

**CPC****COOPERATIVE PATENT CLASSIFICATION****C11B**

**PRODUCING ( [pressing, extraction](#) ), REFINING AND PRESERVING FATS, FATTY SUBSTANCES ( [e.g. lanolin](#) ), FATTY OILS AND WAXES, INCLUDING EXTRACTION FROM WASTE MATERIALS; ESSENTIAL OILS; PERFUMES ( [drying-oils C09F](#) )**

**NOTE**

In this subclass, boron and silicon are considered as metals

**C11B 1/00****Production of fats or fatty oils from raw materials**

- C11B 1/02 . Pretreatment
- C11B 1/025 .. { [by enzymes or microorganisms, living or dead](#) }
- C11B 1/04 .. of vegetable raw material {( [C11B 1/025 takes precedence](#) )}
- C11B 1/06 . by pressing
- C11B 1/08 .. by hot pressing
- C11B 1/10 . by extracting
- C11B 1/102 .. { [in counter-current; utilisation of an equipment wherein the material is conveyed by a screw](#) }
- C11B 1/104 .. using super critical gases or vapours
- C11B 1/106 .. { [using ultra-sounds](#) }
- C11B 1/108 .. { [after-treatment, e.g. of miscellae](#) }
- C11B 1/12 . by melting out
- C11B 1/14 .. with hot water or aqueous solutions
- C11B 1/16 .. with steam

**C11B 3/00****Refining fats or fatty oils**

- C11B 3/001 . { [by a combination of two or more of the means hereafter](#) }
- C11B 3/003 . { [by enzymes or microorganisms, living or dead](#) }
- C11B 3/005 . { [by wave energy or electric current, e.g. electrodialysis](#) }
- C11B 3/006 . { [by extraction](#) }
- C11B 3/008 . { [by filtration, e.g. including ultra filtration, dialysis \( \[C11B 3/005 takes precedence\]\(#\) \)](#) }
- C11B 3/02 . by chemical reaction {( [C11B 3/003 takes precedence](#) )}
- C11B 3/04 .. with acids
- C11B 3/06 .. with bases

C11B 3/08 . . with oxidising agents

C11B 3/10 . by adsorption

**NOTE**

When classifying in this group, classification is also made in group [B01D 15/08](#) insofar as subject matter of general interest relating to chromatography is concerned.

C11B 3/12 . by distillation

C11B 3/14 . . with the use of indifferent gases or vapours, e.g. steam

C11B 3/16 . by mechanical means

**C11B 5/00 Preserving by using additives, e.g. anti-oxidants**

**NOTE**

In groups [C11B 5/0007](#) to [C11B 5/0092](#) , in the absence of an indication to the contrary, a composition is classified in the last appropriate place

C11B 5/0007 . { Organic substances }

C11B 5/0014 . { Hydrocarbons }

C11B 5/0021 . { containing oxygen }

C11B 5/0028 . . { Carboxylic acids; Their derivatives }

C11B 5/0035 . . { Phenols; Their halogenated and aminated derivatives, their salts, their esters with carboxylic acids }

C11B 5/0042 . { containing nitrogen }

C11B 5/005 . . { Amines or imines ( [C11B 5/0035](#) takes precedence ) }

C11B 5/0057 . . { Amides or imides }

C11B 5/0064 . . { Heterocyclic compounds containing nitrogen in the ring }

C11B 5/0071 . { containing halogens, sulfur or phosphorus ( [halogenated phenols C11B 5/0035](#) ) }

C11B 5/0078 . { Metal hydrides or organo-metallic compounds, i.e. organic compounds containing a metal-to-carbon link }

C11B 5/0085 . { Substances of natural origin of unknown constitution, f.i. plant extracts }

C11B 5/0092 . { Mixtures }

**C11B 7/00 Separation of mixtures of fats or fatty oils into their constituents, e.g. saturated oils from unsaturated oils**

**NOTE**

In groups [C11B 7/0008](#) to [C11B 7/0091](#) , in the absence of an indication to the contrary an invention is classified in the last appropriate place

- C11B 7/0008 . { by differences of solubilities, e.g. by extraction, by separation from a solution by means of anti-solvents ( [addition of a minor amount of solvent intended to lower the melting point C11B 7/0083](#) , [C11B 7/0091](#) ) }
- C11B 7/0016 . . { in hydrocarbons or halogenated hydrocarbons ( [in pressure liquefied gases C11B 7/005](#) ) }
- C11B 7/0025 . . { in solvents containing oxygen in their molecule }
- C11B 7/0033 . . { in solvents containing other heteroatoms in their molecule }
- C11B 7/0041 . . { in mixtures of individualized solvents ( [water is not taken into account](#) ) }
- C11B 7/005 . . { in solvents used at superatmospheric pressures }
- C11B 7/0058 . . { in solvents or mixtures of solvents of different natures or compositions used in succession }
- C11B 7/0066 . . { between two or more non-miscible solvent phases }
- C11B 7/0075 . { by differences of melting or solidifying points }
- C11B 7/0083 . { with addition of auxiliary substances, e.g. crystallisation promoters, filter aids, melting point depressors, ( [if a characterised solution is formed C11B 7/0008](#) ) }
- C11B 7/0091 . { non-solvents, e.g. water wherein the fat or oil is dispersed account a more washing out of fractions is not taken into }
  
- C11B 9/00** **Essential oils; Perfumes** ( [synthesis of chemical substances C07](#) )
- C11B 9/0003 . { Compounds of unspecified constitution defined by the chemical reaction for their preparation }
- C11B 9/0007 . { Aliphatic compounds }
- C11B 9/0011 . . { containing S }
- C11B 9/0015 . . { containing oxygen as the only heteroatom }
- C11B 9/0019 . . . { carbocyclic acids; Salts or esters thereof }
- C11B 9/0023 . . { containing nitrogen as the only heteroatom }
- C11B 9/0026 . { compounds containing an alicyclic ring not condensed with another ring }
- C11B 9/003 . . { the ring containing less than six carbon atoms }
- C11B 9/0034 . . { the ring containing six carbon atoms }
- C11B 9/0038 . . { the ring containing more than six carbon atoms }
- C11B 9/0042 . { compounds containing condensed hydrocarbon rings }
- C11B 9/0046 . . { containing only two condensed rings }
- C11B 9/0049 . . . { the condensed rings sharing two common C atoms }
- C11B 9/0053 . . . . { both rings being six-membered }

- C11B 9/0057 . . . { Spiro compounds }
- C11B 9/0061 . { compounds containing a six-membered aromatic ring not condensed with another ring }
- C11B 9/0065 . . { Nitriles }
- C11B 9/0069 . { Heterocyclic compounds }
- C11B 9/0073 . . { containing only O or S as heteroatoms }
- C11B 9/0076 . . . { the hetero rings containing less than six atoms }
- C11B 9/008 . . . { the hetero rings containing six atoms }
- C11B 9/0084 . . . { the hetero rings containing more than six atoms }
- C11B 9/0088 . . . { Spiro compounds }
- C11B 9/0092 . . { containing only N as heteroatom }
- C11B 9/0096 . . { containing at least two different heteroatoms, at least one being nitrogen }
  
- C11B 9/02 . Recovery or refining of essential oils from raw materials
- C11B 9/022 . . { Refining }
- C11B 9/025 . . { Recovery by solvent extraction }
- C11B 9/027 . . { Recovery of volatiles by distillation or stripping }
  
- C11B 11/00** **Recovery or refining of other fatty substances, e.g. lanolin, waxes ( [synthetic waxes C07](#) , [C08](#) ; mineral waxes [C10G](#) )**
- C11B 11/005 . { Lanolin; Woolfat }
  
- C11B 13/00** **Recovery of fats, fatty oils, or fatty acids from waste materials ( [mechanical separation from waste water C02F](#) , [E03F](#) )**
- C11B 13/005 . { of residues of the fabrication of wood-cellulose ( in particular tall-oil ) }
- C11B 13/02 . from soap stock
- C11B 13/04 . from spent adsorption materials
  
- C11B 15/00** **Solidifying fatty oils, fats, or waxes by physical processes**