

Title (en)
LUBRICANT AND METHOD FOR COLD DEFORMING METALLIC MATERIALS

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Abstract (en)
[origin: EP0303734A2] The invention relates to a lubricant and to a method for cold-forming metallic materials, using such a lubricant. The lubricant contains fatty acids or naphthenic acids and/or salts thereof as the lubricating agent and, if appropriate, inorganic and/or organic compounds as additives which serve as dispersants, adhesion promoters, film-formers, extreme-pressure additives or, under dynamic conditions, as viscosity stabilisers. According to the invention, salts of oligo- alpha -methylstyrene-dicarboxylic acids in a concentration of 0.01 to 30 % by mass as an extreme-pressure additive and 0 to 90 % by mass of polyphosphate are additionally present. In the cold-forming process according to the invention, a lubricant is used, which contains up to 50 % by mass of lubricant and, as additives, 0.005 to 15 % by mass of salts of oligo- alpha -methylstyrene-dicarboxylic acids and 0 to 45 % by mass of polyphosphate in a liquid, the forming process being carried out either directly within a bath prepared with this lubricant or with using a lubricant layer which has been applied to the forming material and preferably has been dried.

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