

Title (en)  
PERCUSSION DEVICE FOR A HAND MACHINE TOOL

Title (de)  
SCHLAGWERK FÜR EINE HANDWERKZEUGMASCHINE

Title (fr)  
OUTIL DE PERCUSSION POUR UNE MACHINE-OUTIL A MAIN

Publication  
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Application  
**EP 04762744 A 20040903**

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Abstract (en)  
[origin: WO2005044521A1] The invention relates to a percussion device for a hand machine tool, in particular, a hammer drill, a paving breaker or an impact driller, comprising a drive piston (11), arranged for axial displacement in a guide tube, driven by motor in a reciprocating back and forth axial motion, by means of a gear (17) and a striker, acting on a tool, housed such as to be displaced axially in the guide tube and defining a compression chamber with an enclosed air cushion, along with the drive piston (11). According to the invention, a free configuration of the time course for the reciprocating motion of the drive piston (11), for the purposes of optimisation, for example, reduction of the peak pressure in the compression chamber, may be achieved, whereby the gear (17) comprises two engaging non-circular gearwheels (18, 19), the rotation axes (20, 21) of which are arranged at a fixed separation (a) from each other. The one driving non-circular gearwheel (18) is driven by motor and a connecting rod (23), connected to the drive piston (11), is connected, eccentrically to the rotation axis (21) of the non-circular gearwheel (19) as driven by the non-circular gearwheel (18).

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