Title (en)

ELECTRONIC LOCKING CYLINDER

Title (de

ELEKTRONISCHER SCHLIESSZYLINDER

Title (fr)

BARILLET ÉLECTRONIQUE

Publication

EP 4261368 A1 20231018 (EN)

Application

EP 22167663 A 20220411

Priority

EP 22167663 A 20220411

Abstract (en)

An electronic locking cylinder comprises a housing (2) and a cylinder core (4) rotatably mounted in the housing about a rotation axis. The cylinder core comprises an external sector (44) configured to receive a key element (12) and an internal sector (46), separated from each other by a protection member (80). The internal sector comprises an authentication circuit and an actuator unit (6). An electrical interface (14) with the key element is provided to transfer energy to the authentication circuit and to the actuator unit and to exchange authentication data with the authentication circuit. The actuator unit comprises a locking member (8) which can be set in a blocking state and a release state. The actuator unit can be switched between an activatable state and a deactivated state. In the activatable state, the actuator unit is configured to be able to transfer the locking member from its blocking state to its release state. In the deactivated state, the actuator unit is configured to set the locking member into its blocking state. The electronic locking cylinder further comprises a mechanical transfer element (70) which is moved during the insertion movement of the key element from a first position to a second position. The actuator unit is in its activatable state when the mechanical transfer element is in its second position and the actuator unit controls the locking member to be transferred from its blocking state to its release state upon the exchange of the authentication data with the authentication circuit if the mechanical transfer element is in its second position. The actuator unit is in its deactivated state when the mechanical transfer element is in its first position. The electronic locking cylinder further comprises means (20) configured to force the mechanical transfer element into its first position by the pull-out movement of the key element. The means force the mechanical transfer element into its first position when the key element is pulled out. Consequently, the pull-out movement causes - via the mechanical transfer element - the actuator unit to be in the deactivated state. In this manner safety features of the electronic locking cylinder are improved.

IPC 8 full level

E05B 47/06 (2006.01); E05B 15/08 (2006.01); E05B 15/16 (2006.01); E05B 17/22 (2006.01); G07C 9/00 (2020.01)

CPC (source: EP

E05B 15/08 (2013.01); **E05B 15/1621** (2013.01); **E05B 17/22** (2013.01); **E05B 47/063** (2013.01); **G07C 9/00174** (2013.01); E05B 2047/0063 (2013.01); E05B 2047/0084 (2013.01); G07C 2009/00634 (2013.01); G07C 2009/00753 (2013.01)

Citation (search report)

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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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

EP 4261368 A1 20231018

DOCDB simple family (application)

EP 22167663 A 20220411