

Title (en)

HIGH-SPEED SPINDLE WITH FORCED MECHANICAL VIBRATORY ASSISTANCE

Title (de)

HOCHGESCHWINDIGKEITSSPINDEL MIT MECHANISCHER ZWANGSVIBRATIONSUNTERSTÜTZUNG

Title (fr)

BROCHE HAUTE VITESSE A ASSISTANCE VIBRATOIRE MECANIQUE FORCEEE

Publication

EP 4132735 A1 20230215 (FR)

Application

EP 21716728 A 20210401

Priority

- FR 2003470 A 20200407
- EP 2021058763 W 20210401

Abstract (en)

[origin: CA3174649A1] Disclosed is a spindle (1) for a machine tool, comprising - a housing (10), - a shaft (20) for driving a cutting tool, rotatably mounted inside the housing with a possibility of axial movement relative to the housing, - a single ball (200), axially interposed between a bearing ring (202) fixed relative to the housing and a bearing ring (201) movable with the shaft, one of these rolling rings defining an inclined bearing surface (231) that is not perpendicular to the axis of rotation of the shaft, so that the rotation of the ball generates an axial oscillation of the shaft.

IPC 8 full level

B23B 47/34 (2006.01)

CPC (source: EP US)

B23B 47/34 (2013.01 - EP US); **B23B 2220/36** (2013.01 - EP US); **B23B 2260/008** (2013.01 - EP US)

Citation (search report)

See references of WO 2021204709A1

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Designated extension state (EPC)

BA ME

Designated validation state (EPC)

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DOCDB simple family (publication)

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