

Title (en)

METHOD AND DEVICE FOR GRINDING A ROTATING ROLLER USING AN ELASTIC STEADY-REST SUPPORT

Title (de)

VERFAHREN UND VORRICHTUNG ZUM SCHLEIFEN EINER ROTIERENDEN WALZE MIT EINER ELASTISCHEN SETZSTOCKAUFLAGE

Title (fr)

PROCEDE ET DISPOSITIF POUR RECTIFIER UN CYLINDRE ROTATIF A L'AIDE D'UN SUPPORT DE LUNETTE FIXE ELASTIQUE

Publication

EP 1521663 B1 20061025 (DE)

Application

EP 03763887 A 20030717

Priority

- DE 10232394 A 20020717
- EP 0307788 W 20030717

Abstract (en)

[origin: WO2004007145A1] The invention relates to a device for grinding rollers (6), also for grinding hollow rollers. As the rollers tend to vibrate transversally as a result of the contact with the grinding disc (13), a cushioned body (15) is applied to the opposite side of the roller from the grinding disc (13), said body being engaged pneumatically against the roller (6) and adapting at least partially to the contours of the roller. The cushioned body consists of an elastic solid material or an elastic external skin that is filled with an elastic pressurised medium. The engagement pressure of the cushion is adjustable. This is achieved by a pneumatic advance cylinder (17) located on a base (16), said cylinder having a piston that can be impinged on both sides (18) and that bears on its piston rod (19) a fixing plate (20) comprising the elastic cushion (15). The advance cylinder (17) is connected to compressed air conduits (21, 22), P indicating the conduit comprising a pressure regulator and L indicating the return conduit in the standard case. The invention thus provides a device (14) for damping vibrations, which suppresses any regenerative chatter and guarantees a grinding pattern that is devoid of chatter marks.

IPC 8 full level

B24B 5/04 (2006.01); **B24B 5/37** (2006.01); **B24B 41/00** (2006.01); **B24B 41/06** (2012.01)

CPC (source: EP KR)

B24B 5/04 (2013.01 - EP KR); **B24B 41/007** (2013.01 - EP); **B24B 41/06** (2013.01 - KR); **B24B 41/065** (2013.01 - EP)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2004007145 A1 20040122; AT E343453 T1 20061115; AU 2003254370 A1 20040202; BR 0312660 A 20050426; CA 2491800 A1 20040122; CA 2491800 C 20110222; CN 100379520 C 20080409; CN 1668421 A 20050914; DE 10232394 A1 20040226; DE 10232394 B4 20040722; DE 50305509 D1 20061207; EP 1521663 A1 20050413; EP 1521663 B1 20061025; ES 2276116 T3 20070616; JP 2005537140 A 20051208; JP 4030998 B2 20080109; KR 101026324 B1 20110331; KR 20050019813 A 20050303; RU 2005104233 A 20051010

DOCDB simple family (application)

EP 0307788 W 20030717; AT 03763887 T 20030717; AU 2003254370 A 20030717; BR 0312660 A 20030717; CA 2491800 A 20030717; CN 03816813 A 20030717; DE 10232394 A 20020717; DE 50305509 T 20030717; EP 03763887 A 20030717; ES 03763887 T 20030717; JP 2004520664 A 20030717; KR 20047021543 A 20030717; RU 2005104233 A 20030717