

Title (en)
LOCK DEVICE EQUIPPED WITH OPENING SUPPORT MECHANISM, AND SLIDING DOOR INCLUDING LOCK DEVICE EQUIPPED WITH
OPENING SUPPORT MECHANISM

Title (de)
SCHLOSSVORRICHTUNG MIT ÖFFNUNGSUNTERSTÜTZUNGSMECHANISMUS UND SCHIEBETÜR MIT SCHLOSSVORRICHTUNG MIT
ÖFFNUNGSUNTERSTÜTZUNGSMECHANISMUS

Title (fr)
DISPOSITIF DE VERROUILLAGE ÉQUIPÉ D'UN MÉCANISME DE SUPPORT D'OUVERTURE ET COMPRENANT UN DISPOSITIF DE
VERROUILLAGE DE PORTE COULISSANTE ÉQUIPÉE D'UN MÉCANISME DE SUPPORT D'OUVERTURE

Publication
EP 3135842 A1 20170301 (EN)

Application
EP 16185643 A 20160825

Priority
JP 2015169793 A 20150828

Abstract (en)
A lock device equipped with an opening support mechanism includes: an operation mechanism (20) mounted to a stile of a sliding door being a door end stile or a meeting stile and configured to be operated with an operation handle (20a); a lock configured to lock or unlock the sliding door by the operation mechanism (20); an opening support mechanism (60) configured to kick out the sliding door; and a link bar (50) configured to connect between the operation mechanism (20) and the opening support mechanism (60). The operation mechanism (20) includes a slider (40) that can move vertically in conjunction with turning of a handle shaft (22) of the operation handle (20a). The opening support mechanism (60) is arranged at the link bar (50) while being away from the slider (40) at a predetermined interval, the link bar (50) being connected to the slider (40) and transmitting a vertical motion of the slider (40).

IPC 8 full level
E05B 65/08 (2006.01); **E05B 53/00** (2006.01); **E05B 63/20** (2006.01)

CPC (source: CN EP)
E05B 17/0033 (2013.01 - EP); **E05B 65/08** (2013.01 - CN EP); **E05F 7/00** (2013.01 - CN); **E05F 13/02** (2013.01 - CN); **E05B 53/00** (2013.01 - EP); **E05B 63/20** (2013.01 - EP); **E05Y 2900/132** (2013.01 - CN)

Citation (applicant)

- JP 4426477 B2 20100303
- JP S5915584 U 19840130
- JP 2006241748 A 20060914 - SHIN NIKKEI CO LTD

Citation (search report)

- [IA] DE 10107028 A1 20020905 - EMS ISOLIERTUEREN MICKELEIT GM [DE]
- [A] US 2004212198 A1 20041028 - GLOVER J RAYMOND [US]
- [A] JP 2004353378 A 20041216 - TOSTEM CORP
- [A] EP 1431481 A2 20040623 - GEZE GMBH [DE]

Cited by
CN114622778A; US11008775B2

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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3135842 A1 20170301; **EP 3135842 B1 20190619**; CN 106481157 A 20170308; CN 106481157 B 20181030; JP 2017044044 A 20170302; JP 6537409 B2 20190703; TW 201708680 A 20170301; TW I592560 B 20170721

DOCDB simple family (application)
EP 16185643 A 20160825; CN 201610729526 A 20160825; JP 2015169793 A 20150828; TW 105127128 A 20160824