

Title (en)
METHOD AND DEVICE FOR CENTERLESS CYLINDRICAL GRINDING

Title (de)
VERFAHREN UND VORRICHTUNG ZUM SPITZENLOSEN RUNDSCHEIFEN

Title (fr)
PROCEDE ET DISPOSITIF DE RECTIFICATION CYLINDRIQUE SANS POINTE

Publication
EP 1419030 B1 20050302 (DE)

Application
EP 02767332 A 20020806

Priority
• DE 10139894 A 20010814
• EP 0208779 W 20020806

Abstract (en)
[origin: WO03015983A1] During centerless cylindrical grinding, attention must be paid to the fact that the workpiece (3) is placed in a very specific position between the grinding wheel (1), the regulating wheel (2) and the support guide (4). The optimal position of the workpiece (3) initially set cannot be maintained as a result of the progression of the grinding process and the changes caused by said process in the diameter and contour of the workpiece (3). The invention provides a solution to said problem, whereby height adjustment and/or the oblique position of the support guide (4) are automatically modified in accordance with the progression of the grinding process and during said grinding process with the purpose of achieving operationally optimal readjustment. The progression of the grinding process can be detected using measuring techniques, e.g. by measuring the diameter of the workpiece (3) or its deviation from roundness and using said measurement as output variable for adjusting the support guide (4).

IPC 1-7
B24B 5/22; B24B 5/307; B24B 49/02

IPC 8 full level
B24B 49/10 (2006.01); **B24B 5/00** (2006.01); **B24B 5/18** (2006.01); **B24B 5/22** (2006.01); **B24B 5/307** (2006.01); **B24B 49/02** (2006.01)

CPC (source: EP KR US)
B24B 5/22 (2013.01 - EP KR US); **B24B 5/307** (2013.01 - EP US); **B24B 49/02** (2013.01 - EP US)

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)
WO 03015983 A1 20030227; AT E289894 T1 20050315; CN 100506479 C 20090701; CN 1525899 A 20040901; CZ 2004226 A3 20040714; CZ 296364 B6 20060215; DE 10139894 A1 20030313; DE 10139894 B4 20090910; DE 50202390 D1 20050407; EP 1419030 A1 20040519; EP 1419030 B1 20050302; ES 2236578 T3 20050716; JP 2004538164 A 20041224; JP 3995653 B2 20071024; KR 100955131 B1 20100428; KR 20040030822 A 20040409; RU 2004107511 A 20050610; RU 2298467 C2 20070510; US 2004209558 A1 20041021; US 7258594 B2 20070821

DOCDB simple family (application)
EP 0208779 W 20020806; AT 02767332 T 20020806; CN 02813717 A 20020806; CZ 2004226 A 20020806; DE 10139894 A 20010814; DE 50202390 T 20020806; EP 02767332 A 20020806; ES 02767332 T 20020806; JP 2003520526 A 20020806; KR 20047000875 A 20020806; RU 2004107511 A 20020806; US 48751104 A 20040217