CPC  COOPERATIVE PATENT CLASSIFICATION

D  TEXTILES; PAPER

TEXTILES OR FLEXIBLE MATERIALS NOT OTHERWISE PROVIDED FOR

D01  NATURAL OR MAN-MADE THREADS OR FIBRES; SPINNING

(NOTE omitted)

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

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

1/00  General methods for the manufacture of artificial filaments or the like

1/02  . . Addition of substances to the spinning solution or to the melt (addition of substances to viscose

D01F 2/08  - D01F 2/20)

1/04  . . Pigments

1/06  . . Dyes

1/07  . . for making fire- or flame-proof filaments

1/08  . . for forming hollow filaments

1/09  . . for making electroconductive or anti-static filaments

1/10  . . Other agents for modifying properties

1/103  . . {Agents inhibiting growth of microorganisms} 

1/106  . . {Radiation shielding agents, e.g. absorbing, reflecting agents}

2/00  Monocomponent artificial filaments or the like of cellulose or cellulose derivatives; Manufacture thereof

2/02  . . from solutions of cellulose in acids, bases or salts

2/04  . . from cuprammonium solutions

2/06  . . from viscose (preparation of alkali cellulose C08B)

2/08  . . Composition of the spinning solution or the bath (preparing or dissolving cellulose xanthate C08B)

2/10  . . Addition to the spinning solution or spinning bath of substances which exert their effect equally well in either

2/12  . . Addition of delustering agents to the spinning solution

2/14  . . . . . . Addition of pigments

2/16  . . . . . . Addition of dyes to the spinning solution

2/18  . . . . . . Addition to the spinning solution of substances to influence ripening

2/20  . . . . for the manufacture of hollow threads

2/22  . . . . by the dry spinning process

2/24  . . from cellulose derivatives

2/26  . . from nitrocellulose

2/28  . . from organic cellulose esters or ethers, e.g. cellulose acetate

2/30  . . . . by the dry spinning process

4/00  Monocomponent artificial filaments or the like of proteins; Manufacture thereof

4/02  . . from fibroin

4/04  . . from casein

4/06  . . from globulins, e.g. groundnut protein

6/00  Monocomponent artificial filaments or the like of synthetic polymers; Manufacture thereof

6/02  . . from homopolymers obtained by reactions only involving carbon-to-carbon unsaturated bonds

6/04  . . . from polyolefins

6/06  . . . from polypropylene

6/08  . . . from polymers of halogenated hydrocarbons

6/10  . . . from polyvinyl chloride or polyvinylidene chloride

6/12  . . . from polymers of fluorinated hydrocarbons

6/14  . . . from polymers of unsaturated alcohols, e.g. polyvinyl alcohol, or of their acetals or ketals

6/16  . . . from polymers of unsaturated carboxylic acids or unsaturated organic esters, e.g. polyacrylic esters, polyvinyl acetate

6/18  . . . from polymers of unsaturated nitriles, e.g. polyacrylonitrile, polyvinylidene cyanide

6/20  . . . from polymers of cyclic compounds with one carbon-to-carbon double bond in the side chain

6/22  . . . from polystyrene

6/24  . . . from polymers of aliphatic compounds with more than one carbon-to-carbon double bond

6/26  . . . from other polymers

6/28  . . . from copolymers obtained by reactions only involving carbon-to-carbon unsaturated bonds

NOTE
For the purposes of groups D01F 6/30 - D01F 6/96, the percentage for determining the major constituent is expressed in mole percent.

6/30  . . . comprising olefins as the major constituent

6/32  . . . comprising halogenated hydrocarbons as the major constituent

6/34  . . . comprising unsaturated alcohols, acetals or ketals as the major constituent

6/36  . . . comprising unsaturated carboxylic acids or unsaturated organic esters as the major constituent
Artificial filaments or the like of other substances; Manufacture thereof; Apparatus specially adapted for the manufacture of carbon filaments

9/00  
9/02  . of reaction products of rubber with acids or acid anhydrides, e.g. sulfur dioxide
9/04  . of alginates
9/08  . of inorganic material (from softened glass, minerals or slags C03B 37/00; obtaining ceramic fibres C04B 35/62227; incandescent bodies F21H H01K 1/02, H01K 3/02)
9/10  . by decomposition of organic substances (D01F 9/12 takes precedence)
9/12  . Carbon filaments; Apparatus specially adapted for the manufacture thereof (with fullerene structure, e.g. carbon nanotubes C01B 32/15)
9/127  . by thermal decomposition of hydrocarbon gases or vapours (or other carbon-containing compounds in the form of gas or vapour, e.g. carbon monoxide, alcohol)
9/1271 . . [Alkanes or cycloalkanes]
9/1272 . . [Methane]
9/1273 . . [Alkenes, alkynes]
9/1274 . . [Butadiene]
9/1275 . . [Acetylene]
9/1276 . . [Aromatics, e.g. toluene]
9/1277 . . [Other organic compounds]
9/1278 . . [Carbon monoxide]
9/133  . . Apparatus therefor
9/14  . . by decomposition of organic filaments
9/145 . . from pitch or distillation residues
9/15  . . from coal pitch
9/155 . . from petroleum pitch
9/16  . . from products of vegetable origin or derivatives thereof, e.g. from cellulose acetate (D01F 9/18 takes precedence)
9/17  . . from lignin
9/18  . . from proteins, e.g. from wool
9/20  . . from polyaddition, polycondensation or polymerisation products (D01F 9/145, D01F 9/16, D01F 9/18 take precedence)
9/21  . . from macromolecular compounds obtained by reactions only involving carbon-to-carbon unsaturated bonds
9/22  . . from polyacrylonitriles
9/225  . . . . from stabilised polyacrylonitriles
9/24  . . from macromolecular compounds obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds
9/245  . . . . from polyurethanes
9/26  . . . . from polyesters
9/28  . . . . from polyamides
9/30  . . . . from aromatic polyamides
9/32  . . . . Apparatus therefor
9/322  . . . . . . . . for manufacturing filaments from pitch
9/324  . . . . . . . . for manufacturing filaments from products of vegetable origin
9/326  . . . . . . . . for manufacturing filaments from proteins

8/00  Conjugated, i.e. bi- or multicomponent, artificial filaments or the like; Manufacture thereof
8/02  . from cellulose, cellulose derivatives, or proteins
8/04  . from synthetic polymers
8/06  . with at least one polyolefin as constituent
8/08  . with at least one polyacrylonitrile as constituent
8/10  . with at least one macromolecular compound obtained by reactions only involving carbon-to-carbon unsaturated bonds as constituent
8/12  . with at least one polyamide as constituent
8/14  . . with at least one polyester as constituent

8/16  . with at least one other macromolecular compound obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds as constituent
8/18  . from other substances
Chemical after-treatment of artificial filaments or the like during manufacture (of artificial filaments from softened glass, minerals or slags C03C; from ceramics C04B; finishing D06M)

- of cellulose, cellulose derivatives, or proteins
- of synthetic polymers
- of macromolecular compounds obtained by reactions only involving carbon-to-carbon unsaturated bonds
- of macromolecular compounds obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds
- of carbon
- with inorganic substances (Intercalation)
- Halogen, halogenic acids or their salts
- Oxygen, oxygen-generating compounds (anode oxidising D01F 11/16)
- Oxides
- Boron, borides, boron nitrides
- Carbon
- Carbides (boron-containing compounds D01F 11/124; nitrogen carbide D01F 11/128)
- Metals (metal depositing by electrolysis D01F 11/16; metal alloys with reinforcing carbon fibres C22C 49/14)
- Nitrides, nitrogen carbides (nitrogen borides D01F 11/124)
- Intercalated carbon- or graphite fibres
- with organic compounds, e.g. macromolecular compounds
- by physicochemical methods

Recovery of starting material, waste material or solvents during the manufacture of artificial filaments or the like

- of cellulose, cellulose derivatives or proteins
- (recovery of sodium sulfate from coagulation baths C01D 5/006)
- of synthetic polymers