

Title (en)  
LOCKING DRIVE

Title (de)  
VERRIEGELUNGSANTRIEB

Title (fr)  
ENTRAÎNEMENT DE VERROUILLAGE

Publication  
**EP 3575516 B1 20201125 (DE)**

Application  
**EP 19173847 A 20190510**

Priority  
DE 102018208416 A 20180528

Abstract (en)  
[origin: CN110541624A] The invention discloses a locking driving device for locking/unlocking a wing of a window, a wing of a door, or analogs. The locking driving device comprises a shell; a mechanical locking energy storage device, wherein the energy stored in the locking energy storage device can be used to lock a wing; a mechanical unlocking energy storage device, wherein the energy stored in the unlocking energy storage device can be used to unlock the wing; a tensioning device, which can be loaded by the closed wing, is used to pre-tension all energy storage devices, and can be coupled to all energy storage devices; and a controller. The controller can trigger pre-tensioned locking energy storage device to release energy to lock the wing and trigger the pre-tensioned unlocking energy storage device to unlock the wing. The tensioning device is coupled to all energy storage devices through connection pieces. The connection pieces can be operated in idleness in order to cancel the coupling between the tensioning device and the energy storage devices when the wing is opened. Moreover, the connection pieces can couple the tensioning device and the energy storage devices when the wing is closed; and through the closed fan, the energy storage devices are pre-tensioned.

IPC 8 full level  
**E05B 15/00** (2006.01); **E05B 15/04** (2006.01); **E05B 47/00** (2006.01)

CPC (source: CN EP KR)  
**E05B 15/002** (2013.01 - EP); **E05B 15/04** (2013.01 - KR); **E05B 17/0045** (2013.01 - KR); **E05B 51/00** (2013.01 - CN); **E05F 1/10** (2013.01 - CN); **E05F 3/22** (2013.01 - CN); **E05B 2015/0406** (2013.01 - KR); **E05B 2015/0448** (2013.01 - EP); **E05B 2047/0031** (2013.01 - EP); **E05Y 2800/422** (2013.01 - KR)

Designated contracting state (EPC)  
AL 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 RS SE SI SK SM TR

DOCDB simple family (publication)  
**EP 3575516 A1 20191204; EP 3575516 B1 20201125**; CN 110541624 A 20191206; CN 110541624 B 20210608;  
DE 102018208416 A1 20191128; DE 102018208416 B4 20200820; DK 3575516 T3 20210125; ES 2843500 T3 20210719;  
HR P20210308 T1 20210402; HU E053218 T2 20210628; KR 102157603 B1 20200918; KR 20190135424 A 20191206;  
PL 3575516 T3 20210628; PT 3575516 T 20210104; RS 61495 B1 20210331; SI 3575516 T1 20210331; TW 202003987 A 20200116;  
TW I697608 B 20200701

DOCDB simple family (application)  
**EP 19173847 A 20190510**; CN 201910449669 A 20190528; DE 102018208416 A 20180528; DK 19173847 T 20190510;  
ES 19173847 T 20190510; HR P20210308 T 20210223; HU E19173847 A 20190510; KR 20190061843 A 20190527; PL 19173847 T 20190510;  
PT 19173847 T 20190510; RS P20210202 A 20190510; SI 201930026 T 20190510; TW 108118269 A 20190527