

Title (en)

Single spindle driving device with vibration damping means

Title (de)

Einzelspindel-antriebsvorrichtung mit Vibrationsdämpfungsmitteln

Title (fr)

Dispositif d'entraînement des broches individuelles avec des moyens pour amortir les vibrations

Publication

EP 1156141 A1 20011121 (EN)

Application

EP 01111106 A 20010508

Priority

- JP 2000146202 A 20000518
- JP 2001015956 A 20010124

Abstract (en)

To provide a spindle device for driving a single spindle which is capable of preventing the vibration of a bolster from being directly transferred to a motor housing and in which it is easy to incorporate a buffer member. A spindle device (1) for driving a single spindle is provided with a rotor (6) and a stator (9). The rotor (6) is fixed to a spindle (4) in a manner that allows the rotor (6) to rotate together with the spindle (4) that is rotatably supported in a bolster (2). The stator (9) is fixed inside a motor housing (8) supported on a spindle rail (7). A buffer member (10) having a damper effect is placed between a housing (2a) of the bolster (2) and the motor housing (8) such that the buffer member (10) is fixed to a motor housing attaching portion (13) and a bolster attaching portion (14) only on its laterally extending faces. The buffer member (10) is fixed to the attaching portions (13 and 14) by thermal fusion. The buffer member (10) is shaped into a ring and placed such that it is sandwiched between the attaching portions (13 and 14). <IMAGE>

IPC 1-7

D01H 1/244; **D01H 7/04**

IPC 8 full level

D01H 1/244 (2006.01); **D01H 7/04** (2006.01)

CPC (source: EP KR)

D01H 1/244 (2013.01 - EP); **D01H 7/04** (2013.01 - KR); **D01H 7/045** (2013.01 - EP)

Citation (search report)

- [DA] US 5127218 A 19920707 - SCHIESSER MANFRED [DE], et al
- [A] DE 4103518 A1 19911002 - SKF TEXTILMASCH KOMPONENTEN [DE]
- [A] US 4543780 A 19851001 - MUELLER ALFRED [CH], et al

Cited by

US10424332B2; US10424333B2; WO2017064613A1; EP3754058A1; WO2005045106A1; US10783919B2; US10789980B2

Designated contracting state (EPC)

CH DE IT LI

DOCDB simple family (publication)

EP 1156141 A1 20011121; **EP 1156141 B1 20040204**; DE 60101920 D1 20040311; DE 60101920 T2 20041209; KR 100385252 B1 20030527; KR 20010106184 A 20011129; TW 517719 U 20030111

DOCDB simple family (application)

EP 01111106 A 20010508; DE 60101920 T 20010508; KR 20010021022 A 20010419; TW 91204666 U 20010329