

Title (en)

Door lock mechanism in a cluster mailbox, especially for letter

Title (de)

Türverriegelungsmechanismus in einer Postfachanordnung, insbesondere für Briefe

Title (fr)

Dispositif de verrouillage des casiers à courrier, notamment pour des lettres

Publication

EP 2843161 B1 20190320 (EN)

Application

EP 14002941 A 20140825

Priority

PL 40516013 A 20130829

Abstract (en)

[origin: EP2843161A1] The lock mechanism includes a housed (2) linear electromechanical actuator (4) which raises the hook bolt (9) protruding from the face plate (3) through the double-arm lever system (6) and leaves it in an open position. The "L"-shaped double-arm lever (6) is rotated around a shorter horizontal arm (8) by 180°. The lever has a rotating bearing on a pin (7) in the corner area of both arms (8, 10), the shorter horizontal arm (8) of which is topped with a hook bolt (9) and the longer vertical arm (10) is topped with a pusher (11) facing the opening in the face plate (3). The double-armed lever (6) is loaded with a torsion spring mounted at one end to the pin (7) and at the other to the longer arm (10) on the side of the pusher (11). The electromechanical actuator (4) faces the piston rod (5) and presses on the longer arm (10) on the opposite side to the pusher (11). Dimensions of the length of arms (8, 10) of the double-armed lever (6), the depth of the bolt (9) and the length of the pusher (11) are carefully chosen. When the piston rod (5) of the electromechanical actuator (4) is being pushed out, the face of the pusher (11) makes contact with the door (1) only after the bolt (9) is at a height that is not less than its depth.

IPC 8 full level

A47G 29/124 (2006.01); **E05B 17/20** (2006.01); **E05B 47/02** (2006.01); **E05C 3/30** (2006.01)

CPC (source: EP)

E05B 17/0029 (2013.01); **E05B 17/208** (2013.01); **E05B 47/023** (2013.01); **E05B 2047/0068** (2013.01)

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 2843161 A1 20150304; **EP 2843161 B1 20190320**; PL 221985 B1 20160630; PL 2843161 T3 20190930; PL 405160 A1 20150302; WO 2015030614 A1 20150305

DOCDB simple family (application)

EP 14002941 A 20140825; PL 14002941 T 20140825; PL 2014000096 W 20140827; PL 40516013 A 20130829