

CPC COOPERATIVE PATENT CLASSIFICATION

D TEXTILES; PAPER

TEXTILES OR FLEXIBLE MATERIALS NOT OTHERWISE PROVIDED FOR

D07 ROPES; CABLES OTHER THAN ELECTRIC

D07B ROPES OR CABLES IN GENERAL (joining ropes or cables to one another or to other objects [B65H 69/00](#), [F16G 11/00](#); {mountaineering ropes [A63B 29/02](#)}; mechanical finishing or dressing of ropes [D02J](#); {braiding [D04C](#)}; decorative ropes or cords [D04D](#); suspension cables for bridges [E01D 19/16](#); specially adapted for driving, or for being driven by, pulleys or other gearing elements [F16G 9/00](#); electric cables or joints insofar as electrical aspects are essential [H01B](#), [H01R](#))

WARNING

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

1/00 Constructional features of ropes or cables

WARNING

Group [D07B 1/00](#) is impacted by reclassification into group [D07B 1/24](#).

Groups [D07B 1/00](#) and [D07B 1/24](#) should be considered in order to perform a complete search.

- 1/005 . {Composite ropes, i.e. ropes built-up from fibrous or filamentary material and metal wires}
- 1/02 . Ropes built-up from fibrous or filamentary material, e.g. of vegetable origin, of animal origin, regenerated cellulose, plastics
- 1/025 . . {comprising high modulus, or high tenacity, polymer filaments or fibres, e.g. liquid-crystal polymers}
- 1/04 . . with a core of fibres or filaments arranged parallel to the centre line
- 1/06 . Ropes or cables built-up from metal wires, e.g. of section wires around a hemp core
- 1/0606 . . {Reinforcing cords for rubber or plastic articles}
- 1/0613 . . . {the reinforcing cords being characterised by the rope configuration}
- 1/062 . . . {the reinforcing cords being characterised by the strand configuration}
- 1/0626 {the reinforcing cords consisting of three core wires or filaments and at least one layer of outer wires or filaments, i.e. a 3+N configuration}
- 1/0633 {having a multiple-layer configuration}
- 1/064 {the reinforcing cords being twisted and with at least one wire exchanging place with another wire}
- 1/0646 . . . {comprising longitudinally preformed wires}
- 1/0653 {in the core}
- 1/066 . . . {the wires being made from special alloy or special steel composition}
- 1/0666 . . . {the wires being characterised by an anti-corrosive or adhesion promoting coating}
- 1/0673 . . {having a rope configuration}

- 1/068 . . . {characterised by the strand design}
- 1/0686 . . . {characterised by the core design}
- 1/0693 . . {having a strand configuration}
- 1/08 . . the layers of which are formed of profiled interlocking wires, i.e. the strands forming concentric layers {([D07B 1/0606](#) takes precedence)}
- 1/10 . . . with a core of wires arranged parallel to the centre line
- 1/12 . Ropes or cables with a hollow core
- 1/14 . Ropes or cables with incorporated auxiliary elements, e.g. for marking, extending throughout the length of the rope or cable

WARNING

Group [D07B 1/14](#) is impacted by reclassification into group [D07B 1/24](#).

Groups [D07B 1/14](#) and [D07B 1/24](#) should be considered in order to perform a complete search.

- 1/141 . . {comprising liquid, pasty or powder agents, e.g. lubricants or anti-corrosive oils or greases}
- 1/142 . . . {for ropes or rope components built-up from fibrous or filamentary material}
- 1/144 . . . {for cables or cable components built-up from metal wires}
- 1/145 . . {comprising elements for indicating or detecting the rope or cable status}

WARNING

Group [D07B 1/145](#) is impacted by reclassification into group [D07B 1/24](#).

Groups [D07B 1/145](#) and [D07B 1/24](#) should be considered in order to perform a complete search.

- 1/147 . . {comprising electric conductors or elements for information transfer ([D07B 1/145](#) takes precedence)}
- 1/148 . . {comprising marks or luminous elements}

- 1/16 . Ropes or cables with an enveloping sheathing or inlays of rubber or plastics ([D07B 1/04](#), [D07B 1/10 take precedence](#))
- 1/162 . . {characterised by a plastic or rubber enveloping sheathing}
- 1/165 . . {characterised by a plastic or rubber inlay}
- 1/167 . . . {having a predetermined shape}
- 1/18 . Grommets ([slings B66C 1/12](#))
- 1/185 . . {characterised by the eye construction}
- 1/20 . Buoyant ropes, e.g. with air-filled cellular cores; Accessories therefor
- 1/22 . Flat or flat-sided ropes; Sets of ropes consisting of a series of parallel ropes

WARNING

Group [D07B 1/22](#) is impacted by reclassification into group [D07B 5/045](#).

Groups [D07B 1/22](#) and [D07B 5/045](#) should be considered in order to perform a complete search.

- 1/24 . {Ropes or cables with a prematurely failing element}

WARNING

Group [D07B 1/24](#) is incomplete pending reclassification of documents from groups [D07B 1/00](#), [D07B 1/14](#), and [D07B 1/145](#).

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

Manufacture of ropes or cables

3/00 General-purpose machines or apparatus for producing twisted ropes or cables from component strands of the same or different material

- 3/005 . {with alternating twist directions}
- 3/02 . in which the supply reels rotate about the axis of the rope or cable {or in which a guide member rotates about the axis of the rope or cable to guide the component strands away from the supply reels in fixed position}

WARNING

Group [D07B 3/02](#) is impacted by reclassification into group [D07B 3/022](#).

Groups [D07B 3/02](#) and [D07B 3/022](#) should be considered in order to perform a complete search.

- 3/022 . . {with provision for imparting two or more twists to the filaments for each revolution of the guide member}

WARNING

Group [D07B 3/022](#) is incomplete pending reclassification of documents from groups [D07B 3/02](#) and [D01H 1/10](#).

Groups [D07B 3/02](#), [D01H 1/10](#), and [D07B 3/022](#) should be considered in order to perform a complete search.

- 3/04 . . and are arranged in tandem along the axis of the machine {, e.g. tubular or high-speed type stranding machine}

- 3/045 . . . {with the reels axially aligned, their common axis coinciding with the axis of the machine}
- 3/06 . . and are spaced radially from the axis of the machine {, i.e. basket or planetary-type stranding machine}
- 3/08 . in which the take-up reel rotates about the axis of the rope or cable {or in which a guide member rotates about the axis of the rope or cable to guide the rope or cable on the take-up reel in fixed position} and the supply reels are fixed in position
- 3/085 . . {in which a guide member rotates about the axis of the rope or cable to guide the rope or cable on the take-up reel in fixed position}
- 3/10 . . with provision for imparting more than one complete twist to the ropes or cables for each revolution of the take-up reel {or of the guide member}
- 3/103 . . . {characterised by the bow construction}
- 3/106 . . . {characterised by comprising two bows, both guiding the same bundle to impart a twist}
- 3/12 . operating with rotating loops of filaments
- 3/14 . hand-operated

5/00 Making ropes or cables from special materials or of particular form

- 5/002 . {Making parallel wire strands}
- 5/005 . {characterised by their outer shape or surface properties}
- 5/006 . . {by the properties of an outer surface polymeric coating}
- 5/007 . {comprising postformed and thereby radially plastically deformed elements}
- 5/02 . from straw or like vegetable material
- 5/04 . Rope bands

WARNING

Group [D07B 5/04](#) is impacted by reclassification into group [D07B 5/045](#).

Groups [D07B 5/04](#) and [D07B 5/045](#) should be considered in order to perform a complete search.

- 5/045 . . {Belts comprising additional filaments for laterally interconnected load bearing members}

WARNING

Group [D07B 5/045](#) is incomplete pending reclassification of documents from groups [D07B 1/22](#) and [D07B 5/04](#).

Groups [D07B 1/22](#), [D07B 5/04](#), and [D07B 5/045](#) should be considered in order to perform a complete search.

- 5/06 . from natural or artificial staple fibres
- 5/08 . . agglutinated by adhesives
- 5/10 . from strands of non-circular cross-section
- 5/12 . of low twist or low tension by processes comprising setting or straightening treatments

7/00 Details of, or auxiliary devices incorporated in, rope- or cable-making machines; Auxiliary apparatus associated with such machines

- 7/02 . Machine details; Auxiliary devices
- WARNING**
- Group [D07B 7/02](#) is impacted by reclassification into group [D07B 7/021](#).
- Groups [D07B 7/02](#) and [D07B 7/021](#) should be considered in order to perform a complete search.
- 7/021 . . {Guiding means for filaments, strands, ropes or cables}
- WARNING**
- Group [D07B 7/021](#) is incomplete pending reclassification of documents from groups [D07B 7/02](#) and [D03D 13/00](#).
- Groups [D07B 7/02](#), [D03D 13/00](#), and [D07B 7/021](#) should be considered in order to perform a complete search.
- 7/022 . . {Measuring or adjusting the lay or torque in the rope}
- 7/025 . . {Performing the wires or strands prior to closing}
- 7/027 . . {Postforming of ropes or strands}
- 7/04 . . Devices for imparting reverse rotation to bobbin- or reel cages
- 7/06 . . Bearing supports or brakes for supply bobbins or reels
- 7/08 . . Alarms or stop motions responsive to exhaustion or breakage of filamentary material fed from supply reels or bobbins
- 7/10 . . Devices for taking-up or winding the finished rope or cable
- 7/12 . . for softening, lubricating or impregnating ropes, cables, or component strands thereof
- 7/14 . . for coating or wrapping ropes, cables, or component strands thereof ([applying liquids or other fluent materials to surfaces in general B05](#); [wrapping elongated cores in general B65H 81/06](#))
- 7/145 . . . {Coating or filling-up interstices}
- 7/16 . Auxiliary apparatus
- 7/162 . . {Vices or clamps for bending or holding the rope or cable during splicing}
- 7/165 . . {for making slings}
- 7/167 . . {for joining rope components}
- 7/169 . . {for interconnecting two cable or rope ends, e.g. by splicing or sewing ([fixation or holding of the ends prior to or during splicing D07B 7/162](#); [joining the rope or cable components individually or joining the rope ends by permanent means such as welding, gluing or crimp sleeve D07B 7/167](#); [preparing the splice by opening the ends D07B 7/18](#))}
- 7/18 . . for spreading or untwisting ropes or cables into constituent parts for treatment or splicing purposes
- 7/182 . . . {for spreading ropes or cables by hand-operated tools for splicing purposes, e.g. needles or spikes}
- 7/185 . . . {for temporarily untwisting ropes or cables into constituent parts for applying a coating}
- 7/187 . . . {for forming bulbs in ropes or cables}

9/00 Binding or sealing ends, e.g. to prevent unravelling

WARNING

Group [D07B 9/00](#) is impacted by reclassification into group [D07B 9/001](#).

Groups [D07B 9/00](#) and [D07B 9/001](#) should be considered in order to perform a complete search.

- 9/001 . {combined with cutting or severing}

WARNING

Group [D07B 9/001](#) is incomplete pending reclassification of documents from group [D07B 9/00](#).

Groups [D07B 9/00](#) and [D07B 9/001](#) should be considered in order to perform a complete search.

2201/00 Ropes or cables

- 2201/10 . Rope or cable structures
- 2201/1004 . . General structure or appearance
- 2201/1008 . . . Several parallel ropes
- 2201/1012 . . characterised by their internal structure
- 2201/1014 . . . characterised by being laid or braided from several sub-ropes or sub-cables, e.g. hawsers
- 2201/1016 . . . characterised by the use of different strands
- 2201/102 . . . including a core
- 2201/1024 . . Structures that change the cross-sectional shape
- 2201/1028 . . characterised by the number of strands
- 2201/1032 . . . three to eight strands respectively forming a single layer
- 2201/1036 . . . nine or more strands respectively forming multiple layers
- 2201/104 . . twisted
- 2201/1044 . . . characterised by a value or range of the pitch parameter given
- 2201/1048 . . . using regular lay, i.e. the wires or filaments being parallel to rope axis
- 2201/1052 . . . using lang lay, i.e. the wires or filaments being inclined relative to the rope axis
- 2201/1056 . . . using alternate lay, i.e. the wires or filaments in the strands being oppositely inclined relative to the rope axis
- 2201/106 . . . Pitch changing over length
- 2201/1064 . . . characterised by lay direction of the strand compared to the lay direction of the wires in the strand
- 2201/1068 having the same lay direction
- 2201/1072 . . . Compact winding, i.e. S/S or Z/Z
- 2201/1076 . . . Open winding
- 2201/108 Cylinder winding, i.e. S/Z or Z/S
- 2201/1084 Different twist pitch
- 2201/1088 . . false twisted
- 2201/1092 . . Parallel strands
- 2201/1096 . . braided
- 2201/20 . Rope or cable components
- 2201/2001 . . Wires or filaments
- 2201/2002 . . . characterised by their cross-sectional shape
- 2201/2003 flat
- 2201/2004 triangular
- 2201/2005 oval

2201/2006	. . . characterised by a value or range of the dimension given	2201/2057	. . . . . resulting in a twisted structure
2201/2007	. . . characterised by their longitudinal shape	2201/2058	. . . . . comprising fillers
2201/2008	. . . . wavy or undulated	2201/2059	. . . . . comprising wires
2201/2009	. . . characterised by the materials used	2201/206	. . . . . arranged parallel to the axis
2201/201	. . . characterised by a coating	2201/2061	. . . . . resulting in a twisted structure
2201/2011	. . . . comprising metals	2201/2062	. . . . . comprising fillers
2201/2012	. . . . comprising polymers	2201/2063	. . . . . being hollow
2201/2013	. . . . comprising multiple layers	2201/2064	. . . . . being discontinuous in the longitudinal direction
2201/2014	. . . Compound wires or compound filaments	2201/2065	. . . . . comprising a coating
2201/2015	. . Strands	2201/2066	. . . characterised by the materials used
2201/2016	. . . characterised by their cross-sectional shape	2201/2067	. . . characterised by the elongation or tension behaviour
2201/2017	. . . . triangular	2201/2068	. . . . . having a load bearing function
2201/2018	. . . . oval	2201/2069	. . . . . being elastic
2201/2019	. . . pressed to shape	2201/207	. . . . . being viscous
2201/202	. . . characterised by a value or range of the dimension given	2201/2071	. . Spacers
2201/2021	. . . characterised by their longitudinal shape	2201/2072	. . . characterised by the materials used
2201/2022	. . . coreless	2201/2073	. . . in circumferencial direction
2201/2023	. . . with core	2201/2074	. . . in radial direction
2201/2024	. . . twisted	2201/2075	. . Fillers
2201/2025	. . . . characterised by a value or range of the pitch parameter given	2201/2076	. . . having a lubricant function
2201/2026	. . . . Pitch changing over length	2201/2077	. . . having an anti-corrosive function
2201/2027	. . . . Compact winding	2201/2078	. . . having a load bearing function
2201/2028	. . . . . having the same lay direction and lay pitch	2201/2079	. . . characterised by the kind or amount of filling
2201/2029	. . . . Open winding	2201/208	. . . . having an open structure
2201/203	. . . . . Cylinder winding, i.e. S/Z or Z/S	2201/2081	. . . . having maximum filling
2201/2031	. . . . . Different twist pitch	2201/2082	. . . characterised by the materials used
2201/2032	. . . . . compared with the core	2201/2083	. . Jackets or coverings
2201/2033	. . . Parallel wires	2201/2084	. . . characterised by their shape
2201/2034	. . . comprising crossing wires or filaments in the same layer	2201/2085	. . . . concerning the internal shape
2201/2035	. . . false twisted	2201/2086	. . . . concerning the external shape
2201/2036	. . . characterised by the use of different wires or filaments	2201/2087	. . . being of the coated type
2201/2037	. . . . regarding the dimension of the wires or filaments	2201/2088	. . . having multiple layers
2201/2038	. . . characterised by the number of wires or filaments	2201/2089	. . . comprising wrapped structures
2201/2039	. . . . three to eight wires or filaments respectively forming a single layer	2201/209	. . . comprising braided structures
2201/204	. . . . nine or more wires or filaments respectively forming multiple layers	2201/20903	. . . comprising woven structures
2201/2041	. . . characterised by the materials used	2201/20907	. . . comprising knitted structures
2201/2042	. . . characterised by a coating	2201/2091	. . . being movable relative to the internal structure
2201/2043	. . . . comprising metals	2201/2092	. . . characterised by the materials used
2201/2044	. . . . comprising polymers	2201/2093	. . . . being translucent
2201/2045	. . . . comprising multiple layers	2201/2094	. . . . being luminescent or reflective
2201/2046	. . . comprising fillers	2201/2095	. . Auxiliary components, e.g. electric conductors or light guides
2201/2047	. . Cores	2201/2096	. . . Light guides
2201/2048	. . . characterised by their cross-sectional shape	2201/2097	. . . Binding wires
2201/2049	. . . . having protrusions extending radially functioning as spacer between strands or wires	2201/2098	. . . . characterized by special properties or the arrangements of the binding wire
2201/2051	. . . characterised by a value or range of the dimension given	2205/00	Rope or cable materials
2201/2052	. . . characterised by their structure	2205/10	. Natural organic materials
2201/2053	. . . . being homogeneous	2205/103	. . Animal and plant materials
2201/2054	. . . . . comprising foam material	2205/106	. . . Manila, hemp or sisal
2201/2055	. . . . comprising filaments or fibers	2205/20	. Organic high polymers
2201/2056	. . . . . arranged parallel to the axis	2205/2003	. . Thermoplastics
		2205/2007	. . Duroplastics
		2205/201	. . Polyolefins
		2205/2014	. . . High performance polyolefins, e.g. Dyneema or Spectra
		2205/2017	. . Polystyrenes
		2205/2021	. . Polyvinyl halides
		2205/2025	. . Polyvinyl acetates

2205/2028	. . Polyvinyl alcohols	2207/201	. . Manually operated systems
2205/2032	. . Polyacrylics	2207/202	. . Double twist unwinding
2205/2035	. . Polyacetals	2207/203	. . . comprising flyer
2205/2039	. . Polyesters	2207/204	. . Double twist winding
2205/2042	. . . High performance polyesters, e.g. Vectran	2207/205	. . . comprising flyer
2205/2046	. . Polyamides, e.g. nylons	2207/206	. . . with means for providing less than double twist, e.g. counter rotating means
2205/205	. . . Aramides	2207/207	. . Sequential double twisting devices
2205/2053	. . . . Polybenzimidazol [PBI]	2207/208	. . . characterised by at least partially unwinding the twist of the upstream double twisting step
2205/2057	. . Phenol resins	2207/209	. . Tubular strander
2205/206	. . Epoxy resins	2207/40	. Machine components
2205/2064	. . Polyurethane resins	2207/4004	. . Unwinding devices
2205/2067	. . Viscose or regenerated cellulose, e.g. Rayon	2207/4009	. . . over the head
2205/2071	. . Fluor resins	2207/4013	. . . comprising flyer
2205/2075	. . Rubbers, i.e. elastomers	2207/4018	. . Rope twisting devices
2205/2078	. . . being of natural origin	2207/4022	. . . characterised by twisting die specifics
2205/2082	. . . being of synthetic nature, e.g. chloroprene	2207/4027	. . . . including a coating die
2205/2085	. . having particular high polymer characteristics	2207/4031	. . Winding device
2205/2089	. . . showing heat contraction	2207/4036	. . . comprising traversing means
2205/2092	. . . related to water solubility	2207/404	. . Heat treating devices; Corresponding methods
2205/2096	. . Poly-p-phenylenebenzo-bisoxazole [PBO]	2207/4045	. . . to change the crystal structure of the load bearing material
2205/30	. Inorganic materials	2207/405	. . . to heat towards the glass transition temperature of the load bearing material
2205/3003	. . Glass	2207/4054	. . . to soften the load bearing material
2205/3007	. . Carbon	2207/4059	. . . to soften the filler material
2205/301	. . Ceramics	2207/4063	. . . for stress relief
2205/3014	. . Asbestos	2207/4068	. . . for curing
2205/3017	. . Silicon carbides	2207/4072	. . Means for mechanically reducing serpentinizing or mechanically killing of rope
2205/3021	. . Metals	2207/4077	. . Safety devices
2205/3025	. . . Steel	2207/4081	. . . comprising means for stopping or shutting down the machine
2205/3028	. . . . Stainless steel	2207/4086	. . . providing warnings
2205/3032	. . . . Austenite	2207/409	. . Drives
2205/3035	. . . . Pearlite	2207/4095	. . . Control means therefor
2205/3039	. . . . Martensite	2301/00	Controls
2205/3042	. . . . Ferrite	2301/10	. Open loop
2205/3046	. . . . characterised by the carbon content	2301/15	. Closed loop
2205/305	. . . . . having a low carbon content, e.g. below 0,5 percent respectively NT wires	2301/155	. . being of the extended closed loop control system type, e.g. using models or more than one signal in the feedback loop
2205/3053	. . . . . having a medium carbon content, e.g. greater than 0,5 percent and lower than 0.8 percent respectively HT wires	2301/20	. Controller types
2205/3057	. . . . . having a high carbon content, e.g. greater than 0,8 percent respectively SHT or UHT wires	2301/201	. . proportional
2205/306	. . . Aluminium (Al)	2301/202	. . integrative
2205/3064	. . . Chromium (Cr)	2301/204	. . differential
2205/3067	. . . Copper (Cu)	2301/205	. . Programmable controllers; Calculating or controlling methods
2205/3071	. . . Zinc (Zn)	2301/207	. . . Fuzzy logic
2205/3075	. . . Tin (Sn)	2301/208	. . . using timing functions
2205/3078	. . . Lead (Pb)	2301/25	. System input signals, e.g. set points
2205/3082	. . . Tungsten (W)	2301/251	. . Twist
2205/3085	. . . Alloys, i.e. non ferrous	2301/252	. . Temperature
2205/3089	. . . . Brass, i.e. copper (Cu) and zinc (Zn) alloys	2301/253	. . . Temperature profile or sequence
2205/3092	. . . . Zinc (Zn) and tin (Sn) alloys	2301/254	. . Amount of material
2205/3096	. . . Amorphous metals	2301/255	. . Power consumption of drive
2205/40	. Superconductive materials	2301/256	. . Pressure
2205/405	. . Ceramic superconductor	2301/257	. . Force
2205/50	. Lubricants	2301/258	. . Tensile stress
2205/502	. . Oils	2301/259	. . Strain or elongation
2205/505	. . Greases		
2205/507	. . Solid lubricants		
2207/00	Rope or cable making machines		
2207/20	. Type of machine		

2301/30	• Signals indicating failure or excessive conditions, e.g. overheating	2401/2025	• • • avoiding corrosion
2301/302	• • Temperature	2401/203	• • • Low temperature resistance
2301/305	• • Wear or friction	2401/2035	• • • High temperature resistance
2301/307	• • Breakage of wire or strand or rope	2401/204	• • • Moisture handling
2301/35	• System output signals	2401/2045	• • Avoiding longitudinal load for covering
2301/3508	• • Twist	2401/205	• • Avoiding relative movement of components
2301/3516	• • Temperature	2401/2055	• • Improving load capacity
2301/3525	• • • Temperature profile or sequence	2401/206	• • Improving radial flexibility
2301/3533	• • Amount of material	2401/2065	• • Reducing wear
2301/3541	• • Power consumption of drive	2401/207	• • • internally
2301/355	• • Pressure	2401/2075	• • • externally
2301/3558	• • Force	2401/208	• • Enabling filler penetration
2301/3566	• • Tensile stress	2401/2085	• • Adjusting or controlling final twist
2301/3575	• • Strain or elongation	2401/209	• • • comprising compensation of rope twist in strand twist
2301/3583	• • Rotational speed	2401/2095	• • Improving filler wetting respectively or filler adhesion
2301/3591	• • Linear speed	2401/40	• related to rope making machines
2301/40	• Feedback signal in closed loop controls	2401/401	• • Reducing wear
2301/4008	• • Twist	2401/403	• • Reducing vibrations
2301/4016	• • Temperature	2401/405	• • Addressing space constraints
2301/4025	• • • Temperature profile or sequence	2401/406	• • Increasing speed
2301/4033	• • Amount of material	2401/408	• • Increasing rope length, e.g. on drum
2301/4041	• • Power consumption of drive		
2301/405	• • Pressure	2501/00	Application field
2301/4058	• • Force	2501/20	• related to ropes or cables
2301/4066	• • Tensile stress	2501/2007	• • Elevators
2301/4075	• • Strain or elongation	2501/2015	• • Construction industries
2301/4083	• • Rotational speed	2501/2023	• • • Concrete enforcements
2301/4091	• • Linear speed	2501/203	• • • Bridges
2301/45	• for diagnosing (signals indicating failure or excessive conditions D07B 2301/30)	2501/2038	• • Agriculture, forestry and fishery
2301/50	• User Interface or value setting	2501/2046	• • Tire cords
2301/55	• Sensors	2501/2053	• • • for wheel rim attachment
2301/5504	• • characterised by their arrangement	2501/2061	• • Ship moorings
2301/5509	• • • being movable	2501/2069	• • Climbing or tents
2301/5513	• • • being of the reflective type	2501/2076	• • Power transmissions
2301/5518	• • • • Transducers therefor	2501/2084	• • Mechanical controls, e.g. door lashes
2301/5522	• • • being of the barrier type	2501/2092	• • Evacuation lines or lifelines
2301/5527	• • • comprising an array or multiple sensors	2501/40	• related to rope or cable making machines
2301/5531	• • using electric means or elements	2501/403	• • for making belts
2301/5536	• • • for measuring electrical current	2501/406	• • for making electrically conductive cables
2301/554	• • • for measuring variable resistance		
2301/5545	• • • and piezoelectric phenomena	2801/00	Linked indexing codes associated with indexing codes or classes of D07B
2301/555	• • • for measuring magnetic properties		NOTE
2301/5554	• • • for measuring capacitance		The following indexing codes are applied as linked indexing codes associated to other indexing codes or classes of D07B , with the following restrictions:
2301/5559	• • • for measuring inductance		• D07B 2801/10 , D07B 2801/14 - D07B 2801/22 are only to be used as linked indexing codes with D07B 2205/00 and lower hierarchy
2301/5563	• • • for measuring temperature, i.e. thermocouples		• D07B 2801/12 and D07B 2801/24 are only to be used as linked indexing codes with D07B 2205/00 and lower hierarchy or D07B 2201/2047 and lower hierarchy
2301/5568	• • • acoustic or ultrasonic		• D07B 2801/60 and D07B 2801/62 are only to be used as linked indexing codes with D07B 2207/404 and lower hierarchy
2301/5572	• • • optical		• D07B 2801/90 is only used as linked indexing code with any class or indexing code of D07B and defines that the classified feature belongs to the general knowledge.
2301/5577	• • • using light guides		
2301/5581	• • • using cameras		
2301/5586	• • • using lasers		
2301/559	• • • for pressure		
2301/5595	• • • for force		
2401/00	Aspects related to the problem to be solved or advantage		
2401/20	• related to ropes or cables		
2401/2005	• • Elongation or elasticity		
2401/201	• • • regarding structural elongation		
2401/2015	• • Killing or avoiding twist		
2401/202	• • Environmental resistance		

D07B

- 2801/10 . Smallest filamentary entity of a rope or strand, i.e. wire, filament, fiber or yarn
- 2801/12 . Strand
- 2801/14 . Core
- 2801/16 . Filler
- 2801/18 . Coating
- 2801/20 . Spacer
- 2801/22 . Jacket or covering
- 2801/24 . Rope
- 2801/60 . Method
- 2801/62 . Device
- 2801/90 . General knowledge