

Title (en)

AQUEOUS ONE STEP TYPE LUBRICATING AGENT FOR EFFICIENT COLD FORGING

Title (de)

WÄSSRIGER SCHMIERSTOFF VOM EINSCHRITT-TYP ZUM EFFIZIENTEN KALTSCHMIEDEN

Title (fr)

AGENT LUBRIFIANT AQUEUX DE TYPE A UN STADE POUR FORGEAGE A FROID EFFICACE

Publication

EP 1316602 A1 20030604 (EN)

Application

EP 01961303 A 20010903

Priority

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Abstract (en)

A new aqueous lubricant of one process type used for high efficient cold forging of metallic materials is disclosed. The aqueous lubricant produces less industrial waste than conventional process, requires simple processing steps and provides improved lubricative performance. The aqueous lubricant of the invention is comprising (A) a water soluble inorganic salt, (B) wax and (C) a metal salt of a fatty acid, those are dissolved or dispersed in water, and the ratio of (B) / (A) is 0.60 SIMILAR 0.70 and the ratio of (C) / (A) is 0.1 SIMILAR 0.3. The water soluble inorganic salt may be a sulfates, silicates, borates, molybdates and tungstates. The wax may be a synthetic wax of which melting point is in a range of 70 SIMILAR 150 DEG C. The metal salt of a fatty acid may be a product prepared by reacting of C12 SIMILAR C26 saturated fatty acids with metal selected from zinc, calcium, barium, aluminum, magnesium and lithium.

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