

Title (en)

METHOD OF MAKING HOLES WITH HIGH-QUALITY SURFACE AND DEVICE FOR CARRYING OUT THE METHOD

Publication

**EP 0183031 B1 19910724 (DE)**

Application

**EP 85113073 A 19851015**

Priority

DE 3443106 A 19841127

Abstract (en)

[origin: US4683680A] A method and apparatus for producing, in workpieces, bores having a high surface quality, and especially for producing cylinder bores in engine cylinder blocks. At least one fine surface machining is carried out with a rotating honing tool that executes a contrarotating stroke movement in the direction of the axis of a bore. The honing tool has honing stones that can be pressed radially against the wall of the bore via a feed system. The method and apparatus preclude damaging effects upon the surface quality of a bore as a result of the movement reversal of the honing tool. This is accomplished by reducing the force, with which the honing stones are pressed against the bore wall, during the reversal of the direction of the stroke movement of the honing tool. In particular, the pressure in the cylinder space of the piston/cylinder arrangement of the apparatus is reduced during reversals of the direction of the stroke movement of the honing tool.

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