

**CPC****COOPERATIVE PATENT CLASSIFICATION****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](#))

**Guidance heading:** Kinds or types of spinning or twisting machines; Drafting machines or arrangements; Twisting arrangements

**D01H 1/00**

**Spinning or twisting machines in which the product is wound-up continuously** (open-end spinning machines [D01H 4/00](#); {doubling of yarns [B65H 54/00+T](#); doubled, plied or cabled threads [D02G 3/28](#), e.g. using hollow spindles [D02G 3/283](#); spin-twisting [D02G 3/281](#); threads with alternately "S" and "Z" direction of twist, e.g. self-twist process, [D02G 3/286](#); wrapping strands of filaments or staple fibres by a binder yarn [D02G 3/38](#)})

- [D01H 1/003](#) . {Twisting machines in which twist is imparted from the supply packages, e.g. up twist}
- [D01H 1/006](#) . {Twisting machines in which twist is imparted at the paying-out and take-up stations}
- [D01H 1/02](#) . ring type {(arrangements with two or more spinning or twisting devices in combination [D01H/90](#))}
- [D01H 1/025](#) .. {with a condensing device between drafting system and spinning unit}
- [D01H 1/04](#) . flyer type
- [D01H 1/06](#) . cap type
- [D01H 1/08](#) . cup, pot or disc type, in which annular masses of yarn are formed by centrifugal action
- [D01H 1/10](#) . for imparting multiple twist, e.g. two-for-one twisting
- [D01H 1/101](#) .. {in which multiple twist is imparted at the take-up stations}
- [D01H 1/103](#) ... {Two-for-one twisting}
- [D01H 1/105](#) .. {Arrangements using hollow spindles, i.e. the yarns are running through the spindle of the unwound bobbins}
- [D01H 1/106](#) ... {Two-for-one twisting}
- [D01H 1/108](#) .... {for two or more supply bobbins one on top of the other}
- [D01H 1/11](#) . Spinning by false-twisting {(twisting by false-twisting [D01H 7/92](#); [D02G 3/28](#); increasing the strength of a roving or sliver by false-twisting [D01H 7/92](#), during drafting [D01H 5/28](#))}
- [D01H 1/115](#) .. using pneumatic means
- [D01H 1/14](#) . Details (drafting arrangements [D01H 5/00](#); twisting arrangements [D01H 7/00](#))
- [D01H 1/16](#) .. Framework; Casings; Coverings {Removal of heat; Means for generating overpressure of air against infiltration of dust; Ducts for electric cables}
- [D01H 1/162](#) ... {for ring type}
- [D01H 1/164](#) ... {for flyer type}
- [D01H 1/166](#) ... {for two-for-one type}
- [D01H 1/168](#) ... {Arrangements for the sound-dampening of the machines (in general [G10K 11/00](#))}

D01H 1/18	..	Supports for supply packages
D01H 1/183	...	{Overhead suspension devices}
D01H 1/186	...	{for supplying from cans}
D01H 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> )
D01H 1/22	...	for rollers {of drafting machines; Roller speed control}(regulating or varying draft <a href="#">D01H 5/32</a> )
D01H 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> )
D01H 1/241	....	driven by belt
D01H 1/242	....	driven by toothed wheels
D01H 1/243	....	driven by friction discs
D01H 1/244	....	each spindle driven by an electric motor
D01H 1/26	....	with two or more speeds; with variable-speed arrangements
D01H 1/28	...	for two or more machine elements possessing different characteristics but in operative association
D01H 1/30	....	with two or more speeds; with variable-speed arrangements
D01H 1/305	.....	{Speed control of the spindles in response to the displacements of the ring rail}
D01H 1/32	...	for complete machines
D01H 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> )}
D01H 1/36	..	Package-shaping arrangements, e.g. building motions {e.g. control for the traversing stroke of ring rails; Stopping ring rails in a predetermined position}
D01H 1/365	...	{for flyer type}
D01H 1/38	..	Arrangements for winding reserve lengths of yarn on take-up packages {or spindles}, e.g. transfer tails
D01H 1/385	...	{Removing waste reserve lengths from spindles}
D01H 1/40	..	Arrangements for connecting continuously-delivered material to bobbins or the like
D01H 1/42	..	Guards or protectors for yarns or threads, e.g. separator plates, anti-ballooning devices (anti-ballooning devices on spindles <a href="#">D01H 7/18</a> )
D01H 1/422	...	{Separator plates}
D01H 1/425	...	{Anti-ballooning rings}
D01H 1/427	...	{Anti-ballooning cylinders, e.g. for two-for-one twist machine (with combined cleaning effect <a href="#">D01H 11/00</a> )}
<b>D01H 3/00</b>		<b>Spinning or twisting machines in which the product is wound-up intermittently, e.g. mules</b>
D01H 3/02	.	Details (drafting arrangements <a href="#">D01H 5/00</a> ; twisting arrangements <a href="#">D01H 7/00</a> )
D01H 3/04	..	Carriages; Mechanisms effecting carriage movements
D01H 3/06	...	Carriages; Carriage rails; Squaring motions
D01H 3/08	...	Drawing-out or taking-in motions
D01H 3/10	...	Moving-creel arrangements, e.g. for twiners

- D01H 3/12 . . Package-shaping motions; Faller arrangements
- D01H 3/14 . . Roller-driving arrangements ([drafting arrangements of general application in spinning machines D01H 5/18](#))
- D01H 3/16 . . Spindle-driving arrangements ([spindles, spindle bearings, spindle supports D01H 7/04](#))
- D01H 3/18 . . . Tin rollers; Driving arrangements intimately associated with tin rollers
- D01H 3/20 . . . Spindle-driving arrangements during drawing-out or backing-off
- D01H 3/22 . . . Spindle-driving arrangements during taking-in
- D01H 3/24 . . . . Quadrant motions; Nosing motions
- D01H 3/26 . . Driving or stopping arrangements not otherwise provided for; Locking motions ([safety devices D01H 13/14](#))[{Control of machines}](#)

**D01H 4/00** **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** [{\(arrangements with two or more spinning or twisting devices of different types in combination D01H 7/90\)}](#)

#### **NOTE**

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"

- D01H 4/02 . imparting twist by a fluid, e.g. air vortex
- D01H 4/04 . imparting twist by contact of fibres with a running surface
- D01H 4/06 . . co-operating with suction means ([D01H 4/08, D01H 4/16 take precedence](#))
- D01H 4/08 . . Rotor spinning, i.e. the running surface being provided by a rotor
- D01H 4/10 . . . Rotors
- D01H 4/12 . . . Rotor bearings; Arrangements for driving or stopping ([control therefor D01H 4/42](#))
- D01H 4/14 . . . . Rotor driven by an electric motor
- D01H 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 [{\(false twisting with friction drums D01H 1/11\)}](#)
- D01H 4/18 . . . Friction drums, e.g. arrangement of suction holes
- D01H 4/20 . . . Drum bearings; Arrangements for driving or stopping ([control therefor D01H 4/42](#))
- D01H 4/22 . . Cleaning of running surfaces
- D01H 4/24 . . . in rotor spinning
- D01H 4/26 . . . in friction spinning
- D01H 4/28 . using electrostatic fields
- D01H 4/30 . Arrangements for separating slivers into fibres; Orienting or straightening fibres, [{e.g. using guide-rolls}](#)
- D01H 4/32 . . using opening rollers [{\(stopping of rovings or slivers D01H 13/18\)}](#)
- D01H 4/34 . . using air-jet streams

- D01H 4/36 . . with means for taking away impurities
- D01H 4/38 . Channels for feeding fibres to the yarn forming region
- D01H 4/40 . Removing running yarn from the yarn forming region, e.g. using tubes
- D01H 4/42 . Control of driving or stopping
- D01H 4/44 . . in rotor spinning
- D01H 4/46 . . in friction spinning
- D01H 4/48 . Piecing arrangements; Control therefor [{\(stopping roving D01H 13/18\)}](#)
- D01H 4/50 . . for rotor spinning
- D01H 4/52 . . for friction spinning
  
- D01H 5/00** **Drafting machines or arrangements** [{Threading of roving into drafting machine}](#)[\(arrangements in which draft is dependent on linear movement of take-up spindles, e.g. in mules, D01H 3/00; devices for combing or orienting fibres for open-end spinning machines D01H 4/30; {increasing the strength of a roving or sliver by false-twisting D01H 7/92, during drafting D01H 5/28, after drafting and before spinning according to groups D01H 1/02 to D01H 1/08, D01H 7/90; depositing materials in cans after drafting B65H 54/76 + T}\)](#)
- D01H 5/005 . [{Arrangements for feeding or conveying the slivers to the drafting machine}](#)
- D01H 5/02 . Gill boxes or other drafting machines employing fallers or like pinned bars [\(lubricating fibres in gill boxes D01G 29/00\)](#)
- D01H 5/04 . . with pinned bars actuated by screw members
- D01H 5/06 . . . Intersecting gill boxes
- D01H 5/08 . . with bars connected by links, chains, or the like
- D01H 5/10 . . with pinned bars unconnected with each other but actuated through pressure of one against another
- D01H 5/12 . . Details
- D01H 5/14 . . . Pinned bars
- D01H 5/16 . . . Framework; Casings; Coverings
- D01H 5/18 . Drafting machines or arrangements without fallers or like pinned bars
- D01H 5/20 . . in which fibres are controlled by contact with stationary or reciprocating surfaces
- D01H 5/22 . . in which fibres are controlled by rollers only
- D01H 5/24 . . . with porcupines or like pinned rotary members
- D01H 5/26 . . in which fibres are controlled by one or more endless aprons
- D01H 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\)}](#)
- D01H 5/30 . . incorporating arrangements for severing continuous filaments, e.g. in direct spinning [\(converting tows to slivers or yarns D01G 1/06\)](#)
- D01H 5/32 . . Regulating or varying draft
- D01H 5/34 . . . by manual adjustments
- D01H 5/36 . . . according to a pre-arranged pattern, e.g. to produce slubs
- D01H 5/38 . . . in response to irregularities in material; [{Measuring irregularities}](#)
- D01H 5/385 . . . . [{employing hydraulic or pneumatic time-delay devices}](#)

D01H 5/40	....	employing mechanical time-delay devices
D01H 5/42	....	employing electrical time-delay devices
D01H 5/44	..	Adjusting drafting elements, e.g. altering ratch
D01H 5/46	..	Loading arrangements
D01H 5/48	...	using weights
D01H 5/50	...	using springs
D01H 5/505	....	{for top roller arms}
D01H 5/52	...	using fluid pressure
D01H 5/525	....	{for top roller arms}
D01H 5/54	...	using magnetic arrangements
D01H 5/56	..	Supports for drafting elements (saddles or top roller arms forming essential components of weighting arrangements <a href="#">D01H 5/48</a> )
D01H 5/565	...	{Top roller arms}
D01H 5/58	..	Arrangements for traversing drafting elements (traversing arrangements for roving guides <a href="#">D01H 13/06</a> )
D01H 5/60	..	Arrangements maintaining drafting elements free of fibre accumulations
D01H 5/62	...	Non-rotary cleaning pads or plates; Scrapers
D01H 5/625	....	{in cooperation with suction or blowing means}
D01H 5/64	...	Rollers or aprons with cleaning surfaces
D01H 5/645	....	{in cooperation with suction or blowing means}
D01H 5/66	...	Suction devices {exclusively; ( <a href="#">D01H 5/625</a> and <a href="#">D01H 5/645</a> take precedence; in cooperation with thread breakage detecting means <a href="#">D01H 13/1691</a> )}
D01H 5/68	....	Suction end-catchers
D01H 5/70	..	Constructional features of drafting elements
D01H 5/72	...	Fibre-condensing guides (guides for slivers, rovings, or yarns applicable solely for spinning, twisting, curling, or crimping purposes <a href="#">D01H 13/04</a> ; {combined with false twisting before drafting or before spinning according to groups <a href="#">D01H 1/02</a> to <a href="#">D01H 1/08</a> : <a href="#">D01H 7/92</a> })
D01H 5/74	...	Rollers {or roller bearings}
D01H 5/76	....	Loose-boss assemblies
D01H 5/78	....	with flutes or other integral surface characteristics
D01H 5/80	....	with covers; Cots or covers
D01H 5/82	....	Arrangements for coupling roller sections
D01H 5/84	....	Porcupines
D01H 5/86	...	Aprons; Apron supports; Apron tensioning arrangements
D01H 5/88	....	Cradles; Tensors
<b>D01H 7/00</b>		<b>Spinning or twisting arrangements (for open-end spinning <a href="#">D01H 4/00</a>)</b>
D01H 7/02	.	for imparting permanent twist
D01H 7/04	..	Spindles ({bearings for hollow spindles <a href="#">D01H 7/88</a> }; spindle bearings, supports therefor, in general <a href="#">F16C</a> )
D01H 7/041	...	{Spindles with sliding contact bearings ( <a href="#">D01H 7/045</a> takes precedence)}

D01H 7/042	...	{Spindles with rolling contact bearings ( <a href="#">D01H 7/045</a> takes precedence)}
D01H 7/044	...	{Spindles with fluid bearings}
D01H 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 <a href="#">F16F 15/00</a> )}
D01H 7/047	....	{with springs}
D01H 7/048	....	{with means using plastic deformation of members}
D01H 7/06	...	Stationary spindles with package-holding sleeves
D01H 7/08	...	Mounting arrangements
D01H 7/10	....	Spindle supports; Rails; Rail supports, e.g. poker guides
D01H 7/12	....	Bolsters; Bearings
D01H 7/14	....	Holding-down arrangements
D01H 7/16	...	Arrangements for coupling bobbins or like to spindles
D01H 7/18	...	Arrangements on spindles for suppressing yarn balloons ( <a href="#">thread guards or protectors D01H 1/42</a> )
D01H 7/20	...	Lubricating arrangements
D01H 7/22	...	Braking arrangements
D01H 7/2208	....	{using mechanical means}
D01H 7/2216	.....	{with one or two manually actuated shoe-brakes acting on a part of the whorl}
D01H 7/2225	.....	{the braking means surrounding nearly the whole periphery of the whorl}
D01H 7/2233	.....	{by suppressing the driving means, e.g. by declutching}
D01H 7/2241	.....	{the belt being moved off the driven whorl}
D01H 7/225	.....	{and the spindle being braked simultaneously}
D01H 7/2258	.....	{the pivoted spindle being pulled off the belt}
D01H 7/2266	.....	{and braked simultaneously}
D01H 7/2275	....	{using hydraulically or pneumatically operated brakes}
D01H 7/2283	....	{using electromagnetically operated brakes}
D01H 7/2291	....	{characterised by the control of braking means, e.g. operated by a yarn break-detector or tension device}
D01H 7/24	..	Flyer or like arrangements ( <a href="#">multiple-twist arrangements D01H 7/86</a> )
D01H 7/26	...	Flyer constructions
D01H 7/28	....	arranged to guide material over exterior of legs
D01H 7/30	....	with guide channels formed in legs, e.g. slubbing flyers
D01H 7/32	.....	with pressing devices
D01H 7/34	....	with haul pulleys or like arrangements
D01H 7/36	....	with traversing devices
D01H 7/38	....	Ring flyers
D01H 7/40	...	Flyer supports, e.g. rails
D01H 7/42	...	Arrangements coupling flyers to spindles
D01H 7/44	...	Drag arrangements for bobbins or flyers

D01H 7/46	...	Devices attached to, or integral with, flyers for temporarily increasing twist in material passing to them
D01H 7/48	...	Eyes or like guiding arrangements ( <a href="#">D01H 7/46 takes precedence</a> )
D01H 7/50	...	Interrelated flyer and bobbin drive mechanisms, e.g. winding-on motions for cotton-roving frames ( <a href="#">variation of machine speed according to growing bobbin diameter D01H 1/34</a> ); package-building mechanisms <a href="#">D01H 1/36</a> )
D01H 7/52	..	Ring-and-traveller arrangements
D01H 7/54	...	with fixed rings
D01H 7/56	...	with freely-rotatable rings; with braked or dragged rings; {Lubricating arrangements therefor}
D01H 7/565	....	{with fluid bearings}
D01H 7/58	...	with driven rings; {Bearings or braking arrangements therefor}
D01H 7/585	....	{by fluid driving means}
D01H 7/60	...	Rings or travellers; Manufacture thereof not otherwise provided for ( <a href="#">hand tools for applying travellers to rings D01H 17/02</a> ){ <a href="#">Cleaning means for rings</a> }
D01H 7/602	....	{Rings}
D01H 7/604	....	{Travellers}
D01H 7/606	.....	{Driving means for travellers}
D01H 7/608	.....	{Cleaning means for travellers}
D01H 7/62	...	Arrangements providing lubricant for travellers
D01H 7/64	...	Ring supports, e.g. ring rails ( <a href="#">poker guides or other rail supports D01H 7/10</a> )
D01H 7/66	..	Cap arrangements
D01H 7/68	...	Cap constructions
D01H 7/70	...	Arrangements for supporting caps on spindles
D01H 7/72	...	Bobbin-supporting arrangements, e.g. bobbin rails ( <a href="#">poker guides or other rail supports D01H 7/10</a> )
D01H 7/74	..	Cup or like arrangements
D01H 7/76	...	Rotary discs
D01H 7/78	...	Constructions of cups, e.g. spinning boxes
D01H 7/80	....	adapted to collect wet yarns
D01H 7/82	...	Casings or guards for rotary cups or the like
D01H 7/84	...	Spindles or yarn carriers for co-operation with rotary cups ( <a href="#">removing yarn from centrifugal cups on to yarn carriers D01H 9/06</a> )
D01H 7/86	..	Multiple-twist arrangements, e.g. two-for-one twisting devices { <a href="#">Threading of yarn; Devices in hollow spindles for imparting false twist</a> }
D01H 7/862	...	{ <a href="#">Arrangements for holding the bobbin in a fixed position</a> }
D01H 7/864	...	{ <a href="#">Coupling devices between the fixed and the rotative parts</a> }
D01H 7/866	...	{ <a href="#">Means to facilitate the unwinding of yarn</a> }
D01H 7/868	...	{ <a href="#">Yarn guiding means, e.g. guiding tubes</a> }
D01H 7/88	..	Hollow-spindle arrangements ( <a href="#">D01H 7/86 takes precedence</a> )
D01H 7/90	..	Arrangements with two or more { <a href="#">spinning or</a> } twisting devices { <a href="#">of different types</a> } in combination ( <a href="#">D01H 1/006</a> ), <a href="#">D01H 7/86</a> , <a href="#">D01H 7/88</a> take precedence)



- D01H 7/92 . for imparting transient twist {i.e. false twist ([D01H 1/11](#) takes precedence)}
- D01H 7/923 . . {by means of rotating devices}
- D01H 7/926 . . {by means of traversing devices}

**Guidance heading:** 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](#))

**D01H 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](#)

- D01H 9/001 . {Bobbin-taking arrangements}
- D01H 9/003 . . {Graspers operating under the action of a fluid}
- D01H 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}
- D01H 9/006 . . {for two-for-one twist type machines}
- D01H 9/008 . . {for cans}
- D01H 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
- D01H 9/04 . . Doffing arrangements integral with spinning or twisting machines
- D01H 9/043 . . . {for cap type machines}
- D01H 9/046 . . . {for flyer type machines}
- D01H 9/06 . . . Removing yarn from centrifugal cups on to yarn carriers
- D01H 9/08 . . Doffing arrangements independent of spinning or twisting machines
- D01H 9/10 . . . Doffing carriages; [{Loading carriages with cores}](#)
- D01H 9/12 . . . Manual cop-tube applying apparatus; [Stands for cop-tube applying apparatus](#)
- D01H 9/14 . . for preparing machines for doffing of yarns, [{e.g. raising cops prior to removal}](#)[\(stop motions responsive to delivery of a measured length of material D01H 13/24\)](#)
- D01H 9/16 . . Yarn-severing arrangements, [{e.g. for cutting transfer tails; Separating of roving in flyer}](#)
- D01H 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 \(transporting full yarn bobbins to subsequent machines B65H 67/06+T\)}](#)
- D01H 9/182 . . {Overhead conveying devices}
- D01H 9/185 . . {Transporting cans}
- D01H 9/187 . . {on individual supports, e.g. pallets}

**D01H 11/00** Arrangements for confining or removing dust, fly, or the like ([cleaning of running surfaces in open-end spinning machines D01H 4/22](#); [separation in general B01D](#); [cleaning in general B08B](#); [air-conditioning F24F](#), e.g. by filtering [F24F 3/16](#))

- D01H 11/001 . {Hand tools used for cleaning the machines}
- D01H 11/003 . . {with a rotary pin}



- D01H 11/005 . {with blowing and/or suction devices (in general [A47L 7/00](#); in cooperation with thread breakage detecting means [D01H 13/1691](#))}
- D01H 11/006 . . {travelling along the machines}
- D01H 11/008 . {with static field means}
- D01H 13/00** **Other common constructional features, details or accessories (for open-end spinning [D01H 4/00](#))**
- D01H 13/005 . {Service carriages travelling along the machines (characteristics relating to the apparatus supported by the carriage, see relevant groups, e.g. [D01H 9/005](#), [D01H 9/10](#), [D01H 13/145](#), [D01H 15/00](#))}
- D01H 13/02 . Roller arrangements not otherwise provided for
- D01H 13/04 . Guides for slivers, rovings, or yarns; Smoothing dies (fibre-condensing guides [D01H 5/72](#); {means to facilitate the unwinding of yarn in multiple-twist arrangements [D01H 7/866](#)})
- D01H 13/045 . . {Guide tube}
- D01H 13/06 . . Traversing arrangements
- D01H 13/08 . Twist arresters
- D01H 13/10 . Tension devices
- D01H 13/102 . . {Regulating tension by regulating delivery of yarn from supply package ([D01H 13/108](#) takes precedence)}
- D01H 13/104 . . {Regulating tension by devices acting on running yarn and not associated with supply or take-up devices}
- D01H 13/106 . . . {for double-twist spindle}
- D01H 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}
- D01H 13/12 . Arrangements preventing snarls or inadvertent doubling of yarns (suction end-catchers [D01H 5/68](#))
- D01H 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 [F16P](#); indicating devices of general application [G08B](#)
- D01H 13/145 . . {set on carriages travelling along the machines; Warning or safety devices pulled along the working unit by a band or the like}
- D01H 13/16 . . responsive to reduction in material tension, failure of supply, or breakage, of material
- D01H 13/1608 . . . {where the paying-out and take-up stations are stopped at one and the same time}
- D01H 13/1616 . . . {characterised by the detector}
- D01H 13/1625 . . . . {Electro-mechanical actuators}
- D01H 13/1633 . . . . {Electronic actuators}
- D01H 13/1641 . . . . . {Capacitor sensing means}
- D01H 13/165 . . . . . {Photo-electric sensing means}
- D01H 13/1658 . . . . {Associated actuators with mutual actuation, e.g. for two or more running yarns}
- D01H 13/1666 . . . . {Lighting or luminous devices making easier the setting of the breakage of yarns}

D01H 13/1675	.....	{Pencil of rays on side of machines}
D01H 13/1683	....	{Pneumatic sensing means}
D01H 13/1691	...	{Thread breakage detector means associated with pneumatic cleaning devices, e.g. suction of broken end of yarn}
D01H 13/18	...	stopping supply only
D01H 13/181	....	{by stopping supply packages}
D01H 13/182	....	{by raising or lifting of one of the drafting cylinders, e.g. by removing of the loading means}
D01H 13/183	....	{the yarn moving out of its normal path, e.g. by lateral diverting}
D01H 13/185	....	{a plate moving in the nip of drafting or guiding cylinders}
D01H 13/186	....	{guiding or drafting cylinders moving by gravity when a yarn breakage occurs}
D01H 13/187	....	{using means stopping the driving of the drafting, guiding cylinders, e.g. friction clutches}
D01H 13/188	....	{by cutting or clamping yarns or rovings}
D01H 13/20	..	responsive to excessive tension or irregular operation of apparatus
D01H 13/22	..	responsive to presence of irregularities in running material
D01H 13/24	..	responsive to delivery of a measured length of material, completion of winding of a package or filling of a receptacle
D01H 13/26	.	Arrangements facilitating the inspection or testing of yarns or the like in connection with spinning or twisting
D01H 13/28	.	Heating or cooling arrangements {for yarns (removal of heat from machines <a href="#">D01H 1/16</a> )}
D01H 13/30	.	Moistening, sizing, oiling, waxing, colouring, or drying yarns or the like as incidental measures during spinning or twisting
D01H 13/302	..	{Moistening, e.g. for wet spinning}
D01H 13/304	..	{ Conditioning during spinning or twisting (for carding or combing <a href="#">D01G 99/005</a> )}
D01H 13/306	..	{by applying fluids, e.g. steam or oiling liquids}
D01H 13/308	..	{by applying solids, e.g. wax}
D01H 13/32	.	Counting, measuring, recording or registering devices (in general, see the appropriate subclass of Section G, e.g. <a href="#">G01B 21/12</a> , <a href="#">G01N 33/36</a> )
<b>D01H 15/00</b>		<b>Piecing arrangements</b> (for open-end spinning machines <a href="#">D01H 4/48</a> ; in machines for producing textile fabrics, see the appropriate subclasses); {Automatic end-finding, e.g. by suction and reverse package rotation; Devices for temporarily storing yarn during piecing (piecing of rovings in combination with replacing of completed packages or cans <a href="#">D01H 9/005</a> )}
D01H 15/002	.	{for false-twisting spinning machines}
D01H 15/004	.	{for centrifugal spinning machines}
D01H 15/007	.	for two-for-one twisting machines
D01H 15/013	.	Carriages travelling along the machines
<b>D01H 17/00</b>		<b>Hand tools</b> (cop-tube applying apparatus <a href="#">D01H 9/12</a> )
D01H 17/02	.	Arrangements for storing ring travellers; Devices for applying travellers to rings

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**D01H 2700/00****Spinning or twisting machines; Drafting devices**

D01H 2700/01

. Preparatory spinning machines

D01H 2700/20

. Spinning mules; Transmissions

D01H 2700/202

.. Carriages or their movement; Lubrication

D01H 2700/205

.. Spindles or spindle control in spinning mules

D01H 2700/207

.. Yarn delivery rollers; Drawing systems for spinning mules; Silver rollers

D01H 2700/21

. Piecing or cleaning in spinning mules

D01H 2700/22

. Winding devices for spinning mules

D01H 2700/24

. Spinning or twisting machines of different kinds

D01H 2700/242

.. Spinning or twisting devices wherein twist is created during winding

D01H 2700/245

. Conception or fabrication of drafting cylinders

D01H 2700/247

. Guiding means for veil or sliver on drafting systems