

Title (en)

AQUEOUS LUBRICANT AND SURFACE CONDITIONER FOR FORMED METAL SURFACES

Title (de)

WÄSSRIGES SCHMIERMITTEL UND OBERFLÄCHEBEHANDLUNGSMITTEL FÜR GEBILDETE METALLOBERFLÄCHEN

Title (fr)

AGENT DE CONDITIONNEMENT DE SURFACE/LUBRIFIANT AQUEUX POUR DES SURFACES METALLIQUES FORMEES

Publication

**EP 0708812 A4 19980128 (EN)**

Application

**EP 94907136 A 19940104**

Priority

- US 9400024 W 19940104
- US 9072493 A 19930713
- US 10979193 A 19930923
- US 14380393 A 19931027

Abstract (en)

[origin: WO9502660A1] A lubricant and surface conditioner for formed metal surfaces, particularly aluminum and tin beverage containers, reduces the coefficient of static friction of said metal surfaces and enables drying said metal surfaces at a lower temperature. The conditioner includes (i) a water-soluble organic material selected from amine oxides and quaternary ammonium salts, ethoxylated castor oil derivatives, and imidazoline moiety-containing phosphonates and preferably also includes (ii) at least one of fluozirconate, fluohafnate, or fluotitanate ion, and (iii) phosphate and/or nitrate ions. Good resistance to damaging the friction reducing effect by overheating and to staining of the domes of treated containers during pasteurization can be achieved.

IPC 1-7

**C10M 173/02**; B21B 45/02

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

- [Y] US 4521321 A 19850604 - ANDERSON PATRICIA A [CA], et al
- [Y] GB 875972 A 19610830 - COLLARDIN GMBH GERHARD
- [Y] US 3661784 A 19720509 - BELLOS THOMAS J
- See references of WO 9502660A1

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**WO 9502660 A1 19950126**; AU 6082094 A 19950213; AU 683047 B2 19971030; BR 9407122 A 19960910; CA 2166300 A1 19950126; CA 2166300 C 20031021; CN 1044716 C 19990818; CN 1066483 C 20010530; CN 1127010 A 19960717; CN 1203265 A 19981230; EP 0708812 A1 19960501; EP 0708812 A4 19980128; JP H09500408 A 19970114; PL 180724 B1 20010330; PL 312564 A1 19960429; SG 79190 A1 20010320

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