

Title (en)
Combination lock with two dial plates

Title (de)
Kombinationsschloss mit zwei Nummernplatten

Title (fr)
Cadenas à combinaison doté de deux cadrans

Publication
EP 2410111 A1 20120125 (EN)

Application
EP 10251303 A 20100722

Priority
EP 10251303 A 20100722

Abstract (en)
A combination lock includes an outer case (10) with an inner case (11) received therein, the inner case (11) has a first chamber (140) and a second chamber (141) and the outer case (10) has a chamber (14) which communicates with a passage (15) in which a latch (20) is received. A spring (21) is mounted to the latch (20) and provides a force to move the latch (20) in a direction away from the chamber (14). A front unit (3) having two disks (31,32) is located in the first chamber (140) and a rear unit (5) having two disks (51,52) is located in the second chamber (141). The two disks (31,32) of the front unit (3) drive each other and the two disks (51,52) of the rear unit (5) drive each other. A first dial plate (4) drives one of the disks (31,32) of the front unit (3) and a second dial plate (6) drives one of the disks (51,52) of the rear unit (5). When the notches (311,321,511,521) of the disks (31,32,51,52) are in alignment with each other, an end piece (22) of the latch (20) can pass through the notches (311,321,511,521) and the lock is unlocked.

IPC 8 full level
E05B 37/00 (2006.01); **E05C 19/18** (2006.01)

CPC (source: EP)
E05B 37/0068 (2013.01); **E05B 37/0096** (2013.01); **E05C 19/186** (2013.01)

Citation (search report)

- [A] US 2007245785 A1 20071025 - LIU WEN-KUEI [TW], et al
- [A] FR 2616834 A1 19881223 - PANNEQUIN ROGER [FR]
- [A] FR 926162 A 19470923 - ROBERT ROWELL & SONS ENGINEERS
- [A] US 1696061 A 19281218 - FRANK SOLEY

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 SE SI SK SM TR

Designated extension state (EPC)
BA ME RS

DOCDB simple family (publication)
EP 2410111 A1 20120125; EP 2410111 B1 20130306; ES 2412054 T3 20130710; PL 2410111 T3 20130830

DOCDB simple family (application)
EP 10251303 A 20100722; ES 10251303 T 20100722; PL 10251303 T 20100722