

Title (en)

METHOD FOR COLD ROLLING METALS USING AN AQUEOUS LUBRICANT COMPRISING AT LEAST A CARBOXYLIC ACID, A PHOSPHATE ESTER AND A WAX

Title (de)

VERFAHREN ZUM KALTWALZEN VON METALL UNTER VERWENDUNG VON EINEM WÄSSRIGEN SCHMIERMITTEL DAS MINDESTENS EINE KARBONSÄURE, EIN PHOPHATESTER UND EINE WACHS ENHÄLT

Title (fr)

PROCEDE DE LAMINAGE A FROID DE METAUX UTILISANT UN LUBRIFIANT AQUEUX COMPRENANT AU MOINS UN ACIDE CARBOXYLIQUE, UN ESTER PHOSPHATE ET UNE CIRE

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Application

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Abstract (en)

[origin: FR2820431A1] The invention concerns a method for cold rolling metals using an aqueous lubricant comprising: (1) at least a mixture based on at least an acid selected among saturated or unsaturated mono- or poly-carboxylic acids, comprising 5 to 40 carbon atoms; at least an acid phosphate ester of formula $(RO)xP(=O)(OH)x'$, wherein: R is a hydrocarbon radical, optionally polyalkoxylated; x and x' being equal to 3; the carboxylic acid and/or the acid phosphate ester being optionally neutralised by an organic or mineral base; and (2) at least a natural or synthetic wax exhibiting a melting point not less than 50 DEG C and having an average particle size ranging between 0.5 and 10 μ m. The use of said lubricant enables to increase the productivity of the method by at least 15 % relative to a method using a conventional lubricant.

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