

Title (en)

Method for grinding thin sheet-like workpiece and double-end surface grinder

Title (de)

Verfahren zum Schleifen eines dünnen blattartigen Werkstücks und doppelendiger Oberflächenschleifer

Title (fr)

Procédé de meulage d'une pièce à usiner mince en forme de feuille et broyeur de surface à double extrémité

Publication

EP 2543475 A3 20170104 (EN)

Application

EP 12175279 A 20120706

Priority

JP 2011152022 A 20110708

Abstract (en)

[origin: EP2543475A2] [Object] To reduce influences of external forces that are to be applied to a carrier ring and improve workpiece grinding precision, and maintain high grinding precision over a long period of time without problems such as wear, etc. [Solution Means] In a double-end surface grinder that grinds both surfaces of a thin sheet-like workpiece W by a pair of grinding wheels 3 while rotating the workpiece W via a carrier 4 in a state where the workpiece W fitted to the carrier 4 is supported by static pressures of a pair of static pressure pads 1 in a non-contact manner, a plurality of static pressure carrier guides 6a and 6b that support a carrier ring 5 on the outer periphery of the carrier 4 by static pressures in a non-contact manner are provided in the circumferential direction. The carrier ring 5 has a cylindrical outer peripheral surface 12, and in proximity to the outer peripheral surface 12, static pressure carrier guides 6a and 6b are disposed at substantially even intervals. The static pressure carrier guides 6a and 6b may be fixed or floatable.

IPC 8 full level

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CPC (source: EP KR)

B24B 7/04 (2013.01 - EP); **B24B 7/17** (2013.01 - KR); **B24B 7/228** (2013.01 - EP); **B24B 37/08** (2013.01 - KR)

Citation (search report)

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- [A] JP 2002036078 A 20020205 - KOYO MACHINE IND CO LTD

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CN104259984A; CN104369058A

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 2543475 A2 20130109; **EP 2543475 A3 20170104**; **EP 2543475 B1 20190327**; JP 2013018065 A 20130131; JP 5627114 B2 20141119; KR 101911553 B1 20181024; KR 20130006303 A 20130116; SG 187316 A1 20130228; TW 201313386 A 20130401; TW I604918 B 20171111

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