

TECHNICAL ANNEXES

ANNEX 1E A01B [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance **Parts, details or accessories of agricultural machines or implements, in general**
 heading
 51/00-
 75/00

ANNEX 2E A01D [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance **Hand implements**
 heading
 1/00-
 11/00

CL M **1/00 Hand-cutting implements for harvesting** (devices for picking apples or like fruits **A01D 46/24**; hedge trimming means **A01G 3/04**)

CL M **11/00 Other hand implements** (devices for picking apples or like fruits **A01D 46/24**)

CL M Guidance **Harvesters or mowers for grass, cereals or other crops**
 heading
 34/00-
 51/00

CL M Guidance **Components of harvesters or mowers for grass or cereals**
 heading
 57/00-
 69/00

CL M Guidance **Haymakers; Crop conditioners**
 heading
 76/00-
 84/00

CL M **76/00 Haymakers with tines that are stationary with respect to the machine during operation but that may be liftable for dumping** (haymakers combined with mowers **A01D 43/04**)

CL M **78/00 Haymakers with tines moving with respect to the machine** (haymakers combined with mowers **A01D 43/04**)

CL M **84/00 Haymakers not provided for in a single one of groups **A01D 76/00-A01D 82/00**** (haymakers combined with mowers **A01D 43/04**)

ANNEX 7E A01K [Project-Rapporteur : M031/IB] <CE40>

CL M Note This subclass covers :

- A01K
- equipment for the care, culture or rearing of all animals or for obtaining their products, unless provided for elsewhere, e.g. milking **A01J**, shoeing animals **A01L**, veterinary devices **A61D**, devices in connection with harnesses **B68B**;
 - methods of breeding animals or new animal breeds. [5]

CL M Guidance **Animal husbandry in general, especially cattle-raising**

heading

1/00-

29/00

AL M 1/12 • Milking stations

ANNEX 8E A01K [Project-Rapporteur : C440/US] <CE40>

CL M **15/00 Devices for taming animals, e.g. nose-rings, hobbles; Devices for overturning animals in general; Training or exercising equipment; Covering boxes** (devices for veterinary purposes **A61D 3/00**)

AL M 15/02 • Training or exercising equipment, e.g. mazes or labyrinths for animals (**A01K 15/04** takes precedence)

ANNEX 9E A01K [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance **Fishing**

heading

69/00-

81/00

ANNEX 10E A01K [Project-Rapporteur : M109/EP] <CE40>

CL M **69/00 Stationary catching devices for fishing**

CL M **71/00 Floating fishing nets**

CL M **73/00 Drawn fishing nets**

CL M **74/00 Other catching nets or the like for fishing**

CL M **75/00 Accessories for fishing nets; Details of fishing nets, e.g. structure**

CL M **77/00 Landing-nets for fishing; Landing-spoons for fishing**

- CL M 80/00 **Harvesting oysters, mussels, sponges or the like** (fishing nets [A01K 73/00](#), [A01K 74/00](#); dredgers [E02F](#))
- CL M 85/00 **Artificial bait for fishing**
- CL M 87/00 **Fishing rods**
- CL M 89/00 **Fishing reels**
- CL M 91/00 **Fishing lines**
- CL M 97/00 **Accessories for angling** (fish stringers [A01K 65/00](#); landing-nets or landing-spoons for fishing [A01K 77/00](#))
-

ANNEX 11E A01N [Project-Rapporteur : M032/IB] <CE40>

- CL M Title **PRESERVATION OF BODIES OF HUMANS OR ANIMALS OR PLANTS OR PARTS THEREOF** (preservation of food or foodstuff [A23](#)) ; **BIOCIDES, e.g. AS DISINFECTANTS, AS PESTICIDES, AS HERBICIDES** (preparations for medical, dental or toilet purposes which kill or prevent the growth or proliferation of unwanted organisms [A61K](#)) ; **PEST REPELLANTS OR ATTRACTANTS; PLANT GROWTH REGULATORS** (mixtures of pesticides with fertilisers [C05G](#))
- CL M 1/00 **Preservation of bodies of humans or animals, or parts thereof**
- CL M 3/00 **Preservation of plants or parts thereof, e.g. inhibiting evaporation, improvement of the appearance of leaves** (preservation or chemical ripening of harvested fruit or vegetables [A23B 7/00](#)) ; **Grafting wax**
- CL M 25/00 **Biocides, pest repellants or attractants, or plant growth regulators, characterised by their forms, or by their non-active ingredients or by their methods of application** (fungicidal, bactericidal, insecticidal, disinfecting or antiseptic paper [D21H](#)) ; **Substances for reducing the noxious effect of the active ingredients to organisms other than pests**
- CL M 25/18 · Vapour or smoke emitting compositions with delayed or sustained release
-

ANNEX 12E A43D [Project-Rapporteur : M031/IB] <CE40>

- CL M Title **MACHINES, TOOLS, EQUIPMENT OR METHODS FOR MANUFACTURING OR REPAIRING FOOTWEAR** (sewing [D05B](#))
- CL M Guidance [Making or fastening soles, heels, or welts, or preparing same for fastening to the shoe](#); [Carrying out other operations subsequent to lasting](#); [Turning](#)
25/00-
86/00
-

ANNEX 13E A45B [Project-Rapporteur : M031/IB] <CE40>

CL M Title **WALKING STICKS** (walking aids, e.g. sticks, for blind persons [A61H 3/06](#); walking sticks formed as supports or tripod stands [F16M 13/08](#)) ; **UMBRELLAS; LADIES' OR LIKE FANS** (cane or umbrella stands or holders [A47G 25/12](#))

CL M Note In this subclass, the following terms are used with the meaning indicated:
A45B

- "umbrellas" also covers sunshades similar in construction to umbrellas;
- "*sticks*" covers walking sticks and sticks for umbrellas. [new]

CL M Guidance [Walking sticks; Sticks for umbrellas](#)
heading
1/00-
9/00

CL M Guidance [Umbrellas](#)
heading
11/00-
25/00

ANNEX 14E A45D [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance [Devices for cleaning the hair or the scalp, drying the hair or colouring the hair](#)
heading
19/00-
20/00

CL M Guidance [Containers or accessories specially adapted for handling toilet or cosmetic substances](#)
heading
33/00-
40/00

CL M 37/00 **Sachet pads specially adapted for liquid toilet or cosmetic substances**

CL M 40/00 **Casings or accessories specially adapted for storing or handling solid or pasty toilet or cosmetic substances, e.g. shaving soap, lipstick, make-up** (features common to containers for handling powdery or liquid toilet or cosmetic substances [A45D 33/00-A45D 37/00](#); cosmetic or like preparations [A61K 8/00](#), [A61Q](#); features common to writing or drawing implements [B43](#); sample tables or the like [G09F 5/00](#))

ANNEX 15E A47B [Project-Rapporteur : M031/IB] <CE40>

CL M Title **TABLES; DESKS; OFFICE FURNITURE; CABINETS; DRAWERS; GENERAL DETAILS OF FURNITURE** (jointing of furniture [F16B 12/00](#))

- CL M Guidance Tables or desks characterised by adaptation for particular purposes
heading
17/00-
37/00
- CL M **23/00 Bed-tables** (operating tables **A61G 13/00**) ; **Trays; Reading-racks; Book-rests**
- CL M **37/00 Tables adapted for other particular purposes** (flower tables **A47G 7/04**; operating tables **A61G 13/00**; laboratory tables **B01L 9/02**; work tables **B25H 1/02**)
- CL M Guidance Structural features of cabinets, racks, shelf units or similar furniture; Similar features of built-in cupboards
heading
43/00-
57/00
- CL N Guidance Special adaptations of cabinets racks, shelf units or similar furniture; Similar features of built-in cupboards
heading
61/00-
81/00
- CL M **81/00 Cabinets, racks or shelf units specially adapted for other particular purposes, e.g. for storing guns or skis** (racks for dispensing merchandise **A47F 1/00**; showcases or show cabinets **A47F 3/00**; racks specially adapted for workshops **B25H 3/04**; peculiar to housing recording apparatus or records therefor **G11B 33/02**; peculiar to housing electrical apparatus or installations **H05K**)
- CL M Guidance Combined or convertible furniture
heading
83/00-
87/00
- CL M **85/00 Furniture convertible into other kinds of furniture** (convertible chairs, stools or benches **A47C 13/00**; into beds **A47C 17/52**; into billiard tables **A63D 15/04**)
- CL D Guidance < Deleted / Supprimé >
heading /
Rubrique
d'orientation
88/00-
96/00

ANNEX 16E A47C [Project-Rapporteur : M031/IB] <CE40>

- CL M **25/00 Unframed spring units specially adapted for sofas or beds**
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ANNEX 17E A47H [Project-Rapporteur : M099/IB] <CE40>

CL M Title **FURNISHINGS FOR WINDOWS OR DOORS** (concerned with the functioning of the door or window **E05**; roller blinds **E06B**; special arrangements or measures in connection with doors or windows, e.g. for ventilation or sealing, **E06B 7/00**)

CL D 33/00 (transferred to **A47H 99/00**)

CL N **99/00** *Subject matter not provided for in other groups of this subclass*

ANNEX 18E A47L [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance **Suction cleaners**
heading
5/00-
9/00

ANNEX 19E A61 [Project-Rapporteur : M014/IB] <CE40>

CL M Title **HEALTH; LIFE-SAVING; AMUSEMENT**

ANNEX 20E A61B [Project-Rapporteur : M032/IB] <CE40>

CL M Title **DIAGNOSIS; SURGERY; IDENTIFICATION** (analysing biological material **G01N**, e.g. **G01N 33/48**)

CL M 1/24 · for the mouth, i.e. stomatoscopes, e.g. with tongue depressors (tongue depressors per se **A61B 13/00**) ; Instruments for opening or keeping open the mouth (combined with saliva removers **A61C 17/10**)

CL M **3/00** **Apparatus for testing the eyes; Instruments for examining the eyes** (eye inspection using ultrasonic, sonic or infrasonic waves **A61B 8/10**)

AL M 3/04 · · · Trial frames; Sets of lenses for use therewith

AL M 3/125 · · · with contact lenses

CL M 5/0215 · · · by means inserted into the body

AL M 5/025 · · · within occluders, e.g. responsive to Korotkoff sounds

CL M 5/04 · Measuring bioelectric signals of the body or parts thereof

- CL M 5/055 · · involving electronic [EMR] or nuclear [NMR] magnetic resonance, e.g. magnetic resonance imaging
- CL M 5/103 · Measuring devices for testing the shape, pattern, size or movement of the body or parts thereof, for diagnostic purposes ([A61B 5/08](#) takes precedence; measuring instruments specially adapted for dentistry [A61C 19/04](#))
- CL M 5/11 · · Measuring movement of the entire body or parts thereof, e.g. head or hand tremor, mobility of a limb (for measuring pulse [A61B 5/02](#))
- CL M 5/117 · Identification of persons, e.g. finger-printing, foot-printing, impression techniques (dental impression cups or articulators [A61C 9/00](#), [A61C 11/00](#); recognising fingerprints [G06K 9/00](#); identification of persons by analysing their voice or speech [G10L 17/00](#))
- CL M 5/16 · Devices for psychotechnics (using teaching or educational appliances [G09B 1/00-G09B 7/00](#)) ; Testing reaction times
- CL M 5/22 · Ergometry; Measuring muscular strength or the force of a muscular blow
- CL M **6/00 Apparatus for radiation diagnosis, e.g. combined with radiation therapy equipment** (instruments measuring radiation intensity for application in the field of nuclear medicine, e.g. in vivo counting, [G01T 1/161](#); apparatus for taking X-ray photographs [G03B 42/02](#))
- CL M 6/02 · Devices for diagnosis sequentially in different planes; Stereoscopic radiation diagnosis
- CL M 6/03 · · Computerised tomographs (echo-tomography [A61B 8/14](#))
- CL M 6/10 · Application or adaptation of safety means
- CL M **8/00 Diagnosis using ultrasonic, sonic or infrasonic waves**
- CL M 8/06 · Measuring blood flow
- CL M **10/00 Other methods or instruments for diagnosis, e.g. for vaccination diagnosis; Sex determination; Ovulation-period determination; Throat striking implements**
- CL M 17/02 · for holding wounds open; Tractors
- CL M 17/04 · · for suturing wounds; Holders or packages for needles or suture materials
- CL M 17/06 · · · Needles; Holders or packages for needles or suture materials (puncturing needles [A61B 17/34](#); hypodermic needles [A61M 5/32](#))
- AL M 17/10 · · for applying or removing wound clamps; Wound clamp magazines
- CL M 17/12 · for ligaturing or otherwise compressing tubular parts of the body, e.g. blood vessels, umbilical cord
- AL M 17/135 · · · inflatable
- CL M 17/14 · Surgical saws (tooth saws [A61C 3/12](#))
- CL M 17/20 · for vaccinating or cleaning the skin previous to the vaccination (apparatus for injections [A61M 3/00](#), [A61M 5/00](#))

- CL M 17/22 • Implements for squeezing-off ulcers or the like on inner organs of the body; Implements for scraping-out cavities of body organs, e.g. bones; for invasive removal or destruction of calculus using mechanical vibrations; for removing obstructions in blood vessels, not otherwise provided for
- CL M 17/225 • for extracorporeal shock wave lithotripsy [ESWL], e.g. by using ultrasonic waves
- CL M 17/42 • Gynaecological or obstetrical instruments or methods
- AL M 17/425 • • for reproduction or fertilisation
- AL M 17/46 • • Embryotomes
- CL M 17/50 • Instruments, other than pincettes or toothpicks, for removing foreign bodies from the human body
- CL M 17/56 • Surgical instruments or methods for treatment of bones or joints; Devices specially adapted therefor
- CL M 17/60 • • • for external osteosynthesis, e.g. distractors, contractors
- CL M 18/04 • by heating (by applying electromagnetic radiation [A61B 18/18](#); devices for heating specific reflex points of the body within cell-life limits [A61H 39/06](#))
- AL M 19/04 • Operating gloves; Finger-stalls for operating; Devices for treating them, e.g. cleaning, powdering
- AL M 19/08 • Surgical drapes

ANNEX 21E A61C [Project-Rapporteur : M031/IB] <CE40>

CL M Title **DENTISTRY; APPARATUS OR METHODS FOR ORAL OR DENTAL HYGIENE**
(non-driven toothbrushes [A46B](#); preparations for dentistry [A61K 6/00](#); preparations for cleaning the teeth or mouth [A61K 8/00](#), [A61Q 11/00](#))

CL M Subclass
index

DENTAL SURGERY	1/00-8/00
DENTAL PROSTHETICS; ARTIFICIAL TEETH	9/00-13/00
DEVICES FOR CLEANING OF TEETH OR MOUTH	15/00 , 17/00
DENTAL AUXILIARY APPLIANCES	19/00

CL M Guidance [Dental prosthetics; Artificial teeth](#)
heading
9/00-
13/00

CL M **9/00 Impression methods specially adapted for dental prosthetics; Impression cups therefor**

CL M Guidance Tooth-cleaning or mouth-rinsing devices
heading
15/00-
17/00

ANNEX 22E A61F [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance Filters; Devices providing patency to tubular structures; Prostheses; Accessories
heading
2/00-
4/00

ANNEX 23E A61G [Project-Rapporteur : M031/IB] <CE40>

CL M Title **TRANSPORT, PERSONAL CONVEYANCES, OR ACCOMMODATION
SPECIALLY ADAPTED FOR PATIENTS OR DISABLED PERSONS; OPERATING
TABLES OR CHAIRS; CHAIRS FOR DENTISTRY; FUNERAL DEVICES**
(embalming corpses [A01N 1/00](#); chairs or beds in general [A47C](#); appliances for aiding
patients or disabled persons to walk [A61H 3/00](#))

ANNEX 24E A61G [Project-Rapporteur : M032/IB] <CE40>

CL M Title **TRANSPORT, PERSONAL CONVEYANCES, OR ACCOMMODATION
SPECIALLY ADAPTED FOR PATIENTS OR DISABLED PERSONS** (appliances for
aiding patients or disabled persons to walk [A61H 3/00](#)) ; **OPERATING TABLES OR
CHAIRS; CHAIRS FOR DENTISTRY; FUNERAL DEVICES**

CL M 1/003 · with facilities for picking up patients or disabled persons, e.g. break-away type or using
endless belts

CL M 1/007 · with skis or sled runners

AL M 1/01 · Sheets specially adapted for use as or with stretchers

CL M 5/00 **Chairs or personal conveyances specially adapted for patients or disabled persons, e.g.
wheelchairs** (devices enabling patients or disabled persons to operate an apparatus or
device not forming part of the body [A61F 4/00](#); bicycles specially adapted for disabled
riders [B62K 3/16](#))

CL M 7/00 **Beds specially adapted for nursing; Devices for lifting patients or disabled persons**
(equipment for beds, treatment tables, floor frames or the like for extending or stretching
[A61F 5/045](#); stretchers with facilities for picking up patients or disabled persons [A61G
1/003](#))

AL M 7/16 · · converting a lying surface into a chair

AL M 10/02 · with artificial climate; with means to maintain a desired pressure, e.g. for germ-free rooms

- CL M 12/00 **Accommodation for nursing, e.g. in hospitals, not covered by groups A61G 1/00-A61G 11/00, e.g. trolleys for transport of medicaments or food; Prescription lists**
- CL M 13/00 **Operating tables; Auxiliary appliances therefor** (illumination of operating tables **F21L**, **F21S** or **F21V**)
- CL M 15/00 **Operating chairs; Dental chairs; Accessories specially adapted therefor, e.g. work stands**
-

ANNEX 25E A61G [Project-Rapporteur : M031/IB] <CE40>

- CL M Guidance **Funeral devices**
heading
17/00-
21/00

- CL M 17/00 **Coffins; Funeral wrappings; Funeral urns**
-

ANNEX 26E A61G [Project-Rapporteur : M032/IB] <CE40>

- AL M 17/08 · Urns
-

ANNEX 27E A61H [Project-Rapporteur : M031/IB] <CE40>

- CL D Guidance < Deleted / Supprimé >
heading /
Rubrique
d'orientation
7/00- 23/00

- CL M 7/00 **Devices for suction-kneading massage; Devices for massaging the skin by rubbing or brushing not otherwise provided for** (electro-medical massage devices applying electric current by contact **A61N 1/18**; brushes in general **A46**; bathing sponges, brushes, gloves or similar cleaning or rubbing implements not specially for massage **A47K 7/02**; suction devices for nursing **A61M 1/06**, **A61M 1/08**)
- CL M 31/00 **Artificial respiration or heart stimulation, e.g. heart massage** (artificial respiration by treatment with gas or air, e.g. mouth-to-mouth respiration, **A61M 16/00**; applying electric currents by contact electrodes for stimulation, e.g. heart pace-makers, **A61N 1/36**)
-

ANNEX 28E A61K [Project-Rapporteur : M032/IB] <CE40>

- CL M Title **PREPARATIONS FOR MEDICAL, DENTAL, OR TOILET PURPOSES** (devices or methods specially adapted for bringing pharmaceutical products into particular physical or administering forms [A61J 3/00](#); chemical aspects of, or use of materials for deodorisation of air, for disinfection or sterilisation, or for bandages, dressings, absorbent pads or surgical articles [A61L](#); soap compositions [C11D](#))
- CL M **6/00 Preparations for dentistry** (teeth cleaning preparations [A61K 8/00](#), [A61Q 11/00](#); fastening dental prostheses in the mouth using adhesive foils or adhesive compositions [A61C 13/23](#))
- AL M 6/04 · · Use of metals or alloys
- AL M 6/06 · · Use of inorganic cements
- AL M 6/08 · · Use of natural or synthetic resins
- CL M 6/10 · Compositions for taking dental impressions
- CL M **8/00 Cosmetics or similar toilet preparations**
- CL M **9/00 Medicinal preparations characterised by special physical form**
- CL M 9/68 · chewing gum type
- CL M 9/70 · Web, sheet or filament bases
- CL M **41/00 Medicinal preparations obtained by treating materials with wave energy or particle radiation** ([A61K 31/59](#) takes precedence)
-

ANNEX 29E A61L [Project-Rapporteur : M031/IB] <CE40>

- CL M **11/00 Disinfection or sterilising methods specially adapted for refuse**
-

ANNEX 30E A61M [Project-Rapporteur : M031/IB] <CE40>

- CL M Guidance [Syringes](#); [Irrigators](#); [Baths for subaquatic intestinal cleaning](#)
heading
3/00-
9/00
- CL M **19/00 Devices for local anaesthesia** (syringes therefor [A61M 5/00](#)) ; **Devices for hypothermia** ([A61M 5/42](#) takes precedence; cooling blood in a bypass of the arterial system [A61M 1/36](#))

CL M Guidance Probes; Catheters; Dilators; Drainage appliances for wounds
heading
23/00-
29/00

CL M 29/00 **Dilators with or without means for introducing media, e.g. remedies** (instruments for performing visual medical inspections of cavities or tubes of the body [A61B 1/00](#); stents [A61F 2/82](#))

ANNEX 31E A61Q [Project-Rapporteur : M099/IB] <CE40>

CL N 90/00 *Cosmetics or similar toilet preparations for specific uses not provided for in other groups of this subclass*

CL D 99/00 (transferred to [A61Q 90/00](#))

ANNEX 32E A62B [Project-Rapporteur : M031/IB] <CE40>

CL M Title **DEVICES, APPARATUS, OR METHODS FOR LIFE-SAVING** (valves specially adapted for medical use [A61M 39/00](#); composition of chemical substances used in respirators, gas-masks, breathing apparatus or the like [A62D](#); rescuing from mountains or trees [A63B 27/00](#), [A63B 29/00](#); life-saving devices, apparatus or methods specially adapted for use in water [B63C 9/00](#); divers' equipment [B63C 11/00](#); specially adapted for use with aircraft, e.g. parachutes, ejector seats, [B64D](#); rescue devices peculiar to mining [E21F 11/00](#))

CL M Guidance Rescuing from fire; Rescuing from buildings or the like
heading
1/00-
5/00

CL M Guidance Respirators; Gas-masks, including breathing apparatus, e.g. for high altitude, or masks therefor; Devices affording protection against harmful chemical agents
heading
7/00-
33/00

ANNEX 33E A62B [Project-Rapporteur : M099/IB] <CE40>

CL D 37/00 (transferred to [A62B 99/00](#))

CL N 99/00 *Subject matter not provided for in other groups of this subclass*

ANNEX 34E A62C [Project-Rapporteur : M031/IB] <CE40>

CL M Title **FIRE-FIGHTING** (fire-extinguishing compositions, use of chemical substances in extinguishing fires [A62D 1/00](#); spraying, applying liquids or other fluent materials to surfaces in general [B05](#); fire-fighting aircraft [B64D 1/16](#); alarm arrangements [G08B](#), e.g. fire alarms actuated by smoke or gases [G08B 17/10](#))

CL D Guidance < Deleted / Supprimé >
heading /
Rubrique
d'orientation
27/00-
33/00

CL M **27/00 Fire-fighting land vehicles** (vehicle aspects, see the appropriate subclasses of classes [B60-B62](#))

CL M **29/00 Fire-fighting vessels or like floating structures** (shipbuilding or navigation aspects, see the appropriate subclasses of class [B63](#))

CL D Guidance < Deleted / Supprimé >
heading /
Rubrique
d'orientation
35/00

CL M **35/00 Permanently-installed equipment** ([A62C 31/00](#), [A62C 33/00](#), [A62C 37/00](#) take precedence; for forming water curtains [A62C 2/08](#))

ANNEX 35E A63B [Project-Rapporteur : M031/IB] <CE40>

CL M Title **APPARATUS FOR PHYSICAL TRAINING, GYMNASTICS, SWIMMING, CLIMBING, OR FENCING; BALL GAMES; TRAINING EQUIPMENT** (apparatus for passive exercising, massage [A61H](#))

CL M Guidance [Gymnastic exercising apparatus](#)
heading
1/00-
26/00

CL M **1/00 Horizontal bars for gymnastics**

CL M **3/00 Parallel bars or similar gymnastic apparatus**

CL M **15/00 Clubs for gymnastics or the like**

ANNEX 36E A63G [Project-Rapporteur : M031/IB] <CE40>

CL M Title **MERRY-GO-ROUNDS; SWINGS; ROCKING-HORSES** (swings or rocking horses as nursery furniture [A47D 13/10](#)) ; **CHUTES; SWITCHBACKS; SIMILAR DEVICES FOR PUBLIC AMUSEMENT**

CL M Guidance [Swings](#); [See-saws](#); [Rocking horses](#); [Other toy animals for riding](#)
heading
9/00-
19/00

ANNEX 37E A63J [Project-Rapporteur : M099/IB] <CE40>

CL M Subclass index	STAGE OR CIRCUS ARRANGEMENTS	1/00-5/00
	OTHER VISUAL ENTERTAINMENT	13/00-19/00 , 99/00
	OTHER ENTERTAINMENT	9/00 , 11/00 , 99/00
	APPARATUS FOR ARTISTES	7/00 , 21/00

CL D 23/00 (transferred to [A63J 99/00](#))

AL D 23/02 (transferred to [A63J 25/00](#))

CL N 25/00 *Equipment specially adapted for cinemas (cinematographic projection means [G03B](#))*

CL N 99/00 *Subject matter not provided for in other groups of this subclass*

ANNEX 38E B01D [Project-Rapporteur : M032/IB] <CE40>

CL M Title **SEPARATION** (separating solids from solids by wet methods [B03B](#), [B03D](#), by pneumatic jigs or tables [B03B](#), by other dry methods [B07](#); magnetic or electrostatic separation of solid materials from solid materials or fluids, separation by high-voltage electric fields [B03C](#); centrifuges [B04B](#); vortex apparatus [B04C](#); presses per se for squeezing-out liquid from liquid-containing material [B30B 9/02](#))

CL M 1/00 **Evaporating** (drying solid materials or objects by evaporating liquids therefrom [F26B](#))

AL M 1/20 · · Sprayers

CL M 3/00 **Distillation or related exchange processes in which liquids are contacted with gaseous media, e.g. stripping**

AL M 3/16 · · Fractionating columns in which vapour bubbles through liquid

CL M 8/00 **Cold traps; Cold baffles**

- CL M 15/00 **Separating processes involving the treatment of liquids with solid sorbents; Apparatus therefor**
- CL M 17/00 **Separation of liquids, not provided for elsewhere, e.g. by thermal diffusion**
- CL M 19/02 • Foam dispersion or prevention
- CL M 21/00 **Separation of suspended solid particles from liquids by sedimentation** (differential sedimentation **B03D 3/00**)
- CL M 21/01 • using flocculating agents
- CL M 21/26 • Separation of sediment aided by centrifugal force
-

ANNEX 39E B01D [Project-Rapporteur : M031/IB] <CE40>

- CL M Guidance **Filtration; Filtering material, regeneration thereof**
heading
24/00-
41/00
-

ANNEX 40E B01D [Project-Rapporteur : M032/IB] <CE40>

- AL M 33/052 • • • combined with a compression device (**B01D 33/64** takes precedence)
- CL M 35/06 • Filters making use of electricity or magnetism (ultrafiltration, microfiltration **B01D 61/14**; electro-dialysis, electro-osmosis **B01D 61/42**; devices comprising filters and magnetic separators **B03C 1/30**)
- CL M 35/14 • Safety devices specially adapted for filtration; Devices for indicating clogging (incorporated in a throw-away filter **B01D 27/10**)
- CL M 39/18 • • • the material being cellulose or derivatives thereof
- CL M 39/20 • • of inorganic material, e.g. asbestos paper, metallic filtering material of non-woven wires
-

ANNEX 41E B01D [Project-Rapporteur : M031/IB] <CE40>

- CL M Guidance **Separating dispersed particles from gases or vapours**
heading
45/00-
51/00
-

ANNEX 42E B01D [Project-Rapporteur : M032/IB] <CE40>

AL M 47/14 · Packed scrubbers

ANNEX 43E B01D [Project-Rapporteur : M031/IB] <CE40>

CL M 51/00 **Auxiliary pretreatment of gases or vapours to be cleaned from dispersed particles**
(preventing dust fires [A62C](#); pretreatment specially adapted for magnetic or electrostatic separation [B03C](#))

ANNEX 44E B01D [Project-Rapporteur : M032/IB] <CE40>

CL M 51/00 **Auxiliary pretreatment of gases or vapours to be cleaned**

CL M 53/00 **Separation of gases or vapours; Recovering vapours of volatile solvents from gases; Chemical or biological purification of waste gases, e.g. engine exhaust gases, smoke, fumes, flue gases, aerosols** (recovery of volatile solvents by condensation [B01D 5/00](#); sublimation [B01D 7/00](#); cold traps, cold baffles [B01D 8/00](#); separation of difficult-to-condense gases or air by liquefaction [F25J 3/00](#))

AL M 53/18 · · Absorbing units; Liquid distributors therefor ([B01D 3/16](#), [B01D 3/26](#), [B01D 3/30](#) take precedence)

CL M 53/18 · · Absorbing units; Liquid distributors therefor ([B01D 3/14](#) takes precedence) only

CL M 53/22 · by diffusion

CL M 57/02 · by electrophoresis

CL M 59/00 **Separation of different isotopes of the same chemical element**

AL M 59/38 · Separation by electrochemical methods

ANNEX 45E B01D [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance [Processes of separation using semi-permeable membranes, e.g. dialysis, osmosis, ultrafiltration; Apparatus specially adapted therefor; Semi-permeable membranes or their production](#)
heading 61/00-71/00

CL M 61/00 **Processes of separation using semi-permeable membranes, e.g. dialysis, osmosis, ultrafiltration; Apparatus, accessories or auxiliary operations specially adapted therefor** (separation of gases or vapours by diffusion [B01D 53/22](#))

ANNEX 46E B01J [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance Ion-exchange
heading
39/00-
49/00

ANNEX 47E B05C [Project-Rapporteur : M031/IB] <CE40>

- CL M Note B05C
1. This subclass covers apparatus or hand tools, in general, for applying liquids or other fluent materials to a surface or a part thereof, by any mechanical or physical method, in particular apparatus for obtaining a uniform distribution of liquids or other fluent materials on a surface. [2]
 2. *Hand tools or apparatus using hand-held tools are classified in group B05C 17/00. [new]*
 3. Attention is drawn to the Note following the title of class B05. [2]

CL D Guidance < Deleted >
heading
1/00-
11/00

- CL M 1/00 **Apparatus in which liquid or other fluent material is applied to the surface of the work by contact with a member carrying the liquid or other fluent material, e.g. a porous member loaded with a liquid to be applied as a coating (B05C 5/02, B05C 7/00, B05C 19/00 take precedence)**
- CL M 3/00 **Apparatus in which the work is brought into contact with a bulk quantity of liquid or other fluent material (B05C 19/00 takes precedence)**
- CL M 5/00 **Apparatus in which liquid or other fluent material is projected, poured or allowed to flow on to the surface of the work (B05C 7/00, B05C 19/00 take precedence; essentially involving spraying or electrostatic projection B05B)**
- CL M 7/00 **Apparatus specially designed for applying liquid or other fluent material to the inside of hollow work (B05C 19/00 takes precedence)**
- CL M 9/00 **Apparatus or plant for applying liquid or other fluent material to surfaces by means not covered by groups B05C 1/00-B05C 7/00, or in which the means of applying the liquid or other fluent material is not important (B05C 19/00 takes precedence)**
- CL M 11/00 **Component parts, details or accessories not specifically provided for in groups B05C 1/00-B05C 9/00 (B05C 19/00 takes precedence; means for manipulating or holding work B05C 13/00; enclosures for apparatus, booths B05C 15/00; spray booths B05B 15/12)**
-

ANNEX 48E B07C [Project-Rapporteur : M099/IB] <CE40>

CL M Subclass
index

SORTING CHARACTERISED BY THE METHOD **5/00, 7/00, 99/00**
SORTING ACCORDING TO DESTINATION **1/00, 3/00**

ANNEX 49E B07C [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance **Postal sorting; Similar sorting of documents, e.g. cheques**
heading
1/00-
3/00

CL M **1/00 Measures preceding sorting of mail or documents according to destination**

CL M **3/00 Sorting of mail or documents according to destination**

ANNEX 50E B07C [Project-Rapporteur : M099/IB] <CE40>

CL D 9/00 (transferred to **B07C 99/00**)

CL N **99/00 Subject matter not provided for in other groups of this subclass**

ANNEX 51E B21B [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance **Rolling methods or mills specially designed for making or processing tubes**
heading
17/00-
25/00

CL M **17/00 Tube-rolling by rollers of which the axes are arranged essentially perpendicular to the axis of the work, e.g. "axial" tube-rolling**

CL M **19/00 Tube-rolling by rollers arranged outside the work and having their axes not perpendicular to the axis of the work (straightening by rollers **B21D**)**

CL M **21/00 Pilgrim-step tube-rolling**

CL M **23/00 Tube-rolling not restricted to methods provided for in only one of groups **B21B 17/00-
B21B 21/00**, e.g. combined processes (**B21B 25/00** takes precedence)**

CL M **25/00 Mandrels for metal tube rolling mills, e.g. mandrels of the types used in the methods covered by group **B21B 17/00**; Accessories or auxiliary means therefor**

ANNEX 52E B21C [Project-Rapporteur : C444/SE] <CE40>

CL M Title **MANUFACTURE OF METAL SHEETS, WIRE, RODS, TUBES, PROFILES OR LIKE SEMI-MANUFACTURED PRODUCTS OTHERWISE THAN BY ROLLING; AUXILIARY OPERATIONS USED IN CONNECTION WITH METAL-WORKING WITHOUT ESSENTIALLY REMOVING MATERIAL**

CL M Subclass
index

METAL DRAWING	
General methods	1/00
Auxiliary operations	5/00, 9/00
Equipment	3/00, 19/00
METAL EXTRUDING	
General methods	23/00
Auxiliary operations	29/00, 33/00, 35/00
Equipment	25/00, 26/00, 27/00
Control	31/00
DETAILS COMMON TO DRAWING AND EXTRUDING OF METAL	43/00
MANUFACTURING NOT OTHERWISE PROVIDED FOR	37/00
AUXILIARY OPERATIONS USED IN CONNECTION WITH METAL-WORKING WITHOUT ESSENTIALLY REMOVING MATERIAL	
Reeling	47/00
Other auxiliary operations	45/00, 51/00
Auxiliary equipment	19/00, 49/00

ANNEX 53E B21C [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance [Metal drawing](#)
heading
1/00-
9/00

ANNEX 54E B21C [Project-Rapporteur : C444/SE] <CE40>

CL M 1/00 **Manufacture of metal sheets, wire, rods, tubes or like semi-manufactured products by drawing**

AL M 1/16 • Metal drawing by machines or apparatus in which the drawing action is effected by means other than drums, e.g. by a longitudinally-moved carriage pulling or pushing the work or stock for making metal sheets, rods or tubes

CL M 1/16 · Metal drawing by machines or apparatus in which the drawing action is effected by means only other than drums, e.g. by a longitudinally-moved carriage pulling or pushing the work or stock for making metal sheets, rods or tubes (bending sheet metal into tubular form by drawing [B21D 5/06](#))

ANNEX 55E B21C [Project-Rapporteur : M031/IB] <CE40>

CL M 3/00 **Profiling tools for metal drawing; Combinations of dies and mandrels for metal drawing**

CL M 5/00 **Pointing or push-pointing drawn work or drawing material**

CL M Guidance [Metal extruding](#)
heading
23/00-
35/00

ANNEX 56E B21C [Project-Rapporteur : C444/SE] <CE40>

AL M 23/08 · · · Making wire, rods or tubes

ANNEX 57E B21C [Project-Rapporteur : M031/IB] <CE40>

CL M 26/00 **Rams or plungers for metal extruding; Discs therefor**

CL M 29/00 **Cooling or heating extruded work or parts of the extrusion press**

CL M 31/00 **Control devices for metal extruding, e.g. for regulating the pressing speed or temperature of metal ([B21C 25/08](#) takes precedence) ; Measuring devices, e.g. for temperature of metal, combined with or specially adapted for use in connection with extrusion presses (measuring devices of more general interest within subclass [B21C](#), see group [B21C 51/00](#))**

CL M 35/00 **Removing work or waste from extruding presses; Drawing-off extruded work (in connection with the extruding of bent tubes or rods [B21C 23/12](#)) ; Cleaning dies, ducts, containers, or mandrels for metal extruding**

ANNEX 58E B21C [Project-Rapporteur : C444/SE] <CE40>

CL M 37/00 **Manufacture of metal sheets, rods, wire, tubes, profiles or like semi-manufactured products, not otherwise provided for (by rolling [B21B](#); by working or processing semi-finished sheet metal, profiles, tubes, or wire [B21D](#), [B21F](#); by casting [B22](#); by material-removing machine tools [B23](#); by welding, e.g. cladding or plating, [B23K](#); by grinding or polishing [B24](#); by electroforming [C25D 1/00](#)) ; Manufacture of tubes of special shape**

AL M 37/04 · of rods or wire

ANNEX 59E B21C [Project-Rapporteur : M099/IB] <CE40>

CL N *99/00 Subject matter not provided for in other groups of this subclass*

ANNEX 60E B21D [Project-Rapporteur : C442/EP] <CE40>

CL M 51/02 · characterised by the structure of the objects

CL N *Note* Making hollow objects characterised both by their structure and by their use is classified 51/02 only in group **B21D 51/16**.

CL M 51/16 · characterised by the use of the objects (making heat exchangers **B21D 53/02**)

AL M 51/38 · · Making inlet or outlet arrangements of cans, tins, baths, bottles or other vessels; Making can ends; Making closures

CL M 51/38 · · Making inlet or outlet arrangements of cans, tins, baths, bottles or other vessels (folded only of thin metal foils in the way of making paper caps **B31D 5/00**) ; Making can ends; Making closures

ANNEX 61E B21F [Project-Rapporteur : M099/IB] <CE40>

CL D 21/00 (transferred to **B21F 99/00**)

CL N *99/00 Subject matter not provided for in other groups of this subclass*

ANNEX 62E B21L [Project-Rapporteur : M099/IB] <CE40>

CL M **Title MAKING CHAINS** (making chains or chain links by casting **B22D 25/02**; chains in general **F16G**)

CL M Subclass
index

GENERAL METHODS OF WORKING

Chains made from individual links **1/00, 3/00, 7/00, 9/00**

Chains with integral links **5/00**

METHODS FOR MAKING SPECIAL CHAINS OR
PARTS THEREOF **11/00, 13/00**

TOOLS FOR MANUFACTURE OR REPAIR **19/00, 21/00**

FINISHING **15/00**

OTHER MANUFACTURE **99/00**

CL D 17/00 (transferred to **B21L 99/00**)

CL N **99/00** *Subject matter not provided for in other groups of this subclass*

ANNEX 63E B22C [Project-Rapporteur : M031/IB] <CE40>

CL M **11/00** **Moulding machines for making moulds or cores, characterised by the relative arrangement of their parts**

CL M **15/00** **Moulding machines for making moulds or cores, characterised by the compacting mechanism; Accessories therefor**

CL M **17/00** **Moulding machines for making moulds or cores, characterised by the mechanism for separating the pattern from the mould or for turning over the flask or the pattern plate**

CL M **19/00** **Components or accessories for moulding machines for making moulds or cores**

ANNEX 64E B22D [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance **Final measures after casting**
heading
29/00-
31/00

CL M **31/00** **Cutting-off surplus material after casting, e.g. gates** (cleaning of castings by sand-blasting **B24C**)

CL M Guidance **Other equipment for casting**
heading
33/00-
45/00

CL M **35/00** **Equipment for conveying molten metal into beds or moulds** (**B22D 37/00-B22D 41/00** take precedence; specially adapted to particular processes or machines, see the relevant groups)

- CL M 37/00 **Controlling or regulating the pouring of molten metal from a casting melt-holding vessel** (**B22D 39/00**, **B22D 41/00** take precedence; specially adapted to particular processes or machines, see the relevant groups of this subclass)
- CL M 39/00 **Equipment for supplying molten metal in rations** (specially adapted to particular processes or machines, see the relevant groups of this subclass)
- CL M 41/00 **Casting melt-holding vessels, e.g. ladles, tundishes, cups or the like** (**B22D 39/00**, **B22D 43/00** take precedence)
-

ANNEX 65E B23B [Project-Rapporteur : M031/IB] <CE40>

- CL M **Title TURNING; BORING** (using an electrode which takes the place of a tool **B23H**, e.g. making holes **B23H 9/14**; working by laser beam **B23K 26/00**; arrangements for copying or controlling **B23Q**)
- CL M **13/00 Arrangements for automatically conveying, chucking or guiding stock for turning machines**
- CL Guidance < Become(s) / Deviennent/Deviendra 17/00-25/00 >
heading /
Rubrique
d'orientation
17/00-
33/00
- CL M Guidance **Boring; Drilling**
heading
35/00-
45/00
-

ANNEX 66E B23D [Project-Rapporteur : M031/IB] <CE40>

- CL M Guidance **Sawing**
heading
45/00-
65/00
- CL M Guidance **Filing or rasping**
heading
67/00-
73/00
-

ANNEX 67E B23K [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance Soldering, e.g. brazing, or unsoldering
heading
1/00-
3/00

ANNEX 68E B24B [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance Polishing surfaces; Finishing surfaces
heading
29/00-
39/00

CL M **29/00 Machines or devices for polishing surfaces on work by means of tools made of soft or flexible material with or without the application of solid or liquid polishing agents** (machines or devices for grinding or polishing glass **B24B 7/24, B24B 9/08, B24B 13/00**; for grinding or polishing using belts **B24B 21/00**; polishing tools in general **B24D 13/00**)

CL M **31/00 Machines or devices designed for polishing or abrading surfaces on work by means of tumbling apparatus or other apparatus in which the work or the abrasive material is loose; Accessories therefor** (machines or devices for grinding or polishing glass **B24B 7/24, B24B 9/08, B24B 13/00**; abrasive blasting machines **B24C 3/26**)

CL M **35/00 Machines or devices designed for superfinishing surfaces on work, i.e. by means of abrading blocks reciprocating with high frequency** (**B24B 3/00** takes precedence)

CL M **37/00 Lapping machines or devices, i.e. requiring pulverulent abrading substances inserted between a lap of relatively soft but rigid material and the surface to be lapped; Accessories therefor** (**B24B 3/00** takes precedence)

CL M **39/00 Burnishing machines or devices, i.e. requiring pressure members for compacting the surface zone** (modifying the physical properties or structure of metal by burnishing **C21D 7/08, C22F 1/00**) ; **Accessories therefor** (**B24B 3/00** takes precedence)

CL M Guidance Component parts of general applicability for grinding machines or devices
heading
41/00-
47/00

CL M **41/00 Component parts of grinding machines or devices, such as frames, beds, carriages, headstocks**

CL M **47/00 Drives or gearings for grinding machines or devices; Equipment therefor**

ANNEX 69E B26B [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance Hand shears; Scissors
heading
13/00-
15/00

ANNEX 70EF B27B [Project-Rapporteur : M031/IB] <CE40>

CL Guidance < Become(s) / Deviennent/Deviendra 5/00-9/00 >
heading /
Rubrique
d'orientation
5/00- 11/00

ANNEX 71E B27G [Project-Rapporteur : M031/IB] <CE40>

CL M Title **ACCESSORY MACHINES OR APPARATUS; TOOLS** (sawing tools **B27B 33/00**;
tools for slotting or mortising machines **B27F 5/00**; tools for the manufacture of wood
shavings, chips, powder, or the like **B27L 11/00**) ; **SAFETY DEVICES, e.g. FOR SAWS**
(clamping devices for mitre joints, presses for producing frames, press frames, or cages
equipped with clamping devices **B25B**; woodworkers' benches **B25H**)

CL M Guidance Tools
heading
13/00-
17/00

ANNEX 72E B28C [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance Mixing clay or cement with other material
heading
3/00-
7/00

CL M **3/00 Apparatus or methods for mixing clay with other substances** (producing clay
suspensions **B28C 1/02**; general arrangement or layout of plant **B28C 9/00**)

CL M **5/00 Apparatus or methods for producing mixtures of cement with other substances, e.g.
slurries, mortars, porous or fibrous compositions** (controlling the mixing apparatus and
supplying the ingredients **B28C 7/00**; general arrangement or layout of plant **B28C 9/00**)

ANNEX 73E B31C [Project-Rapporteur : M099/IB] <CE40>

CL D 13/00 (transferred to **B31C 99/00**)

CL N 99/00 *Subject matter not provided for in other groups of this subclass*

ANNEX 74E B41L [Project-Rapporteur : M031/IB] <CE40>

CL M 5/00 **Autographic registers or like apparatus for manifolding by means of pressure-sensitive layers, using movable strips or webs** (movable-strip writing or reading apparatus **B42D 19/00**)

ANNEX 75E B60 [Project-Rapporteur : M014/IB] <CE40>

CL M Note In this class, the following term is used with the meaning indicated:

- B60
- "vehicle" means all vehicles except those restricted to one of the following types of vehicles: rail vehicles, waterborne vessels, aircraft, space vehicles, hand carts, cycles, animal-drawn vehicles, and sledges, which are covered by the relevant subclasses of **B61-B64**.

Thus the term "vehicle" includes:

- vehicular characteristics which are common to more than one of the above-listed types;
- certain characteristics restricted to automobiles, road or cross-country trailers.
- The following exceptions to the above should be noted:
 - a. subclass **B60B** or **B60C** embrace all vehicle wheels and tyres, except wheels for roller skates **A63C 17/22**, wheels for model railway vehicles **A63H 19/22**, and special adaptations of wheels or tyres for aircraft **B64C 25/36**;
 - b. subclass **B60C** embraces the connection of valves to inflatable elastic bodies in general, and in this respect it is not limited to vehicles;
 - c. subclass **B60L** embraces certain electric equipment of all electrically-propelled vehicles;
 - d. subclass **B60M** embraces certain power supply equipment for, but external to, any kind of electrically-propelled vehicle;
 - e. subclass **B60R** embraces safety belts or body harnesses used in all types of land vehicles; [4]
 - f. subclass **B60S** relates to all kinds of vehicles, except the servicing of rail locomotives **B61K 11/00**, ground equipment for aircraft **B64F**, or cleaning apparatus peculiar to waterborne vessels **B63B 57/00**, **B63B 59/00**;
 - g. subclass **B60T** includes brake control systems of general applicability, and in this respect it is not limited to vehicles. It also

includes rail-vehicle power-brake systems and some other features of rail-vehicle brake systems;

- h. subclass **B60V** embraces air-cushion vehicles *per se* and land vehicles, waterborne vessels or aircraft combined with features allowing them to alternatively operate as air-cushion vehicles or to be partially supported by an air cushion. [new]

ANNEX 76E B60B [Project-Rapporteur : M031/IB] <CE40>

CL M Title **VEHICLE WHEELS** (making wheels or wheel parts by rolling **B21H 1/00**, by forging, hammering or pressing **B21K 1/28**) ; **CASTORS; AXLES; INCREASING WHEEL ADHESION**

CL M Guidance Wheels
heading
1/00-
19/00

CL M Guidance Apparatus or tools for mounting, holding or assembling wheels
heading
29/00-
31/00

ANNEX 77E B60D [Project-Rapporteur : M099/IB] <CE40>

CL D 7/00 (transferred to **B60D 99/00**)

CL N 99/00 *Subject matter not provided for in other groups of this subclass*

ANNEX 78E B60K [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance Arrangement or mounting of propulsion units in vehicles
heading
1/00-
8/00

CL M Guidance Arrangement or mounting of transmissions or their control in vehicles
heading
17/00-
23/00

CL M 17/00 **Arrangement or mounting of transmissions in vehicles** (torque-transmitting axles **B60B 35/12**; combined transmission and steering gear for steering non-deflectable wheels **B62D 11/00**; clutches *per se* , e.g. construction thereof, **F16D**; gearing *per se* , e.g. construction thereof, **F16H**)

- CL M 23/00 **Arrangement or mounting of control devices for vehicle transmissions, or parts thereof, not otherwise provided for** (combined transmission and steering gear for steering non-deflectable wheels **B62D 11/00**; movable cabs having special adaptations of vehicle control devices **B62D 33/073**; such control devices per se **F16D**, **F16H**)
-

ANNEX 79E B60R [Project-Rapporteur : M099/IB] <CE40>

- CL D 27/00 (transferred to **B60R 99/00**)

- CL N 99/00 *Subject matter not provided for in other groups of this subclass*
-

ANNEX 80E B60T [Project-Rapporteur : M032/IB] <CE40>

- CL M Title **VEHICLE BRAKE CONTROL SYSTEMS OR PARTS THEREOF; BRAKE CONTROL SYSTEMS OR PARTS THEREOF, IN GENERAL** (control of electrodynamic brake systems **B60L 7/00**; conjoint control of brakes and other drive units of vehicles **B60W**) ; **ARRANGEMENT OF BRAKING ELEMENTS ON VEHICLES IN GENERAL; PORTABLE DEVICES FOR PREVENTING UNWANTED MOVEMENT OF VEHICLES; VEHICLE MODIFICATIONS TO FACILITATE COOLING OF BRAKES**

- CL M 7/14 · · operated upon collapse of driver

- AL M 8/175 · · Brake regulation specially adapted to prevent excessive wheel spin during vehicle acceleration, e.g. for traction control

- CL M 8/32 · responsive to a speed condition, e.g. acceleration or deceleration (**B60T 8/28** takes precedence)

- CL M 11/00 **Transmitting braking action from initiating means to ultimate brake actuator without power assistance or drive or where such assistance or drive is irrelevant**

- CL M 11/16 · · Master control, e.g. master cylinders

- AL M 11/21 · · · · with two pedals operating on respective circuits, pressures therein being equalised when both pedals are operated together, e.g. for steering

- CL M 13/00 **Transmitting braking action from initiating means to ultimate brake actuator with power assistance or drive; Brake systems incorporating such transmitting means, e.g. air-pressure brake systems**

- AL M 13/08 · · · Overrun brakes

- CL M 15/00 **Construction, arrangement, or operation of valves incorporated in power brake systems and not covered by groups **B60T 11/00** or **B60T 13/00**** (valve structures responsive to a speed condition **B60T 8/34**)

- AL M 15/08 · · · Driver's valves for pressure brakes having automatic control

CL M 17/00 **Component parts, details, or accessories of brake systems not covered by groups B60T 8/00, B60T 13/00 or B60T 15/00, or presenting other characteristic features**

AL M 17/04 • Arrangement of piping, valves in the piping, e.g. cut-off valves, couplings or air hoses

AL M 17/08 • Brake cylinders other than ultimate actuators

ANNEX 81E B61B [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance Rope railways; Power-and-free systems
heading
7/00-
12/00

CL M 9/00 **Tramway or funicular systems with rigid track and cable traction** (haulage clips **B61B 12/12**; shunting devices with cable traction **B61J**)

CL M 12/00 **Component parts, details, or accessories for rope railways or power-and-free systems not provided for in groups B61B 7/00-B61B 11/00** (railway brakes **B61H**; turntables **B61J 1/06**)

ANNEX 82E B61C [Project-Rapporteur : M031/IB] <CE40>

CL M 7/00 **Other locomotives or motor railcars characterised by the type of motive power plant used; Locomotives or motor railcars with two or more different kinds or types of motive power**

ANNEX 83E B61D [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance Heating, cooling, ventilating, lighting, or air-conditioning, peculiar to rail vehicles
heading
27/00-
29/00

CL M Guidance Furniture or furnishings peculiar to rail vehicles
heading
31/00-
37/00

CL M Guidance Other details peculiar to rail vehicles
heading
39/00-
49/00

ANNEX 84E B61G [Project-Rapporteur : M031/IB] <CE40>

CL M Title **COUPLINGS SPECIALLY ADAPTED FOR RAILWAY VEHICLES; DRAUGHT OR BUFFING APPLIANCES SPECIALLY ADAPTED FOR RAILWAY VEHICLES**

ANNEX 85E B61G [Project-Rapporteur : M014/IB] <CE40>

CL M 5/00 Couplings not otherwise provided for

ANNEX 86E B62B [Project-Rapporteur : M031/IB] <CE40>

CL M Title **HAND-PROPELLED VEHICLES, e.g. HAND CARTS, PERAMBULATORS; SLEDGES** (characterised by animal propulsion **B62C**; propulsion of sledges by driver or engine **B62M**)

CL M Guidance **Carriages for children; Perambulators**
heading
7/00-
9/00

CL M Guidance **Sledges**
heading
13/00-
15/00

ANNEX 87E B62C [Project-Rapporteur : M099/IB] <CE40>

CL N 99/00 *Subject matter not provided for in other groups of this subclass*

ANNEX 88E B62D [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance **Steering of motor vehicles or trailers**
heading
1/00-
15/00

CL M Guidance **Motor vehicles or trailers classified according to type; Parts or accessories thereof not otherwise provided for**
heading
47/00-
63/00

ANNEX 89E B62J [Project-Rapporteur : M099/IB] <CE40>

CL M Title **CYCLE SADDLES OR SEATS; ACCESSORIES PECULIAR TO CYCLES AND NOT OTHERWISE PROVIDED FOR, e.g. ARTICLE CARRIERS, CYCLE PROTECTORS** (registration plates **B60R 13/10**; cyclometers, i.e. wheel-revolution counters, **G01C 22/00**)

CL M Subclass
index

SADDLES, SEATS; FOOT-RESTS, KNEE GRIPS	1/00; 25/00
LIGHTING OR SIGNALLING DEVICES; MIRROR ARRANGEMENTS	3/00, 6/00; 29/00
ARTICLE CARRIERS, ACCESSORIES	7/00, 9/00, 11/00
PROTECTING ARRANGEMENTS OR ACCESSORIES	
Chain-guards; mud-guards; parking covers	13/00; 15/00; 19/00
For rider only; weather guards, fairing; dress protectors; warming	17/00; 21/00; 33/00
Other protectors	23/00
SAFETY EQUIPMENT	27/00
INSTALLATIONS OF LUBRICATING DEVICES; OF FUEL TANKS; OF SUPPLY LINES	31/00; 35/00; 37/00
OTHER ACCESSORIES	99/00

ANNEX 90E B62J [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance Signal or lighting devices specially adapted for cycles
heading
3/00-
6/00

CL M Guidance Article carriers
heading
7/00-
11/00

CL M Guidance Protectors; Fairings or streamlining parts not otherwise provided for
heading
13/00-
25/00

CL M 13/00 **Guards for chain, chain drive, or equivalent drive, e.g. belt drive** (chain guards forming part of cycle frames **B62K 19/44**)

CL M 17/00 **Weather guards for riders; Fairings or streamlining parts not otherwise provided for** (protective clothing or garments **A41D 13/00**; crash helmets **A42B 3/00**; fairings forming part of frames **B62K 19/48**; fairings for sidecars **B62K 27/04**; hoods for sidecars **B62K 27/16**)

ANNEX 91E B62J [Project-Rapporteur : M099/IB] <CE40>

CL D 39/00 (transferred to [B62J 99/00](#))

CL N 99/00 *Subject matter not provided for in other groups of this subclass*

ANNEX 92E B62M [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance [Rider propulsion of wheeled vehicles](#)
heading
1/00-
5/00

CL M 1/00 **Rider propulsion of wheeled vehicles** (propulsion by ground-engaging rods [B62M 29/02](#))

ANNEX 93E B63B [Project-Rapporteur : M014/IB] <CE40>

CL M 35/00 **Vessels or like floating structures adapted for special purposes** (vessels characterised by load- accommodating arrangements [B63B 25/00](#); fire- fighting vessels [A62C 29/00](#); submarines, mine-layers, or mine-sweepers [B63G](#); large containers for use in or under water [B65D 88/78](#))

ANNEX 94E B63C [Project-Rapporteur : M014/IB] <CE40>

CL M 3/00 **Launching or hauling-out, e.g. by landborne slipways; Slipways** (ship-borne guides for handling lifeboats or the like [B63B 23/30](#); cranes, winches, or the like [B66](#); ship-lifting for adapting to different water levels [E02C](#))

ANNEX 95E B63H [Project-Rapporteur : M014/IB] <CE40>

CL M Title **MARINE PROPULSION OR STEERING** (propulsion of air-cushion vehicles [B60V 1/14](#); peculiar to submarines, other than nuclear propulsion, [B63G](#); peculiar to torpedoes [F42B 19/00](#))

ANNEX 96E B63J [Project-Rapporteur : M099/IB] <CE40>

CL D 5/00 (transferred to [B63J 99/00](#))

CL N 99/00 *Subject matter not provided for in other groups of this subclass*

ANNEX 97E B64C [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance [Aircraft structures or fairings](#)
heading
1/00-
7/00

ANNEX 98E B64G [Project-Rapporteur : M099/IB] <CE40>

CL D 9/00 (transferred to **B64G 99/00**)

CL N **99/00** *Subject matter not provided for in other groups of this subclass*

ANNEX 99E B65D [Project-Rapporteur : M014/IB] <CE40>

- CL M Note
B65D
1. This subclass covers : [6]
 - containers, packaging elements or packages with auxiliary means or provision for displaying articles or materials; [6]
 - 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**. [6]
 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.
 3. In this subclass, groups **B65D 5/00**, **B65D 27/00**, **B65D 30/00** 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.
 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. *Large containers, as defined in Note (6) below, are classified in groups **B65D 88/00** or **B65D 90/00**. Features that are of interest for containers in general may also be classified in other groups of subclass **B65D** when they are considered to represent information of interest for search. [new]*
 6. In this subclass, the following terms or expressions are used with the meanings indicated:
 - "rigid or semi-rigid containers" includes:
 - a. containers not deformed by, or not taking-up the shape of, their contents;
 - b. containers adapted to be temporarily deformed to expel their contents;
 - c. pallets;

- d. trays;
 - "flexible containers" includes:
 - a. containers deformed by, or taking-up the shape of, their contents;
 - b. containers adapted to be permanently deformed to expel their contents;
 - "packaging elements" includes:
 - a. elements, other than containers, for covering, protecting, stiffening, or holding together articles or materials to be stored or transported;
 - b. packaging materials of special type or form not provided for in other subclasses;
 - "packages" includes:
 - a. 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 Standardization Organization) containers, or larger containers. [3]
7. Tamper-indicating means for containers or closures are classified in the group appropriate to the type of container or closure, e.g. **B65D 5/43**, **B65D 5/54**, **B65D 17/00**, **B65D 27/30**, **B65D 27/34**, **B65D 33/34**, **B65D 41/32**, **B65D 47/36**, **B65D 49/12**, **B65D 51/20**, **B65D 55/06**. [6]

ANNEX 100E B65D [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance General kinds of rigid or semi-rigid containers
heading
1/00-
21/00

CL M 1/00 **Rigid or semi-rigid containers having bodies formed in one piece, e.g. by casting metallic material, by moulding plastics, by blowing vitreous material, by throwing ceramic material, by moulding pulped fibrous material, by deep-drawing operations performed on sheet material** (by winding, bending, or folding paper **B65D 3/00**, **B65D 5/00**; specially constructed to be opened by cutting, piercing, or tearing of wall portions **B65D 17/00**; pallets **B65D 19/00**; details of bottles or of jars **B65D 23/00**; bundles of articles held together by packaging elements for convenience of storage or transport, e.g. portable segregating carriers for plural receptacles such as beer cans, pop bottles, **B65D 71/00**)

CL M 3/00 **Rigid or semi-rigid containers having bodies or peripheral walls of curved or partially-curved cross-section made by winding or bending paper without folding along defined lines** (with end walls of different materials **B65D 6/00**, **B65D 8/00**)

- CL M 5/00 **Rigid or semi-rigid containers of polygonal cross-section, e.g. boxes, cartons, trays, formed by folding or erecting one or more blanks made of paper** (pallets [B65D 19/00](#); bundles of articles held together by packaging elements for convenience of storage or transport, e.g. portable segregating carriers for plural receptacles such as beer cans, pop bottles, [B65D 71/00](#); forming foldable or erectable blanks [B31B](#))
- CL M 17/00 **Rigid or semi-rigid containers specially constructed to be opened by cutting or piercing, or by tearing of frangible member or portion** (opening arrangements or devices for containers made by winding, bending or folding paper [B65D 3/00](#), [B65D 5/00](#); frangible inner closure members associated with caps, lids or covers [B65D 51/20](#); opening devices added or incorporated during filling or closing of containers [B65D 77/30](#); separate devices for opening closed containers [B67B 7/00](#))
-

ANNEX 101E B65D [Project-Rapporteur : M014/IB] <CE40>

- AL M 21/00 **Nestable, stackable or joinable containers; Containers of variable capacity**
- CL M 21/00 **Nestable, stackable or joinable containers; Containers of variable capacity** (containers only of polygonal cross-section adapted to be of variable capacity formed by folding or erecting blanks made of paper [B65D 5/00](#))
-

ANNEX 102E B65D [Project-Rapporteur : M031/IB] <CE40>

- CL M Guidance [Details of rigid or semi-rigid containers not otherwise provided for](#)
heading
23/00-
25/00
- CL M Guidance [General kinds of flexible containers](#)
heading
27/00-
37/00
- CL M 27/00 **Envelopes or like essentially-rectangular flexible containers for postal or other purposes having no structural provision for thickness of contents** (with shock-absorbing properties [B65D 81/03](#); letter-cards [B42D 15/00](#))
- CL M Guidance [Movable or hinged closure members for rigid or semi-rigid containers or for flexible containers presenting similar closing problems; Parts of containers co-operating with closure members or characterised by the form of closure member](#)
heading
39/00-
55/00
- CL M 43/00 **Lids or covers for rigid or semi-rigid containers** (for cooking vessels [A47J 36/06](#); covers for pressure vessels in general [F16J 13/00](#))
- CL M 45/00 **Clamping or other pressure-applying devices for securing or retaining closure members** (screw-threaded or bayonet connections between stoppers or caps and containers [B65D 39/08](#), [B65D 41/04](#), [B65D 41/34](#); expansible stoppers [B65D 39/12](#); for pressure vessels in general [F16J 13/00](#))

CL M 50/00 **Closures with means for discouraging unauthorised opening or removal thereof, with or without indicating means, e.g. child-proof closures** (tamper-indicating closures without means for discouraging, see the relevant groups, e.g. **B65D 41/32**, **B65D 51/20**; means per se for discouraging or indicating unauthorised opening or removal of closure **B65D 55/02**)

ANNEX 103E B65D [Project-Rapporteur : M014/IB] <CE40>

CL D Note < Deleted >
88/00-
90/00

ANNEX 104E B65G [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance **Devices assisting manual conveyance of articles over short distances, e.g. in storage depots, warehouses, or factories**
heading
7/00-
9/00

CL M 7/00 **Devices for assisting manual moving or tilting heavy loads** (chutes **B65G 11/00**; roller-ways **B65G 13/00**; for tilting and emptying barrels or casks **B65G 65/24**)

CL M 9/00 **Apparatus for assisting manual handling having suspended load-carriers movable by hand or gravity** (manually-operated endless-rope or chain conveyers **B65G 17/00**; railway systems **B61B**)

CL M Guidance **Chutes; Kinds or types of conveyers; Constructional features, details, or auxiliary devices peculiar to conveyers of particular types**
heading
11/00-
37/00

CL M 11/00 **Chutes** (used as storage devices **B65G 1/02**, **B65D 88/26**; feeding or discharging conveyers by devices incorporated in, or operatively associated with, conveyers **B65G 47/00**; for sports, games, or amusements **A63G 21/00**; for refuse disposal in buildings **E04F 17/12**)

CL M 13/00 **Roller-ways** (storage devices comprising roller-ways **B65G 1/02**; endless-chain conveyers comprising load-supporting rollers **B65G 17/00**; rollers, or arrangements thereof **B65G 39/00**; feeding or discharging conveyers by devices incorporated in, or operatively associated with, conveyers **B65G 47/00**; in metal-rolling equipment **B21B 39/00**, **B21B 41/00**)

CL M 15/00 **Conveyers having endless load-conveying surfaces, i.e. belts and like continuous members, to which tractive effort is transmitted by means other than endless driving elements of similar configuration** (having load-conveying surfaces formed by interconnected longitudinal links **B65G 17/06**; feeding or discharging conveyers by devices incorporated in, or operatively associated with, conveyers **B65G 47/00**)

CL M 17/00 **Conveyers having an endless traction element, e.g. a chain, transmitting movement to a continuous or substantially-continuous load-carrying surface or to a series of individual load-carriers; Endless-chain conveyers in which the chains form the load-**

carrying surface (feeding or discharging conveyers by devices incorporated in, or operatively associated with, conveyers **B65G 47/00**; railway systems, detachable load-carriers on rails **B61B**; escalators or paternosters neither combined nor associated with loading or unloading apparatus **B66B 9/00**)

- CL M **19/00 Conveyers comprising an impeller or a series of impellers carried by an endless traction element and arranged to move articles or materials over a supporting surface or underlying material, e.g. endless scraper conveyers** (feeding or discharging conveyers by devices incorporated in, or operatively associated with, conveyers **B65G 47/00**)
- CL M **25/00 Conveyers comprising a cyclically-moving, e.g. reciprocating, carrier or impeller which is disengaged from the load during the return part of its movement** (jigging **B65G 27/00**; feeding or discharging conveyers by devices incorporated in, or operatively associated with, conveyers **B65G 47/00**; pumps **F04**)
- CL M **27/00 Jigging conveyers** (feeding or discharging conveyers by devices incorporated in, or operatively associated with, conveyers **B65G 47/00**; jigs for wet separation **B03B**; generating or transmitting mechanical vibrations **B06**; jiggers for screening, sifting, or sorting **B07B 1/28**)
- CL M **29/00 Rotary conveyers, e.g. rotating discs, arms, star-wheels, cones** (mechanical projectors **B65G 31/00**; screw or rotary spiral conveyers **B65G 33/00**; feeding or discharging conveyers by devices incorporated in, or operatively associated with, conveyers **B65G 47/00**)
- CL M **31/00 Mechanical throwing machines for articles or solid materials** (feeding or discharging conveyers by devices incorporated in, or operatively associated with, conveyers **B65G 47/00**; distributors for fertilisers **A01C**; moulding machines **B22C**; sandblasting devices **B24C**; implements for applying plaster **E04F 21/06**)
- CL M **33/00 Screw or rotary spiral conveyers** (feeding or discharging conveyers by devices incorporated in, or operatively associated with, conveyers **B65G 47/00**; screws for extruding, compressing, kneading, mixing, pumping, or other special operations, see the relevant classes)
- CL M **35/00 Mechanical conveyers not otherwise provided for** (feeding or discharging conveyers by devices incorporated in, or operatively associated with, conveyers **B65G 47/00**)
- CL M **37/00 Combinations of mechanical conveyers of the same kind, or of different kinds, of interest apart from their application in particular machines or use in particular manufacturing processes** (mechanical storage devices **B65G 1/04**; series of co-operating belt conveyer units **B65G 15/22**; series of co-operating chain conveyer units **B65G 17/26**; sequence control of combined conveyers **B65G 43/10**; feeding or discharging conveyers by devices incorporated in, or operatively associated with, conveyers **B65G 47/00**; specially adapted for handling radioactive materials **G21**)
- CL M Guidance **Non-mechanical conveying through pipes or tubes; Floating in troughs**
heading
51/00-
53/00
- CL M **53/00 Conveying materials in bulk through troughs, pipes, or tubes by floating the materials, or by flow of gas, liquid, or foam** (fluidising in connection with loading or unloading **B65G 69/06**; loaders for hay or like field crops **A01D 87/00**; fluidising devices facilitating filling or emptying of large containers **B65D 88/72**; dredging **E02F**; winning materials out

of alluvial deposits **E21C 45/00**; hydraulic or pneumatic mine-filling-up machines **E21F 15/00**; fluid dynamics **F15D**; pipe-line systems **F17D**)

- CL M Guidance **Stacking or de-stacking; Loading or unloading**
heading
57/00-
61/00
- CL M **65/00 Loading or unloading** (by means incorporated in, or operatively associated with, conveyers **B65G 47/00**; of vehicles **B65G 67/00**)
- CL M **67/00 Loading or unloading vehicles** (by means incorporated in, or operatively associated with, conveyers **B65G 47/00**; by means incorporated in the vehicles **B60-B64**; ground or aircraft-carrier-deck installations **B64F**; transferring of refuse between vehicles or containers **B65F 9/00**)
- CL M **69/00 Auxiliary measures taken, or devices used, in connection with loading or unloading** (by means incorporated in, or operatively associated with, conveyers **B65G 47/00**; preventing, minimising, or fighting fire **A62C**; in vehicles, see the relevant subclasses)
-

ANNEX 105E B65H [Project-Rapporteur : M031/IB] <CE40>

- CL M Guidance **Feeding articles to machines; Separating articles from piles; Pile supports**
heading
1/00-
11/00
- CL M **1/00 Supports or magazines for piles from which articles are to be separated** (carriers used for associating, collating, or gathering articles **B65H 39/00**; combinations of piling and depiling operations, of interest apart from the single operation of piling or depiling **B65H 83/00**)
- CL M **3/00 Separating articles from piles** (associating, collating, or gathering articles **B65H 39/00**; machines for separating superposed webs **B65H 41/00**; unpiling thin material combined with folding **B65H 45/26**; combinations of piling and depiling operations, of interest apart from the single operation of piling or depiling **B65H 83/00**)
- CL M **5/00 Feeding articles separated from piles; Feeding articles to machines** (identical mechanisms or parts for delivering or advancing articles from machines **B65H 29/00**; recirculating articles **B65H 85/00**)
- CL M Guidance **Feeding webs to or from machines; Winding or unwinding webs; Splicing webs**
heading
16/00-
27/00
- CL M **20/00 Advancing webs** (web-delivering apparatus incorporating devices for performing auxiliary operations **B65H 35/00**, **B65H 37/00**)
- CL M **21/00 Apparatus for splicing webs** (during web-roll changing **B65H 19/00**; associating two or more webs **B65H 39/16**)

- CL M **27/00** **Special constructions, e.g. surface features, of feed or guide rollers for webs** (rollers in general [F16C 13/00](#))
- CL M Guidance heading [Delivering articles from machines; Piling articles; Article or web delivery apparatus incorporating devices for performing specified auxiliary operations; Associating or gathering articles or webs; Machines for separating superposed webs](#)
29/00-43/00
- CL M **29/00** **Delivering or advancing articles from machines; Advancing articles to or into piles** (associating, collating or gathering articles [B65H 39/00](#); combinations of piling and depiling operations, of interest apart from the single operation of piling or depiling [B65H 83/00](#); recirculating articles [B65H 85/00](#); for articles other than those defined by Note (3) (i) of this subclass, [see B65G](#))
- CL M **31/00** **Pile receivers** (carriers used for associating, collating, or gathering articles [B65H 39/00](#); combinations of piling and depiling operations, of interest apart from the single operation of piling or depiling [B65H 83/00](#))
- CL M **39/00** **Associating, collating, or gathering articles or webs** (combinations of piling and depiling operations, of interest apart from the single operation of piling or depiling [B65H 83/00](#); machines for both collating or gathering and permanently attaching together sheets or signatures [B42C 1/00](#))
- CL M Guidance heading [Unwinding, paying-out, forwarding, winding, coiling, or depositing filamentary material](#)
49/00-73/00
- CL M **54/00** **Winding, coiling, or depositing filamentary material** (cores, formers, holders, cans, or receptacles [B65H 75/02](#); devices specially adapted or mounted for storing and repeatedly paying-out and re-storing lengths of material [B65H 75/34](#))
- CL M **63/00** **Warning or safety devices for use when unwinding, paying-out, forwarding, winding, coiling or depositing filamentary material, e.g. automatic fault detectors, stop-motions** (safety devices in general [F16P](#); indicating devices in general [G08B](#))
- CL M Guidance heading [Methods, apparatus, or devices of general interest or not otherwise provided for in connection with the handling of webs, tapes, or filamentary materials](#)
75/00-81/00

ANNEX 106E B66B [Project-Rapporteur : M031/IB] <CE40>

- CL M **3/00** **Applications of devices for indicating or signalling operating conditions of elevators**
- CL M **5/00** **Applications of checking, fault-correcting, or safety devices in elevators**
- CL M **31/00** **Accessories for escalators, or moving walkways, e.g. for sterilising or cleaning** (for safety [B66B 29/00](#))
-

ANNEX 107E B66C [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance Kinds or types of cranes
heading
17/00-
23/00

CL M 17/00 **Overhead travelling cranes comprising one or more substantially-horizontal girders the ends of which are directly supported by wheels or rollers running on tracks carried by spaced supports** (adaptations of girders or of track-supporting structures **B66C 6/00**)

CL M 19/00 **Cranes comprising trolleys or crabs running on fixed or movable bridges or gantries** (**B66C 17/00** takes precedence; base-supporting structures with legs **B66C 5/00**; adaptations of girders or of track-supporting structures **B66C 6/00**; jib cranes **B66C 23/00**)

CL M 21/00 **Cable cranes, i.e. comprising hoisting devices running on aerial cable-ways** (adaptations of girders or of track-supporting structures **B66C 6/00**; rope or cable drives for trolleys, combinations of such drives with hoisting gear **B66C 11/16**; railway systems **B61B**; rope or cable winding mechanisms **B66D 1/00**)

CL M 23/00 **Cranes comprising essentially a beam, boom, or triangular structure acting as a cantilever and mounted for translatory or swinging movements in vertical or horizontal planes or a combination of such movements, e.g. jib cranes, derricks, tower cranes** (base-supporting structures with legs **B66C 5/00**; adaptations of girders or of track-supporting structures **B66C 6/00**)

ANNEX 108E B67B [Project-Rapporteur : M099/IB] <CE40>

CL N 6/00 *Closing bottles, jars or similar containers by applying closure members, not provided for in groups **B67B 1/00-B67B 5/00***

ANNEX 109E B68G [Project-Rapporteur : M099/IB] <CE40>

CL N 99/00 *Subject matter not provided for in other groups of this subclass*

ANNEX 110E C [Project-Rapporteur : M702/EP] <CE40>

CL M Note C 1. In section C, the definitions of groups of chemical elements are as follows:

Alkali metals: Li, Na, K, Rb, Cs, Fr

Alkaline earth metals: Ca, Sr, Ba, Ra

Lanthanides: elements with atomic numbers 57 to 71 inclusive

Rare earths: Sc, Y, Lanthanides

Actinides: elements with atomic numbers 89 to 103 inclusive

Refractory metals: Ti, V, Cr, Zr, Nb, Mo, Hf, Ta, W

Halogens: F, Cl, Br, I, At

Noble gases: He, Ne, Ar, Kr, Xe, Rn

Platinum group: Os, Ir, Pt, Ru, Rh, Pd

Noble metals: Ag, Au, Platinum group

Light metals: alkali metals, alkaline earth metals, Be, Al, Mg

Heavy metals: metals other than light metals

Iron group: Fe, Co, Ni

Non-metals: H, B, C, Si, N, P, O, S, Se, Te, noble gases, halogens

Metals: elements other than non-metals

Transition elements: elements with atomic numbers 21 to 30 inclusive, 39 to 48 inclusive, 57 to 80 inclusive, 89 upwards

2. Section C covers :

- a. pure chemistry, which covers inorganic compounds, organic compounds, macromolecular compounds, and their methods of preparation;
 - b. applied chemistry, which covers compositions containing the above compounds, such as: glass, ceramics, fertilisers, plastics compositions, paints, products of the petroleum industry. It also covers certain compositions on account of their having particular properties rendering them suitable for certain purposes, as in the case of explosives, dyestuffs, adhesives, lubricants, and detergents;
 - c. certain marginal industries, such as the manufacture of coke and of solid or gaseous fuels, the production and refining of oils, fats and waxes, the fermentation industry (e.g., brewing and wine-making), the sugar industry;
 - d. certain operations or treatments, which are either purely mechanical, e.g., the mechanical treatment of leather and skins, or partly mechanical, e.g., the treatment of water or the prevention of corrosion in general;
 - e. metallurgy, ferrous or non-ferrous alloys.
3. In all sections of the IPC, in the absence of an indication to the contrary, the Periodic System of chemical elements referred to is the one with 8 groups as represented in the table below. For example, group **C07F 3/00** "Compounds containing elements of the 2nd Group of the Periodic System" refers to the elements of columns IIa and IIb. **[new.]**

Period	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	IA	IIA	IIIB	IVB	VB	VIB	VII B	VIII B			IB	IIB	IIIA	IVA	VA	VIA	VIIA	VIIIA
1	H																	He
2	Li	Be											B	C	N	O	F	Ne
3	Na	Mg											Al	Si	P	S	Cl	Ar
4	K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr
5	Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe
6	Cs	Ba	Lanthanides	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn
7	Fr	Ra	Actinides	Rf	Db	Sg	Bh	Hs	Mt	Ds	Rg							

Lanthanides	La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu
Actinides	Ac	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	Lr

4.

- a. In the case of operations, treatments, products or articles having both a chemical and a non-chemical part or aspect, the general rule is that the chemical part or aspect is covered by section C.
- b. In some of these cases, the chemical part or aspect brings with it a non-

chemical one, even though purely mechanical, because this latter aspect either is essential to the operation or treatment or constitutes an important element thereof. It has seemed, in fact, more logical not to dissociate the different parts or aspects of a coherent whole. This is the case for applied chemistry and for the industries, operations and treatments mentioned in Notes (1)(c), (d) and (e). For example, furnaces peculiar to the manufacture of glass are covered by class **C03** and not by class **F27**.

- c. There are, however, some exceptions in which the mechanical (or non-chemical) aspect carries with it the chemical aspect, for example:
- Certain extractive processes, in subclass **A61K**;
 - The chemical purification of air, in subclass **A61L**;
 - Chemical methods of fire-fighting, in subclass **A62D**;
 - Chemical processes and apparatus, in class **B01**;
 - Impregnation of wood, in subclass **B27K**;
 - Chemical methods of analysis or testing, in subclass **G01N**;
 - Photographic materials and processes, in class **G03**, and, generally, the chemical treatment of textiles and the production of cellulose or paper, in section D.
- d. In still other cases, the pure chemical aspect is covered by section C and the applied chemical aspect by another section, such as A, B or F, e.g., the use of a substance or composition for:
- treatment of plants or animals, covered by subclass **A01N**;
 - foodstuffs, covered by class **A23**;
 - ammunition or explosives, covered by class **F42**.
- e. When the chemical and mechanical aspects are so closely interlocked that a neat and simple division is not possible, or when certain mechanical processes follow as a natural or logical continuation of a chemical treatment, section C may cover, in addition to the chemical aspect, a part only of the mechanical aspect, e.g., after-treatment of artificial stone, covered by class **C04**. In this latter case, a note or a reference is usually given to make the position clear, even if sometimes the division is rather arbitrary.

ANNEX 111E C03B

[Project-Rapporteur : M031/IB] <CE40>

CL M Title **MANUFACTURE OR SHAPING OF GLASS, OR OF MINERAL OR SLAG WOOL; SUPPLEMENTARY PROCESSES IN THE MANUFACTURE OR SHAPING OF GLASS, OR OF MINERAL OR SLAG WOOL** (surface treatment **C03C**)

CL M 1/00 **Preparing the batches**

CL M Guidance **Shaping of glass**
heading
9/00-
21/00

CL M Guidance After-treatment of glass product
heading
25/00-
35/00

CL M **25/00 Annealing glass products** (after-treatment of fibres **C03B 37/10**)

CL M **27/00 Tempering glass products** (after-treatment of fibres **C03B 37/10**)

CL M **29/00 Reheating glass products for softening or fusing their surfaces; Fire-polishing; Fusing of margins** (after-treatment of fibres **C03B 37/10**)

CL M **32/00 Thermal after-treatment of glass products not provided for in groups **C03B 25/00-
C03B 31/00**, e.g. crystallisation, eliminating gas inclusions or other impurities** (after-treatment of fibres **C03B 37/10**)

ANNEX 112E C03C [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance Joining glass to glass or to other materials
heading
27/00-
29/00

CL M **27/00 Joining pieces of glass to pieces of other inorganic material; Joining glass to glass other than by fusing** (**C03C 17/00** takes precedence; fusion seal compositions **C03C 8/24**; wired glass **C03B**; joining glass to ceramics **C04**)

ANNEX 113E C04B [Project-Rapporteur : M032/IB] <CE40>

CL M **2/00 Lime, magnesia or dolomite**

AL M 2/12 · · in shaft or vertical furnaces

CL M **5/00 Treatment of molten slag** (manufacture of slag wool **C03B**; treatment of slag in, or for the production of metals **C21B, C22B**) ; **Artificial stone from molten slag**

AL M 5/02 · Granulating (granulating apparatus **B01J 2/00**) ; Dehydrating; Drying

CL M **7/00 Hydraulic cements**

AL M 7/12 · Natural pozzuolanas; Natural pozzuolana cements

AL M 7/40 · · · Dehydrating; Forming, e.g. granulating (granulating apparatus **B01J 2/00**)

AL M 7/42 · · · Active ingredients added before, or during, the burning process

AL M 11/26 · starting from phosphogypsum or from waste, e.g. purification products of smoke (**C04B 11/02** takes precedence)

AL M 12/02 · Phosphate cements

AL M 12/04 · Alkali metal or ammonium silicate cements

ANNEX 114E C04B [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance **Use of materials as fillers for mortars, concrete or artificial stone**
heading
14/00-
20/00

CL M **14/00 Use of inorganic materials as fillers, e.g. pigments, for mortars, concrete or artificial stone; Treatment of inorganic materials specially adapted to enhance their filling properties in mortars, concrete or artificial stone** (expanding or defibrillating materials **C04B 20/00**; reinforcing elements for building **E04C 5/00**)

ANNEX 115E C04B [Project-Rapporteur : M032/IB] <CE40>

CL M **14/00 Use of inorganic materials as fillers, e.g. pigments, for mortars, concrete or artificial stone; Treatment of inorganic materials specially adapted to enhance their filling properties in mortars, concrete or artificial stone**

ANNEX 116E C04B [Project-Rapporteur : M031/IB] <CE40>

CL M **16/00 Use of organic materials as fillers, e.g. pigments, for mortars, concrete or artificial stone; Treatment of organic materials specially adapted to enhance their filling properties in mortars, concrete or artificial stone** (reinforcing elements for building **E04C 5/00**)

ANNEX 117E C04B [Project-Rapporteur : M032/IB] <CE40>

AL M 16/02 · Cellulosic materials

ANNEX 118E C04B [Project-Rapporteur : M031/IB] <CE40>

CL M **18/00 Use of agglomerated or waste materials or refuse as fillers for mortars, concrete or artificial stone** (use of waste materials for the manufacture of cement **C04B 7/24**) ;
Treatment of agglomerated or waste materials or refuse, specially adapted to enhance their filling properties in mortars, concrete or artificial stone (reinforcing elements for building **E04C 5/00**)

ANNEX 119E C04B [Project-Rapporteur : M032/IB] <CE40>

CL M 18/00 Use of agglomerated or waste materials or refuse as fillers for mortars, concrete or artificial stone; Treatment of agglomerated or waste materials or refuse, specially adapted to enhance their filling properties in mortars, concrete or artificial stone

AL M 18/14 · · from metallurgical processes (treatment of molten slag C04B 5/00)

ANNEX 120E C04B [Project-Rapporteur : M031/IB] <CE40>

CL M 20/00 Use of materials as fillers for mortars, concrete or artificial stone according to more than one of groups C04B 14/00-C04B 18/00 and characterised by shape or grain distribution; Treatment of materials according to more than one of the groups C04B 14/00-C04B 18/00 specially adapted to enhance their filling properties in mortars, concrete or artificial stone; Expanding or defibrillating materials (reinforcing elements for building E04C 5/00)

CL M Guidance Compositions of mortars, concrete or artificial stone
heading
26/00-
32/00

ANNEX 121E C04B [Project-Rapporteur : M032/IB] <CE40>

AL M 28/06 · · Aluminous cements

ANNEX 122E C04B [Project-Rapporteur : M031/IB] <CE40>

CL M 30/00 Compositions for artificial stone, not containing binders (artificial stone from molten slag C04B 5/00)

CL M 32/00 Artificial stone not provided for in other groups of this subclass (artificial stone from molten slag C04B 5/00)

ANNEX 123E C04B [Project-Rapporteur : M032/IB] <CE40>

AL M 33/28 · Slip casting

CL M 35/00 Shaped ceramic products characterised by their composition; Ceramic compositions (containing free metal bonded to carbides, diamond, oxides, borides, nitrides, silicides, e.g. cermets, or other metal compounds, e.g. oxynitrides or sulfides, other than as macroscopic reinforcing agents C22C) ; Processing powders of inorganic compounds preparatory to the manufacturing of ceramic products

- CL M 35/51 • based on compounds of actinides
- CL M 37/00 **Joining burned ceramic articles with other burned ceramic articles or other articles by heating**
- CL M 40/00 **Processes, in general, for influencing or modifying the properties of mortars, concrete or artificial stone compositions, e.g. their setting or hardening ability** (by selecting active ingredients **C04B 22/00-C04B 24/00**; hardening of a well-defined composition **C04B 26/00-C04B 28/00**; making porous, cellular or lightening **C04B 38/00**)
- CL M 41/00 **After-treatment of mortars, concrete, artificial stone or ceramics; Treatment of natural stone** (glazes, other than cold glazes, **C03C 8/00**)
- CL M 41/45 • Coating or impregnating
-

ANNEX 124E C07C [Project-Rapporteur : M031/IB] <CE40>

- CL M Title **ACYCLIC OR CARBOCYCLIC COMPOUNDS** (preparation of macromolecular compounds **C08F**; production of organic compounds by electrolysis or electrophoresis **C25B 3/00, C25B 7/00**)
- CL M Guidance **Hydrocarbons**
heading
1/00-
15/00
-

ANNEX 125E C07C [Project-Rapporteur : M032/IB] <CE40>

- CL M 2/00 **Preparation of hydrocarbons from hydrocarbons containing a smaller number of carbon atoms**
- AL M 2/88 • • Growth and elimination reactions
- CL M 4/00 **Preparation of hydrocarbons from hydrocarbons containing a larger number of carbon atoms**
- AL M 5/02 • by hydrogenation
- AL M 5/22 • by isomerisation (with simultaneous hydrogenation **C07C 5/13**)
-

ANNEX 126E C07C [Project-Rapporteur : M031/IB] <CE40>

- CL M 7/00 **Purification, separation or stabilisation of hydrocarbons; Use of additives** (working-up undefined gaseous mixtures obtained by cracking hydrocarbon oils **C10G 70/00**)
-

ANNEX 127E C07C [Project-Rapporteur : M032/IB] <CE40>

CL M 7/00 **Purification; Separation; Stabilisation; Use of additives**

AL M 9/02 · with one to four carbon atoms

AL M 9/04 · · Methane (production by treatment of sewage [C02F 11/04](#))

AL M 13/21 · · · · Menthadienes

ANNEX 128E C07C [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance [Compounds containing carbon and halogens with or without hydrogen](#)
heading
17/00-
25/00

CL M Guidance [Compounds containing carbon and oxygen, with or without hydrogen or halogens](#)
heading
27/00-
71/00

ANNEX 129E C07C [Project-Rapporteur : M032/IB] <CE40>

AL M 29/03 · by addition of hydroxy groups to unsaturated carbon-to-carbon bonds, e.g. with the aid of H_2O_2

AL M 29/05 · · · with formation of absorption products in mineral acids and their hydrolysis

AL M 31/28 · Metal alcoholates

AL M 45/27 · by oxidation

AL M 45/85 · · by treatment giving rise to a chemical modification

AL M 45/87 · Preparation of ketenes or dimeric ketenes

AL M 47/19 · · containing hydroxy groups

CL M **49/00 Ketones; Ketenes; Dimeric ketenes; Ketonic chelates**

AL M 49/17 · · containing hydroxy groups

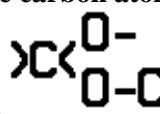
CL M **51/00 Preparation of carboxylic acids or their salts, halides, or anhydrides**

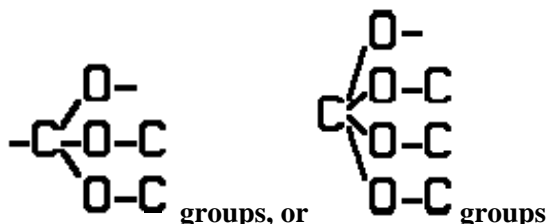
AL M 53/08 · Acetic acid

CL M 55/00 Saturated compounds having more than one carboxyl group bound to acyclic carbon atoms

CL M 57/00 Unsaturated compounds having carboxyl groups bound to acyclic carbon atoms

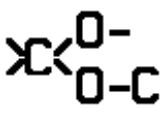
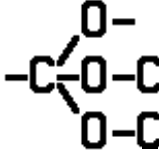
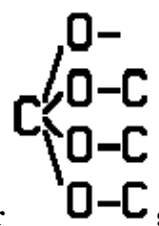
CL M 59/00 Compounds having carboxyl groups bound to acyclic carbon atoms and containing

any of the groups OH, O-metal, —CHO, keto, ether,  groups,



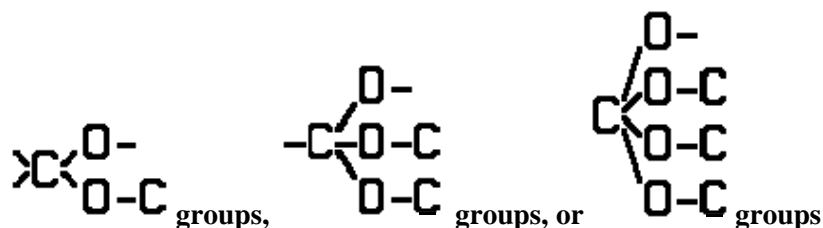
CL M 61/00 Compounds having carboxyl groups bound to carbon atoms of rings other than six-membered aromatic rings

CL M 62/00 Compounds having carboxyl groups bound to carbon atoms of rings other than six-membered aromatic rings and containing any of the groups OH, O-metal, —CHO,

keto, ether,  groups,  groups, or  groups

CL M 63/00 Compounds having carboxyl groups bound to carbon atoms of six-membered aromatic rings

CL M 65/00 Compounds having carboxyl groups bound to carbon atoms of six-membered aromatic rings and containing any of the groups OH, O-metal, —CHO, keto, ether,



CL M 66/00 Quinone carboxylic acids

AL M 67/10 · by reacting carboxylic acids or symmetrical anhydrides with ester groups or with a carbon-halogen bond

CL M 69/00 Esters of carboxylic acids; Esters of carbonic or haloformic acids (ortho esters, see the relevant groups, e.g. [C07C 43/32](#))

AL M 69/21 · · · of hydroxy compounds with more than three hydroxy groups

AL M 69/30 · · · esterified with trihydroxylic compounds

AL M 69/33 · · · esterified with hydroxy compounds having more than three hydroxy groups

AL M 69/62 · Halogen-containing esters

ANNEX 130E C07C [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance Compounds containing carbon and nitrogen with or without hydrogen, halogens or oxygen
heading oxygen
201/00-
291/00

ANNEX 131E C07C [Project-Rapporteur : M032/IB] <CE40>

AL M 237/12 · · · having the nitrogen atom of at least one of the carboxamide groups bound to an acyclic carbon atom of a hydrocarbon radical substituted by carboxyl groups

AL M 237/22 · · having nitrogen atoms of amino groups bound to the carbon skeleton of the acid part, further acylated

CL M **239/00 Compounds containing nitrogen-to-halogen bonds; Hydroxylamino compounds or ethers or esters thereof**

ANNEX 132E C07C [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance Compounds containing carbon together with sulfur, selenium, or tellurium, with or without hydrogen, halogens, oxygen, or nitrogen
heading without hydrogen, halogens, oxygen, or nitrogen
301/00-
395/00

ANNEX 133E C07C [Project-Rapporteur : M032/IB] <CE40>

CL M **301/00 Esters of sulfurous acid**

CL M **305/00 Esters of sulfuric acids**

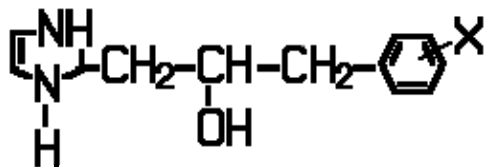
AL M 309/62 · · Sulfonated fats, oils or waxes of undetermined constitution

ANNEX 134E C07D [Project-Rapporteur : M012/IB] <CE40>

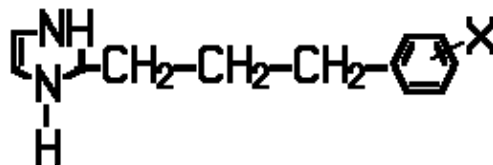
AL M Note C07D 1. This subclass does not cover compounds containing saccharide radicals (as defined in Note (3) following the title of subclass **C07H**), which are covered by subclass **C07H. [2]**

2. In this subclass, in compounds containing a hetero ring covered by group **C07D 295/00** and at least one other hetero ring, the hetero ring covered by group **C07D 295/00** is considered as an acyclic chain containing nitrogen atoms. [3]
3. In this subclass, the following terms or expressions are used with the meanings indicated:
 - "hetero ring" is a ring having at least one halogen, nitrogen, oxygen, sulfur, selenium, or tellurium atom as a ring member; [2]
 - "bridged" means the presence of at least one fusion other than ortho, peri or spiro; [2]
 - two rings are "condensed" if they share at least one ring member, i.e. "spiro" and "bridged" are considered as condensed; [2]
 - "condensed ring system" is a ring system in which all rings are condensed among themselves; [2]
 - "number of relevant rings" in a condensed ring system equals the number of scissions necessary to convert the ring system into one acyclic chain; [2]
 - "relevant rings" in a condensed ring system, i.e. the rings which taken together describe all the links between every atom of the ring system, are chosen according to the following criteria consecutively:
 - a. lowest number of ring members;
 - b. highest number of hetero atoms as ring members;
 - c. lowest number of members shared with other rings;
 - d. last place in the classification scheme. [2]
4. Attention is drawn to Note (3) after class **C07**, which defines the last place priority rule applied in the range of subclasses **C07C-C07K** and within these subclasses. [8]
5. Therapeutic activity of compounds is further classified in subclass **A61P**. [7]
6. In this subclass, in the absence of an indication to the contrary:
 - a. compounds having only one hetero ring are classified in the last appropriate place in one of the groups **C07D 203/00-C07D 347/00**. The same applies for compounds having more hetero rings covered by the same main group, neither condensed among themselves nor condensed with a common carbocyclic ring system; [2]
 - b. compounds having two or more hetero rings covered by different main groups neither condensed among themselves nor condensed with a common carbocyclic ring system are classified in the last appropriate place in one of the groups **C07D 401/00-C07D 421/00**; [2]
 - c. compounds having two or more relevant hetero rings, covered by the same or by different main groups, which are condensed among themselves or condensed with a common carbocyclic ring system, are classified in the last appropriate place in one of the groups **C07D 451/00-C07D 519/00**. [2]
7. In this subclass:
 - where a compound may exist in tautomeric forms, it is classified as though existing in the form which is classified last in the system. Therefore, double bonds between ring members and non-ring members and double bonds between ring members themselves are considered equivalent in determining the degree of hydrogenation of the ring. Formulae are considered to be written in Kekule form; [2]
 - hydrocarbon radicals containing a carbocyclic ring and an acyclic chain by which it is linked to the hetero ring and being substituted on both the carbocyclic ring and the acyclic chain by hetero atoms or by carbon atoms

having three bonds to hetero atoms with at the most one bond to halogen, are classified according to the substituents on the acyclic chain. For example, the compound



is classified in group **C07D**



233/22, and the compound

is classified in groups **C07D 233/24** and **C07D 233/26**, where X —NH₂, —NHCOCH₃, or —COOCH₃. [2]

CL M Note
 only C07D

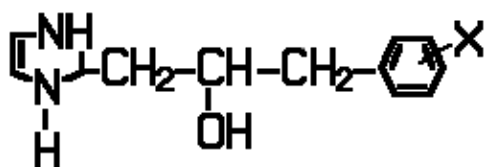
1. This subclass does not cover compounds containing saccharide radicals (as defined in Note (3) following the title of subclass **C07H**), which are covered by subclass **C07H**. [2]
2. In this subclass, in compounds containing a hetero ring covered by group **C07D 295/00** and at least one other hetero ring, the hetero ring covered by group **C07D 295/00** is considered as an acyclic chain containing nitrogen atoms. [3]
3. In this subclass, the following terms or expressions are used with the meanings indicated:
 - "hetero ring" is a ring having at least one halogen, nitrogen, oxygen, sulfur, selenium, or tellurium atom as a ring member; [2]
 - "bridged" means the presence of at least one fusion other than ortho, peri or spiro; [2]
 - two rings are "condensed" if they share at least one ring member, i.e. "spiro" and "bridged" are considered as condensed; [2]
 - "condensed ring system" is a ring system in which all rings are condensed among themselves; [2]
 - "number of relevant rings" in a condensed ring system equals the number of scissions necessary to convert the ring system into one acyclic chain; [2]
 - "relevant rings" in a condensed ring system, i.e. the rings which taken together describe all the links between every atom of the ring system, are chosen according to the following criteria consecutively:
 - a. lowest number of ring members;
 - b. highest number of hetero atoms as ring members;
 - c. lowest number of members shared with other rings;
 - d. last place in the classification scheme. [2]
4. Attention is drawn to Note (3) after class **C07**, which defines the last place priority rule applied in the range of subclasses **C07C-C07K** and within these subclasses. [8]
5. Therapeutic activity of compounds is further classified in subclass **A61P**. [7]
6. In this subclass, in the absence of an indication to the contrary:
 - a. compounds having only one hetero ring are classified in the last appropriate place in one of the groups **C07D 203/00-C07D 347/00**. The same applies for compounds having more hetero rings covered by the same main group,

neither condensed among themselves nor condensed with a common carbocyclic ring system; [2]

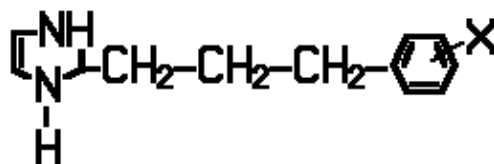
- b. compounds having two or more hetero rings covered by different main groups neither condensed among themselves nor condensed with a common carbocyclic ring system are classified in the last appropriate place in one of the groups **C07D 401/00-C07D 421/00**; [2]
- c. compounds having two or more relevant hetero rings, covered by the same or by different main groups, which are condensed among themselves or condensed with a common carbocyclic ring system, are classified in the last appropriate place in one of the groups **C07D 451/00-C07D 519/00**. [2]

7. In this subclass:

- where a compound may exist in tautomeric forms, it is classified as though existing in the form which is classified last in the system. Therefore, double bonds between ring members and non-ring members and double bonds between ring members themselves are considered equivalent in determining the degree of hydrogenation of the ring. Formulae are considered to be written in Kekule form; [2]
- hydrocarbon radicals containing a carbocyclic ring and an acyclic chain by which it is linked to the hetero ring and being substituted on both the carbocyclic ring and the acyclic chain by hetero atoms or by carbon atoms having three bonds to hetero atoms with at the most one bond to halogen, are classified according to the substituents on the acyclic chain. For example, the compound



is classified in group **C07D**



233/22, and the compound

is classified in group **C07D 233/00**, where X —NH₂, —NHCOCH₃, or —COOCH₃. [2]

CL N *Note* 521/00 This group is only used for the classification of heterocyclic compounds the chemical structure of which is not specified, i.e. only in those cases where the heterocyclic compounds cannot be classified in any of groups **C07D 201/00-C07D 519/00**.

ANNEX 136E C07G [Project-Rapporteur : M099/IB] <CE40>

CL M Title **COMPOUNDS OF UNKNOWN CONSTITUTION** (sulfonated fats, oils or waxes of undetermined constitution [C07C 309/62](#))

CL D 17/00 (transferred to [C07G 99/00](#))

CL N *99/00 Subject matter not provided for in other groups of this subclass*

ANNEX 137E C07K [Project-Rapporteur : M032/IB] <CE40>

CL M Title **PEPTIDES** (peptides containing β -lactam rings [C07D](#); cyclic dipeptides not having in their molecule any other peptide link than those which form their ring, e.g. piperazine-2,5-diones, [C07D](#); ergot alkaloids of the cyclic peptide type [C07D 519/02](#); single cell proteins, enzymes [C12N](#); genetic engineering processes for obtaining peptides [C12N 15/00](#))

AL M 7/08 · · having 12 to 20 amino acids

AL M 14/575 · · Hormones

CL M 16/46 · Hybrid immunoglobulins (hybrids of an immunoglobulin with a peptide not being an immunoglobulin [C07K 19/00](#))

CL M **17/00 Carrier-bound or immobilised peptides; Preparation thereof**

CL M **19/00 Hybrid peptides** (hybrid immunoglobulins composed solely of immunoglobulins [C07K 16/46](#))

ANNEX 138E C08B [Project-Rapporteur : M031/IB] <CE40>

CL M **9/00 Preparation of cellulose xanthate or viscose**

ANNEX 139E C08F [Project-Rapporteur : M031/IB] <CE40>

CL M Title **MACROMOLECULAR COMPOUNDS OBTAINED BY REACTIONS ONLY INVOLVING CARBON-TO-CARBON UNSATURATED BONDS** (production of liquid hydrocarbon mixtures from lower carbon number hydrocarbons, e.g. by oligomerisation, [C10G 50/00](#); graft polymerisation of monomers containing carbon-to-carbon unsaturated bonds on to fibres, threads, yarns, fabrics or fibrous goods made from such materials [D06M 14/00](#))

CL M Guidance [Graft polymers](#); [Polymers crosslinked with unsaturated monomers](#)
heading
251/00-
292/00

ANNEX 140EF C08H [Project-Rapporteur : M031/IB] <CE40>

CL D Guidance < Deleted / Supprimé >
heading /
Rubrique
d'orientation
1/00- 5/00

ANNEX 141E C08J [Project-Rapporteur : M032/IB] <CE40>

- CL M Title **WORKING-UP; GENERAL PROCESSES OF COMPOUNDING; AFTER-TREATMENT NOT COVERED BY SUBCLASSES C08B, C08C, C08F, C08G or C08H** (working, e.g. shaping, of plastics **B29**)
- CL M 5/00 **Manufacture of articles or shaped materials containing macromolecular substances** (manufacture of semi-permeable membranes **B01D 67/00-B01D 71/00**)
- CL M 5/04 • Reinforcing macromolecular compounds with loose or coherent fibrous material
- CL M 9/00 **Working-up of macromolecular substances to porous or cellular articles or materials; After-treatment thereof** (mechanical aspects of shaping of plastics or substances in a plastic state for the production of porous or cellular articles **B29C**)
- AL M 9/32 • from compositions containing micro-balloons, e.g. syntactic foams
- AL M 11/08 • • • using selective solvents for polymer components
- AL M 11/10 • • • by chemically breaking down the molecular chains of polymers or breaking of crosslinks, e.g. devulcanisation (depolymerisation to the original monomer **C07**)
- AL M 11/12 • • • by dry-heat treatment only

ANNEX 142E C08L [Project-Rapporteur : M031/IB] <CE40>

- CL M Guidance **Compositions of natural macromolecular compounds or of derivatives thereof**
heading
89/00-
99/00
- AL M 93/00 **Compositions of natural resins; Compositions of derivatives thereof** (of polysaccharides **C08L 1/00-C08L 5/00**; of natural rubber **C08L 7/00**; polishing compositions **C09G**)
- CL M 93/00 **Compositions of natural resins; Compositions of derivatives thereof** (of polysaccharides only **C08L 1/00-C08L 5/00**; of natural rubber **C08L 7/00**; French polish **C09F**; polishing compositions **C09G**)

- CL M 97/00 Compositions of lignin-containing materials (of polysaccharides [C08L 1/00-C08L 5/00](#))
- CL M 99/00 Compositions of natural macromolecular compounds or of derivatives thereof not provided for in groups [C08L 1/00-C08L 7/00](#) or [C08L 89/00-C08L 97/00](#)
-

ANNEX 143E C09B [Project-Rapporteur : M031/IB] <CE40>

- CL M 27/00 Azo dyes in which the azo group is formed in any way other than by diazotising and coupling
-

ANNEX 144E C09D [Project-Rapporteur : M031/IB] <CE40>

- CL M Guidance [Coating compositions based on natural macromolecular compounds or on derivatives thereof](#)
heading
189/00-
199/00

CL M 193/00 Coating compositions based on natural resins; Coating compositions based on derivatives thereof (based on polysaccharides [C09D 101/00-C09D 105/00](#); based on natural rubber [C09D 107/00](#); polishing compositions [C09G](#))

CL M 197/00 Coating compositions based on lignin-containing materials (based on polysaccharides [C09D 101/00-C09D 105/00](#))

CL M 199/00 Coating compositions based on natural macromolecular compounds or on derivatives thereof, not provided for in groups [C09D 101/00-C09D 107/00](#) or [C09D 189/00-C09D 197/00](#)

ANNEX 145E C09J [Project-Rapporteur : M031/IB] <CE40>

- CL M Guidance [Adhesives based on natural macromolecular compounds or on derivatives thereof](#)
heading
189/00-
199/00

CL M 193/00 Adhesives based on natural resins; Adhesives based on derivatives thereof (based on polysaccharides [C09J 101/00-C09J 105/00](#); based on natural rubber [C09J 107/00](#); polishing compositions [C09G](#))

CL M 197/00 Adhesives based on lignin-containing materials (based on polysaccharides [C09J 101/00-C09J 105/00](#))

CL M 199/00 Adhesives based on natural macromolecular compounds or on derivatives thereof, not provided for in groups [C09J 101/00-C09J 107/00](#) or [C09J 189/00-C09J 197/00](#)

ANNEX 146E C09K [Project-Rapporteur : M032/IB] <CE40>

- CL M 3/10 · for sealing or packing joints or covers
- CL M 3/12 · for stopping leaks, e.g. in radiators, in tanks
- CL M 3/14 · Anti-slip materials; Abrasives
- CL M 3/18 · for application to surface to minimize adherence of ice, mist or water thereto; Thawing or antifreeze materials for application to surfaces
- CL M 3/30 · for aerosols
- CL M 3/32 · for treating liquid pollutants, e.g. oil, gasoline, fat (processes for making harmful chemical substances harmless, or less harmful, by effecting a chemical change in the substances [A62D 3/00](#))
- AL M 5/20 · Antifreeze additives therefor, e.g. for radiator liquids
- CL M 8/42 · Compositions for cementing, e.g. for cementing casings into boreholes; Compositions for plugging, e.g. for killing wells (compositions for plastering borehole walls [C09K 8/50](#))
- CL M 8/50 · Compositions for plastering borehole walls, i.e. compositions for temporary consolidation of borehole walls
- CL M 8/56 · Compositions for consolidating loose sand or the like around wells without excessively decreasing the permeability thereof
- CL M 9/00 **Tenebrescent materials, i.e. materials for which the range of wavelengths for energy adsorption is changed as a result of excitation by some form of energy**
- CL M 11/65 · · containing carbon
- CL M 13/00 **Etching, surface-brightening or pickling compositions**
- CL M 15/00 **Anti-oxidant compositions; Compositions inhibiting chemical change**
- CL M 17/00 **Soil-conditioning materials or soil-stabilising materials**
- CL M 21/00 **Fireproofing materials**

ANNEX 147E C10B [Project-Rapporteur : M031/IB] <CE40>

- CL M 31/00 **Charging devices for coke ovens**
- CL M 33/00 **Discharging devices for coke ovens; Coke guides**
- CL M 35/00 **Combined charging and discharging devices for coke ovens**

CL M 57/00 **Other carbonising or coking processes; Features of destructive distillation processes in general**

ANNEX 148E C10G [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance Hydrotreatment processes
heading
45/00-
49/00

ANNEX 149E C10L [Project-Rapporteur : M032/IB] <CE40>

CL M Title **FUELS NOT OTHERWISE PROVIDED FOR; NATURAL GAS; SYNTHETIC NATURAL GAS OBTAINED BY PROCESSES NOT COVERED BY SUBCLASSES C10G OR C10K; LIQUEFIED PETROLEUM GAS; USE OF ADDITIVES TO FUELS OR FIRES; FIRE-LIGHTERS**

CL M 5/00 **Solid fuels** (produced by solidifying fluid fuels C10L 7/00; peat briquettes C10F 7/06)

AL M 5/06 · · Briquetting processes

AL M 5/08 · · · without the aid of extraneous binders

AL M 7/02 · liquid fuels

CL M 10/00 **Use of additives to fuels or fires for particular purposes** (using binders for briquetting solid fuels C10L 5/10; using additives to improve the combustion of solid fuels C10L 9/10)

ANNEX 150E C22C [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance Non-ferrous alloys, i.e. alloys based essentially on metals other than iron
heading
1/00-
32/00

CL N Note Groups C22C 43/00-C22C 49/00 take precedence over groups C22C 1/00-C22C 1/00-38/00. [new]
38/00

CL M 1/00 **Making non-ferrous alloys** (powder-metallurgical apparatus or processes, not specially modified for making alloys B22F; by electrothermic methods C22B 4/00; by electrolysis C25C)

CL M 3/00 **Removing material from non-ferrous alloys to produce alloys of different constitution**

CL M Guidance Ferrous alloys, i.e. alloys based on iron
heading
33/00-
38/00

CL M 33/00 Making ferrous alloys (heat treatment thereof **C21D 5/00**, **C21D 6/00**)

ANNEX 151E C23C [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance Coating by applying the coating material in the molten state
heading
2/00-
6/00

CL M 4/00 **Coating by spraying the coating material in the molten state, e.g. by flame, plasma or electric discharge** (built-up welding **B23K**, e.g. **B23K 5/18**, **B23K 9/04**; spraying guns **B05B**; making alloys containing fibres or filaments by thermal spraying of metal **C22C 47/16**; plasma guns **H05H**)

CL M Guidance Chemical deposition or plating by decomposition; Contact plating
heading
16/00-
20/00

CL D Guidance < Deleted / Supprimé >
heading /
Rubrique
d'orientation
22/00

ANNEX 152E C23D [Project-Rapporteur : M031/IB] <CE40>

CL M 11/00 Continuous processes for firing enamels; Apparatus therefor

ANNEX 153E D01H [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance Common features or details of, or accessories for, spinning or twisting machines of various kinds or types
heading
9/00-
17/00

ANNEX 154E D04B [Project-Rapporteur : M031/IB] <CE40>

CL M 3/00 Hand tools or implements for weft knitting

- CL M 5/00 **Weft knitting apparatus or machines without needles for domestic use** (with needles [D04B 7/08](#))
- CL M 9/00 **Circular weft knitting machines with independently-movable needles** (with fixed spring or bearded needles [D04B 13/00](#))
- CL M 13/00 **Circular weft knitting machines with fixed spring or bearded needles, e.g. loop-wheel machines** (with independently-movable needles [D04B 9/00](#))
- CL M Guidance [Crocheting](#); [Apparatus therefor](#)
heading
31/00-
33/00
- CL M 33/00 **Crocheting tools or apparatus** (galloon crocheting machines for warp knitting [D04B 25/06](#))

ANNEX 155E D04G [Project-Rapporteur : M099/IB] <CE40>

- CL M 5/00 **Knotting not otherwise provided for**

ANNEX 156E D05B [Project-Rapporteur : M031/IB] <CE40>

- CL M 27/00 **Work-feeding means for sewing machines**
- CL M 29/00 **Pressers or presser feet for sewing machines** (for feeding [D05B 27/04](#))
- CL M 35/00 **Work-feeding or work-handling elements for sewing machines, not otherwise provided for**
- CL M 39/00 **Workpiece carriers for sewing machines** (for automatically controlling movement of work-carrier to obtain particular configuration of seam [D05B 21/00](#); in general [A41H 15/00](#))
- CL M 41/00 **Work-collecting devices for sewing machines**
- CL M 47/00 **Needle-thread tensioning devices for sewing machines; Applications of tensometers in sewing machines**
- CL M 49/00 **Take-up devices, e.g. levers, for the needle thread of sewing machines**
- CL M 51/00 **Applications of needle-thread guards in sewing machines; Thread-break detectors for sewing machines** (for embroidery machines [D05C 11/00](#))
- CL M 53/00 **Thread- or cord-laying mechanisms for sewing machines; Thread fingers for sewing machines**
- CL M 55/00 **Needle holders for sewing machines; Needle bars for sewing machines** (needles [D05B 85/00](#))

- CL M 57/00 Loop takers, e.g. loopers, for sewing machines
- CL M 59/00 Applications of bobbin-winding or -changing devices in sewing machines; Indicating or control devices associated therewith
- CL M 61/00 Loop holders; Loop spreaders for sewing machines; Stitch-forming fingers for sewing machines
- CL M 63/00 Devices associated with the loop-taker thread of sewing machines, e.g. for tensioning
- CL M 65/00 Devices for severing the needle or lower thread in sewing machines
- CL M 69/00 Driving-gear or control devices for sewing machines
- CL M 71/00 Lubricating or cooling devices for sewing machines
- CL M 73/00 Casings for sewing machines
- CL M 79/00 Incorporations or adaptations of lighting equipment for sewing machines
- CL M 83/00 Guards or like devices for preventing injury to operator of sewing machines (machine safety devices in general [F16P](#))
- CL M 93/00 Stitches; Stitch seams for hand sewing

ANNEX 157E D05C [Project-Rapporteur : M031/IB] <CE40>

- CL M Title **EMBROIDERING** (programme-controlled sewing machines with embroidering capability [D05B 19/00](#), [D05B 21/00](#)) ; **TUFTING** (making non-woven fabrics [D04H](#); sewing [D05B](#))
- CL M Guidance [Embroidering machines](#)
heading
3/00-
13/00

ANNEX 158E D06F [Project-Rapporteur : C446/EP] <CE40>

- CL M Subclass index
 - RECEPTACLES; REMOVABLE DEVICES FOR USE WITH DIFFERENT RECEPTACLES [1/00](#); [7/00](#)
 - HAND IMPLEMENTS [5/00](#)
 - IMPLEMENTS FOR WASHING BY HAND
 - Receptacles; hand rubbing apparatus [1/00](#); [3/00](#)
 - WASHING MACHINES
 - using brushes, rollers [9/00](#), [11/00](#)
 - with stationary receptacle: using agitators; using [13/00](#); [15/00](#); [17/00](#); [18/00](#)

beating or squeezing means; with agitation of liquid; with additional drying means	
with moving receptacle	
with rotary movement, e.g. oscillatory: for washing; for washing and draining; for washing and draining with additional drying means	21/00; 23/00; 25/00
with bodily movements, e.g. reciprocating or swinging	27/00
using vibrations for washing	19/00
Details of above machines	1/00, 7/00, 37/00, 39/00
Combinations with other apparatus or machines	29/00, 31/00
Control of washing operations	33/00
Other washing machines or methods	35/00
RINSING APPARATUS	29/00, 41/00
DRY-CLEANING	43/00
EXPELLING WATER FROM LINEN; SMOOTHING BY COLD ROLLING	
by rollers; by presses	45/00; 47/00
by centrifugal movement of the receptacle	23/00, 25/00, 49/00
Apparatus not otherwise provided for	51/00
DRYING; AIRING	
Clothes-lines; clothes-pegs; other supporting means	53/00; 55/00; 57/00
Driers	58/00
Special supports retaining shape of articles to be dried	59/00
Other drying	60/00
IRONING; PRESSING	
Ironing	
by hand:	
Irons; accessories; ironing boards	75/00; 77/00, 79/00; 81/00
by machine:	
using rollers; using rollers coating with table; using rollers coating with curved surfaces	61/00; 63/00; 65/00
Details	67/00
Other ironing machines	69/00
Pressing	
Hot or cold pressing; smoothing by use of formers with heat or steam	71/00; 73/00
Coverings or pads for equipment, elements interposed between article and ironing or pressing surface	83/00, 85/00
AUXILIARY APPARATUS; LAUNDRY SYSTEMS	
Conditioning; folding; starching; counting, sorting, marking	87/00; 89/00; 91/00; 93/00

Laundry systems, arrangements of apparatus or
machines

95/00

CL M Guidance **Drying; Airing**
heading
53/00-
60/00

CL N **60/00 Drying not provided for in groups D06F 53/00-D06F 59/00**

ANNEX 159E D06F [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance **Ironing; Pressing**
heading
61/00-
85/00

CL M **71/00 Apparatus for hot-pressing clothes, linen, or other textile articles, i.e. wherein there is substantially no relative movement between pressing element and article while pressure is being applied to the article; Similar machines for cold-pressing clothes, linen, or other textile articles** (smoothing by cold rolling between two or more co-operating rollers **D06F 45/00**; devices, for household use, for cold-pressing garments **A47G**)

ANNEX 160E D21F [Project-Rapporteur : M108/EP] <CE40>

CL M **1/00 Wet end of machines for making continuous webs of paper**

CL M 1/10 • Wire-cloths

AL M 1/36 • Guiding mechanisms

AL M 1/68 • • using hydrocyclones

CL M **2/00 Transferring continuous webs from wet ends to press sections**

CL M **13/00 Methods or apparatus for making discontinuous sheets of paper, pulpboard, or cardboard, or of wet web, for fibreboard production** (making discontinuous sheets of board in moulds **D21J**; drying paper, pulpboard, or cardboard, in discontinuous-sheet form **F26B**)

ANNEX 161E E01B [Project-Rapporteur : M031/IB] <CE40>

CL M Title **PERMANENT WAY; PERMANENT-WAY TOOLS; MACHINES FOR MAKING RAILWAYS OF ALL KINDS** (derailing or rerailing blocks on track, track brakes or retarders **B61K**; removal of foreign matter from the permanent way, vegetation control, applying liquids **E01H**)

CL M Guidance **Making, maintaining, renewing, or taking-up the ballastway or the track; Tools or machines specially designed therefor**
heading
27/00-
37/00

ANNEX 162E E01C [Project-Rapporteur : C439/SE] <CE40>

AL M 13/10 · for artificial surfaces for outdoor or indoor practice of snow or ice sports (**E01C 13/08** takes precedence; production of snow or ice for winter sports or similar recreational purposes **F25C 3/00**)

ANNEX 163E E01C [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance **Machines, tools, or auxiliary devices for constructing or repairing the surfacing of roads or like structures**
heading
19/00-
23/00

ANNEX 164E E01H [Project-Rapporteur : C439/SE] <CE40>

CL M **4/00 Working on surfaces of snow or ice in order to make them suitable for traffic or sporting purposes, e.g. by compacting snow** (production of artificial snow **F25C 3/04**)

AL M 4/02 · for sporting purposes, e.g. preparation of ski trails (production of snow or ice for winter sports or similar recreational purposes **F25C 3/00**)

ANNEX 165E E04G [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance **Falsework, forms, or shutterings for shaping of building parts in situ**
heading
9/00-
19/00

CL M **13/00 Falsework, forms, or shutterings for particular parts of buildings, e.g. stairs, steps, cornices, balconies** (moulds for making units for prefabricated buildings or prefabricated stair units **B28B 7/22**)

ANNEX 166E E05B [Project-Rapporteur : M031/IB] <CE40>

- CL M Guidance Details or accessories of locks or the like; keys
heading
1/00-
19/00
- CL M 9/00 Lock or latch-mechanism casings mountable on or in wings (padlock casings **E05B 67/02**)
- CL M 21/00 Locks with rotary keys moving lamelliform tumblers perpendicular to the key, in which the tumblers do not follow the movement of the bolt
- CL M 23/00 Locks with rotary keys moving lamelliform tumblers perpendicular to the key, in which the tumblers follow the movement of the bolt
- CL M 25/00 Locks with rotary keys moving lamelliform tumblers perpendicular to the key, characterised by the tumblers
- CL M 27/00 Cylinder locks with tumbler pins or balls that are set by pushing the key in
- CL M 29/00 Cylinder locks with plate tumblers that are set by pushing the key in
- CL M 31/00 Cylinder locks with both tumbler pins or balls and plate tumblers that are set by pushing the key in
- CL M 33/00 Cylinder locks with tumblers that are set by pushing the key in, in which the bolt is moved by means other than the key
- CL M Guidance Operation or control of locks by non-mechanical means, e.g. from a distance
heading
47/00-
51/00
- CL M 47/00 Operating or controlling locks or other fastening devices by electric or magnetic means (electric permutation locks **E05B 49/00**; holding in open position or limiting movement of wings by magnetic or electromagnetic attraction **E05C 17/56**; key switches **H01H 27/00**)
- CL M Guidance Locks with provision for latching
heading
55/00-
61/00

ANNEX 167E E05C [Project-Rapporteur : M031/IB] <CE40>

- CL M Guidance Bolts, latches, or equivalent wing-fastening devices, characterised by special way of movement, e.g. moving rectilinearly, pivotally, or rotatively
heading
1/00-
5/00

- CL M 1/00 **Fastening devices with bolts moving rectilinearly** (devices released automatically by pull or pressure on the wing [E05C 19/02](#))
- CL M 3/00 **Fastening devices with bolts moving pivotally or rotatively** (devices released automatically by pull or pressure on the wing [E05C 19/02](#))
- CL M 5/00 **Fastening devices with bolts moving otherwise than only rectilinearly and only pivotally or rotatively** (devices released automatically by pull or pressure on the wing [E05C 19/02](#))
-

ANNEX 168E E05F [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance [Operating mechanisms for wings](#)
heading
9/00-
17/00

CL M 13/00 **Operating mechanisms for wings, operated by the movement or weight of a person or vehicle** (through power-operated wing-operating mechanisms [E05F 15/00](#))

ANNEX 169E E21B [Project-Rapporteur : M031/IB] <CE40>

CL M 4/00 **Drives for drilling, used in the borehole**

ANNEX 170E E21C [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance [Methods of mining or quarrying](#); [Open-pit mining](#); [Layouts therefor](#)
heading
41/00-
51/00

ANNEX 171E E21D [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance [Tunnels](#); [Galleries](#); [Large underground chambers](#); [Linings therefor](#)
heading
9/00-
13/00

CL M 9/00 **Tunnels or galleries, with or without linings; Methods or apparatus for making thereof** (linings per se [E21D 11/00](#); galleries protecting against falling rocks or avalanches [E01F 7/04](#)) ; **Layout of tunnels or galleries**

ANNEX 172E E21F [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance Safety devices; Rescue devices
heading
5/00-
13/00

CL M 5/00 **Means or methods for preventing, binding, depositing, or removing dust; Preventing explosions or fires** (dams **E21F 17/103**; applying liquids or other fluent materials to surfaces in general **B05**; flue-gas indicators **G01N**)

ANNEX 173E F01K [Project-Rapporteur : M031/IB] <CE40>

CL M 7/00 **Steam engine plants characterised by the use of specific types of engine (F01K 3/02 takes precedence) ; Plants or engines characterised by their use of special steam systems, cycles, or processes** (reciprocating-piston engines using uniflow principle **F01B 17/04**) ; **Regulating means peculiar to such systems, cycles, or processes; Use of withdrawn or exhaust steam for feed-water heating**

CL M 9/00 **Steam engine plants characterised by condensers arranged or modified to co-operate with the engines** (by condensers structurally combined with engines **F01K 11/00**; steam condensers per se **F28B**)

CL M 11/00 **Steam engine plants characterised by the engines being structurally combined with boilers or condensers**

CL M 13/00 **General layout or general methods of operation, of complete steam engine plants**

CL M 15/00 **Adaptations of steam engine plants for special use**

ANNEX 174E F01L [Project-Rapporteur : M031/IB] <CE40>

- CL M Note
F01L
1. *Groups **F01L 1/00-F01L 13/00** cover only valve-gear or valve arrangements without provision for variable fluid distribution. [new]*
 2. *Valve gear or valve arrangements specially adapted for steam engines are covered by groups **F01L 15/00-F01L 35/00**. [new]*
 3. *Valve-gear or valve arrangements specially adapted for machines or engines with variable working-fluid distribution are covered by groups **F01L 15/00-F01L 35/00**. [new]*
 4. Attention is drawn to the Notes preceding class **F01**, especially Note (3).
 5. As regards the above-mentioned Note (3), attention is drawn to **F01B 3/10, F01B 15/06, F01C 20/20, F01C 21/18, F02B 53/06, F03C 1/08, F04B 1/18, F04B 7/00, F04B 39/08, F04B 39/10, F04C 14/00, F04C 15/06, F04C 28/00** and **F04C 29/12**.

- CL M Guidance Valve-gear or valve arrangements for positive-displacement machines or engines other than steam engines, e.g. for internal-combustion piston engines, without provision for variable fluid distribution
heading 1/00-13/00
- CL M Guidance Valve-gear or valve arrangements specially adapted for steam engines, or specially adapted for other positive-displacement machines or engines with variable working-fluid distribution
heading 15/00-31/00
- CL U Note < unchanged >
15/00
- CL M Guidance Rotary or oscillatory slide-valve gear or lift-valve gear or such valve arrangements specially adapted for steam engines, or specially adapted for other positive-displacement machines or engines with variable working-fluid distribution
heading 33/00-35/00
- CL M **33/00 Rotary or oscillatory slide-valve gear or valve arrangements, specially adapted for machines or engines with variable fluid distribution** (drive, adjustment during operation, tripping-gear, reversing-gear, use of working pistons or piston-rods as valves or as valve-supporting elements, valve-gear or valve arrangements peculiar to free-piston machines or engines **F01L 15/00-F01L 31/00**)
- CL M **35/00 Lift-valve gear or valve arrangements specially adapted for machines or engines with variable fluid distribution** (drive, adjustment during operation, tripping-gear, reversing-gear, use of working pistons or piston-rods as valves or as valve-supporting elements, valve-gear or valve arrangements peculiar to free-piston machines or engines **F01L 15/00-F01L 31/00**)

ANNEX 175E F01M [Project-Rapporteur : M032/IB] <CE40>

- CL M Title **LUBRICATING OF MACHINES OR ENGINES IN GENERAL; LUBRICATING INTERNAL-COMBUSTION ENGINES; CRANKCASE VENTILATING**
- CL M 1/02 • using lubricating pumps
- CL M 1/06 • Lubricating systems characterised by the provision therein of crankshafts or connecting-rods with lubricant passageways, e.g. bores
- CL M 1/16 • Controlling lubricant pressure or quantity
- AL M 1/20 • • concerning lubricant pressure
- CL M 11/03 • Mounting or connecting of lubricant purifying means relative to the machine or engine; Details of lubricant purifying means
- AL M 11/08 • Separating lubricant from air or fuel-air mixture before entry into cylinder
- AL M 11/12 • • concerning lubricant level
-

ANNEX 176E F01P [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance Air cooling; Liquid cooling
heading
1/00-
3/00

CL M 1/00 **Air cooling** (propelling cooling-air or liquid coolants **F01P 5/00**; controlling supply or circulation of coolants **F01P 7/00**)

CL M 3/00 **Liquid cooling** (propelling cooling-air or liquid coolants **F01P 5/00**; controlling supply or circulation of coolants **F01P 7/00**)

ANNEX 177E F02B [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance Engines characterised by the working fluid to be compressed, or characterised by the type of ignition
heading
1/00-
11/00

CL M 1/00 **Engines characterised by fuel-air mixture compression** (characterised by both fuel-air mixture compression and air compression, or characterised by both positive ignition and compression ignition **F02B 11/00**; characterised by precombustion chambers **F02B 19/00**; characterised by air-storage chambers **F02B 21/00**; characterised by special shape or construction of combustion chambers **F02B 23/00**)

CL M 3/00 **Engines characterised by air compression and subsequent fuel addition** (characterised by both fuel-air mixture compression and air compression, or characterised by both positive ignition and compression ignition **F02B 11/00**; characterised by precombustion chambers **F02B 19/00**; characterised by air-storage chambers **F02B 21/00**; characterised by special shape or construction of combustion chambers **F02B 23/00**)

CL M 5/00 **Engines characterised by positive ignition** (**F02B 1/02**, **F02B 3/02** take precedence; with non-timed positive ignition **F02B 9/06**; characterised by both fuel-air mixture compression and air compression, or characterised by both positive ignition and compression ignition **F02B 11/00**; characterised by precombustion chambers **F02B 19/00**; characterised by air-storage chambers **F02B 21/00**; characterised by special shape or construction of combustion chambers **F02B 23/00**)

CL M 7/00 **Engines characterised by the fuel-air charge being ignited by compression ignition of an additional fuel** (characterised by both fuel-air mixture compression and air compression, or characterised by both positive ignition and compression ignition **F02B 11/00**; characterised by precombustion chambers **F02B 19/00**; characterised by air-storage chambers **F02B 21/00**; characterised by special shape or construction of combustion chambers **F02B 23/00**)

CL M 9/00 **Engines characterised by other types of ignition** (characterised by both fuel-air mixture compression and air compression, or characterised by both positive ignition and compression ignition **F02B 11/00**; characterised by precombustion chambers **F02B 19/00**; characterised by air-storage chambers **F02B 21/00**; characterised by special shape or construction of combustion chambers **F02B 23/00**)

- CL M 11/00 **Engines characterised by both fuel-air mixture compression and air compression, or characterised by both positive ignition and compression ignition, e.g. in different cylinders** (characterised by precombustion chambers **F02B 19/00**; characterised by air-storage chambers **F02B 21/00**; characterised by special shape or construction of combustion chambers **F02B 23/00**)
- CL M Guidance **Engines characterised by the method of introducing liquid fuel into cylinders**
heading
13/00-
15/00
- CL M 13/00 **Engines characterised by the introduction of liquid fuel into cylinders by use of auxiliary fluid**
- CL M 15/00 **Engines characterised by the method of introducing liquid fuel into cylinders and not otherwise provided for**
- CL M Guidance **Engines characterised by precombustion chambers or air-storage chambers, or characterised by special shape or construction of combustion chambers to improve operation**
heading
19/00-
23/00
- CL M 19/00 **Engines characterised by precombustion chambers** (engines with incandescent chambers **F02B 9/08**)
- CL M 21/00 **Engines characterised by air-storage chambers**
- CL M 23/00 **Other engines characterised by special shape or construction of combustion chambers to improve operation** (engines with incandescent chambers **F02B 9/08**)
- CL M Guidance **Engines characterised by provision for charging or scavenging**
heading
25/00-
29/00
- CL M 25/00 **Engines characterised by using fresh charge for scavenging cylinders**
(aspects characterised by provision of driven charging or scavenging pumps **F02B 33/00-F02B 39/00**)
- CL M 27/00 **Use of kinetic or wave energy of charge in induction systems, or of combustion residues in exhaust systems, for improving quantity of charge or for increasing removal of combustion residues** (aspects characterised by provision of driven charging or scavenging pumps **F02B 33/00-F02B 39/00**, e.g. use of driven apparatus for immediate conversion of combustion gas pressure into pressure of fresh charge **F02B 33/42**)
- CL M 29/00 **Engines characterised by provision for charging or scavenging not provided for in groups **F02B 25/00**, **F02B 27/00** or **F02B 33/00-F02B 39/00**; Details thereof**
- CL M Guidance **Engines characterised by provision of driven charging or scavenging pumps**
heading
33/00-
39/00

- CL M **33/00 Engines characterised by provision of pumps for charging or scavenging** (characterised by the introduction of liquid fuel into cylinders by use of auxiliary fluid **F02B 13/00**; characterised by after-charging **F02B 29/06**; characterised by provision of pumps for sucking combustion residues from cylinders **F02B 35/00**; characterised by provision of exhaust-driven pumps **F02B 37/00**)
- CL M **35/00 Engines characterised by provision of pumps for sucking combustion residues from cylinders**
- CL M **37/00 Engines characterised by provision of pumps driven at least for part of the time by exhaust** (characterised by the introduction of liquid fuel into cylinders by use of auxiliary fluid **F02B 13/00**; characterised by after-charging **F02B 29/06**; characterised by passages conducting the charge from the pump to the engine inlet **F02B 33/44**)
- CL M **39/00 Component parts, details, or accessories relating to driven charging or scavenging pumps, not provided for in groups **F02B 33/00-F02B 37/00****
- CL M **41/00 Engines characterised by special means for improving conversion of heat or pressure energy into mechanical power**
- CL M Guidance **Engines operating on non-liquid fuels; Plants including such engines, i.e. combinations of the engine with fuel-generating apparatus**
heading
43/00-
45/00
- CL M **43/00 Engines characterised by operating on gaseous fuels; Plants including such engines** (engines characterised by the gas-air charge being ignited by compression ignition of an additional fuel **F02B 7/06**; engines convertible from gas to other fuel consumption **F02B 69/04**)
- CL M **45/00 Engines characterised by operating on non-liquid fuels other than gas; Plants including such engines** (plants involving generation of gaseous fuel from solid fuel **F02B 43/08**; engines convertible from gas to other fuel consumption **F02B 69/04**)
- CL M Guidance **Methods of operating engines involving specific pre-treating of, or adding specific substances to, combustion air, fuel, or fuel-air mixture of the engines, and not otherwise provided for**
heading
47/00-
51/00
- CL M Guidance **Adaptations of engines for special use; Combinations of engines with devices other than engine parts or auxiliaries**
heading
61/00-
65/00
- CL M **61/00 Adaptations of engines for driving vehicles or for driving propellers; Combinations of engines with gearing** (the engine torque being divided by a differential gear for driving a scavenging or charging pump and the engine output shaft **F02B 39/06**; adaptations or combinations of rotary-piston or oscillating-piston engines **F02B 53/14**; arrangements in vehicles, see the relevant classes for vehicles)
- CL M **63/00 Adaptations of engines for driving pumps, hand-held tools or electric generators; Portable combinations of engines with engine-driven devices** (of rotary-piston or oscillating-piston engines **F02B 53/14**)

- CL M 65/00 Adaptations of engines for special uses not provided for in groups **F02B 61/00** or **F02B 63/00**; Combinations of engines with other devices, e.g. with non-driven apparatus (of rotary-piston or oscillating-piston engines **F02B 53/14**; combinations of prime-movers consisting of electric motors and internal combustion engines for mutual or common propulsion **B60K 6/20**)
-

ANNEX 178E F02D [Project-Rapporteur : M031/IB] <CE40>

- CL M Guidance Controlling, e.g. regulating, fuel injection
heading
1/00-
7/00

- CL M Guidance Other non-electrical control of combustion engines
heading
31/00-
39/00

- CL M 31/00 Use of non-electrical speed-sensing governors to control combustion engines, not otherwise provided for

- CL M 33/00 Non-electrical control of delivery of fuel or combustion-air, not otherwise provided for

- CL M 35/00 Non-electrical control of engines, dependent on conditions exterior or interior to engines, not otherwise provided for

- CL M 37/00 Non-electrical conjoint control of two or more functions of engines, not otherwise provided for
-

ANNEX 179E F02K [Project-Rapporteur : M099/IB] <CE40>

- CL D 11/00 (transferred to **F02K 99/00**)

- CL N 99/00 *Subject matter not provided for in other groups of this subclass*
-

ANNEX 180E F02M [Project-Rapporteur : M031/IB] <CE40>

- CL M Guidance Carburettors for liquid fuels
heading
1/00-
19/00

- CL M 3/00 Idling devices for carburettors (with means for facilitating idling below operational temperatures **F02M 1/00**)

- CL M 5/00 Float-controlled apparatus for maintaining a constant fuel level in carburettors

CL M Guidance **Fuel-injection apparatus**
heading
39/00-
65/00

CL N *Note* Low-pressure fuel injection is classified in groups **F02M 51/00**, **F02M 69/00** or **F02M 39/00- 71/00**.
67/00

CL M **61/00 Fuel injectors not provided for in groups **F02M 39/00-F02M 57/00** or **F02M 67/00****

CL M **63/00 Other fuel-injection apparatus having pertinent characteristics not provided for in groups **F02M 39/00-F02M 57/00** or **F02M 67/00**; Details, component parts, or accessories of fuel-injection apparatus, not provided for in, or of interest apart from, the apparatus of groups **F02M 39/00-F02M 61/00** or **F02M 67/00****

CL D Guidance < Deleted / Supprimé >
heading /
Rubrique
d'orientation
67/00-
71/00

ANNEX 181E F02N [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance **Muscle-operated starting apparatus**
heading
1/00-
3/00

CL M **1/00 Starting apparatus having hand cranks (with intermediate power storage **F02N 5/00-F02N 15/00**)**

CL M **3/00 Other muscle-operated starting apparatus (with intermediate power storage **F02N 5/00-F02N 15/00**)**

ANNEX 182E F02P [Project-Rapporteur : M031/IB] <CE40>

CL M **3/00 Other electric spark ignition installations characterised by the type of ignition power generation storage**

CL M **5/00 Advancing or retarding electric ignition spark; Control therefor**

CL M **7/00 Arrangement of distributors, circuit-makers, circuit-breakers or pick-up devices for electric spark ignition (advancing or retarding ignition or control therefor **F02P 5/00**; such devices per se , see the relevant classes of section H, e.g. rotary switches **H01H 19/00**, contact-breakers, distributors **H01R 39/00**, generators **H02K**)**

ANNEX F03B [Project-Rapporteur : M031/IB] <CE40>
183EF

CL D Guidance < Deleted / Supprimé >
heading /
Rubrique
d'orientation
1/00- 9/00

ANNEX 184E F03H [Project-Rapporteur : M099/IB] <CE40>

CL D 5/00 (transferred to **F03H 99/00**)

CL N 99/00 *Subject matter not provided for in other groups of this subclass*

ANNEX 185E F04B [Project-Rapporteur : M031/IB] <CE40>

CL M Note F04B

1. In this subclass, the following term is used with the meaning indicated:
 - "piston" also covers a plunger.
2. Attention is drawn to the Notes following the titles of class **B81** and subclass **B81B** relating to "micro-structural devices" and "micro-structural systems". [7]
3. Attention is drawn to the Notes preceding class **F01**, especially as regards the definitions of "machines", "pumps", and "positive-displacement".
4. *Machines, pumps or pumping installations having flexible working members are classified in groups **F04B 43/00** or **F04B 45/00**. [new]*

CL M Guidance **Pumps for liquids or for liquid and elastic fluids; Positive-displacement machines for liquids**
heading **liquids**
1/00-
23/00

CL M Guidance **Pumps specially adapted for elastic fluids**
heading
25/00-
41/00

CL M 25/00 **Multi-stage pumps specially adapted for elastic fluids**

CL M 27/00 **Multi-cylinder pumps specially adapted for elastic fluids and characterised by number or arrangement of cylinders** (**F04B 25/00** takes precedence; control of reciprocating machines or pumps in general **F04B 49/00**)

CL M 31/00 **Free-piston pumps specially adapted for elastic fluids; Systems incorporating such pumps** (muscle-driven pumps in which the stroke is not defined by gearing **F04B 33/00**; free-piston combustion engines, free-piston gas generators **F02B 71/00**; systems predominated by prime mover aspects, see the relevant class for the prime mover)

- CL M 33/00 **Pumps specially adapted for elastic fluids actuated by muscle power, e.g. for inflating**
 - CL M 35/00 **Piston pumps specially adapted for elastic fluids and characterised by the driving means to their working members, or by combination with, or adaptation to, specific driving engines or motors, not otherwise provided for** (predominant aspects of the engines or motors, see the relevant classes)
 - CL M 37/00 **Pumps specially adapted for elastic fluids and having pertinent characteristics not provided for in, or of interest apart from, groups F04B 25/00-F04B 35/00**
 - CL M 39/00 **Component parts, details, or accessories, of pumps or pumping systems specially adapted for elastic fluids, not otherwise provided for in, or of interest apart from, groups F04B 25/00-F04B 37/00** (for controlling F04B 49/00)
 - CL M 41/00 **Pumping installations or systems specially adapted for elastic fluids (F04B 31/00, F04B 35/00 take precedence)**
-

ANNEX 186E F04D [Project-Rapporteur : M031/IB] <CE40>

- CL D Guidance < Deleted / Supprimé >
heading /
Rubrique
d'orientation
1/00- 15/00
- CL M 1/00 **Radial-flow pumps, e.g. centrifugal pumps; Helico-centrifugal pumps** (adapted for pumping specific fluids F04D 7/00; priming or boosting F04D 9/00; pumping liquids and elastic fluids at the same time F04D 31/00)
- CL M 3/00 **Axial-flow pumps** (priming or boosting F04D 9/00; pumping liquids and elastic fluids at the same time F04D 31/00)
- CL M 5/00 **Pumps with circumferential or transverse flow** (pumping liquids and elastic fluids at the same time F04D 31/00)
- CL M 7/00 **Pumps adapted for handling specific fluids, e.g. by selection of specific materials for pumps or pump parts** (pumping liquids and elastic fluids at the same time F04D 31/00)
- CL M 11/00 **Other rotary non-positive-displacement pumps** (pumping installations or systems F04D 13/00; pumping liquids and elastic fluids at the same time F04D 31/00)
- CL M 13/00 **Pumping installations or systems** (controlling F04D 15/00; pumping liquids and elastic fluids at the same time F04D 31/00)
- CL M Guidance **Rotary pumps specially adapted for elastic fluids**
heading
17/00-
27/00
- CL M 17/00 **Radial-flow pumps specially adapted for elastic fluids, e.g. centrifugal pumps; Helico-centrifugal pumps specially adapted for elastic fluids** (F04D 21/00 takes precedence)
- CL M 19/00 **Axial-flow pumps specially adapted for elastic fluids** (F04D 21/00 takes precedence)

- CL M 21/00 **Pumps specially adapted for elastic fluids involving supersonic speed of pumped fluids**
- CL M 23/00 **Other rotary non-positive-displacement pumps specially adapted for elastic fluids**
(pumping installations or systems **F04D 25/00**)
- CL M 25/00 **Pumping installations or systems specially adapted for elastic fluids** (controlling **F04D 27/00**)
- CL M 27/00 **Control, e.g. regulation, of pumps, pumping installations, or systems specially adapted for elastic fluids**
-

ANNEX 187E F04F [Project-Rapporteur : M099/IB] <CE40>

CL M Subclass
index

PUMPS USING PRESSURE OR FLOW OF ANOTHER FLUID	1/00, 5/00
PUMPS USING NEGATIVE PRESSURE; PUMPS USING INERTIA OF THE FLUID	1/00, 3/00; 7/00
DIFFUSION PUMPS, e.g. WITH FORE PUMPS	9/00
SIPHONS; OTHER PUMPS	10/00; 99/00
JET-PUMP INSTALLATIONS	5/54

CL D 11/00 (transferred to **F04F 99/00**)

AL D 11/02 (transferred to **F04F 13/00**)

CL N **13/00 Pressure exchangers**

CL N **99/00 Subject matter not provided for in other groups of this subclass**

ANNEX 188E F15B [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance **Fluid-pressure actuator systems**
heading
7/00-
21/00

- CL M Note 7/00-21/00
1. Groups **F15B 7/00-F15B 21/00** cover systems in which members are moved into one or more definite positions by means of fluid pressure.
 2. Pump, motor, and control features so far as not peculiar to this purpose are classified in the relevant classes.

CL M **7/00 Fluid-pressure actuator systems in which the movement produced is definitely related to the output of a volumetric pump; Telemotors**

- CL M 19/00 **Testing fluid-pressure actuator systems or apparatus, so far as not provided for elsewhere**
 - CL M 20/00 **Safety arrangements for fluid actuator systems; Applications of safety devices in fluid actuator systems; Emergency measures for fluid actuator systems**
 - CL M 21/00 **Common features of fluid actuator systems; Fluid-pressure actuator systems, or details thereof, not covered by any other group of this subclass**
-

ANNEX 189E F16B [Project-Rapporteur : M031/IB] <CE40>

- CL M Title **DEVICES FOR FASTENING OR SECURING CONSTRUCTIONAL ELEMENTS OR MACHINE PARTS TOGETHER, e.g. NAILS, BOLTS, CIRCLIPS, CLAMPS, CLIPS, WEDGES; JOINTS OR JOINTING** (couplings for transmitting rotation **F16D**)

CL M Guidance **Fastenings for constructional elements or machine parts in general**
heading
2/00-
9/00

CL M Guidance **Fastening means without screw-thread**
heading
15/00-
21/00

- CL M 17/00 **Fastening means without screw-thread for connecting constructional elements or machine parts by a part of or on one member entering a hole in the other** (construction of bolts, pins, or rivets **F16B 19/00**; riveting **F16B 19/04**; means for preventing withdrawal of a pin, spigot, or the like from its operative position, stud-and-socket releasable fastenings **F16B 21/00**)

- CL M 21/00 **Means without screw-thread for preventing relative axial movement of a pin, spigot, shaft, or the like and a member surrounding it** (riveted or deformable spigots **F16B 19/04**; for gudgeon pins **F16J 1/18**) ; **Stud-and-socket releasable fastenings without screw-thread**

CL M Guidance **Fastening means using screw-thread**
heading
23/00-
39/00

- CL M 29/00 **Screwed connection with deformation of nut or auxiliary member while fastening** (wall-dowels **F16B 13/00**; members deformed for locking screws, bolts or nuts **F16B 39/22**)

- CL M 33/00 **Features common to bolt and nut** (wall-dowels **F16B 13/00**)

- CL M 35/00 **Screw-bolts; Stay bolts; Screw-threaded studs; Screws; Set screws** (wall-dowels **F16B 13/00**; thread-cutting screws **F16B 25/00**)

- CL M 37/00 **Nuts or like thread-engaging members** (wall-dowels **F16B 13/00**)

- CL M **39/00 Locking of screws, bolts, or nuts** (wall-dowels **F16B 13/00**; locking of bottle closures **B65D**; locking of rail-fastening bolts for permanent ways **E01B 9/12**; locking of fastening means for railway fishplates **E01B 11/38**; locking devices for valves or cocks **F16K**)
-

ANNEX 190E F16C [Project-Rapporteur : M031/IB] <CE40>

- CL M Guidance **Bearings**
heading
17/00-
32/00

- CL M **17/00 Sliding-contact bearings for exclusively rotary movement** (**F16C 32/06** takes precedence; adjustable bearings **F16C 23/00**, **F16C 25/00**)

- CL M **19/00 Bearings with rolling contact, for exclusively rotary movement** (adjustable bearings **F16C 23/00**, **F16C 25/00**)

- CL M **21/00 Combinations of sliding-contact bearings with ball or roller bearings, for exclusively rotary movement** (**F16C 17/24**, **F16C 19/52** take precedence)

- CL M **23/00 Bearings for exclusively rotary movement adjustable for aligning or positioning** (**F16C 27/00** takes precedence)

- CL M **25/00 Bearings for exclusively rotary movement adjustable for wear or play** (**F16C 27/00** takes precedence)

- CL M **27/00 Elastic or yielding bearings or bearing supports, for exclusively rotary movement** (shock-damping bearings for watches or clocks **G04B 31/02**)

- CL D Guidance < Deleted / Supprimé >
heading /
Rubrique
d'orientation
29/00-
32/00

- CL M **41/00 Other accessories for bearings**
-

ANNEX 191E F16D [Project-Rapporteur : M031/IB] <CE40>

- CL M **Title COUPLINGS FOR TRANSMITTING ROTATION** (gearing for conveying rotation **F16H**, e.g. fluid gearing **F16H 39/00-F16H 47/00**) ; **CLUTCHES** (dynamo-electric clutches **H02K 49/00**; clutches using electrostatic attraction **H02N 13/00**) ; **BRAKES** (electrodynamic brake systems for vehicles in general **B60L**; dynamo-electric brakes **H02K 49/00**)

- CL M Guidance **Couplings**
heading
1/00-
9/00

- CL M 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**; fluid couplings **F16D 31/00-F16D 39/00**)
- CL M 5/00 **Impulse couplings, i.e. couplings that alternately accelerate and decelerate the driven member** (fluid couplings **F16D 31/00-F16D 39/00**)
- CL M Guidance **Clutches with mechanically-actuated clutching members; Synchronisation**
heading **arrangements for clutches**
11/00-
23/00
- CL M 11/00 **Clutches in which the members have interengaging parts** (arrangements for synchronisation **F16D 23/02**; automatic clutches **F16D 43/00-F16D 45/00**; external control **F16D 48/00**)
- CL M 13/00 **Friction clutches** (arrangements for synchronisation **F16D 23/02**; automatic clutches **F16D 43/00-F16D 45/00**; external control **F16D 48/00**)
- CL M 15/00 **Clutches with wedging balls or rollers or with other wedgeable separate clutching members** (freewheels, freewheel clutches **F16D 41/00**; automatic clutches **F16D 43/00-F16D 45/00**; external control **F16D 48/00**)
- CL M 17/00 **Clutches in which the drive is transmitted solely by virtue of the eccentricity of the contacting surfaces of clutch members which fit one around the other** (automatic clutches **F16D 43/00-F16D 45/00**; external control **F16D 48/00**)
- CL M 19/00 **Clutches with mechanically-actuated clutching members not otherwise provided for** (automatic clutches **F16D 43/00-F16D 45/00**; external control **F16D 48/00**)
- CL M 21/00 **Systems comprising a plurality of mechanically-actuated clutches** (for synchronisation **F16D 23/04**; automatic clutches **F16D 43/00-F16D 45/00**; external control **F16D 48/00**)
- CL M 23/00 **Details of mechanically-actuated clutches not specific for one distinct type; Synchronisation arrangements for clutches**
- CL M 23/02 · Arrangements for synchronisation (shape or mounting of interengaging parts of clutch members to facilitate engagement **F16D 11/08**)
- CL M Guidance **Clutches actuated non-mechanically**
heading
25/00-
29/00
- CL M 25/00 **Fluid-actuated clutches** (arrangements for synchronisation **F16D 23/02**; fluid clutches **F16D 31/00-F16D 39/00**; automatic clutches **F16D 43/00-F16D 45/00**; external control **F16D 48/00**)
- CL M 27/00 **Magnetically-actuated clutches; Control or electric circuits therefor** (arrangements for synchronisation **F16D 23/02**; clutches with magnetisable particles **F16D 37/02**; automatic clutches **F16D 43/00-F16D 45/00**; circuits for external control **F16D 48/00**)
- CL M 28/00 **Electrically-actuated clutches** (arrangements for synchronisation **F16D 23/02**; clutches actuated directly by means of an electromagnet **F16D 27/00**; automatic clutches **F16D 43/00-F16D 45/00**; external control **F16D 48/00**)

CL M Guidance Couplings or clutches with a fluid or semifluid as power-transmitting means
heading
31/00-
39/00

CL M Guidance Freewheels or freewheel clutches; Automatic clutches
heading
41/00-
45/00

CL N *Note* Groups **F16D 31/00-F16D 39/00** take precedence over groups **F16D 41/00-F16D 45/00**. [new]

CL M Guidance Brakes
heading
49/00-
66/00

CL M **65/00 Parts or details of brakes** (similar members for clutches **F16D 13/58**)

CL M **66/00 Arrangements for monitoring working conditions of brakes, e.g. wear or temperature**

ANNEX 192E F16H [Project-Rapporteur : M031/IB] <CE40>

- CL M Note
F16H
1. *Combinations including mechanical gearings are classified in groups **F16H 37/00** or **F16H 47/00**, unless they are provided for in groups **F16H 1/00-F16H 35/00**. [new]*
 2. In this subclass, sets of rigidly-connected members are regarded as single members.
 3. In this subclass, the following terms or expressions are used with the meanings indicated:
 - "toothed gearing" includes worm gearing and other gearing involving at least one wheel or sector provided with teeth or the equivalent, except gearing with chains or toothed belts, which is treated as friction gearing;
 - "conveying motion" includes transmitting energy, and means that the applied and resultant motions are of the same kind, though they may differ in, e.g. speed, direction, extent;
 - "rotary" implies that the motion may continue indefinitely.
 - "oscillating" means moving about an axis to an extent which is limited by the construction of the gearing and which may exceed one revolution, the movement being alternately forwards and backwards during continued operation of the gearing;
 - "reciprocating" means moving substantially in a straight line, the movement being alternately forwards and backwards during continued operation of the gearing;
 - "reversing" or "reversal" means that an applied movement in one direction may produce a resultant movement in either of two opposed directions at will;
 - "central gears" includes any gears whose axis is the main axis of the gearing.

4. Attention is drawn to the following places:

A01D 69/06	Gearings in harvesters or mowers
A63H 31/00	Gearing for toys
B21B 35/12	Toothed-wheel gearing for metal-rolling mills
B60K	Arrangement of transmissions in vehicles
B61C 9/00	Transmissions for railway locomotives
B62D 3/00	Vehicle steering gears
B62M	Transmissions for cycles
B63H 23/00	Transmissions for marine propulsion
B63H 25/00	Marine steering gears
F01-F04	Machines, engines, pumps
F15B 15/00	Gearings associated with fluid-actuated devices
G01D 5/04	Gearing used in indicating or recording apparatus in connection with measuring devices
H03J 1/00	Driving arrangements for tuning resonant circuits
H04L 13/04	Driving mechanisms for apparatus for transmission of coded digital information. [5]

CL M Guidance **Gearing for conveying rotary motion by endless flexible members**
heading
7/00-
9/00

CL M **7/00 Gearings for conveying rotary motion by endless flexible members** (specific for conveying rotary motion with variable gear ratio or for reversing rotary motion **F16H 9/00**; flexible members, e.g. belts or chains per se **F16G**)

CL M **9/00 Gearings for conveying rotary motion with variable gear ratio, or for reversing rotary motion, by endless flexible members** (control of change-speed or reversing-gearings conveying rotary motion **F16H 59/00-F16H 63/00**; flexible members, e.g. belts or chains per se **F16G**)

CL M Guidance **Gearing for conveying or converting motion by means of levers, links, cams or screw-and-nut mechanisms**
heading
21/00-
25/00

CL M **37/00 Combinations of mechanical gearings, not provided for in groups **F16H 1/00-F16H 35/00**** (combinations of mechanical gearing with fluid clutches or fluid gearing **F16H 47/00**; applications of underdrives or overdrives in motor vehicles, combinations with differential gearings in motor vehicles **B60K**)

CL M Guidance **Fluid gearing**
heading
39/00-
47/00

- CL M 39/00 **Rotary fluid gearing using pumps and motors of the volumetric type, i.e. passing a predetermined volume of fluid per revolution** (control of exclusively fluid gearing **F16H 61/38**; fluid couplings or clutches with pumping sets of volumetric type **F16D 31/00**; application to lifting or pushing equipment **B66F**)
- CL M 41/00 **Rotary fluid gearing of the hydrokinetic type** (control of exclusively fluid gearing **F16H 61/38**; rotary fluid couplings or clutches of the hydrokinetic type **F16D 33/00**)
- CL M Guidance **Details of gearing or mechanisms**
heading
51/00-
57/00
- CL M 51/00 **Levers of gearing mechanisms** (shafts, Bowden mechanisms, cranks, eccentrics, bearings, pivotal connections, crossheads, connecting-rods **F16C**; manipulating levers **G05G**)
- CL M 53/00 **Cams or cam-followers, e.g. rollers for gearing mechanisms** (shafts, Bowden mechanisms, cranks, eccentrics, bearings, pivotal connections, crossheads, connecting-rods **F16C**; cams specially adapted for reciprocating-piston liquid engines **F03C 1/30**)
- CL M 55/00 **Elements with teeth or friction surfaces for conveying motion; Worms, pulleys or sheaves for gearing mechanisms** (of screw-and-nut gearing **F16H 25/00**; shafts, Bowden mechanisms, cranks, eccentrics, bearings, pivotal connections, crossheads, connecting-rods **F16C**; chains, belts **F16G**; pulley-blocks for lifting or hauling appliances **B66D 3/04**)
- CL M 57/00 **General details of gearing** (of fluid gearing **F16H 39/00-F16H 43/00**; of screw-and-nut gearing **F16H 25/00**; shafts, Bowden mechanisms, cranks, eccentrics, bearings, pivotal connections, crossheads, connecting-rods **F16C**)
- CL M Guidance **Control of gearing conveying rotary motion**
heading
59/00-
63/00
- CL M 61/66 · specially adapted for continuously variable gearings (**F16H 61/38** takes precedence; orbital toothed gearings with a secondary drive in order to vary the speed continuously **F16H 3/72**)

ANNEX 193E F16K

[Project-Rapporteur : M031/IB] <CE40>

- CL M Guidance **Constructional types**
heading
1/00-
13/00
-

ANNEX 194E F16L [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance **Pipe joints; Hose nipples**
heading
13/00-
49/00

ANNEX 195E F16N [Project-Rapporteur : M032/IB] <CE40>

CL M 3/00 **Devices for supplying lubricant by manual action**

CL M 7/00 **Arrangements for supplying oil or unspecified lubricant from a stationary reservoir or the equivalent in or on the machine or member to be lubricated**

AL M 7/08 · · controlled by means of the temperature of the member to be lubricated

AL M 7/14 · the lubricant being conveyed from the reservoir by mechanical means (by pumping devices **F16N 7/36, F16N 7/38**)

AL M 7/16 · · the oil being carried up by a lifting device

AL M 7/26 · · Splash lubrication

AL M 7/30 · the oil being fed or carried along by another fluid

AL M 7/32 · · Mist lubrication

AL M 7/34 · · · Atomising devices for oil

AL M 11/08 · with mechanical drive, other than directly by springs or weights (lubricating-pumps **F16N 13/00**)

CL M 13/00 **Lubricating-pumps** (oil cans with pump **F16N 3/08**)

AL M 13/22 · with distributing equipment

CL M 15/00 **Lubrication with substances other than oil or grease; Lubrication characterised by the use of particular lubricants in particular apparatus or conditions** (**F16N 17/00** takes precedence; lubricating compositions, selection of particular substances as lubricants in general **C10M**; lubrication specially adapted to machines or apparatus provided for in a single other class, see the relevant class for the machine or apparatus)

AL M 15/04 · with water

AL M 17/02 · at high temperature

AL M 17/04 · at low temperature

AL M 17/06 · in vacuum or under reduced pressure (of rotary anodes of X-ray tubes **H01J 35/10**)

CL M **21/00 Conduits; Junctions; Fittings for lubrication apertures**

CL M **23/00 Special adaptations of check valves**

CL M **25/00 Distributing equipment** (combined with oil pump **F16N 13/22**)

AL M 25/04 · with rotary distributing member

CL M **27/00 Proportioning devices**

AL M 27/02 · Gating equipment

CL M **29/00 Special means in lubricating arrangements or systems providing for the indication or detection of undesired conditions; Use of devices responsive to conditions in lubricating arrangements or systems** (constructions of apparatus outside the lubricating arrangements or systems, see the relevant classes)

CL M **31/00 Means for collecting, retaining, or draining-off lubricant in or on machines or apparatus**

CL M **35/00 Storage of lubricants in engine-rooms or the like**

AL M 39/02 · by cooling

AL M 39/04 · by heating

AL M 39/06 · by filtration

AL M 39/08 · by diluting, e.g. by addition of fuel

ANNEX 196E F21 [**Project-Rapporteur : C438/US**] <CE40>

CL M Note Attention is drawn to Note III of Section H, and in particular that subclass **H05B** covers
F21 electrical aspects of the same technical subjects that are covered by class **F21**.

ANNEX 197E F21H [**Project-Rapporteur : M099/IB**] <CE40>

CL N **7/00 Other incandescent bodies**

ANNEX 198E F21L [**Project-Rapporteur : C438/US**] <CE40>

CL M Title **LIGHTING DEVICES OR SYSTEMS THEREOF, BEING PORTABLE OR SPECIALLY ADAPTED FOR TRANSPORTATION** (burners **F23D**)

CL M Note 1. This subclass covers devices or systems designed or specially adapted to be carried,
F21L e.g. by hand, or otherwise transported from place to place, e.g. on wheeled supports,

in order to provide illumination as and where required. [7]

2. This subclass does not cover devices or systems intended for fixed installation, e.g. vehicle lighting, or for use essentially at a permanent location, which are covered by subclass **F21S**. [7]
3. *Non-electric lighting devices are classified in groups **F21L 17/00-F21L 26/00** only if a special adaptation related to the use of a non-electric light source is of interest.* [new]

CL D Guidance < Deleted >
heading
2/00-
14/00

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

CL M **4/00 Electric lighting devices with self-contained electric batteries or cells**

CL M **13/00 Electric lighting devices with built-in electric generators** (with solar cells **F21L 4/00**)

CL M **14/00 Electric lighting devices without a self-contained power source, e.g. for mains connection**

CL D Guidance < Deleted >
heading
17/00-
26/00

CL M **17/00 Non-electric torches; Non-electric flares**

CL M **19/00 Non-electric lanterns, e.g. hurricane lamps, candle lamps** (candle holders **F21V 35/00**)

CL M **21/00 Non-electric pocket-lamps, e.g. lamps producing sparks**

CL M **23/00 Non-electric hand-lamps for miners**

CL U **26/00** < unchanged >

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

ANNEX 199E F21S [Project-Rapporteur : M014/IB] <CE40>

CL M Title **NON-PORTABLE LIGHTING DEVICES OR SYSTEMS THEREOF** (burners **F23D**)

ANNEX 200E F21S [Project-Rapporteur : C438/US] <CE40>

- CL M Note F21S
1. This subclass covers devices or systems intended for fixed installation, e.g. vehicle lighting, or for use at a permanent location, e.g. free-standing floor- or table-lamps. [7]
 2. This subclass does not cover devices or systems specially adapted for transportation, which are covered by subclass **F21L**. [7]
 3. *Non-electric lighting devices or systems are classified in groups **F21S 11/00-F21S 15/00** only if a special adaptation related to the use of a non-electric light source is of interest.* [new]

ANNEX 201E F21S [Project-Rapporteur : M014/IB] <CE40>

CL D Guidance < Deleted >
heading
2/00-
10/00

CL M 2/00 **Systems of lighting devices, not provided for in main groups **F21S 4/00-F21S 10/00** or **F21S 19/00**, e.g. of modular construction**

CL M 4/00 **Lighting devices or systems using a string or strip of light sources**

CL M 6/00 **Lighting devices intended to be free-standing (**F21S 9/00**, **F21S 10/00** take precedence)**

CL M 8/00 **Lighting devices intended for fixed installation (**F21S 9/00**, **F21S 10/00** take precedence; using a string or strip of light sources **F21S 4/00**)**

CL M 9/00 **Lighting devices with a built-in power supply; Systems employing lighting devices with a built-in power supply**

CL M 10/00 **Lighting devices or systems producing a varying lighting effect**

CL D Guidance < Deleted >
heading
11/00-
15/00

CL M 11/00 **Non-electric lighting devices or systems using daylight (windows or the like **E06B**)**

CL M 13/00 **Non-electric lighting devices or systems employing a point-like light source (candle holders **F21V 35/00**) ; Non-electric lighting devices or systems employing a light source of unspecified shape**

CL M 15/00 **Non-electric lighting devices or systems employing light sources not covered by main groups **F21S 11/00**, **F21S 13/00** or **F21S 19/00****

CL M 19/00 **Lighting devices or systems employing combinations of electric and non-electric light sources; Replacing or exchanging electric light sources with non-electric light sources or vice versa**

ANNEX 202E F21V [Project-Rapporteur : C438/US] <CE40>

- AL M Note
F21V
1. Groups **F21V 1/00-F21V 14/00** cover details of those parts involved in light emission or distribution. Groups **F21V 15/00-F21V 31/00** cover details of those parts not so involved. [new]
 2. Details of non-electric lighting devices or systems are classified in groups **F21V 35/00-F21V 37/00** only if a special adaptation related to the use of a non-electric light source is of interest. [new]
 3. In this subclass, it is desirable to add the indexing codes of subclasses **F21W** and **F21Y**. [7]

- CL N Note
only F21V
1. Groups **F21V 1/00-F21V 14/00** cover details of those parts involved in light emission or distribution. Groups **F21V 15/00-F21V 31/00** cover details of those parts not so involved. [new]
 2. Details of non-electric lighting devices or systems are classified in groups **F21V 35/00-F21V 37/00** only if a special adaptation related to the use of a non-electric light source is of interest. [new]

CL D Guidance < Deleted >
heading
1/00-
14/00

CL M **1/00 Shades for light sources**

CL M **5/00 Refractors for light sources**

CL M **7/00 Reflectors for light sources**

CL M **11/00 Screens not covered by groups **F21V 1/00, F21V 3/00, F21V 7/00** or **F21V 9/00****

CL D Guidance < Deleted >
heading
15/00-
37/00

CL M **29/00 Cooling or heating arrangements** (cooling of air-treatment systems with air-flow over only lighting fixtures **F24F 3/056**; lighting fixtures combined with outlets for air-treatment systems **F24F 13/078**; cooling of projectors **G03B 21/16**; cooling arrangements structurally associated with electric lamps **H01J 61/02, H01K 1/00**)

AL M **29/00 Cooling or heating arrangements** (cooling of air-treatment systems with air-flow over lighting fixtures **F24F 3/056**; lighting fixtures combined with outlets for air-treatment systems **F24F 13/078**; cooling of projectors **G03B 21/16**)

CL D Note < Deleted >
33/00

ANNEX 203E F22B [Project-Rapporteur : M014/IB] <CE40>

CL D Guidance < Deleted / Supprimé >
heading /
Rubrique
d'orientation
1/00

CL M **3/00 Other methods of steam generation; Steam boilers not provided for in other groups of this subclass**

CL D Guidance < Deleted / Supprimé >
heading /
Rubrique
d'orientation
5/00- 31/00

AL M 37/34 · · Adaptations of boilers for promoting water circulation (auxiliary devices for promoting water circulation **F22D 7/00**)

ANNEX 204E F22D [Project-Rapporteur : M014/IB] <CE40>

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

CL M **7/00 Auxiliary devices for promoting water circulation** (adaptation of boilers for promoting water circulation **F22B 37/34**)

ANNEX 205E F23B [Project-Rapporteur : M032/IB] <CE40>

CL M Title **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 simultaneously or alternately **F23C, F23D 17/00**)

ANNEX 206E F23C [Project-Rapporteur : M032/IB] <CE40>

CL M Title **METHODS OR APPARATUS FOR COMBUSTION USING FLUENT FUEL** (burners **F23D**)

AL M 6/04 · in series connection

AL M 7/02 · Disposition of air supply not passing through burner

ANNEX 207E F23G [Project-Rapporteur : M032/IB] <CE40>

CL M 5/00 **Incineration of waste; Incinerator constructions; Details, accessories or control therefor**

CL M 5/027 · · pyrolysing or gasifying stage (pyrolysis of sludge [C02F 11/00](#))

CL M 7/00 **Incinerators or other apparatus specially adapted for consuming specific waste or low grade fuels, e.g. chemicals** ([F23G 1/00](#) takes precedence; incinerator closets [A47K 11/02](#); incinerating radioactive waste [G21F 9/00](#))

CL M 7/06 · of waste gases or noxious gases, e.g. exhaust gases (of uncombusted material from primary combustion within apparatus for combustion of solid or fluent fuel [F23B](#), [F23C](#))

ANNEX 208E F24F [Project-Rapporteur : M031/IB] <CE40>

CL M 1/00 **Room units for air-conditioning, e.g. receiving primary air from a central station**

ANNEX 209E F25C [Project-Rapporteur : M014/IB] <CE40>

CL M **Title PRODUCTION, WORKING, STORING OR DISTRIBUTION OF ICE** (frozen sweets, including ice-cream, their production [A23G 9/00](#); concentrating solutions by removing frozen solvents [B01D 9/04](#); purification of water by freezing [C02F 1/22](#); refrigeration machines, plants, or systems [F25B](#); solidification of gases or gaseous mixtures [F25J](#); freeze-drying [F26B](#))

ANNEX 210E F25C [Project-Rapporteur : C439/SE] <CE40>

CL M 3/00 **Methods or apparatus specially adapted for the production of ice or snow for winter sports or similar recreational purposes, e.g. for sporting installations; Production of artificial snow** (foundations or pavings for artificial surfaces for outdoor or indoor practice of snow or ice sports [E01C 13/10](#); working on surfaces of snow or ice in order to make them suitable for traffic or sporting purposes [E01H 4/00](#))

AL M 3/02 · for ice rinks

AL M 3/04 · for sledging trails or ski trails; Production of artificial snow

ANNEX 211E F25C [Project-Rapporteur : M014/IB] <CE40>

CL M 5/00 Working, storing or distribution of ice

ANNEX 212E F25D [Project-Rapporteur : M031/IB] <CE40>

- CL M Note
F25D
1. *Devices associated with refrigerating machinery are classified in groups **F25D 11/00-F25D 16/00**. [new]*
 2. In this subclass, the following term is used with the meaning indicated:
 - "device" means an enclosed space to be cooled; such devices being associated either with refrigerating machinery, e.g. in a refrigerator, or with other cold sources, e.g. in an ice-box.
 3. Attention is drawn to Note (2) following the title of subclass **F24F**. [5]

CL M Subclass
index

DEVICES NOT ASSOCIATED WITH
REFRIGERATING MACHINERY

Using cold air or water; other cold materials or bodies **1/00; 3/00**

Using endothermic chemical reactions, or evaporation
without recovery **5/00, 7/00**

Other devices, combinations **9/00**

DEVICES ASSOCIATED WITH REFRIGERATING
MACHINERY: SELF-CONTAINED MOVABLE;
STATIONARY; OTHER

11/00; 13/00; 15/00

In combination with a cooling mode not associated
with refrigerating machinery **16/00**

STRUCTURAL PARTS OR ARRANGEMENTS, OF
GENERAL APPLICATION: DEFROSTING;
GENERAL FEATURES; HANDLING OF ARTICLES
TO BE COOLED

21/00; 23/00; 25/00

CIRCULATING COOLING FLUID OR GAS;
LIGHTING **17/00; 27/00**

ARRANGEMENT OR MOUNTING: OF
REFRIGERATION UNITS; OF CONTROL OR
SAFETY DEVICES **19/00; 29/00**

OTHER APPARATUS **31/00**

CL M 9/00 **Devices not associated with refrigerating machinery and not covered by groups **F25D 1/00-F25D 7/00**; Combinations of devices covered by two or more of the groups **F25D 1/00-F25D 7/00****

CL M 11/00 **Self-contained movable devices associated with refrigerating machinery, e.g. domestic refrigerators**

CL M 13/00 **Stationary devices associated with refrigerating machinery, e.g. cold rooms**

CL M 15/00 **Devices associated with refrigerating machinery not covered by group F25D 11/00 or F25D 13/00, e.g. non-self-contained movable devices**

ANNEX 213E F27B [Project-Rapporteur : M014/IB] <CE40>

CL M 19/00 **Combinations of different kinds of furnace that are not all covered by any single one of main groups F27B 1/00-F27B 17/00**

ANNEX 214E F41J [Project-Rapporteur : C445/SE] <CE40>

CL M Subclass
index

TARGETS

Stationary or movable	1/00, 7/00, 9/00
Reflecting or active	2/00
Specially adapted for arrows or darts	3/00
TARGET-HIT INDICATORS OR RECORDERS	5/00
TARGET STANDS; TARGET RANGES	1/00; 11/00
BULLET CATCHERS	13/00

CL M 1/00 **Targets; Target stands; Target holders (F41J 2/00 to F41J 11/00 take precedence; targets combined with bullet catchers F41J 13/02)**

AL D 1/12 (transferred to F41J 13/00)

AL D 1/14 (transferred to F41J 13/02)

AL D 1/18 (transferred to F41J 11/00)

AL D 1/20 (transferred to F41J 11/02)

CL N 11/00 *Target ranges*

AL N 11/02 • *Safety means therefor*

CL N 13/00 *Bullet catchers*

AL N 13/02 • *combined with targets*

ANNEX 215E F42D [Project-Rapporteur : M099/IB] <CE40>

CL D 7/00 (transferred to F42D 99/00)

CL N 99/00 *Subject matter not provided for in other groups of this subclass*

ANNEX 216E G01 [Project-Rapporteur : M032/IB] <CE40>

CL M Title **MEASURING; TESTING**

ANNEX 217E G01B [Project-Rapporteur : M032/IB] <CE40>

CL M Title **MEASURING LENGTH, THICKNESS OR SIMILAR LINEAR DIMENSIONS; MEASURING ANGLES; MEASURING AREAS; MEASURING IRREGULARITIES OF SURFACES OR CONTOURS**

CL M 9/04 · Measuring microscopes

CL M 9/06 · Measuring telescopes

CL M 11/14 · for measuring distance or clearance between spaced objects or spaced apertures (**G01B 11/26** takes precedence; rangefinders **G01C 3/00**)

ANNEX 218E G01C [Project-Rapporteur : M032/IB] <CE40>

CL M Title **MEASURING DISTANCES, LEVELS OR BEARINGS; SURVEYING; NAVIGATION; GYROSCOPIC INSTRUMENTS; PHOTOGRAMMETRY OR VIDEOGRAMMETRY** (measuring liquid level **G01F**; radio navigation, determining distance or velocity by use of propagation effects, e.g. Doppler effect, propagation time, of radio waves, analogous arrangements using other waves **G01S**)

CL M **1/00 Measuring angles**

AL M 1/10 · · including an artificial horizon (**G01C 1/14** takes precedence)

AL M 1/12 · · · with a stabilised mirror

AL M 1/14 · · Periscopic sextants

CL M **3/00 Measuring distances in line of sight; Optical rangefinders** (tapes, chains, or wheels for measuring length **G01B 3/00**; active triangulation systems, i.e. using the transmission and reflection of electromagnetic waves other than radio waves, **G01S 17/48**)

AL M 3/04 · · Adaptation of rangefinders for combination with telescopes or binoculars

AL M 3/22 · using a parallactic triangle with variable angles and a base of fixed length at, near, or formed by, the object

AL M 3/24 · using a parallactic triangle with fixed angles and a base of variable length in the observation station, e.g. in the instrument

AL M 3/26 · using a parallactic triangle with fixed angles and a base of variable length at, near, or formed by, the object

- CL M **5/00 Measuring height; Measuring distances transverse to line of sight; Levelling between separated points; Surveyors' levels** (**G01C 3/20**, **G01C 3/30** take precedence)
- AL M 5/02 · · · · · involving automatic stabilisation of the line of sight
- AL M 5/06 · · · · · by using barometric means
- CL M **7/00 Tracing profiles** (by photogrammetry or videogrammetry **G01C 11/00**)
- CL M **11/00 Photogrammetry or videogrammetry, e.g. stereogrammetry; Photographic surveying**
- AL M 11/10 · · · · · using computers to control the position of the pictures
- AL M 11/26 · · · · · using computers to control the position of the pictures
- CL M **13/00 Surveying specially adapted to open water, e.g. sea, lake, river, canal** (liquid level metering **G01F**)
- CL M 15/14 · · · · · Artificial horizons
- CL M **17/00 Compasses; Devices for ascertaining true or magnetic north for navigation or surveying purposes** (using gyroscopic effect **G01C 19/00**)
- AL M 19/08 · · · · · electrically driven (**G01C 19/14** takes precedence)
- AL M 19/16 · · · · · Suspensions; Bearings
- AL M 19/26 · · · · · Caging, i.e. immobilising moving parts, e.g. for transport
- AL M 19/32 · · · · · Indicating or recording means specially adapted for rotary gyroscopes
- AL M 19/60 · · · · · Electronic or nuclear magnetic resonance gyrometers
- AL M 19/66 · · · · · Ring laser gyrometers
- CL M **21/00 Navigation; Navigational instruments not provided for in groups G01C 1/00-G01C 19/00** (measuring distance traversed on the ground by a vehicle **G01C 22/00**; control of position, course, altitude or attitude of vehicles **G05D 1/00**; traffic control systems for road vehicles involving transmission of navigation instructions to the vehicle **G08G 1/0968**)
- CL M 21/02 · · · · · by astronomical means (**G01C 21/24**, **G01C 21/26** take precedence)
- CL M 21/04 · · · · · by terrestrial means (**G01C 21/24**, **G01C 21/26** take precedence)
- CL M 21/20 · · · · · Instruments for performing navigational calculations (**G01C 21/24**, **G01C 21/26** take precedence)
- AL M 21/22 · · · · · Plotting boards
- CL M **22/00 Measuring distance traversed on the ground by vehicles, persons, animals, or other moving solid bodies, e.g. using odometers, using pedometers**
-

ANNEX 219E G01L [Project-Rapporteur : M031/IB] <CE40>

CL Guidance < Become(s) / Deviennent/Deviendra 7/00-21/00 >
heading /
Rubrique
d'orientation
7/00- 23/00

CL M 13/00 Devices or apparatus for measuring differences of two or more fluid pressure values

CL M 15/00 Devices or apparatus for measuring two or more fluid pressure values simultaneously

ANNEX 220E G01S [Project-Rapporteur : M032/IB] <CE40>

CL M Title **RADIO DIRECTION-FINDING; RADIO NAVIGATION; DETERMINING DISTANCE OR VELOCITY BY USE OF RADIO WAVES; LOCATING OR PRESENCE-DETECTING BY USE OF THE REFLECTION OR RERADIATION OF RADIO WAVES; ANALOGOUS ARRANGEMENTS USING OTHER WAVES**

AL M 1/72 · using ultrasonic, sonic, or infrasonic waves

AL M 1/76 · · Systems for determining direction or position line

CL M 3/00 **Direction-finders for determining the direction from which infrasonic, sonic, ultrasonic, or electromagnetic waves, or particle emission, not having a directional significance, are being received** (position-fixing by co-ordinating a plurality of determinations of direction or position lines **G01S 5/00**)

AL M 3/06 · · · Means for increasing effective directivity, e.g. by combining signals having differently-oriented directivity characteristics, by sharpening the envelope waveform of the signal derived from a rotating or oscillating beam aerial (comparing amplitude of signals having differently-oriented directivity characteristics to determine direction **G01S 3/16, G01S 3/28**)

AL M 3/68 · · · · wherein the timing of the pulse-type envelope signal is indicated by cathode-ray tube

AL M 3/802 · · Systems for determining direction or deviation from predetermined direction

CL M 5/12 · · by co-ordinating position lines of different shape, e.g. hyperbolic, circular, elliptical, radial

AL M 5/28 · · by co-ordinating position lines of different shape, e.g. hyperbolic, circular, elliptical, radial

CL M 7/03 · · Details of HF subsystems specially adapted therefor, e.g. common to transmitter and receiver

CL M 7/292 · · · · Extracting wanted echo-signals

AL M 7/499 · · using polarisation effects

CL M 7/521 · · Constructional features

CL M **11/00 Systems for determining distance or velocity not using reflection or reradiation**
(position-fixing by co-ordinating two or more distance determinations **G01S 5/00**)

AL M 11/08 · · using synchronised clocks

CL M **13/00 Systems using the reflection or reradiation of radio waves, e.g. radar systems;
Analogous systems using reflection or reradiation of waves whose nature or
wavelength is irrelevant or unspecified**

AL M 13/524 · · · · based upon the phase or frequency shift resulting from movement of objects, with
reference to the transmitted signals, e.g. coherent MTi

AL M 13/88 · Radar or analogous systems, specially adapted for specific applications (electromagnetic
prospecting or detecting of objects, e.g. near-field detection, **G01V 3/00**)

AL M 13/89 · · for mapping or imaging

AL M 13/90 < Add 1 dot(s) >

AL M 13/91 · · for traffic control (**G01S 13/93** takes precedence)

AL M 13/92 < Add 1 dot(s) >

AL M 13/93 · · for anti-collision purposes

AL M 13/94 · · for terrain-avoidance

AL M 13/95 · · for meteorological use

AL M 15/88 · Sonar systems, specially adapted for specific applications (seismic or acoustic prospecting
or detecting **G01V 1/00**)

AL M 15/89 · · for mapping or imaging

AL M 15/93 · · for anti-collision purposes

AL M 15/96 · · for locating fish

CL M **17/00 Systems using the reflection or reradiation of electromagnetic waves other than radio
waves, e.g. lidar systems**

AL M 17/08 · · · for measuring distance only (indirect measurement **G01S 17/46**; active triangulation
systems **G01S 17/48**)

AL M 17/48 · · · · Active triangulation systems, i.e. using the transmission and reflection of
electromagnetic waves other than radio waves

AL M 17/89 · · for mapping or imaging

AL M 17/93 · · for anti-collision purposes

AL M 17/95 · · for meteorological use

ANNEX 221E G01T [Project-Rapporteur : M032/IB] <CE40>

- CL M Title **MEASUREMENT OF NUCLEAR OR X-RADIATION** (radiation analysis of materials, mass spectrometry **G01N 23/00**; electric discharge tubes for analysing radiation or particles **H01J 40/00**, **H01J 47/00**, **H01J 49/00**)
- CL M 1/02 · Dosimeters (**G01T 1/15** takes precedence)
- AL M 1/08 · · Photographic dosimeters
- CL M 1/15 · Instruments in which pulses generated by a radiation detector are integrated, e.g. by a diode pump circuit
- AL M 1/161 · · Applications in the field of nuclear medicine, e.g. in vivo counting
- AL M 1/164 · · · Scintigraphy
- AL M 1/169 · · Exploration, location of contaminated surface areas
- AL M 1/175 · · · Power supply circuits
- AL M 1/185 · · with ionisation-chamber arrangements
- AL M 1/24 · · with semiconductor detectors
- AL M 1/28 · · with secondary-emission detectors
- AL M 1/29 · Measurement performed on radiation beams, e.g. position or section of the beam; Measurement of spatial distribution of radiation
- AL M 3/08 · with semiconductor detectors
- CL M **5/00 Recording of movements or tracks of particles** (spark chambers **H01J 47/14**) ;
Processing or analysis of such tracks
- AL M 5/08 · Scintillation chambers (discharge tubes **H01J 40/00**, **H01J 47/00**)
-

ANNEX 222E G01V [Project-Rapporteur : M032/IB] <CE40>

- CL M Title **GEOPHYSICS; GRAVITATIONAL MEASUREMENTS; DETECTING MASSES OR OBJECTS; TAGS** (means for indicating the location of accidentally buried, e.g. snow-buried, persons **A63B 29/02**)
- CL M 1/02 · Generating seismic energy
- AL M 1/157 · · using spark discharges; using exploding wires
- CL M 1/16 · Receiving elements for seismic signals; Arrangements or adaptations of receiving elements

- CL M 1/22 · Transmitting seismic signals to recording or processing apparatus
- AL M 1/24 · Recording seismic data
- CL M **3/00 Electric or magnetic prospecting or detecting; Measuring magnetic field characteristics of the earth, e.g. declination, deviation**
- CL M 3/08 · operating with magnetic or electric fields produced or modified by objects or geological structures or by detecting devices (with electromagnetic waves [G01V 3/12](#))
- CL M 3/38 · Processing data, e.g. for analysis, for interpretation, for correction
- CL M **5/00 Prospecting or detecting by the use of nuclear radiation, e.g. of natural or induced radioactivity**
- AL M 7/08 · using balances
- CL M **8/00 Prospecting or detecting by optical means**
- CL M 8/10 · Detecting, e.g. by using light barriers (by reflection from the object [G01S 17/00](#))
- CL M **15/00 Tags attached to, or associated with, an object, in order to enable detection of the object** (record carriers for use with machines having a detectable tag or marker [G06K 19/00](#))

ANNEX 223E G01V [Project-Rapporteur : M099/IB] <CE40>

- CL N *99/00 Subject matter not provided for in other groups of this subclass*

ANNEX 224E G03B [Project-Rapporteur : M031/IB] <CE40>

- CL M Guidance Details common to at least two of the following types of apparatus: cameras, projectors, printers
heading
1/00-
5/00
- CL M **1/00 Film-strip handling of general interest for cameras, projectors or printers**
- CL M **3/00 Focusing arrangements of general interest for cameras, projectors or printers**
(focusing means, autofocus systems for cameras [G03B 13/00](#); means for automatic focusing of projectors [G03B 21/53](#); means for automatic focusing of projection-printing apparatus or copying cameras [G03B 27/34](#), [G03F](#))
- CL M **5/00 Adjustment of optical system relative to image or object surface other than for focusing of general interest for cameras, projectors or printers**
-

ANNEX 225E G04B [Project-Rapporteur : M031/IB] <CE40>

CL M 11/00 Click devices, stop clicks or clutches for winding

CL M 19/00 **Indicating the time by visual means** (by electric lamps G04C 17/02; display arrangements in general G09)

CL M 21/00 **Indicating the time by acoustic means** (at preselected times G04B 23/00; by electro-acoustic means G04C 21/04; sound-producing apparatus per se G10)

ANNEX 226E G05G [Project-Rapporteur : M099/IB] <CE40>

CL M 25/00 **Other details, features or accessories of control mechanisms, e.g. supporting intermediate members elastically**

ANNEX 227E G06G [Project-Rapporteur : M099/IB] <CE40>

CL N 99/00 *Subject matter not provided for in other groups of this subclass*

ANNEX 228E G06M [Project-Rapporteur : M031/IB] <CE40>

CL M Guidance **Counting of objects**
heading
7/00-
11/00

ANNEX 229E G10L [Project-Rapporteur : M099/IB] <CE40>

CL N 23/00 *Speech analysis not provided for in other groups of this subclass*

ANNEX 230E G11B [Project-Rapporteur : M032/IB] <CE40>

CL M Title **INFORMATION STORAGE BASED ON RELATIVE MOVEMENT BETWEEN RECORD CARRIER AND TRANSDUCER** (recording measured values in a way that does not require playback through a transducer G01D 9/00; recording or playback apparatus using mechanically marked tape, e.g. punched paper tape, or using unit records, e.g. punched or magnetically marked cards G06K; transferring data from one type of record carrier to another G06K 1/18; circuits for coupling output of reproducer to radio receiver H04B 1/20; gramophone pick-ups or like acoustic electromechanical transducers or circuits therefor H04R)

- CL M 3/00 **Recording by mechanical cutting, deforming or pressing, e.g. of grooves or pits; Reproducing by mechanical sensing; Record carriers therefor (G11B 11/00 takes precedence)**
- AL M 3/02 · Arrangements of heads
- AL M 3/54 · · Storing; Manipulating, e.g. feeding styli to and from heads
- AL M 3/58 · Cleaning record carriers or styli, e.g. removing shavings or dust
- AL M 3/60 · Turntables for record carriers
- AL M 3/70 · · characterised by the selection of material or structure; Processes or apparatus specially adapted for manufacturing record carriers
- CL M 5/02 · Recording, reproducing, or erasing methods; Read, write, or erase circuits therefor
- CL M 5/455 · Arrangements for functional testing of heads; Measuring arrangements for heads
- CL M 5/465 · Arrangements for demagnetisation of heads
- CL M 5/62 · Record carriers characterised by the selection of the material
- AL M 5/627 · · of leaders for magnetic tapes, e.g. non-magnetic strips on the tapes or for connection
- CL M 5/68 · · comprising one or more layers of magnetisable particles homogeneously mixed with a bonding agent
- CL M 5/70 · · · on a base layer
- CL M 5/84 · Processes or apparatus specially adapted for manufacturing record carriers
- CL M 7/085 · · with provision for moving the light beam into, or out of, its operative position (modulating by information signals **G11B 7/12**)
- CL M 7/125 · · Optical beam sources therefor; Modulators, e.g. means for controlling the size or intensity of the optical spot or of the optical trace
- CL M 7/13 · · Optical detectors therefor
- CL M 7/20 · · Dual-recording arrangements, i.e. in which the information is recorded in two different forms simultaneously on the same or related tracks, e.g. recording instantaneous and mean values (sound-recording combined with cinematography **G03C 5/14**)
- CL M 7/24 · Record carriers characterised by the selection of the material or by the structure or form (characterised by the arrangement of information on the carrier **G11B 7/007**)
- CL M 7/26 · · Apparatus or processes specially adapted for the manufacture of record carriers
- AL M 15/22 · · Stopping means (slowing-down preparatory to stopping by means which are different from the stopping means **G11B 15/48**; slowing-down preparatory to stopping by a mechanical linkage which is different from the stopping means **G11B 15/50**)
- AL M 15/54 · · · by stroboscope; by tachometer

- CL M 19/00 **Driving, starting, stopping record carriers not specifically of filamentary or web form, or of supports therefor; Control thereof; Control of operating function**
- CL M 19/22 · · Brakes other than speed-regulating brakes
- CL M 19/28 · · Speed controlling, regulating, or indicating (**G11B 19/24** takes precedence)
- CL M 20/06 · · Angle-modulation recording or reproducing
- CL M 20/08 · · Pulse-modulation recording or reproducing (pulse-code-modulation recording **G11B 20/10**)
- CL M 20/10 · Digital recording or reproducing
- CL M 23/02 · Containers; Storing means (cabinets, cases, stands, modified to store record carriers **G11B 33/04**)
- CL M 23/30 · with provision for auxiliary signals
- CL M 25/00 **Apparatus characterised by the shape of record carrier employed but not specific to the method of recording or reproducing**
- CL M 27/02 · Editing, e.g. varying the order of information signals recorded on, or reproduced from, record carriers
- AL M 27/24 · · · by sensing features on the record carrier other than the transducing track
- CL M 31/00 **Arrangements for the associated working of recording or reproducing apparatus with related apparatus** (with cameras or projectors **G03B 31/00**)
- CL M 33/00 **Constructional parts, details or accessories not provided for in the other groups of this subclass**
- CL M 33/02 · Cabinets; Cases; Stands; Disposition of apparatus therein or thereon

ANNEX 231E G21G [Project-Rapporteur : M099/IB] <CE40>

- CL N 7/00 *Conversion of chemical elements not provided for in other groups of this subclass*

ANNEX 232E H01H [Project-Rapporteur : M032/IB] <CE40>

- CL M Title **ELECTRIC SWITCHES; RELAYS; SELECTORS; EMERGENCY PROTECTIVE DEVICES** (contact cables **H01B 7/10**; electrolytic self-interrupters **H01G 9/18**; emergency protective circuit arrangements **H02H**; switching by electronic means without contact-making **H03K 17/00**)
- AL M 1/36 · · by sliding
- AL M 1/58 · Electric connections to or between contacts; Terminals

- AL M 1/64 · Protective enclosures, baffle plates, or screens for contacts
- CL M **3/00 Mechanisms for operating contacts** (thermal actuating or release means [H01H 37/02](#))
- AL M 7/06 · with thermal timing means
- CL M **9/00 Details of switching devices, not covered by groups [H01H 1/00-H01H 7/00](#)**
- AL M 9/10 · Adaptation for built-in fuses (mounting switch and fuse separately on, or in, common support [H02B 1/18](#))
- CL M 9/20 · Interlocking, locking, or latching mechanisms
- AL M 9/46 · · using arcing horns (using blow-out magnet [H01H 9/44](#))
- CL M **11/00 Apparatus or processes specially adapted for the manufacture of electric switches**
(processes specially adapted for manufacture of rectilinearly movable switches having a plurality of operating members associated with different sets of contacts, e.g. keyboards, [H01H 13/88](#))
- CL M 13/02 · Details
- CL M 13/70 · having a plurality of operating members associated with different sets of contacts, e.g. keyboard (mounting together a plurality of independent switches [H02B](#))
- CL M **19/00 Switches operated by an operating part which is rotatable about a longitudinal axis thereof and which is acted upon directly by a solid body external to the switch, e.g. by a hand**
- CL M **27/00 Switches operated by a removable member, e.g. key, plug, plate; Switches operated by setting members according to a single predetermined combination out of several possible settings** (combined with plug-and-socket connectors [H01R 13/70](#); with current-carrying plug [H01R 31/08](#))
- AL M 29/20 · operated by tilting contact-liquid container
- AL M 29/32 · with contact made by a liquid jet, e.g. earthing switch with contact made by jet of water
- CL M **31/00 Air-break switches for high tension without arc-extinguishing or arc-preventing means** (in combination with high tension or heavy-current switches with arc-extinguishing or arc-preventing means [H01H 33/00](#))
- AL M 31/04 · · Interlocking mechanisms
- AL M 31/10 · · · for interlocking two or more switches
- CL M 33/04 · · Means for extinguishing or preventing arc between current-carrying parts
- AL M 33/20 · · · using arcing horns (using blow-out magnet [H01H 33/18](#))
- AL M 33/36 · · · using dynamo-electric motor
- AL M 33/38 · · · using electromagnet

- CL D 33/62 (transferred to **H01H 33/65**)
- AL M 33/64 · · wherein the break is in gas (vacuum switches **H01H 33/66**)
- CL N 33/65 · · · *wherein the break is in air at atmospheric pressure, e.g. in open air*
- CL M **35/00 Switches operated by change of a physical condition** (operated by change of magnetic or electric field **H01H 36/00**; thermally-actuated switches **H01H 37/00**)
- CL M 35/18 · Switches operated by change of liquid level or of liquid density, e.g. float switch (by magnet carried on a float **H01H 36/02**)
- CL M **37/00 Thermally-actuated switches**
- AL M 37/32 · · Thermally-sensitive members
- AL M 37/74 · Switches in which only the opening movement or only the closing movement of a contact is effected by heating or cooling
- AL M 37/76 · · Contact member actuated by melting of fusible material, actuated due to burning of combustible material or due to explosion of explosive material
- CL M **41/00 Switches providing a selected number of consecutive operations of the contacts by a single manual actuation of the operating part**
- CL M **43/00 Time or time-programme switches providing a choice of time-intervals for executing one or more switching actions and automatically terminating their operation after the programme is completed**
- CL M **47/00 Circuit arrangements not adapted to a particular application of the relay and designed to obtain desired operating characteristics or to provide energising current**
- CL M 50/16 · Magnetic circuit arrangements
- AL M 50/44 · Magnetic coils or windings
- CL M 50/54 · Contact arrangements
- CL M **59/00 Electrostatic relays; Electro-adhesion relays**
- CL M **63/00 Details of electrically-operated selector switches**
- CL M **67/00 Electrically-operated selector switches**
- CL M **69/00 Apparatus or processes for the manufacture of emergency protective devices**
- AL M 69/01 · for calibrating or setting of devices to function under predetermined conditions
- CL M 71/08 · Terminals; Connections
- AL M 73/20 · · Terminals; Connections

- CL M 85/00 **Protective devices in which the current flows through a part of fusible material and this current is interrupted by displacement of the fusible material when this current becomes excessive** (switches actuated by melting of fusible material [H01H 37/76](#); disposition or arrangement of fuses on boards [H02B 1/18](#))
- AL M 85/02 · Details
- AL M 85/165 · · · · Casings
- AL M 85/20 · · Bases for supporting the fuse; Separate parts thereof
- AL M 85/25 · · Safety arrangements preventing or inhibiting contact with live parts, including operation of isolation on removal of cover

ANNEX 233E H01L [Project-Rapporteur : M032/IB] <CE40>

- CL M 21/00 **Processes or apparatus specially adapted for the manufacture or treatment of semiconductor or solid state devices or of parts thereof**
- AL M 21/26 · · · · Bombardment with wave or particle radiation
- AL M 21/265 · · · · · producing ion implantation
- AL M 21/31 · · · · · to form insulating layers thereon, e.g. for masking or by using photolithographic techniques (encapsulating layers [H01L 21/56](#)) ; After-treatment of these layers; Selection of materials for these layers
- AL M 21/3205 · · · · · Deposition of non-insulating-, e.g. conductive-, resistive-, layers, on insulating layers; After-treatment of these layers (manufacture of electrodes [H01L 21/28](#))
- AL M 21/425 · · · · · producing ion implantation
- AL M 21/469 · · · · · to form insulating layers thereon, e.g. for masking or by using photolithographic techniques (encapsulating layers [H01L 21/56](#)) ; After-treatment of these layers
- AL M 21/48 · · · Manufacture or treatment of parts, e.g. containers, prior to assembly of the devices, using processes not provided for in a single one of the groups [H01L 21/06-H01L 21/326](#)
- CL M 21/66 · Testing or measuring during manufacture or treatment
- AL M 21/68 · · for positioning, orientation or alignment
- AL M 21/683 · · for supporting or gripping (for positioning, orientation or alignment [H01L 21/68](#))
- AL M 21/98 · · Assembly of devices consisting of solid state components formed in or on a common substrate; Assembly of integrated circuit devices ([H01L 21/50](#) takes precedence)
- CL M 23/32 · Holders for supporting the complete device in operation, i.e. detachable fixtures ([H01L 23/40](#) takes precedence)

- AL M 23/42 · · · Fillings or auxiliary members in containers selected or arranged to facilitate heating or cooling
- CL M 23/48 · Arrangements for conducting electric current to or from the solid state body in operation, e.g. leads, terminal arrangements
- AL M 23/538 · · · the interconnection structure between a plurality of semiconductor chips being formed on, or in, insulating substrates
- AL M 23/60 · · · Protection against electrostatic charges or discharges, e.g. Faraday shields
- CL M 25/00 **Assemblies consisting of a plurality of individual semiconductor or other solid state devices** (devices consisting of a plurality of solid state components formed in or on a common substrate [H01L 27/00](#); assemblies of photoelectronic cells [H01L 31/042](#))
- CL M 27/00 **Devices consisting of a plurality of semiconductor or other solid-state components formed in or on a common substrate** (details thereof [H01L 23/00](#), [H01L 29/00-H01L 51/00](#); assemblies consisting of a plurality of individual solid state devices [H01L 25/00](#))
- CL M 29/00 **Semiconductor devices specially adapted for rectifying, amplifying, oscillating or switching and having at least one potential-jump barrier or surface barrier; Capacitors or resistors with at least one potential-jump barrier or surface barrier, e.g. PN-junction depletion layer or carrier concentration layer; Details of semiconductor bodies or of electrodes thereof** ([H01L 31/00-H01L 47/00](#), [H01L 51/05](#) take precedence; details other than of semiconductor bodies or of electrodes thereof [H01L 23/00](#); devices consisting of a plurality of solid state components formed in or on a common substrate [H01L 27/00](#))
- AL M 29/04 · · · characterised by their crystalline structure, e.g. polycrystalline, cubic, particular orientation of crystalline planes (characterized by physical imperfections [H01L 29/30](#))
- AL M 29/24 · · · including, apart from doping materials or other impurities, only inorganic semiconductor materials not provided for in groups [H01L 29/16](#), [H01L 29/18](#), [H01L 29/20](#), [H01L 29/22](#)
- CL M 31/00 **Semiconductor devices sensitive to infra-red radiation, light, electromagnetic radiation of shorter wavelength, or corpuscular radiation and specially adapted either for the conversion of the energy of such radiation into electrical energy or for the control of electrical energy by such radiation; Processes or apparatus specially adapted for the manufacture or treatment thereof or of parts thereof; Details thereof** ([H01L 51/42](#) takes precedence; devices consisting of a plurality of solid state components formed in, or on, a common substrate, other than combinations of radiation-sensitive components with one or more electric light sources, [H01L 27/00](#))
- CL M 31/058 · · · including means to utilise heat energy, e.g. hybrid systems, or a supplementary source of electric energy
- CL M 31/12 · structurally associated with, e.g. formed in or on a common substrate with, one or more electric light sources, e.g. electroluminescent light sources, and electrically or optically coupled thereto (electroluminescent light sources per se [H05B 33/00](#))
- CL M 31/18 · Processes or apparatus specially adapted for the manufacture or treatment of these devices or of parts thereof

- CL M 33/00 **Semiconductor devices with at least one potential-jump barrier or surface barrier specially adapted for light emission, e.g. infra-red; Processes or apparatus specially adapted for the manufacture or treatment thereof or of parts thereof; Details thereof** (**H01L 51/50** takes precedence; devices consisting of a plurality of components formed in or on a common substrate **H01L 27/15**; semiconductor lasers **H01S 5/00**)
- CL M 35/00 **Thermoelectric devices comprising a junction of dissimilar materials, i.e. exhibiting Seebeck or Peltier effect with or without other thermoelectric effects or thermomagnetic effects; Processes or apparatus specially adapted for the manufacture or treatment thereof or of parts thereof; Details thereof** (devices consisting of a plurality of solid state components formed in or on a common substrate **H01L 27/00**)
- AL M 35/34 · Processes or apparatus specially adapted for the manufacture or treatment of these devices or of parts thereof
- CL M 37/00 **Thermoelectric devices without a junction of dissimilar materials; Thermomagnetic devices, e.g. using Nernst-Ettinghausen effect; Processes or apparatus specially adapted for the manufacture or treatment thereof or of parts thereof** (devices consisting of a plurality of solid state components formed in or on a common substrate **H01L 27/00**)
- CL M 39/24 · Processes or apparatus specially adapted for the manufacture or treatment of devices provided for in group **H01L 39/00** or of parts thereof
- CL M 41/22 · Processes or apparatus specially adapted for the manufacture or treatment of these elements or of parts thereof
- CL M 43/00 **Devices using galvano-magnetic or similar magnetic effects; Processes or apparatus specially adapted for the manufacture or treatment thereof or of parts thereof** (devices consisting of a plurality of solid state components formed in or on a common substrate **H01L 27/00**)
- AL M 43/12 · Processes or apparatus specially adapted for the manufacture or treatment of these devices or of parts thereof
- CL M 49/00 **Solid state devices not provided for in groups **H01L 27/00-H01L 47/00** and **H01L 51/00** and not provided for in any other subclass; Processes or apparatus specially adapted for the manufacture or treatment thereof or of parts thereof**
- AL M 51/54 · · Selection of materials

ANNEX 234E H01P [Project-Rapporteur : M032/IB] <CE40>

- CL M Title **WAVEGUIDES; RESONATORS, LINES, OR OTHER DEVICES OF THE WAVEGUIDE TYPE** (operating at optical frequencies **G02B**)
- CL M 1/04 · Fixed joints
- CL M 1/08 · Dielectric windows
- CL M 1/16 · for mode selection, e.g. mode suppression or mode promotion; for mode conversion

- CL M 1/18 · Phase-shifters (**H01P 1/165** takes precedence)
- CL M 1/20 · Frequency-selective devices, e.g. filters
- AL M 1/28 · · Short-circuiting plungers
- AL M 3/06 · · Coaxial lines
- AL M 3/20 · Quasi-optical arrangements for guiding a wave, e.g. focusing by dielectric lenses
- CL M **5/00 Coupling devices of the waveguide type**
- CL M 5/08 · for linking lines or devices of different kinds (**H01P 1/16**, **H01P 5/04** take precedence; linking lines of the same kind but with different dimensions **H01P 5/02**)
- CL M **7/00 Resonators of the waveguide type**
- CL M **9/00 Delay lines of the waveguide type**
- CL M **11/00 Apparatus or processes specially adapted for manufacturing waveguides or resonators, lines, or other devices of the waveguide type**

ANNEX 235E H02B [Project-Rapporteur : M099/IB] <CE40>

CL N 99/00 *Subject matter not provided for in other groups of this subclass*

ANNEX 236E H02H [Project-Rapporteur : M099/IB] <CE40>

CL N 99/00 *Subject matter not provided for in other groups of this subclass*

ANNEX 237E H03F [Project-Rapporteur : M099/IB] <CE40>

CL M Title **AMPLIFIERS** (measuring, testing **G01R**; optical parametric amplifiers **G02F**; circuit arrangements with secondary emission tubes **H01J 43/30**; masers, lasers **H01S**; dynamo-electric amplifiers **H02K**; control of amplification **H03G**; coupling arrangements independent of the nature of the amplifier, voltage dividers **H03H**; amplifiers capable only of dealing with pulses **H03K**; repeater circuits in transmission lines **H04B 3/36**, **H04B 3/58**; application of speech amplifiers in telephonic communication **H04M 1/60**, **H04M 3/40**)

CL D 21/00 (transferred to **H03F 99/00**)

CL N 99/00 *Subject matter not provided for in other groups of this subclass*

ANNEX 238E H04B [Project-Rapporteur : C435/EP] <CE40>

CL M Title TRANSMISSION (transmission systems for measured values, control or similar signals **G08C**; speech analysis or synthesis **G10L**; coding, decoding or code conversion, in general **H03M**; broadcast communication **H04H**; multiplex systems **H04J**; secret communication **H04K**; transmission of digital information **H04L**; wireless communication networks **H04W**)

ANNEX 239E H04H [Project-Rapporteur : C434/JP] <CE40>

CL M Title BROADCAST COMMUNICATION (multiplex communication **H04J**; pictorial communication aspects of broadcast systems **H04N**)

- CL M Note H04H
1. In this subclass, the following terms or expressions are used with the meaning indicated:
 - “broadcast” is simultaneous distribution of identical signals to plural receiving stations. The term “broadcast” does not include distribution to receiving stations which is controlled by requests or responses from the receiving stations; **[new]**
 - “broadcast information” covers all kinds of information distributed by broadcast systems; **[new]**
 - “broadcast-related information” is information required by services provided via broadcast systems, other than broadcast information; **[new]**
 - “broadcast time” is a time when particular broadcast information exists and is available; **[new]**
 - “broadcast channel” is a channel via which broadcast information is distributed, e.g. carrier waves, time slots, cables or wireless broadcast service areas; **[new]**
 - “broadcast space” is either a set of broadcast channels in which particular broadcast information exists and is available or a geographical area determined by the set of broadcast channels; **[new]**
 - “broadcast space-time” is space-time determined by broadcast space and broadcast time in which particular broadcast information exists and is available; **[new]**
 - “broadcast system” is a system which consists of transmitter, transponder and receiver for broadcast; **[new]**
 - “broadcast-related system” is a system which is directly affected by generation, broadcast, reception or use of broadcast information; **[new]**
 - “broadcast service” is a service directly provided by a broadcast system, i.e. distribution service of broadcast information; **[new]**
 - “broadcast-related service” is a service provided by broadcast-related systems; **[new]**
 - “A with a direct linkage to B” means that A directly affects B or that A is directly affected by B. **[new]**
 2. In this subclass, multi-aspect classification is applied, so that subject matter characterised by aspects covered by more than one of its groups, which is considered to represent information of interest for search, may also be classified in

each of those groups. [new]

- CL D 1/00 (transferred to **H04H 20/00-H04H 60/00**)
- CL D 1/02 (transferred to **H04H 20/76**)
- CL D 1/04 (transferred to **H04H 20/77**)
- CL D 3/00 (transferred to **H04H 20/67**)
- CL D 5/00 (transferred to **H04H 20/00-H04H 60/00**)
- CL D 7/00 (transferred to **H04H 60/04**)
- CL D 9/00 (transferred to **H04H 20/00-H04H 60/00**)
- CL N **20/00** *Arrangements for broadcast or for distribution combined with broadcast*
- CL N 20/02 • *Arrangements for relaying broadcast information*
- CL N 20/10 • *Arrangements for replacing or switching information during the broadcast or during the distribution*
- CL N 20/12 • *Arrangements for monitoring, testing or troubleshooting*
- CL N 20/16 • *Arrangements for broadcast or distribution of identical information repeatedly*
- CL N 20/18 • *Arrangements for synchronising broadcast or distribution via plural systems*
- CL N 20/20 • *Arrangements for broadcast or distribution of identical information via plural systems*
- CL N 20/26 • *Arrangements for switching distribution systems*
- CL N 20/28 • *Arrangements for simultaneous broadcast of plural pieces of information*
- CL N 20/38 • *Arrangements for distribution where lower stations, e.g. receivers, interact with the broadcast*
- CL N 20/40 • *Arrangements for broadcast specially adapted for accumulation-type receivers*
- CL N 20/42 • *Arrangements for resource management*
- CL N 20/44 • *Arrangements characterised by circuits or components specially adapted for broadcast*
- CL N 20/53 • *Arrangements specially adapted for specific applications e.g. for traffic information or for mobile receivers*
- CL N 20/65 • *Arrangements characterised by transmission systems for broadcast*
- CL N 20/67 • • *Common-wave systems, i.e. using separate transmitters operating on substantially the same frequency*

- CL N 20/76 • • *Wired systems*
- CL N 20/77 • • • *using carrier waves*
- CL N 20/86 • *Arrangements characterised by special technical features of the broadcast information, e.g. signal form or information format*
- CL N 20/88 • • *Stereophonic broadcast systems*
- CL N **40/00** ***Arrangements specially adapted for receiving broadcast information***
- CL N 40/09 • *Arrangements for receiving desired information automatically according to timetables*
- CL N 40/18 • *Arrangements characterised by circuits or components specially adapted for receiving*
- CL N **60/00** ***Arrangements for broadcast applications with a direct linkage to broadcast information or to broadcast space-time; Broadcast-related systems***
- CL N 60/02 • *Arrangements for generating broadcast information; Arrangements for generating broadcast-related information with a direct linkage to broadcast information or to broadcast space-time; Arrangements for simultaneous generation of broadcast information and broadcast-related information*
- CL N 60/04 • • *Studio equipment; Interconnection of studios*
- CL N 60/09 • *Arrangements for device control with a direct linkage to broadcast information or to broadcast space-time; Arrangements for control of broadcast-related services*
- CL N 60/25 • *Arrangements for updating broadcast information or broadcast-related information*
- CL N 60/27 • *Arrangements for recording or accumulating broadcast information or broadcast-related information*
- CL N 60/29 • *Arrangements for monitoring broadcast services or broadcast-related services*
- CL N 60/31 • • *Arrangements for monitoring the use made of the broadcast services*
- CL N 60/35 • *Arrangements for identifying or recognising characteristics with a direct linkage to broadcast information or to broadcast space-time, e.g. for identifying broadcast stations or for identifying users*
- CL N 60/56 • *Arrangements characterised by components specially adapted for monitoring, identification or recognition covered by groups [H04H 60/29](#) or [H04H 60/35](#)*
- CL N 60/61 • *Arrangements for services using the result of monitoring, identification or recognition covered by groups [H04H 60/29](#) or [H04H 60/35](#)*
- CL N 60/68 • *Systems specially adapted for using specific information, e.g. geographical or meteorological information*
- CL N 60/76 • *Arrangements characterised by transmission systems other than for broadcast, e.g. the Internet*
-

ANNEX 240E H04J [Project-Rapporteur : M099/IB] <CE40>

CL D 15/00 (transferred to [H04J 99/00](#))

CL N 99/00 *Subject matter not provided for in other groups of this subclass*

ANNEX 241E H04L [Project-Rapporteur : C435/EP] <CE40>

CL M Title **TRANSMISSION OF DIGITAL INFORMATION, e.g. TELEGRAPHIC COMMUNICATION** (typewriters [B41J](#); order telegraphs, fire or police telegraphs [G08B](#); visual telegraphy [G08B](#), [G08C](#); teleautographic systems [G08C](#); ciphering or deciphering apparatus *per se* [G09C](#); coding, decoding or code conversion, in general [H03M](#); arrangements common to telegraphic and telephonic communication [H04M](#); selecting [H04Q](#); wireless communication networks [H04W](#))

CL M 9/32 • including means for verifying the identity or authority of a user of the system (security arrangements for protecting computers or computer systems against unauthorised activity [G06F 21/00](#); dispensing apparatus actuated by coded identity card or credit card [G07F 7/08](#); specially adapted for wireless communication networks [H04W 12/00](#))

ANNEX 242E H04M [Project-Rapporteur : C435/EP] <CE40>

CL M Title **TELEPHONIC COMMUNICATION** (counting mechanisms [G06M](#); circuits for controlling other apparatus *via* a telephone cable and not involving telephone switching apparatus [G08](#); reels or other take-up devices for cords [H02G 11/00](#); multiplex transmission between switching centres [H04J](#); selecting arrangements [H04Q](#); loudspeakers, microphones, gramophone pick-ups or like electromechanical transducers [H04R](#); wireless communication networks [H04W](#))

CL M 3/42 • Systems providing special services or facilities to subscribers (specially adapted for wireless communication networks [H04W 4/00](#))

ANNEX 243E H04W [Project-Rapporteur : C435/EP] <CE40>

CL N Title **WIRELESS COMMUNICATION NETWORKS**

CL N Note
H04W

1. This subclass covers :
 - *communication networks for selectively establishing one or a plurality of wireless communication links between a desired number of users or between users and network equipment, for the purpose of transferring information via these wireless communication links; [new]*
 - *networks deploying an infrastructure for mobility management of wireless users connected thereto, e.g. cellular networks, WLAN [Wireless Local Area Network], wireless access networks, e.g. WLL [Wireless Local Loop] or self-organising wireless communication networks, e.g. ad hoc*

networks; [new]

- *planning or deployment specially adapted for the above-mentioned wireless networks; [new]*
- *services or facilities specially adapted for the above-mentioned wireless networks; [new]*
- *arrangements or techniques specially adapted for the operation of the above-mentioned wireless networks. [new]*

2. This subclass does not cover :

- *communication systems using wireless extensions, i.e. wireless links without selective communication, e.g. cordless telephones, which are covered by group **H04M 1/72**; [new]*
- *broadcast communication, which is covered by subclass **H04H**. [new]*

3. *In this subclass, at each hierarchical level, in the absence of an indication to the contrary, classification is made in the first appropriate place. [new]*

CL N **4/00** *Services or facilities specially adapted for wireless communication networks*

CL N 4/02 • *Services making use of the location of users or terminals*

CL N 4/06 • *Selective distribution of broadcast; Services to user groups; One-way selective calling services*

CL N 4/12 • *Messaging, e.g. SMS [Short Messaging Service]; Mailboxes; Announcements, e.g. informing users on the status or progress of a communication request*

CL N 4/16 • *Communication-related supplementary services, e.g. call-transfer or call-hold*

CL N 4/18 • *Information format or content conversion, e.g. adaptation by the network of the transmitted or received information for the purpose of wireless delivery to users or terminals*

CL N 4/20 • *Auxiliary data signalling, i.e. transmitting data via a non-traffic channel*

CL N 4/22 • *Emergency connection handling*

CL N 4/24 • *Accounting or billing*

CL N **8/00** *Network data management*

CL N 8/02 • *Processing of mobility data, e.g. registration information at HLR [Home Location Register] or VLR [Visitor Location Register]; Transfer of mobility data, e.g. between HLR, VLR or external networks*

CL N 8/18 • *Processing of user or subscriber data, e.g. subscribed services, user preferences or user profiles; Transfer of user or subscriber data*

CL N 8/22 • *Processing or transfer of terminal data, e.g. status or physical capabilities*

CL N **12/00** *Security arrangements, e.g. access security or fraud detection; Authentication, e.g. verifying user identity or authorisation; Protecting privacy or anonymity*

- CL N **16/00** *Network planning, e.g. coverage or traffic planning tools; Network deployment, e.g. resource partitioning or cell structures*
- CL N **24/00** *Supervisory, monitoring or testing arrangements*
- CL N **28/00** *Network traffic or resource management*
- CL N **28/02** • *Traffic management, e.g. flow control or congestion control*
- CL N **28/16** • *Central resource management; Negotiation of resources, e.g. negotiating bandwidth or QoS [Quality of Service]*
- CL N **36/00** *Handoff or reselecting arrangements*
- CL N **40/00** *Communication routing or communication path finding*
- CL N **40/02** • *Communication route or path selection, e.g. power-based or shortest path routing*
- CL N **40/24** • *Connectivity information management, e.g. connectivity discovery or connectivity update*
- CL N **48/00** *Access restriction; Network selection; Access point selection*
- CL N **52/00** *Power management, e.g. TPC [Transmission Power Control], power saving or power classes*
- CL N **56/00** *Synchronisation arrangements*
- CL N **60/00** *Registration, e.g. affiliation to network; De-registration, e.g. terminating affiliation*
- CL N **64/00** *Locating users or terminals for network management purposes, e.g. mobility management*
- CL N **68/00** *Notification of users, e.g. alerting for incoming communication or change of service*
- CL N **72/00** *Local resource management, e.g. selection or allocation of wireless resources, or wireless traffic scheduling*
- CL N **74/00** *Wireless channel access, e.g. scheduled or random access*
- CL N **76/00** *Connection management, e.g. connection set-up, manipulation or release*
- CL N **80/00** *Wireless network protocols or protocol adaptations to wireless operation, e.g. WAP [Wireless Application Protocol]*
- CL N **84/00** *Network topologies*
- CL N **84/02** • *Hierarchically pre-organized networks, e.g. paging networks, cellular networks, WLAN [Wireless Local Area Network] or WLL [Wireless Local Loop]*
- CL N **84/18** • *Self-organising networks, e.g. ad hoc networks or sensor networks*
- CL N **88/00** *Devices specially adapted for wireless communication networks, e.g. terminals, base stations or access point devices*

CL N *92/00 Interfaces specially adapted for wireless communication networks*

CL N *99/00 Subject matter not provided for in other groups of this subclass*

[End of Technical Annexes and of document]