

SECTION D — TEXTILES; PAPER

D01 NATURAL OR MAN-MADE THREADS OR FIBRES; SPINNING

D01D MECHANICAL METHODS OR APPARATUS IN THE MANUFACTURE OF MAN-MADE FILAMENTS, THREADS, FIBRES, BRISTLES OR RIBBONS (working or processing of metal wire B21F; fibres or filaments of softened glass, minerals or slag C03B 37/00)

Note(s) [5]

1. Attention is drawn to the Note following the title of class D01.
2. Apparatus specially adapted for the manufacture of carbon filaments are classified in group D01F 9/12.

Subclass index

| | |
|--|--------------------------|
| MECHANICAL TREATMENT OF FILAMENT-FORMING MATERIAL..... | 1/00 |
| PRODUCTION OF ARTIFICIAL FIBRES | |
| Methods..... | 5/00 |
| Spinnerette packs; formation of filaments; collecting the newly-spun products..... | 4/00, 5/00, 7/00 |
| Physical treatment during manufacture..... | 10/00 |
| Other operations..... | 11/00 |
| COMPLETE MACHINES; DETAILS..... | 13/00, 4/02, 7/00, 11/04 |

| | |
|---|--|
| 1/00 Treatment of filament-forming or like material (working of plastics or substances in a plastic state, in general B29) [1, 2006.01] | 5/098 • • with simultaneous stretching [4, 2006.01] |
| 1/02 • Preparation of spinning solutions [1, 2006.01] | 5/10 • • using organic materials [1, 2006.01] |
| 1/04 • Melting filament-forming substances [1, 2006.01] | 5/11 • Flash-spinning [3, 2006.01] |
| 1/06 • Feeding liquid to the spinning head (constructions of pumps F04) [1, 2006.01] | 5/12 • Stretch-spinning methods (finishing by stretching D02J 1/22) [1, 2006.01] |
| 1/09 • • Pressure, temperature or feeding rate regulation [3, 2006.01] | 5/14 • • with flowing liquid stretching media [1, 2006.01] |
| 1/10 • Filtering or de-aerating the spinning solution or melt [1, 2006.01] | 5/16 • • using rollers, or like mechanical devices, e.g. snubbing pins [1, 2006.01] |
| 4/00 Spinnerette packs; Cleaning thereof (D01D 5/24, D01D 5/253, D01D 5/28 take precedence) [3, 2006.01] | 5/18 • by means of rotating spinnerets [1, 2006.01] |
| 4/02 • Spinnerettes (alloys therefor C22C) [3, 2006.01] | 5/20 • with varying denier along their length [1, 2006.01] |
| 4/04 • Cleaning spinnerettes or other parts of the spinnerette packs (cleaning in general B08B) [3, 2006.01] | 5/22 • with a crimped or curled structure; with a special structure to simulate wool (producing crimped or curled effects in filaments or threads after formation D02G 1/00) [1, 2006.01] |
| 4/06 • Distributing spinning solution or melt to spinning nozzles [3, 2006.01] | 5/23 • • by asymmetrical cooling of filaments, threads, or the like, leaving the spinnerettes [3, 2006.01] |
| 4/08 • Supporting spinnerettes or other parts of spinnerette packs [3, 2006.01] | 5/24 • with a hollow structure; Spinnerette packs therefor (D01D 5/38 takes precedence; producing tubes of plastic material B29D; addition of agents forming hollow filaments D01F 1/08) [1, 3, 2006.01] |
| 5/00 Formation of filaments, threads, or the like [1, 2006.01] | 5/247 • • Discontinuous hollow structure or microporous structure [3, 2006.01] |
| 5/02 • Starting the formation [1, 2006.01] | 5/253 • with a non-circular cross section; Spinnerette packs therefor (D01D 5/38 takes precedence) [3, 2006.01] |
| 5/04 • Dry spinning methods [1, 2006.01] | 5/26 • Formation of staple fibres (by flash-spinning D01D 5/11) [1, 2006.01] |
| 5/06 • Wet spinning methods [1, 2006.01] | 5/28 • while mixing different spinning solutions or melts during the spinning operation; Spinnerette packs therefor [1, 2006.01] |
| 5/08 • Melt-spinning methods [1, 2006.01] | 5/30 • • Conjugate filaments; Spinnerette packs therefor [3, 2006.01] |
| 5/084 • • Heating filaments, threads or the like, leaving the spinnerettes [3, 2006.01] | 5/32 • • • Side-by-side structure; Spinnerette packs therefor [3, 2006.01] |
| 5/088 • • Cooling filaments, threads or the like, leaving the spinnerettes [3, 2006.01] | 5/34 • • • Core-skin structure; Spinnerette packs therefor [3, 2006.01] |
| 5/092 • • • in shafts or chimneys [3, 2006.01] | |
| 5/096 • • Humidity control, or oiling, of filaments, threads or the like, leaving the spinnerettes [3, 2006.01] | |

D01D

- 5/36 • • • Matrix structure; Spinnerette packs therefor [3, 2006.01]
- 5/38 • Formation of filaments, threads, or the like during polymerisation [3, 2006.01]
- 5/40 • by applying a shearing force to a dispersion or solution of filament formable polymers, e.g. by stirring [3, 2006.01]
- 5/42 • by cutting films into narrow ribbons or filaments or by fibrillation of films [3, 2006.01]
- 7/00 **Collecting the newly-spun products** (collecting newly-spun products with the imparting of twist D01H) [1, 2006.01]
- 7/02 • in centrifugal spinning pots [3, 2006.01]
- 10/00 **Physical treatment of man-made filaments or the like during manufacture, i.e. during a continuous production process before the filaments have been collected** (finishing D02J) [4, 2006.01]
- 10/02 • Heat treatment (heating for finishing D02J 13/00) [4, 2006.01]
- 10/04 • Supporting filaments or the like during their treatment [4, 2006.01]
- 10/06 • Washing or drying [4, 2006.01]
- 11/00 **Other features of manufacture** [1, 2006.01]
- 11/02 • Opening bundles to space the threads or filaments from one another [1, 2006.01]
- 11/04 • Fixed guides [1, 2006.01]
- 11/06 • Coating with spinning solutions or melts [1, 2006.01]
- 13/00 **Complete machines for producing man-made threads** [1, 2006.01]
- 13/02 • Elements of machines in combination [1, 2006.01]