

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**