

Title (en)
ELECTRONIC CYLINDER

Title (de)
ELEKTRONISCHER ZYLINDER

Title (fr)
BARILLET ÉLECTRONIQUE

Publication
EP 2536905 B1 20151104 (EN)

Application
EP 10713268 A 20100218

Priority
PT 2010000006 W 20100218

Abstract (en)

[origin: WO2011102745A1] The electronic cylinder is a device composed by an access system, through the input of a code in a numerical keyboard which allows the replacement of a conventional European mechanical key cylinder, for closing and opening doors. This device is composed by three essential components: 1. The mechanical cylinder; 2. The outer structure that supports the numerical keyboard; 3. The inner structure that supports the inner keyboard. The mechanical cylinder is a mechanism very similar to a traditional key cylinder, and whose profile is defined according to European standard applied in EN1303 compatible locks. The cylinder is equipped with two connectors on each end to make the electrical connection between the outer and inner structures. The outer structure is equipped with a 12 keys keyboard, 10 of them are numbered from zero to nine, one programming key P and one opening key. To show and confirm any operation done, there is a green and red LED to signal a valid and invalid operation respectively. To signal a low battery, the red LED flash intermittently for a 16 seconds period followed by a sound alarm. After each use of the equipment and after the batteries alarm is initiated the user has at least 50 utilizations of the electronical cylinder until the batteries run out. Finally, there is a rotation knob that allows you to open the door, as a key, but that only runs in the opening direction when the pin code typed is valid. The inner structure supports a two button keypad, one to allow the door opening and another one to disable the door opening from outside, even when valid pin code is typed. To lock or unlock the lock, there is a red button similar to the existent one in the outer structure and whose functionality is the same, in other words, to lock or unlock the door, and to lock there is no need to press the release button. Signaling their operations, there is a red and green LED. At the structure bottom there is a cover, where inside the cells are placed charging the device. Four 1.5 Volt AA batteries are used.

IPC 8 full level
E05B 47/06 (2006.01); **G07C 9/00** (2006.01)

CPC (source: EP)
E05B 47/0611 (2013.01); **E05B 47/0615** (2013.01); **E05B 47/0673** (2013.01); **E05B 15/1614** (2013.01); **E05B 17/0062** (2013.01); **E05B 17/22** (2013.01); **E05B 47/0004** (2013.01); **E05B 63/006** (2013.01)

Cited by
ITUA20161682A1

Designated contracting state (EPC)
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 SE SI SK SM TR

DOCDB simple family (publication)
WO 2011102745 A1 20110825; EP 2536905 A1 20121226; EP 2536905 B1 20151104

DOCDB simple family (application)
PT 2010000006 W 20100218; EP 10713268 A 20100218