

Title (en)  
CYLINDER LOCK

Title (de)  
SCHLIESSZYLINDER

Title (fr)  
CYLINDRE DE FERMETURE

Publication  
**EP 1606483 B1 20090701 (DE)**

Application  
**EP 03816430 A 20031028**

Priority  
• EP 0311941 W 20031028  
• DE 10313125 A 20030324

Abstract (en)  
[origin: WO2004085772A1] The cylinder lock is comprised of a cylinder housing (10.1) and of a cylinder core (20.1), which is mounted therein and which accommodates spring-loaded plate-shaped tumblers (31.1) that can be longitudinal placed therein. The plate longitudinal edges (30.1, 30.2) of the tumblers are then guided on guiding surfaces (21.1, 22.1) inside the cylinder core (20.1). The tumblers (31.1) have control edges (41.1) placed at defined heights (45). The aim of the invention is to render the cylinder lock not only burglar-proof, but to also ensure a reliable protection against the loss of tumblers. To this end, the invention firstly provides that a cam (36.1) having a least one pair of flanks (37.1, 38.1) is placed either on one plate longitudinal edge (30.1) of the tumblers (31.1) or on the guiding surface in the cylinder core facing said plate longitudinal edge. The invention also provides that a cutout (26.1) is made either on the cylinder core (20.1) next to its cavity (23.1) for tumbler (31.1) or the cutout is made on the tumbler itself on its plate longitudinal edge facing the cam. Said cutout has at least one pair of mating flanks (27.1, 28.1) and is opposite the cam-side flanks (37.1, 38.1). The flanks and mating flanks (27.1, 37.1) function as a stop and counter stop for concealing the actual position of the control edges. At the same time, at least one flank and mating flank (27.1, 37.1) provide for a protection against the loss of tumblers, which provides for a holding together of the modular unit, which consists of the spring-loaded (13.1) tumblers (31.1) and of the cylinder core (20.1), even when the modular unit is located outside of the cylinder housing (10.1).

IPC 8 full level  
**E05B 29/00** (2006.01)

CPC (source: EP US)  
**E05B 9/088** (2013.01 - EP US); **E05B 29/00** (2013.01 - EP US); **Y10T 70/7599** (2015.04 - EP US)

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)  
**WO 2004085772 A1 20041007**; AT E435349 T1 20090715; CN 1759224 A 20060412; CN 1759224 B 20101110; DE 10313125 A1 20041014; DE 50311675 D1 20090813; EP 1606483 A1 20051221; EP 1606483 B1 20090701; US 2007006623 A1 20070111

DOCDB simple family (application)  
**EP 0311941 W 20031028**; AT 03816430 T 20031028; CN 200380110206 A 20031028; DE 10313125 A 20030324; DE 50311675 T 20031028; EP 03816430 A 20031028; US 55063505 A 20050922