

Title (en)
GRINDING MACHINE TOOL WITH RANDOM ECCENTRIC ORBITAL MOTION SPEED DETECTION

Title (de)
SCHLEIFMASCHINENWERKZEUG MIT ZUFÄLLIGER EXZENTRISCHER ORBITALER BEWEGUNGSGESCHWINDIGKEITSERFASSUNG

Title (fr)
MACHINE-OUTIL DE MEULAGE À DÉTECTION DE VITESSE DE MOUVEMENT ORBITAL EXCENTRIQUE ALÉATOIRE

Publication
EP 3772390 A1 20210210 (EN)

Application
EP 19190321 A 20190806

Priority
EP 19190321 A 20190806

Abstract (en)
A grinding machine tool (10) with random eccentric orbital motion speed detection, the grinding machine tool (10) comprises a body (11) and a grinding disc (12), the body (11) comprises a driving shaft (112) and a tool holder (113) connecting the grinding disc (12) and having an eccentric distance (117) relative to the driving shaft (112), and the grinding disc (12) performs grinding in a random eccentric orbital motion when the driving shaft (112) rotates. The grinding disc (12) comprises at least one detected member (122) on a side of the grinding disc (12) facing the body (11) for detecting a speed of the random eccentric orbital motion, and the at least one detected member (122) defines a detection area (123) with a range greater than or equal to twice the eccentric distance (117). Thereby, an accurate speed of the grinding disc (12) performing the random eccentric orbital motion is obtained, so that the grinding operation of precision grinding which is gradually performed by automation is more precisely controlled.

IPC 8 full level
B24B 23/02 (2006.01); **B24B 7/00** (2006.01); **B24B 23/03** (2006.01); **B24B 23/04** (2006.01); **B24B 49/00** (2012.01); **B24B 49/10** (2006.01); **B24B 49/12** (2006.01)

CPC (source: EP)
B24B 23/03 (2013.01); **B24B 49/003** (2013.01); **B24B 49/006** (2013.01); **B24B 49/10** (2013.01); **B24B 49/12** (2013.01)

Citation (applicant)
• US 2005245183 A1 20051103 - DESHPANDE UDAY S [US], et al
• US 6004197 A 19991221 - HUBER PAUL W [US]
• US 6979254 B1 20051227 - HUBER PAUL W [US]
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Citation (search report)
• [A] US 10160094 B2 20181225 - LIPSON RONALD [US], et al
• [A] EP 2589745 A1 20130508 - VALENTINI GUIDO [IT]
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Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3772390 A1 20210210; EP 3772390 B1 20220302

DOCDB simple family (application)
EP 19190321 A 20190806