

3/00	--- provisions for transporting disabled persons or their personal conveyances, e.g. for ---
3/02	• Loading or unloading personal conveyances; Facilitating access of disabled persons to, or exit of disabled persons from, vehicles
3/04	• • Transfer of seated disabled persons by swinging ---
5/00	Chairs or personal conveyances specially adapted for disabled persons, e.g. wheelchairs (chairs with toilet conveniences A 47 K 11/04 ; devices enabling disabled persons to operate an apparatus or device not forming part of the body A 61 F 4/00 ; running gear or propulsion features B 60 K ; bicycles specially adapted for disabled riders B 62 K 3/16)
Note(s) after 5/00	
	Chairs for disabled persons having removable --- with the disabled person to a vehicle and support the disabled person during use ---
5/02	• propelled by the disabled person
Guide Heading after 5/14	<u>Beds or accessories for disabled persons; Treatment rooms ---</u>
7/00	--- for nursing; Devices for lifting disabled persons (A 61 F 5/045 takes precedence; stretchers with facilities for picking up disabled persons 1/003)
7/08	• Apparatus for transporting beds
7/10	• Devices for lifting disabled persons, e.g. special ---
7/12	• • for hoisting the disabled person under the ---
7/14	• • facilitating both lifting and lateral movement of the disabled person
7/16	<Unchanged>

ANNEX 4 A 61 H [Project-Rapporteur : 386/US] <CE32029E>

Title --- devices enabling disabled persons to operate ---

- 3/00 Appliances for aiding disabled persons to walk about – – –**
 3/04 • Wheeled walking aids for disabled persons

ANNEX 5 A 61 K [Project-Rapporteur : 412/EP] <CE32009E>

Note(s) after
 the title

(3) In this subclass, with the exception of group 8/00, in the absence – – –

*N 8/00 **Cosmetics or similar toilet preparations** (casings or accessories for storing or handling of solid or pasty toilet or cosmetic substances A 45 D 40/00)*

*N Note(s) after
 8/00*

(1) *In each of groups 8/02 and 8/18, in the absence of an indication of the contrary, classification is made in the last appropriate place.*

(2) *Use of cosmetics or similar toilet preparations is further classified in subclass A 61 Q.*

(3) *Attention is drawn to the Notes in class C 07, for example the Notes following the title of subclass C 07 D, setting forth the rules for classifying organic compounds in that class, which rules are also applicable, if not otherwise indicated, to the classification of organic compounds in group 8/00.*

(4) *Salts or complexes of organic compounds are classified according to the base compounds. If a complex is formed between two or more compounds, classification is made in the last appropriate place.*

N 8/02 • characterised by special physical form

N 8/03 • • Liquid compositions with two or more distinct layers

N 8/04 • • Dispersions; Emulsions

N 8/06 • • • Emulsions

N 8/11 • • Encapsulated compositions

N 8/14 • • Liposomes

N 8/18 • characterised by the composition

N 8/19 • • containing inorganic ingredients

N 8/20 • • • Halogens; Compounds thereof

N	8/21	• • • • Fluorides; Derivatives thereof
N	8/22	• • • Peroxides; Oxygen; Ozone
N	8/23	• • • Sulfur; Selenium; Tellurium; Compounds thereof
N	8/24	• • • Phosphorus; Compounds thereof
N	8/25	• • • Silicon; Compounds thereof
N	8/26	• • • Aluminium; Compounds thereof
N	8/27	• • • Zinc; Compounds thereof
N	8/28	• • • Zirconium; Compounds thereof
N	8/29	• • • Titanium; Compounds thereof
N	8/30	• • containing organic compounds
N	8/31	• • • Hydrocarbons
N	8/33	• • • containing oxygen
N	8/34	• • • • Alcohols
N	8/35	• • • • Ketones, e.g. quinones, benzophenone
N	8/36	• • • • Carboxylic acids; Salts or anhydrides thereof
N	8/362	• • • • • Polycarboxylic acids
N	8/365	• • • • • Hydroxycarboxylic acids; Ketocarboxylic acids
N	8/368	• • • • • with carboxyl groups directly bound to carbon atoms of aromatic rings
N	8/37	• • • • Esters of carboxylic acids
N	8/38	• • • • Percompounds, e.g. peracids
N	8/39	• • • • Derivatives containing from 2 to 10 oxyalkylene groups
N	8/40	• • • containing nitrogen (quinones containing nitrogen 8/35)
N	8/41	• • • • Amines
N	8/42	• • • • Amides
N	8/43	• • • • Guanidines
N	8/44	• • • • Aminocarboxylic acids or derivatives thereof, e.g. aminocarboxylic acids containing sulfur; Salts, esters or N-acylated derivatives thereof
N	8/45	• • • • Derivatives containing from 2 to 10 oxyalkylene groups
N	8/46	• • • containing sulfur (8/44 takes precedence)
N	8/49	• • • containing heterocyclic compounds
N	8/55	• • • containing phosphorus
N	8/58	• • • containing atoms other than carbon, hydrogen, halogen, oxygen, nitrogen, sulfur or phosphorus
N	8/60	• • • Sugars; Derivatives thereof

- N 8/63 • • • *Steroids; Derivatives thereof*
- N Note(s) after
8/63
- This group covers steroids, as defined in Note (1) after
the title of subclass C 07 J.*
- N 8/64 • • • *Proteins; Peptides; Derivatives or degradation products
thereof*
- N 8/65 • • • • *Collagen; Gelatin; Keratin; Derivatives or degradation
products thereof*
- N 8/66 • • • • *Enzymes*
- N 8/67 • • • *Vitamins*
- N 8/68 • • • *Sphingolipids, e.g. ceramides, cerebrosides, gangliosides*
- N 8/69 • • • *containing fluorine*
- N 8/70 • • • • *containing perfluoro groups, e.g. perfluoroethers*
- N 8/72 • • *containing organic macromolecular compounds*
- N 8/73 • • • *Polysaccharides*
- N 8/81 • • • *obtained by reactions involving only carbon-to-carbon
unsaturated bonds*
- N 8/84 • • • *obtained by reactions other than those involving only carbon-
to-carbon unsaturated bonds*
- N 8/85 • • • • *Polyesters*
- N 8/86 • • • • *Polyethers*
- N 8/87 • • • • *Polyurethanes*
- N 8/88 • • • • *Polyamides*
- N 8/89 • • • • *Polysiloxanes*
- N 8/891 • • • • • *saturated, e.g. dimethicone, phenyl trimethicone*
- N 8/892 • • • • • *containing silicon bound to unsaturated aliphatic
groups, e.g. vinyl dimethicone*
- N 8/893 • • • • • *containing atoms other than carbon and hydrogen in
the side groups to the main chain*
- N 8/894 • • • • • • *side groups containing halogen, e.g. fluorosilicones*
- N 8/895 • • • • • • *side groups containing nitrogen, e.g.
amodimethicone*
- N 8/896 • • • • • • *side groups containing oxygen, e.g. dimethiconol*
- N 8/897 • • • • • • *modified by an alkoxy group, e.g. behenoxy
dimethicone*

- N 8/898 • • • • • • • *modified by a polyoxyalkylene group, e.g. cetyl dimethicone copolyol*
- N 8/899 • • • • • • • *side groups containing sulfur (8/898 takes precedence)*
- N 8/90 • • • *Block copolymers (8/89 takes precedence)*
- N 8/91 • • • *Graft copolymers (8/89 takes precedence)*
- N 8/92 • • *Oils, fats or waxes; Derivatives thereof, e.g. hydrogenation products*
- N 8/96 • • *containing materials, or derivatives thereof, of undetermined constitution*
- N 8/97 • • • *of vegetable origin, e.g. plant extracts*
- N 8/98 • • • *of animal origin*
- N 8/99 • • • *from micro-organisms*

ANNEX 6 A 61 P [Project-Rapporteur : 412/EP] <CE32033E>

- N 17/18 • *Antioxidants, e.g. antiradicals (preparations for protection against sunlight A 61 Q 17/00)*

ANNEX 7 A 61 Q [Project-Rapporteur : 412/EP] <CE32025E>

- N **Title** **USE OF COSMETICS OR SIMILAR TOILET PREPARATIONS**
 - N *Note(s) after the title*
- (1) *This subclass covers the use of cosmetics or similar toilet preparations already classified as such in main group A 61 K 8/00, in subclasses C 11 D or C 12 N, or in classes C 01, C 07 or C 08.*
 - (2) *When classifying in this subclass, classification is also made in subclass A 61 P if the preparation is stated to have therapeutic activity.*
 - (3) *In this subclass, the use of cosmetics or similar toilet preparations is classified in all appropriate places.*
 - (4) *The classification symbols of this subclass are not listed first when assigned to patent documents.*

- N 1/00 **Make-up preparations; Body powders; Preparations for removing make-up**
- N 1/02 • Preparations containing skin colorants, e.g. pigments (preparations in powder form 1/12)
- N 1/04 • • for lips
- N 1/06 • • • Lipsticks
- N 1/08 • • for cheeks, e.g. rouge
- N 1/10 • • for eyes, e.g. eyeliner, mascara
- N 1/12 • Face or body powders, e.g. for grooming, adorning or absorbing
- N 1/14 • Preparations for removing make-up
- N 3/00 **Manicure or pedicure preparations**
- N 3/02 • Nail coatings
- N 3/04 • Nail coating removers
- N 5/00 **Preparations for care of the hair**
- N 5/02 • Preparations for cleaning the hair
- N 5/04 • Preparations for permanent waving or straightening the hair
- N 5/06 • Preparations for styling the hair, e.g. by temporary shaping or colouring
- N 5/08 • Preparations for bleaching the hair
- N 5/10 • Preparations for permanently dyeing the hair
- N 5/12 • Preparations containing hair conditioners
- N 7/00 **Preparations for affecting hair growth**
- N Note(s) after 7/00

Informative note

References listed below indicate IPC places which could also be of interest when carrying out a search in respect of the subject matter covered by the preceding group:

Preparations with therapeutic activity [A 61 P 17/14](#).

- N 7/02 • Preparations for inhibiting or slowing hair growth
- N 9/00 **Preparations for removing hair or for aiding hair removal**
- N 9/02 • Shaving preparations
- N 9/04 • Depilatories

- N 11/00 **Preparations for care of the teeth, of the oral cavity or of dentures, e.g. dentifrices or toothpastes; Mouth rinses**
- N 11/02 • Preparations for deodorising, bleaching or disinfecting dentures
- N 13/00 **Formulations or additives for perfume preparations (essential oils or perfumes per se C 11 B 9/00)**
- N 15/00 **Anti-perspirants or body deodorants (deodorisation of air A 61 L 9/00)**
- N 17/00 **Barrier preparations; Preparations brought into direct contact with the skin for affording protection against external influences, e.g. sunlight, X-rays or other harmful rays, corrosive materials, bacteria or insect stings (chemical means for combating harmful chemical agents A 62 D 3/00)**
- N Note(s) after 17/00

Informative note

References listed below indicate IPC places which could also be of interest when carrying out a search in respect of the subject matter covered by the preceding group:

Drugs for treating burns A 61 P 17/02.

- N 17/02 • containing insect repellants
- N Note(s) after 17/02

Informative note

References listed below indicate IPC places which could also be of interest when carrying out a search in respect of the subject matter covered by the preceding group:

Pest repellants A 01 N.

- N 17/04 • Topical preparations for affording protection against sunlight or other radiation; Topical sun tanning preparations
- N 19/00 **Preparations for care of the skin**
- N 19/02 • for chemically bleaching or whitening the skin
- N 19/04 • for chemically tanning the skin (topical sun tanning preparations 17/04)
- N 19/06 • for countering cellulitis
- N 19/08 • Anti-ageing preparations
- N 19/10 • Washing or bathing preparations

ANNEX 8 B 29 C [Project-Rapporteur : 278/EP] <CE32035E>

Note(s) after
the title

- (2) Layered products or laminating methods are further
classified in subclass [B 32 B](#).

ANNEX 9 B 29 D [Project-Rapporteur : 278/EP] <CE32036E>

Note(s) after
the title

- N* (2) *Layered products or laminating methods are further
classified in subclass [B 32 B](#).*
- (3) <Former note (2)>
- D* 9/00 (transferred to [B 32 B 37/00](#) to [41/02](#))
- D* Note(s) after 9/00 <Deleted>

ANNEX 10 B 30 B [Project-Rapporteur : 414/PT] <CE32043E>

Title **PRESSES IN GENERAL; PRESSES NOT OTHERWISE
PROVIDED FOR** (producing ultra-high ---

- D* Note(s) after
the title <Deleted>

11/00 --- **tableting presses** (apparatus for forming or shaping of dough
[A 21 C 3/00](#), [11/00](#); apparatus for shaping clay or mixtures containing
cement [B 28 B](#); apparatus for shaping of plastic or substances in a
plastic state [B 29](#), e.g. for compression moulding [B 29 C 43/00](#), for
extrusion moulding [47/00](#))

ANNEX 11 B 32 B [Project-Rapporteur : 278/EP] <CE32018E>

Note(s) after
the title

- <== does not cover:
- --- apparatus is solely applicable to and fully
classifiable ---
- compositions or preparation ==>

(3) In this subclass, a film formed on a layer by spreading a substance thereon is not considered to constitute a layer itself if it serves only as an adhesive or its purpose is merely to finish a surface of a product.

<Delete former note>

(4) In this subclass, ==>

(5) In groups 1/00 to 33/00, at each ---

N (6) *Layered products are classified in groups 37/00 or 38/00 if not characterised by their structure or composition.*

(7) <Former note (6)>

D 1/10 (transferred to 37/00)

D 31/00 to 31/10 (transferred to 37/00)

D 31/12 (transferred to 37/00, 38/00)

D 31/14 to 31/28 (transferred to 37/00)

D 31/30 (transferred to 37/00)

D 35/00 (transferred to 38/00 to 43/00)

N **Guide** **Methods or apparatus for making layered products; Treatment of the**
Heading **layers or of the layered products**
before 37/00

N Note(s)
before 37/00

In groups 37/00 and 39/00, the following expressions are used with the meanings indicated:

- *"laminating" means the action of combining previously unconnected layers to become one product whose layers will remain together;*
- *"partial laminating" occurs when one layer does not fully cover a surface of another layer, whereby the layer with the greater surface area is laminated on only part of its surface;*
- *"adhesive" means a layer, or part of a layer, applied in any state or in any manner, which is incorporated for the purpose of bonding.*

N 37/00 **Methods or apparatus for laminating, e.g. by curing or by ultrasonic bonding**

- N 37/02
 - *characterised by a sequence of laminating steps, e.g. by adding new layers at consecutive laminating stations*
- N 37/04
 - *characterised by the partial melting of at least one layer*
- N 37/06
 - *characterised by the heating method*
- N 37/08
 - *characterised by the cooling method*
- N 37/10
 - *characterised by the pressing technique, e.g. using direct action of vacuum or fluid pressure*
- N 37/12
 - *characterised by using adhesives*
- N 37/14
 - *characterised by the properties of the layers*
- N 37/15
 - • *with at least one layer being manufactured and immediately laminated before reaching its stable state, e.g. in which a layer is extruded and laminated while in semi-molten state*
- N 37/16
 - • *with all layers existing as coherent layers before laminating*
- N 37/18
 - • • *involving the assembly of discrete sheets or panels only*
- N 37/20
 - • • *involving the assembly of continuous webs only*
- N 37/22
 - • • *involving the assembly of both discrete and continuous layers*
- N 37/24
 - • *with at least one layer not being coherent before laminating, e.g. made up from granular material sprinkled onto a substrate (37/15 takes precedence)*
- N 37/26
 - • *with at least one layer which influences the bonding during the laminating process, e.g. release layers or pressure equalising layers*
- N 37/28
 - *involving assembly of non-flat intermediate products which are flattened at a later step, e.g. tubes*
- N 37/30
 - *Partial laminating*
- N 38/00
 - ***Ancillary operations in connection with laminating processes***
- N 38/04
 - *Punching, slitting or perforating*
- N 38/06
 - *Embossing*
- N 38/08
 - *Impregnating*
- N 38/10
 - *Removing layers, or parts of layers, mechanically or chemically (punching, slitting or perforating 38/04)*
- N 38/12
 - *Deep-drawing*
- N 38/14
 - *Printing or colouring*
- N 38/16
 - *Drying; Softening; Cleaning*
- N 38/18
 - *Handling of layers or the laminate*

- N 39/00 *Layout of apparatus or plants, e.g. modular laminating systems*
- N 41/00 *Arrangements for controlling or monitoring lamination processes;
 Safety arrangements*
- N 41/02 • *Safety arrangements*
- N 43/00 *Operations specially adapted for layered products and not otherwise
 provided for, e.g. repairing; Apparatus therefor*

ANNEX 12 B 60 K [Project-Rapporteur : 355/GB] <CE32017E>

- C 28/16 • • *responsive to, or preventing, spinning or skidding of wheels
 (brake regulation specially adapted to prevent excessive wheel
 spin during vehicle acceleration, e.g. for traction control
 B 60 T 8/175; preventing wheel ---*

ANNEX 13 B 60 T [Project-Rapporteur : 355/GB] <CE32016E>

Title --- THEREOF; BRAKE CONTROL SYSTEMS OR PARTS
 THEREOF, IN --- brake actuators, **F 16 D**); ARRANGEMENT OF
 BRAKING ELEMENTS ON VEHICLES IN GENERAL;
 PORTABLE DEVICES FOR PREVENTING UNWANTED
 MOVEMENT OF VEHICLES; VEHICLE MODIFICATIONS TO
 FACILITATE COOLING OF BRAKES

N Note(s) after
 8/00

*When classifying in group 8/17, classification is also
 made in appropriate places in groups 8/18, 8/24, 8/26
 or 8/32 if other aspects than electronic control are of
 interest.*

- N 8/17 • *Using electrical or electronic regulation means to control braking*
- N 8/171 • • *Detecting parameters used in the regulation; Measuring values
 used in the regulation*
- N 8/172 • • *Determining control parameters used in the regulation, e.g. by
 calculations involving measured or detected parameters*
- N 8/173 • • *Eliminating or reducing the effect of unwanted signals, e.g. due
 to vibrations or electrical noise*

- N 8/174 • • *characterised by using special control logic, e.g. fuzzy logic*
- N 8/175 • • *Brake regulation specially adapted to prevent excessive wheel spin during vehicle acceleration, e.g. for traction control (safety devices for propulsion unit control responsive to, or preventing, skidding of wheels B 60 K 28/16)*
- N 8/1755 • • *Brake regulation specially adapted to control the stability of the vehicle, e.g. taking into account yaw rate or transverse acceleration in a curve*
- N 8/176 • • *Brake regulation specially adapted to prevent excessive wheel slip during vehicle deceleration, e.g. ABS (8/1755 takes precedence)*
- N 8/1761 • • • *responsive to wheel or brake dynamics, e.g. wheel slip, wheel acceleration or rate of change of brake fluid pressure*
- N 8/1763 • • • *responsive to the coefficient of friction between the wheels and the ground surface (8/1764 takes precedence)*
- N 8/1764 • • • *Regulation during travel on surface with different coefficients of friction, e.g. between left and right sides, mu-split*
- N 8/1766 • • • *Proportioning of brake forces according to vehicle axle loads, e.g. front to rear of vehicle*
- N 8/1769 • • • *specially adapted for vehicles having more than one driven axle, e.g. four-wheel drive vehicles*

ANNEX	14	B 62 K	[Project-Rapporteur : 386/US]	<CE32022E>
	3/16	• --- disabled riders		
	5/00	--- road wheels (specially adapted for disabled persons A 61 G 5/00 ; cycle ---)		

ANNEX	15	C 08 J	[Project-Rapporteur : 415/GB]	<CE32054E>
	Title	--- C 08 F, G or C 08 H (working, e.g. shaping, of plastics B 29 ; layered ---)		
	5/00	--- to B 01 D 71/00 ; working, e.g. shaping, of plastics B 29)		
	11/00	--- waste materials (recovery of plastics B 29 B 17/00 ; polymerisation processes ---)		

ANNEX	16	C 09 K	[Project-Rapporteur : 362/EP]	<CE32002E>
D	7/00		(transferred to 8/02)	
D	Note(s) after 7/00		<Deleted>	
D	7/02		(transferred to 8/04)	
D	7/04		(transferred to 8/05)	
D	7/06		(transferred to 8/32)	
D	7/08		(transferred to 8/38)	
N	8/00		Compositions for drilling of boreholes or wells; Compositions for treating boreholes or wells, e.g. for completion or for remedial operations	
N	8/02		• Well-drilling compositions	
N	Note(s) after 8/02			
			<i>In this group, in the absence of an indication to the contrary, classification is made in the last appropriate place.</i>	
N	8/03		• • Specific additives for general use in well-drilling compositions	
N	8/035		• • • Organic additives	
N	8/04		• • Aqueous well-drilling compositions	
N	8/05		• • • containing inorganic compounds only, e.g. mixtures of clay and salt	
N	8/06		• • • Clay-free compositions (containing inorganic compounds only 8/05)	
N	8/08		• • • • containing natural organic compounds, e.g. polysaccharides, or derivatives thereof	
N	8/10		• • • • • Cellulose or derivatives thereof	
N	8/12		• • • • containing synthetic organic macromolecular compounds or their precursors	
N	8/14		• • • Clay-containing compositions (containing inorganic compounds only 8/05)	
N	8/16		• • • • characterised by the inorganic compounds other than clay	
N	8/18		• • • • characterised by the organic compounds	
N	8/20		• • • • • Natural organic compounds or derivatives thereof, e.g. polysaccharides or lignin derivatives	
N	8/22		• • • • • Synthetic organic compounds	
N	8/24		• • • • • • Polymers	
N	8/26		• • • Oil-in-water emulsions	

- N 8/28
 - • • • *containing organic additives*
- N 8/32
 - • *Non-aqueous well-drilling compositions, e.g. oil-based*
- N 8/34
 - • • *Organic liquids*
- N 8/36
 - • • *Water-in-oil emulsions*
- N 8/38
 - • *Gaseous or foamed well-drilling compositions*
- N 8/40
 - *Spacer compositions, e.g. compositions used to separate well-drilling from cementing masses*
- N 8/42
 - *Compositions for cementing, e.g. for cementing casings into boreholes; Compositions for plugging, e.g. for killing wells (compositions for plastering 8/50)*
- N 8/44
 - • *containing organic binders only*
- N 8/46
 - • *containing inorganic binders, e.g. Portland cement*
- N 8/467
 - • • *containing additives for specific purposes*
- N 8/473
 - • • • *Density reducing additives, e.g. for obtaining foamed cement compositions*
- N 8/48
 - • • • *Density increasing or weighting additives*
- N 8/487
 - • • • *Fluid loss control additives; Additives for reducing or preventing circulation loss*
- N 8/493
 - • • • *Additives for reducing or preventing gas migration*
- N 8/50
 - *Compositions for plastering borehole walls, i.e. compositions for temporary consolidation of borehole walls (compositions for consolidating loose sand or the like around wells 8/56)*
- N 8/502
 - • *Oil-based compositions*
- N 8/504
 - • *Compositions based on water or polar solvents (8/502 takes precedence)*
- N 8/506
 - • • *containing organic compounds*
- N 8/508
 - • • • *macromolecular compounds*
- N 8/512
 - • • • • *containing cross-linking agents*
- N 8/514
 - • • • • *of natural origin, e.g. polysaccharides, cellulose (8/512 takes precedence)*
- N 8/516
 - • *characterised by their form or by the form of their components, e.g. encapsulated material*
- N 8/518
 - • • *Foams*
- N 8/52
 - *Compositions for preventing, limiting or eliminating depositions, e.g. for cleaning*
- N 8/524
 - • *organic depositions, e.g. paraffins or asphaltenes*
- N 8/528
 - • *inorganic depositions, e.g. sulfates or carbonates*
- N 8/532
 - • • *Sulfur*

N 8/536 • • *characterised by their form or by the form of their components, e.g. encapsulated material*

N 8/54 • *Compositions for in situ inhibition of corrosion in boreholes or wells*

N *Note(s) after 8/54*

Informative note

References listed below indicate IPC places which could also be of interest when carrying out a search in respect of the subject matter covered by the preceding group:

Inhibiting corrosion of metallic materials by using inhibitors in general [C 23 F 11/00](#)

N 8/56 • *Compositions for consolidating loose sand or the like around wells without excessively decreasing the permeability thereof (compositions for plastering borehole walls [8/50](#))*

N *Note(s) after 8/56*

Informative note

References listed below indicate IPC places which could also be of interest when carrying out a search in respect of the subject matter covered by the preceding group:

Soil-conditioning materials or soil-stabilising materials [17/00](#).

N 8/565 • • *Oil-based compositions*

N 8/57 • • *Compositions based on water or polar solvents ([8/565](#) takes precedence)*

N 8/575 • • • *containing organic compounds*

N 8/58 • *Compositions for enhanced recovery methods for obtaining hydrocarbons, i.e. for improving the mobility of the oil, e.g. displacing fluids*

N 8/582 • • *characterised by the use of bacteria*

N 8/584 • • *characterised by the use of specific surfactants*

N 8/588 • • *characterised by the use of specific polymers*

N 8/592 • • *Compositions used in combination with generated heat, e.g. by steam injection*

N 8/594 • • *Compositions used in combination with injected gas ([8/592](#) takes precedence)*

N 8/60 • *Compositions for stimulating production by acting on the underground formation*

N 8/62 • • *Compositions for forming crevices or fractures*

- N 8/64 • • • *Oil-based compositions*
- N 8/66 • • • *Compositions based on water or polar solvents (8/64 takes precedence)*
- N 8/68 • • • • *containing organic compounds*
- N 8/70 • • • *characterised by their form or by the form of their components, e.g. foams*
- N 8/72 • • • *Eroding chemicals, e.g. acids*
- N 8/74 • • • • *combined with additives added for specific purposes*
- N 8/76 • • • • • *for preventing or reducing fluid loss*
- N 8/78 • • • • • *for preventing sealing*
- N 8/80 • • *Compositions for reinforcing fractures, e.g. compositions of proppants used to keep the fractures open*
- N 8/82 • • *Oil-based compositions (8/64 takes precedence)*
- N 8/84 • • *Compositions based on water or polar solvents (8/66, 8/82 take precedence)*
- N 8/86 • • • *containing organic compounds*
- N 8/88 • • • • *macromolecular compounds*
- N 8/90 • • • • • *of natural origin, e.g. polysaccharides, cellulose*
- N 8/92 • • *characterised by their form or by the form of their components, e.g. encapsulated material (8/70 takes precedence)*
- N 8/94 • • • *Foams*
- 17/00** – – – **soil-stabilising materials** (specially adapted for boreholes or wells 8/00; fertilisers C 05; consolidating – – – the soil E 02 D 3/12)

ANNEX 17 C 10 L [Project-Rapporteur : 363/GB] <CE32004E>

Note(s) after
1/10

- (1) In this group, in the absence – – – compound is classified in – – –
- N (2) *If an additive is a mixture of compounds, classification is made for each compound of interest.*
- (3) <Former note (2)>
- N 1/182 • • • • *containing hydroxy groups; Salts thereof*
- N 1/183 • • • • • *at least one hydroxy group bound to an aromatic carbon atom*
- N 1/185 • • • • *Ethers; Acetals; Ketals; Aldehydes; Ketones*

N	1/188	• • • •	<i>Carboxylic acids; Salts thereof</i>
N	1/189	• • • • •	<i>having at least one carboxyl group bound to an aromatic carbon atom</i>
N	1/19	• • • •	<i>Esters</i>
N	1/192	• • • •	<i>Macromolecular compounds</i>
N	1/195	• • • • •	<i>obtained by reactions involving only carbon-to-carbon unsaturated bonds</i>
N	1/196	• • • • • •	<i>derived from monomers containing a carbon-to-carbon unsaturated bond and a carboxyl group or salts, anhydrides or esters thereof</i>
N	1/197	• • • • • •	<i>derived from monomers containing a carbon-to-carbon unsaturated bond and an acyloxy group of a saturated carboxylic or carbonic acid</i>
N	1/198	• • • • •	<i>obtained otherwise than by reactions involving only carbon-to-carbon unsaturated bonds</i>
N	1/222	• • • •	<i>containing at least one carbon-to-nitrogen single bond</i>
N	1/223	• • • • •	<i>having at least one amino group bound to an aromatic carbon atom</i>
N	1/224	• • • • •	<i>Amides; Imides</i>
N	1/226	• • • •	<i>containing at least one nitrogen-to-nitrogen bond, e.g. azo compounds, azides, hydrazines</i>
N	1/228	• • • •	<i>containing at least one carbon-to-nitrogen double bond, e.g. guanidines, hydrazones, semicarbazones, imines; containing at least one carbon-to-nitrogen triple bond, e.g. nitriles</i>
N	1/23	• • • •	<i>containing at least one nitrogen-to-oxygen bond, e.g. nitro-compounds, nitrates, nitrites</i>
N	1/232	• • • •	<i>containing nitrogen in a heterocyclic ring</i>
N	1/233	• • • • •	<i>containing nitrogen and oxygen in the ring, e.g. oxazoles</i>
N	1/234	• • • •	<i>Macromolecular compounds</i>
N	1/236	• • • • •	<i>obtained by reactions involving only carbon-to-carbon unsaturated bonds</i>
N	1/238	• • • • •	<i>obtained otherwise than by reactions involving only carbon-to-carbon unsaturated bonds</i>
N	1/2383	• • • • • •	<i>Polyamines or polyimines, or derivatives thereof</i>
N	1/2387	• • • • • • •	<i>Polyoxyalkyleneamines</i>
	1/30	• • •	containing elements not mentioned in groups 1/16 to 1/28

- C 10/00 Use of additives to fuels or fires for particular purposes (additives for liquid carbonaceous fuels characterised by their chemical nature 1/10; using binders for briquetting solid fuels 5/10; using additives to improve the combustion of solid fuels 9/10)*
- 10/02 • for reducing smoke development
 - 10/04 • for minimising corrosion or incrustation
 - 10/06 • for facilitating soot removal
 - N 10/08 • for improving lubricity; for reducing wear*
 - N 10/10 • for improving the octane number*
 - N 10/12 • for improving the cetane number*
 - N 10/14 • for improving low temperature properties*
 - N 10/16 • • Pour-point depressants*
 - N 10/18 • use of detergents or dispersants for purposes not provided for in groups 10/02 to 10/16*

ANNEX 18 C 12 S [Project-Rapporteur : 362/EP] <CE32031E>

Note(s) after
the title

<== C 08, D 21 C, H
 A 62 D, C 09 B, H, E 21 B
 B 01 D, C 10 G, F 24 F, ==>

ANNEX 19 C 23 F [Project-Rapporteur : 362/EP] <CE32024E>

11/00 – – – **corrosive agent** (compositions for in situ inhibition of corrosion in boreholes or wells C 09 K 8/54; adding inhibitors to mineral – – –

ANNEX 20 E 03 B [Project-Rapporteur : 396/PT] <CE32042E>

9/00 – – – or valves per se F 16 K)
 9/02 • Hydrants; Arrangement of valves therein; Keys for hydrants

ANNEX	21	E 04 G	[Project-Rapporteur : 367/DE]	<CE32027E>
	1/00	Scaffolds primarily resting – – –		
C	1/14	<ul style="list-style-type: none"> • <i>Comprising essentially pre-assembled two-dimensional frame-like elements, e.g. of rods in L- or H-shape, with or – – –</i> 		
C	1/15	<ul style="list-style-type: none"> • <i>– – – precedence); Platforms (boards or planks therefor 5/08)</i> 		
D	1/16	<i>(transferred to 1/17, 5/16)</i>		
N	1/17	<ul style="list-style-type: none"> • <i>Comprising essentially pre-assembled three-dimensional elements, e.g. cubic elements</i> 		
	1/20	<ul style="list-style-type: none"> • • <i>Scaffolds comprising upright – – –</i> 		
	1/22	<ul style="list-style-type: none"> • • <i>Scaffolds having a – – –</i> 		
D	1/26	<i>(transferred to 5/00)</i>		
	1/30	<ul style="list-style-type: none"> • • <i>Ladder scaffolds</i> 		
N	1/38	<ul style="list-style-type: none"> • <i>Scaffolds partly supported by the building (ladders attachable to structures E 06 C 1/34)</i> 		
D	3/02	<i>(transferred to 3/18 to 3/34)</i>		
D	3/04	<i>(transferred to 3/18 to 3/34)</i>		
D	3/06	<i>(transferred to 3/18)</i>		
D	3/08	<i>(transferred to 3/20)</i>		
D	3/10	<i>(transferred to 3/18 to 3/34)</i>		
D	3/12	<i>(transferred to 3/26, 3/34)</i>		
D	3/14	<i>(transferred to 3/18 to 3/34)</i>		
D	3/16	<i>(transferred to 3/18 to 3/34)</i>		
N	3/18	<ul style="list-style-type: none"> • <i>supported by cantilevers or other provisions mounted in openings in the building, e.g. window openings (3/28 takes precedence)</i> 		
N	3/20	<ul style="list-style-type: none"> • <i>supported by walls (3/28 takes precedence; wall-anchors for supporting scaffolds 5/04; consoles 5/06)</i> 		
N	3/22	<ul style="list-style-type: none"> • <i>supported by roofs or ceilings (3/28 takes precedence)</i> 		
N	3/24	<ul style="list-style-type: none"> • <i>specially adapted for particular parts of buildings or for buildings of particular shape, e.g. chimney stacks or pylons (3/28 takes precedence)</i> 		
N	3/26	<ul style="list-style-type: none"> • • <i>specially adapted for working on roofs</i> 		
N	3/28	<ul style="list-style-type: none"> • <i>Mobile scaffolds; Scaffolds with mobile platforms</i> 		
N	3/30	<ul style="list-style-type: none"> • • <i>suspended by flexible supporting elements, e.g. cables</i> 		
N	3/32	<ul style="list-style-type: none"> • • • <i>Hoisting devices; Safety devices</i> 		
N	3/34	<ul style="list-style-type: none"> • • <i>characterised by supporting structures provided on the roofs</i> 		

- C 5/00 **Component parts or accessories for scaffolds** (connections 7/00)
- 5/08 • --- or planks
- N 5/10 • *Steps or ladders specially adapted for scaffolds*
- N 5/12 • *Canopies*
- N 5/14 • *Railings*
- N 5/16 • *Struts or stiffening rods, e.g. diagonal rods*
- N 7/32 • • *with coupling elements using wedges*
- N 7/34 • • *with coupling elements using positive engagement, e.g. hooks or pins*
- 21/24 • --- structures for scaffolds 5/00)
- 21/32 • --- of buildings (related to scaffolds 5/00; ropes or ---
- 27/00 --- **steps, ramps** (as parts or accessories for scaffolds 5/00; gangways B 63; ---

ANNEX 22 E 21 B [Project-Rapporteur : 362/EP] <CE32003E>

Note(s) after the title

- <== for further processing;
- B, e.g. B 23 B;
- N – *compositions for drilling of boreholes or wells or for treating boreholes or wells, which compositions are covered by group C 09 K 8/00, e.g. compositions for enhanced recovery methods for obtaining hydrocarbons 8/58.*
- N (3) *Processes using enzymes or micro-organisms in order to:*
- N (i) *liberate, separate or purify a pre-existing compound or composition, or to*
- N (ii) *treat textiles or clean solid surfaces of materials*
- N *are further classified in subclass C 12 S.*
- C 33/13 • • --- *bailers 27/02; chemical compositions therefor C 09 K 8/00)*
- C 37/06 • --- *like substances (chemical compositions therefor C 09 K 8/52)*

- C 41/02 • --- bailers 27/02; chemical compositions therefor C 09 K 8/54; inhibiting corrosion ---
- C 43/02 • Subsoil filtering (43/11 takes precedence; chemical compositions for consolidating loose sand or the like around wells C 09 K 8/56)
- C 43/22 • • --- precedence; chemical or bacterial compositions therefor C 09 K 8/58; chemical features in ---
- C 43/25 • --- generating arrangements 28/00; chemical compositions therefor C 09 K 8/60)

ANNEX	23	F 01 C	[Project-Rapporteur : 369/EP]	<CE32021E>
N	20/00	Control of, monitoring of, or safety arrangements for, machines or engines		
N	20/02	• specially adapted for several machines or engines connected in series or in parallel		
N	20/04	• specially adapted for reversible machines or engines		
N	20/06	• specially adapted for stopping, starting, idling or no-load operation		
N	20/08	• characterised by varying the rotational speed		
N	20/10	• characterised by changing the positions of the inlet or outlet openings with respect to the working chamber		
N	20/12	• • using sliding valves		
N	20/14	• • using rotating valves		
N	20/16	• • using lift valves		
N	20/18	• characterised by varying the volume of the working chamber (by changing the positions of inlet or outlet openings 20/10)		
N	20/20	• • by changing the form of the inner or outer contour of the working chamber		
N	20/22	• • by changing the eccentricity between cooperating members		
N	20/24	• characterised by using valves regulating pressure or flow rate, e.g. discharge valves (20/10 takes precedence)		
N	20/26	• • using bypass channels		
N	20/28	• Safety arrangements; Monitoring		
	21/00	--- provided for in groups 1/00 to 20/00		
D	21/12	(transferred to 20/00, 21/18)		
D	21/14	(transferred to 20/00)		

- D* 21/16 (transferred to 20/00)
- N* 21/18 • Arrangements for admission or discharge of the working fluid, e.g. constructional features of the inlet or outlet

ANNEX 24 F 01 M [Project-Rapporteur : 416/PT] <CE32038E>

- Note(s) after the title
- (1) Attention is drawn – – –
- N* (2) Attention is drawn to the following places, which cover lubrication of specific machines or engines:
- N* *F 01 B 31/10* Steam engines
- N* *F 01 C 21/04* Rotary-piston or oscillating-piston machines or engines
- N* *F 01 D 25/18* Non-positive-displacement machines
- N* *F 02 C 7/06* Gas-turbine plants
- N* *F 02 F 1/20* Cylinders of combustion engines
- N* *F 04 B 39/02* Pumps for elastic fluids
- N* *F 04 C 29/02* Rotary-piston or oscillating-piston pumps for liquids
- N* *F 04 D 29/04* Non-positive-displacement pumps

ANNEX 25 F 04 C [Project-Rapporteur : 369/EP] <CE32020E>

- D* Guide <Deleted>
 Heading
 before 2/00
- 2/00** – – – 7/00; rotary-piston pumps specially adapted for elastic fluids 18/00, 19/00; rotary-piston machines or pumps – – –
- 3/00** – – – resiliently deformable 5/00; rotary-piston pumps with non-parallel axes of movement of co-operating members specially adapted for elastic fluids 18/48)
- 5/00** – – – **resiliently deformable** (such pumps specially adapted for elastic fluids 18/00)
- 7/00** – – – **the like** (such pumps specially adapted for elastic fluids 19/00)

- 9/00** **Oscillating-piston machines or pumps** (such pumps specially adapted for elastic fluids [21/00](#))
- 11/00** – – – **or oscillating-piston type** (combinations of such pumps specially adapted for elastic fluids [23/00](#)); **Pumping installations** ([13/00](#) takes precedence; specially adapted for elastic fluids [23/00](#); fluid gearing **F 16 H**)
- 13/00** – – – **high pressures** (of pumps specially adapted for elastic fluids [25/00](#))
- N* **14/00** **Control of, monitoring of, or safety arrangements for, machines, pumps or pumping installations** (of pumps or pumping installations specially adapted for elastic fluids [28/00](#))
- N* 14/02 • *specially adapted for several machines or pumps connected in series or in parallel*
- N* 14/04 • *specially adapted for reversible machines or pumps*
- N* 14/06 • *specially adapted for stopping, starting, idling or no-load operation*
- N* 14/08 • *characterised by varying the rotational speed*
- N* 14/10 • *characterised by changing the positions of the inlet or outlet openings with respect to the working chamber*
- N* 14/12 • • *using sliding valves*
- N* 14/14 • • *using rotating valves*
- N* 14/16 • • *using lift valves*
- N* 14/18 • *characterised by varying the volume of the working chamber (by changing the positions of inlet or outlet openings [14/10](#))*
- N* 14/20 • • *by changing the form of the inner or outer contour of the working chamber*
- N* 14/22 • • *by changing the eccentricity between cooperating members*
- N* 14/24 • *characterised by using valves regulating pressure or flow rate, e.g. discharge valves ([14/10](#) takes precedence)*
- N* 14/26 • • *using bypass channels*
- N* 14/28 • *Safety arrangements; Monitoring*
- C* **15/00** **Component parts, details or accessories of machines, pumps or pumping installations, not provided for in groups [2/00](#) to [14/00](#)** (of pumps specially adapted for elastic fluids [18/00](#) to [29/00](#))
- D* 15/02 (*transferred to [14/00](#), [15/06](#)*)
- D* 15/04 (*transferred to [14/00](#)*)

- N* 15/06 • *Arrangements for admission or discharge of the working fluid, e.g. constructional features of the inlet or outlet*
- Guide Heading before 18/00**
- 18/00 Rotary-piston pumps specially adapted for elastic fluids (with fluid**

- 19/00 --- or the like, specially adapted for elastic fluids**
- 21/00 Oscillating-piston pumps specially adapted for elastic fluids**
- 23/00 --- or oscillating-piston type, specially adapted for elastic fluids; Pumping installations specially adapted for elastic fluids; Multi-stage pumps specially adapted for elastic fluids (25/00 takes precedence)**
- 25/00 Adaptations for special use of pumps for elastic fluids**
- 27/00 --- rotary-piston pumps specially adapted for elastic fluids**
- N* 28/00 ***Control of, monitoring of, or safety arrangements for, pumps or pumping installations specially adapted for elastic fluids***
- N* 28/02 • *specially adapted for several pumps connected in series or in parallel*
- N* 28/04 • *specially adapted for reversible pumps*
- N* 28/06 • *specially adapted for stopping, starting, idling or no-load operation*
- N* 28/08 • *characterised by varying the rotational speed*
- N* 28/10 • *characterised by changing the positions of the inlet or outlet openings with respect to the working chamber*
- N* 28/12 • • *using sliding valves*
- N* 28/14 • • *using rotating valves*
- N* 28/16 • • *using lift valves*
- N* 28/18 • *characterised by varying the volume of the working chamber (by changing the positions of inlet or outlet openings 28/10)*
- N* 28/20 • • *by changing the form of the inner or outer contour of the working chamber*
- N* 28/22 • • *by changing the eccentricity between cooperating members*
- N* 28/24 • *characterised by using valves regulating pressure or flow rate, e.g. discharge valves (28/10 takes precedence)*

- N* 28/26 • • *using bypass channels*
- N* 28/28 • *Safety arrangements; Monitoring*
- 29/00** – – – or pumping installations specially adapted for elastic fluids, not provided for in groups 18/00 to 28/00
- D* 29/08 (*transferred to 28/00, 29/12*)
- D* 29/10 (*transferred to 28/00*)
- N* 29/12 • *Arrangements for admission or discharge of the working fluid, e.g. constructional features of the inlet or outlet*

ANNEX 26 F 16 K [Project-Rapporteur : 396/PT] <CE32041E>

Note(s) after
the title

- N* <== for irrigation conduits
- E 03 B 9/02* *Arrangement of valves in hydrants*
- E 03 D* *Flushing valves ==>*

ANNEX 27 F 16 N [Project-Rapporteur : 416/PT] <CE32023E>

Note(s) after
the title

- – – the following places, which cover lubrication of specific apparatus or in particular processes:
- A 01 D 69/12* *Harvesters*
- N* *B 21 B 25/04* *Mandrels for metal tube rolling mills*
- N* *B 21 B 27/06* *Rolls for metal rolling mills*
- N* *B 21 D 37/18* *Tools for machines for working metal without removing material*
- B 21 J 3/00* *Forging or pressing*
- N* *B 22 D 11/07* *Moulds for continuous casting of metals*
- N* *B 23 C 5/28* *Milling cutters*
- N* *B 23 D 59/02,*
- N* *B 23 D 59/04* *Metal saws*

N	B 23 Q 11/10 ,
N	B 23 Q 11/12 <i>Machine tools</i>
	B 25 D 17/26 <i>Portable power-driven percussive tools</i>
N	B 26 B 19/40 <i>Hair-clippers or dry-shavers</i>
N	B 27 B 13/12 <i>Band saw blades for wood or the like</i>
	B 60 R 17/00 <i>Vehicles</i>
N	B 61 B 12/08 <i>Cable systems for railways</i>
	B 61 C 17/08 <i>Railway locomotives</i>
N	B 61 F 17/00 <i>Axle-boxes of rail vehicles</i>
N	B 61 K 3/00 <i>Rail or wheel flanges of railways</i>
	B 62 D 55/092 <i>Endless-track units for vehicles</i>
N	B 62 J 31/00 <i>Cycles</i>
N	B 65 G 45/02 <i>Conveyers</i>
N	B 66 B 7/12 <i>Ropes, cables or guides of elevators</i>
N	D 01 H 7/20 <i>Spindles of machines for spinning or twisting threads or fibres</i>
	D 04 B 35/28 <i>Knitting machines</i>
N	D 05 B 71/00 <i>Sewing machines</i>
N	D 05 C 13/04 <i>Embroidering machines</i>
N	E 01 B 7/26 <i>Switches for railways</i>
	E 05 B 17/08 <i>Locks</i>
	E 05 D 11/02 <i>Hinges</i>
	E 21 B 10/22 <i>Roller bits for earth drilling</i>
N	F 01 C 21/04 <i>Rotary-piston or oscillating-piston machines or engines</i>
N	F 01 D 25/18 <i>Non-positive-displacement machines</i>
N	F 01 M <i>Machines or engines in general</i>
N	F 02 C 7/06 <i>Gas-turbine plants</i>
N	F 02 F 1/20 <i>Cylinders of combustion engines</i>
N	F 04 B 39/02 <i>Pumps for liquids</i>
N	F 04 C 29/02 <i>Rotary-piston or oscillating-piston pumps for liquids</i>
N	F 04 D 29/04 <i>Non-positive-displacement pumps</i>

N	F 16 C 1/24	<i>Flexible shafts</i>
N	F 16 C 33/10	<i>Sliding-contact bearings</i>
N	F 16 C 33/66	<i>Ball or roller bearings</i>
N	F 16 F 1/24	<i>Springs</i>
N	F 16 H 57/04	<i>Transmissions</i>
N	F 41 A 29/04	<i>Smallarms or ordnance</i>
N	G 04 B 31/08	<i>Clocks</i>
N	H 01 R 39/56	<i>Rotary current collectors, distributors or interrupters</i>

ANNEX	28	H 01 H	[Project-Rapporteur : 379/GB]	<CE32012E>
C	11/00	<p>– – – switches (<i>processes specially adapted for manufacture of rectilinearly movable switches having a plurality of operating members associated with different sets of contacts, e.g. keyboards, 13/88; processes or apparatus specially – – –</i>)</p>		
C	13/02	<ul style="list-style-type: none"> • <i>Details (specially adapted for rectilinearly movable switches having operating members associated with different sets of contacts, e.g. keyboards, 13/70)</i> 		
N	13/703	<ul style="list-style-type: none"> • • • <i>characterised by spacers between contact carrying layers</i> 		
N	13/704	<ul style="list-style-type: none"> • • • <i>characterised by the layers, e.g. by their material or structure (13/703 takes precedence)</i> 		
	13/705	<ul style="list-style-type: none"> • • • <i>characterised by construction, mounting or arrangement of operating parts, e.g. push-buttons or keys</i> 		
N	13/7057	<ul style="list-style-type: none"> • • • • <i>characterised by the arrangement of operating parts in relation to each other, e.g. pre-assembled groups of keys</i> 		
N	13/7065	<ul style="list-style-type: none"> • • • • <i>characterised by the mechanism between keys and layered keyboards</i> 		
N	13/7073	<ul style="list-style-type: none"> • • • • • <i>characterised by springs, e.g. Euler springs</i> 		
N	13/78	<ul style="list-style-type: none"> • • <i>characterised by the contacts or the contact sites</i> 		
N	13/785	<ul style="list-style-type: none"> • • • <i>characterised by the material of the contacts, e.g. conductive polymers</i> 		
N	13/79	<ul style="list-style-type: none"> • • • <i>characterised by the form of the contacts, e.g. interspersed fingers or helical networks</i> 		
N	13/80	<ul style="list-style-type: none"> • • • <i>characterised by the manner of cooperation of the contacts, e.g. with both contacts movable or with bounceless contacts</i> 		

- N 13/803 • • • *characterised by the switching function thereof, e.g. normally closed contacts or consecutive operation of contacts*
- N 13/807 • • • *characterised by the spatial arrangement of the contact sites, e.g. superimposed sites*
- N 13/81 • • *characterised by electrical connections to external devices*
- N 13/82 • • *characterised by contact space venting means*
- N 13/83 • • *characterised by legends, e.g. Braille, liquid crystal displays, light emitting or optical elements*
- N 13/84 • • *characterised by ergonomic functions, e.g. for miniature keyboards; characterised by operational sensory functions, e.g. sound feedback (legends 13/83)*
- N 13/85 • • • *characterised by tactile feedback features*
- N 13/86 • • *characterised by the casing, e.g. sealed casings or casings reducible in size*
- N 13/88 • • *Processes specially adapted for manufacture of rectilinearly movable switches having a plurality of operating members associated with different sets of contacts, e.g. keyboards*

ANNEX	29	H 02 P	[Project-Rapporteur : 410/DE]	<CE32013E>
C	1/00	<i>– – – dynamo-electric converters (starting of synchronous motors with electronic commutators 6/20, 6/22; starting dynamo-electric motors rotating step by step 8/04; vector control 21/00)</i>		
C	3/00	<i>– – – dynamo-electric converters (stopping of synchronous motors with electronic commutators 6/24; stopping dynamo-electric motors rotating step by step 8/24; vector control 21/00)</i>		
N	4/00	<i>Arrangements specially adapted for regulating or controlling the speed or torque of electric motors that can be connected to two or more different voltage or current supplies (starting 1/00; stopping or slowing 3/00; vector control 21/00)</i>		
C	5/00	<i>Arrangements specially adapted for regulating or controlling the speed or torque of two or more electric motors (starting 1/00; stopping or slowing 3/00; vector control 21/00)</i>		
D	5/04	<i>(transferred to 29/04)</i>		
D	5/05	<i>(transferred to 25/08)</i>		
D	5/06	<i>(covered by 7/06)</i>		

D	5/08	(covered by 7/06 to 7/22)
D	5/10	(covered by 7/06 to 7/22)
D	5/12	(covered by 7/24)
D	5/14	(covered by 7/26)
D	5/16	(covered by 7/28)
D	5/162	(covered by 7/282)
D	5/165	(covered by 7/285)
D	5/168	(covered by 7/288)
D	5/17	(covered by 7/29)
D	5/172	(covered by 7/292)
D	5/175	(covered by 7/295)
D	5/178	(covered by 7/298)
D	5/18	(covered by 7/30)
D	5/20	(covered by 7/32)
D	5/22	(covered by 7/34)
D	5/24	(covered by 7/34)
D	5/26	(covered by 7/34)
D	5/28	(transferred to 23/00, 25/00, 27/00)
D	5/30	(transferred to 25/18)
D	5/32	(transferred to 25/18)
D	5/34	(transferred to 27/04)
D	5/36	(transferred to 23/00, 25/00, 27/00)
D	5/38	(transferred to 25/32)
D	5/40	(transferred to 23/00, 25/00, 27/00)
D	5/402	(transferred to 27/02)
D	5/405	(transferred to 25/26)
D	5/408	(transferred to 27/04)
D	5/41	(transferred to 27/06)
D	5/412	(transferred to 27/16)
D	5/415	(transferred to 23/00, 27/05)
D	5/418	(transferred to 25/10)
D	5/42	(transferred to 25/28)
D	5/44	(transferred to 25/12, 25/16)
N	5/60	<ul style="list-style-type: none">controlling combinations of dc and ac dynamo-electric motors (5/46 takes precedence)

N	5/68	• <i>controlling two or more dc dynamo-electric motors (5/46, 5/60 take precedence)</i>
N	5/685	• • <i>electrically connected in series, i.e. carrying the same current</i>
N	5/69	• • <i>mechanically coupled by gearing</i>
N	5/695	• • • <i>Differential gearing</i>
N	5/74	• <i>controlling two or more ac dynamo-electric motors (5/46, 5/60 take precedence)</i>
N	5/747	• • <i>mechanically coupled by gearing</i>
N	5/753	• • • <i>Differential gearing</i>
	6/00	– – – commutators therefor (stepping motors 8/00; vector control 21/00)
C	7/00	Arrangements for regulating or controlling the – – – of electric dc-motors (starting 1/00; stopping or slowing 3/00; vector control 21/00)
D	7/01	(transferred to 4/00)
D	7/04	(transferred to 29/04)
D	7/05	(transferred to 25/08)
	7/06	• for regulating or controlling an individual – – –
D	Note(s) before 7/10	<Deleted>
	7/20	• • • – – – of relays (7/24, 7/30 take precedence)
	7/22	• • • – – – variable resistance (7/24, 7/30 take precedence)
D	7/36	(transferred to 23/00, 25/00, 27/00)
D	7/38	(transferred to 23/00, 25/00, 27/00)
D	7/40	(transferred to 25/24)
D	7/42	(transferred to 27/04)
D	7/44	(transferred to 27/04)
D	7/46	(transferred to 27/05)
D	7/48	(transferred to 25/20)
D	7/50	(transferred to 25/12)
D	7/52	(transferred to 23/00, 25/00, 27/00)
D	7/54	(transferred to 25/18)
D	7/56	(transferred to 25/18)
D	7/58	(transferred to 23/00, 25/00, 27/00)
D	7/60	(transferred to 25/32)
D	7/62	(transferred to 23/00, 25/00, 27/00)
D	7/622	(transferred to 27/02)

- D 7/625 (transferred to 25/26)
- D 7/628 (transferred to 27/04)
- D 7/63 (transferred to 27/06)
- D 7/632 (transferred to 27/16)
- D 7/635 (transferred to 23/00, 27/05)
- D 7/638 (transferred to 25/10)
- D 7/64 (transferred to 25/28)
- D 7/66 (transferred to 25/30)
- D 7/67 (transferred to 5/00)
- D 7/68 (transferred to 5/68)
- D 7/685 (transferred to 5/685)
- D 7/69 (transferred to 5/69)
- D 7/695 (transferred to 5/695)
- D 7/74 (transferred to 5/74)
- D 7/747 (transferred to 5/747)
- D 7/753 (transferred to 5/753)
- D 7/80 (transferred to 5/60)
- C 8/00 --- **by step** (vector control 21/00)
- C 9/00 --- arrangements 7/34; vector control 21/00; feeding a ---
- C 11/00 --- slowing 3/00; vector control 21/00; feeding a ---
- C 15/00 --- separate brake 29/04, vector control 21/00)
- C 17/00 --- **dynamo-electric gears** (vector control 21/00)
- D 19/00 (transferred to 1/00, 3/00, 5/00, 7/00, 23/00 to 31/00)
- D 19/02 (transferred to 29/02)
- C 21/00 **Arrangements or methods for the control of electric machines by vector control, e.g. by control of field orientation**
- N Note(s) after 21/00
- When classifying in this group, it is desirable to also classify in groups 25/00 to 27/00 if the kind of ac-motor, structural details, or the kind of supply voltage are of interest.
- N 21/02 • specially adapted for optimising the efficiency at low load

- N 21/04 • *pecially adapted for very low speeds*
- N 21/05 • *pecially adapted for damping motor oscillations, e.g. for reducing hunting*
- N 21/06 • *Rotor flux based control*
- N 21/08 • • *Indirect field-oriented control, e.g. field phase angle calculation based on rotor voltage equation by adding slip frequency and speed proportional frequency*
- N 21/10 • • *Direct field-oriented control*
- N 21/12 • *Stator flux based control*
- N 21/13 • *Observer control, e.g. using Luenberger observers or Kalman filters*
- N 21/14 • *Estimation or adaptation of machine parameters, e.g. rotor time constant, flux, speed, current or voltage*
- N 23/00 ***Arrangements or methods for the control of ac-motors characterised by a control method other than vector control (starting 1/00; stopping or slowing 3/00; of two or more motors 5/00; of synchronous motors with electronic commutators 6/00; of dc-motors 7/00; of stepping motors 8/00)***
- N Note(s) after 23/00

When classifying in this group, it is desirable to also classify in groups 25/00 to 27/00 if the kind of ac-motor, structural details, or the kind of supply voltage are of interest.
- N 23/02 • *pecially adapted for optimising the efficiency at low load*
- N 23/03 • *pecially adapted for very low speeds*
- N 23/04 • *pecially adapted for damping motor oscillations, e.g. for reducing hunting*
- N 23/06 • *Controlling the motor in four quadrants*
- N 23/08 • *Controlling based on slip frequency, e.g. adding slip frequency and speed proportional frequency*
- N 23/10 • *Controlling by adding a dc current (dc current braking 3/24)*
- N 23/12 • *Observer control, e.g. using Luenberger observers or Kalman filters*
- N 23/14 • *Estimation or adaptation of motor parameters, e.g. rotor time constant, flux, speed, current or voltage*

N 25/00 Arrangements or methods for the control of ac-motors characterised by the kind of ac-motor or by structural details (starting 1/00; stopping or slowing 3/00; of two or more motors 5/00; of synchronous motors with electronic commutators 6/00; of dc-motors 7/00; of stepping motors 8/00)

N Note(s) after 25/00

When classifying in this group, it is desirable to also classify in groups 21/00, 23/00 or 27/00 if the control method or the kind of supply voltage are of interest.

N 25/02 • characterised by the kind of motor

N 25/04 • • Single phase motors, e.g. capacitor motors

N 25/06 • • Linear motors

N 25/08 • • Reluctance motors

N 25/10 • • Commutator motors, e.g. repulsion motors

N 25/12 • • • with shiftable brushes

N 25/14 • • • Universal motors (25/12 takes precedence)

N 25/16 • characterised by the circuit arrangement or by the kind of wiring

N 25/18 • • with arrangements for switching the windings, e.g. with mechanical switches or relays

N 25/20 • • • for pole-changing

N 25/22 • • Multiple windings; Windings for more than three phases

N 25/24 • • Variable impedance in stator or rotor circuit

N 25/26 • • • with arrangements for controlling secondary impedance

N 25/28 • • using magnetic devices with controllable degree of saturation, e.g. transducers

N 25/30 • • the motor being controlled by a control effected upon an ac generator supplying it

N 25/32 • • using discharge tubes

N 27/00 Arrangements or methods for the control of ac-motors characterised by the kind of supply voltage (starting 1/00; stopping or slowing 3/00; of two or more motors 5/00; of synchronous motors with electronic commutators 6/00; of dc-motors 7/00; of stepping motors 8/00)

N Note(s) after
27/00

When classifying in this group, it is desirable to also classify in groups [21/00](#), [23/00](#) or [25/00](#) if the control method, the kind of the ac-motor or structural details are of interest.

- N 27/02
 - using supply voltage with constant frequency and variable amplitude
- N 27/04
 - using variable-frequency supply voltage, e.g. inverter or converter supply voltage
- N 27/05
 - • using ac supply for both rotor and stator circuits, the frequency of supply to at least one circuit being variable
- N 27/06
 - • using dc to ac converters or inverters ([27/05](#) takes precedence)
- N 27/08
 - • • with pulse width modulation
- N 27/10
 - • • • using bang-bang controllers
- N 27/12
 - • • • pulsing by guiding the flux-, current-, or voltage-vector on a circle or a closed curve, e.g. direct torque control
- N 27/14
 - • • • with three or more levels of voltage
- N 27/16
 - • using ac to ac converters without intermediate conversion to dc ([27/05](#) takes precedence)
- N 27/18
 - • • varying the frequency by omitting half waves
- N **29/00**

Arrangements for regulating or controlling electric motors, appropriate for both ac- and dc-motors (starting [1/00](#); stopping or slowing [3/00](#); control of motors that can be connected to two or more different voltage or current supplies [4/00](#); vector control [21/00](#))
- N 29/02
 - Providing protection against overload without automatic interruption of supply, e.g. monitoring
- N Note(s) after
29/02

Informative note

References listed below indicate IPC places which could also be of interest when carrying out a search in respect of the subject matter covered by the preceding group:

*Emergency protective circuit arrangements with automatic interruption of supply, in general,
[H 02 H 7/08](#);*

Emergency protective circuit arrangements for limiting excess current or voltage without disconnection, in general, [H 02](#) [H 9/00](#).

N 29/04 • *by means of a separate brake*

N 31/00 ***Arrangements for regulating or controlling electric motors not provided for in groups [1/00](#) to [5/00](#), [7/00](#) or [21/00](#) to [29/00](#)***

[End of Technical Annexes and of document]