

## **CPC** COOPERATIVE PATENT CLASSIFICATION

### **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 OF 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](#)

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

##### **NOTE**

Attention is drawn to the note following the title of Class [D01](#)

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

**NOTE**

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](#)

**WARNING**

The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:

[D01D 5/10](#) covered by [D01D 5/08](#) and subgroups

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

**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 cabs [B65H](#); preparation of fibres for paper-making [D21](#))

**NOTE**

Attention is drawn to the note following the title of Class [D01](#).

**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](#))

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

**NOTE**

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

**D02**

(continued)

- "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, THREADS, OR YARNS; YARNS OR THREADS****NOTE**

Attention is drawn to the note following the title of class [D02](#)

**D02H****WARPING, BEAMING OR LEASING****NOTE**

Attention is drawn to the note following the title of Class [D02](#).

**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](#).

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

The following IPC groups are not used in the CPC scheme. Subject-matter covered by these groups is classified in

D03C

(continued)

the following CPC groups: - [D03C 9/04](#) covered  
by [D03C 9/028](#)

D03D

**WOVEN FABRICS; METHODS OF WEAVING; LOOMS****NOTE**

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.

D03J

**AUXILIARY WEAVING APPARATUS; WEAVERS' TOOLS; SHUTTLES**

D04

**BRAIDING; LACE-MAKING; KNITTING; TRIMMINGS; NON-WOVEN FABRICS**

D04B

**KNITTING****NOTE**

1. In this subclass, the 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

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](#))

**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

**D04G****MAKING NETS BY KNOTTING OF FILAMENTARY MATERIAL; MAKING KNOTTED CARPETS OR TAPESTRIES; KNOTTING NOT OTHERWISE PROVIDED FOR**

(binding knotters for harvesters [A01D 59/04](#); 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)

**D04H****MAKING TEXTILE FABRICS, e.g. FROM FIBRES OR FILAMENTARY MATERIAL**

(weaving [D03](#); knitting [D04B](#); braiding {or lace-making} [D04C](#); net-making {or making knotted carpets} [D04G](#); sewing [D05B](#); tufting [D05C](#), { e.g. [D05C 15/04](#)}; finishing non-woven fabrics [D06](#)); **FABRICS MADE BY SUCH PROCESSES OR APPARATUS, e.g. FELTS, NON-WOVEN FABRICS; COTTON-WOOL; WADDING {Non-woven fabrics from staple fibres, filaments or yarns, bonded with at least one web-like material during their consolidation}** (non-woven fabrics having an intermediate or external layer of a different kind, e.g. of woven fabric, [B32B](#); { manufacturing hats [A42C](#); filtering material [B01D 39/00](#) ; making board or the like from wood fibre [B27N](#); producing shaped articles from mixtures containing fibres [B28B 1/52](#) ; making layered products from solid layers, at least one of which contains synthetic resin as an essential component [B32B 27/00](#) ; making or treating glass wool and mineral wool [C03B 37/00](#) ; compounding ingredients used as fillers for mortars and the like [C04B 14/38](#) , [C04B 16/06](#) , [C04B 20/0048](#) ; sintering plastics particles [C08J 9/24](#) ; manufacturing by extrusion of synthetic filaments and fibres in general [D01D](#); paper [D21C](#) to [D21H](#); making shaped articles from liquid suspensions of cellulose fibres [D21J](#)))

**NOTE**

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

**D04H**

(continued)

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.
4. In this subclass, a number of groups, e.g. [D04H 1/067](#), correspond to IPC2012.01

**WARNING**

Documents of the complete subclass [D04H](#) including all subgroups are in the process of being reorganised to the new groups corresponding to the IPC 2012.01 classification scheme defined below.

**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 39/08](#))

**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

**D05C**

**EMBROIDERING; TUFTING** (making non-woven fabrics [D04H](#); sewing [D05B](#))

**D05D**

**INDEXING SCHEME ASSOCIATED WITH SUBCLASSES [D05B](#) AND [D05C](#), RELATING TO SEWING, EMBROIDERING AND TUFTING**

**NOTE**

D05D

(continued)

This subclass constitutes an internal scheme for indexing only.

**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](#))**NOTE**

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

- "fabric" includes yarns in warp or sheet form;
- "textile material" includes fabrics, yarns or other fibrous materials;
- "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.

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

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

- "fabric" includes yarns in warp or sheet form

**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 vapours [D06B](#); chemical matters, see [D06L](#), [D06M](#))**NOTE**

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:

**D06F**

(continued)

- apparatus for wringing, washing, dry-cleaning, ironing, or other hot-pressing of textiles in manufacturing operations, which is covered by subclass [D06B](#), [D06C](#).

**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](#))

**D06H**

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

**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](#))

**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 of filaments of glass, mineral wool, or slag wool [C03](#); chemical treatment of fibrous material to obtain fibres for spinning [D01](#); for mechanical matters [D06C](#), [D06F](#); bleaching paper pulp or cotton linters [D21](#); {softening compositions for textiles, cleaning compositions for carpets, upholstery, fur or leather [C11D](#)})

**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 { also in the form of fabrics if the chemical aspects of the treatment are important} [C03C 25/00](#); treatment of textiles by mechanical means, see [D06B](#) to [D06J](#))

**NOTE**

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.
2. 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



**D06M**

(continued)

indication to the contrary, according to the essential ingredient which belongs to the last appropriate place in the sequence of substances;

3. 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.
4. In this subclass, the treatment of textiles, not provided for elsewhere in class [D06](#), is classified according to the following principles:
  - Treatment of textiles characterised by the treating agent in groups [D06M 11/00](#) to [D06M 16/00](#);
  - Treatment of textiles characterised by the process in group [D06M 23/00](#).

**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](#).

**WARNING**

The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:

<a href="#">D06N 7/02</a>	covered by	<a href="#">D06M</a> , <a href="#">D06N</a>
<a href="#">D06N 7/04</a>	" "	<a href="#">D06M</a> , <a href="#">D06N</a>
<a href="#">D06N 7/06</a>	" "	<a href="#">D06M</a> , <a href="#">D06N</a>

**D06P**

**DYEING OR PRINTING TEXTILES; DYEING LEATHER, FURS, OR SOLID MACROMOLECULAR SUBSTANCES IN ANY FORM**

(for mechanical matters, see [B41F](#), [D06B](#), [D06C](#); printing on surfaces of materials other than textiles [B41M](#); surface treatment of fibres or filaments from glass, mineral, or slags [C03C 25/00](#); mordanting [D06M](#); dyeing paper [D21H](#))

**WARNING**

The following IPC groups are not used in the CPC system. Subject matter covered by these groups is classified in the following CPC groups:

<a href="#">D06P 3/84</a>	covered by	<a href="#">D06P 3/82</a>
<a href="#">D06P 3/85</a>	" "	<a href="#">D06P 3/82</a>
<a href="#">D06P 3/852</a>	" "	<a href="#">D06P 3/82</a>
<a href="#">D06P 3/86</a>	" "	<a href="#">D06P 3/82</a>
<a href="#">D06P 3/87</a>	" "	<a href="#">D06P 3/82</a>
<a href="#">D06P 3/872</a>	" "	<a href="#">D06P 3/82</a>

**D06P**

(continued)

[D06P 3/874](#) " " [D06P 3/82](#)  
[D06P 5/24](#) to [D06P 5/28](#) " " [D06P 5/003](#) and s.gr.

**D06Q**

**DECORATING TEXTILES** (for treatment of textiles by mechanical means, see [D06B](#) to [D06J](#); metallising the entire surface of textiles [D06M 11/83](#); textile threads, filaments, yarns or tow, glued on macromolecular material [D06N 7/00](#); dyeing or printing [D06P](#))

**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

**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](#); { mountaineering ropes [A63B 29/02](#); mechanical finishing or dressing of ropes [D02J](#); { braiding [D04C](#); decorative ropes or cords [D04D](#); suspension cables for bridges [E01D 19/16](#); 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](#))

**D10****INDEXING SCHEME ASSOCIATED WITH SUBLASSES OF SECTION D, RELATING TO TEXTILES****D10B****INDEXING SCHEME ASSOCIATED WITH SUBLASSES OF SECTION D, RELATING TO TEXTILES****NOTE**

1. This subclass constitutes a scheme for indexing only.
2. The indexing codes of this subclass, relating to the chemical constitution of the fibrous materials, are to be associated with groups of section D, with the exception of those of subclass [D06M](#), as far as these groups themselves do not give information about the chemical nature of the fibres.
3. In a number of fields, the indexing codes relating to the chemical constitution of the fibrous materials are not allotted to documents having an abstract in which the chemical constitution is clearly stated, e.g. if the abstract mentions "polyamide", code [D10B 2331/021](#) is not allotted.

D10B

(continued)

4. Blends of fibres are indexed according to each constituent fibre.

## **Paper**

### **D21 PAPER-MAKING; PRODUCTION OF CELLULOSE**

#### **D21B FIBROUS RAW MATERIALS OR THEIR MECHANICAL TREATMENT**

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

#### **D21D TREATMENT OF THE MATERIALS BEFORE PASSING TO THE PAPER-MAKING MACHINE**

#### **D21F PAPER-MAKING MACHINES; METHODS OF PRODUCING PAPER THEREON**

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

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

#### **NOTE**

1. This subclass covers also pulp compositions for the preparation of fireboard or other fibrous articles by wet processes.
2. In this subclass, the following terms are used with the meaning indicated:
  - "pulp" means a dispersion, { e.g. an aqueous sus-pension,} 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;
  - "paper" means paper, cardboard or wet-laid non-woven fabrics.

**D21H**

(continued)

3. 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.
4. Attention is drawn to the use of Combination Sets as specified in the Notes after groups [D21H 17/00](#), [D21H 17/69](#), [D21H 17/71](#), [D21H 19/00](#), [D21H 21/00](#), [D21H 21/14](#), [D21H 23/00](#), [D21H 23/22](#), [D21H 25/00](#) and [D21H 27/00](#).

**D21J**

**FIBREBOARD; MANUFACTURE OF ARTICLES FROM CELLULOSIC FIBROUS SUSPENSIONS OR FROM PAPIER-MACHE** (manufacture of articles by dry processes [B27N](#))