

**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}

<b>C11B 11/00</b>	<b>Recovery or refining of other fatty substances, e.g. lanolin, waxes( <a href="#">synthetic waxes C07</a> , <a href="#">C08</a> ; mineral waxes <a href="#">C10G</a> )</b>
C11B 11/005	. { <a href="#">Lanolin</a> ; <a href="#">Woolfat</a> }
<b>C11B 13/00</b>	<b>Recovery of fats, fatty oils, or fatty acids from waste materials( <a href="#">mechanical separation from waste water C02F</a> , <a href="#">E03F</a> )</b>
C11B 13/005	. { <a href="#">of residues of the fabrication of wood-cellulose(in particular tall-oil)</a> }
C11B 13/02	. from soap stock
C11B 13/04	. from spent adsorption materials
<b>C11B 15/00</b>	<b>Solidifying fatty oils, fats, or waxes by physical processes</b>