

Title (en)

ONE-STEP PRETREATMENT METHOD OF METALLIC SUBSTRATES FOR METAL COLD FORMING

Title (de)

EINSTUFIGES VORBEHANDLUNGSVERFAHREN FÜR METALLISCHE SUBSTRATE ZUR KALTUMFORMUNG VON METALLEN

Title (fr)

PROCÉDÉ DE PRÉTRAITEMENT EN UNE ÉTAPE DE SUBSTRATS MÉTALLIQUES POUR FORMAGE À FROID DE MÉTAL

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Application

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Abstract (en)

[origin: WO2021170707A1] The present invention relates to method for pretreatment of a metallic substrate for a subsequent metal cold forming process, said method comprising at least steps (1) and (2) and optionally step (3), namely providing at least one substrate having at least one surface at least partially made of at least one metal (1), contacting the at least one surface of the substrate provided in step (1) with an aqueous lubricant composition (A) having a pH value below 2.0 and comprising besides water oxalate anions (a1), thiosulfate anions (a2), chloride anions (a3), at least one film-forming polymer (a4), which is a homopolymer and/or copolymer being prepared by polymerization of at least one ethylenically unsaturated monomer, at least one wax (a5), and fluoride anions and/or bifluoride anions (a6), and optionally drying the coating film obtained after having performed step (2), a pretreated metallic substrate obtainable by the aforementioned inventive method, a method of cold forming of a metallic substrate including a step of subjecting the inventive pretreated metallic substrate to a cold forming process, an aqueous lubricant composition (A) as defined above and a master batch for preparing the aqueous composition (A).

IPC 8 full level

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