

Title (en)
IMPROVED SPINDLE FOR ROTATING HEADS FOR CALIBRATION OR SMOOTHING OF ARTIFICIAL OR NATURAL PLANAR MATERIALS

Title (de)
VERBESSERTE SPINDEL FÜR ROTIERENDE KÖPFE ZUM KALIBRIEREN ODER GLÄTTEN VON KÜNSTLICHEN ODER NATÜRLICHEN PLANEN MATERIALIEN

Title (fr)
BROCHE AMÉLIORÉE POUR TÊTES ROTATIVES POUR LE CALIBRAGE OU LE LISSAGE DE MATÉRIAUX PLANS ARTIFICIELS OU NATURELS

Publication
EP 3903999 A1 20211103 (EN)

Application
EP 21020234 A 20210426

Priority
IT 202000009079 A 20200427

Abstract (en)
A spindle for rotating heads for calibrating or dressing artificial or natural planar materials comprises: a sleeve (10) within which a body (5) of the spindle is slidable in turn provided with a spindle shaft (6) at the lower end (3) of which a rotating head (2) with abrasive tools (9) is applied; at least two pneumatic cylinders (11) for positioning the spindle (1), i.e., the head connected thereto, on a supporting structure (13); fixing the sleeve to the structure (13) of a machine on which the spindle is mounted by means of an adjustment flange (12) with spherical surface (20); at least two electric rotation drive motors (24) of the spindle and a transmission from said motors to the spindle shaft (6); said electric motors being coupled in rotation to the spindle shaft each with a belt transmission (21); between said sleeve and said spindle shaft (6) a sliding body which supports the spindle shaft (1) in rotation and is pushed in a raised or lowered position on the planar surface (30) in operation with said pneumatic cylinders (11); furthermore, it has the pneumatic cylinders connected outside the sleeve (10) and, with a stem (14) at the lower sheet (15) of a transmission box (16) on whose upper sheet (17) a front flanged support (25) is fixed for each electric motor (24); the transmission box (16) comprises outer closing walls positioned between the two lower (15) and upper sheets (17); a central cover (42) for closing, stiffening and accessing the internal compartment with the central groove wheel (22), for belt transmissions, connected and rotating with the spindle shaft (6).

IPC 8 full level
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CPC (source: EP)
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Citation (applicant)
• EP 1849557 A2 20071031 - SR SCHINDLER STEINBEARBEITUNGS [DE]
• EP 1536916 B1 20060906 - PEDRINI LUIGI [IT]
• WO 2015124990 A1 20150827 - PEDRINI SPA AD UNICO SOCIO [IT]

Citation (search report)
• [AD] WO 2015124990 A1 20150827 - PEDRINI SPA AD UNICO SOCIO [IT]
• [A] CN 106737152 A 20170531 - QUANZHOU ZHIXIN PATENT TECH DEV CO LTD

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