

Title (en)  
AN INHERENTLY BALANCED SPINDLE FOR TOOL HEADS USED IN CALIBRATING, SMOOTHING OR POLISHING NATURAL STONE SLABS AND/OR CERAMIC TILES

Title (de)  
EINE INHÄRENT AUSGEGLICHENE SPINDEL FÜR WERKZEUGKÖPFE ZUM EICHEN, GLÄTTEN ODER POLIEREN VON STEINPLATTEN UND/ODER VON KERAMIKFLIESEN

Title (fr)  
BROCHE EQUILIBREE DE MANIERE INHERENTE POUR DES TETES D'OUTIL UTILISEES POUR LE CALIBRAGE, LE LISSAGE OU LE POLISSAGE DE DALLES EN PIERRE NATURELLE ET/OU DE CARREAUX DE CERAMIQUE

Publication  
**EP 1536916 A2 20050608 (EN)**

Application  
**EP 03727953 A 20030515**

Priority  
• IT 0300291 W 20030515  
• IT MO20020135 A 20020520

Abstract (en)  
[origin: WO03097297A2] The spindle comprises a tubular housing (3) in which the spindle body is movable, the spindle body including a shaft (31) carrying a rotary abrasive tool head, and a cylinder for setting the position of the spindle on the metal structure (2); an electric motor and a drive connecting said motor to the spindle shaft; wherein, instead of said motor/drive assembly, two or more motors (21) are provided which are drivingly connected to the spindle shaft through gearing (24, 25) for evenly spreading the mass thereof and the drive torque, as well as for allowing the coolant supply line (29) through the hollow interior of the spindle shaft (27, 31); the spindle body (12) is coaxial with said cylinder actuator (35) an rigidly connected to the piston rod thereof; said tubular housing (3) can be swung around a spherical surface (4) supporting the end flange (5), the other end having a spherical guide band (8) for guiding the latter end across a mating cylindrical surface (9); and a clamping arrangement (7, 10) for locking the tubular housing (3) and the whole spindle (1) in a set position is provided.

IPC 1-7  
**B24B 7/22**; **B24B 41/04**; **B24B 41/00**

IPC 8 full level  
**B24B 7/22** (2006.01); **B24B 27/00** (2006.01); **B24B 41/00** (2006.01); **B24B 41/04** (2006.01); **B24B 41/047** (2006.01)

CPC (source: EP)  
**B24B 7/22** (2013.01); **B24B 27/0084** (2013.01); **B24B 41/005** (2013.01); **B24B 41/042** (2013.01); **B24B 41/047** (2013.01)

Citation (search report)  
See references of WO 03097297A2

Cited by  
WO2015124990A1; CN106170369A; WO2020065687A1; WO2020065689A1; EP3903999A1; IT202000009079A1

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

DOCDB simple family (publication)  
**WO 03097297 A2 20031127**; **WO 03097297 A3 20050317**; AT E338609 T1 20060915; BR 0304833 A 20040817; BR 0304833 B1 20130611; DE 60308198 D1 20061019; DE 60308198 T2 20070913; EP 1536916 A2 20050608; EP 1536916 B1 20060906; ES 2272992 T3 20070501; IT MO20020135 A0 20020520; IT MO20020135 A1 20031120; PT 1536916 E 20070131

DOCDB simple family (application)  
**IT 0300291 W 20030515**; AT 03727953 T 20030515; BR 0304833 A 20030515; DE 60308198 T 20030515; EP 03727953 A 20030515; ES 03727953 T 20030515; IT MO20020135 A 20020520; PT 03727953 T 20030515