

**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**

C11B 3/10  
(continued)

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</b> (synthetic waxes <a href="#">C07</a> , <a href="#">C08</a> ; mineral waxes <a href="#">C10G</a> )
<a href="#">C11B 11/005</a>	<ul style="list-style-type: none"><li>• {Lanolin; Woolfat}</li></ul>
<b>C11B 13/00</b>	<b>Recovery of fats, fatty oils, or fatty acids from waste materials</b> (mechanical separation from waste water <a href="#">C02F</a> , <a href="#">E03F</a> )
<a href="#">C11B 13/005</a>	<ul style="list-style-type: none"><li>• {of residues of the fabrication of wood-cellulose (in particular tall-oil)}</li></ul>
<a href="#">C11B 13/02</a>	<ul style="list-style-type: none"><li>• from soap stock</li></ul>
<a href="#">C11B 13/04</a>	<ul style="list-style-type: none"><li>• from spent adsorption materials</li></ul>
<b>C11B 15/00</b>	<b>Solidifying fatty oils, fats, or waxes by physical processes</b>