

Compilation of Changes to the CPC Scheme Between 2026.01 and 2026.05

Presentation Details

- Entries for new symbols and headings: *Black text in italics*
- Entries for existing symbols and headings
- text insertions: *Green text in italics*
- 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, "Unknown" is given for the Project information.
 - Projects ending in "-F" indicate finalisation after reclassification was completed.

Project: RP10480 (A41G)

C A41G 3/00

Wigs (for dolls only [A63H 3/44](#))

WARNING

Group [A41G 3/00](#) is impacted by reclassification into group [A41G 3/0095](#). Groups [A41G 3/00](#) and [A41G 3/0095](#) should be considered in order to perform a complete search.

D A41G 3/0066

- {Planting hair on bases for wigs}
- <administratively transferred to [A41G 3/0077](#)>

M A41G 3/0075

- {~~Methods and machines~~ *Processes or apparatus* for making wigs}

N A41G 3/0077

- • {for fixing hair filaments on wig bases}

M A41G 3/0083

- {~~Filaments for making wigs~~ *Wigs characterised by their hair filaments*}~~{artificial filaments D01F 6/00}~~

M A41G 3/0091

- {Sweat absorbing means or deodorants *for wigs*}

N A41G 3/0095

- {Methods for attaching wigs to user's head}

WARNING

Group [A41G 3/0095](#) is incomplete pending reclassification of documents from group [A41G 3/00](#). Groups [A41G 3/00](#) and [A41G 3/0095](#) should be considered in order to perform a complete search.

C A41G 5/00

Hair pieces, inserts, rolls, pads, or the like; Toupées

WARNING

Group [A41G 5/00](#) is impacted by reclassification into group [A41G 5/0095](#). Groups [A41G 5/00](#) and [A41G 5/0095](#) should be considered in order to perform a complete search.

M A41G 5/004

- {~~Hair pieces~~ *Hairpieces, e.g. hair extensions*}

M A41G 5/0086

- • {Applicators or tools for applying ~~hair extensions~~ *hairpieces to the user*}

M A41G 5/0093

- {~~Hair accessories~~ connected to ~~a head covering~~ *head accessories or to hair accessories*, e.g. ~~scarf~~ *connected to scarves*}

N A41G 5/0095

- {Methods for attaching toupées, hairpieces or hair extensions to the user}

WARNING

Group [A41G 5/0095](#) is incomplete pending reclassification of documents from group [A41G 5/00](#). Groups [A41G 5/00](#) and [A41G 5/0095](#) should be considered in order to perform a complete search.

- C A41G 5/02
- Artificial eyelashes; Artificial eyebrows
- WARNING
 Group A41G 5/02 is impacted by reclassification into groups A41G 5/026 and A41G 5/027.
 Groups A41G 5/02, A41G 5/026 and A41G 5/027 should be considered in order to perform a complete search.
- N A41G 5/026
- {Applicators or tools for attaching artificial eyelashes or eyebrows to user's head}
- WARNING
 Group A41G 5/026 is incomplete pending reclassification of documents from group A41G 5/02.
 Groups A41G 5/02 and A41G 5/026 should be considered in order to perform a complete search.
- N A41G 5/027
- {Methods for attaching artificial eyelashes or eyebrows to user's head}
- WARNING
 Group A41G 5/027 is incomplete pending reclassification of documents from group A41G 5/02.
 Groups A41G 5/02 and A41G 5/027 should be considered in order to perform a complete search.

Project: MP12735 (A45C)

M A45C

PURSES; LUGGAGE; HAND CARRIED BAGSNOTE

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

- "luggage" means containers for personal belongings for a journey, e.g. travelling bags, suitcases, trunks.
- {"flexible" means providing a structure with no considerable resistance against deformation or decrease of the enclosed volume, whereby a two-dimensional stability may be provided, e.g. by a stiffened bottom;}
- {"semi-rigid" means providing a structure with three-dimensional stability in an unloaded state and resilient resistance against deformation, or allowing a limited decrease, of the enclosed volume, e.g. by a resilient frame or a rigid frame with flexible side walls;}
- {"rigid" means providing a structure with three-dimensional stability allowing no deformation leading to a considerable decrease of the enclosed volume;}
- {"collapsible" means providing a feature other than use of flexible material for reducing the dimensions of flexible luggage or the enclosed volume of semi-rigid or rigid luggage;}
- {"extensible" means providing a feature other than use of flexible material for increasing the enclosed volume of flexible, semi-rigid or rigid luggage.}

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

- "flexible" means providing a structure with no considerable resistance against deformation or decrease of the enclosed volume, whereby a two-dimensional stability may be provided, e.g. by a stiffened bottom
- "semi-rigid" means providing a structure with three-dimensional stability in an unloaded state and resilient resistance against deformation, or allowing a limited decrease, of the enclosed volume, e.g. by a resilient frame or a rigid frame with flexible side walls
- "rigid" means providing a structure with three-dimensional stability allowing no deformation leading to a considerable decrease of the enclosed volume

- "collapsible" means providing a feature other than use of flexible material for reducing the dimensions of flexible luggage or the enclosed volume of semi-rigid or rigid luggage
- "extensible" means providing a feature other than use of flexible material for increasing the enclosed volume of flexible, semi-rigid or rigid luggage

WARNING

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

Project: MP12511 (A47C)

M A47C

CHAIRS; SOFAS; BEDS

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:

[A47C 23/053](#) covered by [A47C 23/05](#), [A47C 23/0507](#),
[A47C 23/0515](#)

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 A47C 1/00

Chairs adapted for special purposes (chairs or personal conveyances specially adapted for patients or disabled persons, e.g. wheelchairs, [A61G 5/00](#); operating chairs or dental chairs [A61G 15/00](#))

U A47C 1/02

- Reclining or easy chairs

U A47C 1/022

- • having independently-adjustable supporting parts

M A47C 1/023

- • • the parts being horizontally-adjustable seats ~~{; Expandable seats or the like, e.g. seats with horizontally adjustable parts}~~

M A47C 1/024

- • • the parts, being the back-rest, or the back-rest and seat unit, having adjustable ~~{and lockable}~~ inclination

M A47C 1/025

- • • • by means of a ~~{rack-and-pinion}~~ or like gearing mechanism

M A47C 1/026

- • • • by means of a ~~peg-and-notch~~ or ~~{pawl-and-ratchet}~~ mechanism

U A47C 1/028

- • • for changing a straight chair into an easy chair {, e.g. by inverting or tilting seat and back-rest in the base frame or by overturning the whole chair}

M A47C 1/029

- • • • by changing the length or the inclination of the legs ~~{{(varying the height of a seat by inclining the legs A47C 3/36)}}~~

M A47C 1/03

- • • the parts being arm-rests ~~{{(conversion into a bed A47C 17/12)}}~~

U A47C 1/031

- • having coupled {concurrently} adjustable supporting parts

U A47C 1/034

- • • the parts including a leg-rest or foot-rest ([A47C 1/037](#) takes precedence)

M A47C 1/035

- • • • in combination with movably ~~-~~coupled seat and back-rest, ~~{i.e. the seat and back-rest being movably coupled in such a way that the extension mechanism of the foot-rest is actuated at least by the relative movements of seat and backrest}~~

M A47C 1/04

- Hairdressers' or similar chairs ~~{, e.g. beauty salon chairs}~~

U A47C 1/12

- Theatre, auditorium or similar chairs (detachable seats for mounting on stadium benches [A47C 1/16](#))

M A47C 1/13

- • Indicators; Devices for reserving or the like ~~{{(coin-freed apparatus for seats or footstools G07F 17/08)}}~~

U A47C 3/00

Chairs characterised by structural features; Chairs or stools with rotatable or vertically-adjustable seats ([A47C 1/00](#), [A47C 4/00](#) take precedence)

U A47C 3/02

- Rocking chairs

M	A47C 3/025	<ul style="list-style-type: none"> • with seat, or seat and back-rest unit elastically {or pivotally}, <i>elastically</i> mounted in a rigid {base} frame
M	A47C 3/026	<ul style="list-style-type: none"> • • with <i>a</i> central column, e.g. rocking office chairs; Tilting chairs
M	A47C 3/027	<ul style="list-style-type: none"> • • with curved rocking members between seat and {base} frame
M	A47C 3/04	<ul style="list-style-type: none"> • Stackable chairs <i>or nesting chairs</i>; Nesting chairs
M	A47C 3/12	<ul style="list-style-type: none"> • with shell-shape<i>shaped</i> seat and back-rest unit, e.g. having arm-rests
U	A47C 3/20	<ul style="list-style-type: none"> • Chairs or stools with vertically-adjustable seats
M	A47C 3/34	<ul style="list-style-type: none"> • • with pins coacting with holes {or bolt-and-nut adjustment}
U	A47C 7/00	Parts, details, or accessories of chairs or stools
U	A47C 7/02	<ul style="list-style-type: none"> • Seat parts
M	A47C 7/14	<ul style="list-style-type: none"> • • of adjustable shape; elastically mounted {; adaptable to a user contour or ergonomic seating positions (movably-coupled seat and backrests with elastic adjustment means A47C 1/03261; elastically-mounted back-rests or backrest-seat units in the base frame A47C 7/44)}
U	A47C 7/36	<ul style="list-style-type: none"> • Supports for the head or the back
U	A47C 7/40	<ul style="list-style-type: none"> • • for the back
M	A47C 7/44	<ul style="list-style-type: none"> • • • with elastically-mounted {back-rest or backrest-seat unit in the base} frame
U	A47C 7/56	<ul style="list-style-type: none"> • Parts or details of tipping-up chairs, e.g. of theatre chairs
M	A47C 7/60	<ul style="list-style-type: none"> • • Use of locks or ledges for limiting the seat movement {{coin-freed apparatus for seats or footstools G07F 17/08}}
U	A47C 7/62	<ul style="list-style-type: none"> • Accessories for chairs
U	A47C 7/72	<ul style="list-style-type: none"> • • Adaptations for incorporating lamps, radio sets, bars, telephones, ventilation, heating or cooling arrangements or the like
M	A47C 7/74	<ul style="list-style-type: none"> • • • for ventilation, heating or cooling {{actuated by rocking the chair A47C 3/02}}
U	A47C 9/00	Stools for specified purposes
M	A47C 9/007	<ul style="list-style-type: none"> • {High stools, e.g. bar stools {children's high chairs A47D 1/00}}
U	A47C 9/02	<ul style="list-style-type: none"> • Office stools; Workshop stools
M	A47C 9/022	<ul style="list-style-type: none"> • • {movably mounted on a working-table or the like {for hairdressers A47C 1/08}}
M	A47C 9/06	<ul style="list-style-type: none"> • Wall stools {; Stools hingedly mounted against the wall}
U	A47C 13/00	Convertible chairs, stools or benches (step-stools requiring conversion between the step and seat functions A47C 12/02)
M	A47C 13/005	<ul style="list-style-type: none"> • {Modular seating {chairs connectible into a row A47C 1/124}}
U	A47C 15/00	Other seating furniture
M	A47C 15/002	<ul style="list-style-type: none"> • {Corner seating furniture, e.g. corner sofas {changing corner couches into double bed A47C 17/36}}
U	A47C 15/004	<ul style="list-style-type: none"> • {Seating furniture for specified purposes not covered by main groups A47C 1/00 or A47C 9/00}
M	A47C 15/006	<ul style="list-style-type: none"> • • {Floating seats {floatable vessel furniture for life-saving B63C 9/30}}

Project: MP12735 (A47C)

M **A47C 17/00**
- ~~A47C 31/00~~
A47C 27/00

Sofas; Beds**NOTE**

In groups [A47C 17/00](#) - [A47C 27/00](#), the following terms or expressions are used with the meaning indicated:

- "bedstead" is used only for the frame of a bed;

- "bed" includes bedsteads combined with spring mattresses, stuffed mattresses; or similar means to enable the lying of persons thereon;
- *"stuffed mattresses" may include metal springs;*
- {"spring mattresses" do not include any stuffed material;- .}
- *"stuffed mattresses" may include metal springs.*

Project: MP12511 (A47C)

U	A47C 17/00	Sofas; Couches; Beds
U	A47C 17/04	• {Seating furniture, e.g.} sofas, couches, settees, or the like, with movable parts {changeable to beds}; Chair beds
U	A47C 17/16	• • {Seating furniture} changeable to beds by tilting or pivoting the back-rest
U	A47C 17/20	• • • thereby uncovering one or more auxiliary parts previously hidden (A47C 17/22 takes precedence)
M	A47C 17/207	• • • with seat cushion consisting of {multiple} superposed parts, at least one lower {hidden} part being used to form part of the {bed} surface
M	A47C 17/213	• • • the surface, when used for lying down {in a bed position}, consisting of one side of the {seating furniture} seat frame and the back-rest frame
M	A47C 17/22	• • {Seating furniture having non-movable back-rest changeable to beds} with means for uncovering a previously hidden mattress or similar bed part
M	A47C 17/23	• • • the lying down {bed} surface partly consisting of one side of the seat
U	A47C 17/38	• Wall beds
M	A47C 17/48	• • characterised by two or more relatively-movable {mattress-support} parts
U	A47C 21/00	Attachments for beds, e.g. sheet holders or bed-cover holders (bed tables supported on the bedstead A47B 23/02); Ventilating, cooling or heating means in connection with bedsteads or mattresses
M	A47C 21/006	• {Oscillating, balancing or vibrating mechanisms connected to the bedstead {for children's beds A47D 9/02}}
U	A47C 21/02	• {Holders for loose bed elements, e.g.} sheet holders; bed cover holders
U	A47C 21/022	• • {Sheet holders; Bed cover holders}
M	A47C 21/024	• • • {for holding bed covers above the body of the user {bed-clothes supports to alleviate the weight of the bed-clothes on the patient A61G 7/0501}}
M	A47C 21/06	• Mattress underlays {mattress tickings or covers A47C 27/002}
U	A47C 23/00	Spring mattresses with rigid frame or forming part of the bedstead, e.g. box springs; Divan bases; Slatted bed bases
M	A47C 23/007	• {Edge stiffeners {for chair seats A47C 7/342; for stuffed mattresses A47C 27/06}}
M	A47C 23/06	• using wooden springs, e.g. of slat type {-; Slatted bed bases}
U	A47C 27/00	Spring, stuffed or fluid mattresses {or cushions} specially adapted for chairs, beds or sofas
M	A47C 27/002	• {Mattress or cushion tickings or covers {bed linen, blankets or counterpanes A47G 9/02}}
U	A47C 27/04	• with spring inlays (A47C 27/20 takes precedence)
M	A47C 27/06	• • Spring inlays <i>or spring units therefor</i>
U	A47C 27/14	• with foamed material inlays
M	A47C 27/20	• • with springs moulded in, or situated in {cavities or} openings in foamed material

- U A47C 31/00** Details or accessories for chairs, beds, or the like, not provided for in other groups of this subclass, e.g. upholstery fasteners, mattress protectors, stretching devices for mattress nets
- M A47C 31/08 • Mattress hand-straps ~~{, hand-grips or the like}~~
- U A47C 31/10 • Loose {or removable} furniture covers
- M A47C 31/11 • • for chairs {(for headrests only [A47C 7/386](#); ~~removable protective covers for car-seats B60N 2/60~~)}

Project: RP12830-C (A61L)

- U A61L 2/00** Disinfection or sterilisation of materials or objects, in general; Accessories therefor

NOTE

In this group, it is desirable to add the indexing codes of group [A61L 2103/00](#).

- U A61L 2/16 • using chemical substances
- C A61L 2/18 • • Liquid substances

WARNING

Group [A61L 2/18](#) is impacted by reclassification into groups [A61L 2/183](#) and [A61L 2/186](#).

Groups [A61L 2/18](#), [A61L 2/183](#) and [A61L 2/186](#) should be considered in order to perform a complete search.

- M A61L 2/183 • • • Ozone dissolved in a liquid

WARNING

Group [A61L 2/183](#) is incomplete pending reclassification of documents from group [A61L 2/18](#).

Groups [A61L 2/18](#) and [A61L 2/183](#) should be considered in order to perform a complete search.

- M A61L 2/186 • • • Peroxide solutions

WARNING

Group [A61L 2/186](#) is incomplete pending reclassification of documents from group [A61L 2/18](#).

Groups [A61L 2/18](#) and [A61L 2/186](#) should be considered in order to perform a complete search.

- C A61L 2/20 • • Gaseous substances, e.g. vapours

WARNING

Group [A61L 2/20](#) is impacted by reclassification into groups [A61L 2/202](#), [A61L 2/204](#), [A61L 2/206](#) and [A61L 2/208](#).

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

- M A61L 2/202 • • • Ozone

WARNING

Group [A61L 2/202](#) is incomplete pending reclassification of documents from group [A61L 2/20](#).

Groups [A61L 2/20](#) and [A61L 2/202](#) should be considered in order to perform a complete search.

- M A61L 2/204 • • • Formaldehyde
- WARNING
Group A61L 2/204 is incomplete pending reclassification of documents from group A61L 2/20.
Groups A61L 2/20 and A61L 2/204 should be considered in order to perform a complete search.
- M A61L 2/206 • • • Ethylene oxide
- WARNING
Group A61L 2/206 is incomplete pending reclassification of documents from group A61L 2/20.
Groups A61L 2/20 and A61L 2/206 should be considered in order to perform a complete search.
- M A61L 2/208 • • • Hydrogen peroxide
- WARNING
Group A61L 2/208 is incomplete pending reclassification of documents from group A61L 2/20.
Groups A61L 2/20 and A61L 2/208 should be considered in order to perform a complete search.

Project: RP12086-F (B01J)

- U B01J 21/00 Catalysts comprising the elements, oxides, or hydroxides of magnesium, boron, aluminium, carbon, silicon, titanium, zirconium, or hafnium**
- M B01J 21/18 • Carbon
- WARNING
Group B01J 21/18 is incomplete pending reclassification of documents from group B01J 35/00.
Groups B01J 35/00 and B01J 21/18 should be considered in order to perform a complete search.
- M B01J 29/00 Catalysts comprising molecular sieves {(molecular sieves per se [C01B](#))}**
- NOTES
- In this group, the following term is used with the meaning indicated:
 - "zeolites" means:
 - crystalline aluminosilicates with base-exchange and molecular sieve properties, having three dimensional [3D], microporous lattice framework structure of tetrahedral oxide units;
 - compounds isomorphous to those of the former category, wherein the aluminium or silicon atoms in the framework are partly or wholly replaced by atoms of other elements, e.g. by gallium, germanium, phosphorus or boron.
 - If metals are introduced into the framework of the molecular sieve already in the synthesis stage, [B01J 29/86](#) - [B01J 29/89](#) take precedence.
 - Mixtures of molecular sieves are classified in [B01J 29/005](#) or [B01J 29/80](#) and receive indexing codes chosen from groups [B01J 29/03](#) - [B01J 29/89](#) to identify the individual constituents of these mixtures
- WARNING
Group B01J 29/00 is incomplete pending reclassification of documents from group B01J 35/00.
Groups B01J 35/00 and B01J 29/00 should be considered in order to perform a complete search.

M	B01J 35/00	<p>Catalysts, in general, characterised by their form or physical properties</p> <p><u>WARNING</u> Group B01J 35/00 is impacted by reclassification into groups B01J 35/20, B01J 35/70-B01J 35/77, B01J 35/80 and B01J 2235/00 – B01J 2235/30. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B01J 35/20	<ul style="list-style-type: none"> characterised by their non-solid state <p><u>WARNING</u> Group B01J 35/20 is incomplete pending reclassification of documents from group B01J 35/00. Groups B01J 35/00 and B01J 35/20 should be considered in order to perform a complete search.</p>
M	B01J 35/23	<ul style="list-style-type: none"> in a colloidal state <p><u>WARNING</u> Group B01J 35/23 is impacted by reclassification into group B01J 35/45. Groups B01J 35/23 and B01J 35/45 should be considered in order to perform a complete search.</p>
M	B01J 35/30	<ul style="list-style-type: none"> characterised by their physical properties <p><u>WARNING</u> Group B01J 35/30 is impacted by reclassification into groups B01J 35/34-B01J 35/38, B01J 35/395, B01J 35/70-B01J 35/77, B01J 35/80 and B01J 2235/00 – B01J 2235/30. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B01J 35/31	<ul style="list-style-type: none"> Density <p><u>WARNING</u> Group B01J 35/31 is impacted by reclassification into groups B01J 35/32, B01J 35/70-B01J 35/77, B01J 35/80 and B01J 2235/00 – B01J 2235/30. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B01J 35/32	<ul style="list-style-type: none"> Bulk density <p><u>WARNING</u> Group B01J 35/32 is incomplete pending reclassification of documents from group B01J 35/31. Groups B01J 35/31 and B01J 35/32 should be considered in order to perform a complete search.</p>
M	B01J 35/34	<ul style="list-style-type: none"> Mechanical properties <p><u>WARNING</u> Groups B01J 35/34 – B01J 35/38 are incomplete pending reclassification of documents from groups B01J 35/30 and B01J 35/50. All groups listed in this Warning should be considered in order to perform a complete search.</p>
U	B01J 35/391	<ul style="list-style-type: none"> {Physical properties of the active metal ingredient}

M	B01J 35/393	<ul style="list-style-type: none"> • • {Metal or metal oxide crystallite size} <p><u>WARNING</u> Group B01J 35/393 is impacted by reclassification into groups B01J 35/73, B01J 35/733, B01J 35/735, B01J 35/737 and B01J 2235/00–B01J 2235/30.– All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B01J 35/395	<ul style="list-style-type: none"> • • {Thickness of the active catalytic layer} <p><u>WARNING</u> Group B01J 35/395 is incomplete pending reclassification of documents from group B01J 35/30.– Groups B01J 35/30 and B01J 35/395 should be considered in order to perform a complete search.</p>
M	B01J 35/40	<ul style="list-style-type: none"> • characterised by dimensions, e.g. grain size (in a colloidal state B01J 35/23; crystallite size B01J 35/77) <p><u>WARNING</u> Group B01J 35/40 is impacted by reclassification into groups B01J 35/45 and B01J 35/77.– Groups B01J 35/40, B01J 35/45 and B01J 35/77 should be considered in order to perform a complete search.</p>
M	B01J 35/45	<ul style="list-style-type: none"> • • Nanoparticles <p><u>WARNING</u> Group B01J 35/45 is incomplete pending reclassification of documents from groups B01J 35/23 and B01J 35/40.– Groups B01J 35/23, B01J 35/40 and B01J 35/45 should be considered in order to perform a complete search.</p>
M	B01J 35/50	<ul style="list-style-type: none"> • characterised by their shape or configuration <p><u>WARNING</u> Group B01J 35/50 is impacted by reclassification into groups B01J 35/34–B01J 35/38, B01J 35/505, B01J 35/54, B01J 35/55 and B01J 2235/00–B01J 2235/30.– All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B01J 35/505	<ul style="list-style-type: none"> • • {with a non-spherical or unspecified core-shell structure} <p><u>WARNING</u> Group B01J 35/505 is incomplete pending reclassification of documents from group B01J 35/50.– Groups B01J 35/50 and B01J 35/505 should be considered in order to perform a complete search.</p>
M	B01J 35/51	<ul style="list-style-type: none"> • • Spheres <p><u>WARNING</u> Group B01J 35/51 is impacted by reclassification into groups B01J 35/52 and B01J 35/53.– Groups B01J 35/51, B01J 35/52 and B01J 35/53 should be considered in order to perform a complete search.</p>

M	B01J 35/52	<ul style="list-style-type: none"> • • • Hollow spheres <p><u>WARNING</u> Group B01J 35/52 is incomplete pending reclassification of documents from group B01J 35/51. Groups B01J 35/51 and B01J 35/52 should be considered in order to perform a complete search.</p>
M	B01J 35/53	<ul style="list-style-type: none"> • • • with a core-shell structure <p><u>WARNING</u> Group B01J 35/53 is incomplete pending reclassification of documents from group B01J 35/51. Groups B01J 35/51 and B01J 35/53 should be considered in order to perform a complete search.</p>
M	B01J 35/54	<ul style="list-style-type: none"> • • Bars or plates <p><u>WARNING</u> Group B01J 35/54 is incomplete pending reclassification of documents from group B01J 35/50. Groups B01J 35/50 and B01J 35/54 should be considered in order to perform a complete search.</p>
M	B01J 35/55	<ul style="list-style-type: none"> • • Cylinders or rings <p><u>WARNING</u> Group B01J 35/55 is incomplete pending reclassification of documents from group B01J 35/50. Groups B01J 35/50 and B01J 35/55 should be considered in order to perform a complete search.</p>
M	B01J 35/56	<ul style="list-style-type: none"> • • Foraminous structures having flow-through passages or channels, e.g. grids or three-dimensional [3D] monoliths <p><u>WARNING</u> Group B01J 35/56 is impacted by reclassification into group B01J 35/57. Groups B01J 35/56 and B01J 35/57 should be considered in order to perform a complete search.</p>
M	B01J 35/57	<ul style="list-style-type: none"> • • • Honeycombs <p><u>WARNING</u> Group B01J 35/57 is incomplete pending reclassification of documents from group B01J 35/56. Groups B01J 35/56 and B01J 35/57 should be considered in order to perform a complete search.</p>
M	B01J 35/70	<ul style="list-style-type: none"> • characterised by their crystalline properties, e.g. semi-crystalline (catalysts comprising carbon B01J 21/18; molecular sieves B01J 29/00) <p><u>WARNING</u> Groups B01J 35/70 and B01J 35/77 are incomplete pending reclassification of documents from groups B01J 35/00, B01J 35/30 and B01J 35/31. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B01J 35/73	<ul style="list-style-type: none"> • • having a two-dimensional [2D] layered crystalline structure, e.g. layered double hydroxide [LDH] <p><u>WARNING</u> Group B01J 35/73 is incomplete pending reclassification of documents from groups B01J 35/00, B01J 35/30, B01J 35/31 and B01J 35/393.</p>

		All groups listed in this Warning should be considered in order to perform a complete search.
M	B01J 35/733	<ul style="list-style-type: none"> • {Perovskite-type} <p><u>WARNING</u> Group B01J 35/733 is incomplete pending reclassification of documents from groups B01J 35/00, B01J 35/30, B01J 35/31 and B01J 35/393. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B01J 35/735	<ul style="list-style-type: none"> • {Pyrochlore-type $A_2B_2O_7$} <p><u>WARNING</u> Group B01J 35/735 is incomplete pending reclassification of documents from groups B01J 35/00, B01J 35/30, B01J 35/31 and B01J 35/393. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B01J 35/737	<ul style="list-style-type: none"> • {Hexaaluminate-type $AB_{12}O_{19}$} <p><u>WARNING</u> Group B01J 35/737 is incomplete pending reclassification of documents from groups B01J 35/00, B01J 35/30, B01J 35/31 and B01J 35/393. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B01J 35/77	<ul style="list-style-type: none"> • Compounds characterised by their crystallite size <p><u>WARNING</u> Group B01J 35/77 is incomplete pending reclassification of documents from groups B01J 35/00, B01J 35/30, B01J 35/31 and B01J 35/40. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B01J 35/80	<ul style="list-style-type: none"> • characterised by their amorphous structures <p><u>WARNING</u> Group B01J 35/80 is incomplete pending reclassification of documents from groups B01J 35/00, B01J 35/30 and B01J 35/31. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B01J 2235/00	<p>Indexing scheme associated with group B01J 35/00, related to the analysis techniques used to determine the catalysts form or properties</p> <p><u>WARNING</u> Groups B01J 2235/00, B01J 2235/05, B01J 2235/10, B01J 2235/15 and B01J 2235/30 are incomplete pending reclassification of documents from groups B01J 35/00, B01J 35/30, B01J 35/31, B01J 35/393 and B01J 35/50. All groups listed in this Warning should be considered in order to perform a complete search.</p>

Project: RP12190-F (B08B)

M	B08B 1/00	<p>Cleaning by methods involving the use of tools (cleaning hollow articles by methods or apparatus specially adapted thereto B08B 9/00)</p> <p><u>WARNING</u> Group B08B 1/00 is impacted by reclassification into groups B08B 1/14, B08B 1/143, B08B 1/145, B08B 1/16, B08B 1/165 and B08B 1/40.</p>
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All groups listed in this Warning should be considered in order to perform a complete search.

M B08B 1/10

- characterised by the type of cleaning tool

WARNING

Group B08B 1/10 is impacted by reclassification into groups B08B 1/14, B08B 1/143, B08B 1/145, B08B 1/16, B08B 1/165 and B08B 1/40.
All groups listed in this Warning should be considered in order to perform a complete search.

M B08B 1/14

- Wipes; Absorbent members, e.g. swabs or sponges (with integrated means for dispensing fluids [B08B 1/40](#))

WARNING

Groups B08B 1/14, B08B 1/143 and B08B 1/145 are incomplete pending reclassification of documents from groups B08B 1/00 and B08B 1/10.
All groups listed in this Warning should be considered in order to perform a complete search.

M B08B 1/16

- Rigid blades, e.g. scrapers; Flexible blades, e.g. wipers

WARNING

Groups B08B 1/16 and B08B 1/165 are incomplete pending reclassification of documents from groups B08B 1/00 and B08B 1/10.
All groups listed in this Warning should be considered in order to perform a complete search.

U B08B 1/30

- by movement of cleaning members over a surface

M B08B 1/32

- using rotary cleaning members

WARNING

Group B08B 1/32 is impacted by reclassification into groups B08B 1/34 and B08B 1/36.
Groups B08B 1/32, B08B 1/34 and B08B 1/36 should be considered in order to perform a complete search.

M B08B 1/40

- Cleaning tools with integrated means for dispensing fluids, e.g. water, steam or detergents (cleaning by the force of jets or sprays [B08B 3/02](#))

WARNING

Group B08B 1/40 is incomplete pending reclassification of documents from groups B08B 1/00 and B08B 1/10.
Groups B08B 1/00, B08B 1/10 and B08B 1/40 should be considered in order to perform a complete search.

M B08B 1/50

- involving cleaning of the cleaning members

WARNING

Group B08B 1/50 is impacted by reclassification into groups B08B 1/52 and B08B 1/54.
Groups B08B 1/50, B08B 1/52 and B08B 1/54 should be considered in order to perform a complete search.

M B08B 1/52

- using fluids

WARNING

Group B08B 1/52 is incomplete pending reclassification of documents from group B08B 1/50.
Groups B08B 1/50 and B08B 1/52 should be considered in order to perform a complete search.

M B08B 1/54

- using mechanical tools

WARNING

Group B08B 1/54 is incomplete pending reclassification of documents from group B08B 1/50.

Groups B08B 1/50 and B08B 1/54 should be considered in order to perform a complete search.

Project: RP0754-F (B09B)

M B09B 3/00

Destroying solid waste or transforming solid waste into something useful or harmless

WARNING

Group B09B 3/00 is incomplete pending reclassification of documents from groups B09B 3/0066 and B09B 3/0075.

Group B09B 3/00 is also impacted by reclassification into groups B09B 3/30, B09B 3/32, B09B 3/35, B09B 3/38, B09B 3/50, B09B 3/60, B09B 3/65 and B09B 3/70.

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

D B09B 3/0066
— (Frozen)

- {Disposal of asbestos}

WARNING

Group B09B 3/0066 is no longer used for the classification of documents as of January 1, 2022.

The content of this group is being reclassified into groups B09B 3/00, B09B 3/30, B09B 3/32, B09B 3/35, B09B 3/38, B09B 3/50, B09B 3/60, B09B 3/65, B09B 3/70 and B09B 2101/35.

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

D B09B 3/0075
— (Frozen)

- {Disposal of medical waste (casings for used articles, e.g. sharps A61B 50/362; sterilisation of refuse A61L 11/00; disposal of used needles or syringes A61M 5/3205; disintegrating medical waste B02C 19/0075)}

WARNING

Group B09B 3/0075 is no longer used for the classification of documents as of January 1, 2022.

The content of this group is being reclassified into groups B09B 3/00, B09B 3/30, B09B 3/32, B09B 3/35, B09B 3/38, B09B 3/50, B09B 3/60, B09B 3/65, B09B 3/70, B09B 2101/65 and B09B 2101/67.

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

M B09B 3/20

- Agglomeration, binding or encapsulation of solid waste

WARNING

Group B09B 3/20 is impacted by reclassification into group B09B 3/32.

Groups B09B 3/20 and B09B 3/32 should be considered in order to perform a complete search.

M B09B 3/21

- using organic binders or matrix

WARNING

Group B09B 3/21 is impacted by reclassification into groups B09B 3/23 and B09B 3/24.

Groups B09B 3/21, B09B 3/23 and B09B 3/24 should be considered in order to perform a complete search.

M	B09B 3/23	<ul style="list-style-type: none">• Binders with asphalt <p><u>WARNING</u> Group B09B 3/23 is incomplete pending reclassification of documents from group B09B 3/21. Groups B09B 3/21 and B09B 3/23 should be considered in order to perform a complete search.</p>
M	B09B 3/24	<ul style="list-style-type: none">• Binders with plastic <p><u>WARNING</u> Group B09B 3/24 is incomplete pending reclassification of documents from group B09B 3/21. Groups B09B 3/21 and B09B 3/24 should be considered in order to perform a complete search.</p>
M	B09B 3/25	<ul style="list-style-type: none">• using mineral binders or matrix <p><u>WARNING</u> Group B09B 3/25 is impacted by reclassification into group B09B 3/27. Groups B09B 3/25 and B09B 3/27 should be considered in order to perform a complete search.</p>
M	B09B 3/27	<ul style="list-style-type: none">• Binding by sodium silicate, e.g. cement or water glass <p><u>WARNING</u> Group B09B 3/27 is incomplete pending reclassification of documents from group B09B 3/25. Groups B09B 3/25 and B09B 3/27 should be considered in order to perform a complete search.</p>
M	B09B 3/30	<ul style="list-style-type: none">• involving mechanical treatment (involving an extraction step B09B 3/80) <p><u>WARNING</u> Group B09B 3/30 is incomplete pending reclassification of documents from groups B09B 3/00, B09B 3/0066, B09B 3/0075 and B09B 5/00. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B09B 3/32	<ul style="list-style-type: none">• Compressing or compacting <p><u>WARNING</u> Group B09B 3/32 is incomplete pending reclassification of documents from groups B09B 3/00, B09B 3/0066, B09B 3/0075, B09B 3/20 and B09B 5/00. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B09B 3/35	<ul style="list-style-type: none">• Shredding, crushing or cutting <p><u>WARNING</u> Group B09B 3/35 is incomplete pending reclassification of documents from groups B09B 3/00, B09B 3/0066, B09B 3/0075 and B09B 5/00. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B09B 3/38	<ul style="list-style-type: none">• Stirring or kneading <p><u>WARNING</u> Group B09B 3/38 is incomplete pending reclassification of documents from groups B09B 3/00, B09B 3/0066, B09B 3/0075 and B09B 5/00. All groups listed in this Warning should be considered in order to perform a complete search.</p>

M	B09B 3/40	<ul style="list-style-type: none"> involving thermal treatment, e.g. evaporation (processes using mineral binders involving a melting or softening step B09B 3/29; involving radiation B09B 3/50) <p>WARNING Group B09B 3/40 is impacted by reclassification into group B09B 3/50. Groups B09B 3/40 and B09B 3/50 should be considered in order to perform a complete search.</p>
M	B09B 3/50	<ul style="list-style-type: none"> involving radiation, e.g. electro-magnetic waves <p>WARNING Group B09B 3/50 is incomplete pending reclassification of documents from groups B09B 3/00, B09B 3/0066, B09B 3/0075, B09B 3/40 and B09B 5/00. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B09B 3/60	<ul style="list-style-type: none"> Biochemical treatment, e.g. by using enzymes <p>WARNING Groups B09B 3/60 and B09B 3/65 are incomplete pending reclassification of documents from groups B09B 3/00, B09B 3/0066, B09B 3/0075 and B09B 5/00. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B09B 3/70	<ul style="list-style-type: none"> Chemical treatment, e.g. pH adjustment or oxidation (involving an extraction step B09B 3/80) <p>WARNING Group B09B 3/70 is incomplete pending reclassification of documents from groups B09B 3/00, B09B 3/0066, B09B 3/0075, B09B 3/80 and B09B 5/00. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B09B 3/80	<ul style="list-style-type: none"> involving an extraction step <p>WARNING Group B09B 3/80 is impacted by reclassification into group B09B 3/70. Groups B09B 3/80 and B09B 3/70 should be considered in order to perform a complete search.</p>
M	B09B 5/00	<p>Operations not covered by a single other subclass or by a single other group in this subclass</p> <p>WARNING Group B09B 5/00 is impacted by reclassification into groups B09B 3/30, B09B 3/32, B09B 3/35, B09B 3/38, B09B 3/50, B09B 3/60, B09B 3/65 and B09B 3/70. All groups listed in this Warning should be considered in order to perform a complete search.</p>
U	B09B 2101/00	Type of solid waste
M	B09B 2101/02	<ul style="list-style-type: none"> Gases or liquids enclosed in discarded articles, e.g. aerosol cans or cooling systems of refrigerators <p>WARNING Group B09B 2101/02 is impacted by reclassification into group B09B 2101/78. Groups B09B 2101/02 and B09B 2101/78 should be considered in order to perform a complete search.</p>

M	B09B 2101/35	<ul style="list-style-type: none"> Asbestos <p><u>WARNING</u> Group B09B 2101/35 is incomplete pending reclassification of documents from group B09B 3/0066. Groups B09B 3/0066 and B09B 2101/35 should be considered in order to perform a complete search.</p>
M	B09B 2101/65	<ul style="list-style-type: none"> Medical waste <p><u>WARNING</u> Groups B09B 2101/65 and B09B 2101/67 are incomplete pending reclassification of documents from group B09B 3/0075. All groups listed in this Warning should be considered in order to perform a complete search.</p>
U	B09B 2101/75	<ul style="list-style-type: none"> Plastic waste
M	B09B 2101/78	<ul style="list-style-type: none"> containing foamed plastics, e.g. polystyrol <p><u>WARNING</u> Group B09B 2101/78 is incomplete pending reclassification of documents from group B09B 2101/02. Groups B09B 2101/02 and B09B 2101/78 should be considered in order to perform a complete search.</p>

Project: RP0552-F (B23C)

U	B23C 5/00	Milling-cutters (for cutting gear-teeth B23F 21/12)
U	B23C 5/16	<ul style="list-style-type: none"> characterised by physical features other than shape
U	B23C 5/20	<ul style="list-style-type: none"> with removable cutter bits or teeth {or cutting inserts}
M	B23C 5/202	<ul style="list-style-type: none"> {Plate-like cutting inserts with special form (special form related to securing of the insert B23C 5/22)} <p><u>WARNING</u> Group B23C 5/202 is impacted by reclassification into group B23C 5/205. Groups B23C 5/202 and B23C 5/205 should be considered in order to perform a complete search.</p>
M	B23C 5/205	<ul style="list-style-type: none"> {characterised by chip-breakers of special form} <p><u>WARNING</u> Group B23C 5/205 is incomplete pending reclassification of documents from group B23C 5/202. Groups B23C 5/202 and B23C 5/205 should be considered in order to perform a complete search.</p>
M	B23C 5/22	<ul style="list-style-type: none"> Securing arrangements for bits or teeth {or cutting inserts} <p><u>WARNING</u> Group B23C 5/22 is impacted by reclassification into groups B23C 5/2298, B23C 5/2301, B23C 5/2304, B23C 5/2306 and B23C 5/2309. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B23C 5/2204	<ul style="list-style-type: none"> {with cutting inserts clamped against the walls of the recess in the cutter body by a clamping member acting upon the wall of a hole in the insert} <p><u>WARNING</u> Group B23C 5/2204 is impacted by reclassification into group B23C 5/2298.</p>

Groups B23C 5/2204 and B23C 5/2298 should be considered in order to perform a complete search.

- M B23C 5/2208 {for plate-like cutting inserts ([B23C 5/2226](#), [B23C 5/2234](#) take precedence))}

WARNING

Group B23C 5/2208 is impacted by reclassification into group B23C 5/2301.

Groups B23C 5/2208 and B23C 5/2301 should be considered in order to perform a complete search.

- M B23C 5/2213 {having a special shape}

WARNING

Group B23C 5/2213 is impacted by reclassification into group B23C 5/2304.

Groups B23C 5/2213 and B23C 5/2304 should be considered in order to perform a complete search.

- M B23C 5/2226 {for plate-like cutting inserts fitted on an intermediate carrier, e.g. shank fixed in the cutter body}

WARNING

Group B23C 5/2226 is impacted by reclassification into group B23C 5/2306.

Groups B23C 5/2226 and B23C 5/2306 should be considered in order to perform a complete search.

- M B23C 5/2234 {for plate-like cutting inserts fitted on a ring or ring segment}

WARNING

Group B23C 5/2234 is impacted by reclassification into group B23C 5/2309.

Groups B23C 5/2234 and B23C 5/2309 should be considered in order to perform a complete search.

- M B23C 5/2239 {with cutting inserts clamped by a clamping member acting almost perpendicular on the cutting face}

WARNING

Group B23C 5/2239 is impacted by reclassification into group B23C 5/2298.

Groups B23C 5/2239 and B23C 5/2298 should be considered in order to perform a complete search.

- M B23C 5/2243 {for plate-like cutting inserts ([B23C 5/2252](#), [B23C 5/226](#) take precedence))}

WARNING

Group B23C 5/2243 is impacted by reclassification into group B23C 5/2301.

Groups B23C 5/2243 and B23C 5/2301 should be considered in order to perform a complete search.

- M B23C 5/2247 {having a special shape}

WARNING

Group B23C 5/2247 is impacted by reclassification into group B23C 5/2304.

Groups B23C 5/2247 and B23C 5/2304 should be considered in order to perform a complete search.

M	B23C 5/2252	<ul style="list-style-type: none"> • • • • {for plate-like cutting inserts fitted on an intermediate carrier, e.g. shank fixed in the cutter body} <p><u>WARNING</u> Group B23C 5/2252 is impacted by reclassification into group B23C 5/2306. Groups B23C 5/2252 and B23C 5/2306 should be considered in order to perform a complete search.</p>
M	B23C 5/226	<ul style="list-style-type: none"> • • • • {for plate-like cutting inserts fitted on a ring or ring segment} <p><u>WARNING</u> Group B23C 5/226 is impacted by reclassification into group B23C 5/2309. Groups B23C 5/226 and B23C 5/2309 should be considered in order to perform a complete search.</p>
M	B23C 5/2265	<ul style="list-style-type: none"> • • • • {by means of a wedge} <p><u>WARNING</u> Group B23C 5/2265 is impacted by reclassification into group B23C 5/2298. Groups B23C 5/2265 and B23C 5/2298 should be considered in order to perform a complete search.</p>
M	B23C 5/2269	<ul style="list-style-type: none"> • • • • {for plate-like cutting inserts (B23C 5/2278, B23C 5/2291 take precedence)} <p><u>WARNING</u> Group B23C 5/2269 is impacted by reclassification into group B23C 5/2301. Groups B23C 5/2269 and B23C 5/2301 should be considered in order to perform a complete search.</p>
M	B23C 5/2273	<ul style="list-style-type: none"> • • • • • {having a special shape} <p><u>WARNING</u> Group B23C 5/2273 is impacted by reclassification into group B23C 5/2304. Groups B23C 5/2273 and B23C 5/2304 should be considered in order to perform a complete search.</p>
M	B23C 5/2278	<ul style="list-style-type: none"> • • • • • {for plate-like cutting inserts fitted on an intermediate carrier, e.g. shank fixed in the cutter body} <p><u>WARNING</u> Group B23C 5/2278 is impacted by reclassification into group B23C 5/2306. Groups B23C 5/2278 and B23C 5/2306 should be considered in order to perform a complete search.</p>
M	B23C 5/2291	<ul style="list-style-type: none"> • • • • • {for plate-like cutting inserts fitted on a ring or ring segment} <p><u>WARNING</u> Group B23C 5/2291 is impacted by reclassification into group B23C 5/2309. Groups B23C 5/2291 and B23C 5/2309 should be considered in order to perform a complete search.</p>

M	B23C 5/2295	<ul style="list-style-type: none"> • • • {the cutting elements being clamped simultaneously} <p><u>WARNING</u> Group B23C 5/2295 is impacted by reclassification into group B23C 5/2298. Groups B23C 5/2295 and B23C 5/2298 should be considered in order to perform a complete search.</p>
M	B23C 5/2298	<ul style="list-style-type: none"> • • • {secured by resilient/flexible means} <p><u>WARNING</u> Group B23C 5/2298 is incomplete pending reclassification of documents from groups B23C 5/22, B23C 5/2204, B23C 5/2239, B23C 5/2265 and B23C 5/2295. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B23C 5/2301	<ul style="list-style-type: none"> • • • • {for plate-like cutting inserts (B23C 5/2306, B23C 5/2309 take precedence)} <p><u>WARNING</u> Group B23C 5/2301 is incomplete pending reclassification of documents from groups B23C 5/22, B23C 5/2208, B23C 5/2243 and B23C 5/2269. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B23C 5/2304	<ul style="list-style-type: none"> • • • • • {having a special shape} <p><u>WARNING</u> Group B23C 5/2304 is incomplete pending reclassification of documents from groups B23C 5/22, B23C 5/2213, B23C 5/2247 and B23C 5/2273. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B23C 5/2306	<ul style="list-style-type: none"> • • • • • {for plate-like cutting inserts fitted on an intermediate carrier, e.g. shank fixed in the cutter body} <p><u>WARNING</u> Group B23C 5/2306 is incomplete pending reclassification of documents from groups B23C 5/22, B23C 5/2226, B23C 5/2252 and B23C 5/2278. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B23C 5/2309	<ul style="list-style-type: none"> • • • • • {for plate-like cutting inserts fitted on a ring or ring segment} <p><u>WARNING</u> Group B23C 5/2309 is incomplete pending reclassification of documents from groups B23C 5/22, B23C 5/2234, B23C 5/226 and B23C 5/2291. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B23C 5/24	<ul style="list-style-type: none"> • • • • adjustable <p><u>WARNING</u> Group B23C 5/24 is impacted by reclassification into groups B23C 5/2462, B23C 5/2465, B23C 5/2468, B23C 5/2472, B23C 5/2475, B23C 5/2479, B23C 5/2482, B23C 5/2486, B23C 5/2489, B23C 5/2493 and B23C 5/2496.</p>

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

- M B23C 5/2462 {the adjusting means being oblique surfaces}

WARNING

Group B23C 5/2462 is incomplete pending reclassification of documents from group B23C 5/24.
Groups B23C 5/24 and B23C 5/2462 should be considered in order to perform a complete search.

- M B23C 5/2465 {the adjusting means being notches}

WARNING

Group B23C 5/2465 is incomplete pending reclassification of documents from group B23C 5/24.
Groups B23C 5/24 and B23C 5/2465 should be considered in order to perform a complete search.

- M B23C 5/2468 {the adjusting means being serrations}

WARNING

Group B23C 5/2468 is incomplete pending reclassification of documents from group B23C 5/24.
Groups B23C 5/24 and B23C 5/2468 should be considered in order to perform a complete search.

- M B23C 5/2472 {the adjusting means being screws}

WARNING

Group B23C 5/2472 is incomplete pending reclassification of documents from group B23C 5/24.
Groups B23C 5/24 and B23C 5/2472 should be considered in order to perform a complete search.

- M B23C 5/2475 {the adjusting means being distance elements, e.g. shims or washers}

WARNING

Group B23C 5/2475 is incomplete pending reclassification of documents from group B23C 5/24.
Groups B23C 5/24 and B23C 5/2475 should be considered in order to perform a complete search.

- M B23C 5/2479 {the adjusting means being eccentrics}

WARNING

Group B23C 5/2479 is incomplete pending reclassification of documents from group B23C 5/24.
Groups B23C 5/24 and B23C 5/2479 should be considered in order to perform a complete search.

- M B23C 5/2482 {the adjusting means being hydraulic cylinders}

WARNING

Group B23C 5/2482 is incomplete pending reclassification of documents from group B23C 5/24.
Groups B23C 5/24 and B23C 5/2482 should be considered in order to perform a complete search.

M	B23C 5/2486	<ul style="list-style-type: none"> • • • • {where the adjustment is made by elastically deforming the toolholders} <p><u>WARNING</u> Group B23C 5/2486 is incomplete pending reclassification of documents from group B23C 5/24.- Groups B23C 5/24 and B23C 5/2486 should be considered in order to perform a complete search.</p>
M	B23C 5/2489	<ul style="list-style-type: none"> • • • • {where the adjustment is made by changing the inclination of the inserts} <p><u>WARNING</u> Group B23C 5/2489 is incomplete pending reclassification of documents from group B23C 5/24.- Groups B23C 5/24 and B23C 5/2489 should be considered in order to perform a complete search.</p>
M	B23C 5/2493	<ul style="list-style-type: none"> • • • • {where the adjustment is made by deforming the seating surfaces} <p><u>WARNING</u> Group B23C 5/2493 is incomplete pending reclassification of documents from group B23C 5/24.- Groups B23C 5/24 and B23C 5/2493 should be considered in order to perform a complete search.</p>
M	B23C 5/2496	<ul style="list-style-type: none"> • • • • {where the adjusting means are gears and racks} <p><u>WARNING</u> Group B23C 5/2496 is incomplete pending reclassification of documents from group B23C 5/24.- Groups B23C 5/24 and B23C 5/2496 should be considered in order to perform a complete search.</p>
M	B23C 5/28	<ul style="list-style-type: none"> • Features relating to lubricating or cooling <p><u>WARNING</u> Group B23C 5/28 is impacted by reclassification into groups B23C 5/281, B23C 5/282, B23C 5/283, B23C 5/285, B23C 5/286 and B23C 5/287.- All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B23C 5/281	<ul style="list-style-type: none"> • {Coolant moving along the outside tool periphery towards the cutting edges} <p><u>WARNING</u> Group B23C 5/281 is incomplete pending reclassification of documents from group B23C 5/28.- Groups B23C 5/28 and B23C 5/281 should be considered in order to perform a complete search.</p>
M	B23C 5/282	<ul style="list-style-type: none"> • {Coolant channel characterised by its cross-sectional shape} <p><u>WARNING</u> Group B23C 5/282 is incomplete pending reclassification of documents from group B23C 5/28.- Groups B23C 5/28 and B23C 5/282 should be considered in order to perform a complete search.</p>
M	B23C 5/283	<ul style="list-style-type: none"> • {Cutting inserts with internal coolant channels} <p><u>WARNING</u> Group B23C 5/283 is incomplete pending reclassification of documents from group B23C 5/28.-</p>

Groups B23C 5/28 and B23C 5/283 should be considered in order to perform a complete search.

M B23C 5/285

- {Nozzles}

WARNING

Group B23C 5/285 is incomplete pending reclassification of documents from group B23C 5/28.
Groups B23C 5/28 and B23C 5/285 should be considered in order to perform a complete search.

M B23C 5/286

- {Deflectors}

WARNING

Groups B23C 5/286 and B23C 5/287 are incomplete pending reclassification of documents from group B23C 5/28.
Groups B23C 5/28, B23C 5/286 and B23C 5/287 should be considered in order to perform a complete search.

U B23C 2200/00

Details of milling cutting inserts

M B23C 2200/28

- Angles

WARNING

Group B23C 2200/28 is impacted by reclassification into groups B23C 2200/291 and B23C 2200/293.
Groups B23C 2200/28, B23C 2200/291 and B23C 2200/293 should be considered in order to perform a complete search.

M B23C 2200/281

- Negative rake angles

WARNING

Group B23C 2200/281 is incomplete pending reclassification of documents from group B23C 2200/283.
Groups B23C 2200/283 and B23C 2200/281 should be considered in order to perform a complete search.

D B23C 2200/283
—(Frozen)

- Negative cutting angles

WARNING

Group B23C 2200/283 is no longer used for the classification of documents as of February 1, 2022.
The content of this group is being reclassified into groups B23C 2200/281 and B23C 2200/284.
Groups B23C 2200/283, B23C 2200/281 and B23C 2200/284 should be considered in order to perform a complete search.

M B23C 2200/284

- Negative clearance angles

WARNING

Group B23C 2200/284 is incomplete pending reclassification of documents from group B23C 2200/283.
Groups B23C 2200/283 and B23C 2200/284 should be considered in order to perform a complete search.

D B23C 2200/286
—(Frozen)

- Positive cutting angles

WARNING

Group B23C 2200/286 is no longer used for the classification of documents as of February 1, 2022.
The content of this group is being reclassified into groups B23C 2200/287 and B23C 2200/289.

B23C 2200/286

(Frozen)

(continued)

Groups B23C 2200/286, B23C 2200/287 and B23C 2200/289 should be considered in order to perform a complete search.

M B23C 2200/287

- Positive rake angles

WARNING

Group B23C 2200/287 is incomplete pending reclassification of documents from group B23C 2200/286.

Groups B23C 2200/286 and B23C 2200/287 should be considered in order to perform a complete search.

M B23C 2200/289

- Positive clearance angles

WARNING

Group B23C 2200/289 is incomplete pending reclassification of documents from group B23C 2200/286.

Groups B23C 2200/286 and B23C 2200/289 should be considered in order to perform a complete search.

M B23C 2200/291

- Variable rake angles

WARNING

Group B23C 2200/291 is incomplete pending reclassification of documents from group B23C 2200/28.

Groups B23C 2200/28 and B23C 2200/291 should be considered in order to perform a complete search.

M B23C 2200/293

- Variable clearance angles

WARNING

Group B23C 2200/293 is incomplete pending reclassification of documents from group B23C 2200/28.

Groups B23C 2200/28 and B23C 2200/293 should be considered in order to perform a complete search.

M B23C 2200/36

- Other features of the milling insert not covered by [B23C 2200/04](#) - [B23C 2200/32](#)

WARNING

Group B23C 2200/36 is impacted by reclassification into groups B23C 2200/364, B23C 2200/369 and B23C 2200/3691.

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

M B23C 2200/364

- Porous inserts, e.g. lattice-shaped constructions

WARNING

Group B23C 2200/364 is incomplete pending reclassification of documents from group B23C 2200/36.

Groups B23C 2200/36 and B23C 2200/364 should be considered in order to perform a complete search.

M B23C 2200/369

- Double-sided inserts

WARNING

Groups B23C 2200/369 and B23C 2200/3691 are incomplete pending reclassification of documents from group B23C 2200/36.

Groups B23C 2200/36, B23C 2200/369 and B23C 2200/3691 should be considered in order to perform a complete search.

U B23C 2210/00

Details of milling cutters

- M B23C 2210/50
- Cutting inserts

WARNING

Group B23C 2210/50 is impacted by reclassification into groups B23C 2210/501, B23C 2210/502 and B23C 2210/504.
All groups listed in this Warning should be considered in order to perform a complete search.

- M B23C 2210/501
- • with cutting edges following one or more helices

WARNING

Group B23C 2210/501 is incomplete pending reclassification of documents from group B23C 2210/50.
Groups B23C 2210/50 and B23C 2210/501 should be considered in order to perform a complete search.

- M B23C 2210/502
- • with cutting edges following straight flutes or rows of more than one insert

WARNING

Group B23C 2210/502 is incomplete pending reclassification of documents from group B23C 2210/50.
Groups B23C 2210/50 and B23C 2210/502 should be considered in order to perform a complete search.

- M B23C 2210/504
- • arranged in a manner that only extends longitudinally by one insert

WARNING

Group B23C 2210/504 is incomplete pending reclassification of documents from group B23C 2210/50.
Groups B23C 2210/50 and B23C 2210/504 should be considered in order to perform a complete search.

- M B23C 2210/64
- End milling cutters having a groove in the end cutting face, the groove not being present so as to provide a cutting edge

WARNING

Group B23C 2210/64 is impacted by reclassification into group B23C 2210/641.
Groups B23C 2210/64 and B23C 2210/641 should be considered in order to perform a complete search.

- M B23C 2210/641
- • at least one groove or gash being different than another

WARNING

Group B23C 2210/641 is incomplete pending reclassification of documents from group B23C 2210/64.
Groups B23C 2210/64 and B23C 2210/641 should be considered in order to perform a complete search.

Project: MP12735 (B23Q)**M B23Q**

DETAILS, COMPONENTS, OR ACCESSORIES FOR MACHINE TOOLS, e.g. ARRANGEMENTS FOR COPYING OR CONTROLLING (tools of the kind used in lathes or boring machines [B23B 27/00](#)); MACHINE TOOLS IN GENERAL CHARACTERISED BY THE CONSTRUCTION OF PARTICULAR DETAILS OR COMPONENTS; COMBINATIONS OR ASSOCIATIONS OF METAL-WORKING MACHINES, NOT DIRECTED TO A PARTICULAR RESULT

NOTES

1. In this subclass, groups designating parts of machine tools ~~cover~~*cover* machine tools characterised by constructional features of such parts.

2. Attention is drawn to the Notes following the title of class [B23](#).

~~2.3.~~ {In this subclass, the following terms or expressions are used with the meanings indicated:

- "controlling" means influencing a variable in any way, e.g. changing its direction or its value (including changing it to or from zero), maintaining it constant, limiting its range of variation;
- "regulation" means maintaining a variable automatically at a desired value or within a desired range of values. The desired value or range may be fixed, or manually varied, or may vary with time according to a predetermined "programme" or according to variation of another variable. Regulation is a form of control;
- "automatic control" is often used in the art as a synonym for regulation.
- "Machine tool" means a mechanical working machine that removes material from a workpiece with a mechanical cutting edge to perform a shaping operation, essentially through drilling, milling, turning or cutting, e.g. sawing. The workpiece is generally made of metal, wood or plastic and is not a human body, food or clothes.

}

~~3. Attention is drawn to the Notes following the title of class [B23](#).~~

WARNING

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

Project: MP12735 (B25B)**M B25B**

TOOLS OR BENCH DEVICES NOT OTHERWISE PROVIDED FOR, FOR FASTENING, CONNECTING, DISENGAGING, OR HOLDING

NOTE

This subclass ~~is to be understood as covering those covers~~ hand tools for fastening, connecting, disengaging, or holding, which are not ~~provided for~~ *in*~~covered by~~ another subclass such as [B25C](#) (*hand-held* nailing or stapling tools) or *in*~~by~~ an application ~~class~~*place* such as ~~B65B (packaging) or subclasses~~ [B21F](#) (working of wire) *or* [B65B](#) (*packaging*).

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:

B25B 23/143	covered by	B25B 23/1422
B25B 23/144	covered by	B25B 23/1425
B25B 23/151	covered by	B25B 23/14 , B25B 23/147
B25B 23/153	covered by	B25B 23/1415
B25B 23/155	covered by	B25B 23/141
B25B 23/157	covered by	B25B 23/14

B25B 23/159	covered by	B25B 23/14
B25B 27/067	covered by	B25B 27/06
B25B 27/073	covered by	B25B 27/062

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: MP12735 (B60B)

M B60B **VEHICLE WHEELS (making wheels or wheel parts by rolling [B21H 1/00](#), by forging, hammering or pressing [B21K 1/28](#)); CASTORS; AXLES FOR WHEELS OR CASTORS; INCREASING WHEEL ADHESION**

NOTE

Attention is drawn to the ~~Explanatory~~ Note following the ~~class-title~~ *(title of class [B60](#))*.

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 B60B 15/00 **Wheels or wheel attachments designed for increasing traction (~~vehicle tires [B60C](#)~~; *vehicle tyres [B60C](#)*; non-skid devices temporarily attachable to resilient ~~tires~~ *tyres* or resiliently-~~tired~~ *tyred* wheels [B60C \[B60C 27/00\]\(#\)](#))**

M B60B 33/00 **Castors in general *{; {Anti-clogging castors}* (castors for large containers [B65D 90/18](#))**

Project: RP12183-F (B60K)

M B60K 35/00 **Instruments specially adapted for vehicles; Arrangement of instruments in or on vehicles**

NOTE

{In this group, it is desirable to add the indexing codes of [B60K 2360/20](#) - [B60K 2360/48](#), [B60K 2360/60](#) - [B60K 2360/62](#) and [B60K 2360/92](#) - [B60K 2360/96](#)}

WARNING

Group B60K 35/00 is impacted by reclassification into groups B60K 35/10, B60K 35/20 - B60K 35/29, B60K 35/40 - B60K 35/425, B60K 35/50 - B60K 35/53, B60K 35/55, B60K 35/60, B60K 35/65 - B60K 35/658, B60K 35/70, B60K 35/80 - B60K 35/81, B60K 35/85 and B60K 35/90.

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

M B60K 35/10 **• Input arrangements, i.e. from user to vehicle, associated with vehicle functions or specially adapted therefor**

NOTE

{In this group, it is desirable to add the indexing codes of [B60K 2360/11](#) - [B60K 2360/149](#)}

WARNING

Group B60K 35/10 is incomplete pending reclassification of documents from group B60K 35/00.

Groups B60K 35/00 and B60K 35/10 should be considered in order to perform a complete search.

M B60K 35/20

- Output arrangements, i.e. from vehicle to user, associated with vehicle functions or specially adapted therefor

NOTE

{In the groups [B60K 35/20](#) – [B60K 35/22](#) and [B60K 35/26](#), it is desirable to add the indexing codes of [B60K 2360/151](#) - [B60K 2360/1526](#)}

WARNING

Groups B60K 35/20, B60K 35/21, B60K 35/211, B60K 35/212, B60K 35/213, B60K 35/214, B60K 35/215, B60K 35/22, B60K 35/223, B60K 35/25, B60K 35/26, B60K 35/265, B60K 35/28, B60K 35/285 and B60K 35/29 are incomplete pending reclassification of documents from group B60K 35/00. All groups listed in this Warning should be considered in order to perform a complete search.

U B60K 35/21

- • using visual output, e.g. blinking lights or matrix displays

M B60K 35/23

- • • Head-up displays [HUD] (optical aspects of head-up displays [G02B 27/01](#))

WARNING

Group B60K 35/23 is incomplete pending reclassification of documents from group B60K 35/00.

Group B60K 35/23 is also impacted by reclassification into groups B60K 35/231, B60K 35/232, B60K 35/233, B60K 35/234 and B60K 35/235. All groups listed in this Warning should be considered in order to perform a complete search.

M B60K 35/231

- • • characterised by their arrangement or structure for integration into vehicles

WARNING

Group B60K 35/231 is incomplete pending reclassification of documents from groups B60K 35/00 and B60K 35/23.

Groups B60K 35/00, B60K 35/23 and B60K 35/231 should be considered in order to perform a complete search.

M B60K 35/232

- • • controlling the projection distance of virtual images depending on the condition of the vehicle or the driver

WARNING

Group B60K 35/232 is incomplete pending reclassification of documents from groups B60K 35/00 and B60K 35/23.

Groups B60K 35/00, B60K 35/23 and B60K 35/232 should be considered in order to perform a complete search.

M B60K 35/233

- • • controlling the size or position in display areas of virtual images depending on the condition of the vehicle or the driver

WARNING

Group B60K 35/233 is incomplete pending reclassification of documents from groups B60K 35/00 and B60K 35/23.

Groups B60K 35/00, B60K 35/23 and B60K 35/233 should be considered in order to perform a complete search.

M B60K 35/234

- • • controlling the brightness, colour or contrast of virtual images depending on the driving conditions or on the condition of the vehicle or the driver

WARNING

Group B60K 35/234 is incomplete pending reclassification of documents from groups B60K 35/00, B60K 35/23 and B60K 2360/349.

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

- M B60K 35/235
- • • with means for detecting the driver's gaze direction or eye points
- WARNING
Group B60K 35/235 is incomplete pending reclassification of documents from groups B60K 35/00, B60K 35/23 and B60K 2360/149.
All groups listed in this Warning should be considered in order to perform a complete search.
- M B60K 35/40
- Instruments specially adapted for improving the visibility thereof to the user, e.g. fogging prevention or anti-reflection arrangements
- WARNING
Groups B60K 35/40 – B60K 35/425 are incomplete pending reclassification of documents from group B60K 35/00.
All groups listed in this Warning should be considered in order to perform a complete search.
- M B60K 35/50
- Instruments characterised by their means of attachment to or integration in the vehicle ([B60K 35/231](#) takes precedence)
- NOTE
{In this group, it is desirable to add the indexing codes of [B60K 2360/816](#) - [B60K 2360/834](#)}
- WARNING
Group B60K 35/50 is incomplete pending reclassification of documents from groups B60K 35/00 and B60K 35/60.
Group B60K 35/50 is also impacted by reclassification into groups B60K 37/00, B60K 37/10 and B60K 37/20.
All groups listed in this Warning should be considered in order to perform a complete search.
- M B60K 35/53
- • Movable instruments, e.g. slidable
- WARNING
Group B60K 35/53 is incomplete pending reclassification of documents from group B60K 35/00.
Group B60K 35/53 is also impacted by reclassification into group B60K 35/55.
Groups B60K 35/00, B60K 35/53 and B60K 35/55 should be considered in order to perform a complete search.
- M B60K 35/55
- Instruments with parts that can change their shape or position to configure an active screen, e.g. by folding or by rolling
- WARNING
Group B60K 35/55 is incomplete pending reclassification of documents from groups B60K 35/00 and B60K 35/53.
Groups B60K 35/00, B60K 35/53 and B60K 35/55 should be considered in order to perform a complete search.
- M B60K 35/60
- Instruments characterised by their location or relative disposition in or on vehicles (arrangements of lighting devices on dashboards [B60Q 3/10](#))
- NOTE
{In this group, it is desirable to add the indexing codes of [B60K 2360/77](#) - [B60K 2360/797](#)}
- WARNING
Group B60K 35/60 is incomplete pending reclassification of documents from group B60K 35/00.
Group B60K 35/60 is also impacted by reclassification into groups B60K 35/50 and B60K 37/00 – B60K 37/20.

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

M B60K 35/65

- Instruments specially adapted for specific vehicle types or users, e.g. for left- or right-hand drive

NOTE

{In the groups [B60K 35/65](#) - [B60K 35/658](#), it is desirable to add the indexing codes of [B60K 2360/731](#) - [B60K 2360/741](#)}

WARNING

Groups B60K 35/65, B60K 35/652, B60K 35/654, B60K 35/656 and B60K 35/658 are incomplete pending reclassification of documents from group B60K 35/00.

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

M B60K 35/70

- Instrument provisions for avoiding injuries to vehicle occupants in case of accidents

WARNING

Group B60K 35/70 is incomplete pending reclassification of documents from groups B60K 35/00 and B60K 2360/652.

Groups B60K 35/00, B60K 2360/652 and B60K 35/70 should be considered in order to perform a complete search.

M B60K 35/80

- Arrangements for controlling instruments

NOTE

{In this group, it is desirable to add the indexing codes of [B60K 2360/55](#) - [B60K 2360/577](#)}

WARNING

Groups B60K 35/80 and B60K 35/81 are incomplete pending reclassification of documents from group B60K 35/00.

Groups B60K 35/00, B60K 35/80 and B60K 35/81 should be considered in order to perform a complete search.

M B60K 35/85

- Arrangements for transferring vehicle- or driver-related data

NOTE

{In this group, it is desirable to add the indexing codes of [B60K 2360/583](#) – [B60K 2360/595](#)}

WARNING

Group B60K 35/85 is incomplete pending reclassification of documents from group B60K 35/00.

Groups B60K 35/00 and B60K 35/85 should be considered in order to perform a complete search.

M B60K 35/90

- Calibration of instruments, e.g. setting initial or reference parameters; Testing of instruments, e.g. detecting malfunction

WARNING

Group B60K 35/90 is incomplete pending reclassification of documents from group B60K 35/00.

Groups B60K 35/00 and B60K 35/90 should be considered in order to perform a complete search.

M	B60K 37/00	Dashboards (as road-vehicle superstructure sub-units B62D 25/14)
NOTE		
{In this group, it is desirable to add the indexing codes of B60K 2360/40 - B60K 2360/48 , B60K 2360/65 - B60K 2360/6992 and B60K 2360/84 }		
WARNING		
Group B60K 37/00 is incomplete pending reclassification of documents from groups B60K 35/50 and B60K 35/60.		
Group B60K 37/00 is also impacted by reclassification into groups B60K 37/10 and B60K 37/20.		
All groups listed in this Warning should be considered in order to perform a complete search.		
M	B60K 37/10	<ul style="list-style-type: none"> • Arrangements for attaching the dashboard to the vehicle
WARNING		
Group B60K 37/10 is incomplete pending reclassification of documents from groups B60K 35/50, B60K 35/60 and B60K 37/00.		
All groups listed in this Warning should be considered in order to perform a complete search.		
M	B60K 37/20	<ul style="list-style-type: none"> • Dashboard panels
WARNING		
Group B60K 37/20 is incomplete pending reclassification of documents from groups B60K 35/50, B60K 35/60 and B60K 37/00.		
All groups listed in this Warning should be considered in order to perform a complete search.		
U	B60K 2360/00	Indexing scheme associated with groups B60K 35/00 or B60K 37/00 relating to details of instruments or dashboards
M	B60K 2360/149	<ul style="list-style-type: none"> • Instrument input by detecting viewing direction not otherwise provided for
WARNING		
Group B60K 2360/149 is impacted by reclassification into group B60K 35/235.		
Groups B60K 2360/149 and B60K 35/235 should be considered in order to perform a complete search.		
U	B60K 2360/20	<ul style="list-style-type: none"> • Optical features of instruments
U	B60K 2360/33	<ul style="list-style-type: none"> • • Illumination features
M	B60K 2360/349	<ul style="list-style-type: none"> • • • Adjustment of brightness
WARNING		
Group B60K 2360/349 is impacted by reclassification into group B60K 35/234.		
Groups B60K 2360/349 and B60K 35/234 should be considered in order to perform a complete search.		
U	B60K 2360/60	<ul style="list-style-type: none"> • Structural details of dashboards or instruments
U	B60K 2360/65	<ul style="list-style-type: none"> • • Features of dashboards
M	B60K 2360/652	<ul style="list-style-type: none"> • • • Crash protection features
WARNING		
Group B60K 2360/652 is impacted by reclassification into group B60K 35/70.		
Groups B60K 2360/652 and B60K 35/70 should be considered in order to perform a complete search.		

Project: MP12735 (B60L)**M B60L**

PROPULSION OF ELECTRICALLY-PROPELLED VEHICLES (arrangements or mounting of electrical propulsion units or of plural diverse prime-movers for mutual or common propulsion in vehicles [B60K 1/00](#), [B60K 6/20](#); arrangements or mounting of electrical gearing in vehicles [B60K 17/12](#), [B60K 17/14](#); preventing wheel slip by reducing power in rail vehicles [B61C 15/08](#); dynamo-electric machines [H02K](#); control or regulation of electric motors [H02P](#)); **SUPPLYING ELECTRIC POWER FOR AUXILIARY EQUIPMENT OF ELECTRICALLY-PROPELLED VEHICLES** (electric coupling devices combined with mechanical couplings of vehicles [B60D 1/64](#); electric heating for vehicles [B60H 1/00](#)); **ELECTRODYNAMIC BRAKE SYSTEMS FOR VEHICLES IN GENERAL** (control or regulation of electric motors [H02P](#)); **MAGNETIC SUSPENSION OR LEVITATION FOR VEHICLES**; **MONITORING OPERATING VARIABLES OF ELECTRICALLY-PROPELLED VEHICLES**; **ELECTRIC SAFETY DEVICES FOR ELECTRICALLY-PROPELLED VEHICLES**

NOTES

- {This subclass, subject to the above references, ~~covers~~[covers](#):
 - feeding of power to auxiliary circuits;
 - current collectors; arrangements thereof on rail or road vehicles or on vehicles in general;
 - electrodynamic brake systems;
 - electric propulsion of vehicles; control and regulation therefor.
- {In this subclass it is desirable to classify any "additional information" which is of interest for search.}

WARNING

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

Project: MP12735 (B62K)**M B62K**

CYCLES; CYCLE FRAMES; CYCLE STEERING DEVICES; RIDER-OPERATED TERMINAL CONTROLS SPECIALLY ADAPTED FOR CYCLES; CYCLE AXLE SUSPENSIONS; CYCLE ~~SIDE-CARS~~[SIDE CARS](#), FORECARS, OR THE LIKE

NOTES

- {In this subclass, each of the main groups [B62K 7/00](#) - [B62K 15/00](#) takes precedence over all the preceding main groups, e.g. a child's bicycle is classified in [B62K 9/00](#) and not in [B62K 3/00](#).}
- {"Cycles" includes a single or plural wheeled straddle-type vehicles having a handlebar, self-balancing vehicles and kid scooters.}

WARNING

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

Project: RP12203-F (B64D)**U B64D 27/00**

Arrangement or mounting of power plants in aircraft; Aircraft characterised by the type or position of power plants

M	B64D 27/02	<ul style="list-style-type: none"> • Aircraft characterised by the type or position of power plants <p><u>WARNING</u> Group B64D 27/02 is impacted by reclassification into groups B64D 27/026, B64D 27/33, B64D 27/357, B64D 27/359, B64D 31/16, B64D 31/18 and B64D 35/021 – B64D 35/025. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B64D 27/026	<ul style="list-style-type: none"> • {comprising different types of power plants, e.g. combination of a piston engine and a gas-turbine (Hybrid electric aircraft B64D 27/33)} <p><u>WARNING</u> Group B64D 27/026 is incomplete pending reclassification of documents from group B64D 27/02. Groups B64D 27/026 and B64D 27/02 should be considered in order to perform a complete search.</p>
M	B64D 27/24	<ul style="list-style-type: none"> • using steam or spring force (jet aircraft B64D 27/16) <p><u>WARNING</u> Group B64D 27/24 is impacted by reclassification into groups B64D 27/30, B64D 27/31, B64D 27/32, B64D 27/33, B64D 27/34, B64D 27/35, B64D 27/351, B64D 27/353, B64D 27/355, B64D 27/357, B64D 27/359, B64D 31/16, B64D 31/18 and B64D 35/021 – B64D 35/025. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B64D 27/30	<ul style="list-style-type: none"> • Aircraft characterised by electric power plants <p><u>WARNING</u> Groups B64D 27/30, B64D 27/31, B64D 27/32, B64D 27/34, B64D 27/35, B64D 27/351 and B64D 27/355 are incomplete pending reclassification of documents from group B64D 27/24. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B64D 27/33	<ul style="list-style-type: none"> • Hybrid electric aircraft <p><u>WARNING</u> Group B64D 27/33 is incomplete pending reclassification of documents from groups B64D 27/02 and B64D 27/24. Groups B64D 27/33, B64D 27/02 and B64D 27/24 should be considered in order to perform a complete search.</p>
U	B64D 27/35	<ul style="list-style-type: none"> • Arrangements for on-board electric energy production, distribution, recovery or storage
M	B64D 27/353	<ul style="list-style-type: none"> • using solar cells <p><u>WARNING</u> Group B64D 27/353 is incomplete pending reclassification of documents from group B64D 27/24. Group B64D 27/353 is also impacted by reclassification into group B64U 50/31. Groups B64D 27/353, B64D 27/24 and B64U 50/31 should be considered in order to perform a complete search.</p>
M	B64D 27/357	<ul style="list-style-type: none"> • using batteries <p><u>WARNING</u> Group B64D 27/357 is incomplete pending reclassification of documents from groups B64D 27/02 and B64D 27/24.</p>

		Groups B64D 27/357, B64D 27/02, B64D 27/24 should be considered in order to perform a complete search.
M	B64D 27/359	<ul style="list-style-type: none">• • • using capacitors <p><u>WARNING</u> Group B64D 27/359 is incomplete pending reclassification of documents from groups B64D 27/02 and B64D 27/24. Groups B64D 27/359, B64D 27/02 and B64D 27/24 should be considered in order to perform a complete search.</p>
M	B64D 27/40	<ul style="list-style-type: none">• Arrangements for mounting power plants in aircraft <p><u>WARNING</u> Group B64D 27/40 is impacted by reclassification into groups B64D 27/402, B64D 27/404 and B64D 27/406. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B64D 27/402	<ul style="list-style-type: none">• {comprising box like supporting frames, e.g. pylons or arrangements for embracing the power plant} <p><u>WARNING</u> Group B64D 27/402 is incomplete pending reclassification of documents from group B64D 27/40. Groups B64D 27/402 and B64D 27/40 should be considered in order to perform a complete search.</p>
M	B64D 27/404	<ul style="list-style-type: none">• {Suspension arrangements specially adapted for supporting vertical loads} <p><u>WARNING</u> Group B64D 27/404 is incomplete pending reclassification of documents from group B64D 27/40. Groups B64D 27/404 and B64D 27/40 should be considered in order to perform a complete search.</p>
M	B64D 27/406	<ul style="list-style-type: none">• {Suspension arrangements specially adapted for supporting thrust loads, e.g. thrust links} <p><u>WARNING</u> Group B64D 27/406 is incomplete pending reclassification of documents from group B64D 27/40. Groups B64D 27/406 and B64D 27/40 should be considered in order to perform a complete search.</p>
M	B64D 31/00	<p>Power plant control systems; Arrangement of power plant control systems in aircraft</p> <p><u>WARNING</u> Group B64D 31/00 is impacted by reclassification into groups B64D 31/16 and B64D 31/18. Groups B64D 31/00, B64D 31/16 and B64D 31/18 should be considered in order to perform a complete search.</p>
U	B64D 31/02	<ul style="list-style-type: none">• Initiating means
M	B64D 31/06	<ul style="list-style-type: none">• • actuated automatically <p><u>WARNING</u> Group B64D 31/06 is impacted by reclassification into group B64D 31/09. Groups B64D 31/06 and B64D 31/09 should be considered in order to perform a complete search.</p>

- M B64D 31/09 • • • in response to power plant failure

WARNING

Group B64D 31/09 is incomplete pending reclassification of documents from group B64D 31/06.

Groups B64D 31/09 and B64D 31/06 should be considered in order to perform a complete search.

- M B64D 31/16 • for electric power plants

WARNING

Groups B64D 31/16 and B64D 31/18 are incomplete pending reclassification of documents from groups B64D 27/02, B64D 27/24 and B64D 31/00.

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

- U B64D 35/00 Transmitting power from power plants to propellers or rotors;
Arrangements of transmissions**

- M B64D 35/02 • specially adapted for specific power plants

WARNING

Group B64D 35/02 is impacted by reclassification into groups B64D 35/021, B64D 35/022, B64D 35/023, B64D 35/024, B64D 35/025 and B64D 35/026.

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

- M B64D 35/021 • • for electric power plants

WARNING

Groups B64D 35/021, B64D 35/022, B64D 35/023, B64D 35/024 and B64D 35/025 are incomplete pending reclassification of documents from groups B64D 27/02, B64D 27/24 and B64D 35/02.

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

Project: RP12459-F (B64D)

- M B64D 35/022 • • • of hybrid-electric type

WARNING

Group B64D 35/022 is incomplete pending reclassification of documents from group B64D 35/08.

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

- M B64D 35/023 • • • of series-parallel type

WARNING

Group B64D 35/023 is incomplete pending reclassification of documents from group B64D 35/08.

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

- M B64D 35/024 • • • of series type

WARNING

Group B64D 35/024 is incomplete pending reclassification of documents from group B64D 35/08.

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

- M B64D 35/025 • • • of parallel type

WARNING

Group B64D 35/025 is incomplete pending reclassification of documents from group B64D 35/08.

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

Project: RP12203-F (B64D)

- M B64D 35/026 • • • the electric power plant being integral with the propeller or rotor

WARNING

Group B64D 35/026 is incomplete pending reclassification of documents from group B64D 35/02.

Groups B64D 35/026 and B64D 35/02 should be considered in order to perform a complete search.

Project: RP12459-F (B64D)

- M B64D 35/08 • characterised by the transmission being driven by a plurality of power plants (for hybrid-electric power plants [B64D 35/022](#))

WARNING

Group B64D 35/08 is impacted by reclassification into groups B64D 35/023, B64D 35/025, B64D 35/024 and B64D 35/022.

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

Project: RP12215-F (B64F)

- M B64F 1/00 **Ground or aircraft-carrier-deck installations**

WARNING

Group B64F 1/00 is impacted by reclassification into groups B64F 1/223, B64F 1/225, B64F 1/227, B64F 1/228 and B64F 1/35.

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

- M B64F 1/04 • for launching aircraft

WARNING

Group B64F 1/04 is impacted by reclassification into groups B64F 1/223, B64F 1/224, B64F 1/225, B64F 1/226, B64F 1/227 and B64F 1/228.

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

- M B64F 1/10 • • using self-propelled vehicles

WARNING

Group B64F 1/10 is impacted by reclassification into groups B64F 1/223, B64F 1/225, B64F 1/227 and B64F 1/228.

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

- M B64F 1/22 • for handling aircraft

WARNING

Group B64F 1/22 is impacted by reclassification into groups B64F 1/223, B64F 1/225, B64F 1/226 and B64F 1/227.

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

M B64F 1/223

- for towing aircraft

WARNING

Groups B64F 1/223, B64F 1/225 and B64F 1/227 are incomplete pending reclassification of documents from groups B64F 1/00, B64F 1/04, B64F 1/10 and B64F 1/22.

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

M B64F 1/224

- • {Towing bars}

WARNING

Group B64F 1/224 is incomplete pending reclassification of documents from group B64F 1/04.

Groups B64F 1/04 and B64F 1/224 should be considered in order to perform a complete search.

U B64F 1/225

- • Vehicles specially adapted therefor, e.g. aircraft tow tractors

M B64F 1/226

- • • {hand manipulated, e.g. hand carts or motorised walk-type tractors}

WARNING

Group B64F 1/226 is incomplete pending reclassification of documents from groups B64F 1/04 and B64F 1/22.

Groups B64F 1/04, B64F 1/22 and B64F 1/226 should be considered in order to perform a complete search.

M B64F 1/228

- • • remotely controlled; operating autonomously

WARNING

Group B64F 1/228 is incomplete pending reclassification of documents from groups B64F 1/00, B64F 1/04 and B64F 1/10.

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

M B64F 1/34

- for starting propulsion plant

WARNING

Group B64F 1/34 is impacted by reclassification into groups B64F 1/35 and B64F 1/352.

Groups B64F 1/34, B64F 1/35 and B64F 1/352 should be considered in order to perform a complete search.

M B64F 1/35

- for supplying electrical power to stationary aircraft

WARNING

Group B64F 1/35 is incomplete pending reclassification of documents from groups B64F 1/00, B64F 1/34, B64F 1/36 and B64F 1/362.

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

M B64F 1/352

- • {Mobile units}

WARNING

Group B64F 1/352 is incomplete pending reclassification of documents from groups B64F 1/34, B64F 1/36, B64F 1/362 and B64F 1/364.

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

- M B64F 1/36
- Other airport installations (ground installations for de-icing aircraft [B64F 5/20](#))

WARNING

~~Group B64F 1/36 is impacted by reclassification into groups B64F 1/35 and B64F 1/352.~~

~~Groups B64F 1/36, B64F 1/35 and B64F 1/352 should be considered in order to perform a complete search.~~

- M B64F 1/362
- {Installations for supplying conditioned air to parked aircraft}

WARNING

~~Group B64F 1/362 is impacted by reclassification into groups B64F 1/35 and B64F 1/352.~~

~~Groups B64F 1/362, B64F 1/35 and B64F 1/352 should be considered in order to perform a complete search.~~

- M B64F 1/364
- • {Mobile units}

WARNING

~~Group B64F 1/364 is impacted by reclassification into group B64F 1/352.~~

~~Groups B64F 1/364 and B64F 1/352 should be considered in order to perform a complete search.~~

Project: RP12203-F (B64U)

- U B64U 50/00 **Propulsion; Power supply**

- U B64U 50/30 • Supply or distribution of electrical power

- M B64U 50/31 • • generated by photovoltaics

WARNING

~~Group B64U 50/31 is incomplete pending reclassification of documents from group B64D 27/353. Groups B64U 50/31 and B64D 27/353 should be considered in order to perform a complete search.~~

Project: MP12735 (B65D)

- M B65D **CONTAINERS FOR STORAGE OR TRANSPORT OF ARTICLES OR MATERIALS, e.g. BAGS, BARRELS, BOTTLES, BOXES, CANS, CARTONS, CRATES, DRUMS, JARS, TANKS, HOPPERS, FORWARDING CONTAINERS; ACCESSORIES, CLOSURES, OR FITTINGS THEREFOR; PACKAGING ELEMENTS; PACKAGES**

NOTES

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

~~2.~~ **1.** This subclass covers:

- containers, packaging elements or packages with ~~auxilliary~~**auxiliary** means or ~~provisions~~**provision** for displaying articles or materials;
- methods of packaging which are wholly characterised by the form of the package produced or the form of the container or packaging element used, as distinct from the operations performed or the apparatus employed, which are covered by subclass [B65B](#).

~~3.~~ **2.** This subclass, which is intended to be as comprehensive as possible, only excludes containers or packages of a nature clearly confined to a single other subclass, which are classified in that subclass.

~~4.~~ **3.** In this subclass, groups [B65D 5/00](#), [B65D 27/00](#) {, [B65D 29/00](#), [B65D 31/00](#)} or [B65D 65/00](#) include constructional features of foldable or

erectable container or wrapper blanks as well as the containers or wrappers formed by folding or erecting such blanks.

~~5.~~ 4. Containers, packaging elements or packages classified in group [B65D 85/00](#), are also classified according to the constructional or functional features, if such features are of interest.

~~6.~~ 5. In this subclass, the following terms or expressions are used with the meanings indicated:-

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

~~7.~~ 6. Tamper-indicating means for containers or closures are classified in the group appropriate to the type of container ~~or~~ closure, e.g. [B65D 5/54](#), [B65D 17/00](#), [B65D 27/30](#), ~~B65D 27/30~~, [B65D 27/34](#), [B65D 33/34](#), [B65D 41/32](#), [B65D 47/36](#), [B65D 49/12](#), [B65D 51/20](#), [B65D 55/06](#).

7. {In this subclass, the indexing codes of [B65D 2519/00004](#) - [B65D 2519/00995](#) should be added, if applicable.}

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:

B65D 5/34	covered by	B65D 5/325
B65D 5/35	covered by	B65D 5/325
B65D 5/355	covered by	B65D 5/0005
B65D 5/43	covered by	B65D 5/42
B65D 5/462	covered by	B65D 5/46008 - B65D 5/46032
B65D 5/465	covered by	B65D 5/46008 - B65D 5/46032
B65D 5/468	covered by	B65D 5/4608
B65D 5/472	covered by	B65D 5/46048
B65D 5/475	covered by	B65D 5/46008
B65D 5/478	covered by	B65D 5/46056

B65D 5/4805 - B65D 5/489	covered by	B65D 5/48002
B65D 5/49 - B65D 5/499	covered by	B65D 5/48024
B65D 5/63	covered by	B65D 5/72
B65D 6/00 - B65D 6/40	covered by	B65D 7/00 , B65D 9/00 , B65D 11/00 , B65D 15/00
B65D 8/00 - B65D 8/22	covered by	B65D 7/00 , B65D 9/00 , B65D 11/00 , B65D 15/00
B65D 19/22	covered by	B65D 19/0004
B65D 19/24	covered by	B65D 19/0004
B65D 19/26	covered by	B65D 19/0004
B65D 19/28	covered by	B65D 19/0004
B65D 19/30	covered by	B65D 19/0004
B65D 19/31	covered by	B65D 19/0004
B65D 19/32	covered by	B65D 19/0002 , B65D 19/0004
B65D 19/34	covered by	B65D 19/0004
B65D 21/024	covered by	B65D 21/0201
B65D 21/028	covered by	B65D 21/0204
B65D 21/032	covered by	B65D 21/0209
B65D 21/036	covered by	B65D 21/0217
B65D 25/26	covered by	B65D 81/02
B65D 30/00 - B65D 30/28	covered by	B65D 29/00 , B65D 31/00
B65D 33/17	covered by	B65D 33/1633
B65D 33/36	covered by	B65D 75/58
B65D 33/38	covered by	B65D 75/5861
B65D 35/48 - B65D 35/54	covered by	B65D 47/2018
B65D 39/18	covered by	B65D 39/00
B65D 41/01	covered by	B65D 41/00
B65D 43/03	covered by	B65D 43/00 + B65D 2543/00027
B65D 43/04	covered by	B65D 43/0214
B65D 43/10	covered by	B65D 43/0204
B65D 47/22	covered by	B65D 47/20
B65D 47/34	covered by	B05B 11/10
B65D 50/08	covered by	B65D 50/02
B65D 50/10	covered by	B65D 50/061
B65D 50/12	covered by	B65D 50/00
B65D 50/14	covered by	B65D 50/067
B65D 65/26 - B65D 65/32	covered by	B65D 75/58
B65D 65/34	covered by	B65D 75/66
B65D 65/36	covered by	B65D 75/58
B65D 71/52 - B65D 71/68	covered by	B65D 71/0003 - B65D 71/0077
B65D 75/60 - B65D 75/64	covered by	B65D 75/58
B65D 81/15	covered by	B65D 81/05
B65D 81/17	covered by	B65D 81/02
B65D 85/57	covered by	G11B 23/00
B65D 85/575	covered by	G11B 23/00
B65D 85/86	covered by	B65D 2585/86 , H05K 13/00
B65D 85/88	covered by	B65D 2585/88 , H01M 50/00

B65D 85/90 covered by [H10W](#), [H05K 13/00](#)

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

- | | | |
|---|----------------------------|---|
| M | B65D 1/00 -
B65D 21/00 | <u>General kinds of rigid or semi-rigid containers</u> (large containers B65D 88/00) |
| M | B65D 23/00 -
B65D 25/00 | <u>Details of rigid or semi-rigid containers not otherwise provided for</u> (for pallets B65D 19/38; of large containers B65D 90/00) |
| M | B65D 27/00 -
B65D 37/00 | <u>General kinds of flexible containers</u> (large containers B65D 88/00) |
| M | B65D 39/00 -
B65D 55/00 | <u>Closure members</u> {for rigid or semi-rigid containers} or for <u>flexible containers presenting similar closing problems</u> (closure flaps or lids attached to, or incorporated in, containers, or foldable or erectable container blanks, made of paper B65D 3/00, B65D 5/00; closure walls of containers specially constructed to be opened by cutting, piercing, or tearing of wall portions B65D 17/00; applying closure members to bottles, jars, or similar containers B67B; covers or similar closure members, for pressure vessels in general F16J 13/00); Parts of containers co-operating with closure members or characterised by the form of closure member <u>members</u> (for large containers B65D 90/00) |
| M | B65D 39/00 | <u>Closures arranged within necks or pouring openings or in discharge apertures, e.g. stoppers (lids or covers</u> B65D 43/00) |

NOTE

{In this group, the indexing codes of [B65D 2539/00](#) are used.}

Project: MP12735 (B81B)

- | | | |
|---|------|--|
| M | B81B | MICROSTRUCTURAL DEVICES OR SYSTEMS, e.g. MICROMECHANICAL DEVICES (piezoelectric, electrostrictive or magnetostrictive elements per se H10N 30/00 , H10N 35/00) |
|---|------|--|

NOTES

1. This subclass does not cover:
 - purely electrical or electronic devices per se which are covered by section [H](#), e.g. class [H10](#);
 - purely optical devices per se which are covered by subclasses [G02B](#) or [G02F](#);
 - essentially two-dimensional [2D] structures, e.g. layered products which are covered by subclass [B32B](#);
 - chemical or biological structures per se which are covered by section [C](#);
 - structures in atomic scale produced by manipulation of single atoms or molecules, which are covered by group [B82B 1/00](#).
2. Devices or systems classified in this subclass are also classified in appropriate subclasses providing for their structural or functional features, if such features are of interest.
3. {Attention is drawn to the following places:

A61K 9/50	Microcapsules for medicinal preparations
B25J 7/00	Micromanipulators
G02B 21/32	Micromanipulators combined with microscopes
G11B 5/127	Magnetic heads
H01P 3/08	Waveguide microstrips.

 }
4. {In this subclass, local "residual" subgroups, e.g. [B81B 7/0077](#), are used with the following purpose:

When classifying a document which does not fit in any of a set of subgroups with the same dot-level, the document should be classified in the residual group, if present, and not in the group at the hierarchical level one dot above.

In the example, the document shall be classified in [B81B 7/0077](#) and not in [B81B 7/0032](#) as [B81B 7/0077](#) is "residual" to [B81B 7/0035-B81B 7/0074](#)

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 B81B 7/00 **Microstructural systems** {; {Auxiliary parts of microstructural devices or systems}

Project: MP12735 (B81C)

M B81C **PROCESSES OR APPARATUS SPECIALLY ADAPTED FOR THE MANUFACTURE OR TREATMENT OF MICROSTRUCTURAL DEVICES OR SYSTEMS** (making microcapsules or microballoons [B01J 13/02](#); processes or apparatus ~~peculiar to~~ *specially adapted for* the manufacture or treatment of piezoelectric, electrostrictive or magnetostrictive ~~element~~ *elements* ~~per se~~ [H10N 30/01](#))

NOTES

1. This subclass does not cover:

- processes or apparatus for the manufacture or treatment of purely electrical or electronic devices, which are covered by section [H](#), e.g. ~~subclass~~ *group* [H10P](#);
- processes or apparatus involving the manipulation of single atoms or molecules, which are covered by group [B82B 3/00](#).

2. {In this subclass, local "residual" subgroups, e.g. [B81C 1/00126](#), are used with the following purpose.

When classifying a document which does not fit in any of a set of subgroups with the same dot-level, the document should be classified in the residual group, if present, and not in the group at the hierarchical level one dot above.

In the example, the document shall be classified in [B81C 1/00126](#) and not in [B81C 1/00023](#) as [B81C 1/00126](#) is "residual" to [B81C 1/00031](#) - [B81C 1/00119](#).)

Project: MP12752 (C01B)

U C01B 13/00 **Oxygen; Ozone; Oxides or hydroxides in general**

U C01B 13/02 • Preparation of oxygen (by liquefying [F25J](#))

M C01B 13/0296 • • {Generators releasing in a self-sustaining way pure oxygen from a solid charge, without interaction of it with a fluid nor external heating, e.g. chlorate candles or canisters containing them-~~(charges per se C01B 13/02)~~}

U C01B 21/00 **Nitrogen; Compounds thereof**

U C01B 21/082 • Compounds containing nitrogen and non-metals {and optionally metals} ([C01B 21/06](#), [C01B 21/08](#) take precedence)

U C01B 21/087 • • containing one or more hydrogen atoms

U C01B 21/092 • • • containing also one or more metal atoms

M C01B 21/0923 • • • • {Metal imides or amides-~~(silicon imides or amides C01B 21/087)~~}

U C01B 25/00 **Phosphorus; Compounds thereof** ({[C01B 6/00](#)}, [C01B 21/00](#), [C01B 23/00](#) take precedence; perphosphates [C01B 15/16](#))

- U C01B 25/16 · Oxyacids of phosphorus; Salts thereof (peroxyacids or salts thereof [C01B 15/00](#))
- U C01B 25/26 · · Phosphates (perphosphates [C01B 15/16](#))
- U C01B 25/30 · · · Alkali metal phosphates
- M C01B 25/301 · · · {Preparation from liquid orthophosphoric acid or from an acid solution or suspension of orthophosphates ~~(using ion-exchangers C01B 25/30)~~}
- U C01B 25/32 · · · Phosphates of magnesium, calcium, strontium, or barium
- M C01B 25/327 · · · {After-treatment ~~(increasing the phosphate content of ores C01B 25/32)~~}
- U C01B 33/00 Silicon; Compounds thereof ({[C01B 6/00](#), [C01B 21/00](#), [C01B 23/00](#) take precedence; persilicates [C01B 15/14](#); carbides [C01B 32/956](#))**
- U C01B 33/20 · Silicates (persilicates [C01B 15/14](#) {; containing aluminium [C01B 33/26](#)})
- U C01B 33/26 · · Aluminium-containing silicates {, i.e. silico-aluminates}
- U C01B 33/28 · · · {Base exchange silicates, e.g. zeolites (regeneration [B01J 49/00](#))}
- U C01B 33/2807 · · · · {Zeolitic silicoaluminates with a tridimensional crystalline structure possessing molecular sieve properties; Isomorphous compounds wherein a part of the aluminium ore of the silicon present may be replaced by other elements such as gallium, germanium, phosphorus; Preparation of zeolitic molecular sieves from molecular sieves of another type or from preformed reacting mixtures}
- U C01B 33/2815 · · · · {of type A (UNION CARBIDE trade name; corresponds to GRACE's types Z-12 or Z-12L)}
- M C01B 33/283 · · · · · {from a reaction mixture containing at least one aluminium silicate or aluminosilicate of a clay-type, e.g. kaolin or metakaolin or its exotherm modification or allophane ~~(containing a single clay substantially chemically modified with an acid, i.e. beyond the activation state C01B 33/2815)~~}

Project: MP12752 (C01C)

- U C01C 1/00 Ammonia; Compounds thereof ({[C01C 3/08](#), [C01C 3/14](#), [C01C 3/16](#), [C01C 3/20](#) take precedence})**
- NOTE
Complex ammine salts, e.g. [Pd(NH₃)₄]Cl₂, are { also} classified in the relevant groups of subclasses [C01D](#) - [C01G](#), according to the metal
- U C01C 1/02 · Preparation, {purification} or separation of ammonia
- U C01C 1/04 · · Preparation of ammonia by synthesis (preparation or purification of gas mixtures for ammonia synthesis [C01B 3/025](#))
- U C01C 1/0405 · · · {from N₂ and H₂ in presence of a catalyst}
- M C01C 1/0417 · · · {characterised by the synthesis reactor, e.g. arrangement of catalyst beds and heat exchangers in the reactor ~~(arrangement of several reactors C01C 1/0405; fixed-bed reactors in general B01J 8/02)~~}

Project: MP12752 (C03B)

- U C03B 37/00 Manufacture or treatment of flakes, fibres, or filaments from softened glass, minerals, or slags**
- U C03B 37/01 · Manufacture of glass fibres or filaments
- U C03B 37/012 · · Manufacture of preforms for drawing fibres or filaments

- U C03B 37/014 • • • made entirely or partially by chemical means {, e.g. vapour phase deposition of bulk porous glass either by outside vapour deposition [OVD], or by outside vapour phase oxidation [OVPO] or by vapour axial deposition [VAD] ([C03C 17/02](#) takes precedence)}
- M C03B 37/018 • • • • by glass deposition on a glass substrate, e.g. by {inside-, modified-, plasma-, or plasma modified-} chemical vapour deposition {[ICVD, MCVD, PCVD, PMCVD], i.e. by thin layer coating on the inside or outside of a glass tube or on a glass rod} ([C03B 37/016](#) takes precedence; ~~{bulk deposition of porous glass by OVD or VAD C03B 37/014}~~; surface treatment of glass by coating *with glass* [C03C 17/02](#))

Project: MP12752 (C04B)

- U C04B 33/00 **Clay-wares (monolithic refractories or refractory mortars [C04B 35/66](#); porous products [C04B 38/00](#))**

NOTE

{In groups [C04B 33/00](#) - [C04B 33/36](#), the indexing codes of groups [C04B 2235/00](#) - [C04B 2235/9646](#) are used (with the exception of [C04B 2235/349](#), [C04B 2235/6027](#), [C04B 2235/604](#) and [C04B 2235/9661](#)) to identify aspects relating to ceramic starting mixtures and sintered ceramic products.}

- U C04B 33/02 • Preparing or treating the raw materials individually or as batches
- U C04B 33/13 • • Compounding ingredients ([C04B 33/36](#), [C04B 35/71](#) take precedence {; pigments for ceramics [C09C 1/0009](#)})
- M C04B 33/132 • • • Waste materials; Refuse {; Residues} ([C04B 33/16](#) takes precedence; ~~{waste glass C04B 33/13}~~)
- M C04B 33/1321 • • • • {Waste slurries, e.g. harbour sludge, industrial muds ~~{slurries of specific well-defined waste streams, e.g. phosphate muds, other than red mud; C04B 33/132}~~}
- M C04B 33/135 • • • • Combustion residues, e.g. fly ash, incineration waste ~~{silica fume C04B 33/132}~~
- M C04B 38/067 • • • • • {Macromolecular compounds ([C04B 38/062](#) takes precedence; ~~polysaccharides C04B 38/0645~~)}

Project: MP12140 (C06C)

- M C06C 15/00 **Pyrophoric compositions; Flints (chemical lighters [C06C 9/00](#); ~~alloys in general C22C~~)**

Project: MP12752 (C07C)

- U C07C 1/00 **Preparation of hydrocarbons from one or more compounds, none of them being a hydrocarbon**
- U C07C 1/02 • from oxides of a carbon (preparation of liquid hydrocarbon mixtures of undefined composition [C10G 2/00](#); of synthetic natural gas [C10L 3/06](#))
- U C07C 1/04 • • from carbon monoxide with hydrogen
- U C07C 1/0455 • • • {Reaction conditions}
- M C07C 1/046 • • • • {Numerical values of parameters ~~{only to be used if no other subgroup of C07C 1/04 is used}~~}
- U C07C 35/00 **Compounds having at least one hydroxy or O-metal group bound to a carbon atom of a ring other than a six-membered aromatic ring**
- U C07C 35/22 • polycyclic, at least one hydroxy group bound to a condensed ring system
- U C07C 35/23 • • with hydroxy on a condensed ring system having two rings

- M C07C 35/36 . . . the condensed ring system being a (4.4.0)[4.4.0] system, e.g. *naphols* *hydrogenated naphthols*

Project: MP12313 (C07D)

- | | | |
|---|--|---|
| M | C07D 201/00
- C07D 201/00
C07D 259/00 | <u>Heterocyclic compounds having only nitrogen as ring hetero atom</u> |
| M | C07D 275/00
- C07D 295/00
C07D 285/00 | <u>Heterocyclic compounds having nitrogen and sulfur as the only ring hetero atoms</u> |
| M | C07D 331/00
- C07D 347/00
C07D 345/00 | <u>Heterocyclic compounds having sulfur, selenium or tellurium <i>atoms</i> as the only ring hetero atoms</u> |

Project: RP11530 (C07K)

- U C07K 14/00** Peptides having more than 20 amino acids; Gastrins; Somatostatins; Melanotropins; Derivatives thereof


- U C07K 14/005 · from viruses

NOTE

When classifying in this group, subject-matter related to viral proteins shall be classified by the symbol [C07K 14/005](#) together with (a number of) appropriate indexing codes out of [C12N 2710/00](#)-[C12N 2795/00](#)

WARNING

1. From March 15, 2012 groups [C07K 14/01](#) - [C07K 14/19](#) and subgroups thereof are no longer used for the classification of new documents. 2. Reclassification of the back-file follows the principle outlined in the Note here above

- | | | |
|---|-------------|---|
| U | C07K 14/01 | • • DNA viruses |
| U | C07K 14/03 | • • • Herpetoviridae, e.g. pseudorabies virus |
| M | C07K 14/045 | • • • •  Cytomegalovirus |
| C | C07K 14/435 | • from animals; from humans |

WARNING

Group C07K 14/435 is impacted by reclassification into groups C07K 14/791 - C07K 14/7929.

Groups C07K 14/435 and C07K 14/791 - C07K 14/7929 should be considered in order to perform a complete search.

- C C07K 14/46 · · from vertebrates

WARNING

Group C07K 14/46 is impacted by reclassification into groups C07K 14/791 - C07K 14/7929.

Groups C07K 14/46 and C07K 14/791 - C07K 14/7929 should be considered in order to perform a complete search.

- C C07K 14/47 . . . from mammals

WARNING

Group C07K 14/47 is impacted by reclassification into groups C07K 14/791 - C07K 14/7929.

Groups C07K 14/47 and C07K 14/791 - C07K 14/7929 should be considered in order to perform a complete search.

- C C07K 14/705
- Receptors; Cell surface antigens; Cell surface determinants {(tumour specific antigens [C07K 14/4748](#))}
- WARNING**
 Group [C07K 14/705](#) is impacted by reclassification into groups [C07K 14/791](#) - [C07K 14/7929](#).
 Groups [C07K 14/705](#) and [C07K 14/791](#) - [C07K 14/7929](#) should be considered in order to perform a complete search.
- U C07K 14/79
- Transferrins, e.g. lactoferrins, ovotransferrins
- N C07K 14/791
- {Ion channels}
- WARNING**
 Groups [C07K 14/791](#) - [C07K 14/79186](#) are incomplete pending reclassification of documents from groups [C07K 14/435](#), [C07K 14/46](#), [C07K 14/47](#) and [C07K 14/705](#).
 All groups listed in this Warning should be considered in order to perform a complete search.
- N C07K 14/7912
- • • {Voltage gated ion channels}
- N C07K 14/79122
- • • • {Potassium channels}
- N C07K 14/79124
- • • • {Sodium channels}
- N C07K 14/79126
- • • • {Calcium channels}
- N C07K 14/7914
- • • {Light-gated ion channels}
- N C07K 14/79144
- • • • {Rhodopsin}
- N C07K 14/79148
- • • • • {Anion-conducting channel rhodopsin}
- N C07K 14/7916
- • • {Ligand-gated ion channels}
- N C07K 14/79162
- • • • {Serotonin}
- N C07K 14/79164
- • • • {Nicotinic acetylcholine}
- N C07K 14/79166
- • • • {Gamma aminobutyric acid [GABA]}
- N C07K 14/79168
- • • • {Glycine [GlyR]}
- N C07K 14/79169
- • • • {Glutamate}
- N C07K 14/7918
- • • {Mechanosensitive ion channels}
- N C07K 14/79182
- • • • {Transient receptor potential cation channels [TRP]}
- N C07K 14/79186
- • • • {Epithelial sodium channel [ENaC] or degenerin sodium channel [DEG]}
- N C07K 14/792
- • {Transporters}
- WARNING**
 Groups [C07K 14/792](#) - [C07K 14/7929](#) are incomplete pending reclassification of documents from groups [C07K 14/435](#), [C07K 14/46](#), [C07K 14/47](#) and [C07K 14/705](#).
 All groups listed in this Warning should be considered in order to perform a complete search.
- N C07K 14/7921
- • • {ATP binding cassette [ABC] transporters}
- N C07K 14/7922
- • • {Na⁺K⁺-ATPase}
- N C07K 14/7924
- • • {Folate}
- N C07K 14/7926
- • • {Glucose}
- N C07K 14/7928
- • • {Dopamine}
- N C07K 14/7929
- • • {Serotonin}

Project: RP12030 (C08G)

M	C08G 77/00	Macromolecular compounds obtained by reactions forming a linkage containing silicon with or without sulfur, nitrogen, oxygen or carbon in the main chain of the macromolecule
		<i>NOTE</i> <i>{In Groups C08G 77/00 - C08G 77/80, the last place priority rule is not applied, i.e. the common rule is applied.}</i>
U	C08G 77/04	• Polysiloxanes
M	C08G 77/06	• • Preparatory processes {{C08G 77/045 takes precedence}}
M	C08G 77/12	• • containing silicon bound to hydrogen {{C08G 77/045 takes precedence}}
M	C08G 77/14	• • containing silicon bound to oxygen-containing groups {{C08G 77/045 takes precedence}}
M	C08G 77/16	• • • to hydroxyl/hydroxy groups
M	C08G 77/20	• • containing silicon bound to unsaturated aliphatic groups {{C08G 77/045 takes precedence}}
M	C08G 77/22	• • containing silicon bound to organic groups containing atoms other than carbon, hydrogen and oxygen {{C08G 77/045 takes precedence}}
M	C08G 77/32	• • Post-polymerisation treatment {{C08G 77/045 takes precedence}} chemical after-treatment C08G 77/38
M	C08G 77/38	• • Polysiloxanes modified by chemical after-treatment {{C08G 77/045 takes precedence}}
U	C08G 77/42	• Block-or graft-polymers containing polysiloxane sequences (polymerising aliphatic unsaturated monomers on to a polysiloxane C08F 283/12)
M	C08G 77/448	• • containing polycarbonate sequences
U	C08G 77/452	• • containing nitrogen-containing sequences
M	C08G 77/458	• • containing polyurethane sequences
U	C08G 77/48	• in which at least two but not all the silicon atoms are connected by linkages other than oxygen atoms (C08G 77/42 takes precedence)
M	C08G 77/50	• • by carbon linkages {{C08G 77/485 takes precedence}}
M	C08G 77/54	• • Nitrogen-containing linkages {{C08G 77/485 takes precedence}}
M	C08G 77/56	• • Boron-containing linkages {{C08G 77/485 takes precedence}}
M	C08G 77/58	• • Metal-containing linkages {{C08G 77/485 takes precedence}}

Project: MP12752 (C09B)

U	C09B 55/00	Azomethine dyes
M	C09B 55/001	• {Azomethine dyes forming a 1,2 complex metal compound, e.g. with Co or Cr, with an-other/another dye, e.g. with an azo or azomethine dye {{for 1,1 complexes with other ligands, C09B 55/00}} }
U	C09B 69/00	Dyes not provided for by a single group of this subclass
M	C09B 69/10	• Polymeric dyes; Reaction products of dyes with monomers or with macromolecular compounds {{addition products of alkylene oxide to dyes, C09B 69/00; dyeing with polymeric dyes D06P 1/0056}}

Project: Unknown (C09K)

U C09K 11/00 Luminescent materials, e.g. electroluminescent or chemiluminescent

NOTE

In this main group, it is desirable to add the indexing codes of groups [C09K 2111/00](#) - [C09K 2113/00](#).

C09K 11/08

- containing inorganic luminescent materials

NOTES

1. In groups {[C09K 11/08](#) - [C09K 11/897](#)}, the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, materials are classified in the last appropriate place; ~~however, activating constituents of the luminescent materials are disregarded for classification purposes.~~

2. {In this group, magnesium is considered as an alkaline earth metal.}

WARNING

Groups [C09K 11/0805](#) - [C09K 11/0894](#), with the exception of [C09K 11/0883](#) for classifying nitrides, are no longer used for classification of new documents. The backlog of this group is being continuously reclassified to subgroups [C09K 11/54](#) - [C09K 11/897](#)

Project: MP12752 (C10B)

U C10B 53/00 Destructive distillation, specially adapted for particular solid raw materials or solid raw materials in special form (wet carbonising of peat [C10F](#))

M C10B 53/07 • {of solid raw materials consisting} of synthetic polymeric materials, e.g. tyres (~~{waste in general, e.g. household waste [C10B 53/00](#);~~ recovery or working-up of waste materials of organic macromolecular compounds or compositions based thereon by dry-heat treatment for obtaining partially depolymerised materials [C08J 11/10](#); production of liquid hydrocarbon mixtures from rubber or rubber waste [C10G 1/10](#))

Project: MP12752 (C11D)

U C11D 1/00 Detergent compositions based essentially on surface-active compounds; Use of these compounds as a detergent

NOTE

In groups [C11D 1/02](#) - [C11D 1/88](#), the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, a compound is classified in the last appropriate place.

{This Note corresponds to IPC Note (1) relating to [C11D 1/02](#) - [C11D 1/88](#).}

- U C11D 1/02** • Anionic compounds {([C11D 1/002](#), [C11D 1/004](#), [C11D 1/008](#) take precedence)}
- U C11D 1/34** • • Derivatives of acids of phosphorus
- M C11D 1/347** • • • {Other P-containing anionic compounds ([C11D 1/006](#); ~~C11D 1/34 take~~ takes precedence)}

Project: MP12752 (C12C)

U C12C 9/00 {Methods specially adapted for the making of beerwort}

U C12C 9/02 • {Beerwort treatment; Boiling with hops; Hop extraction}

M C12C 9/025 • • {Preparation of hop extracts (~~extraction with beerwort [C12C 9/02](#)~~); Isomerisation of these extracts; Treatment of beerwort with these extracts; Surrogates of the hop}

Project: MP12752 (C12P)**M C12P 33/00****Preparation of steroids**NOTE

1. Attention is drawn to ~~the definition of steroids in the note~~ *Note (1)* following the title of subclass ~~C07J~~, *which explains what is covered by the term "steroids".*

2. *In groups C12P 33/02 - C12P 33/20, the following terms are used with the meaning indicated:*

- *"acting", "forming", "hydroxylating", "dehydroxylating" or "dehydrogenating" means the action of a microorganism or enzyme rather than other chemical action.*

3. *{In groups C12P 33/005 - C12P 33/20, the last place priority rule does not apply. Classification may be made in more than one place within C12P 33/00 - C12P 33/18, in contrast to the general last place rule that applies throughout C12P.}*

~~2. In groups C12P 33/02 - C12P 33/20, the terms "acting", "forming", "hydroxylating", "dehydroxylating" and "dehydrogenating" refer to the action of a microorganism or enzyme rather than other chemical action.~~

4. *{This Note corresponds to IPC Note (1) relating to C12P 3/00 - C12P 37/00.}*

M C12P 33/20

- containing heterocyclic rings ~~{(reactions are also classified in groups C12P 33/00 - C12P 33/18)}~~

Project: MP12083 (C21B)**M C21B****MANUFACTURE OF IRON OR STEEL (preliminary treatment of ferrous ores or scrap ~~C22B 1/00~~; ~~electric heating H05B~~)**NOTE

This subclass covers:

- the production of iron or steel from source materials, e.g. the production of pig-iron;
- apparatus specially adapted therefor, e.g. blast furnaces or air heaters.

WARNING

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

U C21B 3/00**General features in the manufacture of pig-iron (mixers for pig-iron ~~C21C 1/06~~)****U C21B 3/04**

- Recovery of by-products, e.g. slag

M C21B 3/06

- • Treatment of liquid slag ~~(slag wool C03B; slag stones C04B)~~

U C21B 5/00**Making pig-iron in the blast furnace****M C21B 5/06**

- using top gas in the blast furnace process ~~(in coke ovens C10B)~~

M C21B 7/00**Blast furnaces ~~(lifts associated with blast furnaces B66B 9/06)~~****M C21B 7/04**

- with special refractories ~~(refractory materials C04B)~~

U C21B 9/00**Stoves for heating the blast in blast furnaces****U C21B 9/10**

- Other details, e.g. blast mains

M C21B 9/12

- • Hot-blast valves or slides for blast furnaces ~~(valves in general F16K)~~

M C21B 15/00**Other processes for the manufacture of iron from iron compounds (~~general methods of reducing to metal C22B 5/00~~; by electrolysis ~~C25C 1/06~~)**

Project: MP12083 (C21C)

- M C21C** **PROCESSING OF PIG-IRON, e.g. REFINING, MANUFACTURE OF WROUGHT-IRON OR STEEL; TREATMENT IN MOLTEN STATE OF FERROUS ALLOYS (~~refining metals in general C22B 9/00~~)**
- WARNING**
In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme:
- U C21C 5/00** **Manufacture of carbon-steel, e.g. plain mild steel, medium carbon steel or cast steel {or stainless steel}**
- M C21C 5/52** • Manufacture of steel in electric furnaces ~~{{(C21C 5/005 takes precedence); electric heating per se H05B}}~~
- U C21C 5/56** • Manufacture of steel by other methods (making liquid steel by direct processes [C21B 13/00](#) ; [C21C 5/005](#) takes precedence)
- U C21C 5/562** • • {starting from scrap}
- M C21C 5/565** • • • {Preheating of scrap ~~(apparatus for preheating scrap in general F27D 13/002)~~}
- M C21C 7/00** **Treating molten ferrous alloys, e.g. steel, not covered by groups [C21C 1/00](#) - [C21C 5/00](#) (treating molten metals during moulding [B22D 1/00](#), [B22D 27/00](#); remelting ferrous metals C22B)**

Project: MP12140 (C22C)

- M C22C** **ALLOYS (~~flints C06C 15/00~~; treatment of alloys [C21D](#), [C22F](#))**
- NOTES**
1. In this subclass, the following terms or expressions are used with the meanings indicated:
- "alloys" includes also:
 - a. metallic composite materials containing a substantial proportion of fibres or other somewhat larger particles;
 - b. ceramic compositions containing free metal bonded to carbides, diamond, oxides, borides, nitrides or silicides, e.g. cermets, or other metal compounds, e.g. oxynitrides or sulfides, other than as macroscopic reinforcing agents;
 - "based on" requires at least 50% by weight of the specified constituent or of the specified group of constituents.
2. Groups [C22C 43/00](#) - [C22C 49/00](#) take precedence over groups [C22C 1/00](#) - [C22C 38/00](#).
{This Note corresponds to IPC Note (1) relating to [C22C 1/00](#) - [C22C 38/00](#).}
3. In groups [C22C 37/00](#) and [C22C 38/00](#), the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, an alloy is classified in the last appropriate place that provides for one of the alloying components. {This Note corresponds to IPC Note (1) relating to [C22C 37/00](#) - [C22C 38/00](#).}
4. {In this subclass it is desirable to classify the individual aspects of combinations of processes or materials for powder metallurgy using Combination Sets with symbols chosen from groups [C22C 1/00](#) - [C22C 43/00](#) or from groups [B22F 1/00](#) - [B22F 9/00](#).}
5. {In this subclass the special database "ALLOYS" is used. This system includes patent documents classified in groups [C22C 1/04](#) and [C22C 5/00](#)-}

~~C22C 49/14 and provides information on the composition of the alloys, their uses and characteristics.}~~

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:

C22C 101/00 , C22C 101/20	covered by	C04B 35/62227
C22C 101/02	covered by	C04B 35/62231
C22C 101/04	covered by	C04B 35/62236
C22C 101/06	covered by	C04B 35/62245
C22C 101/08	covered by	C04B 35/62272
C22C 101/10	covered by	D01F 9/12
C22C 101/12	covered by	C04B 35/62277
C22C 101/14	covered by	C04B 35/62281
C22C 101/16	covered by	C04B 35/62286
C22C 101/18	covered by	C04B 35/62295
C22C 101/22	covered by	C04B 35/6229
C22C 111/00-C22C 111/02	covered by	C22C 47/00 , C22C 49/00
C22C 121/00-C22C 121/02	covered by	C22C 47/02 - C22C 47/068 , C22C 49/00

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

Project: RP11754-F (C22C)

- U C22C 1/00** Making non-ferrous alloys (by electrothermic methods [C22B 4/00](#); by electrolysis [C25C 1/24](#), [C25C 3/36](#))
- M C22C 1/04** • by powder metallurgy ([C22C 1/08](#) takes precedence)
- WARNING**
~~Group C22C 1/04 is impacted by reclassification into group C22C 1/059. Groups C22C 1/04 and C22C 1/059 should be considered in order to perform a complete search.~~
- M C22C 1/0408** • • {Light metal alloys}
- WARNING**
~~Group C22C 1/0408 is impacted by reclassification into group C22C 1/059. Groups C22C 1/0408 and C22C 1/059 should be considered in order to perform a complete search.~~
- M C22C 1/0416** • • • {Aluminium-based alloys}
- WARNING**
~~Group C22C 1/0416 is impacted by reclassification into group C22C 1/059. Groups C22C 1/0416 and C22C 1/059 should be considered in order to perform a complete search.~~
- M C22C 1/0425** • • {Copper-based alloys}
- WARNING**
~~Group C22C 1/0425 is impacted by reclassification into group C22C 1/059. Groups C22C 1/0425 and C22C 1/059 should be considered in order to perform a complete search.~~
- M C22C 1/0433** • • {Nickel- or cobalt-based alloys}
- WARNING**
~~Group C22C 1/0433 is impacted by reclassification into group C22C 1/059.~~

Groups C22C 1/0433 and C22C 1/059 should be considered in order to perform a complete search.

- M C22C 1/0441 • • {Alloys based on intermetallic compounds of the type rare earth - Co, Ni}

WARNING

Group C22C 1/0441 is impacted by reclassification into group C22C 1/059. Groups C22C 1/0441 and C22C 1/059 should be considered in order to perform a complete search.

- M C22C 1/045 • {Alloys based on refractory metals}

WARNING

Group C22C 1/045 is impacted by reclassification into group C22C 1/059. Groups C22C 1/045 and C22C 1/059 should be considered in order to perform a complete search.

- M C22C 1/0458 • • {Alloys based on titanium, zirconium or hafnium}

WARNING

Group C22C 1/0458 is impacted by reclassification into group C22C 1/059. Groups C22C 1/0458 and C22C 1/059 should be considered in order to perform a complete search.

- M C22C 1/0466 • {Alloys based on noble metals}

WARNING

Group C22C 1/0466 is impacted by reclassification into group C22C 1/059. Groups C22C 1/0466 and C22C 1/059 should be considered in order to perform a complete search.

- M C22C 1/047 • • comprising intermetallic compounds {(C22C 1/0441 takes precedence)}

WARNING

Group C22C 1/047 is impacted by reclassification into group C22C 1/059. Groups C22C 1/047 and C22C 1/059 should be considered in order to perform a complete search.

- M C22C 1/0475 • {Impregnated alloys}

WARNING

Group C22C 1/0475 is impacted by reclassification into group C22C 1/059. Groups C22C 1/0475 and C22C 1/059 should be considered in order to perform a complete search.

- M C22C 1/0483 • {Alloys based on the low melting point metals Zn, Pb, Sn, Cd, In or Ga}

WARNING

Group C22C 1/0483 is impacted by reclassification into group C22C 1/059. Groups C22C 1/0483 and C22C 1/059 should be considered in order to perform a complete search.

- M C22C 1/05 • • Mixtures of metal powder with non-metallic powder (C22C 1/08 takes precedence)

WARNING

Group C22C 1/05 is impacted by reclassification into group C22C 1/059. Groups C22C 1/05 and C22C 1/059 should be considered in order to perform a complete search.

- M C22C 1/051
- • • Making hard metals based on borides, carbides, nitrides, oxides or silicides; Preparation of the powder mixture used as the starting material therefor
- WARNING
 Group C22C 1/051 is incomplete pending reclassification of documents from group C22C 1/058.
 Group C22C 1/051 is also impacted by reclassification into groups C22C 1/057 and C22C 1/059.
 All groups listed in this Warning should be considered in order to perform a complete search.
- M C22C 1/053
- • • with in situ formation of hard compounds
- WARNING
 Group C22C 1/053 is incomplete pending reclassification of documents from group C22C 1/058.
 Group C22C 1/053 is also impacted by reclassification into group C22C 1/059.
 Groups C22C 1/058, C22C 1/053 and C22C 1/059 should be considered in order to perform a complete search.
- M C22C 1/055
- • • • using carbon
- WARNING
 Group C22C 1/055 is incomplete pending reclassification of documents from group C22C 1/058.
 Group C22C 1/055 is also impacted by reclassification into group C22C 1/059.
 Groups C22C 1/058, C22C 1/055 and C22C 1/059 should be considered in order to perform a complete search.
- M C22C 1/056
- • • • using gas
- WARNING
 Group C22C 1/056 is incomplete pending reclassification of documents from group C22C 1/058.
 Group C22C 1/056 is also impacted by reclassification into group C22C 1/059.
 Groups C22C 1/058, C22C 1/056 and C22C 1/059 should be considered in order to perform a complete search.
- M C22C 1/057
- • • with in situ formation of phases other than hard compounds by solid state reaction sintering, e.g. metal phase formed by reduction reaction
- WARNING
 Group C22C 1/057 is incomplete pending reclassification documents from groups C22C 1/051, C22C 1/058, C22C 1/1078, C22C 1/1084 and C22C 1/1089.
 All groups listed in this Warning should be considered in order to perform a complete search.
- D C22C 1/058
 —(Frozen)
- • • {by reaction sintering (i.e. gasless reaction starting from a mixture of solid metal compounds)}
- WARNING
 Group C22C 1/058 is no longer used for the classification of documents as of January 1, 2023.
 The content of this group is being reclassified into groups C22C 1/051–C22C 1/057 and C22C 1/059.
 Groups C22C 1/058, C22C 1/051–C22C 1/057 and C22C 1/059 should be considered in order to perform a complete search.

- M C22C 1/059
- • • Making alloys comprising less than 5% by weight of dispersed reinforcing phases
- WARNING
Group C22C 1/059 is incomplete pending reclassification documents from groups C22C 1/04, C22C 1/0408, C22C 1/0416, C22C 1/0425, C22C 1/0433, C22C 1/0441, C22C 1/045, C22C 1/0458, C22C 1/0466, C22C 1/047, C22C 1/0475, C22C 1/0483, C22C 1/05, C22C 1/051, C22C 1/053, C22C 1/055, C22C 1/056, C22C 1/058, C22C 1/10, C22C 1/1005, C22C 1/101, C22C 1/1015, C22C 1/1021, C22C 1/1026, C22C 1/1031, C22C 1/1036, C22C 1/1042, C22C 1/1047, C22C 1/1052, C22C 1/1057, C22C 1/1063, C22C 1/1068, C22C 1/1073, C22C 1/1078, C22C 1/1084, C22C 1/1089, C22C 1/1094 and C22C 32/00 and all its subgroups.
All groups listed in this Warning should be considered in order to perform a complete search.
- M C22C 1/10
- Alloys containing non-metals ([C22C 1/05](#), [C22C 1/08](#) take precedence)
- WARNING
Group C22C 1/10 is impacted by reclassification into group C22C 1/059. Groups C22C 1/10 and C22C 1/059 should be considered in order to perform a complete search.
- M C22C 1/1005
- • {Pretreatment of the non-metallic additives (pretreatment of non-metallic fibres [C22C 47/02](#))}
- WARNING
Group C22C 1/1005 is impacted by reclassification into group C22C 1/059. Groups C22C 1/1005 and C22C 1/059 should be considered in order to perform a complete search.
- M C22C 1/101
- • • {by coating}
- WARNING
Group C22C 1/101 is impacted by reclassification into group C22C 1/059. Groups C22C 1/101 and C22C 1/059 should be considered in order to perform a complete search.
- M C22C 1/1015
- • • {by preparing or treating a non-metallic additive preform}
- WARNING
Group C22C 1/1015 is impacted by reclassification into group C22C 1/059. Groups C22C 1/1015 and C22C 1/059 should be considered in order to perform a complete search.
- M C22C 1/1021
- • • {the preform being ceramic}
- WARNING
Group C22C 1/1021 is impacted by reclassification into group C22C 1/059. Groups C22C 1/1021 and C22C 1/059 should be considered in order to perform a complete search.
- M C22C 1/1026
- • {starting from a solution or a suspension of (a) compound(s) of at least one of the alloy constituents}
- WARNING
Group C22C 1/1026 is impacted by reclassification into group C22C 1/059. Groups C22C 1/1026 and C22C 1/059 should be considered in order to perform a complete search.

M	C22C 1/1031	<ul style="list-style-type: none"> • {starting from gaseous compounds or vapours of at least one of the constituents} <p><u>WARNING</u> Group C22C 1/1031 is impacted by reclassification into group C22C 1/059. Groups C22C 1/1031 and C22C 1/059 should be considered in order to perform a complete search.</p>
M	C22C 1/1036	<ul style="list-style-type: none"> • {starting from a melt} <p><u>WARNING</u> Group C22C 1/1036 is impacted by reclassification into group C22C 1/059. Groups C22C 1/1036 and C22C 1/059 should be considered in order to perform a complete search.</p>
M	C22C 1/1042	<ul style="list-style-type: none"> • • {by atomising} <p><u>WARNING</u> Group C22C 1/1042 is impacted by reclassification into group C22C 1/059. Groups C22C 1/1042 and C22C 1/059 should be considered in order to perform a complete search.</p>
M	C22C 1/1047	<ul style="list-style-type: none"> • • {by mixing and casting liquid metal matrix composites} <p><u>WARNING</u> Group C22C 1/1047 is impacted by reclassification into group C22C 1/059. Groups C22C 1/1047 and C22C 1/059 should be considered in order to perform a complete search.</p>
M	C22C 1/1052	<ul style="list-style-type: none"> • • • {by mixing and casting metal matrix composites with reaction} <p><u>WARNING</u> Group C22C 1/1052 is impacted by reclassification into group C22C 1/059. Groups C22C 1/1052 and C22C 1/059 should be considered in order to perform a complete search.</p>
M	C22C 1/1057	<ul style="list-style-type: none"> • • • {Reactive infiltration} <p><u>WARNING</u> Group C22C 1/1057 is impacted by reclassification into group C22C 1/059. Groups C22C 1/1057 and C22C 1/059 should be considered in order to perform a complete search.</p>
M	C22C 1/1063	<ul style="list-style-type: none"> • • • {Gas reaction, e.g. lanxide} <p><u>WARNING</u> Group C22C 1/1063 is impacted by reclassification into group C22C 1/059. Groups C22C 1/1063 and C22C 1/059 should be considered in order to perform a complete search.</p>
M	C22C 1/1068	<ul style="list-style-type: none"> • • • {Making hard metals based on borides, carbides, nitrides, oxides or silicides} <p><u>WARNING</u> Group C22C 1/1068 is impacted by reclassification into group C22C 1/059. Groups C22C 1/1068 and C22C 1/059 should be considered in order to perform a complete search.</p>

M	C22C 1/1073	<ul style="list-style-type: none"> • • • {Infiltration or casting under mechanical pressure, e.g. squeeze casting} <p><u>WARNING</u> Group C22C 1/1073 is impacted by reclassification into group C22C 1/059. Groups C22C 1/1073 and C22C 1/059 should be considered in order to perform a complete search.</p>
M	C22C 1/1078	<ul style="list-style-type: none"> • • {by internal oxidation of material in solid state} <p><u>WARNING</u> Group C22C 1/1078 is impacted by reclassification into groups C22C 1/057 and C22C 1/059. Groups C22C 1/1078, C22C 1/057 and C22C 1/059 should be considered in order to perform a complete search.</p>
M	C22C 1/1084	<ul style="list-style-type: none"> • • {by mechanical alloying (blending, milling)} <p><u>WARNING</u> Group C22C 1/1084 is impacted by reclassification into groups C22C 1/057 and C22C 1/059. Groups C22C 1/1084, C22C 1/057 and C22C 1/059 should be considered in order to perform a complete search.</p>
M	C22C 1/1089	<ul style="list-style-type: none"> • • {by partial reduction or decomposition of a solid metal compound} <p><u>WARNING</u> Group C22C 1/1089 is impacted by reclassification into groups C22C 1/057 and C22C 1/059. Groups C22C 1/1089, C22C 1/057 and C22C 1/059 should be considered in order to perform a complete search.</p>
M	C22C 1/1094	<ul style="list-style-type: none"> • • {comprising an after-treatment} <p><u>NOTE</u> {Documents classified in group C22C 1/1094 are also classified in subclass C22F.}</p> <p><u>WARNING</u> Group C22C 1/1094 is impacted by reclassification into group C22C 1/059. Groups C22C 1/1094 and C22C 1/059 should be considered in order to perform a complete search.</p>
M	C22C 32/00	<p>Non-ferrous alloys containing at least 5% by weight but less than 50% by weight of oxides, carbides, borides, nitrides, silicides or other metal compounds, e.g. oxynitrides, sulfides, whether added as such or formed <u>in situ</u></p> <p><u>NOTE</u> This group comprises also dispersion hardened alloys with less than 5% of dispersed compounds</p> <p><u>WARNING</u> Group C22C 32/00 is impacted by reclassification into group C22C 1/059. Groups C22C 32/00 and C22C 1/059 should be considered in order to perform a complete search.</p>
M	C22C 32/0005	<ul style="list-style-type: none"> • {with at least one oxide and at least one of carbides, nitrides, borides or silicides as the main non-metallic constituents} <p><u>WARNING</u> Group C22C 32/0005 is impacted by reclassification into group C22C 1/059.</p>

Groups C22C 32/0005 and C22C 1/059 should be considered in order to perform a complete search.

M C22C 32/001

- {with only oxides}

WARNING

Groups C22C 32/001, C22C 32/0015 and C22C 32/0021 are impacted by reclassification into group C22C 1/059.
All groups listed in this Warning should be considered in order to perform a complete search.

U C22C 32/0015

- • {with only single oxides as main non-metallic constituents}

M C22C 32/0026

- • • {Matrix based on Ni, Co, Cr or alloys thereof}

WARNING

Group C22C 32/0026 is impacted by reclassification into groups C22C 1/059 and C22C 33/0261.
Groups C22C 32/0026, C22C 1/059 and C22C 33/0261 should be considered in order to perform a complete search.

M C22C 32/0031

- • • {Matrix based on refractory metals, W, Mo, Nb, Hf, Ta, Zr, Ti, V or alloys thereof}

WARNING

Group C22C 32/0031 is impacted by reclassification into group C22C 1/059.
Groups C22C 32/0031 and C22C 1/059 should be considered in order to perform a complete search.

M C22C 32/0036

- • • {Matrix based on Al, Mg, Be or alloys thereof}

WARNING

Group C22C 32/0036 is impacted by reclassification into group C22C 1/059.
Groups C22C 32/0036 and C22C 1/059 should be considered in order to perform a complete search.

M C22C 32/0042

- • • {Matrix based on low melting metals, Pb, Sn, In, Zn, Cd or alloys thereof}

WARNING

Group C22C 32/0042 is impacted by reclassification into group C22C 1/059.
Groups C22C 32/0042 and C22C 1/059 should be considered in order to perform a complete search.

M C22C 32/0047

- {with carbides, nitrides, borides or silicides as the main non-metallic constituents}

WARNING

Groups C22C 32/0047, C22C 32/0052, C22C 32/0057, C22C 32/0063, C22C 32/0068, C22C 32/0073 and C22C 32/0078 are impacted by reclassification into group C22C 1/059.
All groups listed in this Warning should be considered in order to perform a complete search.

M C22C 32/0084

- {carbon or graphite as the main non-metallic constituent}

WARNING

Group C22C 32/0084 is impacted by reclassification into group C22C 1/059.
Groups C22C 32/0084 and C22C 1/059 should be considered in order to perform a complete search.

- M C22C 32/0089 • {with other, not previously mentioned inorganic compounds as the main non-metallic constituent, e.g. sulfides, glass}

WARNING

Group C22C 32/0089 is impacted by reclassification into group C22C 1/059. Groups C22C 32/0089 and C22C 1/059 should be considered in order to perform a complete search.

- M C22C 32/0094 • {with organic materials as the main non-metallic constituent, e.g. resin}

WARNING

Group C22C 32/0094 is impacted by reclassification into group C22C 1/059. Groups C22C 32/0094 and C22C 1/059 should be considered in order to perform a complete search.

Project: MP12140 (C22C)

- U C22C 33/00 **Making ferrous alloys**
- M C22C 33/02 • by powder metallurgy (~~working metallic powder B22F~~)
- M C22C 33/0207 • • {Using a mixture of ~~prealloyed~~ *pre-alloyed* powders or a master alloy (~~mixtures of metal powder in general B22F 1/09~~)}
- M C22C 33/0235 • • {Starting from compounds, e.g. oxides (~~manufacture of articles starting from powder comprising reducible metal compounds in general B22F 3/001~~)}
- M C22C 33/0242 • • {using the impregnating technique (~~impregnating articles in general B22F 3/26~~)}

Project: RP11754-F (C22C)

- U C22C 33/0257 • • {characterised by the range of the alloying elements}
- M C22C 33/0261 • • • {Matrix based on Fe for ODS steels}

WARNING

Group C22C 33/0261 is incomplete pending reclassification of documents from group C22C 32/0026. Groups C22C 32/0026 and C22C 33/0261 should be considered in order to perform a complete search.

Project: MP12140 (C22C)

- N C22C 2200/00 - C22C 2200/00 Alloys with specific crystalline structure**

Project: MP12752 (D06P)

- U D06P 1/00 **General processes of dyeing or printing textiles, or general processes of dyeing leather, furs, or solid macromolecular substances in any form, classified according to the dyes, pigments, or auxiliary substances employed**
- U D06P 1/44 • using insoluble pigments or auxiliary substances, e.g. binders
- U D06P 1/673 • • Inorganic compounds
- U D06P 1/67333 • • • {Salts or hydroxides (hydroxylamines [D06P 1/67308](#))}
- U D06P 1/6735 • • • • {of alkaline or alkaline-earth metals with anions different from those provided for in [D06P 1/67341](#)}
- M D06P 1/67375 • • • • • {with sulfur-containing anions (~~sulfates D06P 1/6735~~)}

Project: MP12753 (E01C)

- U E01C 7/00** Coherent pavings made in situ (specially adapted for playgrounds or sports grounds [E01C 13/06](#); for footpaths, sidewalks or cycle tracks [E01C 15/00](#))
- U E01C 7/08** • made of road-metal and binders {([E01C 7/36](#) takes precedence)}
- U E01C 7/10** • • of road-metal and cement or like binders (cement or like binders, composition of mortars [C04B](#))
- U E01C 7/14** • • • Concrete paving {(from concrete prepared in situ [E01C 7/12](#); small individual units from concrete cast in situ [E01C 9/001](#); arrangement or construction of joints [E01C 11/04](#); reinforcements [E01C 11/18](#))}
- M E01C 7/142** • • • • {Mixtures or their components, e.g. aggregate ([E01C 7/147](#), [E01C 7/355](#) take precedence; ~~different layers of different composition~~ [E01C 7/14](#))}
- U E01C 7/18** • • of road-metal and bituminous binders {(for surface treatments except for penetration coverings, or for thin surface layers [E01C 7/353](#); bituminous mixtures [C08L 95/00](#))}
- M E01C 7/182** • • • {Aggregate or filler materials, except those according to [E01C 7/26](#) ([E01C 7/187](#), [E01C 7/353](#) take precedence; ~~different aggregates or fillers~~ [E01C 7/18](#))}

Project: MP12753 (E01H)

- U E01H 1/00** Removing undesirable matter from roads or like surfaces, with or without moistening of the surface (for snow or ice [E01H 5/00](#); cleaning tramway rails [E01H 8/00](#); obstruction removers on vehicles [B60R 19/00](#); in combination with application of bitumen or the like [E01C 19/16](#); in combination with application of traffic line [E01C 23/16](#) {; Sweeping apparatus, particularly for lawns [A01G 20/30](#), [A01G 20/40](#); removing undesirable matter from floors and similar surfaces [A47L 5/00](#) - [A47L 13/00](#))}
- U E01H 1/08** • Pneumatically dislodging or taking-up undesirable matter {or small objects} ({[E01H 1/006](#) and [E01H 1/005](#) take precedence; suction cleaners in general [A47L 5/00](#) - [A47L 9/00](#); {sucking-off liquids or semi-liquids [E01H 1/108](#)}); Drying by heat only or by streams of gas (permanently-installed heating or blowing devices [E01C 11/26](#); heating or drying for road- building or repairing [E01C 23/14](#); {devices for melting snow or ice in situ [E01H 5/10](#), [E01H 8/08](#); for scorching undesirable vegetation [E01H 11/00](#)}); Cleaning by projecting abrasive particles (sand-blasting in general [B24C](#); {roughening of road surfaces [E01C 23/08](#); cleaning of road joints [E01C 23/0906](#))}
- M E01H 1/0809** • • {Loosening or dislodging by blowing (combined with suction [E01H 1/0863](#); with steam [E01H 1/10](#); removing snow by blowing [E01H 5/106](#); cleaning rails by blowing [E01H 8/105](#), [E01H 8/125](#); removing fog by blowing [E01H 13/00](#); cleaning joints in road construction by blowing [E01C 23/0906](#)); Drying by means of gas streams (~~by heat only~~ [E01H 1/08](#); combined with snow or ice melting [E01H 5/10](#), [E01H 5/106](#), [E01H 5/108](#))}
- U E01H 1/0827** • • {Dislodging by suction; Mechanical dislodging-cleaning apparatus with independent or dependent exhaust, e.g. dislodging-sweeping machines with independent suction nozzles (combined with blowing [E01H 1/0872](#)); Mechanical loosening devices working under vacuum}
- M E01H 1/0836** • • • {Apparatus dislodging all of the dirt by suction (~~liquids or semi-liquids~~ [E01H 1/108](#); combined with loosening by blowing [E01H 1/0863](#); ~~for cleaning rails~~ [E01H 8/105](#), [E01H 8/125](#); ~~liquids or semi-liquids~~ [E01H 1/108](#); removing snow by suction [E01H 5/106](#), [E01H 8/08](#); ~~for cleaning rails~~ [E01H 8/105](#), [E01H 8/125](#)); Suction nozzles (~~independent suction nozzles in mechanical dislodging-cleaning devices~~ [E01H 1/0827](#); suction and blowing nozzles [E01H 1/0863](#))}

- M E01H 1/0854 • • • {Apparatus in which the mechanically dislodged dirt is partially sucked-off ~~up~~, e.g. dislodging-sweeping apparatus with dirt collector in brush housing or dirt container (~~mechanical dislodging machines with independent suction nozzles E01H 1/0827~~; combined with blowing and suction [E01H 1/0872](#))}
- U E01H 5/00 **Removing snow or ice from roads or like surfaces; Grading or roughening snow or ice (by applying de-icing agents [E01H 10/00](#); obstruction removers on vehicles [B60R 19/00](#); sand, gravel or salt spreaders [E01C 19/20](#))**
- M E01H 5/10 • by application of heat {for melting snow or ice, whether cleared or not, combined or not with clearing or removing mud or water, e.g. burners for melting in situ, heated clearing instruments} (~~{drying by heat E01H 1/0809; melting by application of defrosting agents E01H 10/00; weed scorching devices which can also melt snow E01H 11/00;}~~ stationary blowing or paving heating means [E01C 11/26](#)) {; {Cleaning snow by blowing or suction only}
- M E01H 5/106 • • {Clearing snow or ice exclusively by means of rays or streams of gas or steam; or by suction with or without melting (~~E01H 5/108 takes precedence; drying by means of gas streams, blowing-off dirt E01H 1/0809; sucking-off dirt E01H 1/0827~~ sucking up dirt E01H 1/0827)}
- M E01H 5/108 • • {Devices for melting snow or ice in situ and ~~removing~~ subsequently ~~for removing~~ the ~~mud or melting resultant mud and~~ water (~~melting in situ E01H 5/10~~; by means of hot gases or steam [E01H 5/106](#); ~~removing water or mud E01H 1/108~~)}

Project: MP12753 (E02D)

- U E02D 29/00 {Independent} underground or underwater structures (underground tanks [B65D 88/76](#); hydraulic engineering, e.g. sealings or joints, [E02B](#); underground garages [E04H 6/00](#); underground air-raid shelters [E04H 9/12](#); burial vaults [E04H 13/00](#)); Retaining walls
- U E02D 29/12 • Manhole shafts; Other inspection or access chambers; Accessories therefor (for underground tanks [B65D 90/10](#); for sewerage [E03F 5/02](#) {; climbing irons or ladders [E06C 9/00](#))}
- U E02D 29/14 • • Covers for manholes or the like; Frames for covers {(gully gratings [E03F 5/06](#))}
- M E02D 29/1427 • • • {Locking devices (~~of bayonet type E02D 29/14~~)}

Project: MP12753 (E03F)

- U E03F 9/00 **Arrangements or fixed installations {methods or devices} for cleaning {or clearing} sewer pipes, e.g. by flushing (sediment traps, rakes, screens, or the like, arranged in sewer lines [E03F 5/14](#); cleaning pipes in general, devices for cleaning pipes [B08B 9/02](#) {; gullies provided with flushing means for cleaning or emptying [E03F 5/0402](#); devices to remove obstructions in waste-pipes or sinks [E03C 1/30](#))}**
- M E03F 9/002 • {Cleaning sewer pipes by mechanical means (~~combined with flushing E03F 9/00~~)}

Project: MP12753 (E04G)

- U E04G 21/00 **Preparing, conveying, or working-up building materials or building elements in situ; Other devices or measures for constructional work (conveying in general [B65G](#); lifting devices [B66](#); working stone-like materials [B28D](#); measuring instruments [G01](#))**
- M E04G 21/24 • Safety or protective measures preventing damage to building parts or finishing work during construction (as auxiliary structures for scaffolds [E04G](#); ~~{E04G 5/12}E04G 5/00~~)

Project: MP12753 (E21B)

- U E21B 17/00 **Drilling rods or pipes; Flexible drill strings; Kellies; Drill collars; Sucker rods;{Cables;} Casings; Tubings**
- U E21B 17/10
 - Wear protectors; Centralising devices {, e.g. stabilisers}
- M E21B 17/1078
 - • {Stabilisers or centralisers for casing, tubing or drill pipes (~~devices for off-center positioning E21B 17/10;~~ [E21B 17/1007](#) - [E21B 17/1064](#) take precedence)}

Project: MP12753 (F04D)

- U F04D 29/00 **Details, component parts, or accessories (machine elements in general [F16](#))**
- U F04D 29/18
 - Rotors (specially for elastic fluids [F04D 29/26](#))
- U F04D 29/22
 - • specially for centrifugal pumps
- M F04D 29/2205
 - • • {Conventional flow pattern (~~F04D 29/18 takes precedence~~)}

Project: MP12753 (F16D)

- U F16D 3/00 **Yielding couplings, i.e. with means permitting movement between the connected parts during the drive (couplings disconnectable simply by axial movement [F16D 1/10](#); slip couplings [F16D 7/00](#))**
- U F16D 3/16
 - Universal joints in which flexibility is produced by means of pivots or sliding or rolling connecting parts
- U F16D 3/26
 - • Hooke's joints or other joints with an equivalent intermediate member to which each coupling part is pivotally or slidably connected ([F16D 3/18](#), [F16D 3/20](#) take precedence)
- U F16D 3/38
 - • • with a single intermediate member with trunnions or bearings arranged on two axes perpendicular to one another ([F16D 3/36](#) takes precedence)
- U F16D 3/382
 - • • • {constructional details of other than the intermediate member}
- M F16D 3/385
 - • • • • {Bearing cup; Bearing construction; Bearing seal; Mounting of bearing on the intermediate member (~~mounting of bearing in fork F16D 3/382~~)}

Project: MP12753 (F16G)

- U F16G 13/00 **Chains (making thereof [B21L](#))**
- U F16G 13/02
 - Driving-chains (specially adapted to gearings with variable gear-ratio [F16H 9/00](#))
- M F16G 13/06
 - • with links connected by parallel driving-pins with or without rollers {so-called open links (~~if the parallel coupling pins have only a joining function – so-called closed links – F16G 13/02~~)}

Project: RP12426 (F23B)

M F23B

METHODS OR APPARATUS FOR COMBUSTION USING ONLY SOLID FUEL (for combustion of fuels that are solid at room temperatures, but burned in melted form, e.g. candle wax, [C11C 5/00](#), [F23C](#), [F23D](#); using solid fuel suspended in air [F23C](#), [F23D 1/00](#); using solid fuel suspended in liquids [F23C](#), [F23D 11/00](#); using solid fuel ~~and fluent fuel~~ *together with fluid fuel or with solid fuel suspended in air*, simultaneously or alternately, [F23C](#), [F23D 17/00](#); ~~burning of low grade fuel F23G; grates F23H; feeding solid fuel to combustion apparatus F23K; combustion chambers, not otherwise provided for F23M; domestic apparatus F24; central heating boilers F24D; package boilers F24H~~)

NOTES

1. This subclass only covers combustion wherein the main body of fuel is either essentially stationary during combustion or mechanically transported, as opposed to pneumatically transported or suspended in air, during combustion.
2. In this subclass, the first place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, classification is made in the first appropriate place.
3. In this subclass, methods are classified in the groups that cover the apparatus used. Methods that are not related to a particular type of apparatus are classified in group [F23B 90/00](#).
4. In this subclass, it is desirable to add the indexing codes of groups [F23B 2101/00](#) - [F23B 2900/00](#).

WARNING

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

F F23B 1/00
(Frozen)

{Combustion apparatus using only lump fuel}

WARNING

Group [F23B 1/00](#) is no longer used for the classification of documents as of May 1, 2026. The content of this group is being reclassified into groups [F23B 10/00](#) - [F23B 99/00](#).

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

F F23B 1/02
(Frozen)

- {for indirect heating of a medium in a vessel, e.g. for boiling water (steam generation [F22](#))}

WARNING

Group [F23B 1/02](#) is no longer used for the classification of documents as of May 1, 2026. The content of this group is being reclassified into groups [F23B 10/00](#) - [F23B 99/00](#).

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

F F23B 1/04
(Frozen)

- {External furnaces, i.e. with furnace in front of the vessel}

WARNING

Group [F23B 1/04](#) is no longer used for the classification of documents as of May 1, 2026. The content of this group is being reclassified into groups [F23B 10/00](#) - [F23B 99/00](#).

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

- F F23B 1/06
(Frozen)
- • {for heating water-tube boilers, e.g. Tenbrink flue furnaces}
- WARNING
Group *F23B 1/06* is no longer used for the classification of documents as of May 1, 2026. The content of this group is being reclassified into groups *F23B 10/00* - *F23B 99/00*.
All groups listed in this Warning should be considered in order to perform a complete search.
- F F23B 1/08
(Frozen)
- • {Internal furnaces, i.e. with furnaces inside the vessel}
- WARNING
Group *F23B 1/08* is no longer used for the classification of documents as of May 1, 2026. The content of this group is being reclassified into groups *F23B 10/00* - *F23B 99/00*.
All groups listed in this Warning should be considered in order to perform a complete search.
- F F23B 1/10
(Frozen)
- • {for heating locomotive boilers}
- WARNING
Group *F23B 1/10* is no longer used for the classification of documents as of May 1, 2026. The content of this group is being reclassified into groups *F23B 10/00* - *F23B 99/00*.
All groups listed in this Warning should be considered in order to perform a complete search.
- F F23B 1/12
(Frozen)
- • {with a plurality of combustion chambers}
- WARNING
Group *F23B 1/12* is no longer used for the classification of documents as of May 1, 2026. The content of this group is being reclassified into groups *F23B 10/00* - *F23B 99/00*.
All groups listed in this Warning should be considered in order to perform a complete search.
- F F23B 1/16
(Frozen)
- {the combustion apparatus being modified according to the form of grate or other fuel support (for incinerators [F23G 5/002](#))}
- WARNING
Group *F23B 1/16* is no longer used for the classification of documents as of May 1, 2026. The content of this group is being reclassified into groups *F23B 10/00* - *F23B 99/00*.
All groups listed in this Warning should be considered in order to perform a complete search.
- F F23B 1/165
(Frozen)
- • {using roller grate}
- WARNING
Group *F23B 1/165* is no longer used for the classification of documents as of May 1, 2026. The content of this group is being reclassified into groups *F23B 10/00* - *F23B 99/00*.
All groups listed in this Warning should be considered in order to perform a complete search.
- F F23B 1/18
(Frozen)
- • {using inclined grate}
- WARNING
Group *F23B 1/18* is no longer used for the classification of documents as of May 1, 2026. The content of this group is being reclassified into groups *F23B 10/00* - *F23B 99/00*.

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

F F23B 1/20
(Frozen)

- {using step-type grate}

WARNING

Group F23B 1/20 is no longer used for the classification of documents as of May 1, 2026. The content of this group is being reclassified into groups F23B 10/00 - F23B 99/00.

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

F F23B 1/22
(Frozen)

- {using travelling grate}

WARNING

Group F23B 1/22 is no longer used for the classification of documents as of May 1, 2026. The content of this group is being reclassified into groups F23B 10/00 - F23B 99/00.

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

F F23B 1/24
(Frozen)

- {using rotating grate}

WARNING

Group F23B 1/24 is no longer used for the classification of documents as of May 1, 2026. The content of this group is being reclassified into groups F23B 10/00 - F23B 99/00.

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

F F23B 1/26
(Frozen)

- {using imperforate fuel supports}

WARNING

Group F23B 1/26 is no longer used for the classification of documents as of May 1, 2026. The content of this group is being reclassified into groups F23B 10/00 - F23B 99/00.

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

F F23B 1/28
(Frozen)

- {using ridge-type grate, e.g. for combustion of peat, sawdust, or pulverulent fuel (combustion of peat, sawdust [F23G 7/10](#))}

WARNING

Group F23B 1/28 is no longer used for the classification of documents as of May 1, 2026. The content of this group is being reclassified into groups F23B 10/00 - F23B 99/00.

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

F F23B 1/30
(Frozen)

- {characterised by the form of combustion chamber}

WARNING

Group F23B 1/30 is no longer used for the classification of documents as of May 1, 2026. The content of this group is being reclassified into groups F23B 10/00 - F23B 99/00.

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

F F23B 1/32 (Frozen)	<ul style="list-style-type: none"> • {rotating} <p>WARNING</p> <p>Group F23B 1/32 is no longer used for the classification of documents as of May 1, 2026. The content of this group is being reclassified into groups F23B 10/00 - F23B 99/00. All groups listed in this Warning should be considered in order to perform a complete search.</p>
F F23B 1/34 (Frozen)	<ul style="list-style-type: none"> • {annular} <p>WARNING</p> <p>Group F23B 1/34 is no longer used for the classification of documents as of May 1, 2026. The content of this group is being reclassified into groups F23B 10/00 - F23B 99/00. All groups listed in this Warning should be considered in order to perform a complete search.</p>
F F23B 1/36 (Frozen)	<ul style="list-style-type: none"> • {shaft-type} <p>WARNING</p> <p>Group F23B 1/36 is no longer used for the classification of documents as of May 1, 2026. The content of this group is being reclassified into groups F23B 10/00 - F23B 99/00. All groups listed in this Warning should be considered in order to perform a complete search.</p>
F F23B 1/38 (Frozen)	<ul style="list-style-type: none"> • {for combustion of peat, sawdust, or pulverulent fuel on a grate or other fuel support (combustion of peat, sawdust F23G 7/10)} <p>WARNING</p> <p>Group F23B 1/38 is no longer used for the classification of documents as of May 1, 2026. The content of this group is being reclassified into groups F23B 10/00 - F23B 99/00. All groups listed in this Warning should be considered in order to perform a complete search.</p>
F F23B 3/00 (Frozen)	<p>{Combustion apparatus which is portable or removable with respect to the boiler or other apparatus which is heated}</p> <p>WARNING</p> <p>Group F23B 3/00 is no longer used for the classification of documents as of May 1, 2026. The content of this group is being reclassified into groups F23B 20/00, F23B 2103/02 and F23B 2103/00. All groups listed in this Warning should be considered in order to perform a complete search.</p>
F F23B 5/00 (Frozen)	<p>{Combustion apparatus with arrangements for burning uncombusted material from primary combustion (combustion apparatus characterised by the combination of two or more combustion chambers F23C 6/00; the primary combustion being pulverulent fuel F23C 9/003)}</p> <p>WARNING</p> <p>Group F23B 5/00 is no longer used for the classification of documents as of May 1, 2026. The content of this group is being reclassified into groups F23B 10/00 - F23B 99/00. All groups listed in this Warning should be considered in order to perform a complete search.</p>

- | | |
|-----------------------------|---|
| F F23B 5/02
(Frozen) | <ul style="list-style-type: none"> • {in main combustion chamber} <div style="background-color: #e0ffe0; padding: 10px; margin-top: 5px;"> <p><u>WARNING</u></p> <p>Group <u>F23B 5/02</u> is no longer used for the classification of documents as of May 1, 2026. The content of this group is being reclassified into groups <u>F23B 10/00</u> - <u>F23B 99/00</u>.</p> <p>All groups listed in this Warning should be considered in order to perform a complete search.</p> </div> |
| F F23B 5/025
(Frozen) | <ul style="list-style-type: none"> • • {recirculating uncombusted solids to combustion chamber} <div style="background-color: #e0ffe0; padding: 10px; margin-top: 5px;"> <p><u>WARNING</u></p> <p>Group <u>F23B 5/025</u> is no longer used for the classification of documents as of May 1, 2026. The content of this group is being reclassified into groups <u>F23B 10/00</u> - <u>F23B 99/00</u>.</p> <p>All groups listed in this Warning should be considered in order to perform a complete search.</p> </div> |
| F F23B 5/04
(Frozen) | <ul style="list-style-type: none"> • {in separate combustion chamber; on separate grate} <div style="background-color: #e0ffe0; padding: 10px; margin-top: 5px;"> <p><u>WARNING</u></p> <p>Group <u>F23B 5/04</u> is no longer used for the classification of documents as of May 1, 2026. The content of this group is being reclassified into groups <u>F23B 10/00</u> - <u>F23B 99/00</u>.</p> <p>All groups listed in this Warning should be considered in order to perform a complete search.</p> </div> |
| F F23B 7/00
(Frozen) | <p>{Combustion techniques; Other solid-fuel combustion apparatus}</p> <div style="background-color: #e0ffe0; padding: 10px; margin-top: 5px;"> <p><u>WARNING</u></p> <p>Group <u>F23B 7/00</u> is no longer used for the classification of documents as of May 1, 2026. The content of this group is being reclassified into groups <u>F23B 10/00</u> - <u>F23B 99/00</u>.</p> <p>All groups listed in this Warning should be considered in order to perform a complete search.</p> </div> |
| F F23B 7/002
(Frozen) | <ul style="list-style-type: none"> • {characterised by gas flow arrangements} <div style="background-color: #e0ffe0; padding: 10px; margin-top: 5px;"> <p><u>WARNING</u></p> <p>Group <u>F23B 7/002</u> is no longer used for the classification of documents as of May 1, 2026. The content of this group is being reclassified into groups <u>F23B 10/00</u> - <u>F23B 99/00</u>.</p> <p>All groups listed in this Warning should be considered in order to perform a complete search.</p> </div> |
| F F23B 7/005
(Frozen) | <ul style="list-style-type: none"> • • {with downdraught through fuel bed and grate} <div style="background-color: #e0ffe0; padding: 10px; margin-top: 5px;"> <p><u>WARNING</u></p> <p>Group <u>F23B 7/005</u> is no longer used for the classification of documents as of May 1, 2026. The content of this group is being reclassified into groups <u>F23B 10/00</u> - <u>F23B 99/00</u>.</p> <p>All groups listed in this Warning should be considered in order to perform a complete search.</p> </div> |
| F F23B 7/007
(Frozen) | <ul style="list-style-type: none"> • • {with fluegas recirculation to combustion chamber} <div style="background-color: #e0ffe0; padding: 10px; margin-top: 5px;"> <p><u>WARNING</u></p> <p>Group <u>F23B 7/007</u> is no longer used for the classification of documents as of May 1, 2026. The content of this group is being reclassified into groups <u>F23B 10/00</u> - <u>F23B 99/00</u>.</p> </div> |

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

M F23B 10/00 **Combustion apparatus characterised by the combination of two or more combustion chambers**

WARNING

Groups F23B 10/00 and F23B 10/02 are incomplete pending reclassification of documents from groups F23B 1/00 - F23B 1/38 and F23B 5/00 - F23B 7/007. All groups listed in this Warning should be considered in order to perform a complete search.

M F23B 20/00 **Combustion apparatus specially adapted for portability or transportability**

WARNING

Group F23B 20/00 is incomplete pending reclassification of documents from groups F23B 1/00 - F23B 7/007. All groups listed in this Warning should be considered in order to perform a complete search.

M F23B 30/00 **Combustion apparatus with driven means for agitating the burning fuel;
Combustion apparatus with driven means for advancing the burning fuel through the combustion chamber**

WARNING

Groups F23B 30/00 - F23B 30/10 are incomplete pending reclassification of documents from groups F23B 1/00 - F23B 1/38 and F23B 5/00 - F23B 7/007. All groups listed in this Warning should be considered in order to perform a complete search.

U F23B 30/02 • with movable, e.g. vibratable, fuel-supporting surfaces; with fuel-supporting surfaces that have movable parts

T F23B 30/06 • • with fuel-supporting surfaces that are specially adapted for advancing *the* fuel through the combustion zone

M F23B 40/00 **Combustion apparatus with driven means for feeding fuel into the combustion chamber**

WARNING

Groups F23B 40/00 - F23B 40/08 are incomplete pending reclassification of documents from groups F23B 1/00 - F23B 1/38 and F23B 5/00 - F23B 7/007. All groups listed in this Warning should be considered in order to perform a complete search.

M F23B 50/00 **Combustion apparatus in which the fuel is fed into or through the combustion zone by gravity, e.g. from a fuel storage situated above the combustion zone**

WARNING

Groups F23B 50/00 - F23B 50/12 are incomplete pending reclassification of documents from groups F23B 1/00 - F23B 1/38 and F23B 5/00 - F23B 7/007. All groups listed in this Warning should be considered in order to perform a complete search.

M F23B 60/00 **Combustion apparatus in which the fuel burns essentially without moving**

WARNING

Groups F23B 60/00 and F23B 60/02 are incomplete pending reclassification of documents from groups F23B 1/00 - F23B 1/38 and F23B 5/00 - F23B 7/007.

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

T F23B 70/00

Combustion apparatus characterised by means *for* returning solid combustion residues to the combustion chamber

WARNING

*Group F23B 70/00 is incomplete pending reclassification of documents from groups F23B 1/00 - F23B 1/38 and F23B 5/00 - F23B 7/007.
All groups listed in this Warning should be considered in order to perform a complete search.*

M F23B 80/00

Combustion apparatus characterised by means creating a distinct flow path for flue gases or for non-combusted gases given off by the fuel

WARNING

*Groups F23B 80/00 - F23B 80/04 are incomplete pending reclassification of documents from groups F23B 1/00 - F23B 1/38 and F23B 5/00 - F23B 7/007.
All groups listed in this Warning should be considered in order to perform a complete search.*

M F23B 90/00

Combustion methods not related to a particular type of apparatus

NOTE

Groups [F23B 90/00](#) - [F23B 90/08](#) correspond to IPC2012.01

WARNING

*Groups F23B 90/00 - F23B 90/08 are incomplete pending reclassification of documents from groups F23B 1/00 - F23B 1/38 and F23B 5/00 - F23B 7/007.
All groups listed in this Warning should be considered in order to perform a complete search.*

M F23B 99/00

Subject matter not provided for in other groups of this subclass

WARNING

*Group F23B 99/00 is incomplete pending reclassification of documents from groups F23B 1/00 - F23B 1/38 and F23B 5/00 - F23B 7/007.
All groups listed in this Warning should be considered in order to perform a complete search.*

M F23B 2103/00

Adaptation of combustion apparatus for placement in or against an opening of a boiler, e.g. for replacing an oil burner

WARNING

*Groups F23B 2103/00 and F23B 2103/02 are incomplete pending reclassification of documents from group F23B 3/00.
Groups F23B 3/00, F23B 2103/00 and F23B 2103/02 should be considered in order to perform a complete search.*

Project: RP12426 (F23G)

U F23G 7/00

Incinerators or other apparatus for consuming industrial waste, e.g. chemicals (incinerator closets [A47K 11/02](#); oxidation of sludge [C02F 11/06](#); burners in general, burner details [F23D](#); incinerating radioactive waste [G21F 9/00](#))

- M F23G 7/06
- of waste gases or noxious gases, e.g. exhaust gases (exhaust apparatus for engines with means for rendering the exhaust innocuous, e.g. by thermal or catalytic conversion, [F01N 3/08](#); combustion of uncombusted material from primary combustion within apparatus for combustion of solid or fluent fuel [F23B](#); {, of non combusted material from primary combustion of solid fuels ~~F23B 5/00~~; of gases produced by primary combustion of solid fuels [F23B 90/04](#)}, [F23C](#))

Project: RP12292 (F25B)

- U F25B 2313/00 **Compression machines, plants or systems with reversible cycle not otherwise provided for**
- U F25B 2313/027
- characterised by the reversing means
- U F25B 2313/0276
- • using six-way valves
- N F25B 2313/0278
- • using eight-way valves
- C F25B 2327/00 **Refrigeration system using an engine for driving a compressor**
Compressor driving means
- WARNING
Group [F25B 2327/00](#) is impacted by reclassification into groups [F25B 2327/02](#) and [F25B 2327/10](#).
Groups [F25B 2327/00](#), [F25B 2327/02](#) and [F25B 2327/10](#) should be considered in order to perform a complete search.
- D F25B 2327/001
- of the internal combustion type
- <administratively transferred to [F25B 2327/12](#) ADD>
- N F25B 2327/02
- using multiple power sources
- WARNING
Group [F25B 2327/02](#) is incomplete pending reclassification of documents from groups [F25B 2327/00](#) and [F25B 2327/12](#).
Groups [F25B 2327/00](#), [F25B 2327/12](#) and [F25B 2327/02](#) should be considered in order to perform a complete search.
- N F25B 2327/10
- using engines
- WARNING
Group [F25B 2327/10](#) is incomplete pending reclassification of documents from group [F25B 2327/00](#).
Groups [F25B 2327/00](#) and [F25B 2327/10](#) should be considered in order to perform a complete search.
- Q F25B 2327/12
- • using internal combustion engines
- WARNING
Group [F25B 2327/12](#) is impacted by reclassification into group [F25B 2327/02](#).
Groups [F25B 2327/12](#) and [F25B 2327/02](#) should be considered in order to perform a complete search.
- M F25B 2400/00 **General features or devices for refrigeration machines, plants or systems, combined heating and refrigeration systems or heat-pump systems, i.e. not limited to a particular subgroup of**
Component parts or details not F25B otherwise provided for in this subclass
- U F25B 2400/04
- Refrigeration circuit bypassing means
- M F25B 2400/0401
- • for ~~the compressor~~[compressors](#)
- M F25B 2400/0403
- • for ~~the condenser~~[condensers](#)

M	F25B 2400/0405	• for the desuperheater desuperheaters
M	F25B 2400/0407	• for the ejector ejectors
M	F25B 2400/0409	• for the evaporator evaporators
M	F25B 2400/0411	• for the expansion valve valves or capillary tube tubes
M	F25B 2400/0413	• for the filter or drier filters or driers
M	F25B 2400/0415	• for the receiver receivers
M	F25B 2400/0417	• for the subcooler subcoolers
M	F25B 2400/0419	• for the superheater superheaters
N	F25B 2400/0421	• for suction line accumulators
N	F25B 2400/0423	• for economisers
N	F25B 2400/0425	• for internal heat exchangers
N	F25B 2400/0427	• for oil separators
M	F25B 2400/24	• Storage receiver heat Thermal storage element
N	F25B 2400/25	• Liquid pumps
N	F25B 2400/27	• Water as refrigerant
U	F25B 2700/00	Sensing or detecting of parameters; Sensors therefor
U	F25B 2700/06	• Piston positions of a compressor
N	F25B 2700/08	• Vapour quality, i.e. the mass fraction of vapour in the liquid-vapour mixture
U	F25B 2700/19	• Pressures
U	F25B 2700/197	• of the evaporator
N	F25B 2700/198	• Intermediate pressures
U	F25B 2700/21	• Temperatures
U	F25B 2700/2117	• of an evaporator
U	F25B 2700/21175	• of the refrigerant at the outlet of the evaporator
N	F25B 2700/2118	• at an intermediate pressure position

Project: RP11925-F (G06Q)

U	G06Q 30/00	Commerce
M	G06Q 30/01	• Customer relationship services
WARNING Group-G06Q-30/01 is impacted by reclassification into group G06Q 30/015: Groups G06Q 30/01 and G06Q 30/015 should be considered in order to perform a complete search.		
M	G06Q 30/015	• Providing customer assistance, e.g. assisting a customer within a business location or via helpdesk
WARNING Group-G06Q-30/015 is incomplete pending reclassification of documents from group G06Q 30/01: Groups G06Q 30/01 and G06Q 30/015 should be considered in order to perform a complete search.		

Project: RP12200-F (G06T)

M	G06T 5/00	Image enhancement or restoration
WARNING Group-G06T-5/00 is impacted by reclassification into group G06T 5/60.		

Groups G06T 5/00 and G06T 5/60 should be considered in order to perform a complete search.

M G06T 5/60

- using machine learning, e.g. neural networks

WARNING

Group G06T 5/60 is incomplete pending reclassification of documents from group G06T 5/00.

Groups G06T 5/00 and G06T 5/60 should be considered in order to perform a complete search.

Project: RP12201-F (H04B)

M H04B 5/00

Near-field transmission systems, e.g. inductive or capacitive transmission systems

WARNING

Group H04B 5/00 is impacted by reclassification into groups H04B 5/40, H04B 5/43 and H04B 5/45.

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

M H04B 5/20

- characterised by the transmission technique; characterised by the transmission medium

WARNING

Groups H04B 5/20, H04B 5/22, H04B 5/24, H04B 5/26, H04B 5/263, H04B 5/266 and H04B 5/28 are incomplete pending reclassification of documents from group H04B 5/72.

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

M H04B 5/40

- characterised by components specially adapted for near-field transmission

WARNING

Groups H04B 5/40 and H04B 5/43 are incomplete pending reclassification of documents from group H04B 5/00.

Groups H04B 5/00, H04B 5/40 and H04B 5/43 should be considered in order to perform a complete search.

M H04B 5/45

- Transponders

WARNING

Group H04B 5/45 is incomplete pending reclassification of documents from groups H04B 5/00 and H04B 5/72.

Groups H04B 5/00, H04B 5/72 and H04B 5/45 should be considered in order to perform a complete search.

M H04B 5/70

- specially adapted for specific purposes

WARNING

Group H04B 5/70 is incomplete pending reclassification of documents from group H04B 5/72.

Groups H04B 5/72 and H04B 5/70 should be considered in order to perform a complete search.

M H04B 5/72

- for local intradevice communication

WARNING

Group H04B 5/72 is impacted by reclassification into groups H04B 5/20, H04B 5/22, H04B 5/24, H04B 5/26, H04B 5/263, H04B 5/266, H04B 5/28, H04B 5/45 and H04B 5/70.

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

Project: RP10460-F (H04L)

U H04L 9/00

{Cryptographic mechanisms or cryptographic} arrangements for secret or secure communications; Network security protocols

NOTES

1. This group covers:

1.1 Cryptographic mechanisms including cryptographic protocols and cryptographic algorithms, whereby a cryptographic protocol is a distributed cryptographic algorithm defined by a sequence of steps precisely specifying the actions required of two or more entities to achieve specific security objectives (e.g. cryptographic protocol for key agreement), and whereby a cryptographic algorithm is specifying the steps followed by a single entity to achieve specific security objectives (e.g. cryptographic algorithm for symmetric key encryption).

1.2 [H04L 9/00](#) focuses on cryptographic mechanisms such as encryption schemes, digital signatures, hash functions, random number generation, key management, said cryptographic mechanisms providing information security such as privacy or confidentiality, data integrity, message authentication, entity authentication, authorization, validation, certification, time-stamping, anonymity, revocation, non-repudiation.

1.3 [H04L 9/00](#) covers also countermeasures against attacks on cryptographic mechanisms.

2. This group does not cover:

2.1 Networking architectures or network communication protocols for securing the traffic flowing through data packet networks and providing secure exchanges among applications communicating through data packet networks, which are covered by [H04L 63/00](#). Attention is drawn to the Note 1. after group [H04L 63/00](#)

2.2 Security arrangements for protecting computers or computer systems against unauthorised activity, which are covered by [G06F 21/00](#)

3. In subgroups [H04L 9/001](#) - [H04L 9/38](#), the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, classification is made in the last appropriate place.

M H04L 9/40

• Network security protocols

NOTE

{When allocating [H04L 9/40](#) to patent documents, attention should be made to check whether other subgroups from [H04L 63/00](#) need to be allocated also for a complete classification.}

WARNING

Group [H04L 9/40](#) is impacted by reclassification into groups [H04L 61/09](#), [H04L 63/00](#), [H04L 65/60](#), [H04L 65/61](#), [H04L 65/611](#), [H04L 65/612](#), [H04L 65/613](#), [H04L 65/65](#), [H04L 65/70](#), [H04L 65/75](#), [H04L 65/752](#), [H04L 65/756](#), [H04L 67/01](#), [H04L 67/1001](#), [H04L 67/10015](#), [H04L 67/131](#), [H04L 67/133](#), [H04L 67/1396](#) and [H04L 67/50](#).

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

M H04L 41/00

Arrangements for maintenance, administration or management of data switching networks, e.g. of packet switching networks

WARNING

Group [H04L 41/00](#) is impacted by reclassification into groups [H04L 41/34](#), [H04L 41/342](#), [H04L 41/344](#) and [H04L 41/40](#).

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

M H04L 41/04

- Network management architectures or arrangements

WARNING

Group H04L 41/04 is impacted by reclassification into groups H04L 41/045, H04L 41/052, H04L 41/34, H04L 41/342 and H04L 41/344.

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

M H04L 41/045

- comprising client-server management architectures

WARNING

Group H04L 41/045 is incomplete pending reclassification of documents from group H04L 41/04.

Groups H04L 41/04 and H04L 41/045 should be considered in order to perform a complete search.

M H04L 41/052

- using standardised network management architectures, e.g. telecommunication management network [TMN] or unified network management architecture [UNMA]

WARNING

Group H04L 41/052 is incomplete pending reclassification of documents from group H04L 41/04.

Groups H04L 41/04 and H04L 41/052 should be considered in order to perform a complete search.

M H04L 41/08

- Configuration management of networks or network elements (address allocation [H04L 61/50](#))

WARNING

Group H04L 41/08 is impacted by reclassification into group H04L 41/0895.

Groups H04L 41/08 and H04L 41/0895 should be considered in order to perform a complete search.

M H04L 41/0893

- Assignment of logical groups to network elements

WARNING

Group H04L 41/0893 is impacted by reclassification into group H04L 41/0894.

Groups H04L 41/0893 and H04L 41/0894 should be considered in order to perform a complete search.

M H04L 41/0894

- Policy-based network configuration management

WARNING

Group H04L 41/0894 is incomplete pending reclassification of documents from group H04L 41/0893.

Groups H04L 41/0893 and H04L 41/0894 should be considered in order to perform a complete search.

M H04L 41/0895

- Configuration of virtualised networks or elements, e.g. virtualised network function or OpenFlow elements

WARNING

Group H04L 41/0895 is incomplete pending reclassification of documents from group H04L 41/08.

Groups H04L 41/08 and H04L 41/0895 should be considered in order to perform a complete search.

M	H04L 41/0896	<ul style="list-style-type: none"> • Bandwidth or capacity management, i.e. automatically increasing or decreasing capacities (flow or congestion control using dynamic resource allocation, e.g. in-call renegotiation, H04L 47/76) <p>WARNING Group H04L 41/0896 is impacted by reclassification into group H04L 41/0897. Groups H04L 41/0896 and H04L 41/0897 should be considered in order to perform a complete search.</p>
M	H04L 41/0897	<ul style="list-style-type: none"> • by horizontal or vertical scaling of resources, or by migrating entities, e.g. virtual resources or entities <p>WARNING Group H04L 41/0897 is incomplete pending reclassification of documents from group H04L 41/0896. Groups H04L 41/0896 and H04L 41/0897 should be considered in order to perform a complete search.</p>
M	H04L 41/12	<ul style="list-style-type: none"> • Discovery or management of network topologies <p>WARNING Group H04L 41/12 is impacted by reclassification into groups H04L 41/122, H04L 41/34, H04L 41/342, H04L 41/344 and H04L 41/40. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	H04L 41/122	<ul style="list-style-type: none"> • of virtualised topologies, e.g. software-defined networks [SDN] or network function virtualisation [NFV] <p>WARNING Group H04L 41/122 is incomplete pending reclassification of documents from group H04L 41/12. Groups H04L 41/12 and H04L 41/122 should be considered in order to perform a complete search.</p>
M	H04L 41/14	<ul style="list-style-type: none"> • Network analysis or design <p>WARNING Group H04L 41/14 is impacted by reclassification into group H04L 41/149. Groups H04L 41/14 and H04L 41/149 should be considered in order to perform a complete search.</p>
M	H04L 41/147	<ul style="list-style-type: none"> • for predicting network behaviour <p>WARNING Group H04L 41/147 is impacted by reclassification into group H04L 41/149. Groups H04L 41/147 and H04L 41/149 should be considered in order to perform a complete search.</p>
M	H04L 41/149	<ul style="list-style-type: none"> • for prediction of maintenance <p>WARNING Group H04L 41/149 is incomplete pending reclassification of documents from groups H04L 41/14 and H04L 41/147. Groups H04L 41/14, H04L 41/147 and H04L 41/149 should be considered in order to perform a complete search.</p>

M	H04L 41/34	<ul style="list-style-type: none"> • Signalling channels for network management communication <p><u>WARNING</u> Groups H04L 41/34, H04L 41/342 and H04L 41/344 are incomplete pending reclassification of documents from groups H04L 41/00, H04L 41/04 and H04L 41/12. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	H04L 41/40	<ul style="list-style-type: none"> • using virtualisation of network functions or resources, e.g. SDN or NFV entities <p><u>WARNING</u> Group H04L 41/40 is incomplete pending reclassification of documents from groups H04L 41/00 and H04L 41/12. Groups H04L 41/00, H04L 41/12 and H04L 41/40 should be considered in order to perform a complete search.</p>
U	H04L 43/00	Arrangements for monitoring or testing data switching networks
M	H04L 43/08	<ul style="list-style-type: none"> • Monitoring or testing based on specific metrics, e.g. QoS, energy consumption or environmental parameters <p><u>WARNING</u> Group H04L 43/08 is impacted by reclassification into group H04L 43/20. Groups H04L 43/08 and H04L 43/20 should be considered in order to perform a complete search.</p>
M	H04L 43/20	<ul style="list-style-type: none"> • the monitoring system or the monitored elements being virtualised, abstracted or software-defined entities, e.g. SDN or NFV <p><u>WARNING</u> Group H04L 43/20 is incomplete pending reclassification of documents from group H04L 43/08. Groups H04L 43/08 and H04L 43/20 should be considered in order to perform a complete search.</p>
M	H04L 45/00	Routing or path finding of packets in data switching networks (routing or path finding in wireless networks H04W 40/00) <p><u>WARNING</u> Group H04L 45/00 is impacted by reclassification into groups H04L 45/17, H04L 45/243, H04L 45/247, H04L 45/645, H04L 45/655, H04L 45/76, H04L 45/80, H04L 45/85 and H04L 45/851. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	H04L 45/02	<ul style="list-style-type: none"> • Topology update or discovery <p><u>WARNING</u> Group H04L 45/02 is impacted by reclassification into groups H04L 45/03, H04L 45/033, H04L 45/036, H04L 45/037 and H04L 45/0377. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	H04L 45/03	<ul style="list-style-type: none"> • by updating link state protocols <p><u>WARNING</u> Group H04L 45/03 is incomplete pending reclassification of documents from group H04L 45/02. Groups H04L 45/02 and H04L 45/03 should be considered in order to perform a complete search.</p>

M	H04L 45/033	<ul style="list-style-type: none"> • by updating distance vector protocols <p><u>WARNING</u> Group H04L 45/033 is incomplete pending reclassification of documents from group H04L 45/02. Groups H04L 45/02 and H04L 45/033 should be considered in order to perform a complete search.</p>
M	H04L 45/036	<ul style="list-style-type: none"> • Updating the topology between route computation elements, e.g. between OpenFlow controllers <p><u>WARNING</u> Groups H04L 45/036, H04L 45/037 and H04L 45/0377 are incomplete pending reclassification of documents from group H04L 45/02. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	H04L 45/17	<ul style="list-style-type: none"> • Shortcut routing, e.g. using next hop resolution protocol [NHRP] <p><u>WARNING</u> Group H04L 45/17 is incomplete pending reclassification of documents from group H04L 45/00. Groups H04L 45/00 and H04L 45/17 should be considered in order to perform a complete search.</p>
M	H04L 45/22	<ul style="list-style-type: none"> • {Alternate routing} <p><u>WARNING</u> Group H04L 45/22 is impacted by reclassification into group H04L 45/247. Groups H04L 45/22 and H04L 45/247 should be considered in order to perform a complete search.</p>
U	H04L 45/24	<ul style="list-style-type: none"> • Multipath
M	H04L 45/243	<ul style="list-style-type: none"> • using M+N parallel active paths <p><u>WARNING</u> Group H04L 45/243 is incomplete pending reclassification of documents from group H04L 45/00. Groups H04L 45/00 and H04L 45/243 should be considered in order to perform a complete search.</p>
M	H04L 45/247	<ul style="list-style-type: none"> • using M:N active or standby paths <p><u>WARNING</u> Group H04L 45/247 is incomplete pending reclassification of documents from groups H04L 45/00 and H04L 45/22. Groups H04L 45/00, H04L 45/22 and H04L 45/247 should be considered in order to perform a complete search.</p>
M	H04L 45/48	<ul style="list-style-type: none"> • Routing tree calculation <p><u>WARNING</u> Group H04L 45/48 is impacted by reclassification into groups H04L 45/484 and H04L 45/488. Groups H04L 45/48, H04L 45/484 and H04L 45/488 should be considered in order to perform a complete search.</p>
M	H04L 45/484	<ul style="list-style-type: none"> • using multiple routing trees <p><u>WARNING</u> Group H04L 45/484 is incomplete pending reclassification of documents from group H04L 45/48.</p>

		Groups H04L 45/48 and H04L 45/484 should be considered in order to perform a complete search.
M	H04L 45/488	<ul style="list-style-type: none"> • using root node determination <p><u>WARNING</u> Group H04L 45/488 is incomplete pending reclassification of documents from group H04L 45/48. Groups H04L 45/48 and H04L 45/488 should be considered in order to perform a complete search.</p>
M	H04L 45/645	<ul style="list-style-type: none"> • Splitting route computation layer and forwarding layer, e.g. routing according to path computational element [PCE] or based on OpenFlow functionality <p><u>WARNING</u> Groups H04L 45/645 and H04L 45/655 are incomplete pending reclassification of documents from group H04L 45/00. Groups H04L 45/00, H04L 45/645 and H04L 45/655 should be considered in order to perform a complete search.</p>
U	H04L 45/74	<ul style="list-style-type: none"> • Address processing for routing
M	H04L 45/745	<ul style="list-style-type: none"> • Address table lookup; Address filtering <p><u>WARNING</u> Group H04L 45/745 is impacted by reclassification into groups H04L 45/7452 and H04L 45/7459. Groups H04L 45/745, H04L 45/7452 and H04L 45/7459 should be considered in order to perform a complete search.</p>
M	H04L 45/7452	<ul style="list-style-type: none"> • Multiple parallel or consecutive lookup operations (lookup operation involving Bloom filters H04L 45/7459) <p><u>WARNING</u> Group H04L 45/7452 is incomplete pending reclassification of documents from group H04L 45/745. Groups H04L 45/745 and H04L 45/7452 should be considered in order to perform a complete search.</p>
U	H04L 45/7453	<ul style="list-style-type: none"> • using hashing
M	H04L 45/7459	<ul style="list-style-type: none"> • using Bloom filters <p><u>WARNING</u> Group H04L 45/7459 is incomplete pending reclassification of documents from group H04L 45/745. Groups H04L 45/745 and H04L 45/7459 should be considered in order to perform a complete search.</p>
M	H04L 45/76	<ul style="list-style-type: none"> • Routing in software-defined topologies, e.g. routing between virtual machines <p><u>WARNING</u> Group H04L 45/76 is incomplete pending reclassification of documents from group H04L 45/00. Groups H04L 45/00 and H04L 45/76 should be considered in order to perform a complete search.</p>
M	H04L 45/80	<ul style="list-style-type: none"> • Ingress point selection by the source endpoint, e.g. selection of ISP or POP <p><u>WARNING</u> Groups H04L 45/80, H04L 45/85 and H04L 45/851 are incomplete pending reclassification of documents from group H04L 45/00.</p>

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

- U H04L 47/00** Traffic control in data switching networks (arrangements for detecting or preventing errors in the information received [H04L 1/00](#))

NOTE

This group covers:

1. Flow control or congestion control
2. Queue scheduling
3. Admission control or resource allocation

- M H04L 47/10** • Flow control; Congestion control

WARNING

Group H04L 47/10 is impacted by reclassification into groups H04L 47/43 and H04L 47/431.

Groups H04L 47/10, H04L 47/43 and H04L 47/431 should be considered in order to perform a complete search.

- M H04L 47/12** • • Avoiding congestion; Recovering from congestion

WARNING

Group H04L 47/12 is impacted by reclassification into group H04L 47/129.

Groups H04L 47/12 and H04L 47/129 should be considered in order to perform a complete search.

- M H04L 47/129** • • at the destination endpoint, e.g. reservation of terminal resources or buffer space

WARNING

Group H04L 47/129 is incomplete pending reclassification of documents from group H04L 47/12.

Groups H04L 47/12 and H04L 47/129 should be considered in order to perform a complete search.

- M H04L 47/26** • • using explicit feedback to the source, e.g. choke packets

WARNING

Group H04L 47/26 is impacted by reclassification into groups H04L 47/265 and H04L 47/267.

Groups H04L 47/26, H04L 47/265 and H04L 47/267 should be considered in order to perform a complete search.

- M H04L 47/265** • • sent by intermediate network nodes

WARNING

Group H04L 47/265 is incomplete pending reclassification of documents from group H04L 47/26.

Groups H04L 47/26 and H04L 47/265 should be considered in order to perform a complete search.

- M H04L 47/267** • • sent by the destination endpoint (network streaming of media packets with control of the source by the destination [H04L 65/613](#))

WARNING

Group H04L 47/267 is incomplete pending reclassification of documents from group H04L 47/26.

Groups H04L 47/26 and H04L 47/267 should be considered in order to perform a complete search.

M	H04L 47/43	<ul style="list-style-type: none"> Assembling or disassembling of packets, e.g. segmentation and reassembly [SAR] <p>WARNING Groups H04L 47/43 and H04L 47/431 are incomplete pending reclassification of documents from group H04L 47/10. Groups H04L 47/10, H04L 47/43 and H04L 47/431 should be considered in order to perform a complete search.</p>
M	H04L 47/70	<ul style="list-style-type: none"> Admission control; Resource allocation <p>WARNING Group H04L 47/70 is impacted by reclassification into group H04L 47/83. Groups H04L 47/70 and H04L 47/83 should be considered in order to perform a complete search.</p>
M	H04L 47/83	<ul style="list-style-type: none"> based on usage prediction <p>WARNING Group H04L 47/83 is incomplete pending reclassification of documents from group H04L 47/70. Groups H04L 47/70 and H04L 47/83 should be considered in order to perform a complete search.</p>
U	H04L 49/00	Packet switching elements
M	H04L 49/10	<ul style="list-style-type: none"> characterised by the switching fabric construction <p>WARNING Group H04L 49/10 is impacted by reclassification into groups H04L 49/111, H04L 49/112, H04L 49/113, H04L 49/115, H04L 49/116 and H04L 49/118. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	H04L 49/111	<ul style="list-style-type: none"> Switch interfaces, e.g. port details <p>WARNING Group H04L 49/111 is incomplete pending reclassification of documents from group H04L 49/10. Groups H04L 49/10 and H04L 49/111 should be considered in order to perform a complete search.</p>
M	H04L 49/112	<ul style="list-style-type: none"> Switch control, e.g. arbitration <p>WARNING Group H04L 49/112 is incomplete pending reclassification of documents from group H04L 49/10. Groups H04L 49/10 and H04L 49/112 should be considered in order to perform a complete search.</p>
M	H04L 49/113	<ul style="list-style-type: none"> Arrangements for redundant switching, e.g. using parallel planes <p>WARNING Groups H04L 49/113, H04L 49/115, H04L 49/116 and H04L 49/118 are incomplete pending reclassification of documents from group H04L 49/10. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	H04L 49/90	<ul style="list-style-type: none"> Buffering arrangements <p>WARNING Group H04L 49/90 is impacted by reclassification into group H04L 49/9023.</p>

~~Groups H04L 49/90 and H04L 49/9023 should be considered in order to perform a complete search.~~

- M H04L 49/9023
- for implementing a jitter-buffer

WARNING

~~Group H04L 49/9023 is incomplete pending reclassification of documents from group H04L 49/90.~~

~~Groups H04L 49/90 and H04L 49/9023 should be considered in order to perform a complete search.~~

- M H04L 51/00
- User-to-user messaging in packet-switching networks, transmitted according to store-and-forward or real-time protocols, e.g. e-mail**

WARNING

~~Group H04L 51/00 is impacted by reclassification into groups H04L 51/07 and H04L 51/21.~~

~~Groups H04L 51/00, H04L 51/07 and H04L 51/21 should be considered in order to perform a complete search.~~

- M H04L 51/07
- characterised by the inclusion of specific contents

WARNING

~~Group H04L 51/07 is incomplete pending reclassification of documents from group H04L 51/00.~~

~~Groups H04L 51/00 and H04L 51/07 should be considered in order to perform a complete search.~~

- M H04L 51/21
- Monitoring or handling of messages

WARNING

~~Group H04L 51/21 is incomplete pending reclassification of documents from group H04L 51/00.~~

~~Groups H04L 51/00 and H04L 51/21 should be considered in order to perform a complete search.~~

- U H04L 61/00
- Network arrangements, protocols or services for addressing or naming**

NOTE

This group does not cover:

- {aspects relating to switching or routing which are covered by groups [H04L 45/00](#) or [H04L 49/00](#);}
- {aspects relating to configuration management of data networks or network elements in general, which are covered by group [H04L 41/08](#)}
- {aspects of addressing in telephony which are covered by group [H04M 7/00](#);}
- {aspects of addressing within devices, e.g. process or memory, which are covered by groups [G06F 13/42](#) or [G06F 12/00](#).}

- M H04L 61/09
- Mapping addresses

WARNING

~~Group H04L 61/09 is incomplete pending reclassification of documents from group H04L 9/40.~~

~~Groups H04L 9/40 and H04L 61/09 should be considered in order to perform a complete search.~~

M H04L 63/00

{Network architectures or network communication protocols for network security (cryptographic mechanisms or cryptographic arrangements for secret or secure communication [H04L 9/00](#); network architectures or network communication protocols for wireless network security [H04W 12/00](#); security arrangements for protecting computers or computer systems against unauthorised activity [G06F 21/00](#))}

WARNING

Group H04L 63/00 is incomplete pending reclassification of documents from group H04L 9/40.

Groups H04L 9/40 and H04L 63/00 should be considered in order to perform a complete search.

U H04L 65/00

Network arrangements, protocols or services for supporting real-time applications in data packet communication (real-time or near real-time messaging, e.g. instant messaging [IM] [H04L 51/04](#); selective video distribution [H04N 21/00](#))

NOTES

1. {This group covers:

- only communications which fulfill the following two conditions:
 - i. they are based on packet data;
 - ii. there is real-time or pseudo-real-time temporal association between source and destination, or source and network, or destination and network;
- provided that the above two conditions are met, this group covers arrangements relating to
 - a. the transmission of the multimedia data itself,
 - b. the user-to-user, user-to-network, inter-network or intra-network signalling supporting:
 - b1. the establishment of a session for the subsequent transmission of the multimedia data, or
 - b2. the maintenance of the session or
 - b3. the application services available to the user during the session (unless explicitly excluded in certain cases).

}

2. {This group does not cover:

- non-real-time multimedia file transfer, which is covered by group [H04L 67/06](#);
- multimedia store or forward messaging as in e-mail, MMS or the like, which is covered by group [H04L 51/00](#);
- analogue video streaming, as in analogue television systems, which is covered by group [H04N 7/00](#);
- selective distribution of MPEG elementary or transport streams, containing video and/or additional data, which is covered by group [H04N 21/00](#);
- bit streaming, i.e. not packet-based, such as in ISDN, which is covered by group [H04Q 11/0428](#);
- instant messaging, which is covered by group [H04L 51/04](#);
- any other multimodal data communications which do not meet the conditions of being packet-based and real-time or pseudo-real-time;
- flow control in packet switching networks, which is covered by group [H04L 47/10](#).

}

3. {In this group the following terms or expressions are used with the meaning indicated:

- H.323 means International Telecommunication Union Recommendation no. 323, series H, entitled "Packet-based multimedia communications systems"
- IP means Internet Protocol

- IMS means IP Multimedia Subsystem
- ISDN means Integrated Services Digital Network
- MGC means Media Gateway Control/Controller
- MGCP means Media Gateway Control Protocol
- MMS means Multimedia Messaging Service
- PBX means Private Branch Exchange
- PSTN means Public Switched Telephone Network
- QoS means Quality of Service
- RTP means Real Time Protocol
- RTCP means Real Time Control Protocol
- RTSP means Real Time Streaming Protocol.
- SIP means Session Initiation Protocol
- SPAM means unsolicited electronic mail
- SPIT means SPAM Prevention in IP Telephony

}

- U H04L 65/10
- M H04L 65/1053
 - Architectures or entities
 - IP private branch exchange [PBX] functionality entities or arrangements (circuit switched PBXs [H04M 3/00](#))

WARNING

Group H04L 65/1053 is impacted by reclassification into group H04L 65/1055.
Groups H04L 65/1053 and H04L 65/1055 should be considered in order to perform a complete search.

- M H04L 65/1055
 - Single-site

WARNING

Group H04L 65/1055 is incomplete pending reclassification of documents from group H04L 65/1053.
Groups H04L 65/1053 and H04L 65/1055 should be considered in order to perform a complete search.

- U H04L 65/1066
- M H04L 65/1083
 - Session management
 - In-session procedures

WARNING

Group H04L 65/1083 is impacted by reclassification into groups H04L 65/1094 and H04L 65/1095.
Groups H04L 65/1083, H04L 65/1094 and H04L 65/1095 should be considered in order to perform a complete search.

- M H04L 65/1094
 - Inter-user-equipment sessions transfer or sharing

WARNING

Group H04L 65/1094 is incomplete pending reclassification of documents from group H04L 65/1083.
Groups H04L 65/1083 and H04L 65/1094 should be considered in order to perform a complete search.

- M H04L 65/1095
 - Inter-network session transfer or sharing

WARNING

Group H04L 65/1095 is incomplete pending reclassification of documents from group H04L 65/1083.
Groups H04L 65/1083 and H04L 65/1095 should be considered in order to perform a complete search.

M	H04L 65/1101	<ul style="list-style-type: none"> • Session protocols <p><u>WARNING</u> Group H04L 65/1101 is impacted by reclassification into group H04L 65/1108. Groups H04L 65/1101 and H04L 65/1108 should be considered in order to perform a complete search.</p>
M	H04L 65/1108	<ul style="list-style-type: none"> • Web based protocols, e.g. webRTC <p><u>WARNING</u> Group H04L 65/1108 is incomplete pending reclassification of documents from group H04L 65/1101. Groups H04L 65/1101 and H04L 65/1108 should be considered in order to perform a complete search.</p>
M	H04L 65/40	<ul style="list-style-type: none"> • Support for services or applications <p><u>WARNING</u> Group H04L 65/40 is impacted by reclassification into groups H04L 65/401, H04L 65/4015, H04L 65/402, H04L 65/403, H04L 65/4038, H04L 65/4046, H04L 65/4053 and H04L 65/4061. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	H04L 65/401	<ul style="list-style-type: none"> • wherein the services involve a main real-time session and one or more additional parallel real-time or time sensitive sessions, e.g. white board sharing or spawning of a subconference <p><u>WARNING</u> Groups H04L 65/401 and H04L 65/4015 are incomplete pending reclassification of documents from group H04L 65/40. Groups H04L 65/40, H04L 65/401 and H04L 65/4015 should be considered in order to perform a complete search.</p>
M	H04L 65/402	<ul style="list-style-type: none"> • wherein the services involve a main real-time session and one or more additional parallel non-real time sessions, e.g. downloading a file in a parallel FTP session, initiating an email or combinational services <p><u>WARNING</u> Group H04L 65/402 is incomplete pending reclassification of documents from group H04L 65/40. Groups H04L 65/40 and H04L 65/402 should be considered in order to perform a complete search.</p>
M	H04L 65/403	<ul style="list-style-type: none"> • Arrangements for multi-party communication, e.g. for conferences (data switching systems for conference H04L 12/18; arrangements for connecting several subscribers to a common circuit, i.e. affording conference facilities H04M 3/56; television conferencing systems H04N 7/15) <p><u>WARNING</u> Groups H04L 65/403, H04L 65/4038, H04L 65/4046 and H04L 65/4053 are incomplete pending reclassification of documents from group H04L 65/40. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	H04L 65/4061	<ul style="list-style-type: none"> • Push-to services, e.g. push-to-talk or push-to-video <p><u>WARNING</u> Group H04L 65/4061 is incomplete pending reclassification of documents from group H04L 65/40.</p>

~~Groups H04L 65/40 and H04L 65/4061 should be considered in order to perform a complete search.~~

M H04L 65/60

- Network streaming of media packets

WARNING

~~Groups H04L 65/60, H04L 65/61, H04L 65/611, H04L 65/612, H04L 65/613, H04L 65/65 and H04L 65/70 are incomplete pending reclassification of documents from group H04L 9/40.
All groups listed in this Warning should be considered in order to perform a complete search.~~

M H04L 65/75

- • Media network packet handling

WARNING

~~Group H04L 65/75 is incomplete pending reclassification of documents from group H04L 9/40.
Group H04L 65/75 is also impacted by reclassification into groups H04L 65/752 and H04L 65/756.
All groups listed in this Warning should be considered in order to perform a complete search.~~

M H04L 65/752

- • adapting media to network capabilities

WARNING

~~Group H04L 65/752 is incomplete pending reclassification of documents from groups H04L 9/40 and H04L 65/75.
Groups H04L 9/40, H04L 65/75 and H04L 65/752 should be considered in order to perform a complete search.~~

M H04L 65/756

- • adapting media to device capabilities

WARNING

~~Group H04L 65/756 is incomplete pending reclassification of documents from groups H04L 9/40 and H04L 65/75.
Groups H04L 9/40, H04L 65/75 and H04L 65/756 should be considered in order to perform a complete search.~~

U H04L 67/00

Network arrangements or protocols for supporting network services or applications (user-to-user messaging [H04L 51/00](#); network arrangements, protocols or services for supporting real-time applications in data packet communications networks [H04L 65/00](#))

NOTES

1. This group covers:

1. Networking arrangements or communication protocols to support networked applications which occur at the abstract network layers 5 to 7 of the OSI layer model. The higher layers constitute the interface between the network and the computer applications that use the network to communicate.
2. Network-specific aspects of client-server applications as well as of networking arrangements supporting networked/distributed applications, e.g. data transport, scheduling. This group also covers specific networked application layer protocols, e.g. FTP, WAP, HTTP.

2. This group does not cover:

1. Distributed applications which are network-agnostic, i.e. distributed information systems for which the network functions are transparent. These field are covered, e.g. by [G06F 9/00](#), [G06F 17/00](#). Data switching network provisions in general and the lower layer network functionalities which support application layer provisions are covered by [H04L 12/00](#)

M H04L 67/01

• Protocols

WARNING

Group H04L 67/01 is incomplete pending reclassification of documents from group H04L 9/40.

Group H04L 67/01 is also impacted by reclassification into groups

H04L 67/02, H04L 67/025, H04L 67/04, H04L 67/06, H04L 67/08, H04L 67/10, H04L 67/1001, H04L 67/1004, H04L 67/1006, H04L 67/1008, H04L 67/101, H04L 67/1012, H04L 67/1014, H04L 67/1017, H04L 67/1019, H04L 67/1021, H04L 67/1023, H04L 67/1025, H04L 67/1027, H04L 67/1029, H04L 67/1031, H04L 67/1034, H04L 67/1036, H04L 67/1038, H04L 67/104, H04L 67/1042, H04L 67/1044, H04L 67/1046, H04L 67/1048, H04L 67/1051, H04L 67/1053, H04L 67/1055, H04L 67/1057, H04L 67/1059, H04L 67/1061, H04L 67/1063, H04L 67/1065, H04L 67/1068, H04L 67/107, H04L 67/1072, H04L 67/1074, H04L 67/1076, H04L 67/1078, H04L 67/108, H04L 67/1082, H04L 67/1085, H04L 67/1087, H04L 67/1089, H04L 67/1091, H04L 67/1093, H04L 67/1095, H04L 67/1097, H04L 67/12, H04L 67/125, H04L 67/131, H04L 67/133, H04L 67/1396, H04L 67/2866, H04L 67/2869, H04L 67/2871, H04L 67/2876, H04L 67/288, H04L 67/2885, H04L 67/289, H04L 67/2895, H04L 67/30, H04L 67/303 and H04L 67/306.

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

M H04L 67/02

- based on web technology, e.g. hypertext transfer protocol [HTTP]

WARNING

Groups H04L 67/02 and H04L 67/025 are incomplete pending reclassification of documents from group H04L 67/01.

Groups H04L 67/01, H04L 67/02 and H04L 67/025 should be considered in order to perform a complete search.

M H04L 67/04

- specially adapted for terminals or networks with limited capabilities; specially adapted for terminal portability

WARNING

Group H04L 67/04 is incomplete pending reclassification of documents from group H04L 67/01.

Groups H04L 67/01 and H04L 67/04 should be considered in order to perform a complete search.

M H04L 67/06

- specially adapted for file transfer, e.g. file transfer protocol [FTP]

WARNING

Group H04L 67/06 is incomplete pending reclassification of documents from group H04L 67/01.

Groups H04L 67/01 and H04L 67/06 should be considered in order to perform a complete search.

M H04L 67/08

- specially adapted for terminal emulation, e.g. Telnet

WARNING

Group H04L 67/08 is incomplete pending reclassification of documents from group H04L 67/01.

Groups H04L 67/01 and H04L 67/08 should be considered in order to perform a complete search.

M H04L 67/10

- in which an application is distributed across nodes in the network (software deployment [G06F 8/60](#); multiprogramming arrangements [G06F 9/46](#))

WARNING

Group H04L 67/10 is incomplete pending reclassification of documents from group H04L 67/01.

~~Groups H04L 67/01 and H04L 67/10 should be considered in order to perform a complete search.~~

- M H04L 67/1001 • • • for accessing one among a plurality of replicated servers

WARNING

~~Group H04L 67/1001 is incomplete pending reclassification of documents from groups H04L 9/40 and H04L 67/01.
Groups H04L 9/40, H04L 67/01 and H04L 67/1001 should be considered in order to perform a complete search.~~

- M H04L 67/10015 • • • {Access to distributed or replicated servers, e.g. using brokers}

WARNING

~~Group H04L 67/10015 is incomplete pending reclassification of documents from group H04L 9/40.
Groups H04L 9/40 and H04L 67/10015 should be considered in order to perform a complete search.~~

- M H04L 67/1004 • • • Server selection for load balancing

WARNING

~~Group H04L 67/1004 is incomplete pending reclassification of documents from group H04L 67/01.
Groups H04L 67/01 and H04L 67/1004 should be considered in order to perform a complete search.~~

- M H04L 67/1006 • • • • with static server selection, e.g. the same server being selected for a specific client

WARNING

~~Group H04L 67/1006 is incomplete pending reclassification of documents from group H04L 67/01.
Groups H04L 67/01 and H04L 67/1006 should be considered in order to perform a complete search.~~

- M H04L 67/1008 • • • • based on parameters of servers, e.g. available memory or workload (monitoring of computer activity [G06F 11/30](#))

WARNING

~~Group H04L 67/1008 is incomplete pending reclassification of documents from group H04L 67/01.
Groups H04L 67/01 and H04L 67/1008 should be considered in order to perform a complete search.~~

- M H04L 67/101 • • • • based on network conditions

WARNING

~~Group H04L 67/101 is incomplete pending reclassification of documents from group H04L 67/01.
Groups H04L 67/01 and H04L 67/101 should be considered in order to perform a complete search.~~

- M H04L 67/1012 • • • • based on compliance of requirements or conditions with available server resources

WARNING

~~Group H04L 67/1012 is incomplete pending reclassification of documents from group H04L 67/01.
Groups H04L 67/01 and H04L 67/1012 should be considered in order to perform a complete search.~~

M	H04L 67/1014	<ul style="list-style-type: none"> • • • • based on the content of a request <p><u>WARNING</u> Group H04L 67/1014 is incomplete pending reclassification of documents from group H04L 67/01. Groups H04L 67/01 and H04L 67/1014 should be considered in order to perform a complete search.</p>
M	H04L 67/1017	<ul style="list-style-type: none"> • • • • based on a round robin mechanism <p><u>WARNING</u> Group H04L 67/1017 is incomplete pending reclassification of documents from group H04L 67/01. Groups H04L 67/01 and H04L 67/1017 should be considered in order to perform a complete search.</p>
M	H04L 67/1019	<ul style="list-style-type: none"> • • • • Random or heuristic server selection <p><u>WARNING</u> Group H04L 67/1019 is incomplete pending reclassification of documents from group H04L 67/01. Groups H04L 67/01 and H04L 67/1019 should be considered in order to perform a complete search.</p>
M	H04L 67/1021	<ul style="list-style-type: none"> • • • • based on client or server locations <p><u>WARNING</u> Group H04L 67/1021 is incomplete pending reclassification of documents from group H04L 67/01. Groups H04L 67/01 and H04L 67/1021 should be considered in order to perform a complete search.</p>
M	H04L 67/1023	<ul style="list-style-type: none"> • • • • based on a hash applied to IP addresses or costs <p><u>WARNING</u> Group H04L 67/1023 is incomplete pending reclassification of documents from group H04L 67/01. Groups H04L 67/01 and H04L 67/1023 should be considered in order to perform a complete search.</p>
M	H04L 67/1025	<ul style="list-style-type: none"> • • • • Dynamic adaptation of the criteria on which the server selection is based <p><u>WARNING</u> Group H04L 67/1025 is incomplete pending reclassification of documents from group H04L 67/01. Groups H04L 67/01 and H04L 67/1025 should be considered in order to perform a complete search.</p>
M	H04L 67/1027	<ul style="list-style-type: none"> • • • • Persistence of sessions during load balancing <p><u>WARNING</u> Group H04L 67/1027 is incomplete pending reclassification of documents from group H04L 67/01. Groups H04L 67/01 and H04L 67/1027 should be considered in order to perform a complete search.</p>
M	H04L 67/1029	<ul style="list-style-type: none"> • • • • using data related to the state of servers by a load balancer <p><u>WARNING</u> Group H04L 67/1029 is incomplete pending reclassification of documents from group H04L 67/01.</p>

		<p>Groups H04L 67/01 and H04L 67/1029 should be considered in order to perform a complete search.</p>
M	H04L 67/1031	<ul style="list-style-type: none">Controlling of the operation of servers by a load balancer, e.g. adding or removing servers that serve requests <p><u>WARNING</u> Group H04L 67/1031 is incomplete pending reclassification of documents from group H04L 67/01. Groups H04L 67/01 and H04L 67/1031 should be considered in order to perform a complete search.</p>
M	H04L 67/1034	<ul style="list-style-type: none">Reaction to server failures by a load balancer <p><u>WARNING</u> Group H04L 67/1034 is incomplete pending reclassification of documents from group H04L 67/01. Groups H04L 67/01 and H04L 67/1034 should be considered in order to perform a complete search.</p>
M	H04L 67/1036	<ul style="list-style-type: none">Load balancing of requests to servers for services different from user content provisioning, e.g. load balancing across domain name servers <p><u>WARNING</u> Group H04L 67/1036 is incomplete pending reclassification of documents from group H04L 67/01. Groups H04L 67/01 and H04L 67/1036 should be considered in order to perform a complete search.</p>
M	H04L 67/1038	<ul style="list-style-type: none">Load balancing arrangements to avoid a single path through a load balancer <p><u>WARNING</u> Group H04L 67/1038 is incomplete pending reclassification of documents from group H04L 67/01. Groups H04L 67/01 and H04L 67/1038 should be considered in order to perform a complete search.</p>
M	H04L 67/104	<ul style="list-style-type: none">Peer-to-peer [P2P] networks <p><u>WARNING</u> Groups H04L 67/104, H04L 67/1042, H04L 67/1044, H04L 67/1046, H04L 67/1048, H04L 67/1051, H04L 67/1053, H04L 67/1055, H04L 67/1057, H04L 67/1059, H04L 67/1061, H04L 67/1063, H04L 67/1065, H04L 67/1068, H04L 67/107, H04L 67/1072, H04L 67/1074, H04L 67/1076, H04L 67/1078, H04L 67/108, H04L 67/1082, H04L 67/1085, H04L 67/1087, H04L 67/1089, H04L 67/1091 and H04L 67/1093 are incomplete pending reclassification of documents from group H04L 67/01. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	H04L 67/1095	<ul style="list-style-type: none">Replication or mirroring of data, e.g. scheduling or transport for data synchronisation between network nodes <p><u>WARNING</u> Group H04L 67/1095 is incomplete pending reclassification of documents from group H04L 67/01. Groups H04L 67/01 and H04L 67/1095 should be considered in order to perform a complete search.</p>

M	H04L 67/1097	<ul style="list-style-type: none"> • for distributed storage of data in networks, e.g. transport arrangements for network file system [NFS], storage area networks [SAN] or network attached storage [NAS] <p><u>WARNING</u> Group H04L 67/1097 is incomplete pending reclassification of documents from group H04L 67/01. Groups H04L 67/01 and H04L 67/1097 should be considered in order to perform a complete search.</p>
M	H04L 67/12	<ul style="list-style-type: none"> • specially adapted for proprietary or special-purpose networking environments, e.g. medical networks, sensor networks, networks in vehicles or remote metering networks <p><u>WARNING</u> Groups H04L 67/12 and H04L 67/125 are incomplete pending reclassification of documents from group H04L 67/01. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	H04L 67/131	<ul style="list-style-type: none"> • Protocols for games, networked simulations or virtual reality <p><u>WARNING</u> Group H04L 67/131 is incomplete pending reclassification of documents from groups H04L 9/40 and H04L 67/01. Groups H04L 9/40, H04L 67/01 and H04L 67/131 should be considered in order to perform a complete search.</p>
M	H04L 67/133	<ul style="list-style-type: none"> • Protocols for remote procedure calls [RPC] <p><u>WARNING</u> Group H04L 67/133 is incomplete pending reclassification of documents from groups H04L 9/40 and H04L 67/01. Groups H04L 9/40, H04L 67/01 and H04L 67/133 should be considered in order to perform a complete search.</p>
M	H04L 67/1396	<ul style="list-style-type: none"> • specially adapted for monitoring users' activity <p><u>WARNING</u> Group H04L 67/1396 is incomplete pending reclassification of documents from groups H04L 9/40 and H04L 67/01. Groups H04L 9/40, H04L 67/01 and H04L 67/1396 should be considered in order to perform a complete search.</p>
M	H04L 67/2866	<ul style="list-style-type: none"> • Architectures; Arrangements <p><u>WARNING</u> Groups H04L 67/2866, H04L 67/2869, H04L 67/2871, H04L 67/2876, H04L 67/288, H04L 67/2885, H04L 67/289, H04L 67/2895, H04L 67/30, H04L 67/303 and H04L 67/306 are incomplete pending reclassification of documents from group H04L 67/01. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	H04L 67/50	<ul style="list-style-type: none"> • Network services <p><u>WARNING</u> Group H04L 67/50 is incomplete pending reclassification of documents from group H04L 9/40. Groups H04L 9/40 and H04L 67/50 should be considered in order to perform a complete search.</p>

U	H04L 69/00	Network arrangements, protocols or services independent of the application payload and not provided for in the other groups of this subclass (network security protocols H04L 9/40 ; wireless communication networks H04W)
M	H04L 69/08	<ul style="list-style-type: none"> Protocols for interworking; Protocol conversion <p>WARNING Group H04L 69/08 is impacted by reclassification into group H04L 69/085. Groups H04L 69/08 and H04L 69/085 should be considered in order to perform a complete search.</p>
M	H04L 69/085	<ul style="list-style-type: none"> • specially adapted for interworking of IP-based networks with other networks <p>WARNING Group H04L 69/085 is incomplete pending reclassification of documents from group H04L 69/08. Groups H04L 69/08 and H04L 69/085 should be considered in order to perform a complete search.</p>
U	H04L 69/30	<ul style="list-style-type: none"> Definitions, standards or architectural aspects of layered protocol stacks
M	H04L 69/32	<ul style="list-style-type: none"> • Architecture of open systems interconnection [OSI] 7-layer type protocol stacks, e.g. the interfaces between the data link level and the physical level <p>WARNING Group H04L 69/32 is impacted by reclassification into groups H04L 69/321, H04L 69/322, H04L 69/323, H04L 69/324, H04L 69/325, H04L 69/326, H04L 69/327, H04L 69/328, and H04L 69/329. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	H04L 69/321	<ul style="list-style-type: none"> • Interlayer communication protocols or service data unit [SDU] definitions; Interfaces between layers <p>WARNING Group H04L 69/321 is incomplete pending reclassification of documents from group H04L 69/32. Groups H04L 69/32 and H04L 69/321 should be considered in order to perform a complete search.</p>
M	H04L 69/322	<ul style="list-style-type: none"> • Intralayer communication protocols among peer entities or protocol data unit [PDU] definitions <p>WARNING Groups H04L 69/322 H04L 69/323, H04L 69/324, H04L 69/325, H04L 69/326, H04L 69/327, H04L 69/328 and H04L 69/329 are incomplete pending reclassification of documents from group H04L 69/32. All groups listed in this Warning should be considered in order to perform a complete search.</p>

Project: RP11979-F (H04N)

U	H04N 3/00	Scanning details of television systems; Combination thereof with generation of supply voltages
U	H04N 3/10	<ul style="list-style-type: none"> by means not exclusively optical-mechanical (H04N 3/36 takes precedence)
U	H04N 3/14	<ul style="list-style-type: none"> • by means of electrically scanned solid-state devices (for picture generation H04N 25/00)

- D H04N 3/15
—(Frozen)
- • • {for picture signal-generation}
- WARNING
Group H04N 3/15 is no longer used for the classification of documents as of August 1, 2023.
The content of this group is being reclassified into groups H04N 25/00, H04N 25/10, H04N 25/11, H04N 25/13, H04N 25/131, H04N 25/133, H04N 25/134, H04N 25/135, H04N 25/136, H04N 25/17, H04N 25/20, H04N 25/21, H04N 25/30, H04N 25/70, H04N 25/701, H04N 25/7013, H04N 25/702, H04N 25/703, H04N 25/704, H04N 25/705, H04N 25/706, H04N 25/707, H04N 25/708, H04N 25/709 and H04N 25/79.
All groups listed in this Warning should be considered in order to perform a complete search.
- D H04N 3/1506
—(Frozen)
- • • • {with addressing of the image-sensor elements (H04N 3/1575 takes precedence)}
- WARNING
Group H04N 3/1506 is no longer used for the classification of documents as of August 1, 2023.
The content of this group is being reclassified into groups H04N 25/76, H04N 25/766, H04N 25/767, H04N 25/768, H04N 25/77, H04N 25/771, H04N 25/772, H04N 25/773, H04N 25/778, H04N 25/779, H04N 25/7795 and H04N 25/78.
All groups listed in this Warning should be considered in order to perform a complete search.
- D H04N 3/1512
—(Frozen)
- • • • • {for MOS image-sensors, e.g. MOS-CCD (H04N 3/1581 takes precedence)}
- WARNING
Group H04N 3/1512 is no longer used for the classification of documents as of August 1, 2023.
The content of this group is being reclassified into groups H04N 25/76, H04N 25/766, H04N 25/767, H04N 25/768, H04N 25/77, H04N 25/771, H04N 25/772, H04N 25/773, H04N 25/778, H04N 25/779, H04N 25/7795 and H04N 25/78.
All groups listed in this Warning should be considered in order to perform a complete search.
- D H04N 3/1525
—(Frozen)
- • • • {with charge transfer within the image-sensor, e.g. time delay and integration (H04N 3/1575 takes precedence)}
- WARNING
Group H04N 3/1525 is no longer used for the classification of documents as of August 1, 2023.
The content of this group is being reclassified into groups H04N 25/71, H04N 25/711 and H04N 25/713.
All groups listed in this Warning should be considered in order to perform a complete search.
- D H04N 3/155
—(Frozen)
- • • • {Control of the image-sensor operation, e.g. image processing within the image-sensor}
- WARNING
Group H04N 3/155 is no longer used for the classification of documents as of August 1, 2023.
The content of this group is being reclassified into groups H04N 25/40, H04N 25/41, H04N 25/42, H04N 25/44, H04N 25/441, H04N 25/443, H04N 25/445, H04N 25/447, H04N 25/46, H04N 25/47, H04N 25/48, H04N 25/50, H04N 25/51, H04N 25/53, H04N 25/531, H04N 25/532,

H04N 3/155

(Frozen)

(continued)

H04N 25/533, H04N 25/534, H04N 25/535, H04N 25/57, H04N 25/571, H04N 25/573, H04N 25/575, H04N 25/58, H04N 25/581, H04N 25/583, H04N 25/585, H04N 25/587, H04N 25/589 and H04N 25/59.

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

D H04N 3/1556

—(Frozen)

. . . . {for variable integration time}

WARNING

Group H04N 3/1556 is no longer used for the classification of documents as of August 1, 2023.

The content of this group is being reclassified into groups H04N 25/53, H04N 25/531, H04N 25/532, H04N 25/533, H04N 25/534 and H04N 25/535.

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

D H04N 3/1562

—(Frozen)

. . . . {for selective scanning, e.g. windowing, zooming}

WARNING

Group H04N 3/1562 is no longer used for the classification of documents as of August 1, 2023.

The content of this group is being reclassified into groups H04N 25/40, H04N 25/41, H04N 25/42, H04N 25/44, H04N 25/441, H04N 25/443, H04N 25/445, H04N 25/447 and H04N 25/46.

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

D H04N 3/1568

—(Frozen)

. . . . {for disturbance correction or prevention within the image sensor, e.g. biasing, blooming, smearing (correction circuits H04N 25/62)}

WARNING

Group H04N 3/1568 is no longer used for the classification of documents as of August 1, 2023.

The content of this group is being reclassified into groups H04N 25/60, H04N 25/61, H04N 25/611, H04N 25/615, H04N 25/6153, H04N 25/616, H04N 25/617, H04N 25/618, H04N 25/62, H04N 25/621, H04N 25/622, H04N 25/623, H04N 25/625, H04N 25/626, H04N 25/627, H04N 25/628, H04N 25/63, H04N 25/633, H04N 25/65, H04N 25/67, H04N 25/671, H04N 25/672, H04N 25/673, H04N 25/674, H04N 25/677, H04N 25/68, H04N 25/683 and H04N 25/69.

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

D H04N 3/1575

—(Frozen)

. . . . {Picture signal readout register, e.g. shift registers, interline shift registers}

WARNING

Group H04N 3/1575 is no longer used for the classification of documents as of August 1, 2023.

The content of this group is being reclassified into groups H04N 25/713 and H04N 25/767.

Groups H04N 3/1575, H04N 25/713 and H04N 25/767 should be considered in order to perform a complete search.

D H04N 3/1581

—(Frozen)

. . . . {using linear image sensor}

WARNING

Group H04N 3/1581 is no longer used for the classification of documents as of August 1, 2023.

The content of this group is being reclassified into groups H04N 25/701 and H04N 25/7013.

H04N 3/1581

(Frozen)

(continued)

Groups H04N 3/1581, H04N 25/701 and H04N 25/7013 should be considered in order to perform a complete search.

M H04N 25/00**Circuitry of solid-state image sensors [SSIS]; Control thereof****WARNING**

Groups H04N 25/00, H04N 25/10, H04N 25/11, H04N 25/13, H04N 25/131, H04N 25/133, H04N 25/134, H04N 25/135, H04N 25/136, H04N 25/17, H04N 25/20, H04N 25/21, H04N 25/30, H04N 25/70, H04N 25/702, H04N 25/703, H04N 25/704, H04N 25/705, H04N 25/706, H04N 25/707, H04N 25/708, H04N 25/709 and H04N 25/79 are incomplete pending reclassification of documents from group H04N 3/15.

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

M H04N 25/40

- Extracting pixel data from image sensors by controlling scanning circuits, e.g. by modifying the number of pixels sampled or to be sampled

WARNING

Groups H04N 25/40, H04N 25/41, H04N 25/42, H04N 25/44, H04N 25/441, H04N 25/443, H04N 25/445, H04N 25/447 and H04N 25/46 are incomplete pending reclassification of documents from groups H04N 3/155 and H04N 3/1562.

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

M H04N 25/47

- Image sensors with pixel address output; Event-driven image sensors; Selection of pixels to be read out based on image data

WARNING

Group H04N 25/47 is incomplete pending reclassification of documents from group H04N 3/155.

Groups H04N 3/155 and H04N 25/47 should be considered in order to perform a complete search.

M H04N 25/48

- Increasing resolution by shifting the sensor relative to the scene

WARNING

Group H04N 25/48 is incomplete pending reclassification of documents from group H04N 3/155.

Groups H04N 3/155 and H04N 25/48 should be considered in order to perform a complete search.

M H04N 25/50

- Control of the SSIS exposure

WARNING

Groups H04N 25/50, H04N 25/51, H04N 25/53, H04N 25/531, H04N 25/532, H04N 25/533, H04N 25/534, H04N 25/535, H04N 25/57, H04N 25/571, H04N 25/573, H04N 25/575, H04N 25/58, H04N 25/581, H04N 25/583, H04N 25/585, H04N 25/587, H04N 25/589 and H04N 25/59 are incomplete pending reclassification of documents from groups H04N 3/155 and H04N 3/1556.

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

M H04N 25/60

- Noise processing, e.g. detecting, correcting, reducing or removing noise

WARNING

Groups H04N 25/60 – H04N 25/69 are incomplete pending reclassification of documents from group H04N 3/1568.

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

- U H04N 25/70
 - M H04N 25/701
- SSIS architectures; Circuits associated therewith
 - • Line sensors

WARNING

Groups H04N 25/701 and H04N 25/7013 are incomplete pending reclassification of documents from groups H04N 3/15 and H04N 3/1581. Groups H04N 3/15, H04N 3/1581, H04N 25/701 and H04N 25/7013 should be considered in order to perform a complete search.

- M H04N 25/71
- • Charge-coupled device [CCD] sensors; Charge-transfer registers specially adapted for CCD sensors

WARNING

Group H04N 25/71 is incomplete pending reclassification of documents from group H04N 3/1525. Groups H04N 3/1525 and H04N 25/71 should be considered in order to perform a complete search.

- M H04N 25/711
- • Time delay and integration [TDI] registers; TDI shift registers

WARNING

Group H04N 25/711 is incomplete pending reclassification of documents from group H04N 3/1525. Groups H04N 3/1525 and H04N 25/711 should be considered in order to perform a complete search.

- M H04N 25/713
- • Transfer or readout registers; Split readout registers or multiple readout registers

WARNING

Group H04N 25/713 is incomplete pending reclassification of documents from groups H04N 3/1525 and H04N 3/1575. Groups H04N 3/1525, H04N 3/1575 and H04N 25/713 should be considered in order to perform a complete search.

- M H04N 25/76
- • Addressed sensors, e.g. MOS or CMOS sensors

WARNING

Groups H04N 25/76, H04N 25/766, H04N 25/767, H04N 25/768, H04N 25/77, H04N 25/771, H04N 25/772, H04N 25/773, H04N 25/778, H04N 25/779, H04N 25/7795 and H04N 25/78 are incomplete pending reclassification of documents from groups H04N 3/1506 and H04N 3/1512. All groups listed in this Warning should be considered in order to perform a complete search.

- M H04N 25/767
- • Horizontal readout lines, multiplexers or registers

WARNING

Group H04N 25/767 is incomplete pending reclassification of documents from group H04N 3/1575. Groups H04N 3/1575 and H04N 25/767 should be considered in order to perform a complete search.

Project: RP12202-F (H04W)

- U H04W 74/00
 - U H04W 74/08
- Wireless channel access
 - Non-scheduled access, e.g. ALOHA (hybrid access [H04W 74/02](#))

- M H04W 74/0833
- • Random access procedures, e.g. with 4-step access
- WARNING**
Group H04W 74/0833 is impacted by reclassification into groups H04W 74/0836 and H04W 74/0838.
Groups H04W 74/0833, H04W 74/0836 and H04W 74/0838 should be considered in order to perform a complete search.

- M H04W 74/0836
- • with 2-step access
- WARNING**
Group H04W 74/0836 is incomplete pending reclassification of documents from group H04W 74/0833.
Groups H04W 74/0833 and H04W 74/0836 should be considered in order to perform a complete search.

- M H04W 74/0838
- • using contention-free random access [CFRA]
- WARNING**
Group H04W 74/0838 is incomplete pending reclassification of documents from group H04W 74/0833.
Groups H04W 74/0833 and H04W 74/0838 should be considered in order to perform a complete search.

Project: RP10453-F (H05B)

- U H05B 47/00
- Circuit arrangements for operating light sources in general, i.e. where the type of light source is not relevant**

- U H05B 47/10
- Controlling the light source

- M H05B 47/17
- • Operational modes, e.g. switching from manual to automatic mode or prohibiting specific operations

WARNING
Group H05B 47/17 is impacted by reclassification into group H05B 47/172.
Groups H05B 47/17 and H05B 47/172 should be considered in order to perform a complete search.

- M H05B 47/172
- • {Emergency operational modes}

WARNING
Group H05B 47/172 is incomplete pending reclassification of documents from group H05B 47/17.
Groups H05B 47/17 and H05B 47/172 should be considered in order to perform a complete search.

- M H05B 47/175
- • by remote control
- WARNING**
Group H05B 47/175 is impacted by reclassification into groups H05B 47/196 — H05B 47/1995.
Groups H05B 47/175 and H05B 47/196 — H05B 47/1995 should be considered in order to perform a complete search.

- M H05B 47/18
- • via data-bus transmission
- WARNING**
Group H05B 47/18 is impacted by reclassification into groups H05B 47/183, H05B 47/184, H05B 47/196 - H05B 47/1975 and H05B 47/198 - H05B 47/1995.
All groups listed in this Warning should be considered in order to perform a complete search.

M	H05B 47/183	<ul style="list-style-type: none"> • • • {using digital addressable lighting interface [DALI] communication protocols} <p><u>WARNING</u> Group H05B 47/183 is incomplete pending reclassification of documents from group H05B 47/18. Groups H05B 47/18 and H05B 47/183 should be considered in order to perform a complete search.</p>
M	H05B 47/184	<ul style="list-style-type: none"> • • • {using digital multiplexed [DMX] communication protocols} <p><u>WARNING</u> Group H05B 47/184 is incomplete pending reclassification of documents from group H05B 47/18. Groups H05B 47/18 and H05B 47/184 should be considered in order to perform a complete search.</p>
M	H05B 47/185	<ul style="list-style-type: none"> • • • via power line carrier transmission <p><u>WARNING</u> Group H05B 47/185 is impacted by reclassification into groups H05B 47/187, H05B 47/196 - H05B 47/1975 and H05B 47/198 - H05B 47/1995. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	H05B 47/187	<ul style="list-style-type: none"> • • • {using power over ethernet [PoE] supplies} <p><u>WARNING</u> Group H05B 47/187 is incomplete pending reclassification of documents from group H05B 47/185. Groups H05B 47/185 and H05B 47/187 should be considered in order to perform a complete search.</p>
M	H05B 47/19	<ul style="list-style-type: none"> • • • via wireless transmission <p><u>WARNING</u> Group H05B 47/19 is impacted by reclassification into groups H05B 47/196 - H05B 47/1975 and H05B 47/198 - H05B 47/1995. Groups H05B 47/19, H05B 47/196 - H05B 47/1975 and H05B 47/198 - H05B 47/1995 should be considered in order to perform a complete search.</p>
M	H05B 47/195	<ul style="list-style-type: none"> • • • the transmission using visible or infrared light <p><u>WARNING</u> Group H05B 47/195 is impacted by reclassification into groups H05B 47/196 - H05B 47/1975 and H05B 47/198 - H05B 47/1995. Groups H05B 47/195, H05B 47/196 - H05B 47/1975 and H05B 47/198 - H05B 47/1995 should be considered in order to perform a complete search.</p>
M	H05B 47/196	<ul style="list-style-type: none"> • • • {characterised by user interface arrangements} <p><u>WARNING</u> Groups H05B 47/196 - H05B 47/1975 are incomplete pending reclassification of documents from groups H05B 47/175, H05B 47/18, H05B 47/185, H05B 47/19 and H05B 47/195. All groups listed in this Warning should be considered in order to perform a complete search.</p>

- M H05B 47/198 • • • {Grouping of control procedures or address assignment to light sources}

WARNING

Groups H05B 47/198 – H05B 47/1995 are incomplete pending reclassification of documents from groups H05B 47/175, H05B 47/18, H05B 47/185, H05B 47/19 and H05B 47/195.

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

Project: RP12819-C (H10W)

- U H10W 40/00 **Arrangements for thermal protection or thermal control (integrated devices comprising arrangements for thermal protection [H10D 89/60](#))**

WARNING

Group [H10W 40/00](#) is incomplete pending reclassification of documents from group [H10W 99/00](#). Group [H10W 40/00](#) is also impacted by reclassification into groups [H10W 40/20](#) and [H10W 40/50](#).

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

- C H10W 40/10 • Arrangements for heating

WARNING

Group [H10W 40/10](#) is impacted by reclassification into group [H10W 40/20](#).

Groups [H10W 40/10](#) and [H10W 40/20](#) should be considered in order to perform a complete search.

- M H10W 40/20 • Arrangements for cooling

WARNING

Group [H10W 40/20](#) is incomplete pending reclassification of documents from groupgroups [H10W 40/00](#) and [H10W 40/10](#).

GroupsAll [H10W 40/00](#) andgroups listed [H10W 40/20](#)in this *Warning* should be considered in order to perform a complete search.

- U H10W 72/00 **Interconnections or connectors in packages**

NOTE

In this group, bond pads in general, i.e. where the nature of a related connector is unspecified or generic to multiple types of connectors, are classified in group [H10W 72/90](#). Bond pads specially adapted for a specific type of connector are classified in the group covering the connector type. For example, bond pads specially adapted for wire connectors are classified in group [H10W 72/59](#).

WARNING

Group [H10W 72/00](#) is incomplete pending reclassification of documents from groups [H10W 20/40](#), [H10W 72/07232](#), [H10W 72/07233](#) and [H10W 72/07236](#).

Group [H10W 72/00](#) is also impacted by reclassification into groups [H10W 72/20](#), [H10W 72/221](#), [H10W 72/222](#), [H10W 72/223](#), [H10W 72/224](#), [H10W 72/225](#), [H10W 72/227](#), [H10W 72/228](#), [H10W 72/231](#), [H10W 72/232](#), [H10W 72/234](#), [H10W 72/235](#), [H10W 72/237](#), [H10W 72/241](#), [H10W 72/242](#), [H10W 72/244](#), [H10W 72/245](#), [H10W 72/247](#), [H10W 72/248](#), [H10W 72/251](#), [H10W 72/252](#), [H10W 72/253](#), [H10W 72/255](#), [H10W 72/257](#), [H10W 72/2524](#), [H10W 72/2528](#), [H10W 72/261](#), [H10W 72/263](#), [H10W 72/265](#), [H10W 72/267](#), [H10W 72/281](#), [H10W 72/283](#), [H10W 72/285](#), [H10W 72/287](#), [H10W 72/30](#), [H10W 72/321](#), [H10W 72/322](#), [H10W 72/323](#), [H10W 72/324](#), [H10W 72/325](#), [H10W 72/327](#), [H10W 72/328](#), [H10W 72/331](#), [H10W 72/332](#), [H10W 72/334](#), [H10W 72/335](#), [H10W 72/337](#), [H10W 72/341](#), [H10W 72/342](#), [H10W 72/344](#), [H10W 72/345](#), [H10W 72/347](#), [H10W 72/348](#), [H10W 72/351](#), [H10W 72/352](#), [H10W 72/353](#), [H10W 72/354](#), [H10W 72/355](#), [H10W 72/357](#), [H10W 72/3524](#), [H10W 72/3528](#),

[H10W 72/361](#), [H10W 72/365](#), [H10W 72/367](#), [H10W 72/381](#), [H10W 72/383](#),
[H10W 72/385](#), [H10W 72/387](#), [H10W 72/40](#), [H10W 72/49](#), [H10W 72/50](#),
[H10W 72/521](#), [H10W 72/522](#), [H10W 72/523](#), [H10W 72/524](#), [H10W 72/525](#),
[H10W 72/527](#), [H10W 72/528](#), [H10W 72/531](#), [H10W 72/533](#), [H10W 72/534](#),
[H10W 72/535](#), [H10W 72/537](#), [H10W 72/536](#), [H10W 72/5363](#), [H10W 72/5366](#),
[H10W 72/5368](#), [H10W 72/541](#), [H10W 72/543](#), [H10W 72/547](#), [H10W 72/5434](#),
[H10W 72/5438](#), [H10W 72/5473](#), [H10W 72/5475](#), [H10W 72/5445](#), [H10W 72/5449](#),
[H10W 72/5453](#), [H10W 72/551](#), [H10W 72/552](#), [H10W 72/5522](#), [H10W 72/5524](#),
[H10W 72/5525](#), [H10W 72/553](#), [H10W 72/555](#), [H10W 72/557](#), [H10W 72/5528](#),
[H10W 72/581](#), [H10W 72/583](#), [H10W 72/585](#), [H10W 72/60](#), [H10W 72/621](#),
[H10W 72/622](#), [H10W 72/623](#), [H10W 72/624](#), [H10W 72/625](#), [H10W 72/627](#),
[H10W 72/631](#), [H10W 72/634](#), [H10W 72/635](#), [H10W 72/637](#), [H10W 72/641](#),
[H10W 72/645](#), [H10W 72/647](#), [H10W 72/646](#), [H10W 72/642](#), [H10W 72/643](#),
[H10W 72/6478](#), [H10W 72/651](#), [H10W 72/652](#), [H10W 72/653](#), [H10W 72/6528](#),
[H10W 72/655](#), [H10W 72/657](#), [H10W 72/681](#), [H10W 72/683](#), [H10W 72/685](#) and
[H10W 72/691](#).

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

- | | | |
|---|---------------|--|
| U | H10W 72/071 | • {Connecting or disconnecting} |
| U | H10W 72/075 | • • {of bond wires} |
| M | H10W 72/07551 | • • • {characterised by changes in properties of the bond wires during the connecting} |
| U | H10W 72/07552 | • • • • {changes in structures or sizes} |
| U | H10W 72/07553 | • • • • {changes in shapes} |
| U | H10W 72/07554 | • • • • {changes in dispositions} |
| U | H10W 72/07555 | • • • • {changes in materials} |