

Title (en)

CLAMPING DEVICE FOR AXIALLY TIGHTENING A TOOL, ESPECIALLY A DISK

Publication

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Application

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Priority

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Abstract (en)

[origin: US4976071A] PCT No. PCT/DE87/00555 Sec. 371 Date May 26, 1989 Sec. 102(e) Date May 26, 1989 PCT Filed Nov. 28, 1987 PCT Pub. No. WO88/04596 PCT Pub. Date Jun. 30, 1988. A clamping device for portable grinding machines comprising a clamping nut which can be screwed on to the end-side threaded step (13) of the drive spindle (10) to clamp a grinding disk (15) in place. The clamping nut carries a clamping fork (22) which, with its fork leg ends (26, 27), is held so as to be movable about a diametral pivot axis (30) between a clamping position and a loosened position. The ends (26, 27) are provided with eccentric pressing surfaces (28, 29) which decrease with regard to the eccentricity during the pivoting from the clamping position to the release position and act axially on the grinding disk (15) via a pressing disk (36). For releasing, the clamping fork (22) is pivoted about the pivot axis, surface areas of decreasing eccentricity of the pressing surfaces (28, 29) becoming effective. In the process, the thread (14, 20) is relieved and the clamping nut loosened, which can be fully unscrewed manually by taking hold of the clamping fork (22). This enables a grinding disk to be changed quickly and safely without a tool (FIG. 1).

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