

Title (en)

OPENING-CLOSING DEVICE FOR OPENING-CLOSING BODY

Title (de)

ÖFFNUNGS-/SCHLIESSVORRICHTUNG FÜR EIN ÖFFNUNGS-/SCHLIESSELEMENT

Title (fr)

DISPOSITIF D'OUVERTURE/FERMETURE POUR CORPS D'OUVERTURE/FERMETURE

Publication

EP 2940239 A4 20160803 (EN)

Application

EP 13869061 A 20131218

Priority

- JP 2012287898 A 20121228
- JP 2013083832 W 20131218

Abstract (en)

[origin: EP2940239A1] An opening-closing device for an opening-closing body characterized in that: an inner guide (6) has a first restricting part (61) which is elastic and a second restricting part (62) and forms a confining structure (S) such that the first restricting part (61) and the second restricting part (62) prevent an inner cable (5) from escaping out of the inner guide (6). The inner cable (5) is disposed in the confining structure (S) by being moved due to tension applied to the inner cable (5) and pressing on and bending the first restricting part (61). By using this device, an opening-closing device for an opening-closing body can be provided for which inserting an inner cable is simple and for which the inner cable after insertion does not escape even when moving in the inner guide.

IPC 8 full level

E05F 11/48 (2006.01); **B60J 1/17** (2006.01); **E05F 15/689** (2015.01)

CPC (source: EP)

E05F 11/486 (2013.01); **E05Y 2201/66** (2013.01); **E05Y 2800/422** (2013.01); **E05Y 2900/55** (2013.01)

Citation (search report)

- [Y] JP 2011069059 A 20110407 - JOHNNAN SEISAKUSHO
- [Y] JP 2008169684 A 20080724 - TOYOTA MOTOR CORP, et al
- See references of WO 2014103816A1

Cited by

US11408217B2

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 2940239 A1 20151104; **EP 2940239 A4 20160803**; **EP 2940239 B1 20190206**; CN 104903535 A 20150909; CN 104903535 B 20170728; JP 6247227 B2 20171213; JP WO2014103816 A1 20170112; WO 2014103816 A1 20140703

DOCDB simple family (application)

EP 13869061 A 20131218; CN 201380068095 A 20131218; JP 2013083832 W 20131218; JP 2014554351 A 20131218