Compilation of Changes to the CPC Scheme Between 2018.02 and 2018.05

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~~

- Entries arranged by project.
- 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: MP0320 (G06F)

M G06F

~~ELECTRICAL~~*ELECTRIC* DIGITAL DATA PROCESSING (~~computers in which a part of the computation is effected hydraulically or pneumatically G06D; optically G06E; self-contained input or output peripheral equipment G06K; impedance networks using digital techniques H03H~~*computer systems based on specific computational models G06N*)

NOTE

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

- "handling" includes processing or transporting of data;
- "data processing equipment" means an association of an electric digital data processor classifiable under group G06F 7/00, with one or more arrangements classifiable under groups G06F 1/00 - G06F 5/00 and G06F 9/00 - G06F 13/00.

WARNING

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

G06F 3/18	covered by	G06F 3/00, G06K 11/00
G06F 7/04	covered by	G06F 7/02
G06F 9/302 - G06F 9/318	covered by	G06F 9/30

U G06F 1/00 **Details not covered by groups G06F 3/00 – G06F 13/00 and G06F 21/00 (architectures of general purpose stored program computers G06F 15/76)**

M G06F 1/16 · Constructional details or arrangements ~~(instrument details G12B)~~

M G06F 1/24 · Resetting means ~~(microprogramme loading G06F 9/24; restoration from data faults G06F 11/00)~~

M G06F 1/26 · Power supply means, e.g. regulation thereof (for memories G11C ~~{; regulation in general G05F}~~)

M G06F 1/30 · · Means for acting in the event of power-supply failure or interruption, e.g. power-supply fluctuations (for resetting only G06F 1/24~~; involving the processing of data-words G06F 11/00~~)

M G06F 3/05 · Digital input using the sampling of an analogue quantity at regular intervals of time~~,~~ {, input from a/d converter or output to d/a converter}~~(analogue- digital conversion per se H03M 1/00; sampling per se H03K 17/00; sample- and- hold arrangements per se G11C 27/02)~~

M G06F 3/12 · Digital output to print unit~~,~~ {, e.g. line printer, chain printer}~~(digital output to typewriter G06F 3/09; printing of alphanumeric characters G06K 15/02)~~

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 7/38	· Methods or arrangements for performing computations using exclusively denominational number representation, e.g. using binary, ternary, decimal representation
U	G06F 7/48	· · using non-contact-making devices, e.g. tube, solid state device; using unspecified devices
M	G06F 7/544	· · · for evaluating functions by calculation *{*({~~}~~G06F 7/4824 ~~take~~ *takes* precedence ~~}; with a look-up table G06F 1/02; complex mathematical operations G06F 17/10~~)*}*
M	G06F 7/58	· Random or pseudo-random number generators ~~{(random pulse generators H03K 3/84; secret telegraphic communication H04L 9/00; lottery apparatus G07C 15/00)}~~
M	**G06F 11/00**	**Error detection; Error correction; Monitoring (~~methods or arrangements for verifying the correctness of marking on a record carrier G06K 5/00~~*error detection, correction or monitoring in information storage based on relative movement between record carrier and transducer G11B 20/18*~~; in information storage based on relative movement between record carrier and transducer G11B, e.g. G11B 20/18;~~ *; monitoring, i.e. supervising the progress of recording or reproducing G11B 27/36;* in static stores ~~G11C~~*G11C 29/00*~~; 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
M	G06F 11/22	· Detection or location of defective computer hardware by testing during standby operation or during idle time, e.g. start-up testing ~~(testing of digital circuits, e.g. of separate computer components G01R 31/317)~~
M	**G06F 13/00**	**Interconnection of, or transfer of information or other signals between, memories, input/output devices or central processing units (interface circuits for specific input/output devices G06F 3/00; multiprocessor systems G06F 15/16 *{multiprogram control therefor G06F 9/46}*~~; transmission of digital information in general H04L; selecting H04Q; {multiprogramme control therefor G06F 9/46}~~)**
U	G06F 13/38	· Information transfer, e.g. on bus (G06F 13/14 takes precedence)
M	G06F 13/42	· · Bus transfer protocol, e.g. handshake; Synchronisation ~~(synchronisation in transmission of digital information in general H04L 7/00)~~
U	**G06F 15/00**	**Digital computers in general (details G06F 1/00 – G06F 13/00); Data processing equipment in general**
M	G06F 15/18	· in which a ~~programme~~*program* is changed according to experience gained by the computer itself during a complete run; Learning machines (adaptive control systems G05B 13/00 ~~{not used, see G06N 99/005}~~*; artificial intelligence G06N*)
M	G06F 15/76	· Architectures of general purpose stored ~~programme~~*program* computers (~~with programme plugboard G06F 15/08;~~ *with program plugboard G06F 15/08;* multicomputers G06F 15/16~~, general purpose image data processing G06T 1/00~~)
M	G06F 19/22	· · for sequence comparison involving nucleotides or amino acids, e.g. homology search, motif or ~~SNP~~ [Single-Nucleotide Polymorphism *[SNP*] discovery or sequence alignment

M	**G06F 21/00**	**Security arrangements for protecting computers, components thereof, programs or data against unauthorised activity ~~{{address-based protection against unauthorised use of memory G06F 12/14; record carriers for use with machines and with at least a part designed to carry digital markings G06K 19/00; preventing unauthorised reproduction or copying of disc-type recordable media G11B 20/00; secret or secure communication H04L 9/00; digital watermarking on images H04N 1/32; protection in video systems or pay television H04N 7/16)}~~**

Project: MP0345 (G01N)

U	**G01N 33/00**	**Investigating or analysing materials by specific methods not covered by the preceding groups**
U	G01N 33/48	・Biological material, e.g. blood, urine (G01N 33/02 - G01N 33/14, G01N 33/26, G01N 33/44, G01N 33/46 take precedence; determining the germinating capacity of seeds A01C 1/02); Haemocytometers (counting blood corpuscules distributed over a surface by scanning the surface G06M 11/02)
M	G01N 33/50	・・Chemical analysis of biological material, e.g. blood, urine; Testing involving biospecific ligand binding methods; Immunological testing (measuring or testing processes involving enzymes or microorganisms, compositions or test papers therefor; processes for forming such compositions, condition responsive control in microbiological or enzymological processes C12Q) NOTES ~~1. The expression "involving", when used in relation to a material includes the testing for the material as well as employing the material as a determinant or reactant in a test for a different material.~~ *1. In this group, the following expression is used with the meaning indicated: "involving", when used in relation to a material, includes the testing for the material as well as employing the material as a determinant or reactant in a test for a different material.* 2. In groups G01N 33/52 ~~-~~ ~~G01N 33/96~~*G01N 33/98*, *the last place priority rule is applied, i.e. at each hierarchical level,* in the absence of an indication to the contrary, ~~an invention~~ *classification* is ~~also classified~~ *made* in the last appropriate place. 3. Documents relating to new peptides or new DNA or its corresponding mRNA, encoding for the peptides, and their use in measuring or testing processes are classified in subclass C07K or in group C12N 9/00 according to the peptides, with the appropriate indexing codes relating to their use in diagnostics. However, if the investigating or analysing aspects are of interest, the documents are classified in this group~~.~~

Project: MP0345 (G01Q)

M	**G01Q**	**SCANNING-PROBE TECHNIQUES OR APPARATUS; APPLICATIONS OF SCANNING-PROBE TECHNIQUES, e.g. SCANNING PROBE MICROSCOPY [SPM]** NOTE In this subclass, the first place priority rule is applied, i.e. at each hierarchical level, *in the absence of an indication to the contrary,* classification is made in the first appropriate place.

Project: MP0345 (G03F)

M	**G03F 1/00**	**Originals for photomechanical production of textured or patterned surfaces, e.g., masks, photo-masks, reticles; Mask blanks or pellicles therefor; Containers specially adapted therefor; Preparation thereof**

NOTE

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

WARNING

Groups G03F 1/0007-G03F 1/16 are no longer used for the classification of documents as of January 1, 2012. The backfile of these groups is being reclassified into groups G03F 1/20-G03F 1/92 as follows: G03F 1/0007-G03F 1/0092 and G03F 1/08-G03F 1/16 into groups G03F 1/20-G03F 1/86; G03F 1/02 into G03F 1/88; G03F 1/04 into G03F 1/90; G03F 1/06 into G03F 1/92. Until reclassification is complete, groups G03F 1/0007-G03F 1/16 and G03F 1/20-G03F 1/92 should be considered in order to perform a complete search.

Project: MP0345 (G03G)

U	**G03G 9/00**	**Developers**
M	G03G 9/08	・with toner particles

NOTE

In groups G03G 9/0802 - G03G 9/135, 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.

M	G03G 9/0827	・・{characterised by their shape, e.g. degree of sphericity}

~~NOTE~~

~~In groups G03G 9/083 - G03G 9/135, in the absence of an indication to the contrary, classification is made in the last appropriate place~~

Project: MP0345 (G05G)

M	**G05G 1/00**	**Controlling members, e.g. knobs or handles; Assemblies or arrangements thereof; Indicating position of controlling members ({means for preventing, limiting or returning the movements of parts of a control mechanism G05G 5/00; providing feel, e.g. means to create a counterforce G05G 5/03; specially adapted for programme control G05G 21/00; vibration damping G05G 25/02;} joysticks G05G 9/04; steering wheels for motor vehicles B62D)**

NOTE

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

Project: MP0345 (G06F)

U G06F 3/00 **Input arrangements for transferring data to be processed into a form capable of being handled by the computer; Output arrangements for transferring data from processing unit to output unit, e.g. interface arrangements (typewriters B41J; conversion of physical variables F15B 5/00, G01; image acquisition G06T 1/00, G06F 9/00; coding, decoding or code conversion in general H03M; transmission of digital information H04L; {in regulating or control systems G05B})**

U G06F 3/01 · Input arrangements or combined input and output arrangements for interaction between user and computer (G06F 3/16 takes precedence)

M G06F 3/03 · · Arrangements for converting the position or the displacement of a member into a coded form

NOTE

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

U G06F 19/00 **Digital computing or data processing equipment or methods, specially adapted for specific applications (specially adapted for specific functions G06F 17/00; data processing systems or methods specially adapted for administrative, commercial, financial, managerial, supervisory or forecasting purposes G06Q; healthcare informatics G16H)**

NOTE

This group only covers specific applications related to the fields of healthcare or life sciences, e.g. bioinformatics (G09F 19/10), medical informatics (G06F 19/30), or chemoinformatics (G06F 19/70).

M G06F 19/10 · Bioinformatics, i.e. methods or systems for genetic or protein-related data processing in computational molecular biology (in silico methods of screening virtual chemical libraries C40B 30/02; in silico or mathematical methods of creating virtual chemical libraries C40B 50/02)

NOTES

1. This group also covers bioinformatics methods or systems where digital data processing is inherent or implicit, but not explicitly mentioned.

2. In this group, the following term is used with the meaning indicated:

- *"systems" include apparatus.*

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

Project: MP0345 (G06Q)

M G06Q **DATA PROCESSING SYSTEMS OR METHODS, SPECIALLY ADAPTED FOR ADMINISTRATIVE, COMMERCIAL, FINANCIAL, MANAGERIAL, SUPERVISORY OR FORECASTING PURPOSES; SYSTEMS OR METHODS SPECIALLY ADAPTED FOR ADMINISTRATIVE, COMMERCIAL, FINANCIAL, MANAGERIAL, SUPERVISORY OR FORECASTING PURPOSES, NOT OTHERWISE PROVIDED FOR**

NOTES

1. Groups G06Q 10/00 - G06Q 50/00 and G06Q 99/00 only ~~cover~~*cover* systems or methods that involve significant data processing operations, i.e. data processing operations that need to be carried out by a technological, e.g. computing, system or device. Group G06Q 90/00*covers* ~~covers~~ systems

or methods that do not involve significant data processing, when both of the following conditions are fulfilled:

- the systems or methods are specially adapted for the purposes mentioned in the subclass title or the titles of groups G06Q 10/00 - G06Q 50/00; and
- the systems or methods cannot be classified elsewhere in the IPC, for example by applying the principles described in paragraph 96 of the Guide.

When classifying such systems or methods in group G06Q 90/00, additional classification may be made in the most closely related group of this or any other subclass, if this classification gives information about the application of the systems or methods that could be of interest for searching. Such non-obligatory classification must be given as "additional information".

2. When classifying in groups G06Q 10/00 - G06Q 40/00, systems or methods that are specially adapted for a specific business sector must also be classified in group G06Q 50/00, when the special adaptation is determined to be novel and non-obvious.

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

WARNING

G06Q has been largely refined to bring most of the former USPC 705 groups into ECLA, prior to CPC launch. Therefore, most of the new G06Q subdivisions are not complete pending reclassification. Users are invited to systematically consult also the hierarchically higher groups, up to the first valid IPC group. For example, while searching in G06Q 50/2053, it is appropriate to consult also G06Q 50/205 and G06Q 50/20

Project: MP0345 (G07D)

M G07D 5/00 **Testing specially adapted to determine the identity or genuineness of coins, e.g. for segregating coins which are unacceptable or alien to a currency {(in combination with apparatus freed or actuated by coins or the like G07F 3/00)}**

NOTE

In groups G07D 5/005 - G07D 5/10, 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.

Project: MP0345 (H01L)

M H01L 33/00 **Semiconductor devices with at least one potential-jump barrier or surface barrier specially adapted for light emission; Processes or apparatus specially adapted for the manufacture or treatment thereof or of parts thereof; Details thereof (H01L 51/50 takes precedence; devices consisting of a plurality of semiconductor components formed in or on a common substrate and including semiconductor components with at least one potential-jump barrier or surface barrier, specially adapted for light emission H01L 27/15; semiconductor lasers H01S 5/00)**

NOTES

1. This group covers light emitting diodes [LEDs] or superluminescent diodes [SLDs], including LEDs or SLDs emitting infra-red [IR] light or ultra-violet [UV] light.

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

Project: MP0345 (H02B)

M	**H02B 1/00**	**Frameworks, boards, panels, desks, casings; Details of substations or switching arrangements**
		NOTE *In groups H02B 1/01 to H02B 1/56, 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.*
M	H02B 1/24	・Circuit arrangements for boards or switchyards (devices for displaying diagrams H02B 15/00; service supply H02J 11/00)
		~~NOTE~~ ~~In groups H02B 1/26 - H02B 1/56, in the absence of an indication to the contrary, an invention is classified in the last appropriate place.~~

Project: MP0345 (H03M)

M	**H03M 5/00**	**Conversion of the form of the representation of individual digits**
		NOTE In groups H03M 5/02 - H03M 5/22, *the last place priority rule is applied, i.e. at each hierarchical level,* in the absence of an indication to the contrary, ~~an invention~~ *classification* is ~~classified~~*made* in the last appropriate place.
M	**H03M 7/00**	**Conversion of a code where information is represented by a given sequence or number of digits to a code where the same information {or similar information or a subset of information} is represented by a different sequence or number of digits**
		NOTE *In groups H03M 7/001 - H03M 7/50, the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, classification is made in the last appropriate place.*
U	H03M 7/001	・{characterised by the elements used}
M	H03M 7/008	・・{using opto-electronic devices}
		~~NOTE~~ ~~In groups H03M 7/02 - H03M 7/50, in the absence of an indication to the contrary, an invention is classified in the last appropriate place.~~
U	**H03M 13/00**	**Coding, decoding or code conversion, for error detection or error correction; Coding theory basic assumptions; Coding bounds; Error probability evaluation methods; Channel models; Simulation or testing of codes (error detection or error correction for analogue/digital, digital/ analogue or code conversion H03M 1/00 - H03M 11/00; specially adapted for digital computers G06F 11/08, for information storage based on relative movement between record carrier and transducer G11B, e.g. G11B 20/18, for static stores G11C; {use of error detection or error correction in transmission systems H04L 1/004, in television systems H04N 7/0357})**
U	H03M 13/03	・Error detection or forward error correction by redundancy in data representation, i.e. code words containing more digits than the source words
U	H03M 13/05	・・using block codes, i.e. a predetermined number of check bits joined to a predetermined number of information bits {(H03M 13/2906 takes precedence)}
M	H03M 13/21	・・・Non-linear codes, e.g. m-bit data word to n-bit code word ~~(~~*[*mBnB~~)~~*]* conversion with error detection or error correction

Project: MP0345 (H04L)

U	**H04L 7/00**	**Arrangements for synchronising receiver with transmitter {(synchronisation of electronic time-pieces G04G 7/00; synchronisation of generators of electric oscillations or pulses H03L; synchronising in TV system H04N 5/04; regeneration of clock signals for television systems H04N 7/0352)}**
U	H04L 7/04	・Speed or phase control by synchronisation signals {(H04L 7/0075 takes precedence)}
M	H04L 7/10	・・Arrangements for initial synchronisation

~~NOTE~~

~~In group H04L 9/00 - H04L 9/32, in the absence of an indication to the contrary, an invention is classified in the last appropriate place.~~

M	**H04L 9/00**	**{Cryptographic mechanisms or cryptographic} arrangements for secret or secure communication {(network architectures or network communication protocols for network security H04L 63/00 or for wireless network security H04W 12/00; security arrangements for protecting computers or computer systems against unauthorized activity G06F 21/00)}**

NOTES

1. This group covers:
   1.1 Cryptographic mechanisms including cryptographic protocols and cryptographic algorithms, whereby a cryptographic protocol is a distributed cryptographic algorithm defined by a sequence of steps precisely specifying the actions required of two or more entities to achieve specific security objectives (e.g. cryptographic protocol for key agreement), and whereby a cryptographic algorithm is specifying the steps followed by a single entity to achieve specific security objectives (e.g. cryptographic algorithm for symmetric key encryption).
   1.2 H04L 9/00 focuses on cryptographic mechanisms such as encryption schemes, digital signatures, hash functions, random number generation, key management, said cryptographic mechanisms providing information security such as privacy or confidentiality, data integrity, message authentication, entity authentication, authorization, validation, certification, time-stamping, anonymity, revocation, non-repudiation.
   1.3 H04L 9/00 covers also countermeasures against attacks on cryptographic mechanisms.
2. This group does not cover:
   2.1 Networking architectures or network communication protocols for securing the traffic flowing through data packet networks and providing secure exchanges among applications communicating through data packet networks, which are covered by H04L 63/00. Attention is drawn to the Note 1. after group H04L 63/00
   2.2 Security arrangements for protecting computers or computer systems against unauthorised activity, which are covered by G06F 21/00

3. In subgroups H04L 9/001 - H04L 9/38, 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.

Project: MP0345 (H04N)

U	H04N 5/30	・Transforming light or analogous information into electric information (H04N 5/222 takes precedence; scanning details H04N 3/00; light transforming elements H01J, H01L)

M H04N 5/335 ・・using solid-state image sensors [SSIS] (H04N 5/32, H04N 5/33 take precedence)

NOTE

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

M H04N 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, *the first place priority rule is applied, i.e.* at each hierarchical level, in the absence of an indication to the contrary, classification is made in the first appropriate place.

3. In this main group, the following terms and expressions are used with the meaning indicated:

   additional data - designates still pictures, textual, graphical or executable data such as software. It is used to convey supplemental information and can be generated prior to or during the distribution process itself, e.g. metadata, keys.
   content designates video or audio streams, which may be combined with additional data. Video data will always be present and occupy most of the downlink bandwidth in the distribution process
   server - designates an apparatus designed for adapting the content received from the content provider to the distribution network. It also manages the distribution to client devices or intermediate components over a network. Further servers may also be present for gathering or generating additional data, e.g. rights management server
   additional data server - designates a server, which sole purpose is the distribution or management of additional data. It is not in charge of the distribution of video or audio data

client - designates an apparatus such as a TV receiver, a set-top-box, a PC-TV, a mobile appliance (e.g. mobile phone or receiver in a vehicle), for receiving video, audio and possibly additional data from one or several servers or intermediate components via a network for further processing, storing or displaying. It can also transmit this data on a home-based local network to further devices, e.g. a home server transmitting video to PCs and set-top-boxes within a home.
local network - pertains to a restricted area, e.g. a home or a vehicle, and designates the link between a client and its peripheral devices
network - is to be distinguished from "local network": "network" designates the link between the server and the clients, or between the server and the intermediate components, or between the intermediate components and the clients, or between remotely located clients
distribution - encompasses broadcasting, multicasting and unicasting techniques for transmitting content from one or more sources to one or more receiving stations. The distribution follows a request by a receiving station to the source, e.g. VOD or from a customization of the content by the source, e.g. targeting advertisements to a demographic group in a unidirectional or bidirectional system. Additionally, distribution encompasses techniques where the client acts as a source and another client acts as a receiving station, e.g. a peer-to-peer system for sharing video among client devices
end-user - designates a physical person, e.g. a TV viewer, who consumes the content using the client device. He is the final recipient of the content distributed by the server
interaction - covers actions occurring between or among two or more objects that have an effect upon one another, wherein objects comprise users, system operators, system elements, or content. The user may interact with content locally at the client device, e.g. for requesting additional data stored within the client device. The user may interact with content remotely through a server e.g. for VOD playback control or for uploading video to a server. The client device may interact with the content e.g. selecting content based upon the user profile. The client device may interact with a server using a return channel, e.g. for authenticating client or uploading client hardware capabilities. The server may interact with a client device, e.g. to force a client to tune to an advertisement channel
upstream - designates the direction of data flow towards the source, e.g. a server receiving a request via a mobile phone network ~~d~~*.*
~~ownstream~~ *downstream* - designates the direction of data flow towards a client, e.g. a client receiving data originating from a server elementary stream An elementary stream (ES) as defined by the MPEG system layer designates the output of an audio or video encoder~~.~~*.*

Project: MP0345 (H04S)

M H04S **STEREOPHONIC SYSTEMS ~~(information storage on discs or tapes G11B; broadcast systems for the distribution of stereophonic information H04H 20/88; multiplex systems in general H04J)~~**

NOTE

1. In this subclass, the following term is used with the meaning indicated:
   - "stereophonic systems" covers quadraphonic or similar systems

2. In this subclass, it is desirable to add the indexing codes of H04S 2400/00 and H04S 2420/00.

M H04S 5/00 **Pseudo-stereo systems, e.g. in which additional channel signals are derived from monophonic signals by means of phase shifting, time delay or reverberation ~~(arrangements for producing a reverberation or echo sound G10K 15/08)~~**

Project: MP0345 (H04W)

M H04W **WIRELESS COMMUNICATIONS NETWORKS (radio transmission systems H04B 7/00; transmission systems using electromagnetic waves other than radio waves, e.g. light, infrared H04B 10/00; communication systems using wireless extensions, i.e. wireless links without selective communication, e.g. cordless telephones H04M 1/72; broadcast communication H04H)**

NOTES

1. This subclass covers :
   - communication networks for selectively establishing one or a plurality of wireless communication links between a desired number of users or between users and network equipment, for the purpose of transferring information via these wireless communication links;
   - networks deploying an infrastructure for mobility management of wireless users connected thereto, e.g. cellular networks, WLAN [Wireless Local Area Network], wireless access networks, e.g. WLL [Wireless Local Loop] or self-organising wireless communication networks, e.g. ad hoc networks;
   - planning or deployment specially adapted for the above-mentioned wireless networks;
   - services or facilities specially adapted for the above-mentioned wireless networks;
   - arrangements or ~~echniques~~*techniques* specially adapted for the operation of the above-mentioned wireless networks.
2. This subclass does not cover :
   - communication systems using wireless extensions, i.e. wireless links without selective communication, e.g. cordless telephones, which are covered by group H04M 1/72;
   - broadcast communication, which is covered by subclass H04H.
3. In this subclass, *the first place priority rule is applied, i.e.* at each hierarchical level, in the absence of an indication to the contrary, classification is made in the first appropriate place.

Project: MP0347 (G03B)

M G03B **APPARATUS OR ARRANGEMENTS FOR TAKING PHOTOGRAPHS OR FOR PROJECTING OR VIEWING THEM; APPARATUS OR ARRANGEMENTS EMPLOYING ANALOGOUS TECHNIQUES USING WAVES OTHER THAN OPTICAL WAVES; ACCESSORIES THEREFOR (optical parts of such apparatus G02B~~; systems for automatic generation of focusing signals for optical elements per se G02B 7/28~~; photosensitive materials or processes for photographic purposes G03C; apparatus for processing exposed photographic materials G03D)**

NOTE

1. This subclass ~~covers~~*covers*, as far as processes are concerned, only processes characterised by the use or manipulation of apparatus classifiable ~~per se~~ *per se* in this subclass.

~~2. {This subclass covers:~~

- ~~apparatus or methods for taking photographs using light sensitive film for image capture, apparatus, or methods for printing, for projecting or viewing images using film stock, photographic film or slides by optical means, e.g. mounting of optical elements, flashes, or their related controls, e.g.~~

exposure, focus, (opto-)mechanical motion blur (anti-shake), cooling, beam shaping;
- aspects of apparatus or methods for taking photographs using an electronic image sensor [EIS] for image capture, insofar as they correspond to those of said apparatus or methods for taking photographs using light sensitive film, i.e. insofar not peculiar to the presence of the EIS, e.g. mounting of optical elements or flashes not peculiar to the presence of the EIS, or their related controls insofar they are not peculiar to the presence of the EIS, e.g. exposure, focus, (opto-) mechanical motion blur (anti-shake);
- aspects of apparatus or methods for projecting or viewing images using an electronic spatial light modulator [ESLM], insofar as they correspond to those of said apparatus or methods for projecting or viewing images using film stock, photographic film or slides, i.e. insofar as not peculiar to the presence of the ESLM, e.g. mounting of optical elements not peculiar to the presence of the ESLM, or their related controls not peculiar to the presence of the ESLM, e.g. cooling, beam shaping, optical keystone correction;
- (opto-)mechanical image enhancement in printers or projectors, e.g. keystone correction;
- optical viewfinders;
- remote control of cameras and projectors insofar not peculiar to the EIS or ESLM;
- optical aspects of camera modules using electronic image sensors or related constructional details;
- constructional aspects of projectors, e.g. cooling, beam shaping, light integrating means not peculiar to the ESLM.

}

3. {This subclass does not cover:
- concerning cameras or projectors:
  - arrangements or methods for image capture peculiar to the presence or use of an EIS or image projection peculiar to the presence or use of an ESLM, and their related controls insofar they are peculiar to the presence or use of the EIS or ESLM, which are covered by H04N;
  - processing of electrical image signals from the EIS or provided to the ESLM, which is covered by H04N;
  - electronic viewfinders, e.g. control of image pickup devices based on information indicated by the electronic viewfinder displaying an image signal generated by the EIS, which are covered by H04N;
  - electrical or mechanical aspects of camera modules using electronic image sensors and related constructional details as in webcams or mobile phones, which are covered by H04M, H04N;
  - details of projectors peculiar to the use of an ESLM, e.g. dichroic or polarizing arrangements specially adapted for the ESLM, which are covered by H04N;
  - remote control of cameras or projectors peculiar to the EIS or the ESLM, e.g. affecting their operation, or based on a generated electrical image signal, which is covered by H04N;
  - adaptations peculiar to the use of an EIS or ESLM or the display, the transmission, recording or other use of electrical image data and related circuitry, e.g. mounting of EIS or ESLM, integrated cleaning system for the EIS, dust mapping, cooling of the EIS. which are coveerd by H04N;
  - video cameras, TV cameras, e.g. in studios, CCTV cameras, surveillance cameras and camcorders; constructional and mechanical details related to such cameras, e.g. housings, even when not peculiar to the presence of an EIS, which are covered by H04N 5/225;

- systems or apparatus wherein the inventive contribution lies in features covered above, concerning cameras when interacting with those to be covered by G03B, e.g. switch-over between electronic motion-blur correction of electronic viewfinder during focussing and optical motion-blur correction of the lens during exposure, electronic-motion blur correction of the electronic image signal based on output signals of additional sensor, or interaction between mechanical shutter and electronic control of the charge accumulation period of the EIS, which are covered by H04N.
- EIS-sensor read-out, which is covered by H04N 5/335;
- processing or use of electrical image signals from the EIS for the generation of camera control signals. e.g. focusing, exposure control, electronic blur correction, display in electronic viewfinder, which are covered by H04N 5/232, H04N 5/235.

- optical parts for apparatus or arrangements for taking photographs or for projecting or viewing them, which are covered by G02B;
- photosensitive materials for photographic purposes, which are covered by G03C;
- apparatus for processing exposed photographic materials; accessories therefor, which are covered by G03D.
- optical elements or arrangements associated with solid state imager structures, which are covered by H01L 27/146;

}

4. {In this subclass the following expression is used with the meaning indicated: subject to the application of Notes 1 and 2 above, "photography" is the process of recording pictures by means of capturing light on a light-sensitive medium, e.g. silver halide based chemical or an electronic image sensor. Light patterns reflected or emitted from objects expose such a light sensitive medium during a timed exposure, usually through a photographic lens in a device known as a camera.

}

5. {In this subclass, as in subclass H04N, the following terms are used with the meaning indicated:

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

}

U	**G03B 1/00**	**Film strip handling**
M	G03B 1/60	・Measuring or indicating length of the used or unused film; Counting number of exposures (measuring length in general G01B)
M	G03B 1/66	・・Counting number of exposures (counting mechanisms per se G06M)

M	**G03B 3/00**	**Focusing arrangements *of general interest for cameras, projectors or printers*** ~~**(focusing means, autofocus systems for cameras G03B 13/00; means for automatic focusing of projectors G03B 21/53; means for automatic focusing of projection-printing apparatus or copying cameras G03B 27/34, G03F)**~~
U	G03B 3/10	・Power-operated focusing
M	G03B 3/12	・・adapted for remote control ~~(control systems in general G05)~~
U	**G03B 9/00**	**Exposure-making shutters; Diaphragms**
M	G03B 9/08	・Shutters ~~(electro-, magneto-, or acousto-optical shutters G02F 1/00)~~
M	**G03B 11/00**	**Filters or other obturators specially adapted for photographic purposes** ~~**(filters per se G02B {G02B 5/20})**~~
M	**G03B 13/00**	**Viewfinders; Focusing aids for cameras; Means for focusing for cameras; Autofocus systems for cameras** ~~**(hoods, caps G03B 11/04; reflex camera arrangements G03B 19/12, G03B 19/14; rangefinders per se G01C 3/00; automatic focusing in general G02B 7/09; systems for automatic generation of focusing signals G02B 7/28)**~~
U	**G03B 15/00**	**Special procedures for taking photographs; Apparatus therefor**
U	G03B 15/02	・Illuminating scene
U	G03B 15/03	・・Combinations of cameras with lighting apparatus; Flash units
M	G03B 15/04	・・・Combinations of ~~photographic apparatus~~ *cameras* with non-electronic flash apparatus; Non-electronic flash units ~~({control of the photographic apparatus according to the flash apparatus characteristics G03B 7/16; test apparatus for flash G03B 43/00;} light sources using a charge of combustible material F21K 5/00; ignition circuits H05B 43/02)~~
M	G03B 15/05	・・・Combinations of cameras with electronic flash apparatus; Electronic flash units ~~(discharge lamps per se H01J; circuit arrangements H05B 41/00)~~
M	G03B 15/16	・for photographing the track of moving objects (high-speed photography G03B 39/00~~; recording tracks of nuclear particles G01T 5/00~~)
U	**G03B 17/00**	**Details of cameras or camera bodies; Accessories therefor (lens hoods or caps G03B 11/04)**
U	G03B 17/02	・Bodies
M	G03B 17/04	・・collapsible, foldable~~,~~ or extensible, e.g. book~~-~~ type ~~(bellows for instruments in general G12B)~~
M	G03B 17/36	・Counting number of exposures (of film strips G03B 1/66~~; counting mechanisms per se G06M~~)
M	G03B 17/48	・adapted for combination with other photographic or optical apparatus ~~(with microscopes, with telescopes G02B)~~
M	G03B 17/50	・・with both developing and finishing apparatus ~~(processing apparatus G03D)~~
M	G03B 17/56	・Accessories (~~camera cases A45C 11/38; {lens caps G03B 11/041; stands or trestles as support for apparatus or articles placed thereon F16M 11/00; means for attachment of apparatus allowing quick-release F16M 11/041; means for supporting on, or holding steady relative to a person F16M 13/04; tripods F16M 11/24; tripods with telescopic legs F16M 11/32; monopod or tripod having a central telescopic column F16M 11/28; heads or undercarriages for supporting an object and allowing movement thereof F16M 11/043 - F16M 11/14 or F16M 11/2007 - F16M 11/24}~~*carrying-cases A45C 11/38*) WARNING Groups G03B 17/561 - G03B 17/568 are not complete pending reclassification; see also G03B 17/56

M **G03B 21/00** **Projectors or projection-type viewers; Accessories therefor (devices for changing pictures G03B 23/00~~; Zoetropes G03B 25/00; photographic printing apparatus G03B 27/00; arrangements for obtaining special effects on stages or in circuses or in arenas F21W 2111/06; optical projection comparators G01B 9/08; projection microscopes G02B 21/36 {laser projectors using scanning devices H04N 9/3129; interactive projectors, e.g. whiteboards, with input means to control the projection G06F 3/00; optical distortion correction, e.g. keystone G03B 21/14; projection devices comprising an electronic spatial light modulator and peculiar thereto H04N 5/74 or H04N 9/31}~~)**

WARNING

Groups G03B 21/001 - G03B 21/008 are incomplete pending reclassification of documents from group G03B 21/00.

Until reclassification is complete, groups G03B 21/00 and G03B 21/001 - G03B 21/008 should be considered in order to perform a complete search.

M G03B 21/10 · Projectors with built-in or built-on screen ~~(projection screens in general G03B 21/56)~~

U G03B 21/14 · Details

WARNING

Groups G03B 21/142 - G03B 21/147 are incomplete pending reclassification of documents from group G03B 21/14.

Until reclassification is complete, groups G03B 21/14 and G03B 21/142 - G03B 21/147 should be considered in order to perform a complete search.

M G03B 21/20 · · Lamp houses ~~*housings* (condensers per se G02B)~~

M G03B 21/26 · · Projecting separately subsidiary matter simultaneously with main image ~~(light pointers G02B 27/20)~~

U G03B 21/32 · · Details specially adapted for motion-picture projection (with film moving continuously through the gate G03B 41/02)

U G03B 21/43 · · · Driving mechanisms

M G03B 21/44 · · · · Mechanisms transmitting motion to film-strip feed; Mechanical linking of shutter and intermittent feed ~~(film-strip per se G03B 1/00)~~

M G03B 21/50 · · · Control devices operated by the film strip during the run ~~(controlling or regulating speed G03B 21/48)~~

M G03B 21/53 · · Means for automatic focusing, e.g. to compensate thermal effects ~~(automatic focusing in general G02B 7/09; systems for automatic generation of focusing signals G02B 7/28)~~

M **G03B 23/00** **Devices for changing pictures in viewing apparatus or projectors ~~(film-strip handling G03B 1/00; direct viewers per se G02B)~~**

NOTE

For the purposes of this group the term "picture" denotes any flat representation, whether transparent or not, e.g. produced by photography, writing or printing

M **G03B 25/00** **Viewers, other than projection viewers, giving motion-picture effects by persistence of vision, e.g. zoetrope ~~(high-speed photography G03B 39/00)~~**

M **G03B 27/00** **Photographic printing apparatus ~~(film-strip handling G03B 1/00)~~**

U G03B 27/02 · Exposure apparatus for contact printing

U G03B 27/14 · · Details

M	G03B 27/30	・・・adapted to be combined with processing apparatus ~~(processing apparatus per se G03D)~~
U	G03B 27/32	・Projection printing apparatus, e.g. enlarger, copying camera
M	G03B 27/34	・・Means for automatic focusing therefor ~~(systems for automatic generation of focusing signals G02B 7/28)~~
U	G03B 27/52	・・Details
M	G03B 27/53	・・・Automatic registration or positioning of originals with respect to each other or the photosensitive layer ~~(within photo-mechanical production of textured or patterned surfaces, e.g. of integrated circuits, G03F 9/00)~~
M	G03B 27/54	・・・Lamp housings; Illuminating means ~~(controlling the exposure G03B 27/72)~~
M	G03B 27/72	・Controlling or varying light intensity, spectral composition, or exposure time in photographic printing apparatus ~~(exposure meters per se G01J; control of light intensity in general G05D 25/00)~~
M	**G03B 29/00**	**Combinations of cameras, projectors~~,~~ or photographic printing apparatus with non-photographic non-optical apparatus, e.g. clocks~~,~~ *or* weapons; Cameras having the shape of other objects (combinations with flash apparatus G03B 15/03~~; combinations with instruments for medical examination A61B 1/04, A61B 3/14; combinations with surveying instruments G01C; combinations with core or moderator structure of nuclear reactors G21C 17/08; structural combinations with electric discharge tubes H01J 5/16, H01J 29/89, H01J 37/22~~)**
M	**G03B 31/00**	**Associated working of cameras or projectors with sound ~~-~~ recording or *sound-* reproducing means ~~(record carriers characterised by the selection of the material and comprising cinematographic film and magnetic track G11B 5/633)~~**
M	**G03B 35/00**	**Stereoscopic photography ~~(panoramic or widescreen systems G03B 37/00; photogrammetry G01C)~~**
M	**G03B 42/00**	**Obtaining records using waves other than optical waves; Visualisation of such records by using optical means ~~(investigating or analysing materials using electromagnetic or sonic waves G01N; using radar, sonar or analogous techniques G01S; {holography G03H})~~**
M	G03B 42/02	・using X-rays ~~(measurement of X-radiation G01T; X-ray apparatus, circuits therefor H05G 1/00)~~
M	G03B 42/06	・using ultrasonic, sonic or infrasonic waves ~~(measurement of ultrasonic, sonic or infrasonic waves G01H)~~
M	G03B 42/08	・~~Visualising the~~*Visualisation of* records by optical means ~~(optical means using spatial filters G02B 27/46; optical systems for visualising phase objects G02B 27/50)~~
M	**G03B 43/00**	**Testing correct operation of photographic apparatus or parts thereof ~~(measuring specific variables G01)~~**
M	G03B 43/02	・Testing shutters ~~(measuring time intervals G04F)~~

Project: MP0348 (G21H)

M	**G21H**	**OBTAINING ENERGY FROM RADIOACTIVE SOURCES; APPLICATIONS OF RADIATION FROM RADIOACTIVE SOURCES*, NOT OTHERWISE PROVIDED FOR*; UTILISING COSMIC RADIATION (measurement of nuclear or X-radiation G01T; fusion reactors G21B; nuclear reactors G21C~~; semiconductor devices sensitive to electro-magnetic or corpuscular radiation H01L 31/00~~*; lamps in which a gas filling is excited to luminescence by external corpuscular radiation or by radioactive material structurally associated with the lamp H01J 65/04, H01J 65/06*)**

U	**G21H 1/00**	**Arrangements for obtaining electrical energy from radioactive sources, e.g. from radioactive isotopes {, nuclear or atomic batteries}**
M	G21H 1/04	・Cells using secondary emission induced by alpha radiation, beta radiation, or gamma radiation ~~(discharge tubes H01J 40/00)~~
M	G21H 1/08	・Cells in which radiation ionises a gas in the presence of a junction of two dissimilar metals, i.e. contact potential difference cells ~~(discharge tubes H01J)~~
M	G21H 1/10	・Cells in which radiation ~~{of disintegration heat}~~ heats a thermoelectric junction or a thermionic converter ~~(discharge tubes functioning as thermionic generators H01J 45/00; thermo electric devices comprising a junction of dissimilar materials H01L 35/00 {Devices where heating occurs from fission reactions G21C 3/04})~~
M	**G21H 3/00**	**Arrangements for direct conversion of radiation energy from radioactive sources into forms of energy other than electric energy, e.g. {into} light {or mechanic energy}** ~~**(lasers H01S 3/00; {gamma masers H01S 4/00})**~~
M	G21H 3/02	・in which material is excited to luminesce by the radiation (~~{luminescent substances containing radioactive material C09C 1/00};~~ lamps in which a gas filling or screen or coating is excited to luminesce by radioactive material structurally associated with the lamp H01J 65/00)
M	**G21H 5/00**	**Applications of radiation from radioactive sources or arrangements therefor** ~~**, *not otherwise provided for* (producing mutation in plants A01H 1/06; preservation of dairy products A23C; preservation of foodstuffs A23L 3/26; for therapeutic purposes A61N 5/10; in chemical, physical or physicochemical processes in general B01J 19/08; in electrostatic separation B03C 3/38; for after-treatment of coatings applied as liquids or other fluent materials B05D 3/06; for action between electric vehicles and tracked apparatus B61L 1/10, B61L 3/06; introducing isotopes into organic compounds C07B 59/00; for preparation of organic chemical compounds C07, C08, e.g. C08F 2/46; for treating macromolecular substances or articles made therefrom B29C 71/04, C08J 3/28, C08J 7/18; for cracking of hydrocarbon oils C10G 15/00, C10G 32/04; for reforming naphtha C10G 35/16; preservation or ageing of products obtained from fermentation processes C12H 1/06, C12H 1/16; for bleaching fibres D06L 4/50; measuring G01; irradiation devices, gamma- or X-ray microscopes G21K; in discharge tubes H01J; apparatus for generating ions to be introduced into non-enclosed gases, e.g. into the atmosphere, H01T 23/00; for carrying-off electrostatic charges H05F 3/06)**~~
M	G21H 5/02	・as tracers ~~{(medicinal preparations containing radioactive substances A61K 51/00; investigating or analysing biological material G01N 33/48)}~~

Project: MP0353 (A01K)

M	**A01K 1/00**	**Housing animals; Equipment therefor** ~~**(building construction, features of buildings E04; ventilating buildings F24F)**~~
U	A01K 1/02	・Pigsties; Dog-kennels; Rabbit-hutches or the like
M	A01K 1/035	・・Devices for use in keeping domestic animals, e.g. fittings in housings~~,~~ *or* dog beds
M	A01K 1/06	・Devices for fastening animals, e.g. halters, toggles, neck-bars~~,~~ *or* chain fastenings
M	A01K 1/10	・Feed racks~~, {e.g. associated with enclosures or troughs}(devices for impeding movement of animals A01K 15/04)~~

M	**A01K 3/00**	**Pasturing equipment, e.g. tethering devices; {Guiding corridors; Corrals, e.g. portable, collapsible~~}~~;*}* Grids for preventing cattle from straying; Electrified wire fencing (~~construction of fencing in general E04H 17/00;~~ electric circuits *devices or apparatus* for ~~fences~~ *supplying electric wire fencing* H05C)**
M	**A01K 5/00**	**Feeding devices for stock or game (A01K 1/10 takes precedence~~; for poultry A01K 39/00~~ *; feeding devices for poultry or other birds A01K 39/00*){; Feeding wagons; Feeding stacks}**
M	A01K 5/008	· {Feed bags ~~(nose-bags for oats B68B 5/00)~~}
M	A01K 5/015	· Licking-stone holders *{*~~(salt blocks A23K 20/00)~~; ~~{~~Other dispensers for minerals}
U	**A01K 7/00**	**Watering equipment for stock or game**
M	A01K 7/02	· Automatic devices~~,~~ {~~e.g. actuated by weight of water~~; Medication dispensers} ~~(construction of valves F16K)~~
M	**A01K 11/00**	**Marking of animals (~~of poultry A01K 35/00 {; of fish A01K 61/90}; lead-sealing pliers B25B~~*marking poultry or other birds A01K 35/00*)**
M	**A01K 13/00**	**Devices for grooming or caring of animals, e.g. curry-combs ~~(scissors B26B)~~; Fetlock rings ~~(bandages, poultices A61D)~~; Tail-holders (as part of the harness B68B 5/04); Devices for preventing crib-biting; Washing devices ~~(milking machine accessories for treatment of udders or teats A01J 7/04; for medical purposes A61D 11/00)~~; Protection against weather conditions or insects**
M	A01K 13/003	· {Devices for applying insecticides or medication (~~A01K 27/005~~*A01K 27/007* takes precedence; for veterinary purposes ~~A61D~~*A61D 7/00*)}
M	A01K 13/006	· {Protective coverings (~~shoeing of animals A01L; ~~*Elastic soles or covers for hoofs A01L 5/00, A01L 7/02;* for veterinary purposes A61D)}
M	**A01K 14/00**	**Removing the fleece from live sheep or similar animals (~~hand-held cutting tools B26B~~*hand-held clippers or shavers with a plurality of cutting edges, specially adapted for shearing animals, e.g. sheep, B26B 19/24*)**
M	**A01K 15/00**	**Devices for taming animals, e.g. nose-rings~~,~~ *or* hobbles; Devices for overturning animals in general; Training *or exercising* equipment; Covering boxes ~~({animal holding devices A01K 1/0613}; devices for veterinary purposes A61D 3/00)~~**
M	A01K 15/02	· Training or ~~exercise~~*exercising* equipment~~,~~ *e.g. mazes or labyrinths for animals* (A01K 15/04 takes precedence)*{*; {Electric shock devices (circuits therefor H03K 3/537); Toys, e.g. for pets}
M	**A01K 21/00**	**Devices for assisting or preventing mating ~~(covering boxes A01K 15/00)~~**
M	**A01K 27/00**	**Leads or collars, e.g. for dogs ~~(devices specially adapted or mounted for storing and repeatedly paying-out and re-storing lengths of material B65H 75/34)~~**
U	**A01K 31/00**	**Housing birds**
M	A01K 31/02	· Door appliances; Automatic door-openers ~~({laying-nests A01K 31/16}; counters for specific applications G07C 9/00)~~
U	**A01K 39/00**	**Feeding or drinking appliances for poultry or other birds {(A01K 31/005, A01K 31/06, A01K 31/17 take precedence)}**
M	A01K 39/02	· Drinking appliances (A01K 39/04 takes precedence~~; construction of valves F16K~~)

U	**A01K 43/00**	**Testing, sorting or cleaning eggs (investigating or analysing eggs, e.g. by candling G01N 33/08); {Conveying devices (for batteries A01K 31/165); Pick-up devices}**
U	A01K 43/04	・Grading eggs
M	A01K 43/08	・・according to weight ~~(sorting according to weight in general B07C 5/16)~~
U	**A01K 47/00**	**Beehives**
M	A01K 47/06	・Other details of beehives, e.g. ventilating devices, entrances to hives, guards, partitions~~,~~ *or* bee escapes
M	**A01K 55/00**	**Bee-smokers; Bee-keepers' accessories, e.g. veils ~~({smoke-generators for gardens or orchards A01G 13/06, for killing insects A01M 13/006, for killing rats A01M 17/004}; smoking pipes A24F)~~**
U	**A01K 63/00**	**Receptacles for live fish, e.g. aquaria (keepnets or other containers for keeping captured fish A01K 97/20); Terraria** WARNING Group A01K 63/00 is impacted by reclassification into group A01K 63/10. Groups A01K 63/00 and A01K 63/10 should be considered in order to perform a complete search.
M	A01K 63/04	・Arrangements for treating water specially adapted to receptacles for live fish ~~(, e.g. filters, water pumps}({cleaning receptacles A01K 63/10;} filters in general B01D; water treatment in general C02F)~~
M	A01K 63/06	・Arrangements for heating or lighting in, or attached to, receptacles for live fish ~~(heating, {cooling} or lighting apparatus per se F21, H01, H05B)~~
M	**A01K 67/00**	**Rearing or breeding animals, not otherwise provided for; New breeds of animals ~~(methods for reproduction or fertilisation A61D 19/00; medicinal preparations containing sperm A61K 35/52; tissue- or animal-cell cultivation apparatus C12M 3/00; cultivation or maintenance of tissue or animal cells C12N 5/00; mutation or genetic engineering C12N 15/00)~~** NOTE In this group the following term is used with the meaning indicated: • "breeding" means obtaining animals up to and including their birth or hatching.
M	A01K 67/02	・Breeding vertebrates ~~(covering boxes A01K 15/00; devices for assisting or preventing mating A01K 21/00)~~ NOTE {Documents relating to new peptides or new DNA or its corresponding mRNA encoding for peptides, and their use for the obtention of transgenic animals, are classified in subclass C07K or in group C12N 9/00 according to the peptides, with the appropriate indexing codes}
M	A01K 67/033	・Rearing or breeding invertebrates; New breeds of invertebrates ~~(non-chemical sterilisation of invertebrates A01M)~~ NOTE In group A01K 67/033, it is desirable to add the indexing codes relating to transgenic animals. In group A01K 67/033, it is desirable to add the indexing codes relating to animals characterised by their purpose
U	**A01K 75/00**	**Accessories for nets; Details of nets, e.g. structure**
M	A01K 75/04	・Floats ~~(for angling A01K 93/00)~~
M	A01K 75/06	・Sinkers ~~(for angling A01K 95/00)~~

U	**A01K 79/00**	**Methods or means of catching fish in bulk not provided for in groups A01K 69/00 - A01K 77/00, {e.g. fish pumps; Detection of fish; Whale fishery}**
M	A01K 79/02	· by electrocution *{*~~(electric circuits therefor H05C)~~; ~~{~~Attracting or stunning fish; Scaring sharks}
M	**A01K 80/00**	**Harvesting oysters, mussels, sponges or the like~~, {e.g. drags, clam diggers, marine life collectors}(nets A01K 73/00, A01K 74/00; dredgers E02F)~~**
U	**A01K 85/00**	**Artificial baits, {i.e. Lures}**
M	A01K 85/08	· Artificial flies ~~(fly tying devices A01K 97/26)~~
U	**A01K 91/00**	**Lines**
M	A01K 91/06	· Apparatus on lines not otherwise provided for, e.g. automatic hookers ~~(floats A01K 93/00)~~
M	A01K 91/18	· Trotlines, longlines; Accessories therefor, e.g. baiting devices, lifters~~,~~ *or* setting reelers
M	**A01K 97/00**	**Accessories for angling (*fish stringers A01K 65/00;* landing-nets~~,~~ *or* landing-spoons *for fishing* A01K 77/00)*{; fish finder G01S 15/96}***
M	A01K 97/04	· Containers for bait; Preparation of bait ~~{; Dispensers (feeding-stuffs for particular animals A23K 50/00)}~~
M	A01K 97/05	· · Containers for live bait kept in water, e.g. for minnows~~,~~ *or* shrimps

Project: MP0354 (A01M)

M	**A01M**	**CATCHING~~,~~ *, TRAPPING* OR ~~TRAPPING~~*SCARING* OF ANIMALS (~~apiculture A01K 47/00 - A01K 59/00;~~ *appliances for catching swarms or drone-catching A01K 57/00;* fishing A01K 69/00 - ~~A01K 97/00~~*A01K 99/00*~~;~~ ~~pesticides A01N~~*; biocides, pest repellants or attractants A01N*); APPARATUS FOR THE DESTRUCTION OF NOXIOUS ANIMALS OR NOXIOUS PLANTS ~~(equipment fitted in or to aircraft for dropping or releasing powdered, liquid or gaseous matter, e.g. pesticides, herbicides, B64D 1/16)~~** NOTE in this subclass, terms "killing" and "destruction" cover "non-chemical sterilisation" of invertebrates
M	**A01M 1/00**	**Stationary means for catching or killing insects ~~{(for repelling A01M 29/00)}~~**
M	**A01M 7/00**	**Special adaptations or arrangements of liquid-spraying apparatus for purposes covered by this subclass ~~{(apparatus for the destruction of unwanted vegetation A01M 21/00; distributing devices specially adapted for liquid manure or other fertilising liquid A01C 23/00; watering gardens, fields, sports grounds or the like A01G 25/00; chemical treatment of plants or soils A01N 25/00 - A01N 65/00}; spraying apparatus in general B05B)~~**
M	**A01M 9/00**	**Special adaptations or arrangements of powder-spraying apparatus for purposes covered by this subclass ~~{(A01M 7/00, A01C 15/00 take precedence}; spraying apparatus in general B05B)~~**
M	**A01M 11/00**	**Special adaptations or arrangements of combined liquid- and powder-spraying apparatus for purposes covered by this subclass ~~(spraying apparatus in general B05B)~~**
M	**A01M 15/00**	**Flame-throwers specially adapted for purposes covered by this subclass ~~(flame-throwers in general F41H 9/02)~~**

M	**A01M 21/00**	**Apparatus for the destruction of unwanted vegetation, e.g. weeds (~~biocides, plant growth regulators A01N 25/00 - A01N 65/00; spraying or atomising apparatus in general B05B; soil-conditioning or soil-stabilising materials C09K 17/00;~~ control of undesirable vegetation on roads or permanent ways of railways E01H 11/00)**
U	**A01M 31/00**	**Hunting appliances**
M	A01M 31/02	· Shooting stands ~~(folding seats A47C)~~

Project: MP0367 (F03D)

M	**F03D**	**WIND MOTORS** NOTE *1. This subclass covers wind motors, i.e. mechanisms for converting the energy of wind into useful mechanical power, and the transmission of such power to its point of use.* *2. This subclass does not cover electrical power generation or distribution aspects of wind-power plants, which are covered by section H, e.g. H02J or H02P.* ~~1.~~ *3.* In this subclass, the following ~~words~~ *terms or expressions* are used with the meanings indicated: • ~~"Wind motor" means a mechanism for converting the energy of natural wind into useful mechanical power, and the transmission of such power to its point of use;~~ • "~~Rotor~~*rotor*" means the wind-engaging parts of the wind motor and the rotary member carrying them; • "~~Rotations~~*rotation* axis" means the axis of rotation of the rotor.
M	**F03D 1/00**	**Wind motors with rotation axis substantially ~~in wind direction~~ *parallel to the air flow entering the rotor* (controlling ~~F03D 7/00~~*thereof F03D 7/02*)**
M	**F03D 3/00**	**Wind motors with rotation axis substantially ~~at right-angles~~ *perpendicular* to ~~wind direction~~ *the air flow entering the rotor* (controlling ~~F03D 7/00~~*thereof F03D 7/06*)**
M	**F03D 5/00**	**Other wind motors (controlling *thereof* F03D 7/00)**
U	**F03D 7/00**	**Controlling wind motors**
M	F03D 7/02	· the wind motors having rotation axis substantially ~~in wind direction~~*parallel to the air flow entering the rotor*
M	F03D 7/06	· the wind motors having rotation axis substantially ~~at right angle~~ *perpendicular* to ~~wind direction {~~*the air flow entering the rotor* ~~(F03D 3/068 takes precedence)}~~

Project: MP0368 (F23C)

M **F23C** **~~COMBUSTION~~ *METHODS OR* APPARATUS *FOR COMBUSTION* USING ~~FLUENT~~*FLUID* FUEL *OR SOLID FUEL SUSPENDED IN {A CARRIER GAS OR} AIR* (~~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~~)**

NOTE

In this subclass, methods are classified in the groups that cover the apparatus used.

WARNING

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

F23C 101/00 covered by

M **F23C 1/00** **Combustion apparatus specially adapted for combustion of two or more kinds of fuel simultaneously or alternately, at least one kind of fuel being ~~fluent~~ *either a fluid fuel or a solid fuel suspended in {a carrier gas or} air* (combustion apparatus ~~characterised~~*characterized* by the combination of two or more combustion chambers F23C 6/00; pilot flame igniters F23Q 9/00)**

M F23C 1/02 · lump ~~or~~*and* liquid fuel

M F23C 1/04 · lump ~~or~~*and* gaseous fuel

M F23C 1/06 · lump ~~or~~*and* pulverulent fuel

M F23C 1/08 · liquid ~~or~~*and* gaseous fuel

M F23C 1/10 · liquid ~~or~~*and* pulverulent fuel

M F23C 1/12 · gaseous ~~or~~*and* pulverulent fuel

M **F23C 7/00** **Combustion apparatus characterised by arrangements for air supply (inlets for fluidisation air F23C 10/20*; baffles or shields with air supply passages F23M 9/04*)**

Project: MP0395 (E05B)

M **E05B 1/00** **Knobs or handles for wings ~~{{specially adapted for vehicle doors E05B 85/10}; for furniture A47B 95/02}~~; Knobs, handles, or press buttons for locks or latches on wings (E05B 5/00, E05B 7/00 take precedence)**

M **E05B 9/00** **Lock casings or latch-mechanism casings *{*; ~~{~~Fastening locks or fasteners or parts thereof to the wing}(padlock casings E05B 67/02~~; for vehicles E05B 79/04, E05B 85/02~~*; forvehicles E05B 79/04, E05B 85/02*)**

M **E05B 15/00** **Other details of locks; Parts for engagement by bolts of fastening devices ~~(fastening devices for wings other than locks or associated with locks E05C)~~**

M E05B 15/16 · Use of special materials for parts of locks ~~(for handles E05B 1/00 {; for reducing friction E05B 17/007; for keys E05B 19/26})~~

U **E05B 17/00** **Accessories in connection with locks (buffers E05F 5/00; means for preventing rattling of wings E05F 7/04; means for taking the weight of the wing E05F 7/06)**

M E05B 17/20 · Means independent of the locking mechanism~~, {i.e. other than the tumblers or detents}~~ for preventing unauthorised opening, e.g. for securing the bolt in the fastening position {(~~E05B 63/12 takes precedence~~*locks with means carried by the bolt for interlocking with the keeper E05B 63/12*)}

M	**E05B 19/00**	**Keys; Accessories therefor ({E05B 11/005 takes precedence*{key modifications or attachments preventing removal from the lock E05B 11/005;* ; illuminating devices E05B 17/103; key rings A44B 15/00; key cases A45C 11/32; key holders A47G 29/10;} making keys, seesee the relevant places, e.g. B21D 53/42 {or B23P 15/005}; milling grooves in keys B23C 3/35)**
M	**E05B 21/00**	**Locks with {lamelliform} tumblers {which are not set by the insertion of the key and} } in which are} the tumblers do not followingfollow the movement of the bolt {, e.g. Chubb-locks}**
M	**E05B 23/00**	**Locks with {lamelliform} tumblers {which are not set by the insertion of the key and} } in which are} following the tumblers follow the movement of the bolt**
M	**E05B 37/00**	**Permutation {or combination} locks ({handles with combination locks E05B 13/103; keyhole guards with combination locks E05B 17/145; alarms therefor E05B 45/061};} electric permutation locks E05B 49/00 ; electric permutation locks E05B 49/00; {for container closures B65D 55/145; combination switches H01H 27/10}); Puzzle locks**
U	**E05B 39/00**	**Locks giving indication of {authorised} or unauthorised unlocking {(with key identification means E05B 35/001; alarm locks E05B 45/00)}**
M	E05B 39/02	· with destructible seal closures or paper closures (seals per se G09F 3/00)
M	**E05B 43/00**	**Time locks, {e.g. locks with delaying means}{clocks or clock mechanisms with attached or built-in means operating any device at preselected times or after a predetermined time interval G04B 23/00 {; time recording locks G07C 1/32})**
M	**E05B 45/00**	**AlarmsAlarm locks (alarm devices actuated by tampering with fastenings, in general G08B; {vehicle fittings actuating a signalling device B60R 25/10; bicycle appliances indicating unauthorised use B62H 5/20})**
M	**E05B 47/00**	**Operating or controlling locks or other fastening devices by electric or magnetic means (electric permutation locks E05B 49/00; holding in open position or limiting movement of wings by magnetic or electromagnetic attraction E05C 17/56; {E05B 17/0029, E05B 17/147, E05B 81/00, E05C 19/16 take precedence})**
U	**E05B 63/00**	**Locks {or fastenings} with special structural characteristics**
M	E05B 63/14	· Arrangement of several locks or locks with several bolts, e.g. arranged one behind the other ({locks for keyshaving bolts with several bits multiple head E05B 35/14E05B 15/108; with provision for latching E05B 59/00, E05B 61/00;} with provision for latching E05B 59/00, E05B 61/00; arrangements of simultaneously-actuated bolts or other securing devices at well-separated positions on the same wing E05C 9/00; {takes precedence; E05B 15/108, E05B 65/0858, E05B 85/245, E05C 3/28, E05C 3/34 take precedence})
U	E05B 63/16	· with the handles on opposite sides moving independently
M	E05B 63/24	· Arrangements in which the fastening members which engage one another are mounted respectively on the wing and the frame and are both movable, e.g. for release by moving either of them (hasp locks E05B 65/48; hasp fastenings E05C 19/08 {E05B 47/0046, E05B 47/0696, E05B 63/128, E05B 65/48, E05C 19/08 take precedence}{operating or controlling locks using electric or magnetic means in the striker or on the frame E05B 47/0046, adaptation of locks locking the bolt by an electromagnet in the striker E05B 47/0696, locks with means carried by the bolt for interlocking with the keeper and having additional bolt in the striker E05B 63/128;} hasp locks E05B 65/48)

U	**E05B 65/00**	**Locks {or fastenings} for special use**
M	E05B 65/52	· Other locks for chests, boxes, trunks, baskets, travelling bags, or the like ~~(closures for bags or trunks A45C 13/06, A45C 13/10, A45C 13/16 {; hasp locks E05B 65/50; permutation locks E05B 37/00; toggles E05C 19/14; locking slide fasteners A44B 19/301})~~
M	**E05B 67/00**	**Padlocks (permutation locks E05B 37/00 ~~{; steering wheel padlocks B60R 25/022}~~); Details thereof**
M	**E05B 69/00**	**Devices for locking clothing; Lockable clothing holders or hangers ~~({anti-theft monitors E05B 73/0017; shoe hangers, clothing}, dress or hat holders in general A47G 25/00)~~**
M	E05B 69/02	· Lockable clothing hooks (~~coin controlled locking hooks G07F~~*coin-controlled locking hooks G07F 17/10*)
M	**E05B 71/00**	**Locks specially adapted for bicycles, other than padlocks ({locks integral with holders for parking or storing bicycles B62H 3/00~~}; locks integral with cycles B62H 5/00~~;} *locks integral with cycles B62H 5/00*)**
U	**E05B 73/00**	**Devices for locking portable objects against unauthorised removal; Miscellaneous locking devices {(motorcycle helmets A42B 3/0413, B62J 11/005; gun racks A47B 81/005; showcases with theft protection A47F 3/002; anti-theft means for peg-boards, grids or rods for hanging merchandise A47F 5/0861; show stands, hangers, shelves with provision against unauthorised removal A47F 7/024; for self-service hand-carts A47F 10/04; locking skis A63C 11/004; locking bolts, nuts or pins F16B 41/00)}**
M	E05B 73/02	· for walking ~~-~~ sticks or umbrellas *{*(~~{walking sticks with locks A45B 1/04}; stick or umbrella holders in general A47G 25/12~~*locks integral with walking sticks A45B 1/04*)*}*
U	**E05B 77/00**	**Vehicle locks characterised by special functions or purposes (locks specially adapted for bicycles E05B 71/00; locking arrangements for non-fixed vehicle roofs B60J 7/185)**
M	E05B 77/34	· Protection against ~~water~~*weather or dirt*, e.g. against water ingress (closures or guards for keyholes E05B 17/14)
U	E05B 77/54	· Automatic securing or unlocking of bolts triggered by certain vehicle parameters, e.g. exceeding a speed threshold (triggered by vehicle collision E05B 77/12)
U	**E05B 81/00**	**Power-actuated vehicle locks**
U	E05B 81/02	· characterised by the type of actuators used
U	E05B 81/04	· · Electrical (electrical circuits E05B 81/54)
U	E05B 81/10	· · Hydraulic or pneumatic (hydraulic or pneumatic circuits E05B 81/52)
U	E05B 81/52	· Pneumatic or hydraulic circuits (for locking several wings simultaneously E05B 77/50)
U	E05B 81/54	· Electrical circuits (for locking several wings simultaneously E05B 77/48)
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)**
U	**E05B 85/00**	**Details of vehicle locks not provided for in groups E05B 77/00 - E05B 83/00**
M	E05B 85/02	· Lock casings ~~(mounting of lock casings E05B 79/04)~~

Project: RP0131 (Y02B)

M	**Y02B**	**~~INDEXING SCHEME RELATING TO~~ CLIMATE CHANGE MITIGATION TECHNOLOGIES RELATED TO BUILDINGS, e.g. ~~INCLUDING~~ HOUSING ~~AND~~*, HOUSE* APPLIANCES OR RELATED END-USER APPLICATIONS**
E	**Y02B 10/00**	**Integration of renewable energy sources in buildings**
D	Y02B 10/60	· ~~Use of biomass for heating~~ <administratively transferred to Y02B 10/00>
U	**Y02B 20/00**	**Energy efficient lighting technologies**
U	Y02B 20/30	· Semiconductor lamps, e.g. solid state lamps [SSL] light emitting diodes [LED] or organic LED [OLED]
E	Y02B 20/32	· · Electroluminescent panels ~~(not used, see subgroups)~~
D	Y02B 20/325	· · · ~~Specially adapted circuits~~ <administratively transferred to Y02B 20/32>
M	Y02B 20/34	· · ~~inorganic~~*Inorganic* LEDs ~~(not used, see subgroups)~~
U	**Y02B 30/00**	**Energy efficient heating, ventilation or air conditioning [HVAC]**
C	Y02B 30/08	· relating to domestic heating, space heating ~~or~~ , domestic hot water heating *[DHW]* or supply systems ~~[DHW]~~
M	Y02B 30/10	· · using boilers ~~(not used, see subgroups)~~
E	Y02B 30/12	· · Hot water central heating systems using heat pumps
D	Y02B 30/123	· · · ~~Self contained heating units using heat pumps~~ <administratively transferred to Y02B 30/12>
N	*Y02B 30/125*	· · · *combined with the use of heat accumulated in storage masses*
D	Y02B 30/126	· · · · ~~combined with the use of heat accumulated in storage masses~~ <administratively transferred to Y02B 30/125>
N	*Y02B 30/13*	· · *Hot air central heating systems using heat pumps*
U	Y02B 30/16	· · Central heating systems using steam or condensate extracted or exhausted from steam engine plants
N	*Y02B 30/17*	· · *District heating*
M	Y02B 30/20	· · Heat consumers, i.e. devices to provide the end ~~-~~ user with heat
U	Y02B 30/22	· · · Low temperature radiators, i.e. convectors, radiators or a mixture of both with increased heat-exchange surface being suitable for systems working with a low temperature heat transfer medium
U	Y02B 30/28	· · · Direct fired air heaters, i.e. the air being in direct contact with the exhaust gases of the burner
M	Y02B 30/50	· Systems profiting of external ~~/~~ *or* internal conditions ~~(not used, see subgroups)~~
M	Y02B 30/54	· · Free-cooling systems ~~(not used, see subgroups)~~
M	Y02B 30/56	· · Heat recovery units ~~(not used, see subgroups)~~
M	Y02B 30/60	· Other technologies for heating or cooling ~~(not used, see subgroups)~~
U	Y02B 30/62	· · Absorption based systems
M	Y02B 30/625	· · · ~~integrating~~ combined *with* heat ~~and~~*or* power generation [CHP] ~~systems~~, ~~i.e~~*e.g*. trigeneration
U	Y02B 30/70	· Efficient control or regulation technologies (empty, see subgroups)
M	Y02B 30/74	· · Technologies based on motor control ~~(not used, see subgroups)~~
M	Y02B 30/743	· · · ~~Condensing~~ *Speed control of condenser or evaporator fans, e.g. for controlling the* pressure ~~control~~*of the condenser*
M	Y02B 30/76	· · Centralised control ~~(not used, see subgroups)~~
M	Y02B 30/90	· Passive houses; Double facade technology ~~(not used, see subgroups)~~

U	**Y02B 40/00**	**Technologies aiming at improving the efficiency of home appliances**
M	Y02B 40/10	· ~~Relating~~*relating* to domestic cooking ~~(not used, see subgroups)~~
M	Y02B 40/12	· · Induction cooking in kitchen stoves ~~(not used, see subgroups)~~
M	Y02B 40/14	· · Microwave ovens ~~(not used, see subgroups)~~
M	Y02B 40/16	· · Improved cooking stoves ~~(not used, see subgroups)~~
M	Y02B 40/30	· ~~Relating~~*relating* to refrigerators or freezers ~~(not used see subgroups)~~
M	Y02B 40/40	· ~~Relating~~*relating* to dish~~-~~ washers ~~(not used, see subgroups)~~
M	Y02B 40/70	· ~~Relating~~*relating* to laundry dryers ~~(not used, see subgroups)~~
M	Y02B 40/80	· ~~Related~~*relating* to vacuum cleaners ~~(not used, see subgroups)~~
U	**Y02B 70/00**	**Technologies for an efficient end-user side electric power management and consumption**
M	Y02B 70/10	· Technologies improving the efficiency by using switched-mode power supplies [SMPS], i.e. efficient power electronics conversion ~~(not used, see subgroups)~~
M	Y02B 70/14	· · Reduction of losses in power supplies ~~(not used, see subgroups)~~
M	Y02B 70/1416	· · · Converters benefiting from a resonance, e.g. resonant or quasi-resonant converters ~~(not used, see subgroups)~~
M	Y02B 70/1458	· · · Synchronous rectification ~~(not used, see subgroups)~~
M	Y02B 70/30	· Systems integrating technologies related to power network operation and communication or information technologies for improving the carbon footprint of the management of residential or tertiary loads, i.e. smart grids as climate change mitigation technology in the buildings sector, including also the last stages of power distribution and the control, monitoring or operating management systems at local level (smart grids supporting the management or operation of end-user stationary applications in general, ~~including technologies~~ *e.g.* with no associated climate change mitigation effect Y04S 20/00)~~(not used, see subgroups)~~
M	Y02B 70/32	· · End-user application control systems ~~(not used, see subgroups)~~
M	Y02B 70/3208	· · · characterised by the aim of the control ~~(not used, see subgroups)~~
M	Y02B 70/3258	· · · characterised by the end-user application ~~(not used, see subgroups)~~
M	Y02B 70/34	· · Smart metering supporting the carbon neutral operation of end-user applications in buildings ~~(not used, see subgroups)~~
U	**Y02B 90/00**	**Enabling technologies or technologies with a potential or indirect contribution to GHG emissions mitigation**
M	Y02B 90/20	· Systems integrating technologies related to power network operation and communication or information technologies mediating in the improvement of the carbon footprint of the management of residential or tertiary loads, i.e. smart grids as enabling technology in buildings sector ~~(not used, see subgroups)~~(~~Smart~~*smart* grids supporting the management or operation of end-user stationary applications in general, ~~including~~ *or like* technologies with no associated climate change mitigation effect Y04S 20/00)
M	Y02B 90/22	· · Systems characterised by the monitored, controlled or operated end-user elements or equipments ~~(not used, see subgroups)~~
M	Y02B 90/24	· · Smart metering mediating in the carbon neutral operation of end-user applications in buildings ~~(not used, see subgroups)~~
M	Y02B 90/26	· · Communication technology specific aspects ~~(not used, see subgroups)~~
M	Y02B 90/2607	· · · ~~Details of the transmission structure or support~~ *characterised by data transport means* between the monitoring, controlling or managing units and *the* monitored, controlled or operated electrical equipment ~~(not used, see subgroups)~~

M	Y02B 90/2638	····using a *wired telecommunication network or a* data transmission bus
M	Y02B 90/2669	····~~using~~ *involving the use of* Internet *protocol*
M	Y02B 90/2676	···~~Aspects related to the treatment or conditioning of data or signals~~ *Communication technology specific aspects* ~~(not used, see subgroups)~~
M	Y02B 90/2684	····~~associated with communication via~~ *using* dedicated transmission supports
M	Y02B 90/2692	····~~associated with communication via~~ *using* the power ~~transmission network~~*network as support for the transmission*

Project: RP0131 (Y02E)

M	**Y02E**	**REDUCTION OF GREENHOUSE ~~GASES~~*GAS* [GHG] ~~EMISSION~~*EMISSIONS*, RELATED TO ENERGY GENERATION, TRANSMISSION OR DISTRIBUTION**
U	**Y02E 10/00**	**Energy generation through renewable energy sources**
M	Y02E 10/30	·Energy from *the* sea (tidal stream Y02E 10/28)~~(not used; see subgroups)~~
U	Y02E 10/50	·Photovoltaic [PV] energy
M	Y02E 10/54	··Material technologies ~~(not used; see subgroups)~~
U	**Y02E 20/00**	**Combustion technologies with mitigation potential**
M	Y02E 20/10	·Combined combustion ~~(not used, see subgroups)~~
M	Y02E 20/30	·Technologies for a more efficient combustion or heat usage ~~(not used, see subgroups)~~
M	Y02E 20/32	··Direct CO_2 mitigation ~~(not used, see subgroups)~~
M	Y02E 20/34	··Indirect CO_2 mitigation, i.e. by acting on non CO_2 directly related matters of the process, e.g. more efficient use of fuels ~~(not used, see subgroups)~~
U	**Y02E 40/00**	**Technologies for an efficient electrical power generation, transmission or distribution**
M	Y02E 40/20	·Active power filtering [APF] ~~(not used, see subgroups)~~
M	Y02E 40/30	·Reactive power compensation (Y02E 40/10~~,~~ ~~Y02E 40/20~~ take precedence)
M	Y02E 40/70	·Systems integrating technologies related to power network operation and communication or information technologies for improving the carbon footprint of electrical power generation, transmission or distribution, i.e. smart grids as climate change mitigation technology in the energy generation sector (smart grids relating to the energy generation sector in general, ~~including the technologies~~ *e.g.* with no associated climate change mitigation effect Y04S 10/00~~)~~ ~~(not used, see subgroups)~~
C	Y02E 40/72	··Systems characterised by the monitoring, control or operation of energy generation units, e.g. distributed generation [DER] or load-side generation
N	*Y02E 40/725*	···*the energy generation units being or involving renewable energy sources*
U	**Y02E 50/00**	**Technologies for the production of fuel of non-fossil origin**
U	Y02E 50/30	·Fuel from waste
M	Y02E 50/32	··Synthesis of alcohols or diesel from waste including a pyrolysis ~~and/~~or gasification step
M	Y02E 50/34	··Methane ~~(not used, see subgroups)~~
U	**Y02E 60/00**	**Enabling technologies or technologies with a potential or indirect contribution to GHG emissions mitigation**
M	Y02E 60/10	·Energy storage ~~(not used, see subgroups)~~
E	Y02E 60/12	··Battery ~~technology~~*technologies with an indirect contribution to GHG emissions mitigation (battery technologies specific to electromobility Y02T 10/7005)*

C	Y02E 60/128	· · · Hybrid cells *composed of a half-cell of a fuel-cell type and a half-cell of the secondary-cell type*
M	Y02E 60/14	· · Thermal storage ~~(empty, covered by subgroups)~~
M	Y02E 60/30	· Hydrogen technology ~~(not used, see subgroups)~~
M	Y02E 60/70	· Systems integrating technologies related to power network operation and communication or information technologies mediating in the improvement of the carbon footprint of electrical power generation, transmission or distribution, i.e. smart grids as enabling technology in the energy generation sector (smart grids relating to the energy generation sector in general, ~~including the technologies~~ *e.g.* with no associated climate change mitigation effect Y04S 10/00)~~{not used, see subgroups}~~
M	Y02E 60/72	· · Systems characterised by the monitored, controlled or operated power network elements or equipments ~~{not used, see subgroups}~~
M	Y02E 60/721	· · · the elements or equipments being or involving ~~electricity based~~ *electric vehicles [EV] or hybrid* vehicles *[HEV]*, i.e. power aggregation of ~~electric vehicles [~~EV~~]~~ or ~~hybrid vehicles~~ *HEV, vehicle to grid arrangements* [~~HEV~~*V2G*] (remote or cooperative charging Y02T 90/168; details associated with the interoperability in the section of transportation, e.g. vehicle recognition, authentication, identification or billing Y02T 90/169)
U	Y02E 60/727	· · · the elements or equipments being or involving measuring units
M	Y02E 60/728	· · · · the ~~elements or equipments~~ *measuring units* being or involving phasor measuring units [PMU]
M	Y02E 60/78	· · Communication technology specific aspects ~~(not used, see subgroups)~~
M	Y02E 60/7807	· · · ~~Details of the transmission structure or support~~ *characterised by data transport means* between the monitoring, controlling or managing units and monitored, controlled or operated electrical equipment ~~(not used, see subgroups)~~
M	Y02E 60/7838	· · · · using a *wired telecommunication network or a* data transmission bus
M	Y02E 60/7869	· · · · ~~using~~ *involving the use of* Internet *protocol*
M	Y02E 60/7876	· · · ~~Aspects related to the treatment or conditioning of data or signals {not used, see subgroups}~~*Communication technology specific aspects*
M	Y02E 60/7884	· · · · ~~Associated with communication via~~ *using* dedicated transmission supports
M	Y02E 60/7892	· · · · ~~Associated with communication via~~ *using the* power ~~transmission network~~*network as support for the transmission*

Project: RP0131 (Y02T)

U	**Y02T 10/00**	**Road transport of goods or passengers**
U	Y02T 10/10	· Internal combustion engine [ICE] based vehicles
U	Y02T 10/12	· · Technologies for the improvement of indicated efficiency of a conventional ICE
M	Y02T 10/121	· · · Adding non fuel substances *or small quantities of secondary fuel* to fuel, air or fuel/air mixture
M	Y02T 10/126	· · · ~~Treating~~ *Acting upon* fuel *or oxidizing compound*, ~~air~~ *e.g. pre-treatment by catalysts, ultrasound* or ~~air/fuel mixture~~*electricity*
U	Y02T 10/14	· · Technologies for the improvement of mechanical efficiency of a conventional ICE
M	Y02T 10/146	· · · Charge mixing enhancing ~~and kinetic or wave energy of charge~~ outside the combustion chamber~~, i.e. ICE with external or indirect fuel injection~~
E	Y02T 10/30	· · Use of alternative fuels

D	Y02T 10/38	· · · ~~Non-fossil fuels~~ <administratively transferred to Y02T 10/30>
U	Y02T 10/50	· · Intelligent control systems, e.g. conjoint control
M	Y02T 10/60	· Other road transportation technologies with climate change mitigation effect ~~(not used, see subgroups)~~
U	Y02T 10/62	· · Hybrid vehicles
M	Y02T 10/6213	· · · using ICE and electric energy storage, i.e. battery, capacitor (battery ~~or capacitor technology~~*for energy storage* for electromobility in general Y02T 10/7005~~, Y02T 10/7022~~*; capacitor technology for energy storage for electromobility in general Y02T 10/7022*)
U	Y02T 10/6273	· · · Combining different types of energy storage
U	Y02T 10/64	· · Electric machine technologies for applications in electromobilty
U	Y02T 10/642	· · · Control strategies of electric machines for automotive applications
E	Y02T 10/646	· · · · ~~Number of~~ *With two or more* electric drive machines
D	Y02T 10/647	· · · · · ~~One electric drive machine~~ <administratively transferred to Y02T 10/646>
D	Y02T 10/648	· · · · · ~~Two electric drive machines~~ <administratively transferred to Y02T 10/646>
D	Y02T 10/649	· · · · · ~~More than two electric drive machines~~ <administratively transferred to Y02T 10/646>
U	Y02T 10/72	· · Electric energy management in electromobility
E	Y02T 10/7258	· · · Optimisation of vehicle performance
D	Y02T 10/7266	· · · · ~~Automated control~~ <administratively transferred to Y02T 10/7258>
M	Y02T 10/7291	· · · · ~~Route~~ *by route* optimisation *processing*
M	Y02T 10/80	· Technologies aiming to reduce ~~green house~~ *greenhouse* gasses emissions common to all road transportation technologies
M	Y02T 10/82	· · ~~Tools or systems~~ *Elements* for ~~aerodynamic design~~*improving aerodynamics*
E	Y02T 10/86	· · Optimisation of rolling resistance*, e.g. weight reduction*
M	Y02T 10/862	· · · Tyres, e.g. materials~~, shape~~
D	Y02T 10/867	· · · ~~Others, e.g. wheel construction~~ <administratively transferred to Y02T 10/86>
U	Y02T 10/88	· · Optimized components or subsystems, e.g. lighting, actively controlled glasses
U	Y02T 10/90	· · Energy harvesting concepts as power supply for auxiliaries' energy consumption, e.g. photovoltaic sun-roof
E	**Y02T 50/00**	**Aeronautics or air transport**
U	Y02T 50/10	· Drag reduction
E	Y02T 50/14	· · Adaptive structures*, e.g. morphing wings*
D	Y02T 50/145	· · · ~~Morphing wings or smart wings~~ <administratively transferred to Y02T 50/14>
U	Y02T 50/16	· · by influencing airflow
E	Y02T 50/162	· · · ~~Wing tip vortex reduction~~*by generating or controlling vortexes*
M	Y02T 50/164	· · · · ~~Winglets~~*at the wing tip, e.g. winglets*
U	Y02T 50/166	· · · by influencing the boundary layer
D	Y02T 50/168	· · · · ~~actively~~ <administratively transferred to Y02T 50/162>
U	Y02T 50/30	· Wing lift efficiency

U	Y02T 50/40	· Weight reduction
U	Y02T 50/42	· · Airframe
E	Y02T 50/43	· · · ~~Materials~~*Composites*
D	Y02T 50/433	· · · · ~~Composites~~ <administratively transferred to Y02T 50/43>
D	Y02T 50/436	· · · · ~~Metallic lightweight~~ <administratively transferred to Y02T 50/43>
E	Y02T 50/46	· · Interior
D	Y02T 50/47	· · · ~~Materials~~ <administratively transferred to Y02T 50/46>
D	Y02T 50/48	· · · ~~Design measures~~ <administratively transferred to Y02T 50/46>
U	Y02T 50/50	· On board measures aiming to increase energy efficiency
U	Y02T 50/52	· · concerning the electrical systems
E	Y02T 50/54	· · · ~~Electric actuators~~ *All-electric* or ~~motors~~*substantially electric architectures*
D	Y02T 50/545	· · · · ~~All electric architecture~~ <administratively transferred to Y02T 50/54>
N	*Y02T 50/55*	· · · *Solar cells as on-board power source*
E	Y02T 50/56	· · Thermal management*, e.g. environmental control systems [ECS] or cooling*
D	Y02T 50/57	· · · ~~Reduction of energy losses~~ <administratively transferred to Y02T 50/56>
D	Y02T 50/58	· · · ~~Optimization of hot and cold sources on board an aircraft~~ <administratively transferred to Y02T 50/56>
U	Y02T 50/60	· Efficient propulsion technologies
C	Y02T 50/67	· · Relevant aircraft propulsion technologies
M	Y02T 50/673	· · · Improving the ~~rotor~~ blades ~~aerodynamic~~*aerodynamics*
U	Y02T 50/675	· · · Enabling an increased combustion temperature by cooling
U	Y02T 50/676	· · · · Blades cooling
N	*Y02T 50/6765*	· · · *Enabling an increased combustion temperature by thermal barrier coatings*
U	Y02T 50/678	· · · using fuels of non-fossil origin
D	Y02T 50/69	· · ~~Solar cells as on board power source~~ <administratively transferred to Y02T 50/55>
D	Y02T 50/70	· ~~Enabling use of sustainable fuels~~ <administratively transferred to Y02T 50/00>
D	Y02T 50/72	· · ~~Synthetic fuels~~ <administratively transferred to Y02T 50/00>
D	Y02T 50/74	· · ~~Bio fuels~~ <administratively transferred to Y02T 50/00>
U	Y02T 50/80	· Energy efficient operational measures
U	Y02T 50/82	· · Related to ground operations
M	Y02T 50/826	· · · ~~Ground~~*Towing* equipment
C	**Y02T 90/00**	**Enabling technologies or technologies with a potential or indirect contribution to GHG emissions mitigation**
M	Y02T 90/10	· Technologies related to electric vehicle charging ~~(not used, see subgroups)~~
U	Y02T 90/16	· · Information or communication technologies improving the operation of electric vehicles

E Y02T 90/163 · · · Information or communication technologies ~~for~~ *related to* charging ~~station selection~~*of electric vehicle*

D Y02T 90/164 · · · · ~~Charging station suitability~~
<administratively transferred to Y02T 90/163>

D Y02T 90/165 · · · · ~~Charging station location~~
<administratively transferred to Y02T 90/163>

D Y02T 90/166 · · · · ~~Charging station availability~~
<administratively transferred to Y02T 90/163>

M Y02T 90/167 · · · Systems integrating technologies related to power network operation and communication or information technologies for supporting the interoperability of electric or hybrid vehicles, i.e. smartgrids as interface for battery charging of electric ~~and~~ *vehicles [EV] or* hybrid vehicles *[HEV]* (~~power aggregation of HEV or EV Y02E 60/721~~*power aggregation of EV or HEV Y02E 60/721*)~~(not used, see subgroups)~~

NOTE

Documents tagged under Y02T 90/167 are concurrently tagged also under Y04S 30/10

M Y02T 90/30 · Application of fuel cell technology to transportation ~~(not used, see subgroups)~~

M Y02T 90/40 · Application of hydrogen technology to transportation ~~(Y02T 90/30 takes precedence)(not used, see subgroups)~~

U Y02T 90/46 · · Hydrogen as fuel in waterborne transportation

N Y02T 90/50 · *Computer aided design [CAD] for improving the mechanical performance in the sector of transportation, e.g. improvement of aerodynamics, noise or vibration reduction, tyre design*

Project: RP0131 (Y04S)

U Y04S 10/00 Systems supporting electrical power generation, transmission or distribution

M Y04S 10/10 · Systems characterised by the monitored, controlled or operated power network elements or equipment ~~(not used, see subgroups)~~

M Y04S 10/12 · · the elements or ~~equipments~~*equipment* being or involving energy generation units, including distributed generation [DER] or load-side generation

M Y04S 10/126 · · · the energy generation units being or involving ~~electricity based~~ *electric vehicles [EV] or hybrid* vehicles *[HEV]*, i.e. power aggregation of ~~electric vehicles~~ [EV] or ~~hybrid vehicles~~ *HEV, vehicle to grid arrangements* [~~HEV~~*V2G*] (remote or cooperative charging Y04S 30/12; details associated with the interoperability in the section of transportation, e.g. vehicle recognition, authentication, identification or billing Y04S 30/14)

U Y04S 10/26 · · the elements or equipments being or involving measuring units

M Y04S 10/265 · · · the ~~elements or equipments~~ *measuring units* being or involving phasor measuring units [PMU]

M Y04S 10/50 · Systems or methods supporting the power network operation or management, involving a certain degree of interaction with the load-side end user applications ~~(not used, see subgroups)~~

M Y04S 10/52 · · Outage or fault management ~~(not used, see subgroups)~~

C Y04S 10/54 · · Management of operational aspects~~, e.g. planning, load or production forecast, maintenance, construction, extension~~

N Y04S 10/542 · · · *Planning, load or production forecast*

U Y04S 10/545 · · · Computing methods or systems for efficient or low carbon management or operation of electric power systems

N Y04S 10/547 · · · *Maintenance, construction or extension*

M	Y04S 10/56	· · Supply chain or logistics*, e.g. warehousing, distribution, inventory, stock management, order filling, procurement or balancing against orders*
M	Y04S 10/58	· · Financial *or economic* aspects *related to the network operation*
M	**Y04S 20/00**	**Systems supporting the management or operation of end-user stationary applications, including also the last stages of power distribution and the control, monitoring or operating management systems at local level *(the energy generation units being or involving electricity based vehicles Y04S 10/126; remote or cooperative charging of electric or hybrid vehicles Y04S 30/12)***
M	Y04S 20/10	· System characterised by the monitored, controlled or operated end-user elements or equipments ~~(not used, see subgroups)~~
M	Y04S 20/12	· · the elements or equipments being or involving energy storage units, uninterruptible power supply [UPS] systems or standby or emergency generators involved in the last power distribution stages ~~(energy storage units involved in power generation, transmission and distribution Y04S 10/14; uninterruptible power supply systems or standby or emergency generators as end-user application Y04S 20/248)~~
M	Y04S 20/20	· End-user application control systems ~~(not used, see subgroups)~~
M	Y04S 20/22	· · ~~The system~~ characterised by the aim of the control ~~(not used, see subgroups)~~
M	Y04S 20/24	· · ~~The system~~ characterised by the end-user application ~~(not used, see subgroups)~~
M	Y04S 20/248	· · · the end-user application involving ~~uninterruptible power supply~~ [UPS] systems or standby or emergency generators ~~(for uninterruptible power supply systems or standby or emergency generators in the last power distribution stages Y04S 20/12)~~
U	**Y04S 30/00**	**Systems supporting specific end-user applications in the sector of transportation**
M	Y04S 30/10	· Systems supporting the interoperability of electric or hybrid vehicles ~~(not used, see subgroups)~~
M	**Y04S 40/00**	**~~Communication or information technology specific aspects supporting~~ *Systems for* electrical power generation, transmission, distribution or end-user application management *characterised by the use of communication or information technologies, or communication or information technology specific aspects supporting them***
C	Y04S 40/10	· ~~Communication technology specific aspects~~ *characterised by communication technology* ~~(not used, see subgroups)~~
M	Y04S 40/12	· · ~~Details of the transmission structure or support~~ *characterised by data transport means* between the monitoring, controlling or managing units and monitored, controlled or operated electrical equipment ~~(not used, see subgroups)~~
M	Y04S 40/124	· · · ~~Using a~~ *using wired telecommunication networks or* data transmission ~~bus~~*busses*
M	Y04S 40/128	· · · ~~Using~~ *involving the use of* Internet *protocol*
M	Y04S 40/14	· · ~~Aspects related to the treatment or conditioning of data or signals~~ *Communication technology specific aspects* ~~(not used, see subgroups)~~
M	Y04S 40/143	· · · ~~Associated to the communication via~~ *using* dedicated transmission supports
M	Y04S 40/146	· · · ~~Associated to the communication via the power~~ *using power networks as support for* transmission ~~network~~
M	Y04S 40/16	· · Details of management of the overlaying communication network between the monitoring, controlling or managing units and monitored, controlled or operated electrical ~~equipments~~ *equipment* ~~(not used, see subgroups)~~

U	Y04S 40/168	・・・for performance monitoring
N	*Y04S 40/18*	・・*Network protocols supporting networked applications, e.g. including control of end-device applications over a network*
M	Y04S 40/20	・Information technology specific aspects ~~(not used, see subgroups)~~
C	**Y04S 50/00**	**Market activities related to the operation of systems integrating technologies related to power network operation ~~and~~ *or related to* communication or information technologies**
U	Y04S 50/14	・Marketing, i.e. market research and analysis, surveying, promotions, advertising, buyer profiling, customer management or rewards
N	*Y04S 50/16*	・*Energy services, e.g. dispersed generation or demand or load or energy savings aggregation*

Project: RP0375 (G11C)

U	**G11C 5/00**	**Details of stores covered by G11C 11/00**
U	G11C 5/02	・Disposition of storage elements, e.g. in the form of a matrix array
M	G11C 5/04	・・Supports for storage elements~~, Supports for storage elements~~ *{*, ~~{~~e.g. memory modules}; Mounting or fixing of storage elements on such supports
U	**G11C 7/00**	**Arrangements for writing information into, or reading information out from, a digital store (G11C 5/00 takes precedence; auxiliary circuits for stores using semiconductor devices G11C 11/4063, G11C 11/413)**
M	G11C 7/10	・Input/output ~~({~~*[*~~I/O~~*]*~~)~~ data interface arrangements, e.g. I/O data control circuits, I/O data buffers ~~(level conversion circuits in general H03K 19/0175)~~
M	G11C 7/16	・Storage of analogue signals in digital stores using an arrangement comprising analogue/digital ~~({~~*[*~~A/D~~*]*~~)~~ converters, digital memories and digital/analogue ~~({~~*[*~~D/A~~*]*~~)~~ converters
M	G11C 7/22	・Read-write ~~({~~*[*~~R-W~~*]*~~)~~ timing or clocking circuits; Read-write ~~({~~*[*~~R-W~~*]*~~)~~ control signal generators or management
U	**G11C 8/00**	**Arrangements for selecting an address in a digital store (for stores using transistors G11C 11/407, G11C 11/413; {switching or gating circuits for general use H03K 17/00})**
M	G11C 8/04	・using a sequential addressing device, e.g. shift register, counter ~~{~~(~~FIFO G06F 5/06; LIFO G06F 7/78; multidimensional memory addressing G06F 12/0207~~*using first in first out [FIFO] registers for changing speed of digital data flow G06F 5/06; using last in first out [LIFO] registers for processing digital data by operating upon their order G06F 7/00*)~~}~~
U	**G11C 11/00**	**Digital stores characterised by the use of particular electric or magnetic storage elements; Storage elements therefor (G11C 14/00 - G11C 21/00 take precedence)**
U	G11C 11/02	・using magnetic elements {(using multibit magnetic storage elements G11C 11/5607; counters with magnetic elements H03K 23/76; pulse generators, static switches, logic circuits with such elements H03K 3/45, H03K 17/80, H03K 19/16; measurement of magnetic variables G01R 33/00)}
U	G11C 11/06	・・using single-aperture storage elements, e.g. ring core; using multi-aperture plates in which each individual aperture forms a storage element
U	G11C 11/06007	・・・{using a single aperture or single magnetic closed circuit} NOTE Provisionally contains the following details; control write -, read -, address circuitry (pulse generators in general H03K 5/00, H03K 17/00); arrangements for temperature compensation; checking of the correct functioning and repair arrangements (checking methods in general

G06F 11/00, G06F 11/28; testing magnetic elements per se G01R 33/00); magnetic properties, choice of materials or the like (materials per se H01F 1/00)

M G11C 11/06014 · · · ·{using one such element ~~pro~~*per* bit}

U G11C 11/21 ·using electric elements

U G11C 11/34 · ·using semiconductor devices {(processes or apparatus for the manufacture or treatment of semiconductor or solid state devices H01L 21/00; integrated circuit devices H01L 27/00; generating electric pulses, e.g. bistable devices using semiconductor devices H03K 3/00)}

M G11C 11/35 · · ·with charge storage in a depletion layer, e.g. ~~charged~~*charge* coupled devices {(in shift registers G11C 19/282)}

U G11C 11/40 · · ·using transistors

M G11C 11/401 · · · ·forming cells needing refreshing or charge regeneration~~{~~, i.e. dynamic cells~~}~~

U G11C 11/4063 · · · · ·Auxiliary circuits, e.g. for addressing, decoding, driving, writing, sensing or timing

U G11C 11/407 · · · · · ·for memory cells of the field-effect type

M G11C 11/4072 · · · · · · ·Circuits ~~or~~*for* initialisation, powering up or down, clearing memory or presetting

M G11C 11/409 · · · · · · ·Read-write ~~(~~*[*R-W~~)~~*]* circuits

M G11C 11/4093 · · · · · · · ·Input/output ~~(~~*[*I/O~~)~~*]* data interface arrangements, e.g. data buffers ~~(level conversion circuits in general H03K 19/0175)~~

M G11C 11/4096 · · · · · · · ·Input/output ~~(~~*[*I/O~~)~~*]* data management or control circuits, e.g. reading or writing circuits, I/O drivers~~,~~ *or* bit-line switches

U G11C 11/41 · · · ·forming {static} cells with positive feedback, i.e. cells not needing refreshing or charge regeneration, e.g. bistable multivibrator or Schmitt trigger

U G11C 11/413 · · · · ·Auxiliary circuits, e.g. for addressing, decoding, driving, writing, sensing, timing, power reduction (in general G11C 5/00 - G11C 8/00)

U G11C 11/414 · · · · · ·for memory cells of the bipolar type

M G11C 11/416 · · · · · · ·Read-write *[R-W]*circuits

U G11C 11/417 · · · · · ·for memory cells of the field-effect type

M G11C 11/419 · · · · · · ·Read-write *[R-W]* circuits

U G11C 13/00 Digital stores characterised by the use of storage elements not covered by groups G11C 11/00, G11C 23/00 - G11C 25/00

M G11C 13/0002 ·{using ~~resistance random access memory~~ *resistive RAM* [RRAM] elements}

U G11C 14/00 Digital stores characterised by arrangements of cells having volatile and non-volatile storage properties for back-up when the power is down {(bistable elements storing the actual state when the supply voltage fails H03K 3/02335, H03K 3/0375, H03K 3/2865, H03K 3/356008)}

U G11C 14/0009 ·{in which the volatile element is a DRAM cell}

M G11C 14/0018 · ·{~~and~~*whereby* the nonvolatile element is an EEPROM element, e.g. a floating gate or *metal-nitride-oxide-silicon [*MNOS*]* transistor}

U G11C 16/00 Erasable programmable read-only memories (G11C 14/00 takes precedence)

U G11C 16/02 ·electrically programmable {(programmable multibit digital storage elements G11C 11/5621)}

U G11C 16/04 · ·using variable threshold transistors, e.g. FAMOS

M	G11C 16/0466	・・・{comprising cells with charge storage in an insulating layer, e.g. *metal-nitride-oxide-silicon [*MNOS*]*, ~~SNOS~~ *silicon-oxide-nitride-oxide-silicon [SONOS]* (G11C 16/0483, G11C 16/0491 take precedence)}
U	**G11C 17/00**	**Read-only memories programmable only once; Semi-permanent stores, e.g. manually-replaceable information cards ({multibit read-only memories G11C 11/5692; } erasable programmable read-only memories G11C 16/00; coding, decoding or code conversion, in general H03M {; combination of ROM and RAM G11C 11/005, G11C 14/00; for electrical control of combustion engines F02D 41/2406})**
M	G11C 17/02	・using magnetic or ~~induction~~*inductive* elements (G11C 17/14 takes precedence)
U	**G11C 19/00**	**Digital stores in which the information is moved stepwise, e.g. shift register (counting chains H03K 23/00){stack stores, push-down stores (linear pulse counters H03K 23/54, pulse distributors H03K 5/15, methods and arrangements for shifting data G06F 5/01)}**
U	G11C 19/28	・using semiconductor elements (G11C 19/14 takes precedence)
M	G11C 19/282	・・{with charge storage in a depletion layer, i.e. charge coupled devices ~~(C.C.D)~~*[CCD]*}
U	**G11C 29/00**	**Checking stores for correct operation {; Subsequent repair}; Testing stores during standby or offline operation {(testing of electronic circuits in general G01R 31/28; error detection or error correction in computer memories during normal operation G06F 11/1008, G06F 11/1666; testing of computers during standby G06F 11/22)}**
U	G11C 29/04	・Detection or location of defective memory elements {, e.g. cell constructio details, timing of test signals}
U	G11C 29/08	・・Functional testing, e.g. testing during refresh, power-on self testing [POST] or distributed testing
M	G11C 29/10	・・・Test algorithms, e.g. memory scan ~~(~~*[*MScan~~)~~*]* algorithms; Test patterns, e.g. checkerboard patterns

Project: RP0438 (F41B)

M	**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 in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:

F41B 5/16	covered by	*F41B 5/1473*
F41B 5/18	covered by	*F41B 5/1469*
F41B 5/20	covered by	*F41B 5/1426*
F41B 5/22	covered by	*F41B 5/143*

U	**F41B 11/00**	**Compressed-gas guns, e.g. air guns; Steam guns**
U	F41B 11/50	・Magazines for compressed-gas guns; Arrangements for feeding or loading projectiles from magazines

C F41B 11/57 · · Electronic or electric systems for feeding or loading (F41B 11/53 takes precedence)

WARNING
Group F41B 11/57 is impacted by reclassification into group F41B 11/71.
Groups F41B 11/57 and F41B 11/71 should be considered in order to perform a complete search.

U F41B 11/70 · Details not provided for in F41B 11/50 or F41B 11/60

E F41B 11/71 · · Electric or electronic control systems, e.g. for safety purposes ~~(F41B 11/57 takes precedence)~~

WARNING
Group F41B 11/71 is incomplete pending reclassification of documents from group F41B 11/57.
Groups F41B 11/57 and F41B 11/71 should be considered in order to perform a complete search.

Project: RP0484 (A01H)

M A01H **NEW PLANTS OR PROCESSES FOR OBTAINING THEM; PLANT REPRODUCTION BY TISSUE CULTURE TECHNIQUES**

NOTES
1. This subclass covers all aspects related to new plants, including disease resistance, cold resistance and growth speed.
2. In this subclass, angiosperms, i.e. flowering plants, are classified in group A01H 6/00 according to their botanic taxonomy and in group A01H 5/00 according to their plant parts, where disclosed.

C A01H 5/00 **~~Flowering plants~~*Angiosperms*, i.e. ~~angiosperms~~*flowering plants, characterised by their plant parts; Angiosperms characterised otherwise than by their botanic taxonomy***

WARNING
Group A01H 5/00 is impacted by reclassification into groups A01H 6/00, A01H 6/02, A01H 6/024, A01H 6/028, A01H 6/04, A01H 6/045, A01H 6/06, A01H 6/064, A01H 6/068, A01H 6/08, A01H 6/084, A01H 6/088, A01H 6/10, A01H 6/12, A01H 6/14, A01H 6/1408, A01H 6/1416, A01H 6/1424, A01H 6/1432, A01H 6/144, A01H 6/1448, A01H 6/1456, A01H 6/1464, A01H 6/1472, A01H 6/148, A01H 6/1488, A01H 6/1496, A01H 6/16, A01H 6/165, A01H 6/18, A01H 6/185, A01H 6/20, A01H 6/201, A01H 6/202, A01H 6/203, A01H 6/204, A01H 6/205, A01H 6/206, A01H 6/207, A01H 6/22, A01H 6/223, A01H 6/225, A01H 6/228, A01H 6/24, A01H 6/26, A01H 6/264, A01H 6/268, A01H 6/28, A01H 6/30, A01H 6/305, A01H 6/32, A01H 6/324, A01H 6/328, A01H 6/34, A01H 6/342, A01H 6/344, A01H 6/346, A01H 6/348, A01H 6/36, A01H 6/364, A01H 6/368, A01H 6/38, A01H 6/385, A01H 6/40, A01H 6/42, A01H 6/425, A01H 6/44, A01H 6/444, A01H 6/448, A01H 6/46, A01H 6/4606, A01H 6/4612, A01H 6/4618, A01H 6/4624, A01H 6/463, A01H 6/4636, A01H 6/4642, A01H 6/4648, A01H 6/4654, A01H 6/466, A01H 6/4666, A01H 6/4672, A01H 6/4678, A01H 6/4684, A01H 6/469, A01H 6/48, A01H 6/50, A01H 6/502, A01H 6/504, A01H 6/506, A01H 6/508, A01H 6/52, A01H 6/525, A01H 6/54, A01H 6/541, A01H 6/542, A01H 6/543, A01H 6/544, A01H 6/545, A01H 6/546, A01H 6/547, A01H 6/56, A01H 6/564, A01H 6/568, A01H 6/58, A01H 6/60, A01H 6/604, A01H 6/608, A01H 6/62, A01H 6/64, A01H 6/66, A01H 6/68, A01H 6/70, A01H 6/72, A01H 6/74, A01H 6/7409, A01H 6/7418, A01H 6/7427, A01H 6/7436, A01H 6/7445, A01H 6/7454, A01H 6/7463, A01H 6/7472, A01H 6/7481, A01H 6/749, A01H 6/7499, A01H 6/76, A01H 6/78, A01H 6/785,

A01H 6/80, A01H 6/82, A01H 6/821, A01H 6/822, A01H 6/823, A01H 6/824, A01H 6/825, A01H 6/826, A01H 6/827, A01H 6/84, A01H 6/86, and A01H 6/88. All groups listed in this Warning should be considered in order to perform a complete search.

C A01H 5/02 ・Flowers

WARNING
Group A01H 5/02 is impacted by reclassification into groups A01H 6/00, A01H 6/02, A01H 6/024, A01H 6/028, A01H 6/04, A01H 6/045, A01H 6/06, A01H 6/064, A01H 6/068, A01H 6/08, A01H 6/084, A01H 6/088, A01H 6/10, A01H 6/12, A01H 6/14, A01H 6/1408, A01H 6/1416, A01H 6/1424, A01H 6/1432, A01H 6/144, A01H 6/1448, A01H 6/1456, A01H 6/1464, A01H 6/1472, A01H 6/148, A01H 6/1488, A01H 6/1496, A01H 6/16, A01H 6/165, A01H 6/18, A01H 6/185, A01H 6/20, A01H 6/201, A01H 6/202, A01H 6/203, A01H 6/204, A01H 6/205, A01H 6/206, A01H 6/207, A01H 6/22, A01H 6/223, A01H 6/225, A01H 6/228, A01H 6/24, A01H 6/26, A01H 6/264, A01H 6/268, A01H 6/28, A01H 6/30, A01H 6/305, A01H 6/32, A01H 6/324, A01H 6/328, A01H 6/34, A01H 6/342, A01H 6/344, A01H 6/346, A01H 6/348, A01H 6/36, A01H 6/364, A01H 6/368, A01H 6/38, A01H 6/385, A01H 6/40, A01H 6/42, A01H 6/425, A01H 6/44, A01H 6/444, A01H 6/448, A01H 6/46, A01H 6/4606, A01H 6/4612, A01H 6/4618, A01H 6/4624, A01H 6/463, A01H 6/4636, A01H 6/4642, A01H 6/4648, A01H 6/4654, A01H 6/466, A01H 6/4666, A01H 6/4672, A01H 6/4678, A01H 6/4684, A01H 6/469, A01H 6/48, A01H 6/50, A01H 6/502, A01H 6/504, A01H 6/506, A01H 6/508, A01H 6/52, A01H 6/525, A01H 6/54, A01H 6/541, A01H 6/542, A01H 6/543, A01H 6/544, A01H 6/545, A01H 6/546, A01H 6/547, A01H 6/56, A01H 6/564, A01H 6/568, A01H 6/58, A01H 6/60, A01H 6/604, A01H 6/608, A01H 6/62, A01H 6/64, A01H 6/66, A01H 6/68, A01H 6/70, A01H 6/72, A01H 6/74, A01H 6/7409, A01H 6/7418, A01H 6/7427, A01H 6/7436, A01H 6/7445, A01H 6/7454, A01H 6/7463, A01H 6/7472, A01H 6/7481, A01H 6/749, A01H 6/7499, A01H 6/76, A01H 6/78, A01H 6/785, A01H 6/80, A01H 6/82, A01H 6/821, A01H 6/822, A01H 6/823, A01H 6/824, A01H 6/825, A01H 6/826, A01H 6/827, A01H 6/84, A01H 6/86, and A01H 6/88.
All groups listed in this Warning should be considered in order to perform a complete search.

D A01H 5/0205 ・・~~{Amaryllidaceae}~~
<administratively transferred to A01H 5/02 and A01H 6/04>

D A01H 5/0211 ・・・~~{Alstroemeria}~~
<administratively transferred to A01H 5/02 and A01H 6/564>

D A01H 5/0216 ・・~~{Rosaceae}~~
<administratively transferred to A01H 5/02 and A01H 6/74>

D A01H 5/0222 ・・・~~{Rosa roses}~~
<administratively transferred to A01H 5/02 and A01H 6/749>

D A01H 5/0227 ・・~~{Caryophyllaceae}~~
<administratively transferred to A01H 5/02 and A01H 6/30>

D A01H 5/0233 ・・・~~{Dianthus carnations}~~
<administratively transferred to A01H 5/02 and A01H 6/305>

D A01H 5/0238 ・・~~{Begonia}~~
<administratively transferred to A01H 5/02 and A01H 6/18>

D A01H 5/0244 ・・~~{Euphorbia Poinsettia}~~
<administratively transferred to A01H 5/02 and A01H 6/38>

D A01H 5/025 ・・~~{Compositae}~~
<administratively transferred to A01H 5/02 and A01H 6/14>

D A01H 5/0255 ・・・~~{Chrysanthemum}~~
<administratively transferred to A01H 5/02 and A01H 6/1424>

D A01H 5/0261 ・・~~{Impatiens}~~
<administratively transferred to A01H 5/02 and A01H 6/16>

D A01H 5/0266 ・・~~{Kalanchoe}~~
<administratively transferred to A01H 5/02 and A01H 6/32>

D A01H 5/0272 ・・~~{Lilium}~~
<administratively transferred to A01H 5/02 and A01H 6/56>

D A01H 5/0277 ・・~~{Pelargonium Geraniums}~~
<administratively transferred to A01H 5/02 and A01H 6/42>

D A01H 5/0283 ・・~~{Gesneriaceae}~~
<administratively transferred to A01H 5/02 and A01H 6/44>

D A01H 5/0288 ・・・~~{Saintpaulia Afr. Violets}~~
<administratively transferred to A01H 5/02 and A01H 6/444>

D A01H 5/0294 ・・・~~{Streptocarpus}~~
<administratively transferred to A01H 5/02 and A01H 6/448>

C A01H 5/04 ・Stems

WARNING
Group A01H 5/04 is impacted by reclassification into groups A01H 6/00, A01H 6/02, A01H 6/024, A01H 6/028, A01H 6/04, A01H 6/045, A01H 6/06, A01H 6/064, A01H 6/068, A01H 6/08, A01H 6/084, A01H 6/088, A01H 6/10, A01H 6/12, A01H 6/14, A01H 6/1408, A01H 6/1416, A01H 6/1424, A01H 6/1432, A01H 6/144, A01H 6/1448, A01H 6/1456, A01H 6/1464, A01H 6/1472, A01H 6/148, A01H 6/1488, A01H 6/1496, A01H 6/16, A01H 6/165, A01H 6/18, A01H 6/185, A01H 6/20, A01H 6/201, A01H 6/202, A01H 6/203, A01H 6/204, A01H 6/205, A01H 6/206, A01H 6/207, A01H 6/22, A01H 6/223, A01H 6/225, A01H 6/228, A01H 6/24, A01H 6/26, A01H 6/264, A01H 6/268, A01H 6/28, A01H 6/30, A01H 6/305, A01H 6/32, A01H 6/324, A01H 6/328, A01H 6/34, A01H 6/342, A01H 6/344, A01H 6/346, A01H 6/348, A01H 6/36, A01H 6/364, A01H 6/368, A01H 6/38, A01H 6/385, A01H 6/40, A01H 6/42, A01H 6/425, A01H 6/44, A01H 6/444, A01H 6/448, A01H 6/46, A01H 6/4606, A01H 6/4612, A01H 6/4618, A01H 6/4624, A01H 6/463, A01H 6/4636, A01H 6/4642, A01H 6/4648, A01H 6/4654, A01H 6/466, A01H 6/4666, A01H 6/4672, A01H 6/4678, A01H 6/4684, A01H 6/469, A01H 6/48, A01H 6/50, A01H 6/502, A01H 6/504, A01H 6/506, A01H 6/508, A01H 6/52, A01H 6/525, A01H 6/54, A01H 6/541, A01H 6/542, A01H 6/543, A01H 6/544, A01H 6/545, A01H 6/546, A01H 6/547, A01H 6/56, A01H 6/564, A01H 6/568, A01H 6/58, A01H 6/60, A01H 6/604, A01H 6/608, A01H 6/62, A01H 6/64, A01H 6/66, A01H 6/68, A01H 6/70, A01H 6/72, A01H 6/74, A01H 6/7409, A01H 6/7418, A01H 6/7427, A01H 6/7436, A01H 6/7445, A01H 6/7454, A01H 6/7463, A01H 6/7472, A01H 6/7481, A01H 6/749, A01H 6/7499, A01H 6/76, A01H 6/78, A01H 6/785, A01H 6/80, A01H 6/82, A01H 6/821, A01H 6/822, A01H 6/823, A01H 6/824, A01H 6/825, A01H 6/826, A01H 6/827, A01H 6/84, A01H 6/86, and A01H 6/88.
All groups listed in this Warning should be considered in order to perform a complete search.

C A01H 5/06 ・Roots

WARNING
Group A01H 5/06 is impacted by reclassification into groups A01H 6/00, A01H 6/02, A01H 6/024, A01H 6/028, A01H 6/04, A01H 6/045, A01H 6/06, A01H 6/064, A01H 6/068, A01H 6/08, A01H 6/084, A01H 6/088, A01H 6/10, A01H 6/12, A01H 6/14, A01H 6/1408, A01H 6/1416, A01H 6/1424, A01H 6/1432, A01H 6/144, A01H 6/1448, A01H 6/1456, A01H 6/1464, A01H 6/1472, A01H 6/148, A01H 6/1488, A01H 6/1496, A01H 6/16,

A01H 6/165, A01H 6/18, A01H 6/185, A01H 6/20, A01H 6/201, A01H 6/202, A01H 6/203, A01H 6/204, A01H 6/205, A01H 6/206, A01H 6/207, A01H 6/22, A01H 6/223, A01H 6/225, A01H 6/228, A01H 6/24, A01H 6/26, A01H 6/264, A01H 6/268, A01H 6/28, A01H 6/30, A01H 6/305, A01H 6/32, A01H 6/324, A01H 6/328, A01H 6/34, A01H 6/342, A01H 6/344, A01H 6/346, A01H 6/348, A01H 6/36, A01H 6/364, A01H 6/368, A01H 6/38, A01H 6/385, A01H 6/40, A01H 6/42, A01H 6/425, A01H 6/44, A01H 6/444, A01H 6/448, A01H 6/46, A01H 6/4606, A01H 6/4612, A01H 6/4618, A01H 6/4624, A01H 6/463, A01H 6/4636, A01H 6/4642, A01H 6/4648, A01H 6/4654, A01H 6/466, A01H 6/4666, A01H 6/4672, A01H 6/4678, A01H 6/4684, A01H 6/469, A01H 6/48, A01H 6/50, A01H 6/502, A01H 6/504, A01H 6/506, A01H 6/508, A01H 6/52, A01H 6/525, A01H 6/54, A01H 6/541, A01H 6/542, A01H 6/543, A01H 6/544, A01H 6/545, A01H 6/546, A01H 6/547, A01H 6/56, A01H 6/564, A01H 6/568, A01H 6/58, A01H 6/60, A01H 6/604, A01H 6/608, A01H 6/62, A01H 6/64, A01H 6/66, A01H 6/68, A01H 6/70, A01H 6/72, A01H 6/74, A01H 6/7409, A01H 6/7418, A01H 6/7427, A01H 6/7436, A01H 6/7445, A01H 6/7454, A01H 6/7463, A01H 6/7472, A01H 6/7481, A01H 6/749, A01H 6/7499, A01H 6/76, A01H 6/78, A01H 6/785, A01H 6/80, A01H 6/82, A01H 6/821, A01H 6/822, A01H 6/823, A01H 6/824, A01H 6/825, A01H 6/826, A01H 6/827, A01H 6/84, A01H 6/86, and A01H 6/88.
All groups listed in this Warning should be considered in order to perform a complete search.

C A01H 5/08 ・Fruits

WARNING
Group A01H 5/08 is impacted by reclassification into groups A01H 6/00, A01H 6/02, A01H 6/024, A01H 6/028, A01H 6/04, A01H 6/045, A01H 6/06, A01H 6/064, A01H 6/068, A01H 6/08, A01H 6/084, A01H 6/088, A01H 6/10, A01H 6/12, A01H 6/14, A01H 6/1408, A01H 6/1416, A01H 6/1424, A01H 6/1432, A01H 6/144, A01H 6/1448, A01H 6/1456, A01H 6/1464, A01H 6/1472, A01H 6/148, A01H 6/1488, A01H 6/1496, A01H 6/16, A01H 6/165, A01H 6/18, A01H 6/185, A01H 6/20, A01H 6/201, A01H 6/202, A01H 6/203, A01H 6/204, A01H 6/205, A01H 6/206, A01H 6/207, A01H 6/22, A01H 6/223, A01H 6/225, A01H 6/228, A01H 6/24, A01H 6/26, A01H 6/264, A01H 6/268, A01H 6/28, A01H 6/30, A01H 6/305, A01H 6/32, A01H 6/324, A01H 6/328, A01H 6/34, A01H 6/342, A01H 6/344, A01H 6/346, A01H 6/348, A01H 6/36, A01H 6/364, A01H 6/368, A01H 6/38, A01H 6/385, A01H 6/40, A01H 6/42, A01H 6/425, A01H 6/44, A01H 6/444, A01H 6/448, A01H 6/46, A01H 6/4606, A01H 6/4612, A01H 6/4618, A01H 6/4624, A01H 6/463, A01H 6/4636, A01H 6/4642, A01H 6/4648, A01H 6/4654, A01H 6/466, A01H 6/4666, A01H 6/4672, A01H 6/4678, A01H 6/4684, A01H 6/469, A01H 6/48, A01H 6/50, A01H 6/502, A01H 6/504, A01H 6/506, A01H 6/508, A01H 6/52, A01H 6/525, A01H 6/54, A01H 6/541, A01H 6/542, A01H 6/543, A01H 6/544, A01H 6/545, A01H 6/546, A01H 6/547, A01H 6/56, A01H 6/564, A01H 6/568, A01H 6/58, A01H 6/60, A01H 6/604, A01H 6/608, A01H 6/62, A01H 6/64, A01H 6/66, A01H 6/68, A01H 6/70, A01H 6/72, A01H 6/74, A01H 6/7409, A01H 6/7418, A01H 6/7427, A01H 6/7436, A01H 6/7445, A01H 6/7454, A01H 6/7463, A01H 6/7472, A01H 6/7481, A01H 6/749, A01H 6/7499, A01H 6/76, A01H 6/78, A01H 6/785, A01H 6/80, A01H 6/82, A01H 6/821, A01H 6/822, A01H 6/823, A01H 6/824, A01H 6/825, A01H 6/826, A01H 6/827, A01H 6/84, A01H 6/86, and A01H 6/88.
All groups listed in this Warning should be considered in order to perform a complete search.

D A01H 5/0806 ・・~~{Citrus}~~
<administratively transferred to A01H 5/08 and A01H 6/78>

D A01H 5/0812 ・・~~{Vitis grapes}~~
<administratively transferred to A01H 5/08 and A01H 6/88>

D A01H 5/0818 · · ~~{Persea avocados}~~
<administratively transferred to A01H 5/08 and A01H 6/52>

D A01H 5/0825 · · ~~{Nuts}~~
<administratively transferred to A01H 5/08 and A01H 6/54>

D A01H 5/0831 · · ~~{Rosaceae}~~
<administratively transferred to A01H 5/08 and A01H 6/749>

D A01H 5/0837 · · · ~~{Prunus}~~
<administratively transferred to A01H 5/08 and A01H 6/7427>

D A01H 5/0843 · · · · ~~{Apricots}~~
<administratively transferred to A01H 5/08 and A01H 6/7436>

D A01H 5/085 · · · · ~~{Cherries}~~
<administratively transferred to A01H 5/08 and A01H 6/7445>

D A01H 5/0856 · · · · ~~{Nectarines}~~
<administratively transferred to A01H 5/08 and A01H 6/7454>

D A01H 5/0862 · · · · ~~{Plums}~~
<administratively transferred to A01H 5/08 and A01H 6/7472>

D A01H 5/0868 · · · · ~~{Peaches}~~
<administratively transferred to A01H 5/08 and A01H 6/7463>

D A01H 5/0875 · · · ~~{Malus apples}~~
<administratively transferred to A01H 5/08 and A01H 6/7418>

D A01H 5/0881 · · · ~~{Pyrus pears}~~
<administratively transferred to A01H 5/08 and A01H 6/7481>

D A01H 5/0887 · · · ~~{Rubus brambles}~~
<administratively transferred to A01H 5/08 and A01H 6/7499>

D A01H 5/0893 · · · ~~{Fragaria strawberries}~~
<administratively transferred to A01H 5/08 and A01H 6/7409>

C A01H 5/10 · Seeds ~~{, e.g. gramineae leguminosae, brassicaceae}~~

WARNING

Group A01H 5/10 is impacted by reclassification into groups A01H 6/00, A01H 6/02, A01H 6/024, A01H 6/028, A01H 6/04, A01H 6/045, A01H 6/06, A01H 6/064, A01H 6/068, A01H 6/08, A01H 6/084, A01H 6/088, A01H 6/10, A01H 6/12, A01H 6/14, A01H 6/1408, A01H 6/1416, A01H 6/1424, A01H 6/1432, A01H 6/144, A01H 6/1448, A01H 6/1456, A01H 6/1464, A01H 6/1472, A01H 6/148, A01H 6/1488, A01H 6/1496, A01H 6/16, A01H 6/165, A01H 6/18, A01H 6/185, A01H 6/20, A01H 6/201, A01H 6/202, A01H 6/203, A01H 6/204, A01H 6/205, A01H 6/206, A01H 6/207, A01H 6/22, A01H 6/223, A01H 6/225, A01H 6/228, A01H 6/24, A01H 6/26, A01H 6/264, A01H 6/268, A01H 6/28, A01H 6/30, A01H 6/305, A01H 6/32, A01H 6/324, A01H 6/328, A01H 6/34, A01H 6/342, A01H 6/344, A01H 6/346, A01H 6/348, A01H 6/36, A01H 6/364, A01H 6/368, A01H 6/38, A01H 6/385, A01H 6/40, A01H 6/42, A01H 6/425, A01H 6/44, A01H 6/444, A01H 6/448, A01H 6/46, A01H 6/4606, A01H 6/4612, A01H 6/4618, A01H 6/4624, A01H 6/463, A01H 6/4636, A01H 6/4642, A01H 6/4648, A01H 6/4654, A01H 6/466, A01H 6/4666, A01H 6/4672, A01H 6/4678, A01H 6/4684, A01H 6/469, A01H 6/48, A01H 6/50, A01H 6/502, A01H 6/504, A01H 6/506, A01H 6/508, A01H 6/52, A01H 6/525, A01H 6/54, A01H 6/541, A01H 6/542, A01H 6/543, A01H 6/544, A01H 6/545, A01H 6/546, A01H 6/547, A01H 6/56, A01H 6/564, A01H 6/568, A01H 6/58, A01H 6/60, A01H 6/604, A01H 6/608, A01H 6/62, A01H 6/64, A01H 6/66, A01H 6/68, A01H 6/70, A01H 6/72, A01H 6/74, A01H 6/7409, A01H 6/7418, A01H 6/7427, A01H 6/7436, A01H 6/7445, A01H 6/7454, A01H 6/7463, A01H 6/7472, A01H 6/7481, A01H 6/749, A01H 6/7499, A01H 6/76, A01H 6/78, A01H 6/785, A01H 6/80, A01H 6/82, A01H 6/821, A01H 6/822, A01H 6/823, A01H 6/824, A01H 6/825, A01H 6/826, A01H 6/827, A01H 6/84, A01H 6/86, and A01H 6/88.

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

C A01H 5/12 · Leaves ~~{, e.g. raygrass, bluegrass, lettuce, tobacco or crops produced for industrial treatment or commercialisation of their leaves}~~

WARNING
Group A01H 5/12 is impacted by reclassification into groups A01H 6/00, A01H 6/02, A01H 6/024, A01H 6/028, A01H 6/04, A01H 6/045, A01H 6/06, A01H 6/064, A01H 6/068, A01H 6/08, A01H 6/084, A01H 6/088, A01H 6/10, A01H 6/12, A01H 6/14, A01H 6/1408, A01H 6/1416, A01H 6/1424, A01H 6/1432, A01H 6/144, A01H 6/1448, A01H 6/1456, A01H 6/1464, A01H 6/1472, A01H 6/148, A01H 6/1488, A01H 6/1496, A01H 6/16, A01H 6/165, A01H 6/18, A01H 6/185, A01H 6/20, A01H 6/201, A01H 6/202, A01H 6/203, A01H 6/204, A01H 6/205, A01H 6/206, A01H 6/207, A01H 6/22, A01H 6/223, A01H 6/225, A01H 6/228, A01H 6/24, A01H 6/26, A01H 6/264, A01H 6/268, A01H 6/28, A01H 6/30, A01H 6/305, A01H 6/32, A01H 6/324, A01H 6/328, A01H 6/34, A01H 6/342, A01H 6/344, A01H 6/346, A01H 6/348, A01H 6/36, A01H 6/364, A01H 6/368, A01H 6/38, A01H 6/385, A01H 6/40, A01H 6/42, A01H 6/425, A01H 6/44, A01H 6/444, A01H 6/448, A01H 6/46, A01H 6/4606, A01H 6/4612, A01H 6/4618, A01H 6/4624, A01H 6/463, A01H 6/4636, A01H 6/4642, A01H 6/4648, A01H 6/4654, A01H 6/466, A01H 6/4666, A01H 6/4672, A01H 6/4678, A01H 6/4684, A01H 6/469, A01H 6/48, A01H 6/50, A01H 6/502, A01H 6/504, A01H 6/506, A01H 6/508, A01H 6/52, A01H 6/525, A01H 6/54, A01H 6/541, A01H 6/542, A01H 6/543, A01H 6/544, A01H 6/545, A01H 6/546, A01H 6/547, A01H 6/56, A01H 6/564, A01H 6/568, A01H 6/58, A01H 6/60, A01H 6/604, A01H 6/608, A01H 6/62, A01H 6/64, A01H 6/66, A01H 6/68, A01H 6/70, A01H 6/72, A01H 6/74, A01H 6/7409, A01H 6/7418, A01H 6/7427, A01H 6/7436, A01H 6/7445, A01H 6/7454, A01H 6/7463, A01H 6/7472, A01H 6/7481, A01H 6/749, A01H 6/7499, A01H 6/76, A01H 6/78, A01H 6/785, A01H 6/80, A01H 6/82, A01H 6/821, A01H 6/822, A01H 6/823, A01H 6/824, A01H 6/825, A01H 6/826, A01H 6/827, A01H 6/84, A01H 6/86, and A01H 6/88.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/00 ***Angiosperms, i.e. flowering plants, characterised by their botanic taxonomy***

WARNING
Group A01H 6/00 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/02 · *Amaranthaceae or Chenopodiaceae, e.g. beet or spinach*

WARNING
Group A01H 6/02 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/024 · · *{Beta vulgaris [beet]}*

WARNING
Group A01H 6/024 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

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

N A01H 6/028 · · {Spinacia oleracea [spinach]}

WARNING
Group A01H 6/028 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

Q A01H 6/04 · Amaryllidaceae, e.g. onion

WARNING
Group A01H 6/04 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. Group A01H 6/04 is also impacted by reclassification into groups A01H 6/045.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/045 · · {Allium cepa [onion]}

WARNING
Group A01H 6/045 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/04.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/06 · Apiaceae, e.g. celery or carrot

WARNING
Group A01H 6/06 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/064 · · {Apium graveolens [celery]}

WARNING
Group A01H 6/064 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/068 · · {Daucus carota [carrot]}

WARNING
Group A01H 6/068 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/08 · *Apocynaceae, e.g. Madagascar periwinkle*

WARNING

Group A01H 6/08 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/084 · · *{Catharanthus, e.g. Madagascar periwinkle}*

WARNING

Group A01H 6/084 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/088 · · *{Mandevilla}*

WARNING

Group A01H 6/088 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/10 · *Aroideae, e.g. Zantedeschia*

WARNING

Group A01H 6/10 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/12 · *Asparagaceae, e.g. Hosta*

WARNING

Group A01H 6/12 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

Q A01H 6/14 · *Asteraceae or Compositae, e.g. safflower, sunflower, artichoke or lettuce*

WARNING

Group A01H 6/14 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. Group A01H 6/14 is also impacted by reclassification into groups A01H 6/1408, A01H 6/1416, A01H 6/1424, A01H 6/1432, A01H 6/144, A01H 6/1448, A01H 6/1456, A01H 6/1464, A01H 6/1472, A01H 6/148, A01H 6/1488, and A01H 6/1496.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/1408* · · *{Aster}*

WARNING

Group A01H 6/1408 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/14.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/1416* · · *{Carthamus tinctorius [safflower]}*

WARNING

Group A01H 6/1416 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/14.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/1424* · · *{Chrysanthemum}*

WARNING

Group A01H 6/1424 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/14.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/1432* · · *{Cynara cardunculus [artichoke]}*

WARNING

Group A01H 6/1432 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/14.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/144* · · *{Dahlia}*

WARNING

Group A01H 6/144 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/14.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/1448* · · *{Echinacea}*

WARNING

Group A01H 6/1448 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/14.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/1456* · · *{Gerbera}*

WARNING

Group A01H 6/1456 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/14.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/1464* · · *{Helianthus annuus [sunflower]}*

WARNING
Group A01H 6/1464 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/14.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/1472* · · *{Lactuca sativa [lettuce]}*

WARNING
Group A01H 6/1472 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/14.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/148* · · *{Osteospermum}*

WARNING
Group A01H 6/148 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/14.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/1488* · · *{Stevia}*

WARNING
Group A01H 6/1488 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/14.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/1496* · · *{Tagetes [marigold]}*

WARNING
Group A01H 6/1496 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/14.
All groups listed in this Warning should be considered in order to perform a complete search.

Q *A01H 6/16* · *Balsaminaceae, e.g. Impatiens*

WARNING
Group A01H 6/16 is incomplete pending reclassification of documents from group A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. Group A01H 6/16. Group A01H 6/16 is also impacted by reclassification into group A01H 6/165.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/165* · · *{Impatiens}*

WARNING
Group A01H 6/165 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/16.

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

Q A01H 6/18 · *Begoniaceae, e.g. Begonia*

WARNING
Group A01H 6/18 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. Group A01H 6/18 is also impacted by reclassification into group A01H 6/185.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/185 · · *{Begonia}*

WARNING
Group A01H 6/185 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/18.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/20 · *Brassicaceae, e.g. canola, broccoli or rucola*

WARNING
Group A01H 6/20 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/201 · · *{Brassica juncea}*

WARNING
Group A01H 6/201 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/202 · · *{Brassica napus [canola]}*

WARNING
Group A01H 6/202 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/203 · · *{Brassica oleraceae, e.g. broccoli or kohlrabi}*

WARNING
Group A01H 6/203 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/204* · · *{Brassica rapa}*

WARNING
Group A01H 6/204 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/205* · · *{Eruca sativa [rucola, arugula or rocket]}*

WARNING
Group A01H 6/205 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/206* · · *{Raphanus sativus [radish]}*

WARNING
Group A01H 6/206 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/207* · · *{Sinapis alba [white mustard]}*

WARNING
Group A01H 6/207 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/22* · *Bromeliaceae*

WARNING
Group A01H 6/22 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/223* · · *{Aechmea fasciata}*

WARNING
Group A01H 6/223 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/225* · · *{Guzmania}*

WARNING
Group A01H 6/225 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/228* · · *{Vriesea}*

WARNING

Group A01H 6/228 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/24* · *Cactaceae, e.g. cactus or Easter cactus*

WARNING

Group A01H 6/24 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/26* · *Campanulaceae*

WARNING

Group A01H 6/26 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/264* · · *{Campanula}*

WARNING

Group A01H 6/264 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/268* · · *{Lobelia}*

WARNING

Group A01H 6/268 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/28* · *Cannabaceae, e.g. cannabis*

WARNING

Group A01H 6/28 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

Q *A01H 6/30* · *Caryophyllaceae*

WARNING

Group A01H 6/30 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. Group A01H 6/30 is also impacted by reclassification into group A01H 6/305.

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

N A01H 6/305 · · {Dianthus carnations}

WARNING
Group A01H 6/305 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/30.
All groups listed in this Warning should be considered in order to perform a complete search.

Q A01H 6/32 · Crassulaceae

WARNING
Group A01H 6/32 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. Group A01H 6/32 is also impacted by reclassification into groups A01H 6/324 and A01H 6/328.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/324 · · {Kalanchoe}

WARNING
Group A01H 6/324 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/32.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/328 · · {Sedum}

WARNING
Group A01H 6/328 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/32.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/34 · Cucurbitaceae, e.g. bitter melon, cucumber or watermelon

WARNING
Group A01H 6/34 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/342 · · {Citrullus lanatus [watermelon]}

WARNING
Group A01H 6/342 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/344* · · *{Cucumis melo [melon]}*

WARNING

Group A01H 6/344 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/346* · · *{Cucumis sativus[cucumber]}*

WARNING

Group A01H 6/346 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/348* · · *{Cucurbita, e.g. squash or pumpkin}*

WARNING

Group A01H 6/348 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/36* · *Ericaceae, e.g. azalea, cranberry or blueberry*

WARNING

Group A01H 6/36 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/364* · · *{Rhododendron, e.g. Azalea}*

WARNING

Group A01H 6/364 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/368* · · *{Vaccinium, e.g. cranberry, blueberry}*

WARNING

Group A01H 6/368 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

Q *A01H 6/38* · *Euphorbiaceae, e.g. Poinsettia*

WARNING

Group A01H 6/38 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. Group A01H 6/38 is also impacted by reclassification into group A01H 6/385.

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

N *A01H 6/385* · · *{Euphorbia, e.g. Poinsettia}*

WARNING
Group A01H 6/385 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/38.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/40* · *Gentianaceae, e.g. Exacum*

WARNING
Group A01H 6/40 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

Q *A01H 6/42* · *Geraniaceae, e.g. Geranium*

WARNING
Group A01H 6/42 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. Group A01H 6/42 is also impacted by reclassification into group A01H 6/425.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/425* · · *{Pelargonium [Geranium]}*

WARNING
Group A01H 6/425 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/42.
All groups listed in this Warning should be considered in order to perform a complete search.

Q *A01H 6/44* · *Gesneriaceae, e.g. African violet*

WARNING
Group A01H 6/44 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. Group A01H 6/44 is also impacted by reclassification into groups A01H 6/444 and A01H 6/448.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/444* · · *{Saintpaulia [African violet]}*

WARNING
Group A01H 6/444 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/44.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/448* · · *{Streptocarpus}*

WARNING

Group A01H 6/448 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/44.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/46* · *Gramineae or Poaceae, e.g. ryegrass, rice, wheat or maize*

WARNING

Group A01H 6/46 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/4606* · · *{Agrostis [bentgrass]}*

WARNING

Group A01H 6/4606 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/4612* · · *{Cynodon [Bermudagrass]}*

WARNING

Group A01H 6/4612 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/4618* · · *{Fescue}*

WARNING

Group A01H 6/4618 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/4624* · · *{Hordeum vulgarus [barley]}*

WARNING

Group A01H 6/4624 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/463* · · *{Lolium [ryegrass]}*

WARNING

Group A01H 6/463 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/4636 · · *{Oryza sp. [rice]}*

WARNING

Group A01H 6/4636 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/4642 · · *{Panicum [switchgrass]}*

WARNING

Group A01H 6/4642 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/4648 · · *{Paspalum}*

WARNING

Group A01H 6/4648 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/4654 · · *{Pennisetum [pearl millet]}*

WARNING

Group A01H 6/4654 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/466 · · *{Poa, e.g. bluegrass}*

WARNING

Group A01H 6/466 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/4666 · · *{Sorghum, e.g. sudangrass}*

WARNING

Group A01H 6/4666 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/4672 · · *{Triticale}*

WARNING

Group A01H 6/4672 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/4678 · · *{Triticum sp. [wheat]}*

WARNING

Group A01H 6/4678 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/4684 · · *{Zea mays [maize]}*

WARNING

Group A01H 6/4684 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/469 · · *{Zoysia}*

WARNING

Group A01H 6/469 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/48 · *Hydrangeacae, e.g. Hydrangea*

WARNING

Group A01H 6/48 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/50 · *Laminaceae, e.g. lavender, mint or chia*

WARNING

Group A01H 6/50 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/502 · · *{Lavendula, e.g. lavender}*

WARNING

Group A01H 6/502 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/504 · · *{Mentha sp., e.g. mint}*

WARNING

Group A01H 6/504 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/506* · · *{Ocimum basilicum [basil]}*

WARNING

Group A01H 6/506 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/508* · · *{Salvia sp., e.g. chia}*

WARNING

Group A01H 6/508 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

Q *A01H 6/52* · *Lauraceae, e.g. avocado*

WARNING

Group A01H 6/52 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. Group A01H 6/52 is also impacted by reclassification into group A01H 6/525.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/525* · · *{Persea [avocado]}*

WARNING

Group A01H 6/525 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/52.
All groups listed in this Warning should be considered in order to perform a complete search.

Q *A01H 6/54* · *Leguminosae or Fabaceae, e.g. soybean, alfalfa or peanut*

WARNING

Group A01H 6/54 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. Group A01H 6/54 is also impacted by reclassification into groups A01H 6/541, A01H 6/542, A01H 6/543, A01H 6/544, A01H 6/545, A01H 6/546, and A01H 6/547.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/541* · · *{Arachis hypogaea [peanut]}*

WARNING

Group A01H 6/541 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12 and A01H 6/54.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/542* · · *{Glycine max [soybean]}*

WARNING

Group A01H 6/542 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12 and A01H 6/54.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/543* · · *{Lupinus}*

WARNING

Group A01H 6/543 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12 and A01H 6/54.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/544* · · *{Medicago sativa [alfalfa]}*

WARNING

Group A01H 6/544 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12 and A01H 6/54.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/545* · · *{Phaseolus, e.g. kidney beans, scarlet runners or spotted beans}*

WARNING

Group A01H 6/545 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12 and A01H 6/54.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/546* · · *{Pisum sativum [pea]}*

WARNING

Group A01H 6/546 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12 and A01H 6/54.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/547* · · *{Vigna [cowpea]}*

WARNING

Group A01H 6/547 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12 and A01H 6/54.
All groups listed in this Warning should be considered in order to perform a complete search.

Q *A01H 6/56* · *Liliaceae, e.g. Alstroemeria or Lilium*

WARNING

Group A01H 6/56 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. Group A01H 6/56 is also impacted by reclassification into groups A01H 6/564 and A01H 6/568.

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

N A01H 6/564 · · *{Alstroemeria}*

WARNING
Group A01H 6/564 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/56.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/568 · · *{Lilium}*

WARNING
Group A01H 6/568 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/56.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/58 · *Linaceae, e.g. flax*

WARNING
Group A01H 6/58 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/60 · *Malvaceae, e.g. cotton or hibiscus*

WARNING
Group A01H 6/60 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/604 · · *{Gossypium [cotton]}*

WARNING
Group A01H 6/604 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/608 · · *{Hibiscus}*

WARNING
Group A01H 6/608 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/62 · *Orchidaceae [Orchid family]*

WARNING
Group A01H 6/62 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

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

N A01H 6/64 · *Papaveraceae, e.g. poppy*

WARNING
Group A01H 6/64 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/66 · *Pedaliaceae, e.g. sesame*

WARNING
Group A01H 6/66 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/68 · *Plantaginaceae, e.g. Antirrhinum*

WARNING
Group A01H 6/68 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/70 · *Polemoniaceae, e.g. Phlox*

WARNING
Group A01H 6/70 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/72 · *Ranunculaceae, e.g. Clematis*

WARNING
Group A01H 6/72 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

Q A01H 6/74 · *Rosaceae, e.g. strawberry, apple, almonds, pear, rose, blackberries or raspberries*

WARNING
Group A01H 6/74 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. Group A01H 6/74 is also impacted by reclassification into groups A01H 6/7409, A01H 6/7418, A01H 6/7427, A01H 6/7436, A01H 6/7445, A01H 6/7454, A01H 6/7463, A01H 6/7472, A01H 6/7481, A01H 6/749, and A01H 6/7499.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/7409 · · *{Fragaria, i.e. strawberries}*

WARNING

Group A01H 6/7409 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12 and A01H 6/74.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/7418 · · *{Malus domestica, i.e. apples}*

WARNING

Group A01H 6/7418 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12 and A01H 6/74.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/7427 · · *{Prunus, e.g. almonds}*

WARNING

Group A01H 6/7427 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12 and A01H 6/74.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/7436 · · · *{Apricots}*

WARNING

Group A01H 6/7436 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12 and A01H 6/74.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/7445 · · · *{Cherries}*

WARNING

Group A01H 6/7445 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12 and A01H 6/74.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/7454 · · · *{Nectarines}*

WARNING

Group A01H 6/7454 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12 and A01H 6/74.
All groups listed in this Warning should be considered in order to perform a complete search.

N A01H 6/7463 · · · *{Peaches}*

WARNING

Group A01H 6/7463 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12 and A01H 6/74.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/7472* · · ·*{Plums}*

WARNING

Group A01H 6/7472 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12 and A01H 6/74.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/7481* · ·*{Pyrus, i.e. pears}*

WARNING

Group A01H 6/7481 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12 and A01H 6/74.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/749* · ·*{Rosa, i.e. roses}*

WARNING

Group A01H 6/749 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12 and A01H 6/74.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/7499* · ·*{Rubus, e.g. blackberries or raspberries}*

WARNING

Group A01H 6/7499 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12 and A01H 6/74.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/76* ·*Rubiaceae, e.g. Pentas*

WARNING

Group A01H 6/76 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

Q *A01H 6/78* ·*Rutaceae, e.g. lemons or limes*

WARNING

Group A01H 6/78 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. Group A01H 6/78 is also impacted by reclassification into group A01H 6/785.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/785* · ·*{Citrus, e.g. lemons or limes}*

WARNING

Group A01H 6/785 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12 and A01H 6/78.

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

N *A01H 6/80* · *Saxifragaceae, e.g. Heuchera*

WARNING
Group A01H 6/80 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/82* · *Solanaceae, e.g. pepper, tobacco, potato, tomato or eggplant*

WARNING
Group A01H 6/82 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/821* · · *{Calibrachoa}*

WARNING
Group A01H 6/821 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/822* · · *{Capsicum sp. [pepper]}*

WARNING
Group A01H 6/822 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/823* · · *{Nicotiana, e.g. tobacco}*

WARNING
Group A01H 6/823 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/824* · · *{Petunia}*

WARNING
Group A01H 6/824 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/825* · · *{Solanum lycopersicum [tomato]}*

WARNING
Group A01H 6/825 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

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

N *A01H 6/826* · · *{Solanum melongena [eggplant]}*

WARNING
Group A01H 6/826 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/827* · · *{Solanum tuberosum [potato]}*

WARNING
Group A01H 6/827 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/84* · *Urticaceae, e.g. ramie*

WARNING
Group A01H 6/84 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/86* · *Verbenaceae, e.g. Verbena*

WARNING
Group A01H 6/86 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

N *A01H 6/88* · *Vitaceae, e.g. Vitus [grape]*

WARNING
Group A01H 6/88 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.
All groups listed in this Warning should be considered in order to perform a complete search.

Project: RP0489 (H04N)

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

NOTES

1. This subclass covers :
   - ~~{generation, recording or}~~ transmission of pictures or their transient or permanent reproduction either locally or remotely {and the corresponding electronic image capture and reproduction process employing image

representative electric signals~~,~~}, by methods ~~or arrangements~~ *involving both of* {~~involving~~*or* at least one of} the following steps:~~-~~

a. the {electronic acquisition or} scanning of a picture {or scene}~~-~~, i.e. resolving the whole picture-containing area into individual picture-elements and the derivation of picture-representative electric signals related thereto, simultaneously or in sequence {, e.g. by reading an electronic solid-state image sensor [SSIS] pickup device ~~(~~, e.g. CCD or CMOS image sensor~~)~~, as electronic image sensor converting optical image information into said electrical signals~~;~~};
b. the reproduction of the whole picture-containing area {or scene} by the reproduction of individual picture -elements into which the picture is resolved by means of picture -representative electric signals derived therefrom, simultaneously or in sequence ~~by converting an electric image signal into light e.g. with an electronic spatial light modulator~~;

- ~~{ concerning cameras or projectors:~~
  - ~~video cameras or TV cameras, e.g. in studios, CCTV cameras, surveillance cameras, camcorders; constructional or mechanical details related to such cameras even when not peculiar to the presence of an electronic image sensor [EIS] e.g. housings;~~
  - ~~arrangements or methods for image capture using an EIS or image projection using an electronic spatial light modulator [ESLM], i.e.~~
    i. ~~sensor read-out;~~
    ii. ~~processing of electrical image signals from the EIS or provided to the ESLM for the generation of respective camera or projector control signals,~~
      - ~~for controlling the EIS or its read-out for e.g. exposure, scene selection for auto focussing, or electronic image enhancement or processing of the image signals captured by the EIS, e.g. white balance, electronic motion blur correction, noise suppression H04N 5/00,~~
      - ~~for controlling the ESLM, e.g. control of the light source based on electronic image signal, light conditioning specially adapted for the ESLM, or~~
      - ~~for controlling other camera functions, e.g. exposure, shaking by influencing optical parts of the camera (generation of control signals for focussing for optical elements G02B 7/28; using such signals to control focus of particular apparatus, see the subclasses for the apparatus, e.g. G03B, G03F, H04N);~~
  - ~~electronic image data storage (data storage in general G11B, G11C);~~
  - ~~in-camera image processing e.g. correction of lens distortion, defect pixel correction, noise suppression, removal of motion blur, improving of the dynamic range of the image, in-projector image processing, electronic image data manipulation, e.g. during display or projection (image processing per seG06T);~~
  - ~~electronic viewfinders e.g. control of image pickup devices based on information indicated by the electronic viewfinder displaying an image signal generated by the EIS ;~~
  - ~~electrical or mechanical aspects of camera modules using electronic image sensors, as well as related constructional details as in webcams or mobile phones (seeH04M 1/0264 for mounting structure in mobile phones);~~
  - ~~details of projectors peculiar to the use of an ESLM, e.g. dichroic or polarizing arrangements specially adapted for the ESLM (dichroic or polarizing arrangements in general G02B, G03B);~~
  - ~~remote control of cameras or projectors peculiar to the EIS or the ESLM, e.g. affecting their operation, or based on a generated image signal;~~

~~• adaptations peculiar to the use of a EIS or ESLM and/or the display, the transmission, recording or other use of electrical image data and related circuitry, e.g. mounting of EIS or ESLM, integrated cleaning system for the EIS, dust mapping, cooling of the EIS, controlling the operation of the EIS by external input signals;~~
~~• systems or apparatus wherein the inventive contribution lies in the interaction between features covered in Notes 1 above, concerning cameras and projectors, when interacting with those covered in Note 1 of G03B, e.g. switch-over between electronic motion-blur correction of electronic viewfinder during focussing and optical motion-blur correction of the lens during exposure, electronic motion blur correction of the electronic image sensor based on output signals of additional sensor, or interaction between mechanical shutter and electronic control of the charge accumulation period of the EIS;~~
~~}~~

- ~~(~~in group H04N 1/00 ~~)~~ , systems for the transmission or the reproduction of arbitrarily composed pictures or patterns in which the local light variations composing a picture are not subject to variation with time, e.g. documents ~~(both written and printed)~~, maps, charts, photographs ~~(~~other than cinematograph films~~)~~;
- circuits specially designed for dealing with pictorial communication signals, e.g. television signals, as distinct from merely signals of a particular frequency range.

2. This subclass does not cover :
   - circuits or other parts of systems which form the subject of other subclasses, which are covered by the corresponding subclasses, e.g. H03C, H03F, H03J, H04B, H04H;
   - systems in which legible alphanumeric or like character forms are analysed according to step (a) of Note (1) to derive an electric signal from which the character is recognised by comparison with stored information, which are covered by subclass G06K;
   - systems for the direct photographic copying of an original picture in which an electric signal representative of the picture is derived according to the said step (a) ~~of~~ and employed to modify the operation of the system, e.g. to control exposure, which are covered by class G03;
   - systems for the reproduction according to step (b) of Note (1) of pictures comprising alphanumeric or like character forms but involving the production of the equivalent of a signal which would be derived according to the ~~abovementioned~~ *above -mentioned* step (a), e.g. by cams, punched card or tape, coded control signal, or other means, which are covered by the subclass for the application, e.g. G01D, G06T, H04L;
   - systems for the reproduction *according* to the above-mentioned step (b) of pictures comprising alphanumeric or like character forms and involving the generation according to the ~~abovementioned~~ *above -mentioned* step (a) of picture-representative electric signals from a pre-arranged assembly of such characters, or records thereof, forming an integral part of the systems, which are covered by the subclass for the application, e.g. B41B, G06K, subject to those applications which are covered by this subclass;
   - printing, duplication or marking ~~methods~~*processes* , or materials or processes therefor, which are covered by the relevant subclasses, e.g. B41C, *B41J,* B41M, G03C, G03F, G03G;
   - {apparatus or methods for taking photographs using light sensitive film for image capture, apparatus/methods for printing, for projecting or viewing images using film stock, photographic film or slides by optical means, e.g. mounting of optical elements, flashes, and their related controls, e.g. exposure, focus, (opto-)mechanical motion blur (anti-shake), cooling, beam shaping;}
   - {aspects of apparatus or methods for taking photographs using an electronic image sensor [EIS] for image capture, insofar as they

correspond to those of said apparatus methods for taking photographs using light sensitive film, i.e. insofar as not peculiar to the presence of the EIS, e.g. mounting of optical elements or flashes not peculiar to the presence of the EIS, and their related controls insofar as they are not peculiar to the presence or use of the EIS, e.g. exposure, focus, (opto-)mechanical motion blur (anti-shake);}

- {aspects of apparatus or methods for projecting or viewing images using an electronic spatial light modulator [ESLM], insofar as they correspond to those of said apparatus/ methods for projecting or viewing images using film stock, photographic film or slides, i.e. insofar as not peculiar to the presence of the ESLM, e.g. mounting of optical elements not peculiar to the presence of the ESLM, and their related controls not peculiar to the presence of the ESLM, e.g. cooling, beam shaping, optical keystone correction;}
- {(opto-)mechanical image enhancement in printers or projectors, e.g. keystone correction;}
- {optical viewfinders;}
- {remote control of cameras and projectors insofar not peculiar to the EIS or ESLM, e.g. not affecting their operation, or being based on a generated image signal;}
- { optical aspects of camera modules using electronic image sensors and related constructional details (optical elements or arrangements associated with solid state imager structures H01L 27/14625); }
- {constructional aspects of projectors, e.g. cooling, beam shaping, light integrating means not peculiar to the ESLM;}

3. In this subclass, the following expression is used with the meaning indicated:

- "television systems" means those systems for the {electronic generation, } ~~,~~transmission and reproduction of arbitrarily composed pictures in which the local light variations composing a picture may change with time, e.g. natural "live" scenes, {electronic} recordings of such scenes such as cinematograph films.

4. {In this subclass, as in subclass G03B, the following terms are used with the meaning indicated:

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

}

WARNING

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

~~**H04N5/31**~~	~~covered by~~	~~G01S 7/52, G01S 15/89~~
H04N 5/761	covered by	H04N 5/782

H04N 5/7613	covered by	H04N 5/782
H04N 5/7617	covered by	H04N 5/782
H04N 5/922	covered by	H04N 5/92
H04N 5/924	covered by	H04N 5/92
H04N 9/815	covered by	H04N 9/81
H04N 11/24	covered by	H04N 11/002
~~**H04N15/00**~~	~~covered by~~	~~H04N 13/00~~

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 5/222 ・Studio circuitry; Studio devices; Studio equipment {; Cameras comprising an electronic image sensor, e.g. digital cameras, video cameras, TV cameras, video cameras, camcorders, webcams, camera modules for embedding in other devices, e.g. mobile phones, computers or vehicles}

U H04N 5/225 ・・Television cameras {; Cameras comprising an electronic image sensor, e.g. digital cameras, video cameras, video cameras, camcorders, webcams, camera modules for embedding in other devices, e.g. mobile phones, computers or vehicles (optical systems G02B; associated working of recording or reproducing apparatus with TV camera or receiver in which the television signal is not significantly involved G11B 31/006; tubes H01J)}

M H04N 5/2251 ・・・{Constructional details (~~arrangement comprising a plurality of cameras H04N 5/247;~~ *arrangements comprising a plurality of cameras H04N 5/247;* stereoscopic cameras having a single image sensor ~~H04N 13/0207~~*H04N 13/207*)}

M H04N 5/247 ・・・Arrangements of television cameras {(constructional details of cameras H04N 5/2251~~; stereoscopic picture signal generators H04N 13/0239; H04N 13/0242~~)}

M **H04N 13/00** **Stereoscopic ~~{or multiview} television~~ *video* systems*; Multi-view video systems*; Details thereof**

NOTE

~~{~~ This group covers systems ~~where~~*providing* a three-dimensional *[3D]* effect*,* or different views ~~according~~ to ~~the viewpoint location are provided to~~ one or more viewers by means of electronic signals representing ~~a plurality of images~~ *images, which could be taken from different viewpoints,* or *by means of* signals including depth information *{*, e.g. taken from different viewpoint locations representing the interocular distance ~~(optical systems for producing stereoscopic or other three dimensional effects G02B 27/22)~~}

D H04N 13/0003 ・~~{Stereoscopic image signal coding, multiplexing, processing, recording or transmission (television signal bandwidth reduction H04N 19/00; image coding for general purpose image data processing G06T 9/00; transformation of the video signal for recording, including multiplexing of another television signal H04N 5/9205; for colour signals, H04N 9/8227; selective content distribution, e.g. interactive television, VOD H04N 21/00; assembling of a multiplex stream, e.g. transport stream, by combining a video stream with other content or additional data, remultiplexing of multiplex streams, insertion of stuffing bits into the multiplex stream, assembling of a packetized elementary stream H04N 21/236; disassembling of a multiplex stream, e.g. demultiplexing audio and video streams or extraction of additional data from a video stream, remultiplexing of multiplex streams, extraction or processing of service information at client side, disassembling of packetized elementary stream H04N 21/434)}~~
<administratively transferred to H04N 13/10>

D H04N 13/0007 ・・~~{Processing stereoscopic image signals (H04N 19/597, H04N 13/004 take precedence; image processing as such G06T)}~~
<administratively transferred to H04N 13/106>

D H04N 13/0011 ・・・~~{Transformation of stereoscopic image signals corresponding to virtual viewpoints, e.g. spatial image interpolation}~~
<administratively transferred to H04N 13/111>

D H04N 13/0014 ・・・・~~{the virtual viewpoint location being selected by the observer, e.g. observer tracking with look around effect (H04N 13/0278 takes precedence)}~~
<administratively transferred to H04N 13/117>

D H04N 13/0018 ・・・~~{Improving the 3D impression of a stereoscopic image by modifying the image content, e.g. with filtering or addition of monoscopic depth cues}~~
<administratively transferred to H04N 13/122>

D H04N 13/0022 ・・・~~{Aspects relating to depth or disparity adjustment}~~
<administratively transferred to H04N 13/128>

D H04N 13/0025 ・・・~~{Equalizing the characteristics of different image components in stereoscopic images, e.g. average brightness or colour balance}~~
<administratively transferred to H04N 13/133>

D H04N 13/0029 ・・・~~{Format conversion of stereoscopic images, e.g. frame-rate or size (standards conversion per se H04N 7/01; reformatting operations at client side of video signals for household redistribution, storage or real-time display H04N 21/4402; reformatting operations at server side of video signals for distribution or compliance with end-user requests or end-user device requirements H04N 21/2343)}~~
<administratively transferred to H04N 13/139>

D H04N 13/0033 ・・・~~{Aspects relating to flicker and/or eyestrain reduction}~~
<administratively transferred to H04N 13/144>

D H04N 13/0037 ・・~~{Colour aspects (processing of colour signals per se H04N 9/64)}~~
<administratively transferred to H04N 13/15>

D H04N 13/004 ・・~~{Mixing stereoscopic image signals}~~
<administratively transferred to H04N 13/156>

D H04N 13/0044 ・・~~{Switching stereoscopic image signals}~~
<administratively transferred to H04N 13/158>

D H04N 13/0048 · · ~~{Encoding, multiplexing or demultiplexing different image signal components in stereoscopic image signals (H04N 19/597 takes precedence; assembling of a multiplex stream, e.g. transport stream, by combining a video stream with other content or additional data, remultiplexing of multiplex streams, insertion of stuffing bits into the multiplex stream, assembling of a packetized elementary stream H04N 21/236; disassembling of a multiplex stream, e.g. demultiplexing audio and video streams or extraction of additional data from a video stream, remultiplexing of multiplex streams, extraction or processing of service information at client side, disassembling of packetized elementary stream H04N 21/434; demultiplexing of several video streams H04N 21/4347)}~~
<administratively transferred to H04N 13/161>

D H04N 13/0051 · · ~~{Synchronisation or controlling aspects (synchronization processes at server side, e.g. processing of program clock references H04N 21/242; content synchronization processes at client side H04N 21/4302; control signals issued by server directed to the network components or client H04N 21/633; control signals issued by the network directed to the server or the client H04N 21/64746; control signals issued by the client directed to the server or network components H04N 21/637; transmission of management data between client and server H04N 21/65)}~~
<administratively transferred to H04N 13/167>

D H04N 13/0055 · · ~~{Recording or reproducing stereoscopic image signals}~~
<administratively transferred to H04N 13/189>

D H04N 13/0059 · · ~~{Transmission of stereoscopic image signals (selective content distribution, e.g. interactive television, VOD H04N 21/00; assembling of a multiplex stream, e.g. transport stream, by combining a video stream with other content or additional data, remultiplexing of multiplex streams, insertion of stuffing bits into the multiplex stream, assembling of a packetized elementary stream H04N 21/236; disassembling of a multiplex stream, e.g. demultiplexing audio and video streams or extraction of additional data from a video stream, remultiplexing of multiplex streams, extraction or processing of service information at client side, disassembling of packetized elementary stream H04N 21/434; interfacing the downstream path of the transmission network for selective content distribution at server side H04N 21/238; interfacing the downstream path of the transmission network originating from a server for selective content distribution at client side H04N 21/438)}~~
<administratively transferred to H04N 13/194>

D H04N 13/0062 · · ~~{the image signal comprising non-image signal components, e.g. metadata, headers, format information or subtitles (multiplexing of additional data and video streams H04N 21/23614; demultiplexing of additional data and video streams H04N 21/4348)}~~
<administratively transferred to H04N 13/172>

D H04N 13/0066 · · · ~~{metadata (generation or processing, within selective content distribution, of descriptive data, e.g. content descriptors H04N 21/84)}~~
<administratively transferred to H04N 13/178>

D H04N 13/007 · · · ~~{subtitles or other OSD information, e.g. menu (data services within selective content distribution, e.g. news ticker H04N 21/488; data services for displaying subtitles H04N 21/4884)}~~
<administratively transferred to H04N 13/183>

U H04N 2013/0074 · {Stereoscopic image analysis}

U H04N 2013/0096 · · {Synchronisation or controlling aspects}

D H04N 13/02 · ~~Picture signal generators~~
<administratively transferred to H04N 13/20>

D H04N 13/0203 · · ~~{using a stereoscopic image camera (endoscopes with stereoscopic vision A61B 1/00193; stereoscopic photography G03B 35/00)}~~
<administratively transferred to H04N 13/204>

D H04N 13/0207 · · · ~~{involving a single 2D image pickup sensor}~~
<administratively transferred to H04N 13/207>

D H04N 13/021 · · · · ~~{using temporal multiplexing, i.e. alternatively capturing several geometrical viewpoints separated in time (H04N 13/0221 takes precedence)}~~
<administratively transferred to H04N 13/211>

D H04N 13/0214 · · · · ~~{using spectral multiplexing, i.e. simultaneously capturing several geometrical viewpoints separated by different spectral characteristics}~~
<administratively transferred to H04N 13/214>

D H04N 13/0217 · · · · ~~{using spatial multiplexing, i.e. simultaneously capturing several geometrical viewpoints on different parts of the image pickup sensor}~~
<administratively transferred to H04N 13/218>

D H04N 13/0221 · · · · ~~{using the relative movement between camera and object}~~
<administratively transferred to H04N 13/221>

D H04N 13/0225 · · · · ~~{having a parallax barrier}~~
<administratively transferred to H04N 13/225>

D H04N 13/0228 · · · · ~~{having a lenticular screen (H04N 13/0232 takes precedence)}~~
<administratively transferred to H04N 13/229>

D H04N 13/0232 · · · · ~~{having a fly-eye lenticular screen}~~
<administratively transferred to H04N 13/232>

D H04N 13/0235 · · · · ~~{having a varifocal lens or mirror}~~
<administratively transferred to H04N 13/236>

D H04N 13/0239 · · · ~~{having two 2D image pickup sensors representing the interocular distance}~~
<administratively transferred to H04N 13/239>

D H04N 13/0242 · · · ~~{having more than two 2D image pickup sensors}~~
<administratively transferred to H04N 13/243>

D H04N 13/0246 · · · ~~{Calibration aspects relating to the control of a stereoscopic camera (processing of captured images to determine and compensate stereo camera misalignment, e.g. stereo camera calibration G06T 7/85)}~~
<administratively transferred to H04N 13/246>

D H04N 13/025 · · · ~~{having several image pickup sensors with different characteristics other than location or field of view, e.g. different resolution, colour pickup characteristic or additional depth information or, where the image signals of one image pickup sensor are used to control the characteristics of at least one other image pickup sensor}~~
<administratively transferred to H04N 13/25>

D H04N 13/0253 · · · ~~{in combination with an electromagnetic radiation source for illuminating the subject}~~
<administratively transferred to H04N 13/254>

D H04N 13/0257 · · ~~{Colour aspects (processing of color signals per se H04N 9/64)}~~
<administratively transferred to H04N 13/257>

D H04N 13/026 · · ~~{with monoscopic to stereoscopic image conversion (H04N 13/0221 takes precedence)}~~
<administratively transferred to H04N 13/261>

D H04N 13/0264 · · · ~~{using the relative movement of objects in two video frames or fields}~~
<administratively transferred to H04N 13/264>

D H04N 13/0267 · · · ~~{by scanning a film}~~
<administratively transferred to H04N 13/266>

D H04N 13/0271 · · ~~{wherein the generated image signal comprises a depth map or a disparity map (depth map generation as such G06T 7/593)}~~
<administratively transferred to H04N 13/271>

D H04N 13/0275 · · ~~{from a 3D object model, e.g. computer generated stereoscopic image signals}~~
<administratively transferred to H04N 13/275>

D H04N 13/0278 · · · ~~{the virtual viewpoint location being selected by the observer, e.g. observer tracking}~~
<administratively transferred to H04N 13/279>

D H04N 13/0282 · · ~~{for generating stereoscopic image signals corresponding to more than two geometrical viewpoints, e.g. multiview systems}~~
<administratively transferred to H04N 13/282>

D H04N 13/0285 · · ~~{having a monoscopic mode and a separate stereoscopic mode}~~

~~WARNING~~

~~this group is not complete, pending a reorganization. Documents classified before 6/10/2011 which, in the present scheme, should be classified in this group can be found in H04N 13/0292.~~

<administratively transferred to H04N 13/286>

D H04N 13/0289 · · · ~~{details relating to the switching between said modes}~~

~~WARNING~~

~~this group is not complete, pending a reorganization. Documents classified before 6/10/2011 which, in the present scheme, should be classified in this group can be found in H04N 13/0292.~~

<administratively transferred to H04N 13/289>

D H04N 13/0292 · · ~~{generating mixed monoscopic/stereoscopic images, e.g. a stereoscopic image overlay window in a monoscopic image background}~~

~~NOTE~~

~~this group provisionally includes documents classified before 6/10/2011 which, in the present scheme, should be classified in H04N 13/0285 and H04N 13/0289.~~

<administratively transferred to H04N 13/293>

D H04N 13/0296 · · ~~{Synchronisation or controlling aspects (synchronization processes at server side, e.g. processing of program clock references H04N 21/242; content synchronization processes at client side H04N 21/4302)}~~

~~NOTE~~

~~control aspects for eyestrain reduction are classified here in combination with H04N 2213/002~~

<administratively transferred to H04N 13/296>

D H04N 13/04 · ~~Picture reproducers {(optical systems for producing stereoscopic or other three dimensional effects G02B 27/22)}~~
<administratively transferred to H04N 13/30>

D H04N 13/0402 · · ~~{using an autostereoscopic display, i.e. viewing by the user without the aid of special glasses}~~
<administratively transferred to H04N 13/302>

D H04N 13/0404 · · · ~~{using a lenticular screen (H04N 13/0406 takes precedence)}~~
<administratively transferred to H04N 13/305>

D H04N 13/0406 · · · ~~{using a fly-eye lenticular screen}~~
<administratively transferred to H04N 13/307>

D H04N 13/0409 · · · ~~{using a parallax barrier, e.g. spatial light modulator}~~
<administratively transferred to H04N 13/31>

D H04N 13/0411 · · · · ~~{the parallax barrier being placed behind the spatial light modulator, e.g. between backlight and SLM}~~
<administratively transferred to H04N 13/312>

D H04N 13/0413 · · · · ~~{the parallax barrier being time-variant}~~
<administratively transferred to H04N 13/315>

D H04N 13/0415 · · · ~~{with slanted parallax optics}~~
<administratively transferred to H04N 13/317>

D H04N 13/0418 · · · ~~{using an array of controllable light sources or a moving aperture or light source}~~
<administratively transferred to H04N 13/32>

D H04N 13/042 · · · ~~{using a varifocal lens or mirror}~~
<administratively transferred to H04N 13/322>

D H04N 13/0422 · · ~~{Colour aspects (processing of colour signals per se H04N 9/64)}~~
<administratively transferred to H04N 13/324>

D H04N 13/0425 · · ~~{Calibration aspects}~~
<administratively transferred to H04N 13/327>

D H04N 13/0427 · · ~~{using a digital micromirror device [DMD]}~~
<administratively transferred to H04N 13/365>

D H04N 13/0429 · · ~~{for viewing by the user with the aid of special glasses or head mounted displays [HMD], i.e. stereoscopic displaying (spectacles or goggles insofar as they have the same features as spectacles G02C)}~~
<administratively transferred to H04N 13/332>

D H04N 13/0431 · · · ~~{with spectral multiplexing, i.e. simultaneously displaying left and right images separated using glasses with different spectral characteristics, e.g. anaglyph method or Pulfrich method}~~
<administratively transferred to H04N 13/334>

D H04N 13/0434 · · · ~~{with polarisation multiplexing, i.e. simultaneously displaying left and right images separated using glasses with different polarising characteristics}~~
<administratively transferred to H04N 13/337>

D H04N 13/0436 · · · ~~{with spatial multiplexing, i.e. simultaneously displaying left and right images on different parts of the display screen and using glasses to optically recombine the stereoscopic image, e.g. with prisms or mirrors (H04N 13/0434 takes precedence)}~~
<administratively transferred to H04N 13/339>

D H04N 13/0438 · · · ~~{with temporal multiplexing, i.e. alternatively displaying left and right images separated in time and using glasses to alternatively block the right and left eye}~~
<administratively transferred to H04N 13/341>

D H04N 13/044 · · · ~~{with head mounted left-right displays (optical head mounted displays G02B 27/017)}~~
<administratively transferred to H04N 13/344>

D H04N 13/0443 · · ~~{using a half transparent mirror or prism}~~
<administratively transferred to H04N 13/346>

D H04N 13/0445 · · ~~{for displaying more than two geometrical viewpoints without observer tracking, i.e. multiview displays}~~
<administratively transferred to H04N 13/349>

D H04N 13/0447 · · · ~~{simultaneously}~~
<administratively transferred to H04N 13/351>

D H04N 13/045 · · · ~~{sequentially}~~
<administratively transferred to H04N 13/354>

D H04N 13/0452 · · ~~{having a monoscopic mode and a separate stereoscopic mode}~~

~~WARNING~~

~~this group is not complete, pending a reorganization. Documents classified before 6/10/2011 which, in the present scheme, should be classified in this group are provisionally classified in H04N 13/0456.~~

<administratively transferred to H04N 13/356>

D H04N 13/0454 · · · ~~{details of mode switching}~~

~~WARNING~~

~~this group is not complete, pending a reorganization. Documents classified before 6/10/2011 which, in the present scheme, should be classified in this group are provisionally classified in H04N 13/0456.~~

<administratively transferred to H04N 13/359>

D H04N 13/0456 · · ~~{generating mixed monoscopic or stereoscopic images, e.g. a stereoscopic image overlay window on a monoscopic image background}~~

~~NOTE~~

~~this group provisionally includes documents classified before 6/10/2011 which, in the present scheme, should be classified in H04N 13/0452 and H04N 13/0454.~~

<administratively transferred to H04N 13/361>

D H04N 13/0459 · · ~~{using an image projection screen (H04N 13/0493, H04N 13/0495 take precedence; projection devices per se H04N 9/31)}~~
<administratively transferred to H04N 13/363>

D H04N 2013/0461 · · ~~{Privacy aspects, i.e. devices showing different images to different viewers, the images not being viewpoints of the same scene (not used, see subgroups)}~~
<administratively transferred to H04N 2013/40>

D H04N 2013/0463 · · · ~~{the images being monoscopic}~~
<administratively transferred to H04N 2013/403>

D H04N 2013/0465 · · · ~~{the images being stereoscopic or three dimensional}~~
<administratively transferred to H04N 2013/405>

D H04N 13/0468 · · ~~{using observer tracking (computer input or output arrangements in interaction with the human body G06F 3/011)}~~
<administratively transferred to H04N 13/366>

D H04N 13/047 · · · ~~{for several observers}~~
<administratively transferred to H04N 13/368>

D H04N 13/0472 · · · ~~{for tracking with variable interocular distance or rotational head movements around the vertical axes}~~
<administratively transferred to H04N 13/371>

D H04N 13/0475 · · · ~~{for tracking forward-backward translational head movements, i.e. longitudinal movements}~~
<administratively transferred to H04N 13/373>

D H04N 13/0477 · · · ~~{for tracking left-right translational head movements, i.e. lateral movements}~~
<administratively transferred to H04N 13/376>

D H04N 13/0479 · · · ~~{for tracking rotational head movements in a plane parallel to the screen}~~
<administratively transferred to H04N 13/378>

D H04N 13/0481 · · · ~~{for tracking vertical translational head movements}~~
<administratively transferred to H04N 13/38>

D H04N 13/0484 · · · ~~{for tracking with gaze detection, i.e. detecting the lines of sight of the observers eyes}~~
<administratively transferred to H04N 13/383>

D H04N 13/0486 · · ~~{alternating rapidly the location of the left-right image components on the display screen}~~
<administratively transferred to H04N 13/315>

D H04N 13/0488 · · ~~{Volumetric display, i.e. systems where the image is built up from picture elements distributed over a volume}~~
<administratively transferred to H04N 13/388>

D H04N 13/049 · · · ~~{the picture elements emitting light where a pair of light beams intersect in a transparent material}~~
<administratively transferred to H04N 13/39>

D H04N 13/0493 · · · ~~{the volume being generated by a moving, e.g. vibrating or rotating, surface}~~
<administratively transferred to H04N 13/393>

D H04N 13/0495 · · · ~~{with depth sampling, i.e. the volume being constructed from a stack or sequence of 2D image planes}~~
<administratively transferred to H04N 13/395>

D H04N 13/0497 · · ~~{Synchronisation or controlling aspects (synchronization processes at server side, e.g. processing of program clock references H04N 21/242; content synchronization processes at client side H04N 21/4302)}~~

~~NOTE~~

~~control aspects for eyestrain reduction are classified here in combination with H04N 2213/002~~

<administratively transferred to H04N 13/398>

N H04N 13/10 · Processing, recording or transmission of stereoscopic or multi-view image signals

N H04N 13/106 · · Processing image signals (for multi-view video sequence encoding H04N 19/597)

N H04N 13/111 · · · Transformation of image signals corresponding to virtual viewpoints, e.g. spatial image interpolation

N H04N 13/117 · · · · the virtual viewpoint locations being selected by the viewers or determined by viewer tracking

Q H04N 13/122 · · · Improving the 3D impression of stereoscopic images by modifying image signal contents, e.g. by filtering or adding monoscopic depth cues (H04N 13/128 takes precedence)

WARNING

Group H04N 13/122 is impacted by reclassification into groups H04N 13/125 and H04N 13/128.
Groups H04N 13/122, H04N 13/125, and H04N 13/128 should be considered in order to perform a complete search.

N H04N 13/125 · · · · for crosstalk reduction

WARNING

Group H04N 13/125 is incomplete pending reclassification of documents from group H04N 13/122.
Groups H04N 13/122 and H04N 13/125 should be considered in order to perform a complete search.

N H04N 13/128 · · · Adjusting depth or disparity

WARNING

Group H04N 13/128 is incomplete pending reclassification of documents from group H04N 13/122.
Groups H04N 13/122 and H04N 13/128 should be considered in order to perform a complete search.

N	*H04N 13/133*	*· · · Equalising the characteristics of different image components, e.g. their average brightness or colour balance*
N	*H04N 13/139*	*· · · Format conversion, e.g. of frame-rate or size*
N	*H04N 13/144*	*· · · for flicker reduction*
N	*H04N 13/15*	*· · · for colour aspects of image signals*
N	*H04N 13/156*	*· · · Mixing image signals*
N	*H04N 13/158*	*· · · {Switching image signals}*
N	*H04N 13/161*	*· · · Encoding, multiplexing or demultiplexing different image signal components (for multi-view video sequence encoding H04N 19/597)*
N	*H04N 13/167*	*· · · Synchronising or controlling image signals*
N	*H04N 13/172*	*· · · image signals comprising non-image signal components, e.g. headers or format information*
N	*H04N 13/178*	*· · · · Metadata, e.g. disparity information*
N	*H04N 13/183*	*· · · · On-screen display [OSD] information, e.g. subtitles or menus*
N	*H04N 13/189*	*· · Recording image signals; Reproducing recorded image signals*
N	*H04N 13/194*	*· · Transmission of image signals*
Q	*H04N 13/20*	*· Image signal generators*
		WARNING *Group H04N 13/20 is impacted by reclassification into group H04N 13/268. Groups H04N 13/20 and H04N 13/268 should be considered in order to perform a complete search.*
N	*H04N 13/204*	*· · using stereoscopic image cameras (stereoscopic photography G03B 35/00)*
N	*H04N 13/207*	*· · · using a single 2D image sensor*
N	*H04N 13/211*	*· · · · using temporal multiplexing*
		WARNING *Group H04N 13/211 is incomplete pending reclassification of documents from group H04N 13/221. Groups H04N 13/221 and H04N 13/211 should be considered in order to perform a complete search.*
N	*H04N 13/214*	*· · · · using spectral multiplexing*
N	*H04N 13/218*	*· · · · using spatial multiplexing*
Q	*H04N 13/221*	*· · · · using the relative movement between cameras and objects*
		WARNING *Group H04N 13/221 is impacted by reclassification into group H04N 13/211. Groups H04N 13/221 and H04N 13/211 should be considered in order to perform a complete search.*
N	*H04N 13/225*	*· · · · using parallax barriers*
N	*H04N 13/229*	*· · · · using lenticular lenses, e.g. arrangements of cylindrical lenses*
		WARNING *Group H04N 13/229 is incomplete pending reclassification of documents from group H04N 13/232. Groups H04N 13/232 and H04N 13/229 should be considered in order to perform a complete search.*

Q H04N 13/232 ····using fly-eye lenses, e.g. arrangements of circular lenses

WARNING

Group H04N 13/232 is impacted by reclassification into group H04N 13/229.
Groups H04N 13/232 and H04N 13/229 should be considered in order to perform a complete search.

N H04N 13/236 ····using varifocal lenses or mirrors

Q H04N 13/239 ···using two 2D image sensors having a relative position equal to or related to the interocular distance (H04N 13/243 takes precedence)

WARNING

Group H04N 13/239 is impacted by reclassification into group H04N 13/243.
Groups H04N 13/239 and H04N 13/243 should be considered in order to perform a complete search.

N H04N 13/243 ···using three or more 2D image sensors

WARNING

Group H04N 13/243 is incomplete pending reclassification of documents from group H04N 13/239.
Groups H04N 13/239 and H04N 13/243 should be considered in order to perform a complete search.

N H04N 13/246 ···Calibration of cameras

N H04N 13/25 ···using two or more image sensors with different characteristics other than in their location or field of view, e.g. having different resolutions or colour pickup characteristics; using image signals from one sensor to control the characteristics of another sensor

N H04N 13/254 ···in combination with electromagnetic radiation sources for illuminating objects

N H04N 13/257 ··Colour aspects

N H04N 13/261 ··with monoscopic-to-stereoscopic image conversion

N H04N 13/264 ···using the relative movement of objects in two video frames or fields

N H04N 13/266 ···{by scanning a film}

N H04N 13/268 ···based on depth image-based rendering [DIBR]

WARNING

Group H04N 13/268 is incomplete pending reclassification of documents from group H04N 13/20.
Groups H04N 13/20 and H04N 13/268 should be considered in order to perform a complete search.

N H04N 13/271 ··wherein the generated image signals comprise depth maps or disparity maps

N H04N 13/275 ··from 3D object models, e.g. computer-generated stereoscopic image signals

N H04N 13/279 ···the virtual viewpoint locations being selected by the viewers or determined by tracking

N H04N 13/282 ··for generating image signals corresponding to three or more geometrical viewpoints, e.g. multi-view systems

N H04N 13/286 ··having separate monoscopic and stereoscopic modes

N H04N 13/289 ···Switching between monoscopic and stereoscopic modes

N H04N 13/293 ··Generating mixed stereoscopic images; Generating mixed monoscopic and stereoscopic images, e.g. a stereoscopic image overlay window on a monoscopic image background

N	*H04N 13/296*	*· · Synchronisation thereof; Control thereof*
Q	*H04N 13/30*	*· Image reproducers (optical systems for producing stereoscopic or other three-dimensional effects G02B 27/22)* *WARNING* *Group H04N 13/30 is impacted by reclassification into groups H04N 13/365 and H04N 13/385.* *All Groups listed in this Warning should be considered in order to perform a complete search.*
N	*H04N 13/302*	*· · for viewing without the aid of special glasses, i.e. using autostereoscopic displays*
N	*H04N 13/305*	*· · · using lenticular lenses, e.g. arrangements of cylindrical lenses* *WARNING* *Group H04N 13/305 is incomplete pending reclassification of documents from group H04N 13/307.* *Groups H04N 13/307 and H04N 13/305 should be considered in order to perform a complete search.*
Q	*H04N 13/307*	*· · · using fly-eye lenses, e.g. arrangements of circular lenses* *WARNING* *Group H04N 13/307 is incomplete pending reclassification of documents from group H04N 13/349.* *Group H04N 13/307 is also impacted by reclassification into group H04N 13/305.* *Groups H04N 13/349, H04N 13/307 and H04N 13/305 should be considered in order to perform a complete search.*
N	*H04N 13/31*	*· · · using parallax barriers*
N	*H04N 13/312*	*· · · · the parallax barriers being placed behind the display panel, e.g. between backlight and spatial light modulator [SLM]*
N	*H04N 13/315*	*· · · · the parallax barriers being time-variant*
N	*H04N 13/317*	*· · · using slanted parallax optics*
N	*H04N 13/32*	*· · · using arrays of controllable light sources; using moving apertures or moving light sources*
N	*H04N 13/322*	*· · · using varifocal lenses or mirrors*
N	*H04N 13/324*	*· · Colour aspects*
N	*H04N 13/327*	*· · Calibration thereof*
N	*H04N 13/332*	*· · Displays for viewing with the aid of special glasses or head-mounted displays [HMD]*
N	*H04N 13/334*	*· · · using spectral multiplexing*
N	*H04N 13/337*	*· · · using polarisation multiplexing*
N	*H04N 13/339*	*· · · using spatial multiplexing (H04N 13/337 takes precedence)*
N	*H04N 13/341*	*· · · using temporal multiplexing*
N	*H04N 13/344*	*· · · with head-mounted left-right displays*
N	*H04N 13/346*	*· · using prisms or semi-transparent mirrors*
Q	*H04N 13/349*	*· · Multi-view displays for displaying three or more geometrical viewpoints without viewer tracking (for viewing without the aid of special glasses using fly-eye lenses H04N 13/307)* *WARNING* *Group H04N 13/349 is impacted by reclassification into group H04N 13/307.*

Groups H04N 13/349 and H04N 13/307 should be considered in order to perform a complete search.

N	*H04N 13/351*	*· · · for displaying simultaneously*
N	*H04N 13/354*	*· · · for displaying sequentially*
N	*H04N 13/356*	*· · having separate monoscopic and stereoscopic modes*
N	*H04N 13/359*	*· · · Switching between monoscopic and stereoscopic modes*
N	*H04N 13/361*	*· · Reproducing mixed stereoscopic images; Reproducing mixed monoscopic and stereoscopic images, e.g. a stereoscopic image overlay window on a monoscopic image background*
Q	*H04N 13/363*	*· · using image projection screens (volumetric display H04N 13/388)* *WARNING* *Group H04N 13/363 is incomplete pending reclassification of documents from group H04N 13/393 and H04N 13/395.* *Group H04N 13/363 is also impacted by reclassification into groups H04N 13/388 and H04N 13/39.* *All groups listed in this Warning should be considered in order to perform a complete search.*
N	*H04N 13/365*	*· · using digital micromirror devices [DMD]* *WARNING* *Group H04N 13/365 is incomplete pending reclassification of documents from group H04N 13/30.* *Groups H04N 13/30 and H04N 13/365 should be considered in order to perform a complete search.*
N	*H04N 13/366*	*· · using viewer tracking*
N	*H04N 13/368*	*· · · for two or more viewers*
N	*H04N 13/371*	*· · · for tracking viewers with different interocular distances; for tracking rotational head movements around the vertical axis*
N	*H04N 13/373*	*· · · for tracking forward-backward translational head movements, i.e. longitudinal movements*
N	*H04N 13/376*	*· · · for tracking left-right translational head movements, i.e. lateral movements*
N	*H04N 13/378*	*· · · for tracking rotational head movements around an axis perpendicular to the screen*
N	*H04N 13/38*	*· · · for tracking vertical translational head movements*
N	*H04N 13/383*	*· · · for tracking with gaze detection, i.e. detecting the lines of sight of the viewer's eyes*
N	*H04N 13/385*	*· · alternating rapidly the location of the left-right image components on the display screens (for viewing without the aid of special glasses using time variant parallax barriers H04N 13/315; displays for viewing with the aid of special glasses or head-mounted displays using temporal multiplexing H04N 13/341)* *WARNING* *Group H04N 13/385 is incomplete pending reclassification of documents from group H04N 13/30.* *Groups H04N 13/30 and H04N 13/385 should be considered in order to perform a complete search.*

N	*H04N 13/388*	· · *Volumetric displays, i.e. systems where the image is built up from picture elements distributed through a volume* *WARNING* *Group H04N 13/388 is incomplete pending reclassification of documents from groups H04N 13/363, H04N 13/393, and H04N 13/395.* *All groups listed in this Warning should be considered in order to perform a complete search.*
N	*H04N 13/39*	· · · *the picture elements emitting light at places where a pair of light beams intersect in a transparent material* *WARNING* *Group H04N 13/39 is incomplete pending reclassification of documents from groups H04N 13/363, H04N 13/393, and H04N 13/395.* *All groups listed in this Warning should be considered in order to perform a complete search.*
Q	*H04N 13/393*	· · · *the volume being generated by a moving, e.g. vibrating or rotating, surface* *WARNING* *Group H04N 13/393 is impacted by reclassification into groups H04N 13/363, H04N 13/388 and H04N 13/39.* *All groups listed in this warning should be considered in order to perform a complete search.*
Q	*H04N 13/395*	· · · *with depth sampling, i.e. the volume being constructed from a stack or sequence of 2D image planes* *WARNING* *Group H04N 13/395 is impacted by reclassification into groups H04N 13/363, H04N 13/388 and H04N 13/39.* *All groups listed in this warning should be considered in order to perform a complete search.*
N	*H04N 13/398*	· · *Synchronisation thereof; Control thereof*
N	*H04N 2013/40*	· · *{Privacy aspects, i.e. devices showing different images to different viewers, the images not being viewpoints of the same scene}*
N	*H04N 2013/403*	· · · *{the images being monoscopic}*
N	*H04N 2013/405*	· · · *{the images being stereoscopic or three dimensional}*
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
M	H04N 21/236	· · · Assembling of a multiplex stream, e.g. transport stream, by combining a video stream with other content or additional data, e.g. inserting a Uniform Resource Locator [URL] into a video stream, multiplexing software data into a video stream; Remultiplexing of multiplex streams; Insertion of stuffing bits into the multiplex stream, e.g. to obtain a constant bit-rate; Assembling of a packetised elementary stream {(multiplexing of data packets for data networks, e.g. RTP/UDP H04L 65/00~~; stereoscopic image multiplexing or transmission H04N 13/0003~~)}
U	H04N 21/40	· Client devices specifically adapted for the reception of or interaction with content, e.g. set-top-box [STB]; Operations thereof {(arrangements for distribution where lower stations, e.g. receivers, interact with the broadcast H04H 20/38; arrangements specially adapted for receiving broadcast information H04H 40/00)}

U H04N 21/43 ・・Processing of content or additional data, e.g. demultiplexing additional data from a digital video stream; Elementary client operations, e.g. monitoring of home network, synchronizing decoder's clock; Client middleware {(demultiplexing of data packets for data networks, e.g. RTP/UDP H04L 29/06176)}

M H04N 21/434 ・・・Disassembling of a multiplex stream, e.g. demultiplexing audio and video streams, extraction of additional data from a video stream; Remultiplexing of multiplex streams; Extraction or processing of SI; Disassembling of packetised elementary stream {(demultiplexing of data packets for data networks, e.g. RTP/UDP H04L 65/00~~; stereoscopic image multiplexing or transmission H04N 13/0003~~)}

Project: RP0492 (C12Q)

M C12Q **MEASURING OR TESTING PROCESSES INVOLVING ENZYMES~~,~~ *NUCLEIC ACIDS* OR MICROORGANISMS (immunoassay G01N 33/53); COMPOSITIONS OR TEST PAPERS THEREFOR; PROCESSES OF PREPARING SUCH COMPOSITIONS; CONDITION~~-~~RESPONSIVE CONTROL IN MICROBIOLOGICAL OR ENZYMOLOGICAL PROCESSES**

NOTES

1. This subclass does not cover the observation of the progress or of the result of processes specified in this subclass by any of the methods specified in groups G01N 3/00 - G01N 29/00, which is covered by subclass G01N.

2. In this subclass, the following expression is used with the meaning indicated: "involving", when used in relation to a substance, includes the testing for the substance as well as employing the substance as a determinant or reactant in a test for a different substance.

3. Attention is drawn to Notes (1) to (3) following the title of class C12.

4. In this subclass, test media are classified in the appropriate group for the relevant test process.

5. Documents describing the use of an electrode for analysis of a specific analyte are classified in C12Q 1/001 or subgroups and not according to the last place rule

6. Documents relating to new peptides, e.g. enzymes, or new DNA or its corresponding mRNA, encoding for the peptides, and their use in measuring or testing processes are classified in subclass C07K or in group C12N 9/00 according to the peptides, with the appropriate indexing codes relating to their use in diagnostics. However where the new nucleic acids are principally used in diagnostic processes, e.g. PCR, hybridisation reactions, the documents are also classified in group C12Q 1/68

7. When classifying in groups C12Q 1/68 - C12Q 1/70 it is desirable to classify with symbols from groups C12Q 2500/00 - C12Q 2565/634, relating to relevant technical features of the invention, using Combination Sets.

8. In groups C12Q 1/6876 - C12Q 1/6895 and C12Q 1/70 - C12Q 1/708 it is desirable to add the indexing codes C12Q 2600/00 - C12Q 2600/178 which reflect the use of the product in combination with the virus groups only if the application refers to products.

M C12Q 1/00 **Measuring or testing processes involving enzymes, ~~{~~nucleic acids~~}~~ or microorganisms (measuring or testing apparatus with condition measuring or sensing means, e.g. colony counters~~-~~, C12M 1/34); Compositions therefor; Processes of preparing such compositions**

E	C12Q 1/68	· involving nucleic acids NOTE ~~In subgroups of C12Q 1/68, classification is made according to the most relevant feature rather than according to the last-place-rule~~ *In this group, classification is made according to the most relevant feature irrespective of the last place priority rule.*
D	C12Q 1/6802	· · ~~{General aspects (not used, see subgroups)}~~ <administratively transferred to C12Q 1/68>
M	C12Q 1/6804	· · ~~-~~ {Nucleic acid analysis ~~utilising~~*using* immunogens~~}~~ *(immunoassay G01N 33/53)*
M	C12Q 1/6806	· · ~~-~~ {Preparing nucleic acids for analysis, e.g. for *polymerase chain reaction [*PCR*]* assay (C12Q 1/6804 takes precedence)~~}~~
M	C12Q 1/6809	· · ~~-~~ ~~{Sequence~~ *Methods for determination or* identification *of nucleic acids* involving differential detection~~}~~
M	C12Q 1/6811	· · ~~-~~ {Selection methods for production or design of target specific ~~oligonucleotide~~*oligonucleotides* or binding molecules~~}~~
M	C12Q 1/6813	· · ~~{~~Hybridisation assays~~}~~
M	C12Q 1/6816	· · · ~~{~~characterised by the *detection* means ~~of detection~~ (C12Q 1/6804 takes precedence)~~}~~
M	C12Q 1/6818	· · · · ~~{~~involving interaction of ~~at least two~~*two or more* labels, e.g. resonant energy transfer~~}~~
M	C12Q 1/682	· · · · ~~{~~Signal amplification~~}~~
M	C12Q 1/6823	· · · · ~~{~~Release of bound ~~marker}~~*markers*
M	C12Q 1/6825	· · · · ~~{~~Nucleic acid detection involving sensors~~}~~
M	C12Q 1/6827	· · · ~~{~~for *detection of* mutation or polymorphism ~~detection}~~
M	C12Q 1/683	· · · · ~~{~~involving restriction enzymes, e.g. *restriction fragment length polymorphism [*RFLP~~}~~*]*
M	C12Q 1/6832	· · · ~~{~~Enhancement of hybridisation reaction~~}~~
M	C12Q 1/6834	· · · ~~{Nucleic acid analysis involving immobilisation; Immobilisation characterised by the carrier~~ *Enzymatic* or *biochemical* coupling ~~agent}~~*of nucleic acids to a solid phase*
M	C12Q 1/6837	· · · · ~~{characterised by the use of~~ *using* probe arrays or probe chips (C12Q 1/6874 takes precedence)~~}~~
M	C12Q 1/6839	· · · ~~{~~Triple helix formation *or other higher order conformations* in hybridisation assays~~}~~
M	C12Q 1/6841	· · · ~~{~~*In situ*~~"In-situ"~~ hybridisation~~}~~
M	C12Q 1/6844	· · ~~{~~Nucleic acid amplification reactions~~}~~
M	C12Q 1/6848	· · · · ~~-~~ {*characterised by the means for* preventing contamination~~}~~ *or increasing the specificity or sensitivity of an amplification reaction*
M	C12Q 1/6851	· · · · ~~-~~ {Quantitative amplification~~}~~
M	C12Q 1/6853	· · · · ~~-~~ {using modified primers or templates~~}~~
M	C12Q 1/6855	· · · · · ~~-~~ {Ligating adaptors~~}~~
M	C12Q 1/6858	· · · · ~~-~~ {Allele~~-~~specific amplification~~}~~
M	C12Q 1/686	· · · ~~{~~Polymerase ~~Chain Reaction~~*chain reaction* [PCR]~~}~~
M	C12Q 1/6862	· · · ~~{~~Ligase ~~Chain Reaction~~*chain reaction* [LCR]~~}~~
M	C12Q 1/6865	· · · ~~{~~Promoter~~-~~based amplification, e.g. *nucleic acid sequence amplification [*NASBA*]*, *self-sustained sequence replication [*3SR~~,~~*] or transcription-based amplification system [*TAS~~}~~*]*

M	C12Q 1/6867	· · ·{Replicase -based ~~amplifications~~*amplification*, e.g. *using* Q-beta replicase~~}~~
M	C12Q 1/6869	· ·~~{~~Methods for sequencing~~}~~
M	C12Q 1/6872	· · ·~~{~~involving mass spectrometry~~}~~
M	C12Q 1/6874	· · ·~~{~~involving nucleic acid arrays, e.g. ~~Sequencing By Hybridisation [SBH]}~~*sequencing by hybridisation*
M	C12Q 1/6876	· ·~~{Hybridisation~~ *Nucleic acid products used in the analysis of nucleic acids, e.g. primers or* probes~~}~~
M	C12Q 1/6879	· · ·~~{~~for sex determination~~}~~
M	C12Q 1/6881	· · ·~~{~~for tissue ~~and~~*or* cell typing, e.g. *human leukocyte antigen [*HLA*]* probes~~}~~
M	C12Q 1/6883	· · ·~~{~~for diseases caused by alterations of genetic material~~}~~
M	C12Q 1/6886	· · · ·~~{~~for cancer~~}~~ *(immunoassay for cancer G01N 33/574)*
M	C12Q 1/6888	· · ·~~{~~for detection or identification of organisms~~}~~
M	C12Q 1/689	· · · ·~~{~~for bacteria~~}~~
M	C12Q 1/6893	· · · ·~~{~~for protozoa~~}~~
M	C12Q 1/6895	· · · ·~~{~~for plants, fungi~~,~~ or algae~~}~~
M	C12Q 1/6897	· ·~~{~~involving reporter genes operably linked to promoters~~}~~

Project: RP0492 (G01N)

M	G01N 33/53	· · ·Immunoassay; Biospecific binding assay ~~(preparations containing antigens or antibodies for therapeutic purposes A61K 39/00; haptens in general, see the relevant places in class C07; proteins in general C07K)~~*; Materials therefor*

Project: RP0493 (A01G)

U	**A01G 9/00**	**Receptacles, forcing-frames or greenhouses for horticulture (for mushrooms A01G 18/60; soilless cultivation A01G 31/00); Edging for beds, lawn or the like** WARNING Group A01G 9/00 is impacted by reclassification into groups A01G 18/60 and A01G 9/28. Groups A01G 9/00, A01G 18/60, and A01G 9/28 should be considered in order to perform a complete search.
U	A01G 9/24	· Devices {or systems} for heating, ventilating, regulating temperature, or watering, in greenhouses, forcing-frames, or the like
	A01G 9/243	· · {Collecting solar energy (~~in general F24J~~*in general F24S*)}

Project: RP0493 (E04C)

U	**E04C 2/00**	**Building elements of relatively thin form for the construction of parts of buildings, e.g. sheet materials, slabs, or panels (materials or manufacture, see the relevant subclasses, e.g. B27N, D21J; made in situ E04B; specially designed for insulation or other protection E04B 1/62; load-carrying floor structures E04B 5/02, E04B 5/16; roofs consisting of self-supporting slabs E04B 7/20; roof or like covering elements E04D 3/00; for lining or finishing E04F 13/00)**
U	E04C 2/44	· {characterised by the purpose}
U	E04C 2/52	· · with special adaptations for auxiliary purposes, e.g. serving for locating conduits (E04C 2/54 takes precedence; block-shaped elements therefor E04C 1/39; floor structures incorporating ducts E04B 5/48)
U	E04C 2/521	· · · {serving for locating conduits; for ventilating, heating or cooling}

E04C 2/525 ・・・・{for heating or cooling (~~solar heat collectors F24J 2/04;~~ *solar heat collectors F24S 10/00;* heat storage F28D 20/00)}

Project: RP0493 (E04D)

M E04D **ROOF COVERINGS; SKY-LIGHTS; GUTTERS; ROOF-WORKING TOOLS (coverings of outer walls by plaster or other porous material E04F 13/00)**

NOTE

In this subclass, the following expression is used with the meaning indicated:

- "roof coverings" includes any similar kind of watertight covering against rain, snow, hail, or the like, for other parts of buildings

WARNING

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

E04D 3/3645	covered by	E04D 3/363
E04D 3/367	covered by	E04D 3/364
E04D 13/18	covered by	~~F24J 2/00~~ *F24S 20/67* , H02S 20/23

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)**

E04D 3/40 ・Slabs or sheets locally modified for auxiliary purposes, e.g. for resting on walls, for serving as guttering; Elements for particular purposes, e.g. ridge elements, specially designed for use in conjunction with slabs or sheets {(E04D 13/15 and E04D 13/174 take precedence; ridge sealing E04D 1/36~~; solar collectors F24J 2/00~~*; solar collectors F24S 20/67*; photovoltaic devices H01L 31/00)}

Project: RP0493 (E04H)

U E04H 4/00 **Swimming or splash baths or pools (wave-producers for baths A47K 3/10; separation B01D; treatment of water C02F; wave-producing pumps F04D 35/00)**

U E04H 4/12 ・Devices or arrangements for circulating water {, i.e. devices for removal of polluted water, cleaning baths or for water treatment}

E04H 4/129 ・・{Systems for heating the water content of swimming pools (~~solar collectors using pools F24J 2/0472, F24J 2/0461; by solar radiation F24J 2/423~~*solar collectors using pools F24S 10/17, F24S 10/10; by solar radiation F24S 20/02*)}

Project: RP0493 (F03G)

U F03G 6/00 **Devices for producing mechanical power from solar energy (solar boilers F24)**

F03G 6/06 ・with means for concentrating solar rays (~~means per se F24J 2/06~~*means per se F24S 23/00*)

Project: RP0493 (F21S)

F21S 11/00 **Non-electric lighting devices or systems using daylight {(roofs with sky-light opening E04D 13/03; sun blinds for windows with means for redirecting light onto ceiling of a room E06B 9/00; hybrid lighting devices combining artificial and natural light F21S 19/00~~; solar heat collectors F24J 2/00~~*; solar heat collectors F24S*; solar cells or solar cell modules H01L 31/00)}**

Project: RP0493 (F22B)

F22B 1/00 **Methods of steam generation characterised by form of heating method (~~solar heating F24J;~~ *solar heating F24S;* jackets or other cooling means in which steam is generated and which serve for cooling other apparatus, see the subclasses for such apparatus)**

F22B 1/006 · {using solar heat (~~solar heat collectors per se F24J 2/00;~~ *solar heat collectors per se F24S;* devices for producing mechanical power from solar energy F03G 6/00)}

Project: RP0493 (F22G)

F22G 1/00 **Steam superheating characterised by heating method (~~exothermal chemical reactions not involving a supply of free oxygen gas, apparatus or devices for using the heat therefrom F24J~~*exothermal chemical reactions not involving a supply of free oxygen gas, apparatus or devices for using the heat therefrom F24V 30/00*)**

Project: RP0493 (F24C)

F24C 9/00 **Stoves or ranges heated by a single type of energy supply not covered by groups F24C 3/00 - F24C 7/00 or F24B (~~using the heat from an exothermal reaction not involving a supply of free oxygen gas, {using special gaseous fuel, e.g. acetylene, hydrogen,} using solar energy F24J~~*using the heat from an exothermal reaction not involving a supply of free oxygen gas, {using special gaseous fuel, e.g. acetylene, hydrogen,} using solar energy F24S 20/30; using the heat from an exothermal reaction not involving a supply of free oxygen gas F24V 30/00*)**

Project: RP0493 (F24D)

U **F24D 3/00** **Hot-water central heating systems (F24D 10/00, F24D 11/00 take precedence)**

F24D 3/005 · {combined with solar energy (~~solar heat collectors per se F24J 2/00~~*solar heat collectors per se F24S*)}

U **F24D 5/00** **Hot-air central heating systems (F24D 10/00, F24D 11/00 take precedence; air conditioning F24F); Exhaust gas central heating systems**

F24D 5/005 · {combined with solar energy (~~solar heat collectors per se F24J 2/00~~*solar heat collectors per se F24S*)}

Project: RP0493 (F24J)

D **F24J** ~~**PRODUCING OR USE OF HEAT NOT OTHERWISE PROVIDED FOR (materials therefor C09K 5/00; engines or other mechanisms for producing mechanical power from heat, see the relevant classes, e.g. F03G for using natural heat)**~~

D **F24J 1/00** ~~**Apparatus or devices using heat produced by exothermal chemical reactions other than by combustion (for cooking-vessels A47J 36/28; self-heating compresses A61F {A61F 7/03}; materials for the production of heat or cold involving non-reversible chemical reactions, other than by combustion, when used C09K 5/18)**~~
<administratively transferred to F24V 30/00>

D	**F24J 2/00**	**~~Use of solar heat, e.g. solar heat collectors (distillation or evaporation of water using solar energy C02F 1/14; devices for producing mechanical power from solar energy F03G 6/00; semiconductor devices specially adapted for converting solar energy into electrical energy H01L 31/00; photovoltaic [PV] cells including means directly associated with the PV cell to utilise heat energy H01L 31/0525; PV modules including means associated with the PV module to utilise heat energy H02S 40/44)~~**
		~~NOTE~~ ~~Supporting structures also intended for use with photovoltaic modules should further be classified in the relevant groups of subclass H02S.~~
		<administratively transferred to F24S 21/00>
D	F24J 2/0007	· ~~{Passive solar heat collectors}~~ <administratively transferred to F24S 20/61>
D	F24J 2/0015	· ~~{Solar heat collectors absorbing essentially direct solar radiation combined with a solar heat collector absorbing concentrated radiation}~~ <administratively transferred to F24S 20/25>
D	F24J 2/0023	· ~~{Solar heat collector using additional ambient air heat or another heat source, e.g. electrical}~~ <administratively transferred to F24S 20/40>
D	F24J 2002/003	· ~~{Heat traps}~~ <administratively transferred to F24S 2023/88>
D	F24J 2002/0038	· ~~{Solar modules layout; Modular arrangements}~~ <administratively transferred to F24S 2020/10>
D	F24J 2002/0046	· · ~~{in the form of multiple rows and multiple columns, all solar modules being coplanar}~~ <administratively transferred to F24S 2020/11>
D	F24J 2002/0053	· · ~~{Coplanar arrangements with frame overlapping portions}~~ <administratively transferred to F24S 2020/12>
D	F24J 2002/0061	· · ~~{Overlaying arrangements similar to roof tiles}~~ <administratively transferred to F24S 2020/13>
D	F24J 2002/0069	· · ~~{Stepped arrangements, e.g. in parallel planes, without module overlapping}~~ <administratively transferred to F24S 2020/14>
D	F24J 2002/0076	· · ~~{Non-parallel arrangements}~~ <administratively transferred to F24S 2020/15>
D	F24J 2002/0084	· · ~~{Preventing shading effects}~~ <administratively transferred to F24S 2020/16>
D	F24J 2002/0092	· · ~~{Arrangements of solar thermal modules combined with solar PV modules}~~ <administratively transferred to F24S 2020/17>
D	F24J 2/02	· ~~Solar heat collectors with support for article heated, e.g. stoves, ranges, crucibles, furnaces or ovens using solar heat~~ <administratively transferred to F24S 20/30>
D	F24J 2/04	· ~~Solar heat collectors having working fluid conveyed through collector~~ <administratively transferred to F24S 10/00>
D	F24J 2002/0405	· · ~~{having a particular shape, e.g. prismatic, pyramidal}~~ <administratively transferred to F24S 2020/18>
D	F24J 2002/0411	· · · ~~{in the form of louvers}~~ <administratively transferred to F24S 2020/183>
D	F24J 2002/0416	· · · ~~{allowing change of position for optimization of heat collection}~~ <administratively transferred to F24S 2020/186>
D	F24J 2/0422	· · ~~{Solar collectors integrated in fixed constructions, e.g. in buildings}~~ <administratively transferred to F24S 20/60>

D F24J 2/0427 · · · ~~{in the form of a fence, a balustrade or a handrail}~~
<administratively transferred to F24S 20/62>

D F24J 2/0433 · · · ~~{in the form of a window}~~
<administratively transferred to F24S 20/63>

D F24J 2/0438 · · · ~~{in the form of a floor construction}~~
<administratively transferred to F24S 20/64>

D F24J 2/0444 · · · ~~{in the form of a façade construction}~~
<administratively transferred to F24S 20/66>

D F24J 2/045 · · · ~~{in the form of a roof construction (F24J 2/0455 takes precedence)}~~
<administratively transferred to F24S 20/67>

D F24J 2/0455 · · · ~~{in the form of shingles or tiles}~~
<administratively transferred to F24S 20/69>

D F24J 2/0461 · · ~~{using pools or ponds}~~
<administratively transferred to F24S 10/10>

D F24J 2/0466 · · · ~~{Salt gradient solar ponds}~~
<administratively transferred to F24S 10/13>

D F24J 2/0472 · · · ~~{Floating solar collectors or covers}~~
<administratively transferred to F24S 10/17>

D F24J 2/0477 · · ~~{having circuits for more than one working fluid (F24J 2/30 takes precedence)}~~
<administratively transferred to F24S 10/20>

D F24J 2/0483 · · ~~{having two or more passages for the same working fluid (F24J 2/20, F24J 2/24 take precedence)}~~
<administratively transferred to F24S 10/25>

D F24J 2/0488 · · ~~{Solar heat collectors having absorber surfaces of a particular form}~~
<administratively transferred to F24S 70/60>

D F24J 2/0494 · · · ~~{having two or more absorber surfaces}~~
<administratively transferred to F24S 70/65>

D F24J 2/05 · · ~~surrounded by a transparent enclosure, e.g. evacuated solar collectors~~
<administratively transferred to F24S 10/40>

D F24J 2/055 · · · ~~{the enclosure being cylindrical}~~
<administratively transferred to F24S 10/45>

D F24J 2/06 · · ~~having concentrating elements (optical elements or systems per se G02B)~~
<administratively transferred to F24S 23/00>

D F24J 2/062 · · · ~~{Prisms}~~
<administratively transferred to F24S 23/10>

D F24J 2/065 · · · ~~{Fluorescent material}~~
<administratively transferred to F24S 23/11>

D F24J 2/067 · · · ~~{Light guides}~~
<administratively transferred to F24S 23/12>

D F24J 2/07 · · · ~~Receivers working at high temperature, e.g. for solar power plants~~
<administratively transferred to F24S 20/20>

D F24J 2002/075 · · · · ~~{movable or adjustable}~~
<administratively transferred to F24S 2020/23>

D F24J 2/08 · · · ~~having lenses as concentrating elements~~
<administratively transferred to F24S 23/30>

D F24J 2/085 · · · · ~~{having discontinuous faces, e.g. Fresnel lenses}~~
<administratively transferred to F24S 23/31>

D F24J 2/10 · · · ~~having reflectors as concentrating elements~~
<administratively transferred to F24S 23/70>

D F24J 2002/1004 · · · ·~~{Special shape not covered by F24J 2/1047 - F24J 2/18}~~
<administratively transferred to F24S 2023/83>

D F24J 2002/1009 · · · · ·~~{corrugated}~~
<administratively transferred to F24S 2023/831>

D F24J 2002/1014 · · · · ·~~{curved}~~
<administratively transferred to F24S 2023/832>

D F24J 2002/1019 · · · · ·~~{dish-shaped}~~
<administratively transferred to F24S 2023/833>

D F24J 2002/1023 · · · · ·~~{trough-shaped}~~
<administratively transferred to F24S 2023/834>

D F24J 2002/1028 · · · · · ·~~{asymmetric}~~
<administratively transferred to F24S 2023/835>

D F24J 2002/1033 · · · · ·~~{spiral}~~
<administratively transferred to F24S 2023/836>

D F24J 2002/1038 · · · · ·~~{hyperbolic}~~
<administratively transferred to F24S 2023/837>

D F24J 2002/1042 · · · · ·~~{involutes}~~
<administratively transferred to F24S 2023/838>

D F24J 2/1047 · · · ·~~{having discontinuous faces}~~
<administratively transferred to F24S 23/80>

D F24J 2/1052 · · · ·~~{flexible (F24J 2/125, F24J 2/145 take precedence)}~~
<administratively transferred to F24S 23/81>

D F24J 2/1057 · · · ·~~{characterised by the material or the construction of the reflector}~~
<administratively transferred to F24S 23/82>

D F24J 2002/1061 · · · ·~~{Reflective elements inside solar collector casings}~~
<administratively transferred to F24S 2023/84>

D F24J 2002/1066 · · · ·~~{Microreflectors}~~
<administratively transferred to F24S 2023/85>

D F24J 2002/1071 · · · ·~~{in the form of reflective coatings}~~
<administratively transferred to F24S 2023/86>

D F24J 2002/1076 · · · ·~~{Reflectors layout}~~
<administratively transferred to F24S 2023/87>

D F24J 2002/108 · · · · ·~~{Assemblies of spaced reflective elements on common support, e.g. Fresnel reflectors}~~
<administratively transferred to F24S 2023/872>

D F24J 2002/1085 · · · · ·~~{Reflectors formed by assemblies of adjacent similar reflective facets}~~
<administratively transferred to F24S 2023/874>

D F24J 2002/109 · · · · ·~~{Reflectors formed by assemblies of adjacent reflective elements having different orientation or different features}~~
<administratively transferred to F24S 2023/876>

D F24J 2002/1095 · · · · ·~~{Assemblies of spaced reflective elements in the form of grids, e.g. vertical or inclined reflective elements extending over heat absorbing elements}~~
<administratively transferred to F24S 2023/878>

D F24J 2/12 · · · ·~~parabolic~~
<administratively transferred to F24S 23/71>

D F24J 2/125 · · · · ·~~{flexible}~~
<administratively transferred to F24S 23/715>

D F24J 2/13 · · · ·~~hemispherical~~
<administratively transferred to F24S 23/72>

D F24J 2/14 · · · ·~~semi-cylindrical or cylindro-parabolic~~
<administratively transferred to F24S 23/74>

D F24J 2/145 · · · · ·~~{flexible}~~
<administratively transferred to F24S 23/745>

D F24J 2/15 · · · ·~~conical~~
<administratively transferred to F24S 23/75>

D F24J 2/16 · · · ·~~having flat plates~~
<administratively transferred to F24S 23/77>

D F24J 2/18 · · · ·~~spaced, opposed interacting reflecting surfaces~~
<administratively transferred to F24S 23/79>

D F24J 2/20 · ·~~the working fluid being conveyed between plates~~
<administratively transferred to F24S 10/50>

D F24J 2/201 · · ·~~{having conduits of plastic material}~~
<administratively transferred to F24S 10/501>

D F24J 2/202 · · ·~~{having conduits formed by paired plates and internal partition means}~~
<administratively transferred to F24S 10/502>

D F24J 2/204 · · ·~~{having conduits formed by paired plates, only one of which is plane}~~
<administratively transferred to F24S 10/503>

D F24J 2/205 · · ·~~{having conduits formed by paired non-plane plates}~~
<administratively transferred to F24S 10/504>

D F24J 2/207 · · ·~~{having curved plate-like conduits, e.g. semi-spherical}~~
<administratively transferred to F24S 10/505>

D F24J 2/208 · · ·~~{having conduits formed by inflation of portions of a pair of joined sheets}~~
<administratively transferred to F24S 10/506>

D F24J 2/22 · · ·~~having extended surfaces, e.g. protrusions, corrugations (F24J 2/28 takes precedence)~~
<administratively transferred to F24S 10/55>

D F24J 2/23 · ·~~the working fluid trickling freely {or flowing in a continuous film} over collector elements~~
<administratively transferred to F24S 10/60>

D F24J 2/24 · ·~~the working fluid being conveyed through tubular heat absorbing conduits~~
<administratively transferred to F24S 10/70>

D F24J 2002/241 · · ·~~{the conduits having a non-circular cross-section}~~
<administratively transferred to F24S 2010/71>

D F24J 2/242 · · ·~~{the tubular conduits being integrated in a block; the tubular conduits touching each other}~~
<administratively transferred to F24S 10/72>

D F24J 2/243 · · ·~~{the tubular conduits being of plastic material}~~
<administratively transferred to F24S 10/73>

D F24J 2/244 · · ·~~{the tubular conduits are not fixed to heat absorbing plates and are not touching each other}~~
<administratively transferred to F24S 10/74>

D F24J 2/245 · · · ·~~{the conduits being parallel to each other}~~
<administratively transferred to F24S 10/742>

D F24J 2/246 · · · ·~~{the conduits being helically coiled}~~
<administratively transferred to F24S 10/744>

D F24J 2/247 · · · ·~~{the conduits being spirally coiled}~~
<administratively transferred to F24S 10/746>

D F24J 2/248 · · · ·~~{the conduits being otherwise bent, e.g. zig-zag}~~
<administratively transferred to F24S 10/748>

D F24J 2/26 ・・・~~having extended surfaces, e.g. protrusions (F24J 2/28 takes precedence)~~
<administratively transferred to F24S 10/75>

D F24J 2002/261 ・・・・~~{Special fins}~~
<administratively transferred to F24S 2010/751>

D F24J 2002/263 ・・・・・~~{extending obliquely}~~
<administratively transferred to F24S 2010/752>

D F24J 2/265 ・・・・~~{the conduits being parallel to each other}~~
<administratively transferred to F24S 10/753>

D F24J 2/266 ・・・・~~{the conduits being spirally coiled}~~
<administratively transferred to F24S 10/754>

D F24J 2/268 ・・・・~~{the conduits being otherwise bent, e.g. zig-zag}~~
<administratively transferred to F24S 10/755>

D F24J 2/28 ・・~~having permeable mass, foraminous or porous materials~~
<administratively transferred to F24S 10/80>

D F24J 2/30 ・・~~with means to exchange heat between plural fluids~~
<administratively transferred to F24S 10/30>

D F24J 2/32 ・・~~having evaporator and condenser section, e.g. heat pipe~~
<administratively transferred to F24S 10/90>

D F24J 2/34 ・・~~having heat storage mass~~
<administratively transferred to F24S 60/00>

D F24J 2/345 ・・・~~{Hot water storage}~~
<administratively transferred to F24S 60/30>

D F24J 2/36 ・~~Rollable or foldable collector units~~
<administratively transferred to F24S 20/50>

D F24J 2/38 ・~~employing tracking means (F24J 2/02, F24J 2/06 take precedence; rotary supports or mountings therefor F24J 2/54; supporting structures of photovoltaic modules for generation of electric power specially adapted for solar tracking systems H02S 20/32)~~
<administratively transferred to F24S 50/20>

D F24J 2002/385 ・・~~{Calibration means; Methods for initial positioning of solar concentrators or solar receivers}~~
<administratively transferred to F24S 2050/25>

D F24J 2/40 ・~~Control arrangements {(control of position for tracking F24J 2/38)}~~
<administratively transferred to F24S 50/00>

D F24J 2/402 ・・~~{responsive to temperature}~~
<administratively transferred to F24S 50/40>

D F24J 2/405 ・・~~{responsive to wind}~~
<administratively transferred to F24S 50/60>

D F24J 2/407 ・・~~{for controlling transmission of solar radiation}~~
<administratively transferred to F24S 50/80>

D F24J 2/42 ・~~Solar heat systems not otherwise provided for {(solar heat systems in greenhouses A01G 9/243; distillation by solar energy C02F 1/14; devices for producing mechanical power from solar energy F03G 6/00; central heat systems using heat solar energy F24D 11/003, F24D 11/007, F24D 11/0221, F24D 11/0264; domestic hot-water supply systems using solar energy F24D 17/0015, F24D 17/0042, F24D 17/0063; air-conditioning systems using solar energy F24F 5/0046; refrigeration machines, plants or systems using solar energy F25B 27/002; drying solid materials or objects by radiation, e.g. from the sun F26B 3/28)}~~
<administratively transferred to F24S 90/00>

D F24J 2/423 ・・~~{for swimming pools}~~
<administratively transferred to F24S 20/02>

D F24J 2/426 · · ~~{for showers}~~
<administratively transferred to F24S 20/04>

D F24J 2/44 · · ~~having thermosiphonic circulation~~
<administratively transferred to F24S 90/10>

D F24J 2/46 · ~~Component parts, details or accessories of solar heat collectors~~
<administratively transferred to F24S 80/00>

D F24J 2002/4601 · · ~~{Arrangements for heat transfer optimization}~~
<administratively transferred to F24S 2080/03>

D F24J 2002/4603 · · · ~~{Flow guiding means; Inserts inside conduits}~~
<administratively transferred to F24S 2080/05>

D F24J 2002/4605 · · · ~~{Arrangements for one-way heat transfer, e.g. thermal diodes}~~
<administratively transferred to F24S 2080/07>

D F24J 2/4607 · · ~~{Safety or protection arrangements; Arrangements for preventing malfunction; Auxiliary devices, e.g. means for testing (control means F24J 2/40)}~~
<administratively transferred to F24S 40/00>

D F24J 2/4609 · · · ~~{Protective covers, lids; closure members (F24J 2/50 takes precedence)}~~
<administratively transferred to F24S 40/10>

D F24J 2/461 · · · ~~{Means for cleaning or for removing snow}~~
<administratively transferred to F24S 40/20>

D F24J 2/4612 · · · ~~{Means for preventing corrosion or protecting against contaminants, e.g. preventing condensations}~~
<administratively transferred to F24S 40/40>

D F24J 2/4614 · · · · ~~{for draining rain water}~~
<administratively transferred to F24S 40/44>

D F24J 2/4616 · · · · ~~{for maintaining vacuum, e.g. by using getters}~~
<administratively transferred to F24S 40/46>

D F24J 2/4618 · · · · ~~{for preventing condensation}~~
<administratively transferred to F24S 40/42>

D F24J 2/462 · · · · ~~{for deaerating or degassing the working fluid}~~
<administratively transferred to F24S 40/48>

D F24J 2/4621 · · · ~~{Means for overtemperature protection (arrangements for draining the working fluid: F24J 2/4634); Means for overpressure protection}~~
<administratively transferred to F24S 40/50>

D F24J 2/4623 · · · · ~~{Arrangements for modifying heat collecting features, e.g. by defocusing or by changing the position of heat receiving elements}~~
<administratively transferred to F24S 40/52>

D F24J 2/4625 · · · · ~~{Cooling arrangements, e.g. by using external heat dissipating means or internal cooling circuits (F24J 2/4627 takes precedence)}~~
<administratively transferred to F24S 40/55>

D F24J 2/4627 · · · · ~~{Arrangements for venting solar collector enclosures}~~
<administratively transferred to F24S 40/53>

D F24J 2/4629 · · · · ~~{Arrangements for preventing overpressure inside solar collector enclosures (F24J 2/4627 takes precedence)}~~
<administratively transferred to F24S 40/57>

D F24J 2/463 · · · · ~~{Arrangements for preventing overpressure inside solar collector circuits}~~
<administratively transferred to F24S 40/58>

D F24J 2/4632 · · · ~~{Means for freezing protection (arrangements for draining the working fluid: F24J 2/4634)}~~
<administratively transferred to F24S 40/70>

D F24J 2/4634 · · · ~~{Arrangements for draining the working fluid}~~
<administratively transferred to F24S 40/60>

D F24J 2/4636 · · · ~~{Arrangements to accommodate differential expansion of solar collector elements}~~
<administratively transferred to F24S 40/80>

D F24J 2/4638 · · · ~~{Arrangements for protecting solar collectors against adverse weather conditions (F24J 2/4609 takes precedence)}~~
<administratively transferred to F24S 40/85>

D F24J 2/464 · · ~~{Casings}~~
<administratively transferred to F24S 80/40>

D F24J 2/4641 · · · ~~{characterised by using specific material}~~
<administratively transferred to F24S 80/45>

D F24J 2/4643 · · · · ~~{Plastic materials}~~
<administratively transferred to F24S 80/457>

D F24J 2/4645 · · · · ~~{Metallic materials}~~
<administratively transferred to F24S 80/453>

D F24J 2/4647 · · ~~{Means for fluidically interconnecting different solar collectors or for connecting solar connectors with other components; Headers; Fluid distributing means}~~
<administratively transferred to F24S 80/30>

D F24J 2/4649 · · ~~{Selection of particular working medium (materials for heat transfer C09K 5/00)}~~
<administratively transferred to F24S 80/20>

D F24J 2/465 · · ~~{Arrangements of sealing means}~~
<administratively transferred to F24S 80/70>

D F24J 2/4652 · · ~~{Solar heat collectors having absorber surfaces provided with special coatings, e.g. anti-reflective coatings}~~
<administratively transferred to F24S 70/30>

D F24J 2/4654 · · ~~{Materials for the heat-exchange conduits (F24J 2/201, F24J 2/243, F24J 2/48 take precedence)}~~
<administratively transferred to F24S 80/10>

D F24J 2002/4656 · · ~~{Arrangements for reinforcement of solar collector elements}~~
<administratively transferred to F24S 2080/09>

D F24J 2002/4658 · · ~~{Fastening; Joining}~~
<administratively transferred to F24S 25/60>

D F24J 2002/4659 · · · ~~{by using hook and loop-type fasteners}~~
<administratively transferred to F24S 2025/6001>

D F24J 2002/4661 · · · ~~{by using hooks}~~
<administratively transferred to F24S 2025/6002>

D F24J 2002/4663 · · · ~~{by clamping}~~
<administratively transferred to F24S 2025/6003>

D F24J 2002/4665 · · · ~~{by clipping, e.g. by using snap connectors}~~
<administratively transferred to F24S 2025/6004>

D F24J 2002/4667 · · · ~~{by screwed connection}~~
<administratively transferred to F24S 2025/6005>

D F24J 2002/4669 · · · ~~{by using threaded elements, e.g. stud bolts}~~
<administratively transferred to F24S 2025/6006>

D F24J 2002/467 · · · ~~{by using form-fitting connection means, e.g. tongue and groove}~~
<administratively transferred to F24S 2025/6007>

D F24J 2002/4672 · · · ~~{by using toothed elements}~~
<administratively transferred to F24S 2025/6008>

D F24J 2002/4674 · · · ~~{by deforming the material, e.g. by crimping or clinching}~~
<administratively transferred to F24S 2025/6009>

D F24J 2002/4676 · · · ~~{by bonding, e.g. by using adhesives}~~
<administratively transferred to F24S 2025/601>

D F24J 2002/4678 · · · ~~{by welding or brazing}~~
<administratively transferred to F24S 2025/6011>

D F24J 2002/4679 · · · ~~{Joining different materials}~~
<administratively transferred to F24S 2025/6012>

D F24J 2002/4681 · · · · ~~{Joining glass with non-glass elements}~~
<administratively transferred to F24S 2025/6013>

D F24J 2002/4683 · · ~~{Selection of particular materials}~~
<administratively transferred to F24S 2080/01>

D F24J 2002/4685 · · · ~~{Ceramics}~~
<administratively transferred to F24S 2080/011>

D F24J 2002/4687 · · · ~~{Concrete}~~
<administratively transferred to F24S 2080/012>

D F24J 2002/4689 · · · ~~{Foams}~~
<administratively transferred to F24S 2080/013>

D F24J 2002/469 · · · ~~{Carbone, e.g. graphite}~~
<administratively transferred to F24S 2080/014>

D F24J 2002/4692 · · · ~~{Plastics}~~
<administratively transferred to F24S 2080/015>

D F24J 2002/4694 · · · ~~{Textiles; Fabrics}~~
<administratively transferred to F24S 2080/016>

D F24J 2002/4696 · · · ~~{Natural materials, e.g. wood}~~
<administratively transferred to F24S 2080/017>

D F24J 2002/4698 · · · ~~{Recycled materials}~~
<administratively transferred to F24S 2080/018>

D F24J 2/48 · · ~~characterised by absorber material~~
<administratively transferred to F24S 70/10>

D F24J 2/481 · · · ~~{of metallic material (F24J 2/487 takes precedence)}~~
<administratively transferred to F24S 70/12>

D F24J 2/482 · · · ~~{of plastic (F24J 2/488 takes precedence)}~~
<administratively transferred to F24S 70/14>

D F24J 2/484 · · · ~~{of ceramic; of concrete; of natural stone (F24J 2/485 takes precedence)}~~
<administratively transferred to F24S 70/16>

D F24J 2/485 · · · ~~{using absorber coatings (radiation-absorbing paints C09D 5/32)}~~
<administratively transferred to F24S 70/20>

D F24J 2/487 · · · · ~~{of metallic material}~~
<administratively transferred to F24S 70/25>

D F24J 2/488 · · · · ~~{of plastic material}~~
<administratively transferred to F24S 70/275>

D F24J 2/50 · · ~~Transparent coverings~~
<administratively transferred to F24S 80/50>

D F24J 2002/501 · · · ~~{Special shape}~~
<administratively transferred to F24S 2080/501>

D F24J 2002/502 · · · · ~~{in the form of multiple covering elements}~~
<administratively transferred to F24S 2080/502>

D F24J 2002/503 · · · · ~~{in the form of curved covering elements}~~
<administratively transferred to F24S 2080/503>

D F24J 2/505 · · · ~~{characterised by using specific material}~~
<administratively transferred to F24S 80/52>

D F24J 2/506 · · · ·~~{plastic material}~~
<administratively transferred to F24S 80/525>

D F24J 2/507 · · ·~~{using evacuated elements (F24J 2/05 takes precedence)}~~
<administratively transferred to F24S 80/54>

D F24J 2002/508 · · ·~~{Transparent insulation; Convection preventing members}~~
<administratively transferred to F24S 80/56>

D F24J 2/51 · ·~~Thermal insulation (F24J 2/50 takes precedence)~~
<administratively transferred to F24S 80/60>

D F24J 2/515 · · ·~~{characterised by the material}~~
<administratively transferred to F24S 80/65>

D F24J 2/52 · ·~~Arrangement of mountings or supports~~
<administratively transferred to F24S 25/00>

D F24J 2/5201 · · ·~~{Stationary supporting structures for solar modules; Load-bearing elements for movable supporting structures}~~
<administratively transferred to F24S 25/00>

D F24J 2/5203 · · · ·~~{comprising elongated rigid mounting elements, e.g. mounting profiles or rails for covering a building surface with solar modules; Module frames (F24J 2/523 takes precedence)}~~
<administratively transferred to F24S 25/30>

D F24J 2/5205 · · · · ·~~{Substantially planar profile assemblies, e.g. grids comprising coplanar profiles or stacked profiles}~~
<administratively transferred to F24S 25/33>

D F24J 2/5207 · · · · · ·~~{comprising profiles of particular shape having in cross-section first and second module supporting portions for coupling adjacent solar modules}~~
<administratively transferred to F24S 25/35>

D F24J 2/5209 · · · · · ·~~{Substantially coplanar profile assemblies comprising longitudinal profiles laterally coupled with transversal profiles}~~
<administratively transferred to F24S 25/37>

D F24J 2/5211 · · · · ·~~{Solar module peripheral frames}~~
<administratively transferred to F24S 25/20>

D F24J 2002/5213 · · · · ·~~{Special profiles}~~
<administratively transferred to F24S 2025/80>

D F24J 2002/5215 · · · · · ·~~{having hollow parts with closed cross-section}~~
<administratively transferred to F24S 2025/801>

D F24J 2002/5216 · · · · · ·~~{having circular or oval cross-section}~~
<administratively transferred to F24S 2025/802>

D F24J 2002/5218 · · · · · ·~~{having a central web, e.g. I-shaped, inverted T- shaped}~~
<administratively transferred to F24S 2025/803>

D F24J 2002/522 · · · · · ·~~{U-, C- or O-shaped; Hat profiles}~~
<administratively transferred to F24S 2025/804>

D F24J 2002/5222 · · · · · ·~~{in the form of corrugated profiles}~~
<administratively transferred to F24S 2025/805>

D F24J 2002/5224 · · · · · ·~~{having curved portions}~~
<administratively transferred to F24S 2025/806>

D F24J 2002/5226 · · · · · ·~~{having undercut grooves}~~
<administratively transferred to F24S 2025/807>

D F24J 2/5228 · · · ·~~{comprising plate-like mounting elements, e.g. profiled or corrugated plates; Plate-like module frames (F24J 2/523 takes precedence)}~~
<administratively transferred to F24S 25/40>

D F24J 2/523 · · · ·~~{comprising elongated standing elements, e.g. posts, legs; Standing structures for supporting solar modules at defined orientation; Three-dimensional frameworks; Volumetric supporting structures, e.g. box-like elements or shaped bodies}~~
<administratively transferred to F24S 25/10>

D F24J 2/5232 · · · · ·~~{Posts coupled with upper profiles}~~
<administratively transferred to F24S 25/12>

D F24J 2/5233 · · · · ·~~{Profile arrangements, e.g. assemblies of base profiles with vertical or inclined profiles, three-dimensional frameworks (F24J 2/5232 takes precedence)}~~
<administratively transferred to F24S 25/13>

D F24J 2/5235 · · · · ·~~{comprising bent plates or assemblies of plates}~~
<administratively transferred to F24S 25/15>

D F24J 2/5237 · · · · ·~~{comprising shaped bodies, e.g. molded box-like elements, concrete elements, foamed elements; Massive supporting structures}~~
<administratively transferred to F24S 25/11>

D F24J 2/5239 · · · · ·~~{Interconnected assemblies of stands; Stands having first and second module supporting portions for coupling adjacent modules}~~
<administratively transferred to F24S 25/16>

D F24J 2/5241 · · · ·~~{comprising elongated non rigid elements, e.g. straps, wires, ropes}~~
<administratively transferred to F24S 25/50>

D F24J 2/5243 · · · ·~~{Fixation means, e.g. connectors or fasteners}~~
<administratively transferred to F24S 25/60>

D F24J 2/5245 · · · · ·~~{Connectors for anchoring solar modules or supporting elements to the ground or to building structures}~~
<administratively transferred to F24S 25/61>

D F24J 2/5247 · · · · · ·~~{in the form of bent strips or assemblies of strips; Hook-like connectors; Connectors to be mounted between building covering elements}~~
<administratively transferred to F24S 25/613>

D F24J 2/5249 · · · · · ·~~{for anchoring to protrusions of buildings, e.g. to corrugations or to standing seams}~~
<administratively transferred to F24S 25/615>

D F24J 2/525 · · · · · ·~~{Ground anchoring means; Foundations for supporting elements; Massive elements for anchoring supporting structures to the ground or to flat horizontal surfaces}~~
<administratively transferred to F24S 25/617>

D F24J 2/5252 · · · · ·~~{Connectors for fixing solar modules, or solar module peripheral frames to supporting elements, e.g. to profiled mounting members}~~
<administratively transferred to F24S 25/63>

D F24J 2/5254 · · · · · ·~~{Solar module side connectors or base connectors}~~
<administratively transferred to F24S 25/632>

D F24J 2/5256 · · · · · ·~~{Clamping or clipping elements}~~
<administratively transferred to F24S 25/634>

D F24J 2/5258 · · · · · · ·~~{with clamping action by using screw-threaded elements}~~
<administratively transferred to F24S 25/636>

D F24J 2/526 · · · · ·~~{Connectors for coupling adjacent supporting elements together, e.g. profile to profile connectors}~~
<administratively transferred to F24S 25/65>

D F24J 2/5262 · · · · ·~~{Connectors for coupling adjacent solar modules or solar module peripheral frames together (F24J 2/5252 takes precedence)}~~
<administratively transferred to F24S 25/67>

D F24J 2/5264 · · · ·~~{comprising means for adjusting the final position or the final orientation of a supporting element relative to another one or relative to a mounting surface; comprising means for compensating mounting tolerances}~~
<administratively transferred to F24S 25/70>

D F24J 2/5266 · · ·~~{adapted for non-rotary movement}~~
<administratively transferred to F24S 30/20>

D F24J 2/5267 · · ·~~{Waterborne solar collectors}~~
<administratively transferred to F24S 20/70>

D F24J 2/5269 · · · ·~~{Moving platforms}~~
<administratively transferred to F24S 20/70>

D F24J 2/5271 · · ·~~{Airborne solar collectors, e.g. using inflated structures (F24J 2/0472, F24J 2/5267 take precedence)}~~
<administratively transferred to F24S 20/80>

D F24J 2002/5273 · · ·~~{Details; Special support components or methods}~~
<administratively transferred to F24S 2025/01>

D F24J 2002/5275 · · · ·~~{Arrangements for mounting elements inside solar collectors; Spacers inside solar collectors}~~
<administratively transferred to F24S 2025/011>

D F24J 2002/5277 · · · ·~~{Foldable support elements}~~
<administratively transferred to F24S 2025/012>

D F24J 2002/5279 · · · ·~~{Stackable support elements}~~
<administratively transferred to F24S 2025/013>

D F24J 2002/5281 · · · ·~~{Methods for installing support elements}~~
<administratively transferred to F24S 2025/014>

D F24J 2002/5283 · · · ·~~{Supports with play between elements}~~
<administratively transferred to F24S 2025/015>

D F24J 2002/5284 · · · ·~~{Filling or spacing means; Elastic means}~~
<administratively transferred to F24S 2025/016>

D F24J 2002/5286 · · · ·~~{Tensioning means}~~
<administratively transferred to F24S 2025/017>

D F24J 2002/5288 · · · ·~~{Means for preventing movements, e.g. stops}~~
<administratively transferred to F24S 2025/018>

D F24J 2002/529 · · · ·~~{Means for accommodating irregularities on mounting surface; Tolerance compensation means}~~
<administratively transferred to F24S 2025/019>

D F24J 2002/5292 · · · ·~~{Ballasting means}~~
<administratively transferred to F24S 2025/02>

D F24J 2002/5294 · · · ·~~{Sealing means between support elements and mounting surface}~~
<administratively transferred to F24S 2025/021>

D F24J 2002/5296 · · · ·~~{Sealing means between support elements, e.g. overlapping arrangements; Gap closing arrangements}~~
<administratively transferred to F24S 2025/022>

D F24J 2002/5298 · · · ·~~{Means for preventing theft; Locking means}~~
<administratively transferred to F24S 2025/023>

D F24J 2/54 · · ·~~specially adapted for rotary movement {(F24J 2/5269 takes precedence)}~~
<administratively transferred to F24S 30/40>

D F24J 2/5403 · · · ·~~{with only one rotation axis}~~
<administratively transferred to F24S 30/42>

D F24J 2/5406 · · · · ·~~{with vertical axis}~~
<administratively transferred to F24S 30/422>

D F24J 2/541 · · · · ·~~{with horizontal axis}~~
<administratively transferred to F24S 30/425>

D F24J 2/5413 · · · · ·~~{with inclined axis}~~
<administratively transferred to F24S 30/428>

D F24J 2/5417 · · · ·~~{with two rotation axis}~~
<administratively transferred to F24S 30/45>

D F24J 2/542 · · · · ·~~{with vertical primary axis}~~
<administratively transferred to F24S 30/452>

D F24J 2/5424 · · · · ·~~{with horizontal primary axis}~~
<administratively transferred to F24S 30/455>

D F24J 2/5427 · · · · ·~~{with inclined primary axis}~~
<administratively transferred to F24S 30/458>

D F24J 2/5431 · · · ·~~{with more than two rotation axis or with multiple degrees of freedom}~~
<administratively transferred to F24S 30/48>

D F24J 2002/5434 · · · ·~~{Special components}~~
<administratively transferred to F24S 2030/10>

D F24J 2002/5437 · · · · ·~~{Driving means}~~
<administratively transferred to F24S 2030/11>

D F24J 2002/5441 · · · · · ·~~{hydraulic or pneumatic}~~
<administratively transferred to F24S 2030/115>

D F24J 2002/5444 · · · · ·~~{Coupling means}~~
<administratively transferred to F24S 2030/12>

D F24J 2002/5448 · · · · ·~~{Transmissions}~~
<administratively transferred to F24S 2030/13>

D F24J 2002/5451 · · · · · ·~~{in the form of articulated bars}~~
<administratively transferred to F24S 2030/131>

D F24J 2002/5455 · · · · · · ·~~{in the form of compasses, scissors or parallelograms}~~
<administratively transferred to F24S 2030/132>

D F24J 2002/5458 · · · · · ·~~{in the form of flexible elements, e.g. belts, chains, ropes}~~
<administratively transferred to F24S 2030/133>

D F24J 2002/5462 · · · · · ·~~{in the form of gearings or rack-and-pinion transmissions}~~
<administratively transferred to F24S 2030/134>

D F24J 2002/5465 · · · · · ·~~{in the form of threaded elements}~~
<administratively transferred to F24S 2030/135>

D F24J 2002/5468 · · · · · ·~~{for moving several solar collectors by common transmission elements}~~
<administratively transferred to F24S 2030/136>

D F24J 2002/5472 · · · · · ·~~{for deriving one movement from another one, e.g. for deriving elevation movement from azimuth movement}~~
<administratively transferred to F24S 2030/137>

D F24J 2002/5475 · · · · ·~~{Movement guiding means}~~
<administratively transferred to F24S 2030/14>

D F24J 2002/5479 · · · · · ·~~{Tracks}~~
<administratively transferred to F24S 2030/145>

D F24J 2002/5482 · · · · ·~~{Bearings}~~
<administratively transferred to F24S 2030/15>

D F24J 2002/5486 · · · · · ·~~{Hinged elements; Pin connections}~~
<administratively transferred to F24S 2030/16>

D F24J 2002/5489 · · · · · ·~~{Spherical joints}~~
<administratively transferred to F24S 2030/17>

D F24J 2002/5493 · · · · ·~~{Load balancing means, e.g. use of counter-weights}~~
<administratively transferred to F24S 2030/18>

D F24J 2002/5496 · · · · ·~~{Movement dampening means; Braking means}~~
<administratively transferred to F24S 2030/19>

D F24J 3/00 ~~**Other production or use of heat, not derived from combustion (use of solar heat F24J 2/00)**~~
<administratively transferred to F24V 99/00>

D F24J 3/003 ·~~{using heat resulting from internal friction of a moving fluid or from friction between a fluid and a moving body}~~
<administratively transferred to F24V 40/00>

D F24J 3/006 · ·~~{the fluid passing through a restriction means}~~
<administratively transferred to F24V 40/10>

D F24J 3/06 ·~~using natural heat~~
<administratively transferred to F24V 50/00>

D F24J 3/08 · ·~~using geothermal heat~~
<administratively transferred to F24T 10/00>

D F24J 3/081 · · ·~~{by circulating a working fluid through underground channels, the working fluid not coming into direct contact with the ground}~~
<administratively transferred to F24T 10/10>

D F24J 3/082 · · · ·~~{Compact tube assemblies inserted into the ground, e.g. geothermal probes}~~
<administratively transferred to F24T 10/13>

D F24J 3/083 · · · · ·~~{in the form of bent tubes or in the form of tubes assembled with connectors or with return headers}~~
<administratively transferred to F24T 10/15>

D F24J 3/084 · · · · ·~~{in the form of tubes being closed at one end, i.e. return type}~~
<administratively transferred to F24T 10/17>

D F24J 3/085 · · ·~~{by injecting a working fluid directly into the ground or by using underground water, e.g. systems using injection and recovery wells}~~
<administratively transferred to F24T 10/20>

D F24J 3/086 · · ·~~{by injecting a working fluid into a closed well; by using intermediate working fluids, e.g. by using heat pipes}~~
<administratively transferred to F24T 10/30>

D F24J 2003/087 · · ·~~{Component parts, details or accessories}~~
<administratively transferred to F24T 2010/50>

D F24J 2003/088 · · · ·~~{Methods for installation}~~
<administratively transferred to F24T 2010/53>

D F24J 2003/089 · · · ·~~{Control arrangements}~~
<administratively transferred to F24T 2010/56>

D F24J 2200/00 ~~**Prediction; Simulation**~~
<administratively transferred to F24V 99/00>

D F24J 2200/04 ·~~for solar techniques~~
<administratively transferred to F24S 2201/00>

D F24J 2200/06 ·~~for geothermal techniques~~
<administratively transferred to F24T 2201/00>

Project: RP0493 (F24S)

N	***F24S***	***SOLAR HEAT COLLECTORS; SOLAR HEAT SYSTEMS (for producing mechanical power from solar energy F03G 6/00)***
		NOTE *In this subclass, the following terms or expressions are used with the meanings indicated:* • *"solar heat collector modules", often referred to simply as "modules", covers;* *a. whole solar heat collectors* *b. elements of solar heat collectors, e.g. reflectors, lenses or heat storage elements.* • *"absorbing elements" covers elements for absorbing solar-rays and converting it into heat.* • *"solar heat systems" covers systems having solar heat collectors as their components and using the collected heat*
N	***F24S 10/00***	***Solar heat collectors using working fluids***
N	*F24S 10/10*	*· the working fluids forming pools or ponds*
N	*F24S 10/13*	*· · Salt-gradient ponds*
N	*F24S 10/17*	*· · using covers or floating solar absorbing elements*
N	*F24S 10/20*	*· having circuits for two or more working fluids (with means for exchanging heat between two or more fluids F24S 10/30)*
N	*F24S 10/25*	*· having two or more passages for the same working fluid layered in direction of solar-rays, e.g. having upper circulation channels connected with lower circulation channels*
N	*F24S 10/30*	*· with means for exchanging heat between two or more working fluids*
N	*F24S 10/40*	*· in absorbing elements surrounded by transparent enclosures, e.g. evacuated solar collectors*
N	*F24S 10/45*	*· · {the enclosure being cylindrical}*
N	*F24S 10/50*	*· the working fluids being conveyed between plates*
N	*F24S 10/501*	*· · {having conduits of plastic material}*
N	*F24S 10/502*	*· · {having conduits formed by paired plates and internal partition means}*
N	*F24S 10/503*	*· · {having conduits formed by paired plates, only one of which is plane}*
N	*F24S 10/504*	*· · {having conduits formed by paired non-plane plates}*
N	*F24S 10/505*	*· · {having curved plate-like conduits, e.g. semi-spherical}*
N	*F24S 10/506*	*· · {having conduits formed by inflation of portions of a pair of joined sheets}*
N	*F24S 10/55*	*· · with enlarged surfaces, e.g. with protrusions or corrugations (collectors comprising porous materials or permeable masses directly contacting the working fluids F24S 10/80)*
N	*F24S 10/60*	*· the working fluids trickling freely over absorbing elements*
N	*F24S 10/70*	*· the working fluids being conveyed through tubular absorbing conduits*
N	*F24S 2010/71*	*· · {the conduits having a non-circular cross-section}*
N	*F24S 10/72*	*· · {the tubular conduits being integrated in a block; the tubular conduits touching each other}*
N	*F24S 10/73*	*· · {the tubular conduits being of plastic material}*
N	*F24S 10/74*	*· · {the tubular conduits are not fixed to heat absorbing plates and are not touching each other}*
N	*F24S 10/742*	*· · · {the conduits being parallel to each other}*
N	*F24S 10/744*	*· · · {the conduits being helically coiled}*

N	*F24S 10/746*	*· · ·{the conduits being spirally coiled}*
N	*F24S 10/748*	*· · ·{the conduits being otherwise bent, e.g. zig-zag}*
N	*F24S 10/75*	*· ·with enlarged surfaces, e.g. with protrusions or corrugations (collectors comprising porous material or permeable masses directly contacting the working fluids F24S 10/80)*
N	*F24S 2010/751*	*· · ·{Special fins}*
N	*F24S 2010/752*	*· · · ·{extending obliquely}*
N	*F24S 10/753*	*· · ·{the conduits being parallel to each other}*
N	*F24S 10/754*	*· · ·{the conduits being spirally coiled}*
N	*F24S 10/755*	*· · ·{the conduits being otherwise bent, e.g. zig-zag}*
Q	*F24S 10/80*	*·comprising porous material or permeable masses directly contacting the working fluids (for conveying liquefied working fluid from evaporator sections to condenser sections with capillary force F24S 10/95)* *WARNING* *Group F24S 10/80 is impacted by reclassification into group F24S 10/95.* *Groups F24S 10/80 and F24S 10/95 should be considered in order to perform a complete search.*
Q	*F24S 10/90*	*·using internal thermosiphonic circulation* *WARNING* *Group F24S 10/90 is incomplete pending reclassification of documents from group F24S 90/10.* *Group F24S 10/90 is also impacted by reclassification into groups F24S 10/95 and F24S 90/10.* *All groups listed in this Warning should be considered in order to perform a complete search.*
N	*F24S 10/95*	*· ·having evaporator sections and condenser sections, e.g. heat pipes* *WARNING* *Group F24S 10/95 is incomplete pending reclassification of documents from groups F24S 10/80, F24S 10/90 and F24S 90/10.* *Groups F24S 10/80, F24S 10/90, F24S 90/10, and F24S 10/95 should be considered in order to perform a complete search.*
N	***F24S 20/00***	***Solar heat collectors specially adapted for particular uses or environments*** *WARNING* *Group F24S 20/00 is incomplete pending reclassification of documents from group F24S 21/00.* *Groups F24S 20/00 and F24S 21/00 should be considered in order to perform a complete search.*
N	*F24S 20/02*	*·{for swimming pools}*
N	*F24S 20/04*	*·{for showers}*
N	*F24S 2020/10*	*·{Solar modules layout; Modular arrangements}*
N	*F24S 2020/11*	*· ·{in the form of multiple rows and multiple columns, all solar modules being coplanar}*
N	*F24S 2020/12*	*· ·{Coplanar arrangements with frame overlapping portions}*
N	*F24S 2020/13*	*· ·{Overlaying arrangements similar to roof tiles}*
N	*F24S 2020/14*	*· ·{Stepped arrangements, e.g. in parallel planes, without module overlapping}*
N	*F24S 2020/15*	*· ·{Non-parallel arrangements}*
N	*F24S 2020/16*	*· ·{Preventing shading effects}*

N	*F24S 2020/17*	*· · {Arrangements of solar thermal modules combined with solar PV modules}*
N	*F24S 2020/18*	*· · {having a particular shape, e.g. prismatic, pyramidal}*
N	*F24S 2020/183*	*· · · {in the form of louvers}*
N	*F24S 2020/186*	*· · · {allowing change of position for optimization of heat collection}*
N	*F24S 20/20*	*· Solar heat collectors for receiving concentrated solar energy, e.g. receivers for solar power plants*
N	*F24S 2020/23*	*· · {movable or adjustable}*
N	*F24S 20/25*	*· · using direct solar radiation in combination with concentrated radiation*
Q	*F24S 20/30*	*· Solar heat collectors for heating objects, e.g. solar cookers or solar furnaces* *WARNING* *Group F24S 20/30 is impacted by reclassification into group F24S 50/20. Groups F24S 20/30 and F24S 50/20 should be considered in order to perform a complete search.*
N	*F24S 20/40*	*· Solar heat collectors combined with other heat sources, e.g. using electrical heating or heat from ambient air*
Q	*F24S 20/50*	*· Rollable or foldable solar heat collector modules* *WARNING* *Group F24S 20/50 is impacted by reclassification into group F24S 20/55. Groups F24S 20/50 and F24S 20/55 should be considered in order to perform a complete search.*
N	*F24S 20/55*	*· · made of flexible materials* *WARNING* *Group F24S 20/55 is incomplete pending reclassification of documents from group F24S 20/50. Groups F24S 20/50 and F24S 20/55 should be considered in order to perform a complete search.*
N	*F24S 20/60*	*· Solar heat collectors integrated in fixed constructions, e.g. in buildings*
N	*F24S 20/61*	*· · Passive solar heat collectors, e.g. operated without external energy source*
N	*F24S 20/62*	*· · in the form of fences, balustrades or handrails*
N	*F24S 20/63*	*· · in the form of windows*
N	*F24S 20/64*	*· · in the form of floor constructions, grounds or roads*
Q	*F24S 20/66*	*· · in the form of facade constructions, e.g. wall constructions (in the form of shingles or tiles F24S 20/69)* *WARNING* *Group F24S 20/66 is impacted by reclassification into group F24S 20/69. Groups F24S 20/66 and F24S 20/69 should be considered in order to perform a complete search.*
N	*F24S 20/67*	*· · in the form of roof constructions (in the form of shingles or tiles F24S 20/69)*
N	*F24S 20/69*	*· · in the form of shingles or tiles* *WARNING* *Group F24S 20/69 is incomplete pending reclassification of documents from group F24S 20/66. Groups F24S 20/66 and F24S 20/69 should be considered in order to perform a complete search.*

Q F24S 20/70 · *Waterborne solar heat collector modules (for working fluids forming pools or ponds F24S 10/10)*

WARNING

Group is impacted by reclassification into groups F24S 30/00, F24S 30/20, F24S 30/40, F24S 30/42, F24S 30/422, F24S 30/425, F24S 30/428, F24S 30/45, F24S 30/452, F24S 30/455, F24S 30/458, and F24S 30/48. All groups listed in this Warning should be considered in order to perform a complete search.

N F24S 20/80 · *Airborne solar heat collector modules, e.g. inflatable structures*

Q F24S 21/00 *Solar heat collectors not provided for in groups F24S 10/00-F24S 20/00*

WARNING

Group F24S 21/00 is impacted by reclassification into group F24S 20/00. Groups F24S 21/00 and F24S 20/00 should be considered in order to perform a complete search.

Q F24S 23/00 *Arrangements for concentrating solar-rays for solar heat collectors*

WARNING

Group F24S 23/00 is impacted by reclassification into group F24S 50/20. Groups F24S 23/00 and F24S 50/20 should be considered in order to perform a complete search.

N F24S 23/10 · *{Prisms}*

N F24S 23/11 · *{Fluorescent material}*

N F24S 23/12 · *{Light guides}*

N F24S 23/30 · *with lenses*

N F24S 23/31 · · *{having discontinuous faces, e.g. Fresnel lenses}*

N F24S 23/70 · *with reflectors*

Q F24S 23/71 · · *with parabolic reflective surfaces (with cylindro-parabolic reflective surfaces F24S 23/74)*

WARNING

Group F24S 23/71 is impacted by reclassification into group F24S 23/74. Groups F24S 23/71 and F24S 23/74 should be considered in order to perform a complete search.

N F24S 23/715 · · · *{flexible}*

N F24S 23/72 · · *with hemispherical reflective surfaces*

N F24S 23/74 · · *with trough-shaped or cylindro-parabolic reflective surfaces*

WARNING

Group F24S 23/74 is incomplete pending reclassification of documents from group F24S 23/71. Groups F24S 23/71 and F24S 23/74 should be considered in order to perform a complete search.

N F24S 23/745 · · · *{flexible}*

N F24S 23/75 · · *with conical reflective surfaces*

N F24S 23/77 · · *with flat reflective plates*

N F24S 23/79 · · *with spaced and opposed interacting reflective surfaces*

N F24S 23/80 · · *{having discontinuous faces}*

N F24S 23/81 · · *{flexible (F24S 23/715, F24S 23/745 take precedence)}*

N	*F24S 23/82*	*· ·{characterised by the material or the construction of the reflector}*
N	*F24S 2023/83*	*· ·{Other shapes}*
N	*F24S 2023/831*	*· · ·{corrugated}*
N	*F24S 2023/832*	*· · ·{curved}*
N	*F24S 2023/833*	*· · ·{dish-shaped}*
N	*F24S 2023/834*	*· · ·{trough-shaped}*
N	*F24S 2023/835*	*· · · ·{asymmetric}*
N	*F24S 2023/836*	*· · ·{spiral}*
N	*F24S 2023/837*	*· · ·{hyperbolic}*
N	*F24S 2023/838*	*· · ·{involutes}*
N	*F24S 2023/84*	*· ·{Reflective elements inside solar collector casings}*
N	*F24S 2023/85*	*· ·{Micro-reflectors}*
N	*F24S 2023/86*	*· ·{in the form of reflective coatings}*
N	*F24S 2023/87*	*· ·{Reflectors layout}*
N	*F24S 2023/872*	*· · ·{Assemblies of spaced reflective elements on common support, e.g. Fresnel reflectors}*
N	*F24S 2023/874*	*· · ·{Reflectors formed by assemblies of adjacent similar reflective facets}*
N	*F24S 2023/876*	*· · ·{Reflectors formed by assemblies of adjacent reflective elements having different orientation or different features}*
N	*F24S 2023/878*	*· · ·{Assemblies of spaced reflective elements in the form of grids, e.g. vertical or inclined reflective elements extending over heat absorbing elements}*
Q	*F24S 2023/88*	*· ·{Multi reflective traps}*

WARNING

Group F24S 2023/88 is impacted by reclassification into group F24S 2070/62.
Groups F24S 2023/88 and F24S 2070/62 should be considered in order to perform a complete search.

N	***F24S 25/00***	***Arrangement of stationary mountings or supports for solar heat collector modules***

NOTE

Arrangements also intended for use with photovoltaic modules should further be classified in the relevant groups of subclass H02S.

N	*F24S 2025/01*	*·{Special support components; Methods of use}*
N	*F24S 2025/011*	*· ·{Arrangements for mounting elements inside solar collectors; Spacers inside solar collectors}*
N	*F24S 2025/012*	*· ·{Foldable support elements}*
N	*F24S 2025/013*	*· ·{Stackable support elements}*
N	*F24S 2025/014*	*· ·{Methods for installing support elements}*
N	*F24S 2025/015*	*· ·{Supports with play between elements}*
N	*F24S 2025/016*	*· ·{Filling or spacing means; Elastic means}*
N	*F24S 2025/017*	*· ·{Tensioning means}*
N	*F24S 2025/018*	*· ·{Means for preventing movements, e.g. stops}*
N	*F24S 2025/019*	*· ·{Means for accommodating irregularities on mounting surface; Tolerance compensation means}*
N	*F24S 2025/02*	*· ·{Ballasting means}*
N	*F24S 2025/021*	*· ·{Sealing means between support elements and mounting surface}*

N	*F24S 2025/022*	*· ·{Sealing means between support elements, e.g. overlapping arrangements; Gap closing arrangements}*
N	*F24S 2025/023*	*· ·{Means for preventing theft; Locking means}*
N	*F24S 25/10*	*· extending in directions away from a supporting surface*
N	*F24S 25/11*	*· · using shaped bodies, e.g. concrete elements, foamed elements or moulded box-like elements*
N	*F24S 25/12*	*· · using posts in combination with upper profiles*
N	*F24S 25/13*	*· · Profile arrangements, e.g. trusses (F24S 25/12 takes precedence)*
N	*F24S 25/15*	*· · using bent plates; using assemblies of plates*
N	*F24S 25/16*	*· · Arrangement of interconnected standing structures; Standing structures having separate supporting portions for adjacent modules*
N	*F24S 25/20*	*· Peripheral frames for modules*
N	*F24S 25/30*	*· using elongate rigid mounting elements extending substantially along the supporting surface, e.g. for covering buildings with solar heat collectors (extending in directions away from the supporting surface F24S 25/10; peripheral frames for modules F24S 25/20)*
N	*F24S 25/33*	*· · forming substantially planar assemblies, e.g. of coplanar or stacked profiles*
N	*F24S 25/35*	*· · · by means of profiles with a cross-section defining separate supporting portions for adjacent modules*
N	*F24S 25/37*	*· · · forming coplanar grids comprising longitudinal and transversal profiles*
N	*F24S 25/40*	*· using plate-like mounting elements, e.g. profiled or corrugated plates; Plate-like module frames (extending in directions away from a supporting surface F24S 25/10)*
N	*F24S 25/50*	*· comprising elongate non-rigid elements, e.g. straps, wires or ropes*
N	*F24S 25/60*	*· Fixation means, e.g. fasteners, specially adapted for supporting solar heat collector modules*
N	*F24S 2025/6001*	*· ·{by using hook and loop-type fasteners}*
N	*F24S 2025/6002*	*· ·{by using hooks}*
N	*F24S 2025/6003*	*· ·{by clamping}*
N	*F24S 2025/6004*	*· ·{by clipping, e.g. by using snap connectors}*
N	*F24S 2025/6005*	*· ·{by screwed connection}*
N	*F24S 2025/6006*	*· ·{by using threaded elements, e.g. stud bolts}*
N	*F24S 2025/6007*	*· ·{by using form-fitting connection means, e.g. tongue and groove}*
N	*F24S 2025/6008*	*· ·{by using toothed elements}*
N	*F24S 2025/6009*	*· ·{by deforming the material, e.g. by crimping or clinching}*
N	*F24S 2025/601*	*· ·{by bonding, e.g. by using adhesives}*
N	*F24S 2025/6011*	*· ·{by welding or brazing}*
N	*F24S 2025/6012*	*· ·{Joining different materials}*
N	*F24S 2025/6013*	*· · ·{Joining glass with non-glass elements}*
N	*F24S 25/61*	*· · for fixing to the ground or to building structures*
N	*F24S 25/613*	*· · · in the form of bent strips or assemblies of strips; Hook-like connectors; Connectors to be mounted between building-covering elements*
N	*F24S 25/615*	*· · · for fixing to protruding parts of buildings, e.g. to corrugations or to standing seams*
N	*F24S 25/617*	*· · · Elements driven into the ground, e.g. anchor-piles; Foundations for supporting elements; Connectors for connecting supporting structures to the ground or to flat horizontal surfaces*
N	*F24S 25/63*	*· · for fixing modules or their peripheral frames to supporting elements*

N	*F24S 25/632*	*· · ·Side connectors; Base connectors*
N	*F24S 25/634*	*· · ·Clamps; Clips*
N	*F24S 25/636*	*· · · ·clamping by screw-threaded elements*
N	*F24S 25/65*	*· ·for coupling adjacent supporting elements, e.g. for connecting profiles together*
N	*F24S 25/67*	*· ·for coupling adjacent modules or their peripheral frames (for fixing modules or their peripheral frames to supporting elements F24S 25/63)*
N	*F24S 25/70*	*·with means for adjusting the final position or orientation of supporting elements in relation to each other or to a mounting surface; with means for compensating mounting tolerances*
N	*F24S 2025/80*	*·{Special profiles}*
N	*F24S 2025/801*	*· ·{having hollow parts with closed cross-section}*
N	*F24S 2025/802*	*· ·{having circular or oval cross-section}*
N	*F24S 2025/803*	*· ·{having a central web, e.g. I-shaped, inverted T- shaped}*
N	*F24S 2025/804*	*· ·{U-, C- or O-shaped; Hat profiles}*
N	*F24S 2025/805*	*· ·{in the form of corrugated profiles}*
N	*F24S 2025/806*	*· ·{having curved portions}*
N	*F24S 2025/807*	*· ·{having undercut grooves}*

N F24S 30/00 Arrangements for moving or orienting solar heat collector modules

NOTE

Arrangements also intended for use with photovoltaic modules should further be classified in the relevant groups of subclass H02S.

WARNING

Group F24S 30/00 is incomplete pending reclassification of documents from groups F24S 20/70 and F24S 30/20
Groups F24S 20/70, F24S 30/20, and F24S 30/00 should be considered in order to perform a complete search.

N	*F24S 2030/10*	*·{Special components}*
N	*F24S 2030/11*	*· ·{Driving means}*
N	*F24S 2030/115*	*· · ·{Linear actuators, e.g. pneumatic cylinders}*
N	*F24S 2030/12*	*· ·{Coupling means}*
N	*F24S 2030/13*	*· ·{Transmissions}*
N	*F24S 2030/131*	*· · ·{in the form of articulated bars}*
N	*F24S 2030/132*	*· · · ·{in the form of compasses, scissors or parallelograms}*
N	*F24S 2030/133*	*· · ·{in the form of flexible elements, e.g. belts, chains, ropes}*
N	*F24S 2030/134*	*· · ·{in the form of gearings or rack-and-pinion transmissions}*
N	*F24S 2030/135*	*· · ·{in the form of threaded elements}*
N	*F24S 2030/136*	*· · ·{for moving several solar collectors by common transmission elements}*
N	*F24S 2030/137*	*· · ·{for deriving one movement from another one, e.g. for deriving elevation movement from azimuth movement}*
N	*F24S 2030/14*	*· ·{Movement guiding means}*
N	*F24S 2030/145*	*· · ·{Tracks}*
N	*F24S 2030/15*	*· ·{Bearings}*
N	*F24S 2030/16*	*· ·{Hinged elements; Pin connections}*
N	*F24S 2030/17*	*· ·{Spherical joints}*
N	*F24S 2030/18*	*· ·{Load balancing means, e.g. use of counter-weights}*

N F24S 2030/19 · · *{Movement dampening means; Braking means}*

Q F24S 30/20 · *for linear movement*

WARNING

Group F24S 30/20 is incomplete pending reclassification of documents from group F24S 20/70.
Group F24S 30/20 is also impacted by reclassification into group F24S 30/00.
Groups F24S 20/70, F24S 30/20, and F24S 30/00 should be considered in order to perform a complete search

N F24S 30/40 · *for rotary movement*

WARNING

Group F24S 30/40 is incomplete pending reclassification of documents from group F24S 20/70.
Groups F24S 20/70 and F24S 30/40 should be considered in order to perform a complete search.

N F24S 30/42 · · *with only one rotation axis*

WARNING

Group F24S 30/42 is incomplete pending reclassification of documents from group F24S 20/70.
Groups F24S 20/70 and F24S 30/42 should be considered in order to perform a complete search.

N F24S 30/422 · · · *Vertical axis*

WARNING

Group F24S 30/422 is incomplete pending reclassification of documents from group F24S 20/70.
Groups F24S 20/70 and F24S 30/422 should be considered in order to perform a complete search.

N F24S 30/425 · · · *Horizontal axis*

WARNING

Group F24S 30/425 is incomplete pending reclassification of documents from group F24S 20/70.
Groups F24S 20/70 and F24S 30/425 should be considered in order to perform a complete search.

N F24S 30/428 · · · *with inclined axis*

WARNING

Group F24S 30/428 is incomplete pending reclassification of documents from group F24S 20/70.
Groups F24S 20/70 and F24S 30/428 should be considered in order to perform a complete search.

N F24S 30/45 · · *with two rotation axes*

WARNING

Group F24S 30/45 is incomplete pending reclassification of documents from group F24S 20/70.
Groups F24S 20/70 and F24S 30/45 should be considered in order to perform a complete search.

N *F24S 30/452* *· · · Vertical primary axis*

WARNING
Group F24S 30/452 is incomplete pending reclassification of documents from group F24S 20/70.
Groups F24S 20/70 and F24S 30/452 should be considered in order to perform a complete search.

N *F24S 30/455* *· · · Horizontal primary axis*

WARNING
Group F24S 30/455 is incomplete pending reclassification of documents from group F24S 20/70.
Groups F24S 20/70 and F24S 30/455 should be considered in order to perform a complete search.

N *F24S 30/458* *· · · with inclined primary axis*

WARNING
Group F24S 30/458 is incomplete pending reclassification of documents from group F24S 20/70.
Groups F24S 20/70 and F24S 30/458 should be considered in order to perform a complete search.

N *F24S 30/48* *· · with three or more rotation axes or with multiple degrees of freedom*

WARNING
Group F24S 30/48 is incomplete pending reclassification of documents from group F24S 20/70.
Groups F24S 20/70 and F24S 30/48 should be considered in order to perform a complete search.

Q ***F24S 40/00*** ***Safety or protection arrangements of solar heat collectors; Preventing malfunction of solar heat collectors (control arrangements F24S 50/00)***

WARNING
Group F24S 40/00 is impacted by reclassification into group F24S 40/90.
Groups F24S 40/00 and F24S 40/90 should be considered in order to perform a complete search.

N *F24S 40/10* *· Protective covers or shrouds; Closure members, e.g. lids (transparent coverings F24S 80/50)*

N *F24S 40/20* *· Cleaning; Removing snow*

N *F24S 40/40* *· Preventing corrosion; Protecting against dirt or contamination*

Q *F24S 40/42* *· · Preventing condensation inside solar modules (by venting F24S 40/53)*

WARNING
Group F24S 40/42 is impacted by reclassification into group F24S 40/53.
Groups F24S 40/42 and F24S 40/53 should be considered in order to perform a complete search .

N *F24S 40/44* *· · Draining rainwater or condensation*

N *F24S 40/46* *· · Maintaining vacuum, e.g. by using getters*

N *F24S 40/48* *· · Deaerating or degassing the working fluid*

N *F24S 40/50* *· Preventing overheating or overpressure (by draining the working fluid F24S 40/60)*

N *F24S 40/52* *· · by modifying the heat collection, e.g. by defocusing or by changing the position of heat-receiving elements*

N F24S 40/53 *· · by venting solar heat collector enclosures*

WARNING
Group F24S 40/53 is incomplete pending reclassification of documents from group F24S 40/42.
Groups F24S 40/42 and F24S 40/53 should be considered in order to perform a complete search.

N F24S 40/55 *· · Arrangements for cooling, e.g. by using external heat dissipating means or internal cooling circuits (by venting F24S 40/53)*

N F24S 40/57 *· · Preventing overpressure in solar collector enclosures (by venting F24S 40/53)*

N F24S 40/58 *· · Preventing overpressure in working fluid circuits*

N F24S 40/60 *· Arrangements for draining the working fluid*

N F24S 40/70 *· Preventing freezing (arrangements for draining the working fluid F24S 40/60)*

N F24S 40/80 *· Accommodating differential expansion of solar collector elements*

N F24S 40/85 *· · {Arrangements for protecting solar collectors against adverse weather conditions (F24S 40/10 takes precedence)}*

N F24S 40/90 *· Arrangements for testing solar heat collectors*

WARNING
Group F24S 40/90 is incomplete pending reclassification of documents from group F24S 40/00.
Groups F24S 40/00 and F24S 40/90 should be considered in order to perform a complete search.

N F24S 50/00 ***Arrangements for controlling solar heat collectors***

N F24S 50/20 *· for tracking*

WARNING
Group F24S 50/20 is incomplete pending reclassification of documents from groups F24S 20/30 and F24S 23/00.
Groups F24S 50/20 and F24S 50/20 should be considered in order to perform a complete search.

N F24S 2050/25 *· · {Calibration means; Methods for initial positioning of solar concentrators or solar receivers}*

N F24S 50/40 *· responsive to temperature*

N F24S 50/60 *· responsive to wind*

N F24S 50/80 *· for controlling collection or absorption of solar radiation*

Q F24S 60/00 ***Arrangements for storing heat collected by solar heat collectors (working fluids forming pools or ponds F24S 10/10)***

WARNING
Group F24S 60/00 is impacted by reclassification into groups F24S 60/10 and F24S 60/20.
Groups F24S 60/00, F24S 60/10, and F24S 60/20 should be considered in order to perform a complete search.

N F24S 60/10 *· using latent heat*

WARNING
Group F24S 60/10 is incomplete pending reclassification of documents from groups F24S 60/00 and F24S 60/30.
Groups F24S 60/00, F24S 60/30, and F24S 60/10 should be considered in order to perform a complete search.

N *F24S 60/20* *· using chemical reactions, e.g. thermochemical reactions or isomerisation reactions*

WARNING
Group F24S 60/20 is incomplete pending reclassification of documents from groups F24S 60/00 and F24S 60/30.
Groups F24S 60/00, F24S 60/30, and F24S 60/20 should be considered in order to perform a complete search.

Q *F24S 60/30* *· storing heat in liquids*

WARNING
Group F24S 60/30 is impacted by reclassification into groups F24S 60/10 and F24S 60/20.
Groups F24S 60/30, F24S 60/10, and F24S 60/20 should be considered in order to perform a complete search.

N ***F24S 70/00*** ***Details of absorbing elements***

WARNING
Group F24S 70/00 is incomplete pending reclassification of documents from group F24S 80/00.
Groups F24S 80/00 and F24S 70/00 should be considered in order to perform a complete search.

N *F24S 70/10* *· characterised by the absorbing material (absorbing coatings or surface treatment for increasing absorption F24S 70/20)*

N *F24S 70/12* *· · made of metallic material*

N *F24S 70/14* *· · made of plastics*

N *F24S 70/16* *· · made of ceramic; made of concrete; made of natural stone*

Q *F24S 70/20* *· characterised by absorbing coatings; characterised by surface treatment for increasing absorption*

WARNING
Group F24S 70/20 is impacted by reclassification into group F24S 70/225.
Groups F24S 70/20 and F24S 70/225 should be considered in order to perform a complete search.

N *F24S 70/225* *· · for spectrally selective absorption*

WARNING
Group F24S 70/225 is incomplete pending reclassification of documents from groups F24S 70/20, F24S 70/25, and F24S 70/275.
All groups listed in this Warning should be considered in order to perform a complete search.

Q *F24S 70/25* *· · Coatings made of metallic material*

WARNING
Group F24S 70/25 is impacted by reclassification into group F24S 70/225.
Groups F24S 70/25 and F24S 70/225 should be considered in order to perform a complete search.

Q *F24S 70/275* *· · Coatings made of plastics*

WARNING
Group F24S 70/275 is impacted by reclassification into group F24S 70/225.
Groups F24S 70/275 and F24S 70/225 should be considered in order to perform a complete search.

N	*F24S 70/30*	*· Auxiliary coatings, e.g. anti-reflective coatings*
N	*F24S 70/60*	*· characterised by the structure or construction (absorbing coatings or surface treatment for increasing absorption F24S 70/20; auxiliary coatings F24S 70/30)*
N	*F24S 2070/62*	*· · {Heat traps}* *WARNING* *Group F24S 2070/62 is incomplete pending reclassification of documents from group F24S 2023/88.* *Groups F24S 2023/88 and F24S 2070/62 should be considered in order to perform a complete search.*
N	*F24S 70/65*	*· · Combinations of two or more absorbing elements*
Q	***F24S 80/00***	***Details, accessories or component parts of solar heat collectors not provided for in groups F24S 10/00-F24S 70/00*** *WARNING* *Group F24S 80/00 is impacted by reclassification into group F24S 70/00.* *Groups F24S 80/00 and F24S 70/00 should be considered in order to perform a complete search.*
N	*F24S 2080/01*	*· {Selection of particular materials}*
N	*F24S 2080/011*	*· · {Ceramics}*
N	*F24S 2080/012*	*· · {Concrete}*
N	*F24S 2080/013*	*· · {Foams}*
N	*F24S 2080/014*	*· · {Carbone, e.g. graphite}*
N	*F24S 2080/015*	*· · {Plastics}*
N	*F24S 2080/016*	*· · {Textiles; Fabrics}*
N	*F24S 2080/017*	*· · {Natural materials, e.g. wood}*
N	*F24S 2080/018*	*· · {Recycled materials}*
N	*F24S 2080/03*	*· {Arrangements for heat transfer optimization}*
N	*F24S 2080/05*	*· · {Flow guiding means; Inserts inside conduits}*
N	*F24S 2080/07*	*· · {Arrangements for one-way heat transfer, e.g. thermal diodes}*
N	*F24S 2080/09*	*· {Arrangements for reinforcement of solar collector elements}*
N	*F24S 80/10*	*· Materials for heat-exchange conduits*
N	*F24S 80/20*	*· Working fluids specially adapted for solar heat collectors*
N	*F24S 80/30*	*· Arrangements for connecting the fluid circuits of solar collectors with each other or with other components, e.g. pipe connections; Fluid distributing means, e.g. headers*
N	*F24S 80/40*	*· Casings*
N	*F24S 80/45*	*· · characterised by the material*
N	*F24S 80/453*	*· · · made of metallic material*
N	*F24S 80/457*	*· · · made of plastics*
Q	*F24S 80/50*	*· Elements for transmitting incoming solar rays and preventing outgoing heat radiation; Transparent coverings* *WARNING* *Group F24S 80/50 is impacted by reclassification into groups F24S 80/56 and F24S 80/58.* *Groups F24S 80/50, F24S 80/56, and F24S 80/58 should be considered in order to perform a complete search.*
N	*F24S 2080/501*	*· · {Special shape}*

N *F24S 2080/502* *· · ·{in the form of multiple covering elements}*

N *F24S 2080/503* *· · ·{in the form of curved covering elements}*

Q *F24S 80/52* *· ·characterised by the material (for preventing heat loss F24S 80/56)*

WARNING
Group F24S 80/52 is impacted by reclassification into groups F24S 80/56 and F24S 80/58.
Groups F24S 80/52, F24S 80/56, and F24S 80/58 should be considered in order to perform a complete search.

Q *F24S 80/525* *· · ·made of plastics*

WARNING
Group F24S 80/525 is impacted by reclassification into groups F24S 80/56 and F24S 80/58.
Groups F24S 80/525, F24S 80/56, and F24S 80/58 should be considered in order to perform a complete search.

Q *F24S 80/54* *· ·using evacuated elements*

WARNING
Group F24S 80/54 is impacted by reclassification into groups F24S 80/56 and F24S 80/58.
Groups F24S 80/54, F24S 80/56, and F24S 80/58 should be considered in order to perform a complete search.

N *F24S 80/56* *· ·characterised by means for preventing heat loss*

WARNING
Group F24S 80/56 is incomplete pending reclassification of documents from groups F24S 80/50, F24S 80/52, F24S 80/525, and F24S 80/54.
All groups listed in this Warning should be considered in order to perform a complete search.

N *F24S 80/58* *· ·characterised by their mountings or fixing means*

WARNING
Group F24S 80/58 is incomplete pending reclassification of documents from groups F24S 80/50, F24S 80/52, F24S 80/525, and F24S 80/54.
All groups listed in this Warning should be considered in order to perform a complete search.

N *F24S 80/60* *· Thermal insulation (transparent coverings F24S 80/50)*

N *F24S 80/65* *· ·characterised by the material*

N *F24S 80/70* *· Sealing means*

N ***F24S 90/00*** ***Solar heat systems not otherwise provided for***

Q *F24S 90/10* *· using thermosiphonic circulation*

WARNING
Group F24S 90/10 is incomplete pending reclassification of documents from group F24S 10/90.
Group F24S 90/10 is also impacted by reclassification into groups F24S 10/90 and F24S 10/95.
All groups listed in this Warning should be considered in order to perform a complete search.

N ***F24S 2201/00*** ***Prediction; Simulation***

Project: RP0493 (F24T)

N	***F24T***	***GEOTHERMAL COLLECTORS; GEOTHERMAL SYSTEMS***
Q	***F24T 10/00***	***Geothermal collectors***
		WARNING *Group F24T 10/00 is impacted by reclassification into groups F24T 10/10, F24T 10/30, F24T 10/40, and F24T 50/00.* *All groups listed in this Warning should be considered in order to perform a complete search.*
Q	*F24T 10/10*	*· with circulation of working fluids through underground channels, the working fluids not coming into direct contact with the ground* *WARNING* *Group F24T 10/10 is incomplete pending reclassification of documents from group F24T 10/00.* *Group F24T 10/10 is also impacted by reclassification into groups F24T 10/30 and F24T 10/40.* *All groups listed in this Warning should be considered in order to perform a complete search.*
N	*F24T 10/13*	*· · using tube assemblies suitable for insertion into boreholes in the ground, e.g. geothermal probes*
N	*F24T 10/15*	*· · · using bent tubes; using tubes assembled with connectors or with return headers*
N	*F24T 10/17*	*· · · using tubes closed at one end, i.e. return-type tubes*
N	*F24T 10/20*	*· using underground water as working fluid; using working fluid injected directly into the ground, e.g. using injection wells and recovery wells*
Q	*F24T 10/30*	*· using underground reservoirs for accumulating working fluids or intermediate fluids* *WARNING* *Group F24T 10/30 is incomplete pending reclassification of documents from groups F24T 10/00 and F24T 10/10.* *Group F24T 10/30 is also impacted by reclassification into group F24T 10/40.* *All groups listed in this Warning should be considered in order to perform a complete search.*
N	*F24T 10/40*	*· operated without external energy sources, e.g. using thermosiphonic circulation or heat pipes* *WARNING* *Group F24T 10/40 is incomplete pending reclassification of documents from groups F24T 10/00, F24T 10/10, and F24T 10/30.* *All groups listed in this Warning should be considered in order to perform a complete search.*
N	*F24T 2010/50*	*· {Component parts, details or accessories}* *WARNING* *Group F24T 50/00 is incomplete pending reclassification of documents from group F24T 10/00.* *Groups F24T 10/00 and F24T 50/00 should be considered in order to perform a complete search.*
N	*F24T 2010/53*	*· · {Methods for installation}*
N	*F24T 2010/56*	*· · {Control arrangements}*

N	***F24T 50/00***	***Geothermal systems (for producing mechanical power from geothermal energy {F03G 7/04})***
		WARNING *Group F24T 50/00 is incomplete pending reclassification of documents from group F24T 10/00.* *Groups F24T 10/00 and F24T 50/00 should be considered in order to perform a complete search.*
N	***F24T 2201/00***	***Prediction; Simulation***

Project: RP0493 (F24V)

N	***F24V***	***COLLECTION, PRODUCTION OR USE OF HEAT NOT OTHERWISE PROVIDED FOR***
N	***F24V 30/00***	***Apparatus or devices using heat produced by exothermal chemical reactions other than combustion***
N	***F24V 40/00***	***Production or use of heat resulting from internal friction of moving fluids or from friction between fluids and moving bodies***
N	*F24V 40/10*	*・the fluid passing through restriction means*
N	***F24V 50/00***	***Use of heat from natural sources, e.g. from the sea***
N	***F24V 99/00***	***Subject matter not provided for in other main groups of this subclass***

Project: RP0493 (F25B)

U	**F25B 27/00**	**Machines, plant, or systems, using particular sources of energy (F25B 30/06 takes precedence)**
	F25B 27/002	・{using solar energy (~~use of solar heat not otherwise provided for F24J 2/00~~*solar heat collectors F24S*)}

Project: RP0493 (F28D)

U	**F28D 15/00**	**Heat-exchange apparatus with the intermediate heat-transfer medium in closed tubes passing into or through the conduit walls {; Heat-exchange apparatus employing intermediate heat-transfer medium or bodies (F28D 17/00, F28D 19/00, F28D 20/00 take precedence)}**
	F28D 15/02	・in which the medium condenses and evaporates, e.g. heat pipes {(~~heat pipes used in solar heat collectors F24J 2/32;~~ *heat pipes used in solar heat collectors F24S 10/95;* in radiators F28D 1/0226; in nuclear reactors G21C 15/257)}
M	**F28D 20/00**	**Heat storage plants or apparatus in general ~~(specially adapted for particular applications, see the relevant places, e.g. F24D 15/02)~~; Regenerative heat-exchange apparatus not covered by groups F28D 17/00 or F28D 19/00**

Project: RP0493 (G02B)

U	**G02B 6/00**	**Light guides**
U	G02B 6/24	・Coupling light guides (for electric waveguides H01P 1/00)
U	G02B 6/42	・・Coupling light guides with opto-electronic elements NOTE In this group, the following expression is used with the meaning indicated: • "opto-electronic elements" includes light emitting elements, e.g. lasers or LED's, as well as light receiving elements, e.g. photodiodes or phototransistors

G02B 6/4298 ・・・{coupling with non-coherent light sources and/or radiation detectors, e.g. lamps, incandescent bulbs, scintillation chambers ~~(coupling of solar energy into light guides F24J)~~}

Project: RP0493 (G05D)

M G05D **SYSTEMS FOR CONTROLLING OR REGULATING NON-ELECTRIC VARIABLES (for continuous casting of metals B22D 11/16 ; valves per se F16K; sensing non-electric variables, see the relevant subclasses of G01; for regulating electric or magnetic variables G05F)**

NOTES

1. This subclass does not cover features of general applicability to regulating systems, e.g. anti-hunting arrangements, which are covered by subclass G05B.

2. In this subclass, the following term is used with the meaning indicated:
   - "systems" includes self-contained devices such as speed governors, pressure regulators.

3. Control systems specially adapted for particular apparatus, machines or processes are classified in the subclasses for the apparatus, machines or processes, provided that there is specific provision for control or regulation relevant to the special adaptation, either at a detailed level, (e.g. A21B 1/40 : "for regulating temperature in bakers' ovens") or at a general level, (e.g. B23K 9/095 : "for automatic control of welding parameters in arc welding"). Otherwise, classification is madein the most appropriate place in this subclass.

The following are lists of places where there is specific provision of the kind referred to above. Where such provision is at a detailed level, the places have been grouped according to the main groups of this subclass. Where the provision is at a general level (e.g. of a kind appropriate to more than one of the main groups specified in the lists, or to main groups G05D 27/00 or G05D 29/00), the places are listed under the title "General References".

Places related to G05D 1/00

A01B 69/00	Agricultural machines or implements
A63H 17/36	Toy vehicles
B60V 1/11	Air-cushion vehicles
B62D 1/00	Steering controls of motor vehicles or trailers,i.e. means for initiating a change of direction
B62D 6/00	Arrangements for automatically controlling thesteering depending on driving conditions
B62D 55/116	Chassis of endless-tracked vehicles
B63H 25/00	Marine steering; control of waterborne vessels
B64C 13/00 - B64C 15/00	Controlling aircraft
B64D 25/10	Controlling attitude or direction of aircraftejector seats
B64G 1/24	Cosmonautic vehicles
F41G 7/00	Self-propelled missiles
F42B 15/01	Guided missiles
F42B 19/01	Marine torpedoes

Places related to G05D 3/00

A43D 119/00	Footwear manufacture
B21K 31/00	Tool carriers in forging or pressing
B23B 39/26	Pattern-controlled boring or drilling tools
B23D 1/30, B23D 3/06, B23D 5/04	Planing or slotting machines controlled by copying device

B23H 7/18	Electrode to workpiece spacing in ~~electricdischargte~~ *electric discharge*and electrochemical machining
B23K 26/02	Workpiece in laser welding or cutting
B23K 37/04	Workpiece in welding
B23K 37/06	Molten metal in welding
B23Q 5/20	Spindles in machine tools
B23Q 15/00, B23Q 16/00	Tool or work position in machine tools
B23Q 35/00	Tools controlled by pattern or master model
B24B 17/00	Grinding controlled by patterns, drawings,magnetic tape or the like
B24B 47/22	Starting position in grinding
B30B 15/24	Actuating members in presses
B62D 55/116	Chassis of tracked vehicles
B65H 23/18	Web-advancing mechanisms
E02F 3/43	Dippers or buckets in dredgers
F15B 9/00	Fluid-pressure servomotors with follow-~~upaction~~*up action*
~~F24J 2/38~~ *F24S 50/20*	Tracking of solar haet collectors
G03F 9/00	Photomechanical production of patterned ~~ortextured~~ *or textured*surfaces
G11B 5/588	Rotating heads in information storage systems
G21C 7/12	Movement of control elements in ~~nuclearreactors~~*nuclear reactors*

Places related to G05D 5/00

A24B 7/14	Tobacco cutting
B05C 11/02	Thickness of coating of fluent material onsurface
B21B 37/16	Thickness, width, diameter or othertransverse dimensions of the products ofmetal-rolling mills
C03B 18/04	Dimension of glass ribbon
D21F 7/06	Thickness of layer in paper making

Places related to G05D 7/00

A45D 20/26	Air in hair drying helmets
A61M 5/168	Flow of media to the human body
B03C 3/36	Gases or vapour in electrostatic separators
B05C 11/10	Fluent material in coating devices
B67D 1/12	Dispensing beverages on draught
B67D 7/28	Transferring liquids
C10K 1/28	Gas purifiers
E21B 21/08	Flushing boreholes
E21B 43/12	Obtaining liquids from wells
F01D 17/00	Flow in non-positive-displacement machinesor systems
F01M 1/16	Lubrication arrangements
F01P 7/00	Coolant flow in cooling devices
F02C 9/16, F02C 9/50	Gas-turbine working fluid
F16L 55/027	Throttle passages in pipes
F24F 11/00	Air-flow or supply of heating or cooling fluids in air treatment arrangements
F26B 21/12	Air or gas flow in dryers

G01G 11/08	Continuous flow weighing apparatus
G21D 3/14	Coolant in nuclear power plant

Places related to G05D 9/00

B01D 21/34	Liquid level in sedimentation arrangements
B41L 27/04	Ink level in printing, manifolding orduplicating arrangements
F22D 5/00	Feed water for boilers
H01J 1/10, H01J 13/14	Liquid pool electrodes in electric dischargetubes or lamps

Places related to G05D 11/00

B01D 21/32	Density in sedimentation arrangements
B01F 15/04	Mixers
B24C 7/00	Abrasive blasts
B28C 7/00	Mixtures of clays or cements
B65G 53/66	Bulk material conveyors
F02K 3/075	Flow ratio in jet-propulsion plants

Places related to G05D 13/00

B21C 1/12	Drum speed in metal drawing
B23Q 15/00	Cutting velocity of tool or work
B30B 15/20	Ram speed in presses
B60K 31/00	Setting or limiting speed of vehicles
B60L 15/00	Electrically-propelled vehicles
B64D 31/08	Cruising speed of aircraft
D01D 1/09	Feed rate in manufacture of artificialfilaments, threads, fibres, bristles orribbons
D01G 15/36	Carding machines
D02H 13/14	Warping, beaming or leasing machines
D03D 51/16	Cyclically varying speed of looms
G01N 30/32	Speed of fluid carrier in chemical analysis
G11B 15/46	Filamentary or web record carriers or headsfor such carriers in information storagesystems
G11B 19/28	Non-filamentary, non-web record carriers, orheads for such carriers in information storagesystems

Places related to G05D 15/00

B25D 9/26	Portable percussive tools
B30B 15/22	Ram pressure in presses
B65H 59/00	Tension in filamentary material
{B65H 23/00, B65H 59/00}	Tension in webs, tapes, filamentary material
B66D 1/50	Rope, cable or chain tension
D03D 49/04	Tension in looms
D05B 47/04	Tension in sewing machines
D21F 3/06	Pressure in paper-making machines
F26B 13/12	Drying fabrics
F26B 21/10	Pressure in dryers
G11B 15/43	Record carrier tension in informationstorage arrangements

Places related to G05D 16/00

B60C 23/00	Tyre pressure
B63C 11/08	Air within diving suit
B64D 13/00	Aircraft air-pressure
B65G 53/66	Bulk material conveyors
D01D 1/09	Manufacture of artificial filaments, threads,fibres, bristles or ribbons
E21B 21/08	Flushing boreholes
F01M 1/16	Lubrication arrangements
G01N 30/32	Pressure of fluid carrier in chemical analysis
H01J 7/14	Pressure in electric discharge tubes or lamps
H01K 1/52	Pressure in electric incandescent lamps

Places related to G05D 19/00

B25D 9/26	Portable percussion tools
B65G 27/32	Jigging conveyors

Places related to G05D 21/00

B01D 21/32	Density in sedimentation arrangements
B01D 53/30	Treating gases or vapours
G01N 30/34	Composition of fluid carrier in chemicalanalysis

Places related to G05D 22/00

A01G 25/16	Watering gardens, fields, sports groundsor the like
A01K 41/04	Poultry incubators
A24B 9/00	Tobacco products
F24F 11/00	Air conditioning
F26B 21/08	Dryers

Places related to G05D 23/00

A21B 1/40	Bakers' ovens
A45D 6/20	Hair curlers
B21C 31/00	Metal extruding
B60C 23/00	Tyre temperature
B64G 1/50	Cosmonautic vehicles
C03B 18/18, C03B 18/22	Float baths in glass making
D01D 1/09	Manufacture of artificial filaments,threads, fibres, bristles or ribbons
D04B 35/30	Knitting machines
D06F 75/26	Hand irons
D21F 5/06	Paper-making machines
F01M 5/00	Lubricant in lubrication arrangements
F16N 7/08	Arrangements for supplying oil or unspecifiedlubricant from a reservoir
F22G 5/00	Steam superheat
F26B 21/10	Dryers
G01N 30/30	Temperature of fluid carrier in chemicalanalysis
H01M 10/60	Electric storage cells
H05B 6/06, H05B 6/50, H05B 6/68	Dielectric, induction or microwave heating
H05G 1/36	Anode of X-ray tube

Places related to G05D 25/00

B41B 21/08	Photographic composing machines
H01S 3/10, H05B 33/08, H05B 35/00 to H05B 43/00	Lasers and other light sources

General references

A01J 5/007	Milking machines
B23K 9/095	Welding parameters
B23Q 35/00	Copying
B24B 17/00, B24B 49/00	Grinding or polishing
B24C 7/00	Abrasive blasts
B67D 1/12	Dispensing beverages on draught
G03G 21/20	Electrographic, electrophotographic ormagnetographic processes
H02P 5/00 - H02P 9/00	Dynamo-electric motors or generators

Project: RP0493 (H01L)

H01L 31/00 **Semiconductor devices sensitive to infra-red radiation, light, electromagnetic radiation of shorter wavelength or corpuscular radiation and adapted either for the conversion of the energy of such radiation into electrical energy or for the control of electrical energy by such radiation; Processes or apparatus peculiar to the manufacture or treatment thereof or of parts thereof; Details thereof (H01L 51/42 takes precedence; devices consisting of a plurality of solid state components formed in, or on, a common substrate, other than combinations of radiation-sensitive components with one or more electric light sources, H01L 27/00~~; production of heat using solar heat F24J 2/00~~; measurement of X-radiation, gamma radiation, corpuscular radiation or cosmic radiation with semiconductor detectors G01T 1/24, with resistance detectors G01T 1/26; measurement of neutron radiation with semiconductor detectors G01T 3/08; couplings of light guides with optoelectronic elements G02B 6/42; obtaining energy from radioactive sources G21H)**

Project: RP0493 (H02S)

M H02S **GENERATION OF ELECTRIC POWER BY CONVERSION OF INFRA-RED RADIATION, VISIBLE LIGHT OR ULTRAVIOLET LIGHT, ~~e.g~~*E.G*. USING PHOTOVOLTAIC [PV] MODULES (*obtaining electrical energy from radioactive sources G21H 1/12;* light sensitive inorganic semiconductor devices H01L 31/00; thermoelectric devices H01L 35/00; pyroelectric devices H01L 37/00; light sensitive organic semiconductor devices ~~H01L 51/00~~*H01L 51/42*~~; obtaining electrical energy from radioactive sources G21H 1/12; solar heat collectors F24J 2/00~~)**

M **H02S 20/00** **Supporting structures for PV modules**

NOTE

Supporting structures also intended for use with solar heat collectors should also be classified in groups ~~F24J 2/38~~*F24S 25/00*-*F24S 30/00* or ~~F24J 2/52~~*F24S 50/20*

WARNING

Groups H02S 20/10 - H02S 20/32 are incomplete pending reclassification of documents from groups H02S 20/00, ~~F24J 2/00~~*F24S 21/00*, ~~F24J 2/38~~*F24S 50/20*, and H01L 31/048.

Until reclassification is complete, groups H02S 20/00, ~~F24J 2/00~~*F24S 21/00*, ~~F24J 2/38~~*F24S 50/20*, and H01L 31/048 should be considered in order to perform a complete search.

U H02S 20/20 ・Supporting structures directly fixed to an immovable object (H02S 20/30 takes precedence)

U H02S 20/22 ・・specially adapted for buildings

U H02S 20/23 ・・・specially adapted for roof structures

M **H02S 40/00** **Components or accessories in combination with PV modules, not provided for in groups H02S 10/00 - H02S 30/00**

WARNING

Groups H02S 40/10 - H02S 40/44 are incomplete pending reclassification of documents from groups H02S 40/00, ~~F24J 2/00~~*F24S 21/00*, H01L 31/0232, H01L 31/05 - H01L 31/055.

Until reclassification is complete, groups H02S 40/00, ~~F24J 2/00~~*F24S 21/00*, H01L 31/0232 and H01L 31/05 - H01L 31/055 should be considered in order to perform a complete search.

Project: RP0513 (B31B)

U **B31B 50/00** **Making rigid or semi-rigid containers, e.g. boxes or cartons**

NOTE

In this group, it is desirable to add the indexing codes of groups B31B 2100/00 – B31B 2120/00.

WARNING

Group B31B 50/00 is incomplete pending reclassification of documents from groups B31D 1/00, B31D 3/00, B31D 5/00, B31D 5/02, B31D 5/04 and B31D 99/00.
Group B31B 50/00 is also impacted by reclassification into group B31B 50/59.
All groups listed in this warning should be considered in order to perform a complete search.

D B31B 50/001 ・~~{Shaping, other than by folding, sheet material under pressure}~~
<administratively transferred to B31B 50/59>

D B31B 50/0012 ・・~~{using punches or dies}~~
<administratively transferred to B31B 50/592>

D B31B 50/0014 ・・~~{Modifying the shape of tubular boxes or of paper bottle necks}~~
<administratively transferred to B31B 50/594>

E B31B 50/59 · Shaping sheet material under pressure (by folding B31B 50/26; embossing B31B 50/88)

WARNING

Group B31B 50/59 is incomplete pending reclassification of documents from group B31B 50/00.
Groups B31B 50/00 and B31B 50/59 should be considered in order to perform a complete search.

N B31B 50/592 · · *{using punches or dies}*

N B31B 50/594 · · *{Modifying the shape of tubular boxes or of paper bottle necks}*

Project: RP0514 (H01P)

U H01P 3/00 **Waveguides; Transmission lines of the waveguide type**

M H01P 3/20 · Quasi-optical arrangements for guiding a wave, e.g. focusing by dielectric lenses ~~(quasi-optical devices in general H01Q 15/00)~~

Project: RP0514 (H01Q)

M H01Q ***ANTENNAS, i.e. RADIO*** **AERIALS (~~microwave radiators for near-field therepeutic treatment A61N 5/04; apparatus for testing aerials or for measuring aerial characteristics G01R; waveguides H01P;~~ radiators or ~~aerials~~*antennas* for microwave heating H05B 6/72)**

NOTES

1. This subclass covers:
   - in addition to the primary active radiating elements,
     i. secondary devices for absorbing or for modifying the direction or polarisation of waves radiated from ~~aerials~~*antennas*, and
     ii. combinations with auxiliary devices such as earthing switches, lead-in devices, and lightning protectors;
   - both transmitting and receiving ~~aerials~~*antennas.*

2. This subclass does not cover devices of the waveguide type, such as resonators or lines, not designed as radiating elements, which are covered by subclass H01P.

3. In this subclass, the following expression is used with the meaning indicated:
   - "active radiating element" covers corresponding parts of a receiving ~~aerial~~*antenna*.

M H01Q 1/00 **Details of, or arrangements associated with, ~~aerials~~ *antennas* (arrangements for varying orientation of directional pattern H01Q 3/00)**

NOTES

1. This group covers only:
   - structural details or features of ~~aerials~~*antennas* not dependent on electric operation;
   - structural details or features applicable to more than one type of ~~aerial~~*antenna* or ~~aerial~~*antenna* element.

2. Structural details or features described with reference to, or clearly applicable only to, ~~aerials~~*antennas* or ~~aerial~~*antenna* elements of a particular type are classified in the group appropriate to that type~~.~~

M H01Q 1/002 · {Protection against seismic waves, thermal radiation or other disturbances, e.g. nuclear explosion; Arrangements for improving the power handling capability of an ~~aerial~~ *antenna}* ~~(cooling H01Q 1/02)}~~

M H01Q 1/005 · {Damping of vibrations; Means for reducing wind-induced forces ~~(damping of vibrations in general F16F)~~}

M	H01Q 1/02	· Arrangements for de-icing; Arrangements for drying-out {; Arrangements for cooling; Arrangements for preventing corrosion ~~(radomes H01Q 1/42)~~}
M	H01Q 1/06	· Means for the lighting or illuminating of ~~aerials~~*antennas*, e.g. for purpose of warning
M	H01Q 1/08	· ~~Means for collapsing aerials or parts thereof; {Collapsible aerials}~~*Means for collapsing antennas or parts thereof* ({collapsible ~~supports~~ *loop* ~~H01Q 1/1235}~~ *antennas H01Q 7/02*~~; collapsible loop aerials H01Q 7/02~~*; means for collapsing H-antennas or Yagi antennas H01Q 19/04*~~; {collapsible helical aerials H01Q 11/086; collapsible reflecting surfaces H01Q 15/161, H01Q 15/20} ; collapsible H-aerials or Yagi aerials H01Q 19/04~~)
U	H01Q 1/081	· · {Inflatable antennas}
M	H01Q 1/082	· · · {Balloon antennas ~~(balloon supported antennas H01Q 1/1292)~~}
M	H01Q 1/084	· · {Pivotable antennas ~~(mechanical movement of aerial or aerial system for changing or varying the orientation or the shape of the directional pattern H01Q 3/02; adjustment of angle between two radiating elements H01Q 9/12)~~}
M	H01Q 1/12	· Supports; Mounting means ~~({for the purpose of scanning H01Q 3/00; mounting structure for reflecting surfaces H01Q 15/14; towers, masts, or poles E04H 12/00} ; supporting conductors in general H02G 7/00)~~
U	H01Q 1/1207	· · {for fastening a rigid aerial element}
M	H01Q 1/1228	· · · {on a boom ~~(coupling of tubular pipes F16B 7/04)~~}
M	H01Q 1/125	· · {Means for positioning ~~(stabilising H01Q 1/18; remotely controlled positioning H01Q 3/005)~~}
M	H01Q 1/1257	· · · {using the received signal strength ~~(direction finding G01S 3/38; diversity H04B 7/10)~~}
M	H01Q 1/18	· · Means for stabilising ~~aerials~~*antennas* on an unstable platform ~~{(reducing wind-induced forces H01Q 1/005)}~~
M	H01Q 1/185	· · · {by electronic means ~~(electronic scanning H01Q 3/26)~~}
M	H01Q 1/22	· · by structural association with other equipment or articles ~~{(portable transceivers H04B 1/3827)}~~
M	H01Q 1/2208	· · · {associated with components used in interrogation type services, i.e. in systems for information exchange between an interrogator/reader and a tag/transponder, e.g. in Radio Frequency Identification [RFID] systems (~~G06K 7/00 and G06K 19/00 take precedence~~*methods or arrangements for sensing record carriers, e.g. for reading patterns G06K 7/00; record carrier for use with machines and with at least a part designed to carry digital markings G06K 19/00*)}
M	H01Q 1/2233	· · · · {used in consumption-meter devices, e.g. electricity, gas or water meters ~~(remote reading of utility meters G01D 4/002; transmission of measured values using a radio link in general G08C 17/02)~~}
M	H01Q 1/2241	· · · · {used in or for vehicle tyres ~~(tyres in general B60C 3/04)~~}
M	H01Q 1/225	· · · {used in level-measurement devices, e.g. for level gauge measurement ~~(level measuring with electromagnetic waves in general G01F 23/284)~~}
M	H01Q 1/2283	· · · {mounted in or on the surface of a semiconductor substrate as a chip-type antenna or integrated with other components into an IC package ~~(chip carriers for flat cards H01L 23/49855)~~}
U	H01Q 1/24	· · · with receiving set
M	H01Q 1/247	· · · · {with frequency mixer, e.g. for direct satellite reception or Doppler radar ~~(active antennas H01Q 23/00)~~}
M	H01Q 1/27	· Adaptation for use in or on movable bodies (H01Q 1/08, H01Q 1/12, H01Q 1/18 take precedence ~~{; portable transceivers H04B 1/3827}~~)
U	H01Q 1/28	· · Adaptation for use in or on aircraft, missiles, satellites, or balloons

M	H01Q 1/30	· · ·Means for trailing ~~aerials~~*antennas*
M	H01Q 1/32	· ·Adaptation for use in or on road or rail vehicles ~~(telescopic elements H01Q 1/10; resilient mountings for aerials H01Q 1/20)~~
M	H01Q 1/34	· ·Adaptation for use in or on ships, submarines, buoys~~,~~ or torpedoes (for subaqueous use H01Q 1/04~~; retractable loop aerials H01Q 7/02~~)
U	H01Q 1/36	·Structural form of radiating elements, e.g. cone, spiral, umbrella; {Particular materials used therewith}(H01Q 1/08, H01Q 1/14 take precedence)
M	H01Q 1/38	· ·formed by a conductive layer on an insulating support *{*({~~{~~patch antennas H01Q 9/0407; microstrip dipole antennas H01Q 9/065; microstrip slot ~~antenn as~~ *antennas* H01Q 13/106; transmission line microstrip antennas H01Q 13/206; manufacturing reflecting surfaces using insulating material for supporting the reflecting surface H01Q 15/142~~}~~ ~~; conductors in general H01B 5/14~~)*}*
M	H01Q 1/44	·~~using equipment having another main function to serve additionally as an aerial;~~ *using equipment having another main function to serve additionally as an antenna* {~~Means~~ *, e.g. means* for giving an ~~aerial anaesthetic~~ *antenna an aesthetic* aspect}(~~H01Q 1/28~~*H01Q 1/27* - H01Q 1/34 take precedence)
M	H01Q 1/46	· ·Electric supply lines or communication lines ~~{(circuits for signal transmission via power distribution lines H04B 3/56)}~~
M	H01Q 1/48	·Earthing means; Earth screens; Counterpoises ~~(earthing pins H01R 4/66)~~
M	H01Q 1/50	·Structural association of ~~aerials~~*antennas* with earthing switches, lead-in devices or lightning protectors ~~(lead-in devices H01B; lightning protectors, switches H01H)~~
M	H01Q 1/52	·Means for reducing coupling between ~~aerials~~*antennas*; Means for reducing coupling between an ~~aerial~~*antenna* and another structure ~~{~~(absorbing means H01Q 17/00)~~}~~
U	H01Q 1/521	· ·{reducing the coupling between adjacent antennas}
M	H01Q 1/525	· · ·{between emitting and receiving antennas ~~(feed-through nulling for radar G01S 7/038)~~}
M	H01Q 1/526	· ·{Electromagnetic shields ~~(anechoic chambers G01R 29/105; shielding of instruments G12B 17/00, of CRT H01J 29/867, of electrical apparatus or components H05K 9/00)~~}
M	H01Q 1/528	· ·{reducing the ~~reradiation~~*re-radiation* of a support structure (in a parabolic reflector antenna H01Q 19/023)}
M	**H01Q 3/00**	**Arrangements for changing or varying the orientation or the shape of the directional pattern of the waves radiated from an ~~aerial~~*antenna* or ~~aerial~~*antenna* system {(means for positioning H01Q 1/125)}**
M	H01Q 3/005	·{using remotely controlled ~~aerial~~*antenna* positioning or scanning ~~(remote control in general G08C)~~}
M	H01Q 3/01	·varying the shape of the ~~aerial~~*antenna* or ~~aerial~~*antenna* system
M	H01Q 3/02	·using mechanical movement of ~~aerial~~*antenna* or ~~aerial~~*antenna* system as a whole
M	H01Q 3/12	·using mechanical relative movement between primary active elements and secondary devices of ~~aerials~~*antennas* or ~~aerial~~*antenna* systems ~~{(positioning H01Q 1/1264)}~~
M	H01Q 3/26	·varying the relative phase or relative amplitude of energisation between two or more active radiating elements; varying the distribution of energy across a radiating aperture ({H01Q 3/12,} ~~,~~H01Q 3/22, H01Q 3/24 take precedence ~~{; use of steered beams for mobile service area coverage H04W 16/28}~~)
M	H01Q 3/2605	· ·{Array of radiating elements provided with a feedback control over the element weights, e.g. adaptive arrays ~~(tracking G01S 3/42)~~}

M	H01Q 3/267	· ·{Phased-array testing or checking devices ~~(measuring radiation diagrams of aerials G01R 29/10)~~}
M	H01Q 3/2676	· ·{Optically controlled phased array ~~(optical fibre networks H03H 2/003)~~}
U	H01Q 3/30	· ·varying the {relative} phase {between the radiating elements of an array (H01Q 3/2605, H01Q 3/2658, H01Q 3/2682, H01Q 3/44 take precedence)}
U	H01Q 3/34	· · ·by electrical means (active lenses or reflecting arrays H01Q 3/46)
M	H01Q 3/36	· · · ·with variable phase-shifters ~~{(combined with time delay devices H01Q 3/2682)}~~
M	**H01Q 5/00**	**Arrangements for simultaneous operation of ~~aerials~~*antennas* on two or more different wavebands, e.g. dual-band or multi-band arrangements (combinations of separate active ~~aerial~~*antenna* units operating in different wavebands and connected to a common feeder system H01Q 21/30)**
M	H01Q 5/10	·Resonant ~~aerials~~*antennas*
M	H01Q 5/15	· ·for operation of centre-fed ~~aerials~~*antennas* comprising one or more collinear, substantially straight or elongated active elements
U	H01Q 5/40	·Imbricated or interleaved structures; Combined or electromagnetically coupled arrangements, e.g. comprising two or more non-connected fed radiating elements
M	H01Q 5/48	· ·Combinations of two or more dipole type ~~aerials~~*antennas*
M	H01Q 5/49	· · ·with parasitic elements used for purposes other than for dual-band or multi-band, e.g. imbricated Yagi ~~aerials~~*antennas*
U	H01Q 5/50	·Feeding or matching arrangements for broad-band or multi-band operation
M	H01Q 5/55	· ·for horn or waveguide ~~aerials~~*antennas*
M	**H01Q 7/00**	**Loop ~~aerials~~*antennas* with a substantially uniform current distribution around the loop and having a directional radiation pattern in a plane perpendicular to the plane of the loop**
M	H01Q 7/005	·{with variable reactance for tuning the antenna ~~(tuning resonant circuits H03J)~~}
M	H01Q 7/02	·Collapsible ~~aerials~~*antennas*; Retractable ~~aerials~~*antennas*
M	H01Q 7/04	·Screened ~~aerials~~ *antennas* (H01Q 7/02, H01Q 7/06 take precedence)
M	**H01Q 9/00**	**Electrically-short ~~aerials~~*antennas* having dimensions not more than twice the operating wavelength and consisting of conductive active radiating elements ~~(loop aerials H01Q 7/00; waveguide horns or mouths H01Q 13/00; slot aerials H01Q 13/00; combinations of active elements with secondary devices to give desired directional characteristic H01Q 19/00; combinations of two or more active elements H01Q 21/00)~~**
M	H01Q 9/02	·Non-resonant ~~aerials~~*antennas*
M	H01Q 9/04	·Resonant ~~aerials~~*antennas*
M	H01Q 9/16	· ·with feed intermediate between the extremities of the ~~aerial~~*antenna*, e.g. centre-fed dipole (H01Q 9/44 takes precedence)
M	H01Q 9/18	· · ·Vertical disposition of the ~~aerial~~*antenna*
M	H01Q 9/26	· · ·with folded element or elements, the folded parts being spaced apart a small fraction of operating wavelength (resonant loop ~~aerials~~ *antennas* H01Q 7/00)
M	H01Q 9/27	· · · ·Spiral ~~aerials~~*antennas*
M	H01Q 9/28	· · ·Conical, cylindrical, cage, strip, gauze, or like elements having an extended radiating surface; Elements comprising two conical surfaces having collinear axes and adjacent apices and fed by two-conductor transmission lines (~~biconical horns H01Q 13/04~~*waveguide horns or mouths H01Q 13/00; slot antennas H01Q 13/00*)

U	H01Q 9/30	· · with feed to end of elongated active element, e.g. unipole (H01Q 9/44 takes precedence)
U	H01Q 9/32	· · · Vertical arrangement of element (H01Q 9/40 takes precedence)
M	H01Q 9/34	· · · · Mast, tower, or like self-supported ~~aerials~~*antennas*
U	H01Q 9/42	· · · with folded element, the folded parts being spaced apart a small fraction of the operating wavelength
M	H01Q 9/43	· · · · Scimitar ~~aerials~~*antennas*
M	H01Q 9/44	· · with *a* plurality of divergent straight elements, e.g. V-dipole, X-~~aerial~~*antenna*; with *a* plurality of elements having mutually inclined substantially straight portions (*combinations of two or more active elements H01Q 21/00;* turnstile ~~aerials~~ *antennas* H01Q 21/26)
M	**H01Q 11/00**	**Electrically-long ~~aerials~~*antennas* having dimensions more than twice the shortest operating wavelength and consisting of conductive active radiating elements (leaky waveguides ~~aerials,~~ *antennas or* slot ~~aerials~~ *antennas* H01Q 13/00~~; combinations of active elements with secondary devices to give desired directional characteristic H01Q 19/00; aerial arrays or systems H01Q 21/00~~)**
M	H01Q 11/02	· Non-resonant ~~aerials~~*antennas*, e.g. travelling-wave ~~aerial~~*antenna (Yagi antennas H01Q 19/30)*
M	H01Q 11/04	· · with parts bent, folded, shaped, screened~~,~~ or electrically loaded to obtain desired phase relation of radiation from selected sections of the ~~aerial~~ *antenna* (~~rhombic aerials, V-aerials H01Q 11/06~~*H01Q 11/06 – H01Q 11/10 take precedence*)
M	H01Q 11/06	· · Rhombic ~~aerials~~*antennas*; V-~~aerials~~*antennas*
M	H01Q 11/08	· · Helical ~~aerials~~*antennas*
M	H01Q 11/10	· · ~~Log-periodic aerials {periodic aerials, e.g. length or spacing of elements according to a given law}~~*Logperiodic antennas* (H01Q 11/08 takes precedence)
M	H01Q 11/12	· Resonant ~~aerials~~*antennas*
M	H01Q 11/14	· · with parts bent, folded, shaped~~,~~ or screened~~,~~ or with phasing impedances, to obtain desired phase relation of radiation from selected sections of the ~~aerial~~*antenna* or to obtain desired polarisation ~~effects~~*effect (H01Q 11/20 takes precedence)*
M	H01Q 11/20	· · V-~~aerials~~*antennas*
M	**H01Q 13/00**	**Waveguide horns or mouths; Slot ~~aerials~~*antennas*; Leaky-waveguide ~~aerials~~*antennas*; Equivalent structures causing radiation along the transmission path of a guided wave ~~{{multimode aerials H01Q 25/04)}~~**
M	H01Q 13/10	· Resonant slot ~~aerials~~*antennas*
M	H01Q 13/12	· · Longitudinally slotted cylinder ~~aerials~~*antennas*; Equivalent structures
M	H01Q 13/14	· · · Skeleton cylinder ~~aerials~~*antennas*
M	H01Q 13/16	· · Folded slot ~~aerials~~*antennas*
M	H01Q 13/20	· Non-resonant leaky-waveguide or transmission-line ~~aerials~~*antennas*; Equivalent structures causing radiation along the transmission path of a guided wave ~~{(varying the phase velocity H01Q 3/443; near-field transmission systems using leaky cable H04B 5/0018)}~~
M	H01Q 13/28	· · comprising elements constituting electric discontinuities and spaced in direction of wave propagation, e.g. dielectric elements~~,~~ *or* conductive elements forming artificial dielectric ~~(Yagi aerials H01Q 19/30)~~

M	**H01Q 15/00**	**Devices for reflection, refraction, diffraction~~,~~ or polarisation of waves radiated from an ~~aerial~~*antenna*, e.g. quasi-optical devices (variable for purpose of altering directivity H01Q 3/00; arrangements of such devices for guiding waves H01P 3/20; variable for purpose of modulation H03C 7/02)**
U	H01Q 15/02	· Refracting or diffracting devices, e.g. lens, prism
M	H01Q 15/10	· · comprising three-dimensional array of impedance discontinuities, e.g. holes in conductive surfaces or conductive discs forming artificial dielectric ~~(leaky-waveguide aerials H01Q 13/28)~~
M	H01Q 15/14	· Reflecting surfaces; Equivalent structures {(electromagnetic shields H01Q 1/526~~; radar-reflecting targets in general F41J 2/00~~)}
M	H01Q 15/22	· · functioning also as polarisation filter ~~{(in combination with polarising devices H01Q 15/24)}~~
M	H01Q 15/24	· Polarising devices; Polarisation filters (~~devices functioning simultaneously both as polarisation filters and as refracting or diffracting devices or as reflectors H01Q 15/12, H01Q 15/22~~*H01Q 15/12, H01Q 15/22 take precedence*)
M	**H01Q 17/00**	**Devices for absorbing waves radiated from an ~~aerial~~*antenna*; Combinations of such devices with active ~~aerial~~*antenna* elements or systems ~~{(anechoic chambers G01R 29/105)}~~**
M	**H01Q 19/00**	**Combinations of primary active ~~aerial~~*antenna* elements and units with secondary devices, e.g. with quasi-optical devices, for giving the ~~aerial~~*antenna* a desired directional characteristic {(combination of horns with slotted waveguide array H01Q 13/0233)}**
U	H01Q 19/02	· Details {(fastening of an element on a boom H01Q 1/1228)}
M	H01Q 19/04	· · Means for collapsing H-~~aerials~~*antennas* or Yagi ~~aerials~~*antennas*
U	H01Q 19/06	· using refracting or diffracting devices, e.g. lens {(radome H01Q 1/42)}
M	H01Q 19/09	· · wherein the primary active element is coated with or embedded in a dielectric or magnetic material (protective material H01Q 1/40*, varying the electric or magnetic characteristics of refracting or diffracting devices H01Q 3/44*~~; with variable characteristics H01Q 3/44~~)
U	H01Q 19/10	· using reflecting surfaces
U	H01Q 19/12	· · wherein the surfaces are concave (H01Q 19/18 takes precedence)
M	H01Q 19/15	· · · the primary radiating source being a line source, e.g. leaky waveguide ~~aerials~~*antennas*
M	H01Q 19/18	· · having two or more spaced reflecting surfaces (~~{surfaces of convex toroïdal shape H01Q 19/102; using a deflecting plane mirror H01Q 19/104; splash plate feeds H01Q 19/134} ; producing pencil beam by two cylindrical reflectors with their focal lines orthogonally disposed H01Q 19/20~~*H01Q 19/20 takes precedence*)
U	H01Q 19/22	· using a secondary device in the form of a single substantially straight conductive element
M	H01Q 19/24	· · the primary active element being centre-fed and substantially straight, e.g. H-~~aerial~~*antenna*
M	H01Q 19/28	· using a secondary device in the form of two or more substantially straight conductive elements (~~log-periodic aerials H01Q 11/10;~~ *log- periodic antennas H01Q 11/10;* constituting a reflecting surface H01Q 19/10)
E	H01Q 19/30	· · the primary active element being centre-fed and substantially straight, e.g. Yagi~~-aerial~~ *antenna* *WARNING* *Group H01Q 19/30 is incomplete pending reclassification of documents from group H01Q 21/12.*

Groups H01Q 21/12 and H01Q 19/30 should be considered in order to perform a complete search.

M H01Q 21/00 **~~Aerial~~*Antenna* arrays or systems (~~producing a beam the orientation or the shape of the directional pattern of which can be changed or varied H01Q 3/00; {combination of imbricated aerials or arrays operating on different wavebands H01Q 5/40;} electrically-long aerials H01Q 11/00~~*arrangements for changing or varying the orientation or the shape of the directional pattern of the waves radiated from an antenna or antenna system H01Q 3/00*)**

NOTE

This group includes:

- arrays comprising two or more individually energised similar active aerial units spaced apart;
- combinations of different types of active aerials or arrays;
- combinations of substantially independant non-interacting active aerials or arrays.

M H01Q 21/06 · Arrays of individually energised ~~active aerial~~ *antenna* units similarly polarised and spaced apart

U H01Q 21/08 · · the units being spaced along or adjacent to a rectilinear path {(waveguide fed H01Q 21/0037)}

C H01Q 21/12 · · · Parallel arrangements of substantially straight elongated conductive units (travelling-wave ~~aerials~~*antennas* comprising transmission line loaded with transverse elements~~, e.g~~ *H01Q 11/02*~~. "fishbone" aerial H01Q 11/04~~*; Yagi antennas H01Q 19/30*)

WARNING

Group H01Q 21/12 is impacted by reclassification into group H01Q 19/30. Groups H01Q 21/12 and H01Q 19/30 should be considered in order to perform a complete search.

M H01Q 21/14 · · · · Adcock ~~aerials~~*antennas*

M H01Q 21/22 · · ~~Aerial~~*Antenna* units of the array energised non-uniformly in amplitude or phase, e.g. tapered array~~,~~ *or* binomial array

M H01Q 21/24 · Combinations of ~~aerial elements or aerial~~ *antenna* units polarised in different directions for transmitting or receiving circularly and elliptically polarised waves or waves linearly polarised in any direction {(circularly polarised patch antennas H01Q 9/0428; circularly polarised horns H01Q 13/0241; cross-polarised horns H01Q 13/0258; polarisation converters H01Q 15/242; cross-polarised rear feeds H01Q 19/136; crossed polarisation dual antenna H01Q 25/001)}

M H01Q 21/26 · · Turnstile or like ~~aerials~~*antennas* comprising arrangements of three or more elongated elements disposed radially and symmetrically in a horizontal plane about a common centre

M H01Q 21/28 · Combinations of substantially independent non-interacting ~~aerial~~*antenna* units or systems {(multiple beam H01Q 25/00)}

M H01Q 21/29 · Combinations of different interacting ~~aerial~~*antenna* units for giving a desired directional characteristic (H01Q 25/00 takes precedence)

M H01Q 21/30 · Combinations of separate ~~aerial~~*antenna* units operating in different wavebands and connected to a common feeder system

M	**H01Q 23/00**	**~~Aerials~~*Antennas* with active circuits or circuit elements integrated within them or attached to them**
		NOTE
		1. This group covers only such combinations in which the type of antenna or antenna element is immaterial.
		~~1.~~ *2.* ~~Group~~ ~~H01Q 23/00 includes only such combinations in which the type of aerial or aerial element is immaterial.~~ Combinations with a particular type of ~~aerial~~*antenna* are classified in the group appropriate to that type.
M	**H01Q 25/00**	**~~Aerials~~*Antennas* or ~~aerial~~*antenna* systems providing at least two radiating patterns (arrangements for changing or varying the orientation or the shape of the directional pattern H01Q 3/00)**
M	H01Q 25/02	· providing sum and difference patterns (~~multimode aerials H01Q 25/04~~*H01Q 25/04 takes precedence*)
M	H01Q 25/04	· Multimode ~~aerials~~*antennas* {(corrugated horns H01Q 13/0208)}

Project: N/A (A23D)

	A23D	**EDIBLE OILS ~~OF~~*OR* FATS, e.g. MARGARINES, SHORTENINGS, COOKING OILS (animal feeding-stuffs A23K 10/00-A23K 20/30, A23K 30/00-A23K 50/90; foods or foodstuffs containing edible oils or fats A21D, A23C, A23G, A23L; obtaining, refining, preserving C11B, C11C; hydrogenation C11C 3/12)**

Project: N/A (A63B)

U	**A63B 37/00**	**Solid balls; {Rigid hollow balls}; Marbles (heavy throwing balls A63B 65/06)**
	A63B 37/0003	· {Golf balls (for practising drives A63B 69/3655, for practising ~~puts~~ *putts* A63B 69/3688)}

Project: N/A (B07B)

U	**B07B 1/00**	**Sieving, screening, sifting, or sorting solid materials using networks, gratings, grids, or the like {(ash-sifters for domestic stoves or ranges F24B 15/007)}**
U	B07B 1/46	· Constructional details of screens in general; Cleaning or heating of screens
U	B07B 1/4609	· · {constructional details of screening surfaces or meshes}
	B07B 1/4672	· · · {Woven ~~meshes~~*meshes*}

Project: N/A (B29C)

	B29C 35/00	**Heating, cooling or curing, e.g. crosslinking or vulcanising; Apparatus therefor (moulds with incorporated heating or cooling means B29C 33/02 {~~thermal after-treatment of shaped articles B29C 71/02~~}*; thermal after-treatment of shaped articles B29C 71/02*}; curing devices for plastics dental prostheses A61C 13/14; before moulding B29B 13/00)**
U	**B29C 59/00**	**Surface shaping {of articles}, e.g. embossing; Apparatus therefor {(in-mould printing B29C 37/0025; by using liquids B29C 71/0009; by using gases without chemical reaction B29C 71/009; for decorating in general B44; abrasive blasting B24C; chemical aspects C08J 7/00)}**
	B29C 59/14	· ~~by plasma treatment {;~~ *by* plasma ~~tubes~~ *treatment* ~~per se H01J}~~*{(plasma tubes per se H01J)}*

	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~~; ***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)***~~using porous material formed by internal pressure generated therein for joining preformed parts B29C 44/1228, B29C 44/326~~}** WARNING 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
	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 B60C 5/142**~~}~~**;} *retreading tyres B29D 30/54*; devices for covering leaks in pipes or hoses F16L 55/16)**
	B29C 73/16	・Auto-repairing or self-sealing arrangements or agents {~~incorporating auto-repairing or self-sealing arrangements or agents on or into tyres B29D 30/0685~~*(incorporating auto-repairing or self-sealing arrangements or agents on or into tyres B29D 30/0685)*}

Project: N/A (B60K)

U	**B60K 2350/00**	**Arrangements or adaptations of instruments; Dashboards**
U	B60K 2350/10	・Input/output devices or features thereof
U	B60K 2350/1076	・・Type of information
	B60K 2350/1092	・・・~~Eonomic~~*Economic* driving

Project: N/A (B60T)

U	**B60T 17/00**	**Component parts, details, or accessories of power brake systems not covered by groups B60T 8/00, B60T 13/00 or B60T 15/00, or presenting other characteristic features (air compressors per se F04)**
U	B60T 17/18	・Safety devices; Monitoring
U	B60T 17/22	・・Devices for monitoring or checking brake systems; Signal devices
	B60T 17/221	・・・{Procedure or apparatus for checking or keeping in a correct ~~functionning~~*functioning* condition of brake systems (hydraulic pressure systems in general F15B 19/00, F15B 21/04; testing structures or apparatus G01M)}

Project: N/A (B64D)

U	**B64D 9/00**	**Equipment for handling freight; Equipment for facilitating passenger embarkation or the like (emergency equipment B64D 17/00, B64D 19/00, B64D 25/00; structures integral with fuselage to facilitate loading, fuselage floors specially adapted for freight, steps mounted on and retractable within aircraft B64C; ground installations B64F)**
	B64D 2009/006	・{Rollers or drives for pallets of ~~fright~~*freight* containers, e.g. PDU}

Project: N/A (B65G)

U	**B65G 47/00**	**Article or material handling devices associated with conveyors; Methods employing such devices (for sorting, e.g. postal B07C)**
U	B65G 47/74	・Feeding, transfer, or discharging devices of particular kinds or types

U	B65G 47/90	・・Devices for picking-up and depositing articles or materials
U	B65G 47/91	・・・incorporating pneumatic, e.g. suction, grippers
	B65G 47/918	・・・・{with at ~~leats~~*least* two picking-up heads}

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
U	E05F 11/16	・・・・shifting the wing by pivotally-connected members {(moving) in a plane perpendicular to the pivot axis of the wing}
	E05F 11/22	・・・・・consisting of a lever, e.g. an angle lever, and ~~tow~~*two* or more additional links in series {no material}

Project: N/A (G10K)

U	**G10K 11/00**	**Methods or devices for transmitting, conducting or directing sound in general; Methods or devices for protecting against, or for damping, noise or other acoustic waves in general**
U	G10K 11/16	・Methods or devices for protecting against, or for damping, noise or other acoustic waves in general (G10K 11/36 takes precedence) NOTE This group does not cover protecting against, or damping of, acoustic waves adapted for particular applications, which are covered by the subclasses for these applications, provided that there is a specific provision for this aspect.
	G10K 11/172	・・・using resonance effects

Project: N/A (H01M)

U	**H01M 10/00**	**Secondary cells; Manufacture thereof** NOTE Secondary cells are accumulators receiving and supplying electrical energy by means of reversible electrochemical reactions.
U	H01M 10/04	・Construction or manufacture in general (H01M 10/12, H01M 10/28, H01M 10/38 take precedence)
	H01M 10/0436	・・{Small-sized flat cells or batteries *for* portable equipment}