

SECTION D — TEXTILES; PAPER

D01 NATURAL OR ARTIFICIAL THREADS OR FIBRES; SPINNING

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

Note(s)

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.

Subclass index

GENERAL PROCESSES.....	1/00
FILAMENTS AND MANUFACTURE THEREOF	
From cellulose or derivatives; from proteins.....	2/00, 4/00
From synthetic resins.....	6/00
From other materials.....	9/00
Multicomponent filaments.....	8/00
AFTER-TREATMENT; RECOVERY OF STARTING MATERIAL.....	11/00, 13/00

1/00	General methods for the manufacture of artificial filaments or the like	2/22	• • by the dry spinning process [2]
1/02	• Addition of substances to the spinning solution or to the melt (addition of substances to viscose D01F 2/08)	2/24	• from cellulose derivatives [2]
1/04	• • Pigments	2/26	• • from nitrocellulose [2]
1/06	• • Dyes	2/28	• • from organic cellulose esters or ethers, e.g. cellulose acetate [2]
1/07	• • for making fire- or flame-proof filaments [4]	2/30	• • • by the dry spinning process [2]
1/08	• • for forming hollow filaments	4/00	Monocomponent artificial filaments or the like of proteins; Manufacture thereof [2]
1/09	• • for making electroconductive or anti-static filaments [4]	4/02	• from fibroin [2]
1/10	• • Other agents for modifying properties [2]	4/04	• from casein [2]
		4/06	• from globulins, e.g. groundnut protein [2]
2/00	Monocomponent artificial filaments or the like of cellulose or cellulose derivatives; Manufacture thereof [2]	6/00	Monocomponent artificial filaments or the like of synthetic polymers; Manufacture thereof [2]
2/02	• from solutions of cellulose in acids, bases, or salts [2]		Note(s) [2006.01]
2/04	• • from cuprammonium solutions [2]		In this group, the percentage for determining the major constituent is expressed in mole percent.
2/06	• from viscose (preparation of alkali cellulose C08B) [2]	6/02	• from homopolymers obtained by reactions only involving carbon-to-carbon unsaturated bonds [2]
2/08	• • Composition of the spinning solution or the bath (preparing or dissolving cellulose xanthate C08B) [2]	6/04	• • from polyolefins [2]
2/10	• • • Addition to the spinning solution or spinning bath of substances which exert their effect equally well in either [2]	6/06	• • • from polypropylene [2]
2/12	• • • Addition of delustring agents to the spinning solution [2]	6/08	• • from polymers of halogenated hydrocarbons [2]
2/14	• • • • Addition of pigments [2]	6/10	• • • from polyvinyl chloride or polyvinylidene chloride [2]
2/16	• • • • Addition of dyes to the spinning solution [2]	6/12	• • • from polymers of fluorinated hydrocarbons [2]
2/18	• • • • Addition to the spinning solution of substances to influence ripening [2]	6/14	• • from polymers of unsaturated alcohols, e.g. polyvinyl alcohol, or of their acetals or ketals [2]
2/20	• • • for the manufacture of hollow threads [2]	6/16	• • from polymers of unsaturated carboxylic acids or unsaturated organic esters, e.g. polyacrylic esters, polyvinyl acetate [2]

D01F

- 6/18 • • from polymers of unsaturated nitriles, e.g. polyacrylonitrile, polyvinylidene cyanide [2]
- 6/20 • • from polymers of cyclic compounds with one carbon-to-carbon double bond in the side chain [2]
- 6/22 • • • from polystyrene [2]
- 6/24 • • from polymers of aliphatic compounds with more than one carbon-to-carbon double bond [2]
- 6/26 • • from other polymers [2]
- 6/28 • from copolymers obtained by reactions only involving carbon-to-carbon unsaturated bonds [2]
- 6/30 • • comprising olefins as the major constituent [2]
- 6/32 • • comprising halogenated hydrocarbons as the major constituent [2]
- 6/34 • • comprising unsaturated alcohols, acetals, or ketals as the major constituent [2]
- 6/36 • • comprising unsaturated carboxylic acids or unsaturated organic esters as the major constituent [2]
- 6/38 • • comprising unsaturated nitriles as the major constituent [2]
- 6/40 • • Modacrylic fibres, i.e. containing 35 to 85% acrylonitrile [2]
- 6/42 • • comprising cyclic compounds containing one carbon-to-carbon double bond in the side chain as major constituent [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]
- 6/48 • • of polymers of halogenated hydrocarbons [2]
- 6/50 • • of polyalcohols, polyacetals or polyketals [2]
- 6/52 • • of polymers of unsaturated carboxylic acids or unsaturated esters [2]
- 6/54 • • of polymers of unsaturated nitriles [2]
- 6/56 • • of polymers of cyclic compounds with one carbon-to-carbon double bond in the side chain [2]
- 6/58 • from homopolycondensation products [2]
- 6/60 • • from polyamides (from polyamino acids or polypeptides D01F 6/68) [2]
- 6/62 • • from polyesters [2]
- 6/64 • • • from polycarbonates [2]
- 6/66 • • from polyethers [2]
- 6/68 • • from polyaminoacids or polypeptides [2]
- 6/70 • • from polyurethanes [2]
- 6/72 • • from polyureas [2]
- 6/74 • • from polycondensates of cyclic compounds, e.g. polyimides, polybenzimidazoles [2]
- 6/76 • • from other polycondensation products [2]
- 6/78 • from copolycondensation products [2]
- 6/80 • • from copolyamides [2]
- 6/82 • • from polyester amides or polyether amides [2]
- 6/84 • • from copolyesters [2]
- 6/86 • • from polyetheresters [2]
- 6/88 • from mixtures of polycondensation products as major constituent with other polymers or low-molecular-weight compounds [2]
- 6/90 • • of polyamides [2]
- 6/92 • • of polyesters [2]
- 6/94 • • of other polycondensation products [2]
- 6/96 • from other synthetic polymers [2]
- 8/00 Conjugated, i.e. bi- or multicomponent, artificial filaments or the like; Manufacture thereof [2]**
- 8/02 • from cellulose, cellulose derivatives, or proteins [2]
- 8/04 • from synthetic polymers [2]
- 8/06 • • with at least one polyolefin as constituent [2]
- 8/08 • • with at least one polyacrylonitrile as constituent [2]
- 8/10 • • with at least one other macromolecular compound obtained by reactions only involving carbon-to-carbon unsaturated bonds as constituent [2]
- 8/12 • • with at least one polyamide as constituent [2]
- 8/14 • • with at least one polyester as constituent [2]
- 8/16 • • with at least one other macromolecular compound obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds [2]
- 8/18 • from other substances [2]
- 9/00 Artificial filaments or the like of other substances; Manufacture thereof; Apparatus specially adapted for the manufacture of carbon filaments [5]**
- 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; incandescent bodies F21H, H01K 1/02, H01K 3/02) [2]
- 9/10 • • by decomposition of organic substances (D01F 9/12 takes precedence) [2]
- 9/12 • • Carbon filaments; Apparatus specially adapted for the manufacture thereof [2, 5]
- 9/127 • • • by thermal decomposition of hydrocarbon gases or vapours [5]
- 9/133 • • • • Apparatus therefor [5]
- 9/14 • • • by decomposition of organic filaments [2, 5]
- 9/145 • • • • from pitch or distillation residues [5]
- 9/15 • • • • from coal pitch [5]
- 9/155 • • • • from petroleum pitch [5]
- 9/16 • • • • from products of vegetable origin or derivatives thereof, e.g. from cellulose acetate (D01F 9/18 takes precedence) [2, 5]
- 9/17 • • • • from lignin [5]
- 9/18 • • • • from proteins, e.g. from wool [2]
- 9/20 • • • • from polyaddition, polycondensation or polymerisation products (D01F 9/145, D01F 9/16, D01F 9/18 take precedence) [2, 5]
- 9/21 • • • • • from macromolecular compounds obtained by reactions only involving carbon-to-carbon unsaturated bonds [5]
- 9/22 • • • • • from polyacrylonitriles [2, 5]
- 9/24 • • • • • from macromolecular compounds obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds [5]
- 9/26 • • • • • from polyesters [5]
- 9/28 • • • • • from polyamides [5]
- 9/30 • • • • • from aromatic polyamides [5]
- 9/32 • • • • Apparatus therefor [5]
- 11/00 Chemical after-treatment of artificial filaments or the like during manufacture (finishing D06M) [2]**
- 11/02 • of cellulose, cellulose derivatives, or proteins [2]
- 11/04 • of synthetic polymers [2]
- 11/06 • • of macromolecular compounds obtained by reactions only involving carbon-to-carbon unsaturated bonds [2]
- 11/08 • • of macromolecular compounds obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds [2]
- 11/10 • of carbon [2]
- 11/12 • • with inorganic substances [5]

- 11/14 • • with organic compounds, e.g. macromolecular compounds [5]
- 11/16 • • by physicochemical methods [5]

13/00 Recovery of starting material, waste material, or solvents during the manufacture of artificial filaments or the like [2]

- 13/02 • of cellulose, cellulose derivatives, or proteins [2]
- 13/04 • of synthetic polymers [2]