

International Patent Classification

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Volume 2

Section D

Textiles; Paper



World Intellectual Property Organization

SECTION D – TEXTILES; PAPER

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(References and notes omitted)

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SECTION D – TEXTILES; PAPER

TEXTILES OR FLEXIBLE MATERIALS NOT OTHERWISE PROVIDED FOR

D01 NATURAL OR ARTIFICIAL THREADS OR FIBRES; SPINNING (metal threads B21; fibres or filaments of softened glass, minerals, or slag C03B 37/00; yarns D02)

Note

In this class, the following terms are used with the meanings indicated:

- “fibre” means a relatively-short, elongated member of natural or artificial material;
- “filament” means an endless or quasi-endless, elongated member of natural or artificial material;
- “yarn” means a unitary assembly of fibres, usually produced by spinning;
- “thread” means an assembly of yarns or filaments, usually produced by twisting.

D01B MECHANICAL TREATMENT OF NATURAL FIBROUS OR FILAMENTARY MATERIAL TO OBTAIN FIBRES OR FILAMENTS, E.G. FOR SPINNING (crude extraction of asbestos fibres from ores B03B; apparatus for retting D01C)

Note

Attention is drawn to the Note following the title of class D01.

Subclass Index

TREATMENT OF PLANT MATERIAL		TREATMENT OF ANIMAL FIBRES	
	Separation of fibres from plant material 1/00		De-burring, washing, scouring..... 3/00
	Hackling or heckling machines 5/00		Obtaining silk fibres 7/00
			OTHER TREATMENTS 9/00
1/00	Mechanical separation of fibres from plant material, e.g. seeds, leaves, stalks	5/00	Hackling or heckling machines (hand heckling tools D01G 33/00)
3/00	Mechanical removal of impurities from animal fibres (carbonising rags to recover animal fibres D01C 5/00; de-burring arrangements forming part of, or intimately associated with, carding or drafting machines, e.g. burr-crushing rollers, D01G) [2]	7/00	Obtaining silk fibres or filaments
		9/00	Other mechanical treatment of natural fibrous or filamentary material to obtain fibres or filaments

D01C CHEMICAL TREATMENT OF NATURAL FILAMENTARY OR FIBROUS MATERIAL TO OBTAIN FILAMENTS OR FIBRES FOR SPINNING; CARBONISING RAGS TO RECOVER ANIMAL FIBRES

Notes

- (1) Attention is drawn to the Note following the title of class D01.
- (2) Processes using enzymes or micro-organisms in order to:
 - (i) liberate, separate or purify a pre-existing compound or composition, or to
 - (ii) treat textiles or clean solid surfaces of materials
 are further classified in subclass C12S. [5]

- | | |
|-------------|---|
| 1/00 | Treatment of vegetable material |
| 3/00 | Treatment of animal material, e.g. chemical scouring of wool (recovery of lanolin or wool wax C11B 11/00) |
| 5/00 | Carbonising rags to recover animal fibres (chemical removal of vegetable impurities from threads or fabrics of animal fibres D06M) |

D01D MECHANICAL METHODS OR APPARATUS IN THE MANUFACTURE OF ARTIFICIAL FILAMENTS, THREADS, FIBRES, BRISTLES, OR RIBBONS**Notes**

- (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. [5]

Subclass Index

MECHANICAL TREATMENT OF FILAMENT-FORMING MATERIAL	1/00	Physical treatment during manufacture.....	10/00
PRODUCTION OF ARTIFICIAL FIBRES		Other operations.....	11/00
Methods	5/00	COMPLETE MACHINES; DETAILS	13/00; 4/00, 7/00, 11/00
Spinnerette packs; formation of filaments; collecting the newly- spun products.....	4/00; 5/00; 7/00		
<hr/>			
1/00 Treatment of filament-forming or like material (working of plastics or substances in a plastic state, in general B29)	5/30	. . Conjugate filaments; Spinnerette packs therefor [3]	
	5/34	. . . Core-skin structure; Spinnerette packs therefor [3]	
4/00 Spinnerette packs; Cleaning thereof (D01D 5/00, D01D 5/28 take precedence) [3]	7/00	Collecting the newly-spun products (collecting newly- spun products with the imparting of twist D01H)	
5/00 Formation of filaments, threads, or the like	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]	
5/06 . Wet spinning methods			
5/08 . Melt-spinning methods			
5/088 . . Cooling filaments, threads or the like, leaving the spinnerettes [3]			
5/12 . Stretch-spinning methods (finishing by stretching D02J 1/22)	11/00	Other features of manufacture	
5/28 . while mixing different spinning solutions or melts during the spinning operation; Spinnerette packs therefor	13/00	Complete machines for producing artificial threads	

D01F CHEMICAL FEATURES IN THE MANUFACTURE OF ARTIFICIAL FILAMENTS, THREADS, FIBRES, BRISTLES, OR RIBBONS; APPARATUS SPECIALLY ADAPTED FOR THE MANUFACTURE OF CARBON FILAMENTS [2]**Notes**

- (1) Attention is drawn to the Note following the title of class D01.
 (2) Processes using enzymes or micro-organisms in order to:
 (i) liberate, separate or purify a pre-existing compound or composition, or to
 (ii) treat textiles or clean solid surfaces of materials
 are further classified in subclass C12S. [5]

Subclass Index

GENERAL PROCESSES	1/00	From synthetic resins	6/00
FILAMENTS AND MANUFACTURE THEREOF		From other materials	9/00
From cellulose or derivatives; from proteins	2/00; 4/00	Multicomponent filaments.....	8/00
		AFTER-TREATMENT; RECOVERY OF STARTING MATERIAL	11/00; 13/00
<hr/>			
1/00 General methods for the manufacture of artificial filaments or the like	2/00	Monocomponent artificial filaments or the like of cellulose or cellulose derivatives; Manufacture thereof [2]	
1/02 . Addition of substances to the spinning solution or to the melt (addition of substances to viscose D01F 2/00)	2/24	. from cellulose derivatives [2]	
1/10 . . Other agents for modifying properties [2]	4/00	Monocomponent artificial filaments or the like of proteins; Manufacture thereof [2]	

6/00 Monocomponent artificial filaments or the like of synthetic polymers; Manufacture thereof [2]**Note**

In this group, the percentage for determining the major constituent is expressed in mole percent. [8]

- 6/02 . from homopolymers obtained by reactions only involving carbon-to-carbon unsaturated bonds [2]
- 6/04 . . from polyolefins [2]
- 6/18 . . from polymers of unsaturated nitriles, e.g. polyacrylonitrile, polyvinylidene cyanide [2]
- 6/28 . from copolymers obtained by reactions only involving carbon-to-carbon unsaturated bonds [2]
- 6/44 . from mixtures of polymers obtained by reactions only involving carbon-to-carbon unsaturated bonds as major constituent with other polymers or low-molecular-weight compounds [2]
- 6/46 . . of polyolefins [2]
- 6/58 . from homopolycondensation products [2]
- 6/60 . . from polyamides (from polyamino acids or polypeptides D01F 6/58) [2]
- 6/62 . . from polyesters [2]
- 6/64 . . . from polycarbonates [2]
- 6/78 . from copolycondensation products [2]
- 6/84 . . from copolyesters [2]

- 6/88 . from mixtures of polycondensation products as major constituent with other polymers or low-molecular-weight compounds [2]
- 6/92 . . of polyesters [2]

8/00 Conjugated, i.e. bi- or multicomponent, artificial filaments or the like; Manufacture thereof [2]

- 8/04 . from synthetic polymers [2]
- 8/06 . . with at least one polyolefin as constituent [2]
- 8/12 . . with at least one polyamide as constituent [2]
- 8/14 . . with at least one polyester as constituent [2]

9/00 Artificial filaments or the like of other substances; Manufacture thereof; Apparatus specially adapted for the manufacture of carbon filaments [5]

- 9/08 . of inorganic material (from softened glass, minerals, or slags C03B 37/00; incandescent bodies F21H, H01K 1/00, H01K 3/00) [2]
- 9/12 . . Carbon filaments; Apparatus specially adapted for the manufacture thereof [2,5]
- 9/14 . . . by decomposition of organic filaments [2,5]
- 9/145 from pitch or distillation residues [5]

11/00 Chemical after-treatment of artificial filaments or the like during manufacture (finishing D06M) [2]**13/00 Recovery of starting material, waste material, or solvents during the manufacture of artificial filaments or the like [2]****D01G PRELIMINARY TREATMENT OF FIBRES, E.G. FOR SPINNING** (winding or unwinding, conducting or guiding laps, webs, slivers, or rovings in general, sliver or roving cans, depositing in sliver or roving cans B65H; preparation of fibres for paper-making D21)**Note**

Attention is drawn to the Note following the title of class D01.

Subclass Index**OPERATIONS BEFORE CARDING; MACHINES THEREFOR**

- Opening fibre bales; separating and sorting of fibres; opening or cleaning fibres..... 7/00; 5/00; 9/00
- Severing of continuous filaments; roughening of fibres..... 1/00; 3/00
- Recovery of fibres by breaking-up fibre-containing articles..... 11/00
- Mixing of fibres, or of fibres with non-fibrous materials..... 13/00

CARDING OR SUBSEQUENT OPERATIONS; MACHINES THEREFOR

- Feeding or conveying fibres for machines; lap-forming; lap-winding; lubricating fibres..... 23/00; 25/00; 27/00; 29/00
- Carding and burr-crushing, combing 15/00, 19/00

- SILK-DRESSING; TREATMENT OF OAKUM 17/00; 35/00
- COMBINATION OF MACHINES OR PROCESSES FOR CONTINUOUS PROCESSING..... 21/00
- WARNING OR SAFETY DEVICES..... 31/00
- HAND TOOLS FOR TREATMENT OF FIBRES 33/00
- OTHER PRELIMINARY TREATMENTS..... 37/00

1/00 Severing continuous filaments or long fibres, e.g. stapling (drafting arrangements, twisting arrangements D01H)**3/00 Roughening of fibres****5/00 Separating, e.g. sorting, fibres** (separating fibres of differing lengths in silk-dressing machines D01G 17/00; in combing machines D01G 19/00)**7/00 Breaking or opening fibre bales**

D01G – D01H

9/00	Opening or cleaning fibres, e.g. scutching cotton (scutching flax or like fibres D01B; making cellulose wadding in paper-making machines D21F 11/00)	23/00	Feeding fibres to machines; Conveying fibres between machines (D01G 21/00 takes precedence; intermediate feeds in carding machines D01G 15/00)
11/00	Disintegrating fibre-containing articles to obtain fibres for re-use (mechanical treatment for paper-making D21B)	25/00	Lap-forming devices not integral with machines specified above (forming mats or batts of continuous filaments for non-woven fabrics D04H)
13/00	Mixing, e.g. blending, fibres; Mixing non-fibrous materials with fibres (mixing of fibres combined with other operations, e.g. bale-breaking or fibre-opening, <u>see</u> the appropriate groups for such operations)	27/00	Lap- or sliver-winding devices, e.g. for products of cotton scutchers, jute cards, or worsted gill boxes
15/00	Carding machines or accessories; Card clothing; Burr-crushing or removing arrangements associated with carding or other preliminary-treatment machines (de-burring apparatus or machines operating independently D01B)	29/00	Arrangements for lubricating fibres, e.g. in gill boxes (processes involving the use of particular lubricants D06M 15/00)
17/00	Silk-dressing machines	31/00	Warning or safety devices, e.g. automatic fault detectors, stop motions (safety devices of general application F16P; indicating devices of general application G08B)
19/00	Combing machines	33/00	Hand tools for treatment of fibres
21/00	Combinations of machines, apparatus, or processes, e.g. for continuous processing (D01G 1/00, D01G 9/00, D01G 15/00 take precedence)	35/00	Treatment of oakum
		37/00	Other preliminary treatment of fibres

D01H SPINNING OR TWISTING (unwinding, paying-out, forwarding, winding, or coiling filamentary material, not intimately associated with spinning or twisting, B65H; cores, formers, supports, or holders for coiled or wound material, e.g. bobbins, B65H; twisting oakum D01G 35/00; crimping or curling of fibres, filaments, or yarns D02G 1/00; making chenille D03D, D04D 3/00; testing yarns, rovings, slivers, fibres, or fibre webs G01)

Note

Attention is drawn to the Note following the title of class D01.

Subclass Index

SPINNING OR TWISTING MACHINES	COMMON STRUCTURAL FEATURES, DETAILS, OR ACCESSORIES
With continuous wind-up; with intermittent wind-up..... 1/00; 3/00	Replacing bobbins; confining or removing dust or fly..... 9/00; 11/00
Open-end spinning4/00	Other structural features, details, or accessories..... 13/00
Drafting machines or arrangements5/00	Piecing arrangements; hand tools..... 15/00; 17/00
Spinning or twisting arrangements7/00	

Kinds or types of spinning or twisting machines; Drafting machines or arrangements; Twisting arrangements

- 1/00 **Spinning or twisting machines in which the product is wound-up continuously** (open-end spinning machines D01H 4/00) [5]
- 3/00 **Spinning or twisting machines in which the product is wound-up intermittently, e.g. mules**

- 4/00** Open-end spinning machines or arrangements for imparting twist to independently moving fibres separated from slivers; Piecing arrangements therefor; Covering endless core threads with fibres by open-end spinning techniques [5]

Note

In this group, the expression “open-end spinning” covers such expressions as “break spinning”, “ringless spinning”, “rotor spinning” and “friction spinning”, but does not cover the expression “spinning by false-twisting”. [5]

- 5/00** **Drafting machines or arrangements** (arrangements in which draft is dependent on linear movement of take-up spindles, e.g. in mules, D01H 3/00; devices for combing or orienting fibres for open-end spinning machines D01H 4/00; traversing arrangements for roving guides or guides for slivers, rovings, or yarns applicable solely for spinning, twisting, curling or crimping purposes D01H 13/00)
- 7/00** **Spinning or twisting arrangements** (for open-end spinning D01H 4/00) [5]
- 7/02 . for imparting permanent twist
- 7/52 . . Ring-and-traveller arrangements

Common features or details of, or accessories for, spinning or twisting machines of various kinds or types

- 9/00** **Arrangements for replacing or removing bobbins, cores, receptacles, or completed packages at paying-out or take-up stations** (arrangements of general interest in the winding of filamentary material B65H)
- 9/02 . for removing completed take-up packages and replacing by bobbins, cores, or receptacles at take-up stations; Transferring material between adjacent full and empty take-up elements
- 11/00** **Arrangements for confining or removing dust, fly, or the like** (cleaning of running surfaces in open-end spinning machines D01H 4/00; separation in general B01D; cleaning in general B08B; air-conditioning F24F, e.g. by filtering F24F 3/16) [5]
- 13/00** **Other common constructional features, details, or accessories** (for open-end spinning D01H 4/00) [5]
- 13/14 . Warning or safety devices, e.g. automatic fault detectors, stop motions (warning or safety devices for filamentary material, not intimately associated with spinning or like machines B65H; safety devices of general application F16P; indicating devices of general application G08B)
- 15/00** **Piecing arrangements** (for open-end spinning machines D01H 4/00; in machines for producing textile fabrics, see the appropriate subclasses) [5]
- 15/007 . for two-for-one twisting machines [5]
- 17/00** **Hand tools** (cop-tube applying apparatus D01H 9/02)

D02 YARNS; MECHANICAL FINISHING OF YARNS OR ROPES; WARPING OR BEAMING**Note**

In this class, the following terms are used with the meanings indicated:

- “fibre” means a relatively-short, elongated member of natural or artificial material;
- “filament” means an endless or quasi-endless, elongated member of natural or artificial material;
- “yarn” means a unitary assembly of fibres, usually produced by spinning;
- “thread” means an assembly of yarns or filaments, usually produced by twisting.

D02G CRIMPING OR CURLING FIBRES, FILAMENTS, YARNS, OR THREADS; YARNS OR THREADS**Note**

Attention is drawn to the Note following the title of class D02.

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- | | |
|--|--|
| 1/00 Producing crimped or curled fibres, filaments, yarns, or threads, giving them latent characteristics (yarns <i>per se</i> D02G 3/00; during formation of artificial filaments, threads, or the like D01D 5/00; general aspects of chemical treatment D06M) | 3/04 . . Blended or other yarns or threads containing components made from different materials
3/12 . . Threads containing metallic filaments or strips
3/22 . Yarns or threads characterised by constructional features |
| 1/02 . by twisting, fixing the twist and backtwisting, i.e. by imparting false twist | 3/24 . . Bulkied yarns or threads, e.g. formed from staple fibre components with different relaxation characteristics |
| 1/04 . . Devices for imparting false twist | 3/26 . . with characteristics dependent on the amount or direction of twist |
| 1/10 . using knife edges, e.g. heated knife edges, for edge crimping | 3/34 . . Yarns or threads having slubs, knops, spirals, loops, tufts, or other irregular or decorative effects, i.e. effect yarns |
| 1/12 . using stuffer boxes | 3/36 . . Cored or coated yarns or threads (elastic yarns or threads D02G 3/22) |
| 1/14 . using grooved rollers or gear-wheel-type members | 3/38 . . Threads in which fibres, filaments, or yarns are wound with other yarns or filaments (covering endless core threads with fibres by using open-end spinning techniques D01H 4/00) |
| 1/16 . using jets or streams of turbulent gases, e.g. air, steam | 3/44 . Yarns or threads characterised by the purpose for which they are designed |
| 1/18 . by combining fibres, filaments, or yarns, having different shrinkage characteristics | 3/48 . . Tyre cords |
| 1/20 . Combinations of two or more of the above-mentioned operations or devices; 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) | |
| 3/02 . Yarns or threads characterised by the material or by the materials from which they are made | |
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D02H WARPING, BEAMING, OR LEASING**Note**

Attention is drawn to the Note following the title of class D02.

Subclass Index

CREELS	1/00	LEASING	9/00
WARPING; BEAMING; WARPING AND		OTHER MACHINES AND METHODS.....	11/00
BEAMING COMBINED	3/00; 5/00; 7/00	DETAILS OF MACHINES	13/00

-
- 1/00 Creels, i.e. apparatus for supplying a multiplicity of individual threads**
- 3/00 Warping machines**

- 5/00 Beaming machines**
- 7/00 Combined warping and beaming machines**

9/00	Leasing	13/00	Details of machines of the other groups of this subclass
11/00	Methods or apparatus not provided for in groups D02H 1/00 to D02H 9/00, e.g. for cleaning the warp		

D02J FINISHING OR DRESSING OF FILAMENTS, YARNS, THREADS, CORDS, ROPES, OR THE LIKE (curling or crimping D02G; by treatment with liquids, gases or vapours D06B; finishing other than by liquid treatment, of yarns in warp or sheet form D06C; for chemical matters, see D06L, D06M, D06P, D06Q; treatment during rope-making, apparatus for treating ropes auxiliary to rope-making D07B)

Note

Attention is drawn to the Note following the title of class D02.

Subclass Index

MODIFYING THE STRUCTURE, FORM, OR SURFACE.....	1/00, 3/00	COMBINATIONS OF ABOVE PROCESSES NOT COVERED BY ONE SINGLE GROUP	11/00
REMOVING UNDESIRABLE BODIES.....	7/00	HEATING OR COOLING OPERATIONS NOT SPECIFIC TO ONE OF THE ABOVE PROCESSES	13/00

1/00	Modifying the structure or properties resulting from a particular structure; Modifying, retaining, or restoring the physical form or cross-sectional shape, e.g. by use of dies or squeeze rollers (modifying only the surface D02J 3/00; by crimping, by curling D02G)	11/00	Combinations, not covered by any one of groups D02J 1/00 to D02J 7/00, of processes provided for in such groups; Plant for carrying-out such combinations of processes
1/22	• Stretching or tensioning, shrinking or relaxing, e.g. by use of overfeed and underfeed apparatus, or preventing stretch (stretch spinning D01D 5/12)	13/00	Heating or cooling the yarn, thread, cord, rope, or the like, not specific to any one of the processes provided for in this subclass (heating, cooling, or drying during spinning or twisting D01H; drying of yarns, or the like, in general F26B)
3/00	Modifying the surface		
7/00	Cleaning, e.g. removing dust, loose fibres, charred ends (in combination with the shearing, singeing, or otherwise removing of projecting fibre ends D02J 3/00)		

D03 WEAVING**D03C SHEDDING MECHANISMS; PATTERN CARDS OR CHAINS; PUNCHING OF CARDS; DESIGNING PATTERNS****Subclass Index**

SHEDDING MECHANISMS

Dobbies; jacquards; cam and other
direct-acting mechanisms..... 1/00; 3/00;
5/00

Healds9/00

Selvage mechanisms not forming
part of shedding mechanisms 11/00

Other shedding mechanisms 7/00, 13/00

PATTERN CARDS OR CHAINS; CARD-
PUNCHING; METHODS OR DEVICES FOR
PREPARING PATTERNS..... 15/00; 17/00;
19/00

1/00	Dobbies	11/00	Selvage shedding mechanisms not forming part of main shedding mechanism (selvage jacquards D03C 3/00; leno selvage mechanism D03C 7/00)
3/00	Jacquards (controlling jacquard by scanning design D03C 17/00; for gripper Axminster looms D03D 39/00)	13/00	Shedding mechanisms not otherwise provided for
5/00	Cam or other direct-acting shedding mechanisms, i.e. operating heald frames without intervening power-supplying devices	15/00	Pattern cards or chains
7/00	Leno or similar shedding mechanisms	17/00	Card-punching apparatus (marking record carriers in digital fashion G06K)
9/00	Healds; Heald frames (for leno shedding D03C 7/00)	19/00	Methods or devices concerned with designing or making patterns, not provided for in other groups of this subclass

D03D WOVEN FABRICS; METHODS OF WEAVING; LOOMS**Notes**

- (1) Class D06 takes precedence over this subclass in respect of processes involving both weaving and finishing steps and in respect of the finished fabrics.
- (2) A method of weaving is classified in the group designating the fabric woven unless the method is characterised by the operation of a particular loom rather than by the production of a particular fabric. In this case, the method is classified in the group for the loom.
- (3) In this subclass, if there is any doubt as to which of the essential features is the most important (this is usually the most restrictive feature), the groups designating woven fabrics should be considered in the order in which they appear at each level of indentation, except that groups designating woven pile fabrics are to be considered as taking precedence over groups designating other woven fabrics.

Subclass Index

WOVEN FABRICS OR CORRESPONDING WEAVING METHODS

Characterised by: the construction
of the yarn or the material; their
shape; their resiliency; their
elasticity 15/00; 3/00;
7/00; 17/00

Kinds of woven fabrics

open-work fabrics; woven pile
fabrics; gauze; lappet- or
swivel-woven 9/00; 27/00;
19/00; 21/00

with special disposition of
warp or weft threads; multi-ply
fabrics not otherwise provided
for 13/00; 11/00

for specified articles 1/00

other kinds 25/00

Selvages 5/00, 47/00

General weaving methods not
special to a particular fabric or loom 23/00

LOOMS OR CORRESPONDING METHODS OF WEAVING

Hand looms 29/00

Characterised by the article to be
woven: lappet or swivel type for
embroidery-like decoration; for
narrow ribbon-like fabrics; for pile
fabric; other types for other kinds of
fabrics 31/00; 35/00;
39/00; 41/00

Characterised by their construction:
circular; with change-boxes; with
automatic weft replenishment; of
shuttleless type 37/00; 43/00;
45/00; 47/00

Multiple looms 33/00

General details and constructional features..... 49/00

Driving; starting, stopping the loom..... 51/00

Woven fabrics; Methods of weaving other than those characterised by the operation of a particular loom

- 1/00 Woven fabrics designed to make specified articles**
 - 1/02 . Inflatable articles
 - 1/04 . Sack- or bag-like articles
 - 1/06 . Curtain heading tapes
 - 1/08 . Ladder tapes (ladder tapes for venetian blinds E06B 9/38)
- 3/00 Woven fabrics characterised by their shape**
- 5/00 Selvages**
- 7/00 Woven fabrics designed to be resilient, i.e. to recover from compressive stress**
- 9/00 Open-work fabrics** (ladder-tape fabrics D03D 1/08)
- 11/00 Double or multi-ply fabrics not otherwise provided for**
- 13/00 Woven fabrics characterised by the special disposition of the warp or weft threads, e.g. with curved weft threads, with discontinuous warp threads, with diagonal warp or weft**
- 15/00 Woven fabrics characterised by the material or construction of the yarn or other warp or weft elements used**
 - 15/02 . the warp or weft elements being of stiff material, e.g. wire, cane, slat
 - 15/04 . woven to produce shapes or effects upon differential shrinkage
 - 15/06 . using scaffolding threads, i.e. threads removed after weaving
 - 15/08 . using stretchable or elastic threads (woven fabrics whose elastic or stretch properties are due to the manner of weaving D03D 17/00)
 - 15/10 . using threads having high or low coefficients of friction
 - 15/12 . using heat-resistant or fireproof threads
- 17/00 Woven fabrics having elastic or stretch properties due to manner of weaving** (fabrics using stretchable or elastic threads D03D 15/08)
- 19/00 Gauze or leno-woven fabrics**
- 21/00 Lappet- or swivel-woven fabrics**
- 23/00 General weaving methods not special to the production of any particular woven fabric or the use of any particular loom; Weaves not provided for in any other single group**

25/00 Woven fabrics not otherwise provided for

27/00 Woven pile fabrics

Looms; Methods of weaving characterised by the operation of particular looms

- 29/00 Hand looms**
- 31/00 Lappet, swivel or other looms for forming embroidery-like decoration on fabrics**
- 33/00 Multiple looms, i.e. two or more looms assembled together, whether or not they have mechanisms in common** (D03D 35/00 takes precedence)
- 35/00 Smallware looms, i.e. looms for weaving ribbons or other narrow fabrics** (D03D 47/00 takes precedence)
- 37/00 Circular looms** (looms for weaving separate fabrics disposed in a circle or polygon D03D 33/00)
- 39/00 Pile-fabric looms**
- 41/00 Looms not otherwise provided for, e.g. for weaving chenille yarn; Details peculiar to these looms**
- 43/00 Looms with change-boxes**
- 45/00 Looms with automatic weft replenishment** (automatic replenishment in smallware looms D03D 35/00; in circular looms D03D 37/00; bobbins rewound on loom D03J 1/00)
- 47/00 Looms in which bulk supply of weft does not pass through shed, e.g. shuttleless looms, gripper shuttle looms, dummy shuttle looms** (circular looms D03D 37/00)
 - 47/28 . wherein the weft itself is projected into the shed
 - 47/34 . Handling the weft between bulk storage and weft-inserting means
 - 47/36 . . Measuring and cutting the weft
- 49/00 Details or constructional features not peculiar to looms of a particular type** (temples D03J 1/00)
 - 49/04 . Control of the tension in warp or cloth (cutting weft in looms with automatic weft replenishment D03D 45/00; loose reed stop motion D03D 51/18; construction of warp beam D02H)
- 51/00 Driving, starting, or stopping arrangements; Automatic stop motions**
 - 51/18 . Automatic stop motions

D03J AUXILIARY WEAVING APPARATUS; WEAVERS' TOOLS; SHUTTLES

- 1/00 Auxiliary apparatus combined with or associated with looms** (cutting pile on the loom D03D 39/00)
- 3/00 Weavers' tools, e.g. knot-tying tools**

- 5/00 Shuttles** (swivel shuttles D03D 31/00; shuttles for smallware looms D03D 35/00; circular loom shuttles D03D 37/00; selvedge shuttles D03D 47/00)

D04 BRAIDING; LACE-MAKING; KNITTING; TRIMMINGS; NON-WOVEN FABRICS**D04B KNITTING****Notes**

- (1) In this subclass, groups designating machines, apparatus, devices, or implements include processes characterised by, or dependent on, their use, and the products of such processes.
- (2) Knitted products, i.e. fabrics, articles, are classified in this subclass only if they have constructional features which are of interest from the knitting aspect.

Subclass Index**WEFT KNITTING AND MACHINES THEREFOR**

General processes or knitted articles.....	1/00
Hand tools or implements; knitting apparatus or machines for domestic use	3/00; 5/00, 7/00
Flat-bed knitting machines:	
with independently-movable needles; with fixed needles.....	7/00; 11/00
Circular knitting machines:	
with independently-movable needles; with fixed spring or bearded needles.....	9/00; 13/00
Details or auxiliary devices incorporated in the machines	15/00, 35/00

WARP KNITTING AND MACHINES THEREFOR

General processes and knitted articles	21/00
Machines	
flat-bed; other types	23/00; 25/00
details or auxiliary devices incorporated in the machines	27/00, 35/00

AUXILIARY APPARATUS USED WITH KNITTING MACHINES**CROCHETING AND APPARATUS THEREFOR**

Processes; tools or implements.....	31/00; 33/00
Details or auxiliary devices incorporated in the apparatus.....	35/00

REPAIRING; UNRAVELLING**PROCESSES AND KNITTING MACHINES****NOT OTHERWISE PROVIDED FOR.....****Weft knitting; Machines therefor**

1/00	Weft knitting processes for the production of fabrics or articles not dependent on the use of particular machines; Fabrics or articles defined by such processes
1/02	. Pile fabrics or articles having similar surface features
1/06	. Non-run fabrics or articles
1/10	. Patterned fabrics or articles
1/14	. Other fabrics or articles characterised primarily by the use of particular thread materials
1/22	. specially adapted for knitting goods of particular configuration
3/00	Hand tools or implements for weft knitting
5/00	Weft knitting apparatus or machines without needles for domestic use (with needles D04B 7/00)
7/00	Flat-bed knitting machines with independently-movable needles (straight-bar machines with fixed needles D04B 11/00)
9/00	Circular weft knitting machines with independently-movable needles (with fixed spring or bearded needles D04B 13/00)
11/00	Straight-bar knitting machines with fixed needles (flat-bed machines with independently-movable needles D04B 7/00)
13/00	Circular weft knitting machines with fixed spring or bearded needles, e.g. loop-wheel machines (with independently-movable needles D04B 9/00)

15/00	Details of, or auxiliary devices incorporated in, weft knitting machines, restricted to machines of this kind (details or auxiliary devices not so restricted D04B 35/00)
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15/38	. Devices for supplying, feeding, or guiding threads to needles
15/66	. Devices for determining or controlling patterns

Repairing or unravelling knitted fabrics

17/00	Repairing knitted fabrics by knitting operations
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19/00	Unravelling knitted fabrics
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Warp knitting; Machines therefor

21/00	Warp knitting processes for the production of fabrics or articles not dependent on the use of particular machines; Fabrics or articles defined by such processes
21/14	. Fabrics characterised by the incorporation by knitting, in one or more thread, fleece, or fabric layers, of reinforcing, binding, or decorative threads; Fabrics incorporating small auxiliary elements, e.g. for decorative purposes (pile fabrics D04B 21/00; non-woven fabrics in general D04H)
23/00	Flat warp knitting machines
25/00	Warp knitting machines not otherwise provided for

27/00 Details of, or auxiliary devices incorporated in, warp knitting machines, restricted to machines of this kind (details or auxiliary devices not so restricted D04B 35/00)

Crocheting; Apparatus therefor

31/00 Crocheting processes for the production of fabrics or articles

33/00 Crocheting tools or apparatus (galloon crocheting machines for warp knitting D04B 25/00)

35/00 Details of, or auxiliary devices incorporated in, knitting machines, not otherwise provided for

37/00 Auxiliary apparatus or devices for use with knitting machines (Jacquard cards, pattern chains, apparatus for punching same D03C)

39/00 Knitting processes, apparatus or machines, not otherwise provided for

D04C BRAIDING OR MANUFACTURE OF LACE, INCLUDING BOBBIN-NET OR CARBONISED LACE; BRAIDING MACHINES; BRAID; LACE (machines for making soles from strips of material A43D 29/00; cane working B27J 1/00)

1/00 Braid or lace, e.g. pillow-lace; Processes for the manufacture thereof

3/00 Braiding or lacing machines

5/00 Twist or bobbin-net lace-making machines (bobbins B65H 75/02)

7/00 Tools or apparatus for braiding or lacing by hand

D04D TRIMMINGS; RIBBONS, TAPES, OR BANDS, NOT OTHERWISE PROVIDED FOR (fittings or trimmings for hats, e.g. hat bands, A42C 5/00; decorating art B44; yarns or threads D02G; weaving D03; braid or lace D04C; non-woven fabrics D04H)

Note

In this subclass, the following term is used with the meaning indicated:

- “trimmings” means decorative or ornamental articles made wholly or partly of textile or analogous material, or strips of textile or analogous material intended to be used for decorative or ornamental purposes, not otherwise provided for.

1/00 Ropes or like decorative or ornamental elongated trimmings made from filamentary material (ropes or cords in general D07B)

3/00 Chenille trimmings (chenille yarns D02G; making chenille trimmings by weaving D03D)

5/00 Fringes (tasselled D04D 7/00)

7/00 Decorative or ornamental textile articles

9/00 Ribbons, tapes, welts, bands, beadings, or other decorative or ornamental strips, not otherwise provided for (made by laminating B32B; binders for packaging purposes B65D; adhesive tape C09J 7/02; made by weaving D03; made by braiding D04C)

11/00 Ribbon-threading apparatus or devices (needles D05B)

D04G MAKING NETS BY KNOTTING OF FILAMENTARY MATERIAL; MAKING KNOTTED CARPETS OR TAPESTRIES; KNOTTING NOT OTHERWISE PROVIDED FOR (binding knotters for harvesters A01D 59/00; wire netting B21F; tying articles by knotting B65B; knotting in association with winding or unwinding B65H 69/00; knotting in weaving D03J; making nets, carpets, or tapestries by other techniques, see the relevant subclasses)

1/00 Making nets by knotting of filamentary material

3/00 Making knotted carpets or tapestries

5/00 Knotting not otherwise provided for

D04H MAKING TEXTILE FABRICS, E.G. FROM FIBRES OR FILAMENTARY MATERIAL (weaving D03; knitting D04B; braiding D04C; net-making D04G; sewing D05B; tufting D05C; finishing non-woven fabrics D06); **FABRICS MADE BY SUCH PROCESSES OR APPARATUS, E.G. FELTS, NON-WOVEN FABRICS; COTTON-WOOL; WADDING** (non-woven fabrics having an intermediate or external layer of a different kind, e.g. of woven fabric, B32B)

Notes

- (1) In this subclass, the following expression is used with the meaning indicated:
 - “non-woven fabrics” means fabrics formed wholly or partly of textile material by processes comprising operations other than the weaving, knitting, braiding, lacing, or knotting of yarns, threads, or filaments for which provision is made in other subclasses of section D. This expression includes felts, cotton-wool and wadding.
- (2) In this subclass:
 - some of the non-woven fabrics can also be regarded as “layered products” within the meaning of subclass B32B, and further classification in that subclass should be considered in accordance with the notes thereto;
 - in cases where the making of non-woven fabrics involves the use of particular chemical compounds or compositions, e.g. for treating or bonding fibres, filaments, or yarns, further classification in other appropriate subclasses should also be considered.
- (3) By varying the proportions of fibres or threads, and the chemical compounds or compositions, the final products may be given the appearance of paper, cardboard, leather, or the like.

Subclass Index

TYPES AND CONSTRUCTIONAL	Pile fabrics	11/00
FEATURES OF NON-WOVEN FABRICS;	Other non-woven fabrics	13/00
APPARATUS AND PROCESSES FOR	FELTING APPARATUS; NEEDLING	
PRODUCING THEM	MACHINES	17/00; 18/00
From short fibres; from long fibres;		
from mixture of short and long		
fibres	1/00; 3/00;	
	5/00	

Kinds or types of non-woven fabrics; Apparatus or processes for making such products

1/00 Non-woven fabrics formed wholly or mainly of staple fibres or like relatively short fibres	1/64 . . . the bonding agent being applied in wet state, e.g. chemical agents in dispersions or solutions
1/40 . from fleeces or layers composed of fibres without existing or potential cohesive properties	1/70 . characterised by the method of forming fleeces or layers, e.g. reorientation of fibres (lap-forming devices D01G 25/00; paper web-making by wet methods D21F, D21H) [4]
1/42 . . characterised by the use of certain kinds of fibres insofar as this use has no preponderant influence on the consolidation of the fleece	3/00 Non-woven fabrics formed wholly or mainly of yarns or like filamentary material of substantial length
1/44 . . the fleeces or layers being consolidated by mechanical means, e.g. by rolling	3/02 . characterised by the method of forming fleeces or layers, e.g. reorientation of yarns or filaments (lap-forming devices D01G 25/00; paper web-making by wet methods D21F, D21H) [4]
1/45 . . . by forming intermeshing loops or stitches from some of the fibres (knitting D04B; sewing D05B) [4]	3/08 . characterised by the method of strengthening or consolidating
1/46 . . . by needling or like operations to cause entanglement of fibres (D04H 1/45 takes precedence; needling machines D04H 18/00) [4]	3/14 . . with bonds between thermoplastic yarns or filaments produced by welding
1/48 in combination with at least one other method of consolidation, e.g. with application of bonding agents	3/16 . . . with bonds between thermoplastic filaments produced in association with filament formation, e.g. immediately following extrusion [4]
1/54 . . by welding together the fibres, e.g. by partially melting or dissolving (in combination with needling D04H 1/48)	5/00 Non-woven fabrics formed of mixtures of relatively-short fibres and yarns or like filamentary material of substantial length
1/56 . . . in association with fibre formation, e.g. immediately following extrusion of staple fibres	11/00 Non-woven pile fabrics (layered products forming non-woven pile fabrics B32B; woven pile fabrics D03D; tufting D05C)
1/58 . . by applying, incorporating, or activating chemical or thermoplastic bonding agents, e.g. adhesives (in combination with needling D04H 1/48)	13/00 Other non-woven fabrics
	<hr/>
	17/00 Felting apparatus
	18/00 Needling machines

D05 SEWING; EMBROIDERING; TUFTING

D05B SEWING (appliances for the tailoring trade A41H; sewing tables A47B 29/00; sewing in bookbinding B42B 2/00; sewing machines modified for knitting D04B 39/00)

Note

In this subclass, the groups designating sewing apparatus or machines cover also sewing processes dependent on their use, and the thread seams produced thereby.

Subclass Index**TYPES OF MACHINES**

General types for making thread seams without lateral movement 1/00

Special-purpose or automatic machines

 with lateral movement of needle or work 3/00

 for sewing quilts or mattresses, sacks, leather goods 11/00, 13/00, 15/00

 for temporarily connecting articles 5/00

 linking machines; hem-stitch machines; for making thread and welded seams 7/00; 9/00; 17/00

 programme-controlled 19/00, 21/00

Other types of sewing machines 23/00

Combination of machines; machines incorporating devices for other purposes than sewing 25/00; 81/00

THE WORK; MACHINE ELEMENTS RELATING THERETO

For feeding, pressing, holding, supplying, or removing the work 27/00, 29/00, 31/00, 33/00

Devices for slitting, grooving, or cutting the work 37/00

Work-piece carriers, work-collecting devices 39/00, 41/00

Other elements relating to the work 35/00

SEWING-THREAD; MACHINE ELEMENTS RELATING THERETO

Needle thread

 spool-pin assemblies 43/00

measuring length of thread used; regulating tension; severing thread 45/00; 47/00; 65/00

take-up, needle-thread guard, break detectors, thread laying; needle holders 49/00, 51/00, 53/00; 55/00

Lower thread

loop takers; loop manipulators; tension; severing thread 57/00; 61/00; 63/00; 65/00

bobbin winding or changing 59/00

Lubricating, waxing, or colouring thread 67/00

OTHER ELEMENTS OF SEWING MACHINES; ACCESSORIES

Driving or control; lubricating or cooling; lighting equipment 69/00; 71/00; 79/00

Accessories

guards for operator 83/00

casings; frames or tables; covers or portable enclosures 73/00; 75/00; 77/00

HAND SEWING

Tools and accessories; stitches or stitch seams 91/00; 93/00

Preparatory or finishing operations 95/00

Hand-sewing processes and apparatus for other special work, or not otherwise provided for 97/00

NEEDLES; NEEDLE-THREADING

DEVICES; SEAM-RIPPING 85/00; 87/00; 89/00

1/00 General types of sewing apparatus or machines without mechanism for lateral movement of the needle or the work or both

Special-purpose or automatic sewing apparatus or machines

3/00 Sewing apparatus or machines with mechanism for lateral movement of the needle or the work or both for making ornamental pattern seams, for sewing buttonholes, for reinforcing openings, or for fastening articles, e.g. buttons, by sewing (programme-controlled sewing machines D05B 19/00; with devices for automatically controlling movement of work-carrier D05B 21/00) [6]

3/02 . with mechanisms for needle-bar movement

5/00 Sewing machines for temporarily connecting articles, e.g. pairs of socks

7/00 Linking machines, e.g. for joining knitted fabrics

9/00 Hem-stitch sewing machines

11/00 Machines for sewing quilts or mattresses (control of workpiece-holding frames, or of sewing machines, in order to obtain particular seam configuration D05B 21/00)

13/00 Machines for sewing sacks

15/00 Machines for sewing leather goods (making pseudo-lock-stitch seams D05B 1/00)

D05B

- 17/00 Sewing machines for concurrently making thread and welded seams** (for making non-welded fluid-tight seams D05B 1/00)
- 19/00 Programme-controlled sewing machines** (with devices for automatically controlling movement of work-carrier D05B 21/00; devices for stopping drive when sewing tools have reached a predetermined position D05B 69/22)
- 21/00 Sewing machines with devices for automatically controlling movement of work-carrier relative to stitch-forming mechanism in order to obtain particular configuration of seam, e.g. programme-controlled for sewing collars, for attaching pockets**
- 23/00 Sewing apparatus or machines not otherwise provided for** (for making zip closures A44B 19/00)

- 25/00 Sewing units consisting of combinations of several sewing machines**

Sewing-machine elements for feeding, positioning, handling, or treating the work

- 27/00 Work-feeding means for sewing machines**
- 29/00 Pressers or presser feet for sewing machines** (for feeding D05B 27/00)
- 31/00 Workpiece holders or hold-downs in machines for sewing leather**
- 33/00 Devices incorporated in sewing machines for supplying or removing the work**
- 35/00 Work-feeding or work-handling elements for sewing machines, not otherwise provided for**
- 35/02 . for facilitating seaming; Hem-turning elements; Hemmers
- 35/06 . for attaching bands, ribbons, strips, or tapes or for binding
- 37/00 Devices incorporated in sewing machines for slitting, grooving, or cutting** (severing sewing-threads D05B 65/00)
- 39/00 Workpiece carriers for sewing machines** (for automatically controlling movement of work-carrier to obtain particular configuration of seam D05B 21/00; in general A41H 15/00)
- 41/00 Work-collecting devices for sewing machines**

Sewing-machine elements for supplying, handling, or treating thread material

- 43/00 Spool-pin assemblies incorporated in sewing machines**
- 45/00 Applications of measuring devices for determining the length of threads used in sewing machines** (measuring devices in embroidery machines D05C, in general G01B)
- 47/00 Needle-thread tensioning devices for sewing machines; Applications of tensometers in sewing machines**
- 49/00 Take-up devices, e.g. levers, for the needle thread of sewing machines**

- 51/00 Applications of needle-thread guards in sewing machines; Thread-break detectors for sewing machines** (for embroidery machines D05C 11/00)
- 53/00 Thread- or cord-laying mechanisms for sewing machines; Thread fingers for sewing machines**
- 55/00 Needle holders for sewing machines; Needle bars for sewing machines** (needles D05B 85/00)
- 57/00 Loop takers, e.g. loopers, for sewing machines**
- 59/00 Applications of bobbin-winding or -changing devices in sewing machines; Indicating or control devices associated therewith**
- 61/00 Loop holders; Loop spreaders for sewing machines; Stitch-forming fingers for sewing machines**
- 63/00 Devices associated with the loop-taker thread of sewing machines, e.g. for tensioning**
- 65/00 Devices for severing the needle or lower thread in sewing machines**
- 67/00 Devices incorporated in sewing machines for lubricating, waxing, or colouring the threads**

Driving-gear, control, lubricating, or cooling devices for sewing machines

- 69/00 Driving-gear or control devices for sewing machines**
- 69/14 . Devices for changing speed or for reversing direction of rotation
- 69/22 . Devices for stopping drive when sewing tools have reached a predetermined position (electric motor control systems in general H02P)
- 71/00 Lubricating or cooling devices for sewing machines**

Casings, supports, covers, or accessories for sewing machines; Sewing machines combined with auxiliary devices serving purposes other than sewing

- 73/00 Casings for sewing machines**
- 75/00 Frames, stands, tables, or other furniture adapted to carry sewing machines** (furniture aspects A47B, A47C)
- 77/00 Covers, or portable enclosures, for sewing machines**
- 79/00 Incorporations or adaptations of lighting equipment for sewing machines**
- 81/00 Sewing machines incorporating devices serving purposes other than sewing, e.g. for blowing air, for grinding**
- 83/00 Guards or like devices for preventing injury to operator of sewing machines** (machine safety devices in general F16P)

Needles; Needle threaders; Seam-ripping devices

- 85/00 Needles** (surgical needles A61B 17/06; manufacture of needles B21G 1/00)
- 87/00 Needle-threading devices**
- 89/00 Seam-ripping devices**

Hand sewing

91/00	Tools, implements, or accessories for hand sewing (needles, needle threaders D05B 85/00, D05B 87/00; appliances for the tailoring trade A41H)	93/00	Stitches; Stitch seams for hand sewing
		95/00	Preparatory or finishing operations in connection with hand sewing
		97/00	Hand sewing processes or apparatus for special work or not otherwise provided for

D05C EMBROIDERING (programme-controlled sewing machines with embroidering capability D05B 19/00, D05B 21/00); **TUFTING** (making non-woven fabrics D04H; sewing D05B)

Subclass Index

HAND EMBROIDERY	1/00	Details.....	9/00, 11/00, 13/00
EMBROIDERING MACHINES		Auxiliary devices	13/00
General types of machines.....	3/00	MAKING PILE FABRICS BY INSERTING	
Machines with automatic control or		LOOPS	15/00
for special kinds of embroidery.....	5/00, 7/00	EMBROIDERED OR TUFTED PRODUCTS	17/00

1/00	Apparatus, devices, or tools for hand embroidering	13/00	Auxiliary devices incorporated in embroidering machines, not otherwise provided for; Ancillary apparatus for use with embroidering machines
<u>Embroidering machines</u>			
3/00	General types of embroidering machines	15/00	Making pile fabrics or articles having similar surface features by inserting loops into a base material (layered products B32B; non-woven pile fabrics D04H 11/00)
5/00	Embroidering machines with arrangements for automatic control of a series of individual steps	17/00	Embroidered or tufted products; Base fabrics specially adapted for embroidered work; Inserts for producing surface irregularities in embroidered products (layered products B32B; non-woven pile fabrics D04H 11/00)
7/00	Special-purpose or automatic embroidering machines		
9/00	Appliances for holding or feeding the base fabric in embroidering machines		
11/00	Devices for guiding, feeding, handling, or treating the threads in embroidering machines; Machine needles; Operating or control mechanisms therefor		

D06 TREATMENT OF TEXTILES OR THE LIKE; LAUNDERING; FLEXIBLE MATERIALS NOT OTHERWISE PROVIDED FOR

D06B TREATING TEXTILE MATERIALS BY LIQUIDS, GASES, OR VAPOURS (applying liquids to surfaces in general B05; conveying in general, handling webs or filaments in general B65; treating leather C14C; mechanical removal of impurities from animal fibres D01B; laundering D06F; chemical matters, see D06L to D06Q) [2]

Note

In this subclass, the following terms or expressions are used with the meaning indicated:

- “fabric” includes yarns in warp or sheet form; [2]
- “textile material” includes fabrics, yarns or other fibrous materials; [2]
- “indefinite length” means an extent of material having the characteristic that the longitudinal dimension is effectively infinite in so far as the procedure for advancing or moving the material is concerned. [3]

Subclass Index

FLUID TREATMENT	Local treating	11/00
Applying to the surface of, or forcing through, material	Mercerising	7/00
Passing material through the treating fluid	Other treatments.....	13/00, 17/00, 19/00, 21/00
Solvent-treating	REMOVAL OF TREATING FLUID	15/00
	GENERAL APPARATUS	23/00

1/00 Applying liquids, gases, or vapours on to textile materials to effect treatment, e.g. washing, dyeing, bleaching, sizing, impregnating (mercerising D06B 7/00; solvent-treatment D06B 9/00; treatment of selected parts of textile materials D06B 11/00; with aid of vibration D06B 13/00; transfer application of finishing agents D06M 23/00) [4]

3/00 Passing of textile materials through liquids, gases, or vapours to effect treatment, e.g. washing, dyeing, bleaching, sizing, impregnating (mercerising D06B 7/00; solvent-treatment D06B 9/00; treatment of selected parts of textile materials D06B 11/00; with aid of vibration D06B 13/00) [2]

5/00 Forcing liquids, gases, or vapours through textile materials to effect treatment, e.g. washing, dyeing, bleaching, sizing, impregnating (mercerising D06B 7/00; solvent-treatment D06B 9/00; treatment of selected parts of textile materials D06B 11/00; with aid of vibration D06B 13/00) [2]

7/00 Mercerising, e.g. lustring by mercerising [2]

9/00 Solvent-treatment of textile materials (dry-cleaning D06F 43/00) [2]

11/00 Treatment of selected parts of textile materials, e.g. partial dyeing [2]

13/00 Treatment of textile materials with liquids, gases, or vapours with aid of vibration [2]

15/00 Removing liquids, gases, or vapours from textile materials in association with treatment of the materials by liquids, gases, or vapours (drying F26B) [2]

17/00 Storing of textile materials in association with the treatment of the materials by liquids, gases, or vapours (carriers or supports specially adapted therefor D06B 23/00) [2]

19/00 Treatment of textile materials by liquids, gases, or vapours, not provided for in groups D06B 1/00 to D06B 17/00 [2]

21/00 Successive treatments of textile materials by liquids, gases, or vapours (successive treatments in which the characteristics of a single treatment are of interest only, or in which all treatments have characteristics provided for in a single main group, see the relevant groups for the single treatment) [2]

23/00 Component parts, details, or accessories of apparatus or machines, specially adapted for the treating of textile materials, not restricted to a particular kind of apparatus, provided for in groups D06B 1/00 to D06B 21/00 [2]

D06C FINISHING, DRESSING, TENTERING, OR STRETCHING TEXTILE FABRICS (chemical matters, see D06L to D06Q; drying F26B) [2]

Note

In this subclass, the following term is used with meaning indicated:

- “fabric” includes yarns in warp or sheet form.

Subclass Index

GENERAL TREATMENTS

Without elimination of material	
heating or cooling	7/00
stretching or tentering; shaping or stretching; shrinking by compressing	3/00; 5/00; 21/00
calendering, ironing, or glazing; fulling; breaking or softening	15/00; 17/00; 19/00

With slight elimination of material	
singeing; teasing or napping; shearing or cropping	9/00; 11/00; 13/00
For decoration	23/00

SPECIAL TREATMENTS

Making patterns or designs	23/00
Treating selvages or edges	25/00

FINISHING OR DRESSING NOT
OTHERWISE PROVIDED FOR

Compound processes or apparatus; other treatments	27/00; 29/00
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3/00	Stretching, tentering, or spreading textile fabrics; Producing elasticity in textile fabrics (shaping or stretching tubular fabrics upon cores or internal frames D06C 5/00; removing skew or disorientation of weft threads in woven fabrics D06H 3/00)	15/00	Calendering, pressing, ironing, glossing, or glazing textile fabrics (shrinking by compressing D06C 21/00; for making patterns or designs D06C 23/00; domestic, laundry, or like ironing or pressing D06F)
5/00	Shaping or stretching of tubular fabrics upon cores or internal frames (supports simply for drying D06F 59/00)	17/00	Fulling
7/00	Heating or cooling textile fabrics (hosiery boarding D06C 5/00; singeing D06C 9/00; treating with liquids, gases, or vapours D06B; processes comprising combined chemical and mechanical treatment D06M; during operations provided for elsewhere, <u>see</u> the relevant groups for such operations)	19/00	Breaking or softening of fabrics (by stretching D06C 3/00; by calendering, pressing, or beetling D06C 15/00; by fulling D06C 17/00)
9/00	Singeing (for making patterns or designs D06C 23/00)	21/00	Shrinking by compressing
11/00	Teasing, napping, or otherwise roughening or raising pile of textile fabrics (for making patterns or designs D06C 23/00)	23/00	Making patterns or design on fabrics (by printing B41F; decoration in general B44)
13/00	Shearing, clipping, or cropping surfaces of textile fabrics; Pile cutting; Trimming seamed edges (for making patterns or designs D06C 23/00; cutting pile loops on the loom or splitting double pile fabrics on the loom D03D 39/00; cutting or severing fabrics D06H)	25/00	Treating selvages or other edges, e.g. stiffening (trimming edges D06C 13/00; forming selvages on the loom, e.g. by adhesive, D03D 47/00)
		27/00	Compound processes or apparatus, for finishing or dressing textile fabrics, not otherwise provided for
		29/00	Finishing or dressing, of textile fabrics, not provided for in the other groups of this subclass

D06F LAUNDERING, DRYING, IRONING, PRESSING OR FOLDING TEXTILE ARTICLES (apparatus for blocking, pressing, steaming, or stretching hats A42C; treating textile materials by liquids, gases or vapors D06B; chemical matters, see D06L, D06M)

Notes

- (1) This subclass covers:
 - domestic or laundry dry-cleaning apparatus using volatile solvents;
 - domestic, laundry, or tailors' ironing or other hot-pressing of clothes, linen, or other textile articles.
- (2) This subclass does not cover apparatus for wringing, washing, dry-cleaning, ironing, or other hot-pressing of textiles in manufacturing operations, which is covered by subclasses D06B, D06C.

Subclass IndexRECEPTACLES; REMOVABLE DEVICES
FOR USE WITH DIFFERENT

RECEPTACLES..... 1/00; 7/00

HAND IMPLEMENTS..... 5/00

IMPLEMENTS FOR WASHING BY HAND

Receptacles; hand rubbing apparatus	1/00; 3/00
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WASHING MACHINES

using brushes, rollers	9/00, 11/00
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with stationary receptacle: using agitators; using beating or squeezing means; with agitation of liquid; with additional drying means	13/00; 15/00; 17/00; 18/00
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with moving receptacle	
with rotary movement,	
e.g. oscillatory: for washing;	
for washing and draining; for	
washing and draining with	
additional drying means	21/00; 23/00;
	25/00
with bodily movements,	
e.g. reciprocating or swinging	27/00
using vibrations for washing	19/00
Details of above machines.....	1/00, 7/00,
	37/00, 39/00
Combinations with other apparatus	
or machines.....	29/00, 31/00
Control of washing operations	33/00
Other washing machines or	
methods.....	35/00
RINSING APPARATUS	29/00, 41/00
DRY-CLEANING	43/00
EXPPELLING WATER FROM LINEN;	
SMOOTHING BY COLD ROLLING	
by rollers; by presses	45/00; 47/00
by centrifugal movement of the	
receptacle	23/00, 25/00,
	49/00
Apparatus not otherwise provided	
for.....	51/00
DRYING; AIRING	
Clothes-lines; clothes-pegs; other	
supporting means.....	53/00; 55/00;
	57/00
Driers	58/00

Special supports retaining shape of	
articles to be dried.....	59/00
Other drying	60/00

IRONING; PRESSING

Ironing	
by hand:	
Irons; accessories; ironing	
boards	75/00; 77/00,
	79/00; 81/00
by machine:	
using rollers; using rollers	
coacting with table; using	
rollers coacting with	
curved surfaces	61/00; 63/00;
	65/00
Details.....	67/00
Other ironing machines	69/00
Pressing	
Hot or cold pressing;	
smoothing by use of formers	
with heat or steam	71/00; 73/00
Coverings or pads for equipment,	
elements interposed between article	
and ironing or pressing surface.....	83/00, 85/00

AUXILIARY APPARATUS; LAUNDRY SYSTEMS

Conditioning; folding; starching;	
counting, sorting, marking.....	87/00; 89/00;
	91/00; 93/00
Laundry systems, arrangements of	
apparatus or machines.....	95/00

Washing; Rinsing; Dry-cleaning

1/00	Washing receptacles (of washing machines D06F 37/00, D06F 39/00)	17/00	Washing machines having receptacles, stationary for washing purposes, wherein the washing action is effected solely by circulation or agitation of the washing liquid (washing devices adapted to be used independently of any particular receptacle D06F 7/00; using vibrations for washing purposes D06F 19/00)
3/00	Hand rubbing apparatus (corrugated tub-walls D06F 1/00)	18/00	Washing machines having receptacles, stationary for washing purposes, and having further drying means (details concerning drying only D06F 58/00) [3]
5/00	Hand implements for washing purposes, e.g. sticks (hand rubbing appliances D06F 3/00; brushes A46B)	19/00	Washing machines using vibrations for washing purposes (devices of the vibrator type adapted to be used independently of any particular receptacle D06F 7/00)
7/00	Washing devices adapted to be used independently of any particular receptacle, e.g. for removable mounting on wash-tubs, bath-tubs, or the like	21/00	Washing machines with receptacles, e.g. perforated, having a rotary movement, e.g. oscillatory movement (with receptacles serving both for washing and centrifugally draining D06F 23/00, D06F 25/00; with receptacles moving bodily about an axis D06F 27/00; programme control aspects D06F 33/00)
9/00	Brushing-type washing machines	23/00	Washing machines with receptacles, e.g. perforated, having a rotary movement, e.g. oscillatory movement, the receptacle serving both for washing and centrifugally draining (with further drying means D06F 25/00; programme control aspects D06F 33/00)
11/00	Washing machines using rollers, e.g. of the mangle type		
13/00	Washing machines having receptacles, stationary for washing purposes, with agitators therein contacting the articles being washed (plungers or the like adapted for removable mounting on receptacles D06F 5/00; washing devices adapted to be used independently of any particular receptacle D06F 7/00)		
15/00	Washing machines having beating, rubbing, or squeezing means in receptacles stationary for washing purposes (plungers or the like adapted for removable mounting on receptacles D06F 5/00; mangle-type washing machines D06F 11/00)		

- 25/00** Washing machines with receptacles, e.g. perforated, having a rotary movement, e.g. oscillatory movement, the receptacle serving both for washing and centrifugally draining and having further drying means, e.g. using hot air (programme-control aspects D06F 33/00; details concerning drying only D06F 58/00)
- 27/00** Washing machines with receptacles moving bodily, e.g. reciprocating, swinging
- 29/00** Combinations of a washing machine with other separate apparatus in a common frame or the like, e.g. with rinsing apparatus (with roller wringer D06F 45/00)
- 31/00** Washing installations comprising an assembly of several washing machines or washing units, e.g. continuous flow assemblies
- 33/00** Controlling a series of operations in washing machines, e.g. programme-control arrangements for washing and drying cycles (D06F 31/00 takes precedence)
- 33/02 . electrically
- 35/00** Washing machines, apparatus, or methods not otherwise provided for
- 37/00** Details of washing machines of kinds covered by groups D06F 21/00 to D06F 25/00, restricted to machines of these kinds (details of more general application D06F 39/00; details concerning drying only D06F 58/00)
- 37/20 . Mountings, e.g. resilient mountings, for the rotary receptacle, motor, tub, or casing; preventing or damping vibrations (damping vibrations in general F16F)
- 37/30 . Driving arrangements
- 39/00** Details of washing machines in so far as such details are not special to washing machines of groups D06F 21/00 to D06F 25/00 or to any particular type of washing machine defined in groups D06F 9/00 to D06F 19/00 or D06F 27/00
- 39/02 . Devices for adding soap or other washing agents
- 39/08 . Liquid supply or discharge arrangements (supplying liquid detergent D06F 39/02)
- 39/12 . Casings; Tubs
- 41/00** Rinsing apparatus
- 43/00** Dry-cleaning apparatus using volatile solvents (D06F 9/00 to D06F 41/00 take precedence)

Expelling water from the linen; Smoothing by cold rolling

- 45/00** Wringing machines with two or more co-operating rollers; Similar cold-smoothing apparatus (combined with tables A47B)
- 47/00** Apparatus of the press type for expelling water from the linen
- 49/00** Domestic spin-dryers or similar spin-dryers not suitable for industrial use (centrifuges in general B04B)
- 51/00** Apparatus for expelling or draining water from the linen, not provided for in groups D06F 45/00 to D06F 49/00

Drying; Airing

- 53/00** Clothes-lines; Supports therefor (drying frames incorporating clothes-lines D06F 57/00; supports or holders specially adapted or mounted for storing and repeatedly paying-out and restoring lengths of lines B65H 75/34; ropes, cables D07B)
- 55/00** Clothes-pegs
- 57/00** Supporting means, other than simple clothes-lines, for linen or garments to be dried or aired (in combination with means for heating or positive air circulation D06F 58/00, F26B; adapted to retain the shape of particular articles being dried D06F 59/00; clothing hangers, e.g. suit hangers, A47G 25/00)
- 58/00** Domestic laundry driers (supports adapted to retain the shape of particular articles being dried, e.g. incorporating heating means D06F 59/00; drying in general F26B) [2]
- 58/02 . having drier drums rotating about a horizontal axis [3]
- 58/04 . . Details (controlling or regulating arrangements D06F 58/28) [3]
- 58/10 . Drying cabinets or drying chambers having heating or ventilating means [3]
- 58/16 . having heatable surfaces for contacting the laundry (D06F 59/00 takes precedence) [3]
- 58/18 . Detachable or door-mounted drying arrangements for washing machines [3]
- 58/20 . General details of domestic laundry driers (D06F 59/00 takes precedence) [3]
- 58/28 . . Controlling or regulating (controlling or regulating in general G05) [3]
- 59/00** Supports adapted to retain the shape of particular articles being dried, e.g. incorporating heating means
- 60/00** *Drying not provided for in groups D06F 53/00 to D06F 59/00 [2009.01]*

Ironing; Pressing

- 61/00** Ironing machines using two or more co-operating pressing rollers
- 63/00** Ironing machines having a roller or rollers coacting with a fixed or moving flat bed or table (coverings or pads D06F 83/00)
- 65/00** Ironing machines with rollers rotating against curved surfaces
- 67/00** Details of ironing machines provided for in groups D06F 61/00, D06F 63/00, or D06F 65/00 (coverings or pads for ironing or pressing members D06F 83/00)
- 69/00** Ironing machines not otherwise provided for
- 71/00** Apparatus for hot-pressing clothes, linen, or other textile articles, i.e. wherein there is substantially no relative movement between pressing element and article while pressure is being applied to the article; Similar machines for cold-pressing clothes, linen, or other textile articles (smoothing by cold rolling between two or more co-operating rollers D06F 45/00; devices, for household use, for cold-pressing garments A47G)

D06F – D06H

- 73/00** Apparatus for smoothing or removing creases from garments or other textile articles by formers, cores, stretchers, or internal frames, with the application of heat or steam (stretchers for drying purposes D06F 59/00; combined with external pressure means D06F 71/00; stretchers for use with presses D06F 71/00; dress forms for the tailoring trade A41H; garment stretchers without the application of heat A47G 25/00)
- 75/00** **Hand irons**
75/08 . Hand irons internally heated by electricity
- 77/00** Arrangements for exerting pressure on, lifting, or guiding hand irons
- 79/00** Accessories for hand irons
- 81/00** Ironing boards (coverings or pads therefor D06F 83/00; combined with tables, mounted in kitchen cabinets A47B; tables in general A47B; combined with ladders E06C)
- 83/00** Coverings or pads for ironing or pressing members

- 85/00** Independent elements for interposition between the article and the ironing or pressing surface

Other laundry apparatus or systems

- 87/00** Apparatus for moistening or otherwise conditioning the article to be ironed or pressed (apparatus for smoothing or removing creases from garments or other textile articles by formers, cores, stretchers or internal frames, with the application of heat or steam D06F 73/00)
- 89/00** Apparatus for folding textile articles with or without stapling [4]
- 91/00** Starching apparatus
- 93/00** Counting, sorting, or marking arrangements specially adapted for laundry purposes
- 95/00** Laundry systems or arrangements of apparatus or machines; Mobile laundries (D06F 31/00 takes precedence; laundries as buildings E04H)

D06G MECHANICAL OR PRESSURE CLEANING OF CARPETS, RUGS, SACKS, HIDES, OR OTHER SKIN OR TEXTILE ARTICLES OR FABRICS; TURNING INSIDE-OUT FLEXIBLE TUBULAR OR OTHER HOLLOW ARTICLES (mechanical preparation or mechanical treatment of bed feathers B68G 3/00)

- 1/00** Beating, brushing, or otherwise mechanically cleaning or pressure cleaning carpets, rugs, sacks, hides, or other skin or textile articles or fabrics (brushes A46B; suction cleaners A47L; domestic cleaning apparatus A47L; cleaning in general B08B; apparatus for cleaning bed feathers B68G 3/00)
- 3/00** Turning inside-out flexible tubular or other hollow articles (in combination with inspecting D06H 3/00)
- 5/00** Mechanical, vacuum, or pressure cleaning in combination with the turning inside-out of flexible tubular or other hollow articles

D06H MARKING, INSPECTING, SEAMING, OR SEVERING TEXTILE MATERIALS (seaming by sewing D05B; in connection with manufacturing, see the relevant subclasses)

Subclass Index

MARKING, METERING, INSPECTING 1/00, 3/00
 SEAMING BY PROCESSES NOT
 OTHERWISE PROVIDED FOR5/00
 APPARATUS OR PROCESSES FOR
 CUTTING OR OTHERWISE SEVERING7/00

-
- 1/00** Marking textile materials; Marking in combination with metering or inspecting

3/00 Inspecting textile materials (testing physical properties of textile materials G01N, e.g. investigating the presence of flaws, defects or contamination using optical means G01N 21/88)

5/00 Seaming textile materials

7/00 Apparatus or processes for cutting, or otherwise severing, specially adapted for the cutting, or otherwise severing, of textile materials (severing for making buttonholes A41H; hand cutting tools in general B26B; cutting machines in general B26D; severing otherwise than by cutting in general B26F; trimming seamed edges, shearing surfaces of fabrics, shearing lace or embroidery, e.g. cutting loose threads D06C)

D06J PLEATING, KILTING, OR GOFFERING TEXTILE FABRICS OR WEARING APPAREL (corrugating, creasing, or otherwise deforming paper, or material worked in a manner analogous to paper, without removing material B31F; by weaving D03D; by sewing D05B; apparatus for pressing or setting formed pleats D06C)

1/00 Pleating, kilting, or goffering textile fabrics or wearing apparel

D06L BLEACHING, E.G. OPTICAL BLEACHING, DRY-CLEANING, OR WASHING FIBRES, THREADS, YARNS, FABRICS, FEATHERS, OR MADE-UP FIBROUS GOODS; BLEACHING LEATHER OR FURS (treatment of fibres or filaments of glass, mineral wool, or slag wool C03; chemical treatment of fibrous material to obtain fibres for spinning D01; for mechanical matters, see D06B, D06C, D06F; bleaching paper pulp or cotton linters D21)

Note

Processes using enzymes or micro-organisms in order to:

- (i) liberate, separate or purify a pre-existing compound or composition, or to
 - (ii) treat textiles or clean solid surfaces of materials
- are further classified in subclass C12S. [5]

1/00 Dry-cleaning or washing fibres, threads, yarns, fabrics, feathers, or made-up fibrous goods

3/00 Bleaching fibres, threads, yarns, fabrics, feathers, or made-up fibrous goods, leather, or furs

D06M TREATMENT, NOT PROVIDED FOR ELSEWHERE IN CLASS D06, OF FIBRES, THREADS, YARNS, FABRICS, FEATHERS, OR FIBROUS GOODS MADE FROM SUCH MATERIALS (surface treatment of fibres or filaments from glass, minerals or slags C03C 25/00; treatment of textiles by mechanical means, see D06B to D06J)

Notes

- (1) In each of the groups D06M 11/00 to D06M 15/00, in the absence of an indication to the contrary, a substance is classified in the last appropriate place. [5]
- (2) In this subclass:
 - (a) Within each one of main groups D06M 11/00 to D06M 15/00, a mixture of substances is classified at least according to the essential ingredient. If more than one ingredient is essential, the mixture is classified, in the absence of an indication to the contrary, according to the essential ingredient which belongs to the last appropriate place in the sequence of substance.
 - (b) Treatment by mixtures of substances covered by two or more of main groups D06M 11/00 to D06M 15/00 is classified in each appropriate main group. [5]
- (3) In this subclass, the treatment of textiles, not provided for elsewhere in class D06, is classified according to the following principles:
 - (a) Treatment of textiles characterised by the treating agent in groups D06M 11/00 to D06M 16/00.
 - (b) Treatment of textiles characterised by the process in group D06M 23/00. [5]
- (4) Processes using enzymes or micro-organisms in order to:
 - (i) liberate, separate or purify a pre-existing compound or composition, or to
 - (ii) treat textiles or clean solid surfaces of materials

are further classified in subclass C12S. [5]

Subclass Index

TREATMENT OF FIBRES, THREADS,
YARNS, FABRICS, OR FIBROUS
ARTICLES

with inorganic substances11/00

with non-macromolecular organic
substances 13/00
graft polymerisation 14/00
with macromolecular substances 15/00

BIOCHEMICAL TREATMENT	16/00
PHYSICAL TREATMENT	10/00
TREATMENT CHARACTERISED BY THE PROCESS	23/00

TREATMENT OF FEATHERS	19/00
PRODUCING MULTI-LAYER FABRICS	17/00

10/00 Physical treatment of fibres, threads, yarns, fabrics, or fibrous goods made from such materials, e.g. ultrasonic, corona discharge, irradiation, electric currents, magnetic fields; Physical treatment combined with treatment with chemical compounds or elements (graft polymerisation using wave energy or particle radiation D06M 14/00) [2,5]

11/00 Treating fibres, threads, yarns, fabrics, or fibrous goods made from such materials, with inorganic substances or complexes thereof; Such treatment combined with mechanical treatment, e.g. mercerising (D06M 10/00 takes precedence; decorating textiles by local treatment D06Q 1/00) [5]

Note

In this group, the following term is used with the meaning indicated:

- “treatment” means, in the absence of an indication to the contrary, the treatment which leads to the end product, e.g. treatment with barium sulfate can mean treatment with barium chloride and with sulfuric acid in two separate steps. [5]

13/00 Treating fibres, threads, yarns, fabrics or fibrous goods made from such materials with non-macromolecular organic compounds (D06M 10/00, D06M 14/00 take precedence; treatment with complexes of organic amines with inorganic substances D06M 11/00); Such treatment combined with mechanical treatment [4,5]

Note

In this group, the following term is used with the meaning indicated:

- “treatment” means, in the absence of an indication to the contrary, the treatment which leads to the end product, e.g. treatment with chloroacetic acid can mean treatment with chloroacetylchloride and saponification in two separate steps. [5]

14/00 Graft polymerisation of monomers containing carbon-to-carbon unsaturated bonds on to fibres, threads, yarns, fabrics, or fibrous goods made from such materials (on to unshaped polymers C08F 251/00 to C08F 292/00) [4]

15/00 Treating fibres, threads, yarns, fabrics or fibrous goods made from such materials with macromolecular compounds; Such treatment combined with mechanical treatment (D06M 10/00, D06M 14/00 take precedence) [5]

Note

In this group, the following term is used with the meaning indicated:

- “treatment” means, in the absence of an indication to the contrary, the treatment which leads to the end product, e.g.:
 - (a) treatment with polyvinylalcohol can mean treatment with polyvinylacetate and subsequent saponification in a separate step;
 - (b) treatment with aminoplast can mean the delayed cure process or the treatment with precondensation products, or with e.g. urea and with formaldehyde in two separate steps. [5]

15/01 . with natural macromolecular compounds or derivatives thereof (with natural rubber or derivatives thereof D06M 15/693) [4]

15/19 . with synthetic macromolecular compounds (with synthetic rubber D06M 15/693) [4]

15/21 . . Macromolecular compounds obtained by reactions only involving carbon-to-carbon unsaturated bonds [4]

15/37 . . Macromolecular compounds obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds [4]

15/693 . with natural or synthetic rubber, or derivatives thereof [4]

15/70 . combined with mechanical treatment (decorating textiles D06Q)

16/00 Biochemical treatment of fibres, threads, yarns, fabrics, or fibrous goods made from such materials, e.g. enzymatic [2]

17/00 Producing multi-layer textile fabrics

19/00 Treatment of feathers [2]

23/00 Treatment of fibres, threads, yarns, fabrics or fibrous goods made from such materials, characterised by the process [5]

23/08 . Processes in which the treating agent is applied in powder or granular form (adhesives for multi-layer textile fabrics D06M 17/00; decorating textiles D06Q) [5]

23/12 . Processes in which the treating agent is incorporated in microcapsules (making microcapsules B01J 13/02) [5]

D06N WALL, FLOOR, OR LIKE COVERING MATERIALS, E.G. LINOLEUM, OILCLOTH, ARTIFICIAL LEATHER, ROOFING FELT, CONSISTING OF A FIBROUS WEB COATED WITH A LAYER OF MACROMOLECULAR MATERIAL; FLEXIBLE SHEET MATERIAL NOT OTHERWISE PROVIDED FOR (laminates in general B32B; coated webs which retain the character of paper or cardboard D21)

Note

Layered products classified in this subclass are also classified in subclass B32B.

1/00	Linoleum	3/00	Artificial leather, oilcloth, or like material obtained by covering fibrous webs with macromolecular material, e.g. resins, rubber or derivatives thereof [4]
		3/12	• with macromolecular compounds obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds
		5/00	Roofing felt, i.e. fibrous webs coated with bitumen
		7/00	Flexible sheet materials not otherwise provided for, e.g. textile threads, filaments, yarns or tow, glued on macromolecular material

D06P DYEING OR PRINTING TEXTILES; DYEING LEATHER, FURS, OR SOLID MACROMOLECULAR SUBSTANCES IN ANY FORM (for mechanical matters, see B41F, B41J, D06B, D06C; printing on surfaces of materials other than textiles B41M; surface treatment of fibres or filaments from glass, minerals, or slags C03C 25/00; mordanting D06M; dyeing paper D21H)

Note

Processes using enzymes or micro-organisms in order to:

- (i) liberate, separate or purify a pre-existing compound or composition, or to
 - (ii) treat textiles or clean solid surfaces of materials
- are further classified in subclass C12S. [5]

Subclass Index

DYEING OR PRINTING PROCESSES		Combined with mechanical treatment.....	7/00
Classified according to dyes or auxiliary agents.....	1/00	OTHER FEATURES, e.g. AFTER-TREATMENT, RESERVE DYEING OR PRINTING.....	5/00
Classified according to material treated.....	3/00		

1/00	General processes of dyeing or printing textiles, or general processes of dyeing leather, furs, or solid macromolecular substances in any form, classified according to the dyes, pigments, or auxiliary substances employed	3/04	• . . containing amide groups
		3/24	• . . Polyamides; Polyurethanes
		3/34	• Material containing ester groups (D06P 3/04 takes precedence)
1/02	• using azo dyes (D06P 1/18, D06P 1/38, D06P 1/39, D06P 1/41 take precedence) [2]	3/58	• Material containing hydroxyl groups
1/16	• using dispersed, e.g. acetate, dyestuffs	3/70	• Material containing nitrile groups
1/18	• . . Azo dyes	3/79	• Polyolefins [2]
1/38	• using reactive dyes	3/80	• Inorganic fibres (surface treatment of fibres or filaments from glass, minerals or slags C03C 25/00)
1/39	• using acid dyes [2]	3/82	• Textiles which contain different kinds of fibres
1/41	• using basic dyes [2]	5/00	Other features in dyeing or printing textiles, or dyeing leather, furs, or solid macromolecular substances in any form
1/44	• using insoluble pigments or auxiliary substances, e.g. binders [2]	5/02	• After-treatment
1/64	• . . using compositions containing low-molecular-weight organic compounds without sulfate or sulfonate groups	5/12	• Reserving parts of the material before dyeing or printing
3/00	Special processes of dyeing or printing textiles, or dyeing leather, furs, or solid macromolecular substances in any form, classified according to the material treated	5/13	• Fugitive dyeing or stripping dyes [2]
		5/15	• Locally discharging the dyes [2]
		5/20	• Physical treatments affecting dyeing, e.g. ultrasonic, electric [2]
3/02	• Material containing basic nitrogen		

D06P – D06Q

5/22 . Effecting variation of dye affinity on textile material by chemical means that react with the fibre [2]

5/24 . Transfer printing (transfer printing apparatus for textile material B41F 16/00) [7]

5/30 . Ink jet printing (ink jet printing apparatus B41J 2/00) [7]

7/00 Dyeing or printing processes combined with mechanical treatment

D06Q DECORATING TEXTILES (for treatment of textiles by mechanical means, see D06B to D06J; metallising the entire surface of textiles D06M 11/00; textile threads, filaments, yarns or tow, glued on macromolecular material D06N 7/00; dyeing or printing D06P) [5]

Note

In this subclass, the following term is used with the meaning indicated:

- “decorating” means “local treatment” or “local effects produced” as to change, e.g. optically, the appearance or the properties of textile materials. [5]

1/00 Decorating textiles (partial dyeing D06B 11/00; reserving parts of the material before dyeing or printing textiles D06P 5/12)

D07 ROPES; CABLES OTHER THAN ELECTRIC

D07B ROPES OR CABLES IN GENERAL (joining ropes or cables to one another or to other objects B65H 69/00, F16G 11/00; mechanical finishing or dressing of ropes D02J; decorative ropes or cords D04D; suspension cables for bridges E01D 19/00; specially adapted for driving, or for being driven by, pulleys or other gearing elements F16G 9/00; electric cables or joints insofar as electrical aspects are essential H01B, H01R)

Subclass Index

STRUCTURAL FEATURES.....	1/00	Making from special material	5/00
MANUFACTURE		Making ropes or cables of particular	
Machines of general application.....	3/00	form	5/00
Details, auxiliary devices.....	7/00	Binding or sealing ends.....	9/00

1/00 Constructional features of ropes or cables

5/00 Making ropes or cables from special materials or of particular form

Manufacture of ropes or cables

3/00 General-purpose machines or apparatus for producing twisted ropes or cables from component strands of the same or different material

7/00 Details of, or auxiliary devices incorporated in, rope- or cable-making machines; Auxiliary apparatus associated with such machines

9/00 Binding or sealing ends, e.g. to prevent unravelling

PAPER

D21 PAPER-MAKING; PRODUCTION OF CELLULOSE

D21B FIBROUS RAW MATERIALS OR THEIR MECHANICAL TREATMENT

- 1/00 Fibrous raw materials or their mechanical treatment**
(breaking-up or cutting wood or the like by dry methods
B27L; obtaining fibres mechanically for spinning from
rags, peat, or the like D01B; beaters D21D 1/00)

D21C PRODUCTION OF CELLULOSE BY REMOVING NON-CELLULOSE SUBSTANCES FROM CELLULOSE-CONTAINING MATERIALS; REGENERATION OF PULPING LIQUORS; APPARATUS THEREFOR

Note

Processes using enzymes or micro-organisms in order to:
(i) liberate, separate or purify a pre-existing compound or composition, or to
(ii) treat textiles or clean solid surfaces of materials
are further classified in subclass C12S. [5]

Subclass Index

PRODUCTION OF CELLULOSE	Digesters	7/00
Pretreatment of raw material	AFTER-TREATMENT	9/00
Pulping.....	REGENERATION OF PULP LIQUORS	11/00
Other processes.....		

1/00 Pretreatment of the finely-divided materials before digesting (of waste paper D21C 5/02)	9/00 After-treatment of cellulose pulp, e.g. of wood pulp, or cotton linters
3/00 Pulping cellulose-containing materials (digesters D21C 7/00)	9/10 . Bleaching
5/00 Other processes for obtaining cellulose, e.g. cooking cotton linters (obtaining fibres for spinning D01C)	9/147 . . with oxygen or its allotropic modifications (D21C 9/16 takes precedence) [4]
5/02 . Working-up waste paper (mechanical part D21B 1/00)	9/16 . . with per compounds
7/00 Digesters	11/00 Regeneration of pulp liquors
	11/12 . Combustion of pulp liquors

D21D TREATMENT OF THE MATERIALS BEFORE PASSING TO THE PAPER-MAKING MACHINE [5]

- 1/00 Methods of beating or refining; Beaters of the Hollander type** (knotter screens D21F)
- 5/00 Purification of the pulp suspension by mechanical means; Apparatus therefor** (centrifuges, cyclones B04)
- 99/00 Subject matter not provided for in other groups of this subclass** [8]

D21F PAPER-MAKING MACHINES; METHODS OF PRODUCING PAPER THEREON**Subclass Index****MAKING CONTINUOUS WEBS**

Complete machines.....	9/00
Details	
wet end, transfer to press	
section, press section, dryer	
section	1/00, 2/00, 3/00, 5/00

other details 7/00

Processes 11/00

MAKING DISCONTINUOUS SHEETS 13/00

1/00	Wet end of machines for making continuous webs of paper (suction rolls D21F 3/02)	5/00	Dryer section of machines for making continuous webs of paper
1/02	. Head boxes of Fourdrinier machines	7/00	Other details of machines for making continuous webs of paper
1/06	. Regulating pulp flow	7/08	. Felts
1/10	. Wire-cloths	9/00	Complete machines for making continuous webs of paper
1/18	. Shaking-apparatus for wire-cloths and associated parts	11/00	Processes for making continuous lengths of paper, or of cardboard, or of wet web for fibreboard production, on paper-making machines
1/24	. Tilting, raising, or lowering mechanisms for wire-cloths	13/00	Methods or apparatus for making discontinuous sheets of paper, pulpboard, or cardboard, or of wet web, for fibreboard production (making discontinuous sheets of board in moulds D21J; drying paper, pulpboard, or cardboard, in discontinuous-sheet form F26B)
1/30	. Protecting wire-cloths from mechanical damage		
1/32	. Washing wire-cloths or felts		
1/48	. Suction apparatus (suction rolls D21F 3/02)		
1/66	. Pulp catching, de-watering, or recovering; Re-use of pulp-water		
2/00	Transferring continuous webs from wet ends to press sections		
3/00	Press section of machines for making continuous webs of paper		
3/02	. Wet presses		

D21G CALENDERS; ACCESSORIES FOR PAPER-MAKING MACHINES (winders or rewinders for finished products, means for adjustment of wrinkles or lateral extensions B65H)

1/00	Calenders (if restricted to the treatment of particular materials, <u>see</u> the relevant place, e.g. B29C 43/24, D06); Smoothing apparatus	5/00	Safety devices
		7/00	Damping devices
3/00	Doctors	9/00	Other accessories for paper-making machines

D21H PULP COMPOSITIONS; PREPARATION THEREOF NOT COVERED BY SUBCLASSES D21C, D21D; IMPREGNATING OR COATING OF PAPER; TREATMENT OF FINISHED PAPER NOT COVERED BY CLASS B31 OR SUBCLASS D21G; PAPER NOT OTHERWISE PROVIDED FOR [5]**Notes**

- (1) This subclass covers also pulp compositions for the preparation of fibreboard or other fibrous articles by wet processes. [5]
- (2) In this subclass, the following terms are used with the meaning indicated:
 - “pulp” means a dispersion comprising paper-making fibres and optional additives, which is to be processed, and covers the term “stock”; it also means dry paper-making fibres which are to be made into paper by either wet or dry processes; [5]
 - “paper” means paper, cardboard or wet-laid non-woven fabrics.
- (3) If a pulp composition or a paper, or a constituent thereof, is characterised by more than one feature provided for in this subclass, for example, by both the fibrous material and a coating or by both a colorant and a water-repelling agent, classification is made in all places providing for these features. [8]
- (4) Processes using enzymes or micro-organisms in order to:
 - (i) liberate, separate or purify a pre-existing compound or composition, or to

- (ii) treat textiles or clean solid surfaces of materials are further classified in subclass C12S. [5]

Subclass Index

PULP OR PAPER

comprising cellulose, lignocellulose or non-cellulose fibres or web-forming material 11/00, 13/00
comprising fibres or web-forming material not characterised by their chemical constitution 15/00

Processes or apparatus for adding

material 23/00

NON-FIBROUS MATERIAL ADDED TO THE PULP, PAPER-IMPREGNATING

MATERIAL 17/00, 21/00

COATED PAPER; COATING MATERIAL 19/00

OTHER AFTER-TREATMENTS OF PAPER 25/00

SPECIAL PAPER 27/00

Note

In groups D21H 11/00 to D21H 15/00, in the absence of an indication to the contrary, classification is made in the last appropriate place. [5]

11/00 Pulp or paper, comprising cellulose or lignocellulose fibres of natural origin only [5]

13/00 Pulp or paper, comprising synthetic cellulose or non-cellulose fibres or web-forming material (chemical features in the manufacture of artificial fibres D01F) [5]

15/00 Pulp or paper, comprising fibres or web-forming material characterised by features other than their chemical constitution [5]

17/00 Non-fibrous material added to the pulp, characterised by its constitution; Paper-impregnating material characterised by its constitution [5]

19/00 Coated paper (coated fibreboard D21J 1/00); **Coating material** (recording sheets characterised by the coating used to improve ink, dye or pigment receptivity B41M 5/50) [5]

21/00 Non-fibrous material added to the pulp, characterised by its function, form or properties; Paper impregnating or coating material, characterised by its function, form or properties (coatings characterised by a special visual effect D21H 19/00) [5]

21/06 . Paper forming aids [5]

21/10 . . Retention agents or drainage improvers [5]

21/14 . characterised by function or properties in or on the paper (D21H 19/00, D21H 27/02 take precedence) [5]

21/22 . . Agents rendering paper porous, absorbent or bulky [5]

21/34 . . Ignifugeants [5]

21/40 . . Agents facilitating proof of genuineness or preventing fraudulent alteration, e.g. for security paper (watermarking B41M 3/00, D21F 1/00; security printing B41M 3/14; securities or banknotes characterised by colour effects B44F 1/00; testing paper currency or valuable papers for genuineness G07D 7/00) [5]

23/00 Processes or apparatus for adding material to the pulp or to the paper (applying liquids or other fluent material to surfaces, in general B05; processes for making continuous lengths of paper D21F 11/00) [5]

25/00 After-treatment of paper not provided for in groups D21H 17/00 to D21H 23/00 [5]

27/00 Special paper not otherwise provided for, e.g. made by multi-step processes [5]

Note

This group provides for the classification of paper with special properties or applications which are only partially or not at all provided for elsewhere in the classification. Whenever possible, however, these papers are classified according to the criteria used in the other groups of this subclass. [5]

27/02 . Patterned paper (patterned coatings D21H 19/00; embossing B31F 1/00; prepared on the paper-making machines D21F 11/00) [5]

27/06 . Vegetable or imitation parchment; Glassine paper [5]

27/08 . Filter paper (self-supporting filtering material B01D 39/14; making on paper-making machines D21F 11/00) [5]

27/10 . Packing paper (packaging materials of special type or form B65D 65/38) [5]

27/12 . Electrically-insulating paper [5]

27/14 . Paper having stable form or dimension; Curl-resistant paper (anticoil photographic support G03C 1/81) [5]

27/16 . Pure paper, i.e. paper lacking or having low content of contaminants (after-treatment of cellulose pulp D21C 9/00) [5]

27/18 . Paper- or board-based structures for surface covering (printed wallpapers B41M 3/00) [5]

27/30 . Multi-ply (for surface covering D21H 27/18; making on paper-making machines D21F 9/00, D21F 11/00) [5]

Note

Layered products classified in this group are also classified in subclass B32B. [5]

D21J FIBREBOARD; MANUFACTURE OF ARTICLES FROM CELLULOSIC FIBROUS SUSPENSIONS OR FROM PAPIER-MÂCHÉ (manufacture of articles by dry processes B27N)

1/00 Fibreboard (preparation of pulp compositions or addition of chemical agents D21B, D21C, D21H; formation of the wet web D21F)

3/00 Manufacture of articles by pressing wet fibre pulp, or papier-mâché, between moulds

5/00 Manufacture of hollow articles by transferring sheets, produced from fibres suspensions or papier-mâché by suction on wire-net moulds, to couch moulds

7/00 Manufacture of hollow articles from fibre suspensions or papier-mâché by deposition of fibres in or on a wire-net mould

D99Z

D99 SUBJECT MATTER NOT OTHERWISE PROVIDED FOR IN THIS SECTION [8]

D99Z SUBJECT MATTER NOT OTHERWISE PROVIDED FOR IN THIS SECTION [8]

Note

This subclass covers subject matter that: [8]
(a) is not provided for, but is most closely related to, the subject matter covered by the subclasses of this section, and [8]
(b) is not explicitly covered by any subclass of another section. [8]

**99/00 Subject matter not otherwise provided for in this
section [8]**