

CPC**COOPERATIVE PATENT CLASSIFICATION****D02G****CRIMPING OR CURLING FIBRES, FILAMENTS, THREADS, OR YARNS; YARNS OR THREADS****NOTE**

Attention is drawn to the note following the title of class [D02](#)

D02G 1/00

Producing crimped or curled fibres, filaments, yarns, or threads, giving them latent characteristics (yarns per se [D02G 3/00](#); during formation of artificial filaments, threads, or the like [D01D 5/22](#); general aspects of chemical treatment [D06M](#))

NOTE

In the context of this group, the terms "texturing" or "texturising" encompass curling and crimping

D02G 1/002

- . { by knitting, weaving or tufting, fixing and then unravelling }

D02G 1/004

- . { by heating fibres, filaments, yarns or threads so as to create a temperature gradient across their diameter, thereby imparting them latent asymmetrical shrinkage properties }

D02G 1/006

- . { by impinging the yarn against an uneven surface and thereby deforming it }

D02G 1/008

- . { with provision for imparting irregular effects to the yarn }

D02G 1/02

- . by twisting, fixing the twist and backtwisting, i.e. by imparting false twist

D02G 1/0206

- .. { by false-twisting }

D02G 1/0213

- ... { after drawing the yarn on the same machine }

D02G 1/022

- ... { while simultaneously drawing the yarn }

D02G 1/0226

- ... { multiple false-twisting }

D02G 1/0233

- ... { with real twist being imparted to the yarn before or after false-twisting }

D02G 1/024

- ... { with provision for imparting irregular effects to the yarn }

D02G 1/0246

- ... { at least some of the filaments being simultaneously broken or cut, e.g. by stretching or abrading }

D02G 1/0253

- ... { while bonding at least some of the filaments or fibres together }

D02G 1/026

- ... { in the presence of a crimp finish }

D02G 1/0266

- ... { false-twisting machines }

D02G 1/0273

- { threading up and starting the false-twisting machine }

D02G 1/028

- .. { by twisting or false-twisting at least two filaments, yarns or threads, fixing the twist and separating the filaments, yarns or threads }

D02G 1/0286

- .. { characterised by the use of certain filaments, fibres or yarns }

D02G 1/0293

- ... { composed, at least in part, of natural fibres }

D02G 1/04

- .. Devices for imparting false twist

- D02G 1/06 . . . Spindles
- D02G 1/08 . . . Rollers { or other friction causing elements }
- D02G 1/082 . . . { with the periphery of at least one disc }
- D02G 1/085 . . . { between crossed belts }
- D02G 1/087 . . . { between the flanks of rotating discs }

- D02G 1/10 . using knife edges, e.g. heated knife edges, for edge crimping

- D02G 1/12 . using stuffer boxes
- D02G 1/122 . . { introducing the filaments in the stuffer box by means of a fluid jet }
- D02G 1/125 . . { including means for monitoring or controlling yarn processing }
- D02G 1/127 . . { including drawing or stretching on the same machine }

- D02G 1/14 . using grooved rollers or gear-wheel-type members

- D02G 1/16 . using jets or streams of turbulent gases, e.g. air, steam {([interlacing filaments D02J 1/08](#))}
- D02G 1/161 . . { yarn crimping air jets }
- D02G 1/162 . . { with provision for imparting irregular effects to the yarn }
- D02G 1/164 . . { in the presence of a liquid, e.g. a crimp finish }
- D02G 1/165 . . { characterised by the use of certain filaments or yarns }
- D02G 1/167 . . { including means for monitoring or controlling yarn processing }
- D02G 1/168 . . { including drawing or stretching on the same machine }

- D02G 1/18 . by combining fibres, filaments, or yarns, having different shrinkage characteristics {([D02G 1/004 takes precedence](#))}

- D02G 1/20 . Combinations of two or more of the above-mentioned operations or devices; After-treatments for fixing crimp or curl
- D02G 1/205 . . { After-treatments for fixing crimp or curl }

- D02G 3/00** **Yarns or threads, e.g. fancy yarns; Processes or apparatus for the production thereof, not otherwise provided for ([for producing crimped or curled yarns D02G 1/00](#))**

- D02G 3/02 . Yarns or threads characterised by the material or by the materials from which they are made
- D02G 3/025 . . { Yarns or threads formed from hair ([horse-hair threads D02G 3/14](#))}
- D02G 3/04 . . Blended or other yarns or threads containing components made from different materials
- D02G 3/042 . . . { all components being made from natural material }
- D02G 3/045 . . . { all components being made from artificial or synthetic material }
- D02G 3/047 . . . { including aramid fibres }
- D02G 3/06 . . Threads formed from strip material other than paper
- D02G 3/08 . . Paper yarns or threads
- D02G 3/10 . . Yarns or threads formed from collagenous material, e.g. catgut {([surgical threads or yarns A61L](#))}

- D02G 3/12 . . Threads containing metallic filaments or strips
- D02G 3/14 . . Horse-hair threads
- D02G 3/16 . . Yarns or threads made from mineral substances
- D02G 3/18 . . . from glass or the like
- D02G 3/182 { the glass being present only in part of the structure }
- D02G 3/185 { in the core }
- D02G 3/187 { in the sheath }
- D02G 3/20 . . . from asbestos

- D02G 3/22 . Yarns or threads characterised by constructional features, { e.g. blending, filament/fibre (piecing of yarns or threads [D01H 15/00](#)) }
- D02G 3/24 . . Bulkied yarns or threads, e.g. formed from staple fibre components with different relaxation characteristics
- D02G 3/26 . . with characteristics dependent on the amount or direction of twist
- D02G 3/28 . . . Doubled, plied, or cabled threads {([D02G 3/32](#), [D02G 3/36](#) take precedence; effect yarns [D02G 3/34](#); details of spindles, e.g. bearings [D01H 7/86](#)) }
- D02G 3/281 { using one drawing frame for two slivers and twisting of the slivers to a single yarn, i.e. spin-twisting (guides having associated actuators with mutual action [D01H 13/1658](#)) }
- D02G 3/283 { using hollow spindles through which one yarn is running }
- D02G 3/285 { one yarn running over the feeding spool of another yarn }
- D02G 3/286 { with alternatively "S" and "Z" direction of twist, e.g. Self-twist process }
- D02G 3/288 { with same direction of twist, but with an amount of twist varying along the thread }
- D02G 3/30 . . . Crêped or other highly-twisted yarns or threads
- D02G 3/32 . . Elastic yarns or threads; { Production of plied or cored yarns, one of which is elastic }
- D02G 3/322 . . . { using hollow spindles (details of spindles, e.g. bearings [D01H 7/86](#)) }
- D02G 3/324 . . . { using a drawing frame }
- D02G 3/326 . . . { the elastic properties due to the construction rather than to the use of elastic material }
- D02G 3/328 . . . { containing elastane }
- D02G 3/34 . . Yarns or threads having slubs, knops, spirals, loops, tufts, or other irregular or decorative effects, i.e. effect yarns {([carding machines for producing decorative or fancy effects in products \[D01G\]\(#\)](#); drafting machines with varying draft according to a pre-arranged pattern [D01H 5/36](#)) }
- D02G 3/343 . . . { using hollow spindles (details of spindles, e.g. bearings [D01H 7/86](#)) }
- D02G 3/346 . . . { with coloured effects, i.e. by differential dyeing process }
- D02G 3/36 . . Cored or coated yarns or threads {([D02G 3/34](#), [D02G 3/40](#) take precedence ; elastic yarns or threads [D02G 3/32](#)) }
- D02G 3/362 . . . { using hollow spindles (details of spindles, e.g. bearings [D01H 7/86](#)) }
- D02G 3/365 { around which a reel supporting feeding spool rotates }
- D02G 3/367 . . . { using a drawing frame }
- D02G 3/38 . . Threads in which fibres, filaments, or yarns are wound with other yarns or filaments, { e.g. wrap yarns, i.e. strands of filaments or staple fibres are wrapped by a helically wound binder yarn; ([D02G 3/32](#) takes precedence) }; (covering endless core threads with fibres by using open-end spinning techniques [D01H 4/00](#)) }

- D02G 3/385 ... { using hollow spindles, e.g. making coverspun yarns }
- D02G 3/40 .. Yarns in which fibres are united by adhesives; Impregnated yarns or threads
- D02G 3/402 ... { the adhesive being one component of the yarn, i.e. thermoplastic yarn }
- D02G 3/404 ... { Yarns or threads coated with polymeric solutions }
- D02G 3/406 { where the polymeric solution is removable at a later stage, e.g. by washing }
- D02G 3/408 ... { Flocked yarns }
- D02G 3/42 .. Chenille threads

- D02G 3/44 . Yarns or threads characterised by the purpose for which they are designed
 {([protective gloves A41D 19/00](#); [protective clothing A62B 17/00](#); [ropes D07B 1/02](#))}
- D02G 3/441 .. { Yarns or threads with antistatic, conductive or radiation-shielding properties
 ([electroconductive, anti-static or radiation-shielding filaments D01F 1/09](#),
 [D01F 1/106](#); [anti-static fabrics D03D 15/0005](#); [conducting, insulating or anti-static layers for floor coverings D06N 7/0042](#))}
- D02G 3/442 .. { Cut or abrasion resistant yarns or threads }
- D02G 3/443 .. { Heat-resistant, fireproof or flame-retardant yarns or threads ([fire- or flame-proof filaments D01F 1/07](#); [woven fabrics using heat-resistant or fireproof threads D03D 15/12](#))}
- D02G 3/444 .. { Yarns or threads for use in sports applications ([strings for tennis rackets A63B 51/02](#))}
- D02G 3/445 .. { Yarns or threads for use in floor fabrics ([floor fabrics A47G 27/00](#); [floor coverings on textile basis D06N 7/0005](#))}
- D02G 3/446 .. { Yarns or threads for use in automotive applications }
- D02G 3/447 .. { Yarns or threads for specific use in general industrial applications, e.g. as filters or reinforcement }
- D02G 3/448 .. { Yarns or threads for use in medical applications ([D02G 3/449](#) takes precedence; [surgical suture materials A61L 17/00](#))}
- D02G 3/449 .. { Yarns or threads with antibacterial properties ([filaments containing agents inhibiting growth of micro-organisms D01F 1/103](#))}
- D02G 3/46 .. Sewing-cottons or the like
- D02G 3/48 .. Tyre cords {([tyre reinforcements B60C 9/00](#); [metal cords for reinforcing rubber or plastic articles D07B 1/0606](#))}