. This group is pending a reorganisation, also documents covered by group B63B 35/083 are within this group

M   B63B 35/083   · · {Ice-breakers (B63B 35/10, B63B 35/12 take precedence)}

WARNING
Not complete, pending a reorganisation, see B63B 35/08

Project: N/A (B63B)

B63B 35/40   · for transporting marine vessels {(~~load accomodation for floating barges and the like B63B 25/006~~*load accommodation for floating barges and the like B63B 25/006*)}

Project: MP0140 (B63B)

M	B63B 35/44	· Floating buildings, stores, drilling platforms, or workshops, e.g. carrying water-oil separating devices {(construction methods for floating offshore platforms B63B 9/065)}

WARNING

This group and its subgroups are pending a reorganisation, also documents covered by groups B63B 27/30, B63B 27/32 and B63B 27/34 are within this group and its subgroups.

M	B63B 35/50	· Vessels or floating structures for aircraft (aircraft carriers B63G 11/00; flying-boat hulls, other flotation means for aircraft B64)

WARNINGS

1. not complete pending a reorganisation, see for self-levelling landing platforms also B63B 29/12;

2. this group and its subgroup B63B 35/52 are pending a reorganisation, also documents covered by group B63B 35/53 are in this group and its subgroups

M	B63B 35/52	· · Nets, slipways or the like, for recovering aircraft from the water

WARNING

This group is pending a reorganisation, also documents covered by group B63B 35/53 are within this group.

M	B63B 35/53	· · Floating runways

WARNING

Group B63B 35/53 is not complete pending a reorganisation; see also groups B63B 35/50 and B63B 35/52

U	B63B 35/73	· Other vessels or like floating structures for pleasure or sport
U	B63B 35/79	· · Surf-boards, e.g. sailboards
U	B63B 35/7953	· · · {Winddriven boards}
U	B63B 35/7973	· · · · {Sail arrangements}
U	B63B 35/7976	· · · · · {Sails pivotally mounted at a mast-tip; Kite-sails (kites per se B64C 31/06)}
M	B63B 35/7979	· · · · · · {Control means for kite-sails; Harnesses for connecting kite-sails to a user, e.g. of quick release type}

WARNING

Not complete, see B63B 35/7976, B64C 31/06

Project: N/A (B63B)

	B63B 38/00	**Vessels or like floating structures not otherwise provided for (vessels characterised by load-~~accomodating~~ _accommodating_ arrangements B63B 25/00; fire-extinguishing vessels A62C 29/00; submarines, mine-layers or mine-sweepers B63G; large containers for use in or under water B65D 88/78)**

Project: MP0140 (B63B)

M   **B63B 45/00**   **Arrangement or adaptation of signalling or lighting devices (arrangement of signalling or lighting devices, the mounting or supporting thereof or circuits therefor, for vehicles in general B60Q; life-buoys, -belts, -jackets, -suits or the like, characterised by signalling means B63C 9/20; lighting devices or systems therefor F21L, F21S)**

> WARNING
>
> Not complete, pending a reorganisation; see B63C 9/21

Project: N/A (B63B)

U   **B63B 2701/00**   **Building of the ship's hull**

   B63B 2701/22   · Lining and panelling in wood or metal; Movable partition walls within ~~accomodation~~*accommodation* spaces; Insulating walls; Stairs; Windshields on decks (internal partitions for buildings E04B 2/00)

Project: MP0140 (B63C)

M   **B63C 7/00**   **Salvaging of disabled, stranded, or sunken vessels; Salvaging of vessel parts or furnishings, e.g. of safes; salvaging of other underwater objects (means for searching for underwater objects B63C 11/48)**

> NOTE
>
> in this group the following indexing codes are used:
> - B63B 2702/02, B63B 2738/00, B63B 2738/04

> WARNING
>
> this group is pending a reorganisation; also documents covered by groups B63C 7/006 are within this group

M   B63C 7/006   · {Emptying the contents of sunken, stranded, or disabled vessels, e.g. by engaging the vessel, or collecting underwater buoyant, e.g. liquid or particulate, or gaseous contents escaping from sunken vessels, e.g. using funnels, or tents for recovery of escaping hydrocarbons (Cleaning or keeping clear the surface of open water in general E02B 15/00)}

> WARNING
>
> B63C 7/006 is not complete pending a reclassification; see also groups B63C 7/00 and B63C 7/16

M   **B63C 9/00**   **Life-saving in water (life-saving in general A62B; arrangement or adaptation of signalling or lighting devices for ships, other waterborne vessels or for equipment for shipping B63B 45/00; rescue equipment specially adapted for submarine personnel B63G 8/40)**

> NOTE
>
> - in this group the following indexing code is used: B63B 2729/00

> WARNING
>
> this group is pending a reorganisation; also documents covered by group B63C 9/065 are within this group

M   B63C 9/01   · Air-sea rescue devices, i.e. equipment carried by, and capable of being dropped from, an aircraft (inflatable vessels B63B 7/00; inflatable buoys B63B 22/22)

> WARNING
>
> This group is not complete pending a reclassification; for documents published before 01.01.2012, see also group B63C 9/00

M	B63C 9/02	· Lifeboats, life-rafts or the like, specially adapted for life-saving (floatable furniture B63C 9/30; boats in general B63B; inflatable vessels B63B 7/00; equipment for handling lifeboats or the like B63B 23/00; rafts B63B 35/58)

NOTE
- in this group the following indexing code is used: B63B 2728/00

WARNING
this group is pending a reorganisation; also documents covered by group B63C 9/065 are within this group

M	B63C 9/03	· · enclosed

WARNING
This group is not complete pending a reclassification; for documents published before 01.01.2012, see also group B63C 9/02

M	B63C 9/04	· · Life-rafts

WARNING
this group is pending a reorganisation; also documents covered by group B63C 9/065 are within this group

M	B63C 9/05	· · Shark screens, e.g. buoyant means combined with means to surround or otherwise enclose the user (B63C 9/06 takes precedence)

WARNING
This group is not complete pending a reclassification; for documents published before 01.01.2012 see also group B63C 9/00

M	B63C 9/06	· Floatable closed containers with accommodation for one or more persons inside (B63C 9/01 takes precedence)

WARNING
this group is pending a reorganisation; also documents covered by group B63C 9/065 are within this group

M	B63C 9/065	· · {for one person}

WARNING
B63C 9/065 is not complete pending a reorganisation; see also groups B63C 9/00, B63C 9/02, B63C 9/04 and B63C 9/06

U	B63C 9/08	· Life-buoys, e.g. rings; Life-belts, jackets, suits, or the like ({non-sinkable swimsuits, drawers or trunks A41D 7/001} ; equipment for swimming A63B, e.g. swimming aids {other than life-buoys or life-belts} A63B 31/00, {teaching frames for swimming, swimming boards A63B 69/14})
M	B63C 9/18	· · Inflatable equipment characterised by the gas-generating {or inflation} device

WARNING
This group is not complete pending a reorganisation; see also group B63C 9/24; this group is pending a reorganisation; also documents covered by group B63C 9/19 are within this group

M	B63C 9/19	· · · Arrangements for puncturing gas-generating cartridges

WARNING
This group is not complete pending a reorganisation; see also groups B63C 9/18 and B63C 9/24

M	B63C 9/20	· · characterised by signalling means, e.g. lights (arrangement or adaptation of signalling or lighting devices for ships or other waterborne vessels B63B 45/00)

WARNING

Not complete, pending a reorganisation; see B63C 9/21

M	B63C 9/22	· Devices for holding or launching life-buoys, inflatable life-rafts, or other floatable life-saving equipment (equipment for handling life-boats or the like B63B 23/00)

WARNING

This group is pending a reorganisation; also documents covered by group B63C 9/23 are within this group

M	B63C 9/23	· · Containers for inflatable life-saving equipment

WARNING

This group is not complete pending a reclassification; for documents published before 01.01.2012 see also group B63C 9/22

M	B63C 9/24	· {Arrangements of inflating valves or of controls thereof (connecting inflating valves to elastic bodies B60C 29/00)}

WARNING

this group is pending a reorganisation; also documents covered by group B63C 9/18, and subgroups are within this group

U	**B63C 11/00**	**Equipment for dwelling or working underwater; Means for searching for underwater objects (composition of chemical substances for use in breathing apparatus A62D 9/00; swimming aids or equipment A63B 31/00 - A63B 35/00; submarines B63G 8/00)**
U	B63C 11/34	· Diving chambers {or underwater vessels, e.g. unmanned,} with mechanical link, e.g. cable, to a base (manipulators B25J; {externally attached cofferdams and the like B63B 17/0018; } diving chambers without mechanical link to a base B63G 8/00; caissons adapted to laying foundations E02D 23/00 - E02D 27/00)
U	B63C 11/36	· · of closed type
M	B63C 11/42	· · · with independent propulsion or direction control {(underwater vessels adapted for special purposes B63G 8/001)}

WARNING

this group is pending a reorganisation; also documents covered by group B63G 8/001 are within this group

Project: MP0140 (B63G)

U	**B63G 8/00**	**Underwater vessels, e.g. submarines; {Equipment specially adapted therefor}(submarine hulls B63B 3/13; diving chambers with mechanical link, e.g. cable, to a base B63C 11/34; divers' sleds B63C 11/46; torpedoes F42B 19/00)**
M	B63G 8/001	· {Underwater vessels adapted for special purposes, e.g. unmanned, underwater vessels; Equipment specially adapted therefor, e.g. docking stations (self-propelled or direction controlled diving chambers with mechanical link to a base B63C 11/42)}

WARNING

B63G 8/001 is not complete pending a reclassification; see also group B63C 11/42

Project: MP0140 (B63H)

U	**B63H 1/00**	**Propulsive elements directly acting on water (jet propulsion <u>B63H 11/00</u>; attachment of propellers on shafts <u>B63H 23/34</u>)**
U	B63H 1/02	· of rotary type (endless-track type <u>B63H 1/34</u>)
U	B63H 1/12	· · with rotation axis substantially in propulsive direction
M	B63H 1/14	· · · Propellers (pitch changing <u>B63H 3/00</u>)

WARNING

this group is pending a reorganisation; also documents covered by group B63H 1/15 are within this group

M	B63H 1/15	· · · · having vibration damping means (anti-vibration mounting of propulsion plant <u>B63H 21/30</u>; means for damping vibration in general <u>F16F</u>)

WARNING

This group is not complete pending a reclassification; for documents published before 01.01.2012, see also group B63H 1/14

U	B63H 1/30	· of non-rotary type
M	B63H 1/32	· · Flaps, pistons, or the like, reciprocating in propulsive direction

WARNING

this group is pending a reorganisation; also documents covered by group B63H 11/09 are within this group

M	B63H 1/36	· · swinging sideways, e.g. fishtail type

WARNING

this group is pending a reorganisation; also documents covered by group B63H 1/37 are within this group

M	B63H 1/37	· · Moving-wave propellers, i.e. wherein the propelling means comprise a flexible undulating structure

WARNING

This group is not complete pending a reclassification; for documents published before 01.01.2012, see also group B63H 1/36

U	**B63H 5/00**	**Arrangements on vessels of propulsion elements directly acting on water**
M	B63H 5/02	· of paddle wheels, e.g. of stern wheels

WARNING

this group is pending a reorganisation; also documents covered by group B63H 5/03 are within this group

M	B63H 5/03	· · movably mounted with respect to the hull, e.g. having means to reposition paddle wheel assembly, or to retract paddle or to change paddle attitude

WARNING

This group is not complete pending a reclassification; for documents published before 01.01.2012, see also group B63H 5/02

U	B63H 5/07	· of propellers (forming part of outboard units {or Z-drives} <u>B63H 20/00</u>)

M	B63H 5/125	· · movably mounted with respect to hull, e.g. adjustable in direction {, e.g. podded azimuthing thrusters} ({outboard units or Z-drives B63H 20/00; } movably mounted for steering purposes only, {rudders carrying propellers} B63H 25/42)

WARNING
- B63H 5/125 and subgroups are not complete pending a reorganisation; see also groups B63H 21/26 and B63H 25/42 - this group is pending a reorganisation; also documents covered by groups B63H 20/00, and subgroups, and by B63H 25/42 are within this group

M	B63H 5/1252	· · · {the ability to move being conferred by gearing in transmission between prime mover and propeller and the propulsion unit being other than in a "Z" configuration}

WARNING
Some documents of group B63H 5/1252 are in the process of being reorganized to group B63H 20/14 and subgroups

U	B63H 5/14	· · characterised by being mounted in non-rotating ducts or rings, e.g. adjustable for steering purpose (shrouding ring attached to blades B63H 1/16; jet propulsion B63H 11/00)
M	B63H 5/15	· · · Nozzles, e.g. Kort-type

WARNING
This group is not complete pending a reclassification; for documents published before 01.01.2012, see also group B63H 5/14

M	B63H 5/18	· · of emergency propellers, e.g. arranged at the side of the vessel

WARNING
this group is pending a reorganisation; also documents covered by group B63H 5/20 are within this group

M	B63H 5/20	· · · movable from a working position to a non-working position {(movable arrangements of propellers in general B63H 5/125; outboard propulsion units in general B63H 20/00; steering or dynamic anchoring by propellers used therefore only, or by rudders carrying propellers B63H 25/42)}

WARNING
This group is not complete pending a reclassification; for documents published before 01.01.2012, see also group B63H 5/18

U	**B63H 9/00**	**Propulsive devices directly acted on by wind; Arrangements thereof (air driven propellers driving underwater propulsive elements B63H 13/00)**
U	B63H 9/04	· using sails or like wind-catching surfaces (sailing sledges or ice boats B62B 15/00; {masts for sailing boats B63B 15/0083; sail arrangements for wind-driven boards B63B 35/7973})
U	B63H 9/08	· · Connections of sails to masts, spars, or the like
M	B63H 9/10	· · · Running rigging, e.g. reefing equipment (staying of masts B63B 15/02)

WARNING
this group is pending a reorganisation; also documents covered by group B63H 9/1092 are within this group

M	B63H 9/1092	· · · · {Means for stowing, or securing sails when not in use (B63H 9/1021 takes precedence)}

WARNING

B63H 9/1092 is not complete pending a reorganisation; see also group B63H 9/10

U	**B63H 11/00**	**Effecting propulsion by jets, i.e. reaction principle (steering by {auxiliary} jet action, {rudders carrying jets} B63H 25/46; power plant per se, see the relevant classes)**
U	B63H 11/02	· the propulsive medium being ambient water
U	B63H 11/04	· · by means of pumps
M	B63H 11/09	· · · by means of pressure pulses applied to a column of liquid, e.g. by ignition of an air/gas or vapour mixture

WARNING

This group is not complete pending a reclassification; for documents published before 01.01.2012, see also group B63H 1/32

M	B63H 11/10	· · having means for deflecting jet or influencing cross-section thereof

WARNING

Documents concerning deflection of the jet into a direction substantially parallel to the plane of the pump outlet are in the process of being reorganised to B63H 11/101

M	B63H 11/101	· · · {having means for deflecting jet into a propulsive direction substantially parallel to the plane of the pump outlet opening}

WARNING

Not complete, pending a reorganisation; see B63H 11/10 and B63H 11/107 and subgroups

M	B63H 11/107	· · · Direction control of propulsive fluid {(B63H 11/101 takes precedence)}

WARNING

Documents concerning means for deflecting jet into a propulsive direction substantially parallel to the plane of the pump outlet opening are in the process of being reorganized to B63H 11/101

U	**B63H 16/00**	**Effecting propulsion by muscle power (swimming frameworks, {i.e. apparatus fixed to or held by the swimmer or diver} with swimmer-operated driving mechanism A63B 35/00; land-based training equipment for rowing or sculling A63B 69/06)**
M	B63H 16/06	· Rowlocks; Mountings therefor

WARNING

this group is pending a reorganisation; also documents covered by groups B63H 16/067, and B63H 16/073 are within this group

M	B63H 16/067	· · Rowlocks mounted on a structure extending beyond the gunwale of the vessel

WARNING

This group is not complete pending a reclassification; for documents published before 01.01.2012, see also group B63H 16/06

M	B63H 16/073	· · having oar shaft restraining means

> ~~WARNING~~
>
> ~~This group is not complete pending a reclassification; for documents published before 01.01.2012, see also group B63H 16/06~~

U	B63H 16/08	· Other apparatus for converting muscle power into propulsive effort (general features of propulsion elements, <u>see</u> the relevant groups)
M	B63H 16/16	· · using reciprocating pull cable, i.e. a strand-like member movable alternately backward and forward

> ~~WARNING~~
>
> ~~This group is not complete pending a reclassification; for documents published before 01.01.2012, see also groups B63H 16/12 and B63H 16/14~~

M	B63H 16/18	· · using sliding {or pivoting} handle or pedal, i.e. the motive force being transmitted to a propelling means by means of a lever operated by the hand or foot of the occupant

> ~~WARNING~~
>
> ~~This group is not complete pending a reclassification; for documents published before 01.01.2012, see also groups B63H 16/12 and B63H 16/14~~

M	B63H 16/20	· · using rotary cranking arm

> ~~WARNING~~
>
> ~~This group is not complete pending a reclassification; for documents published before 01.01.2012, see also groups B63H 16/12 and B63H 16/14~~

M	**B63H 20/00**	**Outboard propulsion units, i.e. propulsion units having a substantially vertical power leg mounted outboard of a hull and terminating in a propulsion element, e.g. "outboard motors", Z-drives {with level bridging shaft arranged substantially outboard} (power plants <u>per se</u>, <u>see</u> the relevant classes); Arrangements thereof on vessels {(transom panels for outboard motors on inflatable boats <u>B63B 7/087</u>; tug-type floating propeller units <u>B63B 35/665</u>; rudders carrying propellers <u>B63H 25/42</u>; rudders carrying jets <u>B63H 25/46</u>; engines of outboard propulsion units <u>F02B 61/045</u>)}**

> ~~WARNING~~
>
> ~~Not complete pending a reclassification; see also B63H 5/1252, as well as B63H 21/26 and subgroups~~

M	B63H 20/001	· {Arrangements, apparatus and methods for handling fluids used in outboard drives (for handling exhaust gas <u>B63H 20/24</u>; for handling cooling-water <u>B63H 20/28</u>; cooling outboard marine engines <u>F01P 3/202</u>; air intakes for outboard marine engines <u>F02M 35/167</u>)}

> ~~WARNING~~
>
> ~~This group and its subgroups are not complete, pending a reorganisation; see B63H 21/38 and B63B 2770/00~~

M	B63H 20/24	· {Arrangements, apparatus and methods for handling exhaust gas in outboard drives, e.g.} exhaust gas outlets {(in engines, e.g. outboard marine engines, <u>F01N</u>)}

> ~~WARNING~~
>
> ~~This group and its subgroups are not complete, pending a reorganisation; see B63H 21/32, B63H 21/38 and B63B 2770/00~~

M	B63H 20/28	• {Arrangements, apparatus and methods for handling cooling-water in outboard drives, e.g.} cooling-water intakes {(cooling circuits for outboard marine engines F01P 3/202)}

> WARNING
>
> This group and its subgroups are not complete, pending a reorganisation; see B63H 21/38 and B63B 2770/00

M	**B63H 21/00**	**Use of propulsion power plant or units on vessels (use of outboard propulsion units B63H 20/00; hull reinforcements for carrying propulsion power plant or units B63B 3/70; {propulsion of submarines B63G 8/08; } propulsion power plant or units per se, see the relevant classes)**

NOTE

This group comprises arrangements of propulsion power plant or units on vessels and to some extent it includes adaptations of such plant or units to facilitate such arrangements

> WARNING
>
> this group is pending a reorganisation; also documents covered by group B63H 21/36 are within this group

U	B63H 21/12	• the vessel being motor-driven (B63H 21/175, B63H 21/18 take precedence; {cooling circuits with liquid-to-liquid heat-exchange relative to marine vessels F01P 3/207})

WARNING

Group B63H 21/12 is no longer used for classification of vessels being motor-driven by electric motor, powered by land vehicle supported by vessel, and powered by nuclear energy. These documents are in the process of being reorganised to groups B63H 21/17, B63H 21/175, and B63H 21/18 respectively

M	B63H 21/165	• • by hydraulic fluid motor, i.e. wherein a liquid under pressure is utilised to rotate the propelling means {(transmission from power plant or unit to propeller using fluid gearing per se B63H 23/26)}

> WARNING
>
> This group is not complete pending a reclassification; for documents published before 01.01.2012, see also group B63H 21/12

M	B63H 21/17	• • by electric motor (electrically-propelled vehicles B60L; {Transmitting power from propulsion power plant to propulsive elements with electric gearing B63H 23/24})

> WARNING
>
> Not complete. See B63H 21/12, B63H 23/24

M	B63H 21/175	• the vessel being powered by land vehicle supported by vessel

> WARNING
>
> not complete pending a reorganisation, see also B63H 21/12

M	B63H 21/18	• the vessels being powered by nuclear energy

> WARNING
>
> not complete pending a reorganisation, see also B63H 21/12

M	B63H 21/21	· Control means for engine or transmission, specially adapted for use on marine vessels

WARNING

This group is not complete pending a reclassification; for documents published before 01.01.2012, see also group B63H 21/22

M	B63H 21/22	· the propulsion power units being controlled from exterior of engine room, e.g. from navigation bridge; Arrangements of order telegraphs ({conjoint control of specific features of internal combustion engines and of propelling elements F02D} ; order telegraphs per se G08B 9/00)

WARNING

This group is not complete pending a reorganisation; also documents covered by group B63H 21/21 are within this group

M	B63H 21/36	· Covers or casing arranged to protect plant or unit from marine environment ({Housings of outboard propulsion units B63H 20/32} hull construction B63B 3/00)

WARNING

This group is not complete pending a reclassification; for documents published before 01.01.2012, see also group B63H 21/00

U	**B63H 23/00**	**Transmitting power from propulsion power plant to propulsive elements (changing pitch or propellers B63H 3/00; adaptation of transmission to allow adjustment in location or direction of propellers B63H 5/125; transmission between wind motors and propulsive elements B63H 13/00; in outboard propulsion units B63H 20/14; adaptation of transmission to allow adjustment of location of propeller B63H 20/08; {adaptations of transmissions to allow steering or dynamic anchoring by propellers carried on rudders B63H 25/42; } for vehicles in general B60K; driving auxiliary machinery B63J; transmission elements per se F16)**
U	B63H 23/22	· with non-mechanical gearing
M	B63H 23/24	· · electric {(dynamo-electric machines H02K)}

WARNING

This group is not complete pending a reclassification; also documents covered by group B63H 21/17 are in this group

U	B63H 23/32	· Other parts
U	B63H 23/34	· · Propeller shafts; Paddle-wheel shafts; Attachment of propellers on shafts (shafts in general F16C; attachment of a member on a shaft in general F16D 1/06)
M	B63H 23/35	· · · Shaft braking or locking, i.e. means to slow or stop the rotation of the propeller shaft or to prevent the shaft from initial rotation

WARNING

This group is not complete pending a reclassification; for documents published before 01.01.2012, see also group B63H 23/34

M	B63H 25/00	**Steering; Slowing-down otherwise than by use of propulsive elements (using adjustably-mounted propeller ducts or rings for steering B63H 5/14; using movably-installed outboard propulsion units B63H 20/00); Dynamic anchoring, i.e. positioning vessels by means of main or auxiliary propulsive elements (anchoring, other than dynamic B63B 21/00; equipment to decrease pitch, roll or like unwanted vessel movements by auxiliary jets or propellers B63B 39/08; {systems for waterborne vessel position control G05, e.g. G05D 1/00})**

WARNING

This group is pending a reorganisation; also documents covered by group B63H 25/02, and subgroups are within this group

M	B63H 25/02	· Initiating means for steering, {for slowing down, otherwise than by use of propulsive elements, or for dynamic anchoring}

WARNING

B63H 25/02 and subgroups are not complete in view of initiating means for slowing down or for dynamic anchoring, pending a reorganisation; see also group B63H 25/00

M	B63H 25/42	· Steering or dynamic anchoring by propulsive elements (by jets B63H 25/46); Steering or dynamic anchoring by propellers used therefor only; Steering or dynamic anchoring by rudders carrying propellers

WARNING

This group is not complete as to rudders carrying propellers, pending a reorganisation; see also B63H 5/125, and B63H 21/26 and subgroups - this group is pending a reorganisation; also documents covered by groups B63H 5/125, and subgroups, and by B63H 20/00, and subgroups are within this group

M	B63H 25/46	· Steering or dynamic anchoring by jets {or by rudders carrying jets (steering or dynamic anchoring by deflecting or directing main propulsion jets B63H 11/00)}

WARNING

This group is no complete as to rudders carrying jets, pending a reclassification; see also B63H 20/00 and subgroups

Project: MP0140 (B63J)

M	B63J 3/00	**Driving of auxiliaries (transmission elements per se F16)**

WARNING

B63J 3/00 and subgroups are not complete pending a reclassification; see also group B63J 99/00

M	B63J 4/00	**Arrangements of installations for treating {ballast water,} waste water, sewage, {sludge, or refuse}, or for preventing environmental pollution not otherwise provided for; ({centrifugal bilge-water separators B04; discharge of refuse, e.g. for ash B63B 17/06; arrangements on tanks for fuel or the like for minimizing pollution by accidents B63B 17/0036, associated with cargo tanks B63B 25/082; vessels for collecting pollution from open water B63B 35/30;} soil-water discharges B63B 29/16; {treating waste water, sewage, or sludge, in general, C02F; cleaning or keeping clear the surface of open water, in general E02B 15/00})**

WARNING

B63J 4/00 is not complete pending a reclassification; see also groups B63B 13/00, B63B 17/00, B63B 29/16, B63J 99/00

M	B63J 99/00	**Subject matter not provided for in other groups of this subclass**

WARNING

~~This group is pending a reorganisation; also documents covered by groups B63B 17/00, B63J 3/00, B63J 4/00, and subgroups are within this group~~

Project: RP0126 (B64C)

U	B64C 23/00	**Influencing air-flow over aircraft surfaces, not otherwise provided for**
U	B64C 23/06	· by generating vortices
C	B64C 23/065	· · {at the wing ~~tip, e.g. winglets, splines~~*tips*}

WARNING
Group B64C 23/065 is impacted by reclassification into groups B64C 23/069, B64C 23/072, B64C 23/076.
All groups listed in this Warning should be considered in order to perform a complete search.

N	B64C 23/069	· · · {using one or more wing tip airfoil devices, e.g. winglets, splines, wing tip fences or raked wingtips}

WARNING
Group B64C 23/069 is incomplete pending reclassification of documents from group B64C 23/065.
All groups listed in this Warning should be considered in order to perform a complete search.

N	B64C 23/072	· · · · {the wing tip airfoil devices being moveable in their entirety}

WARNING
Group B64C 23/072 is incomplete pending reclassification of documents from group B64C 23/065.
All groups listed in this Warning should be considered in order to perform a complete search.

N	B64C 23/076	· · · · {the wing tip airfoil devices comprising one or more separate moveable members thereon affecting the vortices, e.g. flaps}

WARNING
Group B64C 23/076 is incomplete pending reclassification of documents from group B64C 23/065.
All groups listed in this Warning should be considered in order to perform a complete search.

Project: RP0348 (B64C)

D	B64C 2700/00	~~**Codes corresponding to the former IdT classification**~~
D	B64C 2700/62	· ~~Codes corresponding to the former IdT classification of class 62~~
D	B64C 2700/6201	· · ~~Airplanes, helicopters, autogyros~~
D	B64C 2700/6202	· · · ~~Characteristics not limited to an aircraft type~~
D	B64C 2700/6204	· · · · ~~Materials~~
D	B64C 2700/6205	· · · · ~~Protection means, e.g. against rust, water, fire~~
D	B64C 2700/6207	· · · · ~~Stabilisation~~
D	B64C 2700/6208	· · · · · ~~Longitudinal and transversal stability~~
D	B64C 2700/6209	· · · · · · ~~automatically controlled~~
D	B64C 2700/6211	· · · · · · · ~~with movable weight not acting as pendulum~~

D	B64C 2700/6212	· · · · · · · with weight acting as pendulum
D	B64C 2700/6214	· · · · · · · · with parts of the aircraft acting as pendulum
D	B64C 2700/6215	· · · · · · · · with fluid acting as pendulum
D	B64C 2700/6216	· · · · · · · by gyroscopical effect (also in combination with pendulum)
D	B64C 2700/6218	· · · · · · · by other pulse power source, e.g. aerodynamical effect, propellers
D	B64C 2700/6219	· · · · · · · · by auxiliary fixed or movable surfaces or other special devices, or surfaces acting as parachutes
D	B64C 2700/6221	· · · · · · manually controlled
D	B64C 2700/6222	· · · · · · · with movable weight not acting as pendulum
D	B64C 2700/6223	· · · · · · · with weight acting as pendulum
D	B64C 2700/6225	· · · · · · · by gyroscopical effet (also in combination with pendulum)
D	B64C 2700/6226	· · · · · · · by other pulse power source; e.g. aerodymamical effet, popeller
D	B64C 2700/6228	· · · · · · · · by auxiliary planes or parachutes
D	B64C 2700/6229	· · · · · · Special devices to stabilise or to compensate a helicoper rotor by other means than counter rotating rotor
D	B64C 2700/623	· · · · · · Special devices to stabilise or to compensate a gyroplane pivoting torque
D	B64C 2700/6232	· · · Airplanes with fixed or movable wings
D	B64C 2700/6233	· · · · Design, structure or mounting of wings
D	B64C 2700/6235	· · · · · Guy-wires assemblies; Connections between wings and fuselage
D	B64C 2700/6236	· · · · · Honeycomb stiffeners
D	B64C 2700/6238	· · · · · Pressure equalising devices between the inside of the wing and the atmosphere
D	B64C 2700/6239	· · · · · Ful wing structures
D	B64C 2700/624	· · · · · Wings or parts thereof movable during flight
D	B64C 2700/6242	· · · · · · adjustable about several axes
D	B64C 2700/6243	· · · · Control systems
D	B64C 2700/6245	· · · · · by warping of wings tips
D	B64C 2700/6246	· · · · · by auxiliary surfaces at the wings tips
D	B64C 2700/6247	· · · · · by auxiliary surfaces outside the wings tips
D	B64C 2700/6249	· · · · · by propellers
D	B64C 2700/625	· · · · · by jet flaps
D	B64C 2700/6252	· · · · · Control systems assemblies
D	B64C 2700/6253	· · · · · · Feedback compensation devices
D	B64C 2700/6254	· · · · · Control systems or transmitting systems for actuating control surfaces
D	B64C 2700/6256	· · · · · · Control devices for fins or rudders
D	B64C 2700/6257	· · · · · · · by hydraulical, pneumatical or electrical means
D	B64C 2700/6259	· · · · · · Control devices for feed-back compensating and guiding surfaces
D	B64C 2700/626	· · · · · · · by hydraulical, pneumatical or electrical means
D	B64C 2700/6261	· · · · · · Transmission systems
D	B64C 2700/6263	· · · · · · Servo actuators; Auxiliary motors
D	B64C 2700/6264	· · · · · Vibrations suppressing devices
D	B64C 2700/6266	· · · · · Safety devices
D	B64C 2700/6267	· · · · · Control devices for a special position of the flying aircraft or a special position of the pilot

D	B64C 2700/6269	· · · · ~~Control from outside the aircraft~~
D	B64C 2700/627	· · · · ~~Influencing airflow over aircraft surfaces~~
D	B64C 2700/6271	· · · · · ~~by fluid flow around the aircraft~~
D	B64C 2700/6273	· · · · · ~~lift being provided by static devices, e.g. balloons~~
D	B64C 2700/6274	· · · · · ~~by other means, e.g. propellers, rotors, air jets~~
D	B64C 2700/6276	· · · ~~Rotorcraft~~
D	B64C 2700/6277	· · · · ~~with driven or windmilling propellers~~
D	B64C 2700/6278	· · · · · ~~Features common for any type of rotorcraft~~
D	B64C 2700/628	· · · · · · ~~Devices for the adjustment of the blades; Folding blades~~
D	B64C 2700/6281	· · · · · ~~Helicopters~~
D	B64C 2700/6283	· · · · · · ~~Rotor construction~~
D	B64C 2700/6284	· · · · · · · ~~Blades control devices~~
D	B64C 2700/6285	· · · · · · · · ~~Drag reducing devices for an inoperative rotor~~
D	B64C 2700/6287	· · · · · · · ~~Rotor drives~~
D	B64C 2700/6288	· · · · · · · · ~~Hydraulic, electric or man powered rotorcrafts~~
D	B64C 2700/629	· · · · · · · ~~Rotors which can be used as propulsion means~~
D	B64C 2700/6291	· · · · · · · ~~Rotors stowable in the wings~~
D	B64C 2700/6292	· · · · · · ~~Control means using other devices than the rotor~~
D	B64C 2700/6294	· · · · · · ~~Construction parts, e.g. frames; Balancing; Flight control; Brakes~~
D	B64C 2700/6295	· · · ~~Aircraft specially adapted for special uses~~
D	B64C 2700/6297	· · · · ~~for military uses~~
D	B64C 2700/6298	· · · ~~Gliders~~

Project: N/A (B64D)

B64D 11/00	**Passenger or crew ~~accomodation~~ <mark>*accommodation*</mark>; Flight-deck installations not otherwise provided for**

Project: RP0348 (B64D)

D	**B64D 2700/00**	~~**** to be decided ****~~
D	B64D 2700/62	· ~~** to be decided **~~
D	B64D 2700/62008	· · ~~Aircraft equipment~~
D	B64D 2700/62017	· · · ~~Respiratory apparatus for high altitude~~
D	B64D 2700/62026	· · · · ~~Pressurised cabins~~
D	B64D 2700/62035	· · · · · ~~Pressure control valves~~
D	B64D 2700/62043	· · · ~~Indicators; Protective devices~~
D	B64D 2700/62052	· · · · ~~De-icing or preventing icing~~
D	B64D 2700/62061	· · · · · ~~of structural elements, e.g. fuselage, wings and the like~~
D	B64D 2700/6207	· · · · ~~by mechanical means~~
D	B64D 2700/62078	· · · · ~~by electric heating~~
D	B64D 2700/62087	· · · · ~~by ducted exhaust gas~~
D	B64D 2700/62096	· · · · · ~~of propellers~~
D	B64D 2700/62105	· · · · ~~by mechanical means~~
D	B64D 2700/62114	· · · · ~~by electric heating~~
D	B64D 2700/62122	· · · · ~~by ducted exhaust gas~~
D	B64D 2700/62131	· · · · · ~~of windows or air intakes~~

D	B64D 2700/6214	· · · · by mechanical means
D	B64D 2700/62149	· · · · by electric heating
D	B64D 2700/62157	· · · · by ducted exhaust gas
D	B64D 2700/62166	· · · Mounting of instruments
D	B64D 2700/62175	· Dashboards; Radar antennae; Chart tables
D	B64D 2700/62184	· Measuring instruments
D	B64D 2700/62192	· · not using electrical means
D	B64D 2700/62201	· · · Turbulence detectors not using radar signals
D	B64D 2700/6221	· · using electrical means
D	B64D 2700/62219	· · · Electric safety devices
D	B64D 2700/62228	· · · Electric compensation or correction devices
D	B64D 2700/62236	· · · Electrical circuits for acceleration indicators
D	B64D 2700/62245	· · · Electric circuits for rate of change indicators
D	B64D 2700/62254	· · · · Airspeed indicators
D	B64D 2700/62263	· · · · Devices indicating or eliminating decrease of the airspeed
D	B64D 2700/62271	· · · · Roll, pitch or yaw indicators
D	B64D 2700/6228	· · · · Airflow direction indicators
D	B64D 2700/62289	· · · Flight recorders, e.g. black boxes
D	B64D 2700/62298	· · Weight and center of gravity indicators
D	B64D 2700/62307	· · · Tanks
D	B64D 2700/62315	· · Tanks or accessories
D	B64D 2700/62324	· · · Manufacturing and materials
D	B64D 2700/62333	· · · Special panels
D	B64D 2700/62342	· · · · Flexible or foldable panels
D	B64D 2700/6235	· · · · Self-sealing or double panels; Tanks suspended elastically
D	B64D 2700/62359	· · · · Thermally insulated walls
D	B64D 2700/62368	· · · Fluid level indicators
D	B64D 2700/62377	· · · Accessories, e.g. packs, floats, valves
D	B64D 2700/62385	· · Mounting of tanks; Supporting devices
D	B64D 2700/62394	· · · Auxiliary tanks; Tanks convertible into floating devices
D	B64D 2700/62403	· · · Wing parts used as fuel tanks
D	B64D 2700/62412	· · Emptying or filling of tanks
D	B64D 2700/62421	· · · Emptying devices
D	B64D 2700/62429	· · · · Flow lines; Couplings
D	B64D 2700/62438	· · Safety devices for tanks
D	B64D 2700/62447	· · · Fire preventing devices
D	B64D 2700/62456	· · · · Explosion preventing devices
D	B64D 2700/62464	· · · Devices for degassing fuel or for controlling boiloff
D	B64D 2700/62473	· · · Parachutes
D	B64D 2700/62482	· · Parts or accessories
D	B64D 2700/62491	· · · Construction of canopies
D	B64D 2700/625	· · · Load suspension; Harnesses or quick release boxes
D	B64D 2700/62508	· · Disposition or mounting in aircraft
D	B64D 2700/62517	· · Manufacturing or packing

D	B64D 2700/62526	· · · Parachutes with a rigid armature
D	B64D 2700/62535	· · · Means for deflating the parachute after use
D	B64D 2700/62543	· · · Means to open or to close the parachute pack
D	B64D 2700/62552	· · · Devices to open or to drive the parachute during fall
D	B64D 2700/62561	· · · · Devices to control the time or rate of the opening; Deceleration devices
D	B64D 2700/6257	· · · · Opening induced by means other than airstream
D	B64D 2700/62578	· · Special uses of parachutes or similar devices
D	B64D 2700/62587	· · Other emergency devices, e.g. balloons, parachutes with propellers
D	B64D 2700/62596	· · · Dropping, ejecting, releasing or receiving articles during flight
D	B64D 2700/62605	· · Dropping, ejecting or releasing articles
D	B64D 2700/62614	· · · the article being explosive, e.g. bombs
D	B64D 2700/62622	· · · · equipped with parachutes, rotary wings or rudders
D	B64D 2700/62631	· · · Armaments
D	B64D 2700/6264	· · Mounting of flame-projectors
D	B64D 2700/62649	· · Mounting of firearms
D	B64D 2700/62657	· · Devices adapted to shoot throught the hollow propeller shaft
D	B64D 2700/62666	· · · Means for protecting aircraft against aerial barriers
D	B64D 2700/62675	· · · Turrets which can be lowered
D	B64D 2700/62684	· · · General disposition of the aircraft in relation to the propulsion means
D	B64D 2700/62692	· · Tractive or propulsive propellers
D	B64D 2700/62701	· · · operated by hydraulic power
D	B64D 2700/6271	· · · operated by electrical power
D	B64D 2700/62719	· · · jet-driven
D	B64D 2700/62728	· · · Specific for seaplanes or amphibian aircrafts
D	B64D 2700/62736	· · jet propulsion
D	B64D 2700/62745	· · · combined with propellers
D	B64D 2700/62754	· · · combined with jet-deflectors
D	B64D 2700/62763	· · · Propulsion or transmission devices
D	B64D 2700/62771	· · General arrangements
D	B64D 2700/6278	· · · in propeller driven aircraft
D	B64D 2700/62789	· · · · In seaplanes or amphibian aircraft
D	B64D 2700/62798	· · · · One propeller being driven by several engines
D	B64D 2700/62807	· · · · Several non-coaxial propellers driven by only one engine
D	B64D 2700/62815	· · · · Double propellers
D	B64D 2700/62824	· · · · · co-rotating
D	B64D 2700/62833	· · · · · counter-rotating
D	B64D 2700/62842	· · · · · · driven by only one engine
D	B64D 2700/6285	· · · · · · driven by several engines
D	B64D 2700/62859	· · · in jet propulsion aircraft
D	B64D 2700/62868	· · Manufacturing of propellers or propulsive wheels
D	B64D 2700/62877	· · · Variable-pitch blades
D	B64D 2700/62885	· · · · Torque transmission to the propeller shaft
D	B64D 2700/62894	· · · · Coupling between motor shaft and propeller shaft

D	B64D 2700/62903	· · · · · ~~through an overrunning coupling, a friction clutch, an adjustable slipping coupling, a hydraulic coupling or a retarding coupling~~
D	B64D 2700/62912	· · · · · ~~through a device which changes the direction of rotation of the propeller relative to the engine~~
D	B64D 2700/62921	· · · · ~~Brakes arranged on the propeller shaft~~
D	B64D 2700/62929	· · · · ~~Lubrication of the transmission~~
D	B64D 2700/62938	· · · ~~Arrangements of propulsion plants~~
D	B64D 2700/62947	· · · · ~~in propeller driven aircraft~~
D	B64D 2700/62956	· · · · ~~in jet propulsion aircraft~~
D	B64D 2700/62964	· · · ~~Engines ejectable during flight~~
D	B64D 2700/62973	· · · ~~Heating and cooling devices~~
D	B64D 2700/62982	· · · ~~Elastic suspension using rubber~~
D	B64D 2700/62991	· · ~~Devices for braking or boosting aircraft, e.g. auxiliary propeller, rockets, jets, take-off assistance~~

Project: RP0348 (B64F)

D	**B64F 2700/00**	**~~** Title-to-be-decided **~~**
D	B64F 2700/62	· ~~** Title-to-be-decided **~~
D	B64F 2700/6203	· · ~~Alighting gear~~
D	B64F 2700/6207	· · · ~~for airships, airplanes or seaplanes~~
D	B64F 2700/6211	· · · · ~~for airships~~
D	B64F 2700/6215	· · · · · ~~Landing bumpers~~
D	B64F 2700/6219	· · · · · ~~Anchors~~
D	B64F 2700/6223	· · · · · ~~Floats~~
D	B64F 2700/6226	· · · · ~~for airplanes~~
D	B64F 2700/623	· · · ~~Shock-absorbers~~
D	B64F 2700/6234	· · · ~~Tail wheels~~
D	B64F 2700/6238	· · · ~~Power driven wheels~~
D	B64F 2700/6242	· · · ~~Fluid-damped shock absorbers~~
D	B64F 2700/6246	· · · · ~~working independently of the springs; Non-hydraulic or non-pneumatic shock absorbers~~
D	B64F 2700/6249	· · · ~~Brakes~~
D	B64F 2700/6253	· · · · ~~fluid operated~~
D	B64F 2700/6257	· · ~~Overturn preventing devices or protection means~~
D	B64F 2700/6261	· · · ~~Seaplanes equipped with floats or skates~~
D	B64F 2700/6265	· · ~~inflatable or deformable~~
D	B64F 2700/6269	· · ~~collapsible or retractable~~
D	B64F 2700/6273	· · · ~~disposed at the wings tips~~
D	B64F 2700/6276	· · ~~Arrangement of the flating devices~~
D	B64F 2700/628	· · ~~Aircraft provided with floats and wheels or endless-tracks~~
D	B64F 2700/6284	· · ~~Propellers, rudders or brakes acting in the water~~
D	B64F 2700/6288	· · ~~Floats suspension~~
D	B64F 2700/6292	· · · ~~Floating devices or aircraft parts usable as a life saving boats~~
D	B64F 2700/6296	· · · ~~take-off devices~~

Project: N/A (B64G)

U	**B64G 1/00**	**Cosmonautic vehicles**
U	B64G 1/22	· Parts of, or equipment specially adapted for fitting in or to, cosmonautic vehicles
	B64G 1/60	· · Crew or passenger ~~accomodations~~*accommodations*

Project: N/A (B65C)

U	**B65C 9/00**	**Details of labelling machines or apparatus {(attaching articles to carriers B65B 15/00; cards of samples G09F 5/04)}**
U	B65C 9/02	· Devices for moving articles, e.g. containers, past labelling station
U	B65C 9/04	· · having means for rotating the articles
	B65C 9/045	· · · {adapted for ~~accomodating~~*accommodating* articles of different diameters, e.g. for adapting the program of rotation to the diameter of the articles}
U	**B65C 2210/00**	**Details of manually controlled or manually operable label dispensers**
	B65C 2210/0067	· ~~accomodating~~*accommodating* labels of different sizes

Project: N/A (B65D)

B65D **CONTAINERS FOR STORAGE OR TRANSPORT OF ARTICLES OR MATERIALS, e.g. BAGS, BARRELS, BOTTLES, BOXES, CANS, CARTONS, CRATES, DRUMS, JARS, TANKS, HOPPERS, FORWARDING CONTAINERS; ACCESSORIES, CLOSURES, OR FITTINGS THEREFOR; PACKAGING ELEMENTS; PACKAGES (containers specially adapted for storing agricultural or horticultural products A01F 25/14; containers specially adapted for use in dairies A01J; travelling bags or baskets, suitcases A45C; travelling or camp equipment A45F; {linkable display containers A47B87/00C} ; household or table equipment A47G; letter-boxes for home use A47G 29/12; kitchen equipment A47J; associated with vehicles, see the appropriate subclass of B60 - B64; machines, apparatus, or devices for, or methods of, packaging articles or materials B65B; sack holders B65B 67/00; refuse receptacles B65F 1/00; handling sheets, webs or filamentary material B65H; load-engaging elements or devices attached to lifting or lowering gear of cranes or adapted for connection therewith for transmitting lifting forces B66C; liquid handling B67; storing gases F17; {packaging for photosensitive or like materials G03, e.g. G03C 3/00}; making containers, see subclasses dealing with the working of the material concerned)**

NOTES

1. In this subclass, the indexing codes of B65D 2519/00004 - B65D 2519/00995 should be added, if applicable

2. This subclass covers:
   - containers, packaging elements or packages with auxilliary means or provisions for displaying articles or materials;
   - methods of packaging which are wholly characterised by the form of the package produced or the form of the container or packaging element used, as distinct from the operations performed or the apparatus employed, which are covered by subclass B65B

3. This subclass, which is intended to be as comprehensive as possible, only excludes containers or packages of a nature clearly confined to a single other subclass, which are classified in that subclass

4. In this subclass, groups B65D 5/00, B65D 27/00, **B65D30/00** or B65D 65/00 include constructional features of foldable or erectable container or wrapper

blanks as well as the containers or wrappers formed by folding or erecting such blanks

5. Containers, packaging elements or packages classified in group B65D 85/00, are also classified according to the constructional or functional features, if such features are of interest

6. In this subclass, the following terms or expressions are used with the meanings indicated:
- "rigid or semi-rigid containers" includes:
  a. containers not deformed by, or not taking-up the shape of, their contents;
  b. containers adapted to be temporarily deformed to expel their contents;
  c. pallets;
  d. trays;
- "flexible containers" includes:
  a. containers deformed by, or taking-up the shape of, their contents;
  b. containers adapted to be permanently deformed to expel their contents;
- "packaging elements" includes:
  a. elements, other than containers, for covering, protecting,stiffening, or holding together articles or materials tobe stored or transported;
  b. packaging materials of special type or form not provided for in other subclasses;
- "packages" includes:
  a. combination of containers or packaging elements with articles or materials to be stored or transported:
  b. articles joined together for convenience of storage or transport;
- "paper" includes materials, e.g. cardboard, plastic sheet materials, laminated materials, or metal foils, worked in a manner analogous to paper;
- "large containers", in groups B65D 88/00 or B65D 90/00, means containers having about the size of containers used in container traffic, sometimes referred to as freight, forwarding or "ISO" (International Standardization) containers, or larger containers

7. Tamper-indicating means for containers or closures are classified in the group appropriate to the type of container of closure, e.g. B65D 5/54, B65D 17/00, B65D 27/30, B65D 27/30, B65D 27/34, B65D 33/34, B65D 41/32, B65D 47/36, B65D 49/12, B65D 51/20, B65D 55/06

WARNING

The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:

B65D 5/34	covered by	B65D 5/325
B65D 5/35	covered by	B65D 5/32
B65D 5/355	covered by	B65D 5/0005
B65D 5/43	covered by	B65D 5/42
B65D 5/462	covered by	B65D 5/46008 - B65D 5/46032
B65D 5/465	covered by	B65D 5/46008 - B65D 5/46032
B65D 5/468	covered by	B65D 5/4608
B65D 5/472	covered by	B65D 5/46048
B65D 5/475	covered by	B65D 5/46008
B65D 5/478	covered by	B65D 5/46056
B65D 5/4805 - B65D 5/489	covered by	B65D 5/48002
B65D 5/49 - B65D 5/499	covered by	B65D 5/48024

B65D 5/63	covered by	B65D 5/72
B65D 6/00 - B65D 6/40	covered by	B65D 7/00, B65D 9/00, B65D 11/00, B65D 15/00
B65D 8/00 - B65D 8/22	covered by	B65D 7/00, B65D 9/00, B65D 11/00, B65D 15/00
B65D 19/22	covered by	B65D 19/0004 & subgroups
B65D 19/24	covered by	B65D 19/0004 & subgroups
B65D 19/26	covered by	B65D 19/0004 & subgroups
B65D 19/28	covered by	B65D 19/0004 & subgroups
B65D 19/30	covered by	B65D 19/0004 & subgroups
B65D 19/31	covered by	B65D 19/0004 & subgroups
B65D 19/34	covered by	B65D 19/0004 & subgroups
B65D 17/28 - B65D 17/48, B65D 17/52	covered by	B65D 17/16 - B65D 17/26
B65D 19/32	covered by	B65D 19/0002, B65D 19/0004
B65D 21/024	covered by	B65D 21/0201
B65D 21/028	covered by	B65D 21/0204
B65D 21/032	covered by	B65D 21/0211
B65D 21/036	covered by	B65D 21/0217
B65D 25/26	covered by	B65D 81/02
B65D 30/00 - B65D 30/28	covered by	B65D 29/00, B65D 31/00
B65D 33/17	covered by	B65D 33/1633
B65D 33/36	covered by	B65D 75/58
B65D 33/38	covered by	B65D 75/5861
B65D 35/48 - B65D 35/54	covered by	B65D 47/2018
B65D 39/18	covered by	B65D 39/00 +s.gr.
B65D 41/01	covered by	B65D 41/00
B65D 43/03	covered by	B65D 43/00 + B65D 2543/00027
B65D 43/04	*covered by*	
B65D 43/10	*covered by*	
B65D 47/22	covered by	B65D 47/20
B65D 47/34	covered by	B05B 11/00
B65D 50/06	covered by	
B65D 50/08	covered by	B65D 55/02
B65D 50/10	covered by	B65D 55/02
B65D 50/12	covered by	B65D 55/02
B65D 50/14	covered by	B65D 55/02
B65D 65/26 - B65D 65/32	covered by	B65D 75/58
B65D 65/34	covered by	B65D 75/66
B65D 65/36	covered by	B65D 75/58
B65D 71/52 - B65D 71/68	covered by	B65D 71/0003 - B65D 71/0077
B65D 75/60 - B65D 75/64	covered by	B65D 75/58
B65D 81/15	covered by	B65D 81/05
B65D 81/17	covered by	B65D 81/02
B65D 83/18 - B65D 83/74	covered by	B65D 83/14, B65D 83/16
B65D 83/18	covered by	B65D 83/201
B65D 83/58	covered by	B65D 83/44
B65D 83/76	covered by	B65D 83/0005

B65D 85/07	covered by	
B65D 85/57	covered by	G11B 23/00
B65D 85/575	covered by	G11B 23/00
B65D 85/86 - B65D 85/90	covered by	H01L 21/00, H05K 13/00
B65D91/00	covered by	A47G 29/12

Project: MP0140 (B65D)

U	**B65D 19/00**	**Pallets or like platforms, with or without side walls, for supporting loads to be lifted or lowered (in devices for lifting or lowering bulky or heavy goods for loading or unloading purposes B66F 9/12)**
M	B65D 19/0002	· {Platforms, i.e. load supporting devices without provision for handling by a forklift}

WARNING
~~Group B65D 19/0002 and subgroups are not yet complete. See also B65D19/22 and subgroups~~

M	B65D 19/0004	· {Rigid pallets without side walls}

WARNING
~~Group B65D 19/0004 and subgroups are not yet complete. See also B65D19/22 and subgroups~~

Project: N/A (B65D)

U	**B65D 50/00**	**Closures with means for discouraging unauthorised opening or removal thereof, with or without indicating means, e.g. child-proof closures (tamper-indicating closures without means for discouraging, see the relevant groups, e.g. B65D 41/32, B65D 51/20)**
U	B65D 50/02	· openable or removable by the combination of plural actions
U	B65D 50/04	· · requiring the combination of simultaneous actions, e.g. depress and turn, lift and turn, maintain a part and turn another one (caps or covers secured by rotation with bayonet cams B65D 41/06, B65D 41/36)
	B65D 50/043	· · · {the closure comprising a screw cap whose threads are shaped to ~~accomodate~~*accommodate* blocking elements and the closure is removed after first applying axial force to unblock it and allow it to be unscrewed}
U	**B65D 2501/00**	**Containers having bodies formed in one piece**
U	B65D 2501/24	· Boxes or like containers with moulded compartments or partitions
U	B65D 2501/24006	· · Details relating to bottle crates
U	B65D 2501/24197	· · · Arrangements for locating the bottles
	B65D 2501/24324	· · · · Means for ~~accomodating~~*accommodating* grouped bottles, e.g. in a wrapper
	B65D 2501/24337	· · · · Means for ~~accomodating~~*accommodating* bottles of different sizes

Project: N/A (B65H)

	B65H	**HANDLING THIN OR FILAMENTARY MATERIAL, e.g. SHEETS, WEBS, CABLES**

NOTES

1. This subclass does not cover methods or devices intimately associated with other operations on thin or filamentary material, e.g. sheets, webs, cables or means for performing such operations, which are classified in the relevant subclasses for these operations, e.g.:

B07C	Postal sorting, similar sorting of documents, e.g. cheques
B08B 1/02	Cleaning travelling work, e.g. webs, by methods involving the use of tools, brushes or like members
B21B 41/00	Metal rolling involving guiding, conveying or accumulating easily-flexible work, e.g. wire, sheet metal bands, in loops or curves
B21C 47/00	, Winding-up,coiling, winding-off or temporarily
B21C 49/00	accumulating metal wire, metal band or other flexible metal material, characterised by features relevant to metal processing only, other than by rolling
B21D 43/00	Feeding, positioning or storing devices, combined with, or arranged in, or specially adapted for use in connection with, apparatus for working or processing sheet metal without essentially removing material
B23K 9/12	Means for automatic feeding of electrodes for spot or seam welding or cutting
B29C 31/00	Handling for shaping or joining of plastics, for shaping of substances in a plastic state in general or for after-treatment of shaped products, e.g. feeding the material to be shaped
B41B 15/32	, Film-handling mechanisms in photographic
B41B 21/32	composing machines
B41F 13/02	Conveying or guiding webs through rotary printing presses or machines
B41J 11/00	to Handling of copy- or impression-transfer material
B41J 17/00	in typewriters or selective printing mechanisms
B41K 3/44	Means for handling copy matter in stamping or numbering apparatus or devices
B41L	Handling sheets or webs in apparatus or devices for manifolding, duplicating or printing for office or other commercial purposes, or on addressing machines or like series-printing machines
B42B	Handling relating to permanently attaching together sheets, quires, or signatures
B42C	Handling sheets in book-binding
B65B	Handling of sheets or webs in apparatus for, or methods of, packaging articles, not of interest apart from their application in packaging machines
B65C	Handling of labels in labelling or tagging apparatus
C14B 1/62	Winding or stacking hides or leather in machines or devices for manufacturing leather
D01- D07	Spinning, weaving, braiding, lace-making, knitting, sewing, making ropes or cables
D21F 2/00	Transferring webs from wet ends to press sections in paper-making
F26B 13/00	Handling fabrics, fibres, yarns or other material in long lengths in drying apparatus
G03B	Film-strip handling or handling of pictures in apparatus for taking photographs or for projecting or viewing them
G06K 13/00	Conveying record carriers from one station to another
G06M 7/00	Counting of flat articles, e.g. sheets, carried by a conveyor
G11B 15/00	to Information storage based on relative movement
G11B 19/00	, between record carrier and transducer,
G11B 23/00	, involving handling record carriers for

G11B 25/00	recording or reproducing
H01F 41/06	Manufacturing coils for magnets, inductances, transformers, by winding
H01G 13/02	Machines for winding capacitors
H04N 1/00	Sheet handling not of interest apart from its use in systems for transmission or reproduction of pictures or patterns not varying in time, e.g. facsimile transmission

2. In this subclass:
- the groups relating to thin material, as defined under (i) of Note (3) below, are primarily intended to cover the handling of articles made of paper or cardboard,but also include the handling of articles made of other materials which have similar characteristics or present similar handling problems, e.g. articles made of sheet- plastics or leather;
- the groups relating to filamentary material (groups B65H 49/00 onwards,) as defined in Note (3) below, cover only methods or devices of general application or interest.

3. In this subclass, the following terms or expressions are used with the meanings indicated:
- "handling" includes feeding, folding (other than in the manufacture of products), guiding, orientating, storing, unwinding, and winding;
- "thin material" includes:
    i. sheets, signatures, envelopes, blanks, and thin and thin piles thereof (hereinafter referred to as "articles"), and
    ii. webs, tapes, and films, e.g. of paper, fabric, metal foil, or plastics;
- "filamentary material" includes thread, wires, ropes, cables, and hoses;
- "package" means a mass of filamentary material, formedby coiling, depositing, or winding, with or without a supporting core or former or an enclosing container or receptacle.
- {"yarn" also covers similar filamentary materials.}

WARNING

The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:

B65H 19/16	*covered by*	
B65H 35/07	covered by	B65H 35/0006
B65H 77/00	covered by	B65H 23/00, B65H 59/00
B65H 83/00, B65H 83/02	covered by	B07C 1/025, G07D 11/00 and s.gr
B65H 85/00	covered by	G03B 27/62, G03B 27/6264, G03B 27/6257

Project: MP0140 (B65H)

U	**B65H 19/00**	**Changing the web roll**
U	B65H 19/10	· in unwinding mechanisms or in connection with unwinding operations
M	B65H 19/18	· · Attaching, e.g. pasting, the replacement web to the expiring web {(adhesive arrangements on leading end of replacement web, tabs and adhesive tapes for splicing B65H 19/102)}

~~WARNING~~

~~Groups B65H 19/1805 - B65H 19/1842 are not complete pending reclassification. See also this group~~

Project: N/A (B65H)

U	**B65H 2511/00**	**Dimension; Position; Number; Identification; Occurence**

U	B65H 2511/50	· Occurence
U	B65H 2511/52	· · Error; Fault (dimensional irregularities B65H 2511/16; irregularities in location B65H 2511/24; speed irregularities B65H 2513/106)
	B65H 2511/529	· · · number thereof, frequency of ~~occurence~~ *occurrence*

Project: MP0140 (B66B)

U	**B66B 1/00**	**Control systems of elevators in general (safety devices B66B 5/00; controlling door or gate operation B66B 13/00; systems of general application G05)**
U	B66B 1/24	· Control systems with regulation, i.e. with retroactive action, for influencing travelling speed, acceleration, or deceleration
U	B66B 1/28	· · electrical (detecting excessive speed B66B 5/04); {(control of electrical motor H02P)}
M	B66B 1/285	· · · {with the use of a speed pattern generator}

> ~~WARNING~~
>
> ~~This group is not complete due to reorganisation in progress, see also B66B 1/28~~

Project: N/A (C03C)

C03C	**CHEMICAL COMPOSITION OF GLASSES, GLAZES, OR VITREOUS ENAMELS; SURFACE TREATMENT OF GLASS; SURFACE TREATMENT OF FIBRES OR FILAMENTS FROM GLASS, MINERALS OR SLAGS; JOINING GLASS TO GLASS OR OTHER MATERIALS**

NOTES

1. This subclass covers compositions of polycristalline fibres

2. This subclass does not cover the preparation of single-cristal fibres, which is covered by subclass C30B

WARNING

The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:

C03C 6/00	covered by	C03C 1/00
C03C 6/02-C03C 6/10	*covered by*	
C03C 10/02 - C03C 10/14	covered by	C03C 10/00
C03C 13/02	covered by	C03C 13/00
C03C 27/12	covered by	B32B 17/00

Project: N/A (C04B)

C04B	**LIME, MAGNESIA; SLAG; CEMENTS; COMPOSITIONS THEREOF, e.g. MORTARS, CONCRETE OR LIKE BUILDING MATERIALS; ARTIFICIAL STONE {(roofing granules E04D 7/005)}; CERAMICS (devitrified glass-ceramics C03C 10/00); REFRACTORIES; TREATMENT OF NATURAL STONE**

NOTES

1. In this subclass, the following terms or expressions are used with the meanings indicated:
- "fillers" includes pigments, aggregates and fibrous reinforcing materials;
- "active ingredients" includes processing aids or property improvers, e.g. grinding aids used after the burning process or used in the absence of a burning process;

- "mortars", "concrete" and "artificial stone" are to be considered as a single group of materials, and therefore, in the absence of an indication to the contrary, they include mortar, concrete and other cementitious compositions.

2. In groups C04B 7/00 - C04B 32/00, in the absence of an indication to the contrary, classification is made in the last appropriate place.

3. A composition classified in groups C04B 26/00 or C04B 28/00 is also classified in groups C04B 14/00 - C04B 24/00 if a filler or active ingredient is of interest.

4. In groups C04B 2/00 - C04B 32/00 and C04B 38/00 - C04B 41/00 it is desirable to classify the individual constituents of the mixtures, or other aspects relating to the mixtures or constituents, using Combination Sets with symbols chosen from groups C04B 2/00 - C04B 41/00.

5. In groups C04B 2/00 - C04B 32/00 and C04B 38/00 - C04B 41/00 it is desirable to classify the function of the individual constituents of the mixtures, or other aspects relating to the properties or uses of the mixtures or products obtained, using Combination Sets with symbols chosen from groups C04B 2103/00 - C04B 2111/00.

6. Groups C04B 20/123 and C04B 20/126 are used for indexing purposes only of documents classified in C04B 20/12

WARNING

The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:

C04B 5/02	covered by	B01J 2/00, C21B 3/06
C04B 28/20, C04B 28/22	covered by	C04B 28/18, C04B 28/182, C04B 28/184, C04B 28/186, C04B 28/188
C04B 35/035	covered by	C04B 35/26, C04B 35/2608, C04B 35/2616, C04B 35/2625, C04B 35/2633, C04B 35/2641, C04B 35/265, C04B 35/2658, C04B 35/2666, C04B 35/2675, C04B 35/2683, C04B 35/2691
C04B 35/28-C04B 35/40	*covered by*	
C04B 35/567, C04B 35/569, C04B 35/576, C04B 35/577	covered by	C04B 35/565, C04B 35/571, C04B 35/573, C04B 35/575, C04B 35/5755, C04B 35/806
C04B 35/582	covered by	C04B 35/581, C04B 35/806
C04B 35/5833, C04B 35/5835	covered by	C04B 35/583, C04B 35/806
C04B 35/586, C04B 35/587, C04B 35/594, C04B 35/596	covered by	C04B 35/584, C04B 35/589, C04B 35/591, C04B 35/593, C04B 35/5935, C04B 35/806
C04B 35/599	covered by	C04B 35/597
C04B 35/81	covered by	C04B 35/78
C04B 35/84	covered by	C04B 35/628, C04B 35/78

Project: N/A (C07B)

C07B	**GENERAL METHODS OF ORGANIC CHEMISTRY; APPARATUS THEREFOR (preparation of carboxylic acid esters by telomerisation C07C 67/47; telomerisation C08F)**

NOTES

1. In this subclass, the functional group which is present already in some residue being introduced and is not substantially involved in a chemical reaction, is not considered as the functional group which is formed or introduced as a result of the chemical reaction.

2. In this subclass, the following term is used with the meaning indicated:
- "separation" means separation only for the purposes of recovering organic compounds.

3. When classifying in this subclass, classification is also made in group B01D 15/08 insofar as subject matter of general interest relating to chromatography is concerned

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, classification is made in the last appropriate place according to the type of reaction employed, noting the bond or the functional group which is formed or introduced as a result of the chemical reaction.

5. {C07B 59/00 and subgroups thereof are used for the classification of individual labelled compounds as well as for general methods.}

6. {C07B 61/02 is used for the classification of individual free radicals as well as for general methods.}

> *WARNING*
> *The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:*
> *C07B 60/00   covered by*

Project: RP0341 (C07C)

D	C07C 2101/00	~~Systems containing only non-condensed rings~~ <administratively transferred to C07C 2601/00>
D	C07C 2101/02	· ~~with a three-membered ring~~ <administratively transferred to C07C 2601/02>
D	C07C 2101/04	· ~~with a four-membered ring~~ <administratively transferred to C07C 2601/04>
D	C07C 2101/06	· ~~with a five-membered ring~~ <administratively transferred to C07C 2601/06>
D	C07C 2101/08	· · ~~The ring being saturated~~ <administratively transferred to C07C 2601/08>
D	C07C 2101/10	· · ~~The ring being unsaturated~~ <administratively transferred to C07C 2601/10>
D	C07C 2101/12	· ~~with a six-membered ring~~ <administratively transferred to C07C 2601/12>
D	C07C 2101/14	· · ~~The ring being saturated~~ <administratively transferred to C07C 2601/14>
D	C07C 2101/16	· · ~~The ring being unsaturated~~ <administratively transferred to C07C 2601/16>

D   C07C 2101/18   · with a ring being at least seven-membered

        <administratively transferred to C07C 2601/18>

D   C07C 2101/20   · · The ring being twelve-membered

        <administratively transferred to C07C 2601/20>

D   C07C 2102/00   Systems containing two condensed rings

        <administratively transferred to C07C 2602/00>

D   C07C 2102/02   · The rings having only two atoms in common

        <administratively transferred to C07C 2602/02>

D   C07C 2102/04   · · One of the condensed rings being a six-membered aromatic ring

        <administratively transferred to C07C 2602/04>

D   C07C 2102/06   · · · The other ring being four-membered

        <administratively transferred to C07C 2602/06>

D   C07C 2102/08   · · · The other ring being five-membered (e.g. indane)

        <administratively transferred to C07C 2602/08>

D   C07C 2102/10   · · · The other ring being six-membered (e.d. tetraline)

        <administratively transferred to C07C 2602/10>

D   C07C 2102/12   · · · The other ring being at least seven-membered

        <administratively transferred to C07C 2602/12>

D   C07C 2102/14   · · All rings being cycloaliphatic

        <administratively transferred to C07C 2602/14>

D   C07C 2102/16   · · · The ring system contains five carbon atoms

        <administratively transferred to C07C 2602/16>

D   C07C 2102/18   · · · The ring system contains six carbon atoms

        <administratively transferred to C07C 2602/18>

D   C07C 2102/20   · · · The ring system contains seven carbon atoms

        <administratively transferred to C07C 2602/20>

D   C07C 2102/22   · · · The ring system contains eight carbon atoms (e.g. pentalene)

        <administratively transferred to C07C 2602/22>

D   C07C 2102/24   · · · The ring system contains nine carbon atoms (e.g. perhydroindane)

        <administratively transferred to C07C 2602/24>

D   C07C 2102/26   · · · The ring system contains ten carbon atoms

        <administratively transferred to C07C 2602/26>

D   C07C 2102/28   · · · · Hydrogenated naphthalenes

        <administratively transferred to C07C 2602/28>

D   C07C 2102/30   · · · · (Hydrogenated) azulenes

        <administratively transferred to C07C 2602/30>

D   C07C 2102/32   · · · The ring system contains at least eleven carbon atoms

        <administratively transferred to C07C 2602/32>

D   C07C 2102/34   · · · · (Hydrogenated) heptalenes

        <administratively transferred to C07C 2602/34>

D   C07C 2102/36   · The rings having more than two atoms in common

        <administratively transferred to C07C 2602/36>

D	C07C 2102/38	· · The bicyclo ring system contains five carbon atoms
		<administratively transferred to C07C 2602/38>
D	C07C 2102/40	· · The bicyclo ring system contains six carbon atoms
		<administratively transferred to C07C 2602/40>
D	C07C 2102/42	· · The bicyclo ring system contains seven carbon atoms
		<administratively transferred to C07C 2602/42>
D	C07C 2102/44	· · The bicyclo ring system contains eight carbon atoms
		<administratively transferred to C07C 2602/44>
D	C07C 2102/46	· · The bicyclo ring system contains nine carbon atoms
		<administratively transferred to C07C 2602/46>
D	C07C 2102/48	· · The bicyclo ring system contains ten carbon atoms
		<administratively transferred to C07C 2602/48>
D	C07C 2102/50	· Spiro compounds
		<administratively transferred to C07C 2602/50>
D	**C07C 2103/00**	**Systems containing at least three condensed rings**
		<administratively transferred to C07C 2603/00>
D	C07C 2103/02	· Ortho- or ortho- and peri-condensed systems
		<administratively transferred to C07C 2603/02>
D	C07C 2103/04	· · containing three rings
		<administratively transferred to C07C 2603/04>
D	C07C 2103/06	· · · containing at least one ring with less than six ring members
		<administratively transferred to C07C 2603/06>
D	C07C 2103/08	· · · · containing three- or four-membered rings
		<administratively transferred to C07C 2603/08>
D	C07C 2103/10	· · · · containing five-membered rings
		<administratively transferred to C07C 2603/10>
D	C07C 2103/12	· · · · · only one five-membered ring
		<administratively transferred to C07C 2603/12>
D	C07C 2103/14	· · · · · · (Hydrogenated) benz[f]indenes
		<administratively transferred to C07C 2603/14>
D	C07C 2103/16	· · · · · · (Hydrogenated) benz[e]indenes
		<administratively transferred to C07C 2603/16>
D	C07C 2103/18	· · · · · · (Hydrogenated) fluorenes
		<administratively transferred to C07C 2603/18>
D	C07C 2103/20	· · · · · · (Hydrogenated) acenaphthenes
		<administratively transferred to C07C 2603/20>
D	C07C 2103/22	· · · containing only six-membered rings
		<administratively transferred to C07C 2603/22>
D	C07C 2103/24	· · · · (Hydrogenated) anthracenes
		<administratively transferred to C07C 2603/24>
D	C07C 2103/26	· · · · (Hydrogenated) phenanthrenes
		<administratively transferred to C07C 2603/26>

D   C07C 2103/28   · · · · (Hydrogenated) phenalenes

                                                   <administratively transferred to C07C 2603/28>

D   C07C 2103/30   · · · containing seven-membered rings

                                                   <administratively transferred to C07C 2603/30>

D   C07C 2103/32   · · · · (Hydrogenated) dibenzocycloheptenes

                                                   <administratively transferred to C07C 2603/32>

D   C07C 2103/34   · · · · (Hydrogenated) benzoheptalenes

                                                   <administratively transferred to C07C 2603/34>

D   C07C 2103/36   · · · containing eight-membered rings

                                                   <administratively transferred to C07C 2603/36>

D   C07C 2103/38   · · · containing rings with at least nine members

                                                   <administratively transferred to C07C 2603/38>

D   C07C 2103/40   · · containing four condensed rings

                                                   <administratively transferred to C07C 2603/40>

D   C07C 2103/42   · · · containing only six-membered rings

                                                   <administratively transferred to C07C 2603/42>

D   C07C 2103/44   · · · · (Hydrogenated) naphthacenes

                                                   <administratively transferred to C07C 2603/44>

D   C07C 2103/46   · · · · · 1,4,4a,5,5a,6,11,12a-Octahydronaphthacenes, e.g. tetracyclines

                                                   <administratively transferred to C07C 2603/46>

D   C07C 2103/48   · · · · (Hydrogenated) chrysenes

                                                   <administratively transferred to C07C 2603/48>

D   C07C 2103/50   · · · · (Hydrogenated) pyrenes

                                                   <administratively transferred to C07C 2603/50>

D   C07C 2103/52   · · containing five condensed rings

                                                   <administratively transferred to C07C 2603/52>

D   C07C 2103/54   · · containing more than five condensed rings

                                                   <administratively transferred to C07C 2603/54>

D   C07C 2103/56   · Ring systems containing bridged rings

                                                   <administratively transferred to C07C 2603/56>

D   C07C 2103/58   · · containing three rings

                                                   <administratively transferred to C07C 2603/58>

D   C07C 2103/60   · · · containing at least one ring with less than six members

                                                   <administratively transferred to C07C 2603/60>

D   C07C 2103/62   · · · containing three- or four-membered rings

                                                   <administratively transferred to C07C 2603/62>

D   C07C 2103/64   · · · · having a tricyclo[2.2.1.0(2,6)]hept-structure

                                                   <administratively transferred to C07C 2603/64>

D   C07C 2103/66   · · · · containing five-membered rings

                                                   <administratively transferred to C07C 2603/66>

D   C07C 2103/68   · · · · (Hydrogenated) dicyclopentadienes

                                                 <administratively transferred to C07C 2603/68>

D	C07C 2103/70	· · · containing only six-membered rings
		<administratively transferred to C07C 2603/70>
D	C07C 2103/72	· · · · (Hydrogenated) ethanonaphthalenes
		<administratively transferred to C07C 2603/72>
D	C07C 2103/74	· · · · Adamantanes
		<administratively transferred to C07C 2603/74>
D	C07C 2103/76	· · · containing at least one ring which contains more than six ring members
		<administratively transferred to C07C 2603/76>
D	C07C 2103/78	· · · · containing seven-membered rings
		<administratively transferred to C07C 2603/78>
D	C07C 2103/80	· · · · containing eight-membered rings
		<administratively transferred to C07C 2603/80>
D	C07C 2103/82	· · · · · having three condensed rings with in total fourteen carbon atoms and having a having a [5.4.3.0(1,8)] ring structure, e.g. pleuromutiline
		<administratively transferred to C07C 2603/82>
D	C07C 2103/84	· · · · containing rings with more than eight members
		<administratively transferred to C07C 2603/84>
D	C07C 2103/86	· · containing four rings
		<administratively transferred to C07C 2603/86>
D	C07C 2103/88	· · · (Hydrogenated) ethanoanthracenes
		<administratively transferred to C07C 2603/88>
D	C07C 2103/90	· · containing more than four rings
		<administratively transferred to C07C 2603/90>
D	C07C 2103/91	· · · (Hydrogenated) polycyclopentadienes
		<administratively transferred to C07C 2603/91>
D	C07C 2103/92	· with a condensed ring system consisting of at least two mutually uncondensed aromatic ring systems, linked by an annular structure formed by carbon chains on non-adjacent positions of the aromatic system, e.g. cyclophanes
		<administratively transferred to C07C 2603/92>
D	C07C 2103/93	· Spiro compounds
		<administratively transferred to C07C 2603/93>
D	C07C 2103/94	· · containing "free" spiro atoms
		<administratively transferred to C07C 2603/94>
D	C07C 2103/95	· · containing "not free" spiro atoms
		<administratively transferred to C07C 2603/95>
D	C07C 2103/96	· · · containing at least one ring which contains less than six members
		<administratively transferred to C07C 2603/96>
D	C07C 2103/97	· · · · containing five-membered rings
		<administratively transferred to C07C 2603/97>
D	C07C 2103/98	· · · containing at least one ring which contains more than six ring members
		<administratively transferred to C07C 2603/98>
D	C07C 2103/99	· · · · containing eight-membered rings
		<administratively transferred to C07C 2603/99>

D	C07C 2104/00	~~Fullerenes, e.g. C$_{60}$ (buckminsterfullerene) or C$_{70}$~~

<administratively transferred to C07C 2604/00>

Project: N/A (C07C)

C07C 301/00 - ~~C07C 2531/00~~ *C07C 409/00*	**Compounds containing carbon together with sulfur, selenium, or tellurium, with or without hydrogen, halogens, oxygen, or nitrogen (irradiation products of cholesterol or its derivatives C07C 401/00; vitamin D derivatives, 9-10-seco cyclopenta[a]phenanthrene or analogues obtained by chemical preparation without irradiation C07C 401/00; derivatives of cyclohexane or of a cyclohexene {or of cyclohexadiene}, having a side-chain containing an acyclic unsaturated part of at least four carbon atoms, this part being directly attached to the cyclohexane or cyclohexene {or cyclohexadiene} rings C07C 403/00; protaglandins or derivatives thereof C07C 405/00; peroxy compounds C07C 407/00, C07C 409/00)**

Project: RP0341 (C07C)

N	*C07C 2521/00 -* *C07C 2531/00*	*Indexing scheme associated with groups C07C 1/00 - C07C 6/00, relating to catalysts used in the preparation of hydrocarbons*
M	C07C 2521/00	**Catalysts comprising the elements, oxides or hydroxides of magnesium, boron, aluminium, carbon, silicon, titanium, zirconium or hafnium**

> ~~NOTE~~
> ~~The indexing codes of group C07C 2521/00 are associated with groups C07C 1/00 - C07C 6/00.~~

M	C07C 2523/00	**Catalysts comprising metals or metal oxides or hydroxides, not provided for in group C07C 2521/00 (C07C 2521/16 takes precedence)**

> ~~NOTE~~
> ~~The indexing codes of group C07C 2523/00 are associated with groups C07C 1/00 - C07C 6/00.~~

M	C07C 2525/00	**Catalysts of the Raney type**

> ~~NOTE~~
> ~~The indexing codes of group C07C 2525/00 are associated with groups C07C 1/00 - C07C 6/00.~~

M	C07C 2527/00	**Catalysts comprising the elements or compounds of halogens, sulfur, selenium, tellurium, phosphorus or nitrogen; Catalysts comprising carbon compounds**

> NOTE
> 1. Metal catalysts or metal oxide catalysts activated or conditioned by halogens, sulfur or phosphorus, or compounds thereof are indexed in the appropriate groups for metal or metal oxide catalysts.
> ~~2. The indexing codes of group C07C 2527/00 are associated with groups C07C 1/00 - C07C 6/00.~~

M	C07C 2529/00	**Catalysts comprising molecular sieves**

> ~~NOTE~~
> ~~The indexing codes of group C07C 2529/00 are associated with groups C07C 1/00 - C07C 6/00.~~

M	C07C 2531/00	**Catalysts comprising hydrides, coordination complexes or organic compounds**

NOTE

The indexing codes of group C07C 2531/00 are associated with groups C07C 1/00 - C07C 6/00.

N	C07C 2601/00 - C07C 2604/00	***Indexing scheme associated with groups C07C 1/00 - C07C 409/00, relating to carbocyclic rings or ring systems***
N	C07C 2601/00	***Systems containing only non-condensed rings***
N	C07C 2601/02	· *with a three-membered ring*
N	C07C 2601/04	· *with a four-membered ring*
N	C07C 2601/06	· *with a five-membered ring*
N	C07C 2601/08	· · *the ring being saturated*
N	C07C 2601/10	· · *the ring being unsaturated*
N	C07C 2601/12	· *with a six-membered ring*
N	C07C 2601/14	· · *The ring being saturated*
N	C07C 2601/16	· · *the ring being unsaturated*
N	C07C 2601/18	· *with a ring being at least seven-membered*
N	C07C 2601/20	· · *the ring being twelve-membered*
N	C07C 2602/00	***Systems containing two condensed rings***
N	C07C 2602/02	· *the rings having only two atoms in common*
N	C07C 2602/04	· · *One of the condensed rings being a six-membered aromatic ring*
N	C07C 2602/06	· · · *the other ring being four-membered*
N	C07C 2602/08	· · · *the other ring being five-membered, e.g. indane*
N	C07C 2602/10	· · · *the other ring being six-membered, e.g. tetraline*
N	C07C 2602/12	· · · *the other ring being at least seven-membered*
N	C07C 2602/14	· · *All rings being cycloaliphatic*
N	C07C 2602/16	· · · *the ring system containing five carbon atoms*
N	C07C 2602/18	· · · *the ring system containing six carbon atoms*
N	C07C 2602/20	· · · *the ring system containing seven carbon atoms*
N	C07C 2602/22	· · · *the ring system containing eight carbon atoms, e.g. pentalene*
N	C07C 2602/24	· · · *the ring system containing nine carbon atoms, e.g. perhydroindane*
N	C07C 2602/26	· · · *the ring system containing ten carbon atoms*
N	C07C 2602/28	· · · · *Hydrogenated naphthalenes*
N	C07C 2602/30	· · · · *Azulenes; Hydrogenated azulenes*
N	C07C 2602/32	· · · *the ring system containing at least eleven carbon atoms*
N	C07C 2602/34	· · · · *Heptalenes; Hydrogenated heptalenes*
N	C07C 2602/36	· *the rings having more than two atoms in common*
N	C07C 2602/38	· · *the bicyclo ring system containing five carbon atoms*
N	C07C 2602/40	· · *the bicyclo ring system containing six carbon atoms*
N	C07C 2602/42	· · *the bicyclo ring system containing seven carbon atoms*
N	C07C 2602/44	· · *the bicyclo ring system containing eight carbon atoms*
N	C07C 2602/46	· · *the bicyclo ring system containing nine carbon atoms*
N	C07C 2602/48	· · *the bicyclo ring system containing ten carbon atoms*
N	C07C 2602/50	· *Spiro compounds*

N	C07C 2603/00	*Systems containing at least three condensed rings*
N	C07C 2603/02	· *Ortho- or ortho- and peri-condensed systems*
N	C07C 2603/04	· · *containing three rings*
N	C07C 2603/06	· · · *containing at least one ring with less than six ring members*
N	C07C 2603/08	· · · · *containing three- or four-membered rings*
N	C07C 2603/10	· · · · *containing five-membered rings*
N	C07C 2603/12	· · · · · *only one five-membered ring*
N	C07C 2603/14	· · · · · · *Benz[f]indenes; Hydrogenated benz[f]indenes*
N	C07C 2603/16	· · · · · · *Benz[e]indenes; Hydrogenated benz[e]indenes*
N	C07C 2603/18	· · · · · · *Fluorenes; Hydrogenated fluorenes*
N	C07C 2603/20	· · · · · · *Acenaphthenes; Hydrogenated acenaphthenes*
N	C07C 2603/22	· · · *containing only six-membered rings*
N	C07C 2603/24	· · · · *Anthracenes; Hydrogenated anthracenes*
N	C07C 2603/26	· · · · *Phenanthrenes; Hydrogenated phenanthrenes*
N	C07C 2603/28	· · · · *Phenalenes; Hydrogenated phenalenes*
N	C07C 2603/30	· · · *containing seven-membered rings*
N	C07C 2603/32	· · · · *Dibenzocycloheptenes; Hydrogenated dibenzocycloheptenes*
N	C07C 2603/34	· · · · *Benzoheptalenes; Hydrogenated benzoheptalenes*
N	C07C 2603/36	· · · *containing eight-membered rings*
N	C07C 2603/38	· · · *containing rings with at least nine members*
N	C07C 2603/40	· · *containing four condensed rings*
N	C07C 2603/42	· · · *containing only six-membered rings*
N	C07C 2603/44	· · · · *Naphthacenes; Hydrogenated naphthacenes*
N	C07C 2603/46	· · · · · *1,4,4a,5,5a,6,11,12a- Octahydronaphthacenes, e.g. tetracyclines*
N	C07C 2603/48	· · · · *Chrysenes; Hydrogenated chrysenes*
N	C07C 2603/50	· · · · *Pyrenes; Hydrogenated pyrenes*
N	C07C 2603/52	· · *containing five condensed rings*
N	C07C 2603/54	· · *containing more than five condensed rings*
N	C07C 2603/56	· *Ring systems containing bridged rings*
N	C07C 2603/58	· · *containing three rings*
N	C07C 2603/60	· · · *containing at least one ring with less than six members*
N	C07C 2603/62	· · · · *containing three- or four-membered rings*
N	C07C 2603/64	· · · · · *having a tricyclo[2.2.1.0(2,6)]heptstructure*
N	C07C 2603/66	· · · · *containing five-membered rings*
N	C07C 2603/68	· · · · · *Dicyclopentadienes; Hydrogenated dicyclopentadienes*
N	C07C 2603/70	· · · *containing only six-membered rings*
N	C07C 2603/72	· · · · *Ethanonaphthalenes; Hydrogenated ethanonaphthalenes*
N	C07C 2603/74	· · · · *Adamantanes*
N	C07C 2603/76	· · · *containing at least one ring with more than six ring members*
N	C07C 2603/78	· · · · *containing seven-membered rings*
N	C07C 2603/80	· · · · *containing eight-membered rings*
N	C07C 2603/82	· · · · · *having three condensed rings with in total fourteen carbon atoms and having a having a [5.4.3.0(1,8)] ring structure, e.g. pleuromutiline*
N	C07C 2603/84	· · · · *containing rings with more than eight members*

N	C07C 2603/86	· · *containing four rings*
N	C07C 2603/88	· · · *Ethanoanthracenes; Hydrogenated ethanoanthracenes*
N	C07C 2603/90	· · *containing more than four rings*
N	C07C 2603/91	· · · *Polycyclopentadienes; Hydrogenated polycyclopentadienes*
N	C07C 2603/92	· *with a condensed ring system consisting of at least two mutually uncondensed aromatic ring systems, linked by an annular structure formed by carbon chains on non-adjacent positions of the aromatic system, e.g. cyclophanes*
N	C07C 2603/93	· *Spiro compounds*
N	C07C 2603/94	· · *containing "free" spiro atoms*
N	C07C 2603/95	· · *containing "not free" spiro atoms*
N	C07C 2603/96	· · · *containing at least one ring with less than six members*
N	C07C 2603/97	· · · · *containing five-membered rings*
N	C07C 2603/98	· · · *containing at least one ring with more than six ring members*
N	C07C 2603/99	· · · · *containing eight-membered rings*
N	**C07C 2604/00**	**Fullerenes, e.g. C_{60} buckminsterfullerene or C_{70}**

Project: RP0272 (C07K)

D	**C07K 2316/00**	**Immunoglobulins specific features**
		<administratively transferred to C07K 2317/00>
D	C07K 2316/50	· Immunoglobulins characterised by their fragments
		<administratively transferred to C07K 2317/50>
D	C07K 2316/52	· · Constant or Fc region
		<administratively transferred to C07K 2317/52>
D	C07K 2316/95	· Antibodies with agonistic, e.g. apoptotic, activity upon their specific binding to an antigen
		<administratively transferred to C07K 2317/75>
D	C07K 2316/96	· Antibodies with antagonisticactivity upon their specific binding to an antigen
		<administratively transferred to C07K 2317/76>

Project: N/A (C08B)

C08B	**POLYSACCHARIDES; DERIVATIVES THEREOF (polysaccharides containing less than six saccharide radicals attached to each other by glycosidic linkages C07H; fermentation or enzyme-using processes C12P 19/00; sugar industry C13; production of cellulose D21)**

WARNING

The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:

C08B 37/02	covered by	
C08B 37/04	covered by	
C08B 37/06	covered by	C08B 37/0045
C08B 37/08	covered by	
C08B 37/10	covered by	C08B 37/0075
C08B 37/12	covered by	C08B 37/0039
C08B 37/16	covered by	

Project: N/A (C08H)

C08H   **DERIVATIVES OF NATURAL MACROMOLECULAR COMPOUNDS (polysaccharides C08B; natural rubber C08C; natural resins or their derivatives C09F; bituminous materials C10)**

> *WARNING*
> *The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:*
> *C08H 7/00   covered by*

Project: RP0232 (C08K)

U	**C08K 3/00**	**Use of inorganic ingredients**
U	C08K 3/02	・ Elements
C	C08K 3/04	・・ Carbon

> *WARNING*
> *Group C08K 3/04 is impacted by reclassification into groups C08K 3/041, C08K 3/042, C08K 3/043, C08K 3/044, C08K 3/045 and C08K 3/046. All groups listed in this warning should be considered in order to perform a complete search.*

N	C08K 3/041	・・・ {Carbon nanotubes}

> *WARNING*
> *Group C08K 3/041 is incomplete pending reclassification of documents from groups C08K 3/04 and C08K 7/24.*
> *Groups C08K 3/041, C08K 3/04 and C08K 7/24 should be considered in order to perform a complete search.*

N	C08K 3/042	・・・ {Graphene or derivatives, e.g. graphene oxides}

> *WARNING*
> *Group C08K 3/042 is incomplete pending reclassification of documents from groups C08K 3/04 and C08K 3/20.*
> *Groups C08K 3/042, C08K 3/04 and C08K 3/20 should be considered in order to perform a complete search.*

N	C08K 3/043	・・・ {Carbon nanocoils}

> *WARNING*
> *Group C08K 3/043 is incomplete pending reclassification of documents from groups C08K 3/04 and C08K 7/24.*
> *Groups C08K 3/043, C08K 3/04 and C08K 7/24 should be considered in order to perform a complete search.*

N	C08K 3/044	・・・ {Carbon nanohorns or nanobells}

> *WARNING*
> *Group C08K 3/044 is incomplete pending reclassification of documents from groups C08K 3/04 and C08K 7/24.*
> *Groups C08K 3/044, C08K 3/04 and C08K 7/24 should be considered in order to perform a complete search.*

D	C08K 2003/045	・・・ {Fullerenes}

N	*C08K 3/045*	· · · *{Fullerenes}*

> *WARNING*
>
> *Group C08K 3/045 is incomplete pending reclassification of documents from groups C08K 3/04 and C08K 7/24.*
> *Groups C08K 3/045, C08K 3/04 and C08K 7/24 should be considered in order to perform a complete search.*

N	*C08K 3/046*	· · · *{Carbon nanorods, nanowires, nanoplatelets or nanofibres}*

> *WARNING*
>
> *Group C08K 3/046 is incomplete pending reclassification of documents from groups C08K 3/04 and C08K 7/24.*
> *Groups C08K 3/046, C08K 3/04 and C08K 7/24 should be considered in order to perform a complete search.*

U	C08K 3/18	· Oxygen-containing compounds, e.g. metal carbonyls
C	C08K 3/20	· · Oxides; Hydroxides *{(graphene oxides C08K 3/042)}*

> *WARNING*
> *Group C08K 3/20 is impacted by reclassification into group C08K 3/042.*
> *Groups C08K 3/20, and C08K 3/042 should be considered in order to perform a complete search.*

U	**C08K 7/00**	**Use of ingredients characterised by shape**
U	C08K 7/22	· Expanded, porous or hollow particles
C	C08K 7/24	· · ~~Inorganic~~*inorganic*

> *WARNING*
> *Group C08K 7/24 is impacted by reclassification into groups C08K 3/041, C08K 3/042, C08K 3/043, C08K 3/044, C08K 3/045 and C08K 3/046.*
> *All groups listed in this warning should be considered in order to perform a complete search.*

Project: N/A (C08L)

C08L	**COMPOSITIONS OF MACROMOLECULAR COMPOUNDS (pesticides, herbicides A01N; pharmaceuticals, cosmetics A61K; explosives C06B; compositions based on polymerisable monomers C08F, C08G; paints, inks, varnishes, dyes, polishes, adhesives C09; lubricants C10M; detergents C11D; artificial filaments or fibres D01F; textile treating compositions D06)**

NOTES

1. Compositions classified in C08K according to note 3 of C08K, are not classified in C08L.

2. Documents classified before 09.2003: Classification is given in the form of C-Sets. The polymer in majority is given a C08L symbol, and the minor components are characterised by Indexing Codes taken from the list below. The Indexing Codes are linked. The polymer in majority is always first in the C-set. List of C08L codes: C08L 23/00, C08L 23/26, C08L 25/00, C08L 27/00, C08L 27/04, C08L 27/12, C08L 29/00, C08L 31/00, C08L 33/00, C08L 35/00, C08L 37/00, C08L 51/00, C08L 53/00, C08L 55/02, C08L 61/04, C08L 61/20, C08L 63/00, C08L 67/00, C08L 67/02, C08L 67/025, C08L 67/03, C08L 67/04, C08L 67/06, C08L 67/07, C08L 69/00, C08L 69/005, C08L 71/00, C08L 75/04, C08L 77/00, C08L 77/08, C08L 77/12, C08L 79/08, C08L 79/085, C08L 81/00, C08L 83/00, C08L 85/00, C08L 91/06, C08L 95/00 or C08L 2666/00 - C08L 2666/86. Documents from group C08L 23/00 - C08L 23/36, C08L 45/00 - C08L 45/02 and C08L 49/00 have all been reclassified following Note 3 below.

An additive is classified in the last appropriate place in the list as selected for each C08L group. Examples:
   a. A composition based on a polyamide and a graft polymer is classified in (C08L 77/00, C08L 2666/24).
   b. A composition based on polyvinylchloride and containing CaCO3 is classified according to note 4 of C08K, i.e. in (C08K 3/26, C08L 27/06). If this composition contains also a polyamide, then the classification will be (C08L 27/06, C08L 77/00, C08K 3/26).
   c. A composition based on a polysiloxane (C08L 83/04) and containing a second polysiloxane, a phenol and silica is classified in (C08L 83/04, C08L 83/04, C08L 2666/34, C08L 2666/58).

3. From 01.09.2003 until April 2012: Classification is given in the form of C-Sets. The polymer in majority is given a C08L class, and the minor components are characterised by Indexing Codes taken from C08L or C08K and they are linked or unlinked. The polymer in majority is always first in the C-Set. List of C08L codes in the C-Set: C08L 1/00, C08L 81/00, C08L 83/00, C08L 91/06, C08L 95/00 or C08L 2666/02 - C08L 2666/08, C08L 2666/14 - C08L 2666/26. Examples:
   a. A blend of 60 parts polyvinylchloride (C08L 27/06) and 40 parts polyamide is classified in (C08L 27/06, C08L 2666/20) and C08L 77/00.
   b. A blend of 50 parts polyvinylchloride (C08L 27/06) and 50 parts polyamide (C08L 77/00) is classified in (C08L 27/06, C08L 2666/20) and C08L 77/00, as well as in (C08L 77/00, C08L 2666/04) and C08L 27/06.
   c. A composition based on polyvinylchloride and containing CaCO3 is classified according to [N: Note 4 of C08K, i.e. in (C08K 3/26, C08L 27/06). If this composition contains also a polyamide, then the classification will be (C08L 27/06, C08L 2666/20) and C08K 3/26.
   d. A composition based on a first polysiloxane (C08L 83/04) and containing a second polysiloxane, a phenol and silica is classified in (C08L 83/04, C08L 83/04, C08K 5/13, C08K 3/36) and C08L 2205/02.

4. From April 2012 onwards, after the notation C08L, notations concerning the other constituents of the composition may be added, in the form of C-Sets. The further constituent is added with an indexing code. The indexing codes are chosen from C08L 1/00 -C08L 2555/86 or C08K and they may be linked or unlinked: - C08L 1/00 - C08L 101/10 are linked. - C08L 2201/00 - C08L 2555/86 are unlinked. The polymer in majority is always first in the C-Set. Examples:
   a. A blend of 60 parts polyvinylchloride (C08L 27/06) and 40 parts polyamide (C08L 77/00) is classified in (C08L 27/06, C08L 77/00).
   b. A blend of 50 parts polyvinylchloride (C08L 27/06) and 50 parts polyamide (C08L 77/00) is classified in (C08L 27/06, C08L 77/00) and (C08L 77/00, C08L 27/06).
   c. A composition based on polyvinylchloride and containing CaCO3 is classified according to [N: Note 4 of C08K, i.e. in (C08K 3/26, C08L 27/06). If this composition contains also a polyamide, then the classification will be (C08L 27/06, C08L 77/00, C08K 3/26).
   d. A composition based on a first polysiloxane (C08L 83/04) and containing a second polysiloxane, a phenol and silica is classified in (C08L 83/04, C08L 83/00, C08K 5/13, C08K 3/36) and C08L 2205/02.
   e. A composition containing a polyamide in majority, a polyester and a polyethylene is classified in (C08L 77/00, C08L 67/00, C08L 23/06) and C08L 2205/03.

5. "Rubber" includes:
   - 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 compositions of such macromolecular compounds).

6. In this subclass:

a. compositions are classified according to the mutual proportions by weight of only the macromolecular constituents;

b. compositions are classified according to the macromolecular constituent or constituents present in the highest proportion: if all these constituents are present in equal proportions the composition is classified according to each of these constituents.

Project: N/A (C09J)

C09J

ADHESIVES; NON-MECHANICAL ASPECTS OF ADHESIVE PROCESSES IN GENERAL; ADHESIVE PROCESSES NOT PROVIDED FOR ELSEWHERE; USE OF MATERIALS AS ADHESIVES (surgical adhesives A61L 24/00; processes for applying liquids or other fluent materials to surfaces in general B05D; adhesives on the basis of non specified organic macromolecular compounds used as bonding agents in layered products B32B; organic labelling fabrics or comparable materials or articles with deformable surface using adhesives and thermo-activatable adhesives respectively B65C 5/02, B65C 5/04; organic macromolecular compounds C08; production of multi-layer textile fabrics D06M 17/00; preparation of glue or gelatine C09H; adhesive labels, tag tickets or similar identification of indication means G09F 3/10)

NOTES

1. In this subclass, the following terms or expressions are used with the meanings indicated:
   • "use of materials as adhesives" means the use of known or new polymers or products;
   • "rubber" includes:
      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 adhesives based on such macromolecular compounds);
   • "based on" is defined by means of Note 3, below.

2. In this subclass, adhesives containing specific macromolecular substances are classified only according to the macromolecular substance, non-macromolecular substances not being taken into account.

   Example: an adhesive containing polyethene and amino-propyltrimethoxysilane is classified in group C09J 123/06.
   However, adhesives containing combinations of organic non-macromolecular compounds having at least one polymerisable carbon-to-carbon unsaturated bond with prepolymers or polymers other than unsaturated polymers of groups C09J 159/00 - C09J 187/00 are classified according to the unsaturated non-macromolecular component in group C09J 4/00.
   Example: an adhesive containing polyethene and styrene monomer is classified in group C09J 4/06.
   Aspects relating to the physical nature of the adhesives or to the effects produced, as defined in group C09J 9/00, if clearly and explicitly stated, are also classified in this subclass. Adhesives characterised by other

features, e.g. additives, are classified in group C09J 11/00, unless the macromolecular constituent is specified.

3. In this subclass, adhesives comprising two or more macromolecular constituents are classified according to the macromolecular constituent or constituents present in the highest proportion, i.e. the constituent on which the adhesive is based. If the adhesive is based on two or more constituents, present in equal proportions, the adhesive is classified according to each of these constituents.

> Examples: An adhesive containing 80 parts of polyethene and 20 parts of polyvinylchloride is classified in group C09J 123/06; An adhesive containing 40 parts of polyethene and 40 parts of polyvinylchloride is classified in groups C09J 123/06 and C09J 127/06.

4. An adhesive composition containing polyethylene and amino-propyltrimethoxysilane is classified in groups C09J 123/06 and C08K 5/544

5. Documents classified up until 09-2003: Classification is given in the form of C-Sets. The polymer in majority is given a C09J 101/00 - C09J 201/10 symbol, and the minor components are characterised by Indexing Codes taken from the list below. The Indexing Codes are linked. The polymer in majority is always first in the C-set.

List of C08L codes: C08L 23/00, C08L 23/26, C08L 25/00, C08L 27/00, C08L 27/04, C08L 27/12, C08L 29/00, C08L 31/00, C08L 33/00, C08L 35/00, C08L 37/00, C08L 51/00, C08L 53/00, C08L 55/02, C08L 61/04, C08L 61/20, C08L 63/00, C08L 67/00, C08L 67/02, C08L 67/025, C08L 67/03, C08L 67/04, C08L 67/06, C08L 67/07, C08L 69/00, C08L 69/005, C08L 71/00, C08L 75/04, C08L 77/00, C08L 77/08, C08L 77/12, C08L 79/08, C08L 79/085, C08L 81/00, C08L 83/00, C08L 85/00, C08L 91/06, C08L 95/00 or C08L 2666/00 - C08L 2666/86. An additive is classified in the last appropriate place in the list as selected for each C09J group. Examples:

  a. An adhesive composition based on a polyamide and a graft polymer is classified in (C09J 177/00, C08L 2666/24).
  b. An adhesive composition based on polyvinylchloride and containing CaCO3 is classified according to note 4 of C08K, i.e. in C08K 3/26 and C09J 127/06. If this adhesive composition contains also a polyamide, then the classification will be (C09J 127/06, C08L 77/00, C08K 3/26).
  c. An adhesive composition based on a polysiloxane (C09J 183/04) and containing a second polysiloxane, a phenol and silica is classified in (C09J 183/04, C08L 83/04, C08L 2666/34, C08L 2666/54

6. From April 2012, after the notation C09J 4/00, classification concerning the monomer may be added, in the form of C-sets. The notation is selected from C08F 210/00 - C08F 246/00, C08G 77/00 - C08G 77/04 or C08G 77/20 - C08G 77/30.
Ex. 1: An adhesive based on methylmethacrylate monomer is classified in (C09J 4/00, C08F 220/00).
Ex. 2: An adhesive based on a dialkoxysilane monomer compound is classified in (C09J 4/00, C08G 77/04).

7. From 01.09.2003 until April 2012: Classification is given in the form of C-Sets. The polymer in majority is given a C08L class, and the minor components are characterised by Indexing Codes taken from C08L or C08K and they are linked or unlinked. The polymer in majority is always first in the C-set. List of indexing codes in the C-Sets: C08L 1/00, C08L 81/00, C08L 83/00, C08L 91/06, C08L 95/00 or C08L 2666/02 - C08L 2666/08, C08L 2666/14 - C08L 2666/26. Examples:

  a. An adhesive blend of 60 parts polyvinylchloride (C09J 127/06) and 40 parts polyamide is classified in (C09J 127/06, C08L 2666/20), C08L 77/00.
  b. An adhesive blend of 50 parts polyvinylchloride (C09J 127/06) and 50 parts polyamide (C09J 177/00) is classified in (C09J 127/06, C08L 2666/20), (C09J 177/00, C08L 2666/04), C08L 77/00 and C08L 27/06.

   c. An adhesive composition based on polyvinylchloride and containing CaCO3 is classified according to [N: Note 4 of C08K, i.e. in C08K 3/26, C09J 127/06. If this composition contains also a polyamide, then the classification will be (C09J 127/06, C08L 2666/20) and C08K 3/26.
   d. A composition based on a first polysiloxane (C09J 183/04) and containing a second polysiloxane, a phenol and silica is classified in (C09J 183/04, C08L 83/00, C08K 5/13, C08K 3/36) and C08L 2205/02.

8. From April 2012 onwards, after the notation of groups C09J 101/00 - C09J 201/00, notations concerning the other constituents of the adhesive composition may be added, in the form of C-sets. The further constituent is added with an indexing code. The indexing codes are chosen from C08L 1/00 -C08L 2555/86 or C08K and they may be linked or unlinked: - C08L 1/00 - C08L 101/16 are linked. - C08L 2201/00 - C08L 2555/86 are unlinked. The polymer in majority is always first in the C-set.
Examples:
   a. An adhesive composition containing polyethylene and amino-propyltrimethoxysilane is classified in groups C09J 123/06 and C08K 5/544 (unlinked).
   b. An adhesive containing 80 parts of polyethene and 20 parts of polyvinylchloride is classified in group (C09J 123/06, C08L 27/06).
   c. An adhesive containing 40 parts of polyethene and 40 parts of polyvinylchloride is classified in groups (C09J 123/06, C08L 27/06) and (C09J 127/06, C08L 23/06).
   d. An adhesive containing 90% of polysiloxane (C09J 183/04) further containing of polyester (C08L 67/00) and an alcohol is classified in (C09J 183/04, C08L 67/00, C08K 5/05).

WARNING

The following IPC group is not used in the CPC system: Subject matter covered by these groups is classified in the following CPC group:

C09J 4/02	*covered by*	
C09J 4/04	*covered by*	
C09J 161/08	*covered by*	
C09J 163/02	covered by	C09J 163/00
C09J 183/05	*covered by*	
C09J 183/07	*covered by*	

Project: N/A (C09K)

C09K   **MATERIALS FOR MISCELLANEOUS APPLICATIONS, NOT PROVIDED FOR ELSEWHERE**

NOTES

1. This subclass covers also the use of specified materials in general or their use for the applications not specially provided for elsewhere.

2. In this subclass, the following term is used with the meaning indicated:
   • "materials" includes compositions.

WARNING

The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:
C09K 11/78-C09K 11/86   covered by

Project: N/A (C12G)

C12G   **WINE; OTHER ALCOHOLIC BEVERAGES; PREPARATION THEREOF (beer C12C)**

Project: N/A (C12H)

C12H   **PASTEURISATION; STERILISATION; PRESERVATION; PURIFICATION; CLARIFICATION; AGEING**

NOTE

When classifying in this subclass, classification is also made in group B01D 15/08 insofar as subject matter of general interest relating to chromatography is concerned.

Project: N/A (C12N)

C12N
MICRO-ORGANISMS OR ENZYMES; COMPOSITIONS THEREOF (biocides, pest repellants or attractants, or plant growth regulators, containing micro-organisms, viruses, microbial fungi, enzymes, fermentates or substances produced by or extracted from micro-organisms or animal material A01N 63/00; food compositions A21, A23; medicinal preparations A61K; chemical aspects of, or use of materials for, bandages, dressings, absorbent pads or surgical articles A61L; fertilisers C05); PROPAGATING, PRESERVING OR MAINTAINING MICRO-ORGANISMS (preservation of living parts of humans or animals A01N 1/02); MUTATION OR GENETIC ENGINEERING; CULTURE MEDIA (micro-biological testing media C12Q)

NOTES

1. Documents relating to the use of vectors or hosts for the preparation of specific peptides, e.g. enzymes, are classified in subclass C07K or in group C12N 9/00 according to the peptides, with the appropriate indexing codes.

2. Attention is drawn to Notes (1) to (3) following the title of Class C12.

3. When classifying in this group, classification is also made in group B01D 15/08 insofar as subject matter of general interest relating to chromatography is concerned.

WARNING

The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:

C12N 1/11	covered by	C12N 15/79
C12N 1/13	covered by	C12N 15/79
C12N 1/15	covered by	C12N 15/80
C12N 1/19	covered by	C12N 15/81
C12N 1/21	covered by	C12N 15/74
C12N 5/02	covered by	C12N 5/00, C12N 5/04 - C12N 5/166
C12N 5/07 - C12N 5/095	covered by	C12N 5/06 and subgroups
C12N 5/18 - C12N 5/28	covered by	C12N 5/16 and subgroups
C12N 5/18	covered by	C12N 5/16
C12N 5/20	covered by	C12N 5/163
C12N 5/22	covered by	C12N 5/16
C12N 5/24	covered by	C12N 5/163
C12N 5/26	covered by	C12N 5/166
C12N 5/28	covered by	C12N 5/166
C12N 7/01	covered by	C12N 7/00
C12N 9/02-C12N 9/08	*covered by*	
C12N 9/26	covered by	C12N 9/2408
C12N 9/28-C12N 9/30	*covered by*	
C12N 9/32	*covered by*	
C12N 9/34	*covered by*	
C12N 9/36	*covered by*	
C12N 9/38	covered by	C12N 9/2468
C12N 9/40	*covered by*	
C12N 9/42	covered by	C12N 9/2434
C12N 9/44	covered by	C12N 9/2451
C12N 9/46	*covered by*	
C12N 9/56	*covered by*	
C12N 9/66	*covered by*	
C12N 9/68	*covered by*	

C12N 9/70	covered by	C07K 14/3153	
C12N 9/72	covered by		
C12N 9/74	covered by		
C12N 9/76	covered by		
C12N 15/05	covered by	C12N 5/14	
C12N 15/06	covered by	C12N 5/16	
C12N 15/07	covered by	C12N 5/16	
C12N 15/08	covered by	C12N 5/166	
C12N 15/12	covered by	C07K 14/435	
C12N 15/13	covered by	C07K 16/00	
C12N 15/14	covered by	C07K 14/765	
C12N 15/15	covered by	C07K 14/81	
C12N 15/16	covered by	C07K 14/575	
C12N 15/17	covered by	C07K 14/62	
C12N 15/18	covered by	C07K 14/61	
C12N 15/19	covered by	C07K 14/52	
C12N 15/20	covered by	C07K 14/555	
C12N 15/21	covered by	C07K 14/56	
C12N 15/22	covered by	C07K 14/565	
C12N 15/23	covered by	C07K 14/57	
C12N 15/24	covered by	C07K 14/54	
C12N 15/25	covered by	C07K 14/545	
C12N 15/26	covered by	C07K 14/55	
C12N 15/27	covered by	C07K 14/53	
C12N 15/28	covered by	C07K 14/525	
C12N 15/29	covered by	C07K 14/415	
C12N 15/30	covered by	C07K 14/44	
C12N 15/31	covered by	C07K 14/195, C07K 14/005	
C12N 15/32	covered by	C07K 14/325	
C12N 15/33	covered by	C07K 14/005	
C12N 15/34	covered by	C07K 14/01	
C12N 15/35	covered by	C07K 14/015	
C12N 15/36	covered by	C07K 14/02	
C12N 15/37	covered by	C07K 14/025	
C12N 15/38	covered by	C07K 14/03	
C12N 15/39	covered by	C07K 14/065	
C12N 15/40	covered by	C07K 14/08	
C12N 15/41	covered by	C07K 14/085	
C12N 15/42	covered by	C07K 14/09	
C12N 15/43	covered by	C07K 14/105	
C12N 15/44	covered by	C07K 14/11	
C12N 15/45	covered by	C07K 14/115	
C12N 15/46	covered by	C07K 14/14	
C12N 15/47	covered by	C07K 14/145	
C12N 15/48	covered by	C07K 14/15	
C12N 15/49	covered by	C07K 14/155	
C12N 15/50	covered by	C07K 14/165	
C12N 15/51	covered by	C07K 14/02, C07K 14/10, C07K 14/18	
C12N 15/53	covered by	~~C12N 9/02~~ *C12N9/02*	
C12N 15/54	covered by	C12N 9/10	

C12N 15/55	covered by	C12N 9/14
C12N 15/56	covered by	C12N 9/24
C12N 15/57	covered by	C12N 9/48
C12N 15/58	covered by	C12N 9/6456
C12N 15/59	covered by	C12N 9/6483
C12N 15/60	covered by	C12N 9/88
C12N 15/61	covered by	C12N 9/90
C12N 15/83	covered by	C12N 15/82
C12N 15/84	covered by	C12N 15/82

Project: RP0243 (C12N)

U	C12N 2310/00	**Structure or type of the nucleic acid**
C	C12N 2310/10	· Type of nucleic acid
U	C12N 2310/18	· · acting by a non-sequence specific mechanism (other than C12N 2310/16 or C12N 2310/17)
N	C12N 2310/20	· · involving clustered regularly interspaced short palindromic repeats [CRISPRs]

Project: N/A (C12R)

C12R   **PROCESSES USING MICRO-ORGANISMS**

NOTE

The basis for the bacteria terminology is "Bergey's Manual of Determinative Bacteriology", Eighth Edition, 19/75.

WARNING
The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:
C12R 1/92-C12R 1/94   covered by

Project: RP0146 (C21B)

U	C21B 13/00	**Making spongy iron or liquid steel, by direct processes**
C	C21B 13/02	· in shaft furnaces

WARNING
Group C21B 13/02 is impacted by reclassification into group C21B 13/029. Groups C21B 13/02 and C21B 13/029 should be considered in order to perform a complete search.

U	C21B 13/023	· · {wherein iron or steel is obtained in a molten state}
U	C21B 13/026	· · · {heated electrically}
N	C21B 13/029	· · {Introducing coolant gas in the shaft furnaces}

WARNING
Group C21B 13/029 is incomplete pending reclassification of documents from group C21B 13/02.
Groups C21B 13/02 and C21B 13/029 should be considered in order to perform a complete search.

M **C21B 2100/00** ~~Exhaust~~*Handling of exhaust* **gases** *produced during the manufacture of iron or steel*

> *WARNING*
> *Groups C21B 2100/02 - C21B 2100/06 are no longer used for the classification of documents as of May 1, 2017. The content of these groups is being reclassified into groups C21B 2100/20 - C21B 2100/80.*
> *Groups C21B 2100/02 - C21B 2100/06 and C21B 2100/20 - C21B 2100/80 should be considered in order to perform a complete search.*

F C21B 2100/02 · Treatment of the exhaust gases
   (Frozen)

F C21B 2100/04 · Recirculation of the exhaust gases
   (Frozen)

F C21B 2100/06 · Energy from waste gases used in other processes
   (Frozen)

N *C21B 2100/20* · *Increasing the gas reduction potential of recycled exhaust gases*

> *WARNING*
> *Groups C21B 2100/20 - C21B 2100/284 are incomplete pending reclassification of documents from groups C21B 2100/02 - C21B 2100/06.*
> *Groups C21B 2100/02 - C21B 2100/06 and C21B 2100/20 - C21B 2100/284 should be considered in order to perform a complete search.*

N *C21B 2100/22* · · *by reforming*
N *C21B 2100/24* · · *by shift reactions*
N *C21B 2100/26* · · *by adding additional fuel in recirculation pipes*
N *C21B 2100/28* · · *by separation*
N *C21B 2100/282* · · · *of carbon dioxide*
N *C21B 2100/284* · · · *of nitrogen*

N *C21B 2100/40* · *Gas purification of exhaust gases to be recirculated or used in other metallurgical processes*

> *WARNING*
> *Groups C21B 2100/40 - C21B 2100/44 are incomplete pending reclassification of documents from groups C21B 2100/02 - C21B 2100/06.*
> *Groups C21B 2100/02 - C21B 2100/06 and C21B 2100/40 - C21B 2100/44 should be considered in order to perform a complete search.*

N *C21B 2100/42* · · *Sulphur removal*
N *C21B 2100/44* · · *Removing particles, e.g. by scrubbing, dedusting*
N *C21B 2100/60* · *Process control or energy utilisation in the manufacture of iron or steel*

> *WARNING*
> *Groups C21B 2100/60 - C21B 2100/66 are incomplete pending reclassification of documents from groups C21B 2100/02 - C21B 2100/06.*
> *Groups C21B 2100/02 - C21B 2100/06 and C21B 2100/60 - C21B 2100/66 should be considered in order to perform a complete search.*

N *C21B 2100/62* · · *Energy conversion other than by heat exchange, e.g. by use of exhaust gas in energy production*
N *C21B 2100/64* · · *Controlling the physical properties of the gas, e.g. pressure or temperature*
N *C21B 2100/66* · · *Heat exchange*

N	C21B 2100/80	· *Interaction of exhaust gases produced during the manufacture of iron or steel with other processes*

WARNING

Group C21B 2100/80 is incomplete pending reclassification of documents from groups C21B 2100/02 - C21B 2100/06.
Groups C21B 2100/02 - C21B 2100/06 and C21B 2100/80 should be considered in order to perform a complete search.

M	**C21B 2200/00**	**Recycling of *non-gaseous* waste material**

Project: N/A (C22B)

C22B   **PRODUCTION AND REFINING OF METALS (electrolytic C25); PRETREATMENT OF RAW MATERIALS**

NOTE

In this subclass, groups for obtaining metals include obtaining the metals by non-metallurgical processes, and obtaining metal compounds by metallurgical processes, {as far as specifically indicated in the relevant groups} . Thus, for example, group C22B 11/00 covers the production of silver by reduction of ammoniacal silver oxide in solution, and group C22B 17/00 includes the production of cadmium oxide by a metallurgical process. Furthermore, although compounds of arsenic and antimony are classified in C01G, production of the elements themselves is included in C22B, as well as the production of their compounds by metallurgical processes.

WARNING

The following IPC groups are not used in the CPC system. Subject matter covered by these groups is classified in the following CPC groups:

C22B 3/26 - C22B 3/40	covered by	C22B 3/0005
C22B 9/187	covered by	
C22B 9/193	covered by	
C22B 9/21	covered by	
C22B 15/02-C22B 15/14	covered by	

Project: N/A (C22C)

C22C   **ALLOYS (flints C06C 15/00; treatment of alloys C21D, C22F)**

NOTES

1. In this subclass, the following terms or expressions are used with the meanings indicated:
   - "alloys" includes also:
     a. metallic composite materials containing a substantial proportion of fibres or other somewhat larger particles;
     b. ceramic compositions containing free metal bonded to carbides, diamond, oxides, borides, nitrides or silicides, e.g. cermets, or other metal compounds, e.g. oxynitrides or sulfides, other than as macroscopic reinforcing agents;
   - *"based on" requires at least 50% by weight of the specified constituent or of the specified group of constituents.*

   "based on" requires at least 50% by weight of the specified constituent or of the specified group of constituents.

2. In the absence of an indication to the contrary, in groups C22C 5/00 - C22C 32/00 an alloy is classified in the last appropriate place.

3. In this subclass it is desirable to classify the individual aspects of combinations of processes or materials for powder metallurgy using

Combination Sets with symbols chosen from groups C22C 1/00 - C22C 43/00 or from groups B22F 1/00 - B22F 9/00.

4. In this subclass the special database "ALLOYS" is used. This system includes patent documents classified in groups C22C 1/04 and C22C 5/00 - C22C 49/14 and provides information on the composition of the alloys, their uses and characteristics.

Project: N/A (C23F)

C23F

NON-MECHANICAL REMOVAL OF METALLIC MATERIAL FROM SURFACE (working metal by laser beams B23K 26/00; desurfacing by applying flames B23K 7/00; working of metal by electro-erosion B23H; producing decorative effects by removing surface material, e.g. by engraving, by etching, B44C 1/22; electrolytic etching or polishing C25F); INHIBITING CORROSION OF METALLIC MATERIAL OR INCRUSTATION IN GENERAL; MULTI-STEP PROCESSES FOR SURFACE TREATMENT OF METALLIC MATERIAL INVOLVING AT LEAST ONE PROCESS PROVIDED FOR IN CLASS C23 AND AT LEAST ONE PROCESS COVERED BY SUBCLASS C21D OR C22F OR CLASS C25

NOTES

1. protective layers or coating compositions or methods of applying them; these are classified in the appropriate places, e.g. B05, B44, C09D, C23C.

2. mechanical devices or constructional features of particular articles for inhibiting incrustation; these are classified in the appropriate places, e.g. in pipes or pipe fittings F16L 58/00.

3. articles characterised by being made of materials selected for their properties of resistance to corrosion or incrustation; these are classified in the appropriate places, e.g. turbine blades F01D 5/28.

Project: N/A (C25D)

C25D

PROCESSES FOR THE ELECTROLYTIC OR ELECTROPHORETIC PRODUCTION OF COATINGS; ELECTROFORMING (decorating textiles by metallising D06Q 1/04; manufacturing printed circuits by metal deposition H05K 3/18); APPARATUS THEREFOR

WARNING

The following IPC groups are not used in the CPC system. Subject matter covered by these groups is classified in the following CPC groups :

C25D 2/00	*covered by*	
C25D 5/24	covered by	C25D 5/34
C25D 5/26	covered by	C25D 5/36
C25D 5/28	covered by	C25D 5/38
C25D 5/30	covered by	C25D 5/42, C25D 5/44

C25D 5/32	covered by	C25D 5/46
C25D 13/06	covered by	C09D 5/44
C25D 13/08	covered by	C09D 5/4476
C25D 13/10	covered by	C09D 5/448
C25D 19/00	covered by	C25D 17/00

Project: N/A (D06F)

D06F **LAUNDERING, DRYING, IRONING, PRESSING OR FOLDING TEXTILE ARTICLES (apparatus for blocking, pressing, steaming, or stretching hats A42C; treating textile materials by liquids, gases or vapours D06B; chemical matters, see D06L, D06M)**

NOTES

1. This subclass covers:
   - domestic or laundry dry-cleaning apparatus using volatile solvents;
   - domestic, laundry, or tailors' ironing or other hot- pressing of clothes, linen, or other textile articles.

2. This subclass does not cover:
   - apparatus for wringing, washing, dry-cleaning, ironing, or other hot- pressing of textiles in manufacturing operations, which is covered by ~~suclass~~*subclasses* D06B, D06C.

Project: N/A (D06M)

D06M **TREATMENT, NOT PROVIDED FOR ELSEWHERE IN CLASS D06, OF FIBRES, THREADS, YARNS, FABRICS, FEATHERS, OR FIBROUS GOODS MADE FROM SUCH MATERIALS (surface treatment of fibres or filaments from glass, minerals or slags {also in the form of fabrics if the chemical aspects of the treatment are important} C03C 25/00; treatment of textiles by mechanical means, see D06B - D06J)**

NOTES

1. In each of the groups D06M 11/00 - D06M 15/00, in the absence of an indication to the contrary, a substance is classified in the last appropriate place.

2. Within each one of main groups D06M 11/00 - D06M 15/00, a mixture of substances is classified at least according to the essential ingredient. If more than one ingredient is essential, the mixture is classified, in the absence of an indication to the contrary, according to the essential ingredient which belongs to the last appropriate place in the sequence of substances;

3. Treatment by mixtures of substances covered by two or more of main groups D06M 11/00 - D06M 15/00 is classified in each appropriate main group.

4. In this subclass, the treatment of textiles, not provided for ~~for~~ elsewhere in class D06, is classified according to the following principles:
   - Treatment of textiles characterised by the treating agent in groups D06M 11/00 - D06M 16/00;
   - Treatment of textiles characterised by the process in group D06M 23/00.

Project: N/A (D06P)

U **D06P 3/00** **Special processes of dyeing or printing textiles, or dyeing leather, furs, or solid macromolecular substances in any form, classified according to the material treated**

U D06P 3/82 · textiles which contain different kinds of fibres

U D06P 3/8204 · · {fibres of different chemical nature}

D06P 3/8209 · · · {mixtures of fibres ~~containg~~*containing* amide groups}

Project: N/A (D06Q)

D06Q   **DECORATING TEXTILES (~~for treatment of texiles by mechanical means, see~~ D06B - D06J; _for treatment of textiles by mechanical means, see D06B - D06J;_ metallising the entire surface of textiles D06M 11/83; textile threads, filaments, yarns or tow, glued on macromolecular material D06N 7/00; dyeing or printing D06P)**

NOTE
In this subclass, the following term is used with the meaning indicated:
  • "decorating" means "local treatment" or "local effects produced" as to change, e.g. optically, the appearance or the properties of textile materials

Project: N/A (D21C)

U   D21C 11/00   **Regeneration of pulp liquors {or effluent waste waters}**

U   D21C 11/06   · Treatment of pulp gases; Recovery of the heat content of the gases; {Treatment of gases arising from various sources in pulp and paper mills; Regeneration of gaseous SO_2, e.g. arising from liquors containing sulfur compounds}

     D21C 11/063   · · {Treatment of gas streams comprising solid matter, e.g. the ashes resulting from the combustion of black liquor (~~evaportion of pulp liquors by direct contact with gases D21C 11/103;~~ _evaporation of pulp liquors by direct contact with gases D21C 11/103;_ post-combustion of gases D21C 11/127)}

Project: N/A (D21H)

D21H   **PULP COMPOSITIONS; PREPARATION THEREOF NOT COVERED BY SUBCLASSES D21C OR D21D; IMPREGNATING OR COATING OF PAPER; TREATMENT OF FINISHED PAPER NOT COVERED BY CLASS B31 OR SUBCLASS D21G; PAPER NOT OTHERWISE PROVIDED FOR**

NOTES
1. This subclass covers also pulp compositions for the preparation of fireboard or other fibrous articles by wet processes.

2. In this subclass, the following terms are used with the meaning indicated:
  • "pulp" means a dispersion, { e.g. an aqueous sus-pension,} comprising paper-making fibres and optional additives, which is to be processed, and covers the term "stock"; it also means dry paper-making fibres which are to be made into paper by either wet or dry processes;
  • "paper" means paper, cardboard or wet-laid non-woven fabrics.

3. In groups D21H 11/00 - D21H 15/00, in the absence of an indication to the contrary, classification is made in the last appropriate place.

4. Attention is drawn to the use of Combination Sets as specified in the Notes after groups D21H 17/00, D21H 17/69, D21H 17/71, D21H 19/00, D21H 21/00, D21H 21/14, D21H 23/00, D21H 23/22, D21H 25/00 and D21H 27/00.

WARNING
The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:
D21H 27/12   covered by

U   D21H 27/00   **Special paper not otherwise provided for, e.g. made by multi-step processes**

NOTES
1. This group provides for the classification of paper with special properties or applications which are only partially or not at all provided for elsewhere in the

classification. Whenever possible, however, these papers are classified according to the criteria used in the other groups of this subclass.

2. In this group, it is desirable to classify the individual constituents using Combination Sets with symbols chosen from groups D21H 11/00 - D21H 25/00.

U	D21H 27/002	· {Tissue paper; Absorbent paper (D21H 21/22, D21H 27/02, D21H 27/20 take precedence; toilet paper A47K 10/00; absorbent pads for physiological fluids A61L 15/16; making on paper-making machines D21F 11/00)}

WARNING

Not complete. Documents presently classified elsewhere, mainly in D21F and D21H, need reclassification to this group or its subgroups

	D21H 27/004	· · {~~charaterised~~*characterised* by specific parameters (D21H 27/008 takes precedence)}
	D21H 27/008	· · {~~charaterised~~*characterised* by inhomogeneous distribution or incomplete coverage of properties, e.g. obtained by using materials of chemical compounds (D21H 23/02, D21H 23/76, D21H 27/02 take precedence)}

Project: N/A (E01B)

U	**E01B 9/00**	**Fastening rails on sleepers, or the like (fastening rails to bridges E01D 19/12)**
U	E01B 9/38	· Indirect fastening of rails by using tie-plates or chairs; Fastening of rails on the tie-plates or in the chairs
U	E01B 9/44	· · Fastening the rail on the tie-plate
U	E01B 9/50	· · · by keys
	E01B 9/52	· · · · by ~~resilent~~*resilient* keys
U	**E01B 11/00**	**Rail joints (electrical connection of the rail B60M 5/00)**
U	E01B 11/02	· Dismountable rail joints
U	E01B 11/36	· · Fastening means for fishplates
	E01B 11/38	· · · ~~Loking~~*Locking* arrangements for fastening means (locking means for nuts or bolts in general F16B)
U	**E01B 27/00**	**Placing, renewing, working, cleaning, or taking-up the ballast, with or without concurrent work on the track; Devices therefor; Packing sleepers**
	E01B 27/06	· Renewing or cleaning the ballast in situ, ~~wih~~*with* or without concurrent work on the track
U	E01B 27/12	· Packing sleepers, with or without concurrent work on the track; Compacting track-carrying ballast
U	E01B 27/13	· · Packing sleepers, with or without concurrent work on the track (preforming ballast cores or seats for sleepers E01B 27/02)
U	E01B 27/16	· · · Sleeper-tamping machines
	E01B 27/17	· · · · combined with means for lifting, ~~levlling~~*levelling* or slewing the track

Project: N/A (E01C)

U	**E01C 19/00**	**Machines, tools or auxiliary devices for preparing or distributing paving materials, for working the placed materials, or for forming, consolidating, or finishing the paving (surface stabilisation E01C 21/00; apparatus specially adapted for reconditioning or repairing paving E01C 23/00)**
U	E01C 19/22	· for consolidating or finishing laid-down unset materials ({E01C 19/002, E01C 19/48, E01C 21/00} E01C 23/02 {E01C 23/065} take precedence; apparatus for generating vibrations in general B06B)

U   E01C 19/23   · · Rollers therefor; Such rollers usable also for compacting soil ({E01C 19/41, }
                          E01C 19/43, {E01C 19/52, E01C 23/065} take precedence; specially adapted
                          for agricultural purposes A01B 29/00; garden rollers A01G 1/12; making or
                          maintaining surfaces of snow or ice E01H 4/00; solely for soil compaction
                          E02D 3/026)

    E01C 19/29   · · · Rolling apparatus adapted to apply a rolling pressure less than its
                          weight, e.g. roller finishers travelling on formrail {combined with spread-
                          out, strike-off or smoothing means; Rolling elements with controlled
                          ~~peneration~~*penetration* or a controlled path of movement in a vertical plane,
                          e.g. controlled by the formrails, by guides ensuring a desired configuration
                          of the rolled surface}

U   E01C 19/48   · for laying-down the materials and consolidating them, or finishing the surface,
                          {e.g. slip forms therefor, forming kerbs or gutters in a continuous operation
                          in situ (E01C 19/002, E01C 23/065 take precedence; devices for guiding or
                          controlling the machines along a predetermined path E01C 19/004)}

U   E01C 19/4806   · · {with solely rollers for consolidating or finishing (E01C 19/4886 takes
                          precedence; combined with other consolidating or finishing means
                          E01C 19/488)}

    E01C 19/4813   · · · {the materials being simultaneously but ~~seperately~~*separately* applied
                          binders and granular or pulverulent material (such application per se
                          E01C 19/21)}

Project: N/A (E01D)

E01D   **CONSTRUCTION OF BRIDGES, {ELEVATED ROADWAYS} OR VIADUCTS;
                      ASSEMBLY OF BRIDGES (bridges extending between terminal buildings
                      and aircraft for embarking or disembarking passengers B64F 1/305; {tracks
                      for special kinds of railways E01B 25/00; culverts E01F 5/005})**

> *WARNING*
> *The following IPC groups are not used in the CPC scheme. Subject matter
> covered by these groups is classified in the following CPC groups:*
> *E01D 24/00   covered by*

Project: N/A (E01H)

U   **E01H 10/00**   **Improving gripping of ice-bound or other slippery traffic surfaces, e.g.
                      using gritting or thawing materials {Roadside storage of gritting or solid
                      thawing materials; Permanently installed devices for applying gritting or
                      thawing materials; Mobile apparatus specially adapted for treating wintry
                      roads by applying liquid, semi-liquid or granular materials}(roughening ice
                      by means of tools E01H 5/12; applying de-icing agents to rails E01H 8/10;
                      thawing materials C09K 3/18; by constructional features E01C 11/24;
                      {apparatus for distributing granular materials for road building purposes
                      E01C 19/20; treatment of dispersed oil or similar pollution on roads
                      E01H 1/001})**

    E01H 10/005   · {Permanently-installed devices for applying gritting or thawing materials, e.g. for
                          ~~preading~~*spreading* grit, for spraying de-icing liquids}

    E01H 11/00   **Control of undesirable vegetation on roads {or similar surfaces} or
                      permanent ways of ~~railays~~*railways*, {e.g. devices for scorching weeds or
                      for applying herbicides}(destruction of undesirable vegetation in general
                      A01M 7/00 - A01M 15/00, A01M 21/00; weeding involving working the
                      ballast E01B 27/00; mowers for embankments A01D 34/86; hedge shearing
                      machines A01G 3/04); Applying liquids, e.g. water, weed-killer bitumen, to
                      permanent ways (specially to rails E01H 8/10 {E01H 8/105, E01H 8/125}; for
                      preserving sleepers E01B 31/20)**

Project: N/A (E02C)

E02C 1/00   **Locks {or dry-docks}; Shaft locks, i.e. locks of which one front side is formed by a solid wall with an opening in the lower part through which the ships pass (lock gates E02B 7/20 {dry-dock equipment; naval construction aspects B63C 1/00**; flating docks B63C 1/02**}*; floating docks B63C 1/02 }*)**

Project: N/A (E02F)

U   E02F 5/00   **Dredgers or soil-shifting machines for special purposes**

E02F 5/30   · Auxiliary apparatus, e.g. for ~~tawing~~*thawing*, ~~craking~~*cracking*, blowing-up, or other preparatory treatment of the soil

Project: N/A (E03D)

E03D 9/00   **Sanitary or other accessories for lavatories (hand tools for cleaning the toilets bowl A47K 11/10; seats or covers for closets A47K 13/00; body supports, other than seats for closets A47K 17/02; devices for preventing contamination of drinking-water pipes E03C 1/10){Devices for cleaning or ~~desinfecting~~*disinfecting* the toilet room or the toilet bowl; Devices for eliminating smells (**~~cleaning, desinfecting or deodorising the seat A47K 13/30~~*cleaning, disinfecting or deodorising the seat A47K 13/30***)}**

E03D 9/005   · {Devices adding ~~desinfecting~~*disinfecting* or deodorising agents to the bowl}

E03D 9/14   · Noise-reducing means combined with flushing valves (noise-absorbing means in pipe systems F16L 55/00 {if not ~~incombination~~*in combination* with flushing valves E03D 11/00; noise-reducing means in valves in general F16K 47/00})

U   E03D 11/00   **Other component parts of water-closets (pipe-joints or couplings in general F16L){, e.g. noise-reducing means in the flushing system (noise-reducing means in combination with flushing valves E03D 9/14), flushing pipes mounted in the bowl, seals for the bowl outlet, devices preventing overflow of the bowl contents; devices forming a water seal in the bowl after flushing, devices eliminating obstructions in the bowl outlet or preventing backflow of water and excrements from the waterpipe}**

U   E03D 11/13   · Parts or details of bowls; Special adaptations of pipe joints or couplings for use with bowls {, e.g. provisions in bowl construction preventing backflow of waste-water from the bowl in the flushing pipe or cistern, provisions for a secondary flushing, for noise-reducing}

U   E03D 11/14   · · Means for connecting the bowl to the wall, e.g. to a wall outlet

U   E03D 11/143   · · · {Mounting frames for toilets and urinals}

E03D 11/146   · · · · {with incorporated cistern (~~wall bluilt-in flushing cisterns, connecting a cistern to the wall E03D 1/012~~*wall built-in flushing cisterns, connecting a cistern to the wall E03D 1/012*)}

Project: N/A (E03F)

U   E03F 1/00   **Methods, systems, or installations for draining-off sewage or storm water**

U   E03F 1/002   · {with disposal into the ground, e.g. via dry wells}

E03F 1/003   · · {via underground ~~elangated~~*elongated* vaulted elements}

Project: N/A (E04B)

	E04B	**GENERAL BUILDING CONSTRUCTIONS; WALLS, e.g. PARTITIONS; ROOFS; FLOORS; CEILINGS; INSULATION OR OTHER PROTECTION OF BUILDINGS (border constructions of opening in walls, floors or ceilings E06B 1/00; {electromagnetic shielding H05K 9/0001})**

NOTE

In this subclass, the following term is used with the meaning indicated:
- "ceiling" includes all the finishing material concealing the ~~the~~ underside of the load-carrying ceiling structure or roof structure.

WARNING

The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:

E04B 1/682	covered by	E04B 1/68
E04B 1/684	covered by	E04B 1/68
E04B 1/686	covered by	E04B 1/68

U	E04B 1/00		**Constructions in general; Structures which are not restricted either to walls, e.g. partitions, or floors or ceilings or roofs (scaffolds, shutterings E04G; structures specially adapted for buildings for special purposes, general layout of buildings, e.g. modular co-ordination, E04H; the particular parts of buildings, <u>see</u> the relevant groups for those parts)**
U	E04B 1/18	·	Structures comprising elongated load-supporting parts, e.g. columns, girders, skeletons (E04B 1/32 - E04B 1/36 take precedence; elongated load-supporting parts as elements, trusses, truss-like structures E04C 3/00)
U	E04B 1/19	· ·	Three-dimensional framework structures {(folded structures and grid-like formations acting as shell structures E04B 7/10)}
U	E04B 2001/1924	· · ·	{Struts specially adapted therefor}
U	E04B 2001/1927	· · · ·	{of essentially circular cross section}
	E04B 2001/193	· · · · ·	{with ~~flatened~~*flattened* connecting parts, e.g. ends}
U	E04B 1/62	·	Insulation or other protection; Elements or use of specified material therefor (chemical compositions C01 - C11; implements for applying insulation or sealings E04F 21/00; buildings to withstand or to provide protection against external undesired influences E04H 9/00; sealing pipes in walls or partitions F16L 5/02; shielding against dangerous radiation G21F; constructions of particular parts of buildings, <u>see</u> the relevant groups for those parts)
U	E04B 1/74	· ·	Heat, sound or noise insulation, absorption, or reflection (forms of, or arrangements in, rooms for influencing or directing sound E04B 1/99). Other building methods affording favourable thermal or acoustical conditions, e.g. accumulating of heat within walls (fire protection E04B 1/94; elements chiefly adapted for structural purposes E04C 1/00 - E04C 3/00; chiefly adapted for surface covering E04F 13/00; as underlayers for floor coverings E04F 15/18; closures for wall or like openings E06B)
U	E04B 1/82	· · ·	specifically with respect to sound only ({of floors or ceilings E04B 9/001; of flooring E04F 15/20}; noise damping in ducts or channels E04F 17/00; {sound damping devices for pipes F16L 55/033}; noise damping in general G10K 11/00)
U	E04B 1/84	· · · ·	Sound-absorbing elements
U	E04B 2001/8423	· · · · ·	{Tray or frame type panels or blocks, with or without acoustical filling}
U	E04B 2001/8442	· · · · · ·	{Tray type elements}
	E04B 2001/8447	· · · · · · ·	{with two ~~faacing~~*facing* trays}

U	E04B 2/00	**Walls, e.g. partitions, for buildings; Wall construction with regard to insulation; Connections specially adapted to walls (connections for building structures in general E04B 1/38; insulation for buildings in general E04B 1/62; building elements of relatively thin form for parts of buildings E04C 2/00)**
U	E04B 2/02	· built-up from layers of building elements
U	E04B 2002/0256	· · {Special features of building elements}
	E04B 2002/0267	· · · {Building elements with the ~~appearence~~*appearance* of several bricks}
U	E04B 2/74	· Removable non-load-bearing partitions; Partitions with a free upper edge (framed panels E04C 2/38){modular coordination}
U	E04B 2002/7461	· · {Details of connection of sheet panels to frame or posts}
	E04B 2002/7475	· · · {using connectors with claws ~~penetraiting~~*penetrating* the sheet panels}

Project: N/A (E04D)

U	E04D 3/00	**Roof covering by making use of flat or curved slabs or stiff sheets (E04D 1/00 takes precedence; built-up roofs E04D 11/02)**
U	E04D 3/36	· Connecting; Fastening
U	E04D 3/361	· · by specially-profiled marginal portions of the slabs or sheets
	E04D 3/362	· · · by locking the edge of one slab or sheet within ~~theprofiled~~*the profiled* marginal portion of the adjacent slab or sheet, e.g. using separate connecting elements

U	E04D 13/00	**Special arrangements or devices in connection with roof coverings; {Protection against birds}; Roof drainage; {Sky-lights}(ventilation tiles E04D 1/30; ventilation slabs E04D 3/40; internal channels E04F 17/00; elements therefor, see the relevant groups)**
U	E04D 13/04	· Roof drainage; Drainage fittings in flat roofs, {balconies or the like}(gutter tiles E04D 1/30; gutter slabs E04D 3/40; {vessels for collecting rainwater E03B 3/03;} street gullies E03F 5/04)
U	E04D 13/08	· · Down pipes; Special clamping means therefor (clamping pipes in general F16B, F16L)
	E04D 2013/0893	· · · {incorporated in building ~~strucutre~~*structure*}

Project: N/A (E04G)

	E04G	**SCAFFOLDING; FORMS; SHUTTERING; BUILDING IMPLEMENTS OR OTHER BUILDING AIDS, OR THEIR USE; HANDLING BUILDING MATERIALS ON THE SITE; REPAIRING, BREAKING-UP OR OTHER WORK ON EXISTING BUILDINGS**

NOTE

In this subclass the word "scaffolding" includes other supports for like purposes

WARNING

The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:
E04G 23/03   covered by

Project: N/A (E04H)

U	**E04H 12/00**	**Towers; Masts or poles; Chimney stacks; Water-towers; Methods of erecting such structures (cooling-towers E04H 5/12; supports for road signs E01F 9/60; foundation piles E02D 5/22; foundations for masts, poles or chimneys E02D 27/42; structural elongated members in general E04C 3/00; fixed climbing irons E06C 9/04; derricks for oil drilling E21B 15/00)**
U	E04H 12/22	· Sockets or holders for poles or posts {(for sports articles, e.g. floor sockets A63B 71/023; for road signs E01F 9/673; foundations for poles, masts or chimneys E02D 27/42)}
	E04H 12/2238	· · {to be placed on the ground (~~christmas~~*Christmas* tree stands A47G 33/12)}
U	**E04H 15/00**	**Tents or canopies, in general**
U	E04H 15/02	· Tents combined or specially associated with other devices
	E04H 15/04	· · suspended type, e.g~~.~~ from trees, from cantilever supports (supporting frames E04H 15/34)
U	E04H 15/20	· inflatable, e.g. shaped, strengthened, or supported by fluid pressure (connection of valves to inflatable elastic bodies B60C 29/00; inflatable forms for making walls or the like E04G 11/04)
	E04H 2015/206	· · {Details of inflation devices, e.g. ~~vlaves~~*valves*, connections to fluid pressure source}

Project: N/A (E05B)

	E05B	**LOCKS; ACCESSORIES THEREFOR; HANDCUFFS**

NOTES

1. Operating or controlling of locks for vehicle wings are classified in groups E05B 77/00-E05B 81/00.

2. Knobs, handles or press buttons for locks of vehicle wings are classified in E05B 79/00-E05B 85/00.

3. {In this subclass, it is desirable to add the indexing code(s) of E05Y.}

WARNING

The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:

E05B 1/02-E05B 9/06	*covered by*
E05B 13/02-E05B 13/08	*covered by*
E05B 15/12	*covered by*
E05B 17/02	*covered by*
E05B 19/02	*covered by*
E05B 19/06-E05B 19/08	*covered by*
E05B 19/10-E05B 19/12	*covered by*
E05B 19/16	*covered by*
E05B 21/02-E05B 21/04	*covered by*
E05B 25/00-E05B 25/10	*covered by*
E05B 27/04-E05B 27/06	*covered by*
E05B 29/02-E05B 29/14	*covered by*
E05B 35/04	*covered by*
E05B 37/06	*covered by*
E05B 37/18	*covered by*
E05B 37/22	*covered by*
E05B 45/14	*covered by*
E05B 47/04	*covered by*

E05B 47/08	*covered by*
E05B 49/02-E05B 49/04	*covered by*
E05B 55/02	*covered by*
E05B 55/04	*covered by*
E05B 55/08	*covered by*
E05B 55/10	*covered by*
E05B 55/14-E05B 55/16	*covered by*
E05B 59/02-E05B 59/06	*covered by*
E05B 65/04	*covered by*
E05B 67/12	*covered by*
E05B 67/16	*covered by*
E05B 67/20	*covered by*
E05B 67/30	*covered by*
E05B 67/34	*covered by*
E05B 71/02	*covered by*

Project: RP0143 (E05B)

U	E05B 83/00	**Vehicle locks specially adapted for particular types of wing or vehicle (locks specially adapted for bicycles E05B 71/00; locking arrangements for non-fixed vehicle roofs B60J 7/185; latching means for sideboards or tailgates of open load compartments B62D 33/037)**
E	E05B 83/28	· Locks for glove compartments, console boxes, fuel inlet covers or the like
U	E05B 83/32	· · for console boxes, e.g. between passenger seats
D	E05B 2083/33	· · {} <administratively transferred to E05B 83/28>
U	E05B 83/34	· · for fuel inlet covers essentially flush with the vehicle surface

Project: N/A (E05C)

	E05C	**BOLTS OR FASTENING DEVICES FOR WINGS, SPECIALLY FOR DOORS OR WINDOWS (latching means for sideboard or tailgate structures for vehicles B62D, {B62D 33/02}; fastening devices for constructional or engineering elements E04, F16B; locks, fastening devices structurally or operatively combined or having significant cooperation with locks E05B; means for operating or controlling wing fasteners in conjunction with mechanisms for moving the wing E05F)**

NOTES

1. In this subclass only the movement essential for securing the wing is considered, e.g. a sliding bolt which is rotated on its axis to prevent its withdrawal is classified as having only a sliding movement

2. Attention is drawn to the definition following the title of class E05

3. {In this subclass, it is desirable to add the indexing code(s) of E05Y.}

WARNING
The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:

E05C 3/32	*covered by*
E05C 17/06	*covered by*
E05C 17/10	*covered by*
E05C 21/02	*covered by*

Project: N/A (E05F)

U	**E05F 11/00**	**Man-operated mechanisms for operating wings, including those which also operate the fastening (connecting mechanisms for a plurality of wings E05F 17/00)**
U	E05F 11/02	· for wings in general, e.g. fanlights (E05F 11/36 takes precedence; for windows to be lowered vertically E05F 11/38; for doors E05F 11/54)
U	E05F 11/08	· · with longitudinally-moving bars guided, e.g. by pivoted links, in or on the frame
U	E05F 11/12	· · · Mechanisms by which the bar shifts the wing
	E05F 11/24	· · · · ~~shifing~~*shifting* the wing by pivotally-connected members {(moving) in a plane parallel to the pivot axis of the wing}
	E05F 11/53	· for sliding windows, e.g. vehicle windows, to be ~~opended~~*opened* or closed by horizontal movement

Project: N/A (E05G)

U	**E05G 1/00**	**Safes or strong-rooms for valuables (savings boxes A45C 1/12; floatable safes B63C 7/30; storage containers without attack or fire repellent features B65D; bank buildings in general, e.g. modular construction, floor plan, E04H 1/06; buildings resistant to earthquakes or war action E04H 9/00)**
	E05G 1/12	· with fluent material releasing, generating or distributing means, e.g. repellent or fire extinguishing (E05G 1/14 takes precedence; ~~indentifying, scaring or incapacitating burglars, thieves or intruders with smoke, gas, powder or liquid G08B 15/02~~*; identifying, scaring or incapacitating burglars, thieves or intruders with smoke, gas, powder or liquid G08B 15/02*)

Project: N/A (E06B)

U	**E06B 1/00**	**Border constructions of openings in walls, floors, or ceilings; Frames to be rigidly mounted in such openings (E06B 5/00 takes precedence; features relating also to inner frames or wing frames, features relating solely to the mounting of inner frames E06B 3/00; corner joints or edge joints E06B 3/96)**
U	E06B 1/04	· Frames for doors, windows, or the like to be fixed in openings ({of curvilinear outline E06B 1/006; } special adaptations for fixing in base frames E06B 1/02; features relating solely to the mounting of glass panes or other sheets E06B 3/00)
	E06B 1/045	· · {with separate wing abutment strips, e.g. ~~ajustable~~*adjustable*; Door stops (sealing arrangements E06B 7/16)}
U	E06B 1/62	· Tightening or covering joints between the border of openings and the frame {or between contiguous frames}(E06B 1/34 takes precedence)
	E06B 2001/622	· · {especially adapted for door frames; Joint covering devices where the wall surface is ~~parlallel~~*parallel* to the adjacent door or window frame part}
U	**E06B 3/00**	**Window sashes, door leaves, or like elements for closing {wall or like} openings; Layout of fixed or moving closures, e.g. windows {in wall or like openings}; Features of rigidly-mounted outer frames relating to the mounting of wing frames (E06B 5/00 takes precedence; shutters or the like E06B 9/00; glass panes C03)**
U	E06B 3/04	· Wing frames not characterised by the manner of movement (features relating to the manner of movement E06B 3/32)
U	E06B 3/263	· · Frames with special provision for insulation
	E06B 2003/26394	· · · {~~Strenghtening~~*Strengthening* arrangements in case of fire}
U	E06B 3/54	· Fixing of glass panes or like plates

U	E06B 3/58	· · by means of borders, cleats, or the like ({E06B 3/30} , E06B 3/64 take precedence)
	E06B 3/585	· · · {adjustable, e.g. for ~~accomodating~~*accommodating* panes of various thickness, or with provisions for altering the clamping force on the pane (E06B 3/5871 takes precedence)}
U	E06B 3/96	· Corner joints or edge joints for windows, doors, or the like frames or wings {(E06B 3/663 takes precedence)}
U	E06B 3/964	· · using separate connection pieces, e.g. T-connection pieces (E06B 3/9604 - E06B 3/9636 and E06B 3/984 - E06B 3/99 take precedence)
	E06B 3/9649	· · · {Tie rods spanning the whole width or height ~~fo~~*of* the frame; Straps encircling the frame}

Project: N/A (E21B)

	E21B	**EARTH DRILLING, e.g. DEEP DRILLING (mining, quarrying E21C; making shafts, driving galleries or tunnels E21D); OBTAINING OIL, GAS, WATER, SOLUBLE OR MELTABLE MATERIALS OR A SLURRY OF MINERALS FROM WELLS**

WARNING

The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:

E21B 1/12 - E21B 1/38	covered by	E21B 1/00
E21B 7/08	covered by	E21B 7/06
E21B 11/04	covered by	E21B 27/00
E21B 23/12	covered by	E21B 23/002
E21B 31/08	covered by	E21B 27/00
E21B 43/22	covered by	C09K 8/58
E21B 43/27	*covered by*	
E21B 47/001-E21B 47/009	*covered by*	
E21B 47/013-E21B 47/017	*covered by*	
E21B 47/0224-E21B 47/0236	*covered by*	
E21B 47/047-E21B 47/053	*covered by*	
E21B 47/07	*covered by*	
E21B 47/085	*covered by*	
E21B 47/092-E21B 47/098	*covered by*	
E21B 47/103-E21B 47/117	*covered by*	
E21B 47/125-E21B 47/135	*covered by*	
E21B 47/20-E21B 47/24	*covered by*	
E21B 47/26	*covered by*	

U	**E21B 31/00**	**Fishing for or freeing objects in boreholes or wells ({using junk baskets or the like E21B 27/00}; provisions on well heads for introducing or removing objects E21B 33/068; Locating or determining the position of objects in boreholes or wells E21B 47/09)**
U	E21B 31/107	· using impact means for releasing stuck parts, e.g. jars (telescoping joints E21B 17/07)
U	E21B 31/113	· · hydraulically-operated
	E21B 31/1135	· · · {Jars with a hydraulic impedance ~~mecanism~~*mechanism*, i.e. a restriction, for initially delaying escape of a restraining fluid}

U	E21B 34/00	**Valve arrangements for boreholes or wells (in drilling fluid circulation systems E21B 21/10; {tool diverters E21B 23/002;} blow-out preventers E21B 33/06; oil flow regulating apparatus E21B 43/12; valves in general F16K)**
U	E21B 34/06	· in wells
U	E21B 34/10	· · operated by control fluid supplied from above ground ({by a dropped ball or piston E21B 34/14;} above-ground control means E21B 34/16)
	E21B 34/102	· · · {with means for locking the closing element ~~inopen~~*in open* or closed position (E21B 34/105 and E21B 34/108 take precedence)}
U	E21B 47/00	**Survey of boreholes or wells (monitoring pressure or flow of drilling fluid E21B 21/08; geophysical logging G01V)**
U	E21B 47/12	· Means for transmitting measuring-signals {or control signals} from the well to the surface {or from the surface to the well}, e.g. for logging while drilling (remote signalling in general G08)
	E21B 47/122	· · {by electromagnetic energy, e.g. radio frequency (in general H04B ~~magnetic propspecting G01V 3/00~~*; magnetic prospecting G01V 3/00*)}

Project: N/A (E21C)

U	E21C 35/00	**Miscellaneous items relating to machines for slitting or completely freeing the mineral from the seam**
	E21C 35/20	· General features of equipment for removal of chippings, e.g. for loading on ~~coveyer~~*conveyor*

Project: N/A (F)

F		**MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING** ~~ENGINES OR PUMPS~~

NOTE

Guide to the use of this subsection (classes F01-F04)

The following notes are meant to assist in the use of this part of the classification scheme.

1. In this subsection, subclasses or groups designating "engines" or "pumps" cover methods of operating the same, unless otherwise specifically provided for.
2. In this subsection, the following terms or expressions are used with the meanings indicated:
   - "engine" means a device for continuously converting fluid energy into mechanical power. Thus this term includes, for example, steam piston engines or steam turbines, PER SE, or internal-combustion piston engines, but it excludes single- stroke devices. "Engine" also includes the fluid-motive portion of a meter unless such portion is particularly adapted for use in a meter;
   - "pump" means a device for continuously raising, forcing, compressing, or exhausting fluid by mechanical or other means; thus this term includes fans or blowers;
   - "machine" means a device which could equally be an engine and a pump, and not a device which is restricted to an engine or one which is restricted to a pump;
   - "positive displacement" means the way the energy of a working fluid is transformed into mechanical energy, in which variations of volume created by the working fluid in a working chamber produce equivalent displacements of the mechanical member transmitting the energy, the dynamic effect of the fluid being of minor importance; and VICE VERSA;

- "non-positive displacement" means the way the energy of a working fluid is transformed into mechanical energy, by transformation of the energy of the working fluid into kinetic energy; and VICE VERSA;
- "oscillating-piston machine" means a positive-displacement machine in which a fluid-engaging work-transmitting member oscillates. This definition applies also to engines and pumps;
- "rotary-piston machine" means a positive-displacement machine in which a fluid-engaging work-transmitting member rotates about a fixed axis or about an axis moving along a circular or similar orbit. This definition applies also to engines and pumps;
- "rotary piston" means the work-transmitting member of a rotary-piston machine and may be of any suitable form, e.g. like a toothed gear;
- "co-operating members" means the "oscillating piston" or "rotary piston" and another member, e.g. the working-chamber wall, which assists in the driving or pumping action;
- "movement of the co-operating members" is to be interpreted as relative, so that one of the "co-operating members" may be stationary, even though reference may be made to its rotational axis, or both may move;
- "teeth or tooth-equivalents", include lobes, projections or abutments;
- "internal-axis type" means that the rotational axes of the inner and outer co-operating members remain at all times within the outer member, e.g. in a similar manner to that of a pinion meshing with the internal teeth of a ring gear;
- "free-piston" means a piston of which the length of stroke is not defined by any member driven thereby;
- "cylinders" means positive-displacement working chambers in general and thus this term is not restricted to cylinders of circular cross-section;
- "main shaft" means the shaft which converts reciprocating piston motion into rotary motion or VICE VERSA;
- "plant" means an engine together with such additional apparatus as is necessary to run the engine. For example, a steam engine plant includes a steam engine and means for generating the steam;
- "working fluid" means the driven fluid in a pump and the driving fluid in an engine. The working fluid may be in a gaseous state, i.e. compressible, or liquid. In the former case coexistence of two states is possible;
- "steam" includes condensable vapours in general, and "special vapour" is used when steam is excluded;
- "reaction type" as applied to non-positive-displacement machines or engines means machines or engines in which pressure/velocity transformation takes place wholly or partly in the rotor; machines or engines with no, or only slight, pressure/velocity transformation in the rotor are called "impulse type".

3. In this subsection:
   - cyclically operating valves, lubricating, gas-flow silencers or exhaust apparatus, or cooling should be classified in subclasses F01L, F01M, F01N, F01P irrespective of their stated application, unless their classifying features are peculiar to their application, in which case they should be classified only in the relevant subclass of classes F01 - F04;
   - lubricating, gas-flow silencers or exhaust apparatus, or cooling of machines or engines should be classified in subclasses F01M, F01N, F01P except for those peculiar to steam engines which should be classified in subclass F01B.

4. For use of this subsection with a good understanding, it is essential to remember, so far as subclasses F01B, F01C, F01D, F03B, F04B, F04C and F04D, which form its skeleton, are concerned:

- the principle which resides in their elaboration
- the classifying characteristics which they call for, and
- their complementarity

i. Principle

This concerns essentially the subclasses listed above. Other subclasses, notably those of class F02, which cover better-defined matter, are not considered here.

Each subclass covers fundamentally a genus of apparatus (engine or pump) and by extension covers equally "machines" of the same kind. Two different subjects, one having a more general character than the other, are thus covered by in the same subclass

Subclasses F01B, F03B, F04B, beyond the two subjects which they cover, have further a character of generality in relation to other subclasses concerning the different species of apparatus in the genus concerned.

This generality applies as well for the two subjects dealt with, without these always being in relation to the same subclasses.

Thus, subclass F03B, in its part dealing with "machines" should be considered as being the general class relating to subclasses F04B, F04C and in its part dealing with "engines" as being general in relation to subclass F03C.

ii. Characteristics

a. The principal classifying characteristic of the subclass is that of genera of apparatus, of which there are three possible:

Machines; engines; pumps.

b. As stated above, "machines" are always associated with one of the other two genera.These main genera are subdivided according to the general principles of operation of the apparatus:

Positive displacement; non-positive displacement.

c. The positive displacement apparatus are further subdivided according to the ways of putting into effect the principle of operation, that is, to the kind of apparatus:

Simple reciprocating piston; rotary or oscillating piston; other kind.

d. Another classifying characteristic is that of the working fluid, in respect of which three kinds of apparatus are possible, namely:

Liquid and elastic fluid; elastic fluid; liquid.

iii. Complementarity

This resides in association of pairs of the subclasses listed above, according to the characteristics under consideration in respect of kind of apparatus or working fluid.

The subclasses concerned with the various principles, characteristics and complementarity are shown in the following table:

```
_____
Kind      positive                non-  Working fluid
Relations
of        _____  posi- _____  of
gene-
dis-              rotary          tive                          rality
in
place-    reci-  or os-                 liquid
respect
```

```
          ment     pro-   cillat-              and                     of
          kind
          cating   ing                 elastic elastic      of
          dis-
          piston   piston  other       fluid   fluid    liquid
          placement
          _____
          MACHINES
          _____
          X                    X            X       X                  F01B
          X                            X       X             F01C
          X        X       X                  F01D
          X                            X     F03B
          X                    X                              X         F04B
          X                                         X      F04C
          ENGINES
          _____
          X                    X            X       X                  F01B
          X                            X       X             F01C
          X        X       X                  F01D
          X                            X     F03B
          X        X       X                                X          F03C
          PUMPS
          _____
          X                    X            X       X        X         F04B
          X                            X       X        X    F04C
          X        X       X        X     F04D
          _____
```

It is seen from the table that :

- For the same kind of apparatus in a given genus, the characteristic of "working fluid" associates:

F01B and F04B)
F01C and F04C) Machines
F01D and F03B)
F01B and F03C)
F01C and F03C) Engines
F01D and F03B)

- For the same kind of working fluid, the "apparatus" characteristic relates subclasses in the same way as considerations of relative generality.

Project: N/A (F01B)

U F01B 2170/00 **Steam engines, e.g. for locomotives or ships**

U F01B 2170/04 · To-be-deleted with administrative transfer to parent group

U F01B 2170/0405 · · To-be-deleted with administrative transfer to parent group

 F01B 2170/047 · · · ~~mGeneral~~*General* arrangements for steam engines

Project: N/A (F01D)

U F01D 1/00 **Non-positive-displacement machines or engines, e.g. steam turbines (wit working-fluid flows in opposite axial directions for balancing axial thrust F01D 3/02; with other than pure rotation F01D 23/00; turbines characterised by their use in special steam systems, cycles, or processes, regulating devices therefor F01K)**

U F01D 1/02 · with stationary working-fluid guiding means and bladed or like rotor, {e.g. multi-bladed impulse steam turbines}(F01D 1/24 takes precedence; without stationary working-fluid guiding means F01D 1/18)

F01D 1/023	· · {the working-fluid being divided into several separate flows ([F01D 3/02](#) takes precedence); several ~~seperate~~*separate* fluid flows being united in a single flow; the machine or engine having provision for two or more different possible fluid flow paths}

Project: N/A (F01L)

F01L	**CYCLICALLY OPERATING VALVES FOR MACHINES OR ENGINES (valves in general [F16K](#))**

NOTES

1. Groups [F01L 1/00](#) - [F01L 13/00](#) cover only valve-gear or valve arrangements without provision for variable fluid distribution.

2. Valve gear or valve arrangements specially adapted for steam engines are covered by groups [F01L 15/00](#) - [F01L 35/00](#).

3. Valve-gear arrangements specially adapted for machines or engines with variable working-fluid distribution are covered by groups [F01L 15/00](#) - [F01L 35/00](#).

4. Attention is drawn to the notes preceding class [F01](#), especially Note (3).

5. As regards the above-mentioned Note (3), attention is drawn to [F01B 3/10](#), [F01B 15/06](#), [F01C 21/18](#), [F02B 53/06](#), [F03C 1/08](#), [F04B 1/18](#), [F04B 7/00](#), [F04B 39/08](#), [F04B 39/10](#), and [F04C 15/06](#), [F04C 29/12](#).

> *WARNING*
> *The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:*
> | *F01L 31/20* | *covered by* |
> |---|---|
> | *F01L 31/22* | *covered by* |
> | *F01L 31/24* | *covered by* |

U	F01L 3/00	**Lift-valve, i.e. cut-off apparatus with closure members having at least a component of their opening and closing motion perpendicular to the closing faces; Parts or accessories thereof**
U	F01L 2003/25	· {Valve configurations in relation to engine}
	F01L 2003/255	· · {configured other than parallel or ~~symetrical~~*symmetrical* relative to piston axis}

Project: N/A (F01M)

U	F01M 5/00	**Heating, cooling, or controlling temperature of lubricant (arrangement of lubricant coolers in engine cooling system [F01P 11/08](#)); lubrication means facilitating engine starting**
U	F01M 5/02	· Conditioning lubricant for aiding engine starting, e.g. heating
U	F01M 5/021	· · {by heating}
	F01M 2005/023	· · · {Oil sump with partition for ~~faciliting~~*facilitating* heating of oil during starting}
U	F01M 13/00	**Crankcase ventilating or breathing**
U	F01M 13/04	· having means for purifying air before leaving crankcase, e.g. removing oil
U	F01M 2013/0422	· · {Separating oil and gas with a centrifuge device}
	F01M 2013/0427	· · · {the centrifuge device having no rotating part, ~~e.~~*e.g.*~~.g~~ cyclone}
	F01M 2013/0444	· · {with means for ~~accomodating~~*accommodating* movement or position of engines}

Project: N/A (F01P)

U	**F01P 11/00**	**Component parts, details, or accessories not provided for in, or of interest apart from, groups F01P 1/00 - F01P 9/00**
U	F01P 11/06	· Cleaning (in general B08B); Combating corrosion (in general C23F)
	F01P 2011/061	· · {Cleaning or ~~combatting~~*combating* corrosion using filters}
	F01P 2011/066	· · {~~Combatting~~*Combating* corrosion (F01P 2011/061 takes precedence)}

Project: N/A (F02B)

U	**F02B 19/00**	**Engines characterised by precombustion chambers (engines with incandescent chambers F02B 9/08)**
U	F02B 19/10	· with fuel introduced partly into pre-combustion chamber, and partly into cylinder (F02B 19/02 - F02B 19/08 take precedence)
U	F02B 19/1019	· · {with only one pre-combustion chamber (F02B 19/1004 take precedence)}
U	F02B 19/1023	· · · {pre-combustion chamber and cylinder being fed with fuel-air mixture(s)}
U	F02B 19/1028	· · · · {pre-combustion chamber and cylinder having both intake ports or valves, e.g. HONDS CVCC}
	F02B 19/1061	· · · · · {with ~~residuel~~*residual* gas chamber, e.g. containing spark plug}
U	**F02B 75/00**	**Other engines**
U	F02B 75/16	· Engines characterised by number of cylinders, e.g. single-cylinder engines (F02B 75/26 takes precedence)
U	F02B 75/18	· · Multi-cylinder engines (scavenging aspects F02B 25/00)
U	F02B 75/22	· · · with cylinders in V, fan, or star arrangement
	F02B 75/228	· · · · {with cylinders arranged in ~~parlallel~~*parallel* banks}
	F02B 75/36	· Engines with parts of combustion- or working-chamber walls ~~resilently~~*resiliently* yielding under pressure
U	**F02B 2730/00**	**Internal combustion engines with pistons rotating or oscillating with relation to the housing**
	F02B 2730/09	· Arrangements or specially formed elements for engines according to the ~~preceeding~~*preceding* groups

Project: N/A (F02C)

U	**F02C 6/00**	**Plural gas-turbine plants; Combinations of gas-turbine plants with other apparatus (aspects predominantly concerning such apparatus, <u>see</u> the relevant classes for the apparatus); Adaptations of gas- turbine plants for special use**
	F02C 6/006	· {Open cycle gas-turbine in which the working fluid is expanded to a pressure below the atmospheric pressure and then compressed to ~~atmosperic~~*atmospheric* pressure}
U	**F02C 7/00**	**Features, components parts, details or accessories, not provided for in, or of interest apart form groups F02C 1/00 - F02C 6/00; Air intakes for jet-propulsion plants (controlling F02C 9/00)**
	F02C 7/20	· Mounting or supporting of plant; ~~Accomodating~~*Accommodating* heat expansion or creep

Project: N/A (F02D)

U	**F02D 41/00**	**Electrical control of supply of combustible mixture or its constituents (F02D 43/00 takes precedence)**
U	F02D 41/02	· Circuit arrangements for generating control signals

U	F02D 41/04	· · Introducing corrections for particular operating conditions ([F02D 41/14](#) takes precedence)
U	F02D 41/12	· · · for deceleration {([F02D 41/0005](#), [F02D 41/107](#) take precedence)}
U	F02D 41/123	· · · · {the fuel injection being cut-off}
	F02D 41/126	· · · · · {~~transitionnal~~ *transitional* corrections at the end of the cut-off period}

U	**F02D 2700/00**	**Mechanical control of speed or power of a single cylinder piston engine**
	F02D 2700/07	· Automatic control systems according to one of the ~~preceeding~~ *preceding* groups in combination with control of the mechanism receiving the engine power

Project: RP0143 (F02F)

E	**F02F 1/00**	**Cylinders; Cylinder heads (in general [F16J](#))**

Project: N/A (F02F)

U	**F02F 3/00**	**Pistons (in general [F16J](#))**
	F02F 3/02	· having means for ~~accomodating~~ *accommodating* or controlling heat expansion

U	**F02F 7/00**	**Casings, e.g. crankcases (engine casings in general [F16M](#)){or frames}**
U	F02F 7/0043	· {Arrangements of mechanical drive elements}
	F02F 7/0058	· · {~~Longitudially~~ *Longitudinally* or ~~tranversely~~ *transversely* separable crankcases}

Project: RP0143 (F02F)

D	**F02F 2547/00**	
		<administratively transferred to [F02F 1/00](#)>

Project: N/A (F02M)

	F02M	**SUPPLYING COMBUSTION ENGINES IN GENERAL, WITH COMBUSTIBLE MIXTURES OR CONSTITUENTS THEREOF (charging such engines [F02B](#))**

NOTES

1. Attention is drawn to the notes preceding class [F01](#).

2. In this subclass the following terms are used with the meanings indicated:
   - "Carburettors" means essentially apparatus for mixing fuel with air, the fuel being brought into mixing contact with the air by lowering the air pressure, e.g. in a venturi;
   - "Fuel injection apparatus" means apparatus for introducing fuel into a space, e.g. engine cylinder, by pressurising the fuel, e.g. by a pump acting behind   the fuel, and thus embraces the so-called "solid fuel injection" in which   liquid fuel is introduced without any admixture of gas;
   - "Low-pressure fuel injection" means fuel injection in which the fuel-air mixture containing fuel thus injected will be ~~substamtially~~ *substantially* compressed in   the compression stroke of the engine;
   - "Pumping element" means a single piston-cylinder unit in a reciprocating-piston fuel-injection pump or the equivalent unit in any other type of fuel-injection pump.

WARNING

The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:

F02M 7/23	covered by	F02M 7/103
F02M 51/08	covered by	F02M 51/06

U	**F02M 17/00**	**Carburettors having pertinent characteristics not provided for in, or of interest apart from, the apparatus of preceding main groups (apparatus for treating combustion-air, fuel, or fuel-air mixture by catalysts, electric means, magnetism, rays, sound waves, or the like F02M 27/00; combinations of carburettors and low-pressure fuel-injection apparatus F02M 71/00)**
	F02M 17/34	· Other carburettors combined or ~~asscociated~~*associated* with other apparatus, e.g. air filters (predominant aspects of the apparatus, <u>see</u> the relevant classes for such apparatus)
U	**F02M 41/00**	**Fuel-injection apparatus with two or more injectors fed from a common pressure-source sequentially by means of a distributor**
		<u>NOTE</u> - in this group the following indexing codes are used: F02M 2700/1329
U	F02M 41/08	· the distributor and pumping elements being combined
U	F02M 41/14	· · rotary distributor supporting pump pistons
U	F02M 2041/1438	· · · {Arrangements or details pertaining to the devices classified in F02M 41/14 and subgroups}
	F02M 2041/1472	· · · · {Devices for ~~limitating~~*limiting* maximum delivery or for providing excess fuel for starting or for correcting advance at starting}
U	**F02M 55/00**	**Fuel-injection apparatus characterised by their fuel conduits or their venting means; {Arrangements of conduits between fuel tank and pump F02M 37/00 (venting in general B01D 19/00)}**
	F02M 55/04	· Means for damping vibrations {or pressure ~~fluctations~~*fluctuations*} in injection pump inlets {or outlets}
U	**F02M 61/00**	**Fuel-injectors not provided for in groups F02M 39/00 - F02M 57/00 or F02M 67/00**
		<u>NOTE</u> - in this group the following indexing codes are used: F02M 2700/07, F02M 2700/074
U	F02M 61/16	· Details not provided for in, or of interest apart from, the apparatus of groups F02M 61/02 - F02M 61/14
U	F02M 61/18	· · Injection nozzles, e.g. having valve seats; {Details of valve member seated ends, not otherwise provided for}
	F02M 61/188	· · · {~~Shperical~~*Spherical* or partly spherical shaped valve member ends}
U	**F02M 2700/00**	**Supplying, feeding or preparing air, fuel, fuel air mixtures or auxiliary fluids for a combustion engine; Use of exhaust gas; Compressors for piston engines**
		<u>WARNING</u> Groups F02M 2700/00 –F02M 2700/4397 are no longer used for the classification of documents as of January 1, 1975.
U	F02M 2700/07	· Nozzles and injectors with controllable fuel supply
	F02M 2700/077	· · Injectors ~~haviong~~*having* cooling or heating means

Project: N/A (F02N)

U	**F02N 15/00**	**Other power-operated starting apparatus; Component parts, details, or accessories, not provided for in, or of interest apart from groups F02N 5/00 - F02N 13/00**

	F02N 15/003	· {Starters comprising a brake ~~mecanism~~ *mechanism*}

Project: N/A (F02P)

U	**F02P 5/00**	**Advancing or retarding ignition; Control therefor**
U	F02P 5/04	· automatically, as a function of the working conditions of the engine or vehicle or of the atmospheric conditions (dependent on position of personal controls of engine **F02P 5/02**)
U	F02P 5/145	· · using electrical means
U	F02P 5/155	· · · Analogue data processing
	F02P 5/1558	· · · · {with ~~sepcial~~ *special* measures for starting}
U	**F02P 7/00**	**Arrangements of distributors, circuit-makers or -breakers, {e.g. of distributor and circuit-breaker combinations} or pick-up devices (advancing or retarding ignition or control therefor F02P 5/00; such devices per se, see the relevant classes of Section H, e.g. rotary switches H01H 19/00, contact-breakers, distributors H01R 39/00, generators H02K)**
U	F02P 7/02	· of distributors
	F02P 7/03	· · with electrical means (~~ignition occuring simultaneously at different places in one engine cylinder or in two or more separate engine cylinders F02P 15/08~~ *ignition occurring simultaneously at different places in one engine cylinder or in two or more separate engine cylinders F02P 15/08*)

Project: N/A (F02W)

U	**F02W 2746/00**	**Indexing scheme associated with former IdT class 46F**
U	F02W 2746/00006	· Turbines; Gas turbines
U	F02W 2746/0021	· · Plants with specific use of turbines; Construction of power stations with gas turbines
	F02W 2746/00223	· · · Turbo-compressor plants for providing compressed air or gases, hot gases or steam, control of these ~~palnts~~ *plants*

Project: N/A (F03B)

U	**F03B 3/00**	**Machines or engines of reaction type; Parts or details peculiar thereto**
U	F03B 3/12	· Blades; Blade-carrying rotors
U	F03B 3/14	· · Rotors having adjustable blades {(blade form or construction **F03B 3/123**)}
	F03B 3/145	· · · {Mechanisms for adjusting the blades (if the regulation aspect is ~~preponderent~~ *preponderant*, see **F03B 15/00** and subgroups)}
U	**F03B 13/00**	**Adaptations of machines or engines for special use; Combinations of machines or engines with driving or driven apparatus (if the apparatus aspects are predominant, see the relevant subclasses for such apparatus, e.g. H02K 7/18); Power stations or aggregates (incorporating only machines or engines of positive-displacement type F03C; hydraulic engineering aspects E02B; {combinations with wind energy converters F03D 9/008})**
U	F03B 13/12	· characterised by using wave or tide energy
U	F03B 13/14	· · using wave energy
U	F03B 13/141	· · · {with a static energy collector}
U	F03B 13/144	· · · · {which lifts water above sea level}
	F03B 13/145	· · · · · {for ~~inmediate~~ *immediate* use in an energy converter}
U	**F03B 15/00**	**Controlling (controlling in general G05 {regulation of plants characterised by the use of siphons F03B 13/086})**

U   F03B 15/02   · by varying liquid flow

     F03B 15/04   · · of turbines (rotors having adjustable blades F03B 3/06, F03B 3/14; adjustable guide vanes F03B 3/18; specially adapted for turbines with jets of high-velocity liquid ~~inpinging~~*impinging* on bladed or like rotors F03B 15/20)

Project: N/A (F03C)

U   **F03C 1/00**   **Reciprocating-piston liquid engines**

U   F03C 1/22   · with movable cylinders {or cylinder}

U   F03C 1/24   · · in which the liquid exclusively displaces one or more pistons reciprocating in rotary cylinders {(F03C 1/0636 takes precedence)}

     F03C 1/2462   · · · {the rotary cylinder being provided with only one piston ~~reciprocating~~*reciprocating* within this cylinder}

Project: N/A (F03G)

U   **F03G 2730/00**   **Motors driven by springs, weights or manual power**

     F03G 2730/07   · Special parts of devices or motors according to the ~~preceeding~~*preceding* groups

Project: N/A (F04B)

U   **F04B 49/00**   **Control {, e.g. of pump delivery, or pump pressure} of, or safety measures for, machines, pumps, or pumping installations, not otherwise provided for, or of interest apart from, groups F04B 1/00 - F04B 47/00**

                         NOTE

                         The classification symbols in group F04B 49/00 and subgroups can be followed by additional symbols preceded by the sign "+". The symbols are applied in subgroups F04B 49/06, F04B 49/08, F04B 49/16 and F04B 49/225. The symbols have the meanings as listed below:

                         ```
                         +C  specially adapted for pumps for elastic fluids,
                         e.g. compressors
                         +P  specially adapted for pumps for liquids
                         ```

U   F04B 49/12   · by varying the length of stroke of the working members

U   F04B 49/123   · · {by changing the eccentricity of one element relative to another element}

     F04B 49/125   · · · {by changing the eccentricity ~~ot~~*of* the actuation means, e.g. cams or cranks, relative to the driving means, e.g. driving shafts (F04B 49/128 takes precedence)}

U   **F04B 2207/00**   **External parameters**

U   F04B 2207/04   · Settings

U   F04B 2207/042   · · of pressure

     F04B 2207/0422   · · · ~~minmum~~*minimum*

Project: N/A (F04D)

U   **F04D 1/00**   **Radial-flow pumps, e.g. centrifugal pumps; Helico-centrifugal pumps (adapted for pumping specific fluids F04D 7/00; priming or boosting F04D 9/00)**

U   F04D 1/02   · having non-centrifugal stages, e.g. centripetal

     F04D 1/025   · · {Comprising axial and ~~raidal~~*radial* stages}

     F04D 35/00   **Pumps producing waves in liquids, i.e. ~~wave.producers~~*wave-producers* (for bath tubs A47K 3/10)**

Project: N/A (F05B)

U	**F05B 2200/00**	**Mathematical features**
U	F05B 2200/10	· Basic functions
	F05B 2200/12	· · ~~Substraction~~*Subtraction*
U	F05B 2200/20	· Special functions
	F05B 2200/25	· · Hyperbolic ~~trigonemetric~~*trigonometric*, e.g. sinh, cosh, tanh
U	**F05B 2210/00**	**Working fluid**

NOTE

Indexing codes of group F05B 2210/00 can be followed by a name for a specific working fluid preceded by the "+" sign, e.g. F05B 2210/11 +water.

U	F05B 2210/40	· Flow geometry or direction
	F05B 2210/401	· · upwards due to the ~~buoancy~~*buoyancy* of compressed air

Project: N/A (F15B)

U	**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)}**
	F15B 9/14	· with ~~rotaty~~*rotary* servomotors
U	**F15B 11/00**	**Servomotor systems without provision for follow-up action; {Circuits therefor}(F15B 3/00 takes precedence)**
	F15B 11/02	· Systems ~~ess entially~~*essentially* incorporating special features for controlling the speed or actuating force of an output member
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}**
U	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)
	F15B 13/024	· · {Pressure ~~reflief~~*relief* valves}
U	**F15B 2211/00**	**Circuits for servomotor systems**
U	F15B 2211/40	· Flow control
	F15B 2211/46	· · Control of flow in the return ~~lin~~*line*, i.e. meter-out control

Project: N/A (F16B)

F16B	**DEVICES FOR FASTENING OR SECURING CONSTRUCTIONAL ELEMENTS OR MACHINE PARTS TOGETHER, e.g. NAILS, BOLTS, CIRCLIPS, CLAMPS, CLIPS, WEDGES, JOINTS OR JOINTING**

NOTES

1. Attention is drawn to:
   a. the Note following group E04B 1/38;
   b. the following places:

A44B	Buckles, slide fasteners
A47G 3/00	Ornamental heads for nails, screws, ~~orthe~~*or the* like
B42F 3/00	Means, not using staples, for ~~attachingsheets~~*attaching sheets* temporarily together
{C14B 17/08}	{Fastening devices, e.g. clips for leather-stretching used in apparatus or ~~machinesfor~~*machines for* manufacturing or treating skins, hides, leathers or furs}

E01B 9/10	Screws or bolts for railway sleepers
E01B 11/00	Rail joints
E04	Connections for building
E04D 13/08	Clamping means for down pipes for ~~roofdrainage~~*roof drainage*
E04G 5/04	Fastening scaffolds against buildings
E04G 7/00	Scaffolding couplings
E05C	Bolts for fasteners for wings, ~~speciallyfor~~*specially for* doors or windows
F16C 29/10	Locking bearings for parts moving ~~onlylinearly~~*only linearly*
F16G 17/00	Hooks as integral parts of chains
F16L	Pipe joints
F16L 3/00	Supports for pipes, cables or ~~protectivetubing~~*protective tubing*, e.g. hangers, holders, clamps, cleats, clips, brackets
F16L 33/02	Clips for connecting hoses to ~~rigidmembers~~*rigid members*
H01F 7/00	Magnetic holding devices
H02N 13/00	Electrostatic holding devices.

2. Groups F16B 2/00 - F16B 47/00 take precedence over group F16B 1/00.

WARNING

The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:

F16B 7/08	covered by	F16B 5/12, F16B 7/04, F16L 3/00
F16B 7/12	covered by	F16B 7/105
F16B 7/16	covered by	F16B 7/14
F16B 13/10	covered by	F16B 13/08
F16B 13/13	covered by	F16B 13/002, F16B 13/12
F16B 21/14	covered by	F16B 21/12, F16B 21/125
F16B 25/02	covered by	F16B 25/00
F16B 25/04	covered by	F16B 25/00
F16B 25/06	covered by	F16B 25/00
F16B 25/08	covered by	F16B 25/00
F16B 33/04	covered by	F16B 33/02
F16B 37/10	covered by	F16B 37/0842, F16B 37/0871

U F16B 2/00 **Friction-grip releasable fastenings (for cables or ropes, e.g. cleats F16G 11/00){(connections of rods or tubes, e.g. of non-circular section, mutually, including resilient connections F16B 7/00)}**

F16B 2/20 · Clips, i.e. with gripping action effected ~~soley~~*solely* by the inherent resistance to deformation of the material of the fastening

U F16B 13/00 **Dowels or other devices fastened in walls or the like by inserting them in holes made therein for that purpose (nails F16B 15/00; self-locking pins or bolts in general, stud-and-socket releasable fastenings F16B 21/00; dowels or bolts for railroad sleepers E01B 9/00; ans means for anchoring structural elements or bulkheads specially adapted to foundation engineering E02D 5/74; bolts or dowels used while laying bricks or casting concrete sleepers E04B 1/38; setting anchoring bolts in shafts, tunnels or galleries E21D 20/00; anchoring bolts for shafts, tunnels or galleries E21D 21/00)**

F16B 2013/009 · {Double sleeve dowels, i.e. the ~~frist~~*first* sleeve is fixed in a hole by the action of a second sleeve and one of the sleeves receives a nail, a screw or the like}

U F16B 31/00 **Screwed connections specially modified in view of tensile load; Break-bolts (shape of thread {F16B 33/02; in couplings F16D 9/00})**

F16B 31/02 · for indicating {the attainment of a particular tensile load} or limiting tensile load {(apparatus for, or method of, determining value of torque or twisting moment for ~~thightening~~*tightening* a nut or other member similarly stressed G01L 5/24)}

Project: N/A (F16C)

U F16C 17/00 **Sliding-contact bearings for exclusively rotary movement (F16C 32/06 takes precedence; adjustable bearings F16C 23/00, F16C 25/00)**

U F16C 17/02 · for radial load only

F16C 17/026 · · {with helical grooves in the bearing surface to generate hydrodynamic pressure, e.g. ~~heringbone~~*herringbone* grooves}

U F16C 29/00 **Bearings for parts moving only linearly (F16C 32/06 takes precedence; incorporated in flexible shafts F16C 1/28 {parts of bearings in general and special methods for making bearings or parts thereof in general F16C 33/00})**

U F16C 29/04 · Ball or roller bearings

U F16C 29/06 · · in which the rolling bodies circulate partly without carrying load

U F16C 29/0633 · · · {with a bearing body defining a U-shaped carriage, i.e. surrounding a guide rail or track on three sides}

F16C 29/0652 · · · · {whereby the return paths are at least partly defined by ~~seperate~~*separate* parts, e.g. covers attached to the legs of the main body of the U-shaped carriage}

F16C 29/0669 · · · · {whereby the main body of the U-shaped carriage is an assembly of at least three major parts, e.g. an assembly of a top plate with two ~~seperate~~*separate* legs attached thereto in the form of bearing shoes (bearing shoes per se F16C 29/0614)}

Project: N/A (F16D)

U F16D 2500/00 **External control of clutches by electric or electronic means**

U F16D 2500/50 · Problem to be solved by the control system

U F16D 2500/506 · · Relating the transmission

F16D 2500/50615 · · · Facilitating disengagement of a dog clutch, e.g. by ~~appying~~*applying* a pretension on the disengaging elements

Project: N/A (F16F)

F16F **SPRINGS; SHOCK-ABSORBERS; MEANS FOR DAMPING VIBRATION**

NOTES

1. This subclass covers:
   • springs, shock-absorbers or vibration-dampers;
   • their arrangement in, or adaptation for, particular apparatus if not provided for in the subclasses covering said apparatus.

2. This subclass does not cover inventions concerning the arrangement or adaptation of springs, shock-absorbers or vibration-dampers in, or for, particular apparatus, if provided for in the subclasses concerning the said apparatus, e.g.

A47C 23/00 -   Spring mattresses
A47C 27/00

{A61F 2/00}   {Prostheses}

A63C 5/075	Vibration dampers in skis
B60G	Vehicle suspensions
B60R 19/24	Mounting of bumpers on vehicles
B61F	Rail vehicle suspensions
B61G 11/00	Buffers for railway or tramway vehicles
B62D 21/15	Vehicle chassis frames having impact absorbing means
B62J 1/02	Resiliently mounted saddles on cycles
B62K 21/08	Steering dampers
B63H 21/30	Anti-vibration mounting of marine propulsion plant in ships
B64C 25/58	Arrangement of shock-absorbers or springs in aeroplane alighting gear
B65D 81/02	Containers, packing elements or packages with shock-absorbing means
D06F 37/20	Resilient mountings in washing machines
D06F 49/06	Resilient mountings in domestic spin-dryers
{E04B 1/98}	{Protection of buildings against vibrations or shocks}
E05D 7/086	Braking devices structurally combined with hinges
F03G 1/00	Spring motors
{F16L 3/20}	{Pipe or cable supports}
F21V 15/04	Resilient mounting of lighting devices
F41A 25/00	Gun cradles to permit recoil
F41B 5/1426	Vibration dampers for archery bows
G01D 11/00	Indicating or recording in connection with measuring
G01G 21/10	Weighing apparatus, e.g. arrangement of shock-absorbers in weighing apparatus
G04B	Clocks, watches
G12B 3/08	Damping of movements in instruments
G21C 7/20	Disposition of shock-absorbing devices for displaceable control elements ~~innuclear~~ *in nuclear* reactors.
{H02G 7/14}	{Arrangements or devices for damping mechanical oscillations of power lines}

3. Mention of "steel" or "metal" in groups F16F, unless specific mention is made otherwise, should be seen in the light of the title of group F16F 1/00, i.e. material having low internal friction. This normally includes composite materials such as fibre-reinforced plastics.

4. Mention of "rubber" or "plastics" in group F16F, unless specific mention is made otherwise, should be seen in the light of the title of group F16F 1/36, i.e. material having high internal friction. This normally does NOT include composite materials such as fibre-reinforced plastics except in the case of groups F16F 1/366 - F16F 1/3686 and F16F 15/305.

WARNING
The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:

F16F 3/07	covered by	F16F 13/00
F16F 9/24	covered by	F16F 9/22
F16F 9/40	covered by	F16F 9/00 - F16F 9/50
F16F 9/508	covered by	F16F 9/512
F16F 11/00	covered by	F16F 7/00, F16F 9/00, F16F 15/00
F16F 13/12	covered by	F16F 13/08

U	F16F 15/00	**Suppression of vibrations in systems ({damping of non-rotary systems using inertia effect F16F 7/10; prevention or isolation of vibrations in machine tools B23Q 11/0032; suppression of driveline vibrations in hybrid vehicle transmissions B60W 30/20} ; vehicle seat suspension devices B60N 2/50; {methods or devices for protecting against, or damping of, acoustic waves, e.g. sound G10K 11/16}); Means or arrangements for avoiding or reducing out-of-balance forces, e.g. due to motion ({vibration absorbing or balancing means for aircraft propellers B64C 11/008, for rotorcraft rotors B64C 27/001} ; testing static and dynamic balance of machines or structures G01M 1/00)**
U	F16F 15/22	· Compensation of inertia forces {(suppression of vibrations of rotating systems by favourable grouping or relative arrangements of the moving members of the system or systems F16F 15/20, counterweights F16F 15/28; correcting-weights for balancing rotating bodies F16F 15/32)}
U	F16F 15/26	· · of crankshaft systems using solid masses, other than the ordinary pistons, moving with the system, {i.e. masses connected through a kinematic mechanism or gear system (F16F 15/226 takes precedence)}
	F16F 15/262	· · · {Masses attached to pinions, camshafts ~~ordriving~~*or driving* shafts for auxiliary equipment, e.g. for an oil pump}
U	F16F 15/32	· Correcting- or balancing-weights or equivalent means for balancing rotating bodies, e.g. vehicle wheels {(suppression of vibrations in rotating systems by using freely rotating masses F16F 15/14; compensation of inertia forces F16F 15/22; compensating unbalance for testing purposes G01M 1/30)}
U	F16F 15/34	· · Fastening arrangements therefor
		NOTE
		Hand held gripping tools B25B 7/00
	F16F 15/345	· · · {specially adapted for ~~attachement~~*attachment* to a vehicle wheel}

Project: N/A (F16G)

U	F16G 1/00	**Driving-belts (V-belts F16G 5/00; conveyor belt B65G)**
	F16G 1/04	· made of fibrous material, e.g. textiles, whether rubber-~~convered~~*covered* or not (F16G 1/28 takes precedence; making thereof D03D {~~consisting of several parts F16G 1/22~~*; consisting of several parts F16G 1/22*})
	F16G 1/21	· built-~~un~~*up* from superimposed layers, e.g. zig-zag folded

Project: N/A (F16H)

	F16H	**GEARING**

NOTES

1. Combinations including mechanical gearings are classified in groups F16H 37/00 or F16H 47/00, unless they are provided for in groups F16H 1/00 - F16H 35/00.

2. In this subclass, sets of rigidly-connected members are regarded as single members.

3. In this subclass, the following terms or expressions are used with the meanings indicated:
- "toothed gearing" includes worm gearing and other gearing involving at least one wheel or sector provided with teeth or the equivalent, EXCEPT gearing with chains or toothed belts, which is treated as friction gearing;
- "conveying motion" includes transmitting energy, and means that the applied and resultant motions are of the same kind, though they may differ in, e.g. speed, direction extent:
- "rotary" implies that the motion may continue indefinitely;

- "oscillating" means moving about an axis to an extent which is limited by the construction of the gearing, and which may exceed one revolution, the movement being alternately forwards and backwards during continued operation of the gearing;
- "reciprocating" means moving substantially in a straight line, the movement being alternately forwards and backwards during continued operation of the gearing;
- "reversing" or "reversal" means that an applied movement in one direction may produce a resultant movement in either of two opposed directions at will;
- "central gears" includes any gears whose axis is the main axis of the gearing.

4. Attention is drawn to the following places:

A01D 69/06	Gearings in harvesting machines
A63H 31/00	Gearing for toys
B21B 35/12	Toothed-weel gearing for metal-rolling mills
B60K	Arrangement of transmissions in vehicles
B61C 9/00	Transmissions for railway locomotives
B62D 3/00	Vehicle steering gears
B62M	Transmissions for cycles
B63H 23/00	Transmissions for marine propulsions
B63H 25/00	Marine steering gears
{B64C 27/12, B64C 27/58}	{Transmissions for helicopters}
{B64D 35/00}	{Transmissions for aircraft}
F01-F04	Machines, engines, pumps
F15B 15/00	Gearings associated with fluid-actuated devices
G01D 5/04	Gearing used in indicating or ~~recordingapparatus~~*recording apparatus* in connection with ~~measuringdevices~~*measuring devices*
H03J 1/00	Driving arrangements for tuning ~~resonantcircuits~~*resonant circuits*
H04L 13/04	Driving mechanisms for apparatus ~~fortransmission~~*for transmission* of coded digital information.

U F16H 7/00   **Gearings for conveying rotary motion by endless flexible members (specific for conveying rotary motion with variable gear ratio or for reversing rotary motion F16H 9/00; {Belts, V-belts, ropes, cables, and chains F16G, chain-wheels F16H 55/30; pulleys F16H 55/36})**

F16H 7/08   · Means for varying tension of belts, ropes, or chains (pulleys of adjustable construction F16H 55/52; {gearings with endless belts F16H 7/02; tensioning for chains or belts specially adapted for cycles B62M 9/16; belt or chain ~~tesioning~~*tensioning* arrangements for endless conveyors B65G 23/44})

U F16H 41/00   **Rotary fluid gearing of the hydrokinetic type (control of exclusively fluid gearing F16H 61/38)**

U F16H 41/04   · Combined pump-turbine units

F16H 41/22   · · Gearing systems consisting of a plurality of hydrokinetic units operating alternatively, e.g. made effective or ineffective by filling or emptying or by ~~mecanical~~*mechanical* clutches

U F16H 61/00   **Control functions within {control units of} change-speed- or reversing-gearings for conveying rotary motion; {Control of exclusively fluid gearing, friction gearing, gearings with endless flexible members or other particular types of gearing}**

U	F16H 61/66	· specially adapted for continuously variable gearings (F16H 61/38 takes precedence)
U	F16H 61/662	· · with endless flexible means
	F16H 2061/66295	· · · {characterised by means for controlling the geometrical interrelationship of pulleys and the endless flexible member, e.g. belt ~~allignment~~*alignment* or position of the resulting axial pulley force in the plane perpendicular to the pulley axis}
U	**F16H 2704/00**	**Control mechanisms and elements applying a mechanical movement**
	F16H 2704/04	· Speed-change devices ~~whith~~*with* an intermediary mechanism placed between control member and actuator

Project: N/A (F16J)

U	F16J 9/00	**Piston-rings {, e.g. non-metallic piston-rings}, seats therefor; Ring sealings of similar construction (other sealings between pistons and cylinders F16J 3/06, F16J 15/16 {; manufacture of piston-rings B23P 15/06, B23P 15/08}; tools for mounting or removing piston-rings or the like B25B; piston sealing arrangements on brake master cylinders B60T 11/236 {; sealing provided on pump pistons F04B 53/143})**
U	F16J 9/06	· using separate springs {or elastic elements} expanding the rings; Springs therefor; {Expansion by wedging}
U	F16J 9/061	· · {using metallic coiled or blade springs (F16J 9/145 takes precedence)}
	F16J 9/062	· · · {Coiled spring along the entire ~~circonference~~*circumference*}
	F16J 9/063	· · · {Strip or wire along the entire ~~circonference~~*circumference*}

Project: N/A (F16K)

| **F16K** | **VALVES; TAPS; COCKS; ACTUATING-FLOATS; DEVICES FOR VENTING OR AERATING {(devices for emptying and evacuating the excess liquid in valves or conduits F16L 55/07)}** |

NOTE

Attention is drawn to the following places:

A47J 27/09	Safety devices for pressure cookers
A47J 31/46	Dispensing spouts, drain valves or like beverage-making apparatus
A61B 5/0235	Valves specially adapted for measuring pressure in heart or blood vessels
A61F 2/24	Heart valves
A61M 16/20	Valves specially adapted for medical respiratory devices
A61M 39/00	Tube connectors, tube couplings, valves or branch units specially adapted ~~formedical~~*for medical* use in general
A62B 9/02	Valves for respiratory apparatus
A62B 18/10	Valves for breathing masks or helmets
A62C	Fire extinguishers
{B01D 35/04}	{Plug, tap, or cock filters}
B05B	Nozzles, spray heads or other discharge apparatus for spraying or atomising
B60C 29/00	Arrangements of tyre-inflating valves relative to tyres or wheel rims; ~~Connectionof~~*Connection of* valves to wheel rims, tyres or other inflatable elastic bodies
B60G 17/048	Valves specially adapted for adjusting vehicle fluid-spring characteristics
B60T	Valves specially adapted for vehicle brake control systems

B62D 5/08	Vehicle power-assisted steering characterised by the type of valve used
B63B 7/00, B63C 9/00	Arrangement of inflating valves for floatable life-saving equipment
B65D 47/04	Container closures with discharging valves
B65D 90/32	Safety valves for large containers
B65D 90/54	Gates or closures on large containers
B67C 3/28	Flow control devices for bottling liquids
B67D	Dispensing, delivering or transferring liquids
{C21B 9/12}	{Hot-blast valves for blast furnaces}
E02B 8/00	Details, e.g. valves, of barrages or weirs
E02B 13/02	Closures for irrigation conduits
{E03C 1/04}	{Water-basin installations specially adapted for wash-basins or baths}
{E03C 1/05}	{Arrangements on wash-basins for the remote control of taps}
E03D	Flushing valves for water-closets or urinals
{E03F 7/04}	{Valves for preventing return flow in sewer systems}
E05F 3/12	Valve arrangements in door closers
E21B 21/10	Valve arrangements in drilling-fluid circulation systems
E21B 34/00	Valve arrangements for boreholes or wells
{E21D 15/51}	{Arrangement of relief valves in hydraulic mine props}
F01B 25/10	Working-fluid valves for controlling machines or engines in general or ~~ofpositive~~*of positive*-displacement type
F01D 17/10	Final actuators for controlling non-positive displacement machines or engines
F01L	Cyclically operated valves for machines or engines
F02D 9/08	Throttle valves for controlling combustion engines
F02K 9/58	Propellant feed valves for rocket-engines
F02M	Carburettors, fuel injection
F02M 59/46	Valves for fuel injection pumps
F04	Pumps
F16F 9/34	Valves for shock absorbers
F16L 29/00, F16L 37/28	Pipe joints or quick-acting couplings with fluid cut-off means
F16L 55/00	Arrangement of valves in pipes
F16L 55/055	Valves specially adapted to prevent or minimise the effect of water hammer
F16L 55/46	Launching devices for pigs or moles
F16N 23/00	Check valves for lubrication systems
{F16T}	{Draining-off liquids from steam traps}
F17C 13/04	Arrangement of valves in pressure vessels
F22B 37/44	Arrangement of safety valves on steam boilers
F22D 5/34	Application of valves to automatic water-feed in boiler
F23L 13/00	Valves for air supply control to burners
{F23Q 2/16}	{Valves for lighters with gaseous fuel and adjustable flame}
F24C 3/12, F24C 5/16	Arrangement of valves on stoves or ranges
F24F	Air conditioning; Ventilation
F25B 41/04	Disposition of fluid circulation valves in refrigeration machines
G05D	Controlling non-electric variables

G10B 3/06	Valves for organs
G10D 9/04	Valves for other wind-actuated musical instruments
{G21C 9/06}	{Safety valves structurally associated with nuclear reactors}
{H01M 2/12}	{Vent plugs in batteries or cells}

WARNING

The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:

F16K 31/11	covered by	F16K 31/06, F16K 31/08, F16K 31/10
F16K 31/64	covered by	G05D
F16K 31/66	covered by	F16K 31/06 ; H01F
F16K 31/68	covered by	G05D
F16K 31/70	covered by	F16K 31/002
F16K 31/72	covered by	F16K 31/00

U	**F16K 11/00**	**Multiple-way valves, e.g. mixing valves; Pipe fittings incorporating such valves**
U	F16K 11/02	· with all movable sealing faces moving as one unit
U	F16K 11/06	· · comprising only sliding valves, {i.e. sliding closure elements}
U	F16K 11/065	· · · with linearly sliding closure members
U	F16K 11/07	· · · · with cylindrical slides
	F16K 11/0716	· · · · · {with ~~flluid~~*fluid* passages through the valve member (F16K 11/0704, F16K 11/0708, F16K 11/0712 take precedence)}

	F16K 25/00 - F16K 99/00	**Details**

NOTE

Details not provided for in the following groups are ~~classifiedin~~*classified in* the preceding groups.

U	**F16K 31/00**	**{Actuating devices;} Operating means; Releasing devices {(regulating means G05D)}**
U	F16K 31/12	· actuated by fluid ({fluid-actuated lift valves F16K 1/126} ; fluid-actuated check valves F16K 15/00; fluid-actuated safety valves F16K 17/00)
U	F16K 31/122	· · the fluid acting on a piston (F16K 31/143, F16K 31/163, F16K 31/363, F16K 31/383 take precedence)
	F16K 31/1228	· · · {with a ~~stationnary~~*stationary* piston}

Project: N/A (F16L)

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 ~~sepcially~~*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 ~~medicaluse~~*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 ~~bulkto~~*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 ~~orsolidified~~*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 ~~ofheat~~*of heat*-exchangers
G21C 15/22	Structural association of coolant tubes with headers or other pipes in nuclearreactors
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.

WARNING

The following IPC groups are not used in the CPC scheme. Subject matter covered by these 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*	

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})**

U   F16L 3/08   · substantially surrounding the pipe, cable or protective tubing

U	F16L 3/10	· · divided, i.e. with two {or more} members engaging the pipe, cable or protective tubing
U	F16L 3/1033	· · · {with two members engaging the pipe, cable or tubing, the two members being joined only on one side of the pipe}
	F16L 3/1041	· · · · {and being adapted to ~~accomodate~~ *accommodate* pipes of various diameters}
U	**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)**
U	F16L 59/14	· Arrangements for the insulation of pipes or pipe systems (F16L 59/02 - F16L 59/12 take precedence)
U	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)
	F16L 59/163	· · · {Branch units (in general F16L 41/02); Insulation forming a whole ~~whith~~ *with* branches}

Project: N/A (F16P)

U	**F16P 7/00**	**Emergency devices preventing damage to a machine or apparatus (F16P 1/00, F16P 3/00, F16P 5/00 take precedence; indicating means, see the appropriate classes)**
	F16P 7/02	· by causing the machine to stop on the ~~occurence~~ *occurrence* of dangerous conditions therein (devices in bearings affected by abnormal conditions F16C)

Project: N/A (F17C)

U	**F17C 13/00**	**Details of vessels or of the filling or discharging of vessels**
U	F17C 13/08	· Mounting arrangements for vessels
	F17C 13/082	· · {for large sea-borne storage vessels (~~load-accomodating arrangements for ships or waterborne vessels B63B 25/12~~ *load-accommodating arrangements for ships or waterborne vessels B63B 25/12*)}
U	**F17C 2221/00**	**Handled fluid, in particular type of fluid**
U	F17C 2221/03	· Mixtures
	F17C 2221/037	· · Containing ~~polluant~~ *pollutant*, e.g. H_2S, Cl
U	**F17C 2270/00**	**Applications**
U	F17C 2270/05	· for industrial use
	F17C 2270/059	· · Mass ~~botteling~~ *bottling*, e.g. merry belts

Project: N/A (F21V)

U	**F21V 29/00**	**Protecting lighting devices from thermal damage; Cooling or heating arrangements specially adapted for lighting devices or systems (lighting fixtures combined with outlets for air-treatment systems F24F 13/078)**

WARNING

Groups F21V 29/002 - F21V 29/006, F21V 29/02, F21V 29/20, F21V 29/2212, F21V 29/30, F21V 29/40, and F21V 29/402 are no longer used for the classification of documents as of January 15, 2015. The backfile of these groups is being reclassified into groups F21V 29/002 - F21V 29/89.

Until reclassification is complete, groups F21V 29/002 - F21V 29/006 and F21V 29/02, F21V 29/20, F21V 29/2212, F21V 29/30, F21V 29/40, and F21V 29/402 should be considered in order to perform a complete search.

U   F21V 29/50   · Cooling arrangements (air-treatment systems dissipating or using the heat of lighting fixtures F24F 3/056)

WARNING
Groups F21V 29/50 - F21V 29/503 are incomplete pending reclassification of documents from groups F21V 29/002, F21V 29/004, and F21V 29/02.

Until reclassification is complete, groups F21V 29/002, F21V 29/004, and F21V 29/02 should also be considered in order to perform a complete search.

F21V 29/502   · · characterised by the ~~adaption~~*adaptation* for cooling of specific components

Project: N/A (F22G)

U   **F22G 5/00**   **Controlling superheat temperature (control systems for steam boilers F22B; regulating or controlling in general G05)**

F22G 5/02   · Applications of combustion-control devices, e.g. ~~tangetial~~*tangential*-firing burners, tilting burners

Project: N/A (F23C)

F23C   **COMBUSTION APPARATUS USING FLUENT FUEL (combustion apparatus for solid fuel only F23B; burners F23D; constructional details of combustion chambers not otherwise provided for F23M; combustion chambers for generating combustion products of high pressure or high velocity F23R)**

WARNING
The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:
F23C 101/00   covered by

Project: N/A (F23D)

U   **F23D 2700/00**   **TBD**

F23D 2700/024   · Nozzles and ~~cleanig~~*cleaning* devices therefor

Project: N/A (F23M)

U   **F23M 11/00**   **Safety arrangements (structurally associated with burners F23D; for liquid fuel feeding F23K 5/16; involving control of combustion F23N 5/24; structurally associated with igniters F23Q)**

U   F23M 11/04   · Means for supervising combustion, e.g. window (alarm systems G08B)

F23M 11/045   · · {by ~~oberving~~*observing* the flame}

Project: N/A (F23N)

F23N   **REGULATING OR CONTROLLING COMBUSTION (control devices specially adapted for fluidised-bed combustion apparatus F23C 10/28; ~~condition reponsive controls for regulating combustion in domestic stoves with open fires for solid fuel F24B 1/187~~; *condition responsive controls for regulating combustion in domestic stoves with open fires for solid fuel F24B 1/187*)**

F23N 2027/00   ~~Ingnition~~***Ignition*** **or checking**

U   F23N 2029/00   **Flame sensors**

F23N 2029/22   · the sensor's ~~sensivity~~ *sensitivity* being variable

Project: N/A (F23Q)

U   F23Q 7/00   **Incandescent ignition; Igniters using electrically-produced heat, e.g. lighters for cigarettes (circuits therefor H01T 15/00); Electrically-heated glowing plugs**

U   F23Q 7/06   · structurally associated with fluid-fuel burners (lighters containing fuel F23Q 2/00)

F23Q 7/10   · · for gaseous fuel, e.g. in welding ~~applicances~~ *appliances*

U   F23Q 11/00   **Arrangement of catalytic igniters (catalytic igniters per se C06C)**

F23Q 11/06   · remote from the burner, e.g. on the ~~chimmey~~ *chimney* of a lamp

Project: N/A (F24F)

U   F24F 12/00   **Use of energy recovery systems in air conditioning, ventilation or screening (with both heat and humidity transfer between supplied and exhausted air F24F 3/147; heat-exchange in general F28)**

U   F24F 12/001   · {with heat-exchange between supplied and exhausted air}

F24F 12/006   · · {using an air-to-air heat ~~exhanger~~ *exchanger* (F24F 12/002 takes precedence)}

Project: N/A (F28F)

U   F28F 1/00   **Tubular elements; Assemblies of tubular elements (specially adapted for movement F28F 5/00)**

F28F 1/10   · Tubular ~~lements~~ *elements* and assemblies thereof with means for increasing heat-transfer area, e.g. with fins, with projections, with recesses (crimped or corrugated elements F28F 1/06, F28F 1/08)

Project: N/A (F41B)

F41B   **WEAPONS FOR PROJECTING MISSILES WITHOUT USE OF EXPLOSIVE OR COMBUSTIBLE PROPELLANT CHARGE; WEAPONS NOT OTHERWISE PROVIDED FOR (projectiles for fishing, e.g. fish-spears, A01K 81/00; sports implements for throwing A63B 65/00, e.g. boomerangs A63B 65/08; stationary apparatus for projecting sports balls, e.g. tennis balls, A63B 69/40; throwing or slinging toys A63H 33/18; knives, axes B26B; projectiles or missiles other than those incorporating springs as projecting means F42B 6/00)**

> *WARNING*
> *The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:*
> *F41B 5/16   covered by*
> *F41B 5/18   covered by*
> *F41B 5/20   covered by*
> *F41B 5/22   covered by*

Project: N/A (F41J)

U   F41J 5/00   **Target indicating systems; Target-hit or score detecting systems {(for shooting or hurling games A63F 9/0204; devices for measuring projectile velocity using optical means G01P 3/685)}**

F41J 5/24		· Targets producing a particular effect when hit, e.g. detonation of pyrotechnic charge, bell ring, ~~photograhp~~*photograph*

U   F41J 9/00   Moving targets, i.e. moving when fired at (F41J 2/00 takes precedence)

F41J 9/02		· Land-based targets {, e.g. inflatable targets supported by fluid ~~presssure~~*pressure*}

Project: N/A (F42B)

U   F42B 10/00   Means for influencing, e.g. improving, the aerodynamic properties of projectiles or missiles; Arrangements on projectiles or missiles for stabilising, steering, range-reducing, range-increasing or fall-retarding (F42B 6/00 takes precedence)

U	F42B 10/60	· Steering arrangements (F42B 19/01 takes precedence)
U	F42B 10/66	· · Steering by varying intensity or direction of thrust (thrust vector control of rocket engine plants F02K 9/80; {guiding or controlling apparatus using jets adapted for cosmonautic vehicles B64G 1/26})
	F42B 10/668	· · · {Injection of a fluid, e.g. a propellant, into the gas shear in a nozzle or in the boundary layer at the outer surface of a ~~misile~~*missile*, e.g. to create a shock wave in a supersonic flow}

U   F42B 14/00   Projectiles or missiles characterised by arrangements for guiding or sealing them inside barrels, or for lubricating or cleaning barrels

U	F42B 14/06	· Sub-calibre projectiles having sabots; Sabots therefor
	F42B 14/08	· · Sabots filled with propulsive charges; Removing sabots by combustion of pyrotechnic elements or by propulsive-gas pressure (arrangements on barrels for ~~remving~~*removing* sabots from projectiles F41A 21/46)

**   F42B 23/00   Land mines *{*; {Land torpedoes}(F42B 12/00 takes precedence~~; for pratice or training F42B 8/28~~*; for practice or training F42B 8/28*)**

Project: N/A (F42C)

**   F42C 7/00   Fuzes actuated by application of a predetermined mechanical force, e.g. tension, torsion, pressure (by ammunition impact F42C 1/00, by exposure to a ~~predeterminded~~*predetermined* ambient fluid pressure F42C 5/00)**

U   F42C 13/00   Proximity fuzes; Fuzes for remote detonation {(F42C 9/148 takes precedence; constructional details F42C 19/00; mounting of antennas F42B 30/006)}

U	F42C 13/04	· operated by radio waves
	F42C 13/045	· · {using ~~tranmission~~*transmission* of F.M. waves}

Project: N/A (F42D)

**   F42D   BLASTING (fuses, e.g. fuse cords, C06C 5/00; {for obtaining fluid from wells E21B 43/00~~; for mining or quarring E21C 37/00~~*; for mining or quarrying E21C 37/00*; for making tunnels or galleries E21D 9/006}~~;~~; cartridges F42B 3/00)**

Project: N/A (G)

**   G   PHYSICS**

NOTES

1. In this section, the following term is used with the meaning indicated :
   • "variable" (as a noun) means a feature or property, (e.g. a dimension, a physical condition such as temperature, a quality such as density or colour) which, in respect of a particular entity (e.g. an object, a quantity

of a substance, a beam of light) and at a particular instant, is capable of being measured; the variable may change, so that its numerical expression may assume different values at different times or in different conditions or individual cases, but may be constant in respect of a particular entity in certain conditions or for practical purposes, (e.g. the length of a bar may be regarded as constant for many purposes).

2. Attention is drawn to the definitions of terms used appearing in the notes of several of the classes in this Section, particularly of "measuring" in class G01 and "control" and "regulation" in class G05.

3. The classification of inventions in this Section may present more difficulty than in others because the distinction between different fields of use rests to a considerable extent on differences in the intention of the user rather than on any constructional differences or differences in the manner of use of inventions, and also because the subjects dealt with are often in effect systems or combinations which have features or parts in common rather than "things" which are readily distinguishable as a whole. For example, information, (e.g. a set of figures) may be displayed for the purpose of education or advertising (G09), for enabling the result of a measurement to be known (G01), for signalling the information to a distant point or for giving information which has been signalled from a distant point (G08); the words used to describe the purpose depend on features which may be irrelevant to the form of the apparatus concerned - such features as the desired effect on the person who sees the display or whether the display is controlled from a remote point. Again, a device which responds to some change in a condition, e.g. in the pressure of a fluid, may be used, without modification of the device itself, to give information about the pressure (G01L) or about some other condition connected with the pressure (another subclass of G01, e.g. G01K for temperature), to make a record of the pressure or of its ~~occurence~~*occurrence* (G07C), to give an alarm (G08B), or to control some other apparatus (G05). The classification scheme is intended to enable things of a similar nature (as indicated above) to be classified together, and it is therefore particularly necessary for the real nature of any invention to be decided before it can be properly classified.

Project: N/A (G01M)

| G01M | **TESTING STATIC OR DYNAMIC BALANCE OF MACHINES OR STRUCTURES; TESTING 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.

WARNING

~~Subject matter covered by these groups is classified in the following CPC groups: -~~ **~~G01M/38~~** ~~covered by G01M 1/14 and G01M 1/30 and subgroups~~

The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:

| *G01M 1/38* | *covered by* | *G01M 1/14 and G01M 1/30 and subgroups* |

Project: RP0124 (G01R)

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)}
	G01R 31/021	· · {Testing of cables or conductors (testing of electric windings G01R 31/06; testing of insulation of cables G01R 31/1272; testing LANs ~~H04L 12/2697~~*H04L 43/50*; testing line transmission systems H04B 3/46)}
	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~~*; installing, maintaining, repairing or dismantling electric cables or lines H02G 1/00*; testing LAN's ~~H04L 12/2697~~*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})
U	G01R 31/282	· · {Testing of electronic circuits specially adapted for particular applications not provided for elsewhere (G01R 31/2801 and G01R 31/2851 take precedence)}
		NOTE
		References listed below indicate CPC places which could also be of interest when carrying out a search in respect of the subject matter covered by the preceding group: • testing of individual LEDs G01R 31/2635 • testing of lamps G01R 31/44 • testing of displays and display drivers, e.g. LCDs G09G 3/006 • testing of ADCs or DACs H03M 1/1071
	G01R 31/2825	· · · {in household appliances or professional audio/video equipment (~~testing loudspeakers H04R 29/00, testing LAN's H04L 12/2697~~*; testing LAN's H04L 43/50*; testing TV systems H04N 17/00*; testing loudspeakers H04R 29/00*)}

Project: N/A (G01S)

U	G01S 7/00	**Details of systems according to groups G01S 13/00, G01S 15/00, G01S 17/00 {(apparatus for measuring unknown time-intervals by electronic means, e.g. Vernier method G04F 10/00)}**
U	G01S 7/02	· of systems according to group G01S 13/00
U	G01S 7/04	· · Display arrangements

U	G01S 7/06	· · · Cathode-ray tube displays {or other two-dimensional or three-dimensional displays (cathode ray oscilloscopes in general G01R 13/20)}

> WARNING
>
> Groups G01S 7/062 - G01S 7/24 are not complete pending a reorganization. See provisionally G01S 7/06

	G01S 7/068	· · · · {with data-rate converters ~~preceeding~~ *preceding* the display, e.g. flicker free display, constant brightness display (G01S 7/298 takes precedence)}

Project: RP0308 (G03H)

U	**G03H 1/00**	**Holographic processes or apparatus using light, infra-red or ultra-violet waves for obtaining holograms or for obtaining an image from them; Details peculiar thereto**
U	G03H 1/0005	· {Adaptation of holography to specific applications (holographic optical element G02B 5/32; holographic scanner G02B 26/106; recognition using holographic mask G06K 9/76; holographic memories G11B 7/0065, G11C 13/042)}
	G03H 1/0011	· · {for security or authentication (holograms on information-bearing cards B42D 25/328; testing papers with holograms ~~G07D 7/0013~~ *G07D 7/0032*)}

Project: N/A (G04G)

U	**G04G 5/00**	**Setting, i.e. correcting or changing, the time-indication (radio-controlled time-pieces G04R)**
U	G04G 5/04	· by setting each of the displayed values, e.g. date, hour, independently
U	G04G 5/043	· · {using commutating devices for selecting the value, e.g. hours, minutes, seconds, to be corrected}
	G04G 5/048	· · · {by using a ~~seperate~~ *separate* register into which the correct setting of the selected time-counter is introduced which is thereafter transferred to the time-counter to be reset}

Project: N/A (G05B)

U	**G05B 2219/00**	**Program-control systems**
U	G05B 2219/10	· Plc systems
U	G05B 2219/14	· · Plc safety
	G05B 2219/14103	· · · Detection on or off-line, latency from failure ~~occurence~~ *occurrence* to fault recognition
U	G05B 2219/20	· Pc systems
U	G05B 2219/25	· · Pc structure of the system
	G05B 2219/25402	· · · Detect ~~occurence~~ *occurrence* of signal by higher sampling when parameter value within range
U	G05B 2219/30	· Nc systems
U	G05B 2219/31	· · From computer integrated manufacturing till monitoring
	G05B 2219/31272	· · · Avoid piling up, queue of workpieces, ~~accomodate~~ *accommodate* surges

Project: N/A (G05G)

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 ~~occurence~~ *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.

Project: N/A (G06F)

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)**
U	G06F 7/60	· Methods or arrangements for performing computations using a digital non-denominational number representation, i.e. number representation without radix; Computing devices using combinations of denominational and non-denominational quantity representations, {e.g. using difunction pulse trains, STEELE computers, phase computers (conversion of digital data to or from non-denominational form H03M 5/00, H03M 7/00)}
	G06F 7/70	· · using stochastic pulse trains, i.e. randomly ~~occuring~~*occurring* pulses the average pulse rates of which represent numbers {(conversion of analogue signals into stochastic pulse trains and vice versa H03M 1/04)}
U	G06F 11/00	**Error detection; Error correction; Monitoring (methods or arrangements for verifying the correctness of marking on a record carrier G06K 5/00; in information storage based on relative movement between record carrier and transducer G11B, e.g. G11B 20/18; in static stores G11C; coding, decoding or code conversion, for error detection or error correction, in general H03M 13/00)**
		NOTE
		In this group the indexing codes of G06F 1/00 - G06F 15/00 are added
	G06F 11/07	· responding to the ~~occurence~~*occurrence* of a fault, e.g. fault tolerance

Project: RP0124 (G06F)

U	G06F 11/0703	· · {Error or fault processing not based on redundancy, i.e. by taking additional measures to deal with the error or fault not making use of redundancy in operation, in hardware, or in data representation}
	G06F 11/0751	· · · {Error or fault detection not based on redundancy (power supply failures G06F 1/30; network fault management ~~H04L 12/2419~~*H04L 41/06*)}

Project: MP0204 (G06F)

U	G06F 12/00	**Accessing, addressing or allocating within memory systems or architectures (digital input from, or digital output to record carriers, e.g. to disk storage units, G06F 3/06)**
U	G06F 12/02	· Addressing or allocation; Relocation (programme address sequencing G06F 9/00; arrangements for selecting an address in a digital store G11C 8/00)
U	G06F 12/0223	· · {User address space allocation, e.g. contiguous or non contiguous base addressing}
U	G06F 12/023	· · · {Free address space management}
M	G06F 12/0238	· · · · {*Memory management* in non-volatile memory*, e.g. resistive RAM or ferroelectric memory*}

Project: RP0124 (G06F)

U	G06F 15/00	**Digital computers in general (details G06F 1/00 - G06F 13/00); Data processing equipment in general (neural networks for image data processing G06T)**
U	G06F 15/16	· Combinations of two or more digital computers each having at least an arithmetic unit, a programme unit and a register, e.g. for a simultaneous processing of several programmes {(coordinating programme control therefor G06F 9/52; in regulating and control system G05B)}
U	G06F 15/163	· · Interprocessor communication

U	G06F 15/173	· · · using an interconnection network, e.g. matrix, shuffle, pyramid, star, snowflake (interface switching circuits G06F 13/40)
U	G06F 15/17306	· · · · {Intercommunication techniques}
	G06F 15/17312	· · · · · {Routing techniques specific to parallel machines, e.g. wormhole, store and forward, shortest path problem congestion (routing on a LAN ~~H04L 12/5689~~ *H04L 45/00*)}
U	**G06F 17/00**	**Digital computing or data processing equipment or methods, specially adapted for specific functions**
U	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)}
U	G06F 17/30943	· · {details of database functions independent of the retrieved data type}
U	G06F 17/30946	· · · {indexing structures (indexing structures for specific data types G06F 17/30067, G06F 17/30619, G06F 17/30321)}
	G06F 17/30949	· · · · {hash tables (hashing functions for network address lookup or routing in networks ~~H04L 12/5689~~ *H04L 45/00*)}
U	G06F 17/30964	· · · {Querying}
U	G06F 17/30979	· · · · {Query processing}
	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 12/5689~~ *H04L 45/00*)}

Project: RP0094 (G06F)

D	G06F 17/60	· ~~{Administrative, commercial, managerial, supervisory or forecasting purposes (electronic cash registers other than digital data processing aspects thereof G07G 1/12)}~~
D	G06F 17/602	· · ~~{Data processing in buying-selling transactions (for trading of electric energy H02J 3/008)(not used)}~~
D	G06F 17/604	· · · ~~{for exchange business, e.g. quotations or sales transactions of stock or other commodities (stock quotation systems H04L 12/1804)}~~
D	G06F 17/606	· · · ~~{Centrally controlled vending systems (mechanisms actuated by objects other than coins to free or to actuate vending, hiring or the like apparatus G07F 7/00)}~~
D	G06F 17/608	· · ~~{Betting on the outcome of an event, e.g. a race, an election; Totalisators}~~

Project: N/A (G06M)

	G06M	**COUNTING MECHANISMS; COUNTING OF OBJECTS NOT OTHERWISE PROVIDED FOR (counting by measuring volume or weight of articles to be counted G01F, G01G; computers G06C - G06J; counting electric pulses H03K; counting characters, words or messages in switching networks for transmission of digital information H04L 12/08)**

NOTE

This subclass <u>covers</u>:
  • stepping or continuously-moving mechanical counters operated through one or more inputs applied to the lowest order mechanically or electrically;
  • counting systems involving applications of either mechanical, electrical, or electronic counters.

<u>*WARNING*</u>
The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:

G06M 15/00	*covered by*

Project: RP0124 (G06Q)

U   G06Q 10/00   **Administration; Management**

G06Q 10/10   · Office automation, e.g. computer aided management of electronic mail or groupware (electronic mail ~~network systems~~*protocols H04L 29/06* ~~H04L 12/58~~*{; electronic mail protocols H04L 29/06; arrangements for user-to-user messaging in packet-switching networks, e.g. e-mail or instant messages, H04L 41/00}*); Time management, e.g. calendars, reminders, meetings or time accounting {(organizing, planning, scheduling or allocating time G06Q 10/06)}

G06Q 10/107   · · {Computer aided management of electronic mail (~~electronic mail network systems H04L 12/58; electronic mail protocols H04L 29/06~~*electronic mail protocols H04L 29/06; arrangements for user-to-user messaging in packet-switching networks, e.g. e-mail or instant messages, H04L 41/00*)}

Project: N/A (G07C)

U   G07C 9/00   **Individual entry or exit registers**

NOTES

1. This group covers:
  • controlling and registering access of persons to restricted areas or devices

2. This group does not cover:
  • electric permutation locks using mechanical keys, covered by E05B 49/00;
  • apparatus actuated by coded identity cards or credit cards, to free or actuate vending, hiring or money-dispensing, covered by G07F 7/08;
  • access to facilities or services by means of coins or tokens, covered by G07F 17/00;
  • arrangements actuated by coded cards for dispensing or receiving money and posting such transactions to existing accounts, e.g. automatic teller machines, covered by G07F 19/00

3. Attention is drawn to the following places, which may be of interest for search:
  • G06K 7/00, G06K 19/00 arrangements for sensing or reading record carriers
  • H03K 17/00 electronic switching
  • G06K 9/00 biometric sensors, recognising biometric patterns
  • A61B 5/117 biometric identification used for diagnostic purposes
  • G06F 1/00 access to data processing equipment

U   G07C 9/00174   · {Electronically operated locks; Circuits therefor; Nonmechanical keys therefor, e.g. passive or active electrical keys or other data carriers without mechanical keys (mechanical locks with electric permutation E05B 49/00; arrangements for sensing or reading record carriers G06K 7/00, G06K 9/00; electronic switching H03K 17/00)}

U   G07C 9/00309   · · {operated with bidirectional data transmission between data carrier and locks}

U   G07C 2009/00507   · · · {keyless data carrier having more than one function}

G07C 2009/00523   · · · · {opening of different locks ~~seperately~~*separately*}

Project: RP0308 (G07D)

C	**G07D 7/00**	**Testing specially adapted to determine the identity or genuineness of paper currency or similar valuable papers, ~~e.g.~~ *or* for segregating those which are ~~unacceptable or~~ alien to a currency {*or otherwise unacceptable* ~~(arrangements for verifying the correctness of markings on a record carrier G06K 5/00)}~~**

NOTE

In this group, groups G07D 7/16 - G07D 7/20 take precedence over groups G07D 7/02 - G07D 7/14.

WARNING

~~Groups G07D 7/0006, G07D 7/0046 and G07D 7/0093 are not complete pending a reclassification. See also group G07D 7/004~~

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.

D	G07D 7/0006	· {Security markings visible to the naked eye}

WARNING

~~Groups G07D 7/0006 - G07D 7/002 are not complete pending a reorganisation. See also groups G07D 7/124 - G07D 7/127~~

<administratively transferred to G07D 7/003>

D	G07D 7/0013	· · {Holograms}

<administratively transferred to G07D 7/0032>

D	G07D 7/002	· · {Watermarks}

<administratively transferred to G07D 7/0034>

D	G07D 7/0026	· · {Barcodes}

<administratively transferred to G07D 7/0043>

N	G07D 7/003	· {using security elements (using digital security elements G07D 7/004)}
N	G07D 7/0032	· · {using holograms}
D	G07D 7/0033	· · {Checkcodes, e.g. coded number derived from serial number and value}

<administratively transferred to G07D 7/0047>

N	G07D 7/0034	· · {using watermarks}
E	G07D 7/004	· {using digital security elements}, *e.g. information coded on a magnetic thread or strip*

WARNING

~~This group is no longer used for classification of new documents as from January 1st, 2011. The backlog of this group is being continuously reclassified to groups G07D 7/0006, G07D 7/0046, G07D 7/0093~~

Groups G07D 7/004 – G07D 7/0043 are incomplete pending reclassification of documents from group G07D 7/20.
Groups G07D 7/004, G07D 7/0043 and G07D 7/20 should be considered in order to perform a complete search.

N	G07D 7/0043	· · using barcodes
D	G07D 7/0046	· {Security markings invisible to the naked eye, e.g. "digital watermarks"}

<administratively transferred to G07D 7/005>

N	G07D 7/0047	· · using checkcodes, e.g. coded numbers derived from serial number and denomination

N	G07D 7/005	· *Testing security markings invisible to the naked eye, e.g. verifying thickened lines or unobtrusive markings or alterations*

WARNING
Groups G07D 7/005 – G07D 7/0057 are incomplete pending reclassification of documents from group G07D 7/20.
Groups G07D 7/005 – G07D 7/0057 and G07D 7/20 should be considered in order to perform a complete search.

N	G07D 7/0051	· · {involving markings removed from an original pattern}
E	G07D 7/0053	· · {involving markings added to a pattern, e.g. interstitial points}
N	G07D 7/0054	· · {involving markings the properties of which are altered from original properties}
N	G07D 7/0055	· · · {involving markings displaced slightly from original positions within a pattern}
N	G07D 7/0056	· · · {involving markings of altered colours}
N	G07D 7/0057	· · · {involving markings which are altered in dimension, e.g. thickened lines}
D	G07D 7/006	· · {involving markings removed from an original pattern}

<administratively transferred to G07D 7/0051>

D	G07D 7/0066	· · {involving markings the properties of which are altered from original properties}

<administratively transferred to G07D 7/0054>

D	G07D 7/0073	· · · {involving markings displaced slightly from original positions within a pattern}

<administratively transferred to G07D 7/0055>

D	G07D 7/008	· · · {involving markings of altered colours}

<administratively transferred to G07D 7/0056>

D	G07D 7/0086	· · · {involving markings which are altered in dimension, e.g. thickened lines}

<administratively transferred to G07D 7/0057>

D	G07D 7/0093	· {Circuits in note}

<administratively transferred to G07D 7/01>

N	G07D 7/01	· *Testing electronic circuits therein*

WARNING
Group G07D 7/01 is incomplete pending reclassification of documents from group G07D 7/02 and G07D 7/04.
Groups G07D 7/01, G07D 7/02 and G07D 7/04 should be considered in order to perform a complete search.

C	G07D 7/02	· ~~using electric means, {e.g. detecting electric~~ *Testing electrical* properties of ~~banknotes~~*the materials thereof* (~~G07D 7/004, G07D 7/04, G07D 7/06 take precedence~~*G07D 7/01 takes precedence*)~~}~~

WARNING
Group G07D 7/02 is impacted by reclassification into group G07D 7/01.
Groups G07D 7/02 and G07D 7/01 should be considered in order to perform a complete search.

M	G07D 7/023	· · {Measuring conductivity by direct contact}
M	G07D 7/026	· · {using capacitive sensors}

C	G07D 7/04	· ~~using~~*Testing* magnetic ~~means~~*properties of the materials thereof*, e.g. *by* detection of magnetic imprint~~, {detecting magnetic properties of banknotes~~ (~~G07D 7/004~~*G07D 7/01* takes precedence)~~}~~

> *WARNING*
> *Group G07D 7/04 is impacted by reclassification into group G07D 7/01. Groups G07D 7/04 and G07D 7/01 should be considered in order to perform a complete search.*

M	G07D 7/06	· using wave or particle radiation~~, {e.g. radiating waves onto the banknote~~ ~~(G07D 7/004 takes precedence)}~~
U	G07D 7/08	· · Acoustic waves
U	G07D 7/10	· · Microwaves
E	G07D 7/12	· · Visible light, infra-red or ~~ultra violet~~*ultraviolet* radiation

> *WARNING*
> *Group G07D 7/12 is incomplete pending reclassification of documents from group G07D 7/121.*
> *Groups G07D 7/12 and G07D 7/121 should be considered in order to perform a complete search.*

N	*G07D 7/1205*	· · · *Testing spectral properties*
C	G07D 7/121	· · · {~~Illumination assembly~~*Apparatus characterised by sensor* details~~}~~

> *WARNING*
> *Group G07D 7/121 is impacted by reclassification into group G07D 7/12. Groups G07D 7/121 and G07D 7/12 should be considered in order to perform a complete search.*

D	G07D 7/122	· · · ~~{Spectral properties}~~

<administratively transferred to G07D 7/1205>

D	G07D 7/124	· · · ~~{Optical security elements}~~

~~WARNING~~
~~Groups G07D 7/124 - G07D 7/127 are no longer used for the classification of new documents as from March 1, 2008. The backlog of these groups is being continuously reclassified to groups G07D 7/0006 - G07D 7/002~~

<administratively transferred to G07D 7/003>

D	G07D 7/125	· · · · ~~{Holograms or other interface patterns}~~

<administratively transferred to G07D 7/0032>

D	G07D 7/127	· · · · ~~{Watermarks}~~

<administratively transferred to G07D 7/0034>

M	G07D 7/128	· · · {Viewing devices~~}~~
U	G07D 7/14	· using chemical means
N	*G07D 7/15*	· *using heating means*

WARNING
Group G07D 7/15 is incomplete pending reclassification of documents from group G07D 7/00.
Groups G07D 7/00 and G07D 7/15 should be considered in order to perform a complete search.

U	G07D 7/16	· Testing the dimensions
M	G07D 7/162	· · {Length or width~~}~~
M	G07D 7/164	· · {Thickness~~}~~

D	G07D 7/166	· · {Folds or doubles}
		<administratively transferred to G07D 7/183>
D	G07D 7/168	· · {Position of banknote}
		<administratively transferred to G07D 7/17>
N	*G07D 7/17*	· *Apparatus characterised by positioning means or by means responsive to positioning*
D	G07D 7/18	· Testing the stiffness {or other mechanical properties, e.g. wear or tear (G07D 7/16 takes precedence)}
		<administratively transferred to G07D 7/181>
Q	*G07D 7/181*	· *Testing mechanical properties or condition, e.g. wear or tear (G07D 7/16 takes precedence)*

<blockquote>

WARNING

Group G07D 7/181 is impacted by reclassification into group G07D 7/189. Groups G07D 7/181 and G07D 7/189 should be considered in order to perform a complete search.

</blockquote>

M	G07D 7/182	· · {Testing stiffness}
N	*G07D 7/183*	· · *Detecting folds or doubles*
M	G07D 7/185	· · {Detecting holes or pores}
M	G07D 7/187	· · {Detecting defacement or contamination, e.g. dirt}
N	*G07D 7/189*	· · *Detecting attached objects, e.g. tapes or clips (G07D 7/187 takes precedence)*

<blockquote>

WARNING

Group G07D 7/189 is incomplete pending reclassification of documents from group G07D 7/181.
Groups G07D 7/181 and G07D 7/189 should be considered in order to perform a complete search.

</blockquote>

C	G07D 7/20	· Testing patterns thereon {, e.g. recognition of patterns, image processing, comparing to a reference in a memory} (G07D 7/004, G07D 7/005 take precedence)

<blockquote>

WARNING

Group G07D 7/20 is impacted by reclassification into groups G07D 7/004 – G07D 7/005.
Groups G07D 7/20 and G07D 7/004 – G07D 7/005 should be considered in order to perform a complete search.

</blockquote>

M	G07D 7/2008	· · {preprocessing using pre-processing, e.g. deblurring de-blurring, averaging, normalisation, or rotation}
M	G07D 7/2016	· · {using feature extraction, e.g. segmentation, edge detection, or Hough -transformation}
N	*G07D 7/202*	· · *using pattern matching*
D	G07D 7/2025	· · {Pattern matching}
		<administratively transferred to G07D 7/202>
M	G07D 7/2033	· · · {matching Matching unique patterns, e.g i.e. fingerprinting} patterns that are unique to each individual paper
M	G07D 7/2041	· · · {matching a Matching statistical distribution distributions, e.g. of particle sizes orientations}
M	G07D 7/205	· · · {matching Matching spectral properties}

D	G07D 7/2058	· · · {matching a template}
		<administratively transferred to G07D 7/206>
N	*G07D 7/206*	· · · *Matching template patterns*
D	G07D 7/2066	· · · {matching with an overlay, e.g. by interference}
		<administratively transferred to G07D 7/207>
N	*G07D 7/207*	· · · *Matching patterns that are created by the interaction of two or more layers, e.g. moiré patterns*
M	G07D 7/2075	· · {~~setting~~*Setting* acceptance levels or parameters}
M	G07D 7/2083	· · · {~~learning~~*Learning*}
M	G07D 7/2091	· · · {~~where~~*Setting* a plurality of levels ~~are set~~}

U	**G07D 11/00**	**Devices accepting coins or {accepting or dispensing} paper currency, e.g. depositing machines (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 <u>covers</u> 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

U	G07D 11/0003	· {Mechanical details}
U	G07D 11/0021	· · {Handling paper currency, e.g. banknotes (handling paper sheets in general B65H)}

NOTE

Informative reference- handling paper sheets in general B65H

M	G07D 11/0027	· · · {Aligning (~~position of banknote G07D 7/168~~*apparatus characterised by positioning means or by means responsive to positioning G07D 7/17*)}

Project: N/A (G10H)

U	**G10H 2250/00**	**Aspects of algorithms or signal processing methods without intrinsic musical character, yet specifically adapted for or used in electrophonic musical processing (methods with intrinsic musical character G10H 2210/00)**
U	G10H 2250/131	· Mathematical functions for musical analysis, processing, synthesis or composition (algorithms for musical processing G10H 2250/005; computation of mathematical functions G06F 17/10 and G06F 7/544)
U	G10H 2250/165	· · Polynomials, i.e. musical processing based on the use of polynomials, e.g. distortion function for tube amplifier emulation, filter coefficient calculation, polynomial approximations of waveforms, physical modeling equation solutions
	G10H 2250/201	· · · Parabolic or second order polynomials, ~~occuring~~*occurring*, e.g. in vacuum tube distortion modeling or for modeling the gate voltage to drain current relationship of a JFET
	G10H 2250/205	· · · Third order polynomials, ~~occuring~~*occurring*, e.g. in vacuum tube distortion modeling

Project: N/A (H01H)

H01H   **ELECTRIC SWITCHES; RELAYS; SELECTORS; EMERGENCY PROTECTIVE DEVICES (contact cables H01B 7/10; overvoltage protection resistors, resistive arresters H01C 7/12, H01C 8/04; electrolytic self-interrupters H01G 9/18; switching devices of the waveguide type H01P; devices for interrupted current collection H01R 39/00; overvoltage arresters using spark gaps H01T 4/00; emergency protective circuit arrangements H02H; switching by electronic means without contact-making H03K 17/00)**

NOTES

1.
Attention is drawn to the Notes following the titles of class B81 an subclass B81B relating to "micro-structural devices" and micro-structural systems"

2. This subclass covers (in groups H01H 69/00 - H01H 87/00) devices for the protection of electric lines or electric machines or apparatus in the event of undesired change from normal electric working conditions, the electrical condition serving directly as the input to the device.

3. This subclass does not cover bases, casings, or covers ~~accomodating~~*accommodating* two or more switching devices or for ~~accomodating~~*accommodating* a switching device as well as another electric component, e.g. bus-bar, line connector. Those bases, casings or covers are covered by group H02B 1/26.

4. In this subclass, the following terms or expressions are used with the meanings indicated :
   - "relay" means a switching device having contacts which are operated from electric inputs which supply, directly or indirectly, all the mechanical energy necessary to cause both the closure and the opening of the contacts;
   - "driving mechanism" refers to the means by which an operating force applied to the switch is transmitted to the moving contact or contacts;
   - "operating" is used in a broader sense than "actuating" which is reserved for those parts not touched by hand to effect switching;
   - "acting" or "action" means a self-induced movement of parts at one stage of the switching.

These connotations apply to all parts of the verbs "to operate", "to actuate" and "to act" and to words derived therefrom, e.g. to "actuation".

5. In this subclass, details are classified as follows :
   - details of an unspecified type of switching device, or disclosed as applicable to two or more kinds of switching devices designated by the terms or expressions "switches", "relays", "selector switches", and "emergency protective devices", are classified in groups H01H 1/00 - H01H 9/00;
   - details of an unspecified type of switch, or disclosed as applicable to two or more types of switches as defined by groups H01H 13/00 - H01H 43/00 and sub-groups H01H 35/02, H01H 35/06, H01H 35/14, H01H 35/18, H01H 35/24 and H01H 35/42, all hereinafter called basic types, are classified in groups H01H 1/00 - H01H 9/00;
   - details of an unspecified type of relay, or disclosed as applicable to two or more types of relays as defined by groups H01H 51/00 - H01H 61/00, hereinafter called basic types are classified in H01H 45/00;
   - details of an unspecified protective device, or applicable to two or more types of protective devices as defined by groups H01H 73/00 - H01H 83/00, hereinafter called basic types, are classified in H01H 71/00.
   - However, details only described with reference to, or clearly only applicable to, switching devices of a single basic type, are classified in the group appropriate to switching devices of that basic type, e.g. H01H 19/02, H01H 75/04;

> • mechanical structural details of control members of switches or of keyboards such as keys, push-buttons, levers or other mechanisms for transferring the force to the activated elements are classified in this subclass, even when they are used for controlling electronic switches.

However, mechanical details directly producing electronic effects are classified in group H03K 17/94.

WARNING

The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups :

H01H 13/708-H01H 13/718	*covered by*	
H01H 33/575	covered by	H01H 33/56
H01H 33/65	*covered by*	
H01H 33/825	covered by	H01H 33/82
H01H 33/835	covered by	H01H 33/83
H01H 33/867	covered by	H01H 33/86
H01H 33/873	covered by	H01H 33/86
H01H 33/915	covered by	H01H 33/91
H01H 33/985	covered by	H01H 33/98
H01H 33/99	covered by	H01H 33/98

U H01H 50/00   **Details of electromagnetic relays ({H01H 51/28 takes precedence;} electric circuit arrangements H01H 47/00; details of electrically-operated select or switches H01H 63/00; {testing of relays G01R 31/00; electromagnets in general H01F 7/06; relays for emergency protective circuit arrangements H02H})**

U H01H 50/54   · Contact arrangements (contacts for switches in general H01H 1/00)

   H01H 50/62   · · Co-operating movable contacts operated by ~~seperate~~ *separate* electrical actuating means

Project: N/A (H01K)

U H01K 3/00   **Apparatus or processes adapted to the manufacture, installing, removal, or maintenance of incandescent lamps or parts thereof (manufacture of vessels from glass C03B)**

   H01K 3/12   · Joining of mount ~~ot~~*or* stem to vessel; Joining parts of the vessel, e.g. by butt sealing

Project: N/A (H01L)

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; 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 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.

WARNING

The following IPC groups are not used in the CPC scheme. Subject matter covered by these 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

Project: N/A (H01S)

U	**H01S 3/00**	**Lasers, i.e. devices for generation, amplification, modulation, demodulation, or frequency-changing, using stimulated emission, of infra-red, visible, or ultra-violet waves ({stimulated Brillouin or Raman effects H01S 3/30} ; semiconductor lasers H01S 5/00)**
	H01S 3/05	· Construction or shape of optical resonators; ~~Accomodation~~*Accommodation* of active medium therein; Shape of active medium

Project: MP0202 (H02K)

M	H02K	**DYNAMO-ELECTRIC MACHINES (dynamo-electric relays H01H 53/00; conversion of DC or AC input power into surge output power {H03K 3/53})**

NOTES

1. This subclass <u>covers</u> the structural adaptation of dynamo-electric machines for the purpose of their control.

2. This subclass <u>does not cover</u> starting, regulating, electronically commutating, braking, or otherwise controlling motors, generators or dynamo-electric converters, in general, which are covered by subclass H02P.

3. Attention is drawn to the Notes following the titles of class B81 and subclass B81B relating to "micro-structural devices" and "micro-structural systems".

4. {In this subclass, it is desirable to add the indexing codes of H02K 2201/00-H02K 2213/12.}

Project: N/A (H03M)

	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, <u>see</u> 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)**

<u>WARNING</u>

The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:

H03M 7/32	covered by	H03M 7/3004, H03M 7/3048
H03M 7/34	covered by	H03M 7/3004, H03M 7/3051
H03M 7/36	covered by	H03M 7/3004, H03M 7/3044
H03M 7/38	covered by	H03M 7/3004, H03M 7/3046
H03M 7/44	*covered by*	

Project: N/A (H04J)

U	H04J 14/00	**Optical multiplex systems (optical coupling, mixing or splitting, <u>per se</u> G02B)**
U	H04J 14/02	· Wavelength-division multiplex systems
	H04J 14/0224	· · {Irregular wavelength spacing, e.g. to ~~accomodate~~ *accommodate* interference to all wavelengths}

Project: RP0124 (H04L)

M H04L
TRANSMISSION OF DIGITAL INFORMATION, e.g. TELEGRAPHIC COMMUNICATION (typewriters B41J; order telegraphs, fire or police telegraphs G08B; visual telegraphy G08B, G08C; teleautographic systems G08C; ciphering or deciphering apparatus per se G09C; coding, decoding or code conversion, in general H03M; arrangements common to telegraphic and telephonic communication H04M; selecting H04Q)

NOTE

This subclass covers transmission of signals having been supplied in digital form and includes data transmission, telegraphic communication and methods or arrangements for monitoring.

WARNING

The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:

H04L 12/20	covered by	H04L 29/00
H04L 12/24	covered by	H04L 41/00
H04L 12/26	covered by	H04L 43/00
H04L 12/58	covered by	H04L 51/00
H04L 12/60-H04L 12/62	covered by	H04L 12/54
H04L 12/70	covered by	H04L 47/00
H04L 12/701	covered by	H04L 45/00
H04L 12/703	covered by	H04L 45/28
H04L 12/705	covered by	H04L 45/18
H04L 12/707	covered by	H04L 45/22, H04L 45/24
H04L 12/709	covered by	
H04L 12/711	covered by	
H04L 12/713	covered by	H04L 45/586
H04L 12/715	covered by	H04L 45/04, H04L 45/46, H04L 45/64
H04L 12/717	covered by	H04L 45/42
H04L 12/721	covered by	H04L 45/06, H04L 45/12, H04L 45/123, H04L 45/124, H04L 45/127, H04L 45/14, H04L 45/26, H04L 45/32, H04L 45/34, H04L 45/36, H04L 45/38, H04L 45/40, H04L 45/44, H04L 45/566, H04L 45/62, H04L 45/66, H04L 45/68, H04L 45/70, H04L 45/72
H04L 12/723	covered by	H04L 45/50-H04L 45/507
H04L 12/725	covered by	H04L 45/30-H04L 45/308
H04L 12/727	covered by	
H04L 12/729	covered by	H04L 45/125
H04L 12/733	covered by	H04L 45/122, H04L 45/126, H04L 45/20
H04L 12/735	covered by	H04L 45/128-H04L 45/1287
H04L 12/741	covered by	
H04L 12/743	covered by	H04L 45/7453, H04L 45/7457
H04L 12/745	covered by	H04L 45/748
H04L 12/747	covered by	H04L 45/742
H04L 12/749	covered by	H04L 45/741

H04L 12/751	covered by	
H04L 12/753	covered by	H04L 45/48
H04L 12/755	covered by	H04L 45/021
H04L 12/757	covered by	H04L 45/023
H04L 12/759	covered by	H04L 45/023
H04L 12/761	covered by	H04L 45/16
H04L 12/763	covered by	
H04L 12/771	covered by	H04L 45/56, H04L 45/563
H04L 12/773	covered by	H04L 45/60
H04L 12/775	covered by	H04L 45/58, H04L 45/583
H04L 12/781	covered by	H04L 45/52
H04L 12/801	covered by	H04L 47/10, H04L 47/11, H04L 47/115, H04L 47/12, H04L 47/127, H04L 47/13-H04L 47/196, H04L 47/29, H04L 47/33, H04L 47/34, H04L 47/35, H04L 47/37, H04L 47/39
H04L 12/803	covered by	H04L 47/122, H04L 47/125
H04L 12/805	covered by	H04L 47/36, H04L 47/365
H04L 12/807	covered by	H04L 47/27
H04L 12/811	covered by	H04L 47/38
H04L 12/813	covered by	H04L 47/20
H04L 12/815	covered by	H04L 47/22, H04L 47/225, H04L 47/23
H04L 12/819	covered by	H04L 47/21, H04L 47/215
H04L 12/823	covered by	H04L 47/32-H04L 47/326
H04L 12/825	covered by	H04L 47/25-H04L 47/266
H04L 12/827	covered by	
H04L 12/829	covered by	
H04L 12/833	covered by	H04L 47/2458, H04L 47/31
H04L 12/835	covered by	H04L 47/30
H04L 12/841	covered by	H04L 47/28-H04L 47/286
H04L 12/851	covered by	H04L 47/24, H04L 47/2408, H04L 47/2425, H04L 47/2433, H04L 47/245, H04L 47/2483
H04L 12/853	covered by	H04L 47/2416
H04L 12/855	covered by	H04L 47/2466
H04L 12/857	covered by	H04L 47/2491
H04L 12/859	covered by	H04L 47/2475
H04L 12/861	covered by	
H04L 12/863	covered by	H04L 47/50, H04L 47/54, H04L 47/62-H04L 47/627, H04L 47/628, H04L 47/6285, H04L 47/6295
H04L 12/865	covered by	H04L 47/6275
H04L 12/867	covered by	H04L 47/629
H04L 12/869	covered by	H04L 47/58, H04L 47/60
H04L 12/873	covered by	H04L 47/52, H04L 47/521, H04L 47/522, H04L 47/524, H04L 47/527, H04L 47/528
H04L 12/875	covered by	H04L 47/56-H04L 47/568

H04L 12/877	*covered by*	*H04L 47/525*
H04L 12/879	*covered by*	*H04L 49/901*, *H04L 49/9026*
H04L 12/883	*covered by*	
H04L 12/885	*covered by*	
H04L 12/891	*covered by*	*H04L 47/41*
H04L 12/893	*covered by*	
H04L 12/901	*covered by*	
H04L 12/903	*covered by*	
H04L 12/905	*covered by*	
H04L 12/911	*covered by*	*H04L 47/70*-*H04L 47/748*, *H04L 47/78*, *H04L 47/781*, *H04L 47/782*, *H04L 47/783*, *H04L 47/788*, *H04L 47/82*-*H04L 47/829*
H04L 12/913	*covered by*	*H04L 47/724*
H04L 12/915	*covered by*	*H04L 47/785*, *H04L 47/787*, *H04L 47/787*
H04L 12/917	*covered by*	*H04L 47/76*
H04L 12/919	*covered by*	*H04L 47/765*, *H04L 47/767*
H04L 12/923	*covered by*	*H04L 47/762*
H04L 12/925	*covered by*	*H04L 47/722*
H04L 12/927	*covered by*	*H04L 47/80*-*H04L 47/808*
H04L 12/931	*covered by*	
H04L 12/933	*covered by*	*H04L 49/10*-*H04L 49/1592*
H04L 12/935	*covered by*	*H04L 49/30*-*H04L 49/3009*
H04L 12/937	*covered by*	*H04L 49/253*-*H04L 49/255*
H04L 12/939	*covered by*	*H04L 49/55*-*H04L 49/557*
H04L 12/943	*covered by*	
H04L 12/945	*covered by*	
H04L 12/947	*covered by*	*H04L 49/25*, *H04L 49/251*, *H04L 49/252*, *H04L 49/256*, *H04L 49/257*, *H04L 49/258*
H04L 12/951	*covered by*	
H04L 12/953	*covered by*	
H04L 25/04	covered by	H04L 25/03
H04L 25/17	covered by	H03H
H04L 25/18	covered by	H04L 25/027
H04L 25/28	covered by	H04L 25/0268
H04L 25/30	covered by	H04L 25/061
H04L 25/32	covered by	H04L 25/49
H04L 25/34	covered by	H04L 25/4917
~~H04L 25/36~~	~~covered by~~	
H04L 25/48	covered by	H04L 25/49
~~H04L 25/50~~	~~covered by~~	~~H04L 25/05~~
H04L 25/52	covered by	H04L 25/20
H04L 25/54	covered by	H04L 25/20
H04L 25/56	covered by	H04L 25/202
H04L 25/58	covered by	H04L 25/20
H04L 25/60	covered by	H04L 25/207
H04L 25/62	covered by	H04L 25/205
H04L 25/64	covered by	H04L 25/245

		H04L 25/66	covered by	H04L 25/247

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 12/02	· Details
U	H04L 12/16	· · Arrangements for providing special services to substations {contains provisionally no documents}
U	H04L 12/18	· · · for broadcast or conference {, e.g. multicast (multicast or broadcast switches H04L 49/201)}
	H04L 12/1813	· · · · {for computer conferences, e.g. chat rooms (protocols for multimedia communication H04L 29/06027; signaling and real-time protocols for multimedia conference H04L 29/06414; instant messaging ~~H04L 12/581~~ *H04L 51/04*; telephonic conference arrangements H04M 3/56; television conference systems H04N 7/15)}
D	H04L 12/24	· · ~~Arrangements for maintenance or administration~~

~~WARNING~~

~~This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to subgroups of H04L 41/00~~

<administratively transferred to H04L 41/00>

D	H04L 12/2401	· · · ~~{involving integration or standardization}~~

~~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 41/02~~

<administratively transferred to H04L 41/02>

D	H04L 12/2402	· · · · ~~{using standardized network management architectures, e.g. TMN [Telecommunication Management network], UNMA [Unified Network Management Architecture]}~~

~~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 41/0206~~

<administratively transferred to H04L 41/0206>

D	H04L 12/2403	· · · · ~~{using standardized network management protocols, e.g. SNMP [Simple Network Management Protocol], CMIP [Common Management Interface Protocol]}~~

~~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 41/0213~~

<administratively transferred to H04L 41/0213>

D	H04L 12/2404	· · · · ~~{Multivendor or multistandard integration}~~

~~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 41/022~~

D   H04L 12/2405   · · · · {Mapping or translation of multiple network management protocols}

WARNING

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 41/0226

<administratively transferred to H04L 41/0226>

D   H04L 12/2406   · · · · {using object oriented techniques, e.g. CORBA [Common Object Request Broker Architecture] for representation of network management data}

WARNING

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 41/0233

<administratively transferred to H04L 41/0233>

D   H04L 12/2407   · · · · {using relational databases for representation of network management data, e.g. managing via SQL [Structured Query Language]}

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 41/024

<administratively transferred to H04L 41/024>

D   H04L 12/2408   · · · · {using Internet technology, e.g. a standard Web Browser at the management workstation}

WARNING

This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to subgroups of H04L 41/0246

<administratively transferred to H04L 41/0246>

D   H04L 12/2409   · · · {Architectural aspects of network management arrangements}

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 41/04

<administratively transferred to H04L 41/04>

D   H04L 12/241   · · · · {Arrangements involving multiple distributed management centers cooperatively managing the network}

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 41/042

<administratively transferred to H04L 41/042>

D   H04L 12/2411   · · · · {Arrangements involving a hierarchical management structure}

WARNING

This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to subgroups of H04L 41/044

D   H04L 12/2412   · · · · {Aspects of network management Agents}

WARNING

This subgroup is no longer used for classification as from 01.05.2012.
The backlog of this subgroup is being continuously reclassified to
subgroups of H04L 41/046

<administratively transferred to H04L 41/046>

D   H04L 12/2413   · · · · {Arrangements involving CNM [Customer Network Management]}

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 41/18

<administratively transferred to H04L 41/18>

D   H04L 12/2414   · · · {involving network analysis}

WARNING

This subgroup is no longer used for classification as from 01.05.2012. The
backlog of this subgroup is being continuously reclassified to subgroups of
H04L 41/14

<administratively transferred to H04L 41/14>

D   H04L 12/2415   · · · · {using statistical methods, e.g. distribution tests, or establishing statistical
profiles, or calculating probabilities}

WARNING

This subgroup is no longer used for classification as from 01.05.2012.
The backlog of this subgroup is being continuously reclassified to
subgroups of H04L 41/14

<administratively transferred to H04L 41/142>

D   H04L 12/2416   · · · · {for automatically determining the actual topology of a network (Topology
discovery in routers H04L 45/02)}

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 41/12

<administratively transferred to H04L 41/12>

D   H04L 12/2417   · · · · {Service management, i.e. managing value added network services and
related parameters, e.g. SLA [Service Level Agreements], responsetimes,
performance, throughput}

WARNING

This subgroup is no longer used for classification as from 01.05.2012.
The backlog of this subgroup is being continuously reclassified to
subgroups of H04L 41/00

<administratively transferred to H04L 41/50>

D   H04L 12/2418   · · · · {involving monitoring of all traffic over a specific network link}

WARNING

This subgroup is no longer used for classification as from 01.05.2012.
The backlog of this subgroup is being continuously reclassified to
subgroups of H04L 43/00

D   H04L 12/2419   · · · {involving management of faults or events or alarms}

WARNING

This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to subgroups of H04L 41/06

<administratively transferred to H04L 41/06>

D   H04L 12/242   · · · · {Alarm or event filtering, e.g. for reduction of information}

WARNING

This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to subgroups of H04L 41/0604

<administratively transferred to H04L 41/0604>

D   H04L 12/2421   · · · · {Alarm and event correlation}

WARNING

This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to subgroups of H04L 41/0631

<administratively transferred to H04L 41/0631>

D   H04L 12/2422   · · · · {Automatic restoration of network faults}

WARNING

This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to subgroups of H04L 41/0654

<administratively transferred to H04L 41/0654>

D   H04L 12/2423   · · · · {involving Artificial Intelligence algorithms, e.g. expert systems, rule based systems, genetic algorithms}

WARNING

This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to subgroups of H04L 41/16

<administratively transferred to H04L 41/16>

D   H04L 12/2424   · · · {Configuration management of network or network elements (management of devices network applications for proprietary or special purpose network environments H04L 29/08567; automatic configuration in wireless networks H04W 24/02)}

WARNING

This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to subgroups of H04L 41/08

<administratively transferred to H04L 41/08>

D   H04L 12/2425   · · · · {Configuration setting of network or network elements}

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 41/0803

D   H04L 12/2426   · · · · · ~~{for initial configuration or provisioning}~~

~~WARNING~~

~~This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to subgroups of H04L 41/0806~~

<administratively transferred to H04L 41/0806>

D   H04L 12/2427   · · · · · · ~~{Plug-and-play configuration}~~

~~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 41/0809~~

<administratively transferred to H04L 41/0809>

D   H04L 12/2428   · · · · · ~~{Changing of configuration}~~

~~WARNING~~

~~This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to subgroups of H04L 41/0813~~

<administratively transferred to H04L 41/0813>

D   H04L 12/2429   · · · · · · ~~{due to adaptation, e.g. in response to network events}~~

~~WARNING~~

~~This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to subgroups of H04L 41/0816~~

<administratively transferred to H04L 41/0816>

D   H04L 12/243   · · · · · · ~~{due to updating or upgrading of network functionality, e.g. firmware (topology update or discovery for routing purposes H04L 45/02)}~~

~~WARNING~~

~~This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to subgroups of H04L 41/085~~

<administratively transferred to H04L 41/082>

D   H04L 12/2431   · · · · · · ~~{Configuration optimization}~~

~~WARNING~~

~~This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to subgroups of H04L 41/0823~~

<administratively transferred to H04L 41/0823>

D   H04L 12/2432   · · · · · · · ~~{for network cost reduction}~~

~~WARNING~~

~~This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to subgroups of H04L 41/0826~~

D   H04L 12/2433   · · · · · · · {for network speed increase}

> WARNING
>
> This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to subgroups of H04L 41/083
>
> <administratively transferred to H04L 41/083>

D   H04L 12/2434   · · · · · · · {to reduce network energy consumption}

> WARNING
>
> This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to subgroups of H04L 41/0833
>
> <administratively transferred to H04L 41/0833>

D   H04L 12/2435   · · · · · · · {to enhance reliability, e.g. reduce downtime}

> WARNING
>
> This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to subgroups of H04L 41/0836
>
> <administratively transferred to H04L 41/0836>

D   H04L 12/2436   · · · · · {Configuration by copying}

> 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 41/084
>
> <administratively transferred to H04L 41/084>

D   H04L 12/2437   · · · · · · {based on generic templates}

> 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 41/0843
>
> <administratively transferred to H04L 41/0843>

D   H04L 12/2438   · · · · · · {based on copy from other elements}

> 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 41/0846
>
> <administratively transferred to H04L 41/0846>

D   H04L 12/2439   · · · · {Bandwidth or capacity management, i.e. automatically increasing or decreasing capacities, e.g. bandwidth on demand}

> 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 41/0896
>
> <administratively transferred to H04L 41/0896>

D   H04L 12/244   · · · · {Assignment of logical groupings to network elements; Policy based network management or configuration}

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 41/0893

<administratively transferred to H04L 41/0893>

D   H04L 12/2441   · · · {Keeping track of network configuration}

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 41/085

<administratively transferred to H04L 41/085>

D   H04L 12/2442   · · · · {by actively collecting or retrieving configuration information}

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 41/0853

<administratively transferred to H04L 41/0853>

D   H04L 12/2443   · · · · {by archiving or backing up configuration information}

WARNING

This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to subgroups of H04L 41/0856

<administratively transferred to H04L 41/0856>

D   H04L 12/2444   · · · · {by keeping history of different configuration generations or versions}

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 41/0859

<administratively transferred to H04L 41/0859>

D   H04L 12/2445   · · · · {by rolling back to previous configuration versions}

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 41/0863

<administratively transferred to H04L 41/0863>

D   H04L 12/2446   · · · {Checking configuration}

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 41/0866

<administratively transferred to H04L 41/0866>

D H04L 12/2447   · · · · · {by validating configuration within one network element}

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 41/0869

<administratively transferred to H04L 41/0869>

D H04L 12/2448   · · · · · {by checking configuration conflicts with other network elements}

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 41/0873

<administratively transferred to H04L 41/0873>

D H04L 12/2449   · · · · {Aspects of the degree of configuration automation}

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 41/0876

<administratively transferred to H04L 41/0876>

D H04L 12/2451   · · · · · {Manual configuration through operator}

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 41/0879

<administratively transferred to H04L 41/0879>

D H04L 12/2452   · · · · · {Semiautomatic configuration, e.g. proposals from system}

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 41/0883

<administratively transferred to H04L 41/0883>

D H04L 12/2453   · · · · · {Fully automatic configuration}

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 41/0886

<administratively transferred to H04L 41/0886>

D H04L 12/2454   · · · · {Techniques to speed-up the configuration process}

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 41/0889

D   H04L 12/2455   · · · {Hardware and software tools for network management}

WARNING

This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to subgroups of H04L 41/14, H04L 41/20, H04L 41/22, H04L 41/24, H04L 41/26

<administratively transferred to H04L 41/24>

D   H04L 12/2456   · · · · {for network design, e.g. with integrated simulation and design testing}

WARNING

This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to subgroups of H04L 41/14

<administratively transferred to H04L 41/145>

D   H04L 12/2457   · · · · {Network management software packages}

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 41/20

<administratively transferred to H04L 41/20>

D   H04L 12/2458   · · · · {using GUI [Graphical User Interface]}

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 41/22

<administratively transferred to H04L 41/22>

D   H04L 12/2459   · · · · {using dedicated network management hardware}

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 41/24

<administratively transferred to H04L 41/24>

D   H04L 12/246   · · · · {using dedicated tools for LAN [Local Area Network] management}

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 41/26

<administratively transferred to H04L 41/26>

D   H04L 12/2461   · · · {Security in network management, e.g. restricting network management access (protocols or architecture for network security H04L 29/06551)}

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 41/28

D   H04L 12/2462   · · · {Decision processes by autonomous network management units using voting and bidding}

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 41/30

<administratively transferred to H04L 41/30>

D   H04L 12/2463   · · · {Specific management aspects for broadband networks}

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 41/32

<administratively transferred to H04L 41/32>

D   H04L 12/2464   · · · {Network service management, ensuring proper service fulfilment according to an agreement or contract between two parties, e.g. between an IT-provider and a customer}

WARNING

This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to subgroups of H04L 41/50

<administratively transferred to H04L 41/50>

D   H04L 12/2465   · · · · {Managing SLA [Service Level Agreement] or interaction between SLA and QoS [Quality of Service]}

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 41/5003

<administratively transferred to H04L 41/5003>

D   H04L 12/2466   · · · · · {Defining or negotiating SLA contracts, guarantees or penalties (SLA negotiation in wireless networks H04W 28/24)}

WARNING

This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to subgroups of H04L 41/5006

<administratively transferred to H04L 41/5006>

D   H04L 12/2467   · · · · · {Measuring SLA quality parameters, e.g. against possible contract or guarantee violations (Monitoring performance metrics on a simple network level H04L 12/2634)}

WARNING

This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to subgroups of H04L 41/5009

<administratively transferred to H04L 41/5009>

D   H04L 12/2468   · · · · · · {determining service availability}

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 41/5012

D   H04L 12/2469   · · · · · · · {based on actual status of service availability, e.g. which services are available at this point in time}

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 41/5012

<administratively transferred to <u>H04L 41/5012</u>>

D   H04L 12/247   · · · · · · · {based statistics of service availability, e.g. in percentage or over a given time}

WARNING

This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to subgroups of H04L 41/5016

<administratively transferred to <u>H04L 41/5016</u>>

D   H04L 12/2471   · · · · · · {determining service performance, i.e. performance on service level, e.g. response time or MTBF [Mean Time Between Failure]}

WARNING

This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to subgroups of H04L 41/5009

<administratively transferred to <u>H04L 41/5009</u>>

D   H04L 12/2472   · · · · · {Ensuring SLA (flow or congestion control at network level H04L 12/569)}

WARNING

This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to subgroups of H04L 41/5019

<administratively transferred to <u>H04L 41/5019</u>>

D   H04L 12/2473   · · · · · · {by giving priorities, e.g. assigning classes of service}

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 41/5022

<administratively transferred to <u>H04L 41/5022</u>>

D   H04L 12/2474   · · · · · · {by proactively reacting to service quality change (e.g. degradation or upgrade) by reconfiguration (mere restoration of network faults H04L 12/2422)}

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 41/5025

<administratively transferred to <u>H04L 41/5025</u>>

| D | H04L 12/2475 | · · · · · {Service quality level based billing, e.g. dependent on measured service level customer is charged more or less (general charging or billing for transport of data packets H04L 12/14)} |

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 41/5029

<administratively transferred to [H04L 41/5029](#)>

| D | H04L 12/2476 | · · · · · {Generating service level reports} |

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 41/5032

<administratively transferred to [H04L 41/5032](#)>

| D | H04L 12/2477 | · · · · · {Measuring contribution of individual network components to actual service level (alarm or event correlation H04L 12/2421)} |

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 41/5035

<administratively transferred to [H04L 41/5035](#)>

| D | H04L 12/2478 | · · · · · {Testing of service level quality} |

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 41/5038

<administratively transferred to [H04L 41/5038](#)>

| D | H04L 12/2479 | · · · · {Service implementation} |

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 41/5041

<administratively transferred to [H04L 41/5041](#)>

| D | H04L 12/248 | · · · · {Making service definitions prior to deployment} |

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 41/5045

<administratively transferred to [H04L 41/5045](#)>

| D | H04L 12/2481 | · · · · · {Automatic or semi-automatic definitions, e.g. definition templates} |

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 41/5048

D H04L 12/2482 · · · · · · {Service on demand, i.e. services are defined and provided in real time as requested by the user}

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 41/5051

<administratively transferred to H04L 41/5051>

D H04L 12/2483 · · · · · {Automatic provisioning of the service triggered by the service manager, e.g. concrete service implementation by automatic configuration of network components (for initializing configuration, i.e. provisioning of network or devices H04L 12/2425)}

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 41/5054

<administratively transferred to H04L 41/5054>

D H04L 12/2484 · · · · {Service discovery by the Service Manager (automatically determining the actual topology of a network H04L 12/2416; topology discovery in routers H04L 45/02; arrangements for service discovery, e.g. Service Location Protocol [SLP] H04L 29/08648)}

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 41/5058

<administratively transferred to H04L 41/5058>

D H04L 12/2485 · · · · {Customer care}

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 41/5061

<administratively transferred to H04L 41/5061>

D H04L 12/2486 · · · · · {Customer Relationship Management (for arrangements involving Customer Network Management, i.e. giving the customer access to network management functions H04L 12/2413)}

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 41/5064

<administratively transferred to H04L 41/5064>

D H04L 12/2487 · · · · · {Customer-centric QoS [Quality of Service Measurement]}

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 41/5067

D H04L 12/2488 · · · · · {Filtering out customers affected by service problems}

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 41/507

<administratively transferred to H04L 41/507>

D H04L 12/2489 · · · · · {Handling of Trouble Tickets}

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 41/5074

<administratively transferred to H04L 41/5074>

D H04L 12/249 · · · · {Managing simple transport services, i.e. providing only network
infrastructure}

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 41/5077

<administratively transferred to H04L 41/5077>

D H04L 12/2491 · · · · {based on type of value added network service under agreement}

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 41/508

<administratively transferred to H04L 41/508>

D H04L 12/2492 · · · · · {wherein the managed service relates to web hosting (web hosting
as such H04L 29/0809, web-browsers G06F 17/30861, video-hosting
H04N 21/2743)}

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 41/5083

<administratively transferred to H04L 41/5083>

D H04L 12/2493 · · · · · {wherein the managed service relates to voice services (protocols for
real-time multimedia communications H04L 29/06176; management of
telephonic communication services H04M 3/22; management of VoIP
services H04M 7/0081)}

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 41/5087

D   H04L 12/2494   · · · · · {wherein the managed service relates to audio / video / TV (protocols for real-time multimedia communications H04L 29/06176; interactive television or VoD H04N 21/00)}

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 41/509

<administratively transferred to <u>H04L 41/509</u>>

D   H04L 12/2495   · · · · · {wherein the managed service relates to messaging (messaging, such as e-mail in packet-switching networks H04L 12/58)}

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 41/5093

<administratively transferred to <u>H04L 41/5093</u>>

D   H04L 12/2496   · · · · · {wherein the managed service relates to chat services (conducting a computer conference H04L 12/1822; instant messaging H04L 12/581)}

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 41/5093

<administratively transferred to <u>H04L 41/5093</u>>

D   H04L 12/2497   · · · · · {wherein the managed service relates to access to distributed or central networked applications}

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 41/5096

<administratively transferred to <u>H04L 41/5096</u>>

D   H04L 12/2498   · · · · · {wherein the managed service relates to media content delivery over network}

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 41/509

<administratively transferred to <u>H04L 41/509</u>>

D   H04L 12/26   · · Monitoring arrangements; Testing arrangements

WARNING

This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to subgroups of H04L 43/00

<administratively transferred to <u>H04L 43/00</u>>

D   H04L 12/2602   · · · {Monitoring arrangements}

WARNING

This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to subgroups of H04L 43/00

<administratively transferred to <u>H04L 43/00</u>>

D	H04L 12/2605	· · · · {involving a reduction of monitoring data}
		<administratively transferred to H04L 43/02>
D	H04L 12/2607	· · · · · {using sampling of monitoring data, i.e. storing only a selection of packets}
		<administratively transferred to H04L 43/022>
D	H04L 12/261	· · · · · · {using adaptive sampling}
		<administratively transferred to H04L 43/024>
D	H04L 12/2613	· · · · · {using flow Flow generation}
		<administratively transferred to H04L 43/026>
D	H04L 12/2615	· · · · · {using filtering (alarm or event filtering H04L 12/242)}
		<administratively transferred to H04L 43/028>
D	H04L 12/2618	· · · · {processing of captured monitoring data}
		<administratively transferred to H04L 43/04>
D	H04L 12/2621	· · · · · {for graphical visualization of monitoring data (graphical user interfaces H04L 12/2458)}
		<administratively transferred to H04L 43/045>
D	H04L 12/2623	· · · · · {Report generation}
		<administratively transferred to H04L 43/06>
D	H04L 12/2626	· · · · · · {for traffic related reporting}
		<administratively transferred to H04L 43/062>
D	H04L 12/2628	· · · · · · {for device related reporting (reporting of sensed information of home appliances H04L 12/2803)}
		<administratively transferred to H04L 43/065>
D	H04L 12/2631	· · · · · · {for time frame related reporting}
		<administratively transferred to H04L 43/067>
D	H04L 12/2634	· · · · {Monitoring using or based on specific metrics}
		<administratively transferred to H04L 43/08>
D	H04L 12/2636	· · · · · {based on availability}
		<administratively transferred to H04L 43/0805>
D	H04L 12/2639	· · · · · · {based on connectivity}
		<administratively transferred to H04L 43/0811>
D	H04L 12/2642	· · · · · · {based on functioning (monitoring the activity of the application user H04L 29/08675; monitoring appliance functionality of home appliances H04L 12/2803)}
		<administratively transferred to H04L 43/0817>
D	H04L 12/2644	· · · · · {using errors (management of events, faults or alarms H04L 12/2419)}
		<administratively transferred to H04L 43/0823>
D	H04L 12/2647	· · · · · · {using packet loss}
		<administratively transferred to H04L 43/0829>
D	H04L 12/2649	· · · · · · · {using one way packet loss}
		<administratively transferred to H04L 43/0835>
D	H04L 12/2652	· · · · · · · {using round trip packet loss}
		<administratively transferred to H04L 43/0841>

D   H04L 12/2655   · · · · · {based on transmission error}

                                 <administratively transferred to H04L 43/0847>

D   H04L 12/2657   · · · · {based on delays}

                                 <administratively transferred to H04L 43/0852>

D   H04L 12/266   · · · · · {based on one way delays}

                                 <administratively transferred to H04L 43/0858>

D   H04L 12/2663   · · · · · {based on round trip delays}

                                 <administratively transferred to H04L 43/0864>

D   H04L 12/2665   · · · · · {based on Jitter}

                                 <administratively transferred to H04L 43/087>

D   H04L 12/2668   · · · · {based on network utilization}

                                 <administratively transferred to H04L 43/0876>

D   H04L 12/2671   · · · · · {based on utilization of link capacity}

                                 <administratively transferred to H04L 43/0882>

D   H04L 12/2673   · · · · · {based on throughput}

                                 <administratively transferred to H04L 43/0888>

D   H04L 12/2676   · · · · · {based on packet rate}

                                 <administratively transferred to H04L 43/0894>

D   H04L 12/2678   · · · · {using active monitoring, e.g. heartbeat protocols, polling, ping, trace-route}

                                 <administratively transferred to H04L 43/10>

D   H04L 12/2681   · · · · · {with adaptive polling, i.e. dynamically adapting the polling rate}

                                 <administratively transferred to H04L 43/103>

D   H04L 12/2684   · · · · · {by adding timestamps to packets}

                                 <administratively transferred to H04L 43/106>

D   H04L 12/2686   · · · {using dedicated network monitoring probes}

                                 <administratively transferred to H04L 43/12>

D   H04L 12/2689   · · · {using software, i.e. software packages}

                                 <administratively transferred to H04L 43/14>

D   H04L 12/2692   · · · {using threshold monitoring}

                                 <administratively transferred to H04L 43/16>

D   H04L 12/2694   · · · {using protocol analyzers}

                                 <administratively transferred to H04L 43/18>

D   H04L 12/2697   · · · {Testing equipment; Routine testing}

                                 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 43/50

                                 <administratively transferred to H04L 43/50>

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}

	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 12/2416~~*H04L 41/12*; hardware or software tools for network management using graphical user interfaces ~~H04L 12/2458~~*H04L 41/22*)}
	H04L 12/2809	· · · · {indicating that an appliance service is present in a home automation network (~~monitoring functionality H04L 12/2642;~~ arrangements for service discovery H04L 29/08648*; monitoring functionality H04L 43/0817*)}
	H04L 12/2814	· · · · {Exchanging control software or macros for controlling appliance services in a home automation network (arrangements for maintenance or administration involving configuration of the network and network elements ~~H04L 12/2424~~*H04L 41/08*)}
U	H04L 12/2854	· · {Wide area networks, e.g. public data networks}
U	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

U	H04L 12/2858	· · · · {Access network architectures}
	H04L 12/2859	· · · · · {Point-to-point connection between the data network and the subscribers (encapsulation H04L 12/4633; virtual LANs H04L 12/4641; routing of packets ~~H04L 12/5689~~*H04L 45/00*)}
	H04L 12/2863	· · · · {Arrangements for combining access network resources elements, e.g. channel bonding (*modem pooling H04L 25/14;* multichannel protocols H04L 29/06088; routing of packets ~~H04L 12/5689~~*H04L 45/00~~; modem pooling H04L 25/14~~*)}
U	H04L 12/2869	· · · · {Operational details of access network equipments (admission control or resource allocation in access networks H04L 12/5692)}
U	H04L 12/287	· · · · · {Remote access server, e.g. BRAS}
	H04L 12/2876	· · · · · · {Handling of subscriber policies (group policies management ~~H04L 12/244~~*H04L 41/0893*)}
U	H04L 12/40	· · Bus networks
	H04L 12/40006	· · · {Architecture of a communication node (~~intermediate storage or scheduling H04L 12/5694;~~ current supply arrangements H04L 12/10*; intermediate storage or scheduling H04L 49/90*)}

NOTE

In this group the following terms or expressions are used with the meaning indicated:

- a bus controller is a microprocessor dedicated to input and output of data by a node on a bus;
- a bus master is a device controlling which node accesses the bus at a particular time;
- a bus guardian is a device monitoring the timing of node accesses on the bus;
- a bus interface enhancer is a hardware or software arrangement managing the bus controller or the bus interface to modify its behaviour or providing a transparent interface to the bus controller

U	H04L 12/40052	· · · {High-speed IEEE 1394 serial bus (bus transfer protocol on a daisy chain bus using an embedded synchronisation G06F 13/426)}
	H04L 12/40065	· · · · {Bandwidth and channel allocation (home automation networks H04L 12/2803; flow control ~~H04L 12/569~~*H04L 47/10*)}
	H04L 12/40071	· · · · {Packet processing; Packet format (*adaptation of digital video signals for transport over a specific network H04N 21/2381, H04N 21/4363, H04N 21/4381;* packet switches ~~H04L 12/5696~~*H04L 49/00*; intermediate storage or scheduling ~~H04L 12/5694~~*H04L 49/90~~; Adaptation of digital video signals for transport over a specific network H04N 21/2381, H04N 21/4363, H04N 21/4381~~*)}
	H04L 12/40078	· · · · {Bus configuration (home automation networks H04L 12/2803~~; Arrangements for maintenance or administration H04L 12/24~~*; arrangements for maintenance or administration H04L 41/00*)}
	H04L 12/40143	· · · {involving priority mechanisms (~~intermediate storage or scheduling H04L 12/5694;~~ hybrid switching fabrics H04L 12/6402*; intermediate storage or scheduling H04L 49/90*; time-division multiplex systems H04J 3/00)}

	H04L 12/40169	· · · {Flexible bus arrangements (arrangements for maintenance or administration involving management of faults; events, alarms ~~H04L 12/2419~~*H04L 41/06*; automatic restoration of network faults ~~H04L 12/2422~~*H04L 41/0654*)}
U	H04L 12/46	· · Interconnection of networks
M	H04L 12/4641	· · · {Virtual LANs, VLANs, e.g. virtual private networks [VPN] (*LAN interconnection over a bridge based backbone H04L 12/462; encapsulation techniques H04L 12/4633;* virtual private networks for security H04L 29/06612; routing of packets ~~H04L 12/5689~~*H04L 45/00*~~; encapsulation techniques H04L 12/4633; LAN interconnection over a bridge based backbone H04L 12/462~~; packet switches ~~H04L 12/5696~~*H04L 49/00*)}

NOTES

1. {This group covers:
   • a group of hosts with a common set of requirements that communicate as if they were attached to the same broadcast domain, regardless of their physical location.
}

2. {This group does not cover:
   • group multicasting, which is covered by *group* H04L 12/18
   • configuration of switches supporting VLANs, which is covered by ~~H04L 12/2424~~*group H04L 41/08*
   • multiprotocol label switching [MPLS], which is covered by ~~H04L 12/5689~~*group H04L 45/00*
   • spanning tree ~~protocol~~*protocols* [STP], which ~~is~~*are* covered by *group* H04L 12/462
   • arrangements for network security, which ~~is~~*are* covered by *group* H04L 29/06612
   • encapsulation techniques, which ~~is~~*are* covered by *group* H04L 12/4633
   • access arrangements, which ~~is~~*are* covered by *group* H04L 12/2856
}

3. {In this group the following terms or expressions are used with the meaning indicated:
   • B-Tag means Backbone VLAN Tag
   • C-Tag means Customer VLAN Tag
   • GARP means Generic Attribute Registration Protocol
   • GVRP means GARP VLAN Registration Protocol
   • I-SID means Service Instance Identifier
   • MVRP means Multiple VLAN Registration Protocol
   • PBB means Provider Backbone Bridges
   • S-Tag means Service VLAN Tag
   • VLAN means Virtual Local Area Network
   • VPN means Virtual Private Network
   • VTP means VLAN Trunking Protocol
}

	H04L 12/4645	· · · · {Details on frame tagging (routing of packets ~~H04L 12/5689~~*H04L 45/00*; support for virtual LAN H04L 49/354)}
	H04L 12/4675	· · · · {Dynamic sharing of VLAN information amongst network nodes (configuration of the network or of network elements ~~H04L 12/2424~~*H04L 41/08*)}
U	H04L 12/54	· Store-and-forward switching systems (packet switching systems H04L 12/56)
U	H04L 12/56	· · {Packet switching systems}
D	H04L 12/5689	· · · {~~Routing of packets~~}

D H04L 12/569 · · · {Flow control}

> 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 47/10
>
> <administratively transferred to H04L 47/10>

D H04L 12/5693 · · · {Queue scheduling in packet switching networks}

> 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 47/50
>
> <administratively transferred to H04L 47/50>

D H04L 12/5694 · · · {Queuing arrangements}

> 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 49/90
>
> <administratively transferred to H04L 49/90>

D H04L 12/5695 · · · {Admission control; Resource allocation}

> 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 47/70
>
> <administratively transferred to H04L 47/70>

D H04L 12/5696 · · · {Packet switches, e.g. Layer 2 switches, Layer 3 switches, Multilayer switches}

> WARNING
>
> This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to group H04L 49/00
>
> <administratively transferred to H04L 49/00>

D H04L 2012/5697 · · · {Indexing scheme relating to flow control in packet switching networks}

> <administratively transferred to H04L 47/10>

D H04L 2012/5698 · · · {Indexing scheme relating to packet switching systems}

> <administratively transferred to H04L 49/00>

D H04L 12/58 · · Message switching systems, {e.g. electronic mail systems}

> WARNING
>
> This subgroup and all its subgroups are no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 51/00
>
> <administratively transferred to H04L 51/00>

D H04L 12/5805 · · · {with automatic reactions or user delegation, e.g. automatic replies or chatbot}

> <administratively transferred to H04L 51/02>

D H04L 12/581 · · · {Real time or near real time messaging, e.g. instant messaging [IM]}

> <administratively transferred to H04L 51/04>

D H04L 12/5815 · · · · {use or manipulation of presence information in messaging (presence management H04L 29/08684)}

> <administratively transferred to H04L 51/043>

D	H04L 12/582	· · · · {interacting with other applications or services}
		<administratively transferred to H04L 51/046>
D	H04L 12/5825	· · · {Message adaptation based on network or terminal capabilities}
		<administratively transferred to H04L 51/06>
D	H04L 12/583	· · · · {with adaptation as to content}
		<administratively transferred to H04L 51/063>
D	H04L 12/5835	· · · · {with adaptation as to format}
		<administratively transferred to H04L 51/066>
D	H04L 12/584	· · · {messages including annexed information, e.g. attachments}
		<administratively transferred to H04L 51/08>
D	H04L 12/5845	· · · {messages including multimedia information (protocols for multimedia communication H04L 29/06176; voice messaging in telephonic communication using automatic or semi-automatic exchanges with non-audio components H04M 3/5307)}
		<administratively transferred to H04L 51/10>
D	H04L 12/585	· · · {with filtering and selective blocking capabilities}
		<administratively transferred to H04L 51/12>
D	H04L 12/5855	· · · {with selective forwarding}
		<administratively transferred to H04L 51/14>
D	H04L 12/586	· · · {including conversation history, e.g. threads}
		<administratively transferred to H04L 51/16>
D	H04L 12/5865	· · · {messaging using geographical location information (protocols for adapting network applications to user terminal location H04L 29/08657; services specially adapted for wireless communication networks making use of the location of users or terminals H04W 4/02)}
		<administratively transferred to H04L 51/20>
D	H04L 12/587	· · · {with notification on incoming messages}
		<administratively transferred to H04L 51/24>
D	H04L 12/5875	· · · {with reliability check, e.g. acknowledgments, fault reporting}
		<administratively transferred to H04L 51/30>
D	H04L 12/588	· · · {messaging within social networks}
		<administratively transferred to H04L 51/32>
D	H04L 12/5885	· · · {with provisions for tracking the progress of a message}
		<administratively transferred to H04L 51/34>
D	H04L 12/589	· · · {unified messaging, e.g. interactions between instant messaging [IM], e-mail or other types of messages such as Converged IP Messaging [CPM]}
		<administratively transferred to H04L 51/36>
D	H04L 12/5895	· · · {in combination with wireless systems (messaging in wireless communication networks H04W 4/12)}
		<administratively transferred to H04L 51/38>
D	H04L 12/60	· · · Manual relay systems, e.g. push-button switching
		<administratively transferred to H04L 12/54>
D	H04L 12/62	· · · · with perforated tape storage
		<administratively transferred to H04L 12/54>

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
	H04L 29/06095	· · · {Special adaptations or provisions of the transmission control protocol/ internet protocol [TCP/IP] or the user datagram protocol [UDP] (network layer protocol adaptations for supporting mobility, e.g. mobile IP H04W 80/04; flow control in data switching networks in general H04L 12/569 *H04L 47/10*; adapting video multiplex streams to a specific network H04N 21/2381*; network layer protocol adaptations for supporting mobility, e.g. mobile IP H04W 80/04*)}
M	H04L 29/06176	· · · {Arrangements for real-time multimedia communications (data switching systems for broadcast or conference H04L 12/18*; network applications in general H04L 29/08081*; message switching systems H04L 12/58 *H04L 51/00*; television systems H04N 7/00*; systems providing special services to telephonic subscribers H04M 3/42*; interconnection arrangements between switching centres for working between exchanges having different types of switching equipment where the types of switching equipment comprise PSTN/ISDN equipment and equipment of networks other than PSTN/ISDN H04M 7/1205*; systems providing special services to telephonic subscribers H04M 3/42; network applications in general H04L 29/08081*; television systems H04N 7/00*)}

NOTES

1. [N: This group <u>covers</u>:
    * only communications which fulfil the following two conditions:
        1. they are based on packet data;
        2. there is real-time or pseudo-real-time temporal association between source and destination, or source and network, or destination and network;
    * provided that the above two conditions are met, this group <u>covers</u> arrangements relating to
        1. the transmission of the multimedia data itself,
        2. the user-to-user, user-to-network, inter-network or intra-network signalling supporting:
            a. the establishment of a session for the subsequent transmission of the multimedia data, or
            b. the maintenance of the session or
            c. the application services available to the user during the session (unless explicitly excluded in certain cases).

2. This group <u>does not cover</u>:
    * non-real-time multimedia file transfer, which is covered by *group* H04L 29/08117.
    * multimedia store or forward messaging as in e-mail, MMS or the like, which is *are* covered by H04L 12/58 *group H04L 51/00*
    * analogue multimedia streaming, as in analogue television systems, which is covered by *groups* H04N 7/00 and *or* H04N 5/00
    * bit streaming, i.e. not packet-based, *such* as in ISDN*,* which is covered by *group* H04Q 11/04
    * instant messaging, which is covered by H04L 12/581 *group H04L 51/04*

- any other multimodal data communications which do not meet the conditions of being packet-based and real-time or pseudo-real-time.

3. In this group the following terms or expressions are used with the meaning indicated:
- H.323 means International Telecommunication Union Recommendation no. 323, series H, entitled "Packet-based multimedia communications systems"
- IP means Internet Protocol
- IMS means IP Multimedia Subsystem
- ISDN means Integrated Services Digital Network
- MGC means Media Gateway Control/Controller
- MGCP means Media Gateway Control Protocol
- MMS means Multimedia Messaging Service
- PBX means Private Branch Exchange
- PSTN means Public Switched Telephone Network
- QoS means Quality of Service
- RTP means Real Time Protocol
- RTCP means Real Time Control Protocol
- SIP means Session Intiation Protocol
- SPAM means unsolicited electronic mail
- SPIT means SPAM Prevention in IP Telephony

<u>WARNING</u>

Group H04L 29/06176 or subgroups are not complete pending reorganisation. See also H04L 29/06027

	H04L 29/06183	· · · · {Signalling, control or architecture (~~selecting or control in telephonic networks H04Q 3/00;~~ data network management ~~H04L 12/24~~*H04L 41/00*; data network testing or monitoring ~~H04L 12/26~~*H04L 43/00; selecting or control in telephonic networks H04Q 3/00*)}
U	H04L 29/06319	· · · · · {Session control}
U	H04L 29/0634	· · · · · · {Screening (arrangements for screening incoming telephone calls H04M 3/436; arrangements for network security H04L 29/06551)}
	H04L 29/06346	· · · · · · · {of unsolicited session attempts, e.g. SPIT [SPAM prevention in IP telephony] (message switching systems ~~H04L 12/58~~*H04L 51/00*)}
U	H04L 29/06387	· · · · {Services or applications (systems providing special services to telephonic subscribers H04M 3/42; contact center services H04M 3/51; information services comprising voice H04M 3/487)}
U	H04L 29/06394	· · · · · {Services involving a main real time session and one or more additional parallel sessions (multichannel or multilink protocols H04L 29/06088; services and arrangements where telephone services are combined with data services H04M 7/0024)}
	H04L 29/06408	· · · · · · {where none of the additional parallel sessions is real time or time sensitive, e.g. downloading a file in a parallel FTP session, initiating an email, combinational services (*web-based applications H04L 29/0809;* file transfer H04L 29/08117~~; WEB based applications H04L 29/0809~~; message switching systems ~~H04L 12/58~~*H04L 51/00*; instant messaging ~~H04L 12/581~~*H04L 51/04*)}
U	H04L 29/08	· · · Transmission control procedure, e.g. data link level control procedure
	H04L 29/08081	· · · · {Protocols for network applications (~~message switching systems H04L 12/58;~~ protocols for multimedia communication H04L 29/06027; protocols for telewriting H04L 29/06034*; message switching systems H04L 51/00*)}
U	H04L 29/0809	· · · · · {involving the use of web-based technology, e.g. Hyper Text Transfer Protocol [HTTP], (information retrieval from the Internet G06F 17/30861)}

H04L 29/08099 · · · · · · {for remote control or remote monitoring (~~Network~~*network* management using Internet technology ~~H04L 12/2408~~*H04L 41/0246*; ~~Network~~*network* monitoring ~~H04L 12/2602~~*H04L 43/00*)}

U H04L 29/08558 · · · · · {adapted for proprietary or special purpose networking environments, e.g. medical networks, sensor networks, networks in a car (digital computing or data processing equipment or methods, specially adapted for specific applications G06F 19/00; home automation networks H04L 12/2803; total factory control characterised by the network communication G05B 19/4185; games involving transmission A63F 13/30)}

H04L 29/08567 · · · · · · {involving the management of devices over a network (~~network management H04L 12/24;~~ device management using web-based technology H04L 29/08099*; network management H04L 41/00*)}

Project: N/A (H04L)

H04L 29/08657 · · · · · {in which the network application is adapted for the location of the user terminal (~~services specially adpated for wireless communication networks making use of the location of users or terminals H04W 4/02~~*services specially adapted for wireless communication networks making use of the location of users or terminals H04W 4/02*)}

Project: RP0124 (H04L)

H04L 29/08675 · · · · · {Arrangements for tracking the activity of the application user (monitoring arrangements in general ~~H04L 12/2602~~*H04L 43/00*~~; e-ommerce G06Q 30/00~~*; e-commerce G06Q 30/00*)}

H04L 29/08684 · · · · · {Arrangements for presence management (instant messaging ~~H04L 12/581~~*H04L 51/04*)}

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 12/24~~*H04L 41/00*; monitoring provisions ~~H04L 12/2602~~*H04L 43/00*~~; 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~~)}

UNDERLINE 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 29/08738 · · · · · · {Arrangements for data redirection (~~load balancing H04L 29/08144;~~ access network selection H04L 12/5691~~; routing path selection H04L 12/5689~~*; load balancing H04L 29/08144*; context based routing H04L 29/08972; addressing aspects H04L 29/12009*; routing path selection H04L 45/00*)}

H04L 29/0899 · · · · · {involving the display to the application user of network conditions affecting the network application (~~graphical user interfaces for network management H04L 12/2458;~~ terminal emulation H04L 29/08126*; graphical user interfaces for network management H04L 41/22*)}

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 29/1215 | · · · · {Directories for electronic mail or instant messaging (message switching systems per se ~~H04L 12/58~~*H04L 51/00*)} |

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 61/1564

| U | 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; 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 29/12707 | · · · · {Name types} |

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 61/306

| | H04L 29/12726 | · · · · · {E-mail addresses (message switching systems ~~H04L 12/58~~*H04L 51/00*)} |

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 61/307

| U | **H04L 41/00** | **{Arrangements for maintenance or administration or management of packet switching networks}** |

| 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} |

	H04L 41/5019	⋅ ⋅ {Ensuring SLA (flow or congestion control at network level ~~H04L 12/569~~ *H04L 47/10*)}
U	H04L 41/508	⋅ ⋅ {based on type of value added network service under agreement}
	H04L 41/5093	⋅ ⋅ ⋅ {wherein the managed service relates to messaging or chat services (~~messaging, such as e-mail in packet-switching networks H04L 12/58;~~ conducting a computer conference H04L 12/1822*; messaging, such as e-mail in packet-switching networks H04L 51/00*; instant messaging ~~H04L 12/581~~*H04L 51/04*)}

U H04L 47/00 **{Traffic regulation in packet switching networks (arrangements for detecting or correcting errors in the information received H04L 1/00)}**

NOTE

This group covers:
1. Flow control or congestion control
2. Queue scheduling
3. Admission control or resource allocation

U	H04L 47/10	⋅ {Flow control or congestion control}
U	H04L 47/24	⋅ ⋅ {depending on the type of traffic, e.g. priority or quality of service [QoS] (Network arrangements for networked applications for scheduling or organising the servicing of application requests whereby quality of service or priority requirements are taken into account H04L 67/322)}
	H04L 47/2425	⋅ ⋅ ⋅ {Service specification, e.g. SLA (general aspects of SLA management ~~H04L 12/2417~~*H04L 41/50*)}

M H04L 61/00 **{Network arrangements or network protocols for addressing or naming}**

NOTE

This group does not cover:
- ~~Aspects~~*aspects* relating to switching or routing which are ~~classified in~~*covered by groups* H04L 45/00 or H04L 49/00~~, respectively.~~*;*
- ~~Aspects~~*aspects* relating to configuration management of data networks or network elements in general*,* which are ~~classified in~~*covered by group* H04L 41/08~~.~~
- ~~Aspects~~*aspects* of addressing in telephony which are ~~classified in~~*covered by group* H04M 7/00~~.~~*;*
- ~~Aspects~~*aspects* of addressing within devices, e.g. process or memory, which are ~~classified in~~*covered by groups* G06F 13/42 or G06F 12/00.

U H04L 63/00 **{Network architectures or network communication protocols for network security (cryptographic mechanisms or cryptographic arrangements for secret or secure communication H04L 9/00; network architectures or network communication protocols for wireless network security H04W 12/00; security arrangements for protecting computers or computer systems against unauthorised activity G06F 21/00)}**

U	H04L 63/02	⋅ {for separating internal from external traffic, e.g. firewalls}
	H04L 63/0227	⋅ ⋅ {Filtering policies (mail message filtering ~~H04L 12/585~~*H04L 51/12*)}
	H04L 63/10	⋅ {for controlling access to network resources (restricting network management access ~~H04L 12/2461~~*H04L 41/28*)}
U	H04L 63/14	⋅ {for detecting or protecting against malicious traffic}
	H04L 63/1408	⋅ ⋅ {by monitoring network traffic (monitoring network traffic per se ~~H04L 12/2602~~*H04L 43/00*)}

M   H04L 65/00   **{Network arrangements or protocols for real-time communications (computer conference H04L 12/1813; real time or near real time messaging in message switching systems, e.g. instant messaging** ~~H04L 12/581~~*H04L 51/04*; *network applications in general H04L 67/00*; *systems providing special services to telephonic subscribers H04M 3/42*; *interconnection arrangements between switching centres for working between exchanges having different types of switching equipment where the types of switching equipment comprise PSTN/ISDN equipment and equipment of networks other than PSTN/ISDN H04M 7/1205*; **television systems H04N 7/00; selective video distribution H04N 21/00**~~; interconnection arrangements between switching centres for working between exchanges having different types of switching equipment where the types of switching equipment comprise PSTN/ISDN equipment and equipment of networks other than PSTN/ISDN H04M 7/1205; systems providing special services to telephonic subscribers H04M 3/42; network applications in general H04L 67/00~~**)}**

NOTES

1. {This group <u>covers</u>:
   - only communications which fulfill the following two conditions:
       i. they are based on packet data;
       ii. there is real-time or pseudo-real-time temporal association between source and destination, or source and network, or destination and network;
   - provided that the above two conditions are met, this group <u>covers</u> arrangements relating to
       a. the transmission of the multimedia data itself,
       b. the user-to-user, user-to-network, inter-network or intra-network signalling supporting:

       > b1. the establishment of a session for the subsequent transmission of the multimedia data, or
       > b2. the maintenance of the session or
       > b3. the application services available to the user during the session (unless explicitly excluded in certain cases).
}

2. {This group <u>does not cover</u>:
   - non-real-time multimedia file transfer, which is covered by *group H04L 67/06*;
   - multimedia store or forward messaging as in e-mail, MMS or the like, which is covered by ~~H04L 12/58~~*group H04L 51/00*;
   - analogue video streaming, as in analogue television systems, which is covered by *group* H04N 7/00;
   - selective distribution of MPEG elementary or transport streams, containing video and*/or* additional data, which is covered by *group* H04N 21/00;
   - bit streaming, i.e. not packet-based, *such* as in ISDN*,* which is covered by *group* H04Q 11/0428;
   - instant messaging, which is covered by ~~H04L 12/581~~*group H04L 51/04;*
   - any other multimodal data communications which do not meet the conditions of being packet-based and real-time or pseudo-real-time*;*
   - flow control in packet switching networks, which is covered by ~~H04L 12/569~~*group H04L 47/10*.
}

3. {In this group the following terms or expressions are used with the meaning indicated:
   - H.323 means International Telecommunication Union Recommendation no. 323, series H, entitled "Packet-based multimedia communications systems"
   - IP means Internet Protocol
   - IMS means IP Multimedia Subsystem

- ISDN means Integrated Services Digital Network
- MGC means Media Gateway Control/Controller
- MGCP means Media Gateway Control Protocol
- MMS means Multimedia Messaging Service
- PBX means Private Branch Exchange
- PSTN means Public Switched Telephone Network
- QoS means Quality of Service
- RTP means Real Time Protocol
- RTCP means Real Time Control Protocol
- RTSP means Real Time Streaming Protocol.
- SIP means Session Initiation Protocol
- SPAM means unsolicited electronic mail
- SPIT means SPAM Prevention in IP Telephony

}

	H04L 65/10	· {Signalling, control or architecture (selecting or control in telephonic networks H04Q 3/00; data network management H04L 12/24*H04L 41/00*; data network testing or monitoring H04L 12/26*H04L 43/00*; admission control or resource reservation in packet switching networks H04L 12/5695*H04L 47/70*; control signalling related to video distribution H04N 21/63*; selecting or control in telephonic networks H04Q 3/00*)}
	H04L 65/1066	· · {Session control (conducting a computer conference, e.g. admission, detection, selection or grouping of participants, correlating users to one or more conference session or prioritising transmission*,* H04L 12/1822; admission control/resource reservation in packet switching networks H04L 12/5695*H04L 47/70*)}
	H04L 65/1069	· · · {Setup (computer conference organisation arrangements, e.g. handling schedules, setting up parameters needed by nodes to attend a conference, booking network resources or notifying involved parties H04L 12/1818; session management in network applications H04L 67/14*; admission control or resource reservation in packet switching networks H04L 47/70*; arrangements for peer-to-peer networking in network applications H04L 67/104*; session management in network applications H04L 67/14*; negotiation of communication capabilities H04L 69/24; admission control or resource reservation in packet switching networks H04L 12/5695*)}
U	H04L 65/1076	· · · {Screening (arrangements for screening incoming telephone calls H04M 3/436; arrangements for network security H04L 63/00)}
	H04L 65/1079	· · · · {of unsolicited session attempts, e.g. SPIT (message switching systems, e.g. electronic mail systems, with filtering and selective blocking capabilities H04L 12/585*H04L 51/12*)}
	H04L 65/40	· {Services or applications (*network service management for ensuring proper service fulfilment H04L 41/50; information services comprising voice H04M 3/487;* systems providing special services to telephonic subscribers H04M 3/42; contact center services H04M 3/51; information services comprising voice H04M 3/487; network service management for ensuring proper service fulfilment H04L 12/2464)}
	H04L 65/4007	· · {Services involving a main real-time session and one or more additional parallel sessions (real time messaging, e.g. instant messaging, interacting with other applications or services H04L 12/582*H04L 51/046*; multichannel or multilink protocols H04L 69/14; services and arrangements where telephone services are combined with data services H04M 7/0024)}
	H04L 65/4023	· · · {where none of the additional parallel sessions is real time or time sensitive, e.g. downloading a file in a parallel FTP session, initiating an email or combinational services (file transfer H04L 67/06; WEB based applications H04L 67/02; message switching systems H04L 12/58*H04L 51/00*; instant messaging H04L 12/581*H04L 51/04; file transfer H04L 67/06; web-based applications H04L 67/02*)}

U   H04L 65/60   · {Media handling, encoding, streaming or conversion}

H04L 65/601   · · {Media manipulation, adaptation or conversion (~~transmission of television signals using pulse code modulation H04N 7/24;~~ *computer conferences, network arrangements for conference optimisation or adaptation H04L 12/1827; flow control or congestion control in packet switching networks H04L 47/10; message switching systems, e.g. electronic mail systems, with message adaptation based on network or terminal capabilities H04L 51/06;* adaptation for terminals or networks with limited resources or for terminal portability H04L 67/04~~; involving interrnediate processing or storage in the network H04L 67/28~~; network application being adapted for the location of the user terminal H04L 67/18~~; computer conferences, network arrangements for conference optimisation or adaptation H04L 12/1827; message switching systems, e.g. electronic mail systems, with message adaptation based on network or terminal capabilities H04L 12/5825; flow control or congestion control in packet switching networks H04L 12/569~~*; involving interrnediate processing or storage in the network H04L 67/28; transmission of television signals using pulse code modulation H04N 7/24*)}

H04L 65/80   · {QoS aspects (*monitoring of the downstream path of a video distribution network H04N 21/2402, H04N 21/44209; network service management, ensuring proper service fulfillment according to an agreement or contract between two parties, e.g. between an IT-provider and a customer H04L 41/50; monitoring arrangements, testing arrangements, with monitoring of QoS metrics H04L 43/08;* traffic-type related flow control in packet switching networks, e.g. priorities or QoS H04L 47/24; admission control/resource reservation in packet switching networks based on QoS or priority awareness H04L 47/805~~; monitoring arrangements, testing arrangements, with monitoring of QoS metrics H04L 12/2634; arrangements for scheduling or organising the servicing of requests whereby quality of service or priority requirements are taken into account H04L 67/322; network service management, ensuring proper service fulfillment according to an agreement or contract between two parties, e.g. between an IT-provider and a customer H04L 12/2464~~; adaptation for terminals or networks with limited resources, or for terminal portability H04L 67/04~~; reducing the amount or size of exchanged application data H04L 67/2828~~; network application adapted for the location of the user terminal H04L 67/18~~; monitoring of the downstream path of a video distribution network H04N 21/2402, H04N 21/44209~~*; reducing the amount or size of exchanged application data H04L 67/2828; arrangements for scheduling or organising the servicing of requests whereby quality of service or priority requirements are taken into account H04L 67/322*)}

U   **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; 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 <u>does not cover</u>:
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

U	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)}
	H04L 67/025	‣ ‣ {for remote control or remote monitoring of the application (~~management of end-device applications over a special purpose or proprietor network H04L 67/125;~~ network management using Internet technology ~~H04L 12/2408~~*H04L 41/0246*; network monitoring ~~H04L 12/2602~~*H04L 43/00; management of end-device applications over a special purpose or proprietor network H04L 67/125*)}
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 67/1034	‣ ‣ ‣ {Reaction to server failures by a load balancer (~~techniques for recovering from a failure of a protocol instance or entity H04L 69/40;~~ *network fault restoration H04L 41/0654;* departure or maintenance mechanisms in Peer-to-Peer networks H04L 67/1048; intermediate processing providing operational support to end devices by emulation or by off-loading in the network H04L 67/2861~~; network fault restoration H04L 12/2422~~*; techniques for recovering from a failure of a protocol instance or entity H04L 69/40*; error detection or correction of the data by redundancy in hardware G06F 11/16; failing over workload from one server to another one G06F 11/202)}
U	H04L 67/12	‣ {adapted for proprietary or special purpose networking environments, e.g. medical networks, sensor networks, networks in a car or remote metering networks (digital computing or data processing equipment or methods, specially adapted for specific applications in healthcare or life sciences G06F 19/00; home automation networks H04L 12/2803; total factory control characterised by the network communication G05B 19/4185; games involving transmission systems A63F 13/30)}
	H04L 67/125	‣ ‣ {involving the control of end-device applications over a network (~~end-device control or monitoring using web-based technology H04L 67/025;~~ network management of network elements ~~H04L 12/24~~*H04L 41/00; end-device control or monitoring using web-based technology H04L 67/025*)}

H04L 67/16	· {Service discovery or service management, e.g. service location protocol [SLP] or Web services (*network service management for ensuring proper service fulfilment according to an agreement or contract between two parties H04L 41/50;* address allocation to terminals or nodes connected to a network H04L 61/30; mobile application services specially adapted for wireless communication networks H04W 4/00~~; network service management for ensuring proper service fulfilment according to an agreement or contract between two parties H04L 12/2464~~)}
H04L 67/22	· {Tracking the activity of the user (~~recording of computer activity G06F 11/34;~~ network monitoring arrangements ~~H04L 12/2602~~*H04L 43/00; recording of computer activity G06F 11/34*; e-commerce G06Q 30/00)}
H04L 67/24	· {Presence management (use and manipulation of presence information in instant messaging ~~H04L 12/5815~~*H04L 51/043*)}
H04L 67/28	· {for the provision of proxy services, e.g. intermediate processing or storage in the network (network management provisions ~~H04L 12/24~~*H04L 41/00*; network monitoring provisions ~~H04L 12/2602~~*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~~; proxies for network security H04L 63/0281~~)}
H04L 67/2823	· · {for conversion or adaptation of application content or format (~~protocol conversion H04L 69/08;~~ *message adaptation based on network or terminal capabilities H04L 51/06;* media manipulation, adaptation or conversion in real-time communications H04L 65/601~~; message adaptation based on network or terminal capabilities H04L 12/5825~~*; protocol conversion H04L 69/08*; optimising visualization of content for web browsing G06F 17/30905)}
H04L 67/32	· {for scheduling or organising the servicing of application requests, e.g. requests for application data transmissions involving the analysis and optimisation of the required network resources (~~intermediate grouping or aggregating of service requests H04L 67/2833;~~ *computer conference arrangements H04L 12/1813;* broadcast or conference with schedule organisation H04L 12/1881~~; computer conference arrangements H04L 12/1813~~; network service management, ensuring proper service fulfilment according to an agreement or contract between two parties ~~H04L 12/2464~~*H04L 41/50; intermediate grouping or aggregating of service requests H04L 67/2833*)}
H04L 67/322	· · {whereby quality of service [QoS] or priority requirements are taken into account (~~QoS aspects in real-time communications H04L 65/80;~~ monitoring of QoS metrics ~~H04L 12/2634~~*H04L 43/08; QoS aspects in real-time communications H04L 65/80*)}
H04L 67/34	· {involving the movement of software or configuration parameters (~~programme loading or initiating G06F 9/445;~~ *configuration management of network or network elements H04L 41/08;* remote booting G06F 9/4416~~; configuration management of network or network elements H04L 12/2424~~*; programme loading or initiating G06F 9/445*)}
H04L 67/36	· {involving the display of network or application conditions affecting the network application to the application user (graphical user interfaces for network management ~~H04L 12/2458~~*H04L 41/22*)}

	H04L 69/00	**{Application independent communication protocol aspects or techniques in packet data networks (~~interconnection arrangements between CPUs, memories, or peripherals within a single computer G06F 13/00;~~ data switching networks <u>H04L 12/00</u>~~; flow control H04L 12/569; routing of packets H04L 12/5689~~; broadcast or multicast <u>H04L 12/18</u>; network topologies, i.e. networks characterized by the path configuration, media access control <u>H04L 12/28</u>; hybrid switching systems <u>H04L 12/64</u>; gateways <u>H04L 12/66</u>; network management ~~H04L 12/24~~<u>H04L 41/00</u>; network monitoring or testing ~~H04L 12/26~~<u>H04L 43/00</u>; ~~network topologies, i.e. networks characterized by the path configuration, media access control H04L 12/28; intermediate storage or scheduling H04L 12/5694~~; routing of packets <u>H04L 45/00</u>; flow control <u>H04L 47/10</u>; packet switches and switching fabrics ~~H04L 12/5696~~<u>H04L 49/00</u>; intermediate storage or scheduling <u>H04L 49/90</u>; message switching systems, e.g. email, ~~H04L 12/58~~<u>H04L 51/00</u>; ~~broadcast or multicast H04L 12/18; hybrid switching systems H04L 12/64; gateways H04L 12/66~~; interconnection arrangements between CPUs, memories, or peripherals within a single computer <u>G06F 13/00</u>; transmission systems <u>H04B</u>; networks specially adapted for wireless communication <u>H04W</u>~~; transmission systems H04B~~)}**
	H04L 69/08	⋅ {Protocols for interworking or protocol conversion (arrangements for connecting between networks having differing types of switching systems, e.g. gateways, <u>H04L 12/66</u>; network management protocols conversion ~~H04L 12/2405~~<u>H04L 41/0226</u>)}
	H04L 69/16	⋅ {Transmission control protocol/internet protocol [TCP/IP] or user datagram protocol [UDP] (*flow control or congestion control in data switching networks <u>H04L 47/10</u>;* transport layer addressing aspects <u>H04L 61/6063</u>~~; network layer protocol adaptations for supporting mobility, e.g. mobile IP, H04W 80/04; flow control or congestion control in data switching networks H04L 12/569~~; *special adaptations of TCP, UDP or IP for interworking of IP based networks with other networks <u>H04L 69/169</u>*; adapting video multiplex streams to a specific network <u>H04N 21/2381</u>~~; special adaptations of TCP, UDP or IP for interworking of IP based networks with other networks H04L 69/169~~; *network layer protocol adaptations for supporting mobility, e.g. mobile IP, <u>H04W 80/04</u>*)}
	H04L 69/22	⋅ {Header parsing or analysis (traffic monitoring by flow aggregation or filtering ~~H04L 12/2605~~<u>H04L 43/02</u>; flow identification in packet switching networks <u>H04L 47/2483</u>)}
U	H04L 69/30	⋅ {Definitions, standards or architectural aspects of layered protocol stacks}
U	H04L 69/32	⋅ ⋅ {High level architectural aspects of 7-layer open systems interconnection [OSI] type protocol stacks}
U	H04L 69/322	⋅ ⋅ ⋅ {Aspects of intra-layer communication protocols among peer entities or protocol data unit [PDU] definitions}
	H04L 69/325	⋅ ⋅ ⋅ ⋅ {in the network layer, i.e. layer three, e.g. X.25 (packet switching systems, packet routing ~~H04L 12/5689~~<u>H04L 45/00</u>; TCP/IP <u>H04L 69/16</u>)}
	H04L 69/40	⋅ {Techniques for recovering from a failure of a protocol instance or entity, e.g. failover routines, service redundancy protocols, protocol state redundancy or protocol service redirection in case of a failure or disaster recovery (~~reactions to failures of replicated servers by a load balancer H04L 67/1034; departure or maintenance mechanisms in peer-to-peer networks H04L 67/1048; intermediate processing of operational support to end devices when they are unavailable, H04L 67/2861;~~ network fault management ~~H04L 12/2419~~<u>H04L 41/06</u>; route fault recovery in network routing <u>H04L 45/28</u>; fault recovery in packet switches <u>H04L 49/557</u>; *reactions to failures of replicated servers by a load balancer <u>H04L 67/1034</u>; departure or maintenance mechanisms in peer-to-peer networks <u>H04L 67/1048</u>; intermediate processing of operational support to end devices when they are unavailable, <u>H04L 67/2861</u>*)}

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Project: RP0124 (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 1/72	· Substation extension arrangements; Cordless telephones, i.e. devices for establishing wireless links to base stations without route selecting {(constructional features of cordless telephones H04M 1/0202)}
U	H04M 1/725	· · Cordless telephones {(for handsfree use H04M 1/6041)}
U	H04M 1/72519	· · · {Portable communication terminals with improved user interface to control a main telephone operation mode or to indicate the communication status}
U	H04M 1/72522	· · · · {With means for supporting locally a plurality of applications to increase the functionality (for selecting a function in a menu H04M 1/2477)}
	H04M 1/72547	· · · · · {with interactive input/output means for internally managing multimedia messages (~~Mail~~*mail* systems for messages comprising audio and non-audio components H04M 3/5307; ~~Message~~*message* switching systems ~~H04L 12/58~~*H04L 51/00*)}

U	H04M 3/00	**Automatic or semi-automatic exchanges {(constructional details of telephone exchanges H04Q 1/02)}**
U	H04M 3/42	· Systems providing special services or facilities to subscribers
U	H04M 3/50	· · Centralised arrangements for answering calls; Centralised arrangements for recording messages for absent or busy subscribers (H04M 3/487 takes precedence; Centralised dictation systems H04M 11/10); {Centralised arrangements for recording messages}
U	H04M 3/51	· · · Centralised call answering arrangements requiring operator intervention, {e.g. call or contact centers for telemarketing}
	H04M 3/5141	· · · · {Details of processing calls and other types of contacts in an unified manner (unified messaging in packet-switching networks ~~H04L 12/589~~*H04L 51/36*)}

Project: RP0165 (H04N)

U	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)}**
U	H04N 1/40	· Picture signal circuits (H04N 1/387 takes precedence)
D	H04N 1/40018	· · ~~{Halftoning, i.e. converting the picture signal of a continuous-tone original into a corresponding signal showing only two levels}~~
		~~WARNING~~
		~~The group H04N 1/40018 is no longer used for the classification of new documents as from April 1st, 2004. The backlog of this group is being continuously reclassified to H04N 1/405 and sub-groups~~
M	H04N 1/405	· · Halftoning, i.e. converting the picture signal of a continuous-tone original into a corresponding signal showing only two levels
		~~WARNING~~
		~~H04N 1/405 and sub-groups, except for H04N 1/4056 are not complete, see H04N 1/40018~~

Project: N/A (H04N)

U	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

U	H04N 5/44	· Receiver circuitry (H04N 5/14 takes precedence)
U	H04N 5/445	· · for displaying additional information (H04N 5/50 takes precedence)
U	H04N 5/44591	· · · {the additional information being displayed in a separate window, e.g. by using splitscreen display}
	H04N 2005/44595	· · · · {the separate window being opened at the ~~occurence~~ *occurrence* of a selection of a menu option or item}

Project: RP0124 (H04N)

U	H04N 21/00	**Selective content distribution, e.g. interactive television, VOD [Video On Demand] (broadcast communication H04H; 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 covers :
- 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, 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 d

ownstream - 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

U	H04N 21/20	· Servers specifically adapted for the distribution of content, e.g. VOD servers; Operations thereof
U	H04N 21/23	· · Processing of content or additional data; Elementary server operations; Server middleware

U	H04N 21/235	· · · Processing of additional data, e.g. scrambling of additional data, processing content descriptors {(arrangements for simultaneous broadcast of plural pieces of information H04H 20/28)}
	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; message adaptation based on network or terminal capabilities in stored and forward packet switching H04L 12/5825; 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*)}
	H04N 21/238	· · · Interfacing the downstream path of the transmission network, e.g. adapting the transmission rate of a video stream to network bandwidth; Processing of multiplex streams {(hybrid Fiber Coaxial HFC networks for downstream channel allocation for video distribution H04L 12/2801; flow control in packet networks H04L 12/569; formation of RTP packets H04L 29/06176; application layer Quality of Service and content dependent routing H04L 29/08945*; flow control in packet networks H04L 47/10*)}
	H04N 21/2385	· · · · Channel allocation (H04N 21/266 takes precedence); Bandwidth allocation (H04N 21/24 takes precedence {; allocation of channels according to the instantaneous demands of the users in time-division multiplex systems H04J 3/1682*; admission control, resource allocation in open networks H04L 12/5692*; arrangements for maintenance or administration in data switching networks involving bandwidth and capacity management H04L 12/2439*H04L 41/0896; Admission control, resource allocation in open networks H04L 12/5692*; negotiating bandwidth in wireless networks H04W 28/16)}
	H04N 21/239	· · · Interfacing the upstream path of the transmission network, e.g. prioritizing client {content} requests (hybrid Fiber Coaxial [HFC] networks for upstream channel allocation for video distribution H04L 12/2801; flow control in data networks H04L 12/569; formation of RTP packets H04L 29/06176; application layer Quality of Service and content dependent routing of client requests H04L 29/08945*; flow control in data networks H04L 47/10*)
U	H04N 21/24	· · · Monitoring of processes or resources, e.g. monitoring of server load, available bandwidth, upstream requests {(monitoring of server performance or load G06F 11/34; arrangements for observation, testing or troubleshooting for broadcast or for distribution combined with broadcast H04H 20/12)}
	H04N 21/2402	· · · · {Monitoring of the downstream path of the transmission network, e.g. bandwidth available (traffic monitoring in data switching networks H04L 12/2418*H04L 43/00*; monitoring data switching networks utilization H04L 12/2668*H04L 43/0876*)}
	H04N 21/2408	· · · · {Monitoring of the upstream path of the transmission network, e.g. client requests (monitoring data switching networks utilization H04L 12/2668; protocols for scheduling and organising the servicing of requests in network applications in communication control or processing H04L 29/08945*; monitoring data switching networks utilization H04L 43/0876*)}
	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 12/24*H04L 41/00*)}

	H04N 21/254	· · · Management at additional data server, e.g. shopping server, rights management server {(~~arrangements for maintenance or administration in data networks H04L 12/24; Protocols~~*protocols* involving third party service providers for network applications in communication control or processing <u>H04L 29/08666</u>*; arrangements for maintenance or administration in data networks <u>H04L 41/00</u>*)}
	H04N 21/2541	· · · · {Rights Management (protecting software against unauthorised usage in a vending or licensing environment <u>G06F 21/10</u>~~; security in data switching network management H04L 12/2461~~; security management or policies for network security <u>H04L 29/06986</u>*; security in data switching network management <u>H04L 41/28</u>*; access security in wireless networks <u>H04W 12/08</u>)}
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 <u>H04H 60/66</u>; data switching network applications involving user or terminal profiles <u>H04L 29/08918</u>)}
	H04N 21/25866	· · · · {Management of end-user data (customer care in data networks ~~H04L 12/249~~*<u>H04L 41/5077</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 <u>G06F 9/4881</u>; arrangements for scheduling broadcast services or broadcast-related services <u>H04H 60/06</u>~~; flow control in packet networks H04L 12/569~~; 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 <u>H04L 29/08963</u>*; flow control in packet networks <u>H04L 47/10</u>*)}
U	H04N 21/26208	· · · · {the scheduling operation being performed under constraints}
	H04N 21/26216	· · · · · {involving the channel capacity, e.g. network bandwidth (~~flow control in packet networks H04L 12/569;~~ admission control, resource allocation in open networks <u>H04L 12/5692</u>; protocols for scheduling and organising the servicing of requests, whereby quality of service and priority requirements are taken into account in network applications in communication control or processing <u>H04L 29/08954</u>*; flow control in packet networks <u>H04L 47/10</u>*)}
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 <u>G06F 17/30867</u>; arrangements for replacing or switching information during the broadcast <u>H04H 20/10</u>; push services over packet-switching network <u>H04L 12/1859</u>; adaptation of message content in packet-switching networks ~~H04L 12/583~~*<u>H04L 51/063</u>*)}
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 <u>H04H 20/38</u>; arrangements specially adapted for receiving broadcast information <u>H04H 40/00</u>)}

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)}
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; adaptation of message content in packet-switching networks H04L 12/5835; Media*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 21/437	· · · Interfacing the upstream path of the transmission network, e.g. for transmitting client requests to a VOD server {(flow control in data networks H04L 12/569; formation of RTP packets H04L 29/06176; application layer Quality of Service and content dependent routing of client requests H04L 29/08945*; flow control in data networks H04L 47/10*)}
	H04N 21/438	· · · Interfacing the downstream path of the transmission network originating from a server, e.g. retrieving MPEG packets from an IP network {(transmission of MPEG streams over ATM H04L 12/5601*; flow control in data networks H04L 12/569; processing of real-time packets H04L 29/06176*; flow control in data networks H04L 47/10*)}
U	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; monitoring in wireless networks H04W 24/00)}
	H04N 21/44209	· · · · {Monitoring of downstream path of the transmission network originating from a server, e.g. bandwidth variations of a wireless network (arrangements for maintenance or administration in data switching networks involving bandwidth and capacity management H04L 12/2439*H04L 41/0896*)}
	H04N 21/44227	· · · · {Monitoring of local network, e.g. connection or bandwidth variations; Detecting new devices in the local network (configuring of peripheral devices in general G06F 9/4411; monitoring connectivity in data switched networks H04L 12/2639*H04L 43/0811*)}
	H04N 21/44231	· · · · {Monitoring of peripheral device or external card, e.g. to detect processing problems in a handheld device or the failure of an external recording device (configuring of peripheral devices in general G06F 9/4411; monitoring the status of connected device in data switched networks H04L 12/2642; reporting information sensed by appliance or service execution status of appliance services in a home automation network H04L 12/2823*; monitoring the status of connected device in data switched networks H04L 43/0817*)}
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 21/4516	· · · · {involving client characteristics, e.g. Set-Top-Box type, software version, amount of memory available (allocation of resources considering ~~software~~*hardware* capabilities ~~G06F 9/5055~~*G06F 9/5044; Allocation of resources considering hardware capabilities G06F 9/5044; message adaptation based on network or terminal capabilities in packet switching networks H04L 12/5825*; *allocation of resources considering software capabilities G06F 9/5055*; protocols involving terminal profiles for network applications in communication control or processing H04L 29/08927*; message adaptation based on network or terminal capabilities in packet switching networks H04L 51/06*; processing of terminal status or physical abilities in wireless networks H04W 8/22)}
	H04N 21/454	· · · Content or additional data filtering, e.g. blocking advertisements {(filtering and selective blocking of messages over packet-switching networks ~~H04L 12/585~~*H04L 51/12*)}
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 21/4621	· · · · {Controlling the complexity of the content stream or additional data, e.g. lowering the resolution or bit-rate of the video stream for a mobile client with a small screen (arrangements for using the results of monitoring on user's side in broadcast systems H04H 60/65; flow control in packet networks ~~H04L 12/569~~*H04L 47/10*)}
	H04N 21/4627	· · · · Rights management {associated to the content (protecting software against unauthorised usage in a vending or licensing environment G06F 21/10~~; security in data switching network management H04L 12/2461~~; 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)}
U	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 21/472	· · · 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; content on demand in one way streaming for real-time multimedia communications H04L 29/06462)}
	H04N 21/47214	· · · · {for content reservation or setting reminders; for requesting event notification, e.g. of sport results or stock market (~~notification of incoming messages in packet switching networks H04L 12/587;~~ stock exchange data over packet-switching network H04L 12/1804; push services over packet-switching network H04L 12/1859*; notification of incoming messages in packet switching networks H04L 51/24*)}
U	H04N 21/478	· · · Supplemental services, e.g. displaying phone caller identification, shopping application
	H04N 21/4786	· · · · e-mailing {(message switching systems, e.g. electronic mail systems ~~H04L 12/58~~*H04L 51/00*)}

U	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} 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)
	H04N 21/633	· · · Control signals issued by server directed to the network components or client {(management of faults, events, alarms in data networks ~~H04L 12/2419~~*H04L 41/06*)}
U	H04N 21/637	· · · Control signals issued by the client directed to the server or network components
	H04N 21/6373	· · · · for rate control {, e.g. request to the server to modify its transmission rate (flow control in packet networks ~~H04L 12/569~~*H04L 47/10*)}
U	H04N 21/647	· · · Control signaling between network components and server or clients; Network processes for video distribution between server and clients, e.g. controlling the quality of the video stream, by dropping packets, protecting content from unauthorized alteration within the network, monitoring of network load, bridging between two different networks, e.g. between IP and wireless {(signalling, control or architecture for real-time multimedia communications H04L 29/06183)}
	H04N 21/64723	· · · · {Monitoring of network processes or resources, e.g. monitoring of network load (traffic related reporting in data switching networks ~~H04L 12/2626~~*H04L 43/062*)}
	H04N 21/64738	· · · · · {Monitoring network characteristics, e.g. bandwidth, congestion level (data switched network analysis ~~H04L 12/2414~~*H04L 41/14*; monitoring functioning in data switched networks ~~H04L 12/2642~~*H04L 43/0817*; flow control in packet networks ~~H04L 12/569~~*H04L 47/10*)}
U	H04N 21/64746	· · · · {Control signals issued by the network directed to the server or the client}
U	H04N 21/64761	· · · · · {directed to the server}
	H04N 21/64769	· · · · · · {for rate control (flow control in packet networks ~~H04L 12/569~~*H04L 47/10*)}
	H04N 21/64784	· · · · {Data processing by the network (data processing in packet switching systems H04L 12/56*; protocols involving intermediate processing or storage in communication networks H04L 29/08702*; flow control in packet networks ~~H04L 12/569~~*H04L 47/10*; intermediate storage or scheduling ~~H04L 12/5694~~*H04L 49/90*~~; protocols involving intermediate processing or storage in communication networks H04L 29/08702~~)}

Project: RP0124 (H04W)

H04W 4/00	**{Mobile application} services or facilities specially adapted for wireless communication networks {(*wireless network security H04W 12/00; arrangements for broadcast or conference H04L 12/18; message switching systems H04L 51/00*~~network arrangements or communication protocols for networked applications H04L 67/00;~~ *; network arrangements or network protocols for addressing or naming H04L 61/00; network architectures or network communication protocols for network security H04L 63/00;* network arrangements or protocols for real-time communications H04L 65/00~~; network arrangements or network protocols for addressing or naming H04L 61/00~~*; network arrangements or communication protocols for networked applications H04L 67/00*; application independent communication protocol aspects and techniques in packet data networks H04L 69/00~~; network architectures or network communication protocols for network security H04L 63/00; wireless network security H04W 12/00; message switching systems H04L 12/58; arrangements for broadcast or conference H04L 12/18~~; telephonic communication, substation extension arrangements, cordless telephones, portable communication terminals with improved user interface to control a main telephone operation mode or to indicate the communication status H04M 1/72522; automatic or semi-automatic exchanges for telephonic communication - systems providing special services or facilities to subscribers H04M 3/42)}**

NOTES

1. This groups covers mobile application services or application service signalling for communication over wireless networks.

2. This group focuses on application services specially adapted for wireless networks or adjusted to the wireless environment

H04W 4/001	• {Provisioning or reconfiguring application services, e.g. OMA DM (~~network management H04L 12/24; network arrangements or communication protocols for networked applications involving the movement of software or configuration parameters, e.g. applets H04L 67/34;~~ program loading or initiating G06F 9/445; mobile agents G06F 9/4862*; network management H04L 41/00; network arrangements or communication protocols for networked applications involving the movement of software or configuration parameters, e.g. applets H04L 67/34*)}
H04W 4/12	• {Mobile application service signalling using} messaging, e.g. SMS [Short Message Service]; ~~{Mobile application service signalling using} mailboxes;~~ ~~{Mobile application service signalling using} announcements, e.g. informing users on the status or progress of a communication request {(message switching systems ~~H04L 12/58~~*H04L 51/00*; voice mail systems H04M 3/533; arrangements for providing announcements H04M 3/487)}
H04W 4/18	• {Customizing content of application services or} information format or content conversion, e.g. adaptation by the network of the transmitted or received information for the purpose of wireless delivery to users or terminals {(*message adaptation based on network or terminal capabilities for message switching systems H04L 51/06;* network arrangements or communication protocols for networked applications involving intermediate processing or storage in the network, e.g. proxy, H04L 67/28~~; message adaptation based on network or terminal capabilities for message switching systems H04L 12/5825;~~)}
U **H04W 28/00**	**Network traffic or resource management**
U H04W 28/02	• Traffic management, e.g. flow control or congestion control
H04W 28/0284	• • {detecting congestion or overload during communication (monitoring arrangements ~~H04L 12/2602~~*H04L 43/00*)}

Project: MP0299 (H05B)

U	H05B 7/00	**Heating by electric discharge (electron beam or ion beam tubes for localised treatment of objects H01J 37/30; plasma torches H05H 1/26)**
U	H05B 7/18	· Heating by arc discharge
U	H05B 7/22	· · Indirect heating by arc discharge
M	H05B 7/225	· · · {by arc image ~~(heating by means of lamps H05B 3/0033)~~}

Project: N/A (H05F)

	H05F 7/00	**Use of naturally-~~occuring~~*occurring* electricity, {e.g. lightning or static electricity}**

Project: N/A (H05K)

U	**H05K 13/00**	**Apparatus or processes specially adapted for manufacturing or adjusting assemblages of electric components**
	H05K 13/0092	· {Treatment of the terminal leads as a ~~seperate~~*separate* operation (during transport H05K 13/0076, H05K 13/023; during mounting H05K 13/04)}

Project: MP0297 (Y02B)

M	Y02B	**INDEXING SCHEME RELATING TO CLIMATE CHANGE MITIGATION TECHNOLOGIES RELATED TO BUILDINGS, e.g. INCLUDING HOUSING AND APPLIANCES OR RELATED END-USER APPLICATIONS**

~~WARNING~~
~~Subclass Y02B and its groups are not complete~~

Project: MP0297 (Y02T)

M	Y02T	**CLIMATE CHANGE MITIGATION TECHNOLOGIES RELATED TO TRANSPORTATION**

~~WARNING~~
~~Subclass Y02T and its groups are not complete~~

Project: N/A (Y10S)

U	**Y10S 242/00**	**Winding, tensioning, or guiding**
	Y10S 242/917	· ~~Accomodating~~*Accommodating* special material or article, e.g. antenna

Project: RP0143 (Y10S)

E	**Y10S 505/00**	**Superconductor technology: apparatus, material, process**
D	Y10S 505/787	· ##

<administratively transferred to Y10S 505/00>