Title (en)

LEAD SCREW DRIVE FOR A POWER LIFTGATE

Title (de

LEITSPINDELANTRIEB FÜR EINE MOTORISCH BETÄTIGTE HECKKLAPPE

Title (fr)

MECANISME D'ENTRAINEMENT A VIS-MERE POUR HAYON RELEVABLE ELECTRIQUE

Publication

EP 1294585 B1 20070117 (EN)

Application

EP 01951304 A 20010626

Priority

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- US 21427200 P 20000626

Abstract (en)

[origin: WO0200459A2] A power drive assembly moves a liftgate of a motor vehicle between its open and closed positions. The motor vehicle defines an opening and the liftgate closes the opening when the liftgate is in its closed position. The power drive assembly includes a base that is fixedly secured to the motor vehicle at a position in spaced relation to the opening. A drive mechanism is fixedly secured to the guide. The drive mechanism converts electrical energy into a linear force. The power drive assembly includes a translation linkage connected to the drive mechanism for receiving the linear force and translating it into a nonlinear force to move the liftgate between the open position and the closed position. A nut, secured to the translation linkage, moves the translation linkage as it travels along a lead screw that is rotated by a motor.

[origin: WO0200459A2] A power drive assembly moves a liftgate (12) of a motor vehicle (10) between its open and closed positions. The motor vehicle (10) defines an opening and the liftgate (12) closes the opening when the liftgate (12) is in its closed position. The power drive assembly (22) includes a base (24) that is fixedly secured to the motor vehicle (10) at a position in spaced relation to the opening. A drive mechanism (38) is fixedly secured to the guide. The drive mechanism (38) converts electrical energy into a linear force. The power drive assembly (22) includes a translation linkage (58) connected to the drive mechanism (38) for receiving the linear force and translating it into a nonlinear force to move the liftgate (12) between the open position and the closed position. A nut (52), secured to the translation linkage (58), moves the translation linkage (58) as it travels along a lead screw (50) that is rotated by a motor (40).

IPC 8 full level

B60J 1/00 (2006.01); B60J 5/10 (2006.01); E05F 15/611 (2015.01); E05F 15/622 (2015.01)

CPC (source: EP)

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Cited by

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Designated contracting state (EPC)

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WO 0200459 A2 20020103; **WO 0200459 A3 20020606**; AU 7228801 A 20020108; CA 2412517 A1 20020103; CA 2412517 C 20090519; DE 60126086 D1 20070308; DE 60126086 T2 20070712; EP 1294585 A2 20030326; EP 1294585 B1 20070117; JP 2004501819 A 20040122

DOCDB simple family (application)

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