

Title (en)

LINEAR DRIVE FOR A PIVOTALLY SUPPORTED PANEL OR A PIVOTALLY SUPPORTED HARD OR SOFT TOP OF A VEHICLE

Title (de)

LINEARANTRIEB FÜR EINE SCHWENKBAR GELAGERTE Klappe ODER EIN SCHWENKBAR GELAGERTES HARD- ODER SOFTTOP EINES FAHRZEUGES

Title (fr)

DISPOSITIF D'ENTRAÎNEMENT LINÉAIRE POUR HAYON MONTÉ PIVOTANT, OU TOIT RIGIDE OU TOIT DÉCAPOTABLE MONTÉ PIVOTANT D'UN VÉHICULE

Publication

**EP 2250336 A1 20101117 (DE)**

Application

**EP 09707765 A 20090203**

Priority

- EP 2009000703 W 20090203
- DE 102008007536 A 20080205

Abstract (en)

[origin: WO2009098026A1] The invention is based on the object of driving a trunk lid or hard or soft tops of a vehicle by a motor as efficiently and as economically as possible. Typically a hydraulic cylinder having very high energy density, or an electromechanical spindle drive, generally provided with a planetary gear as is known from DE 10 2004 040 170 A 1, is used today. Said arrangement has the disadvantage that the transmission comprises several wheels in order to enable an accordingly high gear ratio for the required slow rotational movement of the spindle. In the process, a loud operating noise is produced. The invention relates to a linear drive having a high-ratio single-step manual transmission and the possibility of integrating an energy storage, for example a helical spring or a gas pressure spring, and the possibility of integrating a hydraulic brake. The invention is particularly suitable for driving a cover or panels/doors/tops/moveable hardtops or other moveable components on vehicles, on other mobile systems or on stationary devices. It is supported on the vehicle body or the stationary device and on the cover or the moveable element, which in turn is rotatably connected to a hinge on the vehicle body or the stationary device.

IPC 8 full level

**E05F 15/12** (2006.01); **F16H 25/22** (2006.01)

CPC (source: EP US)

**E05F 15/622** (2015.01 - EP US); **F16H 25/2025** (2013.01 - EP US); **F16H 25/2295** (2013.01 - EP US); **E05Y 2201/21** (2013.01 - EP US); **E05Y 2201/22** (2013.01 - EP US); **E05Y 2201/236** (2013.01 - EP US); **E05Y 2201/26** (2013.01 - EP US); **E05Y 2201/266** (2013.01 - EP US); **E05Y 2900/546** (2013.01 - EP US); **Y10T 74/18056** (2015.01 - EP US)

Citation (search report)

See references of WO 2009098026A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

**DE 102008007536 A1 20090813**; CN 102084079 A 20110601; EP 2250336 A1 20101117; US 2011197690 A1 20110818; WO 2009098026 A1 20090813

DOCDB simple family (application)

**DE 102008007536 A 20080205**; CN 200980104290 A 20090203; EP 09707765 A 20090203; EP 2009000703 W 20090203; US 86636309 A 20090203