

Title (en)

Linear drive with cylinder without piston rod.

Title (de)

Linearmotor mit Zylinder ohne Kolbenstange.

Title (fr)

Moteur linéaire avec vérin à piston sans tige.

Publication

EP 0502810 A1 19920909 (EN)

Application

EP 92630023 A 19920304

Priority

- US 66434891 A 19910304
- US 78549891 A 19911031

Abstract (en)

The linear drive has a one piece main body (3) with an elongate cylinder (5) therein, and a piston (9) moveable longitudinally within the cylinder (5). The main body (3) has an elongate cylinder slot (11) extending lengthwise thereof in communication with the cylinder (5) along its entire length. A carriage (13) is moveable along the cylinder (5) on the exterior of the main body (3) and a force transmitting member (17) is coupled to the piston (9) and extends radially outwardly of the cylinder (5) through the slot (11) for transmitting force from the piston (9) to the carriage (13) for effecting movement of the carriage (13). In elongate bearing cavity (19) is provided within the main body (3). A bearing body (29) is received within the bearing cavity (19) and is coupled to the force transmitting member (17) and to the carriage (13). The bearing body (29) has a plurality of bearings (33) for transmitting reaction forces to the main body (3) with minimal friction while holding the piston (9) against binding as it moves within the cylinder (5). For sealing the linear drive during movement, internal and external seals (41, 49) are provided. <IMAGE>

IPC 1-7

F15B 15/08

IPC 8 full level

F15B 15/14 (2006.01); **F15B 15/08** (2006.01); **F16J 15/16** (2006.01)

CPC (source: EP)

F15B 15/082 (2013.01)

Citation (search report)

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Designated contracting state (EPC)

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