

ECLA EUROPEAN 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](#)

D02G1/00 Producing crimped or curled fibres, filaments, yarns, or threads, giving them latent characteristics (yarns per se [D02G3/00](#); during formation of artificial filaments, threads, or the like [D01D5/22](#); general aspects of chemical treatment [D06M](#))

[N: **Note**

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

- D02G1/00B . [N: by knitting, weaving or tufting, fixing and then unravelling]
- D02G1/00C . [N: by heating fibres, filaments, yarns or threads so as to create a temperature gradient across their diameter, thereby imparting them latent asymmetrical shrinkage properties]
- D02G1/00D . [N: by impinging the yarn against an uneven surface and thereby deforming it]
- D02G1/00E . [N: with provision for imparting irregular effects to the yarn]
- D02G1/02 . by twisting, fixing the twist and backtwisting, i.e. by imparting false twist
- D02G1/02B . . [N: by false-twisting]
- D02G1/02B1 . . . [N: after drawing the yarn on the same machine]
- D02G1/02B2 . . . [N: while simultaneously drawing the yarn]
- D02G1/02B3 . . . [N: multiple false-twisting]
- D02G1/02B4 . . . [N: with real twist being imparted to the yarn before or after false-twisting]
- D02G1/02B5 . . . [N: with provision for imparting irregular effects to the yarn]
- D02G1/02B6 . . . [N: at least some of the filaments being simultaneously broken or cut, (e.g. by stretching or abrading)]
- D02G1/02B7 . . . [N: while bonding at least some of the filaments or fibres together]
- D02G1/02B8 . . . [N: in the presence of a crimp finish]
- D02G1/02B9 . . . [N: false-twisting machines]
- D02G1/02B9B [N: threading up and starting the false-twisting machine]
- D02G1/02C . . [N: by twisting or false-twisting at least two filaments, yarns or threads, fixing the twist and separating the filaments, yarns or threads]
- D02G1/02D . . [N: characterised by the use of certain filaments, fibres or yarns]
- D02G1/02D1 . . . [N: composed, at least in part, of natural fibres]
- D02G1/04 . . Devices for imparting false twist
- D02G1/06 . . . Spindles
- D02G1/08 . . . Rollers [N: or other friction causing elements]

- D02G1/08B [N: with the periphery of at least one disc]
- D02G1/08C [N: between crossed belts]
- D02G1/08D [N: between the flanks of rotating discs]

- D02G1/10 . using knife edges, e.g. heated knife edges, for edge crimping

- D02G1/12 . using stuffer boxes
- D02G1/12B . . [N: introducing the filaments in the stuffer box by means of a fluid jet]
- D02G1/12C . . [N: including means for monitoring or controlling yarn processing]
- D02G1/12D . . [N: including drawing or stretching on the same machine]

- D02G1/14 . using grooved rollers or gear-wheel-type members

- D02G1/16 . using jets or streams of turbulent gases, e.g. air, steam [N: (interlacing filaments [D02J1/08](#))]
- D02G1/16B . . [N: yarn crimping air jets]
- D02G1/16C . . [N: with provision for imparting irregular effects to the yarn]
- D02G1/16D . . [N: in the presence of a liquid, (e.g. a crimp finish)]
- D02G1/16E . . [N: characterised by the use of certain filaments or yarns]
- D02G1/16F . . [N: including means for monitoring or controlling yarn processing]
- D02G1/16G . . [N: including drawing or stretching on the same machine]

- D02G1/18 . by combining fibres, filaments, or yarns, having different shrinkage characteristics [N: ([D02G1/00C](#) takes precedence)]

- D02G1/20 . Combinations of two or more of the above-mentioned operations or devices; After-treatments for fixing crimp or curl
- D02G1/20B . . [N: After-treatments for fixing crimp or curl]

- D02G3/00** **Yarns or threads, e.g. fancy yarns; Processes or apparatus for the production thereof, not otherwise provided for (for producing crimped or curled yarns [D02G1/00](#))**

- D02G3/02 . Yarns or threads characterised by the material or by the materials from which they are made
- D02G3/02D . . [N: Yarns or threads formed from hair (horse-hair threads [D02G3/14](#))]
- D02G3/04 . . Blended or other yarns or threads containing components made from different materials
- D02G3/04B . . . [N: all components being made from natural material]
- D02G3/04C . . . [N: all components being made from artificial or synthetic material]
- D02G3/04D . . . [N: including aramid fibres] [N0209]
- D02G3/06 . . Threads formed from strip material other than paper
- D02G3/08 . . Paper yarns or threads
- D02G3/10 . . Yarns or threads formed from collagenous material, e.g. catgut [N: (surgical threads or yarns [A61L](#))]
- D02G3/12 . . Threads containing metallic filaments or strips
- D02G3/14 . . Horse-hair threads
- D02G3/16 . . Yarns or threads made from mineral substances

- D02G3/18 . . . from glass or the like
- D02G3/18B [N: the glass being present only in part of the structure] [N0209]
- D02G3/18B2 [N: in the core] [N0209]
- D02G3/18B4 [N: in the sheath] [N0209]
- D02G3/20 . . . from asbestos

- D02G3/22 . Yarns or threads characterised by constructional features, [N: e.g. blending, filament/fibre (piecing of yarns or threads [D01H15/00](#))]
- D02G3/24 . . Bulked yarns or threads, e.g. formed from staple fibre components with different relaxation characteristics
- D02G3/26 . . with characteristics dependent on the amount or direction of twist
- D02G3/28 . . . Doubled, plied, or cabled threads [N: ([D02G3/32](#), [D02G3/36](#) take precedence; effect yarns [D02G3/34](#); details of spindles, e.g. bearings [D01H7/86](#))]
- D02G3/28A [N: 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 [D01H13/16B6](#))]
- D02G3/28B [N: using hollow spindles through which one yarn is running]
- D02G3/28C [N: one yarn running over the feeding spool of another yarn]
- D02G3/28D [N: with alternatively "S" and "Z" direction of twist, e.g. Self-twist process]
- D02G3/28F [N: with same direction of twist, but with an amount of twist varying along the thread]

- D02G3/30 . . . Crêped or other highly-twisted yarns or threads
- D02G3/32 . . Elastic yarns or threads; [N: Production of plied or cored yarns, one of which is elastic]
- D02G3/32B . . . [N: using hollow spindles (details of spindles, e.g. bearings [D01H7/86](#))]
- D02G3/32C . . . [N: using a drawing frame]
- D02G3/32D . . . [N: the elastic properties due to the construction rather than to the use of elastic material] [N0311]
- D02G3/32E . . . [N: containing elastane] [N0311]
- D02G3/34 . . Yarns or threads having slubs, knops, spirals, loops, tufts, or other irregular or decorative effects, i.e. effect yarns [N: (carding machines for producing decorative or fancy effects in products [D01G](#); drafting machines with varying draft according to a pre-arranged pattern [D01H5/36](#))]
- D02G3/34B . . . [N: using hollow spindles (details of spindles, e.g. bearings [D01H7/86](#))]
- D02G3/34D . . . [N: with coloured effects, i.e. by differential dyeing process]
- D02G3/36 . . Cored or coated yarns or threads ([N: [D02G3/34](#), [D02G3/40](#) take precedence]; elastic yarns or threads [D02G3/32](#))
- D02G3/36B . . . [N: using hollow spindles (details of spindles, e.g. bearings [D01H7/86](#))]
- D02G3/36B2 [N: around which a reel supporting feeding spool rotates]
- D02G3/36C . . . [N: using a drawing frame]
- D02G3/38 . . Threads in which fibres, filaments, or yarns are wound with other yarns or filaments, [N: e.g. wrap yarns, i.e. strands of filaments or staple fibres are wrapped by a helically wound binder yarn; ([D02G3/32](#) takes precedence)]; (covering endless core threads with fibres by using open-end spinning techniques [D01H4/00](#))
- D02G3/38B . . . [N: using hollow spindles, e.g. making coverspun yarns]
- D02G3/40 . . Yarns in which fibres are united by adhesives; Impregnated yarns or threads
- D02G3/40B . . . [N: the adhesive being one component of the yarn, i.e. thermoplastic yarn]

- D02G3/40C . . . [N: Yarns or threads coated with polymeric solutions]
- D02G3/40C2 [N: where the polymeric solution is removable at a later stage, e.g. by washing] [N0311]
- D02G3/40D . . . [N: Flocked yarns]
- D02G3/42 . . Chenille threads

- D02G3/44 . Yarns or threads characterised by the purpose for which they are designed [N: (protective gloves [A41D19/00](#); protective clothing [A62B17/00](#); ropes [D07B1/02](#))] [C0209]
- D02G3/44A . . [N: Yarns or threads with antistatic, conductive or radiation-shielding properties (electroconductive, anti-static or radiation-shielding filaments [D01F1/09](#), [D01F1/10C](#); anti-static fabrics [D03D15/00A](#); conducting, insulating or anti-static layers for floor coverings [D06N7/00B8B](#))] [C0209]
- D02G3/44B . . [N: Cut or abrasion resistant yarns or threads] [N0209]
- D02G3/44C . . [N: Heat-resistant, fireproof or flame-retardant yarns or threads (fire- or flame-proof filaments [D01F1/07](#); woven fabrics using heat-resistant or fireproof threads [D03D15/12](#))] [N0209]
- D02G3/44D . . [N: Yarns or threads for use in sports applications (strings for tennis rackets [A63B51/02](#))] [N0209]
- D02G3/44E . . [N: Yarns or threads for use in floor fabrics (floor fabrics [A47G27/00](#); floor coverings on textile basis [D06N7/00B](#))] [N0209]
- D02G3/44F . . [N: Yarns or threads for use in automotive applications] [N0209]
- D02G3/44G . . [N: Yarns or threads for specific use in general industrial applications, e.g. as filters or reinforcement] [N0209]
- D02G3/44H . . [N: Yarns or threads for use in medical applications ([D02G3/44J](#) takes precedence; surgical suture materials [A61L17/00](#))] [N0209]
- D02G3/44J . . [N: Yarns or threads with antibacterial properties (filaments containing agents inhibiting growth of micro-organisms [D01F1/10B](#))] [N0209]
- D02G3/46 . . Sewing-cottons or the like
- D02G3/48 . . Tyre cords [N: (tyre reinforcements [B60C9/00](#); metal cords for reinforcing rubber or plastic articles [D07B1/06B](#))]