

SECTION D — TEXTILES; PAPER

D01 NATURAL OR ARTIFICIAL THREADS OR FIBRES; SPINNING

D01D MECHANICAL METHODS OR APPARATUS IN THE MANUFACTURE OF ARTIFICIAL 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)

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)	5/11 • Flash-spinning [3]
1/02 • Preparation of spinning solutions	5/12 • Stretch-spinning methods (finishing by stretching D02J 1/22)
1/04 • Melting filament-forming substances	5/14 • • with flowing liquid stretching media
1/06 • Feeding liquid to the spinning head (constructions of pumps F04)	5/16 • • using rollers, or like mechanical devices, e.g. snubbing pins
1/09 • • Pressure, temperature or feeding rate regulation [3]	5/18 • by means of rotating spinnerets
1/10 • Filtering or de-aerating the spinning solution or melt	5/20 • with varying denier along their length
4/00 Spinnerette packs; Cleaning thereof (D01D 5/24, D01D 5/253, D01D 5/28 take precedence) [3]	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)
4/02 • Spinnerettes (alloys therefor C22C) [3]	5/23 • • by asymmetrical cooling of filaments, threads, or the like, leaving the spinnerettes [3]
4/04 • Cleaning spinnerettes or other parts of the spinnerette packs (cleaning in general B08B) [3]	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) [3]
4/06 • Distributing spinning solution or melt to spinning nozzles [3]	5/247 • • Discontinuous hollow structure or microporous structure [3]
4/08 • Supporting spinnerettes or other parts of spinnerette packs [3]	5/253 • with a non-circular cross section; Spinnerette packs therefor (D01D 5/38 takes precedence) [3]
5/00 Formation of filaments, threads, or the like	5/26 • Formation of staple fibres (by flash-spinning D01D 5/11)
5/02 • Starting the formation	5/28 • while mixing different spinning solutions or melts during the spinning operation; Spinnerette packs therefor
5/04 • Dry spinning methods	5/30 • • Conjugate filaments; Spinnerette packs therefor [3]
5/06 • Wet spinning methods	5/32 • • • Side-by-side structure; Spinnerette packs therefor [3]
5/08 • Melt-spinning methods	5/34 • • • Core-skin structure; Spinnerette packs therefor [3]
5/084 • • Heating filaments, threads or the like, leaving the spinnerettes [3]	5/36 • • • Matrix structure; Spinnerette packs therefor [3]
5/088 • • Cooling filaments, threads or the like, leaving the spinnerettes [3]	
5/092 • • • in shafts or chimneys [3]	
5/096 • • Humidity control, or oiling, of filaments, threads or the like, leaving the spinnerettes [3]	
5/098 • • with simultaneous stretching [4]	
5/10 • • using organic materials	

D01D

- 5/38

- Formation of filaments, threads, or the like during polymerisation [3]
- 5/40

- by applying a shearing force to a dispersion or solution of filament formable polymers, e.g. by stirring [3]
- 5/42

- by cutting films into narrow ribbons or filaments or by fibrillation of films [3]
- 7/00

Collecting the newly-spun products (collecting newly-spun products with the imparting of twist D01H)
- 7/02

- in centrifugal spinning pots [3]
- 10/00

Physical treatment of artificial filaments or the like during manufacture, i.e. during a continuous production process before the filaments have been collected (finishing D02J) [4]
- 10/02

- Heat treatment (heating for finishing D02J 13/00) [4]
- 10/04

- Supporting filaments or the like during their treatment [4]
- 10/06

- Washing or drying [4]
- 11/00

Other features of manufacture
- 11/02

- Opening bundles to space the threads or filaments from one another
- 11/04

- Fixed guides
- 11/06

- Coating with spinning solutions or melts
- 13/00

Complete machines for producing artificial threads
- 13/02

- Elements of machines in combination