

Title (en)

Grinding apparatus and method of controlling grinding apparatus

Title (de)

Schleifgerät und Steuerverfahren für das Schleifgerät

Title (fr)

Appareil de broyage et procédé pour sa commande

Publication

EP 2025450 A2 20090218 (EN)

Application

EP 08014090 A 20080806

Priority

JP 2007205101 A 20070807

Abstract (en)

A grinding wheel formed on an outer peripheral surface with a grinding surface is attached to a grinding wheel spindle supported by axial active magnetic bearings and radial active magnetic bearings in a noncontact manner axially and radially and rotated by an electric motor. A casing is axially positioned and then is radially moved and a ground part of a workpiece is ground. Before the casing moves radially and the grinding wheel comes in contact with the workpiece, the stiffness value of the radial magnetic bearings is set to an initialization value lower than a value at the usual grinding time and after the grinding surface of the grinding wheel comes in contact with the workpiece, the stiffness value of the radial magnetic bearings is set to a value higher than the initialization value for grinding the workpiece.

IPC 8 full level

B23Q 5/00 (2006.01); **B24B 19/06** (2006.01); **B24B 41/04** (2006.01); **B24B 49/00** (2006.01)

CPC (source: EP US)

B24B 41/044 (2013.01 - EP US); **B24B 49/00** (2013.01 - EP US)

Citation (applicant)

- JP 2001159421 A 20010612 - NSK LTD
- JP S5727660 A 19820215 - KOYO SEIKO CO

Cited by

CN104647151A; CN102626893A; CN105058230A

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

EP 2025450 A2 20090218; JP 2009039797 A 20090226; US 2009042479 A1 20090212

DOCDB simple family (application)

EP 08014090 A 20080806; JP 2007205101 A 20070807; US 22221808 A 20080805