

# CPC COOPERATIVE PATENT CLASSIFICATION

## D TEXTILES; PAPER

### TEXTILES OR FLEXIBLE MATERIALS NOT OTHERWISE PROVIDED FOR

#### D02 YARNS; MECHANICAL FINISHING OF YARNS OR ROPES; WARPING OR BEAMING

(NOTE omitted)

#### 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](#)

##### WARNING

In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

- |        |   |        |   |
|--------|---|--------|---|
| 1/00   | <b>Producing crimped or curled fibres, filaments, yarns, or threads, giving them latent characteristics</b> (yarns per se <a href="#">D02G 3/00</a> ; during formation of artificial filaments, threads, or the like <a href="#">D01D 5/22</a> ; general aspects of chemical treatment <a href="#">D06M</a> ) | 1/028  | . . {by twisting or false-twisting at least two filaments, yarns or threads, fixing the twist and separating the filaments, yarns or threads} |
|        |   | 1/0286 | . . {characterised by the use of certain filaments, fibres or yarns}  |
|        |   | 1/0293 | . . . {composed, at least in part, of natural fibres}   |
|        |   | 1/04   | . . Devices for imparting false twist   |
|        |   | 1/06   | . . . Spindles  |
|        |   | 1/08   | . . . Rollers {or other friction causing elements}  |
|        |   | 1/082  | . . . . {with the periphery of at least one disc}   |
|        |   | 1/085  | . . . . {between crossed belts}   |
|        |   | 1/087  | . . . . {between the flanks of rotating discs}  |
|        |   | 1/10   | . using knife edges, e.g. heated knife edges, for edge crimping   |
|        |   | 1/12   | . using stuffer boxes   |
|        |   | 1/122  | . . {introducing the filaments in the stuffer box by means of a fluid jet}  |
|        |   | 1/125  | . . {including means for monitoring or controlling yarn processing}   |
|        |   | 1/127  | . . {including drawing or stretching on the same machine}   |
|        |   | 1/14   | . using grooved rollers or gear-wheel-type members  |
|        |   | 1/16   | . using jets or streams of turbulent gases, e.g. air, steam {(interlacing filaments <a href="#">D02J 1/08</a> )}                              |
|        |   | 1/161  | . . {yarn crimping air jets}  |
|        |   | 1/162  | . . {with provision for imparting irregular effects to the yarn}  |
|        |   | 1/164  | . . {in the presence of a liquid, e.g. a crimp finish}  |
|        |   | 1/165  | . . {characterised by the use of certain filaments or yarns}  |
|        |   | 1/167  | . . {including means for monitoring or controlling yarn processing}   |
|        |   | 1/168  | . . {including drawing or stretching on the same machine}   |
|        |   | 1/18   | . by combining fibres, filaments, or yarns, having different shrinkage characteristics {( <a href="#">D02G 1/004</a> takes precedence)}       |
| 1/002  | . {by knitting, weaving or tufting, fixing and then unravelling}  |        |   |
| 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}  |        |   |
| 1/006  | . {by impinging the yarn against an uneven surface and thereby deforming it}  |        |   |
| 1/008  | . {with provision for imparting irregular effects to the yarn}  |        |   |
| 1/02   | . by twisting, fixing the twist and backtwisting, i.e. by imparting false twist   |        |   |
| 1/0206 | . . {by false-twisting}   |        |   |
| 1/0213 | . . . {after drawing the yarn on the same machine}  |        |   |
| 1/022  | . . . {while simultaneously drawing the yarn}   |        |   |
| 1/0226 | . . . {multiple false-twisting}   |        |   |
| 1/0233 | . . . {with real twist being imparted to the yarn before or after false-twisting}   |        |   |
| 1/024  | . . . {with provision for imparting irregular effects to the yarn}  |        |   |
| 1/0246 | . . . {at least some of the filaments being simultaneously broken or cut, e.g. by stretching or abrading}   |        |   |
| 1/0253 | . . . {while bonding at least some of the filaments or fibres together}   |        |   |
| 1/026  | . . . {in the presence of a crimp finish}   |        |   |
| 1/0266 | . . . {false-twisting machines}   |        |   |
| 1/0273 | . . . . {threading up and starting the false-twisting machine}  |        |   |

- 1/20 . Combinations of two or more of the above-mentioned operations or devices; After-treatments for fixing crimp or curl
- 1/205 . . {After-treatments for fixing crimp or curl}
- 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](#))**
- NOTE**
- In this main group, further classification in indexing scheme [D10B](#) for aspects relating to yarns is required.
- 3/02 . Yarns or threads characterised by the material or by the materials from which they are made
- 3/025 . . {Yarns or threads formed from hair (horse-hair threads [D02G 3/14](#))}
- 3/04 . . Blended or other yarns or threads containing components made from different materials
- 3/042 . . . {all components being made from natural material}
- 3/045 . . . {all components being made from artificial or synthetic material}
- 3/047 . . . {including aramid fibres}
- 3/06 . . Threads formed from strip material other than paper
- 3/08 . . Paper yarns or threads
- 3/10 . . Yarns or threads formed from collagenous materials, e.g. catgut {(surgical threads or yarns [A61L](#))}
- 3/12 . . Threads containing metallic filaments or strips
- 3/14 . . Horse-hair threads
- 3/16 . . Yarns or threads made from mineral substances
- 3/18 . . . from glass or the like
- 3/182 . . . . {the glass being present only in part of the structure}
- 3/185 . . . . . {in the core}
- 3/187 . . . . . {in the sheath}
- 3/20 . . . from asbestos
- 3/22 . Yarns or threads characterised by constructional features {, e.g. blending, filament/fibre (piecing of yarns or threads [D01H 15/00](#))}
- 3/24 . . Bulkied yarns or threads, e.g. formed from staple fibre components with different relaxation characteristics
- 3/26 . . with characteristics dependent on the amount or direction of twist
- 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](#))}
- 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](#))}
- 3/283 . . . . {using hollow spindles through which one yarn is running}
- 3/285 . . . . {one yarn running over the feeding spool of another yarn}
- 3/286 . . . . {with alternatively "S" and "Z" direction of twist, e.g. Self-twist process}
- 3/288 . . . . {with same direction of twist, but with an amount of twist varying along the thread}
- 3/30 . . . Crêped or other highly-twisted yarns or threads
- 3/32 . . Elastic yarns or threads {; Production of plied or cored yarns, one of which is elastic}
- 3/322 . . . {using hollow spindles (details of spindles, e.g. bearings [D01H 7/86](#))}
- 3/324 . . . {using a drawing frame}
- 3/326 . . . {the elastic properties due to the construction rather than to the use of elastic material}
- 3/328 . . . {containing elastane}
- 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](#))}
- 3/343 . . . {using hollow spindles (details of spindles, e.g. bearings [D01H 7/86](#))}
- 3/346 . . . {with coloured effects, i.e. by differential dyeing process}
- 3/36 . . Cored or coated yarns or threads {([D02G 3/34](#), [D02G 3/40](#) take precedence); elastic yarns or threads [D02G 3/32](#)}
- 3/362 . . . {using hollow spindles (details of spindles, e.g. bearings [D01H 7/86](#))}
- 3/365 . . . . {around which a reel supporting feeding spool rotates}
- 3/367 . . . {using a drawing frame}
- 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](#))
- 3/385 . . . {using hollow spindles, e.g. making coverspun yarns}
- 3/40 . . Yarns in which fibres are united by adhesives; Impregnated yarns or threads
- 3/402 . . . {the adhesive being one component of the yarn, i.e. thermoplastic yarn}
- 3/404 . . . {Yarns or threads coated with polymeric solutions}
- 3/406 . . . . {where the polymeric solution is removable at a later stage, e.g. by washing}
- 3/408 . . . {Flocked yarns}
- 3/42 . . Chenille threads
- 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](#))}
- 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 15/533](#); conducting, insulating or anti-static layers for floor coverings [D06N 7/0042](#))}
- 3/442 . . {Cut or abrasion resistant yarns or threads}
- 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 15/513](#))}

## D02G

- 3/444 . . {Yarns or threads for use in sports applications (strings for tennis rackets [A63B 51/02](#))}
- 3/445 . . {Yarns or threads for use in floor fabrics (floor fabrics [A47G 27/00](#); floor coverings on textile basis [D06N 7/0005](#))}
- 3/446 . . {Yarns or threads for use in automotive applications}
- 3/447 . . {Yarns or threads for specific use in general industrial applications, e.g. as filters or reinforcement}
- 3/448 . . {Yarns or threads for use in medical applications ([D02G 3/449](#) takes precedence; surgical suture materials [A61L 17/00](#))}
- 3/449 . . {Yarns or threads with antibacterial properties (filaments containing agents inhibiting growth of microorganisms [D01F 1/103](#))}
- 3/46 . . Sewing-cottons or the like
- 3/48 . . Tyre cords {(tyre reinforcements [B60C 9/00](#); metal cords for reinforcing rubber or plastic articles [D07B 1/0606](#))}