

Title (en)

METHOD FOR THE MODIFICATION OF TOP LAYERS OF WORKING SURFACES OF MACHINE PARTS

Title (de)

VERFAHREN ZUR MODIFIKATION DER OBEREN SCHICHT VON ARBEITSOBERFLÄCHEN VON MASCHINENTEILEN

Title (fr)

PROCÉDÉ POUR LA MODIFICATION DE COUCHES SUPÉRIEURES DE SURFACES DE TRAITEMENT DE PIÈCES DE MACHINES

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Application

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Abstract (en)

[origin: WO2011081541A1] The subject of the invention is a method for modification of top layers of working surfaces of machine parts, which is used for the treatment of top layers of working surfaces of machine parts, and especially for placement of coatings of micro- and nanometric solid greases in the unevenness of the surfaces of extrusion punches and on sliding guides of machine tools. Characterized in that the treated surface (5), in the zone of the ram, which is a hammer (2) with a ball-shaped working area, connected with a piezoelectric actuator (T), which is driven by a high frequency voltage generator with a frequency changeable within the range of 10 Hz to 1000 Hz and a relative movement of the hammer (2) in relation to the treated material (3) along the acting line within the range of 0.05 to 5.0 mm, is covered with a layer of foreign material (4), which becomes connected by adhesion with the top layer (5) of the modified surface under the pressure exerted by the hammer (2).

IPC 8 full level

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