

Title (en)

Centerless grinding method for barshape work centerless grinder

Title (de)

Spitzenloses Schleifverfahren für stabförmiges Werkstück auf spitzenloser Schleifmaschine

Title (fr)

Procédé de rectification sans centre pour pièce en forme de barre sur rectifieuse sans centre

Publication

EP 1285726 B1 20060503 (EN)

Application

EP 02254844 A 20020710

Priority

JP 2001217101 A 20010717

Abstract (en)

[origin: EP1285726A2] A high efficiency centerless grinding method capable of grinding the tip portion of bar-shape work, assuring high coaxiality and cylindricity even in case of work having extremely small diameter. The base portion (Wa) of work (W) is pressed and supported by pressure roller (4) against regulating wheel (2), forcibly rotating the work (W), and the work (W) is fed by pusher (5) in the axial direction in order to grind the tip portion (Wb) of work (W) by grinding wheel (1). In this way, even when the tip portion (Wb) of work (W) is extremely small in diameter, the lengthwise grinding of the work (W) may be accurately controlled, and the tip portion (Wb) of work (W) is ground in accordance with the diameter of the base portion (Wa) . As a result, it is possible to grind the work (W) into a stepped work (W) in a short time with little deflection in axial center of the work (W) while assuring high coaxiality and cylindricity. <IMAGE>

IPC 8 full level

B24B 5/18 (2006.01); **B24B 5/22** (2006.01); **B24B 5/35** (2006.01); **B24B 53/00** (2006.01)

CPC (source: EP KR)

B24B 5/18 (2013.01 - KR); **B24B 5/22** (2013.01 - EP); **B24B 5/355** (2013.01 - EP); **B24B 53/00** (2013.01 - EP)

Cited by

CN103921182A; CN102240938A; US9486895B2; WO2014124907A1

Designated contracting state (EPC)

DE

DOCDB simple family (publication)

EP 1285726 A2 20030226; **EP 1285726 A3 20040331**; **EP 1285726 B1 20060503**; DE 60211078 D1 20060608; DE 60211078 T2 20061130; JP 2003025194 A 20030129; JP 3984804 B2 20071003; KR 100899136 B1 20090526; KR 20030007125 A 20030123

DOCDB simple family (application)

EP 02254844 A 20020710; DE 60211078 T 20020710; JP 2001217101 A 20010717; KR 20020040319 A 20020711