

Title (en)

Cold forming lubricants and process.

Title (de)

Schmiermittel für die Kaltverformung und Verfahren zu deren Verwendung.

Title (fr)

Lubrifiants pour usinage à froid et procédé d'application.

Publication

EP 0073306 A1 19830309 (EN)

Application

EP 82105093 A 19820611

Priority

- US 29425981 A 19810819
- US 33721982 A 19820106

Abstract (en)

A cold forming lubricant and a process for cold forming ferrous and non-ferrous metals such as steel and aluminum utilizes certain sulfur, chlorine and phosphorous compounds, or mixtures thereof, for example sufurized or chlorinated oleic acids and phosphate esters of polyoxyethylene based non-ionic surfactants, in combination with a dry film lubricant.

IPC 1-7

C10M 7/10

IPC 8 full level

C10M 111/02 (2006.01)

CPC (source: EP)

C10M 105/24 (2013.01); **C10M 105/54** (2013.01); **C10M 105/72** (2013.01); **C10M 105/74** (2013.01); **C10M 111/02** (2013.01); **C10M 173/02** (2013.01); **C10M 2201/085** (2013.01); **C10M 2207/1203** (2013.01); **C10M 2207/1213** (2013.01); **C10M 2207/125** (2013.01); **C10M 2207/1253** (2013.01); **C10M 2207/129** (2013.01); **C10M 2207/163** (2013.01); **C10M 2207/183** (2013.01); **C10M 2207/203** (2013.01); **C10M 2207/243** (2013.01); **C10M 2211/0406** (2013.01); **C10M 2211/0425** (2013.01); **C10M 2211/044** (2013.01); **C10M 2211/0445** (2013.01); **C10M 2211/06** (2013.01); **C10M 2219/003** (2013.01); **C10M 2219/02** (2013.01); **C10M 2219/021** (2013.01); **C10M 2219/0406** (2013.01); **C10M 2219/0463** (2013.01); **C10M 2219/061** (2013.01); **C10M 2219/081** (2013.01); **C10M 2219/101** (2013.01); **C10M 2223/003** (2013.01); **C10M 2223/023** (2013.01); **C10M 2223/0405** (2013.01); **C10M 2223/0495** (2013.01); **C10M 2223/0603** (2013.01); **C10M 2223/083** (2013.01); **C10M 2223/103** (2013.01); **C10M 2225/00** (2013.01); **C10M 2225/02** (2013.01); **C10N 2010/00** (2013.01); **C10N 2010/02** (2013.01); **C10N 2010/04** (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 2050/10** (2013.01); **C10N 2070/00** (2013.01)

Citation (search report)

- [X] GB 1349475 A 19740403 - PYRENE CHEMICAL SERVICES LTD
- [X] FR 1498978 A 19671020 - PARKER STE CONTINENTALE
- [Y] US 3983044 A 19760928 - FELTON JR GEORGE F
- [Y] US 3375193 A 19680326 - RUZZA SERGIO A, et al

Cited by

US6107260A; US9624872B2; US9453465B2; US8950366B2; US9777646B2; WO9712951A1; US9909514B2

Designated contracting state (EPC)

BE DE FR GB NL SE

DOCDB simple family (publication)

EP 0073306 A1 19830309; **EP 0073306 B1 19860409**; AU 547051 B2 19851003; AU 8540682 A 19830224; CA 1182101 A 19850205; DE 3270379 D1 19860515; DK 370082 A 19830220

DOCDB simple family (application)

EP 82105093 A 19820611; AU 8540682 A 19820628; CA 406807 A 19820707; DE 3270379 T 19820611; DK 370082 A 19820818