

Title (en)
THREAD SUPPLYING DEVICE

Title (de)
FÄDENLIEFERGERÄT

Title (fr)
DISPOSITIF FOURNISSEUR DE FIL

Publication
EP 1361997 B1 20050119 (DE)

Application
EP 02718128 A 20020213

Priority

- DE 10107688 A 20010219
- EP 0201512 W 20020213

Abstract (en)
[origin: DE10107688A1] A thread supplying device (F) provided with a housing (1) containing an electric motor wherein the stator (S) is non-rotatingly mounted and the rotor (R) is rotatingly mounted on a motor shaft (W). A thread guiding element (E) is fixed to the motor shaft (W) and a threader device (T) which is fixed to the housing is also provided. When the motor shaft (W) is in a set position of rotation (Y), the thread guiding element (E) must be physically associated with said threader device. A permanent magnet motor (PM) with pole cores provided with windings is integrated into the stator (S) and permanent magnets are integrated into the rotor (R) in such a way that the stator (S), rotor (R) and the thread guiding element (E) are arranged relative to the housing (1), in relation to the axis (X) of the motor shaft, in such a way that the motor shaft (W) adopts the set position of rotation (Y) when the permanent magnet motor is devoid of electric current in a stable relative position of rotation (DLS), caused by magnetic forces, of the rotor(R) in the stator (S).

IPC 1-7
B65H 51/22

IPC 8 full level
B65H 51/22 (2006.01); **D03D 47/36** (2006.01)

CPC (source: EP KR US)
B65H 51/22 (2013.01 - KR); **D03D 47/361** (2013.01 - EP US)

Designated contracting state (EPC)
BE DE IT NL TR

DOCDB simple family (publication)
DE 10107688 A1 20020829; CN 1239367 C 20060201; CN 1491177 A 20040421; DE 50202042 D1 20050224; EP 1361997 A1 20031119;
EP 1361997 B1 20050119; KR 100537989 B1 20051220; KR 20030076689 A 20030926; US 2004108400 A1 20040610;
US 7059556 B2 20060613; WO 02066353 A1 20020829

DOCDB simple family (application)
DE 10107688 A 20010219; CN 02804881 A 20020213; DE 50202042 T 20020213; EP 0201512 W 20020213; EP 02718128 A 20020213;
KR 20037010882 A 20030819; US 46863204 A 20040209