

# CPC COOPERATIVE PATENT CLASSIFICATION

## D TEXTILES; PAPER

### TEXTILES OR FLEXIBLE MATERIALS NOT OTHERWISE PROVIDED FOR

**D01** **NATURAL OR ARTIFICIAL THREADS OR FIBRES; SPINNING** (metal threads [B21](#); fibres or filaments of softened glass, minerals, or slag [C03B 37/00](#); yarns [D02](#))

(NOTE omitted)

**D01H** **SPINNING OR TWISTING** (unwinding, paying-out, forwarding, winding or coiling filamentary material not intimately associated with spinning or twisting [B65H](#); cores, formers, supports or holders for coiled or wound material, e.g. bobbins [B65H](#); twisting oakum [D01G 35/00](#); crimping or curling of fibres, filaments or yarns [D02G 1/00](#); making chenille [D03D](#), [D04D 3/00](#); testing yarns, rovings, slivers, fibres, or fibre webs [G01](#))

#### Kinds or types of spinning or twisting machines; Drafting machines or arrangements; Twisting arrangements

<b>1/00</b>	<b>Spinning or twisting machines in which the product is wound-up continuously</b> (open-end spinning machines <a href="#">D01H 4/00</a> {; doubling of yarns <a href="#">B65H 54/00</a> + <b>T</b> ; doubled, plied or cabled threads <a href="#">D02G 3/28</a> , e.g. using hollow spindles <a href="#">D02G 3/283</a> ; spin-twisting <a href="#">D02G 3/281</a> ; threads with alternately "S" and "Z" direction of twist, e.g. self-twist process, <a href="#">D02G 3/286</a> ; wrapping strands of filaments or staple fibres by a binder yarn <a href="#">D02G 3/38</a> })	1/16	. . Framework; Casings; Coverings {Removal of heat; Means for generating overpressure of air against infiltration of dust; Ducts for electric cables}
		1/162	. . . {for ring type}
		1/164	. . . {for flyer type}
		1/166	. . . {for two-for-one type}
		1/168	. . . {Arrangements for the sound-dampening of the machines (in general <a href="#">G10K 11/00</a> )}
		1/18	. . Supports for supply packages
		1/183	. . . {Overhead suspension devices}
1/003	. {Twisting machines in which twist is imparted from the supply packages, e.g. uptwist}	1/186	. . . {for supplying from cans}
1/006	. {Twisting machines in which twist is imparted at the paying-out and take-up stations}	1/20	. . Driving or stopping arrangements (for open-end spinning machines <a href="#">D01H 4/12</a> , <a href="#">D01H 4/20</a> , <a href="#">D01H 4/42</a> ; safety devices <a href="#">D01H 13/14</a> )
1/02	. ring type {(arrangements with two or more spinning or twisting devices in combination <a href="#">D01H 7/90</a> )}	1/22	. . . for rollers {of drafting machines; Roller speed control} (regulating or varying draft <a href="#">D01H 5/32</a> )
1/025	. . {with a condensing device between drafting system and spinning unit}	1/24	. . . for twisting {or spinning} arrangements, e.g. spindles (braking arrangements for spindles <a href="#">D01H 7/22</a> ; interrelated flyer and bobbin drive mechanisms <a href="#">D01H 7/50</a> )
1/04	. flyer type	1/241	. . . . driven by belt
1/06	. cap type	1/242	. . . . driven by toothed wheels
1/08	. cup, pot or disc type, in which annular masses of yarn are formed by centrifugal action	1/243	. . . . driven by friction discs
1/10	. for imparting multiple twist, e.g. two-for-one twisting	1/244	. . . . each spindle driven by an electric motor
1/101	. . {in which multiple twist is imparted at the take-up stations}	1/26	. . . . with two or more speeds; with variable-speed arrangements
1/103	. . . {Two-for-one twisting}	1/28	. . . for two or more machine elements possessing different characteristics but in operative association
1/105	. . {Arrangements using hollow spindles, i.e. the yarns are running through the spindle of the unwound bobbins}	1/30	. . . . with two or more speeds; with variable-speed arrangements
1/106	. . . {Two-for-one twisting}	1/305	. . . . . {Speed control of the spindles in response to the displacements of the ring rail}
1/108	. . . . {for two or more supply bobbins one on top of the other}	1/32	. . . for complete machines
1/11	. Spinning by false-twisting {(twisting by false-twisting <a href="#">D01H 7/92</a> ; <a href="#">D02G 3/28</a> ; increasing the strength of a roving or sliver by false-twisting <a href="#">D01H 7/92</a> , during drafting <a href="#">D01H 5/28</a> )}	1/34	. . . . with two or more speeds; with variable-speed arrangements {, e.g. variation of machine speed according to growing bobbin diameter (responsive to reduction in material tension <a href="#">D01H 13/16</a> )}
1/115	. . using pneumatic means		
1/14	. Details (drafting arrangements <a href="#">D01H 5/00</a> ; twisting arrangements <a href="#">D01H 7/00</a> )		

1/36	. . Package-shaping arrangements, e.g. building motions {, e.g. <a href="#">control for the traversing stroke of ring rails</a> ; <a href="#">Stopping ring rails in a predetermined position</a> }	4/08	. . Rotor spinning, i.e. the running surface being provided by a rotor
1/365	. . . {for flyer type}	4/10	. . . Rotors
1/38	. . Arrangements for winding reserve lengths of yarn on take-up packages {or <a href="#">spindles</a> }, e.g. transfer tails	4/12	. . . Rotor bearings; Arrangements for driving or stopping ( <a href="#">control therefor D01H 4/42</a> )
1/385	. . . { <a href="#">Removing waste reserve lengths from spindles</a> }	4/14	. . . . Rotor driven by an electric motor
1/40	. . Arrangements for connecting continuously-delivered material to bobbins or the like	4/16	. . Friction spinning, i.e. the running surface being provided by a pair of closely spaced friction drums, e.g. at least one suction drum ({ <a href="#">false twisting with friction drums D01H 1/11</a> })
1/42	. . Guards or protectors for yarns or threads, e.g. separator plates, anti-ballooning devices ( <a href="#">anti-ballooning devices on spindles D01H 7/18</a> )	4/18	. . . Friction drums, e.g. arrangement of suction holes
1/422	. . . {Separator plates}	4/20	. . . Drum bearings; Arrangements for driving or stopping ( <a href="#">control therefor D01H 4/42</a> )
1/425	. . . {Anti-ballooning rings}	4/22	. . Cleaning of running surfaces
1/427	. . . {Anti-ballooning cylinders, e.g. for two-for-one twist machine ( <a href="#">with combined cleaning effect D01H 11/00</a> )}	4/24	. . . in rotor spinning
		4/26	. . . in friction spinning
		4/28	. using electrostatic fields
		4/30	. Arrangements for separating slivers into fibres; Orienting or straightening fibres {, e.g. <a href="#">using guide-rolls</a> }
<b>3/00</b>	<b>Spinning or twisting machines in which the product is wound-up intermittently, e.g. mules</b>	4/32	. . using opening rollers ({ <a href="#">stopping of rovings or slivers D01H 13/18</a> })
3/02	. Details ( <a href="#">drafting arrangements D01H 5/00</a> ; <a href="#">twisting arrangements D01H 7/00</a> )	4/34	. . using air-jet streams
3/04	. . Carriages; Mechanisms effecting carriage movements	4/36	. . with means for taking away impurities
3/06	. . . Carriages; Carriage rails; Squaring motions	4/38	. Channels for feeding fibres to the yarn forming region
3/08	. . . Drawing-out or taking-in motions	4/40	. Removing running yarn from the yarn forming region, e.g. using tubes
3/10	. . . Moving-creel arrangements, e.g. for twiners	4/42	. Control of driving or stopping
3/12	. . Package-shaping motions; Faller arrangements	4/44	. . in rotor spinning
3/14	. . Roller-driving arrangements ( <a href="#">drafting arrangements of general application in spinning machines D01H 5/18</a> )	4/46	. . in friction spinning
3/16	. . Spindle-driving arrangements ( <a href="#">spindles, spindle bearings, spindle supports D01H 7/04</a> )	4/48	. Piecing arrangements; Control therefor ({ <a href="#">stopping roving D01H 13/18</a> })
3/18	. . . Tin rollers; Driving arrangements intimately associated with tin rollers	4/50	. . for rotor spinning
3/20	. . . Spindle-driving arrangements during drawing-out or backing-off	4/52	. . for friction spinning
3/22	. . . Spindle-driving arrangements during taking-in	<b>5/00</b>	<b>Drafting machines or arrangements {<a href="#">Threading of roving into drafting machine</a>} (arrangements in which draft is dependent on linear movement of take-up spindles, e.g. in mules, <a href="#">D01H 3/00</a>; devices for combing or orienting fibres for open-end spinning machines <a href="#">D01H 4/30</a> {; increasing the strength of a roving or sliver by false-twisting <a href="#">D01H 7/92</a>, during drafting <a href="#">D01H 5/28</a>, after drafting and before spinning according to groups <a href="#">D01H 1/02</a> - <a href="#">D01H 1/08</a>, <a href="#">D01H 7/90</a>; depositing materials in cans after drafting <a href="#">B65H 54/76 + T</a>})</b>
3/24	. . . . Quadrant motions; Nosing motions	5/005	. { <a href="#">Arrangements for feeding or conveying the slivers to the drafting machine</a> }
3/26	. . Driving or stopping arrangements not otherwise provided for; Locking motions ( <a href="#">safety devices D01H 13/14</a> ) {; <a href="#">Control of machines</a> }	5/02	. Gill boxes or other drafting machines employing fallers or like pinned bars ( <a href="#">lubricating fibres in gill boxes D01G 29/00</a> )
<b>4/00</b>	<b>Open-end spinning machines or arrangements for imparting twist to independently moving fibres separated from slivers; Piecing arrangements therefor; Covering endless core threads with fibres by open-end spinning techniques {(arrangements with two or more spinning or twisting devices of different types in combination <a href="#">D01H 7/90</a>)}</b>	5/04	. . with pinned bars actuated by screw members
	<b>NOTE</b>	5/06	. . . Intersecting gill boxes
	In this group, the expression "open-end spinning" covers such expressions as "break spinning", "ringless spinning", "rotor spinning" and "friction spinning", but does not cover the expression "spinning by false-twisting"	5/08	. . with bars connected by links, chains, or the like
4/02	. imparting twist by a fluid, e.g. air vortex	5/10	. . with pinned bars unconnected with each other but actuated through pressure of one against another
4/04	. imparting twist by contact of fibres with a running surface	5/12	. . Details
4/06	. . co-operating with suction means ( <a href="#">D01H 4/08</a> , <a href="#">D01H 4/16</a> take precedence)	5/14	. . . Pinned bars
		5/16	. . . Framework; Casings; Coverings
		5/18	. Drafting machines or arrangements without fallers or like pinned bars

- 5/20 . . in which fibres are controlled by contact with stationary or reciprocating surfaces
- 5/22 . . in which fibres are controlled by rollers only
- 5/24 . . . with porcupines or like pinned rotary members
- 5/26 . . in which fibres are controlled by one or more endless aprons
- 5/28 . . in which fibres are controlled by inserting twist during drafting ([spinning by false-twisting D01H 1/11](#); [mules D01H 3/00](#); [twisting by false-twisting D01H 7/92](#); [constructions of false-twist devices D02G 1/04](#))
- 5/30 . . incorporating arrangements for severing continuous filaments, e.g. in direct spinning ([converting tows to slivers or yarns D01G 1/06](#))
- 5/32 . . Regulating or varying draft
- 5/34 . . . by manual adjustments
- 5/36 . . . according to a pre-arranged pattern, e.g. to produce slubs
- 5/38 . . . in response to irregularities in material {; [Measuring irregularities](#)}
- 5/385 . . . . {[employing hydraulic or pneumatic time-delay devices](#)}
- 5/40 . . . . employing mechanical time-delay devices
- 5/42 . . . . employing electrical time-delay devices
- 5/44 . . Adjusting drafting elements, e.g. altering ratch
- 5/46 . . Loading arrangements
- 5/48 . . . using weights
- 5/50 . . . using springs
- 5/505 . . . . {[for top roller arms](#)}
- 5/52 . . . using fluid pressure
- 5/525 . . . . {[for top roller arms](#)}
- 5/54 . . . using magnetic arrangements
- 5/56 . . Supports for drafting elements ([saddles or top roller arms forming essential components of weighting arrangements D01H 5/48](#))
- 5/565 . . . {[Top roller arms](#)}
- 5/58 . . Arrangements for traversing drafting elements ([traversing arrangements for roving guides D01H 13/06](#))
- 5/60 . . Arrangements maintaining drafting elements free of fibre accumulations
- 5/62 . . . Non-rotary cleaning pads or plates; Scrapers
- 5/625 . . . . {[in cooperation with suction or blowing means](#)}
- 5/64 . . . Rollers or aprons with cleaning surfaces
- 5/645 . . . . {[in cooperation with suction or blowing means](#)}
- 5/66 . . . Suction devices ([exclusively; \(D01H 5/625 and D01H 5/645 take precedence; in cooperation with thread breakage detecting means D01H 13/1691\)](#))
- 5/68 . . . . Suction end-catchers
- 5/70 . . Constructional features of drafting elements
- 5/72 . . . Fibre-condensing guides ([guides for slivers, rovings, or yarns applicable solely for spinning, twisting, curling, or crimping purposes D01H 13/04](#); [combined with false twisting before drafting or before spinning according to groups D01H 1/02 - D01H 1/08 : D01H 7/92](#))
- 5/74 . . . Rollers {[or roller bearings](#)}
- 5/76 . . . . Loose-boss assemblies
- 5/78 . . . . with flutes or other integral surface characteristics
- 5/80 . . . . with covers; Cots or covers
- 5/82 . . . . Arrangements for coupling roller sections
- 5/84 . . . . Porcupines
- 5/86 . . . Aprons; Apron supports; Apron tensioning arrangements
- 5/88 . . . . Cradles; Tensors
- 7/00 Spinning or twisting arrangements (for open-end spinning [D01H 4/00](#))**
- 7/02 . for imparting permanent twist
- 7/04 . . Spindles ([bearings for hollow spindles D01H 7/88](#); [spindle bearings, supports therefor, in general F16C](#))
- 7/041 . . . {[Spindles with sliding contact bearings \(D01H 7/045 takes precedence\)](#)}
- 7/042 . . . {[Spindles with rolling contact bearings \(D01H 7/045 takes precedence\)](#)}
- 7/044 . . . {[Spindles with fluid bearings](#)}
- 7/045 . . . {[Spindles provided with flexible mounting elements for damping vibration or noise, or for avoiding or reducing out-of-balance forces due to rotation \(in general F16F 15/00\)](#)}
- 7/047 . . . . {[with springs](#)}
- 7/048 . . . . {[with means using plastic deformation of members](#)}
- 7/06 . . . Stationary spindles with package-holding sleeves
- 7/08 . . . Mounting arrangements
- 7/10 . . . . Spindle supports; Rails; Rail supports, e.g. poker guides
- 7/12 . . . . Bolsters; Bearings
- 7/14 . . . . Holding-down arrangements
- 7/16 . . . Arrangements for coupling bobbins or like to spindles
- 7/18 . . . Arrangements on spindles for suppressing yarn balloons ([thread guards or protectors D01H 1/42](#))
- 7/20 . . . Lubricating arrangements
- 7/22 . . . Braking arrangements
- 7/2208 . . . . {[using mechanical means](#)}
- 7/2216 . . . . . {[with one or two manually actuated shoe-brakes acting on a part of the whorl](#)}
- 7/2225 . . . . . {[the braking means surrounding nearly the whole periphery of the whorl](#)}
- 7/2233 . . . . . {[by suppressing the driving means, e.g. by declutching](#)}
- 7/2241 . . . . . {[the belt being moved off the driven whorl](#)}
- 7/225 . . . . . {[and the spindle being braked simultaneously](#)}
- 7/2258 . . . . . {[the pivoted spindle being pulled off the belt](#)}
- 7/2266 . . . . . {[and braked simultaneously](#)}
- 7/2275 . . . . {[using hydraulically or pneumatically operated brakes](#)}
- 7/2283 . . . . {[using electromagnetically operated brakes](#)}
- 7/2291 . . . . {[characterised by the control of braking means, e.g. operated by a yarn break-detector or tension device](#)}
- 7/24 . . Flyer or like arrangements ([multiple-twist arrangements D01H 7/86](#))
- 7/26 . . . Flyer constructions
- 7/28 . . . . arranged to guide material over exterior of legs

7/30 . . . . with guide channels formed in legs, e.g. slubbing flyers

7/32 . . . . . with pressing devices

7/34 . . . . with haul pulleys or like arrangements

7/36 . . . . with traversing devices

7/38 . . . . Ring flyers

7/40 . . . Flyer supports, e.g. rails

7/42 . . . Arrangements coupling flyers to spindles

7/44 . . . Drag arrangements for bobbins or flyers

7/46 . . . Devices attached to, or integral with, flyers for temporarily increasing twist in material passing to them

7/48 . . . Eyes or like guiding arrangements ([D01H 7/46 takes precedence](#))

7/50 . . . Interrelated flyer and bobbin drive mechanisms, e.g. winding-on motions for cotton-roving frames ([variation of machine speed according to growing bobbin diameter D01H 1/34](#)); package-building mechanisms [D01H 1/36](#))

7/52 . . Ring-and-traveller arrangements

7/54 . . . with fixed rings

7/56 . . . with freely-rotatable rings; with braked or dragged rings ; [Lubricating arrangements therefor](#)

7/565 . . . . {with fluid bearings}

7/58 . . . with driven rings ; [Bearings or braking arrangements therefor](#)

7/585 . . . . {by fluid driving means}

7/60 . . . Rings or travellers; Manufacture thereof not otherwise provided for ([hand tools for applying travellers to rings D01H 17/02](#)) ; [Cleaning means for rings](#)

7/602 . . . . {Rings}

7/604 . . . . {Travellers}

7/606 . . . . . {Driving means for travellers}

7/608 . . . . . {Cleaning means for travellers}

7/62 . . . Arrangements providing lubricant for travellers

7/64 . . . Ring supports, e.g. ring rails ([poker guides or other rail supports D01H 7/10](#))

7/66 . . Cap arrangements

7/68 . . . Cap constructions

7/70 . . . Arrangements for supporting caps on spindles

7/72 . . . Bobbin-supporting arrangements, e.g. bobbin rails ([poker guides or other rail supports D01H 7/10](#))

7/74 . . Cup or like arrangements

7/76 . . . Rotary discs

7/78 . . . Constructions of cups, e.g. spinning boxes

7/80 . . . . adapted to collect wet yarns

7/82 . . . Casings or guards for rotary cups or the like

7/84 . . . Spindles or yarn carriers for co-operation with rotary cups ([removing yarn from centrifugal cups on to yarn carriers D01H 9/06](#))

7/86 . . Multiple-twist arrangements, e.g. two-for-one twisting devices  {[Threading of yarn; Devices in hollow spindles for imparting false twist](#)}

7/862 . . . {Arrangements for holding the bobbin in a fixed position}

7/864 . . . {Coupling devices between the fixed and the rotative parts}

7/866 . . . {Means to facilitate the unwinding of yarn}

7/868 . . . {Yarn guiding means, e.g. guiding tubes}

7/88 . . Hollow-spindle arrangements ([D01H 7/86 takes precedence](#))

7/90 . . Arrangements with two or more {spinning or} twisting devices {of different types} in combination ([D01H 1/006](#)), [D01H 7/86](#), [D01H 7/88 take precedence](#))

7/92 . . for imparting transient twist , i.e. false twist ([D01H 1/11 takes precedence](#))}

7/923 . . {by means of rotating devices}

7/926 . . {by means of traversing devices}

**Common features or details of, or accessories for, spinning or twisting machines of various kinds or types** ([drafting arrangements D01H 5/00](#); [twisting arrangements D01H 7/00](#))

**9/00 Arrangements for replacing or removing bobbins, cores, receptacles, or completed packages at paying-out or take-up stations** ([arrangements of general interest in the winding of filamentary material B65H 67/00](#)) ; **Combination of spinning-winding machine**

9/001 . {Bobbin-taking arrangements}

9/003 . . {Graspers operating under the action of a fluid}

9/005 . {for removing empty packages or cans and replacing by completed (full) packages or cans at paying-out stations; also combined with piecing of the roving}

9/006 . . {for two-for-one twist type machines}

9/008 . . {for cans}

9/02 . for removing completed take-up packages and replacing by bobbins, cores, or receptacles at take-up stations; Transferring material between adjacent full and empty take-up elements

9/04 . . Doffing arrangements integral with spinning or twisting machines

9/043 . . . {for cap type machines}

9/046 . . . {for flyer type machines}

9/06 . . . Removing yarn from centrifugal cups on to yarn carriers

9/08 . . Doffing arrangements independent of spinning or twisting machines

9/10 . . . Doffing carriages ; [Loading carriages with cores](#)

9/12 . . . Manual cop-tube applying apparatus; Stands for cop-tube applying apparatus

9/14 . . for preparing machines for doffing of yarns, {e.g. raising cops prior to removal} ([stop motions responsive to delivery of a measured length of material D01H 13/24](#))

9/16 . . Yarn-severing arrangements , e.g. for cutting transfer tails; [Separating of roving in flyer](#)

9/18 . for supplying bobbins, cores, receptacles, or completed packages to, or transporting from, paying-out or take-up stations ([D01H 9/10 takes precedence](#)) ; [Arrangements to prevent unwinding of roving from roving bobbins](#) ([transporting full yarn bobbins to subsequent machines B65H 67/06+T](#))}

9/182 . . {Overhead conveying devices}

9/185 . . {Transporting cans}

9/187 . . {on individual supports, e.g. pallets}



<b>11/00</b>	<b>Arrangements for confining or removing dust, fly, or the like</b> (cleaning of running surfaces in open-end spinning machines <a href="#">D01H 4/22</a> ; separation in general <a href="#">B01D</a> ; cleaning in general <a href="#">B08B</a> ; air-conditioning <a href="#">F24F</a> , e.g. by filtering <a href="#">F24F 3/16</a> )	13/1683	. . . . {Pneumatic sensing means}
		13/1691	. . . {Thread breakage detector means associated with pneumatic cleaning devices, e.g. suction of broken end of yarn}
11/001	. {Hand tools used for cleaning the machines}	13/18	. . . stopping supply only
11/003	. . {with a rotary pin}	13/181	. . . . {by stopping supply packages}
11/005	. {with blowing and/or suction devices (in general <a href="#">A47L 7/00</a> ; in cooperation with thread breakage detecting means <a href="#">D01H 13/1691</a> )}	13/182	. . . . {by raising or lifting of one of the drafting cylinders, e.g. by removing of the loading means}
11/006	. . {travelling along the machines}	13/183	. . . . {the yarn moving out of its normal path, e.g. by lateral diverting}
11/008	. {with static field means}	13/185	. . . . {a plate moving in the nip of drafting or guiding cylinders}
<b>13/00</b>	<b>Other common constructional features, details or accessories</b> (for open-end spinning <a href="#">D01H 4/00</a> )	13/186	. . . . {guiding or drafting cylinders moving by gravity when a yarn breakage occurs}
13/005	. {Service carriages travelling along the machines (characteristics relating to the apparatus supported by the carriage, <i>see</i> relevant groups, e.g. <a href="#">D01H 9/005</a> , <a href="#">D01H 9/10</a> , <a href="#">D01H 13/145</a> , <a href="#">D01H 15/00</a> )}	13/187	. . . . {using means stopping the driving of the drafting, guiding cylinders, e.g. friction clutches}
13/02	. Roller arrangements not otherwise provided for	13/188	. . . . {by cutting or clamping yarns or rovings}
13/04	. Guides for slivers, rovings, or yarns; Smoothing dies (fibre-condensing guides <a href="#">D01H 5/72</a> ; means to facilitate the unwinding of yarn in multiple-twist arrangements <a href="#">D01H 7/866</a> )	13/20	. . responsive to excessive tension or irregular operation of apparatus
13/045	. . {Guide tube}	13/22	. . responsive to presence of irregularities in running material
13/06	. . Traversing arrangements	13/24	. . responsive to delivery of a measured length of material, completion of winding of a package or filling of a receptacle
13/08	. Twist arresters	13/26	. Arrangements facilitating the inspection or testing of yarns or the like in connection with spinning or twisting
13/10	. Tension devices	13/28	. Heating or cooling arrangements {for yarns (removal of heat from machines <a href="#">D01H 1/16</a> )}
13/102	. . {Regulating tension by regulating delivery of yarn from supply package ( <a href="#">D01H 13/108</a> takes precedence)}	13/30	. Moistening, sizing, oiling, waxing, colouring, or drying yarns or the like as incidental measures during spinning or twisting
13/104	. . {Regulating tension by devices acting on running yarn and not associated with supply or take-up devices}	13/302	. . {Moistening, e.g. for wet spinning}
13/106	. . . {for double-twist spindle}	13/304	. . {Conditioning during spinning or twisting (for carding or combing <a href="#">D01G 99/005</a> )}
13/108	. . {Regulating tension by regulating speed of driving mechanisms of unwinding, paying-out, forwarding, winding or depositing devices, e.g. automatically in response to variations in tension}	13/306	. . {by applying fluids, e.g. steam or oiling liquids}
13/12	. Arrangements preventing snarls or inadvertent doubling of yarns (suction end-catchers <a href="#">D01H 5/68</a> )	13/308	. . {by applying solids, e.g. wax}
13/14	. Warning or safety devices, e.g. automatic fault detectors, stop motions; {Monitoring the entanglement of slivers in drafting arrangements}; (safety devices of general application <a href="#">F16P</a> ; indicating devices of general application <a href="#">G08B</a> )	13/32	. Counting, measuring, recording or registering devices (in general, <i>see</i> the appropriate subclass of <a href="#">Section G</a> , e.g. { <a href="#">G01B 21/12</a> , <a href="#">G01N 33/36</a> })
13/145	. . {set on carriages travelling along the machines; Warning or safety devices pulled along the working unit by a band or the like}	<b>15/00</b>	<b>Piecing arrangements</b> (for open-end spinning machines <a href="#">D01H 4/48</a> ; in machines for producing textile fabrics, <i>see</i> the appropriate subclasses) {; <b>Automatic end-finding, e.g. by suction and reverse package rotation; Devices for temporarily storing yarn during piecing</b> (piecing of rovings in combination with replacing of completed packages or cans <a href="#">D01H 9/005</a> )}
13/16	. . responsive to reduction in material tension, failure of supply, or breakage, of material	15/002	. {for false-twisting spinning machines}
13/1608	. . . {where the paying-out and take-up stations are stopped at one and the same time}	15/004	. {for centrifugal spinning machines}
13/1616	. . . {characterised by the detector}	15/007	. for two-for-one twisting machines
13/1625	. . . . {Electro-mechanical actuators}	15/013	. Carriages travelling along the machines
13/1633	. . . . {Electronic actuators}	<b>17/00</b>	<b>Hand tools</b> (cop-tube applying apparatus <a href="#">D01H 9/12</a> )
13/1641	. . . . . {Capacitor sensing means}	17/02	. Arrangements for storing ring travellers; Devices for applying travellers to rings
13/165	. . . . . {Photo-electric sensing means}		
13/1658	. . . . {Associated actuators with mutual actuation, e.g. for two or more running yarns}		
13/1666	. . . . {Lighting or luminous devices making easier the setting of the breakage of yarns}		
13/1675	. . . . . {Pencil of rays on side of machines}		
<b>2700/00</b>		<b>2700/00</b>	<b>Spinning or twisting machines; Drafting devices</b>
		2700/01	. Preparatory spinning machines
		2700/20	. Spinning mules; Transmissions

## D01H

- 2700/202 . . Carriages or their movement; Lubrication
- 2700/205 . . Spindles or spindle control in spinning mules
- 2700/207 . . Yarn delivery rollers; Drawing systems for spinning mules; Silver rollers
- 2700/21 . Piecing or cleaning in spinning mules
- 2700/22 . Winding devices for spinning mules
- 2700/24 . Spinning or twisting machines of different kinds
- 2700/242 . . Spinning or twisting devices wherein twist is created during winding
- 2700/245 . Conception or fabrication of drafting cylinders
- 2700/247 . Guiding means for veil or sliver on drafting systems