

Title (en)

LINEARLY ADVANCING POLISHING METHOD AND APPARATUS

Title (de)

VERFAHREN UND VORRICHTUNG FÜR LINEAR VORRÜCKENDES POLIEREN

Title (fr)

PROCÉDÉ ET APPAREIL DE POLISSAGE A AVANCE LINEAIRE

Publication

EP 1745888 A1 20070124 (EN)

Application

EP 05727544 A 20050329

Priority

- JP 2005005858 W 20050329
- JP 2004105655 A 20040331

Abstract (en)

Continuous feeding of workpieces to an apparatus and effective use of the space around the apparatus are difficult in rotary abrasive finishing. To solve such problems, the present invention provides a conceptually novel method and apparatus for linear abrasive finishing. A pair of parallel flat surface plates adjacent in parallel move linearly in opposite directions. A workpiece is pressed onto both of the surface plates to apply a couple of forces for rotational movement to the workpiece. The workpiece is subjected to abrasive finishing with abrasive grains by relative movement between the rotation of the workpiece and the linear movement of the pair of surface plates. The workpiece may be held between the pair of parallel flat surface plates and another pair of parallel flat surface plates facing the pair of parallel flat surface plates before one or both surfaces of the workpiece are subjected to the abrasive finishing. Belt polishers passing over a workpiece support may be used instead of the surface plates.

IPC 8 full level

B24B 21/00 (2006.01); **B24B 21/04** (2006.01); **B24B 37/04** (2012.01); **B24B 37/07** (2012.01)

CPC (source: EP KR US)

B24B 21/00 (2013.01 - KR); **B24B 21/04** (2013.01 - EP US); **B24B 37/04** (2013.01 - KR); **B24B 37/08** (2013.01 - EP KR US)

Designated contracting state (EPC)

DE

DOCDB simple family (publication)

EP 1745888 A1 20070124; EP 1745888 A4 20080102; CN 1929954 A 20070314; CN 1929954 B 20111214; JP 4472694 B2 20100602;
JP WO2005095053 A1 20080731; KR 100806949 B1 20080222; KR 20060132954 A 20061222; TW 200531781 A 20051001;
TW I271261 B 20070121; US 2007202777 A1 20070830; WO 2005095053 A1 20051013

DOCDB simple family (application)

EP 05727544 A 20050329; CN 200580007988 A 20050329; JP 2005005858 W 20050329; JP 2006511668 A 20050329;
KR 20067019958 A 20060927; TW 94110147 A 20050330; US 59956205 A 20050329