

Title (en)

REACTIVE LUBRICANT AND PROCESS FOR THE PREPARATION OF METALS FOR COLD FORMING

Publication

EP 0025236 B1 19830302 (DE)

Application

EP 80200736 A 19800802

Priority

US 6468279 A 19790807

Abstract (en)

[origin: EP0025236A1] 1. Aqueous acidic reactive lubricant for the treatment of metal surfaces prior to cold forming with a content of phosphate ions and emulsifiable organic lubricant constituent, characterized in that it contains a) 0,2 to 15% by weight phosphate ions, b) as organic lubricant constituent 0,3 to 16% by weight of an organic carboxylic acid or an alcohol having 8 to 40 carbon atoms including esters, mono- or polyamides, mono- or polyalkyl ammonium salts having 1 to 18 carbon atoms in the alkyl chain or mixtures thereof, c) as emulsifying agent 0,1 to 10% by weight of an oxazoline wax and/or of a compound of the formula $R-(NH-CH_2-CH_2-CH_2)_nNH_2$, wherein n is 1 to 5 and R contains a number of carbon atoms corresponding to tallow fatty acid (tallow alkyl), d) as chelating agent 0.25 to 3% by weight of ethylenediaminetetraacetic acid, the alkali metal and/or ammonium salts respectively.

IPC 1-7

C10M 3/00; C23F 7/08; C23F 11/14

IPC 8 full level

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C-Set (source: EP)

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EP 0025236 A1 19810318; EP 0025236 B1 19830302; AR 225452 A1 19820331; AT E2683 T1 19860315; AU 535470 B2 19840322; AU 6068180 A 19820211; BR 8004943 A 19810217; CA 1149371 A 19830705; DE 3062209 D1 19830407; ES 494476 A0 19810716; ES 8106021 A1 19810716; IT 1132535 B 19860702; IT 8024022 A0 19800806; JP S5632595 A 19810402; JP S616116 B2 19860224; KR 830003597 A 19830621; KR 840000654 B1 19840509; PH 15744 A 19830318; PT 71659 A 19800901; ZA 804457 B 19820331

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