

Title (en)

Lubrication method for cold plastic working of metallic materials.

Title (de)

Schmierverfahren zur plastischen Bearbeitung metallischer Materialien.

Title (fr)

Méthode de lubrification pour traitement de matériaux métalliques lors du travail plastique à froid.

Publication

EP 0412788 B1 19940112 (EN)

Application

EP 90308707 A 19900808

Priority

JP 20458589 A 19890809

Abstract (en)

[origin: EP0412788A1] An aqueous lubrication treatment liquid for a cold plastic working of a metallic material comprises 4 to 160 g/l of a metallic soap, 50 to 400 g/l of a solid lubricant, 0.5 to 40 g/l of a dispersing surfactant for the metallic soap and the solid lubricant, and optionally a colloidal titanium compound in an amount of 10 ppm or more in terms of titanium and 5 to 150 g/l of a binder.

IPC 1-7

C10M 173/02

IPC 8 full level

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Citation (examination)

- US 4303537 A 19811201 - LAEPPLE WERNER, et al
- US 4148970 A 19790410 - MCINTOSH GEORGE A, et al

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