

# 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](#))

<b>1/00</b>	<b>Constructional features of ropes or cables</b>	1/14	. Ropes or cables with incorporated auxiliary elements, e.g. for marking, extending throughout the length of the rope or cable
1/005	. {Composite ropes, i.e. ropes built-up from fibrous or filamentary material and metal wires}	1/141	. . {comprising liquid, pasty or powder agents, e.g. lubricants or anti-corrosive oils or greases}
1/02	. Ropes built-up from fibrous or filamentary material, e.g. of vegetable origin, of animal origin, regenerated cellulose, plastics	1/142	. . . {for ropes or rope components built-up from fibrous or filamentary material}
1/025	. . {comprising high modulus, or high tenacity, polymer filaments or fibres, e.g. liquid-crystal polymers}	1/144	. . . {for cables or cable components built-up from metal wires}
1/04	. . with a core of fibres or filaments arranged parallel to the centre line	1/145	. . {comprising elements for indicating or detecting the rope or cable status}
1/06	. Ropes or cables built-up from metal wires, e.g. of section wires around a hemp core	1/147	. . {comprising electric conductors or elements for information transfer ( <a href="#">D07B 1/145</a> takes precedence)}
1/0606	. . {Reinforcing cords for rubber or plastic articles}	1/148	. . {comprising marks or luminous elements}
1/0613	. . . {the reinforcing cords being characterised by the rope configuration}	1/16	. Ropes or cables with an enveloping sheathing or inlays of rubber or plastics ( <a href="#">D07B 1/04</a> , <a href="#">D07B 1/10</a> take precedence)
1/062	. . . {the reinforcing cords being characterised by the strand configuration}	1/162	. . {characterised by a plastic or rubber enveloping sheathing}
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}	1/165	. . {characterised by a plastic or rubber inlay}
1/0633	. . . . {having a multiple-layer configuration}	1/167	. . . {having a predetermined shape}
1/064	. . . . {the reinforcing cords being twisted and with at least one wire exchanging place with another wire}	1/18	. Grommets {(slings <a href="#">B66C 1/12</a> )}
1/0646	. . . {comprising longitudinally preformed wires}	1/185	. . {characterised by the eye construction}
1/0653	. . . . {in the core}	1/20	. Buoyant ropes, e.g. with air-filled cellular cores; Accessories therefor
1/066	. . . {the wires being made from special alloy or special steel composition}	1/22	. Flat or flat-sided ropes; Sets of ropes consisting of a series of parallel ropes
1/0666	. . . {the wires being characterised by an anti-corrosive or adhesion promoting coating}	<b>Manufacture of ropes or cables</b>	
1/0673	. . {having a rope configuration}	<b>3/00</b>	<b>General-purpose machines or apparatus for producing twisted ropes or cables from component strands of the same or different material</b>
1/068	. . . {characterised by the strand design}	3/005	. {with alternating twist directions}
1/0686	. . . {characterised by the core design}	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}
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 {( <a href="#">D07B 1/0606</a> takes precedence)}	3/04	. . and are arranged in tandem along the axis of the machine {, e.g. tubular or high-speed type stranding machine}
1/10	. . . with a core of wires arranged parallel to the centre line		
1/12	. Ropes or cables with a hollow core		

- 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}

**WARNING**

Group [D07B 5/005](#) is impacted by reclassification into group [D07B 5/006](#).

Groups [D07B 5/005](#) and [D07B 5/006](#) should be considered in order to perform a complete search.

- 5/006 . . {by the properties of an outer surface polymeric coating}

**WARNING**

Group [D07B 5/006](#) is incomplete pending reclassification of documents from group [D07B 5/005](#).

Groups [D07B 5/005](#) and [D07B 5/006](#) should be considered in order to perform a complete search.

- 5/007 . {comprising postformed and thereby radially plastically deformed elements}
- 5/02 . from straw or like vegetable material
- 5/04 . Rope bands
- 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
- 7/022 . . {Measuring or adjusting the lay or torque in the rope}
- 7/025 . . {Preforming 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

**WARNING**

Group [D07B 7/16](#) is impacted by reclassification into group [D07B 7/169](#).

Groups [D07B 7/16](#) and [D07B 7/169](#) should be considered in order to perform a complete search.

- 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](#))}

**WARNING**

Group [D07B 7/169](#) is incomplete pending reclassification of documents from group [D07B 7/16](#).

Groups [D07B 7/16](#) and [D07B 7/169](#) should be considered in order to perform a complete search.

- 7/18 . . for spreading or untwisting ropes or cables into constituent parts for treatment or splicing purposes

**WARNING**

Group [D07B 7/18](#) is impacted by reclassification into groups [D07B 7/182](#), [D07B 7/185](#), and [D07B 7/187](#).

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

- 7/182 . . . {for spreading ropes or cables by hand-operated tools for splicing purposes, e.g. needles or spikes}

**WARNING**

Group [D07B 7/182](#) is incomplete pending reclassification of documents from groups [D07B 7/18](#).

Groups [D07B 7/18](#) and [D07B 7/182](#) should be considered in order to perform a complete search.

- 7/185 . . . {for temporarily untwisting ropes or cables into constituent parts for applying a coating}

**WARNING**

Group [D07B 7/185](#) is incomplete pending reclassification of documents from group [D07B 7/18](#).

Groups [D07B 7/18](#) and [D07B 7/185](#) should be considered in order to perform a complete search.

- 7/187 . . . {for forming bulbs in ropes or cables}

**WARNING**

Group [D07B 7/187](#) is incomplete pending reclassification of documents from group [D07B 7/18](#).

Groups [D07B 7/18](#) and [D07B 7/187](#) should be considered in order to perform a complete search.

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

**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
- 2201/2007 . . . characterised by their longitudinal shape
- 2201/2008 . . . . wavy or undulated
- 2201/2009 . . . characterised by the materials used
- 2201/201 . . . characterised by a coating
- 2201/2011 . . . . comprising metals
- 2201/2012 . . . . comprising polymers
- 2201/2013 . . . . comprising multiple layers
- 2201/2014 . . . Compound wires or compound filaments
- 2201/2015 . . Strands
- 2201/2016 . . . characterised by their cross-sectional shape
- 2201/2017 . . . . triangular
- 2201/2018 . . . . oval
- 2201/2019 . . . pressed to shape
- 2201/202 . . . characterised by a value or range of the dimension given
- 2201/2021 . . . characterised by their longitudinal shape
- 2201/2022 . . . coreless
- 2201/2023 . . . with core
- 2201/2024 . . . twisted
- 2201/2025 . . . . characterised by a value or range of the pitch parameter given
- 2201/2026 . . . . Pitch changing over length
- 2201/2027 . . . . Compact winding
- 2201/2028 . . . . . having the same lay direction and lay pitch
- 2201/2029 . . . . Open winding
- 2201/203 . . . . . Cylinder winding, i.e. S/Z or Z/S
- 2201/2031 . . . . . Different twist pitch
- 2201/2032 . . . . . compared with the core
- 2201/2033 . . . Parallel wires
- 2201/2034 . . . comprising crossing wires or filaments in the same layer
- 2201/2035 . . . false twisted
- 2201/2036 . . . characterised by the use of different wires or filaments
- 2201/2037 . . . . regarding the dimension of the wires or filaments
- 2201/2038 . . . characterised by the number of wires or filaments
- 2201/2039 . . . . three to eight wires or filaments respectively forming a single layer
- 2201/204 . . . . nine or more wires or filaments respectively forming multiple layers
- 2201/2041 . . . characterised by the materials used
- 2201/2042 . . . characterised by a coating
- 2201/2043 . . . . comprising metals
- 2201/2044 . . . . comprising polymers

2201/2045	. . . .	comprising multiple layers	2201/2098	. . . .	characterized by special properties or the arrangements of the binding wire
2201/2046	. . .	comprising fillers			
2201/2047	. .	Cores	<b>2205/00</b>	<b>Rope or cable materials</b>	
2201/2048	. . .	characterised by their cross-sectional shape	2205/10	. .	Natural organic materials
2201/2049	. . . .	having protrusions extending radially functioning as spacer between strands or wires	2205/103	. .	Animal and plant materials
			2205/106	. . .	Manila, hemp or sisal
2201/2051	. . .	characterised by a value or range of the dimension given	2205/20	. .	Organic high polymers
2201/2052	. . .	characterised by their structure	2205/2003	. .	Thermoplastics
2201/2053	. . . .	being homogeneous	2205/2007	. .	Duroplastics
2201/2054	. . . . .	comprising foam material	2205/201	. .	Polyolefins
2201/2055	. . . .	comprising filaments or fibers	2205/2014	. . .	High performance polyolefins, e.g. Dyneema or Spectra
2201/2056	. . . . .	arranged parallel to the axis			
2201/2057	. . . . .	resulting in a twisted structure	2205/2017	. .	Polystyrenes
2201/2058	. . . . .	comprising fillers	2205/2021	. .	Polyvinyl halides
2201/2059	. . . .	comprising wires	2205/2025	. .	Polyvinyl acetates
2201/206	. . . . .	arranged parallel to the axis	2205/2028	. .	Polyvinyl alcohols
2201/2061	. . . . .	resulting in a twisted structure	2205/2032	. .	Polyacrylics
2201/2062	. . . . .	comprising fillers	2205/2035	. .	Polyacetals
2201/2063	. . . .	being hollow	2205/2039	. .	Polyesters
2201/2064	. . . .	being discontinuous in the longitudinal direction	2205/2042	. . .	High performance polyesters, e.g. Vectran
2201/2065	. . . .	comprising a coating	2205/2046	. .	Polyamides, e.g. nylons
2201/2066	. . .	characterised by the materials used	2205/205	. . .	Aramid
2201/2067	. . .	characterised by the elongation or tension behaviour	2205/2053	. . . .	Polybenzimidazol [PBI]
			2205/2057	. .	Phenol resins
2201/2068	. . . .	having a load bearing function	2205/206	. .	Epoxy resins
2201/2069	. . . .	being elastic	2205/2064	. .	Polyurethane resins
2201/207	. . . .	being viscous	2205/2067	. .	Viscose or regenerated cellulose, e.g. Rayon
2201/2071	. .	Spacers	2205/2071	. .	Fluor resins
2201/2072	. . .	characterised by the materials used	2205/2075	. .	Rubbers, i.e. elastomers
2201/2073	. . .	in circumferencial direction	2205/2078	. . .	being of natural origin
2201/2074	. . .	in radial direction	2205/2082	. . .	being of synthetic nature, e.g. chloroprene
2201/2075	. .	Fillers	2205/2085	. .	having particular high polymer characteristics
2201/2076	. . .	having a lubricant function	2205/2089	. . .	showing heat contraction
2201/2077	. . .	having an anti-corrosive function	2205/2092	. . .	related to water solubility
2201/2078	. . .	having a load bearing function	2205/2096	. .	Poly-p-phenylenebenzo-bisoxazole [PBO]
2201/2079	. . .	characterised by the kind or amount of filling	2205/30	. .	Inorganic materials
2201/208	. . . .	having an open structure	2205/3003	. .	Glass
2201/2081	. . . .	having maximum filling	2205/3007	. .	Carbon
2201/2082	. . .	characterised by the materials used	2205/301	. .	Ceramics
2201/2083	. .	Jackets or coverings	2205/3014	. .	Asbestos
2201/2084	. . .	characterised by their shape	2205/3017	. .	Silicon carbides
2201/2085	. . . .	concerning the internal shape	2205/3021	. .	Metals
2201/2086	. . . .	concerning the external shape	2205/3025	. . .	Steel
2201/2087	. . .	being of the coated type	2205/3028	. . . .	Stainless steel
2201/2088	. . .	having multiple layers	2205/3032	. . . .	Austenite
2201/2089	. . .	comprising wrapped structures	2205/3035	. . . .	Pearlite
2201/209	. . .	comprising braided structures	2205/3039	. . . .	Martensite
2201/20903	. . .	comprising woven structures	2205/3042	. . . .	Ferrite
2201/20907	. . .	comprising knitted structures	2205/3046	. . . .	characterised by the carbon content
2201/2091	. . .	being movable relative to the internal structure	2205/305	. . . . .	having a low carbon content, e.g. below 0,5 percent respectively NT wires
2201/2092	. . .	characterised by the materials used	2205/3053	. . . . .	having a medium carbon content, e.g. greater than 0,5 percent and lower than 0.8 percent respectively HT wires
2201/2093	. . . .	being translucent			
2201/2094	. . . .	being luminescent or reflective	2205/3057	. . . . .	having a high carbon content, e.g. greater than 0,8 percent respectively SHT or UHT wires
2201/2095	. .	Auxiliary components, e.g. electric conductors or light guides			
2201/2096	. . .	Light guides	2205/306	. . .	Aluminium (Al)
2201/2097	. . .	Binding wires	2205/3064	. . .	Chromium (Cr)
			2205/3067	. . .	Copper (Cu)
			2205/3071	. . .	Zinc (Zn)

2205/3075	. . . Tin (Sn)	2301/204	. . differential
2205/3078	. . . Lead (Pb)	2301/205	. . Programmable controllers; Calculating or controlling methods
2205/3082	. . . Tungsten (W)	2301/207	. . . Fuzzy logic
2205/3085	. . . Alloys, i.e. non ferrous	2301/208	. . . using timing functions
2205/3089	. . . . Brass, i.e. copper (Cu) and zinc (Zn) alloys	2301/25	. System input signals, e.g. set points
2205/3092	. . . . Zinc (Zn) and tin (Sn) alloys	2301/251	. . Twist
2205/3096	. . . Amorphous metals	2301/252	. . Temperature
2205/40	. Superconductive materials	2301/253	. . . Temperature profile or sequence
2205/405	. . Ceramic superconductor	2301/254	. . Amount of material
2205/50	. Lubricants	2301/255	. . Power consumption of drive
2205/502	. . Oils	2301/256	. . Pressure
2205/505	. . Greases	2301/257	. . Force
2205/507	. . Solid lubricants	2301/258	. . Tensile stress
<b>2207/00</b>	<b>Rope or cable making machines</b>	2301/259	. . Strain or elongation
2207/20	. Type of machine	2301/30	. Signals indicating failure or excessive conditions, e.g. overheating
2207/201	. . Manually operated systems	2301/302	. . Temperature
2207/202	. . Double twist unwinding	2301/305	. . Wear or friction
2207/203	. . . comprising flyer	2301/307	. . Breakage of wire or strand or rope
2207/204	. . Double twist winding	2301/35	. System output signals
2207/205	. . . comprising flyer	2301/3508	. . Twist
2207/206	. . . with means for providing less than double twist, e.g. counter rotating means	2301/3516	. . Temperature
2207/207	. . Sequential double twisting devices	2301/3525	. . . Temperature profile or sequence
2207/208	. . . characterised by at least partially unwinding the twist of the upstream double twisting step	2301/3533	. . Amount of material
2207/209	. . Tubular strander	2301/3541	. . Power consumption of drive
2207/40	. Machine components	2301/355	. . Pressure
2207/4004	. . Unwinding devices	2301/3558	. . Force
2207/4009	. . . over the head	2301/3566	. . Tensile stress
2207/4013	. . . comprising flyer	2301/3575	. . Strain or elongation
2207/4018	. . Rope twisting devices	2301/3583	. . Rotational speed
2207/4022	. . . characterised by twisting die specifics	2301/3591	. . Linear speed
2207/4027	. . . . including a coating die	2301/40	. Feedback signal in closed loop controls
2207/4031	. . Winding device	2301/4008	. . Twist
2207/4036	. . . comprising traversing means	2301/4016	. . Temperature
2207/404	. . Heat treating devices; Corresponding methods	2301/4025	. . . Temperature profile or sequence
2207/4045	. . . to change the crystal structure of the load bearing material	2301/4033	. . Amount of material
2207/405	. . . to heat towards the glass transition temperature of the load bearing material	2301/4041	. . Power consumption of drive
2207/4054	. . . to soften the load bearing material	2301/405	. . Pressure
2207/4059	. . . to soften the filler material	2301/4058	. . Force
2207/4063	. . . for stress relief	2301/4066	. . Tensile stress
2207/4068	. . . for curing	2301/4075	. . Strain or elongation
2207/4072	. . Means for mechanically reducing serpentineing or mechanically killing of rope	2301/4083	. . Rotational speed
2207/4077	. . Safety devices	2301/4091	. . Linear speed
2207/4081	. . . comprising means for stopping or shutting down the machine	2301/45	. for diagnosing ( <a href="#">signals indicating failure or excessive conditions D07B 2301/30</a> )
2207/4086	. . . providing warnings	2301/50	. User Interface or value setting
2207/409	. . Drives	2301/55	. Sensors
2207/4095	. . . Control means therefor	2301/5504	. . characterised by their arrangement
<b>2301/00</b>	<b>Controls</b>	2301/5509	. . . being movable
2301/10	. Open loop	2301/5513	. . . being of the reflective type
2301/15	. Closed loop	2301/5518	. . . . Transducers therefor
2301/155	. . being of the extended closed loop control system type, e.g. using models or more than one signal in the feedback loop	2301/5522	. . . being of the barrier type
2301/20	. Controller types	2301/5527	. . . comprising an array or multiple sensors
2301/201	. . proportional	2301/5531	. . using electric means or elements
2301/202	. . integrative	2301/5536	. . . for measuring electrical current
		2301/554	. . . for measuring variable resistance
		2301/5545	. . . and piezoelectric phenomena
		2301/555	. . . for measuring magnetic properties
		2301/5554	. . . for measuring capacitance
		2301/5559	. . . for measuring inductance

- 2301/5563 . . . for measuring temperature, i.e. thermocouples
- 2301/5568 . . . acoustic or ultrasonic
- 2301/5572 . . . optical
- 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
- 2401/2025 . . . avoiding corrosion
- 2401/203 . . . Low temperature resistance
- 2401/2035 . . . High temperature resistance
- 2401/204 . . . Moisture handling
- 2401/2045 . . Avoiding longitudinal load for covering
- 2401/205 . . Avoiding relative movement of components
- 2401/2055 . . Improving load capacity
- 2401/206 . . Improving radial flexibility
- 2401/2065 . . Reducing wear
- 2401/207 . . . internally
- 2401/2075 . . . externally
- 2401/208 . . Enabling filler penetration
- 2401/2085 . . Adjusting or controlling final twist
- 2401/209 . . . comprising compensation of rope twist in strand twist
- 2401/2095 . . Improving filler wetting respectively or filler adhesion
- 2401/40 . related to rope making machines
- 2401/401 . . Reducing wear
- 2401/403 . . Reducing vibrations
- 2401/405 . . Addressing space constraints
- 2401/406 . . Increasing speed
- 2401/408 . . Increasing rope length, e.g. on drum

#### **2501/00 Application field**

- 2501/20 . related to ropes or cables
- 2501/2007 . . Elevators
- 2501/2015 . . Construction industries
- 2501/2023 . . . Concrete enforcements
- 2501/203 . . . Bridges
- 2501/2038 . . Agriculture, forestry and fishery
- 2501/2046 . . Tire cords
- 2501/2053 . . . for wheel rim attachment
- 2501/2061 . . Ship moorings
- 2501/2069 . . Climbing or tents
- 2501/2076 . . Power transmissions
- 2501/2084 . . Mechanical controls, e.g. door lashes
- 2501/2092 . . Evacuation lines or lifelines
- 2501/40 . related to rope or cable making machines
- 2501/403 . . for making belts
- 2501/406 . . for making electrically conductive cables

#### **2801/00 Linked indexing codes associated with indexing codes or classes of [D07B](#) (not used)**

##### **NOTE**

The following indexing codes are applied as linked indexing codes associated to other indexing codes or classes of [D07B](#), with the following restrictions:

- [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
- [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
- [D07B 2801/60](#) and [D07B 2801/62](#) are only to be used as linked indexing codes with [D07B 2207/404](#) and lower hierarchy
- [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.

- 2801/10 . Smallest elementary 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