

Compilation of Changes to the CPC Scheme Between 2021.05 and 2021.08

Presentation Details

Entries for new symbols and headings:	<i>Black text in italics</i>
Entries for existing symbols and headings	
—text insertions:	<i>Green text in italics with yellow background</i>
—text deletions:	Red strikethrough text with grey background
Entries for deleted symbols and headings:	Black strikethrough text

- In cases when the originating project cannot be found, "N/A" is given for the Project information (e.g. the change could be due to an Editorial Correction).
- Projects ending in "-F" indicate finalisation after reclassification was completed.

Project: RP0689 (A01K)

- C 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 (electric circuits or apparatus for supplying electric wire fencing [H05C](#))**
- WARNING**
Group [A01K 3/00](#) is impacted by reclassification into group [A01K 3/001](#). Groups [A01K 3/00](#) and [A01K 3/001](#) should be considered in order to perform a complete search.
- N A01K 3/001** • {*Portable, temporary, and collapsible fencing for pastures*}
- WARNING**
Group [A01K 3/001](#) is incomplete pending reclassification of documents from group [A01K 3/00](#). Groups [A01K 3/00](#) and [A01K 3/001](#) should be considered in order to perform a complete search.
- C A01K 3/002** • {Grids for preventing cattle from straying *through an open passage of an enclosure*}
- WARNING**
Group [A01K 3/002](#) is impacted by reclassification into group [A01K 3/004](#). Groups [A01K 3/002](#) and [A01K 3/004](#) should be considered in order to perform a complete search.
- N A01K 3/004** • • {*of electrical type, e.g. tape, wire, or rod*}
- WARNING**
Group [A01K 3/004](#) is incomplete pending reclassification of documents from group [A01K 3/002](#). Groups [A01K 3/002](#) and [A01K 3/004](#) should be considered in order to perform a complete search.
- C A01K 3/005** • {Electrified ~~wire fencing~~ *fencing for pastures*}{~~circuits H05C~~}
- WARNING**
Group [A01K 3/005](#) is impacted by reclassification into group [A01K 3/006](#). Groups [A01K 3/005](#) and [A01K 3/006](#) should be considered in order to perform a complete search.
- N A01K 3/006** • • {*Gates specially adapted therefor*}
- WARNING**
Group [A01K 3/006](#) is incomplete pending reclassification of documents from group [A01K 3/005](#).

Groups [A01K 3/005](#) and [A01K 3/006](#) should be considered in order to perform a complete search.

Project: RP0682 (A01N)

M A01N

PRESERVATION OF BODIES OF HUMANS OR ANIMALS OR PLANTS OR PARTS THEREOF (preservation of food or foodstuff [A23](#)); BIOCIDES, e.g. AS DISINFECTANTS, AS PESTICIDES OR AS HERBICIDES (preparations for medical, dental or toilet purposes which kill or prevent the growth or proliferation of unwanted organisms [A61K](#)); PEST REPELLANTS OR ATTRACTANTS; PLANT GROWTH REGULATORS

NOTES

1. This subclass covers:

- compositions, physical forms, methods of application of specific materials or the use of single compounds or compositions
- chemosterilants for the sexual sterilisation of invertebrates, e.g. insects, whereas sex sterilants for other purposes are covered by [A61K](#).

2. This subclass does not cover materials which affect the growth of a plant solely by supplying nutrients, i.e. plant food, ordinarily required for growth or materials which are used to prevent or cure mineral deficiencies in plants, e.g. addition of iron chelates to cure iron chlorosis, which materials are covered by class [C05](#).

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

- "plant growth regulators" are those materials which alter the plant through a chemical modification of the plant metabolism, such as auxins.

4. Biocidal, pest repellent, pest attractant or plant growth regulatory activity of compounds or preparations is further classified in subclass [A01P](#).

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:

A01N 43/824	covered by	A01N 43/82
A01N 43/828	covered by	A01N 43/82
A01N 43/832	covered by	A01N 43/82
A01N 43/836	covered by	A01N 43/82
A01N 53/02	covered by	A01N 53/00
A01N 53/04	covered by	A01N 53/00
A01N 53/06	covered by	A01N 53/00
A01N 53/08	covered by	A01N 53/00
A01N 53/10	covered by	A01N 53/00
A01N 53/12	covered by	A01N 53/00
A01N 53/14	covered by	A01N 53/00
A01N 55/10	covered by	A01N 55/00

Project: RP0682 (A01P)

N A01P **BIOCIDAL, PEST REPELLANT, PEST ATTRACTANT OR PLANT GROWTH REGULATORY ACTIVITY OF CHEMICAL COMPOUNDS OR PREPARATIONS**

NOTES

1. This subclass covers biocidal, pest repellent, pest attractant or plant growth regulatory activity of chemical compounds or preparations already classified as such in subclasses [A01N](#) or [C12N](#), or in classes [C01](#), [C07](#) or [C08](#).
2. Attention is drawn to the notes following the title of subclass [A01N](#), which are also applicable to this subclass.
3. In this subclass, activity is classified in all appropriate places.
4. Attention is drawn to cases where the subject of the invention concerns only biocidal, pest repellent, pest attractant or plant growth regulatory activity of chemical compounds or preparations, and the chemical structure, compound, mixture or composition of this subject of the invention is known. In such cases, classification is made in both subclass [A01N](#) and subclass [A01P](#) as invention information. In addition, if the chemical structure, compound, mixture or composition or any individual ingredient of a mixture or composition is considered to represent information of interest for search, it may also be classified as additional information.
5. The classification symbols of this subclass are not listed first when assigned to patent documents.

N A01P 1/00 **Disinfectants; Antimicrobial compounds or mixtures thereof**

N A01P 3/00 **Fungicides**

N A01P 5/00 **Nematocides**

N A01P 7/00 **Arthropodicides**

N A01P 7/02 · Acaricides

N A01P 7/04 · Insecticides

N A01P 9/00 **Molluscicides**

N A01P 11/00 **Rodenticides**

N A01P 13/00 **Herbicides; Algicides**

N A01P 13/02 · selective

N A01P 15/00 **Biocides for specific purposes not provided for in groups [A01P 1/00](#) - [A01P 13/00](#)**

N A01P 17/00 **Pest repellants**

N A01P 19/00 **Pest attractants**

N A01P 21/00 **Plant growth regulators**

N A01P 23/00 **Chemosterilants**

Project: RP0306-F (A23K)

U A23K 10/00 **Animal feeding-stuffs**

M A23K 10/40 · Mineral licks, e.g. salt blocks

WARNING

Group A23K 10/40 is incomplete pending reclassification of documents from group A23K 20/20.

~~Groups A23K 10/40 and A23K 20/20 should be considered in order to perform a complete search.~~

U A23K 20/00 Accessory food factors for animal feeding-stuffs

- U A23K 20/10
- M A23K 20/168

• • Steroids

WARNING

~~Group A23K 20/168 is impacted by reclassification into group A23K 20/184. Groups A23K 20/168 and A23K 20/184 should be considered in order to perform a complete search.~~

- M A23K 20/184

- • Hormones

WARNING

~~Group A23K 20/184 is incomplete pending reclassification of documents from group A23K 20/168. Groups A23K 20/184 and A23K 20/168 should be considered in order to perform a complete search.~~

- M A23K 20/20

- Inorganic substances, e.g. oligoelements

WARNING

~~Group A23K 20/20 is impacted by reclassification into group A23K 10/40. Groups A23K 20/20 and A23K 10/40 should be considered in order to perform a complete search.~~

U A23K 40/00 Shaping or working-up of animal feeding-stuffs

- M A23K 40/20

- by moulding, e.g. making cakes or briquettes

WARNING

~~Group A23K 40/20 is impacted by reclassification into group A23K 40/25. Groups A23K 40/20 and A23K 40/25 should be considered in order to perform a complete search.~~

- M A23K 40/25

- by extrusion

WARNING

~~Group A23K 40/25 is incomplete pending reclassification of documents from group A23K 40/20. Groups A23K 40/25 and A23K 40/20 s should be considered in order to perform a complete search.~~

Project: MP0472 (A41B)

U A41B 13/00 Baby linen (babies' napkins or holders therefor [A61F 13/15](#) {; patients' garments specially adapted for babies [A41D 13/1272](#)})

- M A41B 13/005

- {~~Overalls~~*Babies overalls, e.g. bodysuits or bib overalls*}

M A41B 2300/00 Details of *shirts*, underwear, baby linen or handkerchiefs *not provided for in other groups of this subclass*

M A41B 2400/00 Functions or special features of *shirts*, underwear, baby linen or handkerchiefs *not provided for in other groups of this subclass*

M A41B 2500/00 Materials for *shirts*, underwear, baby linen or handkerchiefs *not provided for in other groups of this subclass*

Project: MP0472 (A41D)

- U A41D 1/00 **Garments (for children [A41D 11/00](#))**
 M A41D 1/02 · Jackets ~~{{(anoraks A41D 3/00)}}~~

Project: RP0566-F (A41D)

- U A41D 13/00 **Professional, industrial or sporting protective garments, e.g. surgeons' gowns or garments protecting against blows or punches (helmets [A42B 3/00](#); clothing affording protection against chemical agents or for use at high altitudes [A62B 17/00](#); life-saving garments for use at sea, diving suits [B63C](#); bulletproof or armoured clothing [F41H](#); clothing affording protection against radiation [G21F 3/02](#))**

- M A41D 13/0015 · {Sports garments other than provided for in groups [A41D 13/0007](#) - [A41D 13/088](#)}

WARNING

Group A41D 13/0015 is impacted by reclassification into groups A41D 31/18 and A41D 31/185.
 Groups A41D 13/0015, A41D 31/18, and A41D 31/185 should be considered in order to perform a complete search.

- M A41D 13/0017 · · {specially adapted for women}

WARNING

Group A41D 13/0017 is impacted by reclassification into groups A41D 31/18 and A41D 31/185.
 Groups A41D 13/0017, A41D 31/18, and A41D 31/185 should be considered in order to perform a complete search.

Project: MP0472 (A41D)

- M A41D 13/002 · with controlled internal environment ~~{{(ventilating means A41D 27/28)}}~~
 M A41D 13/02 · Overalls *{, e.g. bodysuits or bib overalls}* (sweating suits [A61H 36/00](#))

U A41D 15/00 Convertible garments

- M A41D 15/04 · Garments convertible into other articles ~~(for travelling or camp articles [A45F 4/00](#))~~

U A41D 17/00 Gaiters; Spats

- M A41D 17/02 · Leggings *{, i.e. worn over lower body garments for protecting the garment underneath}*

Project: RP0566-F (A41D)**U A41D 31/00 Materials specially adapted for outerwear**

- M A41D 31/02 · Layered materials (characterised by special function or use [A41D 31/04](#))

WARNING

Group A41D 31/02 is impacted by reclassification into groups A41D 31/04, A41D 31/102, A41D 31/125, A41D 31/145, and A41D 31/185.
 All groups listed in this Warning should be considered in order to perform a complete search.

- M A41D 31/04
- characterised by special function or use (protective clothing affording protection against heat or harmful chemical agents or for use at high altitudes [A62B 17/00](#); composition of materials for coverings or clothing affording protection against harmful chemical agents [A62D 5/00](#))
- WARNING**
~~Group A41D 31/04 is incomplete pending reclassification of documents from group A41D 31/02.~~
~~Group A41D 31/04 is also impacted by reclassification into groups A41D 31/10, A41D 31/102, A41D 31/12, A41D 31/14, A41D 31/18, A62B 17/00, A62B 17/001, A62B 17/003, A62B 17/005, A62B 17/006, A62B 17/008, A62B 17/04, and A62B 17/08.~~
~~All groups listed in this Warning should be considered in order to perform a complete search.~~
- M A41D 31/10
- Impermeable to liquids, e.g. waterproof; Liquid repellent
- WARNING**
~~Group A41D 31/10 is incomplete pending reclassification of documents from group A41D 31/04.~~
~~Groups A41D 31/04 and A41D 31/10 should be considered in order to perform a complete search.~~
- M A41D 31/102
- • Waterproof and breathable
- WARNING**
~~Group A41D 31/102 is incomplete pending reclassification of documents from groups A41D 31/02, A41D 31/04, and A41D 31/14.~~
~~All groups listed in this Warning should be considered in order to perform a complete search.~~
- M A41D 31/12
- • Hygroscopic; Water retaining
- WARNING**
~~Group A41D 31/12 is incomplete pending reclassification of documents from group A41D 31/04.~~
~~Groups A41D 31/04 and A41D 31/12 should be considered in order to perform a complete search.~~
- M A41D 31/125
- • {Moisture handling or wicking function through layered materials}
- WARNING**
~~Group A41D 31/125 is incomplete pending reclassification of documents from group A41D 31/02.~~
~~Groups A41D 31/02 and A41D 31/125 should be considered in order to perform a complete search.~~
- M A41D 31/14
- • Air permeable, i.e. capable of being penetrated by gases (waterproof and breathable [A41D 31/102](#))
- WARNING**
~~Group A41D 31/14 is incomplete pending reclassification of documents from group A41D 31/04.~~
~~Group A41D 31/14 is also impacted by reclassification into groups A41D 31/145 and A41D 31/102.~~
~~All groups listed in this Warning should be considered in order to perform a complete search.~~

- M A41D 31/145
- • • {using layered materials}
- WARNING
Group A41D 31/145 is incomplete pending reclassification of documents from groups A41D 31/02 and A41D 31/14. Groups A41D 31/02, A41D 31/14, and A41D 31/145 should be considered in order to perform a complete search.
- M A41D 31/18
- • Elastic
- WARNING
Group A41D 31/18 is incomplete pending reclassification of documents from groups A41D 13/0015, A41D 13/0017, and A41D 31/04. All groups listed in this Warning should be considered in order to perform a complete search.
- M A41D 31/185
- • • {using layered materials}
- WARNING
Group A41D 31/185 is incomplete pending reclassification of documents from groups A41D 13/0015, A41D 13/0017, and A41D 31/02. All groups listed in this Warning should be considered in order to perform a complete search.
- M A41D 31/30
- • Antimicrobial, e.g. antibacterial
- WARNING
Group A41D 31/30 is impacted by reclassification into group A41D 31/305. Groups A41D 31/30 and A41D 31/305 should be considered in order to perform a complete search.
- M A41D 31/305
- • • {using layered materials}
- WARNING
Group A41D 31/305 is incomplete pending reclassification of documents from group A41D 31/30. Groups A41D 31/30 and A41D 31/305 should be considered in order to perform a complete search.

Project: RP0408-F (A47B)

- M A47B 88/00
- Drawers for tables, cabinets or like furniture; Guides for drawers (A47B 63/02 takes precedence; drawers coupled to doors A47B 96/16)**
- WARNING
Group A47B 88/00 is impacted by reclassification into groups A47B 88/90, A47B 88/969, A47B 88/981, A47B 88/988, and A47B 88/994. All groups listed in this Warning should be considered in order to perform a complete search.
- M A47B 88/40
- Sliding drawers; Slides or guides therefor
- WARNING
Group A47B 88/40 is impacted by reclassification into groups A47B 88/44, A47B 88/443, A47B 88/447, A47B 88/45, A47B 88/453, A47B 88/46, A47B 88/473, and A47B 88/477. All groups listed in this Warning should be considered in order to perform a complete search.

- M A47B 88/44
- Sequencing or synchronisation of drawer slides or functional units
- WARNING**
Groups A47B 88/44, A47B 88/443, A47B 88/447, and A47B 88/45 are incomplete pending reclassification of documents from group A47B 88/40. All groups listed in this Warning should be considered in order to perform a complete search.
- M A47B 88/453
- Actuated drawers
- WARNING**
Groups A47B 88/453 and A47B 88/46 are incomplete pending reclassification of documents from group A47B 88/40. Groups A47B 88/453, A47B 88/46, and A47B 88/40 should be considered in order to perform a complete search.
- M A47B 88/473
- Braking devices, e.g. linear or rotational dampers or friction brakes; Buffers; End stops
- WARNING**
Groups A47B 88/473 and A47B 88/477 are incomplete pending reclassification of documents from groups A47B 88/40 and E05F 5/00. All groups listed in this Warning should be considered in order to perform a complete search.
- M A47B 88/483
- with single extensible guides or parts
- WARNING**
Group A47B 88/483 is impacted by reclassification of documents into group A47B 88/497. Groups A47B 88/483 and A47B 88/497 should be considered in order to perform a complete search.
- M A47B 88/487
- with rollers, ball bearings, wheels, or the like
- WARNING**
Group A47B 88/487 is impacted by reclassification of documents into group A47B 88/497. Groups A47B 88/487 and A47B 88/497 should be considered in order to perform a complete search.
- M A47B 88/497
- with other guiding mechanisms, e.g. scissor mechanisms
- WARNING**
Group A47B 88/497 is incomplete pending reclassification of documents from groups A47B 88/483 and A47B 88/487. Groups A47B 88/483, A47B 88/487, and A47B 88/497 should be considered in order to perform a complete search.
- M A47B 88/90
- Constructional details of drawers
- WARNING**
Group A47B 88/90 is incomplete pending reclassification of documents from group A47B 88/00. Group A47B 88/90 is also impacted by reclassification into groups A47B 88/969, A47B 88/981, A47B 88/988, and A47B 88/994. All groups listed in this Warning should be considered in order to perform a complete search.
- M A47B 88/969
- Drawers having means for organising or sorting the content
- WARNING**
Groups A47B 88/969 is incomplete pending reclassification of documents from groups A47B 88/00 and A47B 88/90.

~~Groups A47B 88/00, A47B 88/90, and A47B 88/969 should be considered in order to perform a complete search.~~

- M A47B 88/981
- • in the form of vertical separation posts

WARNING

~~Groups A47B 88/981 is incomplete pending reclassification of documents from groups A47B 88/00 and A47B 88/90.
Groups A47B 88/00, A47B 88/90, and A47B 88/981 should be considered in order to perform a complete search.~~

- M A47B 88/988
- • in the form of holders for positioning specific articles

WARNING

~~Groups A47B 88/988 is incomplete pending reclassification of documents from groups A47B 88/00 and A47B 88/90.
Groups A47B 88/00, A47B 88/90, and A47B 88/988 should be considered in order to perform a complete search.~~

- M A47B 88/994
- • in the form of trays or inserts

WARNING

~~Groups A47B 88/994 is incomplete pending reclassification of documents from groups A47B 88/00 and A47B 88/90.
Groups A47B 88/00, A47B 88/90, and A47B 88/994 should be considered in order to perform a complete search.~~

Project: RP0293-F (A47G)

- U A47G 29/00
- Miscellaneous supports, holders, or containers for household use (for drying towels [A47K 10/04](#); stands, racks, or the like for airing beds, garments, or the like, clothes, drying devices [D06F 57/00](#))**

- U A47G 29/12
- Mail or newspaper receptacles, e.g. letter-boxes; Openings in doors or the like for delivering mail or newspapers ([A47G 29/14](#) takes precedence {; for desktop use [B42F 7/10](#)}; chutes for mail in buildings [B65G 11/04](#))

- M A47G 29/1209
- • {Rural letter-boxes}

WARNING

~~Group A47G 29/1209 is impacted by reclassification into groups A47G 29/12095 and A47G 29/12097.
All groups listed in this Warning should be considered in order to perform a complete search.~~

- M A47G 29/12095
- • {comprising a chute and a separate outlet door}

WARNING

~~Group A47G 29/12095 is incomplete pending reclassification of documents from group A47G 29/1209.
Groups A47G 29/1209 and A47G 29/12095 should be considered in order to perform a complete search.~~

- M A47G 29/12097
- • {comprising a tray to keep received mail dry}

WARNING

~~Group A47G 29/12097 is incomplete pending reclassification of documents from group A47G 29/1209.
Groups A47G 29/1209 and A47G 29/12097 should be considered in order to perform a complete search.~~

- M A47G 29/121 • • • {Signalling devices}
- WARNING
Group A47G 29/121 is impacted by reclassification into group A47G 2029/12105.
Groups A47G 29/121 and A47G 2029/12105 should be considered in order to perform a complete search.
- M A47G 2029/12105 • • • {activated by the inlet door}
- WARNING
Group A47G 2029/12105 is incomplete pending reclassification of documents from group A47G 29/121.
Groups A47G 2029/12105 and A47G 29/121 should be considered in order to perform a complete search.
- U A47G 29/122 • • Parts, details, or accessories, e.g. signalling devices, lamps, devices for leaving messages ({[A47G 29/1201](#) - [A47G 29/1218](#) take precedence)}
- M A47G 29/1225 • • • {Signalling devices}
- WARNING
Group A47G 29/1225 is impacted by reclassification into group A47G 2029/1229.
Groups A47G 29/1225 and A47G 2029/1229 should be considered in order to perform a complete search.
- M A47G 2029/1229 • • • {activated by the letter flap}
- WARNING
Group A47G 2029/1229 is incomplete pending reclassification of documents from group A47G 29/1225.
A47G 29/1225 and A47G 2029/1229 should be considered in order to perform a complete search.
- M A47G 29/124 • • • Appliances to prevent unauthorised removal of contents
- WARNING
Group A47G 29/124 is impacted by reclassification into groups A47G 29/1248, A47G 29/1251, A47G 29/1254, and A47G 2029/1257.
All groups listed in this Warning should be considered in order to perform a complete search.
- M A47G 29/1248 • • • {comprising trap separation of the storage area}
- WARNING
Groups A47G 29/1248-A47G 29/1254 are incomplete pending reclassification of documents from group A47G 29/124.
All groups listed in this Warning should be considered in order to perform a complete search.
- M A47G 2029/1257 • • • {comprising a lock on the outlet door}
- WARNING
Group A47G 2029/1257 is incomplete pending reclassification of documents from group A47G 29/124.
Groups A47G 29/124 and A47G 2029/1257 should be considered in order to perform a complete search.

Project: RP0659 (A61B)

M A61B **DIAGNOSIS; SURGERY; IDENTIFICATION (analysing biological material [G01N](#), e.g. [G01N 33/48](#); obtaining records using waves other than optical waves, in general [G03B 42/00](#))**

NOTE

This subclass covers instruments, implements and processes for diagnostic, surgical and person-identification purposes, including obstetrics, instruments for cutting corns, vaccination instruments, finger-printing, psycho-physical tests.

WARNINGS

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

A61B 17/03	covered by	A61B 17/00
A61B 17/125	covered by	A61B 17/122
A61B 17/138	covered by	A61B 17/12
A61B 17/76	covered by	A61B 17/744
A61B 17/78	covered by	A61B 17/744
A61B 17/90	covered by	A61B 17/88, A61B 2017/90
A61B 17/94	covered by	A61B 17/29

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

Project: RP0122-F (A61B)

U A61B 5/00 **Measuring for diagnostic purposes (radiation diagnosis [A61B 6/00](#); diagnosis by ultrasonic, sonic or infrasonic waves [A61B 8/00](#)); Identification of persons**

NOTE

In this group, the following term is used with the meaning indicated: "measuring" covers also detecting or recording.

U A61B 5/0033 • {Features or image-related aspects of imaging apparatus classified in [A61B 5/00](#), e.g. for MRI, optical tomography or impedance tomography apparatus; arrangements of imaging apparatus in a room (image data processing or generation [G06T](#))}

M A61B 5/0036 • • {including treatment, e.g., using an implantable medical device, ablating, ventilating}

WARNING

~~Group A61B 5/0036 is incomplete pending reclassification of documents from groups A61B 5/0033 and A61B 5/4836.~~
~~Groups A61B 5/0033, A61B 5/0036 and A61B 5/4836 should be considered in order to perform a complete search.~~

U A61B 5/48 • {Other medical applications}

M A61B 5/4836 • • {Diagnosis combined with treatment in closed-loop systems or methods ([A61B 5/0036](#) takes precedence)}

WARNING

~~Group A61B 5/4836 is impacted by reclassification into A61B 5/0036.~~
~~Groups A61B 5/0036 and A61B 5/4836 should be considered in order to perform a complete search.~~

Project: RP0659 (A61B)

- U A61B 17/00 **Surgical instruments, devices or methods, e.g. tourniquets ([A61B 18/00](#) takes precedence; contraceptive devices, pessaries, or applicators therefor [A61F 6/00](#); eye surgery [A61F 9/007](#); ear surgery [A61F 11/00](#))**
- U A61B 17/56 · Surgical instruments or methods for treatment of bones or joints; Devices specially adapted therefor
- NOTES
1. Documents concerning exclusively surgical methods are classified only in this group.
2. Surgical instruments or devices are classified only in the relevant subgroups
- U A61B 17/58 · · for osteosynthesis, e.g. bone plates, screws {, setting implements} or the like ([A61B 17/14](#), [A61B 17/16](#) take precedence)
- U A61B 17/88 · · · {Osteosynthesis instruments;} Methods or means for implanting or extracting internal {or external} fixation devices {([A61B 17/7074](#) takes precedence)}
- U A61B 17/8897 · · · · {Guide wires or guide pins}
- D A61B 2017/90 · · · · {Guides therefor}
- <administratively transferred to [A61B 17/90](#) INV>
- N A61B 17/90 · · · · *Guides therefor*

Project: RP0659 (A61F)

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

WARNINGS

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

A61F 2/48	covered by	A61F 2/02, A61F 2002/48
A61F 2/56	covered by	A61F 2/54
A61F 2/62	covered by	A61F 2/60
A61F 2/74	covered by	A61F 2/68, A61F 2002/74
A61F 5/045	covered by	A61G 13/12
A61F 5/052	covered by	A61F 5/05
A61F 5/447	covered by	A61F 5/445
A61F 5/452	covered by	A61F 5/451
A61F 5/457	covered by	A61F 5/451
A61F 5/458	covered by	A61F 5/451
A61F 6/10	covered by	A61F 6/08
A61F 9/01	covered by	A61F 9/00802 - A61F 9/00825
A61F 9/011	covered by	A61F 9/00802 - A61F 9/00825
A61F 13/22	covered by	A61F 13/206
A61F 13/24	covered by	A61F 13/2045
A61F 13/30	covered by	A61F 13/26
A61F 13/32	covered by	A61F 13/26

[A61F 13/40](#) covered by [A61M 35/006](#)

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

- U A61F 2/00** **Filters implantable into blood vessels; Prostheses, i.e. artificial substitutes or replacements for parts of the body; Appliances for connecting them with the body; Devices providing patency to, or preventing collapsing of, tubular structures of the body, e.g. stents (as cosmetic articles, see the relevant subclasses, e.g. wigs, hair pieces, [A41G 3/00](#), [A41G 5/00](#); artificial nails [A45D 31/00](#); dental prostheses [A61C 13/00](#); materials for prostheses [A61L 27/00](#); artificial hearts [A61M 60/00](#); artificial kidneys [A61M 1/14](#))**
- U A61F 2/02 . Prostheses implantable into the body {(closure means for urethra or rectum or for artificial body openings therefor [A61F 2/0004](#))}
- U A61F 2/30 . . Joints
- U A61F 2/46 . . . Special tools or methods for implanting or extracting artificial joints, accessories, bone grafts or substitutes, or particular adaptations therefor
- U A61F 2002/4688 {having operating or control means}
- U A61F 2002/4698 {magnetic}
- D A61F 2002/48 . . {Operating or control means}
<administratively transferred to [A61F 2/48](#) INV>
- N A61F 2/48 . . *Operating or control means, e.g. from outside the body, control of sphincters*
- D A61F 2002/481 . . . {acoustic or audible}
<administratively transferred to [A61F 2/481](#) INV>
- N A61F 2/481 . . . {Acoustic or audible means}
- D A61F 2002/482 . . . {electrical}
<administratively transferred to [A61F 2/482](#) INV>
- N A61F 2/482 . . . {Electrical means}
- D A61F 2002/484 . . . {fluid}
<administratively transferred to [A61F 2/484](#) INV>
- N A61F 2/484 . . . {Fluid means, i.e. hydraulic or pneumatic}
- D A61F 2002/485 {hydraulic}
<administratively transferred to [A61F 2/484](#) INV>
- D A61F 2002/487 {pneumatic}
<administratively transferred to [A61F 2/484](#) INV>
- D A61F 2002/488 . . . {Means for detecting or monitoring wear}
<administratively transferred to [A61F 2/488](#) INV>
- N A61F 2/488 . . . {Means for detecting or monitoring wear}
- U A61F 2/50 . Prostheses not implantable in the body {(closure means for urethra or rectum or for artificial body openings therefor [A61F 2/0004](#))}
- M A61F 2002/501 . . {having an inflatable pocket filled with fluid, i.e. liquid or gas (~~A61F 2/602; A61F 2002/74, A61F 2/7843 take precedence; for lubrication A61F 2002/5086~~)}
- U A61F 2002/5016 . . {adjustable (for implantable prostheses [A61F 2002/30537](#))}
- M A61F 2002/5032 . . . {for adjusting fluid pressure (~~inflatable pockets A61F 2002/501, A61F 2/602; A61F 2/7843; fluid operating or control means A61F 2002/74~~)}
- U A61F 2/68 . . Operating or control means
- U A61F 2/70 . . . electrical

- M A61F 2/72 ~~Bioelectrical~~*Bioelectric* control, e.g. myoelectric
- D A61F 2002/74 {fluid, i.e. hydraulic or pneumatic (inflatable pocket filled with fluid A61F-2002/501)}
<administratively transferred to [A61F 2/74](#) INV>
- N A61F 2/74 *fluid* {, i.e. hydraulic or pneumatic}
- D A61F 2002/741 {using powered actuators, e.g. stepper motors or solenoids}
<administratively transferred to [A61F 2/741](#) INV>
- N A61F 2/741 {using powered actuators, e.g. stepper motors or solenoids}
- D A61F 2002/742 {Low pressure systems, e.g. vacuum pump}
<administratively transferred to [A61F 2/742](#) INV>
- N A61F 2/742 {Low pressure systems, e.g. vacuum pump}
- D A61F 2002/744 {Vane- or curved-cylinder type actuators, e.g. actuators using rotary pistons}
<administratively transferred to [A61F 2/744](#) INV>
- N A61F 2/744 {Vane- or curved-cylinder type actuators, e.g. actuators using rotary pistons}
- D A61F 2002/745 {hydraulic}
<administratively transferred to [A61F 2/74](#) INV>
- D A61F 2002/747 {pneumatic}
<administratively transferred to [A61F 2/74](#) INV>
- D A61F 2002/748 {Valve systems}
<administratively transferred to [A61F 2/748](#) INV>
- N A61F 2/748 {Valve systems}

Project: RP0235-F (A61G)**M A61G 17/00 Coffins; Funeral wrappings; Funeral urns****WARNING**

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

- M A61G 17/001 . {Reusable}
- WARNING**
Group A61G 17/001 is incomplete pending reclassification of documents from group A61G 17/00.
Groups A61G 17/00 and A61G 17/001 should be considered in order to perform a complete search.
- M A61G 17/007 . characterised by the construction material used, e.g. biodegradable material; Use of several materials
- WARNING**
Group A61G 17/007 is impacted by reclassification into groups A61G 17/007, A61G 17/0106, A61G 17/0136 and A61G 17/0166.
All groups listed in this Warning should be considered in order to perform a complete search.

- M A61G 17/0106
- {Wood}
- WARNING
Group A61G 17/0106 is incomplete pending reclassification of documents from group A61G 17/007.
Groups A61G 17/0106 and A61G 17/007 should be considered in order to perform a complete search.
- M A61G 17/0136
- {Plastic material}
- WARNING
Group A61G 17/0136 is incomplete pending reclassification of documents from group A61G 17/007.
Groups A61G 17/007 and A61G 17/0136 should be considered in order to perform a complete search.
- M A61G 17/0166
- {Glass}
- WARNING
Group A61G 17/0166 is incomplete pending reclassification of documents from group A61G 17/007.
Groups A61G 17/007 and A61G 17/0166 should be considered in order to perform a complete search.
- M A61G 17/02
- Coffin closures; Packings therefor
- WARNING
Group A61G 17/02 is impacted by reclassification into groups A61G 17/02, A61G 17/024, A61G 17/028, A61G 17/032, A61G 17/034 and A61G 17/036.
All groups listed in this Warning should be considered in order to perform a complete search.
- M A61G 17/024
- {Sliding closures}
- WARNING
Group A61G 17/024 is incomplete pending reclassification of documents from group A61G 17/02.
Groups A61G 17/02 and A61G 17/024 should be considered in order to perform a complete search.
- M A61G 17/028
- {Swinging closures}
- WARNING
Group A61G 17/028 is incomplete pending reclassification of documents from group A61G 17/02.
Groups A61G 17/02 and A61G 17/028 should be considered in order to perform a complete search.
- M A61G 17/032
- {Support for closures (support for whole coffin [A61G 19/00](#))}
- WARNING
Group A61G 17/032 is incomplete pending reclassification of documents from group A61G 17/02.
Groups A61G 17/02 and A61G 17/032 should be considered in order to perform a complete search.
- M A61G 17/034
- {Foldable, pliable or separable closures}
- WARNING
Group A61G 17/034 is incomplete pending reclassification of documents from group A61G 17/02.

~~Groups A61G 17/02 and A61G 17/034 should be considered in order to perform a complete search.~~

M A61G 17/036

- {Packings and seals}

WARNING

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

M A61G 17/04

- Fittings for coffins

WARNING

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

M A61G 17/0405

- {Joints, e.g. hinges}

WARNING

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

M A61G 17/0407

- {Corner structures}

WARNING

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

Project: RP0450-F (A61J)

M A61J 17/00

Baby-comforters; Teething rings

WARNING

~~Group A61J 17/00 is impacted by reclassification into groups A61J 17/001, A61J 17/02, A61J 17/10, A61J 17/101, A61J 17/1011, A61J 17/1012, A61J 17/103, A61J 17/105, A61J 17/107, A61J 17/109, A61J 17/111, A61J 17/1111, A61J 17/1115, and A61J 17/113.
All groups listed in this Warning should be considered in order to perform a complete search.~~

M A61J 17/001

- {Baby-comforters}

WARNING

~~Group A61J 17/001 is incomplete pending reclassification of documents from group A61J 17/00.
Group A61J 17/001 is also impacted by reclassification into groups A61J 17/10, A61J 17/101, A61J 17/1011, A61J 17/1012, A61J 17/103, A61J 17/105, A61J 17/107, A61J 17/109, A61J 17/111, A61J 17/1111, A61J 17/1115, and A61J 17/113.
All groups listed in this Warning should be considered in order to perform a complete search.~~

- M A61J 17/02
- Teething rings
- WARNING
Group A61J 17/02 is incomplete pending reclassification of documents from group A61J 17/00.
Group A61J 17/02 is also impacted by reclassification into groups A61J 17/10, A61J 17/101, A61J 17/1011, A61J 17/1012, A61J 17/103, A61J 17/105, A61J 17/107, A61J 17/109, A61J 17/111, A61J 17/1111, A61J 17/1115, and A61J 17/113.
All groups listed in this Warning should be considered in order to perform a complete search.
- M A61J 17/10
- {Details; Accessories therefor}
- WARNING
Group A61J 17/10 is incomplete pending reclassification of documents from groups A61J 17/00, A61J 17/001, and A61J 17/02.
All groups listed in this Warning should be considered in order to perform a complete search.
- M A61J 17/101
- • {Emitting means, e.g. for emitting sound, light, scents or flavours}
- WARNING
Group A61J 17/101 is incomplete pending reclassification of documents from groups A61J 17/00, A61J 17/001, and A61J 17/02.
All groups listed in this Warning should be considered in order to perform a complete search.
- M A61J 17/1011
- • • {Emitting sound, e.g. having rattles or music boxes}
- WARNING
Group A61J 17/1011 is incomplete pending reclassification of documents from groups A61J 17/00, A61J 17/001, and A61J 17/02.
All groups listed in this Warning should be considered in order to perform a complete search.
- M A61J 17/1012
- • • {Emitting light}
- WARNING
Group A61J 17/1012 is incomplete pending reclassification of documents from groups A61J 17/00, A61J 17/001, and A61J 17/02.
All groups listed in this Warning should be considered in order to perform a complete search.
- M A61J 17/103
- • {Temperature sensing means}
- WARNING
Group A61J 17/103 is incomplete pending reclassification of documents from groups A61J 17/00, A61J 17/001, and A61J 17/02.
All groups listed in this Warning should be considered in order to perform a complete search.
- M A61J 17/105
- • {Nipple attachments}
- WARNING
Group A61J 17/105 is incomplete pending reclassification of documents from groups A61J 17/00, A61J 17/001, and A61J 17/02.
All groups listed in this Warning should be considered in order to perform a complete search.

- M A61J 17/107
- {having specific orthodontic properties}
- WARNING**
Group A61J 17/107 is incomplete pending reclassification of documents from groups A61J 17/00, A61J 17/001, and A61J 17/02. All groups listed in this Warning should be considered in order to perform a complete search.
- M A61J 17/109
- {Decorative elements}
- WARNING**
Group A61J 17/109 is incomplete pending reclassification of documents from groups A61J 17/00, A61J 17/001, and A61J 17/02. All groups listed in this Warning should be considered in order to perform a complete search.
- M A61J 17/111
- {Holders therefor, e.g. to prevent loss or to hold in place}
- WARNING**
Group A61J 17/111 is incomplete pending reclassification of documents from groups A61J 17/00, A61J 17/001, and A61J 17/02. All groups listed in this Warning should be considered in order to perform a complete search.
- M A61J 17/1111
- • {conjoined with soft cushions or toys}
- WARNING**
Group A61J 17/1111 is incomplete pending reclassification of documents from groups A61J 17/00, A61J 17/001, and A61J 17/02. All groups listed in this Warning should be considered in order to perform a complete search.
- M A61J 17/1115
- • {Straps, cords or chains}
- WARNING**
Group A61J 17/1115 is incomplete pending reclassification of documents from groups A61J 17/00, A61J 17/001, and A61J 17/02. All groups listed in this Warning should be considered in order to perform a complete search.
- M A61J 17/113
- {Protective covers therefor, e.g. for protecting during disuse}
- WARNING**
Group A61J 17/113 is incomplete pending reclassification of documents from groups A61J 17/00, A61J 17/001, and A61J 17/02. All groups listed in this Warning should be considered in order to perform a complete search.

Project: RP0682 (A61K)

- M A61K
- PREPARATIONS FOR MEDICAL, DENTAL, OR TOILET PURPOSES**
(devices or methods specially adapted for bringing pharmaceutical products into particular physical or administering forms [A61J 3/00](#); chemical aspects of, or use of materials for deodorisation of air, for disinfection or sterilisation, or for bandages, dressings, absorbent pads or surgical articles [A61L](#); soap compositions [C11D](#))

NOTES

1. This subclass covers the following subject matter, whether set forth as a composition (mixture), process of preparing the composition or process of treating using the composition:
 - a. Drug or other biological compositions which are capable of:

- preventing, alleviating, treating or curing abnormal or pathological conditions of the living body by such means as destroying a parasitic organism, or limiting the effect of the disease or abnormality by chemically altering the physiology of the host or parasite ([biocides A01N 25/00](#) - [A01N 65/00](#));
 - maintaining, increasing, decreasing, limiting, or destroying a physiological body function, e.g. vitamin compositions, sex sterilants, fertility inhibitors, growth promoters, or the like (sex sterilants for invertebrates, e.g. insects, [A01N](#); plant growth regulators [A01N 25/00](#) - [A01N 65/00](#));
 - diagnosing a physiological condition or state by an *in vivo* test, e.g. X-ray contrast or skin patch test compositions (measuring or testing processes involving enzymes or microorganisms [C12Q](#); *in vitro* testing of biological material, e.g. blood, urine, [G01N](#), e.g. [G01N 33/48](#))
- b. Body treating compositions generally intended for deodorising, protecting, adorning or grooming the body, e.g. cosmetics, dentifrices, tooth filling materials.
2. Attention is drawn to the definitions of groups of chemical elements following the title of section [C](#).
3. Attention is drawn to the notes in class [C07](#), for example the notes following the title of the subclass [C07D](#), setting forth the rules for classifying organic compounds in that class, which rules are also applicable, if not otherwise indicated, to the classification of organic compounds in [A61K](#).
4. In this subclass, with the exception of group [A61K 8/00](#), the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, classification is made in the last appropriate place.

5. Therapeutic activity of medicinal preparations is further classified in subclass [A61P](#).

WARNINGS

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

A61K 9/133	covered by	A61K 9/127
A61K 9/18	covered by	A61K 9/14
A61K 9/22	covered by	A61K 9/20
A61K 9/24	covered by	A61K 9/209
A61K 9/26	covered by	A61K 9/2077 , A61K 9/2081
A61K 9/30	covered by	A61K 9/28
A61K 9/32	covered by	A61K 9/28
A61K 9/34	covered by	A61K 9/28
A61K 9/36	covered by	A61K 9/28
A61K 9/38	covered by	A61K 9/28
A61K 9/40	covered by	A61K 9/28
A61K 9/42	covered by	A61K 9/28
A61K 9/44	covered by	A61K 9/2072
A61K 9/46	covered by	A61K 9/0007
A61K 9/52	covered by	A61K 9/50
A61K 9/54	covered by	A61K 9/5073 , A61K 9/5078 , A61K 9/5084
A61K 9/56	covered by	A61K 9/50
A61K 9/58	covered by	A61K 9/50
A61K 9/60	covered by	A61K 9/50
A61K 9/62	covered by	A61K 9/50
A61K 9/64	covered by	A61K 9/50

A61K 9/66	covered by	A61K 9/48
A61K 9/68	covered by	A61K 9/0058
A61K 9/72	covered by	A61K 9/0073
A61K 39/108	covered by	A61K 39/0258 , A61K 39/0266
A61K 39/112	covered by	A61K 39/0275 , A61K 39/0283
A61K 45/08	covered by	A61K 31/00 , A61K 47/00
A61K 47/04	covered by	A61K 47/02
A61K 50/00	covered by	A61K 9/0009 , C09J 9/02

The following IPC indexing codes are not in the CPC scheme:

[A61K 101/00](#) - [A61K 103/00](#) covered by [A61K 51/00](#) - [A61K 51/1296](#)

[A61K 125/00](#) - [A61K 135/00](#) covered by [A61K 36/00](#) - [A61K 36/9068](#)

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

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

Project: RP0577-F (A61K)

U A61K 38/00

Medicinal preparations containing peptides (peptides containing beta-lactam rings [A61K 31/00](#); cyclic dipeptides not having in their molecule any other peptide link than those which form their ring, e.g. piperazine-2,5-diones, [A61K 31/00](#); ergot alkaloids of the cyclic peptide type [A61K 31/48](#); containing macromolecular compounds having statistically distributed amino acid units [A61K 31/74](#); medicinal preparations containing antigens or antibodies [A61K 39/00](#); medicinal preparations characterised by the non-active ingredients, e.g. peptides as drug carriers, [A61K 47/00](#))

NOTES

1. The terms or expressions used in this group follow exactly the definitions given in Note (1) following the title of subclass [C07K](#).

2. Preparations containing fragments of peptides or peptides modified by removal or addition of amino acids, by substitution of amino acids by others, or by combination of these modifications are classified as the preparations containing parent peptides. However, preparations containing fragments of peptides having only four or less amino acids are also classified in groups [A61K 38/05](#) - [A61K 38/07](#).

3. Preparations containing peptides prepared by recombinant DNA technology are not classified according to the host, but according to the original peptide expressed, e.g. preparations containing HIV peptide expressed in E. coli are classified with the preparations containing HIV peptides.

4. This group covers also medicinal preparation containing DNA or RNA encoding for peptides as active ingredient.

5. Documents relating to new peptides, e.g. enzymes, or new DNA or RNA encoding for peptides and their use in medicinal preparations are classified in subclass [C07K](#) or in group [C12N 9/00](#) according to the peptides, with the appropriate indexing codes relating to their medical uses.

U A61K 38/04

• Peptides having up to 20 amino acids in a fully defined sequence; Derivatives thereof ({enzyme inhibitors [A61K 38/005](#)}; gastrins {[A61K 38/2207](#)} somatostatins [A61K 38/31](#), melanotropins [A61K 38/34](#); {protease inhibitors [A61K 38/55](#)})

- M A61K 38/08
- Peptides having 5 to 11 amino acids {([A61K 38/043](#) - [A61K 38/046](#) take precedence)}

WARNING

~~Group A61K 38/08 is impacted by reclassification into group A61K 38/095. All groups listed in this Warning should be considered in order to perform a complete search.~~

- M A61K 38/095
- Oxytocins; Vasopressins; Related peptides

WARNING

~~Group A61K 38/095 is incomplete pending reclassification of documents from group A61K 38/08. Groups A61K 38/095 and A61K 38/08 should be considered in order to perform a complete search.~~

Project: RP0075-F (A61K)

- U A61K 38/16
- Peptides having more than 20 amino acids; Gastrins; Somatostatins; Melanotropins; Derivatives thereof {(enzyme inhibitors [A61K 38/005](#))}
- U A61K 38/17
- from animals; from humans {(enzyme inhibitors [A61K 38/005](#))}
- U A61K 38/1703
- {from vertebrates}
- U A61K 38/1709
- {from mammals}
- U A61K 38/1761
- {Apoptosis related proteins, e.g. Apoptotic protease-activating factor-1 (APAF-1), Bax, Bax-inhibitory protein(s)(BI; bax-I), Myeloid cell leukemia associated protein (MCL-1), Inhibitor of apoptosis [IAP] or Bcl-2}
- D A61K 38/1764
—(Frozen)
- {Tumor specific antigens; Tumor rejection antigen precursors [TRAP]; e.g. MAGE}

WARNING

Group A61K 38/1764 is no longer used for the classification of documents as of August 1, 2018. The content of this group is being reclassified into groups A61K 39/0011, A61K 39/001102, A61K 39/001103, A61K 39/001104, A61K 39/001106, A61K 39/001107, A61K 39/001108, A61K 39/001109, A61K 39/00111, A61K 39/001111, A61K 39/001112, A61K 39/001113, A61K 39/001114, A61K 39/001116, A61K 39/001117, A61K 39/001118, A61K 39/001119, A61K 39/00112, A61K 39/001121, A61K 39/001122, A61K 39/001124, A61K 39/001126, A61K 39/001128, A61K 39/001129, A61K 39/00113, A61K 39/001131, A61K 39/001132, A61K 39/001133, A61K 39/001134, A61K 39/001135, A61K 39/001136, A61K 39/001138, A61K 39/001139, A61K 39/00114, A61K 39/001141, A61K 39/001142, A61K 39/001144, A61K 39/001148, A61K 39/001149, A61K 39/00115, A61K 39/001151, A61K 39/001152, A61K 39/001153, A61K 39/001154, A61K 39/001156, A61K 39/001157, A61K 39/001158, A61K 39/001159, A61K 39/00116, A61K 39/001161, A61K 39/001162, A61K 39/001163, A61K 39/001164, A61K 39/001166, A61K 39/001168, A61K 39/001169, A61K 39/00117, A61K 39/001171, A61K 39/001172, A61K 39/001173, A61K 39/001174, A61K 39/001176, A61K 39/001178, A61K 39/00118, A61K 39/001181, A61K 39/001182, A61K 39/001184, A61K 39/001186, A61K 39/001188, A61K 39/001189, A61K 39/00119, A61K 39/001191, A61K 39/001192, A61K 39/001193,

A61K 38/1764

(Frozen)

(continued)

A61K 39/001194, A61K 39/001195, A61K 39/001196,
A61K 39/001197, A61K 39/001198, A61K 2039/80, A61K 2039/804,
A61K 2039/812, A61K 2039/82, A61K 2039/828, A61K 2039/836,
A61K 2039/844, A61K 2039/852, A61K 2039/86, A61K 2039/868,
A61K 2039/876, A61K 2039/884, and A61K 2039/892.

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

U A61K 39/00**Medicinal preparations containing antigens or antibodies (materials for immunoassay [G01N 33/53](#))****NOTES**

1. Groups [A61K 39/002](#) - [A61K 39/295](#) cover preparations containing protozoa, bacteria, viruses, or subunits thereof, e.g. membrane parts.
2. Preparation of antigen or antibody compositions is also classified in subclass [C12N](#), if the step of cultivating the microorganism is of interest.
3. Documents relating to new peptides, e.g. enzymes, or new DNA or RNA encoding for peptides and their use in medicinal preparations are classified in subclass [C07K](#) or in group [C12N 9/00](#) according to the peptides, with the appropriate indexing codes relating to their medical uses.
4. Documents relating to antibodies or DNA or RNA encoding for antibodies and their use in medicinal preparations are classified in group [C07K 16/00](#) or in group [C12N 9/0002](#) according to the antibodies, with the appropriate indexing codes relating to their medical uses.
5. Documents relating to new therapeutical uses of antibodies or DNA or RNA encoding for antibodies are classified in group [C07K 16/00](#) or in group [C12N 9/0002](#) according to the antibodies, with the appropriate indexing codes relating to their medical uses.
6. Documents relating to medicinal preparations containing different antibodies as active ingredients are classified in group [C07K 16/00](#) according to the different active antibodies, with the appropriate indexing codes relating to their medical uses. However, documents relating to medicinal preparations containing antibodies and other compounds as active ingredients are classified in groups [A61K 39/395](#) - [A61K 39/42](#), in association with symbol [A61K 2300/00](#) in Combination Sets.

U A61K 39/0005

• {Vertebrate antigens (from snakes [A61K 39/38](#))}

M A61K 39/0011

• {Cancer antigens}

WARNING

Group A61K 39/0011 is incomplete pending reclassification of documents from group A61K 38/1764. Group A61K 39/0011 is also impacted by reclassification into groups A61K 39/001102, A61K 39/001103, A61K 39/001104, A61K 39/001106, A61K 39/001107, A61K 39/001108, A61K 39/001109, A61K 39/00111, A61K 39/001111, A61K 39/001112, A61K 39/001113, A61K 39/001114, A61K 39/001116, A61K 39/001117, A61K 39/001118, A61K 39/001119, A61K 39/00112, A61K 39/001121, A61K 39/001122, A61K 39/001124, A61K 39/001126, A61K 39/001128, A61K 39/001129, A61K 39/00113, A61K 39/001131, A61K 39/001132, A61K 39/001133, A61K 39/001134, A61K 39/001135, A61K 39/001136, A61K 39/001138, A61K 39/001139, A61K 39/00114, A61K 39/001141, A61K 39/001142, A61K 39/001144, A61K 39/001148, A61K 39/001149, A61K 39/00115, A61K 39/001151, A61K 39/001152, A61K 39/001153, A61K 39/001154, A61K 39/001156, A61K 39/001157, A61K 39/001158, A61K 39/001159, A61K 39/00116, A61K 39/001161, A61K 39/001162, A61K 39/001163, A61K 39/001164, A61K 39/001166, A61K 39/001168, A61K 39/001169, A61K 39/00117, A61K 39/001171, A61K 39/001172, A61K 39/001173, A61K 39/001174, A61K 39/001176, A61K 39/001178;

~~A61K 39/00118, A61K 39/001181, A61K 39/001182, A61K 39/001184, A61K 39/001186, A61K 39/001188, A61K 39/001189, A61K 39/00119, A61K 39/001191, A61K 39/001192, A61K 39/001193, A61K 39/001194, A61K 39/001195, A61K 39/001196, A61K 39/001197, A61K 39/001198, A61K 2039/80, A61K 2039/804, A61K 2039/812, A61K 2039/82, A61K 2039/828, A61K 2039/836, A61K 2039/844, A61K 2039/852, A61K 2039/86, A61K 2039/868, A61K 2039/876, A61K 2039/884, and A61K 2039/892.~~

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

M A61K 39/001102

- • {Receptors, cell surface antigens or cell surface determinants}

WARNING

~~Groups A61K 39/001102–A61K 39/001198 are incomplete pending reclassification of documents from group A61K 39/0011.~~

~~Groups A61K 38/1764, A61K 39/0011, and A61K 39/001102–A61K 39/001198 and A61K 39/001102 should be considered in order to perform a complete search.~~

M A61K 2039/80

- {Vaccine for a specifically defined cancer}

WARNING

~~Groups A61K 2039/80–A61K 2039/892 are incomplete pending reclassification of documents from group A61K 39/0011.~~

~~Groups A61K 38/1764, A61K 39/0011 and A61K 2039/80–A61K 2039/892 should be considered in order to perform a complete search.~~

Project: RP0659 (A61N)

M A61N

ELECTROTHERAPY; MAGNETOTHERAPY; RADIATION THERAPY; ULTRASOUND THERAPY (measurement of bioelectric currents [A61B](#); surgical instruments, devices or methods for transferring non-mechanical forms of energy to or from the body [A61B 18/00](#); anaesthetic apparatus in general [A61M](#); incandescent lamps [H01K](#); infra-red radiators for heating [H05B](#))

NOTE

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

- "therapy" implies that the treatment, when it aims at destroying sick or abnormal cells, is performed within the limits of healthy cell life, the destruction thereof being undesired, contrary to that which takes place with instruments, devices or methods covered by group [A61B 18/00](#).

WARNINGS

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

A61N 1/34	covered by	A61N 1/36021 , A61N 1/36071
A61N 2/04	covered by	A61N 2/02
A61N 2/08	covered by	A61N 2/06
A61N 2/10	covered by	A61N 2/06
A61N 5/067	covered by	A61N 5/06, A61N 2005/067
A61N 5/073	covered by	A61N 5/06 , A61N 2005/073
A61N 5/08	covered by	A61N 5/06

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

- U A61N 5/00** Radiation therapy (ultrasound therapy [A61N 7/00](#); devices or apparatus applicable to both therapy and diagnosis [A61B 6/00](#))
- U A61N 5/06 · using light
- U A61N 2005/0664 · · {Details}
- U A61N 2005/0668 · · · {Apparatus adapted for operation in a moist environment, e.g. bath or shower}
- D A61N 2005/067 · · {using laser light}
 <administratively transferred to [A61N 5/067](#) INV>
- N A61N 5/067 · · using laser light

Project: RP0566-F (A62B)

- M A62B 17/00** Protective clothing affording protection against heat or harmful chemical agents or for use at high altitudes (protective clothing for work or sport [A41D 13/00](#), {e.g. overalls [A41D 13/02](#), surgical gowns [A41D 13/12](#); materials for protecting clothing [A41D 31/04](#) }; protecting eyes or ears [A61F 9/00](#); composition of materials for protective clothing [A62D 5/00](#); life-saving garments for use at sea [B63C](#); diving suits [B63C 11/02](#); flying suits, {anti-g suits} [B64D 10/00](#); space suits [B64G 6/00](#); bullet-proof clothing [F41H 1/02](#))

WARNING

Groups A62B-17/00--A62B-17/08 are incomplete pending reclassification of documents from group A41D-31/04.

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

Project: RP0117-F (A63B)

- U A63B 15/00** Clubs for gymnastics or the like {, e.g. for swinging exercises}
- M A63B 15/005 · {with a weight movable along the longitudinal axis of the club due to centrifugal forces}

WARNING

Group A63B-15/005 is impacted by reclassification into group A63B-60/04.

Groups A63B-15/005 and A63B-60/04 should be considered in order to perform a complete search.

Project: RP0718 (A63B)

- M A63B 22/00** Exercising apparatus specially adapted for conditioning the cardio-vascular system, for training agility or co-ordination of movements (force-resisting aspects [A63B 21/00](#); {for particular parts of the body, e.g. to strengthen particular limbs or muscles [A63B 23/00](#); } electric or electronic controls therefor [A63B 24/00](#))

NOTE

In this subclass, multi-aspect classification is applied, so that subject matter characterised by aspects covered by more than one of its groups, which is considered to represent information of interest for search, may also be classified in each of those groups.

- U A63B 23/00** Exercising apparatus specially adapted for particular parts of the body ([A63B 22/00](#) takes precedence; force-resisting aspects [A63B 21/00](#); electric or electronic controls therefor [A63B 24/00](#); devices for exercising or strengthening of fingers, or arms in teaching operation of keyboards [G09B 15/06](#))

- U A63B 23/035 · for limbs, i.e. upper or lower limbs, e.g. simultaneously
- U A63B 23/04 · · for lower limbs {(training appliances for special sports [A63B 69/00](#); for the purpose of producing mechanical power [F03G 5/00](#))}
- U A63B 23/0405 · · · {involving a bending of the knee and hip joints simultaneously ([A63B 23/0476](#) takes precedence)}
- T A63B 23/0429 · · · · {with guided foot supports moving parallel to the body-symmetrical-plane by being cantilevered about a horizontal axis}
- D A63B 2023/0435 · · · · · {(not used)}
<administratively transferred to [A63B 23/0429](#)>
- M A63B 2023/0441 · · · · · · {cantilevered about two horizontal axes, e.g. parallelogram systems}
- M A63B 2023/0447 · · · · · · {the axis being in the body-symmetrical-plane}
- M A63B 2023/0452 · · · · · · {the foot support being substantially below said axes}

Project: RP0117-F (A63B)**M A63B 47/00 Devices for handling or treating balls {, e.g. for holding or carrying balls}****WARNING**

Group A63B 47/00 is impacted by reclassification into group A63B 57/20. Groups A63B 47/00 and A63B 57/20 should be considered in order to perform a complete search.

- M A63B 47/001 · {Ball holders attached to the player's body (golfing accessories, e.g. holders [A63B 57/20](#))}

WARNING

Group A63B 47/001 is impacted by reclassification into groups A63B 57/20. Groups A63B 47/001 and A63B 57/20 should be considered in order to perform a complete search.

M A63B 49/00 Stringed rackets, e.g. for tennis (strings therefor [A63B 51/00](#))**NOTES**

1. When classifying in groups [A63B 49/00](#) - [A63B 60/00](#), it is desirable to add the indexing codes of group [A63B 2102/00](#).
2. When classifying in groups [A63B 49/00](#), [A63B 53/00](#) or [A63B 59/00](#), subject matter related to details or accessories of golf clubs, bats, rackets or the like are further classified in group [A63B 60/00](#).

WARNING

Group A63B 49/00 is impacted by reclassification into groups A63B 51/00, A63B 60/00, A63B 60/46, A63B 2102/00, A63B 2102/10, A63B 2102/12, A63B 2102/26, A63B 2102/28, A63B 2102/30, and A63B 2102/38. All groups listed in this Warning should be considered in order to perform a complete search.

- M A63B 49/02 · Frames

WARNING

Group A63B 49/02 is impacted by reclassification into groups A63B 49/022, A63B 49/025, A63B 49/028, A63B 49/03, A63B 49/032, A63B 49/035, A63B 49/038, A63B 60/00 and A63B 60/46. All groups listed in this Warning should be considered in order to perform a complete search.

- M A63B 2049/0217
- {with variable thickness of the head in the string plane}
- WARNING**
Groups A63B 49/022 – A63B 49/038 are incomplete pending reclassification of documents from group A63B 49/02.
All groups listed in this Warning should be considered in order to perform a complete search.
- M A63B 49/08
- with special construction of the handle
- WARNING**
Group A63B 49/08 is impacted by reclassification into groups A63B 60/00 and A63B 60/46.
Groups A63B 49/08, A63B 60/00, and A63B 60/46 should be considered in order to perform a complete search.
- M A63B 49/10
- made of non-metallic materials, other than wood
- WARNING**
Group A63B 49/10 is impacted by reclassification into groups A63B 49/11, A63B 60/00, and A63B 60/46.
All groups listed in this Warning should be considered in order to perform a complete search.
- M A63B 49/11
- with inflatable tubes, e.g. inflatable during fabrication
- WARNING**
Group A63B 49/11 is incomplete pending reclassification of documents from group A63B 49/10.
Groups A63B 49/10 and A63B 49/11 should be considered in order to perform a complete search.
- M A63B 49/12
- made of metal
- WARNING**
Group A63B 49/12 is impacted by reclassification into groups A63B 60/00 and A63B 60/46.
Groups A63B 49/12, A63B 60/00, and A63B 60/46 should be considered in order to perform a complete search.
- M A63B 49/14
- Protection devices on the frame
- WARNING**
Group A63B 49/14 is impacted by reclassification into groups A63B 60/00 and A63B 60/46.
Groups A63B 49/14, A63B 60/00, and A63B 60/46 should be considered in order to perform a complete search.
- M A63B 51/00
- Stringing tennis, badminton or like rackets; Strings therefor; Maintenance of racket strings**
- WARNING**
Group A63B 51/00 is incomplete pending reclassification of documents from group A63B 49/00.
Group A63B 49/00 should be considered in order to perform a complete search.
- M A63B 51/14
- Arrangements for stringing, e.g. for controlling the tension of the strings during stringing
- WARNING**
Group A63B 51/14 is impacted by reclassification into group A63B 51/16.

~~Groups A63B 51/14 and A63B 51/16 should be considered in order to perform a complete search.~~

- M A63B 51/16
- Apparatus for stringing while manufacturing

WARNING

~~Group A63B 51/16 is incomplete pending reclassification of documents from group A63B 51/14.~~

~~Groups A63B 51/14 and A63B 51/16 should be considered in order to perform a complete search.~~

M A63B 53/00

Golf clubs

NOTE

When classifying in group [A63B 53/00](#) and subgroups, subject matter related to details or accessories of golf clubs, bats, rackets or the like are further classified in group [A63B 60/00](#).

WARNING

~~Group A63B 53/00 is impacted by reclassification into groups A63B 60/00 and A63B 60/46.~~

~~Groups A63B 53/00 and A63B 60/00, A63B 60/46 should be considered in order to perform a complete search.~~

- M A63B 53/02
- Joint structures between the head and the shaft

WARNING

~~Group A63B 53/02 is impacted by reclassification into groups A63B 60/00 and A63B 60/46.~~

~~Groups A63B 53/02, A63B 60/00, and A63B 60/46 should be considered in order to perform a complete search.~~

- M A63B 53/04
- Heads

WARNING

~~Group A63B 53/04 is impacted by reclassification into groups A63B 60/00 and A63B 60/46.~~

~~Groups A63B 53/04, A63B 60/00, and A63B 60/46 should be considered in order to perform a complete search.~~

- M A63B 2053/0491
- {with added weights, e.g. changeable, replaceable}

WARNING

~~Group A63B 2053/0491 is impacted by reclassification into group A63B 60/02.~~

~~Groups A63B 2053/0491 and A63B 60/02 should be considered in order to perform a complete search.~~

- M A63B 53/06
- adjustable

WARNING

~~Group A63B 53/06 is impacted by reclassification into groups A63B 60/00 and A63B 60/46.~~

~~Groups A63B 53/06, A63B 60/00, and A63B 60/46 should be considered in order to perform a complete search.~~

- M A63B 53/08
- with special arrangements for obtaining a variable impact

WARNING

~~Group A63B 53/08 is impacted by reclassification into groups A63B 60/00, A63B 60/46.~~

		<p>Groups A63B 53/08 and A63B 60/00, A63B 60/46 should be considered in order to perform a complete search.</p>
M	A63B 53/10	<ul style="list-style-type: none">• Non-metallic shafts <p><u>WARNING</u> Group A63B 53/10 is impacted by reclassification into groups A63B 60/00 and A63B 60/46. Groups A63B 53/10, A63B 60/00, and A63B 60/46 should be considered in order to perform a complete search.</p>
M	A63B 53/12	<ul style="list-style-type: none">• Metallic shafts <p><u>WARNING</u> Group A63B 53/12 is impacted by reclassification into groups A63B 60/00 and A63B 60/46. Groups A63B 53/12, A63B 60/00, and A63B 60/46 should be considered in order to perform a complete search.</p>
M	A63B 53/14	<ul style="list-style-type: none">• Handles <p><u>WARNING</u> Group A63B 53/14 is impacted by reclassification into groups A63B 60/00 and A63B 60/46. Groups A63B 53/14, A63B 60/00, and A63B 60/46 should be considered in order to perform a complete search.</p>
M	A63B 55/00	Bags for golf clubs; Stands for golf clubs for use on the course; Wheeled carriers specially adapted for golf bags <p><u>WARNING</u> Group A63B 55/00 is impacted by reclassification into groups A63B 55/30, A63B 55/40, A63B 60/60, and A63B 60/64. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A63B 55/30	<ul style="list-style-type: none">• Bags with wheels <p><u>WARNING</u> Group A63B 55/30 is incomplete pending reclassification of documents from group A63B 55/00. Group A63B 55/00 should be considered in order to perform a complete search.</p>
M	A63B 55/40	<ul style="list-style-type: none">• Bags with partitions or club holders <p><u>WARNING</u> Group A63B 55/40 is incomplete pending reclassification of documents from group A63B 55/00. Group A63B 55/00 should be considered in order to perform a complete search.</p>
M	A63B 55/50	<ul style="list-style-type: none">• Supports, e.g. with devices for anchoring to the ground <p><u>WARNING</u> Group A63B 55/50 is impacted by reclassification into group A63B 55/57. Groups A63B 55/50 and A63B 55/57 should be considered in order to perform a complete search.</p>
M	A63B 55/53	<ul style="list-style-type: none">• with legs opening automatically upon putting the bag on the ground <p><u>WARNING</u> Group A63B 55/53 is impacted by reclassification into group A63B 55/57.</p>

~~Groups A63B 55/53 and A63B 55/57 should be considered in order to perform a complete search.~~

- M A63B 55/57
- Bags with tripod or like set-up stands

WARNING

~~Group A63B 55/57 is incomplete pending reclassification of documents from groups A63B 55/50, A63B 55/53, A63B 55/60 and A63B 55/61. All Groups listed in this Warning should be considered in order to perform a complete search.~~

- M A63B 55/60
- Wheeled carriers specially adapted for golf bags

WARNING

~~Group A63B 55/60 is impacted by reclassification into group A63B 55/57. Groups A63B 55/60 and A63B 55/57 should be considered in order to perform a complete search.~~

- M A63B 55/61
- {motorised}

WARNING

~~Group A63B 55/61 is impacted by reclassification into group A63B 55/57. Groups A63B 55/61 and A63B 55/57 should be considered in order to perform a complete search.~~

M A63B 57/00 Golfing accessories

WARNING

~~Group A63B 57/00 is impacted by reclassification into groups A63B 57/12, A63B 57/16, A63B 57/20, A63B 57/30, and A63B 57/35. All groups listed in this Warning should be considered in order to perform a complete search.~~

- M A63B 57/0032
- {Tee-gauges; Tee-repairing devices}

WARNING

~~Group A63B 57/0032 is impacted by reclassification into group A63B 57/203. Groups A63B 57/0032 and A63B 57/203 should be considered in order to perform a complete search.~~

- M A63B 57/10
- Golf tees

WARNING

~~Group A63B 57/10 is impacted by reclassification into groups A63B 57/12, A63B 57/13, A63B 57/16, A63B 57/18 and A63B 57/19. All groups listed in this Warning should be considered in order to perform a complete search.~~

- M A63B 57/12
- attached to straps

WARNING

~~Groups A63B 57/12 is incomplete pending reclassification of documents from groups A63B 57/00 and A63B 57/10. All groups listed in this Warning should be considered in order to perform a complete search.~~

- M A63B 57/13
- foldable or separable

WARNING

~~Group A63B 57/13 is incomplete pending reclassification of documents from group A63B 57/10.~~

- Groups A63B 57/13 and A63B 57/10 should also be considered in order to perform a complete search:
- M A63B 57/16
 - Brush-type tees

WARNING
Group A63B 57/16 is incomplete pending reclassification of documents from groups A63B 57/00 and A63B 57/10.
Groups A63B 57/00 and A63B 57/10 should be considered in order to perform a complete search:
 - M A63B 57/18
 - with writing means

WARNING
Groups A63B 57/18 is incomplete pending reclassification of documents from group A63B 57/10.
Group A63B 57/10 should be considered in order to perform a complete search:
 - M A63B 57/19
 - with direction indicators

WARNING
Group A63B 57/19 is incomplete pending reclassification of documents from group A63B 57/10.
Group A63B 57/10 should be considered in order to perform a complete search:
 - M A63B 57/20
 - Holders, e.g. of tees or of balls

WARNING
Group A63B 57/20 is incomplete pending reclassification of documents from groups A63B 47/00, A63B 47/001, and A63B 57/00.
Groups A63B 47/00, A63B 47/001, and A63B 57/00 should be considered in order to perform a complete search:
 - M A63B 57/203
 - {Tee holders (to be fitted on golf bags or caddies [A63B 55/408](#))}

WARNING
Group A63B 57/203 is impacted by reclassification into groups A63B 57/10, A63B 57/12, A63B 57/13, A63B 57/16, A63B 57/18, and A63B 57/19.
All groups listed in this Warning should be considered in order to perform a complete search:
 - M A63B 57/207
 - {Golf ball position marker holders}

WARNING
Group A63B 57/207 is impacted by reclassification into group A63B 57/353.
Groups A63B 57/207 and A63B 57/353 should be considered in order to perform a complete search:
 - M A63B 57/30
 - Markers

WARNING
Groups A63B 57/30 and A63B 57/35 are incomplete pending reclassification of documents from group A63B 57/00.
Group A63B 57/00 should be considered in order to perform a complete search:
 - M A63B 57/353
 - {Golf ball position markers}

WARNING
Group A63B 57/353 is impacted by reclassification into group A63B 57/207.

Groups A63B 57/353 and A63B 57/207 should be considered in order to perform a complete search.

- M A63B 57/357
- {for golf cups or holes, e.g. flags}

WARNING

Group A63B 57/357 is impacted by reclassification into group(s) A63B 57/40. Groups A63B 57/357 and A63B 57/40 should be considered in order to perform a complete search.

- M A63B 57/40
- Golf cups or holes

WARNING

Group A63B 57/40 is impacted by reclassification into group A63B 57/357. Groups A63B 57/40 and A63B 57/357 should be considered in order to perform a complete search.

- M A63B 59/00
- Bats, rackets, or the like, not covered by groups [A63B 49/00](#) - [A63B 57/00](#)**

NOTES

1. In this group, the following term is used with the meaning indicated:
 - "ball" covers also pucks or other objects to be hit during the game.
2. When classifying in group [A63B 59/00](#) and subgroups, subject matter related to details or accessories of golf clubs, bats, rackets or the like are further classified in group [A63B 60/00](#).

WARNING

Group A63B 59/00 is impacted by reclassification into groups A63B 60/00, A63B 60/46, A63B 2102/00, A63B 2102/10, A63B 2102/12, A63B 2102/26, A63B 2102/28, A63B 2102/30, and A63B 2102/38. All groups listed in this Warning should be considered in order to perform a complete search.

- M A63B 59/20
- having means, e.g. pockets, netting or adhesive type surfaces, for catching or holding a ball, e.g. for lacrosse or pelota

WARNING

Group A63B 59/20 is impacted by reclassification into group(s) A63B 60/00, A63B 60/46. All groups listed in this Warning should be considered in order to perform a complete search.

- M A63B 59/40
- Rackets or the like with flat striking surfaces for hitting a ball in the air, e.g. for table tennis

WARNING

Group A63B 59/40 is impacted by reclassification into groups A63B 59/42, A63B 59/45, A63B 60/00, A63B 60/46, and A63B 2102/16. All groups listed in this Warning should be considered in order to perform a complete search.

- M A63B 59/50
- Substantially rod-shaped bats for hitting a ball in the air, e.g. for baseball

WARNING

Group A63B 59/50 is impacted by reclassification into groups A63B 59/51, A63B 59/52, A63B 59/54, A63B 59/55, A63B 59/56, A63B 59/58, A63B 2059/581, A63B 59/59, A63B 59/60, A63B 59/70, A63B 59/80, A63B 60/00, A63B 60/46, A63B 2102/18, A63B 2102/182, and A63B 2102/184. All groups listed in this Warning should be considered in order to perform a complete search.

- M A63B 59/60
- of mallet type, e.g. for croquet {or polo}
- WARNING**
Group A63B 59/60 is impacted by reclassification into groups A63B 60/00, A63B 60/46, A63B 2102/34, and A63B 2102/36.
All groups listed in this Warning should be considered in order to perform a complete search.
- M A63B 59/70
- with bent or angled lower parts for hitting a ball on the ground, on an ice-covered surface, or in the air, e.g. for hockey or hurling
- WARNING**
Group A63B 59/70 is impacted by reclassification into group A63B 60/00, A63B 60/46, A63B 2102/22, and A63B 2102/24.
All groups listed in this Warning should be considered in order to perform a complete search.
- M A63B 59/80
- Circular bats or paddles not provided for in groups [A63B 59/20](#) - [A63B 59/70](#)
- WARNING**
Group A63B 59/80 is impacted by reclassification into groups A63B 60/00, and A63B 60/46.
All groups listed in this Warning should be considered in order to perform a complete search.
- M A63B 60/00**
- Details or accessories of golf clubs, bats, rackets or the like**
- WARNING**
Group A63B 60/00 is incomplete pending reclassification of documents from groups A63B 49/00 - A63B 49/14, A63B 53/00 - A63B 53/14, A63B 59/00, A63B 59/20, A63B 59/40 and A63B 59/60 – A63B 59/80.
Groups A63B 59/00, A63B 59/20, A63B 59/40 and A63B 59/60 - A63B 59/80 should also be considered in order to perform a complete search.
- M A63B 60/02
- Ballast means for adjusting the centre of mass ([A63B 60/24](#), [A63B 60/54](#) take precedence)
- WARNING**
Group A63B 60/02 is incomplete pending reclassification of documents from group A63B 60/42 and A63B 2053/0491.
All groups listed in this Warning should be considered in order to perform a complete search.
- M A63B 60/04
- • Movable ballast means {([A63B 15/005](#) takes precedence)}
- WARNING**
Group A63B 60/04 is incomplete pending reclassification of documents from group A63B 15/005.
Groups A63B 15/005 and A63B 60/04 should be considered in order to perform a complete search.
- M A63B 60/06
- Handles
- WARNING**
Group A63B 60/06 is impacted by reclassification into groups A63B 60/08 and A63B 60/10.
All groups listed in this Warning should be considered in order to perform a complete search.

- M A63B 60/12
- • contoured according to the anatomy of the user's hand
- WARNING**
Group A63B 60/12 is impacted by reclassification into groups A63B 60/08 and A63B 60/10.
All groups listed in this Warning should be considered in order to perform a complete search.
- M A63B 60/42
- Devices for measuring, verifying, correcting or customising the inherent characteristics of golf clubs, bats, rackets or the like, e.g. measuring the maximum torque a batting shaft can withstand
- WARNING**
Group A63B 60/42 is impacted by reclassification into group A63B 60/02.
Groups A63B 60/42 and A63B 60/02 should be considered in order to perform a complete search.
- M A63B 60/46
- Measurement devices associated with golf clubs, bats, rackets or the like for measuring physical parameters relating to sporting activity, e.g. baseball bats with impact indicators or bracelets for measuring the golf swing
- WARNING**
Group A63B 60/46 is incomplete pending reclassification of documents from groups A63B 49/00 – A63B 49/14, A63B 53/00 – A63B 53/14, A63B 59/20, A63B 59/40 and A63B 59/60 – A63B 59/80.
Groups A63B 49/00 – A63B 49/14, A63B 53/00 – A63B 53/14, A63B 59/20, A63B 59/40 and A63B 59/60 – A63B 59/80 should be considered in order to perform a complete search.
- M A63B 60/56
- Devices for protection, storage or transport, e.g. stands or cases
- WARNING**
Group A63B 60/56 is incomplete pending reclassification of documents from group A63B 71/0036.
Groups A63B 71/0036 and A63B 60/56 should be considered in order to perform a complete search.
- M A63B 60/60
- • specially adapted for bats
- WARNING**
Group A63B 60/60 is incomplete pending reclassification of documents from groups A63B 55/00 and A63B 71/0045.
All groups listed in this Warning should be considered in order to perform a complete search.
- U A63B 60/62
- • specially adapted for clubs, e.g. head covers {, connector means therefor}
- M A63B 60/64
- • • Sheaths for golf clubs
- WARNING**
Group A63B 60/64 is incomplete pending reclassification of documents from group A63B 55/00.
Groups A63B 55/00 and A63B 60/64 should be considered in order to perform a complete search.

Project: RP0543-F (A63B)

- U A63B 67/00 **Sporting games or accessories therefor, not provided for in groups [A63B 1/00](#) - [A63B 65/00](#)**

- M A63B 67/08
- Juggling or spinning ball games played as games of skill ([A63B 67/16](#) takes precedence)
- WARNING**
Group A63B 67/08 is impacted by reclassification into groups A63B 67/16 and A63B 67/165.
Groups A63B 67/08, A63B 67/16, and A63B 67/165 should be considered in order to perform a complete search.
- M A63B 67/083
- {Juggling games with integral catching or bouncing arrangements}
- WARNING**
Group A63B 67/083 is impacted by reclassification into groups A63B 67/16 and A63B 67/165.
Groups A63B 67/083, A63B 67/16, and A63B 67/165 should be considered in order to perform a complete search.
- M A63B 67/086
- {Juggling games using sticks or discs}
- WARNING**
Group A63B 67/086 is impacted by reclassification into groups A63B 67/16 and A63B 67/165.
Groups A63B 67/086, A63B 67/16, and A63B 67/165 should be considered in order to perform a complete search.
- M A63B 67/16
- Diabolos or similar thrown and caught spinning tops; Throwing and catching devices therefor
- WARNING**
Group A63B 67/16 is incomplete pending reclassification of documents from groups A63B 67/08, A63B 67/083, A63B 67/086, A63H 1/00, A63H 1/02, A63H 1/04, A63H 1/06, A63H 1/08, A63H 1/10, A63H 1/12, A63H 1/16, A63H 1/18, A63H 1/20, A63H 1/22, A63H 1/24, A63H 1/26, A63H 1/28, A63H 1/30, and A63H 1/32.
Group A63B 67/16 is also impacted by reclassification into group A63B 67/165. All groups listed in this Warning should be considered in order to perform a complete search.
- M A63B 67/165
- {the diablo being able to rotate freely in one direction only, e.g. fitted with an over-running clutch}
- WARNING**
Group A63B 67/165 is incomplete pending reclassification of documents from groups A63B 67/08, A63B 67/083, A63B 67/086, A63B 67/16, A63H 1/00, A63H 1/02, A63H 1/04, A63H 1/06, A63H 1/08, A63H 1/10, A63H 1/12, A63H 1/16, A63H 1/18, A63H 1/20, A63H 1/22, A63H 1/24, A63H 1/26, A63H 1/28, A63H 1/30, and A63H 1/32.
All groups listed in this Warning should be considered in order to perform a complete search.

Project: RP0718 (A63B)

- U A63B 69/00 **Training appliances or apparatus for special sports (training of parachutists [B64D 23/00](#))**
- U A63B 69/20
- Punching balls {, e.g. for boxing; Other boxing training devices, e.g. bags ([A63B 69/34](#) takes precedence)}
- M A63B 69/24
- • mounted on, or suspended from, a movable support ~~{not used, see subgroup}~~

Project: RP0117-F (A63B)

- U A63B 71/00 Games or sports accessories not covered in groups [A63B 1/00](#) - [A63B 69/00](#) (starting appliances [A63K 3/02](#))**
- M A63B 71/0036
- {Accessories for stowing, putting away or transporting exercise apparatus or sports equipment ([A63B 47/00](#), [A63B 55/00](#), [A63B 60/56](#) take precedence)}
- WARNING**
Group [A63B 71/0036](#) is impacted by reclassification into group [A63B 60/56](#). Groups [A63B 71/0036](#) and [A63B 60/56](#) should be considered in order to perform a complete search.
- M A63B 71/0045
- {specially adapted for games played with rackets or bats ([A63B 60/56](#) takes precedence)}
- WARNING**
Group [A63B 71/0045](#) is impacted by reclassification into group [A63B 60/60](#). Groups [A63B 71/0045](#) and [A63B 60/60](#) should be considered in order to perform a complete search.
- M A63B 2102/00 Application of clubs, bats, rackets or the like to the sporting activity {; particular sports involving the use of balls and clubs, bats, rackets, or the like}**
- NOTE**
[A63B 2102/00](#) corresponds to IPC [A63B 102/00](#). [A63B 2102/00](#) is an indexing scheme for all applicable areas of [A63B](#).
- WARNING**
Group [A63B 2102/00](#) is incomplete pending reclassification of documents from groups [A63B 49/00](#), [A63B 59/00](#), and [A63B 2243/00](#). Groups [A63B 49/00](#), [A63B 59/00](#), [A63B 2243/00](#) and [A63B 2102/00](#) should be considered in order to perform a complete search.
- M A63B 2102/10
- Battledore
- WARNING**
Group [A63B 2102/10](#) is incomplete pending reclassification of documents from groups [A63B 49/00](#) and [A63B 59/00](#). Groups [A63B 49/00](#) and [A63B 59/00](#) should be considered in order to perform a complete search.
- M A63B 2102/12
- Hanetsuki
- WARNING**
Group [A63B 2102/12](#) is incomplete pending reclassification of documents from groups [A63B 49/00](#) and [A63B 59/00](#). Groups [A63B 49/00](#) and [A63B 59/00](#) should be considered in order to perform a complete search.
- M A63B 2102/18
- Baseball, rounders or similar games
- WARNING**
Group [A63B 2102/18](#) is impacted by reclassification into groups [A63B 59/50](#), [A63B 59/51](#), [A63B 59/52](#), [A63B 59/54](#), [A63B 59/55](#), [A63B 59/56](#), [A63B 59/58](#), [A63B 2059/581](#), [A63B 59/59](#), [A63B 59/60](#), [A63B 59/70](#), [A63B 59/80](#), [A63B 60/00](#), [A63B 60/46](#), [A63B 2102/182](#), and [A63B 2102/184](#). All groups listed in this Warning should be considered in order to perform a complete search.

- M A63B 2102/26
- Hurling
- WARNING
Group A63B 2102/26 is incomplete pending reclassification of documents from groups A63B 49/00 and A63B 59/00. Groups A63B 49/00, A63B 59/00, and A63B 2102/26 should be considered in order to perform a complete search.
- M A63B 2102/28
- Bandy
- WARNING
Group A63B 2102/28 is incomplete pending reclassification of documents from groups A63B 49/00 and A63B 59/00. Groups A63B 49/00, A63B 59/00, and A63B 2102/28 should be considered in order to perform a complete search.
- M A63B 2102/30
- Floorball
- WARNING
Group A63B 2102/30 is incomplete pending reclassification of documents from groups A63B 49/00 and A63B 59/00. Groups A63B 49/00, A63B 59/00, and A63B 2102/30 should be considered in order to perform a complete search.
- M A63B 2102/38
- Gateball
- WARNING
Group A63B 2102/38 is incomplete pending reclassification of documents from groups A63B 49/00 and A63B 59/00. Groups A63B 49/00, A63B 59/00 should be considered in order to perform a complete search.
- M A63B 2243/00
- Specific ball sports not provided for in [A63B 2102/00](#) - [A63B 2102/38](#)**
- WARNING
Group A63B 2243/00 is impacted by reclassification into group A63B 2102/00. Groups A63B 2243/00 and A63B 2102/00 should be considered in order to perform a complete search.

Project: RP0543-F (A63H)

- M A63H 1/00
- Tops (diabolos or similar thrown and caught spinning tops or throwing and catching devices therefor [A63B 67/16](#); flying tops {[A63H 27/12](#)})**
- WARNING
Group A63H 1/00 is impacted by reclassification into groups A63B 67/16 and A63B 67/165. Groups A63H 1/00, A63B 67/16, and A63B 67/165 should be considered in order to perform a complete search.
- M A63H 1/02
- with detachable winding devices
- WARNING
Group A63H 1/02 is impacted by reclassification into groups A63B 67/16 and A63B 67/165. Groups A63H 1/02, A63B 67/16, and A63B 67/165 should be considered in order to perform a complete search.

- M A63H 1/04
- with string or band winding devices
- WARNING**
Group A63H 1/04 is impacted by reclassification into groups A63B 67/16 and A63B 67/165.
Groups A63H 1/04, A63B 67/16, and A63B 67/165 should be considered in order to perform a complete search.
- M A63H 1/06
- with integral winding devices
- WARNING**
Group A63H 1/06 is impacted by reclassification into groups A63B 67/16 and A63B 67/165.
Groups A63H 1/06, A63B 67/16, and A63B 67/165 should be considered in order to perform a complete search.
- M A63H 1/08
- with arrangements for winding-up by blowing
- WARNING**
Group A63H 1/08 is impacted by reclassification into groups A63B 67/16 and A63B 67/165.
Groups A63H 1/08, A63B 67/16, and A63B 67/165 should be considered in order to perform a complete search.
- M A63H 1/10
- able to be spun by whirling the axis with both hands
- WARNING**
Group A63H 1/10 is impacted by reclassification into groups A63B 67/16 and A63B 67/165.
Groups A63H 1/10, A63B 67/16, and A63B 67/165 should be considered in order to perform a complete search.
- M A63H 1/12
- Whip tops; Top whips
- WARNING**
Group A63H 1/12 is impacted by reclassification into groups A63B 67/16 and A63B 67/165.
Groups A63H 1/12, A63B 67/16, and A63B 67/165 should be considered in order to perform a complete search.
- M A63H 1/16
- Hopping, dancing, or curve-drawing tops
- WARNING**
Group A63H 1/16 is impacted by reclassification into groups A63B 67/16 and A63B 67/165.
Groups A63H 1/16, A63B 67/16, and A63B 67/165 should be considered in order to perform a complete search.
- M A63H 1/18
- Double tops; Multiple tops mounted in or on one another
- WARNING**
Group A63H 1/18 is impacted by reclassification into group(s) A63B 67/16 and A63B 67/165.
Groups A63H 1/18, A63B 67/16, and A63B 67/165 should be considered in order to perform a complete search.
- M A63H 1/20
- with figure-like features; with movable objects, especially figures
- WARNING**
Group A63H 1/20 is impacted by reclassification into groups A63B 67/16 and A63B 67/165.

~~Groups A63H 1/20 and A63B 67/16 and A63B 67/165 should be considered in order to perform a complete search.~~

M A63H 1/22

- Colour tops

WARNING

~~Group A63H 1/22 is impacted by reclassification into groups A63B 67/16 and A63B 67/165.~~

~~Groups A63H 1/22, A63B 67/16, and A63B 67/165 should be considered in order to perform a complete search.~~

M A63H 1/24

- with illuminating arrangements

WARNING

~~Group A63H 1/24 is impacted by reclassification into groups A63B 67/16 and A63B 67/165.~~

~~Groups A63H 1/24, A63B 67/16, and A63B 67/165 should be considered in order to perform a complete search.~~

M A63H 1/26

- emitting blasts or explosions

WARNING

~~Group A63H 1/26 is impacted by reclassification into groups A63B 67/16 and A63B 67/165.~~

~~Groups A63H 1/26, A63B 67/16, and A63B 67/165 should be considered in order to perform a complete search.~~

M A63H 1/28

- Musical tops

WARNING

~~Group A63H 1/28 is impacted by reclassification into groups A63B 67/16 and A63B 67/165.~~

~~Groups A63H 1/28, A63B 67/16, and A63B 67/165 should be considered in order to perform a complete search.~~

M A63H 1/30

- Climbing tops, e.g. Yo-Yo

WARNING

~~Group A63H 1/30 is impacted by reclassification into groups A63B 67/16 and A63B 67/165.~~

~~Groups A63H 1/30, A63B 67/16, and A63B 67/165 should be considered in order to perform a complete search.~~

M A63H 1/32

- Whirling or spinning discs driven by twisted cords

WARNING

~~Group A63H 1/32 is impacted by reclassification into groups A63B 67/16 and A63B 67/165.~~

~~Groups A63H 1/32, A63B 67/16, and A63B 67/165 should be considered in order to perform a complete search.~~

Project: RP0659 (B01D)

M B01D

SEPARATION (separating solids from solids by wet methods [B03B](#), [B03D](#); by pneumatic jigs or tables [B03B](#); by other dry methods [B07](#); magnetic or electrostatic separation of solid materials from solid materials or fluids, separation by high-voltage electric fields [B03C](#); centrifuges, vortex apparatus [B04](#); presses *per se* for squeezing-out liquid from liquid-containing material [B30B 9/02](#); treatment of water [C02F](#), e.g. softening by ion-exchange [C02F 1/42](#); {arrangements of air intake cleaners in gas turbine plants [F02C 7/05](#)}; arrangements or mounting of filters in air-conditioning, air-humidification or ventilation [F24F 13/28](#))

NOTES

1. This subclass covers:
 - evaporation, distillation, crystallisation, filtration, dust precipitation, gas cleaning, absorption, adsorption;
 - similar processes which are not concerned with, or limited to, separation, except in the case of absorption or adsorption.
2. In this subclass the terms or expressions are used with the meaning indicated:
 - "filtration" and analogous terms include straining solids from fluids. Filtration is a process that normally uses a filter medium;
 - "filter medium" is a porous material or porous arrangement of material used to filter solids from fluids;
 - "filtering element" is a section of filter medium in addition to parts to which the medium is demountably or permanently fixed, including other sections of medium, end caps, peripheral frames or edge strips, but excluding housings;
 - "filter housing" is the fluid-constraining impervious vessel, whether open or closed, which contains, or is adapted to contain, one or more filtering elements or filter media;
 - "filter chamber" is the space within a housing, where filtering elements or filter media are located. Partitions may divide a single housing into a plurality of chambers;
 - "filtering apparatus" consists of filtering elements combined with housings, cleaning arrangements, motor or the like parts, which are characteristic of the particular type of apparatus. Ancillary devices such as pumps or valves are considered part of a filtering apparatus when inside the apparatus. Ancillary devices performing similar or different unit operation such as comminutors, mixers or non-filtering separators, whether or not inside the apparatus, are not considered part of a filtering apparatus. The term does not extend to apparatus, e.g. washing machines, of which the filter forms only a part.
3. For apparatus used in drying or evaporation, class [F26](#) takes precedence over this subclass.
4. Group [B01D 59/00](#) takes precedence over the other groups of this subclass and over other subclasses in class [B01](#).

WARNINGS

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

B01D 15/04	covered by	B01J 39/00 - B01J 49/90
B01D 17/022	covered by	B01D 17/0202
B01D 17/025	covered by	B01D 17/0208
B01D 17/028	covered by	B01D 17/0211
B01D 17/032	covered by	B01D 17/0214
B01D 17/035	covered by	B01D 17/0205
B01D 17/038	covered by	B01D 17/0217
B01D 17/05	covered by	B01D 17/047

B01D 17/09	covered by	B01D 17/005
B01D 25/133	covered by	B01D 25/285
B01D 25/168	covered by	B01D 25/285
B01D 29/075	covered by	B01D 29/01, B01D 29/64
B01D 29/37	covered by	B01D 29/336 , B01D 29/356
B01D 33/052	covered by	B01D 33/042, B01D 33/048
B01D 35/01	covered by	B01D 36/001
B01D 61/26	covered by	A61M 1/1656
B01D 61/34	covered by	A61M 1/16

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

- U B01D 9/00** **Crystallisation (crystallisation directly from the vapour phase [B01D 7/02](#); making single crystals [C30B](#) {; crystallisation as part of the Bayer process also classified in [C01F 7/14](#)})**
- M B01D 9/02 · from solutions ~~{not used}~~
- U B01D 29/00** **Other filters with filtering elements stationary during filtration, e.g. pressure or suction filters, or filtering elements therefor {([B01D 24/00](#), [B01D 25/00](#) and [B01D 27/00](#) take precedence)}**
- U B01D 29/01 · with flat filtering elements ([B01D 29/39](#) takes precedence)
- NOTE
{If the construction of the filtering element itself is of minor importance the document is classified in the subgroups [B01D 29/01](#) and [B01D 29/014](#) - [B01D 29/018](#); otherwise in the subgroups [B01D 29/03](#) - [B01D 29/073](#)}
- U B01D 29/05 · · supported
- U B01D 29/07 · · · with corrugated, folded or wound filtering sheets
- U B01D 29/073 · · · · {with wound filtering sheets}
- D B01D 2029/075 · {~~Located in a closed housing and comprising scrapers or agitators on the cake side of the filtering elements, e.g. Nutsche- or Rosenmund-type filters for performing multiple step operations~~}
- ~~<administratively transferred to [B01D 29/075](#) INV>~~
- N B01D 29/075 · · *located in a closed housing and comprising scrapers or agitators on the cake side of the filtering elements, e.g. Nutsche- or Rosenmund-type filters for performing multiple step operations such as chemical reactions, filtering and cake treatment*
- NOTE
If the subject matter classified in this group also contains relevant information covered by other subgroups of group [B01D 29/00](#), it is also classified in the other appropriate subgroups of group [B01D 29/00](#).
- U B01D 33/00** **Filters with filtering elements which move during the filtering operation (filters comprising loose filtering material moving or fluidised during filtration [B01D 24/28](#) - [B01D 24/36](#); centrifuges [B04B](#))**
- U B01D 33/044 · with filtering bands or the like supported on cylinders which are pervious for filtering
- U B01D 33/048 · · with endless filtering bands
- D B01D 2033/052 · · · {~~combined with a compression device~~}
- ~~<administratively transferred to [B01D 33/052](#) INV>~~
- N B01D 33/052 · · · *combined with a compression device ([B01D 33/64](#) takes precedence)*

Project: RP0279 (B01D)

- U B01D 46/00 Filters {, i.e. particle separators} or filtering processes specially modified for separating dispersed particles from gases or vapours (filtering elements [B01D 23/00](#) - [B01D 35/00](#); filtering material [B01D 39/00](#); their regeneration outside the filters [B01D 41/00](#))
- U B01D 46/24 · Particle separators, e.g. dust precipitators, using rigid hollow filter bodies
- U B01D 46/2403 · {characterised by the physical shape or structure of the filtering element}
- U B01D 46/2418 · · {Honeycomb filters (used for filtering exhaust gases of an internal combustion engine [F01N 3/022](#); ceramic honeycomb structures per se [C04B 38/0006](#))}
- C B01D 46/2425 · · · {characterized by parameters related to the physical properties of the honeycomb structure material, e.g. ~~modulus of rupture~~, porosity}
- WARNING**
Group [B01D 46/2425](#) is impacted by reclassification into groups [B01D 46/24493](#), [B01D 46/24494](#), [B01D 46/24495](#), [B01D 46/2476](#), [B01D 46/2478](#) and [B01D 46/248](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- C B01D 46/2429 · · · · {of the honeycomb walls or cells}
- WARNING**
Group [B01D 46/2429](#) is impacted by reclassification into groups [B01D 46/24493](#), [B01D 46/24494](#), [B01D 46/24495](#), [B01D 46/2476](#), [B01D 46/2478](#) and [B01D 46/248](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- D B01D 2046/2433 · · · · · {Porosity}
<administratively transferred to [B01D 46/24491](#) INV>
- D B01D 2046/2437 · · · · · {Pore diameter}
<administratively transferred to [B01D 46/24492](#) INV>
- C B01D 46/244 · · · · · {of the plugs}
- WARNING**
Group [B01D 46/244](#) is impacted by reclassification into groups [B01D 46/24491](#), [B01D 46/24492](#), [B01D 46/24493](#), [B01D 46/24494](#), [B01D 46/24495](#), [B01D 46/2476](#), [B01D 46/2478](#) and [B01D 46/248](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- C B01D 46/2444 · · · · · {of the outer peripheral sealing}
- WARNING**
Group [B01D 46/2444](#) is impacted by reclassification into groups [B01D 46/24491](#), [B01D 46/24492](#), [B01D 46/24493](#), [B01D 46/24494](#), [B01D 46/24495](#), [B01D 46/2476](#), [B01D 46/2478](#) and [B01D 46/248](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- C B01D 46/2448 · · · · · {of the adhesive layers, i.e. joints between segments}
- WARNING**
Group [B01D 46/2448](#) is impacted by reclassification into groups [B01D 46/24491](#), [B01D 46/24492](#), [B01D 46/24493](#), [B01D 46/24494](#), [B01D 46/24495](#), [B01D 46/2476](#), [B01D 46/2478](#) and [B01D 46/248](#).

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

- Q B01D 46/24491 {Porosity}
- WARNING
Group [B01D 46/24491](#) is incomplete pending reclassification of documents from groups [B01D 46/244](#), [B01D 46/2444](#) and [B01D 46/2448](#).
Group [B01D 46/24491](#) is also impacted by reclassification into groups [B01D 46/24493](#), [B01D 46/24494](#) and [B01D 46/24495](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- Q B01D 46/24492 {Pore diameter}
- WARNING
Group [B01D 46/24492](#) is incomplete pending reclassification of documents from groups [B01D 46/244](#), [B01D 46/2444](#) and [B01D 46/2448](#).
Group [B01D 46/24492](#) is also impacted by reclassification into groups [B01D 46/24493](#), [B01D 46/24494](#) and [B01D 46/24495](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- N B01D 46/24493 {Modulus of rupture}
- WARNING
Group [B01D 46/24493](#) is incomplete pending reclassification of documents from groups [B01D 46/2425](#), [B01D 46/2429](#), [B01D 46/244](#), [B01D 46/2444](#), [B01D 46/2448](#), [B01D 46/24491](#) and [B01D 46/24492](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- N B01D 46/24494 {Thermal expansion coefficient, heat capacity or thermal conductivity}
- WARNING
Group [B01D 46/24494](#) is incomplete pending reclassification of documents from groups [B01D 46/2425](#), [B01D 46/2429](#), [B01D 46/244](#), [B01D 46/2444](#), [B01D 46/2448](#), [B01D 46/24491](#) and [B01D 46/24492](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- N B01D 46/24495 {Young's modulus}
- WARNING
Group [B01D 46/24495](#) is incomplete pending reclassification of documents from groups [B01D 46/2425](#), [B01D 46/2429](#), [B01D 46/244](#), [B01D 46/2444](#), [B01D 46/2448](#), [B01D 46/24491](#) and [B01D 46/24492](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- C B01D 46/2451 {characterized by the geometrical structure, shape, pattern or configuration or parameters related to the geometry of the structure, ~~e.g. thickness, cell density~~}
- WARNING
Group [B01D 46/2451](#) is impacted by reclassification into groups [B01D 46/2476](#), [B01D 46/2478](#), [B01D 46/248](#), [B01D 46/2482](#), [B01D 46/2484](#) and [B01D 46/2492](#).

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

- C B01D 46/2455 {of the whole honeycomb or segments, ~~e.g. elliptic body, octagonal segment, centre of gravity~~}

WARNING

Group B01D 46/2455 is impacted by reclassification into groups B01D 46/2476, B01D 46/2478, B01D 46/248, B01D 46/2482, B01D 46/2484 and B01D 46/2492.
All groups listed in this Warning should be considered in order to perform a complete search.

- C B01D 46/2459 {of the plugs, ~~e.g. projections, gaps, length~~}

WARNING

Group B01D 46/2459 is impacted by reclassification into groups B01D 46/2476, B01D 46/2478, B01D 46/248, B01D 46/2482, B01D 46/2484 and B01D 46/2492.
All groups listed in this Warning should be considered in order to perform a complete search.

- C B01D 46/2462 {the outer peripheral sealing, ~~e.g. undulations, thickness~~}

WARNING

Group B01D 46/2462 is impacted by reclassification into groups B01D 46/2476, B01D 46/2478, B01D 46/248, B01D 46/2482, B01D 46/2484 and B01D 46/2492.
All groups listed in this Warning should be considered in order to perform a complete search.

- C B01D 46/2466 {of the adhesive layers, i.e. joints between segments, ~~e.g. undulations, thickness~~}

WARNING

Group B01D 46/2466 is impacted by reclassification into groups B01D 46/2476, B01D 46/2478, B01D 46/248, B01D 46/2482, B01D 46/2484 and B01D 46/2492.
All groups listed in this Warning should be considered in order to perform a complete search.

- C B01D 46/247 {of the cells, ~~e.g. diamonds, hexagonal configuration, cell density~~}

WARNING

Group B01D 46/247 is impacted by reclassification into groups B01D 46/2476, B01D 46/2478, B01D 46/248, B01D 46/2482, B01D 46/2484 and B01D 46/2492.
All groups listed in this Warning should be considered in order to perform a complete search.

- C B01D 46/2474 {of the walls along the length of the honeycomb, ~~e.g. inclination from inlet to outlet, length, thickness~~}

WARNING

Group B01D 46/2474 is impacted by reclassification into groups B01D 46/2476, B01D 46/2478, B01D 46/248, B01D 46/2482, B01D 46/2484 and B01D 46/2492.
All groups listed in this Warning should be considered in order to perform a complete search.

- N B01D 46/2476 {Monolithic structures}
- WARNING
 Group [B01D 46/2476](#) is incomplete pending reclassification of documents from groups [B01D 46/2425](#), [B01D 46/2429](#), [B01D 46/244](#), [B01D 46/2444](#), [B01D 46/2448](#), [B01D 46/2451](#), [B01D 46/2455](#), [B01D 46/2459](#), [B01D 46/2462](#), [B01D 46/2466](#), [B01D 46/247](#), [B01D 46/2474](#), [B01D 46/2486](#), [B01D 46/2488](#), [B01D 46/249](#), [B01D 46/2494](#) and [B01D 46/2496](#).
 All groups listed in this Warning should be considered in order to perform a complete search.
- D B01D 2046/2477 {Triangular shapes or configurations}
- <administratively transferred to [B01D 46/2488](#) ADD>
- N B01D 46/2478 {Structures comprising honeycomb segments}
- WARNING
 Group [B01D 46/2478](#) is incomplete pending reclassification of documents from groups [B01D 46/2425](#), [B01D 46/2429](#), [B01D 46/244](#), [B01D 46/2444](#), [B01D 46/2448](#), [B01D 46/2451](#), [B01D 46/2455](#), [B01D 46/2459](#), [B01D 46/2462](#), [B01D 46/2466](#), [B01D 46/247](#), [B01D 46/2474](#), [B01D 46/2486](#), [B01D 46/2488](#), [B01D 46/249](#), [B01D 46/2494](#) and [B01D 46/2496](#).
 All groups listed in this Warning should be considered in order to perform a complete search.
- N B01D 46/248 {Structures comprising laminated bodies or discs}
- WARNING
 Group [B01D 46/248](#) is incomplete pending reclassification of documents from groups [B01D 46/2425](#), [B01D 46/2429](#), [B01D 46/244](#), [B01D 46/2444](#), [B01D 46/2448](#), [B01D 46/2451](#), [B01D 46/2455](#), [B01D 46/2459](#), [B01D 46/2462](#), [B01D 46/2466](#), [B01D 46/247](#), [B01D 46/2474](#), [B01D 46/2486](#), [B01D 46/2488](#), [B01D 46/249](#), [B01D 46/2494](#) and [B01D 46/2496](#).
 All groups listed in this Warning should be considered in order to perform a complete search.
- D B01D 2046/2481 {Quadrangular shapes or configurations, e.g. square, diamond}
- <administratively transferred to [B01D 46/249](#) INV>
- N B01D 46/2482 {Thickness, height, width, length or diameter}
- WARNING
 Group [B01D 46/2482](#) is incomplete pending reclassification of documents from groups [B01D 46/2451](#), [B01D 46/2455](#), [B01D 46/2459](#), [B01D 46/2462](#), [B01D 46/2466](#), [B01D 46/247](#), [B01D 46/2474](#), [B01D 46/2486](#), [B01D 46/2488](#), [B01D 46/249](#), [B01D 46/2494](#) and [B01D 46/2496](#).
 All groups listed in this Warning should be considered in order to perform a complete search.
- N B01D 46/2484 {Cell density, area or aspect ratio}
- WARNING
 Group [B01D 46/2484](#) is incomplete pending reclassification of documents from groups [B01D 46/2451](#), [B01D 46/2455](#), [B01D 46/2459](#), [B01D 46/2462](#), [B01D 46/2466](#), [B01D 46/247](#), [B01D 46/2474](#), [B01D 46/2486](#), [B01D 46/2488](#), [B01D 46/249](#), [B01D 46/2494](#) and [B01D 46/2496](#).

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

- D B01D 2046/2485 {Octagonal shapes or configurations}
<administratively transferred to [B01D 46/2494](#) INV>
- Q B01D 46/2486 {characterised by the shapes or configurations}
WARNING
Group [B01D 46/2486](#) is impacted by reclassification into groups [B01D 46/2476](#), [B01D 46/2478](#), [B01D 46/248](#), [B01D 46/2482](#), [B01D 46/2484](#) and [B01D 46/2492](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- D B01D 2046/2488 {Circular shapes or configurations}
<administratively transferred to [B01D 46/2496](#) INV>
- Q B01D 46/2488 {Triangular}
WARNING
Group [B01D 46/2488](#) is impacted by reclassification into groups [B01D 46/2476](#), [B01D 46/2478](#), [B01D 46/248](#), [B01D 46/2482](#) and [B01D 46/2484](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- Q B01D 46/249 {Quadrangular e.g. square or diamond}
WARNING
Group [B01D 46/249](#) is impacted by reclassification into groups [B01D 46/2476](#), [B01D 46/2478](#), [B01D 46/248](#), [B01D 46/2482](#) and [B01D 46/2484](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- D B01D 2046/2492 {Other shapes or configurations not covered by groups B01D 46/2474–B01D 2046/2488}
<administratively transferred to [B01D 46/2486](#) INV>
- N B01D 46/2492 {Hexagonal}
WARNING
Group [B01D 46/2492](#) is incomplete pending reclassification of documents from groups [B01D 46/2451](#), [B01D 46/2455](#), [B01D 46/2459](#), [B01D 46/2462](#), [B01D 46/2466](#), [B01D 46/247](#), [B01D 46/2474](#) and [B01D 46/2486](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- Q B01D 46/2494 {Octagonal}
WARNING
Group [B01D 46/2494](#) is impacted by reclassification into groups [B01D 46/2476](#), [B01D 46/2478](#), [B01D 46/248](#), [B01D 46/2482](#) and [B01D 46/2484](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- D B01D 2046/2496 {The honeycomb filter being defined by mathematical equations}
<administratively transferred to [B01D 46/2498](#) INV>

- Q B01D 46/2496 {Circular}
WARNING
 Group [B01D 46/2496](#) is impacted by reclassification into groups [B01D 46/2476](#), [B01D 46/2478](#), [B01D 46/248](#), [B01D 46/2482](#) and [B01D 46/2484](#).
 All groups listed in this Warning should be considered in order to perform a complete search.

- N B01D 46/2498 {The honeycomb filter being defined by mathematical relationships}

Project: RP0683 (B01D)

- U B01D 61/00 **Processes of separation using semi-permeable membranes, e.g. dialysis, osmosis, ultrafiltration; Apparatus, accessories or auxiliary operations specially adapted therefor**

NOTE

In groups [B01D 61/00](#) - [B01D 61/58](#) it is desirable to add the indexing codes relating to process operations and control chosen from groups [B01D 2311/00](#) - [B01D 2311/2696](#), to details relating to membrane modules and apparatus indexing codes chosen from [B01D 2313/00](#) - [B01D 2313/90](#), to details relating to the membrane module operation indexing codes chosen from [B01D 2315/00](#) - [B01D 2315/16](#), to details relating to the module arrangement within a plant or an apparatus indexing codes chosen from [B01D 2317/00](#) - [B01D 2317/08](#) and to details relating to the membrane assembly within one housing indexing codes chosen from [B01D 2319/00](#) - [B01D 2319/06](#)

- B01D 61/002 . {Forward osmosis, direct osmosis (actuators for pressure retarded osmosis [F03G 7/005](#)[F03G 7/015](#))}

Project: RP0144-F (B01L)

- M B01L 1/00 **Enclosures; Chambers (fume cupboards [B08B](#); provided with manipulation devices, glove boxes [B25J](#); {industrial clean rooms [F24F 3/167](#);} cooling chambers [F25D](#))**

WARNING

Group [B01L 1/00](#) is impacted by reclassification into group [B01L 1/52](#).—
 Groups [B01L 1/00](#) and [B01L 1/52](#) should be considered in order to perform a complete search.

- M B01L 1/52 . {Transportable laboratories; Field kits}

WARNING

Group [B01L 1/52](#) is incomplete pending reclassification of documents from groups [B01L 1/00](#) and [B01L 99/00](#).—
 Groups [B01L 1/00](#), [B01L 99/00](#), and [B01L 1/52](#) should be considered in order to perform a complete search.

- M B01L 9/00 **Supporting devices; Holding devices (tweezers, tongs [B25B](#))**

WARNING

Group [B01L 9/00](#) is impacted by reclassification into group [B01L 9/56](#).—
 Groups [B01L 9/00](#) and [B01L 9/56](#) should be considered in order to perform a complete search.

- M B01L 9/56
- {Means for indicating position of a recipient or sample in an array}
- WARNING**
Group B01L 9/56 is incomplete pending reclassification of documents from groups B01L 9/00 and B01L 99/00. Groups B01L 9/00, B01L 99/00, and B01L 9/56 should be considered in order to perform a complete search.
- M B01L 13/00
- {Cleaning or rinsing apparatus}**
- WARNING**
Group B01L 13/00 is incomplete pending reclassification of documents from group B01L 99/00. Groups B01L 99/00 and B01L 13/00 should be considered in order to perform a complete search.
- M B01L 13/02
- {for receptacle or instruments}
- WARNING**
Group B01L 13/02 is incomplete pending reclassification of documents from group B01L 99/00. Groups B01L 99/00 and B01L 13/02 should be considered in order to perform a complete search.
- M B01L 99/00
- Subject matter not provided for in other groups of this subclass**
- WARNING**
Group B01L 99/00 is impacted by reclassification into groups B01L 1/52, B01L 9/56, B01L 13/00, and B01L 13/02. All groups listed in this Warning should be considered in order to perform a complete search.

Project: RP0593-F (B21J)

- U B21J 5/00
- Methods for forging, hammering, or pressing (for working sheet-metal or metal tubes, rods, or profiles [B21D](#); for working wire [B21F](#)); Special equipment or accessories therefor**
- U B21J 5/06
- for performing particular operations
- M B21J 5/068
- {Shaving, skiving or scarifying for forming lifted portions, e.g. slices or barbs, on the surface of the material}
- WARNING**
Group B21J 5/068 is incomplete pending reclassification of documents from group B21J 5/12. Groups B21J 5/12 and B21J 5/068 should be considered in order to perform a complete search.
- M B21J 5/12
- Forming profiles on internal or external surfaces (making screw-thread by forging, pressing, or hammering [B21K](#))
- WARNING**
Group B21J 5/12 is impacted by reclassification into group B21J 5/068. Groups B21J 5/12 and B21J 5/068 should be considered in order to perform a complete search.

Project: RP0726 (B22F)

M B22F

WORKING METALLIC POWDER; MANUFACTURE OF ARTICLES FROM METALLIC POWDER; MAKING METALLIC POWDER (processes or devices for granulating materials in general [B01J 2/00](#); making ceramics by compacting or sintering [C04B](#), e.g. [C04B 35/64](#); for the production of metals as such, see class [C22](#); reduction or decomposition of metal compounds in general [C22B](#); making alloys by powder metallurgy [C22C](#); electrolytic production of metal powder [C25C 5/00](#))

NOTES

1. This subclass covers the making of metallic powder only insofar as powder with specific physical characteristics is made;
2. In this subclass, the following terms or expressions are used with the meanings indicated:
 - "metallic powder" covers powders containing a substantial proportion of non-metallic material;
 - "powder" includes somewhat larger particles which are worked, obtained or behave in a manner similar to powder, e.g. fibres.

3. {In this subclass, combination sets (C-Sets) are used. Detailed information about C-Sets construction and the associated syntax rules is found in the definitions for [B22E](#).}

WARNINGS

1. The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:
[B22F 3/035](#) covered by [B22F 3/03](#)
2. In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

C B22F 3/00

Manufacture of workpieces or articles from metallic powder characterised by the manner of compacting or sintering; Apparatus specially adapted therefor {; Presses and furnaces}

WARNING

Group [B22F 3/00](#) is impacted by reclassification into groups [B22F 10/00](#) - [B22F 12/90](#).
Groups [B22F 3/00](#) and [B22F 10/00](#) - [B22F 12/90](#) should be considered in order to perform a complete search.

T B22F 10/00

Additive manufacturing of workpieces or articles from metallic powder (apparatus or devices therefor [B22F 12/00](#))

WARNING

Group [B22F 10/00](#) is incomplete pending reclassification of documents from group [B22F 3/00](#).
~~Group Groups [B22F 3/00](#) and [B22F 10/00](#) is also impacted by reclassification into groups [B22F 10/10](#) - [B22F 12/90](#).~~
~~All groups listed in this Warning~~ should be considered in order to perform a complete search.

C B22F 10/10

- Formation of a green body

WARNING

~~Groups Group [B22F 10/10](#) -is [B22F 10/18](#) are~~ incomplete pending reclassification of documents from ~~groups group [B22F 3/00](#) and [B22F 10/00](#).~~
~~Group [B22F 10/10](#) is also impacted by reclassification into groups [B22F 10/12](#) - [B22F 10/18](#).~~

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

M B22F 10/12

- by photopolymerisation, e.g. stereolithography [SLA] or digital light processing [DLP]

WARNING

Group B22F 10/12 is incomplete pending reclassification of documents from groups B22F 3/00 and B22F 10/10.
All groups listed in this Warning should be considered in order to perform a complete search.

M B22F 10/14

- by jetting of binder onto a bed of metal powder

WARNING

Group B22F 10/14 is incomplete pending reclassification of documents from groups B22F 3/00 and B22F 10/10.
All groups listed in this Warning should be considered in order to perform a complete search.

M B22F 10/16

- by embedding the binder within the powder bed

WARNING

Group B22F 10/16 is incomplete pending reclassification of documents from groups B22F 3/00 and B22F 10/10.
All groups listed in this Warning should be considered in order to perform a complete search.

M B22F 10/18

- by mixing binder with metal in filament form, e.g. fused filament fabrication [FFF]

WARNING

Group B22F 10/18 is incomplete pending reclassification of documents from groups B22F 3/00 and B22F 10/10.
All groups listed in this Warning should be considered in order to perform a complete search.

C B22F 10/20

- Direct sintering or melting

WARNING

~~Groups~~Group B22F 10/20 ~~-is B22F 10/28 are~~ incomplete pending reclassification of documents from ~~groups~~group B22F 3/00 ~~and B22F 10/00~~.
Group B22F 10/20 is also impacted by reclassification into groups B22F 10/22 - B22F 10/28.

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

M B22F 10/22

- Direct deposition of molten metal

WARNING

Group B22F 10/22 is incomplete pending reclassification of documents from groups B22F 3/00 and B22F 10/20.
All groups listed in this Warning should be considered in order to perform a complete search.

M B22F 10/25

- Direct deposition of metal particles, e.g. direct metal deposition [DMD] or laser engineered net shaping [LENS]

WARNING

Group B22F 10/25 is incomplete pending reclassification of documents from groups B22F 3/00 and B22F 10/20.

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

- M B22F 10/28
- Powder bed fusion, e.g. selective laser melting [SLM] or electron beam melting [EBM]

WARNING

*Group B22F 10/28 is incomplete pending reclassification of documents from groups B22F 3/00 and B22F 10/20.
All groups listed in this Warning should be considered in order to perform a complete search.*

- C B22F 10/30
- Process control

WARNING

Group B22F 10/30 is incomplete pending reclassification of documents from group B22F 3/00.

Group B22F 10/30 is also impacted by reclassification into groups B22F 10/31 - B22F 10/39 are incomplete pending reclassification of documents from groups B22F 3/00, B22F 10/80 and B22F 10/00 B22F 10/85.

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

- M B22F 10/31
- Calibration of process steps or apparatus settings, e.g. before or during manufacturing

WARNING

*Group B22F 10/31 is incomplete pending reclassification of documents from groups B22F 3/00 and B22F 10/30.
All groups listed in this Warning should be considered in order to perform a complete search.*

- M B22F 10/32
- of the atmosphere, e.g. composition or pressure in a building chamber

WARNING

*Groups B22F 10/32 and B22F 10/322 are incomplete pending reclassification of documents from groups B22F 3/00 and B22F 10/30.
All groups listed in this Warning should be considered in order to perform a complete search.*

- M B22F 10/34
- of powder characteristics, e.g. density, oxidation or flowability

WARNING

*Group B22F 10/34 is incomplete pending reclassification of documents from groups B22F 3/00 and B22F 10/30.
All groups listed in this Warning should be considered in order to perform a complete search.*

- M B22F 10/36
- of energy beam parameters

WARNING

*Groups B22F 10/36, B22F 10/362, B22F 10/364, B22F 10/366 and B22F 10/368 are incomplete pending reclassification of documents from groups B22F 3/00 and B22F 10/30.
All groups listed in this Warning should be considered in order to perform a complete search.*

- M B22F 10/37
- of powder bed aspects, e.g. density

WARNING

Group B22F 10/37 is incomplete pending reclassification of documents from groups B22F 3/00 and B22F 10/30.

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

- M B22F 10/38
- to achieve specific product aspects, e.g. surface smoothness, density, porosity or hollow structures
- WARNING**
Groups B22F 10/38 and B22F 10/385 are incomplete pending reclassification of documents from groups B22F 3/00 and B22F 10/30. All groups listed in this Warning should be considered in order to perform a complete search.
- M B22F 10/39
- Traceability, e.g. incorporating identifier into a workpiece or article
- WARNING**
Group B22F 10/39 is incomplete pending reclassification of documents from groups B22F 3/00 and B22F 10/30. Groups B22F 3/00, B22F 10/30 and B22F 10/39 should be considered in order to perform a complete search.
- C B22F 10/40
- Structures for supporting workpieces or articles during manufacture and removed afterwards
- WARNING**
Groups Group B22F 10/40 -is B22F 10/47 are incomplete pending reclassification of documents from groups group B22F 3/00 and B22F 10/00. Group B22F 10/40 is also impacted by reclassification into groups B22F 10/43 and B22F 10/47.
All groups listed in this Warning should be considered in order to perform a complete search.
- M B22F 10/43
- characterised by material
- WARNING**
Group B22F 10/43 is incomplete pending reclassification of documents from groups B22F 3/00 and B22F 10/40. All groups listed in this Warning should be considered in order to perform a complete search.
- M B22F 10/47
- characterised by structural features
- WARNING**
Group B22F 10/47 is incomplete pending reclassification of documents from groups B22F 3/00 and B22F 10/40. All groups listed in this Warning should be considered in order to perform a complete search.
- M B22F 10/50
- Treatment of workpieces or articles during build-up, e.g. treatments applied to fused layers during build-up
- WARNING**
Group B22F 10/50 is incomplete pending reclassification of documents from groups group B22F 3/00 and B22F 10/00.
Groups B22F 3/00, B22F 10/00, and B22F 10/50 should be considered in order to perform a complete search.
- M B22F 10/60
- Treatment of workpieces or articles after build-up
- WARNING**
Groups B22F 10/60-, B22F 10/62, B22F 10/68 B22F 10/64 and B22F 10/66 are incomplete pending reclassification of documents from groups group B22F 3/00 and B22F 10/00.

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

M B22F 10/68

- • Cleaning or washing

WARNING

Group [B22F 10/68](#) is incomplete pending to reclassification of documents from groups [B22F 3/00](#) and [B22F 10/70](#).
All groups listed in this Warning should be considered in order to perform a complete search.

C B22F 10/70

- Recycling

WARNING

Groups [Group B22F 10/70](#) -is [B22F 10/77](#) are incomplete pending to reclassification of documents from [groups group B22F 3/00](#) and [B22F 10/00](#).
Group [B22F 10/70](#) is also impacted by reclassification into groups [B22F 10/68](#), [B22F 10/73](#) and [B22F 10/77](#).

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

M B22F 10/73

- • of powder

WARNING

Group [B22F 10/73](#) is incomplete pending reclassification of documents from groups [B22F 3/00](#) and [B22F 10/70](#).
All groups listed in this Warning should be considered in order to perform a complete search.

M B22F 10/77

- • of gas

WARNING

Group [B22F 10/77](#) is incomplete pending reclassification of documents from groups [B22F 3/00](#) and [B22F 10/70](#).
All groups listed in this Warning should be considered in order to perform a complete search.

M B22F 10/80

- Data acquisition or data processing

WARNING

Groups [B22F 10/80](#) and [B22F 10/85](#) are incomplete pending reclassification of documents from groups [B22F 3/00](#) and [B22F 10/00](#) [B22F 10/30](#).

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

C B22F 12/00

Apparatus or devices specially adapted for additive manufacturing; Auxiliary means for additive manufacturing; Combinations of additive manufacturing apparatus or devices with other processing apparatus or devices

WARNING

Groups [Group B22F 12/00](#) -is [B22F 12/90](#) are incomplete pending to reclassification of documents from [groups group B22F 3/00](#) and [B22F 10/00](#).
Group [B22F 12/00](#) is also impacted by reclassification into groups [B22F 12/10](#) - [B22F 12/90](#).

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

- M B22F 12/10
- Auxiliary heating means
- WARNING
Groups [B22F 12/10](#), [B22F 12/13](#) and [B22F 12/17](#) are incomplete pending to reclassification of documents from groups [B22F 3/00](#) and [B22F 12/00](#). All groups listed in this Warning should be considered in order to perform a complete search.
- M B22F 12/20
- Cooling means
- WARNING
Group [B22F 12/20](#) is incomplete pending reclassification of documents from groups [B22F 3/00](#) and [B22F 12/00](#). All groups listed in this Warning should be considered in order to perform a complete search.
- M B22F 12/22
- {Driving means}
- WARNING
Groups [B22F 12/22](#) - [B22F 12/226](#) are incomplete pending reclassification of documents from groups [B22F 3/00](#) and [B22F 12/00](#). All groups listed in this Warning should be considered in order to perform a complete search.
- M B22F 12/30
- Platforms or substrates
- WARNING
Groups [B22F 12/30](#) - [B22F 12/37](#) are incomplete pending reclassification of documents from groups [B22F 3/00](#) and [B22F 12/00](#). All groups listed in this Warning should be considered in order to perform a complete search.
- M B22F 12/38
- {Housings, e.g. machine housings}
- WARNING
Group [B22F 12/38](#) is incomplete pending reclassification of documents from groups [B22F 3/00](#) and [B22F 12/00](#). All groups listed in this Warning should be considered in order to perform a complete search.
- M B22F 12/40
- Radiation means
- WARNING
Groups [B22F 12/40](#) - [B22F 12/49](#) are incomplete pending reclassification of documents from groups [B22F 3/00](#) and [B22F 12/00](#). All groups listed in this Warning should be considered in order to perform a complete search.
- M B22F 12/50
- Means for feeding of material, e.g. heads
- WARNING
Groups [B22F 12/50](#) - [B22F 12/58](#) are incomplete pending reclassification of documents from groups [B22F 3/00](#) and [B22F 12/00](#). All groups listed in this Warning should be considered in order to perform a complete search.
- M B22F 12/60
- Planarisation devices; Compression devices
- WARNING
Groups [B22F 12/60](#), [B22F 12/63](#) and [B22F 12/67](#) are incomplete pending to reclassification of documents from groups [B22F 3/00](#) and [B22F 12/00](#).

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

M B22F 12/70

- Gas flow means

WARNING

*Group B22F 12/70 is incomplete pending reclassification of documents from groups B22F 3/00 and B22F 12/00.
All groups listed in this Warning should be considered in order to perform a complete search.*

M B22F 12/80

- Plants, production lines or modules

WARNING

*Groups B22F 12/80 - B22F 12/88 are incomplete pending to reclassification of documents from groups B22F 3/00 and B22F 12/00.
All groups listed in this Warning should be considered in order to perform a complete search.*

M B22F 12/90

- Means for process control, e.g. cameras or sensors

WARNING

*Group B22F 12/90 is incomplete pending reclassification of documents from groups B22F 3/00 and B22F 12/00.
All groups listed in this Warning should be considered in order to perform a complete search.*

M B22F 2998/00

Supplementary information concerning processes or compositions relating to powder metallurgy

NOTE

In this group, C-Sets are used. Detailed information about C-Sets construction and the associated syntax rules is found in the Definitions.

M B22F 2998/10

- Processes characterised by the sequence of their steps

NOTE

In this group, C-Sets are used. Detailed information about C-Sets construction and the associated syntax rules is found in the Definitions.

M B22F 2999/00

Aspects linked to processes or compositions used in powder metallurgy

NOTE

In this group, C-Sets are used. Detailed information about C-Sets construction and the associated syntax rules is found in the Definitions.

Project: RP0200-F (B23Q)

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

U B23Q 3/155 • Arrangements for automatic insertion or removal of tools {, e.g. combined with manual handling ([B23Q 7/046](#) takes precedence)}

U B23Q 3/1552 • • {parts of devices for automatically inserting or removing tools}

M B23Q 3/15526 • • • {Storage devices; Drive mechanisms therefor}

NOTE

{When classifying in this group or one of its subgroups the usage of indexing codes [B23Q 2003/15527](#) – [B23Q 2003/15532](#), [B23Q 2003/15537](#) is obligatory.}

WARNING

Group B23Q 3/15526 is impacted by reclassification into groups [B23Q 2003/15527](#), [B23Q 2003/15528](#), [B23Q 2003/1553](#), [B23Q 2003/15531](#), [B23Q 2003/15532](#), [B23Q 3/15534](#), [B23Q 3/15536](#), [B23Q 2003/15537](#) and [B23Q 3/15539](#).
All groups listed in this Warning should be considered in order to perform a complete search.

M B23Q 2003/15527 • • • • {the storage device including means to latch tools}

WARNING

Group B23Q 2003/15527 is incomplete pending reclassification of documents from group B23Q 3/15526.
Groups B23Q 3/15526 and B23Q 2003/15527 should be considered in order to perform a complete search.

M B23Q 2003/15528 • • • • {the storage device including means to project tools therefrom, e.g. for transferring them}

WARNING

Group B23Q 2003/15528 is incomplete pending reclassification of documents from group B23Q 3/15526.
Groups B23Q 3/15526 and B23Q 2003/15528 should be considered in order to perform a complete search.

M B23Q 2003/1553 • • • • • {by rectilinear projection}

WARNING

Group B23Q 2003/1553 is incomplete pending reclassification of documents from group B23Q 3/15526.
Groups B23Q 3/15526 and B23Q 2003/1553 should be considered in order to perform a complete search.

- M B23Q 2003/15531 {by pivoting projection movement}
- WARNING
~~Group B23Q 2003/15531 is incomplete pending reclassification of documents from group B23Q 3/15526.~~
~~Groups B23Q 3/15526 and B23Q 2003/15531 should be considered in order to perform a complete search.~~
- M B23Q 2003/15532 {the storage device including tool pots, adaptors or the like}
- WARNING
~~Group B23Q 2003/15532 is incomplete pending reclassification of documents from group B23Q 3/15526.~~
~~Groups B23Q 3/15526 and B23Q 2003/15532 should be considered in order to perform a complete search.~~
- M B23Q 3/15534 {Magazines mounted on the spindle}
- WARNING
~~Group B23Q 3/15534 is incomplete pending reclassification of documents from group B23Q 3/15526.~~
~~Groups B23Q 3/15526 and B23Q 3/15534 should be considered in order to perform a complete search.~~
- M B23Q 3/15536 {Non-rotary fixed racks}
- WARNING
~~Group B23Q 3/15536 is incomplete pending reclassification of documents from group B23Q 3/15526.~~
~~Groups B23Q 3/15526 and B23Q 3/15536 should be considered in order to perform a complete search.~~
- M B23Q 2003/15537 {Linearly moving storage devices}
- WARNING
~~Group B23Q 2003/15537 is incomplete pending reclassification of documents from group B23Q 3/15526.~~
~~Groups B23Q 3/15526 and B23Q 2003/15537 should be considered in order to perform a complete search.~~
- M B23Q 3/15539 {Plural magazines, e.g. involving tool transfer from one magazine to another (involving manual operation [B23Q 3/15533](#))}
- WARNING
~~Group B23Q 3/15539 is incomplete pending reclassification of documents from group B23Q 3/15526.~~
~~Groups B23Q 3/15526 and B23Q 3/15539 should be considered in order to perform a complete search.~~
- M B23Q 3/1554 {Transfer mechanisms, e.g. tool gripping arms; Drive mechanisms therefore}
- NOTE
 {When classifying in this group the usage of indexing codes [B23Q 2003/155404](#) – [B23Q 2003/155456](#) is obligatory.}
- WARNING
 Group B23Q 3/1554 is impacted by reclassification into groups B23Q 2003/155404, B23Q 2003/155407, B23Q 2003/155411, B23Q 2003/155414, B23Q 2003/155418, B23Q 2003/155421, B23Q 2003/155425, B23Q 2003/155428, B23Q 2003/155432, B23Q 2003/155435, B23Q 2003/155439, B23Q 2003/155442;

~~B23Q 2003/155446, B23Q 2003/155449, B23Q 2003/155453 and B23Q 2003/155456.~~
All groups listed in this Warning should be considered in order to perform a complete search.

M B23Q 2003/155404 {the transfer mechanism comprising a single gripper}

WARNING

~~Group B23Q 2003/155404 is incomplete pending reclassification of documents from group B23Q 3/1554.~~
Groups B23Q 3/1554 and B23Q 2003/155404 should be considered in order to perform a complete search.

M B23Q 2003/155407 {linearly movable}

WARNING

~~Group B23Q 2003/155407 is incomplete pending reclassification of documents from group B23Q 3/1554.~~
Groups B23Q 3/1554 and B23Q 2003/155407 should be considered in order to perform a complete search.

M B23Q 2003/155411 {pivotable}

WARNING

~~Group B23Q 2003/155411 is incomplete pending reclassification of documents from group B23Q 3/1554.~~
Groups B23Q 3/1554 and B23Q 2003/155411 should be considered in order to perform a complete search.

M B23Q 2003/155414 {the transfer mechanism comprising two or more grippers}

WARNING

~~Group B23Q 2003/155414 is incomplete pending reclassification of documents from group B23Q 3/1554.~~
Groups B23Q 3/1554 and B23Q 2003/155414 should be considered in order to perform a complete search.

M B23Q 2003/155418 {the grippers moving together}

WARNING

~~Group B23Q 2003/155418 is incomplete pending reclassification of documents from group B23Q 3/1554.~~
Groups B23Q 3/1554 and B23Q 2003/155418 should be considered in order to perform a complete search.

M B23Q 2003/155421 {the grippers moving independently from each other}

WARNING

~~Group B23Q 2003/155421 is incomplete pending reclassification of documents from group B23Q 3/1554.~~
Groups B23Q 3/1554 and B23Q 2003/155421 should be considered in order to perform a complete search.

M B23Q 2003/155425 {pivotable}

WARNING

~~Group B23Q 2003/155425 is incomplete pending reclassification of documents from group B23Q 3/1554.~~
Groups B23Q 3/1554 and B23Q 2003/155425 should be considered in order to perform a complete search.

- M B23Q 2003/155428 {about a common axis}
- WARNING
Group B23Q 2003/155428 is incomplete pending reclassification of documents from group B23Q 3/1554.
Groups B23Q 3/1554 and B23Q 2003/155428 should be considered in order to perform a complete search.
- M B23Q 2003/155432 {about different axes}
- WARNING
Group B23Q 2003/155432 is incomplete pending reclassification of documents from group B23Q 3/1554.
Groups B23Q 3/1554 and B23Q 2003/155432 should be considered in order to perform a complete search.
- M B23Q 2003/155435 {and linearly movable}
- WARNING
Group B23Q 2003/155435 is incomplete pending reclassification of documents from group B23Q 3/1554.
Groups B23Q 3/1554 and B23Q 2003/155435 should be considered in order to perform a complete search.
- M B23Q 2003/155439 {along the pivoting axis}
- WARNING
Group B23Q 2003/155439 is incomplete pending reclassification of documents from group B23Q 3/1554.
Groups B23Q 3/1554 and B23Q 2003/155439 should be considered in order to perform a complete search.
- M B23Q 2003/155442 {radially to the pivoting axis}
- WARNING
Group B23Q 2003/155442 is incomplete pending reclassification of documents from group B23Q 3/1554.
Groups B23Q 3/1554 and B23Q 2003/155442 should be considered in order to perform a complete search.
- M B23Q 2003/155446 {with translation of the pivoting axis}
- WARNING
Group B23Q 2003/155446 is incomplete pending reclassification of documents from group B23Q 3/1554.
Groups B23Q 3/1554 and B23Q 2003/155446 should be considered in order to perform a complete search.
- M B23Q 2003/155449 {linearly movable only}
- WARNING
Group B23Q 2003/155449 is incomplete pending reclassification of documents from group B23Q 3/1554.
Groups B23Q 3/1554 and B23Q 2003/155449 should be considered in order to perform a complete search.
- M B23Q 2003/155453 {including different gripper configurations for holding differently-configured tools}
- WARNING
Group B23Q 2003/155453 is incomplete pending reclassification of documents from group B23Q 3/1554.

Groups B23Q 3/1554 and B23Q 2003/155453 should be considered in order to perform a complete search.

M B23Q 2003/155456 {using separate transfer mechanisms for each tool in the magazine}

WARNING

Group B23Q 2003/155456 is incomplete pending reclassification of documents from group B23Q 3/1554.
Groups B23Q 3/1554 and B23Q 2003/155456 should be considered in order to perform a complete search.

U B23Q 3/157 {of rotary tools {(in combination with non-rotary tools [B23Q 3/15506](#), [B23Q 3/15513](#))}}

U B23Q 3/15713 {a transfer device taking a single tool from a storage device and inserting it in a spindle ([B23Q 3/15793](#) takes precedence)}

M B23Q 3/1572 {the storage device comprising rotating or circulating storing means}

WARNING

Group B23Q 3/1572 is impacted by reclassification into groups B23Q 3/15722 and B23Q 3/15724.
All groups listed in this Warning should be considered in order to perform a complete search.

M B23Q 3/15722 {Rotary discs or drums}

WARNING

Group B23Q 3/15722 is incomplete pending reclassification of documents from group B23Q 3/1572.
Groups B23Q 3/1572 and B23Q 3/15722 should be considered in order to perform a complete search.

M B23Q 3/15724 {Chains or belts}

WARNING

Group B23Q 3/15724 is incomplete pending reclassification of documents from group B23Q 3/1572.
Groups B23Q 3/1572 and B23Q 3/15724 should be considered in order to perform a complete search.

Project: MP0507 (B24D)

M B24D **TOOLS FOR GRINDING, BUFFING, OR SHARPENING (tools for grinding or polishing optical surfaces on lenses or surfaces of similar shape B24B 13/01; grinding heads B24B 41/00; manufacture of abrasive or friction articles or shaped materials containing macromolecular substances C08J5/14; polishing compositions C09G 1/00; abrasives C09K 3/14 *abrading-bodies specially designed for tumbling apparatus, e.g. abrading-balls B24B 31/14; honing tools B24B 33/08; lapping tools B24B 37/11*)**

NOTES

1. This subclass covers grinding tools for working on any material
2. Tools for grinding, buffing or sharpening, specially designed for a particular purpose, which purpose is provided for in a single other place, are classified in that place, e.g. [B23F 21/02](#)

WARNING

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

- M B24D 3/00** Physical features of abrasive bodies, or sheets, e.g. abrasive surfaces of special nature; Abrasive bodies or sheets characterised by their constituents ~~(composition of friction linings F16D 69/02)~~
- U B24D 3/02 · the constituent being used as bonding agent
- U B24D 3/04 · · and being essentially inorganic
- M B24D 3/14 · · · ceramic, i.e. vitrified bondings ~~(({mixture with metals B24D 3/06})~~
- U B24D 3/34 · characterised by additives enhancing special physical properties, e.g. wear resistance, electric conductivity, self-cleaning properties
- M B24D 3/348 · · {utilised as impregnating agent for porous abrasive bodies ~~(after treatments in general B24D 3/005)}~~
- U B24D 5/00** Bonded abrasive wheels, or wheels with inserted abrasive blocks, designed for acting only by their periphery; Bushings or mountings therefor
- M B24D 5/06 · with inserted abrasive blocks, e.g. segmental ~~(zonally graded B24D 5/14)~~
- U B24D 7/00** Bonded abrasive wheels, or wheels with inserted abrasive blocks, designed for acting otherwise than only by their periphery, e.g. by the front face; Bushings or mountings therefor
- M B24D 7/06 · with inserted abrasive blocks, e.g. segmental ~~(zonally graded B24D 7/14)~~
- M B24D 7/18 · Wheels of special form ~~(if specially designed for a particular purpose provided for in a single other class, that class takes precedence; {saw cylinders having their cutting rim equipped with abrasive particles for working stone or glass B28D 1/041})~~
- M B24D 9/00** Wheels or drums supporting in exchangeable arrangement a layer of flexible abrasive material, e.g. sandpaper ~~(wheels or drums as machine elements F16)~~
- M B24D 99/00** Subject matter not provided for in other groups of this subclass ~~(({B28D 1/124 takes precedence})~~

Project: RP0568-F (B29C)

- U B29C 48/00** Extrusion moulding, i.e. expressing the moulding material through a die or nozzle which imparts the desired form; Apparatus therefor (extrusion blow-moulding [B29C 49/04](#))
- M B29C 48/03 · characterised by the shape of the extruded material at extrusion
- WARNING**
Group B29C 48/03 is incomplete pending reclassification of documents from group B29C 48/30.
Groups B29C 48/30 and B29C 48/03 should be considered in order to perform a complete search.
- M B29C 48/04 · · Particle-shaped (making granules [B29B 9/00](#))
- WARNING**
Group B29C 48/04 is incomplete pending reclassification of documents from group B29C 48/30.
Groups B29C 48/30 and B29C 48/04 should be considered in order to perform a complete search.
- M B29C 48/05 · · Filamentary, e.g. strands
- WARNING**
Group B29C 48/05 is incomplete pending reclassification of documents from group B29C 48/30.

~~Groups B29C 48/30 and B29C 48/05 should be considered in order to perform a complete search.~~

M B29C 48/06

- Rod-shaped

WARNING

~~Group B29C 48/06 is incomplete pending reclassification of documents from group B29C 48/30.
Groups B29C 48/30 and B29C 48/06 should be considered in order to perform a complete search.~~

M B29C 48/07

- Flat, e.g. panels

WARNING

~~Group B29C 48/07 is incomplete pending reclassification of documents from group B29C 48/30.
Groups B29C 48/30 and B29C 48/07 should be considered in order to perform a complete search.~~

M B29C 48/08

- flexible, e.g. films

WARNING

~~Group B29C 48/08 is incomplete pending reclassification of documents from group B29C 48/30.
Groups B29C 48/30 and B29C 48/08 should be considered in order to perform a complete search.~~

M B29C 48/09

- Articles with cross-sections having partially or fully enclosed cavities, e.g. pipes or channels

WARNING

~~Group B29C 48/09 is incomplete pending reclassification of documents from group B29C 48/30.
Groups B29C 48/30 and B29C 48/09 should be considered in order to perform a complete search.~~

M B29C 48/10

- flexible, e.g. blown foils

WARNING

~~Group B29C 48/10 is incomplete pending reclassification of documents from group B29C 48/30.
Groups B29C 48/30 and B29C 48/10 should be considered in order to perform a complete search.~~

M B29C 48/11

- comprising two or more partially or fully enclosed cavities, e.g. honeycomb-shaped

WARNING

~~Group B29C 48/11 is incomplete pending reclassification of documents from group B29C 48/30.
Groups B29C 48/30 and B29C 48/11 should be considered in order to perform a complete search.~~

M B29C 48/12

- Articles with an irregular circumference when viewed in cross-section, e.g. window profiles

WARNING

~~Group B29C 48/12 is incomplete pending reclassification of documents from group B29C 48/30.
Groups B29C 48/30 and B29C 48/12 should be considered in order to perform a complete search.~~

- M B29C 48/13
- Articles with a cross-section varying in the longitudinal direction, e.g. corrugated pipes
- WARNING
Group B29C 48/13 is incomplete pending reclassification of documents from group B29C 48/30.
Groups B29C 48/30 and B29C 48/13 should be considered in order to perform a complete search.
- M B29C 48/131
- {Curved articles}
- WARNING
Group B29C 48/131 is incomplete pending reclassification of documents from group B29C 48/30.
Groups B29C 48/30 and B29C 48/131 should be considered in order to perform a complete search.
- M B29C 48/16
- Articles comprising two or more components, e.g. co-extruded layers
- WARNING
Group B29C 48/16 is incomplete pending reclassification of documents from groups B29C 48/255 and B29C 48/49.
Groups B29C 48/255, B29C 48/49 and B29C 48/16 should be considered in order to perform a complete search.
- M B29C 48/17
- the components having different colours
- WARNING
Group B29C 48/17 is incomplete pending reclassification of documents from groups B29C 48/255 and B29C 48/49.
Groups B29C 48/255, B29C 48/49 and B29C 48/17 should be considered in order to perform a complete search.
- M B29C 48/175
- {comprising a multi-coloured single component, e.g. striated, marbled or wood-like patterned}
- WARNING
Group B29C 48/175 is incomplete pending reclassification of documents from groups B29C 48/255 and B29C 48/49.
Groups B29C 48/255, B29C 48/49 and B29C 48/175 should be considered in order to perform a complete search.
- M B29C 48/18
- the components being layers
- WARNING
Group B29C 48/18 is incomplete pending reclassification of documents from groups B29C 48/255 and B29C 48/49.
Groups B29C 48/255, B29C 48/49 and B29C 48/18 should be considered in order to perform a complete search.
- M B29C 48/185
- {comprising six or more components, i.e. each component being counted once for each time it is present, e.g. in a layer}
- WARNING
Group B29C 48/185 is incomplete pending reclassification of documents from groups B29C 48/255 and B29C 48/49.
Groups B29C 48/255, B29C 48/49 and B29C 48/185 should be considered in order to perform a complete search.

- M B29C 48/19
- • the layers being joined at their edges
- WARNING
Group B29C 48/19 is incomplete pending reclassification of documents from groups B29C 48/255 and B29C 48/49. Groups B29C 48/255, B29C 48/49 and B29C 48/19 should be considered in order to perform a complete search.
- M B29C 48/20
- • one of the layers being a strip, e.g. a partially embedded strip
- WARNING
Group B29C 48/20 is incomplete pending reclassification of documents from groups B29C 48/255 and B29C 48/49. Groups B29C 48/255, B29C 48/49 and B29C 48/20 should be considered in order to perform a complete search.
- M B29C 48/21
- • the layers being joined at their surfaces
- WARNING
Group B29C 48/21 is incomplete pending reclassification of documents from groups B29C 48/255 and B29C 48/49. Groups B29C 48/255, B29C 48/49 and B29C 48/21 should be considered in order to perform a complete search.
- M B29C 48/22
- • with means connecting the layers, e.g. tie layers or undercuts
- WARNING
Group B29C 48/22 is incomplete pending reclassification of documents from groups B29C 48/255 and B29C 48/49. Groups B29C 48/255, B29C 48/49 and B29C 48/22 should be considered in order to perform a complete search.
- M B29C 48/23
- • with means for avoiding adhesion of the layers, e.g. for forming peelable layers
- WARNING
Group B29C 48/23 is incomplete pending reclassification of documents from groups B29C 48/255 and B29C 48/49. Groups B29C 48/255, B29C 48/49 and B29C 48/23 should be considered in order to perform a complete search.
- U B29C 48/25
- Component parts, details or accessories; Auxiliary operations
- M B29C 48/255
- • Flow control means, e.g. valves (flow dividers [B29C 48/695](#))
- WARNING
Group B29C 48/255 is impacted by reclassification into groups B29C 48/695, B29C 48/70, B29C 48/705, B29C 48/71, B29C 48/16, B29C 48/17, B29C 48/175, B29C 48/18, B29C 48/185, B29C 48/19, B29C 48/20, B29C 48/21, B29C 48/22, and B29C 48/23. All groups listed in this Warning should be considered in order to perform a complete search.
- M B29C 48/28
- • Storing of extruded material, e.g. by winding up or stacking
- WARNING
Group B29C 48/28 is impacted by reclassification into group B29C 48/355. Groups B29C 48/28 and B29C 48/355 should be considered in order to perform a complete search.

- M B29C 48/30
- • Extrusion nozzles or dies (extrusion characterised by the shape or cross-section of the extruded article [B29C 48/03](#))
- WARNING**
Group B29C 48/30 is impacted by reclassification into groups B29C 48/03, B29C 48/04, B29C 48/05, B29C 48/06, B29C 48/07, B29C 48/08, B29C 48/09, B29C 48/10, B29C 48/11, B29C 48/12, B29C 48/13, and B29C 48/131.
All groups listed in this Warning should be considered in order to perform a complete search.
- M B29C 48/355
- • Conveyors for extruded articles
- WARNING**
Group B29C 48/355 is incomplete pending reclassification of documents from group B29C 48/28.
Groups B29C 48/28 and B29C 48/355 should be considered in order to perform a complete search.
- M B29C 48/36
- • Means for plasticising or homogenising the moulding material or forcing it through the nozzle or die
- WARNING**
Group B29C 48/36 is impacted by reclassification into group B29C 48/365.
Groups B29C 48/36 and B29C 48/365 should be considered in order to perform a complete search.
- M B29C 48/365
- • • using pumps, e.g. piston pumps
- WARNING**
Group B29C 48/365 is incomplete pending reclassification of documents from group B29C 48/36.
Groups B29C 48/36 and B29C 48/365 should be considered in order to perform a complete search.
- U B29C 48/375
- • • Plasticisers, homogenisers or feeders comprising two or more stages
- M B29C 48/38
- • • • using two or more serially arranged screws in the same barrel
- WARNING**
Group B29C 48/38 is incomplete pending reclassification of documents from group B29C 48/425.
Groups B29C 48/425 and B29C 48/38 should be considered in order to perform a complete search.
- M B29C 48/385
- • • • using two or more serially arranged screws in separate barrels
- WARNING**
Group B29C 48/385 is incomplete pending reclassification of documents from group B29C 48/425.
Groups B29C 48/425 and B29C 48/385 should be considered in order to perform a complete search.
- U B29C 48/395
- • • using screws surrounded by a cooperating barrel, e.g. single screw extruders
- M B29C 48/40
- • • • using two or more parallel screws {or at least two parallel non-intermeshing screws}, e.g. twin screw extruders
- WARNING**
Group B29C 48/40 is impacted by reclassification into groups B29C 48/405, B29C 48/41 and B29C 48/415.

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

M B29C 48/405 Intermeshing co-rotating screws

WARNING

Group B29C 48/405 is incomplete pending reclassification of documents from group B29C 48/40.
Groups B29C 48/40 and B29C 48/405 should be considered in order to perform a complete search.

M B29C 48/41 Intermeshing counter-rotating screws

WARNING

Group B29C 48/41 is incomplete pending reclassification of documents from group B29C 48/40.
Groups B29C 48/40 and B29C 48/41 should be considered in order to perform a complete search.

M B29C 48/415 and having partially non-intermeshing screws

WARNING

Group B29C 48/415 is incomplete pending reclassification of documents from group B29C 48/40.
Groups B29C 48/40 and B29C 48/415 should be considered in order to perform a complete search.

M B29C 48/425 using three or more screws (serially arranged screws [B29C 48/38](#), [B29C 48/385](#))

WARNING

Group B29C 48/425 is impacted by reclassification into groups B29C 48/38, B29C 48/385, B29C 48/43, B29C 48/435 and B29C 48/44.
All groups listed in this Warning should be considered in order to perform a complete search.

M B29C 48/43 Ring extruders

WARNING

Group B29C 48/43 is incomplete pending reclassification of documents from group B29C 48/425.
Groups B29C 48/425 and B29C 48/43 should be considered in order to perform a complete search.

M B29C 48/435 Sub-screws

WARNING

Group B29C 48/435 is incomplete pending reclassification of documents from group B29C 48/425.
Groups B29C 48/425 and B29C 48/435 should be considered in order to perform a complete search.

M B29C 48/44 Planetary screws

WARNING

Group B29C 48/44 is incomplete pending reclassification of documents from group B29C 48/425.
Groups B29C 48/425 and B29C 48/44 should be considered in order to perform a complete search.

- M B29C 48/46
- • • using vanes
- WARNING
Group B29C 48/46 is impacted by reclassification into group B29C 48/47. Groups B29C 48/46 and B29C 48/47 should be considered in order to perform a complete search.
- M B29C 48/47
- • • using discs, e.g. plasticising the moulding material by passing it between a fixed and a rotating disc that are coaxially arranged
- WARNING
Group B29C 48/47 is incomplete pending reclassification of documents from group B29C 48/46. Groups B29C 48/46 and B29C 48/47 should be considered in order to perform a complete search.
- M B29C 48/475
- • • using pistons, accumulators or press rams
- WARNING
Group B29C 48/475 is impacted by reclassification into groups B29C 48/48 and B29C 48/485. Groups B29C 48/475, B29C 48/48, and B29C 48/485 should be considered in order to perform a complete search.
- M B29C 48/48
- • • Two or more rams or pistons
- WARNING
Group B29C 48/48 is incomplete pending reclassification of documents from group B29C 48/475. Groups B29C 48/475 and B29C 48/48 should be considered in order to perform a complete search.
- M B29C 48/485
- • • Hydrostatic extrusion
- WARNING
Group B29C 48/485 is incomplete pending reclassification of documents from group B29C 48/475. Groups B29C 48/475 and B29C 48/485 should be considered in order to perform a complete search.
- M B29C 48/49
- • • using two or more extruders to feed one die or nozzle
- WARNING
Group B29C 48/49 is impacted by reclassification into groups B29C 48/495, B29C 48/16, B29C 48/17, B29C 48/175, B29C 48/18, B29C 48/185, B29C 48/19, B29C 48/20, B29C 48/21, B29C 48/22, and B29C 48/23. All groups listed in this Warning should be considered in order to perform a complete search.
- M B29C 48/495
- • • Feed-blocks (extrusion moulding of multi-component articles [B29C 48/16](#))
- WARNING
Group B29C 48/495 is incomplete pending reclassification of documents from group B29C 48/49. Groups B29C 48/49 and B29C 48/495 should be considered in order to perform a complete search.
- U B29C 48/50
- • • Details of extruders

- M B29C 48/505 Screws
- WARNING
Group B29C 48/505 is impacted by reclassification into groups B29C 48/58 and B29C 48/635.
Groups B29C 48/505, B29C 48/58, and B29C 48/635 should be considered in order to perform a complete search.
- M B29C 48/51 with internal flow passages, e.g. for molten material
- WARNING
Group B29C 48/51 is impacted by reclassification into group B29C 48/515.
Groups B29C 48/51 and B29C 48/515 should be considered in order to perform a complete search.
- M B29C 48/515 for auxiliary fluids, e.g. foaming agents
- WARNING
Group B29C 48/515 is incomplete pending reclassification of documents from groups B29C 48/51 and B29C 48/82.
Groups B29C 48/51, B29C 48/82, and B29C 48/515 should be considered in order to perform a complete search.
- M B29C 48/52 with an outer diameter varying along the longitudinal axis, e.g. for obtaining different thread clearance
- WARNING
Group B29C 48/52 is impacted by reclassification into group B29C 48/525.
Groups B29C 48/52 and B29C 48/525 should be considered in order to perform a complete search.
- M B29C 48/525 Conical screws
- WARNING
Group B29C 48/525 is incomplete pending reclassification of documents from group B29C 48/52.
Groups B29C 48/52 and B29C 48/525 should be considered in order to perform a complete search.
- M B29C 48/58 provided with seal ring elements, i.e. elements of generally circular and tapered shape for preventing the back flow of the melt
- WARNING
Group B29C 48/58 is incomplete pending reclassification of documents from group B29C 48/505.
Groups B29C 48/505 and B29C 48/58 should be considered in order to perform a complete search.
- M B29C 48/59 characterised by details of the thread, i.e. the shape of a single thread of the material-feeding screw
- WARNING
Group B29C 48/59 is impacted by reclassification into groups B29C 48/595, B29C 48/60, B29C 48/605, B29C 48/61, and B29C 48/615.
All groups listed in this Warning should be considered in order to perform a complete search.

- M B29C 48/595 the thread having non-uniform width

WARNING
 Group B29C 48/595 is incomplete pending reclassification of documents from group B29C 48/59. Groups B29C 48/59 and B29C 48/595 should be considered in order to perform a complete search.
- M B29C 48/60 Thread tops

WARNING
 Group B29C 48/60 is incomplete pending reclassification of documents from group B29C 48/59. Groups B29C 48/59 and B29C 48/60 should be considered in order to perform a complete search.
- M B29C 48/605 the thread being discontinuous

WARNING
 Group B29C 48/605 is incomplete pending reclassification of documents from group B29C 48/59. Groups B29C 48/59 and B29C 48/605 should be considered in order to perform a complete search.
- M B29C 48/61 Threads having wavy profiles

WARNING
 Group B29C 48/61 is incomplete pending reclassification of documents from group B29C 48/59. Groups B29C 48/59 and B29C 48/61 should be considered in order to perform a complete search.
- M B29C 48/615 Threads having varying helix angles

WARNING
 Group B29C 48/615 is incomplete pending reclassification of documents from group B29C 48/59. Groups B29C 48/59 and B29C 48/615 should be considered in order to perform a complete search.
- M B29C 48/635 Eccentrically rotating screws; Screws revolving around an axis other than their central axis

WARNING
 Group B29C 48/635 is incomplete pending reclassification of documents from group B29C 48/505. Groups B29C 48/505 and B29C 48/635 should be considered in order to perform a complete search.
- M B29C 48/64 Screws with two or more threads

WARNING
 Group B29C 48/64 is impacted by reclassification into group B29C 48/66. Groups B29C 48/64 and B29C 48/66 should be considered in order to perform a complete search.

- M B29C 48/66 Barrier threads, i.e. comprising primary and secondary threads whereby the secondary thread provides clearance to the barrel for material movement
- WARNING
Group B29C 48/66 is incomplete pending reclassification of documents from group B29C 48/64.
Groups B29C 48/64 and B29C 48/66 should be considered in order to perform a complete search.
- U B29C 48/69 Filters or screens for the moulding material
- M B29C 48/691 Arrangements for replacing filters, e.g. with two parallel filters for alternate use
- WARNING
Group B29C 48/691 is impacted by reclassification into groups B29C 48/693 and B29C 48/694.
Groups B29C 48/691, B29C 48/693, and B29C 48/694 should be considered in order to perform a complete search.
- M B29C 48/693 Substantially flat filters mounted at the end of an extruder screw perpendicular to the feed axis
- WARNING
Group B29C 48/693 is incomplete pending reclassification of documents from group B29C 48/691.
Groups B29C 48/691 and B29C 48/693 should be considered in order to perform a complete search.
- M B29C 48/694 Cylindrical or conical filters
- WARNING
Group B29C 48/694 is incomplete pending reclassification of documents from group B29C 48/691.
Groups B29C 48/691 and B29C 48/694 should be considered in order to perform a complete search.
- M B29C 48/695 Flow dividers, e.g. breaker plates
- WARNING
Group B29C 48/695 is incomplete pending reclassification of documents from group B29C 48/255.
Groups B29C 48/255 and B29C 48/695 should be considered in order to perform a complete search.
- M B29C 48/70 comprising means for dividing, distributing and recombining melt flows
- WARNING
Group B29C 48/70 is incomplete pending reclassification of documents from group B29C 48/255.
Groups B29C 48/255 and B29C 48/70 should be considered in order to perform a complete search.
- M B29C 48/705 {in the die zone, e.g. to create flow homogeneity}
- WARNING
Group B29C 48/705 is incomplete pending reclassification of documents from group B29C 48/255.
Groups B29C 48/255 and B29C 48/705 should be considered in order to perform a complete search.

- M B29C 48/71
- • • • • for layer multiplication (extrusion of multi-component articles [B29C 48/16](#))
- WARNING
Group B29C 48/71 is incomplete pending reclassification of documents from group B29C 48/255. Groups B29C 48/255 and B29C 48/71 should be considered in order to perform a complete search.
- U B29C 48/78
- • Thermal treatment of the extrusion moulding material or of preformed parts or layers, e.g. by heating or cooling
- U B29C 48/80
- • • at the plasticising zone, e.g. by heating cylinders
- M B29C 48/82
- • • • Cooling ([B29C 48/84](#) takes precedence)
- WARNING
Group B29C 48/82 is impacted by reclassification into groups B29C 48/515, B29C 48/84, B29C 48/845 and B29C 48/85. All groups listed in this Warning should be considered in order to perform a complete search.
- M B29C 48/84
- • • • by heating or cooling the feeding screws (for hollow screws [B29C 48/515](#))
- WARNING
Groups B29C 48/84, B29C 48/845 and B29C 48/85 are incomplete pending reclassification of documents from group B29C 48/82. All groups listed in this Warning should be considered in order to perform a complete search.
- M B29C 48/88
- • Thermal treatment of the stream of extruded material, e.g. cooling
- NOTE
When classifying in this group, forms or shapes of products are further classified in groups [B29C 48/03](#) - [B29C 48/13](#)
- WARNING
Group B29C 48/88 is impacted by reclassification into groups B29C 48/885 and B29C 48/89. Groups B29C 48/88, B29C 48/885, and B29C 48/89 should be considered in order to perform a complete search.
- M B29C 48/885
- • • External treatment, e.g. by using air rings for cooling tubular films
- WARNING
Group B29C 48/885 is incomplete pending reclassification of documents from group B29C 48/88. Groups B29C 48/88 and B29C 48/885 should be considered in order to perform a complete search.
- M B29C 48/89
- • • Internal treatment, e.g. by applying an internal cooling fluid stream
- WARNING
Group B29C 48/89 is incomplete pending reclassification of documents from group B29C 48/88. Groups B29C 48/88 and B29C 48/89 should be considered in order to perform a complete search.
- M B29C 48/94
- • Lubricating
- WARNING
Group B29C 48/94 is impacted by reclassification into group B29C 48/95.

~~Groups B29C 48/94 and B29C 48/95 should be considered in order to perform a complete search.~~

- M B29C 48/95
- • by adding lubricant to the moulding material

WARNING

~~Group B29C 48/95 is incomplete pending reclassification of documents from group B29C 48/94.
Groups B29C 48/94 and B29C 48/95 should be considered in order to perform a complete search.~~

Project: RP0402-F (B29C)

- M B29C 64/00
- Additive manufacturing, i.e. manufacturing of three-dimensional [3D] objects by additive deposition, additive agglomeration or additive layering, e.g. by 3D printing, stereolithography or selective laser sintering**

WARNING

~~Group B29C 64/00 is impacted by reclassification into groups B29C 64/10- B29C 64/379.
All groups listed in this Warning should be considered in order to perform a complete search.~~

- M B29C 64/10
- Processes of additive manufacturing

WARNING

~~Group B29C 64/10 is incomplete pending reclassification of documents from group B29C 64/00.
Groups B29C 64/10 and B29C 64/00 should be considered in order to perform a complete search.~~

- M B29C 64/106
- • using only liquids or viscous materials, e.g. depositing a continuous bead of viscous material

WARNING

~~Group B29C 64/106 is impacted by reclassification into group B29C 64/118.
Groups B29C 64/106 and B29C 64/118 should be considered in order to perform a complete search.~~

- M B29C 64/118
- • using filamentary material being melted, e.g. fused deposition modelling [FDM]

WARNING

~~Group B29C 64/118 is incomplete pending reclassification of documents from group B29C 64/106.
Groups B29C 64/106 and B29C 64/118 should be considered in order to perform a complete search.~~

- M B29C 64/141
- • using only solid materials

WARNING

~~Group B29C 64/141 is impacted by reclassification into group B29C 64/147.
Groups B29C 64/141 and B29C 64/147 should be considered in order to perform a complete search.~~

- M B29C 64/147
- • using sheet material, e.g. laminated object manufacturing [LOM] or laminating sheet material precut to local cross sections of the 3D object

WARNING

~~Group B29C 64/147 is incomplete pending reclassification of documents from group B29C 64/141.~~

~~Groups B29C 64/141 and B29C 64/147 should be considered in order to perform a complete search.~~

M B29C 64/159

- using only gaseous substances, e.g. vapour deposition

WARNING

~~Group B29C 64/159 is incomplete pending reclassification of documents from group B29C 64/00.
Groups B29C 64/00 and B29C 64/159 should be considered in order to perform a complete search.~~

M B29C 64/171

- specially adapted for manufacturing multiple 3D objects

WARNING

~~Group B29C 64/171 – B29C 64/182 are incomplete pending reclassification of documents from group B29C 64/00.
Groups B29C 64/00 and B29C 64/171 – B29C 64/182 should be considered in order to perform a complete search.~~

M B29C 64/188

- involving additional operations performed on the added layers, e.g. smoothing, grinding or thickness control (surface shaping [B29C 59/00](#); after-treatment of articles without altering their shape [B29C 71/00](#))

WARNING

~~Group B29C 64/188 and B29C 64/194 are incomplete pending reclassification of documents from group B29C 64/00.
Groups B29C 64/00, B29C 64/188 and B29C 64/194 should be considered in order to perform a complete search.~~

M B29C 64/20

- Apparatus for additive manufacturing; Details thereof or accessories therefor

WARNING

~~Group B29C 64/20 is impacted by reclassification into groups B29C 64/205–B29C 64/379.
All groups listed in this Warning should be considered in order to perform a complete search.~~

M B29C 64/205

- Means for applying layers

WARNING

~~Groups B29C 64/205 – B29C 64/223 are incomplete pending reclassification of documents from group B29C 64/20.
Groups B29C 64/20 and B29C 64/205 – B29C 64/223 should be considered in order to perform a complete search.~~

M B29C 64/227

- Driving means

WARNING

~~Groups B29C 64/227 – B29C 64/241 are incomplete pending reclassification of documents from group B29C 64/20.
Groups B29C 64/20 and B29C 64/227 – B29C 64/241 should be considered in order to perform a complete search.~~

M B29C 64/245

- Platforms or substrates (support structures intended to be sacrificed after manufacture [B29C 64/40](#))

WARNING

~~Group B29C 64/245 is incomplete pending reclassification of documents from group B29C 64/20.
Groups B29C 64/20 and B29C 64/245 should be considered in order to perform a complete search.~~

- M B29C 64/25
- Housings, e.g. machine housings
- WARNING
Group B29C 64/25 is incomplete pending reclassification of documents from group B29C 64/20.
Groups B29C 64/20 and B29C 64/25 should be considered in order to perform a complete search.
- M B29C 64/255
- Enclosures for the building material, e.g. powder containers
- WARNING
Group B29C 64/255 and B29C 64/259 are incomplete pending reclassification of documents from group B29C 64/20.
Groups B29C 64/20, B29C 64/255 and B29C 64/259 should be considered in order to perform a complete search.
- M B29C 64/264
- Arrangements for irradiation
- WARNING
Groups B29C 64/264 — B29C 64/291 are incomplete pending reclassification of documents from group B29C 64/20.
Groups B29C 64/20 and B29C 64/264 — B29C 64/291 should be considered in order to perform a complete search.
- M B29C 64/295
- Heating elements
- WARNING
Group B29C 64/295 is incomplete pending reclassification of documents from group B29C 64/20.
Groups B29C 64/20 and B29C 64/295 should be considered in order to perform a complete search.
- M B29C 64/30
- Auxiliary operations or equipment
- WARNING
Groups B29C 64/30 — B29C 64/343 are incomplete pending reclassification of documents from groups B29C 64/00 and B29C 64/20.
All groups listed in this Warning should be considered in order to perform a complete search.
- M B29C 64/35
- Cleaning
- WARNING
Group B29C 64/35 is impacted by reclassification into group B29C 64/357.
Groups B29C 64/35 and B29C 64/357 should be considered in order to perform a complete search.
- M B29C 64/357
- Recycling
- WARNING
Group B29C 64/357 is incomplete pending reclassification of documents from group B29C 64/35.
Groups B29C 64/20 and B29C 64/357 should be considered in order to perform a complete search.
- M B29C 64/364
- Conditioning of environment
- WARNING
Groups B29C 64/364 and B29C 64/371 are incomplete pending reclassification of documents from groups B29C 64/00 and B29C 64/20.
All groups listed in this Warning should be considered in order to perform a complete search.

- M B29C 64/379
- • Handling of additively manufactured objects, e.g. using robots
- WARNING**
~~Group B29C 64/379 is incomplete pending reclassification of documents from groups B29C 64/00 and B29C 64/20.~~
~~Groups B29C 64/00, B29C 64/20, and B29C 64/379 should be considered in order to perform a complete search.~~
- M B29C 64/386
- • Data acquisition or data processing for additive manufacturing
- WARNING**
~~Group B29C 64/386 is impacted by reclassification into group B29C 64/393.~~
~~Groups B29C 64/386 and B29C 64/393 should be considered in order to perform a complete search.~~
- M B29C 64/393
- • for controlling or regulating additive manufacturing processes
- WARNING**
~~Group B29C 64/393 is incomplete pending reclassification of documents from group B29C 64/386.~~
~~Groups B29C 64/386 and B29C 64/393 should be considered in order to perform a complete search.~~

Project: RP0447-F (B41J)

- U B41J 3/00
- Typewriters or selective printing or marking mechanisms, {e.g. ink-jet printers, thermal printers} characterised by the purpose for which they are constructed (cryptographic typewriters [G09C 3/00](#))**
- U B41J 3/407
- for marking on special material (printing on special surfaces [B41F 7/00](#); {apparatus or processes for manufacturing printed circuits by printing or dispensing a conductive paste or ink [H05K 3/1241](#)})
- M B41J 3/4073
- • {Printing on three-dimensional objects not being in sheet or web form, e.g. spherical or cubic objects ([B41J 3/283](#), [B41J 3/286](#) take precedence; building up a 3D object using individual droplets from jetting heads [B29C 64/112](#))}
- WARNING**
~~Group B41J 3/4073 is impacted by reclassification into groups B41J 3/40731 and B41J 3/40733.~~
~~All groups listed in this Warning should be considered in order to perform a complete search.~~
- M B41J 3/40731
- • {Holders for objects, e. g. holders specially adapted to the shape of the object to be printed or adapted to hold several objects}
- WARNING**
~~Group B41J 3/40731 is incomplete pending reclassification of documents from group B41J 3/4073.~~
~~Groups B41J 3/40731 and B41J 3/4073 should be considered in order to perform a complete search.~~
- M B41J 3/40733
- • {Printing on cylindrical or rotationally symmetrical objects, e. g. on bottles}
- WARNING**
~~Group B41J 3/40733 is incomplete pending reclassification of documents from group B41J 3/4073.~~
~~Groups B41J 3/40733 and B41J 3/4073 should be considered in order to perform a complete search.~~

Project: RP0686 (B60C)

M B60C **VEHICLE TYRES ~~TYRE INFLATION~~; ~~TYRE INFLATION~~; TYRE CHANGING OR REPAIRING; REPAIRING, OR CONNECTING VALVES TO; INFLATABLE ELASTIC BODIES IN GENERAL; DEVICES OR ARRANGEMENTS RELATED TO TYRES**

NOTES

1. In this subclass, the term "tyre" is to be understood as a separate ground-engaging, continuous element outside the periphery of the wheel rim and includes the tyre casing, cover, or jacket and any insert, e.g. inner tube. In the groups relating to repair or connection of valves, the term "tyre" is to be understood to include also inflatable elastic bodies other than tyres or inner tubes

2. Attention is drawn to the note following the title of class [B60](#).

WARNINGS

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

[B60C 11/113](#) covered by [B60C 11/0311](#)

[B60C 11/117](#) covered by [B60C 11/032](#)

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

U B60C 3/00

Tyres characterised by the transverse section

M B60C 3/06

• ~~Asymmetric {~~asymmetric~~(~~asymmetric bead seats~~ [B60C 15/0236](#); ~~asymmetric bead reinforcement~~ [B60C 2015/0696](#))}~~

U B60C 5/00

Inflatable pneumatic tyres or inner tubes ([B60C 1/00](#), [B60C 9/00](#) - [B60C 17/00](#) take precedence)

C B60C 5/002

• {filled at least partially with foam material}

WARNING

Group [B60C 5/002](#) is impacted by reclassification into groups [B60C 7/101](#), [B60C 7/1015](#) and [B60C 7/121](#).

Groups [B60C 5/002](#), [B60C 7/101](#), [B60C 7/1015](#) and [B60C 7/121](#) should be considered in order to perform a complete search.

M B60C 5/10

• ~~→~~ formed as a single discontinuous ring with contiguous ends which may be connected together

U B60C 7/00

Non-inflatable or solid tyres ([B60C 1/00](#) takes precedence)

C B60C 7/10

• characterised by means for increasing resiliency

WARNING

Group [B60C 7/10](#) is impacted by reclassification into groups [B60C 7/101](#) and [B60C 7/121](#).

Groups [B60C 7/10](#), [B60C 7/101](#) and [B60C 7/121](#) should be considered in order to perform a complete search.

N B60C 7/101

• {Tyre casings enclosing a distinct core, e.g. foam (enclosed chambers defined by a distinct core [B60C 7/121](#))}

WARNING

Group [B60C 7/101](#) is incomplete pending reclassification of documents from groups [B60C 5/002](#), [B60C 7/10](#), [B60C 7/102](#), [B60C 7/12](#), [B60C 7/125](#) and [B60C 17/065](#).

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

- N B60C 7/1015
- • • {using foam material}
- WARNING
Group [B60C 7/1015](#) is incomplete pending reclassification of documents from groups [B60C 5/002](#) and [B60C 7/105](#).
Groups [B60C 5/002](#), [B60C 7/105](#) and [B60C 7/1015](#) should be considered in order to perform a complete search.
- C B60C 7/102
- • {Tyres built-up with separate rubber parts}
- WARNING
Group [B60C 7/102](#) is impacted by reclassification into groups [B60C 7/101](#) and [B60C 7/121](#).
Groups [B60C 7/102](#), [B60C 7/101](#) and [B60C 7/121](#) should be considered in order to perform a complete search.
- C B60C 7/105
- • {using foam material ([B60C 7/1015](#) takes precedence)}
- WARNING
Group [B60C 7/105](#) is impacted by reclassification into group [B60C 7/1015](#).
Groups [B60C 7/105](#) and [B60C 7/1015](#) should be considered in order to perform a complete search.
- D B60C 2007/107
- • {comprising lateral openings}
- <administratively transferred to [B60C 7/107](#) INV>
- N B60C 7/107
- • {comprising lateral openings}
- C B60C 7/12
- • using enclosed chambers, e.g. gas-filled
- WARNING
Group [B60C 7/12](#) is impacted by reclassification into groups [B60C 7/101](#) and [B60C 7/121](#).
Groups [B60C 7/12](#), [B60C 7/101](#) and [B60C 7/121](#) should be considered in order to perform a complete search.
- N B60C 7/121
- • • {enclosed chambers defined by a distinct core}
- WARNING
Group [B60C 7/121](#) is incomplete pending reclassification of documents from groups [B60C 5/002](#), [B60C 7/10](#), [B60C 7/102](#), [B60C 7/12](#) and [B60C 7/125](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- C B60C 7/125
- • • {enclosed chambers defined between rim and tread}
- WARNING
Group [B60C 7/125](#) is impacted by reclassification into groups [B60C 7/101](#) and [B60C 7/121](#).
Groups [B60C 7/125](#), [B60C 7/101](#) and [B60C 7/121](#) should be considered in order to perform a complete search.
- U B60C 7/14
- • using springs
- U B60C 7/143
- • • {having a lateral extension disposed in a plane parallel to the wheel axis}
- D B60C 2007/146
- • • {extending substantially radially, e.g. like spokes}
- <administratively transferred to [B60C 7/146](#) INV>
- N B60C 7/146
- • • {extending substantially radially, e.g. like spokes}

- U B60C 9/00** **Reinforcements or ply arrangement of pneumatic tyres (inserts having reinforcing means [B60C 5/08](#); bead structure, e.g. turnup or overlap construction, [B60C 15/00](#))**
- NOTE**
When classifying in this group, classification is also made in subclass [B32B](#) insofar as any layered product is concerned
- U B60C 9/18 · Structure or arrangement of belts or breakers, crown-reinforcing or cushioning layers
- M B60C 9/1835 · · {Rubber strips or cushions at the belt edges ~~(compositions [B60C 2001/0075](#))~~}
- U B60C 11/00** **Tyre tread bands; Tread patterns; Anti-skid inserts**
- U B60C 11/24 · Wear-indicating arrangements
- M B60C 11/246 · · {Tread wear monitoring systems ~~(tyre pressure monitoring [B60C 23/04](#))~~}
- U B60C 13/00** **Tyre sidewalls; Protecting, decorating, marking, or the like, thereof ([B60C 17/08](#) takes precedence; tyre shoulders [B60C 11/01](#); removable tyre sidewall trim rings [B60B 7/01](#))**
- M B60C 13/003 · {characterised by sidewall curvature ~~(carcass ply curvature [B60C 9/0292](#))~~}
- U B60C 15/00** **Tyre beads, e.g. ply turn-up or overlap**
- U B60C 15/02 · Seating or securing beads on rims (sealing means between beads and rims of tubeless tyres [B60C 5/16](#); means for securing solid tyres on rims [B60C 7/24](#))
- M B60C 15/0236 · · {Asymmetric bead seats, e.g. different bead diameter or inclination angle (asymmetric transverse section [B60C 3/06](#); ~~asymmetric bead reinforcement [B60C 2015/0696](#)~~)}
- U B60C 15/06 · Flipper strips, fillers, or chafing strips {and reinforcing layers for the construction of the bead}
- M B60C 15/0603 · · {characterised by features of the bead filler or apex ~~(compositions of the apex rubber [B60C 2001/0058](#))~~}
- U B60C 17/00** **Tyres characterised by means enabling restricted operation in damaged or deflated condition; Accessories therefor**
- U B60C 17/04 · utilising additional non-inflatable supports which become load-supporting in emergency
- U B60C 17/06 · · resilient
- C B60C 17/065 · · · {made-up of foam inserts (tyres filled with foam [B60C 5/002](#))}

WARNING

Group [B60C 17/065](#) is impacted by reclassification into group [B60C 7/101](#). Groups [B60C 17/065](#) and [B60C 7/101](#) should be considered in order to perform a complete search.

Project: RP0718 (B60G)

- M B60G** **VEHICLE SUSPENSION ARRANGEMENTS (air-cushion vehicles [B60V](#); {cycle suspensions [B62K 25/00](#)})**

NOTES

1. Attention is drawn to the **explanatory note following the class title** *Note following the title of class [B60](#).*
2. {Indexing codes [B60G 2200/00](#) - [B60G 2800/00](#) are dedicated to particular aspects of suspension arrangements:
 - [B60G 2200/00](#) refers to the type of suspension arrangement;
 - [B60G 2202/00](#) refers to the suspension elements used (springs, dampers and actuators);

- [B60G 2204/00](#) refers to mounting features of suspension elements;
- [B60G 2206/00](#) refers to constructional and manufacturing details of suspension elements;
- [B60G 2300/00](#) refers to the type of vehicle;
- [B60G 2400/00](#) - [B60G 2800/00](#) refer to the electronic control of suspension arrangements, whereby:
 - [B60G 2400/00](#) refers to input parameters of the control;
 - [B60G 2401/00](#) refers to types of sensors used;
 - [B60G 2500/00](#) refers to the controlled action or device;
 - [B60G 2600/00](#) refers to particular details of the control system;
 - [B60G 2800/00](#) refers to the result to be achieved by the control action.

}

~~3. Groups B60G 2200/00 - B60G 2800/00 are to be used in multi-aspect classification, so that subject matter characterised by aspects covered by more than one of these groups, which is considered to represent information of interest for search, should be classified in a combination of at least one relevant "invention information" symbol in association with indexing codes from each of these groups.~~

WARNINGS

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

[B60G 23/00](#) covered by [B60G 17/0165](#)

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

Project: RP0444-F (B60H)

U B60H 1/00

Heating, cooling or ventilating {[HVAC]} devices (heating, cooling or ventilating devices providing other air treatment, the other treatment being relevant, [B60H 3/00](#); ventilating solely by opening windows, doors, roof parts, or the like [B60J](#); heating or ventilating devices for vehicle seats [B60N 2/56](#); vehicle window or windscreen cleaners using air, e.g. defrosters, [B60S 1/54](#))

NOTE

In this group and its subgroups, as well as in patent documents, the following abbreviation is used:

- HVAC Heating, Ventilating and Air Conditioning

M B60H 1/00271

- {HVAC devices specially adapted for particular vehicle parts or components and being connected to the vehicle HVAC unit}

WARNING

~~Group B60H 1/00271 is impacted by reclassification into group B60H 1/00295. Groups B60H 1/00271 and B60H 1/00295 should be considered in order to perform a complete search.~~

M B60H 1/00295

- {for trim components, e.g. panels, dashboards, liners}

WARNING

~~Group B60H 1/00295 is incomplete pending reclassification of documents from group B60H 1/00271. Groups B60H 1/00295 and B60H 1/00271 should be considered in order to perform a complete search.~~

- M B60H 1/00492
- {comprising regenerative heating or cooling means, e.g. heat accumulators}
- WARNING
Group B60H 1/00492 is impacted by reclassification into group B60H 1/00499. Groups B60H 1/00492 and B60H 1/00499 should be considered in order to perform a complete search.
- M B60H 1/00499
- {Heat or cold storage without phase change including solid bodies, e.g. batteries}
- WARNING
Group B60H 1/00499 is incomplete pending reclassification of documents from groups B60H 1/00492 and B60H 1/005. Groups B60H 1/00492, B60H 1/005 and B60H 1/00499 should be considered in order to perform a complete search.
- M B60H 1/005
- {Regenerative cooling means, e.g. cold accumulators}
- WARNING
Group B60H 1/005 is impacted by reclassification into group B60H 1/00499. Groups B60H 1/005 and B60H 1/00499 should be considered in order to perform a complete search.
- M B60H 1/00642
- {Control systems or circuits; Control members or indication devices for heating, cooling or ventilating devices ([B60H 1/3201](#) - [B60H 1/3208](#), [B60H 1/3225](#) take precedence)}
- WARNING
Group B60H 1/00642 is impacted by reclassification into groups B60H 1/0073 and B60H 2001/00733. Groups B60H 1/00642, B60H 1/0073 and B60H 2001/00733 should be considered in order to perform a complete search.
- M B60H 1/0073
- {Control systems or circuits characterised by particular algorithms or computational models, e.g. fuzzy logic or dynamic models}
- WARNING
Group B60H 1/0073 is incomplete pending reclassification of documents from groups B60H 1/00642, B60H 1/00735 and B60H 1/00964. All groups listed in this Warning should be considered in order to perform a complete search.
- M B60H 2001/00733
- • {Computational models modifying user-set values}
- WARNING
Group B60H 2001/00733 is incomplete pending reclassification of documents from groups B60H 1/00642, B60H 1/00735 and B60H 1/00964. All groups listed in this Warning should be considered in order to perform a complete search.
- M B60H 1/00735
- {Control systems or circuits characterised by their input, i.e. by the detection, measurement or calculation of particular conditions, e.g. signal treatment, dynamic models}
- WARNING
Group B60H 1/00735 is impacted by reclassification into groups B60H 1/0073 and B60H 2001/00733. Groups B60H 1/00735, B60H 1/0073 and B60H 2001/00733 should be considered in order to perform a complete search.
- U B60H 1/00814
- {Control systems or circuits characterised by their output, for controlling particular components of the heating, cooling or ventilating installation}

- M B60H 1/00878 . . . {the components being temperature regulating devices}
- WARNING
Group B60H 1/00878 is impacted by reclassification into group B60H 2001/00961.
Groups B60H 1/00878 and B60H 2001/00961 should be considered in order to perform a complete search.
- M B60H 2001/00928 . . . {comprising a secondary circuit}
- WARNING
Group B60H 2001/00928 is impacted by reclassification into group B60H 2001/00961.
All groups listed in this Warning should be considered in order to perform a complete search.
- M B60H 2001/00935 . . . {comprising four way valves for controlling the fluid direction}
- WARNING
Group B60H 2001/00935 is impacted by reclassification into group B60H 2001/00961.
All groups listed in this Warning should be considered in order to perform a complete search.
- M B60H 2001/00942 . . . {comprising a plurality of heat exchangers, e.g. for multi zone heating or cooling}
- WARNING
Group B60H 2001/00942 is impacted by reclassification into group B60H 2001/00961.
All groups listed in this Warning should be considered in order to perform a complete search.
- M B60H 2001/00949 . . . {comprising additional heating/cooling sources, e.g. second evaporator}
- WARNING
Group B60H 2001/00949 is impacted by reclassification into group B60H 2001/00961.
All groups listed in this Warning should be considered in order to perform a complete search.
- M B60H 2001/00957 . . . {comprising locations with heat exchange within the refrigerant circuit itself, e.g. cross-, counter-, or parallel heat exchange}
- WARNING
Group B60H 2001/00957 is impacted by reclassification into group B60H 2001/00961.
All groups listed in this Warning should be considered in order to perform a complete search.
- M B60H 2001/00961 . . . {comprising means for defrosting outside heat exchangers}
- WARNING
Group B60H 2001/00961 is incomplete pending reclassification of documents from groups B60H 1/00878, B60H 2001/00928, B60H 2001/00935, B60H 2001/00942, B60H 2001/00949 and B60H 2001/00957.
All groups listed in this Warning should be considered in order to perform a complete search.

- M B60H 1/00964
- {Control systems or circuits characterised by including features for automatic and non-automatic control, e.g. for changing from automatic to manual control}
- WARNING**
Group B60H 1/00964 is impacted by reclassification into groups B60H 1/0073 and B60H 2001/00733.
Groups B60H 1/00964, B60H 1/0073 and B60H 2001/00733 should be considered in order to perform a complete search.
- U B60H 1/02
- the heat being derived from the propulsion plant {(B60H 1/00492 takes precedence)}
- M B60H 1/03
- • and from a source other than the propulsion plant
- WARNING**
Group B60H 1/03 is impacted by reclassification into group B60H 1/039.
Groups B60H 1/03 and B60H 1/039 should be considered in order to perform a complete search.
- M B60H 1/039
- • • {from air leaving the interior of the vehicle, i.e. heat recovery}
- WARNING**
Group B60H 1/039 is incomplete pending reclassification of documents from group B60H 1/03.
Groups B60H 1/03 and B60H 1/039 should be considered in order to perform a complete search.
- U B60H 1/22
- the heat being derived otherwise than from the propulsion plant {(B60H 1/0025, B60H 1/00492 and B60H 1/03 take precedence)}
- M B60H 1/2215
- • {the heat being derived from electric heaters}
- WARNING**
Group B60H 1/2215 is impacted by reclassification into groups B60H 1/2226 and B60H 1/2227.
Groups B60H 1/2215, B60H 1/2226 and B60H 1/2227 should be considered in order to perform a complete search.
- M B60H 1/2226
- • • {Electric heaters using radiation}
- WARNING**
Group B60H 1/2226 is incomplete pending reclassification of documents from group B60H 1/2215.
Groups B60H 1/2215 and B60H 1/2226 should be considered in order to perform a complete search.
- M B60H 1/2227
- • • {Electric heaters incorporated in vehicle trim components, e.g. panels or linings}
- WARNING**
Group B60H 1/2227 is incomplete pending reclassification of documents from group B60H 1/2215.
Groups B60H 1/2215 and B60H 1/2227 should be considered in order to perform a complete search.
- U B60H 1/32
- Cooling devices {(B60H 1/00478, B60H 1/005 take precedence;} vehicles adapted to transport refrigerated goods B60P 3/20)
- M B60H 1/3201
- • {using absorption or adsorption}
- WARNING**
Group B60H 1/3201 is impacted by reclassification into groups B60H 1/32014 and B60H 1/32014.

~~Groups B60H 1/3201, B60H 1/32011 and B60H 1/32014 should be considered in order to perform a complete search.~~

- M B60H 1/32011
- • {using absorption, e.g. using Li-Br and water}

WARNING

~~Group B60H 1/32011 is incomplete pending reclassification of documents from group B60H 1/3201.
Groups B60H 1/3201 and B60H 1/32011 should be considered in order to perform a complete search.~~

- M B60H 1/32014
- • {using adsorption, e.g. using Zeolite and water}

WARNING

~~Group B60H 1/32014 is incomplete pending reclassification of documents from group B60H 1/3201.
Groups B60H 1/3201 and B60H 1/32014 should be considered in order to perform a complete search.~~

- M B60H 1/3204
- • {using compression ([B60H 1/3233](#) takes precedence)}

WARNING

~~Group B60H 1/3204 is impacted by reclassification into groups B60H 1/3228, B60H 1/32281 and B60H 1/32284.
All groups listed in this Warning should be considered in order to perform a complete search.~~

- M B60H 1/3205
- • {Control means therefor}

WARNING

~~Group B60H 1/3205 is impacted by reclassification into groups B60H 1/3228, B60H 1/32281 and B60H 1/32284.
All groups listed in this Warning should be considered in order to perform a complete search.~~

- M B60H 1/3222
- • {characterised by the compressor driving arrangements, e.g. clutches, transmissions or multiple drives ([B60H 1/3208](#), [B60H 1/3226](#) take precedence)}

WARNING

~~Group B60H 1/3222 is impacted by reclassification into groups B60H 1/3228, B60H 1/32281 and B60H 1/32284.
All groups listed in this Warning should be considered in order to perform a complete search.~~

- M B60H 1/3223
- • {characterised by the arrangement or type of the compressor ([B60H 1/3222](#) takes precedence)}

WARNING

~~Group B60H 1/3223 is impacted by reclassification into groups B60H 1/3228, B60H 1/32281 and B60H 1/32284.
All groups listed in this Warning should be considered in order to perform a complete search.~~

- M B60H 1/3225
- • {characterised by safety arrangements, e.g. compressor anti-seizure means or by signalling devices}

WARNING

~~Group B60H 1/3225 is impacted by reclassification into groups B60H 1/3228, B60H 1/32281 and B60H 1/32284.
All groups listed in this Warning should be considered in order to perform a complete search.~~

- M B60H 1/3226
- • • {Self-contained devices, i.e. including own drive motor}
- WARNING
Group B60H 1/3226 is impacted by reclassification into groups B60H 1/3228, B60H 1/32281 and B60H 1/32284.
All groups listed in this Warning should be considered in order to perform a complete search.
- M B60H 1/3227
- • • {characterised by the arrangement or the type of heat exchanger, e.g. condenser, evaporator (condensed liquid drainage means [B60H 1/3233](#))}
- WARNING
Group B60H 1/3227 is impacted by reclassification into groups B60H 1/3228, B60H 1/32281 and B60H 1/32284.
All groups listed in this Warning should be considered in order to perform a complete search.
- M B60H 1/3228
- • • {characterised by refrigerant circuit configurations}
- WARNING
Group B60H 1/3228 is incomplete pending reclassification of documents from groups B60H 1/3204, B60H 1/3205, B60H 1/3222, B60H 1/3223, B60H 1/3225, B60H 1/3226, B60H 1/3227, B60H 1/3229, B60H 1/323 and B60H 1/3232.
All groups listed in this Warning should be considered in order to perform a complete search.
- M B60H 1/32281
- • • • {comprising a single secondary circuit, e.g. at evaporator or condenser side}
- WARNING
Group B60H 1/32281 is incomplete pending reclassification of documents from groups B60H 1/3204, B60H 1/3205, B60H 1/3222, B60H 1/3223, B60H 1/3225, B60H 1/3226, B60H 1/3227, B60H 1/3229, B60H 1/323 and B60H 1/3232.
All groups listed in this Warning should be considered in order to perform a complete search.
- M B60H 1/32284
- • • • {comprising two or more secondary circuits, e.g. at evaporator and condenser side}
- WARNING
Group B60H 1/32284 is incomplete pending reclassification of documents from groups B60H 1/3204, B60H 1/3205, B60H 1/3222, B60H 1/3223, B60H 1/3225, B60H 1/3226, B60H 1/3227, B60H 1/3229, B60H 1/323 and B60H 1/3232.
All groups listed in this Warning should be considered in order to perform a complete search.
- M B60H 1/3229
- • • {characterised by constructional features, e.g. housings, mountings, conversion systems ([B60H 1/3227](#), [B60H 1/3233](#) take precedence)}
- WARNING
Group B60H 1/3229 is impacted by reclassification into groups B60H 1/3228, B60H 1/32281 and B60H 1/32284.
All groups listed in this Warning should be considered in order to perform a complete search.

- M B60H 1/323
- • {characterised by comprising auxiliary or multiple systems, e.g. plurality of evaporators, or by involving auxiliary cooling devices}
- WARNING**
Group B60H 1/323 is impacted by reclassification into groups B60H 1/3228, B60H 1/32281 and B60H 1/32284.
All groups listed in this Warning should be considered in order to perform a complete search.
- M B60H 1/3232
- • {particularly adapted for load transporting vehicles ([B60H 1/3226](#) takes precedence)}
- WARNING**
Group B60H 1/3232 is impacted by reclassification into groups B60H 1/3228, B60H 1/32281 and B60H 1/32284.
All groups listed in this Warning should be considered in order to perform a complete search.
- M B60H 1/3233
- • {characterised by condensed liquid drainage means}
- WARNING**
Group B60H 1/3233 is impacted by reclassification into group B60H 1/32331.
Groups B60H 1/3233 and B60H 1/32331 should be considered in order to perform a complete search.
- M B60H 1/32331
- • {comprising means for the use of condensed liquid, e.g. for humidification or for improving condenser performance}
- WARNING**
Group B60H 1/32331 is incomplete pending reclassification of documents from group B60H 1/3233.
Groups B60H 1/3233 and B60H 1/32331 should be considered in order to perform a complete search.

Project: RP0688 (B60K)

- U B60K 20/00 Arrangement or mounting of change-speed gearing control devices in vehicles (movable cabs having special adaptations of vehicle control devices [B62D 33/06](#); such control devices per se [F16H](#))
- U B60K 20/02
- of initiating means (control mechanisms in general [G05G](#))
- M B60K 20/08
- • Dashboard means
- WARNINGS**
1. The groups F16H 59/00 – F16H 63/00 were introduced on 1 May, 1988. These groups include the subject matter of B60K 20/14, which from this date is no longer used for the classification of new documents
2. Documents from the backlog of group B60K 20/14 are in the process of being systematically transferred to groups F16H 59/00 – F16H 63/00
- D B60K 20/14
- • {fluid}
- <administratively transferred to [F16H 59/045](#)>

Project: RP0495-F (B60N)

- U B60N 2/00 Seats specially adapted for vehicles; Arrangement or mounting of seats in vehicles (railway seats [B61D 33/00](#); cycle seats [B62J 1/00](#); aircraft seats [B64D 11/06](#), [B64D 25/04](#), [B64D 25/10](#))
- U B60N 2/80
- Head-rests

- M B60N 2/803
- fixed
- WARNING**
Group B60N 2/803 is incomplete pending reclassification of documents from group B60N 2/879. Groups B60N 2/879 and B60N 2/803 should be considered in order to perform a complete search.
- M B60N 2/806
- movable or adjustable
- WARNING**
Group B60N 2/806 is incomplete pending reclassification of documents from group B60N 2/879. Groups B60N 2/879 and B60N 2/806 should be considered in order to perform a complete search.
- M B60N 2/879
- with additional features not related to head-rest positioning, e.g. heating or cooling devices or loudspeakers
- WARNING**
Group B60N 2/879 is impacted by reclassification into groups B60N 2/803 and B60N 2/806. Groups B60N 2/879, B60N 2/803 and B60N 2/806 should be considered in order to perform a complete search.

Project: RP0718 (B60S)

- U B60S 1/00 **Cleaning of vehicles (by apparatus not integral with vehicle [B60S 3/00](#); cleaning in general [B08B](#); de-icing of aircraft [B64D](#); heating arrangements specially adapted for transparent or reflecting areas [H05B 3/84](#))**
- U B60S 1/02
- Cleaning windscreens, windows or optical devices {(wind deflectors specially adapted for preventing soiling of windows or windscreens [B60J 1/2002](#))}
- U B60S 1/04
- Wipers or the like, e.g. scrapers
- U B60S 1/32
- characterised by constructional features of wiper blade arms {or blades}
- U B60S 1/40
- Connections between blades and arms
- M B60S 1/4003
- {Multi-purpose connections for two or more kinds of arm ends}
- NOTE**
Multi-aspect classification is applied for technical subjects relating to the arms and covered by subgroups B60S 1/4006 – B60S 1/4083

Project: RP0721 (B60W)

- M B60W **CONJOINT CONTROL OF VEHICLE SUB-UNITS OF DIFFERENT TYPE OR DIFFERENT FUNCTION; CONTROL SYSTEMS SPECIALLY ADAPTED FOR HYBRID VEHICLES; ROAD VEHICLE DRIVE CONTROL SYSTEMS FOR PURPOSES NOT RELATED TO THE CONTROL OF A PARTICULAR SUB-UNIT**
- NOTES**
1. This subclass does not cover the control of a single sub-unit; such control is classified in the relevant place for the sub-unit, e.g. [F02D](#), [F16H](#). Where a single sub-unit is controlled by means of signals or commands from other sub-units, the control of this single sub-unit is classified in the relevant place for this sub-unit.

For example, the control of variable-ratio gearing by means of signals from the engine or the accelerator is classified in the subclass for gearing, [F16H](#).

2. Conjoint control of driveline units, e.g. engines, and variable-ratio gearing occurring only transiently during ratio shift and being also characterised by the control of the gearing is also classified in the subclass for gearing, [F16H](#).

~~3. In groups B60W 20/00 - B60W 50/00, the first place priority rule is applied, i.e. at each hierarchical level, classification is made in the first appropriate place.~~

~~4.~~ 3. When classifying in group [B60W 10/00](#), classification must also be made in groups [B60W 20/00](#) - ~~B60W 50/00~~ [B60W 60/00](#) in order to identify the purpose or use of the control.

~~5.~~ 4. In this subclass, the following terms are used with the meanings indicated:

- "conjoint control" means that a programmed or condition-responsive {main} automatic controller on board the vehicle, embodying control logic for vehicle sub-units of different type or different function, sends control signals to actuators of two or more vehicle sub-units, so that the sub-units act together to solve a particular problem or in response to a particular driving condition; {in order to improve stability, comfort or safety by managing the global dynamics of the vehicle};
- "drive control system" means an electronic system on board a road vehicle for automatically controlling the movement {by managing the global dynamics} of that vehicle in order to take certain actions {in order to improve stability, comfort or safety};
- "road vehicle" means a motorised vehicle for transportation on roads, e.g. an automobile, truck or bus;
- "autonomous road vehicle" means a road vehicle capable of controlling all dynamic driving tasks without human intervention during {a plurality of} driving scenarios by using on-board computer hardware and software to execute decision making processes in real-time.
- "sub-unit" means one of the following vehicle systems: {driveline systems, e.g.} propulsion system, clutch system, change-speed gearing system, system for distributing drive torque between front and rear axles, axle differential system, brake system, steering system, suspension system, {and, particularly for hybrid vehicles,} energy storage means, fuel cells, or auxiliary equipment.

WARNING

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

U B60W 50/00

Details of control systems for road vehicle drive control not related to the control of a particular sub-unit {, e.g. process diagnostic or vehicle driver interfaces}

WARNING

Groups [B60W 50/00](#) - [B60W 50/16](#) are incomplete pending reclassification of documents from groups [G05D 1/0061](#), [G05D 1/0088](#), [G05D 1/021](#), [G05D 1/0214](#), [G05D 1/0221](#), and [G05D 1/0223](#).

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

- U B60W 2050/0062 • {Adapting control system settings}
 - T B60W 2050/0075 • • {Automatic parameter input, automatic initialising or calibrating means}
 - D B60W 2050/0077 • • • {involving external transmission of data to or from the vehicle}
- <administratively transferred to [B60W 2556/45](#) ADD and [B60W 2050/0075](#) ADD>

- D B60W 2050/0078 {using Global Position System data}
<administratively transferred to [B60W 2556/50](#) ADD and [B60W 2050/0075](#) ADD>
- D B60W 2050/0079 {using telemetry}
<administratively transferred to [B60W 2556/55](#) ADD and [B60W 2050/0075](#) ADD>
- D B60W 2050/008 {using data transmitted between vehicles, e.g. for platooning, control of inter-vehicle distance}
<administratively transferred to [B60W 2556/65](#) ADD and [B60W 2050/0075](#) ADD>
- D B60W 2050/0081 {using satellite communication}
<administratively transferred to [B60W 2556/60](#) ADD and [B60W 2050/0075](#) ADD>
- U B60W 2050/0083 . . . {Setting, resetting, calibration}
- U B60W 2050/0088 {Adaptive recalibration}
- D B60W 2050/0089 . . . {Historical data record of previous events}
<administratively transferred to [B60W 2556/10](#) ADD and [B60W 2050/0075](#) ADD>
- U B60W 2530/00** **Input parameters relating to vehicle conditions or values, not covered by groups [B60W 2510/00](#) or [B60W 2520/00](#)**
- WARNING
Group [B60W 2530/00](#) - [B60W 2530/20](#) are incomplete pending reclassification of documents from groups [B60K 28/00](#) - [B60K 28/165](#), [G05D 1/0061](#), [G05D 1/0088](#), [G05D 1/021](#), [G05D 1/0214](#), [G05D 1/0221](#), and [G05D 1/0223](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- U B60W 2530/12 . Catalyst or filter state
- N B60W 2530/13 . Mileage
- D B60W 2530/14 . Historical data
<administratively transferred to [B60W 2556/10](#) ADD>
- D B60W 2530/145 . Mileage
<administratively transferred to [B60W 2530/13](#) ADD>

Project: RP0473-F (B63B)

- M B63B** **SHIPS OR OTHER WATERBORNE VESSELS; EQUIPMENT FOR SHIPPING (arrangements of vessel ventilation, heating, cooling, or air-conditioning [B63J 2/00](#); floating substructures as supports of dredgers or soil-shifting machines [E02F 9/06](#))**

NOTE

In this subclass, the indexing codes [B63B 2201/00](#) - [B63B 2241/00](#) are to be used for relevant technical information concerning particular or unusual use, materials, design, methods or means.

WARNING

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

2. Groups ~~[B63B 1/00](#) - [B63B 2241/28](#)~~ are incomplete pending reclassification of documents from groups ~~[B63B 2701/00](#) - [B63B 2770/00](#)~~.

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

D B63B 2701/00
—(Frozen)

Building of the ship's hull

WARNING

Groups B63B 2701/00 — B63B 2770/00 are no longer used for the classification of documents as of January 1, 2020.

The content of these groups is being reclassified into groups B63B 1/00 — B63B 2241/28, B63C 1/00 — B63C 15/00, B63G 1/00 — B63G 2013/027, B63H 1/00 — B63H 25/52, B63J 1/00 — B63J 2099/005.

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

D B63B 2701/02
—(Frozen)

- Steel construction

D B63B 2701/04
—(Frozen)

- Reinforced concrete construction

D B63B 2701/06
—(Frozen)

- Wood construction; Composite construction

D B63B 2701/08
—(Frozen)

- Electric and fusion welding for ships (welding in general B23K)

D B63B 2701/10
—(Frozen)

- Keelsons, floors, double bottoms, tanks, coal bunkers, tunnels, engine and boiler rooms

D B63B 2701/12
—(Frozen)

- Frames, web frames, deck beams, longitudinal girders, coamings, deck pillars

D B63B 2701/14
—(Frozen)

- Deck plating, wooden decks for steel ships

D B63B 2701/16
—(Frozen)

- Shell plating and bulwarks; Fenders; Gunwales; Bilge keels and other elements fixed to the shell

D B63B 2701/18
—(Frozen)

- Longitudinal and transverse bulkheads made of steel or wood

D B63B 2701/20
—(Frozen)

- Stems and keels; Stern frames; Bossings and struts; Propeller guards

D B63B 2701/22
—(Frozen)

- Lining and panelling in wood or metal; Movable partition walls within accommodation spaces; Insulating walls; Stairs; Windshields on decks (internal partitions for buildings E04B 2/00)

D B63B 2702/00
—(Frozen)

Submarines

WARNING

Groups B63B 2702/00 — B63B 2702/14 are no longer used for the classification of documents as of May 1, 2019.

The content of these groups is being reclassified into groups B63B 1/00 — B63B 2241/28, B63C 1/00 — B63C 15/00, B63G 1/00 — B63G 2013/027, B63H 1/00 — B63H 25/52, B63J 1/00 — B63J 2099/005.

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

D B63B 2702/02
—(Frozen)

- Equipment for lifting sunken submarines (Equipment for salvaging sunken vessels or other objects B63C 7/00)

D B63B 2702/04
—(Frozen)

- Arrangements of motors and transmissions in submarines; Propulsion

D B63B 2702/06
—(Frozen)

- Arrangements for the transportation, drydocking, and testing of submarines (drydocking B63C 1/00)

- D B63B 2702/08
—(Frozen) • Arrangements for anchoring of submarines
- D B63B 2702/10
—(Frozen) • Miscellaneous arrangement for submarines
- D B63B 2702/12
—(Frozen) • Submarines of special construction or fitted with special devices or apparatus; Merchant submarines
- D B63B 2702/14
—(Frozen) • Arrangements for detecting and localising submarines (Acoustic detection G01S, electromagnetic detection G01N)
- D B63B 2704/00**
—(Frozen) **Port-holes, windows, doors and other openings in the superstructures**
- WARNING
Group B63B 2704/00 is no longer used for the classification of documents as of May 1, 2019.
The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.
All groups listed in this Warning should be considered in order to perform a complete search.
- D B63B 2705/00**
—(Frozen) **Closets, latrines, swimming pools and washing facilities for ships; Overboard discharges**
- WARNING
Group B63B 2705/00 is no longer used for the classification of documents as of May 1, 2019.
The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.
All groups listed in this Warning should be considered in order to perform a complete search.
- D B63B 2707/00**
—(Frozen) **Doors and closing means**
- WARNING
Group B63B 2707/00 is no longer used for the classification of documents as of May 1, 2019.
The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.
All groups listed in this Warning should be considered in order to perform a complete search.
- D B63B 2708/00**
—(Frozen) **Winches; Capstans**
- WARNING
Groups B63B 2708/00 - B63B 2708/02 is no longer used for the classification of documents as of May 1, 2019.
The content of these groups is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.
All groups listed in this Warning should be considered in order to perform a complete search.
- D B63B 2708/02
—(Frozen) • Winches and capstans driven by electric or electro-hydraulic means

- D B63B 2709/00**
—(Frozen)
- Tables, chairs and other furniture peculiar to vessels**
- WARNING
- Group B63B 2709/00 is no longer used for the classification of documents as of May 1, 2019.
- The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.
- All groups listed in this Warning should be considered in order to perform a complete search.
- D B63B 2710/00**
—(Frozen)
- Miscellaneous equipment for ships, e.g. collision mats, rat guards**
- WARNING
- Group B63B 2710/00 is no longer used for the classification of documents as of May 1, 2019.
- The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.
- All groups listed in this Warning should be considered in order to perform a complete search.
- D B63B 2711/00**
—(Frozen)
- Equipment for watching and measuring the oscillations, the resistance and the movements of ships; Model towing tanks**
- WARNING
- Group B63B 2711/00 is no longer used for the classification of documents as of May 1, 2019.
- The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.
- All groups listed in this Warning should be considered in order to perform a complete search.
- D B63B 2712/00**
—(Frozen)
- Equipment for handling the boats by means of turning davits, i.e. a set formed by the davit, davit foundation, davit drive, boat support, boat guides, boat pulley blocks and winches**
- WARNING
- Group B63B 2712/00 - B63B 2712/02 are no longer used for the classification of documents as of May 1, 2019.
- The content of these groups is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.
- All groups listed in this Warning should be considered in order to perform a complete search.
- D B63B 2712/02**
—(Frozen)
- Equipment for handling the boats by means of swinging davits, i.e. a set formed by the davit, davit foundation, davit drive, boat support, boat guides, boat pulley blocks and winches
- D B63B 2713/00**
—(Frozen)
- Stowing of the boats, i.e. arrangement, chocks, lashing down and transport of the boats on deck**
- WARNING
- Group B63B 2713/00 is no longer used for the classification of documents as of May 1, 2019.
- The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.

B63B 2713/00

(Frozen)

(continued)

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

D B63B 2714/00
—*(Frozen)*

Construction of turning davits, davit foundations and davit drives

WARNING

Groups B63B 2714/00 - B63B 2714/02 are no longer used for the classification of documents as of May 1, 2019.

The content of these groups is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.

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

D B63B 2714/02
—*(Frozen)*

• Construction of swinging davits and other davits and of davit foundation and drives

D B63B 2715/00
—*(Frozen)*

Hydraulic and pneumatic steering gear

WARNING

Group B63B 2715/00 is no longer used for the classification of documents as of May 1, 2019.

The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.

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

D B63B 2716/00
—*(Frozen)*

Steam-powered steering gear

WARNING

Group B63B 2716/00 is no longer used for the classification of documents as of May 1, 2019.

The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.

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

D B63B 2717/00
—*(Frozen)*

Hand-operated steering gears; Combined hand and steam-powered steering gears

WARNING

Group B63B 2717/00 is no longer used for the classification of documents as of May 1, 2019.

The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.

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

D B63B 2718/00
—*(Frozen)*

Components of the steering gears, e.g. steering wheels, telemotors, driving chains, shock dampers, quadrants, arrangements to block the rudder, brakes, rudder stops

WARNING

Group B63B 2718/00 is no longer used for the classification of documents as of May 1, 2019.

B63B 2718/00

(Frozen)

(continued)

The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.

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

D B63B 2719/00
—*(Frozen)*

Arrangements for slowing-down of ships by means of side flaps and for creating a lateral resistance for maneuvering

WARNING

Group B63B 2719/00 is no longer used for the classification of documents as of May 1, 2019.

The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.

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

D B63B 2721/00
—*(Frozen)*

Automatic steering apparatus, non-electric

WARNING

Groups B63B 2721/00 - B63B 2721/02 are no longer used for the classification of documents as of May 1, 2019.

The content of these groups is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.

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

D B63B 2721/02
—*(Frozen)*

- Auxiliary steering gear and other steering arrangements

D B63B 2722/00
—*(Frozen)*

Towing in general

WARNING

Group B63B 2722/00 is no longer used for the classification of documents as of May 1, 2019.

The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.

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

D B63B 2723/00
—*(Frozen)*

Miscellaneous equipment for towing

WARNING

Group B63B 2723/00 is no longer used for the classification of documents as of May 1, 2019.

The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.

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

D B63B 2724/00
—*(Frozen)*

Navigation signals, e.g. masthead and side lights, marking of seaways, arrangements of compasses

WARNING

Group B63B 2724/00 is no longer used for the classification of documents as of May 1, 2019.

B63B 2724/00

(Frozen)

(continued)

The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.

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

D B63B 2725/00
—*(Frozen)*

Engine room signals and arrangements for controlling the main engines from the navigation bridge

WARNING

Group B63B 2725/00 is no longer used for the classification of documents as of May 1, 2019.

The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.

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

D B63B 2726/00
—*(Frozen)*

Miscellaneous signalling devices and draft indicators

WARNING

Group B63B 2726/00 is no longer used for the classification of documents as of May 1, 2019.

The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.

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

D B63B 2727/00
—*(Frozen)*

Signalling devices using acoustic or mechanical means

WARNING

Groups B63B 2727/00 - B63B 2727/02 are no longer used for the classification of documents as of May 1, 2019.

The content of these groups is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.

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

D B63B 2727/02
—*(Frozen)*

- Arrangements for the detection of icebergs, reefs, derelicts, or the like

D B63B 2728/00
—*(Frozen)*

Lifeboats, liferafts, lifesaving floats, etc.

WARNING

Group B63B 2728/00 is no longer used for the classification of documents as of May 1, 2019.

D B63B 2729/00
—*(Frozen)*

Coastal lifesaving

WARNING

Group B63B 2729/00 is no longer used for the classification of documents as of May 1, 2019.

D B63B 2730/00
—*(Frozen)*

Diving suits

WARNING

Groups B63B 2730/00 - B63B 2730/02 are no longer used for the classification of documents as of May 1, 2019.

B63B 2730/00

(Frozen)

(continued)

The content of these groups is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.

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

D B63B 2730/02
—*(Frozen)*

· Resilient suits

D B63B 2731/00
—*(Frozen)*

Arrangements for avoiding capsizing and sinking

WARNING

Group B63B 2731/00 is no longer used for the classification of documents as of May 1, 2019.

The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.

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

D B63B 2732/00
—*(Frozen)*

Arrangements for avoiding or reducing collision damage

WARNING

Group B63B 2732/00 is no longer used for the classification of documents as of May 1, 2019.

The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.

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

D B63B 2733/00
—*(Frozen)*

Arrangements for reducing the risk of running aground; Depth sounders

WARNING

Group B63B 2733/00 is no longer used for the classification of documents as of May 1, 2019.

The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.

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

D B63B 2734/00
—*(Frozen)*

Loading and unloading ships by ship-mounted means

WARNING

Group B63B 2734/00 is no longer used for the classification of documents as of May 1, 2019.

The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.

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

D B63B 2735/00
—*(Frozen)*

Miscellaneous shipbuilding-related arrangements and constructions, e.g. pontoons

WARNING

Group B63B 2735/00 is no longer used for the classification of documents as of May 1, 2019.

B63B 2735/00

(Frozen)

(continued)

The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.

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

D B63B 2736/00
—*(Frozen)*

Slipways, shipyard installations and apparatus for launching or hauling-out ships

WARNING

Group B63B 2736/00 is no longer used for the classification of documents as of May 1, 2019.

The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.

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

D B63B 2737/00
—*(Frozen)*

Dry and floating docks; Cleaning devices for hulls; Drydocking of hull parts; Equipment for dry and floating docks

WARNING

Group B63B 2737/00 is no longer used for the classification of documents as of May 1, 2019.

The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.

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

D B63B 2738/00
—*(Frozen)*

Re-floating of ships and sunken objects

WARNING

Group B63B 2738/00 - B63B 2738/12 is no longer used for the classification of documents as of May 1, 2019.

The content of these groups is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.

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

D B63B 2738/02
—*(Frozen)*

- Salvaging of ships by means of floats

D B63B 2738/04
—*(Frozen)*

- Salvaging of ships using cofferdams

D B63B 2738/06
—*(Frozen)*

- Salvaging of ships using diving bells

D B63B 2738/08
—*(Frozen)*

- Salvaging of ships by other means, e.g. using balloons or frozen blocks

D B63B 2738/10
—*(Frozen)*

- Floating docks for lifting ships

D B63B 2738/12
—*(Frozen)*

- Attaching floats and chains to the hull by mechanical means; Lifting chains

- D B63B 2739/00**
—(Frozen) **Boats or canoes in general; Construction and outfitting**
- WARNING
Group B63B 2739/00 is no longer used for the classification of documents as of May 1, 2019.
The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.
All groups listed in this Warning should be considered in order to perform a complete search.
- D B63B 2741/00**
—(Frozen) **Manual propulsion; Paddles**
- WARNING
Group B63B 2741/00 is no longer used for the classification of documents as of May 1, 2019.
The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.
All groups listed in this Warning should be considered in order to perform a complete search.
- D B63B 2742/00**
—(Frozen) **Anti-torpedo nets and shields for ships; Anti-submarine nets and devices for the protection of harbours and means for the destruction thereof**
- WARNING
Groups B63B 2742/00 - B63B 2742/02 are no longer used for the classification of documents as of May 1, 2019.
The content of these groups is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.
All groups listed in this Warning should be considered in order to perform a complete search.
- D B63B 2742/02**
—(Frozen) • Arrangements on ships for reducing danger due to torpedo or sea mine explosions
- D B63B 2743/00**
—(Frozen) **Paddle wheels for ships in general**
- WARNING
Group B63B 2743/00 is no longer used for the classification of documents as of May 1, 2019.
The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.
All groups listed in this Warning should be considered in order to perform a complete search.
- D B63B 2744/00**
—(Frozen) **Stern paddle wheels**
- WARNING
Group B63B 2744/00 is no longer used for the classification of documents as of May 1, 2019.
The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.
All groups listed in this Warning should be considered in order to perform a complete search.

- D B63B 2745/00**
—(Frozen)
- Propellers for ships in general (construction of air propellers B64C)**
- WARNING
- Groups B63B 2745/00 – B63B 2745/04 are no longer used for the classification of documents as of May 1, 2019.
- The content of these groups is being reclassified into groups B63B 1/00 – B63B 2241/28, B63C 1/00 – B63C 15/00, B63G 1/00 – B63G 2013/027, B63H 1/00 – B63H 25/52, B63J 1/00 – B63J 2099/005.
- All groups listed in this Warning should be considered in order to perform a complete search.
- D B63B 2745/02**
—(Frozen)
- Contra-propellers and other water guiding installations in front of or behind the rotating propeller (rudders with water guiding surfaces B63H 25/00)
- D B63B 2745/04**
—(Frozen)
- Propulsive devices, e.g. rotating cylinders, paddle wheels; Rudders or stabilising surfaces using Magnus effect
- D B63B 2746/00**
—(Frozen)
- Propellers with air exhaust, e.g. hollow propellers for ships**
- WARNING
- Group B63B 2746/00 is no longer used for the classification of documents as of May 1, 2019.
- The content of this group is being reclassified into groups B63B 1/00 – B63B 2241/28, B63C 1/00 – B63C 15/00, B63G 1/00 – B63G 2013/027, B63H 1/00 – B63H 25/52, B63J 1/00 – B63J 2099/005.
- All groups listed in this Warning should be considered in order to perform a complete search.
- D B63B 2747/00**
—(Frozen)
- Arrangements of propellers and other propulsive devices on ships**
- WARNING
- Groups B63B 2747/00 – B63B 2747/02 are no longer used for the classification of documents as of May 1, 2019.
- The content of these groups is being reclassified into groups B63B 1/00 – B63B 2241/28, B63C 1/00 – B63C 15/00, B63G 1/00 – B63G 2013/027, B63H 1/00 – B63H 25/52, B63J 1/00 – B63J 2099/005.
- All groups listed in this Warning should be considered in order to perform a complete search.
- D B63B 2747/02**
—(Frozen)
- Propellers driven by outboard motors placed astern or on the sides of the ship
- D B63B 2748/00**
—(Frozen)
- Propeller hubs and blade connections**
- WARNING
- Group B63B 2748/00 is no longer used for the classification of documents as of May 1, 2019.
- The content of this group is being reclassified into groups B63B 1/00 – B63B 2241/28, B63C 1/00 – B63C 15/00, B63G 1/00 – B63G 2013/027, B63H 1/00 – B63H 25/52, B63J 1/00 – B63J 2099/005.
- All groups listed in this Warning should be considered in order to perform a complete search.
- D B63B 2749/00**
—(Frozen)
- Propeller shafts and paddle-wheel shafts; Shaft liners**
- WARNING
- Group B63B 2749/00 is no longer used for the classification of documents as of May 1, 2019.
- The content of this group is being reclassified into groups B63B 1/00 – B63B 2241/28, B63C 1/00 – B63C 15/00, B63G 1/00 – B63G 2013/027, B63H 1/00 – B63H 25/52, B63J 1/00 – B63J 2099/005.

B63B 2749/00

(Frozen)

(continued)

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

D B63B 2750/00

—(Frozen)

Propeller shaft bearings, thrust bearingsWARNING

Group B63B 2750/00 is no longer used for the classification of documents as of May 1, 2019.

The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.

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

D B63B 2751/00

—(Frozen)

Propulsion of ships using the reaction effect of a water jetWARNING

Group B63B 2751/00 is no longer used for the classification of documents as of May 1, 2019.

The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.

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

D B63B 2752/00

—(Frozen)

Propulsion of ships using the reaction effect of steam jets or gas jetsWARNING

Group B63B 2752/00 is no longer used for the classification of documents as of May 1, 2019.

The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.

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

D B63B 2753/00

—(Frozen)

Propulsion of ships using the reaction effect of gas explosionsWARNING

Group B63B 2753/00 is no longer used for the classification of documents as of May 1, 2019.

The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.

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

D B63B 2754/00

—(Frozen)

Propulsive flapsWARNING

Group B63B 2754/00 is no longer used for the classification of documents as of May 1, 2019.

The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.

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

- D B63B 2755/00**
—(Frozen)
- Electric drives for the propulsive devices**
- WARNING
- Group B63B 2755/00 is no longer used for the classification of documents as of May 1, 2019.
- The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.
- All groups listed in this Warning should be considered in order to perform a complete search.
- D B63B 2756/00**
—(Frozen)
- Steam reciprocating engine drives for the propulsive devices**
- WARNING
- Group B63B 2756/00 is no longer used for the classification of documents as of May 1, 2019.
- The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.
- All groups listed in this Warning should be considered in order to perform a complete search.
- D B63B 2757/00**
—(Frozen)
- Steam turbine drives for the propulsive devices**
- WARNING
- Group B63B 2757/00 is no longer used for the classification of documents as of May 1, 2019.
- The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.
- All groups listed in this Warning should be considered in order to perform a complete search.
- D B63B 2758/00**
—(Frozen)
- Internal combustion engine drives for the propulsive devices**
- WARNING
- Group B63B 2758/00 is no longer used for the classification of documents as of May 1, 2019.
- The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.
- All groups listed in this Warning should be considered in order to perform a complete search.
- D B63B 2759/00**
—(Frozen)
- Other means for driving marine propulsion devices; Arrangements for synchronising two or more engines**
- WARNING
- Group B63B 2759/00 is no longer used for the classification of documents as of May 1, 2019.
- The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.
- All groups listed in this Warning should be considered in order to perform a complete search.

- D B63B 2760/00**
—(Frozen) **Marine drive governors that are influenced by the movements of the ship**
- WARNING
Group B63B 2760/00 is no longer used for the classification of documents as of May 1, 2019.
The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.
All groups listed in this Warning should be considered in order to perform a complete search.
- D B63B 2770/00**
—(Frozen) **Apparatus or methods specially adapted for use on marine vessels, for handling power plant or unit liquids, e.g. lubricants, coolants, fuels or the like**
- WARNING
Group B63B 2770/00 is no longer used for the classification of documents as of May 1, 2019.
The content of this group is being reclassified into groups B63B 1/00 - B63B 2241/28, B63C 1/00 - B63C 15/00, B63G 1/00 - B63G 2013/027, B63H 1/00 - B63H 25/52, B63J 1/00 - B63J 2099/005.
All groups listed in this Warning should be considered in order to perform a complete search.

Project: RP0473-F (B63C)

- M B63C** **LAUNCHING, HAULING-OUT, OR DRY-DOCKING OF VESSELS; LIFE-SAVING IN WATER; EQUIPMENT FOR DWELLING OR WORKING UNDER WATER; MEANS FOR SALVAGING OR SEARCHING FOR UNDERWATER OBJECTS (floating nets, floating slipways, or the like for recovering aircraft from the water [B63B 35/52](#))**
- NOTE
In this subclass, the indexing codes [B63B 2201/00](#) - [B63B 2241/00](#) are to be used for relevant technical information concerning particular or unusual use, materials, design, methods or means.
- WARNING
1. In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.
2. Groups B63C 1/00 - B63C 15/00 are incomplete pending reclassification of documents from groups B63B 2701/00 - B63B 2770/00.
All groups listed in this Warning should be considered in order to perform a complete search.

Project: RP0473-F (B63G)

M B63G OFFENSIVE OR DEFENSIVE ARRANGEMENTS ON VESSELS; MINE-LAYING; MINE-SWEEPING; SUBMARINES; AIRCRAFT CARRIERS (means of attack or defence in general, e.g. turrets [F41H](#))

NOTE

In this subclass, the indexing codes [B63B 2201/00](#) - [B63B 2241/00](#) are to be used for relevant technical information concerning particular or unusual use, materials, design, methods or means.

WARNING

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

~~2. Groups [B63G 1/00](#) - [B63G 2013/027](#) are incomplete pending reclassification of documents from groups [B63B 2701/00](#) - [B63B 2770/00](#).~~

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

Project: RP0473-F (B63H)

M B63H MARINE PROPULSION OR STEERING (propulsion of air-cushion vehicles [B60V 1/14](#); specially adapted for submarines, other than nuclear propulsion, [B63G](#); specially adapted for torpedoes [F42B 19/00](#))

NOTE

In this subclass, the indexing codes [B63B 2201/00](#) - [B63B 2241/00](#) are to be used for relevant technical information concerning particular or unusual use, materials, design, methods or means

WARNING

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

~~2. Groups [B63H 1/00](#) - [B63H 25/52](#) are incomplete pending reclassification of documents from groups [B63B 2701/00](#) - [B63B 2770/00](#).~~

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

Project: RP0473-F (B63J)

M B63J AUXILIARIES ON VESSELS

NOTES

1. In this subclass, the following term is used with the meaning indicated:

- "auxiliaries" means only apparatus specially arranged for rendering vessels, in general, habitable or operative, insofar as such apparatus is not specifically provided for in another subclass of class [B63](#)

2. In this subclass, the indexing codes [B63B 2201/00](#) - [B63B 2241/00](#) are to be used for relevant technical information concerning particular or unusual use, materials, design, methods or means.

WARNING

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

~~2. Groups [B63J 1/00](#) - [B63J 2099/005](#) are incomplete pending reclassification of documents from groups [B63B 2701/00](#) - [B63B 2770/00](#).~~

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

Project: RP0430-F (B64C)

- U B64C 1/00** **Fuselages; Constructional features common to fuselages, wings, stabilising surfaces and the like (aerodynamical features common to fuselages, wings, stabilising surfaces, and the like [B64C 23/00](#); flight-deck installations [B64D](#))**
- M B64C 1/0009 • {Aerodynamic aspects}
- WARNING**
Group B64C 1/0009 is impacted by reclassification into group B64C 39/029.- Groups B64C 1/0009 and B64C 39/029 should be considered in order to perform a complete search.
- M B64C 2001/0045 • {Fuselages characterised by special shapes}
- WARNING**
Group B64C 2001/0045 is impacted by reclassification into group B64C 39/029.- Groups B64C 2001/0045 and B64C 39/029 should be considered in order to perform a complete search.
- U B64C 1/06 • Frames; Stringers; Longerons {; Fuselage sections}
- M B64C 1/068 • • {Fuselage sections}
- WARNING**
Group B64C 1/068 is impacted by reclassification into groups B64C 1/0683 and B64C 1/0685.- Groups B64C 1/068, B64C 1/0683, and B64C 1/0685 should be considered in order to perform a complete search.
- M B64C 1/0683 • • • {Nose cones}
- WARNING**
Group B64C 1/0683 is incomplete pending reclassification of documents from group B64C 1/068.- Groups B64C 1/068 and B64C 1/0683 should be considered in order to perform a complete search.
- M B64C 1/0685 • • • {Tail cones}
- WARNING**
Group B64C 1/0685 is incomplete pending reclassification of documents from group B64C 1/068.- Groups B64C 1/068 and B64C 1/0685 should be considered in order to perform a complete search.
- U B64C 3/00** **Wings (stabilising surfaces [B64C 5/00](#); ornithopter wings [B64C 33/02](#))**
- M B64C 3/10 • Shape of wings
- WARNING**
Group B64C 3/10 is impacted by reclassification into group B64C 39/029.- Groups B64C 3/10 and B64C 39/029 should be considered in order to perform a complete search.
- M B64C 3/16 • • Frontal aspect
- WARNING**
Group B64C 3/16 is impacted by reclassification into group B64C 39/029.- Groups B64C 3/16 and B64C 39/029 should be considered in order to perform a complete search.

- M B64C 7/00 Structures or fairings not otherwise provided for**
- WARNING**
Group B64C 7/00 is impacted by reclassification into group B64C 39/029. Groups B64C 7/00 and B64C 39/029 should be considered in order to perform a complete search.
- M B64C 39/00 Aircraft not otherwise provided for**
- WARNING**
Group B64C 39/00 is impacted by reclassification into group B64C 39/029. Groups B64C 39/00 and B64C 39/029 should be considered in order to perform a complete search.
- M B64C 39/029**
- {Asymmetrical aircraft}
- WARNING**
Group B64C 39/029 is incomplete pending reclassification of documents from groups B64C 1/0009, B64C 2001/0045, B64C 3/10, B64C 3/16, B64C 7/00, and B64C 39/00. All groups should be considered in order to perform a complete search.

Project: RP0430-F (B64F)

- U B64F 1/00 Ground or aircraft-carrier-deck installations (specially adapted for captive aircraft [B64F 3/00](#))**
- M B64F 1/02**
- Arresting gear; Liquid barriers
- WARNING**
Group B64F 1/02 is impacted by reclassification into groups B64F 1/027, B64F 1/029, B64F 1/0295, B64F 1/0297, and B64F 1/0299. All groups listed in this Warning should be considered in order to perform a complete search.
- M B64F 1/027**
- • {using net or mesh}
- WARNING**
Group B64F 1/027 is incomplete pending reclassification of documents from group B64F 1/02. Groups B64F 1/02 and B64F 1/027 should be considered in order to perform a complete search.
- M B64F 1/029**
- • {using a cable or tether}
- WARNING**
Group B64F 1/029 is incomplete pending reclassification of documents from group B64F 1/02. Groups B64F 1/02 and B64F 1/029 should be considered in order to perform a complete search.
- M B64F 1/0295**
- • {aerodynamically or aerostatically supported, e.g. parafoil or balloon}
- WARNING**
Group B64F 1/0295 is incomplete pending reclassification of documents from group B64F 1/02. Groups B64F 1/02 and B64F 1/0295 should be considered in order to perform a complete search.

- M B64F 1/0297
- {adjustable to align with aircraft trajectory}
- WARNING
Group B64F 1/0297 is incomplete pending reclassification of documents from group B64F 1/02.
Groups B64F 1/02 and B64F 1/0297 should be considered in order to perform a complete search.
- M B64F 1/0299
- {characterized by the use of multiple devices}
- WARNING
Group B64F 1/0299 is incomplete pending reclassification of documents from group B64F 1/02.
Groups B64F 1/02 and B64F 1/0299 should be considered in order to perform a complete search.
- M B64F 1/32
- for handling freight
- WARNING
Group B64F 1/32 is impacted by reclassification into groups B64F 1/322, B64F 1/324, and B64F 1/326.
All groups listed in this Warning should be considered in order to perform a complete search.
- M B64F 1/322
- {Cargo loaders specially adapted for loading air freight containers or palletized cargo into or out of the aircraft}
- WARNING
Group B64F 1/322 is incomplete pending reclassification of documents from group B64F 1/32.
Groups B64F 1/32 and B64F 1/322 should be considered in order to perform a complete search.
- M B64F 1/324
- {Luggage loaders specially adapted for loading individual luggage items into or out of the aircraft}
- WARNING
Group B64F 1/324 is incomplete pending reclassification of documents from group B64F 1/32.
Groups B64F 1/32 and B64F 1/324 should be considered in order to perform a complete search.
- M B64F 1/326
- {Supply vehicles specially adapted for transporting catering to and loading into the aircraft}
- WARNING
Group B64F 1/326 is incomplete pending reclassification of documents from group B64F 1/32.
Groups B64F 1/32 and B64F 1/326 should be considered in order to perform a complete search.

Project: RP0168-F, RP0718 (B65B)

- M B65B 59/00 Arrangements to enable machines to handle articles of different sizes, to produce packages of different sizes, to vary the contents of packages {, to handle different types of packaging material,} or to give access for cleaning or maintenance purposes

NOTE

In all subgroups of this main group multi-aspect classification is applied, so that aspects of subject matter that are covered by more than one of its subgroups should be classified in each of those subgroups.

WARNING

Group B65B 59/00 is impacted by reclassification into groups B65B 59/001 and B65B 59/003.

Groups B65B 59/00, B65B 59/001, and B65B 59/003 should be considered in order to perform a complete search.

Project: RP0168-F (B65B)

- M B65B 59/001 • {Arrangements to enable adjustments related to the product to be packaged}

WARNING

Group B65B 59/001 is incomplete pending reclassification of documents from groups B65B 59/00, B65B 59/005, and B65B 59/02.

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

- M B65B 59/003 • {Arrangements to enable adjustments related to the packaging material}

WARNING

Group B65B 59/003 is incomplete pending reclassification of documents from groups B65B 59/00, B65B 59/005, and B65B 59/02.

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

- M B65B 59/005 • {Adjustable conveying means}

WARNING

Group B65B 59/005 is incomplete pending reclassification of documents from group B65B 59/02.

Group B65B 59/005 is also impacted by reclassification into groups B65B 59/001 and B65B 59/003.

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

- M B65B 59/02 • Arrangements to enable adjustments to be made while the machine is running

WARNING

Group B65B 59/02 is impacted by reclassification into groups B65B 59/001, B65B 59/003, and B65B 59/005.

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

Project: RP0571-F (B65D)

- U B65D 90/00 Component parts, details or accessories for large containers
([B65D 88/34](#) - [B65D 88/78](#) take precedence)

- M B65D 90/02
- Wall construction (arrangements of leakage-indicating devices comprising hollow spaces within walls [B65D 90/501](#); arrangements of leakage-indicating devices comprising porous spaces or porous layers in walls [B65D 90/505](#); arrangements of leakage-indicating devices comprising electrically conductive layers in walls [B65D 90/513](#))
- WARNING**
 Group B65D 90/02 is impacted by reclassification into groups B65D 90/501, B65D 90/503, B65D 90/505, B65D 90/507, and B65D 90/513.
 All groups listed in this Warning should be considered in order to perform a complete search.
- U B65D 90/48
- Arrangements of indicating or measuring devices
- M B65D 90/50
- • of leakage-indicating devices
- WARNING**
 Group B65D 90/50 is impacted by reclassification into groups B65D 90/51 and B65D 90/511.
 Groups B65D 90/50, B65D 90/51, and B65D 90/511 should be considered in order to perform a complete search.
- M B65D 90/501
- • • comprising hollow spaces within walls
- WARNING**
 Group B65D 90/501 is incomplete pending reclassification of documents from group B65D 90/02.
 Group B65D 90/501 is also impacted by reclassification into groups B65D 90/51 and B65D 90/511.
 All groups listed in this Warning should be considered in order to perform a complete search.
- M B65D 90/503
- • • • under pressure or vacuum
- WARNING**
 Group B65D 90/503 is incomplete pending reclassification of documents from group B65D 90/02.
 Group B65D 90/503 is also impacted by reclassification into groups B65D 90/51 and B65D 90/511.
 All groups listed in this Warning should be considered in order to perform a complete search. should be considered in order to perform a complete search.
- M B65D 90/505
- • • comprising porous spaces or porous layers in walls
- WARNING**
 Group B65D 90/505 is incomplete pending reclassification of documents from group B65D 90/02.
 Group B65D 90/505 is also impacted by reclassification into groups B65D 90/51 and B65D 90/511.
 All groups listed in this Warning should be considered in order to perform a complete search.
- M B65D 90/507
- • • • under pressure or vacuum
- WARNING**
 Group B65D 90/507 is incomplete pending reclassification of documents from group B65D 90/02.
 Group B65D 90/507 is also impacted by reclassification into groups B65D 90/51 and B65D 90/511.
 All groups listed in this Warning should be considered in order to perform a complete search.

- M B65D 90/51
- • • characterised by sensors
- WARNING
Group B65D 90/51 is incomplete pending reclassification of documents from groups B65D 90/50, B65D 90/501, B65D 90/503, B65D 90/505, B65D 90/507, and B65D 90/513.
All groups listed in this Warning should be considered in order to perform a complete search.
- M B65D 90/511
- • • Float-type indicators
- WARNING
Group B65D 90/511 is incomplete pending reclassification of documents from groups B65D 90/50, B65D 90/501, B65D 90/503, B65D 90/505, B65D 90/507, and B65D 90/513.
All groups listed in this Warning should be considered in order to perform a complete search.
- M B65D 90/513
- • • comprising electrically conductive layers in walls
- WARNING
Group B65D 90/513 is incomplete pending reclassification of documents from group B65D 90/02.
Group B65D 90/513 is also impacted by reclassification into groups B65D 90/51 and B65D 90/511.
All groups listed in this Warning should be considered in order to perform a complete search.

Project: RP0265-F (C01G)

- U C01G 23/00 **Compounds of titanium {(preparation of Ti-compounds from ores or scraps C22B 34/12)}**
- M C01G 23/002
- {Compounds containing, besides titanium, two or more other elements, with the exception of oxygen or hydrogen (C01G 23/001, C01G 23/003 take precedence)}
- WARNING
Group C01G 23/002 is impacted by reclassification into group C01G 23/003.
Groups C01G 23/002 and C01G 23/003 should be considered in order to perform a complete search.
- M C01G 23/003
- {Titanates (C01G 23/001 takes precedence)}
- WARNING
Group C01G 23/003 is incomplete pending reclassification from group C01G 23/002.
Groups C01G 23/002 and C01G 23/003 should be considered in order to perform a complete search.

Project: RP0682 (C07)

- M C07 **ORGANIC CHEMISTRY**
- NOTES
1. In this class, the following term is used with the meaning indicated:

- "preparation" covers purification, separation, stabilisation or use of additives, unless a separate place is provided therefor.
2. Biocidal, pest repellent, pest attractant or plant growth regulatory activity of compounds or preparations is further classified **within IPC. (This IPC Note does not apply in CPC) in subclass A01P.**
 3. In subclasses [C07C-C07K](#), the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, and with the exception referred to below, a compound is classified in the last appropriate place. For example, 2-butyl- pyridine, which contains an acyclic chain and a heterocyclic ring, is classified only as a heterocyclic compound, in subclass [C07D](#). In general, and in the absence of an indication to the contrary, such as mentioned in groups [C07C 59/58](#), [C07C 59/70](#), the terms "acyclic" and "aliphatic" are used to describe compounds in which there is no ring; and, if a ring were present, the compound would be taken by the "last place" rule to a later group for cycloaliphatic or aromatic compounds, if such a group exists. Where a compound or an entire group of compounds exists in tautomeric forms, it is classified as though existing in the form which is classified last in the system, unless the other form is specifically mentioned earlier in the system.
 4. Chemical compounds and their preparation are classified in the groups for the type of compound prepared. The processes of preparation are also classified in places for the types of reaction employed, if of interest. Examples of such places outside this class are:
 - [C12P](#) Fermentation or enzyme-using processes to synthesise a desired chemical compound or composition or to separate optical isomers from a racemic mixture
 - [C25B 3/00](#) Electrolytic production of organic compounds
 - [C25B 7/00](#) Electrophoretic production of compounds
 5. General processes for the preparation of a class of compounds falling into more than one main group are classified in the groups for the processes employed, when such groups exist. The compounds prepared are also classified in the groups for the types of compound prepared, if of interest.
 6. In this class, in the absence of an indication to the contrary, the compounds containing carboxyl or thiocarboxyl groups are classified as the relevant carboxylic or thiocarboxylic acids, unless the "last place rule" (see Note (3), above) dictates otherwise; a carboxyl group being a carbon atom having three bonds, and no more than three, to hetero atoms, other than nitrogen atoms of nitro or nitroso groups, with at least one multiple bond to the same hetero atom and a thiocarboxyl group being a carboxyl group having at least one bond to a sulfur atom, e.g. amides or nitriles of carboxylic acids, are classified with the corresponding acids.
 7. Salts of a compound, unless specifically provided for, are classified as that compound, e.g. aniline hydrochloride is classified as containing carbon, hydrogen and nitrogen only in group [C07C 211/46](#), sodium malonate is classified as malonic acid in [C07C 55/08](#), and a mercaptide is classified as the mercaptan. Metal chelates are dealt with in the same way. Similarly, metal alcoholates and metal phenates are classified in subclass [C07C](#) and not in subclass [C07F](#), the alcoholates for instance in groups [C07C 31/28-C07C 31/32](#) and the phenates in group [C07C 39/235](#) or [C07C 39/44](#). Salts, adducts or complexes formed between two or more organic compounds are classified according to all compounds forming the salts, adducts or complexes.

Project: RP0154-F (C07F)

- U C07F 7/00 **Compounds containing elements of Groups 4 or 14 of the Periodic System**
- U C07F 7/02 - Silicon compounds

- M C07F 7/04
- Esters of silicic acids
- WARNING**
 Group C07F 7/04 is incomplete pending reclassification of documents from group C07F 7/045.
 Group C07F 7/04 is impacted by reclassification into groups C07F 7/06 and C07F 7/07.
 Groups C07F 7/04, C07F 7/045, C07F 7/06 and C07F 7/07 should be considered in order to perform a complete search.
- D C07F 7/045
 —(Frozen)
- {Esters of monosilicic acid}
- WARNING**
 Group C07F 7/045 is no longer used for the classification of documents as of August 1, 2018. The content of this group is being reclassified into groups C07F 7/04, C07F 7/06 and C07F 7/07.
 Groups C07F 7/04, C07F 7/045, C07F 7/06 and C07F 7/07 should be considered in order to perform a complete search.
- M C07F 7/06
- with hydroxyaryl compounds
- WARNING**
 Groups C07F 7/06 and C07F 7/07 are incomplete pending reclassification of documents from groups C07F 7/04 and C07F 7/045.
 Groups C07F 7/04, C07F 7/045, C07F 7/06 and C07F 7/07 should be considered in order to perform a complete search.

Project: RP0505-F (C09J)

- M C09J 7/00
- Adhesives in the form of films or foils**
- NOTE
 {In this group, the indexing codes [C09J 2203/00](#) - [C09J 2499/008](#) are used.}
- WARNING**
 Group C09J 7/00 is impacted by reclassification into group C09J 7/10.
 Groups C09J 7/00 and C09J 7/10 should be considered in order to perform a complete search.
- M C09J 7/10
- without carriers
- WARNING**
 Group C09J 7/10 is incomplete pending reclassification of documents from group C09J 7/00.
 Groups C09J 7/00 and C09J 7/10 should be considered in order to perform a complete search.
- U C09J 7/20
- characterised by their carriers
- M C09J 7/22
- Plastics; Metallised plastics
- WARNING**
 Group C09J 7/22 is incomplete pending reclassification of documents from groups C09J 7/28 and C09J 7/29.
 Groups C09J 7/28, C09J 7/29, and C09J 7/22 should be considered in order to perform a complete search.
- M C09J 7/28
- Metal sheet (metallised plastics [C09J 7/22](#))
- WARNING**
 Group C09J 7/28 is impacted by reclassification into group C09J 7/22.

Groups C09J 7/28 and C09J 7/22 should be considered in order to perform a complete search.

M C09J 7/29

- Laminated material (metallised plastics [C09J 7/22](#))

WARNING

Group C09J 7/29 is impacted by reclassification into group C09J 7/22. Groups C09J 7/29 and C09J 7/22 should be considered in order to perform a complete search.

Project: RP0569-F (C12C)

U C12C 12/00

Processes specially adapted for making special kinds of beer

M C12C 12/04

- Beer with low alcohol content (methods for reducing the alcohol content after fermentation [C12H 3/00](#))

WARNING

Group C12C 12/04 is impacted by reclassification into groups C12H 3/00, C12H 3/02, and C12H 3/04. All groups listed in this Warning should be considered in order to perform a complete search.

Project: RP0569-F (C12G)

M C12G 1/00

Preparation of wine or sparkling wine

WARNING

Group C12G 1/00 is impacted by reclassification into groups C12G 1/06 and C12G 1/14. Groups C12G 1/00, C12G 1/06, and C12G 1/14 should be considered in order to perform a complete search.

M C12G 1/06

- Preparation of sparkling wine; Impregnation of wine with carbon dioxide (methods for reducing the alcohol content after fermentation [C12H 3/00](#); methods for increasing the alcohol content after fermentation [C12H 6/00](#))

WARNING

Group C12G 1/06 is incomplete pending reclassification of documents from group C12G 1/00. Group C12G 1/06 is also impacted by reclassification into groups C12H 3/00, C12H 3/02, C12H 3/04, C12H 6/00, C12H 6/02, and C12H 6/04. All groups listed in this Warning should be considered in order to perform a complete search.

M C12G 1/14

- Preparation of wine or sparkling wine with low alcohol content (methods for reducing the alcohol content after fermentation [C12H 3/00](#))

WARNING

Group C12G 1/14 is incomplete pending reclassification of documents from group C12G 1/00. Groups C12G 1/00 and C12G 1/14 should be considered in order to perform a complete search.

U C12G 3/00

Preparation of other alcoholic beverages

M C12G 3/02

- by fermentation

WARNING

Group C12G 3/02 is impacted by reclassification into groups C12G 3/021, C12G 3/022, C12G 3/023, C12G 3/024, C12G 3/025, and C12G 3/026.

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

- M C12G 3/021
- of botanical family Poaceae, e.g. wheat, millet, sorghum, barley, rye, or corn
- WARNING
Group C12G 3/021 is incomplete pending reclassification of documents from groups C12G 3/02 and C12G 3/025.
Groups C12G 3/02, C12G 3/025, and C12G 3/021 should be considered in order to perform a complete search.
- M C12G 3/022
- of botanical genus Oryza, e.g. rice
- WARNING
Group C12G 3/022 is incomplete pending reclassification of documents from groups C12G 3/02 and C12G 3/025.
Groups C12G 3/02, C12G 3/025, and C12G 3/022 should be considered in order to perform a complete search.
- M C12G 3/023
- of botanical family Solanaceae, e.g. potato
- WARNING
Group C12G 3/023 is incomplete pending reclassification of documents from groups C12G 3/02 and C12G 3/025.
Groups C12G 3/02 and C12G 3/025 and C12G 3/023 should be considered in order to perform a complete search.
- M C12G 3/024
- of fruits other than botanical genus Vitis
- WARNING
Group C12G 3/024 is incomplete pending reclassification of documents from group C12G 3/02 and C12G 3/025.
Groups C12G 3/02, C12G 3/025, and C12G 3/024 should be considered in order to perform a complete search.
- M C12G 3/025
- Low-alcohol beverages (methods for reducing the alcohol content after fermentation [C12H 3/00](#))
- WARNING
Group C12G 3/025 is incomplete pending reclassification of documents from group C12G 3/02.
Group C12G 3/025 is also impacted by reclassification into groups C12G 3/021, C12G 3/022, C12G 3/023, C12G 3/024, and C12G 3/026.
All groups listed in this Warning should be considered in order to perform a complete search.
- M C12G 3/026
- with health-improving ingredients, e.g. flavonoids, flavones, polyphenols or polysaccharides, added before or during the fermentation stage; with flavouring ingredients added before or during the fermentation stage
- WARNING
Group C12G 3/026 is incomplete pending reclassification of documents from groups C12G 3/02 and C12G 3/025.
Groups C12G 3/02, C12G 3/025 and C12G 3/026 should be considered in order to perform a complete search.
- M C12G 3/04
- by mixing, e.g. for preparation of liqueurs
- WARNING
Group C12G 3/04 is impacted by reclassification into group C12G 3/05 and C12G 3/055.

~~Groups C12G 3/04, C12G 3/05 and C12G 3/055 should be considered in order to perform a complete search.~~

- M C12G 3/05
- with health-improving ingredients, e.g. flavonoids, flavones, polyphenols or polysaccharides

WARNING

~~Group C12G 3/05 is incomplete pending reclassification of documents from group C12G 3/04.~~

~~Groups C12G 3/04 and C12G 3/05 should be considered in order to perform a complete search.~~

- M C12G 3/055
- • • extracted from plants

WARNING

~~Group C12G 3/055 is incomplete pending reclassification of documents from group C12G 3/04.~~

~~Groups C12G 3/04 and C12G 3/055 should be considered in order to perform a complete search.~~

- M C12G 3/08
- by methods for altering the composition of fermented solutions or alcoholic beverages not provided for in groups [C12G 3/02](#) - [C12G 3/07](#) (methods for reducing the alcohol content of fermented solutions or alcoholic beverages [C12H 3/00](#); methods for increasing the alcohol content of fermented solutions or alcoholic beverages [C12H 6/00](#))

WARNING

~~Group C12G 3/08 is impacted by reclassification into groups C12H 3/00 and C12H 3/02.~~

~~Groups C12G 3/08, C12H 3/00 and C12H 3/02 should be considered in order to perform a complete search.~~

Project: RP0569-F (C12H)

- M C12H 3/00
- Methods for reducing the alcohol content of fermented solutions or alcoholic beverage to obtain low alcohol or non-alcoholic beverages**

WARNING

~~Group C12H 3/00 is incomplete pending reclassification of documents from groups C12G 12/04, C12G 1/06, and C12G 3/08.~~

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

- M C12H 3/02
- by evaporating

WARNING

~~Group C12H 3/02 is incomplete pending reclassification of documents from groups C12G 12/04, C12G 1/06, and C12G 3/08.~~

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

- M C12H 3/04
- using semi-permeable membranes

WARNING

~~Group C12H 3/04 is incomplete pending reclassification of documents from groups C12G 12/04 and C12G 1/06.~~

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

- M C12H 6/00** **Methods for increasing the alcohol content of fermented solutions or alcoholic beverages**
- WARNING**
Group C12H 6/00 is incomplete pending reclassification of documents from group C12G 1/06.
Groups C12G 1/06 and C12H 6/00 should be considered in order to perform a complete search.
- M C12H 6/02** • by distillation
- WARNING**
Group C12H 6/02 is incomplete pending reclassification of documents from group C12G 1/06.
Groups C12G 1/06 and C12H 6/02 should be considered in order to perform a complete search.
- M C12H 6/04** • by freezing
- WARNING**
Group C12H 6/04 is incomplete pending reclassification of documents from group C12G 1/06.
Groups C12G 1/06 and C12H 6/04 should be considered in order to perform a complete search.

Project: RP0170-F (C12N)

- U C12N 9/00** **Enzymes; Proenzymes; Compositions thereof (preparations containing enzymes for cleaning teeth [A61K 8/66](#), [A61Q 11/00](#); medicinal preparations containing enzymes or proenzymes [A61K 38/43](#); enzyme containing detergent compositions [C11D](#); {enzymes with nucleic acid structure, e.g. ribozymes, [C12N 15/113](#)}); Processes for preparing, activating, inhibiting, separating or purifying enzymes (preparation of malt [C12C 1/00](#))**
- NOTE**
Enzymes are generally categorized below according to the "Nomenclature and Classification of Enzymes" of the International Commission on Enzymes. Where appropriate, this designation appears in the groups below in parenthesis.
- U C12N 9/14** • Hydrolases (3)
- U C12N 9/48** • • acting on peptide bonds (3.4)
- M C12N 9/50** • • • Proteinases {, e.g. Endopeptidases (3.4.21-3.4.25)}
- WARNING**
Group C12N 9/50 is impacted by reclassification into group C12N 9/52.
Groups C12N 9/50 and C12N 9/52 should be considered in order to perform a complete search.
- M C12N 9/52** • • • derived from bacteria {or Archaea}
- NOTE**
{In this group, Archaea, formerly known as Archaeobacteria, are classified with bacteria.}
- WARNING**
Group C12N 9/52 is incomplete pending reclassification of documents from group C12N 9/50.
Groups C12N 9/50 and C12N 9/52 should be considered in order to perform a complete search.

Project: RP0714 (C14B)

- U C14B 17/00 **Details of apparatus or machines for manufacturing or treating skins, hides, leather, or furs**
- D C14B 17/16 ~~· {Inspecting hides or furs}~~
<administratively transferred to [C14B 17/005](#)>

Project: RP0659 (D03C)

- M D03C **SHEDDING MECHANISMS; PATTERN CARDS OR CHAINS; PUNCHING OF CARDS; DESIGNING PATTERNS**

WARNING

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

~~D03C 9/04 covered by D03C 9/028~~

~~2. 1. {In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.}~~

- U D03C 9/00 **Healds; Heald frames (for leno shedding [D03C 7/00](#))**
- U D03C 9/02 ~~· Healds~~
- U D03C 9/026 ~~· {Material used}~~
- D D03C 9/028 ~~· · {Metal}~~
<administratively transferred to [D03C 9/04](#) INV>
- D D03C 2009/04 ~~· {Metal healds}~~
<administratively transferred to [D03C 9/04](#) INV>
- N D03C 9/04 ~~· {Metal healds}~~

Project: RP0255-F (E04D)

- M E04D 1/00 **Roof covering by making use of tiles, slates, shingles, or other small roofing elements (roofing supports {or underlayers} [E04D 12/00](#))**

WARNING

Groups E04D 1/00-E04D 2001/3497 are impacted by reclassification into groups E04D 1/29, E04D 1/2907, E04D 1/2914, E04D 1/2916, E04D 1/2918, E04D 1/2921, E04D 1/2928, E04D 1/2935, E04D 1/2942, E04D 1/2949, E04D 1/2956, E04D 1/2963, and E04D 1/2984.

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

- M E04D 1/29 ~~· {Means for connecting or fastening adjacent roofing elements}~~

WARNING

Groups E04D 1/29 – E04D 1/2984 are incomplete pending reclassification of documents from groups E04D 1/00 – E04D 2001/3497.

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

Project: RP0659 (E05B)

- M E05B 27/00 **Cylinder locks {~~and/or~~ other locks} with tumbler pins ~~which or balls that~~ are set by pushing the key in ~~{{fastening of cylinders, rotors, plugs or cores E05B 9/084; with magnetic tumblers E05B 47/0044; with electromagnetic control E05B 47/0611}}~~**
- U E05B 27/02 ~~· operated by the edge of the key~~

- U E05B 27/08 · · arranged axially
- U E05B 27/086 · · · {of the bar-tumbler type, the bars having slots or protrusions in alignment upon opening the lock}
- D E05B 2027/10 · {Tumblers operated by other surfaces than the edge of the key}
 <administratively transferred to [E05B 27/10](#) INV>
- N E05B 27/10 · operated by other surfaces of the key, e.g. openings receiving projections on the tumblers

Project: RP0408-F (E05F)

- M E05F 5/00 Braking devices, e.g. checks; Stops; Buffers (construction of pneumatic or liquid braking devices [E05F 3/00](#); braking devices, buffers or end stops on drawers for tables, cabinets or like furniture [A47B 88/473](#); combined with devices for holding wings open [E05C 17/00](#); devices for limiting opening of wings or for holding wings open by a movable member extending between frame and wing [E05C 17/04](#))

WARNING

Group E05F 5/00 is impacted by reclassification into groups A47B 88/473 and A47B 88/477.

Groups E05F 5/00, A47B 88/473, and A47B 88/477 should be considered in order to perform a complete search.

Project: RP0029-F (E21C)

- M E21C 41/00 Methods of underground or surface mining ([E21C 45/00](#) takes precedence); Layouts therefor (for peat [E21C 49/00](#))

WARNING

Group E21C 41/00 is incomplete pending reclassification of documents from groups E21C 41/04, E21C 41/10 and E21C 41/14.

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

- D E21C 41/04 · {for hard coal}
—(Frozen)
WARNING
Group E21C 41/04 is no longer used for the classification of documents as of May 1, 2020.
The content of this group is being reclassified into groups E21C 41/00, E21C 41/16 – E21C 41/32.
All the groups listed in this warning should be considered in order to perform a complete search.
- D E21C 41/10 · {for oil-bearing deposits}
—(Frozen)
WARNING
Group E21C 41/10 is no longer used for the classification of documents as of May 1, 2020.
The content of this group is being reclassified into groups E21C 41/00, E21C 41/16 – E21C 41/32.
All the groups listed in this warning should be considered in order to perform a complete search.
- D E21C 41/14 · {for other specified minerals, e.g. gold, mercury, other heavy metals, sulfur, slate; for clay}
—(Frozen)
WARNING
Group E21C 41/14 is no longer used for the classification of documents as of May 1, 2020.

E21C 41/14
(Frozen)
(continued)

The content of this group is being reclassified into groups E21C 41/00, E21C 41/16 – E21C 41/32.

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

- M E21C 41/16
- Methods of underground mining (winning machines therefor [E21C 25/00](#) - [E21C 39/00](#)); Layouts therefor
- WARNING**
Groups E21C 41/16 – E21C 41/24 are incomplete pending reclassification of documents from groups E21C 41/04, E21C 41/10 and E21C 41/14. All the groups listed in this warning should be considered in order to perform a complete search.
- M E21C 41/26
- Methods of surface mining (machines for obtaining, or the removal of, materials in open-pit mines [E21C 47/00](#)); Layouts therefor
- WARNING**
Groups E21C 41/26 – E21C 41/31 are incomplete pending reclassification of documents from groups E21C 41/04, E21C 41/10 and E21C 41/14. All the groups listed in this warning should be considered in order to perform a complete search.
- M E21C 41/32
- Reclamation of surface-mined areas (machines or methods for treating or working soil for agricultural purposes [A01B 77/00](#), [A01B 79/00](#); machines for back-filling [E02F 5/22](#))
- WARNING**
Group E21C 41/32 is incomplete pending reclassification of documents from group-groups E21C 41/04, E21C 41/10 and E21C 41/14. All the groups listed in this warning should be considered in order to perform a complete search.

Project: RP0586-F (F02M)

- U F02M 7/00
- Carburettors with means for influencing, e.g. enriching or keeping constant, fuel/air ratio of charge under varying conditions (choke valves for starting [F02M 1/00](#))**
- M F02M 7/06
- Means for enriching charge on sudden {air} throttle opening, i.e. at acceleration, e.g. storage means in passage way system
- WARNING**
Group F02M 7/06 is impacted by reclassification into groups F02M 71/00, F02M 71/02, and F02M 71/04. All groups listed in this Warning should be considered in order to perform a complete search.
- M F02M 7/08
- • using pumps
- WARNING**
Group F02M 7/08 is impacted by reclassification into groups F02M 71/00, F02M 71/02, and F02M 71/04. All groups listed in this Warning should be considered in order to perform a complete search.
- M F02M 7/083
- • {a pump sucking fuel from the conduit system leading to the spray nozzle downstream of the metering cross-section during deceleration}
- WARNING**
Group F02M 7/083 is impacted by reclassification into groups F02M 71/00, F02M 71/02, and F02M 71/04.

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

M F02M 7/087

- • • changing output according to temperature in engine

WARNING

Group F02M 7/087 is impacted by reclassification into groups F02M 71/00, F02M 71/02, and F02M 71/04.

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

M F02M 7/093

- • • changing output according to intake vacuum

WARNING

Group F02M 7/093 is impacted by reclassification into groups F02M 71/00, F02M 71/02, and F02M 71/04.

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

M F02M 7/10

- Other installations, without moving parts, for influencing fuel/air ratio, e.g. electrical means (fuel aerating devices for influencing fuel/air ratio [F02M 7/23](#))

WARNING

Group F02M 7/10 is impacted by reclassification into groups F02M 7/23, F02M 7/24, F02M 7/245, F02M 7/26, and F02M 7/28.

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

M F02M 7/103

- • {with self-acting equaliser jets}

WARNING

Group F02M 7/103 is impacted by reclassification into groups F02M 7/23, F02M 7/24, F02M 7/245, F02M 7/26, and F02M 7/28.

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

M F02M 7/106

- • {Fluid amplifier as a device for influencing the fuel-air mixture}

WARNING

Group F02M 7/106 is impacted by reclassification into groups F02M 7/23, F02M 7/24, F02M 7/245, F02M 7/26, and F02M 7/28.

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

M F02M 7/11

- • Altering float-chamber pressure (enriching the fuel-air mixture during starting by depressing float to flood carburettor [F02M 1/18](#))

WARNING

Group F02M 7/11 is impacted by reclassification into groups F02M 7/23, F02M 7/24, F02M 7/245, F02M 7/26, and F02M 7/28.

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

U F02M 7/12

- Other installations, with moving parts, for influencing fuel/air ratio, e.g. having valves ([F02M 7/24](#) takes precedence)

U F02M 7/14

- • with means for controlling cross-sectional area of fuel spray nozzle (dependent on air-throttle valve position [F02M 7/22](#))

U F02M 7/16

- • • operated automatically, e.g. dependent on exhaust-gas analysis

- M F02M 7/17
- • • by a pneumatically adjustable piston-like element, e.g. constant depression carburettors
- WARNING**
Group F02M 7/17 is incomplete pending reclassification of documents from groups F02M 9/06 and F02M 9/065. Groups F02M 9/06, F02M 9/065, and F02M 7/17 should be considered in order to perform a complete search.
- M F02M 7/23
- Fuel aerating devices
- WARNING**
Groups F02M 7/23, F02M 7/24, F02M 7/245, F02M 7/26, and F02M 7/28 are incomplete pending reclassification of documents from groups F02M 7/10, F02M 7/103, F02M 7/106, and F02M 7/11. All groups listed in this Warning should be considered in order to perform a complete search.
- U F02M 9/00** **Carburettors having air or fuel-air mixture passage throttling valves other than of butterfly type (register-type carburettors [F02M 11/00](#)); Carburettors having fuel-air mixing chambers of variable shape or position**
- U F02M 9/02
- having throttling valves, e.g. of piston shape, slidably arranged transversely to the passage
- M F02M 9/06
- • with means for varying cross-sectional area of fuel spray nozzle dependent on throttle position (installations, operated automatically by a pneumatically adjustable piston-like element, for influencing fuel/air ratio [F02M 7/17](#))
- WARNING**
Group F02M 9/06 is impacted by reclassification into group F02M 7/17. Groups F02M 9/06 and F02M 7/17 should be considered in order to perform a complete search.
- M F02M 9/065
- • {Automatically and not automatically controlled throttle valves operating mutually}
- WARNING**
Group F02M 9/065 is impacted by reclassification into group F02M 7/17. Groups F02M 9/065 and F02M 7/17 should be considered in order to perform a complete search.
- U F02M 29/00** **Apparatus for re-atomising condensed fuel or homogenising fuel-air mixture (combined with secondary-air supply [F02M 23/12](#) {; collecting condensed fuel [F02M 33/02](#)})**
- M F02M 29/02
- having rotary parts {, e.g. fan wheels}
- WARNING**
Group F02M 29/02 is impacted by reclassification into groups F02M 29/04, F02M 29/06, F02M 29/08, and F02M 29/10. All groups listed in this Warning should be considered in order to perform a complete search.
- M F02M 29/04
- having screens, gratings, baffles or the like
- WARNING**
Groups F02M 29/04, F02M 29/06, F02M 29/08, and F02M 29/10 are incomplete pending reclassification of documents from group F02M 29/02. Groups F02M 29/02 and F02M 29/04 should be considered in order to perform a complete search.

- U F02M 31/00** Apparatus for thermally treating combustion-air, fuel, or fuel-air mixture (carburettors with heating, cooling or thermal insulating means for combustion-air, fuel or fuel-air mixture [F02M 15/00](#); apparatus for de-liquefying non-liquid fuels by heating [F02M 21/06](#); apparatus having heating means for non-gaseous fuels with low melting point [F02M 21/10](#); apparatus characterised by adding hot secondary air to fuel-air mixture [F02M 23/14](#); fuel-injection apparatus characterised by having heating, cooling or thermally insulating means [F02M 53/00](#))
- M F02M 31/02** · for heating ({[F02M 31/005](#) takes precedence;}) for purifying liquid fuel [F02M 37/30](#))
WARNING
 Group F02M 31/02 is impacted by reclassification into group F02M 37/30. Groups F02M 31/02 and F02M 37/30 should be considered in order to perform a complete search.
- M F02M 31/04** · · combustion-air or fuel-air mixture (electrically [F02M 31/12](#); by using heat from working cylinders or cylinder heads [F02M 31/14](#); heating of combustion-air as an engine starting aid [F02N 7/04](#))
WARNING
 Group F02M 31/04 is impacted by reclassification into group F02M 37/30. Groups F02M 31/04 and F02M 37/30 should be considered in order to perform a complete search.
- M F02M 31/042** · · · {Combustion air}
WARNING
 Group F02M 31/042 is impacted by reclassification into group F02M 37/30. Groups F02M 31/042 and F02M 37/30 should be considered in order to perform a complete search.
- M F02M 31/045** · · · {Fuel-air mixture}
WARNING
 Group F02M 31/045 is impacted by reclassification into group F02M 37/30. Groups F02M 31/045 and F02M 37/30 should be considered in order to perform a complete search.
- M F02M 31/047** · · · · {for fuel enriched partial mixture flow path}
WARNING
 Group F02M 31/047 is impacted by reclassification into group F02M 37/30. Groups F02M 31/047 and F02M 37/30 should be considered in order to perform a complete search.
- M F02M 31/06** · · · by hot gases, e.g. by mixing cold and hot air
WARNING
 Group F02M 31/06 is impacted by reclassification into group F02M 37/30. Groups F02M 31/06 and F02M 37/30 should be considered in order to perform a complete search.
- M F02M 31/062** · · · · {with thermostat and pneumatic actuator both working on the air mixture control valve}
WARNING
 Group F02M 31/062 is impacted by reclassification into group F02M 37/30.

		<p>Groups F02M 31/062 and F02M 37/30 should be considered in order to perform a complete search.</p>
M	F02M 31/064	<ul style="list-style-type: none">• • • {pneumatically controlled (F02M 31/062 takes precedence)} <p><u>WARNING</u> Group F02M 31/064 is impacted by reclassification into group F02M 37/30. Groups F02M 31/064 and F02M 37/30 should be considered in order to perform a complete search.</p>
M	F02M 31/066	<ul style="list-style-type: none">• • • {operated manually, e.g. by means of valves on the air filter} <p><u>WARNING</u> Group F02M 31/066 is impacted by reclassification into group F02M 37/30. Groups F02M 31/066 and F02M 37/30 should be considered in order to perform a complete search.</p>
M	F02M 31/068	<ul style="list-style-type: none">• • • {particular constructional aspects of the switching devices, e.g. connecting linkage between two control valves} <p><u>WARNING</u> Group F02M 31/068 is impacted by reclassification into group F02M 37/30. Groups F02M 31/068 and F02M 37/30 should be considered in order to perform a complete search.</p>
M	F02M 31/07	<ul style="list-style-type: none">• • • Temperature-responsive control, e.g. using thermostatically-controlled valves (temperature-responsive control of the amount of exhaust gas or combustion air directed to the heat exchange surface F02M 31/083) <p><u>WARNING</u> Group F02M 31/07 is impacted by reclassification into group F02M 37/30. Groups F02M 31/07 and F02M 37/30 should be considered in order to perform a complete search.</p>
M	F02M 31/08	<ul style="list-style-type: none">• • • the gases being exhaust gases {(adding exhaust gases to the air intake passage F02M 26/00)} <p><u>WARNING</u> Group F02M 31/08 is impacted by reclassification into group F02M 37/30. Groups F02M 31/08 and F02M 37/30 should be considered in order to perform a complete search.</p>
M	F02M 31/0805	<ul style="list-style-type: none">• • • • {Pneumatic control of the amount of exhaust gas or combustion air directed to the heat exchange surfaces, e.g. as a function of the pressure in the air intake passage} <p><u>WARNING</u> Group F02M 31/0805 is impacted by reclassification into group F02M 37/30. Groups F02M 31/0805 and F02M 37/30 should be considered in order to perform a complete search.</p>
M	F02M 31/081	<ul style="list-style-type: none">• • • • {Manual switching of the fluids directed to the heat exchange surfaces} <p><u>WARNING</u> Group F02M 31/081 is impacted by reclassification into group F02M 37/30.</p>

Groups F02M 31/081 and F02M 37/30 should be considered in order to perform a complete search.

- M F02M 31/0815 {Heat exchange surfaces arranged inside a flange}

WARNING

Group F02M 31/0815 is impacted by reclassification into group F02M 37/30.

Groups F02M 31/0815 and F02M 37/30 should be considered in order to perform a complete search.

- M F02M 31/082 {Particular shape of air input passage near to the branch}

WARNING

Group F02M 31/082 is impacted by reclassification into group F02M 37/30.

Groups F02M 31/082 and F02M 37/30 should be considered in order to perform a complete search.

- M F02M 31/0825 {Particular constructional characteristics of the heat exchange surfaces, e.g. finned pipes, coiled pipes or the like}

WARNING

Group F02M 31/0825 is impacted by reclassification into group F02M 37/30.

Groups F02M 31/0825 and F02M 37/30 should be considered in order to perform a complete search.

- M F02M 31/083 Temperature-responsive control of the amount of exhaust gas or combustion air directed to the heat exchange surface

WARNING

Group F02M 31/083 is impacted by reclassification into group F02M 37/30.

Groups F02M 31/083 and F02M 37/30 should be considered in order to perform a complete search.

- M F02M 31/087 Heat-exchange arrangements between the air intake and exhaust gas passages, e.g. by means of contact between the passages

WARNING

Group F02M 31/087 is impacted by reclassification into group F02M 37/30.

Groups F02M 31/087 and F02M 37/30 should be considered in order to perform a complete search.

- M F02M 31/093 Air intake passage surrounding the exhaust gas passage; Exhaust gas passage surrounding the air intake passage

WARNING

Group F02M 31/093 is impacted by reclassification into group F02M 37/30.

Groups F02M 31/093 and F02M 37/30 should be considered in order to perform a complete search.

- M F02M 31/10 . . . by hot liquids, e.g. lubricants {or cooling water}

WARNING

Group F02M 31/10 is impacted by reclassification into group F02M 37/30.

Groups F02M 31/10 and F02M 37/30 should be considered in order to perform a complete search.

- M F02M 31/102
- • • {Particular constructional characteristics of the shape of the heat exchange surfaces}
- WARNING
Group F02M 31/102 is impacted by reclassification into group F02M 37/30.
Groups F02M 31/102 and F02M 37/30 should be considered in order to perform a complete search.
- M F02M 31/105
- • • {Particular constructional characteristics of the switching apparatus}
- WARNING
Group F02M 31/105 is impacted by reclassification into group F02M 37/30.
Groups F02M 31/105 and F02M 37/30 should be considered in order to perform a complete search.
- M F02M 31/107
- • • {Controlled or manual switching}
- WARNING
Group F02M 31/107 is impacted by reclassification into group F02M 37/30.
Groups F02M 31/107 and F02M 37/30 should be considered in order to perform a complete search.
- M F02M 31/12
- • electrically
- WARNING
Group F02M 31/12 is impacted by reclassification into group F02M 37/30.
Groups F02M 31/12 and F02M 37/30 should be considered in order to perform a complete search.
- M F02M 31/125
- • • Fuel
- WARNING
Group F02M 31/125 is impacted by reclassification into group F02M 37/30.
Groups F02M 31/125 and F02M 37/30 should be considered in order to perform a complete search.
- M F02M 31/13
- • • Combustion air
- WARNING
Group F02M 31/13 is impacted by reclassification into group F02M 37/30.
Groups F02M 31/13 and F02M 37/30 should be considered in order to perform a complete search.
- M F02M 31/135
- • • Fuel-air mixture
- WARNING
Group F02M 31/135 is impacted by reclassification into group F02M 37/30.
Groups F02M 31/135 and F02M 37/30 should be considered in order to perform a complete search.
- M F02M 31/14
- • by using heat from working cylinders or cylinder heads
- WARNING
Group F02M 31/14 is impacted by reclassification into group F02M 37/30.
Groups F02M 31/14 and F02M 37/30 should be considered in order to perform a complete search.

- M F02M 31/145
- • • {with particular constructional means}
- WARNING
Group F02M 31/145 is impacted by reclassification into group F02M 37/30. Groups F02M 31/145 and F02M 37/30 should be considered in order to perform a complete search.
- M F02M 31/16
- • Other apparatus for heating fuel
- WARNING
Group F02M 31/16 is impacted by reclassification into group F02M 37/30. Groups F02M 31/16 and F02M 37/30 should be considered in order to perform a complete search.
- M F02M 31/163
- • • {Preheating by burning an auxiliary mixture}
- WARNING
Group F02M 31/163 is impacted by reclassification into group F02M 37/30. Groups F02M 31/163 and F02M 37/30 should be considered in order to perform a complete search.
- M F02M 31/166
- • • {with mechanical generation of heat, e.g. by surface friction}
- WARNING
Group F02M 31/166 is impacted by reclassification into group F02M 37/30. Groups F02M 31/166 and F02M 37/30 should be considered in order to perform a complete search.
- M F02M 31/18
- • • to vaporise fuel
- WARNING
Group F02M 31/18 is impacted by reclassification into group F02M 37/30. Groups F02M 31/18 and F02M 37/30 should be considered in order to perform a complete search.
- M F02M 31/183
- • • • {Control}
- WARNING
Group F02M 31/183 is impacted by reclassification into group F02M 37/30. Groups F02M 31/183 and F02M 37/30 should be considered in order to perform a complete search.
- M F02M 31/186
- • • • {with simultaneous mixing of secondary air}
- WARNING
Group F02M 31/186 is impacted by reclassification into group F02M 37/30. Groups F02M 31/186 and F02M 37/30 should be considered in order to perform a complete search.
- U F02M 35/00** **Combustion-air cleaners, air intakes, intake silencers, or induction systems specially adapted for, or arranged on, internal-combustion engines**
- U F02M 35/10 • Air intakes; Induction systems
- U F02M 35/104 • • Intake manifolds
- M F02M 35/108 • • • with primary and secondary intake passages
- WARNING
Group F02M 35/108 is impacted by reclassification into groups F02M 35/112, F02M 35/116, and F02M 35/1165.

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

- M F02M 35/1085
- • • {the combustion chamber having multiple intake valves (modifying induction systems for imparting a rotation to the charge in the cylinder and having multiple air inlets [F02B 31/08](#); shape or arrangement of intake or exhaust channels in cylinder heads [F02F 1/42](#))}

WARNING

Group F02M 35/1085 is impacted by reclassification into groups F02M 35/112, F02M 35/116, and F02M 35/1165.

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

- M F02M 35/112
- • • for engines with cylinders all in one line

WARNING

Group F02M 35/112 is incomplete pending reclassification of documents from groups F02M 35/108 and F02M 35/1085.

Groups F02M 35/108, F02M 35/1085, and F02M 35/112 should be considered in order to perform a complete search.

- M F02M 35/116
- • • for engines with cylinders in V-arrangement or arranged oppositely relative to the main shaft

WARNING

Group F02M 35/116 is incomplete pending reclassification of documents from groups F02M 35/108 and F02M 35/1085.

Groups F02M 35/108, F02M 35/1085, and F02M 35/116 should be considered in order to perform a complete search.

- M F02M 35/1165
- • • {Boxer or pancake engines}

WARNING

Group F02M 35/1165 is incomplete pending reclassification of documents from groups F02M 35/108 and F02M 35/1085.

Groups F02M 35/108, F02M 35/1085, and F02M 35/1165 should be considered in order to perform a complete search.

Project: RP0536-F (F02M)

- U F02M 37/00
- Apparatus or systems for feeding liquid fuel from storage containers to carburettors or fuel-injection apparatus; Arrangements for purifying liquid fuel specially adapted for, or arranged on, internal-combustion engines**

- M F02M 37/22
- Arrangements for purifying liquid fuel specially adapted for, or arranged on, internal-combustion engines, e.g. arrangements in the feeding system

WARNING

Group F02M 37/22 is impacted by reclassification into groups F02M 37/24, F02M 37/26, F02M 37/28, F02M 37/30, F02M 37/32, F02M 37/34, F02M 37/36, F02M 37/38, F02M 37/40, F02M 37/42, F02M 37/44, F02M 37/46, F02M 37/48, F02M 37/50, F02M 37/52, and F02M 37/54.

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

- M F02M 37/24
- • characterised by water separating means

WARNING

Group F02M 37/24 is impacted by reclassification into groups F02M 37/24 – F02M 37/30.

All groups listed above should be considered in order to perform a complete search:

M F02M 37/26

- • • with water detection means

WARNING

Group F02M 37/26 is incomplete pending reclassification of documents from groups F02M 37/22 and F02M 37/24.
Groups F02M 37/22, F02M 37/24, and F02M 37/26 should be considered in order to perform a complete search.

M F02M 37/28

- • • with means activated by the presence of water, e.g. alarms or means for automatic drainage

WARNING

Group F02M 37/28 is incomplete pending reclassification of documents from groups F02M 37/22 and F02M 37/24.
Groups F02M 37/22, F02M 37/24, and F02M 37/28 should be considered in order to perform a complete search.

M F02M 37/30

- • characterised by heating means

WARNING

Group F02M 37/30 is incomplete pending reclassification of documents from groups F02M 31/02, F02M 31/04, F02M 31/042, F02M 31/045, F02M 31/047, F02M 31/06, F02M 31/062, F02M 31/064, F02M 31/066, F02M 31/068, F02M 31/07, F02M 31/08, F02M 31/0805, F02M 31/081, F02M 31/0815, F02M 31/082, F02M 31/0825, F02M 31/083, F02M 31/087, F02M 31/093, F02M 31/10, F02M 31/102, F02M 31/105, F02M 31/107, F02M 31/12, F02M 31/125, F02M 31/13, F02M 31/135, F02M 31/14, F02M 31/145, F02M 31/16, F02M 31/163, F02M 31/166, F02M 31/18, F02M 31/183, F02M 31/186, F02M 37/22, and F02M 37/24.
All groups listed in this Warning should be considered in order to perform a complete search.

M F02M 37/32

- • characterised by filters or filter arrangements

WARNING

Group F02M 37/32 is incomplete pending reclassification of documents from group F02M 37/22.
Groups F02M 37/22 and F02M 37/32 should be considered in order to perform a complete search.

M F02M 37/34

- • • by the filter structure, e.g. honeycomb, mesh or fibrous

WARNING

Group F02M 37/34 is incomplete pending reclassification of documents from group F02M 37/22.
Groups F02M 37/22 and F02M 37/34 should be considered in order to perform a complete search.

M F02M 37/36

- • • with bypass means

WARNING

Group F02M 37/36 is incomplete pending reclassification of documents from group F02M 37/22.
Groups F02M 37/22 and F02M 37/36 should be considered in order to perform a complete search.

- M F02M 37/38
- • • with regeneration means
- WARNING
Group F02M 37/38 is incomplete pending reclassification of documents from group F02M 37/22.
Groups F02M 37/22 and F02M 37/38 should be considered in order to perform a complete search.
- M F02M 37/40
- • • with means for detection of clogging
- WARNING
Group F02M 37/40 is incomplete pending reclassification of documents from group F02M 37/22.
Groups F02M 37/22 and F02M 37/40 should be considered in order to perform a complete search.
- M F02M 37/42
- • • Installation or removal of filters
- WARNING
Group F02M 37/42 is incomplete pending reclassification of documents from group F02M 37/22.
Groups F02M 37/22 and F02M 37/42 should be considered in order to perform a complete search.
- M F02M 37/44
- • • Filters structurally associated with pumps
- WARNING
Group F02M 37/44 is incomplete pending reclassification of documents from group F02M 37/22.
Groups F02M 37/22 and F02M 37/44 should be considered in order to perform a complete search.
- M F02M 37/46
- • • Filters structurally associated with pressure regulators
- WARNING
Group F02M 37/46 is incomplete pending reclassification of documents from group F02M 37/22.
Groups F02M 37/22 and F02M 37/46 should be considered in order to perform a complete search.
- M F02M 37/48
- • • Filters structurally associated with fuel valves
- WARNING
Group F02M 37/48 is incomplete pending reclassification of documents from group F02M 37/22.
Groups F02M 37/22 and F02M 37/48 should be considered in order to perform a complete search.
- M F02M 37/50
- • • Filters arranged in or on fuel tanks
- WARNING
Group F02M 37/50 is incomplete pending reclassification of documents from group F02M 37/22.
Groups F02M 37/22 and F02M 37/50 should be considered in order to perform a complete search.
- M F02M 37/52
- • • using magnetic means
- WARNING
Group F02M 37/52 is incomplete pending reclassification of documents from group F02M 37/22.

Groups F02M 37/22 and F02M 37/52 should be considered in order to perform a complete search.

M F02M 37/54

- characterised by air purging means (having priming pumps [F02M 37/16](#))

WARNING

Group F02M 37/54 is incomplete pending reclassification of documents from group F02M 37/22.
Groups F02M 37/22 and F02M 37/54 should be considered in order to perform a complete search.

Project: RP0586-F (F02M)

M F02M 39/00

Arrangements of fuel-injection apparatus with respect to engines; Pump drives adapted to such arrangements (fuel-injection apparatus in which injection pumps are driven, or injectors are actuated, by the pressure in engine working cylinders, or by impact of engine working piston [F02M 49/00](#); arrangements of injectors [F02M 61/14](#))

NOTE

Low-pressure fuel injection is classified in groups [F02M 51/00](#), [F02M 69/00](#) or [F02M 71/00](#).

WARNING

Group F02M 39/00 is impacted by reclassification into groups F02M 49/00, F02M 49/02, and F02M 49/04.
All groups listed in this Warning should be considered in order to perform a complete search.

M F02M 39/005

- {Arrangements of fuel feed-pumps with respect to fuel injection apparatus ([F02M 37/00](#) takes precedence)}

WARNING

Group F02M 39/005 is impacted by reclassification into groups F02M 49/00, F02M 49/02, and F02M 49/04.
All groups listed in this Warning should be considered in order to perform a complete search.

M F02M 49/00

Fuel-injection apparatus in which injection pumps are driven or injectors are actuated, by the pressure in engine working cylinders, or by impact of engine working piston

WARNING

Groups F02M 49/00, F02M 49/02, and F02M 49/04 are incomplete pending reclassification of documents from groups F02M 39/00 and F02M 39/005.
Groups F02M 39/00, F02M 39/005, and F02M 49/00 should be considered in order to perform a complete search.

U F02M 51/00

Fuel-injection apparatus characterised by being operated electrically

M F02M 51/06

- Injectors peculiar thereto {with means directly operating the valve needle}

WARNING

Group F02M 51/06 is impacted by reclassification into group F02M 51/08.
Groups F02M 51/06 and F02M 51/08 should be considered in order to perform a complete search.

M F02M 51/08

- specially for low-pressure fuel-injection

WARNING

Group F02M 51/08 is incomplete pending reclassification of documents from group F02M 51/06.

Groups F02M 51/06 and F02M 51/08 should be considered in order to perform a complete search.

M F02M 71/00 Combinations of carburettors and low-pressure fuel-injection apparatus

WARNING

Groups F02M 71/00, F02M 71/02, and F02M 71/04 are incomplete pending reclassification of documents from groups F02M 7/06, F02M 7/08, F02M 7/083, F02M 7/087, and F02M 7/093.
All groups listed in this Warning should be considered in order to perform a complete search.

Project: RP0683 (F03G)

M F03G SPRING, WEIGHT, INERTIA OR LIKE MOTORS; MECHANICAL-POWER PRODUCING DEVICES OR MECHANISMS, NOT OTHERWISE PROVIDED FOR OR USING ENERGY SOURCES NOT OTHERWISE PROVIDED FOR (arrangements in connection with power supply in vehicles from force of nature [B60K 16/00](#); electric propulsion with power supply in vehicles from force of nature [B60L 8/00](#))

NOTE

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

- "motors" means mechanisms for producing mechanical power from potential energy of solid bodies.

WARNINGS

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

F03G 4/00	covered by	F03G 7/04
F03G 4/02	covered by	F03G 7/04
F03G 4/04	covered by	F03G 7/04
F03G 4/06	covered by	F03G 7/04

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

M F03G 1/00 Spring-motor *motors* (spring-driven toys [A63H](#); springs in general [F16F](#); precision time mechanisms, e.g. for clocks or watches, [G04B](#))

C F03G 1/02 • characterised by shape or material of spring, e.g. helical, spiral, coil

WARNING

Group F03G 1/02 is impacted by reclassification into groups F03G 1/022, F03G 1/024, F03G 1/026, F03G 1/028, F03G 1/029 and F03G 1/032.
All groups listed in this Warning should be considered in order to perform a complete search.

N F03G 1/022 • • {using spiral springs}

WARNING

Group F03G 1/022 is incomplete pending reclassification of documents from group F03G 1/02.
Groups F03G 1/02 and F03G 1/022 should be considered in order to perform a complete search.

N F03G 1/024 • • {using helical springs}

WARNING

Group F03G 1/024 is incomplete pending reclassification of documents from group F03G 1/02.

Groups [F03G 1/02](#) and [F03G 1/024](#) should be considered in order to perform a complete search.

N F03G 1/026

- {using torsion springs}

WARNING

Group [F03G 1/026](#) is incomplete pending reclassification of documents from group [F03G 1/02](#).

Groups [F03G 1/02](#) and [F03G 1/026](#) should be considered in order to perform a complete search.

N F03G 1/028

- {using leaf springs}

WARNING

Group [F03G 1/028](#) is incomplete pending reclassification of documents from group [F03G 1/02](#).

Groups [F03G 1/02](#) and [F03G 1/028](#) should be considered in order to perform a complete search.

N F03G 1/029

- {using two or more springs}

WARNING

Group [F03G 1/029](#) is incomplete pending reclassification of documents from group [F03G 1/02](#).

Groups [F03G 1/02](#) and [F03G 1/029](#) should be considered in order to perform a complete search.

N F03G 1/032

- {using bimetals}

WARNING

Group [F03G 1/032](#) is incomplete pending reclassification of documents from group [F03G 1/02](#).

Groups [F03G 1/02](#) and [F03G 1/032](#) should be considered in order to perform a complete search.

U F03G 1/04

- using rubber springs

U F03G 1/06

- Other parts or details

U F03G 1/08

- for winding

U F03G 1/10

- for producing output movement other than rotary, e.g. vibratory

C F03G 3/00

Other motors, e.g. gravity or inertia motors-~~{(driven by falling liquid F03B)}~~

WARNING

Group [F03G 3/00](#) is impacted by reclassification into groups [F03G 3/087](#), [F03G 3/091](#), [F03G 3/094](#), [F03G 3/096](#) and [F03G 3/097](#).

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

U F03G 3/02

- using wheels with circumferentially-arranged compartments co-operating with solid falling bodies ([F03G 3/04](#) takes precedence)

U F03G 3/04

- driven by sand or like fluent solid material

U F03G 3/06

- using pendulums

C F03G 3/08

- using flywheels

WARNING

Group [F03G 3/08](#) is impacted by reclassification into group [F03G 3/083](#).

Groups [F03G 3/08](#) and [F03G 3/083](#) should be considered in order to perform a complete search.

- N F03G 3/083
- {deviating the flywheel axis, e.g. using gyroscopic effects like precession or nutation}
- WARNING
Group [F03G 3/083](#) is incomplete pending reclassification of documents from group [F03G 3/08](#).
Groups [F03G 3/08](#) and [F03G 3/083](#) should be considered in order to perform a complete search.
- N F03G 3/087
- {Gravity or weight motors (using solid falling bodies [F03G 3/02](#); using sand or the like [F03G 3/04](#))}
- WARNING
Groups [F03G 3/087](#), [F03G 3/091](#) and [F03G 3/094](#) are incomplete pending reclassification of documents from group [F03G 3/00](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- N F03G 3/091
- {using unbalanced wheels}
- N F03G 3/094
- {specially adapted for potential energy power storage stations; combinations of gravity or weight motors with electric motors or generators}
- N F03G 3/096
- {adapted for pumping or conveying fluids}
- WARNING
Group [F03G 3/096](#) is incomplete pending reclassification of documents from group [F03G 3/00](#).
Groups [F03G 3/00](#) and [F03G 3/096](#) should be considered in order to perform a complete search.
- N F03G 3/097
- {Motors specially adapted for creating a reciprocating movement, e.g. by rotating eccentric masses}
- WARNING
Group [F03G 3/097](#) is incomplete pending reclassification of documents from group [F03G 3/00](#).
Groups [F03G 3/00](#) and [F03G 3/097](#) should be considered in order to perform a complete search.
- N F03G 4/00** **Devices for producing mechanical power from geothermal energy**
- WARNING
Groups [F03G 4/00](#), [F03G 4/001](#), [F03G 4/02](#), [F03G 4/023](#), [F03G 4/026](#), [F03G 4/029](#), [F03G 4/031](#), [F03G 4/033](#), [F03G 4/035](#), [F03G 4/037](#), [F03G 4/04](#), [F03G 4/045](#), [F03G 4/06](#), [F03G 4/063](#), [F03G 4/066](#), [F03G 4/069](#), [F03G 4/072](#) and [F03G 4/074](#) are incomplete pending reclassification of documents from group [F03G 7/04](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- N F03G 4/001
- {Binary cycle plants where the source fluid from the geothermal collector heats the working fluid via a heat exchanger}
- N F03G 4/02
- with direct {working} fluid contact
- N F03G 4/023
- {characterised by the geothermal collectors}
- N F03G 4/026
- {open loop geothermal collectors}
- N F03G 4/029
- {closed loop geothermal collectors, i.e. the fluid is pumped through a closed loop in heat exchange with the geothermal source, e.g. via a heat exchanger}
- N F03G 4/031
- {using waste heat from a primary power cycle to produce mechanical power in a second cycle}

- N F03G 4/033 • {having a Rankine cycle}
- N F03G 4/035 • • {of the Organic Rankine Cycle [ORC] type or the Kalina Cycle type}
- N F03G 4/037 • {having other power cycles, e.g. Stirling, transcritical or supercritical cycles; combined with other power sources, e.g. wind, gas or nuclear}
- N F03G 4/04 • with deep-well turbo pump
- N F03G 4/045 • {with heat pumps}
- N F03G 4/06 • with fluid flashing
- N F03G 4/063 • {with energy storage devices}
- N F03G 4/066 • • {of the non-thermal type, e.g. springs or batteries}
- N F03G 4/069 • {characterised by the brine or scale treatment, e.g. brine desalination, scale deposit prevention or corrosion-proofing}
- N F03G 4/072 • {Controlling or monitoring}
- N F03G 4/074 • {Safety arrangements}

C F03G 5/00 Devices for producing mechanical power from muscle energy (driving cycles [B62M](#))

WARNING

Group [F03G 5/00](#) is impacted by reclassification into groups [F03G 5/086](#), [F03G 5/089](#), [F03G 5/092](#), [F03G 5/095](#), [F03G 5/098](#) and [F03G 5/103](#). All groups listed in this Warning should be considered in order to perform a complete search.

- U F03G 5/02 • of endless-walk type, e.g. treadmills
- M F03G 5/025 • • {Treadmills ([for animals F03G 5/04](#))}
- U F03G 5/04 • • Horsemills or the like
- U F03G 5/042 • • • {Traction devices, shock absorbers or whipping devices for horsemills}
- U F03G 5/045 • • • {Security devices for horsemills}
- U F03G 5/047 • • • {Transmissions or couplings for horsemills}
- C F03G 5/06 • other than of endless-walk type

WARNING

Group [F03G 5/06](#) is impacted by reclassification into groups [F03G 5/061](#), [F03G 5/062](#), [F03G 5/063](#), [F03G 5/064](#), [F03G 5/065](#) and [F03G 5/066](#). All groups listed in this Warning should be considered in order to perform a complete search.

- N F03G 5/061 • • {driven by animals}

WARNING
Group [F03G 5/061](#) is incomplete pending reclassification of documents from group [F03G 5/06](#). Groups [F03G 5/06](#) and [F03G 5/061](#) should be considered in order to perform a complete search.
- N F03G 5/062 • • {driven by humans}

WARNING
Groups [F03G 5/062](#), [F03G 5/063](#), [F03G 5/064](#), [F03G 5/065](#) and [F03G 5/066](#) are incomplete pending reclassification of documents from group [F03G 5/06](#). All groups listed in this Warning should be considered in order to perform a complete search.
- N F03G 5/063 • • • {operated by the leg or foot}
- N F03G 5/064 • • • • {using a bicycle or a bicycle pedal, e.g. pedal generators}

- N F03G 5/065 • • • {operated by the hand}
- N F03G 5/066 • • • {of the motor-generator type, e.g. the generator is also usable as an electric motor}
- U F03G 5/08 • • for combined actuation by different limbs, e.g. hand and leg
- N F03G 5/086 • {using flywheels}
- WARNING
Group [F03G 5/086](#) is incomplete pending reclassification of documents from group [F03G 5/00](#).
Groups [F03G 5/00](#) and [F03G 5/086](#) should be considered in order to perform a complete search.
- N F03G 5/089 • {using pendulums}
- WARNING
Group [F03G 5/089](#) is incomplete pending reclassification of documents from group [F03G 5/00](#).
Groups [F03G 5/00](#) and [F03G 5/089](#) should be considered in order to perform a complete search.
- N F03G 5/092 • {using centrifugal or centripetal forces}
- WARNING
Group [F03G 5/092](#) is incomplete pending reclassification of documents from group [F03G 5/00](#).
Groups [F03G 5/00](#) and [F03G 5/092](#) should be considered in order to perform a complete search.
- N F03G 5/095 • {with potential energy storage}
- WARNING
Group [F03G 5/095](#) is incomplete pending reclassification of documents from group [F03G 5/00](#).
Groups [F03G 5/00](#) and [F03G 5/095](#) should be considered in order to perform a complete search.
- N F03G 5/098 • {for pumping}
- WARNING
Group [F03G 5/098](#) is incomplete pending reclassification of documents from group [F03G 5/00](#).
Groups [F03G 5/00](#) and [F03G 5/098](#) should be considered in order to perform a complete search.
- N F03G 5/103 • {using springs}
- WARNING
Group [F03G 5/103](#) is incomplete pending reclassification of documents from group [F03G 5/00](#).
Groups [F03G 5/00](#) and [F03G 5/103](#) should be considered in order to perform a complete search.
- C F03G 6/00 Devices for producing mechanical power from solar energy (solar boilers [F24](#))**
- WARNING
Group [F03G 6/00](#) is impacted by reclassification into groups [F03G 6/002](#), [F03G 6/0055](#), [F03G 6/071](#), [F03G 6/074](#), [F03G 6/083](#), [F03G 6/089](#), [F03G 6/092](#), [F03G 6/098](#), [F03G 6/108](#), [F03G 6/111](#), [F03G 6/114](#), [F03G 6/117](#), [F03G 6/121](#), [F03G 6/124](#), [F03G 6/127](#) and [F03G 6/129](#).

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

- U F03G 6/001
 - {having photovoltaic cells}
- N F03G 6/002
 - {with expansion and contraction elements}

WARNING
Group [F03G 6/002](#) is incomplete pending reclassification of documents from group [F03G 6/00](#).
Groups [F03G 6/00](#) and [F03G 6/002](#) should be considered in order to perform a complete search.
- C F03G 6/003
 - {having a Rankine cycle ([F03G 6/065](#) takes precedence)}

WARNING
Group [F03G 6/003](#) is impacted by reclassification into group [F03G 6/004](#).
Groups [F03G 6/003](#) and [F03G 6/004](#) should be considered in order to perform a complete search.
- N F03G 6/004
 - • {of the Organic Rankine Cycle [ORC] type or the Kalina Cycle type}

WARNING
Group [F03G 6/004](#) is incomplete pending reclassification of documents from group [F03G 6/003](#).
Groups [F03G 6/003](#) and [F03G 6/004](#) should be considered in order to perform a complete search.
- M F03G 6/005
 - • {~~using an intermediate fluid for heat transfer~~ Binary cycle plants where the fluid from the solar collector heats the working fluid via a heat exchanger}
- N F03G 6/0055
 - {having other power cycles, e.g. Stirling or transcritical, supercritical cycles; combined with other power sources, e.g. wind, gas or nuclear}

WARNING
Group [F03G 6/0055](#) is incomplete pending reclassification of documents from group [F03G 6/00](#).
Groups [F03G 6/00](#) and [F03G 6/0055](#) should be considered in order to perform a complete search.
- D F03G 2006/006
 - {~~Seles pond~~}

<administratively transferred to [F03G 6/083](#) INV>
- D F03G 2006/008
 - {~~with a tower~~}

<administratively transferred to [F03G 6/063](#) INV>
- U F03G 6/02
 - using a single state working fluid
- U F03G 6/04
 - • gaseous {([F03G 6/064](#), [F03G 6/068](#) take precedence)}
- M F03G 6/045
 - • • {by producing an updraft of heated gas *or a downdraft of cooled gas*, e.g. air driving an engine}
- C F03G 6/06
 - with ~~means for concentrating solar rays~~ solar energy concentrating means (means per se [F24S 23/00](#))

WARNING
Group [F03G 6/06](#) is impacted by reclassification into groups [F03G 6/061](#), [F03G 6/062](#), [F03G 6/063](#) and [F03G 6/068](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- D F03G 2006/061
 - • {~~Parabolic linear concentrator~~}

<administratively transferred to [F03G 6/061](#) INV>

- N F03G 6/061
- {Parabolic linear or through concentrators}
- WARNING
Group [F03G 6/061](#) is incomplete pending reclassification of documents from group [F03G 6/06](#).
Groups [F03G 6/06](#) and [F03G 6/061](#) should be considered in order to perform a complete search.
- D F03G 2006/062
- {Parabolic point concentrator}
- <administratively transferred to [F03G 6/062](#) INV>
- N F03G 6/062
- {Parabolic point or dish concentrators}
- WARNING
Group [F03G 6/062](#) is incomplete pending reclassification of documents from group [F03G 6/06](#).
Groups [F03G 6/06](#) and [F03G 6/062](#) should be considered in order to perform a complete search.
- N F03G 6/063
- {Tower concentrators}
- WARNING
Group [F03G 6/063](#) is incomplete pending reclassification of documents from group [F03G 6/06](#).
Groups [F03G 6/06](#) and [F03G 6/063](#) should be considered in order to perform a complete search.
- U F03G 6/064
- {having a gas turbine cycle, i.e. compressor and gas turbine combination}
- C F03G 6/065
- {having a Rankine cycle}
- WARNING
Group [F03G 6/065](#) is impacted by reclassification into group [F03G 6/066](#).
Groups [F03G 6/065](#) and [F03G 6/066](#) should be considered in order to perform a complete search.
- N F03G 6/066
- • {of the Organic Rankine Cycle [ORC] type or the Kalina Cycle type}
- WARNING
Group [F03G 6/066](#) is incomplete pending reclassification of documents from group [F03G 6/065](#).
Groups [F03G 6/065](#) and [F03G 6/066](#) should be considered in order to perform a complete search.
- M F03G 6/067
- • {using an intermediate fluid for heat transfer Binary cycle plants where the fluid from the solar collector heats the working fluid via a heat exchanger}
- T F03G 6/068
- {having a Stirling cycle} other power cycles, e.g. Stirling or transcritical, supercritical cycles; combined with other power sources, e.g. wind, gas or nuclear}
- WARNING
Group [F03G 6/068](#) is incomplete pending reclassification of documents from group [F03G 6/06](#).
Groups [F03G 6/06](#) and [F03G 6/068](#) should be considered in order to perform a complete search.
- N F03G 6/071
- {with energy storage devices}
- WARNING
Groups [F03G 6/071](#) and [F03G 6/074](#) are incomplete pending reclassification of documents from group [F03G 6/00](#).

Groups [F03G 6/00](#), [F03G 6/071](#) and [F03G 6/074](#) should be considered in order to perform a complete search.

- N [F03G 6/074](#) · · {of the non-thermal type, e.g. springs or batteries}
- N [F03G 6/083](#) · {with solar ponds}

WARNING

Group [F03G 6/083](#) is incomplete pending reclassification of documents from group [F03G 6/00](#).
Groups [F03G 6/00](#) and [F03G 6/083](#) should be considered in order to perform a complete search.

- N [F03G 6/089](#) · {for pumping}

WARNING

Group [F03G 6/089](#) is incomplete pending reclassification of documents from group [F03G 6/00](#).
Groups [F03G 6/00](#) and [F03G 6/089](#) should be considered in order to perform a complete search.

- N [F03G 6/092](#) · {using heat pumps, e.g. solar assisted heat pumps}

WARNING

Group [F03G 6/092](#) is incomplete pending reclassification of documents from groups [F03G 6/00](#) and [F03G 2007/007](#).
Groups [F03G 6/00](#), [F03G 2007/007](#) and [F03G 6/092](#) should be considered in order to perform a complete search.

- N [F03G 6/098](#) · {Components, parts or details}

WARNING

Groups [F03G 6/098](#), [F03G 6/108](#), [F03G 6/111](#), [F03G 6/114](#) and [F03G 6/117](#) are incomplete pending reclassification of documents from group [F03G 6/00](#).
All groups listed in this Warning should be considered in order to perform a complete search.

- N [F03G 6/108](#) · · {of the heat transfer system}
- N [F03G 6/111](#) · · · {Heat transfer fluids}
- N [F03G 6/114](#) · · · · {Molten salts}
- N [F03G 6/117](#) · · · · {Solid-liquid phase change of the heat transfer fluid}
- N [F03G 6/121](#) · {Controlling or monitoring}

WARNING

Groups [F03G 6/121](#), [F03G 6/124](#) and [F03G 6/127](#) are incomplete pending reclassification of documents from group [F03G 6/00](#).
All groups listed in this Warning should be considered in order to perform a complete search.

- N [F03G 6/124](#) · · {Start-up control}
- N [F03G 6/127](#) · · {Over-night operation}
- N [F03G 6/129](#) · {Safety arrangements}

WARNING

Group [F03G 6/129](#) is incomplete pending reclassification of documents from group [F03G 6/00](#).
Groups [F03G 6/00](#) and [F03G 6/129](#) should be considered in order to perform a complete search.

- C F03G 7/00** **Mechanical-power-producing mechanisms, not otherwise provided for or using energy sources not otherwise provided for ~~for microstructural devices or systems, e.g. micromechanical devices B81B~~**
- WARNING**
Group F03G 7/00 is impacted by reclassification into groups F03G 7/003, F03G 7/004, F03G 7/008, F03G 7/009, F03G 7/011, F03G 7/012, F03G 7/0121, F03G 7/015, F03G 7/016, F03G 7/017, F03G 7/025, F03G 7/0252, F03G 7/0254, F03G 7/027, F03G 7/028, F03G 7/029 and F03G 7/092. All groups listed in this Warning should be considered in order to perform a complete search.
- M F03G 7/002** • {using the energy of vibration of ~~a fluid column~~ *fluid columns*}~~{for refrigeration machines using waves F25B 9/14}~~
- N F03G 7/003** • {Motors driven by thermophoresis or thermodiffusion}
- WARNING**
Group F03G 7/003 is incomplete pending reclassification of documents from group F03G 7/00. Groups F03G 7/00 and F03G 7/003 should be considered in order to perform a complete search.
- N F03G 7/004** • {Thermo-magnetic motors, e.g. using the Curie effect}
- WARNING**
Group F03G 7/004 is incomplete pending reclassification of documents from group F03G 7/00. Groups F03G 7/00 and F03G 7/004 should be considered in order to perform a complete search.
- F F03G 7/005 (Frozen)** • {Electro-chemical actuators; Actuators having a material for absorbing or desorbing gas, e.g. a ~~metahydride~~ *metal hydride*; Actuators using the difference in osmotic pressure between fluids; Actuators with elements stretchable when contacted with liquid rich in ions, with UV light, with a salt solution}
- WARNING**
Group F03G 7/005 is no longer used for the classification of documents as of August 1, 2021. The content of this group is being reclassified into groups F03G 7/009, F03G 7/011, F03G 7/012, F03G 7/0121, F03G 7/015, F03G 7/016 and F03G 7/017. All groups listed in this Warning should be considered in order to perform a complete search.
- F F03G 2007/007 (Frozen)** • {using heat pumps}
- WARNING**
Group F03G 2007/007 is no longer used for the classification of documents as of August 1, 2021. The content of this group is being reclassified into groups F03G 7/047 and F03G 6/092. Groups F03G 2007/007, F03G 7/047 and F03G 6/092 should be considered in order to perform a complete search.
- N F03G 7/008** • {characterised by the actuating element (actuating elements for mechanical power producing mechanism using expansion or contraction of bodies due to heating, cooling, moistening, drying or the like [F03G 7/061](#))}
- WARNING**
Group F03G 7/008 is incomplete pending reclassification of documents from group [F03G 7/00](#).

Groups [F03G 7/00](#) and [F03G 7/008](#) should be considered in order to perform a complete search.

- N F03G 7/009
- {Actuators with elements stretchable when contacted with liquid rich in ions, with UV light or with a salt solution}
- WARNING
Group [F03G 7/009](#) is incomplete pending reclassification of documents from groups [F03G 7/00](#) and [F03G 7/005](#).
Groups [F03G 7/00](#), [F03G 7/005](#) and [F03G 7/009](#) should be considered in order to perform a complete search.
- N F03G 7/011
- {Actuators having a material for absorbing or desorbing a gas, e.g. with a fuel cell reaction or a metal hydride}
- WARNING
Group [F03G 7/011](#) is incomplete pending reclassification of documents from groups [F03G 7/00](#) and [F03G 7/005](#).
Groups [F03G 7/00](#), [F03G 7/005](#) and [F03G 7/011](#) should be considered in order to perform a complete search.
- N F03G 7/012
- {Electro-chemical actuators}
- WARNING
Groups [F03G 7/012](#) and [F03G 7/0121](#) are incomplete pending reclassification of documents from groups [F03G 7/00](#) and [F03G 7/005](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- N F03G 7/0121
- • {Electroactive polymers}
- N F03G 7/015
- {Actuators using the difference in osmotic pressure between fluids}
- WARNING
Group [F03G 7/015](#) is incomplete pending reclassification of documents from groups [F03G 7/00](#) and [F03G 7/005](#).
Groups [F03G 7/00](#), [F03G 7/005](#) and [F03G 7/015](#) should be considered in order to perform a complete search.
- N F03G 7/016
- {Photosensitive actuators, e.g. using the principle of Crookes radiometer}
- WARNING
Group [F03G 7/016](#) is incomplete pending reclassification of documents from groups [F03G 7/00](#) and [F03G 7/005](#).
Groups [F03G 7/00](#), [F03G 7/005](#) and [F03G 7/016](#) should be considered in order to perform a complete search.
- N F03G 7/017
- {Actuators comprising biological materials}
- WARNING
Group [F03G 7/017](#) is incomplete pending reclassification of documents from groups [F03G 7/00](#) and [F03G 7/005](#).
Groups [F03G 7/00](#), [F03G 7/005](#) and [F03G 7/017](#) should be considered in order to perform a complete search.
- N F03G 7/025
- {characterised by its use}
- WARNING
Groups [F03G 7/025](#), [F03G 7/0252](#) and [F03G 7/0254](#) are incomplete pending reclassification of documents from group [F03G 7/00](#).
All groups listed in this Warning should be considered in order to perform a complete search.

- N F03G 7/0252
- {Motors; Energy harvesting or waste energy recovery}
- N F03G 7/0254
- {pumping or compressing fluids, e.g. microfluidic devices}
- N F03G 7/027
- {Control or monitoring}
- WARNING**
Group [F03G 7/027](#) is incomplete pending reclassification of documents from group [F03G 7/00](#).
Groups [F03G 7/00](#) and [F03G 7/027](#) should be considered in order to perform a complete search.
- N F03G 7/028
- {Safety arrangements}
- WARNING**
Group [F03G 7/028](#) is incomplete pending reclassification of documents from group [F03G 7/00](#).
Groups [F03G 7/00](#) and [F03G 7/028](#) should be considered in order to perform a complete search.
- N F03G 7/029
- {characterised by the material or the manufacturing process, e.g. the assembly}
- WARNING**
Group [F03G 7/029](#) is incomplete pending reclassification of documents from group [F03G 7/00](#).
Groups [F03G 7/00](#) and [F03G 7/029](#) should be considered in order to perform a complete search.
- C F03G 7/04
- using pressure differences or thermal differences occurring in nature ([F03G 7/06](#) takes precedence)
- WARNING**
Group [F03G 7/04](#) is impacted by reclassification into groups [F03G 4/00](#), [F03G 4/001](#), [F03G 4/02](#), [F03G 4/023](#), [F03G 4/026](#), [F03G 4/029](#), [F03G 4/031](#), [F03G 4/033](#), [F03G 4/035](#), [F03G 4/037](#), [F03G 4/04](#), [F03G 4/045](#), [F03G 4/06](#), [F03G 4/063](#), [F03G 4/066](#), [F03G 4/069](#), [F03G 4/072](#), [F03G 4/074](#), [F03G 7/045](#) and [F03G 7/047](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- N F03G 7/045
- {Environmental heat plants or OTEC plants using an Organic Rankine Cycle [ORC] or a Kalina Cycle}
- WARNING**
Group [F03G 7/045](#) is incomplete pending reclassification of documents from group [F03G 7/04](#).
Groups [F03G 7/04](#) and [F03G 7/045](#) should be considered in order to perform a complete search.
- N F03G 7/047
- {Environmental heat plants or OTEC plants using heat pumps}
- WARNING**
Group [F03G 7/047](#) is incomplete pending reclassification of documents from groups [F03G 2007/007](#) and [F03G 7/04](#).
Groups [F03G 2007/007](#), [F03G 7/04](#) and [F03G 7/047](#) should be considered in order to perform a complete search.
- U F03G 7/05
- Ocean thermal energy conversion, i.e. OTEC

- C F03G 7/06
- using expansion or contraction of bodies due to heating, cooling, moistening, drying or the like (using thermal expansion of non-vaporising liquids [F01K](#))

WARNING

Group [F03G 7/06](#) is impacted by reclassification into groups [F03G 7/061](#), [F03G 7/06112](#), [F03G 7/06113](#), [F03G 7/06114](#), [F03G 7/06115](#), [F03G 7/0612](#), [F03G 7/0613](#), [F03G 7/0614](#), [F03G 7/06143](#), [F03G 7/06145](#), [F03G 7/06146](#), [F03G 7/06147](#), [F03G 7/0615](#), [F03G 7/0616](#), [F03G 7/0618](#), [F03G 7/062](#), [F03G 7/063](#), [F03G 7/0631](#), [F03G 7/06324](#), [F03G 7/0633](#), [F03G 7/0634](#), [F03G 7/0635](#), [F03G 7/0636](#), [F03G 7/064](#), [F03G 7/0641](#), [F03G 7/0645](#), [F03G 7/0646](#), [F03G 7/066](#), [F03G 7/0665](#) and [F03G 7/067](#).

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

- N F03G 7/061
- {characterised by the actuating element}

WARNING

Groups [F03G 7/061](#), [F03G 7/06112](#), [F03G 7/06113](#), [F03G 7/06114](#), [F03G 7/06115](#), [F03G 7/0612](#), [F03G 7/0613](#), [F03G 7/0616](#) and [F03G 7/0618](#) are incomplete pending reclassification of documents from group [F03G 7/06](#). All groups listed in this Warning should be considered in order to perform a complete search.

- N F03G 7/06112
- • • {using the thermal expansion or contraction of enclosed fluids}

- N F03G 7/06113
- • • • {the fluids subjected to phase change}

- N F03G 7/06114
- • • {using the thermal expansion or contraction of solid materials}

- N F03G 7/06115
- • • {using materials changing their chemical composition}

- N F03G 7/0612
- • • {using polymers}

- N F03G 7/0613
- • • {using layers of different materials joined together, e.g. bimetals}

- N F03G 7/0614
- • • {using shape memory elements}

WARNING

Groups [F03G 7/0614](#), [F03G 7/06143](#), [F03G 7/06145](#), [F03G 7/06146](#), [F03G 7/06147](#) and [F03G 7/0615](#) are incomplete pending reclassification of documents from groups [F03G 7/06](#) and [F03G 7/065](#).

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

- N F03G 7/06143
- • • • {Wires}

- N F03G 7/06145
- • • • {Springs}

- N F03G 7/06146
- • • • {Torque tubes or torsion bars}

- N F03G 7/06147
- • • • {Magnetic shape memory alloys, e.g. ferro-magnetic alloys}

- N F03G 7/0615
- • • • {Training, i.e. setting or adjusting the elongation characteristics of the material}

- N F03G 7/0616
- • • {characterised by the material or the manufacturing process, e.g. the assembly (magnetic shape memory alloys [F03G 7/06147](#))}

- N F03G 7/0618
- • • • {comprising biological materials}

- N F03G 7/062
- • {characterised by the activation arrangement}

WARNING

Group [F03G 7/062](#) is incomplete pending reclassification of documents from group [F03G 7/06](#).

Groups [F03G 7/06](#) and [F03G 7/062](#) should be considered in order to perform a complete search.

- N F03G 7/063
- • {characterised by the mechanic interaction}
- WARNING
Groups [F03G 7/063](#), [F03G 7/0631](#), [F03G 7/06324](#), [F03G 7/0633](#), [F03G 7/0634](#), [F03G 7/0635](#) and [F03G 7/0636](#) are incomplete pending reclassification of documents from group [F03G 7/06](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- N F03G 7/0631
- • • {One-way operation, e.g. release mechanism}
- N F03G 7/06324
- • • {increasing or decreasing in volume}
- N F03G 7/0633
- • • {performing a rotary movement}
- N F03G 7/0634
- • • {using cam gearings}
- N F03G 7/0635
- • • {with several elements connected in series}
- N F03G 7/0636
- • • {with several elements connected in parallel}
- N F03G 7/064
- • {characterised by its use}
- WARNING
Groups [F03G 7/064](#), [F03G 7/0641](#), [F03G 7/0645](#) and [F03G 7/0646](#) are incomplete pending reclassification of documents from group [F03G 7/06](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- N F03G 7/0641
- • • {Motors; Energy harvesting or waste energy recovery}
- N F03G 7/0645
- • • {Clamping, fixing or crimping parts}
- N F03G 7/0646
- • • {for pumping or compressing fluids}
- F F03G 7/065
(Frozen)
- • {using a shape memory element}
- WARNING
Group [F03G 7/065](#) is no longer used for the classification of documents as of August 1, 2021.
The content of this group is being reclassified into groups [F03G 7/0614](#), [F03G 7/06143](#), [F03G 7/06145](#), [F03G 7/06146](#), [F03G 7/06147](#) and [F03G 7/0615](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- N F03G 7/066
- • {Actuator control or monitoring}
- WARNING
Groups [F03G 7/066](#) and [F03G 7/0665](#) are incomplete pending reclassification of documents from group [F03G 7/06](#).
Groups [F03G 7/06](#), [F03G 7/066](#) and [F03G 7/0665](#) should be considered in order to perform a complete search.
- N F03G 7/0665
- • • {controlled displacement, e.g. by using a lens positioning actuator}
- N F03G 7/067
- • {Safety arrangements}
- WARNING
Group [F03G 7/067](#) is incomplete pending reclassification of documents from group [F03G 7/06](#).
Groups [F03G 7/06](#) and [F03G 7/067](#) should be considered in order to perform a complete search.

- C F03G 7/08
- recovering energy derived from swinging, rolling, pitching or like movements, e.g. from the vibrations of a machine
- WARNING**
Group [F03G 7/08](#) is impacted by reclassification into groups [F03G 7/081](#), [F03G 7/083](#), [F03G 7/085](#) and [F03G 7/087](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- N F03G 7/081
- {recovering energy from moving road or rail vehicles, e.g. collecting vehicle vibrations in the vehicle tyres or shock absorbers}
- WARNING**
Groups [F03G 7/081](#), [F03G 7/083](#), [F03G 7/085](#) and [F03G 7/087](#) are incomplete pending reclassification of documents from group [F03G 7/08](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- N F03G 7/083
- . . . {using devices on streets or on rails}
- N F03G 7/085
- {hydraulic or pneumatic devices}
- N F03G 7/087
- {magnetic or electromagnetic devices, e.g. linear electric generators}
- N F03G 7/092
- {Motors following new scientific theories not otherwise provide for, e.g. using quantum field effects like zero-point energy, Casimir effect}
- WARNING**
Group [F03G 7/092](#) is incomplete pending reclassification of documents from group [F03G 7/00](#).
Groups [F03G 7/00](#) and [F03G 7/092](#) should be considered in order to perform a complete search.
- C F03G 7/10
- Alleged perpetua mobilia (of buoyancy principle [F03B 17/04](#) using hydrostatic thrust [F03B 17/04](#))
- WARNING**
Group [F03G 7/10](#) is impacted by reclassification into groups [F03G 7/104](#), [F03G 7/107](#), [F03G 7/111](#), [F03G 7/115](#), [F03G 7/119](#), [F03G 7/122](#), [F03G 7/125](#), [F03G 7/129](#) and [F03G 7/135](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- N F03G 7/104
- . . {continuously converting gravity into usable power}
- WARNING**
Groups [F03G 7/104](#), [F03G 7/107](#) and [F03G 7/111](#) are incomplete pending reclassification of documents from group [F03G 7/10](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- N F03G 7/107
- . . . {using an unbalance for increasing torque or saving energy}
- N F03G 7/111
- . . . {using magnets, e.g. gravo-magnetic motors}
- N F03G 7/115
- . . {harvesting energy from inertia forces}
- WARNING**
Groups [F03G 7/115](#) and [F03G 7/119](#) are incomplete pending reclassification of documents from group [F03G 7/10](#).
Groups [F03G 7/10](#), [F03G 7/115](#) and [F03G 7/119](#) should be considered in order to perform a complete search.
- N F03G 7/119
- . . . {amplifying power, torque or energy}

- N F03G 7/122
- • {of closed energy loops}
- WARNING
Group [F03G 7/122](#) is incomplete pending reclassification of documents from group [F03G 7/10](#).
Groups [F03G 7/10](#) and [F03G 7/122](#) should be considered in order to perform a complete search.
- N F03G 7/125
- • {creating a thrust by violating the principle of momentum conservation}
- WARNING
Group [F03G 7/125](#) is incomplete pending reclassification of documents from group [F03G 7/10](#).
Groups [F03G 7/10](#) and [F03G 7/125](#) should be considered in order to perform a complete search.
- N F03G 7/129
- • {Thermodynamic processes}
- WARNING
Group [F03G 7/129](#) is incomplete pending reclassification of documents from group [F03G 7/10](#).
Groups [F03G 7/10](#) and [F03G 7/129](#) should be considered in order to perform a complete search.
- N F03G 7/135
- • {following unproven scientific theories; Theories about perpetual motion}
- WARNING
Group [F03G 7/135](#) is incomplete pending reclassification of documents from group [F03G 7/10](#).
Groups [F03G 7/10](#) and [F03G 7/135](#) should be considered in order to perform a complete search.
- D F03G 2730/00** **Motors driven by springs, weights or manual power**
- D F03G 2730/01
- Spring motors with spiral springs
<administratively transferred to [F03G 1/022](#) INV>
- D F03G 2730/02
- Spring motors with helical springs
<administratively transferred to [F03G 1/024](#) INV>
- D F03G 2730/03
- Spring motors with torsion springs
<administratively transferred to [F03G 1/026](#) INV>
- D F03G 2730/05
- Motors driven by hands or feet
- D F03G 2730/06
- Various motors in general
- D F03G 2730/07
- Special parts of devices or motors according to the preceding groups

Project: RP0537-F (F15B)

- U F15B 21/00** **Common features of fluid actuator systems; Fluid-pressure actuator systems or details thereof, not covered by any other group of this subclass**
- U F15B 21/04
- Special measures taken in connection with the properties of the fluid
- M F15B 21/042
- • Controlling the temperature of the fluid

WARNING

Group F15B 21/042 is impacted by reclassification into groups F15B 21/0423 and F15B 21/0427.

Groups F15B 21/042, F15B 21/0423, and F15B 21/0427 should be considered in order to perform a complete search.

M F15B 21/0423

• • • Cooling

WARNING

Group F15B 21/0423 is incomplete pending reclassification of documents from group F15B 21/042.

Groups F15B 21/042 and F15B 21/0423 should be considered in order to perform a complete search.

M F15B 21/0427

• • • Heating

WARNING

Group F15B 21/0427 is incomplete pending reclassification of documents from group F15B 21/042.

Groups F15B 21/042 and F15B 21/0427 should be considered in order to perform a complete search.

Project: RP0659 (F16B)

M F16B

DEVICES FOR FASTENING OR SECURING CONSTRUCTIONAL ELEMENTS OR MACHINE PARTS TOGETHER, e.g. NAILS, BOLTS, CIRCLIPS, CLAMPS, CLIPS, WEDGES, JOINTS OR JOINTING (couplings for transmitting rotation [F16D](#))

NOTES

1. Attention is drawn to:

- a. the Note following group [E04B 1/38](#);
- b. the following places:

[A44B](#)

Buckles, slide fasteners

[A47G 3/00](#)

Ornamental heads for nails, screws, or the like

[B42F 3/00](#)

Means, not using staples, for attaching sheets temporarily together

[{C14B 17/08}](#)

{Fastening devices, e.g. clips for leather-stretching used in apparatus or machines for manufacturing or treating skins, hides, leathers or furs}

[E01B 9/10](#)

Screws or bolts for railway sleepers

[E01B 11/00](#)

Rail joints

[E04](#)

Connections for building

[E04D 13/08](#)

Clamping means for down pipes for roof drainage

[E04G 5/04](#)

Fastening scaffolds against buildings

[E04G 7/00](#)

Scaffolding couplings

[E05C](#)

Bolts for fasteners for wings, specially for doors or windows

[F16C 29/10](#)

Locking bearings for parts moving only linearly

[F16G 17/00](#)

Hooks as integral parts of chains

[F16L](#)

Pipe joints

[F16L 3/00](#)

Supports for pipes, cables or protective tubing, e.g. hangers, holders, clamps, cleats, clips, brackets

[F16L 33/02](#)

Clips for connecting hoses to rigid members

[H01F 7/00](#)

Magnetic holding devices

[H02N 13/00](#)

Electrostatic holding devices.

2. Groups [F16B 2/00](#) - [F16B 47/00](#) take precedence over group [F16B 1/00](#).

3. {In this main group, it is desirable to add the indexing codes of [F16B 2200/00](#)}

WARNINGS

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

F16B 7/08	covered by	F16B 5/12 , F16B 7/04 , F16L 3/00
F16B 7/12	covered by	F16B 7/105
F16B 7/16	covered by	F16B 7/14 , F16B 2007/16
F16B 13/10	covered by	F16B 13/08 , F16B 2013/10
F16B 13/13	covered by	F16B 13/002 , F16B 13/12
F16B 21/14	covered by	F16B 21/12 , F16B 2021/14
F16B 25/02	covered by	F16B 25/103
F16B 25/04	covered by	F16B 25/00 , F16B 25/106
F16B 25/06	covered by	F16B 25/00 , F16B 25/106
F16B 25/08	covered by	F16B 25/00 , F16B 25/106
F16B 33/04	covered by	F16B 33/02 , F16B 2033/04
F16B 37/10	covered by	F16B 37/0842 , F16B 37/0871

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

- U F16B 7/00** Connections of rods or tubes, e.g. of non-circular section, mutually, including resilient connections ({[F16B 11/008](#), [F16B 17/00](#) take precedence;} umbrella frames [A45B 25/02](#); welding or soldering of connections [B23K](#); vehicle connections in general [B60D](#); railway couplings [B61G](#); bicycle frames [B62K](#); couplings for transmitting rotation [F16D](#); couplings for tubes conveying fluids [F16L](#))
- U F16B 7/10
- Telescoping systems ({for vertically adjustable chairs [A47C 3/20](#); telescopic steering columns [B62D 1/18](#)}; for scaffolding [E04G 25/04](#); {telescopic masts, poles or the like [E04H 12/182](#); telescopic door or window holders [E05C 17/30](#)}; telescope props for mining [E21D 15/14](#) - [E21D 15/46](#); stands or trestles as supports for apparatus or articles placed thereon {[F16M 11/26](#)})
- U F16B 7/14
- • locking in intermediate {non-discrete} positions {(the rod or tube being locked by a tilting clip [F16B 2/246](#))}
- U F16B 7/149
- • • {with a sleeve or ring having a tapered or conical surface ([F16B 7/1463](#) takes precedence)}
- D F16B 2007/16
- • • {locking only against movement in one direction}
<administratively transferred to [F16B 7/16](#) INV>
- N *F16B 7/16*
- • • *locking only against movement in one direction*
- U F16B 13/00** Dowels or other devices fastened in walls or the like by inserting them in holes made therein for that purpose (nails [F16B 15/00](#); self-locking pins or bolts in general, stud-and-socket releasable fastenings [F16B 21/00](#); dowels or bolts for railroad sleepers [E01B 9/00](#); ans means for anchoring structural elements or bulkheads specially adapted to foundation engineering [E02D 5/74](#); bolts or dowels used while laying bricks or casting concrete sleepers [E04B 1/38](#); setting anchoring bolts in shafts, tunnels or galleries [E21D 20/00](#); anchoring bolts for shafts, tunnels or galleries [E21D 21/00](#))
- U F16B 13/04
- with parts gripping in the hole or behind the reverse side of the wall after inserting from the front ({[F16B 13/002](#) and [F16B 13/12](#) take precedence;} friction-grip releasable fastenings in general [F16B 2/00](#))
- U F16B 13/08
- • with separate {or non-separate} gripping parts moved into their final position in relation to the body of the device without further manual operation
- U F16B 13/0891
- • • {with a locking element, e.g. wedge, key or ball moving along an inclined surface of the dowel body ([F16B 13/0816](#), [F16B 13/0825](#), [F16B 13/0883](#) take precedence)}

- D F16B 2013/10
- {with gripping parts moved into their final position in relation to the body of the device by a separate operation}
 - <administratively transferred to [F16B 13/10](#) INV>
- N F16B 13/10
- • with separate gripping parts moved into their final position in relation to the body of the device by a separate operation ([F16B 13/06](#) takes precedence)
- D F16B 2013/105
- • {with a toggle-mechanism}
 - <administratively transferred to [F16B 13/10](#) INV>
- U F16B 21/00 Means for preventing relative axial movement of a pin, spigot, shaft or the like and a member surrounding it (riveted or deformable spigots [F16B 19/04](#); for gudgeon pins [F16J 1/18](#)); Stud-and-socket releasable fastenings**
- U F16B 21/10
- by separate parts ({[F16B 21/06](#) takes precedence}; key-type connection [F16B 3/00](#); locking screws or nuts against rotation by such means [F16B 39/04](#))
- U F16B 21/12
- • with locking-pins or split-pins thrust into holes
- U F16B 21/125
- • • {radially resilient or with a snap-action member, e.g. elastic tooth, pawl with spring, resilient coil or wire}
- D F16B 2021/14
- • • {~~Details of locking-pins or split-pins~~}
 - <administratively transferred to [F16B 21/14](#) INV>
- N F16B 21/14
- • • *Details of locking-pins or split-pins*
- U F16B 33/00 Features common to bolt and nut**
- U F16B 33/02
- Shape of thread; Special thread-forms ({[F16B 25/00](#) takes precedence; used to remove paint or dirt layers [F16B 35/007](#), [F16B 37/002](#)}; used as screw-locking device [F16B 39/30](#))
- U F16B 2033/025
- • {with left-hand thread}
- D F16B 2033/04
- • {in view of tensile load}
 - <administratively transferred to [F16B 33/04](#) INV>
- N F16B 33/04
- • *in view of tensile load*

Project: RP0659 (F16D)

F16D 41/00 Freewheels or freewheel clutches (cycle brakes controlled by back-peddalling [B62L 5/00](#) {; one-way linear clutches ~~F16B 2007/16~~[F16B 7/16](#)})

Project: RP0441 (F16K)

M F16K 15/00 Check valves (valves specially adapted for inflatable balls [A63B 41/00](#))

WARNING

Groups [F16K 15/00](#), [F16K 15/20](#), [F16K 15/202](#) and [F16K 15/205](#) are incomplete pending reclassification of documents from group [F16K 15/03](#).

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

M F16K 15/02

- with guided rigid valve members

WARNING

Groups [F16K 15/02](#), [F16K 15/021](#), [F16K 15/023](#), [F16K 15/04](#) and [F16K 15/048](#) are incomplete pending reclassification of documents from group [F16K 15/03](#).

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

- T F16K 15/025
- {the valve being loaded by a ~~helicoidal~~ spring ([F16K 15/03](#) - [F16K 15/12](#) take precedence)}
- WARNING**
*Group [F16K 15/025](#) is incomplete pending reclassification of documents from group [F16K 15/03](#).
All groups listed in this Warning should be considered in order to perform a complete search.*
- M F16K 15/026
- • {the valve member being a movable body around which the medium flows when the valve is open}
- WARNING**
*Groups [F16K 15/026](#) and [F16K 15/028](#) are incomplete pending reclassification of documents from group [F16K 15/03](#).
All groups listed in this Warning should be considered in order to perform a complete search.*
- C F16K 15/03
- • with a hinged closure member *{or with a pivoted closure member}*
- WARNING**
*Group [F16K 15/03](#) is impacted by reclassification into groups [F16K 15/031](#) - [F16K 15/207](#) and [F16K 17/00](#) - [F16K 17/42](#).
All groups listed in this Warning should be considered in order to perform a complete search.*
- C F16K 15/031
- • {the hinge being flexible (~~F16K 15/035 takes precedence~~)}
- WARNING**
*Group [F16K 15/031](#) is incomplete pending reclassification of documents from groups [F16K 15/03](#), [F16K 15/035](#), [F16K 15/036](#) and [F16K 15/038](#).
Group [F16K 15/031](#) is also impacted by reclassification into group [F16K 15/034](#).
All groups listed in this Warning should be considered in order to perform a complete search.*
- C F16K 15/033
- • {spring-loaded (~~F16K 15/035 takes precedence~~)}
- WARNING**
*Group [F16K 15/033](#) is incomplete pending reclassification of documents from groups [F16K 15/03](#), [F16K 15/035](#), [F16K 15/036](#) and [F16K 15/038](#).
Group [F16K 15/033](#) is also impacted by reclassification into group [F16K 15/034](#).
All groups listed in this Warning should be considered in order to perform a complete search.*
- N F16K 15/034
- • {weight-loaded}
- WARNING**
*Group [F16K 15/034](#) is incomplete pending reclassification of documents from groups [F16K 15/03](#), [F16K 15/031](#), [F16K 15/033](#), [F16K 15/035](#), [F16K 15/036](#) and [F16K 15/038](#).
All groups listed in this Warning should be considered in order to perform a complete search.*
- C F16K 15/035
- • {with a plurality of valve members}
- WARNING**
*Group [F16K 15/035](#) is incomplete pending reclassification of documents from group [F16K 15/03](#).
Group [F16K 15/035](#) is also impacted by reclassification into groups [F16K 15/031](#), [F16K 15/033](#) and [F16K 15/034](#).*

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

- C F16K 15/036
 - • • {Dual valve members with hinges crossing the flow line substantially diametrical}

WARNING

Group F16K 15/036 is incomplete pending reclassification of documents from group F16K 15/03.

Group F16K 15/036 is also impacted by reclassification into groups F16K 15/031, F16K 15/033 and F16K 15/034.

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

- C F16K 15/038
 - • • • {having a common hinge}

WARNING

Group F16K 15/038 is incomplete pending reclassification of documents from group F16K 15/03.

Group F16K 15/038 is also impacted by reclassification into groups F16K 15/031, F16K 15/033 and F16K 15/034.

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

- U F16K 15/04
 - • shaped as balls

- C F16K 15/042
 - • • {with a plurality of balls}

WARNING

Group F16K 15/042 is incomplete pending reclassification of documents from group F16K 15/03.

Group F16K 15/042 is also impacted by reclassification into groups F16K 15/044 and F16K 15/046.

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

- T F16K 15/044
 - • • {spring-loaded (~~F16K 15/042 takes precedence~~)}

WARNING

Groups F16K 15/044 and F16K 15/046 are incomplete pending reclassification of documents from groups F16K 15/03 and F16K 15/042.

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

- C F16K 15/06
 - • with guided stems

WARNING

Group F16K 15/06 is incomplete pending reclassification of documents from group F16K 15/03.

Group F16K 15/06 is also impacted by reclassification into groups F16K 15/063, F16K 15/064, F16K 15/065, F16K 15/066 and F16K 15/067.

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

- C F16K 15/063
 - • • {the valve being loaded by a ~~helical~~ spring}

WARNING

Group F16K 15/063 is incomplete pending reclassification of documents from groups F16K 15/03, F16K 15/06 and F16K 15/066.

Group F16K 15/063 is also impacted by reclassification into groups F16K 15/064, F16K 15/065, F16K 15/066 and F16K 15/067.

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

- N F16K 15/064
- • • {with a spring other than a helicoidal spring}
- WARNING
Group [F16K 15/064](#) is incomplete pending reclassification of documents from groups [F16K 15/03](#), [F16K 15/06](#), [F16K 15/063](#) and [F16K 15/066](#). All groups listed in this Warning should be considered in order to perform a complete search.
- N F16K 15/065
- • • {spring pulling the closure member against the seat}
- WARNING
Group [F16K 15/065](#) is incomplete pending reclassification of documents from groups [F16K 15/03](#), [F16K 15/06](#), [F16K 15/063](#) and [F16K 15/066](#). All groups listed in this Warning should be considered in order to perform a complete search.
- C F16K 15/066
- • • {with a plurality of valve members}
- WARNING
Group [F16K 15/066](#) is incomplete pending reclassification of documents from groups [F16K 15/03](#), [F16K 15/06](#) and [F16K 15/063](#). Group [F16K 15/066](#) is also impacted by reclassification into groups [F16K 15/063](#), [F16K 15/064](#), [F16K 15/065](#) and [F16K 15/067](#). All groups listed in this Warning should be considered in order to perform a complete search.
- N F16K 15/067
- • • {stem guided at two or more points}
- WARNING
Group [F16K 15/067](#) is incomplete pending reclassification of documents from groups [F16K 15/03](#), [F16K 15/06](#), [F16K 15/063](#) and [F16K 15/066](#). All groups listed in this Warning should be considered in order to perform a complete search.
- M F16K 15/08
- • shaped as rings
- WARNING
Groups [F16K 15/08](#), [F16K 15/10](#), and [F16K 15/12](#) are incomplete pending reclassification of documents from group [F16K 15/03](#). All groups listed in this Warning should be considered in order to perform a complete search.
- C F16K 15/14
- with flexible valve members
- WARNING
Group [F16K 15/14](#) is incomplete pending reclassification of documents from group [F16K 15/03](#). Group [F16K 15/14](#) is also impacted by reclassification into groups [F16K 15/1401](#) and [F16K 15/1402](#). All groups listed in this Warning should be considered in order to perform a complete search.
- N F16K 15/1401
- • {having a plurality of independent valve members}
- WARNING
Group [F16K 15/1401](#) is incomplete pending reclassification of documents from groups [F16K 15/03](#), [F16K 15/14](#), [F16K 15/144](#), [F16K 15/147](#), [F16K 15/148](#) and [F16K 15/16](#).

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

- N F16K 15/1402
- {having an integral flexible member cooperating with a plurality of seating surfaces}
- WARNING
Group [F16K 15/1402](#) is incomplete pending reclassification of documents from groups [F16K 15/03](#), [F16K 15/14](#), [F16K 15/144](#), [F16K 15/147](#), [F16K 15/148](#) and [F16K 15/16](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- M F16K 15/141
- {the closure elements not being fixed to the valve body}
- WARNING
Groups [F16K 15/141](#) and [F16K 15/142](#) are incomplete pending reclassification of documents from group [F16K 15/03](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- C F16K 15/144
- {the closure elements being fixed along all or a part of their periphery}
- WARNING
Group [F16K 15/144](#) is incomplete pending reclassification of documents from group [F16K 15/03](#).
Group [F16K 15/144](#) is also impacted by reclassification into groups [F16K 15/1401](#), [F16K 15/1402](#) and [F16K 15/1441](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- N F16K 15/1441
- • {with biasing means in addition to material resiliency, e.g. spring}
- WARNING
Group [F16K 15/1441](#) is incomplete pending reclassification of documents from groups [F16K 15/03](#), [F16K 15/144](#) and [F16K 15/147](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- M F16K 15/145
- • {the closure elements being shaped as a solids of revolution, e.g. cylindrical or conical}
- WARNING
Group [F16K 15/145](#) is incomplete pending reclassification of documents from group [F16K 15/03](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- C F16K 15/147
- • {the closure elements having specially formed slits or being of an elongated easily collapsible form}
- WARNING
Group [F16K 15/147](#) is incomplete pending reclassification of documents from group [F16K 15/03](#).
Group [F16K 15/147](#) is also impacted by reclassification into groups [F16K 15/1401](#), [F16K 15/1402](#), [F16K 15/1441](#), [F16K 15/1471](#) and [F16K 15/1472](#).
All groups listed in this Warning should be considered in order to perform a complete search.

- N F16K 15/1471 . . . {slits arranged along multiple axes}
- WARNING
Group [F16K 15/1471](#) is incomplete pending reclassification of documents from groups [F16K 15/03](#) and [F16K 15/147](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- N F16K 15/1472 . . . {the closure elements being fixed onto an internally extending mount}
- WARNING
Group [F16K 15/1472](#) is incomplete pending reclassification of documents from groups [F16K 15/03](#) and [F16K 15/147](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- C F16K 15/148 . . {the closure elements being fixed in their centre}
- WARNING
Group [F16K 15/148](#) is incomplete pending reclassification of documents from group [F16K 15/03](#).
Group [F16K 15/148](#) is also impacted by reclassification into groups [F16K 15/1401](#), [F16K 15/1402](#) and [F16K 15/1481](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- N F16K 15/1481 . . . {with biasing means in addition to material resiliency, e.g. spring}
- WARNING
Group [F16K 15/1481](#) is incomplete pending reclassification of documents from groups [F16K 15/03](#) and [F16K 15/148](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- C F16K 15/16 . . with tongue-shaped laminae
- WARNING
Group [F16K 15/16](#) is incomplete pending reclassification of documents from group [F16K 15/03](#).
Group [F16K 15/16](#) is also impacted by reclassification into groups [F16K 15/1401](#), [F16K 15/1402](#), [F16K 15/161](#) and [F16K 15/162](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- N F16K 15/161 . . . {with biasing means in addition to material resiliency, e.g. spring}
- WARNING
Group [F16K 15/161](#) is incomplete pending reclassification of documents from groups [F16K 15/03](#) and [F16K 15/16](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- N F16K 15/162 . . . {with limit stop}
- WARNING
Group [F16K 15/162](#) is incomplete pending reclassification of documents from groups [F16K 15/03](#) and [F16K 15/16](#).
All groups listed in this Warning should be considered in order to perform a complete search.

- C F16K 15/18
- with actuating mechanism; Combined check valves and actuated valves
- WARNING**
*Group F16K 15/18 is incomplete pending reclassification of documents from group F16K 15/03.
 Group F16K 15/18 is also impacted by reclassification into groups F16K 15/182, F16K 15/184, F16K 15/1841, F16K 15/1843 and F16K 15/1845.
 All groups listed in this Warning should be considered in order to perform a complete search.*
- D F16K 15/181
- • {for check valves with a hinged closure member (F16K 15/188 takes precedence)}
- <administratively transferred to [F16K 15/1821](#)>
- N F16K 15/182
- • {with actuating mechanism}
- WARNING**
*Group [F16K 15/182](#) is incomplete pending reclassification of documents from groups [F16K 15/03](#) and [F16K 15/18](#).
 All groups listed in this Warning should be considered in order to perform a complete search.*
- Q F16K 15/1821
- • • {for check valves with a hinged or pivoted closure member}
- WARNING**
*Group [F16K 15/1821](#) is incomplete pending reclassification of documents from group [F16K 15/03](#).
 Group [F16K 15/1821](#) is also impacted by reclassification into group [F16K 15/1841](#).
 All groups listed in this Warning should be considered in order to perform a complete search.*
- Q F16K 15/1823
- • • {for ball check valves}
- WARNING**
*Group [F16K 15/1823](#) is incomplete pending reclassification of documents from group [F16K 15/03](#).
 Group [F16K 15/1823](#) is also impacted by reclassification into group [F16K 15/1843](#).
 All groups listed in this Warning should be considered in order to perform a complete search.*
- Q F16K 15/1825
- • • {for check valves with flexible valve members}
- WARNING**
*Group [F16K 15/1825](#) is incomplete pending reclassification of documents from group [F16K 15/03](#).
 Group [F16K 15/1825](#) is also impacted by reclassification into group [F16K 15/1845](#).
 All groups listed in this Warning should be considered in order to perform a complete search.*
- N F16K 15/1826
- • • {Check valves which can be actuated by a pilot valve}
- WARNING**
*Group [F16K 15/1826](#) is incomplete pending reclassification of documents from group [F16K 15/03](#).
 All groups listed in this Warning should be considered in order to perform a complete search.*
- D F16K 15/183
- • {for ball check valves (F16K 15/186, F16K 15/188 take precedence)}
- <administratively transferred to [F16K 15/1823](#)>

- N F16K 15/184
- • {Combined check valves and actuated valves}
- WARNING
Group [F16K 15/184](#) is incomplete pending reclassification of documents from groups [F16K 15/03](#) and [F16K 15/18](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- N F16K 15/1841
- • • {for check valves with a hinged closure member}
- WARNING
Group [F16K 15/1841](#) is incomplete pending reclassification of documents from groups [F16K 15/03](#), [F16K 15/18](#) and [F16K 15/1821](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- N F16K 15/1843
- • • {for ball check valves}
- WARNING
Group [F16K 15/1843](#) is incomplete pending reclassification of documents from groups [F16K 15/03](#), [F16K 15/18](#) and [F16K 15/1823](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- N F16K 15/1845
- • • {for check valves with flexible valve members}
- WARNING
Group [F16K 15/1845](#) is incomplete pending reclassification of documents from groups [F16K 15/03](#), [F16K 15/18](#) and [F16K 15/1825](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- N F16K 15/1848
- • • {Check valves combined with valves having a rotating tap or cock}
- WARNING
Group [F16K 15/1848](#) is incomplete pending reclassification of documents from group [F16K 15/03](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- D F16K 15/185
- • {for check valves with flexible valve members (F16K 15/188 takes precedence)}
- <administratively transferred to [F16K 15/1825](#)>
- D F16K 15/186
- • {Check valves which can be actuated by a pilot valve}
- <administratively transferred to [F16K 15/1826](#)>
- D F16K 15/188
- • {Check valves combined with valves having a rotating tap or cock}
- <administratively transferred to [F16K 15/1848](#)>
- U F16K 15/20
- specially designed for inflatable bodies, e.g. tyres (connecting valves to inflatable bodies [B60C 29/00](#))
- M F16K 15/207
- • {and combined with other valves, e.g. safety valves}
- WARNING
Group [F16K 15/207](#) is incomplete pending reclassification of documents from group [F16K 15/03](#).
All groups listed in this Warning should be considered in order to perform a complete search.

M	F16K 17/00	Safety valves; Equalising valves, {e.g. pressure relief valves}
		<p><u>WARNING</u> <i>Groups F16K 17/00 - F16K 17/42 are incomplete pending reclassification of documents from group F16K 15/03. All groups listed in this Warning should be considered in order to perform a complete search.</i></p>
	F16K 25/00 - F16K 99/00 F16K 2200/00	Details
		<u>NOTE</u> Details not provided for in the following groups are classified in the preceding groups.
U	F16K 27/00	Construction of housing (methods for welding housings B23K); Use of materials therefor
U	F16K 27/02	<ul style="list-style-type: none"> • of lift valves (for reducing the flow resistance of screw-spindle lift-valves F16K 1/06)
U	F16K 27/0209	<ul style="list-style-type: none"> • • {Check valves or pivoted valves}
C	F16K 27/0227	<ul style="list-style-type: none"> • • • {with the valve members swinging around an axis located at the edge of or outside the valve member}
		<p><u>WARNING</u> <i>Group F16K 27/0227 is impacted by reclassification into group F16K 27/0232. Groups F16K 27/0227 and F16K 27/0232 should be considered in order to perform a complete search.</i></p>
N	F16K 27/0232	<ul style="list-style-type: none"> • • • • {the valve member retained by a removable closure}
		<p><u>WARNING</u> <i>Group F16K 27/0232 is incomplete pending reclassification of documents from group F16K 27/0227. Groups F16K 27/0227 and F16K 27/0232 should be considered in order to perform a complete search.</i></p>
C	F16K 47/00	Means in valves for absorbing fluid energy {e.g. cushioning of opening or closure movement, eliminating of vibrations of the valve member} (for pipes F16L 55/00)
		<p><u>WARNING</u> <i>Group F16K 47/00 is impacted by reclassification into groups F16K 47/01, F16K 47/011, F16K 47/0111, F16K 47/0112 and F16K 47/012. All groups listed in this Warning should be considered in order to perform a complete search.</i></p>
N	F16K 47/01	<ul style="list-style-type: none"> • {Damping of valve members}
		<p><u>WARNING</u> <i>Groups F16K 47/01 and F16K 47/012 are incomplete pending reclassification of documents from groups F16K 47/00, F16K 47/02 and F16K 47/023. All groups listed in this Warning should be considered in order to perform a complete search.</i></p>
N	F16K 47/011	<ul style="list-style-type: none"> • • {by means of a dashpot}
		<p><u>WARNING</u> <i>Groups F16K 47/011, F16K 47/0111, and F16K 47/0112 are incomplete pending reclassification of documents from groups F16K 47/00, F16K 47/02 and F16K 47/023.</i></p>

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

- N F16K 47/0111
 - • {the valve members comprising a plunger sliding within a fixed dashpot}
- N F16K 47/0112
 - • {the valve members comprising a dashpot sliding over a fixed plunger}
- N F16K 47/012
 - {by means of a resilient damping element}
- C F16K 47/02
 - for preventing water-hammer or noise ~~{, e.g. for sanitary applications, toilet flush reservoirs (F16K 47/04 and F16K 47/08 take precedence)}~~

WARNING

Group F16K 47/02 is impacted by reclassification into groups F16K 47/01, F16K 47/011, F16K 47/0111, F16K 47/0112 and F16K 47/012.

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

- C F16K 47/023
 - {for preventing water-hammer, e.g. damping of the valve movement}

WARNING

Group F16K 47/023 is impacted by reclassification into groups F16K 47/01, F16K 47/011, F16K 47/0111, F16K 47/0112 and F16K 47/012.

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

N F16K 2200/00

Details of valves

- N F16K 2200/10
 - Means for compensation of misalignment between seat and closure member
- N F16K 2200/101
 - • closure member self-aligning to seat
- N F16K 2200/102
 - • seat self-aligning to closure member
- N F16K 2200/20
 - Common housing having a single inlet, a single outlet and multiple valve members
- N F16K 2200/201
 - • of diverse type, size or shape
- N F16K 2200/202
 - • one valve arranged inside of the valve member of a second valve, e.g. nested valve members
- N F16K 2200/203
 - • in parallel
- N F16K 2200/204
 - • in series
- N F16K 2200/30
 - Spring arrangements
- N F16K 2200/301
 - • Common spring for multiple closure members
- N F16K 2200/302
 - • Plurality of biasing means, e.g. springs, for opening or closing single valve member
- N F16K 2200/303
 - • Means for protecting the spring in the fluid flow path
- N F16K 2200/304
 - • Adjustable spring pre-loading
- N F16K 2200/305
 - • Constructional features of springs
- N F16K 2200/3051
 - • • Generally flat springs
- N F16K 2200/3052
 - • • Cantilever springs
- N F16K 2200/3053
 - • • Helicoidal springs of variable pitch, diameter or spring rate
- N F16K 2200/40
 - Bleeding means in closed position of the valve, e.g. bleeding passages
- N F16K 2200/401
 - • arranged on the closure member
- N F16K 2200/402
 - • arranged on the valve housing or seat
- N F16K 2200/50
 - Self-contained valve assemblies
- N F16K 2200/501
 - • Cartridge valves
- N F16K 2200/502
 - • Cages for valves, i.e. means to be inserted within the valve housing, surrounding and guiding the closure member

Project: RP0313-F (F21K)

M F21K 9/00

Light sources using semiconductor devices as light-generating elements, e.g. using light-emitting diodes [LED] or lasers

NOTES

1. In this group, the following expressions are used with the meaning indicated:
 - "light source" means a light-generating component intended for installation in a fitting or holder incorporated in a lighting device;
 - "retrofit light source" means a light source comprising substantially the same attachment means as those of incandescent lamps or fluorescent lamps. "Retrofit light sources" are specially adapted for replacing or substituting such lamps.
2. Semiconductor devices per se, or assemblies thereof, specially adapted for light emission, e.g. for use in light sources (in the sense of Note (1)) are covered by subclass [H01L](#), e.g. [H01L 33/00](#) or [H01L 51/50](#), or by subclass [H01S](#).
3. Lighting devices or systems in which light sources are used are covered by subclasses [F21L](#) or [F21S](#).
4. When classifying in this group, classification is also made in subclass [F21V](#) if detail aspects covered by that subclass are of interest.

WARNING

~~Group F21K 9/00 is impacted by reclassification into groups F21K 9/20, F21K 9/23, F21K 9/232, F21K 9/233, F21K 9/235, F21K 9/237, F21K 9/238, F21K 9/27, F21K 9/272, F21K 9/275, F21K 9/278, F21K 9/60, F21K 9/61, F21K 9/62, F21K 9/64, F21K 9/65, F21K 9/66, F21K 9/68, F21K 9/69, F21K 9/90 and F21K 99/00.~~

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

M F21K 9/20

- Light sources comprising attachment means

WARNINGS

~~1. Group F21K 9/20 is incomplete pending reclassification of documents from groups F21K 9/00, F21K 99/00, F21S 2/00, F21V 19/042 and F21V 19/045. All groups listed in this Warning should be considered in order to perform a complete search.~~

~~2. Group F21K 9/20 is impacted by reclassification into groups F21K 9/23, F21K 9/232, F21K 9/233, F21K 9/235, F21K 9/237, F21K 9/238, F21K 9/27, F21K 9/272, F21K 9/275 and F21K 9/278.~~

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

M F21K 9/23

- Retrofit light sources for lighting devices with a single fitting for each light source, e.g. for substitution of incandescent lamps with bayonet or threaded fittings

WARNINGS

~~1. Group F21K 9/23 is incomplete pending reclassification of documents from groups F21K 9/00, F21K 9/20, F21K 99/00, F21S 2/00, F21V 19/042 and F21V 19/045.~~

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

~~2. Group F21K 9/23 is impacted by reclassification into F21K 9/235, F21K 9/237 and F21K 9/238.~~

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

- M F21K 9/232
- • specially adapted for generating an essentially omnidirectional light distribution, e.g. with a glass bulb
- WARNING**
Group F21K 9/232 is incomplete pending reclassification of documents from groups F21K 9/00, F21K 9/20, F21K 99/00, F21S 2/00, F21V 19/042 and F21V 19/045.
All groups listed in this Warning should be considered in order to perform a complete search.
- M F21K 9/233
- • specially adapted for generating a spot light distribution, e.g. for substitution of reflector lamps
- WARNING**
Group F21K 9/233 is incomplete pending reclassification of documents from groups F21K 9/00, F21K 9/20, F21K 99/00, F21S 2/00, F21V 19/042 and F21V 19/045.
All groups listed in this Warning should be considered in order to perform a complete search.
- M F21K 9/235
- • Details of bases or caps, i.e. the parts that connect the light source to a fitting; Arrangement of components within bases or caps ([F21K 9/238](#) takes precedence)
- WARNING**
Group F21K 9/235 is incomplete pending reclassification of documents from groups F21K 9/00, F21K 9/20, F21K 9/23, F21K 99/00, F21S 2/00, F21V 19/042 and F21V 19/045.
All groups listed in this Warning should be considered in order to perform a complete search.
- M F21K 9/237
- • Details of housings or cases, i.e. the parts between the light-generating element and the bases; Arrangement of components within housings or cases ([F21K 9/238](#) takes precedence)
- WARNING**
Group F21K 9/237 is incomplete pending reclassification of documents from groups F21K 9/00, F21K 9/20, F21K 9/23, F21K 99/00, F21S 2/00, F21V 19/042 and F21V 19/045.
All groups listed in this Warning should be considered in order to perform a complete search.
- M F21K 9/238
- • Arrangement or mounting of circuit elements integrated in the light source
- WARNING**
Group F21K 9/238 is incomplete pending reclassification of documents from groups F21K 9/00, F21K 9/20, F21K 9/23, F21K 99/00, F21S 2/00, F21V 19/042, F21V 19/045, F21V 23/003, F21V 23/004, F21V 23/005 and F21V 23/006.
All groups listed in this Warning should be considered in order to perform a complete search.
- M F21K 9/27
- • Retrofit light sources for lighting devices with two fittings for each light source, e.g. for substitution of fluorescent tubes
- WARNINGS**
1. Group F21K 9/27 is incomplete pending reclassification of documents from groups F21K 9/00, F21K 9/20, F21K 99/00, F21S 2/00, F21V 19/042, F21V 19/045.

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

2. Group F21K 9/27 is impacted by reclassification into groups F21K 9/272, F21K 9/275 and F21K 9/278.

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

M F21K 9/272

- Details of end parts, i.e. the parts that connect the light source to a fitting; Arrangement of components within end parts ([F21K 9/278](#) takes precedence)

WARNING

Group F21K 9/272 is incomplete pending reclassification of documents from groups F21K 9/00, F21K 9/20, F21K 9/27, F21K 99/00, F21S 2/00, F21V 19/042 and F21V 19/045.

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

M F21K 9/275

- Details of bases or housings, i.e. the parts between the light-generating element and the end caps; Arrangement of components within bases or housings ([F21K 9/278](#) takes precedence)

WARNING

Group F21K 9/275 is incomplete pending reclassification of documents from groups F21K 9/00, F21K 9/20, F21K 9/27, F21K 99/00, F21S 2/00, F21V 19/042 and F21V 19/045.

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

M F21K 9/278

- Arrangement or mounting of circuit elements integrated in the light source

WARNING

Group F21K 9/278 is incomplete pending reclassification of documents from groups F21K 9/00, F21K 9/20, F21K 9/27, F21K 99/00, F21S 2/00, F21V 19/042, F21V 19/045, F21V 23/003, F21V 23/004, F21V 23/005 and F21V 23/006.

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

M F21K 9/60

- Optical arrangements integrated in the light source, e.g. for improving the colour rendering index or the light extraction

WARNINGS

1. Group F21K 9/60 is incomplete pending reclassification of documents from groups F21K 9/00, F21K 99/00, F21S 2/00, F21V 19/042 and F21V 19/045. All groups listed in this Warning should be considered in order to perform a complete search.

2. Group F21K 9/60 is impacted by reclassification into groups F21K 9/66, F21K 9/68 and F21K 9/69.

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

M F21K 9/61

- using light guides

WARNING

Group F21K 9/61 is incomplete pending reclassification of documents from groups F21K 9/00, F21K 99/00, F21S 2/00, F21V 19/042 and F21V 19/045. All groups listed in this Warning should be considered in order to perform a complete search.

- M F21K 9/62
- using mixing chambers, e.g. housings with reflective walls
- WARNING
~~Group F21K 9/62 is incomplete pending reclassification of documents from groups F21K 9/00, F21K 99/00, F21S 2/00, F21V 19/042 and F21V 19/045. All groups listed in this Warning should be considered in order to perform a complete search.~~
- M F21K 9/64
- using wavelength conversion means distinct or spaced from the light-generating element, e.g. a remote phosphor layer
- WARNING
~~Group F21K 9/64 is incomplete pending reclassification of documents from groups F21K 9/00, F21K 99/00, F21S 2/00, F21V 19/042 and F21V 19/045. All groups listed in this Warning should be considered in order to perform a complete search.~~
- M F21K 9/65
- specially adapted for changing the characteristics or the distribution of the light, e.g. by adjustment of parts
- WARNING
~~Group F21K 9/65 is incomplete pending reclassification of documents from groups F21K 9/00, F21K 99/00, F21S 2/00, F21V 19/042 and F21V 19/045. All groups listed in this Warning should be considered in order to perform a complete search.~~
- M F21K 9/66
- Details of globes or covers forming part of the light source
- WARNING
~~Group F21K 9/66 is incomplete pending reclassification of documents from groups F21K 9/00, F21K 9/60, F21K 99/00, F21S 2/00, F21V 19/042 and F21V 19/045. All groups listed in this Warning should be considered in order to perform a complete search.~~
- M F21K 9/68
- Details of reflectors forming part of the light source
- WARNING
~~Group F21K 9/68 is incomplete pending reclassification of documents from groups F21K 9/00, F21K 9/60, F21K 99/00, F21S 2/00, F21V 19/042 and F21V 19/045. All groups listed in this Warning should be considered in order to perform a complete search.~~
- M F21K 9/69
- Details of refractors forming part of the light source
- WARNING
~~Group F21K 9/69 is incomplete pending reclassification of documents from groups F21K 9/00, F21K 9/60, F21K 99/00, F21S 2/00, F21V 19/042 and F21V 19/045. All groups listed in this Warning should be considered in order to perform a complete search.~~
- M F21K 9/90
- Methods of manufacture
- WARNING
~~Group F21K 9/90 is incomplete pending reclassification of documents from groups F21K 9/00, F21K 99/00, F21S 2/00, F21V 19/042 and F21V 19/045. All groups listed in this Warning should be considered in order to perform a complete search.~~

M F21K 99/00 Subject matter not provided for in other groups of this subclass**WARNINGS**

1. Group F21K 99/00 is incomplete pending reclassification of documents from groups F21V 19/042 and F21V 19/045.

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

2. Group F21K 99/00 is impacted by reclassification into groups F21K 9/00, F21K 9/20, F21K 9/23, F21K 9/232, F21K 9/233, F21K 9/235, F21K 9/237, F21K 9/238, F21K 9/27, F21K 9/272, F21K 9/275, F21K 9/278, F21K 9/60, F21K 9/61, F21K 9/62, F21K 9/64, F21K 9/65, F21K 9/66, F21K 9/68, F21K 9/69 and F21K 9/90.

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

Project: RP0313-F (F21S)**M F21S 2/00 Systems of lighting devices, not provided for in main groups [F21S 4/00](#) - [F21S 10/00](#) or [F21S 19/00](#), e.g. of modular construction****WARNING**

Group F21S 2/00 is impacted by reclassification into groups F21K 9/00, F21K 9/20, F21K 9/23, F21K 9/232, F21K 9/233, F21K 9/235, F21K 9/237, F21K 9/238, F21K 9/27, F21K 9/272, F21K 9/275, F21K 9/278, F21K 9/60, F21K 9/61, F21K 9/62, F21K 9/64, F21K 9/65, F21K 9/66, F21K 9/68, F21K 9/69 and F21K 9/90.

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

Project: RP0503-F (F21S)**M F21S 41/00 Illuminating devices specially adapted for vehicle exteriors, e.g. headlamps (reversing lights [F21S 43/00](#))****WARNING**

Group F21S 41/00 is incomplete pending reclassification of documents from group F21S 43/00.

Groups F21S 43/00 and F21S 41/00 should be considered in order to perform a complete search.

U F21S 41/10 · characterised by the light source

M F21S 41/14 · · characterised by the type of light source

WARNING

Group F21S 41/14 is impacted by reclassification into groups F21S 41/16 and F21S 41/176.

Groups F21S 41/14, F21S 41/16 and F21S 41/176 should be considered in order to perform a complete search.

M F21S 41/141 · · · Light emitting diodes [LED]

WARNING

Group F21S 41/141 is impacted by reclassification into groups F21S 41/151 and F21S 41/153.

Groups F21S 41/141, F21S 41/151 and F21S 41/153 should be considered in order to perform a complete search.

- M F21S 41/143
- • • the main emission direction of the LED being parallel to the optical axis of the illuminating device
- WARNING
Group F21S 41/143 is impacted by reclassification into groups F21S 41/145, F21S 41/151 and F21S 41/153.
All groups listed in this Warning should be considered – should be considered in order to perform a complete search.
- M F21S 41/145
- • • the main emission direction of the LED being opposite to the main emission direction of the illuminating device
- WARNING
Group F21S 41/145 is incomplete pending reclassification of documents from group F21S 41/143.
Groups F21S 41/143 and F21S 41/145 should be considered in order to perform a complete search.
- M F21S 41/147
- • • the main emission direction of the LED being angled to the optical axis of the illuminating device
- WARNING
Group F21S 41/147 is impacted by reclassification into groups F21S 41/148, F21S 41/151 and F21S 41/153.
All groups listed in this Warning should be considered in order to perform a complete search.
- M F21S 41/148
- • • the main emission direction of the LED being perpendicular to the optical axis
- WARNING
Group F21S 41/148 is incomplete pending reclassification of documents from group F21S 41/147.
Groups F21S 41/147 and F21S 41/148 should be considered in order to perform a complete search.
- M F21S 41/151
- • • arranged in one or more lines
- WARNING
Group F21S 41/151 is incomplete pending reclassification of documents from groups F21S 41/141, F21S 41/143 and F21S 41/147.
All groups should be considered in order to perform a complete search.
- M F21S 41/153
- • • arranged in a matrix
- WARNING
Group F21S 41/153 is incomplete pending reclassification of documents from groups F21S 41/141, F21S 41/143 and F21S 41/147.
All groups listed in this Warning should be considered in order to perform a complete search.
- M F21S 41/16
- • • Laser light sources
- WARNING
Group F21S 41/16 is incomplete pending reclassification of documents from group F21S 41/14.
Groups F21S 41/14 and F21S 41/16 should be considered in order to perform a complete search.
- M F21S 41/17
- • • Discharge light sources
- WARNING
Group F21S 41/17 is impacted by reclassification into group F21S 41/172.

~~Groups F21S 41/17 and F21S 41/172 should be considered in order to perform a complete search.~~

- M F21S 41/172
- • • High-intensity discharge light sources

WARNING

~~Group F21S 41/172 is incomplete pending reclassification of documents from group F21S 41/17.~~

~~Groups F21S 41/17 and F21S 41/172 should be considered in order to perform a complete search.~~

- M F21S 41/176
- • • Light sources where the light is generated by photoluminescent material spaced from a primary light generating element

WARNING

~~Group F21S 41/176 is incomplete pending reclassification of documents from group F21S 41/14.~~

~~Groups F21S 41/14 and F21S 41/176 should be considered in order to perform a complete search.~~

- U F21S 41/30
- characterised by reflectors

- M F21S 41/32
- • Optical layout thereof

WARNING

~~Group F21S 41/32 is impacted by reclassification into group F21S 41/33.~~

~~Groups F21S 41/32 and F21S 41/33.~~

~~Groups F21S 41/32 and F21S 41/33 should be considered in order to perform a complete search.~~

- M F21S 41/33
- • • Multi-surface reflectors, e.g. reflectors with facets or reflectors with portions of different curvature

WARNING

~~Group F21S 41/33 is incomplete pending reclassification of documents from group F21S 41/32.~~

~~Groups F21S 41/32 and F21S 41/33 should be considered in order to perform a complete search.~~

- M F21S 41/36
- • • Combinations of two or more separate reflectors

WARNING

~~Group F21S 41/36 is impacted by reclassification into group F21S 41/365.~~

~~Groups F21S 41/36 and F21S 41/365 should be considered in order to perform a complete search.~~

- M F21S 41/365
- • • successively reflecting the light

WARNING

~~Group F21S 41/365 is incomplete pending reclassification of documents from group F21S 41/36.~~

~~Groups F21S 41/36 and F21S 41/365 should be considered in order to perform a complete search.~~

- M F21S 43/00**
- Signalling devices specially adapted for vehicle exteriors, e.g. brake lamps, direction indicator lights or reversing lights**

WARNING

~~Group F21S 43/00 is impacted by reclassification into groups F21S 41/00 and F21W 2104/00.~~

~~Groups F21S 43/00, F21S 41/00 and F21W 2104/00 should be considered in order to perform a complete search.~~

U	F21S 43/10	<ul style="list-style-type: none"> • characterised by the light source
M	F21S 43/13	<ul style="list-style-type: none"> • • characterised by the type of light source <p style="color: red; margin-top: 10px;"><u>WARNING</u> Group F21S 43/13 is impacted by reclassification into group F21S 43/16. Groups F21S 43/13 and F21S 43/16 should be considered in order to perform a complete search.</p>
M	F21S 43/16	<ul style="list-style-type: none"> • • • Light sources where the light is generated by photoluminescent material spaced from a primary light generating element <p style="color: red; margin-top: 10px;"><u>WARNING</u> Group F21S 43/16 is incomplete pending reclassification of documents from group F21S 43/13. Groups F21S 43/13 and F21S 43/16 should be considered in order to perform a complete search.</p>
M	F21S 45/00	<p>Arrangements within vehicle lighting devices specially adapted for vehicle exteriors, for purposes other than emission or distribution of light</p> <p style="color: red; margin-top: 10px;"><u>WARNING</u> Group F21S 45/00 is impacted by reclassification into groups F21S 45/20, F21S 45/70 and F21W 2104/00. All groups should be considered in order to perform a complete search.</p>
M	F21S 45/20	<ul style="list-style-type: none"> • Promoting gas flow in lighting devices, e.g. directing flow toward the cover glass for demisting (ventilation F21S 45/30; forced cooling F21S 45/42) <p style="color: red; margin-top: 10px;"><u>WARNING</u> Group F21S 45/20 is incomplete pending reclassification of documents from group F21S 45/00. Groups F21S 45/00 and F21S 45/20 should be considered in order to perform a complete search.</p>
U	F21S 45/40	<ul style="list-style-type: none"> • Cooling of lighting devices
U	F21S 45/42	<ul style="list-style-type: none"> • • Forced cooling
M	F21S 45/43	<ul style="list-style-type: none"> • • • using gas <p style="color: red; margin-top: 10px;"><u>WARNING</u> Group F21S 45/43 is impacted by reclassification into group F21S 45/435. Groups F21S 45/43 and F21S 45/435 should be considered in order to perform a complete search.</p>
M	F21S 45/435	<ul style="list-style-type: none"> • • • circulating the gas within a closed system <p style="color: red; margin-top: 10px;"><u>WARNING</u> Group F21S 45/435 is incomplete pending reclassification of documents from group F21S 45/43. Groups F21S 45/43 and F21S 45/435 should be considered in order to perform a complete search.</p>
M	F21S 45/46	<ul style="list-style-type: none"> • • • using liquid <p style="color: red; margin-top: 10px;"><u>WARNING</u> Group F21S 45/46 is impacted by reclassification into group F21S 45/465. Groups F21S 45/46 and F21S 45/465 should be considered in order to perform a complete search.</p>

- M F21S 45/465
- • • from other vehicle cooling systems, e.g. from air-conditioning or engine cooling systems
- WARNING**
Group F21S 45/465 is incomplete pending reclassification of documents from group F21S 45/46.
Groups F21S 45/46 and F21S 45/465 should be considered in order to perform a complete search.
- M F21S 45/47
- • Passive cooling, e.g. using fins, thermal conductive elements or openings
- WARNING**
Group F21S 45/47 is impacted by reclassification into group F21S 45/48.
Groups F21S 45/47 and F21S 45/48 should be considered in order to perform a complete search.
- M F21S 45/48
- • • with means for conducting heat from the inside to the outside of the lighting devices, e.g. with fins on the outer surface of the lighting device
- WARNING**
Group F21S 45/48 is incomplete pending reclassification of documents from group F21S 45/47.
Groups F21S 45/47 and F21S 45/48 should be considered in order to perform a complete search.
- M F21S 45/70
- Prevention of harmful light leakage
- WARNING**
Group F21S 45/70 is incomplete pending reclassification of documents from group F21S 45/00.
Groups F21S 45/00 and F21S 45/70 should be considered in order to perform a complete search.

Project: RP0483-F (F21V)

- U F21V 1/00** **Shades for light sources {, i.e. lampshades for table, floor, wall or ceiling lamps}**
- U F21V 1/14
- Covers for frames; Frameless shades
- M F21V 1/16
- • characterised by the material
- WARNING**
Group F21V 1/16 is impacted by reclassification into group F21V 1/17.
Groups F21V 1/16 and F21V 1/17 should be considered in order to perform a complete search.
- M F21V 1/17
- • • the material comprising photoluminescent substances
- WARNING**
Group F21V 1/17 is incomplete pending reclassification of documents from groups F21V 1/16, F21V 1/20, F21V 1/22, and F21V 9/30.
All groups listed in this Warning should be considered in order to perform a complete search.
- M F21V 1/20
- • • the material being glass
- WARNING**
Group F21V 1/20 is impacted by reclassification into group F21V 1/17.
Groups F21V 1/20 and F21V 1/17 should be considered in order to perform a complete search.

- M F21V 1/22
- • • the material being plastics
- WARNING**
~~Group F21V 1/22 is impacted by reclassification into group F21V 1/17. Groups F21V 1/22 and F21V 1/17 should be considered in order to perform a complete search.~~
- U F21V 3/00
- Globes; Bowls; Cover glasses (with refracting properties [F21V 5/00](#); with reflecting properties [F21V 7/00](#); characterised by cooling arrangements [F21V 29/506](#))**
- WARNING**
 Groups [F21V 3/00](#) - [F21V 3/049](#) are incomplete pending reclassification of documents from group [F21L 15/02](#).
 All groups listed in this Warning should be considered in order to perform a complete search.
- U F21V 3/04
- characterised by materials, surface treatments or coatings
- U F21V 3/06
- • characterised by the material
- M F21V 3/08
- • • the material comprising photoluminescent substances
- WARNING**
 Group [F21V 3/08](#) is incomplete pending reclassification of documents from ~~groups~~[group](#) [F21L 15/02](#) and ~~F21V 9/30~~.
 All groups listed in this Warning should be considered in order to perform a complete search.
- U F21V 3/10
- • characterised by coatings
- M F21V 3/12
- • • the coatings comprising photoluminescent substances
- WARNING**
 Group [F21V 3/12](#) is incomplete pending reclassification of documents from ~~groups~~[group](#) [F21L 15/02](#) and ~~F21V 9/30~~.
 All groups listed in this Warning should be considered in order to perform a complete search.
- M F21V 5/00
- Refractors for light sources (characterised by cooling arrangements [F21V 29/504](#))**
- WARNING**
~~Groups~~[Group](#) [F21V 5/00](#) is incomplete pending reclassification of documents from group [F21L 15/02](#).
~~Group F21V 5/00 is also impacted by reclassification into group F21V 5/10.~~
 All groups listed in this Warning should be considered in order to perform a complete search.
- M F21V 5/002
- {using microoptical elements for redirecting or diffusing light}
- WARNING**
 Group [F21V 5/002](#) is incomplete pending reclassification of documents from group [F21L 15/02](#).
~~Group F21V 5/002 is also impacted by reclassification into group F21V 5/10.~~
 All groups listed in this Warning should be considered in order to perform a complete search.
- M F21V 5/003
- • {using holograms}
- WARNING**
 Group [F21V 5/003](#) is incomplete pending reclassification of documents from group [F21L 15/02](#).

~~Group F21V 5/003 is also impacted by reclassification into group F21V 5/10.—~~

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

M F21V 5/004

- {using microlenses}

WARNING

Group [F21V 5/004](#) is incomplete pending reclassification of documents from group [F21L 15/02](#).

~~Group F21V 5/004 is also impacted by reclassification into group F21V 5/10.—~~

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

M F21V 5/005

- {using microprisms}

WARNING

Group [F21V 5/005](#) is incomplete pending reclassification of documents from group [F21L 15/02](#).

~~Group F21V 5/005 is also impacted by reclassification into group F21V 5/10.—~~

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

M F21V 5/006

- {applied to portable lighting devices}

WARNING

Group [F21V 5/006](#) is incomplete pending reclassification of documents from group [F21L 15/02](#).

~~Group F21V 5/006 is also impacted by reclassification into group F21V 5/10.—~~

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

M F21V 5/007

- {Array of lenses or refractors for a cluster of light sources, e.g. for arrangement of multiple light sources in one plane (combination of two or more refractors [F21V 5/008](#))}

WARNING

Group [F21V 5/007](#) is incomplete pending reclassification of documents from group [F21L 15/02](#).

~~Group F21V 5/007 is also impacted by reclassification into group F21V 5/10.—~~

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

M F21V 5/008

- {Combination of two or more successive refractors along an optical axis}

WARNING

Group [F21V 5/008](#) is incomplete pending reclassification of documents from group [F21L 15/02](#).

~~Group F21V 5/008 is also impacted by reclassification into group F21V 5/10.—~~

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

M F21V 5/02

- of prismatic shape ([F21V 5/04](#) takes precedence)

WARNING

Group [F21V 5/02](#) is incomplete pending reclassification of documents from group [F21L 15/02](#).

~~Group F21V 5/02 is also impacted by reclassification into group F21V 5/10.—~~

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

- M F21V 5/04
- of lens shape
- WARNING
Group [F21V 5/04](#) is incomplete pending reclassification of documents from group [F21L 15/02](#).
~~Group F21V 5/04 is also impacted by reclassification into group F21V 5/10.~~
All groups listed in this Warning should be considered in order to perform a complete search.
- M F21V 5/041
- {Ball lenses}
- WARNING
Group [F21V 5/041](#) is incomplete pending reclassification of documents from group [F21L 15/02](#).
~~Group F21V 5/041 is also impacted by reclassification into group F21V 5/10.~~
All groups listed in this Warning should be considered in order to perform a complete search.
- M F21V 5/043
- {the lens having cylindrical faces, e.g. rod lenses, toric lenses}
- WARNING
Group [F21V 5/043](#) is incomplete pending reclassification of documents from group [F21L 15/02](#).
~~Group F21V 5/043 is also impacted by reclassification into group F21V 5/10.~~
All groups listed in this Warning should be considered in order to perform a complete search.
- M F21V 5/045
- {the lens having discontinuous faces, e.g. Fresnel lenses}
- WARNING
Group [F21V 5/045](#) is incomplete pending reclassification of documents from group [F21L 15/02](#).
~~Group F21V 5/045 is also impacted by reclassification into group F21V 5/10.~~
All groups listed in this Warning should be considered in order to perform a complete search.
- M F21V 5/046
- {the lens having a rotationally symmetrical shape about an axis for transmitting light in a direction mainly perpendicular to this axis, e.g. ring or annular lens with light source disposed inside the ring}
- WARNING
Group [F21V 5/046](#) is incomplete pending reclassification of documents from group [F21L 15/02](#).
~~Group F21V 5/046 is also impacted by reclassification into group F21V 5/10.~~
All groups listed in this Warning should be considered in order to perform a complete search.
- M F21V 5/048
- {the lens being a simple lens adapted to cooperate with a point-like source for emitting mainly in one direction and having an axis coincident with the main light transmission direction, e.g. convergent or divergent lenses, plano-concave or plano-convex lenses}
- WARNING
Group [F21V 5/048](#) is incomplete pending reclassification of documents from group [F21L 15/02](#).
~~Group F21V 5/048 is also impacted by reclassification into group F21V 5/10.~~
All groups listed in this Warning should be considered in order to perform a complete search.

- M F21V 5/06
- Hanging lustres for chandeliers
- WARNING
Group [F21V 5/06](#) is incomplete pending reclassification of documents from group [F21L 15/02](#).
~~Group F21V 5/06 is also impacted by reclassification into group F21V 5/10.~~
All groups listed in this Warning should be considered in order to perform a complete search.
- M F21V 5/08
- producing an asymmetric light distribution
- WARNING
Group [F21V 5/08](#) is incomplete pending reclassification of documents from group [F21L 15/02](#).
~~Group F21V 5/08 is also impacted by reclassification into group F21V 5/10.~~
All groups listed in this Warning should be considered in order to perform a complete search.
- M F21V 5/10
- comprising photoluminescent material
- WARNING
~~Group F21V 5/10 is incomplete pending reclassification of documents from groups F21V 5/00, F21V 5/002, F21V 5/003, F21V 5/004, F21V 5/005, F21V 5/006, F21V 5/007, F21V 5/008, F21V 5/02, F21V 5/04, F21V 5/041, F21V 5/043, F21V 5/045, F21V 5/046, F21V 5/048, F21V 5/06, F21V 5/08, and F21V 9/30.~~
~~All groups listed in this Warning should be considered in order to perform a complete search.~~
- U F21V 7/00**
- Reflectors for light sources (characterised by cooling arrangements F21V 29/505)**
- WARNING
Group [F21V 7/00](#) is incomplete pending reclassification of documents from group [F21L 15/02](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- M F21V 7/22
- characterised by materials, surface treatments or coatings, e.g. dichroic reflectors
- WARNING
Group [F21V 7/22](#) is incomplete pending reclassification of documents from ~~groups~~[group F21V 9/04](#) and [F21L 15/02](#).
~~Group F21V 7/22 is also impacted by reclassification into groups F21V 7/24, F21V 7/26, F21V 7/28, and F21V 7/30.~~
All groups listed in this Warning should be considered in order to perform a complete search.
- M F21V 7/24
- • characterised by the material
- WARNING
~~Group F21V 7/24 is incomplete pending reclassification of documents from groups F21V 7/22 and F21V 9/04.~~
~~All groups listed in this Warning should be considered in order to perform a complete search.~~
- M F21V 7/26
- • • the material comprising photoluminescent substances
- WARNING
~~Group F21V 7/26 is incomplete pending reclassification of documents from groups F21V 7/22, F21V 9/04, and F21V 9/30.~~

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

M F21V 7/28

- characterised by coatings

WARNING

~~Group F21V 7/28 is incomplete pending reclassification of documents from groups F21V 7/22 and F21V 9/04.~~

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

M F21V 7/30

- • the coatings comprising photoluminescent substances

WARNING

~~Group F21V 7/30 is incomplete pending reclassification of documents from groups F21V 7/22, F21V 9/04, and F21V 9/30.~~

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

M F21V 9/00

Elements for modifying spectral properties, polarisation or intensity of the light emitted, e.g. filters (coloured shades [F21V 1/00](#); elements characterised by cooling arrangements [F21V 29/502](#))

WARNING

~~Group F21V 9/00 is impacted by reclassification into group F21V 9/20.~~

~~Groups F21V 9/00 and F21V 9/20 should be considered in order to perform a complete search.~~

M F21V 9/02

- for simulating daylight ([F21V 9/04](#), [F21V 9/06](#) take precedence)

WARNING

~~Group F21V 9/02 is incomplete pending reclassification of documents from group F21V 9/30.~~

~~Groups F21V 9/30 and F21V 9/02 should be considered in order to perform a complete search.~~

M F21V 9/04

- for filtering out infrared radiation (dichroic reflectors [F21V 7/22](#); using liquid-filled chambers [F21V 9/12](#))

WARNING

~~Group F21V 9/04 is impacted by reclassification into groups F21V 7/22, F21V 7/24, F21V 7/26, F21V 7/28 and F21V 7/30.~~

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

M F21V 9/06

- for filtering out ultra-violet radiation

WARNING

~~Group F21V 9/06 is incomplete pending reclassification of documents from group F21V 9/30.~~

~~Groups F21V 9/30 and F21V 9/06 should be considered in order to perform a complete search.~~

M F21V 9/08

- for producing coloured light, e.g. monochromatic; for reducing intensity of light (with provision for controlling the colour [F21V 9/40](#))

WARNING

~~Group [F21V 9/08](#) is incomplete pending reclassification of documents from ~~groups~~ ~~group~~ [F21V 9/30](#) and [F21L 15/04](#).~~

~~Groups [F21V 9/30](#), [F21V 9/08](#), and [F21L 15/04](#) should be considered in order to perform a complete search.~~

- M F21V 9/20
- Dichroic filters, i.e. devices operating on the principle of wave interference to pass specific ranges of wavelengths while cancelling others
- WARNING
~~Group F21V 9/20 is incomplete pending reclassification of documents from group F21V 9/00.~~
~~Groups F21V 9/00 and F21V 9/20 should be considered in order to perform a complete search.~~
- M F21V 9/30
- Elements containing photoluminescent material distinct from or spaced from the light source (shades [F21V 1/17](#); globes, bowls or cover glasses [F21V 3/08](#), [F21V 3/12](#); refractors [F21V 5/10](#); reflectors [F21V 7/26](#), [F21V 7/30](#); elements with provision for controlling the spectral properties or intensity [F21V 9/40](#))
- WARNING
~~Group F21V 9/30 is impacted by reclassification into groups F21V 1/17, F21V 3/08, F21V 3/12, F21V 5/10, F21V 7/26, F21V 7/30, F21V 9/02, F21V 9/06, F21V 9/08, F21V 9/32, F21V 9/35, F21V 9/38, F21V 9/40, F21V 9/45, F21V 13/08, and F21V 13/14.~~
~~All groups listed in this Warning should be considered in order to perform a complete search.~~
- M F21V 9/32
- • characterised by the arrangement of the photoluminescent material
- WARNING
~~Group F21V 9/32 is incomplete pending reclassification of documents from group F21V 9/30.~~
~~Groups F21V 9/30 and F21V 9/32 should be considered in order to perform a complete search.~~
- M F21V 9/35
- • at focal points, e.g. of refractors, lenses, reflectors or arrays of light sources
- WARNING
~~Group F21V 9/35 is incomplete pending reclassification of documents from group F21V 9/30.~~
~~Groups F21V 9/30 and F21V 9/35 should be considered in order to perform a complete search.~~
- M F21V 9/38
- • Combination of two or more photoluminescent elements of different materials
- WARNING
~~Group F21V 9/38 is incomplete pending reclassification of documents from group F21V 9/30.~~
~~Groups F21V 9/30 and F21V 9/38 should be considered in order to perform a complete search.~~
- M F21V 9/40
- with provision for controlling spectral properties, e.g. colour, or intensity
- WARNING
~~Group [F21V 9/40](#) is incomplete pending reclassification of documents from groups ~~group [F21L 15/04](#), [F21V 14/00](#) and [F21V 9/30](#).~~
~~Group F21V 9/40 is also impacted by reclassification into group [F21V 9/45](#).~~
~~All groups listed in this Warning should be considered in order to perform a complete search.~~~~
- M F21V 9/45
- • by adjustment of photoluminescent elements
- WARNING
~~Group F21V 9/45 is incomplete pending reclassification of documents from groups F21V 9/30, F21V 9/40, and F21V 14/00.~~
~~All groups listed in this Warning should be considered in order to perform a complete search.~~

- U F21V 13/00** Producing particular characteristics or distribution of the light emitted by means of a combination of elements specified in two or more of main groups [F21V 1/00](#) - [F21V 11/00](#) (controlling the distribution of the light emitted by adjustment of elements [F21V 14/00](#))
- WARNING
Groups [F21V 13/00](#) - [F21V 13/14](#) are incomplete pending reclassification of documents from group [F21L 15/02](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- M F21V 13/02** • Combinations of only two kinds of elements
- WARNING
Group [F21V 13/02](#) is incomplete pending reclassification of documents from ~~group~~ [F21L 15/02](#).
~~Group F21V 13/02 is also impacted by reclassification into group F21V 13/08.~~
All groups listed in this Warning should be considered in order to perform a complete search.
- M F21V 13/08** • • the elements being filters or photoluminescent elements and reflectors
- WARNING
Group [F21V 13/08](#) is incomplete pending reclassification of documents from ~~groups~~~~group~~ [F21L 15/02](#), ~~F21V 9/30~~ and ~~F21V 13/02~~.
All groups listed in this Warning should be considered in order to perform a complete search.
- M F21V 13/12** • Combinations of only three kinds of elements
- WARNING
Group [F21V 13/12](#) is incomplete pending reclassification of documents from ~~group~~ [F21L 15/02](#).
~~Group F21V 13/12 is also impacted by reclassification into group F21V 13/14.~~
All groups listed in this Warning should be considered in order to perform a complete search.
- M F21V 13/14** • • the elements being filters or photoluminescent elements, reflectors and refractors
- WARNING
Group [F21V 13/14](#) is incomplete pending reclassification of documents from ~~groups~~~~group~~ [F21L 15/02](#), ~~F21V 9/30~~ and ~~F21V 13/12~~.
All groups listed in this Warning should be considered in order to perform a complete search.
- M F21V 14/00** Controlling the distribution of the light emitted by adjustment of elements (reflectors with provision for adjusting the curvature [F21V 7/16](#); light filters or the like with provision for controlling the colour or intensity [F21V 9/40](#); screens using adjustable parallel laminae or strips [F21V 11/04](#); screens using iris-type diaphragms [F21V 11/10](#); screens using movable sheets without apertures [F21V 11/18](#); adjustable mountings for lighting devices [F21V 21/14](#))
- WARNING
~~Group F21V 14/00 is impacted by reclassification into groups F21V 9/40 and F21V 9/45.~~
~~Groups F21V 14/00, F21V 9/40, and F21V 9/45 should be considered in order to perform a complete search.~~

Project: RP0313-F (F21V)

- U F21V 19/00** **Fastening of light sources or lamp holders (fastening electric light source solely by the coupling device [H01R 33/00](#) {; special means for attaching candle to candle holder [F21V 35/003](#)})**
- WARNING
Groups [F21V 19/00](#) - [F21V 19/04](#) are incomplete pending reclassification of documents from group [F21L 15/06](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- U F21V 19/04** • with provision for changing light source, e.g. turret {(auxiliary devices for cleaning, placing, or removing incandescent lamps [H01K 3/32](#), fluorescent lamps [H01J 9/006](#))}
- D F21V 19/042** • • {the light source being a semiconductor, e.g. an LED}
—(Frozen)
- WARNING
Group F21V 19/042 is no longer used for the classification of documents as of August 1, 2016. The content of this group is being reclassified into groups [F21K 9/00](#), [F21K 9/20](#), [F21K 9/23](#), [F21K 9/232](#), [F21K 9/233](#), [F21K 9/235](#), [F21K 9/237](#), [F21K 9/238](#), [F21K 9/27](#), [F21K 9/272](#), [F21K 9/275](#), [F21K 9/278](#), [F21K 9/60](#), [F21K 9/61](#), [F21K 9/62](#), [F21K 9/64](#), [F21K 9/65](#), [F21K 9/66](#), [F21K 9/68](#), [F21K 9/69](#), [F21K 9/90](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- D F21V 19/045** • • {the light source being a semiconductor mounted on a holder, e.g. a circuit board}
—(Frozen)
- WARNING
Group F21V 19/045 is no longer used for the classification of documents as of August 1, 2016. The content of this group is being reclassified into groups [F21K 9/00](#), [F21K 9/20](#), [F21K 9/23](#), [F21K 9/232](#), [F21K 9/233](#), [F21K 9/235](#), [F21K 9/237](#), [F21K 9/238](#), [F21K 9/27](#), [F21K 9/272](#), [F21K 9/275](#), [F21K 9/278](#), [F21K 9/60](#), [F21K 9/61](#), [F21K 9/62](#), [F21K 9/64](#), [F21K 9/65](#), [F21K 9/66](#), [F21K 9/68](#), [F21K 9/69](#), [F21K 9/90](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- U F21V 23/00** **Arrangement of electric circuit elements in or on lighting devices {(characterised by cooling arrangements [F21V 29/508](#)})**
- WARNING
Groups [F21V 23/00](#) - [F21V 23/06](#) are incomplete pending reclassification of documents from group [F21L 15/06](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- M F21V 23/003** • {the elements being electronics drivers or controllers for operating the light source, e.g. for a LED array}
- WARNING
Group F21V 23/003 is impacted by reclassification into groups [F21K 9/238](#) and [F21K 9/278](#).
All groups listed in this Warning should be considered in order to perform a complete search.

- M F21V 23/004
- {arranged on a substrate, e.g. a printed circuit board}
- WARNING**
Group F21V 23/004 is impacted by reclassification into groups F21K 9/238 and F21K 9/278.
All groups listed in this Warning should be considered in order to perform a complete search.
- M F21V 23/005
- • {the substrate is supporting also the light source}
- WARNING**
Group F21V 23/005 is impacted by reclassification into groups F21K 9/238 and F21K 9/278.
All groups listed in this Warning should be considered in order to perform a complete search.
- M F21V 23/006
- • {the substrate being distinct from the light source holder}
- WARNING**
Group F21V 23/006 is impacted by reclassification into groups F21K 9/238 and F21K 9/278.
All groups listed in this Warning should be considered in order to perform a complete search.

Project: RP0503-F (F21W)

- M F21W 2102/00
- Exterior vehicle lighting devices for illuminating purposes**
- WARNING**
Group F21W 2102/00 is impacted by reclassification into groups F21W 2102/10; F21W 2102/13; F21W 2102/135; F21W 2102/14; F21W 2102/145; F21W 2102/15; F21W 2102/155; F21W 2102/16; F21W 2102/165; F21W 2102/17; F21W 2102/18; F21W 2102/19; F21W 2102/20; F21W 2102/30; F21W 2102/40 and F21W 2105/00.
All groups listed in this Warning should be considered in order to perform a complete search.
- M F21W 2102/10
- Arrangement or contour of the emitted light
- WARNING**
Group F21W 2102/10 is incomplete pending reclassification of documents from group F21W 2102/00.
Groups F21W 2102/00 and F21W 2102/10 should be considered in order to perform a complete search.
- M F21W 2102/13
- • for high-beam region or low-beam region
- WARNING**
Group F21W 2102/13 is incomplete pending reclassification of documents from group F21W 2102/00.
Groups F21W 2102/00 and F21W 2102/13 should be considered in order to perform a complete search.
- M F21W 2102/135
- • the light having cut-off lines, i.e. clear borderlines between emitted regions and dark regions
- WARNING**
Group F21W 2102/135 is incomplete pending reclassification of documents from group F21W 2102/00.
Groups F21W 2102/00 and F21W 2102/135 should be considered in order to perform a complete search.

- M F21W 2102/14
- • • having vertical cut-off lines; specially adapted for adaptive high beams, i.e. wherein the beam is broader but avoids glaring other road users
- WARNING
~~Group F21W 2102/14 is incomplete pending reclassification of documents from group F21W 2102/00.
 Groups F21W 2102/00 and F21W 2102/14 should be considered in order to perform a complete search.~~
- M F21W 2102/145
- • • • wherein the light is emitted between two parallel vertical cutoff lines, e.g. selectively emitted rectangular-shaped high beam
- WARNING
~~Group F21W 2102/145 is incomplete pending reclassification of documents from group F21W 2102/00.
 Groups F21W 2102/00 and F21W 2102/145 should be considered in order to perform a complete search.~~
- M F21W 2102/15
- • • • wherein the light is emitted under L-shaped cut-off lines, i.e. vertical and horizontal cutoff lines
- WARNING
~~Group F21W 2102/15 is incomplete pending reclassification of documents from group F21W 2102/00.
 Groups F21W 2102/00 and F21W 2102/15 should be considered in order to perform a complete search.~~
- M F21W 2102/155
- • • • having inclined and horizontal cutoff lines
- WARNING
~~Group F21W 2102/155 is incomplete pending reclassification of documents from group F21W 2102/00.
 Groups F21W 2102/00 and F21W 2102/155 should be considered in order to perform a complete search.~~
- M F21W 2102/16
- • • • having blurred cut-off lines
- WARNING
~~Group F21W 2102/16 is incomplete pending reclassification of documents from group F21W 2102/00.
 Groups F21W 2102/00 and F21W 2102/16 should be considered in order to perform a complete search.~~
- M F21W 2102/165
- • • the borderlines between emitted regions and dark regions other than cut-off lines being variable
- WARNING
~~Group F21W 2102/165 is incomplete pending reclassification of documents from group F21W 2102/00.
 Groups F21W 2102/00 and F21W 2102/165 should be considered in order to perform a complete search.~~
- M F21W 2102/17
- • for regions other than high beam or low beam
- WARNING
~~Group F21W 2102/17 is incomplete pending reclassification of documents from group F21W 2102/00.
 Groups F21W 2102/00 and F21W 2102/17 should be considered in order to perform a complete search.~~

- M F21W 2102/18
- • • for overhead signs
- WARNING**
Group F21W 2102/18 is incomplete pending reclassification of documents from group F21W 2102/00. Groups F21W 2102/00 and F21W 2102/18 should be considered in order to perform a complete search.
- M F21W 2102/19
- • • for curves
- WARNING**
Group F21W 2102/19 is incomplete pending reclassification of documents from group F21W 2102/00. Groups F21W 2102/00 and F21W 2102/19 should be considered in order to perform a complete search.
- M F21W 2102/20
- Illuminance distribution within the emitted light
- WARNING**
Group F21W 2102/20 is incomplete pending reclassification of documents from group F21W 2102/00. Groups F21W 2102/00 and F21W 2102/20 should be considered in order to perform a complete search.
- M F21W 2102/30
- Fog lights
- WARNING**
Group F21W 2102/30 is incomplete pending reclassification of documents from group F21W 2102/00. Groups F21W 2102/00 and F21W 2102/30 should be considered in order to perform a complete search.
- M F21W 2102/40
- the light being emitted to facilitate access to the vehicle
- WARNING**
Group F21W 2102/40 is incomplete pending reclassification of documents from group F21W 2102/00. Groups F21W 2102/00 and F21W 2102/40 should be considered in order to perform a complete search.
- M F21W 2103/00**
- Exterior vehicle lighting devices for signalling purposes**
- WARNING**
Group F21W 2103/00 is impacted by reclassification into groups F21W 2103/10, F21W 2103/15, F21W 2103/30, F21W 2103/35, F21W 2103/40, F21W 2103/45, F21W 2103/50, F21W 2103/55, F21W 2103/60 and F21W 2105/00. All groups listed in this Warning should be considered in order to perform a complete search.
- M F21W 2103/10
- Position lights
- WARNING**
Group F21W 2103/10 is incomplete pending reclassification of documents from group F21W 2103/00. Groups F21W 2103/00 and F21W 2103/10 should be considered in order to perform a complete search.
- M F21W 2103/15
- Side marker lights
- WARNING**
Group F21W 2103/15 is incomplete pending reclassification of documents from group F21W 2103/00.

		Groups F21W-2103/00 and F21W-2103/15 should be considered in order to perform a complete search.
M	F21W 2103/20	<ul style="list-style-type: none">• Direction indicator lights <p><u>WARNING</u> Group F21W-2103/20 is impacted by reclassification into group F21W-2103/25. Groups F21W-2103/20 and F21W-2103/25 should be considered in order to perform a complete search.</p>
M	F21W 2103/25	<ul style="list-style-type: none">• • for rear-view mirrors <p><u>WARNING</u> Group F21W-2103/25 is incomplete pending reclassification of documents from group F21W-2103/20. Groups F21W-2103/20 and F21W-2103/25 should be considered in order to perform a complete search.</p>
M	F21W 2103/30	<ul style="list-style-type: none">• Hazard lights <p><u>WARNING</u> Group F21W-2103/30 is incomplete pending reclassification of documents from group F21W-2103/00. Groups F21W-2103/00 and F21W-2103/30 should be considered in order to perform a complete search.</p>
M	F21W 2103/35	<ul style="list-style-type: none">• Brake lights <p><u>WARNING</u> Group F21W-2103/35 is incomplete pending reclassification of documents from group F21W-2103/00. Groups F21W-2103/00 and F21W-2103/35 should be considered in order to perform a complete search.</p>
M	F21W 2103/40	<ul style="list-style-type: none">• Rear fog lights <p><u>WARNING</u> Group F21W-2103/40 is incomplete pending reclassification of documents from group F21W-2103/00. Groups F21W-2103/00 and F21W-2103/40 should be considered in order to perform a complete search.</p>
M	F21W 2103/45	<ul style="list-style-type: none">• Reversing lights <p><u>WARNING</u> Group F21W-2103/45 is incomplete pending reclassification of documents from group F21W-2103/00. Groups F21W-2103/00 and F21W-2103/45 should be considered in order to perform a complete search.</p>
M	F21W 2103/50	<ul style="list-style-type: none">• Registration plate lights <p><u>WARNING</u> Group F21W-2103/50 is incomplete pending reclassification of documents from group F21W-2103/00. Groups F21W-2103/00 and F21W-2103/50 should be considered in order to perform a complete search.</p>
M	F21W 2103/55	<ul style="list-style-type: none">• Daytime running lights [DRL] <p><u>WARNING</u> Group F21W-2103/55 is incomplete pending reclassification of documents from group F21W-2103/00.</p>

Groups F21W-2103/00 and F21W-2103/55 should be considered in order to perform a complete search.

- M F21W 2103/60
- Projection of signs from lighting devices, e.g. symbols or information being projected onto the road

WARNING

Group F21W-2103/60 is incomplete pending reclassification of documents from group F21W-2103/00.
Groups F21W-2103/00 and F21W-2103/60 should be considered in order to perform a complete search.

- M F21W 2104/00
- Exterior vehicle lighting devices for decorative purposes**

WARNING

Group F21W-2104/00 is incomplete pending reclassification of documents from groups F21S-43/00 and F21S-45/00.
Groups F21S-43/00, F21S-45/00 and F21W-2104/00 should be considered in order to perform a complete search.

- M F21W 2105/00
- Combinations of lighting devices covered by codes [F21W 2102/00](#) – [F21W 2104/00](#)**

WARNING

Group F21W-2105/00 is incomplete pending reclassification of documents from groups F21W-2102/00 and F21W-2103/00.
Groups F21W-2102/00, F21W-2103/00 and F21W-2105/00 should be considered in order to perform a complete search.

Project: RP0313-F (F21Y)

- M F21Y 2101/00
- Point-like light sources**

WARNING

Group F21Y-2101/00 is impacted by reclassification into groups F21Y-2115/00, F21Y-2115/10, F21Y-2115/15 and F21Y-2115/20.
All groups listed in this Warning should be considered in order to perform a complete search.

- M F21Y 2103/00
- Elongate light sources, e.g. fluorescent tubes**

WARNING

Group F21Y-2103/00 is impacted by reclassification into groups F21Y-2103/10 and F21Y-2103/20.
All groups listed in this Warning should be considered in order to perform a complete search.

- M F21Y 2103/10
- comprising a linear array of point-like light-generating elements

WARNING

Group F21Y-2103/10 is incomplete pending reclassification of documents from group F21Y-2103/00.
Groups F21Y-2103/10 and F21Y-2103/00 should be considered in order to perform a complete search.

- M F21Y 2103/20
- of polygonal shape, e.g. square or rectangular

WARNING

Group F21Y-2103/20 is incomplete pending reclassification of documents from group F21Y-2103/00.

Groups F21Y 2103/20 and F21Y 2103/00 should be considered in order to perform a complete search.

M F21Y 2105/00

Planar light sources

WARNING

Group F21Y 2105/00 is impacted by reclassification into groups F21Y 2105/10, F21Y 2105/12, F21Y 2105/14, F21Y 2105/16 and F21Y 2105/18.
All groups listed in this Warning should be considered in order to perform a complete search.

M F21Y 2105/10

- comprising a two-dimensional array of point-like light-generating elements

WARNINGS

1. Group F21Y 2105/10 is incomplete pending reclassification of documents from group F21Y 2105/00.

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

2. Group F21Y 2105/00 is impacted by reclassification into groups F21Y 2105/14, F21Y 2105/16 and F21Y 2105/18.

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

M F21Y 2105/12

- characterised by the geometrical disposition of the light-generating elements, e.g. arranging light-generating elements in differing patterns or densities

WARNING

Group F21Y 2105/12 is incomplete pending reclassification of documents from group F21Y 2105/00.

Groups F21Y 2105/00 and F21Y 2105/12 should be considered in order to perform a complete search.

M F21Y 2105/14

- characterised by the overall shape of the two-dimensional array

WARNING

Group F21Y 2105/14 is incomplete pending reclassification of documents from groups F21Y 2105/00 and F21Y 2105/10.

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

M F21Y 2105/16

- square or rectangular, e.g. for light panels

WARNING

Group F21Y 2105/16 is incomplete pending reclassification of documents from groups F21Y 2105/00 and F21Y 2105/10.

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

M F21Y 2105/18

- annular; polygonal other than square or rectangular, e.g. for spotlights or for generating an axially symmetrical light beam

WARNING

Group F21Y 2105/18 is incomplete pending reclassification of documents from groups F21Y 2105/00 and F21Y 2105/10.

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

M	F21Y 2107/00	<p>Light sources with three-dimensionally disposed light-generating elements</p> <p><u>WARNINGS</u></p> <p>1. Group F21Y 2107/00 is incomplete pending reclassification of documents from group F21Y 2111/00. All groups listed in this Warning should be considered in order to perform a complete search.</p> <p>2. Group F21Y 2107/00 is impacted by reclassification into groups F21Y 2107/70, F21Y 2107/80 and F21Y 2107/90. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	F21Y 2107/10	<ul style="list-style-type: none"> • on concave supports or substrates, e.g. on the inner side of bowl-shaped supports <p><u>WARNING</u></p> <p>Group F21Y 2107/10 is incomplete pending reclassification of documents from group F21Y 2111/00. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	F21Y 2107/20	<ul style="list-style-type: none"> • on convex supports or substrates, e.g. on the outer surface of spheres <p><u>WARNING</u></p> <p>Group F21Y 2107/20 is incomplete pending reclassification of documents from group F21Y 2111/00. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	F21Y 2107/30	<ul style="list-style-type: none"> • on the outer surface of cylindrical surfaces, e.g. rod-shaped supports having a circular or a polygonal cross section <p><u>WARNING</u></p> <p>Group F21Y 2107/30 is incomplete pending reclassification of documents from group F21Y 2111/00. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	F21Y 2107/40	<ul style="list-style-type: none"> • on the sides of polyhedrons, e.g. cubes or pyramids <p><u>WARNING</u></p> <p>Group F21Y 2107/40 is incomplete pending reclassification of documents from group F21Y 2111/00. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	F21Y 2107/50	<ul style="list-style-type: none"> • on planar substrates or supports, but arranged in different planes or with differing orientation, e.g. on plate-shaped supports with steps on which light-generating elements are mounted <p><u>WARNING</u></p> <p>Group F21Y 2107/50 is incomplete pending reclassification of documents from group F21Y 2111/00. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	F21Y 2107/60	<ul style="list-style-type: none"> • on stacked substrates <p><u>WARNING</u></p> <p>Group F21Y 2107/60 is incomplete pending reclassification of documents from group F21Y 2111/00.</p>

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

- M F21Y 2107/70
- on flexible or deformable supports or substrates, e.g. for changing the light source into a desired form

WARNING

Group F21Y 2107/70 is incomplete pending reclassification of documents from groups F21Y 2107/00 and F21Y 2111/00.

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

- M F21Y 2107/80
- on articulated supports or substrates

WARNING

Group F21Y 2107/80 is incomplete pending reclassification of documents from groups F21Y 2107/00 and F21Y 2111/00.

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

- M F21Y 2107/90
- on two opposite sides of supports or substrates

WARNING

Group F21Y 2107/90 is incomplete pending reclassification of documents from groups F21Y 2107/00 and F21Y 2111/00.

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

- M F21Y 2109/00
- Light sources with light-generating elements disposed on transparent or translucent supports or substrates**

WARNING

Group F21Y 2109/00 is incomplete pending reclassification of documents from group F21Y 2111/00.

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

- M F21Y 2111/00
- Light sources of a form not covered by groups [F21Y 2101/00-F21Y 2107/00](#)**

WARNING

Group F21Y 2111/00 is impacted by reclassification into groups F21Y 2107/00, F21Y 2107/10, F21Y 2107/20, F21Y 2107/30, F21Y 2107/40, F21Y 2107/50, F21Y 2107/60, F21Y 2107/70, F21Y 2107/80, F21Y 2107/90 and F21Y 2109/00.

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

- M F21Y 2115/00
- Light-generating elements of semiconductor light sources**

WARNING

Group F21Y 2115/00 is incomplete pending reclassification of documents from group F21Y 2101/00.

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

- M F21Y 2115/10
- Light-emitting diodes [LED]

WARNING

Group F21Y 2115/10 is incomplete pending reclassification of documents from group F21Y 2101/00.

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

- M F21Y 2115/15
- Organic light-emitting diodes [OLED]

WARNING

Group F21Y 2115/15 is incomplete pending reclassification of documents from group F21Y 2101/00.
All groups listed in this Warning should be considered in order to perform a complete search.

- M F21Y 2115/20
- Electroluminescent [EL] light sources

WARNING

Group F21Y 2115/20 is incomplete pending reclassification of documents from group F21Y 2101/00.
All groups listed in this Warning should be considered in order to perform a complete search.

Project: RP0435-F (F23L)

- M F23L 1/00
- Passages or apertures for delivering primary air for combustion (baffles or deflectors in air inlets [F23M 9/02](#))**

WARNING

Group F23L 1/00 is impacted by reclassification into group F23M 9/02.
Groups F23L 1/00 and F23M 9/02 should be considered in order to perform a complete search.

- M F23L 9/00
- Passages or apertures for delivering secondary air for completing combustion of fuel (baffles or deflectors in air inlets [F23M 9/02](#))**

WARNING

Group F23L 9/00 is impacted by reclassification into group F23M 9/02.
Groups F23L 9/00 and F23M 9/02 should be considered in order to perform a complete search.

Project: RP0435-F (F23M)

- U F23M 9/00
- Baffles or deflectors for air or combustion products (baffles or deflectors for air or combustion products structurally associated with burners [F23D](#));
Flame shields**

- M F23M 9/02
- in air inlets

WARNING

Group F23M 9/02 is incomplete pending reclassification of documents from groups F23L 1/00 and F23L 9/00.
Groups F23L 1/00, F23L 9/00, and F23M 9/02 should be considered in order to perform a complete search.

Project: RP0493-F (F24S)

- U F24S 10/00
- Solar heat collectors using working fluids**

- M 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.

- M 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.
- M 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.
- M 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.
- M 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.
- M 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.
- M 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.
- U F24S 20/60
- Solar heat collectors integrated in fixed constructions, e.g. in buildings
- M 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.
- M 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.~~

- M 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.~~

- M 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.~~

- M 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.~~

- U F24S 23/70
- with reflectors
- M 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.~~

- M 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.~~

- M 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.~~

- M 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:

M 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

M 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:

M 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:

M 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:

M 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:

M 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:

M 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:

- M 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.
- M 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.
- M 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.
- M 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.
- M 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.
- U F24S 40/40
- Preventing corrosion; Protecting against dirt or contamination
- M 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.
- U F24S 40/50
- Preventing overheating or overpressure (by draining the working fluid [F24S 40/60](#))
- M 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.

- M 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.
- U F24S 50/00**
- M F24S 50/20**
- Arrangements for controlling solar heat collectors**
- 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.
- M 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.
- M 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.
- M 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.
- M 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.
- M 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.

- M 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.
- M 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.
- M 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.
- M 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.
- U 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](#))
- M 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.
- M 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.
- M 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.
- M 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.

- M 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.

- M 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.

- M 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.

- M 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.

U F24S 90/00 Solar heat systems not otherwise provided for

- M 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.

Project: RP0493-F (F24T)

M 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.

- M 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.~~
- M 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.~~
- M 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.~~
- M 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.~~
- M 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.~~

Project: RP0601 (F25C)

- U F25C
- PRODUCING, WORKING OR HANDLING ICE**
- NOTE
 In this subclass, the following term is used with the meaning indicated:
- "ice" means any frozen liquid and also covers frozen semiliquids or pasty substances.
- U F25C 1/00
- Producing ice (F25C 3/00 takes precedence)**
- M F25C 1/08
- by immersing freezing chambers {, cylindrical bodies} or plates into water
- U F25C 1/12
- by freezing water on cooled surfaces, e.g. to form slabs

- U F25C 1/14 · · to form thin sheets which are removed by scraping or wedging, e.g. in the form of flakes
- U F25C 1/145 · · · from the inner walls of cooled bodies
- C F25C 1/147 · · · · by using augers

WARNING

Group [F25C 1/147](#) is impacted by reclassification into group [F25C 5/142](#). Groups [F25C 1/147](#) and [F25C 5/142](#) should be considered in order to perform a complete search.

- U F25C 5/00 **Working or handling ice ([F25C 3/00](#) takes precedence)**
- C F25C 5/14 · Apparatus for shaping or finishing ice pieces, e.g. ice presses

WARNING

Group [F25C 5/14](#) is impacted by reclassification into group [F25C 5/142](#). Groups [F25C 5/14](#) and [F25C 5/142](#) should be considered in order to perform a complete search.

- N F25C 5/142 · · {extrusion of ice crystals}
- WARNING**
- Group [F25C 5/142](#) is incomplete pending reclassification of documents from groups [F25C 1/147](#) and [F25C 5/14](#). Groups [F25C 1/147](#), [F25C 5/14](#) and [F25C 5/142](#) should be considered in order to perform a complete search.

- U F25C 2305/00 **Special arrangements or features for working or handling ice**
- C F25C 2305/022 · Harvesting ice including rotating or tilting or pivoting of a mould or tray
- N F25C 2305/0221 · · rotating ice mould
- N F25C 2305/024 · Rotating rake

Project: RP0659 (G01C)

- M G01C **MEASURING DISTANCES, LEVELS OR BEARINGS; SURVEYING; NAVIGATION; GYROSCOPIC INSTRUMENTS; PHOTOGRAMMETRY OR VIDEOGRAMMETRY (measuring liquid level [G01F](#); radio navigation, determining distance or velocity by use of propagation effects, e.g. Doppler effects, propagation time, of radio waves, analogous arrangements using other waves [G01S](#))**

NOTES

1. In this subclass, the following term is used with the meaning indicated:
"navigation" means determining the position and course of land vehicles, ships, aircraft, and space vehicles.
2. Attention is drawn to the Notes following the title of class [G01](#).

WARNING

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

~~[G01C 11/36](#) covered by [G01C 11/00-G01C 11/34](#)~~

~~2-1. {In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.}~~

- U G01C 11/00 **Photogrammetry or videogrammetry, e.g. stereogrammetry; Photographic surveying**
- U G01C 11/04 · Interpretation of pictures
- U G01C 11/30 · · by triangulation

- U G01C 11/34 · · · Aerial triangulation
- D G01C 2011/36 · {Videogrammetry, i.e. electronic processing of video signals from a single source or from different sources to give parallax or range information}
<administratively transferred to [G01C 11/36](#) INV>
- N G01C 11/36 · Videogrammetry, i.e. electronic processing of video signals {from a single source or } from different sources to give parallax or range information

Project: RP0560-F (G01M)**M G01M 13/00 Testing of machine parts****WARNING**

Group G01M 13/00 is impacted by reclassification into group G01M 13/003.
Groups G01M 13/00 and G01M 13/003 should be considered in order to perform a complete search.

- M G01M 13/003 · Machine valves (testing valves for fluid tightness [G01M 3/00](#))

WARNING

Group G01M 13/003 is incomplete pending reclassification of documents from group G01M 13/00.
Groups G01M 13/00 and G01M 13/003 should be considered in order to perform a complete search.

Project: RP0561-F (G01N)**U G01N 33/00 Investigating or analysing materials by specific methods not covered by groups [G01N 1/00](#) - [G01N 31/00](#)****NOTE**

In groups [G01N 33/52](#) - [G01N 33/98](#), the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, classification is made in the last appropriate place.
{This Note corresponds to IPC Note (1) relating to [G01N 33/52](#) - [G01N 33/98](#).}

- M G01N 33/20 · Metals

WARNING

Group G01N 33/20 is impacted by reclassification into groups G01N 33/202, G01N 33/2022, G01N 33/2028, G01N 33/204, G01N 33/2045, G01N 33/207, and G01N 33/208.
All groups listed in this Warning should be considered in order to perform a complete search.

- M G01N 33/202 · · Constituents thereof

WARNING

Group G01N 33/202 is incomplete pending reclassification of documents from group G01N 33/20.
Groups G01N 33/20 and G01N 33/202 should be considered in order to perform a complete search.

- M G01N 33/2022 · · · Non-metallic constituents

WARNING

Group G01N 33/2022 is incomplete pending reclassification of documents from group G01N 33/20.
Groups G01N 33/20 and G01N 33/2022 should be considered in order to perform a complete search.

- M G01N 33/2028
- • • Metallic constituents
- WARNING
Group G01N 33/2028 is incomplete pending reclassification of documents from group G01N 33/20.
Groups G01N 33/20 and G01N 33/2028 should be considered in order to perform a complete search.
- M G01N 33/204
- • Structure thereof, e.g. crystal structure
- WARNING
Group G01N 33/204 is incomplete pending reclassification of documents from group G01N 33/20.
Groups G01N 33/20 and G01N 33/204 should be considered in order to perform a complete search.
- M G01N 33/2045
- • • Defects
- WARNING
Group G01N 33/2045 is incomplete pending reclassification of documents from group G01N 33/20.
Groups G01N 33/20 and G01N 33/2045 should be considered in order to perform a complete search.
- M G01N 33/207
- • Welded or soldered joints; Solderability
- WARNING
Group G01N 33/207 is incomplete pending reclassification of documents from group G01N 33/20.
Groups G01N 33/20 and G01N 33/207 should be considered in order to perform a complete search.
- M G01N 33/208
- • Coatings, e.g. platings
- WARNING
Group G01N 33/208 is incomplete pending reclassification of documents from group G01N 33/20.
Groups G01N 33/20 and G01N 33/208 should be considered in order to perform a complete search.

Project: RP0422 (G01N)

- U G01N 33/48
- Biological material, e.g. blood, urine ([G01N 33/02](#), [G01N 33/26](#), [G01N 33/44](#), [G01N 33/46](#) take precedence); Haemocytometers (counting blood corpuscles distributed over a surface by scanning the surface [G06M 11/02](#))
- U G01N 33/50
- • Chemical analysis of biological material, e.g. blood, urine; Testing involving biospecific ligand binding methods; Immunological testing (measuring or testing processes involving enzymes or microorganisms, compositions or test papers therefor; processes for forming such compositions, condition responsive control in microbiological or enzymological processes [C12Q](#))

NOTES

1. In this group, the following expression is used with the meaning indicated: "involving", when used in relation to a material, includes the testing for the material as well as employing the material as a determinant or reactant in a test for a different material.
2. In groups [G01N 33/52](#) – [G01N 33/98](#), the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, classification is made in the last appropriate place.
3. Documents relating to new peptides or new DNA or its corresponding mRNA, encoding for the peptides, and their use in measuring or testing

processes are classified in subclass [C07K](#) or in group [C12N 9/00](#) according to the peptides, with the appropriate indexing codes relating to their use in diagnostics. However, if the investigating or analysing aspects are of interest, the documents are classified in this group.

- U G01N 33/53 . . . Immunoassay; Biospecific binding assay; Materials therefor
- U G01N 33/543 with an insoluble carrier for immobilising immunochemicals
- U G01N 33/54366 {Apparatus specially adapted for solid-phase testing}
- C G01N 33/54386 {Analytical elements}

WARNING
Group [G01N 33/54386](#) is impacted by reclassification into groups [G01N 33/54387](#), [G01N 33/54388](#), [G01N 33/54389](#) and [G01N 33/54391](#).
All groups listed in this Warning should be considered in order to perform a complete search.

- N G01N 33/54387 {Immunochemical test strips}

WARNING
Groups [G01N 33/54387](#), [G01N 33/54388](#), [G01N 33/54389](#) and [G01N 33/54391](#) are incomplete pending reclassification of documents from groups [G01N 33/54386](#) and [G01N 33/558](#).
All groups listed in this Warning should be considered in order to perform a complete search.

- N G01N 33/54388 {based on lateral flow}
- N G01N 33/54389 {with bidirectional or multidirectional lateral flow, e.g. wherein the sample flows from a single, common sample application point into multiple strips, lanes or zones}
- N G01N 33/54391 {based on vertical flow}
- C G01N 33/558 using diffusion or migration of antigen or antibody
{(immunochemical test strips [G01N 33/54387](#))}

WARNING
Group [G01N 33/558](#) is impacted by reclassification into groups [G01N 33/54387](#), [G01N 33/54388](#), [G01N 33/54389](#) and [G01N 33/54391](#).
All groups listed in this Warning should be considered in order to perform a complete search.

- U G01N 33/569 for microorganisms, e.g. protozoa, bacteria, viruses
- U G01N 33/56983 {Viruses}
- M G01N 33/56988 {AIDS/HIV or HTLV}

U G01N 2469/00 Immunoassays for the detection of microorganisms

- U G01N 2469/20 . Detection of antibodies in sample from host which are directed against antigens from microorganisms

N G01N 2470/00 Immunochemical assays or immunoassays characterised by the reaction format or reaction type

- N G01N 2470/04 . Sandwich assay format
- N G01N 2470/06 . . Second binding partner specifically binding complex of analyte with first binding partner
- N G01N 2470/10 . Competitive assay format
- N G01N 2470/12 . . Displacement or release-type competition

- N G01N 2474/00** **Immunochemical assays or immunoassays characterised by detection mode or means of detection**
- N G01N 2474/10 · Immunoblots, e.g. Western blot or Dot blot
- N G01N 2474/20 · Immunohistochemistry assay
- U G01N 2496/00** **Reference solutions for assays of biological material**
- U G01N 2800/00** **Detection or diagnosis of diseases**
- NOTES
1. The indexing codes [G01N 2800/02](#) - [G01N 2800/44](#) are based on The Merck Manual of Diagnosis and Therapy (17th. Edition, Mark Beers and Robert Berkow).
 2. For diseases caused by microorganism where the microorganism is detected, which subject matter is classified in [G01N 33/569](#) and subgroups, [G01N 33/571](#) or [G01N 33/576](#), the present indexing scheme is not used.
 3. For cancers, which subject matter is classified in [G01N 33/574](#) and subgroups, the present indexing scheme is not used.
 4. When indexing in the following scheme, the organ takes precedence, e.g. inflammation of the skin is indexed with dermatological disorders and not with immunology or allergic disorders, asthma with pulmonary disorders and not with immunology or allergic disorders. Exception is made for thrombosis which is indexed with haematological disorders.
- M G01N 2800/52 · Predicting or monitoring the response to treatment, *e.g. for selection of therapy based on assay results in personalised medicine*; Prognosis

Project: RP0349-F (G01S)

- U G01S 1/00** **Beacons or beacon systems transmitting signals having a characteristic or characteristics capable of being detected by non-directional receivers and defining directions, positions, or position lines fixed relatively to the beacon transmitters; Receivers co-operating therewith (position fixing by co-ordinating a plurality of determinations of direction or position lines [G01S 5/00](#))**
- U G01S 1/02 · using radio waves ([G01S 19/00](#) takes precedence)
- U G01S 1/04 · · Details
- M G01S 1/042 · · · {Transmitters}
- WARNING**
Group [G01S 1/042](#) is impacted by reclassification into groups [G01S 1/0423](#), [G01S 1/0426](#), [G01S 1/0428](#), [G01S 2201/00](#), [G01S 2201/01](#), [G01S 2201/02](#), [G01S 2201/025](#), [G01S 2201/03](#), [G01S 2201/04](#), [G01S 2201/05](#), [G01S 2201/06](#), [G01S 2201/07](#), and [G01S 2201/08](#).
All groups listed in this Warning should be considered in order to perform a complete search.
- M G01S 1/0423 · · · {Mounting or deployment thereof}

WARNING

Group [G01S 1/0423](#) is incomplete pending reclassification of documents from group [G01S 1/042](#).
Groups [G01S 1/042](#) and [G01S 1/0423](#) should be considered in order to perform a complete search.

- M G01S 1/0426 {Collocated with electrical equipment other than beacons }
WARNING
 Group G01S 1/0426 is incomplete pending reclassification of documents from group G01S 1/042.
 Groups G01S 1/042 and G01S 1/0426 should be considered in order to perform a complete search.
- M G01S 1/0428 {Signal details}
WARNING
 Group G01S 1/0428 is incomplete pending reclassification of documents from group G01S 1/042.
 Groups G01S 1/042 and G01S 1/0428 should be considered in order to perform a complete search.
- M G01S 1/70 . using electromagnetic waves other than radio waves
WARNING
 Group G01S 1/70 is impacted by reclassification into groups G01S 1/703, G01S 1/7032, G01S 1/7034, G01S 1/7036, G01S 1/7038, G01S 2201/00, G01S 2201/01, G01S 2201/02, G01S 2201/025, G01S 2201/03, G01S 2201/04, G01S 2201/05, G01S 2201/06, G01S 2201/07, and G01S 2201/08.
 All groups listed in this Warning should be considered in order to perform a complete search.
- M G01S 1/703 . . {Details}
WARNING
 Group G01S 1/703 is incomplete pending reclassification of documents from group G01S 1/70.
 Groups G01S 1/70 and G01S 1/703 should be considered in order to perform a complete search.
- M G01S 1/7032 . . . {Transmitters}
WARNING
 Group G01S 1/7032 is incomplete pending reclassification of documents from group G01S 1/70.
 Groups G01S 1/70 and G01S 1/7032 should be considered in order to perform a complete search.
- M G01S 1/7034 {Mounting or deployment thereof}
WARNING
 Group G01S 1/7034 is incomplete pending reclassification of documents from group G01S 1/70.
 Groups G01S 1/70 and G01S 1/7034 should be considered in order to perform a complete search.
- M G01S 1/7036 {Collocated with electrical equipment other than beacons }
WARNING
 Group G01S 1/7036 is incomplete pending reclassification of documents from group G01S 1/70.
 Groups G01S 1/70 and G01S 1/7036 should be considered in order to perform a complete search.

- M G01S 1/7038 • • • {Signal details}
- WARNING
Group G01S 1/7038 is incomplete pending reclassification of documents from group G01S 1/70.
Groups G01S 1/70 and G01S 1/7038 should be considered in order to perform a complete search.
- U G01S 1/72 • using ultrasonic, sonic or infrasonic waves
- M G01S 1/74 • • Details
- WARNING
Group G01S 1/74 is impacted by reclassification into groups G01S 1/75, G01S 1/751, G01S 1/752, G01S 1/753, G01S 2201/00, G01S 2201/01, G01S 2201/02, G01S 2201/025, G01S 2201/03, G01S 2201/04, G01S 2201/05, G01S 2201/06, G01S 2201/07, and G01S 2201/08.
All groups listed in this Warning should be considered in order to perform a complete search.
- M G01S 1/75 • • • {Transmitters}
- WARNING
Group G01S 1/75 is incomplete pending reclassification of documents from group G01S 1/74.
Groups G01S 1/74 and G01S 1/75 should be considered in order to perform a complete search.
- M G01S 1/751 • • • {Mounting or deployment thereof}
- WARNING
Group G01S 1/751 is incomplete pending reclassification of documents from group G01S 1/74.
Groups G01S 1/74 and G01S 1/751 should be considered in order to perform a complete search.
- M G01S 1/752 • • • • {Collocated with electrical equipment other than beacons }
- WARNING
Group G01S 1/752 is incomplete pending reclassification of documents from group G01S 1/74.
Groups G01S 1/74 and G01S 1/752 should be considered in order to perform a complete search.
- M G01S 1/753 • • • • {Signal details}
- WARNING
Group G01S 1/753 is incomplete pending reclassification of documents from group G01S 1/74.
Groups G01S 1/74 and G01S 1/753 should be considered in order to perform a complete search.
- U G01S 19/00 **Satellite radio beacon positioning systems; Determining position, velocity or attitude using signals transmitted by such systems**
- U G01S 19/01 • Satellite radio beacon positioning systems transmitting time-stamped messages, e.g. GPS [Global Positioning System], GLONASS [Global Orbiting Navigation Satellite System] or GALILEO

- U G01S 19/03
- • Cooperating elements; Interaction or communication between different cooperating elements or between cooperating elements and receivers
- NOTE
The term "cooperating elements" designates additional elements or subsystems, including receivers of other users, which interact or communicate with the receiver or the satellite positioning system.
- M G01S 19/07
- • • providing data for correcting measured positioning data, e.g. DGPS [differential GPS] or ionosphere corrections
- WARNING
~~Group G01S 19/07 is impacted by reclassification into groups G01S 19/071, G01S 19/072, G01S 19/073, and G01S 19/074. All groups listed in this Warning should be considered in order to perform a complete search.~~
- M G01S 19/071
- • • {DGPS corrections}
- WARNING
~~Group G01S 19/071 is incomplete pending reclassification of documents from group G01S 19/07. Groups G01S 19/07 and G01S 19/071 should be considered in order to perform a complete search.~~
- M G01S 19/072
- • • {Ionosphere corrections}
- WARNING
~~Group G01S 19/072 is incomplete pending reclassification of documents from group G01S 19/07. Groups G01S 19/07 and G01S 19/072 should be considered in order to perform a complete search.~~
- M G01S 19/073
- • • {involving a network of fixed stations}
- WARNING
~~Group G01S 19/073 is incomplete pending reclassification of documents from group G01S 19/07. Groups G01S 19/07 and G01S 19/073 should be considered in order to perform a complete search.~~
- M G01S 19/074
- • • • {providing integrity data, e.g. WAAS}
- WARNING
~~Group G01S 19/074 is incomplete pending reclassification of documents from group G01S 19/07. Groups G01S 19/07 and G01S 19/074 should be considered in order to perform a complete search.~~
- U G01S 19/10
- • • providing dedicated supplementary positioning signals
- M G01S 19/11
- • • • wherein the cooperating elements are pseudolites or satellite radio beacon positioning system signal repeaters
- WARNING
~~Group G01S 19/11 is impacted by reclassification into group G01S 19/115. Groups G01S 19/11 and G01S 19/115 should be considered in order to perform a complete search.~~

- M G01S 19/115
- • • • {Airborne or satellite based pseudolites or repeaters}
- WARNING
Group G01S 19/115 is incomplete pending reclassification of documents from group G01S 19/11.
Groups G01S 19/11 and G01S 19/115 should be considered in order to perform a complete search.
- U G01S 19/38
- Determining a navigation solution using signals transmitted by a satellite radio beacon positioning system
- M G01S 19/39
- • the satellite radio beacon positioning system transmitting time-stamped messages, e.g. GPS [Global Positioning System], GLONASS [Global Orbiting Navigation Satellite System] or GALILEO
- WARNING
Group G01S 19/39 is impacted by reclassification into groups G01S 19/393 and G01S 19/396.
Groups G01S 19/39, G01S 19/393, and G01S 19/396 should be considered in order to perform a complete search.
- M G01S 19/393
- • • {Trajectory determination or predictive tracking, e.g. Kalman filtering}
- WARNING
Group G01S 19/393 is incomplete pending reclassification of documents from group G01S 19/39.
Groups G01S 19/39 and G01S 19/393 should be considered in order to perform a complete search.
- M G01S 19/396
- • • {Determining accuracy or reliability of position or pseudorange measurements}
- WARNING
Group G01S 19/396 is incomplete pending reclassification of documents from group G01S 19/39.
Groups G01S 19/39 and G01S 19/396 should be considered in order to perform a complete search.
- M G01S 2201/00**
- Indexing scheme relating to beacons or beacon systems transmitting signals capable of being detected by non-directional receivers and defining directions, positions, or position lines fixed relatively to the beacon transmitters**
- WARNING
Group G01S 2201/00 is incomplete pending reclassification of documents from groups G01S 1/042, G01S 1/70, and G01S 1/74.
All groups listed in this Warning should be considered in order to perform a complete search.
- M G01S 2201/01
- adapted for specific applications or environments
- WARNING
Group G01S 2201/01 is incomplete pending reclassification of documents from groups G01S 1/042, G01S 1/70, and G01S 1/74.
All groups listed in this Warning should be considered in order to perform a complete search.
- M G01S 2201/02
- • Indoor positioning, e.g. in covered car-parks, mining facilities, warehouses
- WARNING
Group G01S 2201/02 is incomplete pending reclassification of documents from groups G01S 1/042, G01S 1/70, and G01S 1/74.

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

- M G01S 2201/025 • • Indoor pedestrian positioning

WARNING

Group G01S 2201/025 is incomplete pending reclassification of documents from groups G01S 1/042, G01S 1/70, and G01S 1/74.

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

- M G01S 2201/03 • • Construction sites

WARNING

Group G01S 2201/03 is incomplete pending reclassification of documents from groups G01S 1/042, G01S 1/70, and G01S 1/74.

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

- M G01S 2201/04 • • Emergencies

WARNING

Group G01S 2201/04 is incomplete pending reclassification of documents from groups G01S 1/042, G01S 1/70, and G01S 1/74.

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

- M G01S 2201/05 • • Sport

WARNING

Group G01S 2201/05 is incomplete pending reclassification of documents from groups G01S 1/042, G01S 1/70, and G01S 1/74.

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

- M G01S 2201/06 • • Aircraft navigation

WARNING

Group G01S 2201/06 is incomplete pending reclassification of documents from groups G01S 1/042, G01S 1/70, and G01S 1/74.

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

- M G01S 2201/07 • • Under water

WARNING

Group G01S 2201/07 is incomplete pending reclassification of documents from groups G01S 1/042, G01S 1/70, and G01S 1/74.

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

- M G01S 2201/08 • • Marine or water borne applications

WARNING

Group G01S 2201/08 is incomplete pending reclassification of documents from groups G01S 1/042, G01S 1/70, and G01S 1/74.

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

Project: RP0211-F (G02B)

- U G02B 15/00** **Optical objectives with means for varying the magnification (anamorphic objectives [G02B 13/08](#))**
- M G02B 15/14** • by axial movement of one or more lenses or groups of lenses relative to the image plane for continuously varying the equivalent focal length of the objective
- WARNING**
Group G02B 15/14 is impacted by reclassification into groups G02B 15/142, G02B 15/1421, G02B 15/1425, G02B 15/143, G02B 15/1431, G02B 15/143101, G02B 15/143103, G02B 15/143105, G02B 15/143107, G02B 15/1435, G02B 15/143501, G02B 15/143503, G02B 15/143505, G02B 15/143507, G02B 15/144, G02B 15/1441, G02B 15/144101, G02B 15/144103, G02B 15/144105, G02B 15/144107, G02B 15/144109, G02B 15/144111, G02B 15/144113, G02B 15/144115, G02B 15/1445, G02B 15/144501, G02B 15/144503, G02B 15/144505, G02B 15/144507, G02B 15/144509, G02B 15/144511, G02B 15/144513, G02B 15/144515, G02B 15/145, G02B 15/1451, G02B 15/145101, G02B 15/145103, G02B 15/145105, G02B 15/145107, G02B 15/145109, G02B 15/145111, G02B 15/145113, G02B 15/145115, G02B 15/145117, G02B 15/145119, G02B 15/145121, G02B 15/145123, G02B 15/145125, G02B 15/145127, G02B 15/145129, G02B 15/145131, G02B 15/1455, G02B 15/145501, G02B 15/145503, G02B 15/145505, G02B 15/145507, G02B 15/145509, G02B 15/145511, G02B 15/145513, G02B 15/145515, G02B 15/145517, G02B 15/145519, G02B 15/145521, G02B 15/145523, G02B 15/145525, G02B 15/145527, G02B 15/145529, G02B 15/145531, G02B 15/146, G02B 15/1461, and G02B 15/1465.
All groups listed in this Warning should be considered in order to perform a complete search.
- M G02B 15/142** • • {having two groups only}
- WARNING**
Group G02B 15/142 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, and G02B 15/16. Group G02B 15/142 is also impacted by reclassification into groups G02B 15/1421 and G02B 15/1425.
All groups listed in this Warning should be considered in order to perform a complete search.
- M G02B 15/1421** • • • {the first group being positive}
- WARNING**
Group G02B 15/1421 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/142, G02B 15/15, G02B 15/155, and G02B 15/16.
All groups listed in this Warning should be considered in order to perform a complete search.
- M G02B 15/1425** • • • {the first group being negative}
- WARNING**
Group G02B 15/1425 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/142, G02B 15/15, G02B 15/155, and G02B 15/16.
All groups listed in this Warning should be considered in order to perform a complete search.

- M G02B 15/143 • • {having three groups only}
- WARNING
Group G02B 15/143 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/177, and G02B 15/20. All groups listed in this Warning should be considered in order to perform a complete search.
- M G02B 15/1431 • • • {the first group being positive}
- WARNING
Groups G02B 15/1431, G02B 15/143101, G02B 15/143103, G02B 15/143105, and G02B 15/143107 are incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, and G02B 15/20. All groups listed in this Warning should be considered in order to perform a complete search.
- M G02B 15/1435 • • • {the first group being negative}
- WARNING
Groups G02B 15/1435, G02B 15/143501, G02B 15/143503, G02B 15/143505, and G02B 15/143507 are incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/177, and G02B 15/20. All groups listed in this Warning should be considered in order to perform a complete search.
- M G02B 15/144 • • {having four groups only}
- WARNING
Groups G02B 15/144 and G02B 15/1441 are incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/17, G02B 15/173, and G02B 15/20. All groups listed in this Warning should be considered in order to perform a complete search.
- U G02B 15/1441 • • • {the first group being positive}
- M G02B 15/144101 • • • • {arranged +---}
- WARNING
Group G02B 15/144101 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/17, and G02B 15/20. All groups listed in this Warning should be considered in order to perform a complete search.
- M G02B 15/144103 • • • • {arranged +++-}
- WARNING
Group G02B 15/144103 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/17, and G02B 15/20. All groups listed in this Warning should be considered in order to perform a complete search.

M G02B 15/144105 . . . {arranged +-+}

WARNING

Group G02B 15/144105 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/173, and G02B 15/20.

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

M G02B 15/144107 . . . {arranged +++}

WARNING

Group G02B 15/144107 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, and G02B 15/20.

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

M G02B 15/144109 . . . {arranged +++}

WARNING

Group G02B 15/144109 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/17, and G02B 15/20.

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

M G02B 15/144111 . . . {arranged +++}

WARNING

Group G02B 15/144111 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/173, and G02B 15/20.

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

M G02B 15/144113 . . . {arranged +++}

WARNING

Group G02B 15/144113 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/173, and G02B 15/20.

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

M G02B 15/144115 . . . {arranged +++}

WARNING

Group G02B 15/144115 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, and G02B 15/20.

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

M G02B 15/1445 . . . {the first group being negative}

WARNING

Group G02B 15/1445 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/173, G02B 15/177, and G02B 15/20.

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

M G02B 15/144501 . . . {arranged ----}

WARNING

Group G02B 15/144501 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/177, and G02B 15/20.

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

M G02B 15/144503 . . . {arranged -+++}

WARNING

Group G02B 15/144503 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/17, G02B 15/177, and G02B 15/20.

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

M G02B 15/144505 . . . {arranged --+-}

WARNING

Group G02B 15/144505 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/177, and G02B 15/20.

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

M G02B 15/144507 . . . {arranged -+++}

WARNING

Group G02B 15/144507 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/177, and G02B 15/20.

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

M G02B 15/144509 . . . {arranged ----}

WARNING

Group G02B 15/144509 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/177, and G02B 15/20.

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

- M G02B 15/144511 . . . {arranged -+++}
WARNING
 Group G02B 15/144511 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/173, G02B 15/177, and G02B 15/20.
 All groups listed in this Warning should be considered in order to perform a complete search.
- M G02B 15/144513 . . . {arranged -+++}
WARNING
 Group G02B 15/144513 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/177, and G02B 15/20.
 All groups listed in this Warning should be considered in order to perform a complete search.
- M G02B 15/144515 . . . {arranged -+++}
WARNING
 Group G02B 15/144515 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/177, and G02B 15/20.
 All groups listed in this Warning should be considered in order to perform a complete search.
- M G02B 15/145 . . {having five groups only}
WARNING
 Group G02B 15/145 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/17, G02B 15/173, G02B 15/177, and G02B 15/20.
 All groups listed in this Warning should be considered in order to perform a complete search.
- M G02B 15/1451 . . . {the first group being positive}
WARNING
 Group G02B 15/1451 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/17, G02B 15/173, and G02B 15/20.
 All groups listed in this Warning should be considered in order to perform a complete search.
- M G02B 15/145101 . . . {arranged +----}
WARNING
 Group G02B 15/145101 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/17, and G02B 15/20.
 All groups listed in this Warning should be considered in order to perform a complete search.

M G02B 15/145103 . . . {arranged +++--}

WARNING

Group G02B 15/145103 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/17, and G02B 15/20.

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

M G02B 15/145105 . . . {arranged +++--}

WARNING

Group G02B 15/145105 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/17, G02B 15/173, and G02B 15/20.

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

M G02B 15/145107 . . . {arranged +++--}

WARNING

Group G02B 15/145107 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/17, and G02B 15/20.

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

M G02B 15/145109 . . . {arranged +++--}

WARNING

Group G02B 15/145109 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/17, and G02B 15/20.

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

M G02B 15/145111 . . . {arranged +++--}

WARNING

Group G02B 15/145111 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/173, and G02B 15/20.

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

M G02B 15/145113 . . . {arranged +++--}

WARNING

Group G02B 15/145113 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/173, and G02B 15/20.

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

- M G02B 15/145115 . . . {arranged +---+}
WARNING
Group G02B 15/145115 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, and G02B 15/20. All groups listed in this Warning should be considered in order to perform a complete search.
- M G02B 15/145117 . . . {arranged +---+}
WARNING
Group G02B 15/145117 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/17, and G02B 15/20. All groups listed in this Warning should be considered in order to perform a complete search.
- M G02B 15/145119 . . . {arranged +---+}
WARNING
Group G02B 15/145119 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/17, and G02B 15/20. All groups listed in this Warning should be considered in order to perform a complete search.
- M G02B 15/145121 . . . {arranged +---+}
WARNING
Group G02B 15/145121 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/173, and G02B 15/20. All groups listed in this Warning should be considered in order to perform a complete search.
- M G02B 15/145123 . . . {arranged +---+}
WARNING
Group G02B 15/145123 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/173, and G02B 15/20. All groups listed in this Warning should be considered in order to perform a complete search.
- M G02B 15/145125 . . . {arranged +---+}
WARNING
Group G02B 15/145125 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/17, and G02B 15/20. All groups listed in this Warning should be considered in order to perform a complete search.

- M G02B 15/145127 . . . {arranged +++++}
WARNING
 Group G02B 15/145127 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/173, and G02B 15/20.
 All groups listed in this Warning should be considered in order to perform a complete search.
- M G02B 15/145129 . . . {arranged +++++}
WARNING
 Group G02B 15/145129 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/173, and G02B 15/20.
 All groups listed in this Warning should be considered in order to perform a complete search.
- M G02B 15/145131 . . . {arranged +++++}
WARNING
 Group G02B 15/145131 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, and G02B 15/20.
 All groups listed in this Warning should be considered in order to perform a complete search.
- M G02B 15/1455 . . . {the first group being negative}
WARNING
 Group G02B 15/1455 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/17, G02B 15/173, G02B 15/177, and G02B 15/20.
 All groups listed in this Warning should be considered in order to perform a complete search.
- M G02B 15/145501 . . . {arranged -----}
WARNING
 Group G02B 15/145501 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/177, and G02B 15/20.
 All groups listed in this Warning should be considered in order to perform a complete search.
- M G02B 15/145503 . . . {arranged -++++}
WARNING
 Group G02B 15/145503 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/17, G02B 15/177, and G02B 15/20.
 All groups listed in this Warning should be considered in order to perform a complete search.

M G02B 15/145505 . . . {arranged ---+}

WARNING

Group G02B 15/145505 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/17, and G02B 15/20.

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

M G02B 15/145507 . . . {arranged -+++}

WARNING

Group G02B 15/145507 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/17, G02B 15/177, and G02B 15/20.

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

M G02B 15/145509 . . . {arranged ---+}

WARNING

Group G02B 15/145509 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/177, and G02B 15/20.

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

M G02B 15/145511 . . . {arranged -+++}

WARNING

Group G02B 15/145511 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/173, G02B 15/177, and G02B 15/20.

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

M G02B 15/145513 . . . {arranged -+++}

WARNING

Group G02B 15/145513 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/177, and G02B 15/20.

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

M G02B 15/145515 . . . {arranged -++++}

WARNING

Group G02B 15/145515 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/177, and G02B 15/20.

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

M G02B 15/145517 . . . {arranged ----+}

WARNING

Group G02B 15/145517 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/177, and G02B 15/20.

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

M G02B 15/145519 . . . {arranged -+++}

WARNING

Group G02B 15/145519 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/17, G02B 15/177, and G02B 15/20.

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

M G02B 15/145521 . . . {arranged --++}

WARNING

Group G02B 15/145521 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/173, G02B 15/177, and G02B 15/20.

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

M G02B 15/145523 . . . {arranged -++++}

WARNING

Group G02B 15/145523 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/173, G02B 15/177, and G02B 15/20.

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

M G02B 15/145525 . . . {arranged ---++}

WARNING

Group G02B 15/145525 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/177, and G02B 15/20.

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

M G02B 15/145527 . . . {arranged -++++}

WARNING

Group G02B 15/145527 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/173, G02B 15/177, and G02B 15/20.

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

M G02B 15/145529 . . . {arranged ---+++}

WARNING

Group G02B 15/145529 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/177, and G02B 15/20.

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

M G02B 15/145531 . . . {arranged -++++}

WARNING

Group G02B 15/145531 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/177, and G02B 15/20.

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

M G02B 15/146 . . {having more than five groups}

WARNING

Groups G02B 15/146 and G02B 15/1465 are incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/17, G02B 15/173, G02B 15/177, and G02B 15/20.

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

M G02B 15/1461 . . . {the first group being positive}

WARNING

Group G02B 15/1461 is incomplete pending reclassification of documents from groups G02B 15/14, G02B 15/15, G02B 15/155, G02B 15/16, G02B 15/163, G02B 15/167, G02B 15/17, G02B 15/173, and G02B 15/20.

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

M G02B 15/15 . . compensation by means of only one movement or by means of only linearly related movements, e.g. optical compensation

WARNING

Group G02B 15/15 is impacted by reclassification into groups G02B 15/142, G02B 15/1421, G02B 15/1425, G02B 15/143, G02B 15/1431, G02B 15/143101, G02B 15/143103, G02B 15/143105, G02B 15/143107, G02B 15/1435, G02B 15/143501, G02B 15/143503, G02B 15/143505, G02B 15/143507, G02B 15/144, G02B 15/1441, G02B 15/144101, G02B 15/144103, G02B 15/144105, G02B 15/144107, G02B 15/144109, G02B 15/144111, G02B 15/144113, G02B 15/144115, G02B 15/1445, G02B 15/144501, G02B 15/144503, G02B 15/144505, G02B 15/144507, G02B 15/144509, G02B 15/144511, G02B 15/144513, G02B 15/144515, G02B 15/145, G02B 15/1451, G02B 15/145101, G02B 15/145103, G02B 15/145105, G02B 15/145107, G02B 15/145109, G02B 15/145111, G02B 15/145113, G02B 15/145115, G02B 15/145117, G02B 15/145119, G02B 15/145121, G02B 15/145123, G02B 15/145125, G02B 15/145127, G02B 15/145129, G02B 15/145131, G02B 15/1455, G02B 15/145501, G02B 15/145503, G02B 15/145505, G02B 15/145507, G02B 15/145509, G02B 15/145511, G02B 15/145513, G02B 15/145515, G02B 15/145517, G02B 15/145519, G02B 15/145521, G02B 15/145523, G02B 15/145525,

~~G02B 15/145527, G02B 15/145529, G02B 15/145531, G02B 15/146,
G02B 15/1461, and G02B 15/1465.~~

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

D G02B 15/155
—(Frozen)

- {Zoom lenses arranged symmetrically around a central plane, e.g. a diaphragm-containing plane}

WARNING

Group G02B 15/155 is no longer used for the classification of documents as of August 1, 2019.

The content of this group is being reclassified into groups ~~G02B 15/142, G02B 15/1421, G02B 15/1425, G02B 15/143, G02B 15/1431, G02B 15/143101, G02B 15/143103, G02B 15/143105, G02B 15/143107, G02B 15/1435, G02B 15/143501, G02B 15/143503, G02B 15/143505, G02B 15/143507, G02B 15/144, G02B 15/1441, G02B 15/144101, G02B 15/144103, G02B 15/144105, G02B 15/144107, G02B 15/144109, G02B 15/144111, G02B 15/144113, G02B 15/144115, G02B 15/1445, G02B 15/144501, G02B 15/144503, G02B 15/144505, G02B 15/144507, G02B 15/144509, G02B 15/144511, G02B 15/144513, G02B 15/144515, G02B 15/145, G02B 15/1451, G02B 15/145101, G02B 15/145103, G02B 15/145105, G02B 15/145107, G02B 15/145109, G02B 15/145111, G02B 15/145113, G02B 15/145115, G02B 15/145117, G02B 15/145119, G02B 15/145121, G02B 15/145123, G02B 15/145125, G02B 15/145127, G02B 15/145129, G02B 15/145131, G02B 15/1455, G02B 15/145501, G02B 15/145503, G02B 15/145505, G02B 15/145507, G02B 15/145509, G02B 15/145511, G02B 15/145513, G02B 15/145515, G02B 15/145517, G02B 15/145519, G02B 15/145521, G02B 15/145523, G02B 15/145525, G02B 15/145527, G02B 15/145529, G02B 15/145531, G02B 15/146, G02B 15/1461, and G02B 15/1465.~~

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

M G02B 15/16

- with interdependent non-linearly related movements between one lens or lens group, and another lens or lens group ([G02B 15/22](#) takes precedence)

WARNING

~~Group G02B 15/16 is impacted by reclassification into groups G02B 15/142, G02B 15/1421, G02B 15/1425, G02B 15/143, G02B 15/1431, G02B 15/143101, G02B 15/143103, G02B 15/143105, G02B 15/143107, G02B 15/1435, G02B 15/143501, G02B 15/143503, G02B 15/143505, G02B 15/143507, G02B 15/144, G02B 15/1441, G02B 15/144101, G02B 15/144103, G02B 15/144105, G02B 15/144107, G02B 15/144109, G02B 15/144111, G02B 15/144113, G02B 15/144115, G02B 15/1445, G02B 15/144501, G02B 15/144503, G02B 15/144505, G02B 15/144507, G02B 15/144509, G02B 15/144511, G02B 15/144513, G02B 15/144515, G02B 15/145, G02B 15/1451, G02B 15/145101, G02B 15/145103, G02B 15/145105, G02B 15/145107, G02B 15/145109, G02B 15/145111, G02B 15/145113, G02B 15/145115, G02B 15/145117, G02B 15/145119, G02B 15/145121, G02B 15/145123, G02B 15/145125, G02B 15/145127, G02B 15/145129, G02B 15/145131, G02B 15/1455, G02B 15/145501, G02B 15/145503, G02B 15/145505, G02B 15/145507, G02B 15/145509, G02B 15/145511, G02B 15/145513, G02B 15/145515, G02B 15/145517, G02B 15/145519, G02B 15/145521, G02B 15/145523, G02B 15/145525, G02B 15/145527, G02B 15/145529, G02B 15/145531, G02B 15/146, G02B 15/1461, and G02B 15/1465.~~

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

- M G02B 15/163
- • • having a first movable lens or lens group and a second movable lens or lens group, both in front of a fixed lens or lens group ([G02B 15/177](#) takes precedence)

WARNING

Group ~~G02B 15/163~~ is impacted by reclassification into groups ~~G02B 15/143, G02B 15/1431, G02B 15/143101, G02B 15/143103, G02B 15/143105, G02B 15/143107, G02B 15/1435, G02B 15/143501, G02B 15/143503, G02B 15/143505, G02B 15/143507, G02B 15/144, G02B 15/1441, G02B 15/144101, G02B 15/144103, G02B 15/144105, G02B 15/144107, G02B 15/144109, G02B 15/144111, G02B 15/144113, G02B 15/144115, G02B 15/1445, G02B 15/144501, G02B 15/144503, G02B 15/144505, G02B 15/144507, G02B 15/144509, G02B 15/144511, G02B 15/144513, G02B 15/144515, G02B 15/145, G02B 15/1451, G02B 15/145101, G02B 15/145103, G02B 15/145105, G02B 15/145107, G02B 15/145109, G02B 15/145111, G02B 15/145113, G02B 15/145115, G02B 15/145117, G02B 15/145119, G02B 15/145121, G02B 15/145123, G02B 15/145125, G02B 15/145127, G02B 15/145129, G02B 15/145131, G02B 15/1455, G02B 15/145501, G02B 15/145503, G02B 15/145505, G02B 15/145507, G02B 15/145509, G02B 15/145511, G02B 15/145513, G02B 15/145515, G02B 15/145517, G02B 15/145519, G02B 15/145521, G02B 15/145523, G02B 15/145525, G02B 15/145527, G02B 15/145529, G02B 15/145531, G02B 15/146, G02B 15/1461, and G02B 15/1465.~~
All groups listed in this Warning should be considered in order to perform a complete search.

- M G02B 15/167
- • • having an additional fixed front lens or group of lenses

WARNING

Group ~~G02B 15/167~~ is impacted by reclassification into groups ~~G02B 15/143, G02B 15/1431, G02B 15/143101, G02B 15/143103, G02B 15/143105, G02B 15/143107, G02B 15/1435, G02B 15/143501, G02B 15/143503, G02B 15/143505, G02B 15/143507, G02B 15/144, G02B 15/1441, G02B 15/144101, G02B 15/144103, G02B 15/144105, G02B 15/144107, G02B 15/144109, G02B 15/144111, G02B 15/144113, G02B 15/144115, G02B 15/1445, G02B 15/144501, G02B 15/144503, G02B 15/144505, G02B 15/144507, G02B 15/144509, G02B 15/144511, G02B 15/144513, G02B 15/144515, G02B 15/145, G02B 15/1451, G02B 15/145101, G02B 15/145103, G02B 15/145105, G02B 15/145107, G02B 15/145109, G02B 15/145111, G02B 15/145113, G02B 15/145115, G02B 15/145117, G02B 15/145119, G02B 15/145121, G02B 15/145123, G02B 15/145125, G02B 15/145127, G02B 15/145129, G02B 15/145131, G02B 15/1455, G02B 15/145501, G02B 15/145503, G02B 15/145505, G02B 15/145507, G02B 15/145509, G02B 15/145511, G02B 15/145513, G02B 15/145515, G02B 15/145517, G02B 15/145519, G02B 15/145521, G02B 15/145523, G02B 15/145525, G02B 15/145527, G02B 15/145529, G02B 15/145531, G02B 15/146, G02B 15/1461, and G02B 15/1465.~~
All groups listed in this Warning should be considered in order to perform a complete search.

- M G02B 15/17
- • • • arranged +--

WARNING

Group ~~G02B 15/17~~ is impacted by reclassification into groups ~~G02B 15/144, G02B 15/1441, G02B 15/144101, G02B 15/144103, G02B 15/144109, G02B 15/144503, G02B 15/145, G02B 15/1451, G02B 15/145101, G02B 15/145103, G02B 15/145105,~~

~~G02B 15/145107, G02B 15/145109, G02B 15/145117,
G02B 15/145119, G02B 15/145125, G02B 15/1455,
G02B 15/145503, G02B 15/145505, G02B 15/145507,
G02B 15/145519, G02B 15/146, G02B 15/1461, and G02B 15/1465.~~
All groups listed in this Warning should be considered in order to
perform a complete search.

M G02B 15/173 arranged ++

WARNING

Group G02B 15/173 is impacted by reclassification into groups
G02B 15/144, G02B 15/1441, G02B 15/144105, G02B 15/144111,
G02B 15/144113, G02B 15/1445, G02B 15/144511,
G02B 15/145, G02B 15/1451, G02B 15/145105, G02B 15/145111,
G02B 15/145113, G02B 15/145121, G02B 15/145123,
G02B 15/145127, G02B 15/145129, G02B 15/1455,
G02B 15/145511, G02B 15/145521, G02B 15/145523,
G02B 15/145527, G02B 15/146, G02B 15/1461, and G02B 15/1465.
All groups listed in this Warning should be considered in order to
perform a complete search.

M G02B 15/177 . . . having a negative front lens or group of lenses

WARNING

Group G02B 15/177 is impacted by reclassification into groups
G02B 15/143, G02B 15/1435, G02B 15/143501, G02B 15/143503,
G02B 15/143505, G02B 15/143507, G02B 15/1445, G02B 15/144501,
G02B 15/144503, G02B 15/144505, G02B 15/144507, G02B 15/144509,
G02B 15/144511, G02B 15/144513, G02B 15/144515, G02B 15/145,
G02B 15/1455, G02B 15/145501, G02B 15/145503, G02B 15/145507,
G02B 15/145509, G02B 15/145511, G02B 15/145513, G02B 15/145515,
G02B 15/145517, G02B 15/145519, G02B 15/145521, G02B 15/145523,
G02B 15/145525, G02B 15/145527, G02B 15/145529, G02B 15/145531,
G02B 15/146, and G02B 15/1465.
All groups listed in this Warning should be considered in order to perform a
complete search.

M G02B 15/20 . . . having an additional movable lens or lens group for varying the objective
focal length

WARNING

Group G02B 15/20 is impacted by reclassification into groups G02B 15/143,
G02B 15/1431, G02B 15/143101, G02B 15/143103, G02B 15/143105,
G02B 15/143107, G02B 15/1435, G02B 15/143501, G02B 15/143503,
G02B 15/143505, G02B 15/143507, G02B 15/144, G02B 15/1441,
G02B 15/144101, G02B 15/144103, G02B 15/144105, G02B 15/144107,
G02B 15/144109, G02B 15/144111, G02B 15/144113, G02B 15/144115,
G02B 15/1445, G02B 15/144501, G02B 15/144503, G02B 15/144505,
G02B 15/144507, G02B 15/144509, G02B 15/144511, G02B 15/144513,
G02B 15/144515, G02B 15/145, G02B 15/1451, G02B 15/145101,
G02B 15/145103, G02B 15/145105, G02B 15/145107, G02B 15/145109,
G02B 15/145111, G02B 15/145113, G02B 15/145115, G02B 15/145117,
G02B 15/145119, G02B 15/145121, G02B 15/145123, G02B 15/145125,
G02B 15/145127, G02B 15/145129, G02B 15/145131, G02B 15/1455,
G02B 15/145501, G02B 15/145503, G02B 15/145505, G02B 15/145507,
G02B 15/145509, G02B 15/145511, G02B 15/145513, G02B 15/145515,
G02B 15/145517, G02B 15/145519, G02B 15/145521, G02B 15/145523,
G02B 15/145525, G02B 15/145527, G02B 15/145529, G02B 15/145531,
G02B 15/146, G02B 15/1461, and G02B 15/1465.

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

Project: RP0066-F (G03B)

- M G03B 7/00 Control of exposure by setting shutters, diaphragms or filters, separately or conjointly (control of exposure in television cameras by means of circuitry influencing the optical part of the camera [H04N 5/238](#))
- WARNING**
Group G03B 7/00 is impacted by reclassification into groups G03B 7/01 and G03B 7/30.
Groups G03B 7/00, G03B 7/01 and G03B 7/30 should be considered in order to perform a complete search.
- M G03B 7/01
- with selection of either manual or automatic mode
- WARNING**
Group G03B 7/01 is incomplete pending reclassification of documents from group G03B 7/00.
Groups G03B 7/00 and G03B 7/01 should be considered in order to perform a complete search.
- U G03B 7/08
- Control effected solely on the basis of the response, to the intensity of the light received by the camera, of a built-in light-sensitive device
- D G03B 7/0807
—(Frozen)
- • {Control circuits (G03B 7/10 takes precedence)}
- WARNING**
Group G03B 7/0807 is no longer used for the classification of documents as of July 1, 2014. The content of this group is being reclassified into groups G03B 7/081 – G03B 7/097.

Until reclassification is complete, groups G03B 7/0807 and G03B 7/081 – G03B 7/097 should be considered in order to perform a complete search.
- M G03B 7/081
- • Analogue circuits
- WARNING**
Groups G03B 7/081 – G03B 7/089 are incomplete pending reclassification of documents from group G03B 7/0807.

Group G03B 7/0807 should be considered when searching any group of the range G03B 7/081 – G03B 7/089 in order to perform a complete search.
- M G03B 7/091
- • Digital circuits
- WARNING**
Groups G03B 7/091 – G03B 7/097 are incomplete pending reclassification of documents from group G03B 7/0807.

Group G03B 7/0807 should be considered when searching any group of the range G03B 7/091 – G03B 7/097 in order to perform a complete search.
- M G03B 7/16
- in accordance with both the intensity of the flash source and the distance of the flash source from the object, e.g. in accordance with the "guide number" of the flash bulb and the focusing of the camera
- WARNING**
Group G03B 7/16 is impacted by reclassification into group G03B 7/17.
Groups G03B 7/16 and G03B 7/17 should be considered in order to perform a complete search.

- M G03B 7/17
- Selection of modes in flash units by exposure control arrangements
- WARNING**
~~Group G03B 7/17 is incomplete pending reclassification of documents from group G03B 7/16.~~
~~Groups G03B 7/16 and G03B 7/17 should be considered in order to perform a complete search.~~
- M G03B 7/30
- Safety arrangements for control of exposure
- WARNING**
~~Group G03B 7/30 is incomplete pending reclassification of documents from group G03B 7/00.~~
~~Groups G03B 7/00 and G03B 7/30 should be considered in order to perform a complete search.~~

Project: RP0700-F (G03B)

- M G03B 30/00
- Camera modules comprising integrated lens units and imaging units, specially adapted for being embedded in other devices, e.g. mobile phones or vehicles**

NOTE

When classification is made in this main group, further classification should be made in other groups of subclass [G03B](#) or in group [G02B 7/00](#) according to the functional aspects of the camera. The classification symbol of this group is not listed first when assigned to patent documents.

WARNING

~~Group G03B 30/00 is incomplete pending reclassification of documents from groups G02B 7/00, G02B 7/02, G02B 7/021, G02B 7/022, G02B 7/023, G02B 7/027, G02B 7/028, G02B 7/04, G02B 7/06, G02B 7/09, G02B 7/10, G02B 7/102, G02B 7/105, G02B 13/001, G02B 13/0015, G02B 13/002, G02B 13/0025, G02B 13/003, G02B 13/0035, G02B 13/004, G02B 13/0045, G02B 13/005, G02B 13/0055, G02B 13/006, G02B 13/0065, G02B 13/007, G02B 13/0075, G02B 13/008, G02B 13/0085, G02B 13/009, G03B 5/00, G03B 17/02, G03B 17/04, G03B 17/08, and G03B 17/55.~~
~~All groups listed in this Warning should be considered in order to perform a complete search.~~

Project: RP0659 (G03C)

- M G03C
- PHOTOSENSITIVE MATERIALS FOR PHOTOGRAPHIC PURPOSES (for photomechanical purposes [G03F](#)); PHOTOGRAPHIC PROCESSES, e.g. CINE, X-RAY, COLOUR, STEREO-PHOTOGRAPHIC PROCESSES; AUXILIARY PROCESSES IN PHOTOGRAPHY (photographic processes characterised by the use or manipulation of apparatus classifiable per se in subclass [G03B](#), see [G03B](#); photomechanical production of textured or patterned surfaces [G03F](#); electrophotography, magnetography [G03G](#))**

NOTE

In this subclass, the following expressions are used with the meanings indicated :

- "photosensitive compositions" covers photosensitive substances, e.g. silverhalides, and, if applicable, binders or additives;
- "photosensitive materials" covers the photosensitive compositions, e.g. emulsions, the bases carrying them, and, if applicable, auxiliary layers.

WARNING

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

Subject matter covered by this group is classified in the following CPC group:
G03C 9/08 covered by G03C 9/00, G03C 2009/08

~~2-1.~~ {In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.}

U G03C 9/00 Stereo-photographic or similar processes

- U G03C 9/06 · Anaglyph
- D G03C 2009/08 · {Producing three-dimensional images}
<administratively transferred to [G03C 9/08](#) INV>
- N G03C 9/08 · *Producing three-dimensional images*

Project: RP0458-F (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

- U G06F 3/01 · Input arrangements or combined input and output arrangements for interaction between user and computer ([G06F 3/16](#) takes precedence)
- U G06F 3/03 · · Arrangements for converting the position or the displacement of a member into a coded form

NOTE

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

- U G06F 3/033 · · · Pointing devices displaced or positioned by the user, e.g. mice, trackballs, pens or joysticks; Accessories therefor (digitisers characterised by the transducing means [G06F 3/041](#))
- M G06F 3/039 · · · · Accessories therefor, e.g. mouse pads

WARNING

Group G06F 3/039 is impacted by reclassification into group G06F 3/0393.
Groups G06F 3/039 and G06F 3/0393 should be considered in order to perform a complete search.

- M G06F 3/0393 · · · · {Accessories for touch pads or touch screens, e.g. mechanical guides added to touch screens for drawing straight lines, hard keys overlaying touch screens or touch pads}

WARNING

Group G06F 3/0393 is incomplete pending reclassification of documents from group G06F 3/039.
Groups G06F 3/039 and G06F 3/0393 should be considered in order to perform a complete search.

- U G06F 3/041 · · · Digitisers, e.g. for touch screens or touch pads, characterised by the transducing means
- M G06F 3/0414 · · · · {using force sensing means to determine a position}

WARNING

Group G06F 3/0414 is impacted by reclassification into groups G06F 3/04142, G06F 3/04144 and G06F 3/04146.
All groups listed in this Warning should be considered in order to perform a complete search.

- M G06F 3/04142 {the force sensing means being located peripherally, e.g. disposed at the corners or at the side of a touch sensing plate}
- WARNING
Group G06F 3/04142 is incomplete pending reclassification of documents from group G06F 3/0414.
Groups G06F 3/0414 and G06F 3/04142 should be considered in order to perform a complete search.
- M G06F 3/04144 {using an array of force sensing means (position sensing using the local deformation of sensor cells [G06F 3/0447](#))}
- WARNING
Group G06F 3/04144 is incomplete pending reclassification of documents from group G06F 3/0414.
Groups G06F 3/0414 and G06F 3/04144 should be considered in order to perform a complete search.
- M G06F 3/04146 {using pressure sensitive conductive elements delivering a boolean signal and located between crossing sensing lines, e.g. located between X and Y sensing line layers}
- WARNING
Group G06F 3/04146 is incomplete pending reclassification of documents from group G06F 3/0414.
Groups G06F 3/0414 and G06F 3/04146 should be considered in order to perform a complete search.
- M G06F 3/0416 {Control or interface arrangements specially adapted for digitisers}
- WARNING
Group G06F 3/0416 is impacted by reclassification into groups G06F 3/04162, G06F 3/04164, G06F 3/04166, G06F 3/041661, and G06F 3/041662.
All groups listed in this Warning should be considered in order to perform a complete search.
- M G06F 3/04162 {for exchanging data with external devices, e.g. smart pens, via the digitiser sensing hardware}
- WARNING
Group G06F 3/04162 is incomplete pending reclassification of documents from group G06F 3/0416.
Groups G06F 3/0416 and G06F 3/04162 should be considered in order to perform a complete search.
- M G06F 3/04164 {Connections between sensors and controllers, e.g. routing lines between electrodes and connection pads}
- WARNING
Group G06F 3/04164 is incomplete pending reclassification of documents from group G06F 3/0416.
Groups G06F 3/0416 and G06F 3/04164 should be considered in order to perform a complete search.

- M G06F 3/04166 {Details of scanning methods, e.g. sampling time, grouping of sub areas or time sharing with display driving (Synchronisation with the driving of the display or the backlighting unit to avoid interferences generated internally [G06F 3/04184](#))}
- WARNING
Group G06F 3/04166 is incomplete pending reclassification of documents from group G06F 3/0416.
Groups G06F 3/0416 and G06F 3/04166 should be considered in order to perform a complete search.
- M G06F 3/041661 {using detection at multiple resolutions, e.g. coarse and fine scanning; using detection within a limited area, e.g. object tracking window}
- WARNING
Group G06F 3/041661 is incomplete pending reclassification of documents from group G06F 3/0416.
Groups G06F 3/0416 and G06F 3/041661 should be considered in order to perform a complete search.
- M G06F 3/041662 {using alternate mutual and self-capacitive scanning}
- WARNING
Group G06F 3/041662 is incomplete pending reclassification of documents from group G06F 3/0416.
Groups G06F 3/0416 and G06F 3/041662 should be considered in order to perform a complete search.
- M G06F 3/0418 {for error correction or compensation, e.g. based on parallax, calibration or alignment}
- WARNING
Group G06F 3/0418 is impacted by reclassification into groups G06F 3/04182, G06F 3/04184, and G06F 3/04186.
All groups listed in this Warning should be considered in order to perform a complete search.
- M G06F 3/04182 {Filtering of noise external to the device and not generated by digitiser components}
- WARNING
Group G06F 3/04182 is incomplete pending reclassification of documents from group G06F 3/0418.
Groups G06F 3/0418 and G06F 3/04182 should be considered in order to perform a complete search.
- M G06F 3/04184 {Synchronisation with the driving of the display or the backlighting unit to avoid interferences generated internally}
- WARNING
Group G06F 3/04184 is incomplete pending reclassification of documents from group G06F 3/0418.
Groups G06F 3/0418 and G06F 3/04184 should be considered in order to perform a complete search.
- M G06F 3/04186 {Touch location disambiguation}
- WARNING
Group G06F 3/04186 is incomplete pending reclassification of documents from group G06F 3/0418.
Groups G06F 3/0418 and G06F 3/04186 should be considered in order to perform a complete search.

M G06F 3/044 by capacitive means

WARNING

Group G06F 3/044 is impacted by reclassification into groups G06F 3/0441, G06F 3/0442, G06F 3/0443, G06F 3/0444, G06F 3/0445, G06F 3/0446, G06F 3/0447, and G06F 3/0448. All groups listed in this Warning should be considered in order to perform a complete search.

Project: MP0502 (G06F)

M G06F 5/00 **Methods or arrangements for data conversion without changing the order or content of the data handled (by coding or decoding H03M)**

M G06F 5/06 . for changing the speed of data flow, i.e. speed regularising {or timing, e.g. delay lines, FIFO buffers; over- or underrun control therefor (G06F 7/78 takes precedence)}; (G06F 7/78 takes precedence)}

M G06F 5/16 . . Multiplexed systems, i.e. using two or more similar devices that which are alternately accessed for enqueue and dequeue operations, e.g. ping-pong buffers

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)**

M G06F 7/02 . Comparing digital values (G06F 7/06, {G06F 7/22, } G06F 7/38 take precedence; information retrieval G06F 16/00; comparing pulses H03K 5/22)

M G06F 7/06 . Arrangements for sorting, selecting, merging, or comparing data on individual record carriers (sorting of postal letters B07C; conveying record carriers from one station to another G06K 13/02)

U G06F 7/38 . Methods or arrangements for performing computations using exclusively denominational number representation, e.g. using binary, ternary, decimal representation

M G06F 7/40 . . using contact-making devices, e.g. electro-magnetic *electromagnetic* relay (G06F 7/46 takes precedence)

U G06F 7/48 . . using non-contact-making devices, e.g. tube, solid state device; using unspecified devices

M G06F 7/483 . . . Computations with numbers represented by a non-linear combination of denominational numbers, e.g. rational numbers, logarithmic number system, or floating-point numbers {(conversion to or from floating-point codes H03M 7/24)} (G06F 7/4806, G06F 7/4824, G06F 7/49, G06F 7/491, G06F 7/544 take precedence)}

M G06F 7/499 . . Denomination or exception handling, e.g. rounding, overflow

NOTE

{ documents published before 12-2005 are not systematically classified in the subgroups of G06F 7/499 : See the relevant subgroup of G06F 7/48 and the ICOs G06F 7/499 + }

M G06F 7/50 . . . Adding; Subtracting (G06F 7/483 - G06F 7/491, G06F 7/544 - G06F 7/556 take precedence)

M G06F 7/501 Half or full adders, i.e. basic adder cells for one denomination (EXCLUSIVE-OR circuits H03K 19/21)

M G06F 7/505 in bit-parallel fashion, i.e. having a different digit-handling circuit for each denomination {(half or full adders G06F 7/501)}

M G06F 7/57 . . . Arithmetic logic units [ALU], i.e. arrangements or devices for performing two or more of the operations covered by groups G06F 7/483 -- G06F 7/556 or for performing logical operations {(instruction execution G06F 9/30 {G06F 7/49, G06F 7/491 take precedence; logic gate circuits H03K 19/00})}

- M G06F 7/76
- Arrangements for rearranging, permuting or selecting data according to predetermined rules, independently of the content of the data (~~according to the content of the data G06F 7/06, G06F 7/22; parallel / series conversion or vice versa H03M 9/00~~)

Project: RP0486-F (G06F)

- U G06F 19/00
(Frozen)
- 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)**
- WARNING
- Group G06F 19/00 is no longer used for the classification of documents as of 02-01-2019. The content of this group is being reclassified into group G16Z 99/00.
- Groups G06F 19/00 and G16Z 99/00 should be considered in order to perform a complete search.
- D G06F 19/30
—(Frozen)
- ~~{Medical informatics, i.e. computer-based analysis or dissemination of patient or disease data (measuring for diagnostic purposes A61B 5/00; recognising patterns in biomedical signals G06K 9/00496; data processing systems or methods specially adapted for administrative or managerial aspects of healthcare or welfare G06Q 50/22)}~~
- WARNING
- Group G06F 19/30 is no longer used for the classification of documents as of January 1, 2018. The content of this group is being reclassified into groups G16H 10/00 – G16H 80/00.
- Groups G06F 19/30 and G16H 10/00 – G16H 80/00 should be considered in order to perform a complete search.
- D G06F 19/32
—(Frozen)
- ~~{Medical data management, e.g. systems or protocols for archival or communication of medical images, computerised patient records or computerised general medical references (information retrieval or databases per se G06F 16/00; data security aspects G06F 21/00)}~~
- WARNING
- Group G06F 19/32 is no longer used for the classification of documents as of January 1, 2018. The content of this group is being reclassified into groups G16H 10/00 – G16H 80/00.
- Groups G06F 19/32 and G16H 10/00 – G16H 80/00 should be considered in order to perform a complete search.
- D G06F 19/321
—(Frozen)
- ~~{Management of medical image data, e.g. communication or archiving systems such as picture archiving and communication systems [PACS] or related medical protocols such as digital imaging and communications in medicine protocol [DICOM]; Editing of medical image data, e.g. adding diagnosis information (image data processing in general G06T, image data processing related to 3D objects G06F 17/00; biomedical image inspection G06T 7/0012)}~~
- WARNING
- Group G06F 19/321 is no longer used for the classification of documents as of January 1, 2018. The content of this group is being reclassified into groups G16H 30/00 – G16H 30/40.
- Groups G06F 19/321 and G16H 30/00 – G16H 30/40 should be considered in order to perform a complete search.

- D G06F 19/324
—(Frozen)
- • • {Management of patient independent data, e.g. medical references in digital format}
- WARNING
Group G06F 19/324 is no longer used for the classification of documents as of January 1, 2018. The content of this group is being reclassified into groups G16H 70/00 and G16H 70/60.
Groups G06F 19/324, G16H 70/00, and G16H 70/60 should be considered in order to perform a complete search.
- D G06F 19/325
—(Frozen)
- • • {Medical practices, e.g. general treatment protocols}
- WARNING
Group G06F 19/325 is no longer used for the classification of documents as of January 1, 2018. The content of this group is being reclassified into groups G16H 70/20 and G16H 70/60.
Groups G06F 19/325, G16H 70/20, and G16H 70/60 should be considered in order to perform a complete search.
- D G06F 19/326
—(Frozen)
- • • {Medication information, e.g. drug reference databases}
- WARNING
Group G06F 19/326 is no longer used for the classification of documents as of January 1, 2018. The content of this group is being reclassified into groups G16H 70/40 and G16H 70/60.
Groups G06F 19/326, G16H 70/40, and G16H 70/60 should be considered in order to perform a complete search.
- D G06F 19/328
—(Frozen)
- • • {Health insurance management, e.g. payments or protection against fraud}
- WARNING
Group G06F 19/328 is no longer used for the classification of documents as of January 1, 2018. The content of this group is being reclassified into groups G06Q 10/10 and G06Q 40/08.
Groups G06F 19/328, G06Q 10/10 and G06Q 40/08 should be considered in order to perform a complete search.
- D G06F 19/34
—(Frozen)
- • {Computer-assisted medical diagnosis or treatment, e.g. computerised prescription or delivery of medication or diets, computerised local control of medical devices, medical expert systems or telemedicine}
- WARNING
Group G06F 19/34 is no longer used for the classification of documents as of January 1, 2018. The content of this group is being reclassified into groups G16H 10/00 – G16H 80/00. Groups G06F 19/34 and G16H 10/00 – G16H 80/00 should .
Groups G06F 19/34 and G16H 10/00 – G16H 80/00 should be considered in order to perform a complete search.
- D G06F 19/3418
—(Frozen)
- • • {Telemedicine, e.g. remote diagnosis, remote control of instruments or remote monitoring of patient carried devices}
- WARNING
Group G06F 19/3418 is no longer used for the classification of documents as of January 1, 2018. The content of this group is being reclassified into groups G16H 40/40, G16H 40/60, G16H 40/67.
Groups G06F 19/3418, G16H 40/40, G16H 40/60, and G16H 40/67 should be considered in order to perform a complete search.

- D G06F 19/3456
—(Frozen)
- • • {Computer-assisted prescription or delivery of medication, e.g. prescription filling or compliance checking}
- WARNING
Group G06F 19/3456 is no longer used for the classification of documents as of January 1, 2018. The content of this group is being reclassified into groups G16H 20/10, G16H 20/60, G16H 20/70, and G16H 20/90. All groups listed in this Warning should be considered in order to perform a complete search.
- D G06F 19/3462
—(Frozen)
- • • • {Computer-assisted distribution of medication from dispensers, i.e. making sure that medication is correctly delivered to patients (medication containers A61J 1/00; dispensers activated by money or the like G07F)}
- WARNING
Group G06F 19/3462 is no longer used for the classification of documents as of January 1, 2018. The content of this group is being reclassified into groups G16H 20/13, G16H 20/60, G16H 20/70, and G16H 20/90. All groups listed in this Warning should be considered in order to perform a complete search.
- D G06F 19/3468
—(Frozen)
- • • • {Computer-assisted delivery of medication via infusion or injection (infusion devices per se A61M 5/14)}
- WARNING
Group G06F 19/3468 is no longer used for the classification of documents as of January 1, 2018. The content of this group is being reclassified into groups G16H 20/17, G16H 20/60, G16H 20/70, and G16H 20/90. All groups listed in this Warning should be considered in order to perform a complete search.
- D G06F 19/3475
—(Frozen)
- • • {Computer-assisted prescription or delivery of diets, e.g. prescription filling or compliance checking}
- WARNING
Group G06F 19/3475 is no longer used for the classification of documents as of January 1, 2018. The content of this group is being reclassified into groups G16H 20/60, G16H 20/70 and G16H 20/90. Groups G06F 19/3475, G16H 20/60, G16H 20/70 and G16H 20/90 should be considered in order to perform a complete search.
- D G06F 19/3481
—(Frozen)
- • • {Computer-assisted prescription or delivery of treatment by physical action, e.g. surgery or physical exercise (surgical instruments, devices or methods A61B 17/00; apparatuses for physical training A63B)}
- WARNING
Group G06F 19/3481 is no longer used for the classification of documents as of January 1, 2018. The content of this group is being reclassified into groups G16H 20/30, G16H 20/40, G16H 20/70 and G16H 20/90. Groups G06F 19/3481, G16H 20/30, G16H 20/40, G16H 20/70 and G16H 20/90 should be considered in order to perform a complete search.
- D G06F 19/36
—(Frozen)
- • {Computer-assisted acquisition of medical data, e.g. computerised clinical trials or questionnaires (measuring analogue medical signals A61B 5/00)}
- WARNING
Group G06F 19/36 is no longer used for the classification of documents as of January 1, 2018. The content of this group is being reclassified into groups G16H 10/00 — G16H 10/40. Groups G06F 19/36 and G16H 10/00 — G16H 10/40 should be considered in order to perform a complete search.

Project: RP0458-F (G06F)

- U G06F 2203/00** **Indexing scheme relating to [G06F 3/00](#) - [G06F 3/048](#)**
- M G06F 2203/041** • Indexing scheme relating to [G06F 3/041](#) - [G06F 3/045](#)
- WARNING
Group G06F 2203/041 is impacted by reclassification into group G06F 2203/04114.
Groups G06F 2203/041 and G06F 2203/04114 should be considered in order to perform a complete search.
- M G06F 2203/04114** • • Touch screens adapted for alternating or simultaneous interaction with active pens and passive pointing devices like fingers or passive pens
- WARNING
Group G06F 2203/04114 is incomplete pending reclassification of documents from group G06F 2203/041.
Groups G06F 2203/041 and G06F 2203/04114 should be considered in order to perform a complete search.

Project: RP0575-F (G06N)

- M G06N 20/00** **Machine learning**
- WARNING
Group G06N 20/00 is impacted by reclassification into groups G06N 20/10 and G06N 20/20.
All groups listed in this Warning should be considered in order to perform a complete search.
- M G06N 20/10** • using kernel methods, e.g. support vector machines [SVM]
- WARNING
Group G06N 20/10 is incomplete pending reclassification of documents from group G06N 20/00.
Groups G06N 20/00 and G06N 20/10 should be considered in order to perform a complete search.
- M G06N 20/20** • Ensemble learning
- WARNING
Group G06N 20/20 is incomplete pending reclassification of documents from group G06N 20/00.
Groups G06N 20/00 and G06N 20/20 should be considered in order to perform a complete search.

Project: RP0486-F (G06Q)

- U G06Q 10/00** **Administration; Management**
- M G06Q 10/10** • Office automation, e.g. computer aided management of electronic mail or groupware (electronic mail protocols [H04L 29/06](#) {; arrangements for user-to-user messaging in packet-switching networks, e.g. e-mail or instant messages, [H04L 41/00](#)}); Time management, e.g. calendars, reminders, meetings or time accounting {(organizing, planning, scheduling or allocating time [G06Q 10/06](#))}
- WARNING
Group G06Q 10/10 is incomplete pending reclassification of documents from group G06F 19/328.
Groups G06Q 10/10 and G06F 19/328 should be considered in order to perform a complete search.

- U G06Q 40/00** Finance; Insurance; Tax strategies; Processing of corporate or income taxes
- M G06Q 40/08
- Insurance, e.g. risk analysis or pensions {(processing of insurance policies or claims [G06Q 10/10](#))}
- WARNING**
Group G06Q 40/08 is incomplete pending reclassification of documents from group G06F 19/328.
Groups G06Q 40/08 and G06F 19/328 should be considered in order to perform a complete search.
- U G06Q 50/00** Systems or methods specially adapted for specific business sectors, e.g. utilities or tourism (healthcare informatics [G16H](#))
- U G06Q 50/10
- Services
- M G06Q 50/22
- · Social work
- WARNING**
Group G06Q 50/22 is impacted by reclassification into groups G06Q 50/22 and G16H 10/00 — G16H 80/00.
Groups G06Q 50/22 and G16H 10/00 — G16H 80/00 should be considered in order to perform a complete search.
- D G06Q 50/24
—(Frozen)
- · · Patient record management
- WARNING**
Group G06Q 50/24 is no longer used for the classification of documents as of January 1, 2018. The content of this group is being reclassified into groups G16H 10/00 — G16H 80/00.
Groups G06Q 50/24 and G16H 10/00 — G16H 80/00 should be considered in order to perform a complete search.

Project: RP0689 (G08B)

- U G08B 13/00** Burglar, theft or intruder alarms
- U G08B 13/02
- Mechanical actuation
- U G08B 13/12
- · by the breaking or disturbance of stretched cords or wires
- G08B 13/122
- · · {for a perimeter fence (features peculiar to electrified fences [A01K 3/00](#)[A01K 3/005](#); fences *per se* [E04H 17/00](#))}

Project: RP0558-F (G10C)

- M G10C 3/00** Details or accessories
- WARNING**
Group G10C 3/00 is impacted by reclassification into group G10C 3/07.
Groups G10C 3/00 and G10C 3/07 should be considered in order to perform a complete search.
- M G10C 3/07
- Strings (resonant strings [G10C 3/06](#))
- WARNING**
Group G10C 3/07 is incomplete pending reclassification of documents from group G10C 3/00.
Groups G10C 3/00 and G10C 3/07 should be considered in order to perform a complete search.
- U G10C 3/12
- Keyboards; Keys

- M G10C 3/14
- for playing by the feet
- WARNING**
Group G10C 3/14 is incomplete pending reclassification of documents from group G10C 3/26. Groups G10C 3/26 and G10C 3/14 should be considered in order to perform a complete search.
- U G10C 3/16
- Actions
- M G10C 3/161
- specially adapted for upright pianos
- WARNING**
Group G10C 3/161 is impacted by reclassification into groups G10C 3/166 and G10C 3/24. Groups G10C 3/161, G10C 3/166, and G10C 3/24 should be considered in order to perform a complete search.
- M G10C 3/166
- for damping the strings ([G10C 3/26](#) takes precedence)
- WARNING**
Group G10C 3/166 is incomplete pending reclassification of documents from groups G10C 3/161, G10C 3/168, G10C 3/20, and G10C 3/22. All groups listed in this Warning should be considered in order to perform a complete search.
- M G10C 3/168
- with hanging jacks, i.e. jacks connected to hammer-butts or hammer-shanks
- WARNING**
Group G10C 3/168 is impacted by reclassification into groups G10C 3/166 and G10C 3/24. Groups G10C 3/168, G10C 3/166, and G10C 3/24 should be considered in order to perform a complete search.
- M G10C 3/20
- involving the use of hydraulic, pneumatic or electromagnetic means
- WARNING**
Group G10C 3/20 is impacted by reclassification into groups G10C 3/166 and G10C 3/24. Groups G10C 3/20, G10C 3/166, and G10C 3/24 should be considered in order to perform a complete search.
- M G10C 3/22
- specially adapted for grand pianos
- WARNING**
Group G10C 3/22 is impacted by reclassification into groups G10C 3/166 and G10C 3/24. Groups G10C 3/22, G10C 3/166, and G10C 3/24 should be considered in order to perform a complete search.
- M G10C 3/24
- Repetition [tremolo] mechanisms
- WARNING**
Group G10C 3/24 is incomplete pending reclassification of documents from groups G10C 3/161, G10C 3/168, G10C 3/20, and G10C 3/22. All groups listed in this Warning should be considered in order to perform a complete search.
- M G10C 3/26
- Pedals or pedal mechanisms ([G10C 3/14](#) takes precedence); Manually operated sound modification means
- WARNING**
Group G10C 3/26 is impacted by reclassification into group G10C 3/14.

~~Groups G10C 3/26 and G10C 3/14 should be considered in order to perform a complete search.~~

Project: RP0159-F (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.
- U G10K 11/175
 - • using interference effects; Masking sound

NOTES
1. Sound/noise masking, classified in [G10K 11/1752](#) - [G10K 11/1754](#),
2. Acoustic noise cancellation, classified in [G10K 11/178](#)

WARNING
Group [G10K 11/175](#) is impacted by reclassification into groups [G10K 11/1752](#) and [G10K 11/1754](#).
Groups [G10K 11/175](#), [G10K 11/1752](#), and [G10K 11/1754](#) should be considered in order to perform a complete search.
- M G10K 11/178
 - • • by electro-acoustically regenerating the original acoustic waves in anti-phase

NOTE
{When classifying in any of the groups [G10K 11/1781](#) - [G10K 11/17861](#), classification is also made in at least one subgroup of [G10K 11/1787](#).}

WARNING
~~Group G10K 11/178 is impacted by reclassification into groups G10K 11/1781 - G10K 11/17885.~~
~~All groups listed in this Warning should be considered in order to perform a complete search.~~
- M G10K 11/1781
 - • • {characterised by the analysis of input or output signals, e.g. frequency range, modes, transfer functions}

WARNING
~~Groups G10K 11/1781, G10K 11/17813, G10K 11/17815, G10K 11/17817, G10K 11/17819, G10K 11/17821, G10K 11/17823, G10K 11/17825, G10K 11/17827 are incomplete pending reclassification of documents from group G10K 11/178.~~
~~All groups listed in this Warning should be considered in order to perform a complete search.~~
- M G10K 11/1783
 - • • {handling or detecting of non-standard events or conditions, e.g. changing operating modes under specific operating conditions}

WARNING
~~Groups G10K 11/1783, G10K 11/17833, G10K 11/17835 and G10K 11/17837 are incomplete pending reclassification of documents from group G10K 11/178.~~

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

- M G10K 11/1785 . . . {Methods, e.g. algorithms; Devices ([G10K 11/1781](#), [G10K 11/1783](#) take precedence)}

WARNING

Groups G10K 11/1785, G10K 11/17853, G10K 11/17854, G10K 11/17855, G10K 11/17857 and G10K 11/17861 are incomplete pending reclassification of documents from group G10K 11/178. All groups listed in this Warning should be considered in order to perform a complete search.

- M G10K 11/1787 . . . {General system configurations}

WARNING

Groups G10K 11/1787, G10K 11/17873, G10K 11/17875, G10K 11/17879, G10K 11/17881, G10K 11/17883 and G10K 11/17885 are incomplete pending reclassification of documents from group G10K 11/178. All groups listed in this Warning should be considered in order to perform a complete search.

Project: RP0525-F (G10L)

- U G10L 21/00 **Processing of the speech or voice signal to produce another audible or non-audible signal, e.g. visual or tactile, in order to modify its quality or its intelligibility ([G10L 19/00](#) takes precedence)**

- M G10L 21/02 . Speech enhancement, e.g. noise reduction or echo cancellation (reducing echo effects in line transmission systems [H04B 3/20](#); echo suppression in hands-free telephones [H04M 9/08](#))

WARNING

Group G10L 21/02 is incomplete pending reclassification of documents from group G10L 21/0202. Groups G10L 21/0202 and G10L 21/02 should be considered in order to perform a complete search.

- D G10L 21/0202 . {Applications}
—(Frozen)

WARNING

Group G10L 21/0202 is no longer used for the classification of documents as of August 1, 2020. The content of this group is being reclassified into groups G10L 21/02, G10L 21/0316, G10L 21/0364, G10L 2021/03643, and G10L 2021/03646. All groups listed in this Warning should be considered in order to perform a complete search.

- M G10L 21/0316 . . by changing the amplitude

WARNING

Group G10L 21/0316 is incomplete pending reclassification of documents from group G10L 21/0202. Groups G10L 21/0202 and G10L 21/0316 should be considered in order to perform a complete search.

- M G10L 21/0364 . . . for improving intelligibility

WARNING

Group G10L 21/0364 is incomplete pending reclassification of documents from group G10L 21/0202.

Groups G10L 21/0202 and G10L 21/0364 should be considered in order to perform a complete search.

M G10L 2021/03643 . . . {Diver speech}

WARNING

Group G10L 2021/03643 is incomplete pending reclassification of documents from group G10L 21/0202.
Groups G10L 21/0202 and G10L 2021/03643 should be considered in order to perform a complete search.

M G10L 2021/03646 . . . {Stress or Lombard effect}

WARNING

Group G10L 2021/03646 is incomplete pending reclassification of documents from group G10L 21/0202.
Groups G10L 21/0202 and G10L 2021/03646 should be considered in order to perform a complete search.

Project: RP0486-F (G16H)

M G16H 10/00 **ICT specially adapted for the handling or processing of patient-related medical or healthcare data (for medical reports [G16H 15/00](#); for therapies or health-improving plans [G16H 20/00](#); for the handling or processing of medical images [G16H 30/00](#))**

WARNING

Group G16H 10/00 is incomplete pending reclassification of documents from groups G06F 19/30, G06F 19/32, G06F 19/34, G06F 19/36, G06Q 50/22, and G06Q 50/24.
All groups listed in this Warning should be considered in order to perform a complete search.

M G16H 10/20 . for electronic clinical trials or questionnaires

WARNING

Group G16H 10/20 is incomplete pending reclassification of documents from groups G06F 19/30, G06F 19/32, G06F 19/34, G06F 19/36, G06Q 50/22, and G06Q 50/24.
All groups listed in this Warning should be considered in order to perform a complete search.

M G16H 10/40 . for data related to laboratory analysis, e.g. patient specimen analysis

WARNING

Group G16H 10/40 is incomplete pending reclassification of documents from groups G06F 19/30, G06F 19/32, G06F 19/34, G06F 19/36, G06Q 50/22, and G06Q 50/24.
All groups listed in this Warning should be considered in order to perform a complete search.

M G16H 10/60 . for patient-specific data, e.g. for electronic patient records

WARNING

Group G16H 10/60 is incomplete pending reclassification of documents from groups G06F 19/30, G06F 19/32, G06F 19/34, G06Q 50/22, and G06Q 50/24.
All groups listed in this Warning should be considered in order to perform a complete search.

- M G16H 10/65
- stored on portable record carriers, e.g. on smartcards, RFID tags or CD
- WARNING**
Group G16H 10/65 is incomplete pending reclassification of documents from groups G06F 19/30, G06F 19/32, G06F 19/34, G06Q 50/22, and G06Q 50/24.
All groups listed in this Warning should be considered in order to perform a complete search.
- M G16H 15/00
- ICT specially adapted for medical reports, e.g. generation or transmission thereof**
- WARNING**
Group G16H 15/00 is incomplete pending reclassification of documents from groups G06F 19/00, G06F 19/30, G06F 19/32, G06Q 50/22, G06Q 50/24.
Groups G06F 19/00, G06F 19/30, G06F 19/32, G06Q 50/22, G06Q 50/24 and G16H 15/00 should and G16H 15/00 should be considered in order to perform a complete search.
- M G16H 20/00
- ICT specially adapted for therapies or health-improving plans, e.g. for handling prescriptions, for steering therapy or for monitoring patient compliance**
- WARNING**
Group G16H 20/00 is incomplete pending reclassification of documents from groups G06F 19/30, G06F 19/32, G06F 19/34, G06Q 50/22, and G06Q 50/24.
All groups listed in this Warning should be considered in order to perform a complete search.
- M G16H 20/10
- relating to drugs or medications, e.g. for ensuring correct administration to patients
- WARNING**
Group G16H 20/10 is incomplete pending reclassification of documents from groups G06F 19/30, G06F 19/32, G06F 19/34, G06F 19/3456, G06Q 50/22, and G06Q 50/24.
All groups listed in this Warning should be considered in order to perform a complete search.
- M G16H 20/13
- delivered from dispensers
- WARNING**
Group G16H 20/13 is incomplete pending reclassification of documents from groups G06F 19/30, G06F 19/32, G06F 19/34, G06F 19/3462, G06Q 50/22, and G06Q 50/24.
All groups listed in this Warning should be considered in order to perform a complete search.
- M G16H 20/17
- delivered via infusion or injection
- WARNING**
Group G16H 20/17 is incomplete pending reclassification of documents from groups G06F 19/30, G06F 19/32, G06F 19/34, G06F 19/3468, G06Q 50/22, and G06Q 50/24.
All groups listed in this Warning should should be considered in order to perform a complete search.

- M G16H 20/30
- relating to physical therapies or activities, e.g. physiotherapy, acupressure or exercising
- WARNING**
 Group G16H 20/30 is incomplete pending reclassification of documents from groups G06F 19/30, G06F 19/32, G06F 19/34, G06F 19/3481, G06Q 50/22, and G06Q 50/24.
 All groups listed in this Warning should be considered in order to perform a complete search.
- M G16H 20/40
- relating to mechanical, radiation or invasive therapies, e.g. surgery, laser therapy, dialysis or acupuncture
- WARNING**
 Group G16H 20/40 is incomplete pending reclassification of documents from groups G06F 19/30, G06F 19/32, G06F 19/34, G06F 19/3481, G06Q 50/22, and G06Q 50/24.
 All groups listed in this Warning should be considered in order to perform a complete search.
- M G16H 20/60
- relating to nutrition control, e.g. diets
- WARNING**
 Group G16H 20/60 is incomplete pending reclassification of documents from groups G06F 19/30, G06F 19/32, G06F 19/34, G06F 19/3456, G06F 19/3462, G06F 19/3468, G06F 19/3475, G06Q 50/22, and G06Q 50/24.
 All groups listed in this Warning should be considered in order to perform a complete search.
- M G16H 20/70
- relating to mental therapies, e.g. psychological therapy or autogenous training
- WARNING**
 Group G16H 20/70 is incomplete pending reclassification of documents from groups G06F 19/30, G06F 19/32, G06F 19/34, G06F 19/3456, G06F 19/3462, G06F 19/3468, G06F 19/3475, G06F 19/3481, G06Q 50/22, and G06Q 50/24.
 All groups listed in this Warning should be considered in order to perform a complete search.
- M G16H 20/90
- relating to alternative medicines, e.g. homeopathy or oriental medicines
- WARNING**
 Group G16H 20/90 is incomplete pending reclassification of documents from groups G06F 19/30, G06F 19/32, G06F 19/34, G06F 19/3456, G06F 19/3462, G06F 19/3468, G06F 19/3475, G06F 19/3481, G06Q 50/22, and G06Q 50/24.
 All groups listed in this Warning should be considered in order to perform a complete search.
- M G16H 30/00
- ICT specially adapted for the handling or processing of medical images (computerised tomography [A61B 6/03](#))**
- WARNING**
 Groups G16H 30/00 – G16H 30/40 are incomplete pending reclassification of documents from groups G06F 19/30, G06F 19/32, G06F 19/321, G06Q 50/22, G06Q 50/24.
 Groups G06F 19/30, G06F 19/32, G06F 19/321, G06Q 50/22, G06Q 50/24 and G16H 30/00 – G16H 30/40 should be considered in order to perform a complete search.

- M G16H 40/00** **ICT specially adapted for the management or administration of healthcare resources or facilities; ICT specially adapted for the management or operation of medical equipment or devices**
- WARNING**
Group G16H 40/00 is incomplete pending reclassification of documents from groups G06F 19/30, G06F 19/32, G06F 19/34, G06Q 50/22, and G06Q 50/24. All groups listed in this Warning should be considered in order to perform a complete search.
- M G16H 40/20**
- for the management or administration of healthcare resources or facilities, e.g. managing hospital staff or surgery rooms
- WARNING**
Group G16H 40/20 is incomplete pending reclassification of documents from groups G06F 19/30, G06F 19/32, G06F 19/34, G06Q 50/22, and G06Q 50/24. All groups listed in this Warning should be considered in order to perform a complete search.
- M G16H 40/40**
- for the management of medical equipment or devices, e.g. scheduling maintenance or upgrades
- WARNING**
Group G16H 40/40 is incomplete pending reclassification of documents from groups G06F 19/30, G06F 19/32, G06F 19/34, G06F 19/3418, G06Q 50/22, and G06Q 50/24. All groups listed in this Warning should be considered in order to perform a complete search.
- M G16H 40/60**
- for the operation of medical equipment or devices
- NOTES**
1. This group covers ICT specially adapted for the operation of medical equipment or devices, or of their interfaces, i.e. aspects of the operation where the focus is on the processing of medical or healthcare data which results in contextual, content-related or structural transformation of said data.
 2. This group does not cover the operation of medical equipment or devices, or of their interfaces, without contextual, content-related or structural transformation of medical or healthcare data, which is covered by the relevant groups of class [A61](#).
- WARNING**
Group G16H 40/60 is incomplete pending reclassification of documents from groups G06F 19/30, G06F 19/32, G06F 19/34, G06F 19/3418, G06Q 50/22, and G06Q 50/24. All groups listed in this Warning should be considered in order to perform a complete search.
- M G16H 40/63**
- for local operation
- WARNING**
Group G16H 40/63 is incomplete pending reclassification of documents from groups G06F 19/30, G06F 19/32, G06F 19/34, G06Q 50/22, and G06Q 50/24. All groups listed in this Warning should be considered in order to perform a complete search.

- M G16H 40/67
- for remote operation
- WARNING**
Group G16H 40/67 is incomplete pending reclassification of documents from groups G06F 19/30, G06F 19/32, G06F 19/34, G06F 19/3418, G06Q 50/22, and G06Q 50/24.
All groups listed in this Warning should be considered in order to perform a complete search.
- M G16H 50/00
- ICT specially adapted for medical diagnosis, medical simulation or medical data mining; ICT specially adapted for detecting, monitoring or modelling epidemics or pandemics**
- WARNING**
Groups G16H 50/00 – G16H 50/80 are incomplete pending reclassification of documents from groups G06F 19/30, G06F 19/32, G06F 19/34, G06Q 50/22, G06Q 50/24.
Groups G06F 19/30, G06F 19/32, G06F 19/34, G06Q 50/22, G06Q 50/24 and G16H 50/00 – G16H 50/80 should be considered in order to perform a complete search.
- M G16H 70/00
- ICT specially adapted for the handling or processing of medical references**
- WARNING**
Group G16H 70/00 is incomplete pending reclassification of documents from groups G06F 19/30, G06F 19/32, G06F 19/324, G06F 19/34, G06Q 50/22, and G06Q 50/24.
All groups listed in this Warning should be considered in order to perform a complete search.
- M G16H 70/20
- relating to practices or guidelines
- WARNING**
Group G16H 70/20 is incomplete pending reclassification of documents from groups G06F 19/30, G06F 19/32, G06F 19/325, G06F 19/34, G06Q 50/22, and G06Q 50/24.
All groups listed in this Warning should be considered in order to perform a complete search.
- M G16H 70/40
- relating to drugs, e.g. their side effects or intended usage
- WARNING**
Group G16H 70/40 is incomplete pending reclassification of documents from groups G06F 19/30, G06F 19/32, G06F 19/326, G06F 19/34, G06Q 50/22, and G06Q 50/24.
All groups listed in this Warning should be considered in order to perform a complete search.
- M G16H 70/60
- relating to pathologies
- WARNING**
Group G16H 70/60 is incomplete pending reclassification of documents from groups G06F 19/30, G06F 19/32, G06F 19/324, G06F 19/325, G06F 19/326, G06F 19/34, G06Q 50/22, and G06Q 50/24.
All groups listed in this Warning should be considered in order to perform a complete search.

M G16H 80/00 ICT specially adapted for facilitating communication between medical practitioners or patients, e.g. for collaborative diagnosis, therapy or health monitoring

WARNING

Group G16H 80/00 is incomplete pending reclassification of documents from groups G06F 19/30, G06F 19/32, G06F 19/34, G06Q 50/22, G06Q 50/24. Groups G06F 19/30, G06F 19/32, G06F 19/34, G06Q 50/22, G06Q 50/24 and G16H 80/00 should and G16H 80/00 should be considered in order to perform a complete search.

Project: RP0292-F (H01J)

U H01J 35/00 X-ray tubes

U H01J 35/02

• Details

U H01J 35/04

• • Electrodes {; Mutual position thereof; Constructional adaptations thereof}

M H01J 35/06

• • • Cathodes

WARNING

Group H01J 35/06 is impacted by reclassification into groups H01J 35/064 and H01J 35/066.
Groups H01J 35/06 and H01J 35/064 and H01J 35/066 should be considered in order to perform a complete search.

M H01J 35/064

• • • {Details of the emitter, e.g. material or structure ([H01J 35/065](#) takes precedence)}

WARNING

Group H01J 35/064 is incomplete pending reclassification of documents from group H01J 35/06.
Groups H01J 35/06 and H01J 35/064 should be considered in order to perform a complete search.

M H01J 35/066

• • • {Details of electron optical components, e.g. cathode cups}

WARNING

Group H01J 35/066 is incomplete pending reclassification of documents from group H01J 35/06.
Groups H01J 35/06 and H01J 35/066 should be considered in order to perform a complete search.

M H01J 35/08

• • • Anodes; Anti cathodes

WARNING

Group H01J 35/08 is impacted by reclassification into groups H01J 35/112 and H01J 35/116.
Groups H01J 35/08 and H01J 35/112 and H01J 35/116 should be considered in order to perform a complete search.

U H01J 35/10

• • • Rotary anodes; Arrangements for rotating anodes; Cooling rotary anodes

M H01J 35/101

• • • • {Arrangements for rotating anodes, e.g. supporting means, means for greasing, means for sealing the axle or means for shielding or protecting the driving}

WARNING

Group H01J 35/101 is impacted by reclassification into groups H01J 35/1017, H01J 35/1024 and H01J 35/104.
All groups listed in this Warning should be considered in order to perform a complete search.

- M H01J 35/1017 {Bearings for rotating anodes}
- WARNING
Groups H01J 35/1017, H01J 35/1024 and H01J 35/104 are incomplete pending reclassification of documents from group H01J 35/101.
Groups H01J 35/101, H01J 35/1017, H01J 35/1024 and H01J 35/104 should be considered in order to perform a complete search
- M H01J 35/105 {Cooling of rotating anodes, e.g. heat emitting layers or structures}
- WARNING
Group H01J 35/105 is impacted by reclassification into group H01J 35/107.
Groups H01J 35/105 and H01J 35/107 should be considered in order to perform a complete search.
- M H01J 35/106 {Active cooling, e.g. fluid flow, heat pipes}
- WARNING
Group H01J 35/106 is impacted by reclassification into group H01J 35/107.
Groups H01J 35/106 and H01J 35/107 should be considered in order to perform a complete search.
- M H01J 35/107 {Cooling of the bearing assemblies}
- WARNING
Group H01J 35/107 is incomplete pending reclassification of documents from groups H01J 35/105 and H01J 35/106.
Groups H01J 35/105, H01J 35/106 and H01J 35/107 should be considered in order to perform a complete search.
- M H01J 35/112 {Non-rotating anodes ([H01J 35/12](#) takes precedence)}
- WARNING
Group H01J 35/112 is incomplete pending reclassification of documents from group H01J 35/08.
Groups H01J 35/08 and H01J 35/112 should be considered in order to perform a complete search.
- M H01J 35/116 {Transmissive anodes (acting as a window [H01J 35/186](#))}
- WARNING
Group H01J 35/116 is incomplete pending reclassification of documents from group H01J 35/08.
Groups H01J 35/08 and H01J 35/116 should be considered in order to perform a complete search.
- M H01J 35/12 Cooling non-rotary anodes
- WARNING
Group H01J 35/12 is impacted by reclassification into group H01J 35/13.
Groups H01J 35/12 and H01J 35/13 should be considered in order to perform a complete search.
- M H01J 35/13 {Active cooling, e.g. fluid flow, heat pipes}
- WARNING
Group H01J 35/13 is incomplete pending reclassification of documents from group H01J 35/12.

~~Groups H01J 35/12 and H01J 35/13 should be considered in order to perform a complete search.~~

- M H01J 35/14
- Arrangements for concentrating, focusing, or directing the cathode ray

WARNING

~~Group H01J 35/14 is impacted by reclassification into groups H01J 35/147 and H01J 35/153.~~

~~Groups H01J 35/14 and H01J 35/147 and H01J 35/153 should be considered in order to perform a complete search.~~

- M H01J 35/147
- • {Spot size control}

WARNING

~~Group H01J 35/147 is incomplete pending reclassification of documents from group H01J 35/14.~~

~~Groups H01J 35/14 and H01J 35/147 should be considered in order to perform a complete search.~~

- M H01J 35/153
- • {Spot position control}

WARNING

~~Group H01J 35/153 is incomplete pending reclassification of documents from group H01J 35/14.~~

~~Groups H01J 35/14 and H01J 35/153 should be considered in order to perform a complete search.~~

- U H01J 35/16
- Vessels; Containers; Shields associated therewith

- M H01J 35/18
- • Windows

WARNING

~~Group H01J 35/18 is impacted by reclassification into group H01J 35/186.~~

~~Groups H01J 35/18 and H01J 35/186 should be considered in order to perform a complete search.~~

- M H01J 35/186
- • • {used as targets or X-ray converters}

WARNING

~~Group H01J 35/186 is incomplete pending reclassification of documents from group H01J 35/18.~~

~~Groups H01J 35/18 and H01J 35/186 should be considered in order to perform a complete search.~~

Project: RP0659 (H01L)

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

NOTES

1. This subclass covers:

- electric solid state devices which are not covered by any other subclass and details thereof, and includes: semiconductor devices adapted for rectifying, amplifying, oscillating or switching; semiconductor devices sensitive to radiation; electric solid state devices using thermoelectric, superconductive, piezo-electric, electrostrictive, magnetostrictive, galvanomagnetic or bulk negative resistance effects and integrated circuit devices;
- photoresistors, magnetic field dependent resistors, field effect resistors, capacitors with potential-jump barrier, resistors with potential-jump barrier or surface barrier, incoherent light emitting diodes and thin-film or thick-film circuits;
- processes and apparatus adapted for the manufacture or treatment of such devices, except where such processes relate to single-step processes for which provision exists elsewhere.

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

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

- "assembly" of a device is the building up of the device from its component constructional units and includes the provision of fillings in containers.

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

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

WARNINGS

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

H01L 21/301	covered by	H01L 21/30
H01L 21/328	covered by	H01L 29/66075
H01L 21/329	covered by	H01L 29/66083
H01L 21/33	covered by	H01L 29/66227
H01L 21/331	covered by	H01L 29/66234
H01L 21/332	covered by	H01L 29/66363
H01L 21/334	covered by	H01L 29/66075
H01L 21/335	covered by	H01L 29/66409
H01L 21/336	covered by	H01L 29/66477
H01L 21/337	covered by	H01L 29/66893
H01L 21/338	covered by	H01L 29/66848
H01L 21/339	covered by	H01L 29/66946
H01L 21/36-H01L 21/368	covered by	H01L 21/02107
H01L 21/58	covered by	H01L 24/80
H01L 21/60	covered by	H01L 21/50, H01L 2021/60
H01L 21/66	covered by	H01L 22/00
H01L 21/603	covered by	H01L 21/50, H01L 2021/603
H01L 21/607	covered by	H01L 21/50, H01L 2021/607
H01L 21/8242	covered by	H01L 27/108
H01L 21/8244	covered by	H01L 27/11
H01L 21/8246	covered by	H01L 27/112
H01L 21/98	covered by	H01L 25/50
H01L 29/38	covered by	H01L 29/04-H01L 29/365
H01L 29/96	covered by	H01L 29/68-H01L 29/945
H01L 51/30	covered by	H01L 51/0032
H01L 51/40	covered by	H01L 51/0001
H01L 51/46	covered by	H01L 51/0032
H01L 51/48	covered by	H01L 51/0001
H01L 51/54	covered by	H01L 51/0032

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

U	H01L 21/00	Processes or apparatus adapted for the manufacture or treatment of semiconductor or solid state devices or of parts thereof
U	H01L 21/02	· Manufacture or treatment of semiconductor devices or of parts thereof

- U H01L 21/04
- • the devices having at least one potential-jump barrier or surface barrier, e.g. PN junction, depletion layer or carrier concentration layer {(multistep manufacturing processes for semiconductor bodies of said devices [H01L 29/02](#); multistep manufacturing processes for electrodes of said devices [H01L 29/401](#); multistep manufacturing processes for said devices [H01L 29/66007](#))}
- U H01L 21/50
- • • Assembly of semiconductor devices using processes or apparatus not provided for in a single one of the subgroups [H01L 21/06](#) - [H01L 21/326](#), {e.g. sealing of a cap to a base of a container}
- NOTE
- Arrangements for connecting or disconnecting semiconductor or other solid state bodies, or methods related thereto, other than those arrangements or methods covered by the following subgroups, are covered by [H01L 24/00](#)
- U H01L 21/56
- • • • Encapsulations, e.g. encapsulation layers, coatings
- U H01L 21/568
- • • • • {Temporary substrate used as encapsulation process aid ([H01L 21/4832](#) and [H01L 21/566](#) take precedence)}
- D H01L 2021/60
- • • • • {Attaching or detaching leads or other conductive members, to be used for carrying current to or from the device in operation}
- <administratively transferred to [H01L 21/60](#) INV>
- N H01L 21/60
- • • • • *Attaching {or detaching} leads or other conductive members, to be used for carrying current to or from the device in operation*
- U H01L 2021/60007
- • • • • • {involving a soldering or an alloying process}
- U H01L 2021/60015
- • • • • • • {using plate connectors, e.g. layer, film}
- U H01L 2021/60022
- • • • • • • {using bump connectors, e.g. for flip chip mounting}
- U H01L 2021/6003
- • • • • • • {Apparatus therefor}
- U H01L 2021/60037
- • • • • • • {Right-up bonding}
- U H01L 2021/60045
- • • • • • • {Pre-treatment step of the bump connectors prior to bonding}
- U H01L 2021/60052
- • • • • • • {Oxide removing step, e.g. flux, rosin}
- U H01L 2021/6006
- • • • • • • {with temporary supporting member not part of an apparatus, e.g. removable coating, film or substrate}
- U H01L 2021/60067
- • • • • • • {Aligning the bump connectors with the mounting substrate}
- U H01L 2021/60075
- • • • • • • {involving active alignment, i.e. by apparatus steering, e.g. using alignment marks, sensors}
- U H01L 2021/60082
- • • • • • • {involving passive alignment, e.g. using surface energy, chemical reactions, thermal equilibrium}
- U H01L 2021/6009
- • • • • • • {involving guiding structures, e.g. structures that are left at least partly in the bonded product, spacers}
- U H01L 2021/60097
- • • • • • • {Applying energy, e.g. for the soldering or alloying process}
- U H01L 2021/60105
- • • • • • • {using electromagnetic radiation}
- U H01L 2021/60112
- • • • • • • • {Coherent radiation, i.e. laser beam}
- U H01L 2021/6012
- • • • • • • • {Incoherent radiation, e.g. polychromatic heating lamp}
- U H01L 2021/60127
- • • • • • • • {Induction heating, i.e. eddy currents}
- U H01L 2021/60135
- • • • • • • • {using convection, e.g. reflow oven}
- U H01L 2021/60142
- • • • • • • • • {with a graded temperature profile}
- U H01L 2021/6015
- • • • • • • • • {using conduction, e.g. chuck heater, thermocompression}
- U H01L 2021/60157
- • • • • • • • • {with a graded temperature profile}
- U H01L 2021/60165
- • • • • • • • • {using an electron beam}
- U H01L 2021/60172
- • • • • • • • • {using static pressure}

- U H01L 2021/6018 {Unidirectional static pressure}
- U H01L 2021/60187 {Isostatic pressure, e.g. degassing using vacuum or pressurised liquid}
- U H01L 2021/60195 {using dynamic pressure, e.g. ultrasonic or thermosonic bonding}
- U H01L 2021/60202 {using a protective atmosphere, e.g. with forming or shielding gas}
- U H01L 2021/6021 {using an autocatalytic reaction}
- U H01L 2021/60217 {Detaching bump connectors, e.g. after testing}
- U H01L 2021/60225 {Arrangement of bump connectors prior to mounting}
- U H01L 2021/60232 {wherein the bump connectors are disposed only on the semiconductor chip}
- U H01L 2021/6024 {wherein the bump connectors are disposed only on the mounting substrate}
- U H01L 2021/60247 {wherein the bump connectors are disposed on both the semiconductor chip and the mounting substrate, e.g. bump to bump}
- U H01L 2021/60255 {wherein the bump connectors are provided as prepeg, e.g. are provided in an insulating plate member}
- U H01L 2021/60262 {Lateral distribution of bump connectors prior to mounting}
- U H01L 2021/6027 {Mounting on semiconductor conductive members}
- U H01L 2021/60277 {involving the use of conductive adhesives}
- U H01L 2021/60285 {involving the use of mechanical auxiliary parts without the use of an alloying of soldering process, e.g. pressure contacts}
- U H01L 2021/60292 {involving the use of an electron or laser beam}
- D H01L 2021/603 {involving the application of pressure, e.g. thermo-compression bonding}
<administratively transferred to [H01L 21/603](#) INV>
- N H01L 21/603 *involving the application of pressure, e.g. thermo-compression bonding ([H01L 21/607](#) takes precedence)*
- D H01L 2021/607 {involving the application of mechanical vibrations, e.g. ultrasonic vibrations}
<administratively transferred to [H01L 21/607](#) INV>
- N H01L 21/607 *involving the application of mechanical vibrations, e.g. ultrasonic vibrations*

Project: RP0156-F (H01L)

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

NOTES

1. In this group, with the exception of groups [H01L 27/115](#) - [H01L 27/11597](#), the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, classification is made in the last appropriate place.
2. When classifying in this group, subject matter relating to electrically programmable read-only memories is classified in group [H01L 27/115](#), irrespective of the last place priority rule.

- U H01L 27/14
 - including semiconductor components sensitive to infra-red radiation, light, electromagnetic radiation of shorter wavelength or corpuscular radiation and specially adapted either for the conversion of the energy of such radiation into electrical energy or for the control of electrical energy by such radiation (radiation-sensitive components structurally associated with one or more electric light sources only [H01L 31/14](#); couplings of light guides with optoelectronic elements [G02B 6/42](#))
- U H01L 27/144
 - · Devices controlled by radiation
- M H01L 27/146
 - · · Imager structures

WARNING

Groups H01L 27/146 – H01L 27/14893 are incomplete pending reclassification of documents from groups H04N 5/3696 and H04N 9/045. Groups H04N 5/3696, H04N 9/045, and H01L 27/146 – H01L 27/14893 should be considered in order to perform a complete search.

- U H01L 27/28
 - including components using organic materials as the active part, or using a combination of organic materials with other materials as the active part
- U H01L 27/30
 - · with components specially adapted for sensing infra-red radiation, light, electromagnetic radiation of shorter wavelength, or corpuscular radiation; with components specially adapted for either the conversion of the energy of such radiation into electrical energy or for the control of electrical energy by such radiation {(combination of organic light sensitive components with organic light emitting components, e.g. optocoupler [H01L 27/288](#))}
- U H01L 27/305
 - · · {Devices controlled by radiation}
- M H01L 27/307
 - · · · {Imager structures}

WARNING

Group H01L 27/307 is incomplete pending reclassification of documents from groups H04N 5/3696 and H04N 9/045. Groups H04N 5/3696, H04N 9/045, and H01L 27/307 should be considered in order to perform a complete search.

Project: RP0151-F (H01L)

- U H01L 29/00

Semiconductor devices adapted for rectifying, amplifying, oscillating or switching, or capacitors or resistors with at least one potential-jump barrier or surface barrier, e.g. PN junction depletion layer or carrier concentration layer; Details of semiconductor bodies or of electrodes thereof; {Multistep manufacturing processes therefor}{[H01L 31/00](#) - [H01L 47/00](#), [H01L 51/05](#) take precedence; processes or apparatus adapted for the manufacture or treatment thereof or of parts thereof [H01L 21/00](#); details other than of semiconductor bodies or of electrodes thereof [H01L 23/00](#); devices consisting of a plurality of solid state components formed in or on a common substrate [H01L 27/00](#); {passive two-terminal components without a potential-jump or surface barrier for integrated circuits, details thereof and multistep manufacturing processes therefor [H01L 28/00](#); } resistors in general [H01C](#); capacitors in general [H01G](#), {e.g. ceramic barrier-layer capacitors [H01G 4/1272](#)}

NOTE
In this main group, classification is made both in groups [H01L 29/02](#) - [H01L 29/51](#) and in groups [H01L 29/66](#) - [H01L 29/94](#) if both of these sets of groups are relevant.

 - U H01L 29/40
 - Electrodes {; Multistep manufacturing processes therefor}

- M H01L 29/401
- {Multistep manufacturing processes}
- WARNING**
Group H01L 29/401 is impacted by reclassification into groups H01L 29/4011, H01L 29/40111, H01L 29/40114 and H01L 29/40117. Groups H01L 29/401, H01L 29/4011, H01L 29/40111, H01L 29/40114 and H01L 29/40117 should be considered in order to perform a complete search.
- M H01L 29/4011
- • {for data storage electrodes}
- WARNING**
Group H01L 29/4011 is incomplete pending reclassification of documents from group H01L 29/401. Group H01L 29/401 and H01L 29/4011 should be considered in order to perform a complete search.
- M H01L 29/40111
- • • {the electrodes comprising a layer which is used for its ferroelectric properties}
- WARNING**
Group H01L 29/40111 is incomplete pending reclassification of documents from group H01L 29/401. Group H01L 29/401 and H01L 29/40111 should be considered in order to perform a complete search.
- M H01L 29/40114
- • • {the electrodes comprising a conductor-insulator-conductor-insulator-semiconductor structure}
- WARNING**
Group H01L 29/40114 is incomplete pending reclassification of documents from group H01L 29/401. Group H01L 29/401 and H01L 29/40114 should be considered in order to perform a complete search.
- M H01L 29/40117
- • • {the electrodes comprising a charge-trapping insulator}
- WARNING**
Group H01L 29/40117 is incomplete pending reclassification of documents from group H01L 29/401. Group H01L 29/401 and H01L 29/40117 should be considered in order to perform a complete search.

Project: RP0514-F (H01Q)

- U H01Q 19/00
- Combinations of primary active antenna elements and units with secondary devices, e.g. with quasi-optical devices, for giving the antenna a desired directional characteristic {(combination of horns with slotted waveguide array [H01Q 13/0233](#))}**
- U H01Q 19/28
- using a secondary device in the form of two or more substantially straight conductive elements (log- periodic antennas [H01Q 11/10](#); constituting a reflecting surface [H01Q 19/10](#))
- M H01Q 19/30
- • the primary active element being centre-fed and substantially straight, e.g. Yagi 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.

- U H01Q 21/00** **Antenna arrays or systems (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 independent non-interacting active aerials or arrays.
- U H01Q 21/06 • Arrays of individually energised 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](#))}
- M H01Q 21/12 • • Parallel arrangements of substantially straight elongated conductive units (travelling-wave antennas comprising transmission line loaded with transverse elements [H01Q 11/02](#); 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.

Project: RP0685 (H02K)

- U H02K 9/00** **Arrangements for cooling or ventilating (channels or ducts in parts of the magnetic circuit [H02K 1/20](#), [H02K 1/32](#); channels or ducts in or between conductors [H02K 3/22](#), [H02K 3/24](#))**
- C H02K 9/19 • for machines with closed casing and closed-circuit cooling using a liquid cooling medium, e.g. oil
- WARNING**
Group [H02K 9/19](#) is impacted by reclassification into group [H02K 9/197](#). Groups [H02K 9/19](#) and [H02K 9/197](#) should be considered in order to perform a complete search.
- T H02K 9/197 • • in which the rotor or stator space is fluid-tight, e.g. to provide for different cooling media for rotor and stator
- WARNING**
Group [H02K 9/197](#) is incomplete pending reclassification of documents from group [H02K 9/19](#). Groups [H02K 9/19](#) and [H02K 9/197](#) should be considered in order to perform a complete search.
- U H02K 11/00** **Structural association of dynamo-electric machines with electric components or with devices for shielding, monitoring or protection (casings, enclosures or supports [H02K 5/00](#))**
- U H02K 11/04 • for rectification
- F H02K 11/044 • • {in motors ([H02K 11/042](#) takes precedence)}
- WARNING**
Group [H02K 11/044](#) is no longer used for the classification of documents as of August 1, 2021. The content of this group is being reclassified into groups [H02K 11/049](#) and [H02K 11/05](#).
- (Frozen)

Groups [H02K 11/044](#), [H02K 11/049](#) and [H02K 11/05](#) should be considered in order to perform a complete search.

F H02K 11/046
(Frozen)

- {in generators ([H02K 11/042](#) takes precedence)}

WARNING

Group [H02K 11/046](#) is no longer used for the classification of documents as of August 1, 2021.

The content of this group is being reclassified into groups [H02K 11/049](#) and [H02K 11/05](#).

Groups [H02K 11/046](#), [H02K 11/049](#) and [H02K 11/05](#) should be considered in order to perform a complete search.

F H02K 11/048
(Frozen)

- • {Rectifiers combined with drive circuits in starter-generators}

WARNING

Group [H02K 11/048](#) is no longer used for the classification of documents as of August 1, 2021.

The content of this group is being reclassified into groups [H02K 11/049](#) and [H02K 11/05](#).

Groups [H02K 11/048](#), [H02K 11/049](#) and [H02K 11/05](#) should be considered in order to perform a complete search.

M H02K 11/049

- • Rectifiers associated with stationary parts, e.g. stator cores

WARNING

Groups [H02K 11/049](#) and [H02K 11/05](#) are incomplete pending reclassification of documents from groups [H02K 11/044](#), [H02K 11/046](#) and [H02K 11/048](#).

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

U H02K 2213/00

Specific aspects, not otherwise provided for and not covered by codes [H02K 2201/00](#) - [H02K 2211/00](#)

U H02K 2213/12

- Machines characterised by the modularity of some components

N H02K 2215/00

Specific aspects not provided for in other groups of this subclass relating to methods or apparatus specially adapted for manufacturing, assembling, maintaining or repairing of dynamo-electric machines

Project: RP0294-F (H02P)

M H02P 5/00

Arrangements specially adapted for regulating or controlling the speed or torque of two or more electric motors ([H02P 6/04](#), [H02P 8/40](#) take precedence)

WARNING

Group [H02P 5/00](#) is impacted by reclassification into groups [H02P 6/04](#), [H02P 8/40](#), [H02P 8/40](#).

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

M H02P 6/00

Arrangements for controlling synchronous motors or other dynamo-electric motors using electronic commutation dependent on the rotor position; Electronic commutators therefor (vector control [H02P 21/00](#))

NOTE

Group [H02P 6/26](#) takes precedence over groups [H02P 6/04](#)–[H02P 6/24](#) and [H02P 6/28](#) – [H02P 6/34](#)

WARNING

Group [H02P 6/00](#) is impacted by reclassification into group [H02P 6/32](#).

~~Groups H02P 6/00 and H02P 6/32 should be considered in order to perform a complete search.~~

- M H02P 6/04
- Arrangements for controlling or regulating the speed or torque of more than one motor ([H02P 6/10](#) takes precedence)

WARNING

~~Group H02P 6/04 is impacted by reclassification into group H02P 6/10. Groups H02P 6/04 and H02P 6/10 should be considered in order to perform a complete search.~~

- M H02P 6/08
- Arrangements for controlling the speed or torque of a single motor ([H02P 6/10](#), [H02P 6/28](#) take precedence)

WARNING

~~Group H02P 6/08 is impacted by reclassification into group H02P 6/10. Groups H02P 6/08 and H02P 6/10 should be considered in order to perform a complete search.~~

- M H02P 6/10
- Arrangements for controlling torque ripple, e.g. providing reduced torque ripple

WARNING

~~Group H02P 6/10 is incomplete pending reclassification of documents from group H02P 6/04 and group H02P 6/08. Groups H02P 6/04, H02P 6/08 and H02P 6/10 should be considered in order to perform a complete search.~~

- M H02P 6/32
- Arrangements for controlling wound field motors, e.g. motors with exciter coils

WARNING

~~Group H02P 6/32 is incomplete pending reclassification of documents from group H02P 6/00. Groups H02P 6/00 and H02P 6/32 should be considered in order to perform a complete search.~~

- M H02P 7/00
- Arrangements for regulating or controlling the speed or torque of electric DC motors**

WARNING

~~Group H02P 7/00 is impacted by reclassification into groups H02P 7/02, H02P 7/025. Groups H02P 7/00, H02P 7/02, and H02P 7/025 should be considered in order to perform a complete search.~~

- M H02P 7/02
- the DC motors being of the linear type

WARNING

~~Group H02P 7/02 is incomplete pending reclassification of documents from group H02P 7/00. Groups H02P 7/00 and H02P 7/02 should be considered in order to perform a complete search.~~

- M H02P 7/025
- the DC motors being of the moving coil type, e.g. voice coil motors

WARNING

~~Group H02P 7/025 is incomplete pending reclassification of documents from group H02P 7/00. Groups H02P 7/00 and H02P 7/025 should be considered in order to perform a complete search.~~

- U H02P 7/06
- for regulating or controlling an individual dc dynamo-electric motor by varying field or armature current

- U H02P 7/18
 - • by master control with auxiliary power
- U H02P 7/34
 - • • using Ward-Leonard arrangements
- M H02P 7/343
 - • • • in which both generator and motor fields are controlled

WARNING

~~Group H02P 7/343 is impacted by reclassification into group H02P 7/347.~~

~~Groups H02P 7/343 and H02P 7/347 should be considered in order to perform a complete search.~~

- M H02P 7/347
 - • • • in which only the generator field is controlled

WARNING

~~Group H02P 7/347 is incomplete pending reclassification of documents from group H02P 7/343.~~

~~Groups H02P 7/343 and H02P 7/347 should be considered in order to perform a complete search.~~

- U H02P 8/00
 - **Arrangements for controlling dynamo-electric motors of the kind having motors rotating step by step (vector control [H02P 21/00](#))**

- M H02P 8/40
 - Special adaptations for controlling two or more stepping motors

WARNING

~~Group H02P 8/40 is incomplete pending reclassification of documents from group H02P 5/00.~~

~~Groups H02P 5/00 and H02P 8/40 should be considered in order to perform a complete search.~~

- U H02P 25/00
 - **Arrangements or methods for the control of AC motors characterised by the kind of AC motor or by structural details**

NOTE

When classifying in this group, subject matter also relating to groups [H02P 21/00](#), [H02P 23/00](#) or [H02P 27/00](#) is further classified in those groups whenever appropriate.

- U H02P 25/02
 - characterised by the kind of motor
- M H02P 25/022
 - • Synchronous motors ([H02P 25/064](#) takes precedence)

WARNING

~~Group H02P 25/022 is impacted by reclassification into group H02P 25/024.~~

~~Groups H02P 25/022 and H02P 25/024 should be considered in order to perform a complete search.~~

- M H02P 25/024
 - • • controlled by supply frequency

WARNING

~~Group H02P 25/024 is incomplete pending reclassification of documents from group H02P 25/022.~~

~~Groups H02P 25/022 and H02P 25/024 should be considered in order to perform a complete search.~~

- M H02P 25/026
 - • • • thereby detecting the rotor position

WARNING

~~Group H02P 25/026 is impacted by reclassification into group H02P 25/03.~~

~~Groups H02P 25/026 and H02P 25/03 should be considered in order to perform a complete search.~~

- M H02P 25/028
- • • with four quadrant control
- WARNING
Group H02P 25/028 is impacted by reclassification into group H02P 25/034.
Groups H02P 25/028 and H02P 25/034 should be considered in order to perform a complete search.
- M H02P 25/03
- • • with brushless excitation
- WARNING
Group H02P 25/03 is incomplete pending reclassification of documents from group H02P 25/026.
Groups H02P 25/026 and H02P 25/03 should be considered in order to perform a complete search.
- U H02P 25/032
- • Reciprocating, oscillating or vibrating motors
- M H02P 25/034
- • • Voice coil motors (voice coil motors driven by DC power [H02P 7/025](#))
- WARNING
Group H02P 25/034 is incomplete pending reclassification of documents from group H02P 25/028.
Groups H02P 25/028 and H02P 25/034 should be considered in order to perform a complete search.
- M H02P 25/06
- • Linear motors
- WARNING
Group H02P 25/06 is impacted by reclassification into group H02P 25/062, H02P 25/064 and H02P 25/066.
All groups listed in this Warning should be considered in order to perform a complete search.
- M H02P 25/062
- • • of the induction type
- WARNING
Group H02P 25/062 is incomplete pending reclassification of documents from group H02P 25/06.
Groups H02P 25/06 and H02P 25/062 should be considered in order to perform a complete search.
- M H02P 25/064
- • • of the synchronous type
- WARNING
Group H02P 25/064 is incomplete pending reclassification of documents from group H02P 25/06.
Groups H02P 25/06 and H02P 25/064 should be considered in order to perform a complete search.
- M H02P 25/066
- • • • of the stepping type
- WARNING
Group H02P 25/066 is incomplete pending reclassification of documents from group H02P 25/06.
Groups H02P 25/06 and H02P 25/066 should be considered in order to perform a complete search.
- U H02P 25/08
- • Reluctance motors

- M H02P 25/083
- • • Arrangements for increasing the switching speed from one coil to the next one
- WARNING**
Group H02P 25/083 is impacted by reclassification into group H02P 25/089.
Groups H02P 25/083 and H02P 25/089 should be considered in order to perform a complete search.
- M H02P 25/086
- • • Commutation
- WARNING**
Group H02P 25/086 is impacted by reclassification into group H02P 25/0925.
Groups H02P 25/086 and H02P 25/0925 should be considered in order to perform a complete search.
- M H02P 25/089
- • • Sensorless control (direct torque control [H02P 23/30](#))
- WARNING**
Group H02P 25/089 is incomplete pending reclassification of documents from group H02P 25/083.
Groups H02P 25/083 and H02P 25/089 should be considered in order to perform a complete search.
- U H02P 25/092
- • • Converters specially adapted for controlling reluctance motors
- M H02P 25/0925
- • • {wherein the converter comprises only one switch per phase}
- WARNING**
Group H02P 25/0925 is incomplete pending reclassification of documents from group H02P 25/086.
Groups H02P 25/086 and H02P 25/0925 should be considered in order to perform a complete search.
- M H02P 29/00
- Arrangements for regulating or controlling electric motors, appropriate for both AC and DC motors (arrangements for starting electric motors [H02P 1/00](#); arrangements for stopping or slowing electric motors [H02P 3/00](#); control of motors that can be connected to two or more different electric power supplies [H02P 4/00](#); regulating or controlling the speed or torque of two or more electric motors [H02P 5/00](#); vector control [H02P 21/00](#))**
- WARNING**
Group H02P 29/00 is impacted by reclassification into groups H02P 29/10, H02P 29/20, H02P 29/40, H02P 29/50, H02P 29/60, H02P 29/62, H02P 29/64, H02P 29/66 and H02P 29/68.
All groups listed in this Warning should be considered in order to perform a complete search.
- U H02P 29/02
- Providing protection against overload without automatic interruption of supply (protection against faults of stepper motors [H02P 8/36](#))
- NOTE**
Informative note
References listed below indicate places which could also be of interest when carrying out a search in respect of the subject matter covered by the preceding group:
Emergency protective circuit arrangements with automatic interruption if supply, in general [H02H 7/08](#);
Emergency protective circuit arrangements for limiting excess current or voltage without disconnection in general [H02H 7/08](#)

- M H02P 29/024
- • Detecting a fault condition, e.g. short circuit, locked rotor, open circuit or loss of load
- WARNING**
 Group H02P 29/024 is impacted by reclassification into group H02P 29/0241.
 Groups H02P 29/024 and H02P 29/0241 should be considered in order to perform a complete search.
- M H02P 29/0241
- • • {the fault being an overvoltage}
- WARNING**
 Group H02P 29/0241 is incomplete pending reclassification of documents from group H02P 29/024.
 Groups H02P 29/024 and H02P 29/0241 should be considered in order to perform a complete search.
- M H02P 29/028
- • • the motor continuing operation despite the fault condition, e.g. eliminating, compensating for or remedying the fault
- WARNING**
 Group H02P 29/028 is impacted by reclassification into group H02P 29/032.
 Groups H02P 29/028 and H02P 29/032 should be considered in order to perform a complete search.
- M H02P 29/032
- • Preventing damage to the motor, e.g. setting individual current limits for different drive conditions
- WARNING**
 Group H02P 29/032 is incomplete pending reclassification of documents from group H02P 29/028.
 Groups H02P 29/028 and H02P 29/032 should be considered in order to perform a complete search.

Project: RP0490-F (H04B)

- U H04B 1/00
- Details of transmission systems, not covered by a single one of groups [H04B 3/00](#) - [H04B 13/00](#); Details of transmission systems not characterised by the medium used for transmission**
- NOTE
 In this group, group [H04B 1/0003](#) takes precedence over groups [H04B 1/005](#) - [H04B 1/76](#)
- U H04B 1/69
- Spread spectrum techniques
- U H04B 1/707
- • using direct sequence modulation
- U H04B 1/7097
- • • Interference-related aspects
- U H04B 1/711
- • • • the interference being multi-path interference
- M H04B 1/7115
- • • • • Constructive combining of multi-path signals, i.e. RAKE receivers
- WARNING**
 Group H04B 1/7115 is incomplete pending reclassification of documents from group H04B 7/02.
 Groups H04B 7/02 and H04B 1/7115 should be considered in order to perform a complete search.
- U H04B 7/00
- Radio transmission systems, i.e. using radiation field ([H04B 10/00](#), [H04B 15/00](#) take precedence)**

- M H04B 7/02
- Diversity systems; Multi-antenna system, i.e. transmission or reception using multiple antennas (RAKE receivers [H04B 1/7115](#))

WARNING

Group H04B 7/02 is impacted by reclassification into group H04B 1/7115.-
Groups H04B 7/02 and H04B 1/7115 should be considered in order to perform a complete search.

Project: RP0680 (H04L)

M H04L

TRANSMISSION OF DIGITAL INFORMATION, e.g. TELEGRAPHIC COMMUNICATION (*{coding or ciphering apparatus for cryptographic or other purposes involving the need for secrecy G09C;}*) arrangements common to telegraphic and telephonic communication [H04M](#))

NOTE

This subclass covers transmission of signals having been supplied in digital form and includes data transmission, telegraphic communication and methods or arrangements for monitoring.

WARNINGS

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

H04L 9/18	covered by	H04L 9/065
H04L 9/20	covered by	H04L 9/0656
H04L 9/22	covered by	H04L 9/0662
H04L 9/24	covered by	H04L 9/0662
H04L 9/26	covered by	H04L 9/0668
H04L 9/28	covered by	H04L 9/002 , H04L 9/008 , H04L 9/06 , H04L 9/08 , H04L 9/30 , H04L 9/32
H04L 12/20	covered by	H04L 29/00
H04L 12/24	covered by	H04L 41/00
H04L 12/26	covered by	H04L 43/00
H04L 12/58	covered by	H04L 51/00
H04L 12/60-H04L 12/62	covered by	H04L 12/54
H04L 12/70	covered by	H04L 47/00
H04L 12/701	covered by	H04L 45/00
H04L 12/703	covered by	H04L 45/28
H04L 12/705	covered by	H04L 45/18
H04L 12/707	covered by	H04L 45/22 , H04L 45/24
H04L 12/709	covered by	H04L 45/245
H04L 12/711	covered by	H04L 45/22 , H04L 45/24
H04L 12/713	covered by	H04L 45/586
H04L 12/715	covered by	H04L 45/04 , H04L 45/46 , H04L 45/64
H04L 12/717	covered by	H04L 45/42

H04L 12/721	covered by	H04L 45/06 , H04L 45/12 , H04L 45/123 , H04L 45/124 , H04L 45/127 , H04L 45/14 , H04L 45/26 , H04L 45/32 , H04L 45/34 , H04L 45/36 , H04L 45/38 , H04L 45/40 , H04L 45/44 , H04L 45/566 , H04L 45/62 , H04L 45/66 , H04L 45/68 , H04L 45/70 , H04L 45/72
H04L 12/723	covered by	H04L 45/50-H04L 45/507
H04L 12/725	covered by	H04L 45/30-H04L 45/308
H04L 12/727	covered by	H04L 45/121
H04L 12/729	covered by	H04L 45/125
H04L 12/733	covered by	H04L 45/122 , H04L 45/126 , H04L 45/20
H04L 12/735	covered by	H04L 45/128-H04L 45/1287
H04L 12/741	covered by	H04L 45/54 , H04L 45/74 , H04L 45/745
H04L 12/743	covered by	H04L 45/7453 , H04L 45/7457
H04L 12/745	covered by	H04L 45/748
H04L 12/747	covered by	H04L 45/742
H04L 12/749	covered by	H04L 45/741
H04L 12/751	covered by	H04L 45/02 , H04L 45/025 , H04L 45/026 , H04L 45/08 , H04L 45/10
H04L 12/753	covered by	H04L 45/48
H04L 12/755	covered by	H04L 45/021
H04L 12/757	covered by	H04L 45/023
H04L 12/759	covered by	H04L 45/023
H04L 12/761	covered by	H04L 45/16
H04L 12/763	covered by	H04L 45/00
H04L 12/771	covered by	H04L 45/56 , H04L 45/563
H04L 12/773	covered by	H04L 45/60
H04L 12/775	covered by	H04L 45/58 , H04L 45/583
H04L 12/781	covered by	H04L 45/52
H04L 12/801	covered by	H04L 47/10 , H04L 47/11 , H04L 47/115 , H04L 47/12 , H04L 47/127 , H04L 47/13 - H04L 47/196 , H04L 47/29 , H04L 47/33 , H04L 47/34 , H04L 47/35 , H04L 47/37 , H04L 47/39
H04L 12/803	covered by	H04L 47/122 , H04L 47/125
H04L 12/805	covered by	H04L 47/36 , H04L 47/365
H04L 12/807	covered by	H04L 47/27
H04L 12/811	covered by	H04L 47/38
H04L 12/813	covered by	H04L 47/20
H04L 12/815	covered by	H04L 47/22 , H04L 47/225 , H04L 47/23
H04L 12/819	covered by	H04L 47/21 , H04L 47/215
H04L 12/823	covered by	H04L 47/32-H04L 47/326
H04L 12/825	covered by	H04L 47/25-H04L 47/266

H04L 12/827	covered by	H04L 47/25 - H04L 47/266
H04L 12/829	covered by	H04L 47/25 - H04L 47/266
H04L 12/833	covered by	H04L 47/2458 , H04L 47/31
H04L 12/835	covered by	H04L 47/30
H04L 12/841	covered by	H04L 47/28 - H04L 47/286
H04L 12/851	covered by	H04L 47/24 , H04L 47/2408 , H04L 47/2425 , H04L 47/2433 , H04L 47/245 , H04L 47/2483
H04L 12/853	covered by	H04L 47/2416
H04L 12/855	covered by	H04L 47/2466
H04L 12/857	covered by	H04L 47/2491
H04L 12/859	covered by	H04L 47/2475
H04L 12/861	covered by	H04L 49/90 , H04L 49/9005 , H04L 49/9031 - H04L 49/9094
H04L 12/863	covered by	H04L 47/50 , H04L 47/54 , H04L 47/62 - H04L 47/627 , H04L 47/628 , H04L 47/6285 , H04L 47/6295
H04L 12/865	covered by	H04L 47/6275
H04L 12/867	covered by	H04L 47/629
H04L 12/869	covered by	H04L 47/58 , H04L 47/60
H04L 12/873	covered by	H04L 47/52 , H04L 47/521 , H04L 47/522 , H04L 47/524 , H04L 47/527 , H04L 47/528
H04L 12/875	covered by	H04L 47/56 - H04L 47/568
H04L 12/877	covered by	H04L 47/525
H04L 12/879	covered by	H04L 49/901 , H04L 49/9026
H04L 12/883	covered by	H04L 49/9015 , H04L 49/9021
H04L 12/885	covered by	H04L 49/90 , H04L 49/9005 , H04L 49/9031 - H04L 49/9094
H04L 12/891	covered by	H04L 47/41
H04L 12/893	covered by	H04L 47/40
H04L 12/901	covered by	H04L 2012/5603 - H04L 2012/5687
H04L 12/903	covered by	H04L 2012/5603 - H04L 2012/5687
H04L 12/905	covered by	H04L 2012/5603 - H04L 2012/5687
H04L 12/911	covered by	H04L 47/70 - H04L 47/748 , H04L 47/78 , H04L 47/781 , H04L 47/782 , H04L 47/783 , H04L 47/788 , H04L 47/82 - H04L 47/829
H04L 12/913	covered by	H04L 47/724
H04L 12/915	covered by	H04L 47/785 , H04L 47/787 , H04L 47/787
H04L 12/917	covered by	H04L 47/76
H04L 12/919	covered by	H04L 47/765 , H04L 47/767
H04L 12/923	covered by	H04L 47/762
H04L 12/925	covered by	H04L 47/722

H04L 12/927	covered by	H04L 47/80-H04L 47/808
H04L 12/931	covered by	H04L 49/00 , H04L 49/20 - H04L 49/208 , H04L 49/35 - H04L 49/508 , H04L 49/60 - H04L 49/70
H04L 12/933	covered by	H04L 49/10-H04L 49/1592
H04L 12/935	covered by	H04L 49/30-H04L 49/3009
H04L 12/937	covered by	H04L 49/253-H04L 49/255
H04L 12/939	covered by	H04L 49/55-H04L 49/557
H04L 12/943	covered by	H04L 49/55 - H04L 49/557
H04L 12/945	covered by	H04L 49/55 - H04L 49/557
H04L 12/947	covered by	H04L 49/25 , H04L 49/251 , H04L 49/252 , H04L 49/256 , H04L 49/257 , H04L 49/258
H04L 12/951	covered by	H04L 2012/5603 - H04L 2012/5687
H04L 12/953	covered by	H04L 2012/5603 - H04L 2012/5687
H04L 12/955	covered by	H04L 2012/5603 - H04L 2012/5687
H04L 25/04	covered by	H04L 25/03
H04L 25/17	covered by	H04L 25/02 - H04L 25/0298
H04L 25/18	covered by	H04L 25/027
H04L 25/28	covered by	H04L 25/0268
H04L 25/30	covered by	H04L 25/061
H04L 25/32	covered by	H04L 25/49
H04L 25/34	covered by	H04L 25/4917
H04L 25/48	covered by	H04L 25/49
H04L 25/52	covered by	H04L 25/20
H04L 25/54	covered by	H04L 25/20
H04L 25/56	covered by	H04L 25/202
H04L 25/58	covered by	H04L 25/20
H04L 25/60	covered by	H04L 25/207
H04L 25/62	covered by	H04L 25/205
H04L 25/64	covered by	H04L 25/245
H04L 25/66	covered by	H04L 25/247

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

M	H04L 1/00	Arrangements for detecting or preventing errors in the information received {(correcting synchronisation H04L 7/00; (for digital computers G06F 11/00); arrangements in the transmission path H04B)}
M	H04L 1/02	• by diversity reception (in general H04B 7/02)
U	H04L 1/12	• by using return channel
M	H04L 1/14	• • in which the signals are sent back to the transmitter to be checked {echo systems}; echo systems}
U	H04L 1/16	• • in which the return channel carries supervisory signals, e.g. repetition request signals
U	H04L 1/18	• • • Automatic repetition systems, e.g. van Duuren system {; ARQ protocols}
U	H04L 1/1829	• • • • {Arrangements specific to the receiver end}

- M H04L 1/1858 {Transmission or retransmission of more than one copy of acknowledgement message ~~(repetition in general H04L-1/08)~~}
- U H04L 1/1867 {Arrangements specific to the transmitter end}
- M H04L 1/189 {Transmission or retransmission of more than one copy of a message ~~(repetition in general H04L-1/08)~~}
- M H04L 1/22 . using redundant apparatus to increase reliability ~~{{(see G06F 11/08 - G06F 11/20)}~~}
- U H04L 5/00 Arrangements affording multiple use of the transmission path**
- U H04L 5/02 . Channels characterised by the type of signal
- U H04L 5/06 . . the signals being represented by different frequencies (combined with time-division multiplexing [H04L 5/26](#))
- M H04L 5/08 . . . each combination of signals in different channels being represented by a fixed frequency ~~{{(, e.g. twinplex; see H04L 27/16)}~~}
- U H04L 5/14 . Two-way operation using the same type of signal, i.e. duplex
- M H04L 5/16 . . Half-duplex systems; Simplex-/duplex switching; Transmission of break signals {non- automatically inverting the direction of transmission}
- M H04L 5/20 . using different combinations of lines, e.g. phantom working ~~{{(phantom interconnection between telephone switching centres H04M 7/08; coupling arrangements therefor H04L 25/0272)}~~}
- U H04L 5/22 . using time-division multiplexing
- M 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 H03L 7/00; synchronising in TV system H04N 5/04; regeneration of clock signals for television systems H04N 7/0352)}}**
- M H04L 7/02 . Speed or phase control by the received code signals, the signals containing no special synchronisation information ~~{{(H04L 7/0075 takes precedence; tuning or selecting resonant circuits H03J; using the properties of error detecting or correcting codes H04L 7/048)}~~}
- U H04L 7/04 . Speed or phase control by synchronisation signals ~~{{(H04L 7/0075 takes precedence)}~~}
- M H04L 7/06 . . the synchronisation signals differing from the information signals in amplitude, polarity; or frequency {or length}
- U H04L 12/00 Data switching networks (interconnection of, or transfer of information or other signals between, memories, input/output devices or central processing units [G06F 13/00](#))**
- U H04L 12/02 . Details
- M H04L 12/14 . . ~~{(Metering;) charging {or billing} arrangements {specially adapted Charging {, metering or billing} arrangements {for data wireline or wireless communications {payment schemes, architectures or protocols per se G06Q 20/00}}~~}
- U H04L 12/16 . . Arrangements for providing special services to substations
- M H04L 12/18 . . . for broadcast or conference {, e.g. multicast ~~(multicast or broadcast switches H04L 49/201)}~~}
- M H04L 12/28 . characterised by path configuration, e.g. ~~local area networks [LAN], wide area networks [WAN] LAN [Local Area Networks] or WAN [Wide Area Networks] (wireless communication networks H04W {; arrangements for dividing the transmission path H04W 40/00})~~
- U H04L 12/40 . . Bus networks

- U H04L 12/40052 . . . {High-speed IEEE 1394 serial bus (bus transfer protocol on a daisy chain bus using an embedded synchronisation [G06F 13/426](#))}
- D H04L 12/4011 {Wireless (wireless communication networks H04W)}
<administratively transferred to [H04L 12/40052](#)>
- U H04L 13/00** **Details of the apparatus or circuits covered by groups [H04L 15/00](#) or [H04L 17/00](#)**
- U H04L 13/02 . Details not particular to receiver or transmitter
- M H04L 13/04 . . Driving mechanisms; Clutches ~~(in general F16)~~
- U H04L 13/10 . . Distributors
- U H04L 13/12 . . . Non-mechanical distributors, e.g. relay distributors
- M H04L 13/14 Electronic distributors ~~(in general H03K 17/00)~~
- M H04L 15/00** **Apparatus or local circuits for transmitting or receiving dot-and-dash codes, e.g. Morse code (teaching apparatus therefor [G09B](#); keyboard switches in general [H01H 13/70](#), [H03K 17/94](#); telegraph tapping keys [H01H 21/86](#); coding in connection with keyboards or like devices, in general [H03M 11/00](#))**
- M H04L 17/00** **Apparatus or local circuits for transmitting or receiving codes wherein each character is represented by the same number of equal-length code elements, e.g. Baudot code (keyboard switches in general [H01H 13/70](#), [H03K 17/94](#); coding in connection with keyboards or like devices, in general [H03M 11/00](#))**
- U H04L 25/00** **Baseband systems**
- M H04L 25/02 . Details ~~{(circuits in general for handling pulses H03K; in line transmission systems in general [H04B 3/02](#)); {Arrangements for supplying electrical power along data transmission lines (systems for transmitting signals via power distribution lines [H04B 3/54](#))}~~
- M H04L 25/03 . . Shaping networks in transmitter or receiver, e.g. adaptive shaping networks ~~{(impedance networks per se H03H); {Receiver end arrangements for processing baseband signals}~~
- M H04L 25/06 . . Dc level restoring means; *Bias distortion correction* ~~{;Bias-distortion correction (decision *Decision* circuits providing symbol by symbol detection (detection of unique words or other known elements H04L 7/00; [H04J 3/0602](#))}~~
- U H04L 25/08 . . Modifications for reducing interference; Modifications for reducing effects due to line faults {; Receiver end arrangements for detecting or overcoming line faults}
- M H04L 25/10 . . Compensating for variations in line balance ~~{(balancing during the coupling of signals H04L 25/0282)}~~
- M H04L 25/12 . . Compensating for variations in line impedance ~~{(impedance matching in coupling arrangements H04L 25/0278)}~~
- M H04L 25/14 . . Channel dividing arrangements {, *i.e.* in which a single bit stream is divided between several baseband channels and reassembled at the receiver}
- U H04L 25/20 . . Repeater circuits; Relay circuits
- M H04L 25/22 . . . Repeaters for converting two wires to four wires ~~(in general H04B)~~;
Repeaters for converting single current to double current
- U H04L 25/38 . Synchronous or start-stop systems, e.g. for Baudot code
- M H04L 25/40 . . Transmitting circuits; Receiving circuits ~~{(repeater circuits, relay circuits [H04L 25/20](#))}~~
- M H04L 25/45 . . . using electronic distributors ~~(electronic distributors in general H03K 17/00)~~

- U H04L 25/49
 - • • using code conversion at the transmitter; using predistortion; using insertion of idle bits for obtaining a desired frequency spectrum; using three or more amplitude levels {; Baseband coding techniques specific to data transmission systems (spectral shaping [H04L 25/03828](#))}
- M H04L 25/497
 - • • • by correlative coding, e.g. partial response coding or echo modulation coding {transmitters and receivers for partial response systems (transversal equalizers [H04L 25/03](#) *at the transmitter end* [H04L 25/03343](#); ~~partial response continuous phase modulation systems H04L 27/18~~)}
- M H04L 27/00

Modulated-carrier systems ~~{(code shift keying in combination with frequency multiplexing [H04L 5/06](#); simultaneous bidirectional transmission of ac signals [H04L 5/143](#); code shift keying [H04L 23/02](#); polarisation shift keying [H04B 14/008](#); transmission of data during the active part of a television frame [H04N 7/025](#))}~~
- M H04L 27/01
 - Equalisers ~~{(baseband equalisers [H04L 25/03](#); control of amplification [H03G](#); *baseband equalizers at the transmitter end* [H04L 25/03343](#); in analogue transmission systems [H04B 3/04](#), [H04B 7/005](#))}~~
- M H04L 27/10
 - Frequency-modulated carrier systems, i.e. using frequency-shift keying ([H04L 27/32](#) takes precedence ~~{; continuous phase systems [H04L 27/18](#)~~)}

Project: RP0156-F (H04N)

- U H04N 5/00

Details of television systems (scanning details or combination thereof with generation of supply voltages [H04N 3/00](#))
- 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, camcorders, webcams, camera modules specially adapted for being embedded in other devices, e.g. mobile phones, computers or vehicles (constructional details of electronic still picture cameras or digital still picture cameras not peculiar to the presence or use of the electronic image sensor [G03B](#))}
- M H04N 5/2251
 - • • {Constructional details}

WARNING
Group H04N 5/2251 is impacted by reclassification into groups H04N 5/22521, H04N 5/22525, and H04N 5/225251.
All groups listed in this Warning should be considered in order to perform a complete search.
- M H04N 5/22521
 - • • • {Elements optimizing image sensor operations, e.g. EMF protection, heat transfer, moisture or dust}

WARNING
Group H04N 5/22521 is incomplete pending reclassification of documents from group H04N 5/2251.
Groups H04N 5/2251 and H04N 5/22521 should be considered in order to perform a complete search.
- M H04N 5/22525
 - • • • {Electronic viewfinders}

WARNING
Groups H04N 5/22525 and H04N 5/225251 are incomplete pending reclassification of documents from group H04N 5/2251.
Groups H04N 5/2251, H04N 5/22525 and H04N 5/225251 should be considered in order to perform a complete search.

- M H04N 5/2254
- • • {Mounting of optical parts, e.g. lenses, shutters, filters or optical parts peculiar to the presence or use of an electronic image sensor}
- WARNING
 Group H04N 5/2254 is impacted by reclassification into group H04N 5/22541.
 Groups H04N 5/2254 and H04N 5/22541 should be considered in order to perform a complete search.
- M H04N 5/22541
- • • {Optical arrangements for light-field or plenoptic cameras}
- WARNING
 Group H04N 5/22541 is incomplete pending reclassification of documents from group H04N 5/2254.
 Groups H04N 5/2254 and H04N 5/22541 should be considered in order to perform a complete search.
- M H04N 5/232
- • • Devices for controlling television cameras, e.g. remote control {; Control of cameras comprising an electronic image sensor} ([H04N 5/235](#) takes precedence {; Mountings, adjusting means, or light-tight connections, for optical elements [G02B 7/00](#)})
- WARNING
 Group H04N 5/232 is impacted by reclassification into groups H04N 5/23218, H04N 5/23227, and H04N 5/23299.
 All groups listed in this Warning should be considered in order to perform a complete search.
- U H04N 5/23203
- • • {Remote-control signaling for television cameras, cameras comprising an electronic image sensor or for parts thereof, e.g. between main body and another part of camera (distributing sync-signals to television cameras [H04N 5/0733](#))}
- M H04N 5/23206
- • • {Transmission of camera control signals via a network, e.g. Internet}
- WARNING
 Group H04N 5/23206 is impacted by reclassification into group H04N 5/232061.
 Groups H04N 5/23206 and H04N 5/232061 should be considered in order to perform a complete search.
- M H04N 5/232061
- • • • {using Master/Slave camera arrangements for affecting the control of camera image capture, e.g. placing the camera in a desirable condition to capture a desired image}
- WARNING
 Group H04N 5/232061 is incomplete pending reclassification of documents from group H04N 5/23206.
 Groups H04N 5/23206 and H04N 5/232061 should be considered in order to perform a complete search.
- M H04N 5/23212
- • • {Focusing based on image signals provided by the electronic image sensor}
- WARNING
 Group H04N 5/23212 is impacted by reclassification into groups H04N 5/232121, H04N 5/232122, H04N 5/232123, H04N 5/232125, H04N 5/232127, and H04N 5/232133.
 All groups listed in this Warning should be considered in order to perform a complete search.

- M H04N 5/232121 {and on active ranging signals, e.g. using light or sound signals emitted toward objects}
- WARNING
Group H04N 5/232121 is incomplete pending reclassification of documents from group H04N 5/23212.
Groups H04N 5/23212 and H04N 5/232121 should be considered in order to perform a complete search.
- M H04N 5/232122 {based on the difference in phase of signals}
- WARNING
Group H04N 5/232122 is incomplete pending reclassification of documents from group H04N 5/23212.
Groups H04N 5/23212 and H04N 5/232122 should be considered in order to perform a complete search.
- M H04N 5/232123 {based on contrast or high frequency components of image signals, e.g. hill climbing method}
- WARNING
Group H04N 5/232123 is incomplete pending reclassification of documents from group H04N 5/23212.
Groups H04N 5/23212 and H04N 5/232123 should be considered in order to perform a complete search.
- M H04N 5/232125 {adjusting depth of field during image capture, e.g. maximizing or setting range based on scene characteristics}
- WARNING
Group H04N 5/232125 is incomplete pending reclassification of documents from group H04N 5/23212.
Groups H04N 5/23212 and H04N 5/232125 should be considered in order to perform a complete search.
- M H04N 5/232127 {setting of focusing region}
- WARNING
Group H04N 5/232127 is incomplete pending reclassification of documents from group H04N 5/23212.
Groups H04N 5/23212 and H04N 5/232127 should be considered in order to perform a complete search.
- M H04N 5/232133 {Bracketing relating to the capture of varying focusing conditions}
- WARNING
Group H04N 5/232133 is incomplete pending reclassification of documents from group H04N 5/23212.
Groups H04N 5/23212 and H04N 5/232133 should be considered in order to perform a complete search.
- M H04N 5/23218 {Control of camera operation based on recognized objects}
- WARNING
Group H04N 5/23218 is incomplete pending reclassification of documents from group H04N 5/232.
Groups H04N 5/232 and H04N 5/23218 should be considered in order to perform a complete search.

- M H04N 5/23227 . . . {involving internal camera communication with the image sensor, e.g. synchronizing or multiplexing SSIS control signals}
- WARNING
Group H04N 5/23227 is incomplete pending reclassification of documents from group H04N 5/232.
Groups H04N 5/232 and H04N 5/23227 should be considered in order to perform a complete search.
- M H04N 5/23241 . . . {Control of camera operation in relation to power supply}
- WARNING
Group H04N 5/23241 is impacted by reclassification into group H04N 5/232411.
Groups H04N 5/23241 and H04N 5/232411 should be considered in order to perform a complete search.
- M H04N 5/232411 . . . {where power supply is reduced or conserved by affecting camera operations, e.g. sleep mode, hibernation mode, power off or turning off selective parts of the camera}
- WARNING
Group H04N 5/232411 is incomplete pending reclassification of documents from group H04N 5/23241.
Groups H04N 5/23241 and H04N 5/232411 should be considered in order to perform a complete search.
- M H04N 5/23293 . . . {Electronic viewfinders}
- WARNING
Group H04N 5/23293 is impacted by reclassification into groups H04N 5/232933, H04N 5/232935, H04N 5/232939, H04N 5/232941, and H04N 5/232945.
All groups listed in this Warning should be considered in order to perform a complete search.
- M H04N 5/232933 . . . {Graphical User Interface [GUI] specifically adapted for controlling image capture or setting capture parameters, e.g. using a touchscreen}
- WARNING
Groups H04N 5/232933 and H04N 5/232935 are incomplete pending reclassification of documents from group H04N 5/23293.
Groups H04N 5/23293, H04N 5/232933 and H04N 5/232935 should be considered in order to perform a complete search.
- M H04N 5/232939 . . . {for displaying additional information relating to control or operation of the camera}
- WARNING
Groups H04N 5/232939, H04N 5/232941 and H04N 5/232945 are incomplete pending reclassification of documents from group H04N 5/23293.
Groups H04N 5/23293, H04N 5/232939, H04N 5/232941 and H04N 5/232945 should be considered in order to perform a complete search.

- M H04N 5/23299
- • • {Controlling the position of the camera for changing the field of view, e.g. panning, tilting or tracking of objects (TV type tracking systems [G01S 3/7864](#); tracking movement of a target in burglar, theft or intruder alarms, using TV cameras [G08B 13/19608](#)}
- WARNING**
~~Group H04N 5/23299 is incomplete pending reclassification of documents from group H04N 5/232.~~
~~Groups H04N 5/232 and H04N 5/23299 should be considered in order to perform a complete search.~~
- U H04N 5/30
- Transforming light or analogous information into electric information ([H04N 5/222](#) takes precedence; scanning details [H04N 3/00](#))
- U 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.
- U H04N 5/357
- • • Noise processing, e.g. detecting, correcting, reducing or removing noise
- M H04N 5/3572
- • • {the noise originating only from the lens unit, e.g. flare, shading, vignetting or "cos4" (suppressing or minimizing noise in picture signal generation [H04N 5/217](#); correction of colour aberration from a lens [H04N 9/04517](#))}
- WARNING**
~~Group H04N 5/3572 is impacted by reclassification into groups H04N 5/35721, H04N 9/04517, and H04N 9/04519.~~
~~All groups listed in this Warning should be considered in order to perform a complete search.~~
- M H04N 5/35721
- • • • {involving a transfer function modeling the optical system, e.g. Optical Transfer Function [OTF], Phase Transfer Function [PhTF] or Modulation Transfer Function [MTF]}
- WARNING**
~~Group H04N 5/35721 is incomplete pending reclassification of documents from group H04N 5/3572.~~
~~Groups H04N 5/3572 and H04N 5/35721 should be considered in order to perform a complete search.~~
- M H04N 5/369
- • • SSIS architecture; Circuitry associated therewith
- WARNING**
~~Group H04N 5/369 is impacted by reclassification into group H04N 5/379.~~
~~Groups H04N 5/369 and H04N 5/379 should be considered in order to perform a complete search.~~
- M H04N 5/3696
- • • • {SSIS architecture characterized by non-identical, non-equidistant or non-planar pixel layout, sensor embedding other types of pixels not meant for producing an image signal, e.g. fovea sensors or display pixels (Imager structures [H01L 27/146](#))}
- WARNING**
~~Group H04N 5/3696 is impacted by reclassification into groups H01L 27/146 — H01L 27/14893, H01L 27/307, H04N 5/36961, H04N 5/36963, and H04N 5/36965.~~
~~All groups listed in this Warning should be considered in order to perform a complete search.~~

- M H04N 5/36961
- • • • {the other type of pixels are pixels specially adapted for focusing, e.g. phase difference pixel sets}
- WARNING**
Group H04N 5/36961 is incomplete pending reclassification of documents from group H04N 5/3696.
Groups H04N 5/3696 and H04N 5/36961 should be considered in order to perform a complete search.
- M H04N 5/36963
- • • • {Details of pixels used only for dark current, e.g. dummy pixels or optical black pixels}
- WARNING**
Group H04N 5/36963 is incomplete pending reclassification of documents from group H04N 5/3696.
Groups H04N 5/3696 and H04N 5/36963 should be considered in order to perform a complete search.
- M H04N 5/36965
- • • • {the other type of pixels are pixels for depth measurement, e.g. RGBZ where Z is the depth pixel or embedded time-of-flight pixels (depth pixels used only for focusing [H04N 5/36961](#))}
- WARNING**
Group H04N 5/36965 is incomplete pending reclassification of documents from group H04N 5/3696.
Groups H04N 5/3696 and H04N 5/36965 should be considered in order to perform a complete search.
- M H04N 5/379
- • • • {Details of the architecture or circuitry being divided to different or multiple substrates, chips or circuit boards, e.g. stacked image sensors (line sensors [H04N 5/3694](#))}
- WARNING**
Group H04N 5/379 is incomplete pending reclassification of documents from group H04N 5/369.
Groups H04N 5/369 and H04N 5/379 should be considered in order to perform a complete search.
- U H04N 9/00** **Details of colour television systems**
- U H04N 9/04
- Picture signal generators
- M H04N 9/045
- {using solid-state devices (scanning of colour motion picture films [H04N 9/11](#); Imager structures [H01L 27/146](#))}
- WARNING**
Group H04N 9/045 is impacted by reclassification into groups H01L 27/146 – H01L 27/14893, H01L 27/307, H04N 9/0451, H04N 9/04511, H04N 9/04513, H04N 9/04515, H04N 9/04517, H04N 9/04519, H04N 9/04521, H04N 9/0455, H04N 9/04551, H04N 9/04553, H04N 9/04555, H04N 9/04557, H04N 9/04559, H04N 9/04561, and H04N 9/04563.
All groups listed in this Warning should be considered in order to perform a complete search.
- M H04N 9/0451
- • • {characterized by colour imaging operations}
- WARNING**
Group H04N 9/0451 is incomplete pending reclassification of documents from group H04N 9/045.
Groups H04N 9/045 and H04N 9/0451 should be considered in order to perform a complete search.

- M H04N 9/04511 . . . {by partially reading a SSIS to preserve the colour pattern with or without loss of information}
- WARNING
Group H04N 9/04511 is incomplete pending reclassification of documents from group H04N 9/045.
Groups H04N 9/045 and H04N 9/04511 should be considered in order to perform a complete search.
- M H04N 9/04513 . . . {to modify Gamut}
- WARNING
Group H04N 9/04513 is incomplete pending reclassification of documents from group H04N 9/045.
Groups H04N 9/045 and H04N 9/04513 should be considered in order to perform a complete search.
- M H04N 9/04515 . . . {Demosaicing, e.g. interpolating colour pixel values (Computational demosaicing [G06T 3/4015](#))}
- WARNING
Group H04N 9/04515 is incomplete pending reclassification of documents from group H04N 9/045.
Groups H04N 9/045 and H04N 9/04515 should be considered in order to perform a complete search.
- M H04N 9/04517 . . . {Correcting colour aberration of lenses}
- WARNING
Groups H04N 9/04517 and H04N 9/04519 are incomplete pending reclassification of documents from groups H04N 5/3572 and H04N 9/045.
Groups H04N 5/3572, H04N 9/045, H04N 9/04517, and H04N 9/04519 should be considered in order to perform a complete search.
- M H04N 9/04521 . . . {Colour sequential image capture, e.g. using a colour wheel}
- WARNING
Group H04N 9/04521 is incomplete pending reclassification of documents from group H04N 9/045.
Groups H04N 9/045 and H04N 9/04521 should be considered in order to perform a complete search.
- M H04N 9/0455 . . . {Colour filter architecture (colour filters structurally associated with image sensors [H01L 27/146](#))}
- WARNING
Group H04N 9/0455 is incomplete pending reclassification of documents from group H04N 9/045.
Groups H04N 9/045 and H04N 9/0455 should be considered in order to perform a complete search.
- M H04N 9/04551 . . . {Mosaic colour filter}
- WARNING
Group H04N 9/04551 is incomplete pending reclassification of documents from group H04N 9/045.
Groups H04N 9/045 and H04N 9/04551 should be considered in order to perform a complete search.

- M H04N 9/04553 {including elements transmitting or passing infrared wavelengths}
- WARNING
Group H04N 9/04553 is incomplete pending reclassification of documents from group H04N 9/045.
Groups H04N 9/045 and H04N 9/04553 should be considered in order to perform a complete search.
- M H04N 9/04555 {including elements transmitting or passing panchromatic light, e.g. white light}
- WARNING
Group H04N 9/04555 is incomplete pending reclassification of documents from group H04N 9/045.
Groups H04N 9/045 and H04N 9/04555 should be considered in order to perform a complete search.
- M H04N 9/04557 {based on three different wavelength filter elements}
- WARNING
Group H04N 9/04557 is incomplete pending reclassification of documents from group H04N 9/045.
Groups H04N 9/045 and H04N 9/04557 should be considered in order to perform a complete search.
- M H04N 9/04559 {based on four or more different wavelength filter elements}
- WARNING
Group H04N 9/04559 is incomplete pending reclassification of documents from group H04N 9/045.
Groups H04N 9/045 and H04N 9/04559 should be considered in order to perform a complete search.
- M H04N 9/04561 {using complementary colours}
- WARNING
Group H04N 9/04561 is incomplete pending reclassification of documents from group H04N 9/045.
Groups H04N 9/045 and H04N 9/04561 should be considered in order to perform a complete search.
- M H04N 9/04563 {colour separation based on photon absorption depth, e.g. full colour resolution obtained simultaneously at each pixel location}
- WARNING
Group H04N 9/04563 is incomplete pending reclassification of documents from group H04N 9/045.
Groups H04N 9/045 and H04N 9/04563 should be considered in order to perform a complete search.

Project: RP0489-F (H04N)

U H04N 13/00 Stereoscopic video systems; Multi-view video systems; Details thereof

NOTE

This group covers systems providing a three-dimensional [3D] effect, or different views to one or more viewers by means of electronic signals representing 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}

- U H04N 13/10
- Processing, recording or transmission of stereoscopic or multi-view image signals
- U H04N 13/106
- • Processing image signals (for multi-view video sequence encoding [H04N 19/597](#))
- M 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.
- M 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.
- M 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.
- M 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.
- U H04N 13/204
- • using stereoscopic image cameras (stereoscopic photography [G03B 35/00](#))
- U H04N 13/207
- • • using a single 2D image sensor
- M 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.
- M 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.
- M 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.
- M 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.
- M 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.
- M 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.
- U H04N 13/261
- • with monoscopic-to-stereoscopic image conversion
- M 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.
- M H04N 13/30
- Image reproducers (optical systems for producing stereoscopic or other three-dimensional effects [G02B 30/00](#))
- 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.
- U H04N 13/302
- • for viewing without the aid of special glasses, i.e. using autostereoscopic displays
- M 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.
- M 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.

- M 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.

- M 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.

- M 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.

- M 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.

- M 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.

- M 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.

- M 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.

- M 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.

Project: MP0475 (H04Q)

M H04Q

SELECTING (switches, relays, selectors ~~H01H~~; ~~electronic switches H03K 17/00~~; ~~wireless communication networks H04W~~)

NOTES

1. This subclass covers:

- methods, circuits, or apparatus for establishing selectively a connection between a desired number of stations (normally two), or between a main station and a desired number of substations (normally one) for the purpose of transferring information via this connection after it has been established;
- selective calling arrangements over connections already established.

In either case, the connection may be made by means of electric conductors or electromagnetic waves.

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

- "subscriber" is a general term for terminal equipment, e.g. telephone for public use;
- "substation" means a subscriber or monitoring equipment which may connect a single subscriber to a line without choice as to subscriber;
- "satellite" is a kind of exchange the operation of which depends upon control signals received from a supervisory exchange;
- "switching centres" includes exchanges and satellites.

WARNING

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

M H04Q 1/00

Details of selecting apparatus or arrangements ~~{for establishing connections among stations for the purpose of transferring information via these connections}~~

- U H04Q 1/02
- Constructional details

- M H04Q 1/028
- {Subscriber network interface devices ~~(line interfacing in the subscriber set H04M 1/0293)}~~}

- M H04Q 1/06
- • Cable ducts or mountings specially adapted for exchange installations ~~(in general H02G)~~

- U H04Q 1/11
- • {Protection against environment}

- M H04Q 1/116
- • • {lightning or EMI protection, e.g. shielding or grounding ~~(suppression of noise or interference in transmission systems H04B 15/00)}~~}

- U H04Q 1/18 · Electrical details
- M H04Q 1/30 · · Signalling arrangements; Manipulation of signalling currents (multiplex systems providing for calling or supervisory signals [H04J 1/14](#), ~~H04Q 3/12~~[H04J 3/12](#); ~~telephone substation equipment H04M 1/00~~)

- U H04Q 3/00 Selecting arrangements ([H04Q 5/00](#) - [H04Q 11/00](#) take precedence)**
- U H04Q 3/0016 · {Arrangements providing connection between exchanges}
- M H04Q 3/0025 · · {Provisions for signalling ~~(circuitry in H04Q 1/30)~~}
- U H04Q 3/0029 · · {Provisions for intelligent networking}
- M H04Q 3/005 · · · {Personal ~~communications~~[communication](#) services, e.g. provisions for portability of subscriber numbers ~~(subscriber services provided at exchanges H04M 3/42)~~}

- U H04Q 3/42 · Circuit arrangements for indirect selecting controlled by common circuits, e.g. register controller, marker
- U H04Q 3/54 · · in which the logic circuitry controlling the exchange is centralised
- M H04Q 3/542 · · · {Logic circuits or arrangements therefor ~~(logic circuits in general H03K 19/00)~~}

- U H04Q 3/545 · · · using a stored programme
- M H04Q 3/54508 · · · · {Configuration, ~~initialization~~[initialisation](#)}

Project: RP0245-F (H04W)**M H04W 36/00 Hand-off or reselection arrangements**NOTE

In this group, local priority rules supersede the first-place priority rule (FPPR) applying throughout [H04W](#)

WARNING

~~Group H04W 36/00 is impacted by reclassification into group H04W 36/03. Groups H04W 36/00 and H04W 36/03 should be considered in order to perform a complete search.~~

- M H04W 36/0005 · {Control or signalling for completing the hand-off}

- WARNING
~~Group H04W 36/0005 is impacted by reclassification into groups H04W 36/0007 and H04W 36/0009. All groups listed in this Warning should be considered in order to perform a complete search.~~

- M H04W 36/0007 · · {for multicast or broadcast services, e.g. MBMS (multicast or broadcast application services [H04W 4/06](#); resource management for broadcast services [H04W 72/005](#); connection management for selective distribution or broadcast [H04W 76/40](#))}

- WARNING
~~Group H04W 36/0007 is incomplete pending reclassification of documents from group H04W 36/0005. Groups H04W 36/0005 and H04W 36/0007 should be considered in order to perform a complete search.~~

- M H04W 36/0009
- {for a plurality of users or terminals, e.g. group communication or moving wireless networks (user group management [H04W 4/08](#); processing of subscriber group data [H04W 8/186](#))}
- WARNING**
Group H04W 36/0009 is incomplete pending reclassification of documents from group H04W 36/0005.
Groups H04W 36/0005 and H04W 36/0009 should be considered in order to perform a complete search.
- M H04W 36/0055
- {Transmission and use of information for re-establishing the radio link}
- WARNING**
Group H04W 36/0055 is impacted by reclassification into groups H04W 36/0058, H04W 36/0069 and H04W 36/0079.
All groups listed in this Warning should be considered in order to perform a complete search.
- M H04W 36/0058
- • {Transmission of hand-off measurement information, e.g. measurement reports}
- WARNING**
Group H04W 36/0058 is incomplete pending reclassification of documents from group H04W 36/0055.
Groups H04W 36/0005 and H04W 36/0058 should be considered in order to perform a complete search.
- M H04W 36/0069
- • {in case of dual connectivity, e.g. CoMP, decoupled uplink/downlink or carrier aggregation (allocation of physical resources in CoMP or in carrier aggregation [H04L 5/0035](#))}
- WARNING**
Group H04W 36/0069 is incomplete pending reclassification of documents from group H04W 36/0055.
Groups H04W 36/0055 and H04W 36/0069 should be considered in order to perform a complete search.
- M H04W 36/0079
- • {in case of hand-off failure or rejection}
- WARNING**
Group H04W 36/0079 is incomplete pending reclassification of documents from groups H04W 36/0055 and H04W 36/30.
Groups H04W 36/0055, H04W 36/30 and H04W 36/0079 should be considered in order to perform a complete search.
- M H04W 36/0083
- • {Determination of parameters used for hand-off, e.g. generation or modification of neighbour cell lists}
- WARNING**
Group H04W 36/0083 is impacted by reclassification into groups H04W 36/00835, H04W 36/00837, and H04W 36/0085.
All groups listed in this Warning should be considered in order to perform a complete search.
- M H04W 36/00835
- • {Determination of the neighbour cell list}
- WARNING**
Group H04W 36/00835 is incomplete pending reclassification of documents from group H04W 36/0083.
Groups H04W 36/0083 and H04W 36/00835 should be considered in order to perform a complete search.

- M H04W 36/00837
- • • {Determination of triggering parameters for hand-off}
- WARNING
Group H04W 36/00837 is incomplete pending reclassification of documents from group H04W 36/0083. Groups H04W 36/0083 and H04W 36/00837 should be considered in order to perform a complete search.
- M H04W 36/0085
- • • {Hand-off measurements}
- WARNING
Group H04W 36/0085 is incomplete pending reclassification of documents from group H04W 36/0083. Groups H04W 36/0083 and H04W 36/0085 should be considered in order to perform a complete search.
- M H04W 36/03
- {Reselecting a link using a direct mode connection}
- WARNING
Group H04W 36/03 is incomplete pending reclassification of documents from group H04W 36/00. Groups H04W 36/03 and H04W 36/00 should be considered in order to perform a complete search.
- M H04W 36/12
- Reselecting a serving backbone network switching or routing node
- WARNING
Group H04W 36/12 is impacted by reclassification into group H04W 36/125. Groups H04W 36/12 and H04W 36/125 should be considered in order to perform a complete search.
- M H04W 36/125
- • {involving different types of service backbone}
- WARNING
Group H04W 36/125 is incomplete pending reclassification of documents from group H04W 36/12. Groups H04W 36/12 and H04W 36/125 should be considered in order to perform a complete search.
- U H04W 36/24
- Reselection being triggered by specific parameters {used to improve the performance of a single terminal}
- M H04W 36/30
- • by measured or perceived connection quality data
- WARNING
Group H04W 36/30 is impacted by reclassification into groups H04W 36/305 and H04W 36/0079. Groups H04W 36/30, H04W 36/305 and H04W 36/0079 should be considered in order to perform a complete search.
- M H04W 36/305
- • • {Reselection due to radio link failure (control signalling for hand-off failure [H04W 36/0079](#))}
- WARNING
Group H04W 36/305 is incomplete pending reclassification of documents from group H04W 36/30. Groups H04W 36/30 and H04W 36/305 should be considered in order to perform a complete search.

Project: RP0222-F (H05B)

U H05B 3/00 Ohmic-resistance heating

- M H05B 3/0004
- {Devices wherein the heating current flows through the material to be heated (Circuit arrangements for heating by passing the current directly across the material to be heated [H05B 3/0023](#); granular, powdered or fluid material [H05B 3/60](#))}
- WARNING**
Group H05B 3/0004 is incomplete pending reclassification of documents from group H05B 3/023.
Groups H05B 3/0004 and H05B 3/023 should be considered in order to perform a complete search.
- M H05B 3/0009
- • {the material to be heated being in motion}
- WARNING**
Group H05B 3/0009 is incomplete pending reclassification of documents from group H05B 3/023.
Groups H05B 3/023 and H05B 3/0009 should be considered in order to perform a complete search.
- U H05B 3/0033
- {Heating devices using lamps}
- U H05B 3/0038
- • {for industrial applications}
- M H05B 3/0047
- • • {for semiconductor manufacture}
- WARNING**
Group H05B 3/0047 is incomplete pending reclassification of documents from group H05B 3/143.
Groups H05B 3/0047 and H05B 3/143 should be considered in order to perform a complete search.
- U H05B 3/02
- Details
- D H05B 3/023
—(Frozen)
- • {the current passing through the material to be heated}
- WARNING**
Group H05B 3/023 is no longer used for the classification of documents as of August 1, 2018. The content of this group is being reclassified into groups H05B 3/0004 and H05B 3/0009.
Groups H05B 3/023, H05B 3/0004, and H05B 3/0009 should be considered in order to perform a complete search.
- U H05B 3/10
- Heater elements characterised by the composition or nature of the materials or by the arrangement of the conductor (compositions per se see the relevant subclasses)
- U H05B 3/12
- • characterised by the composition or nature of the conductive material
- U H05B 3/14
- • • the material being non-metallic
- U H05B 3/141
- • • • {Conductive ceramics, e.g. metal oxides, metal carbides, barium titanate, ferrites, zirconia, vitrous compounds}
- M H05B 3/143
- • • • • {applied to semiconductors, e.g. wafers heating ([H05B 3/0047](#) takes precedence)}
- WARNING**
Group H05B 3/143 is impacted by reclassification into group H05B 3/0047.
Groups H05B 3/143 and H05B 3/0047 should be considered in order to perform a complete search.

Project: RP0422 (Y10S)

U Y10S 435/00 Chemistry: molecular biology and microbiology

- D Y10S 435/96 · Immunohistochemical assay
 <administratively transferred to [G01N 2474/20](#) ADD>

Project: RP0441 (Y10T)**U Y10T 137/00****Fluid handling**

- U Y10T 137/7722 · Line condition change responsive valves
- C Y10T 137/7837 · · Direct response valves [i.e., check valve type]
- C Y10T 137/7838 · · · Plural
- C Y10T 137/7839 · · · · Dividing and recombining in a single flow path
- C Y10T 137/784 · · · · · Integral resilient member forms plural valves
- C Y10T 137/7841 · · · · · One valve carries head and seat for second valve
- C Y10T 137/7842 · · · · · Diverse types
- C Y10T 137/7843 · · · · · Integral resilient member forms plural valves
- C Y10T 137/7845 · · · · · With common biasing means
- C Y10T 137/7846 · · · · · Mechanically interconnected
- C Y10T 137/7847 · · · With leak passage
- C Y10T 137/7848 · · · · Permits flow at valve interface
- C Y10T 137/7849 · · · · Bypass in valve casing
- C Y10T 137/785 · · · With retarder or dashpot
- C Y10T 137/7851 · · · · End of valve forms dashpot chamber
- C Y10T 137/7852 · · · · End of valve moves inside dashpot chamber
- C Y10T 137/7853 · · · · · Enlarged piston on end of valve stem
- U Y10T 137/7854 · · · In couplings for coaxial conduits, e.g., drill pipe check valves
- U Y10T 137/7855 · · · · Valve seat threaded into a coupling element
- U Y10T 137/7856 · · · · Valve seat formed on or carried by a coupling element
- U Y10T 137/7857 · · · · Valve seat clamped between coupling elements
- U Y10T 137/7858 · · · With means for selecting area of valve or seat
- C Y10T 137/7859 · · · Single head, plural ports in parallel
- C Y10T 137/786 · · · · Concentric ports
- C Y10T 137/7861 · · · · Annular head
- C Y10T 137/7862 · · · · · Central post on seat
- C Y10T 137/7863 · · · · · · Stop
- C Y10T 137/7864 · · · · · · With guide
- C Y10T 137/7865 · · · · · · Guide
- C Y10T 137/7866 · · · Plural seating
- C Y10T 137/7867 · · · · Sequential
- C Y10T 137/7868 · · · · · Resilient gasket
- U Y10T 137/7869 · · · Biased open
- U Y10T 137/787 · · · · Oppositely swinging vanes
- U Y10T 137/7871 · · · · Weight biased
- U Y10T 137/7873 · · · · · Ball valves
- U Y10T 137/7874 · · · · · Edge pivoted valve
- U Y10T 137/7875 · · · · Pivoted valves
- C Y10T 137/7876 · · · With external means for opposing bias

- C Y10T 137/7877 With means for retaining external means in bias opposing position
- C Y10T 137/7878 . . . With bias adjustment indicator
- C Y10T 137/7879 . . . Resilient material valve
- C Y10T 137/788 Having expansible port
- C Y10T 137/7881 Apertured plate
- C Y10T 137/7882 Having exit lip
- C Y10T 137/7883 With biasing means
- C Y10T 137/7884 Side vent
- C Y10T 137/7885 Multiple slit
- C Y10T 137/7886 Internally extending mount
- C Y10T 137/7887 Center flexing strip
- C Y10T 137/7888 With valve member flexing about securement
- C Y10T 137/7889 Sleeve
- C Y10T 137/789 Central mount
- C Y10T 137/7891 Flap or reed
- C Y10T 137/7892 With stop
- D Y10T 137/7893 With spring
<administratively transferred to [F16K 15/161](#)>
- D Y10T 137/7894 With weight
<administratively transferred to [F16K 15/161](#)>
- D Y10T 137/7895 Peripherally secured diaphragm
<administratively transferred to [F16K 15/144](#)>
- D Y10T 137/7896 Annulus
<administratively transferred to [F16K 15/142](#)>
- U Y10T 137/7897 . . . Vacuum relief type
- C Y10T 137/7898 . . . Pivoted valves
- C Y10T 137/79 Head retained by removable closure
- C Y10T 137/7901 Valve head movably connected for accommodation to seat
- U Y10T 137/7902 Valve mounted on end of pipe
- U Y10T 137/7903 Weight biased
- C Y10T 137/7904 . . . Reciprocating valves
- C Y10T 137/7905 Plural biasing means
- C Y10T 137/7906 Cam means for adjusting and fixing bias
- U Y10T 137/7907 Varying effective lever arm
- U Y10T 137/7908 Weight biased
- U Y10T 137/7909 Valve body is the weight
- U Y10T 137/791 Ball valves
- U Y10T 137/7911 Removable cage
- U Y10T 137/7912 Separable seat
- U Y10T 137/7913 Guided head
- U Y10T 137/7914 Cage
- U Y10T 137/7915 Guide stem
- U Y10T 137/7916 With closing stop
- U Y10T 137/7917 Oppositely disposed

- U Y10T 137/7918 Head slidable on guide rod
- U Y10T 137/7919 Guide and seat integral unit
- U Y10T 137/792 Guide and closure integral unit
- U Y10T 137/7921 Weight coaxial with valve
- C Y10T 137/7922 Spring biased
- C Y10T 137/7923 With means to protect spring from fluid
- C Y10T 137/7924 Spring under tension
- C Y10T 137/7925 Piston-type valves
- C Y10T 137/7927 Ball valves
- C Y10T 137/7928 With follower
- C Y10T 137/7929 Spring coaxial with valve
- U Y10T 137/793 Broken valve parts retainer
- C Y10T 137/7931 Spring in inlet
- U Y10T 137/7932 Valve stem extends through fixed spring abutment
- U Y10T 137/7933 Yoke or cage-type support for valve stem
- U Y10T 137/7934 Spring abuts removable valve stem guide
- U Y10T 137/7935 Head slides on guide-rod concentric with spring
- C Y10T 137/7936 Spring guides valve head
- U Y10T 137/7937 Cage-type guide for stemless valves
- C Y10T 137/7938 Guide means integral and coplanar with valve disk
- C Y10T 137/7939 Head between spring and guide