Title (en)

LUBRICANT FOR METAL FORMATION

Publication

EP 0251192 A3 19880504 (DE)

Application

EP 87109098 A 19870624

Priority

JP 15117886 A 19860627

Abstract (en)

[origin: EP0251192A2] The aqueous lubricant for metal cold-forming contains 10 to 35% by weight of a thermosetting acrylate-based resin having a glass transition point of -10 to +25 DEG C, 3 to 15% by weight of wax and 0.5 to 5% by weight of a surfactant, the thermosetting resin/wax weight ratio being adjusted to 2-12. Particularly suitable resins are of the general formula -(Ra-Rb-Rc-Rd)n-, Ra, Rb, Rc and Rd being different monomers and "n" being a degree of polymerisation from 1,000 to 50,000. The wax should have a melting point above 45 DEG C. In the process for faciliting the cold-forming of metallic workpieces, the lubricant is applied to the metal surface, dried on in air to form a coating weight from 0.5 to 30 g/m<2>, heated to a temperature of 80 to 120 DEG C (object temperature) and finally cured.

IPC 1-7

C10M 173/02

IPC 8 full level

C10M 173/02 (2006.01); C10N 40/24 (2006.01); C10N 50/02 (2006.01)

CPC (source: EP)

C10M 143/02 (2013.01); **C10M 143/10** (2013.01); **C10M 145/14** (2013.01); **C10M 145/16** (2013.01); **C10M 149/06** (2013.01); **C10M 149/08** (2013.01); **C10M 153/04** (2013.01); **C10M 159/06** (2013.01); **C10M 173/02** (2013.01); C10M 2201/00 (2013.01); C10M 2201/02 (2013.01); C10M 2201/041 (2013.01); C10M 2201/042 (2013.01); C10M 2201/061 (2013.01); C10M 2201/062 (2013.01); C10M 2201/066 (2013.01); C10M 2201/105 (2013.01); C10M 2201/16 (2013.01); C10M 2201/18 (2013.01); C10M 2205/022 (2013.01); C10M 2205/04 (2013.01); C10M 2205/14 (2013.01); C10M 2205/16 (2013.01); C10M 2205/17 (2013.01); C10M 2207/021 (2013.01); C10M 2207/125 (2013.01); C10M 2207/129 (2013.01); C10M 2207/281 (2013.01); C10M 2207/282 (2013.01); C10M 2207/283 (2013.01); C10M 2207/286 (2013.01); C10M 2207/40 (2013.01); C10M 2207/404 (2013.01); C10M 2209/084 (2013.01); C10M 2209/086 (2013.01); C10M 2209/104 (2013.01); C10M 2211/06 (2013.01); C10M 2213/02 (2013.01); C10M 2213/062 (2013.01); C10M 2215/04 (2013.01); C10M 2215/08 (2013.01); C10M 2215/082 (2013.01); C10M 2215/26 (2013.01); C10M 2215/28 (2013.01); C10M 2217/024 (2013.01); C10M 2217/026 (2013.01); C10M 2217/06 (2013.01); C10M 2219/044 (2013.01); C10M 2225/00 (2013.01); C10M 2225/02 (2013.01); C10M 2225/04 (2013.01); C10M 2225/041 (2013.01); C10N 2010/04 (2013.01); C10N 2050/01 (2020.05); C10N 2050/02 (2013.01)

Citation (search report)

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Designated contracting state (EPC)

AT BE CH DE FR IT LI NL SE

DOCDB simple family (publication)

EP 0251192 A2 19880107; **EP 0251192 A3 19880504**; **EP 0251192 B1 19920506**; AT E75770 T1 19920515; DE 3720841 A1 19880114; DE 3778764 D1 19920611; JP H0437878 B2 19920622; JP S638489 A 19880114

DOCDB simple family (application)

EP 87109098 A 19870624; AT 87109098 T 19870624; DE 3720841 A 19870624; DE 3778764 T 19870624; JP 15117886 A 19860627