

Title (en)

WATERBORNE LUBRICANT FOR THE COLD PLASTIC WORKING OF METALS

Title (de)

SCHMIERMITTEL AUF WASSERBASIS FÜR DIE PLASTISCHE KALTBEARBEITUNG VON METALLEN

Title (fr)

LUBRIFIANT A BASE AQUEUSE UTILISE POUR LE FA ONNAGE PLASTIQUE A FROID DE METAUX

Publication

EP 0958339 A4 20000920 (EN)

Application

EP 97938533 A 19970829

Priority

- JP 24709396 A 19960829
- US 9714824 W 19970829

Abstract (en)

[origin: WO9808922A1] A waterborne lubricant for the cold plastic working of metals that contains alkali metal salts of dimer(s) and/or trimer(s) of unsaturated fatty acids with from 10 to 24 carbon atoms per molecule has a lubrication performance at least as good as that of prior lubricants, even at generally lower lubricating film weights, has a long bath life, and generates little dust during cold plastic working operations. Even as little as 5 % of these salts of dimer(s) and/or trimer(s) of unsaturated fatty acids, when mixed with conventional alkali metal salts of saturated fatty acids with from 10-24 carbon atoms per molecule, can provide these benefits.

IPC 1-7

C10M 173/02

IPC 8 full level

B21C 9/00 (2006.01); **C10M 105/24** (2006.01); **C10M 105/26** (2006.01); **C10M 173/02** (2006.01); **C10N 10/02** (2006.01); **C10N 30/00** (2006.01); **C10N 40/24** (2006.01); **C10N 80/00** (2006.01)

CPC (source: EP)

C10M 105/26 (2013.01); **C10M 129/40** (2013.01); **C10M 129/42** (2013.01); **C10M 173/02** (2013.01); **C23C 22/83** (2013.01); **C10M 2201/02** (2013.01); **C10M 2201/08** (2013.01); **C10M 2201/081** (2013.01); **C10M 2201/082** (2013.01); **C10M 2201/083** (2013.01); **C10M 2201/084** (2013.01); **C10M 2207/103** (2013.01); **C10M 2207/1203** (2013.01); **C10M 2207/1213** (2013.01); **C10M 2207/123** (2013.01); **C10M 2207/1233** (2013.01); **C10M 2207/125** (2013.01); **C10M 2207/1253** (2013.01); **C10M 2207/126** (2013.01); **C10M 2207/127** (2013.01); **C10M 2207/1273** (2013.01); **C10M 2207/129** (2013.01); **C10M 2207/1293** (2013.01); **C10M 2207/163** (2013.01); **C10M 2207/183** (2013.01); **C10M 2207/203** (2013.01); **C10M 2207/22** (2013.01); **C10M 2207/223** (2013.01); **C10M 2207/243** (2013.01); **C10M 2207/2606** (2013.01); **C10M 2207/2623** (2013.01); **C10M 2215/042** (2013.01); **C10N 2010/02** (2013.01); **C10N 2040/24** (2013.01); **C10N 2040/241** (2020.05); **C10N 2040/242** (2020.05); **C10N 2040/243** (2020.05); **C10N 2040/244** (2020.05); **C10N 2040/245** (2020.05); **C10N 2040/246** (2020.05); **C10N 2040/247** (2020.05); **C10N 2050/01** (2020.05)

Citation (search report)

- [X] DE 4229848 A1 19940310 - HENKEL KGAA [DE]
- [X] EP 0591771 A1 19940413 - SVILUPPO MATERIALI SPA [IT], et al
- [A] US 4359393 A 19821116 - STURWOLD ROBERT J
- [A] DE 1594502 A1 19700506 - METALLGESELLSCHAFT AG
- [A] GB 2003923 A 19790321 - FOSECO INT
- See references of WO 9808922A1

Designated contracting state (EPC)

DE ES FR IT

DOCDB simple family (publication)

WO 9808922 A1 19980305; CA 2264787 A1 19980305; EP 0958339 A1 19991124; EP 0958339 A4 20000920; JP 3935230 B2 20070620; JP H1067997 A 19980310

DOCDB simple family (application)

US 9714824 W 19970829; CA 2264787 A 19970829; EP 97938533 A 19970829; JP 24709396 A 19960829