SECTION C — CHEMISTRY; METALLURGY

C08 ORGANIC MACROMOLECULAR COMPOUNDS; THEIR PREPARATION OR CHEMICAL WORKING-UP; COMPOSITIONS BASED THEREON

C08B POLYSACCHARIDES; DERIVATIVES THEREOF (polysaccharides containing less than six saccharide radicals attached to each other by glycosidic linkages C07H; fermentation or enzyme-using processes C12P 19/00; production of cellulose D21) [4]

Note(s) [7]

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Preparation of mixed organic cellulose

esters [1, 2006.01]

3/18 • • Aceto-butyrates [1, 2006.01]

Therapeutic activity of compounds is further classified in subclass A61P.

Subclass index

CELLULOSE AND DERIVATIVES THEREOF	
Preparatory treatment of cellulose	1/00
Esters	3/00, 5/00, 7/00, 13/00, 17/00
Ethers	11/00, 13/00, 17/00
Xanthates	
Other derivatives	
Regeneration of cellulose	16/00
STARCH; DEGRADED OR NON-CHEMICALLY MODIFIED STARCH; AMYLOSE;	AMYLOPECTIN. 30/00
CHEMICAL DERIVATIVES OF STARCH, OF AMYLOSE OR OF AMYLOPECTIN	
of starch	
of amylose	33/00
of amylopectin	35/00
OTHER POLYSACCHARIDES	37/00

<u>Preparat</u>	<u>ion</u>	3/20	• Esterification with maintenance of the fibrous structure of the cellulose [1, 2006.01]
1/00	Preparatory treatment of cellulose for making derivatives thereof [1, 2006.01]	3/22	Post-esterification treatments, including purification [1, 2006.01]
1/02	 Rendering cellulose suitable for esterification [1, 2006.01] 	3/24 3/26	 Hydrolysis or ripening [1, 2006.01] Isolation of the cellulose ester [1, 2006.01]
1/04 1/06	 • for the preparation of cellulose nitrate [1, 2006.01] • Rendering cellulose suitable for etherification [1, 2006.01] 	3/28 3/30	• • by precipitation [1, 2006.01]• Stabilisation [1, 2006.01]
1/08 1/10	Alkali cellulose [1, 2006.01]Apparatus for the preparation of alkali	5/00	Preparation of cellulose esters of inorganic acids [1, 2006.01]
1/12 1/14	cellulose [1, 2006.01] • • • Steeping devices [1, 2006.01]	5/02 5/04	 Cellulose nitrate [1, 2006.01] Post-esterification treatments, including
3/00	Preparation of cellulose esters of organic	5/06 5/08	 purification [1, 2006.01] Isolation of the cellulose nitrate [1, 2006.01] Stabilisation [1, 2006.01]
3/02 3/04 3/06	 acids [1, 2006.01] Catalysts used for the esterification [1, 2006.01] Cellulose formate [1, 2006.01] Cellulose acetate [1, 2006.01] 	5/10 5/12 5/14	 • Reducing the viscosity [1, 2006.01] • Replacing the water by organic liquids [1, 2006.01] • Cellulose sulfate [1, 2006.01]
3/08 3/10	 of monobasic organic acids with three or more carbon atoms [1, 2006.01] with five or more carbon atoms [1, 2006.01] 	7/00	Preparation of cellulose esters of both organic and inorganic acids [1, 2006.01]
3/12 3/14	 of polybasic organic acids [1, 2006.01] in which the organic acid residue contains substituents, e.g. NH₂, Cl [1, 2006.01] 	9/00	Preparation of cellulose xanthate or viscose [1, 2006.01]

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9/02

9/04

9/06

• Sulfidisers; Dissolvers [1, 2006.01]

• Continuous processes [1, 2006.01]

• Single-stage processes [1, 2006.01]

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11/00	Preparation of cellulose ethers [1, 2006.01]	30/08	• Concentration of starch suspensions [4, 2006.01]
11/02	 Alkyl or cycloalkyl ethers [1, 2006.01] 	30/10	 Working-up residues from the starch extraction,
11/04	• • with substituted hydrocarbon radicals [1, 2006.01]		including pressing water from the starch-extracted
11/06	• • • with halogen-substituted hydrocarbon		material [4, 2006.01]
	radicals [1, 2006.01]	30/12	 Degraded or non-chemically modified starch;
11/08	• • with hydroxylated hydrocarbon radicals; Esters,		Bleaching of starch (preparation of chemical
	ethers, or acetals thereof [1, 2006.01]	20/44	derivatives of starch C08B 31/00) [4, 2006.01]
11/10	• • • substituted with acid radicals [1, 2006.01]	30/14	• • Cold water dispersible or pregelatinised
11/12	• • • substituted with carboxylic	30/16	starch [4, 2006.01] • Apparatus therefor [4, 2006.01]
	radicals [1, 2006.01]	30/18	• • Dextrin [4, 2006.01]
11/14	• • • with nitrogen-containing groups [1, 2006.01]	30/10	Amylose or amylopectin (chemical derivatives
11/145	• • • with basic nitrogen, e.g. aminoalkyl ethers [2, 2006.01]	30/20	thereof C08B 33/00, C08B 35/00) [4, 2006.01]
11/15	• • • with carbamoyl groups [2, 2006.01]	31/00	Preparation of chemical derivatives of starch
11/155	• • • with cyano groups, e.g. cyanoalkyl ethers [2, 2006.01]	31,00	(chemical derivatives of amylose C08B 33/00; chemical derivatives of amylopectin C08B 35/00) [2, 2006.01]
11/16	 Aryl or aralkyl ethers [1, 2006.01] 	31/02	• Esters [2, 2006.01]
11/18	• • with substituted hydrocarbon radicals [1, 2006.01]	31/04	• • of organic acids [2, 2006.01]
11/187	• with olefinic unsaturated groups [2, 2006.01]	31/04	 of organic acids [2, 2006.01] of inorganic acids [2, 2006.01]
11/193	Mixed ethers, i.e. ethers with two or more different	31/08	• Ethers [2, 2006.01]
	etherifying groups [2, 2006.01]	31/10	 • Alkyl or cycloalkyl ethers [2, 2006.01]
11/20	 Post-etherification treatments, including 	31/10	 having alkyl or cycloalkyl radicals substituted by
	purification [1, 2006.01]	31/12	hetero atoms [2, 2006.01]
11/22	• • Isolation [1, 2006.01]	31/14	 Aryl or aralkyl ethers [2, 2006.01]
12/00	Dyonovation of collulate other actors [1, 2006,01]	31/16	• Ether-esters [2, 2006.01]
13/00 13/02	Preparation of cellulose ether-esters [1, 2006.01]	31/18	• Oxidised starch [2, 2006.01]
13/02	• Cellulose ether xanthates [1, 2006.01]	01/10	5.maisea sairen (=) 2000 1021
15/00	Preparation of other cellulose derivatives or modified	33/00	Preparation of chemical derivatives of
	cellulose [1, 2006.01]		amylose [2, 2006.01]
15/02	 Oxycellulose; Hydrocellulose; Cellulose 	33/02	• Esters [2, 2006.01]
	hydrate [1, 2006.01]	33/04	• Ethers [2, 2006.01]
15/04	Carboxycellulose, e.g. prepared by oxidation with	33/06	• Ether-esters [2, 2006.01]
	nitrogen dioxide [1, 2006.01]	33/08	• Oxidised amylose [2, 2006.01]
15/05	 Derivatives containing elements other than carbon, hydrogen, oxygen, halogen, or sulfur (esters of phosphorus acids C08B 5/00) [2, 2006.01] 	35/00	Preparation of chemical derivatives of amylopectin [2, 2006.01]
15/06	• containing nitrogen [1, 2, 2006.01]	35/02	• Esters [2, 2006.01]
15/08	Fractionation of cellulose, e.g. separation of cellulose	35/04	• Ethers [2, 2006.01]
13/00	crystallites [2, 2006.01]	35/06	• Ether-esters [2, 2006.01]
15/10	• Crosslinking of cellulose [2, 2006.01]	35/08	 Oxidised amylopectin [2, 2006.01]
16/00			V 1 -
	Regeneration of cellulose [2, 2006.01]	37/00	
	Regeneration of cellulose [2, 2006.01]	37/00	Preparation of polysaccharides not provided for in groups C08B 1/00-C08B 35/00; Derivatives thereof
17/00	Apparatus for esterification or etherification of	37/00	Preparation of polysaccharides not provided for in groups C08B 1/00-C08B 35/00; Derivatives thereof (cellulose D21) [4, 2006.01]
	Apparatus for esterification or etherification of cellulose [1, 2006.01]	37/00 37/02	Preparation of polysaccharides not provided for in groups C08B 1/00-C08B 35/00; Derivatives thereof (cellulose D21) [4, 2006.01] • Dextran; Derivatives thereof [2, 2006.01]
17/02	Apparatus for esterification or etherification of cellulose [1, 2006.01] • for making organic esters of cellulose [1, 2006.01]	37/02 37/04	Preparation of polysaccharides not provided for in groups C08B 1/00-C08B 35/00; Derivatives thereof (cellulose D21) [4, 2006.01] Dextran; Derivatives thereof [2, 2006.01] Alginic acid; Derivatives thereof [2, 2006.01]
17/02 17/04	Apparatus for esterification or etherification of cellulose [1, 2006.01] • for making organic esters of cellulose [1, 2006.01] • for making cellulose nitrate [1, 2006.01]	37/02 37/04 37/06	Preparation of polysaccharides not provided for in groups C08B 1/00-C08B 35/00; Derivatives thereof (cellulose D21) [4, 2006.01] Dextran; Derivatives thereof [2, 2006.01] Alginic acid; Derivatives thereof [2, 2006.01] Pectin; Derivatives thereof [2, 2006.01]
17/02	Apparatus for esterification or etherification of cellulose [1, 2006.01] • for making organic esters of cellulose [1, 2006.01]	37/02 37/04	Preparation of polysaccharides not provided for in groups C08B 1/00-C08B 35/00; Derivatives thereof (cellulose D21) [4, 2006.01] Dextran; Derivatives thereof [2, 2006.01] Alginic acid; Derivatives thereof [2, 2006.01] Pectin; Derivatives thereof [2, 2006.01] Chitin; Chondroitin sulfate; Hyaluronic acid;
17/02 17/04 17/06	Apparatus for esterification or etherification of cellulose [1, 2006.01] • for making organic esters of cellulose [1, 2006.01] • for making cellulose nitrate [1, 2006.01] • for making cellulose ethers [1, 2006.01]	37/02 37/04 37/06 37/08	Preparation of polysaccharides not provided for in groups C08B 1/00-C08B 35/00; Derivatives thereof (cellulose D21) [4, 2006.01] Dextran; Derivatives thereof [2, 2006.01] Alginic acid; Derivatives thereof [2, 2006.01] Pectin; Derivatives thereof [2, 2006.01] Chitin; Chondroitin sulfate; Hyaluronic acid; Derivatives thereof [2, 2006.01]
17/02 17/04	Apparatus for esterification or etherification of cellulose [1, 2006.01] • for making organic esters of cellulose [1, 2006.01] • for making cellulose nitrate [1, 2006.01] • for making cellulose ethers [1, 2006.01] Preparation of starch, degraded or non-chemically	37/02 37/04 37/06 37/08	Preparation of polysaccharides not provided for in groups C08B 1/00-C08B 35/00; Derivatives thereof (cellulose D21) [4, 2006.01] Dextran; Derivatives thereof [2, 2006.01] Alginic acid; Derivatives thereof [2, 2006.01] Pectin; Derivatives thereof [2, 2006.01] Chitin; Chondroitin sulfate; Hyaluronic acid; Derivatives thereof [2, 2006.01] Heparin; Derivatives thereof [2, 2006.01]
17/02 17/04 17/06 30/00	Apparatus for esterification or etherification of cellulose [1, 2006.01] • for making organic esters of cellulose [1, 2006.01] • for making cellulose nitrate [1, 2006.01] • for making cellulose ethers [1, 2006.01] Preparation of starch, degraded or non-chemically modified starch, amylose, or amylopectin [4, 2006.01]	37/02 37/04 37/06 37/08 37/10 37/12	Preparation of polysaccharides not provided for in groups C08B 1/00-C08B 35/00; Derivatives thereof (cellulose D21) [4, 2006.01] Dextran; Derivatives thereof [2, 2006.01] Alginic acid; Derivatives thereof [2, 2006.01] Pectin; Derivatives thereof [2, 2006.01] Chitin; Chondroitin sulfate; Hyaluronic acid; Derivatives thereof [2, 2006.01] Heparin; Derivatives thereof [2, 2006.01]
17/02 17/04 17/06	Apparatus for esterification or etherification of cellulose [1, 2006.01] • for making organic esters of cellulose [1, 2006.01] • for making cellulose nitrate [1, 2006.01] • for making cellulose ethers [1, 2006.01] Preparation of starch, degraded or non-chemically	37/02 37/04 37/06 37/08 37/10 37/12 37/14	Preparation of polysaccharides not provided for in groups C08B 1/00-C08B 35/00; Derivatives thereof (cellulose D21) [4, 2006.01] Dextran; Derivatives thereof [2, 2006.01] Alginic acid; Derivatives thereof [2, 2006.01] Pectin; Derivatives thereof [2, 2006.01] Chitin; Chondroitin sulfate; Hyaluronic acid; Derivatives thereof [2, 2006.01] Heparin; Derivatives thereof [2, 2006.01] Agar-agar; Derivatives thereof [2, 2006.01] Hemicellulose; Derivatives thereof [2, 2006.01]
17/02 17/04 17/06 30/00	Apparatus for esterification or etherification of cellulose [1, 2006.01] • for making organic esters of cellulose [1, 2006.01] • for making cellulose nitrate [1, 2006.01] • for making cellulose ethers [1, 2006.01] Preparation of starch, degraded or non-chemically modified starch, amylose, or amylopectin [4, 2006.01] • Preparatory treatment, e.g. crushing of raw	37/02 37/04 37/06 37/08 37/10 37/12	Preparation of polysaccharides not provided for in groups C08B 1/00-C08B 35/00; Derivatives thereof (cellulose D21) [4, 2006.01] Dextran; Derivatives thereof [2, 2006.01] Alginic acid; Derivatives thereof [2, 2006.01] Pectin; Derivatives thereof [2, 2006.01] Chitin; Chondroitin sulfate; Hyaluronic acid; Derivatives thereof [2, 2006.01] Heparin; Derivatives thereof [2, 2006.01]