

Title (en)
CLOSING CYLINDER, IN PARTICULAR FOR MOTOR VEHICLES

Title (de)
SCHLIESSZYLINDER, INSBESONDERE FÜR KRAFTFAHRZEUGE

Title (fr)
CYLINDRE DE FERMETURE, NOTAMMENT POUR VEHICULES A MOTEUR

Publication
EP 1389253 A2 20040218 (DE)

Application
EP 02727186 A 20020522

Priority

- CZ 0200032 W 20020522
- CZ 20011801 A 20010522
- CZ 20021294 A 20020411

Abstract (en)

[origin: WO02097222A2] The invention relates to a closing cylinder, for motor vehicles in particular, comprising a housing (1). A cylinder core (2) equipped with a blocking channel (22) and spring-loaded tumblers (20,20') is arranged in an inner cylindrical cavity of said housing. When an incorrect key is inserted into the locking channel (22), the blocking protrusions (201) of the tumbler (20,20') engage with a locking groove (13,13') arranged in an element in which the cylinder core (2) is rotatably mounted. When the correct key is inserted, the blocking protrusions (201) of the tumblers (20,20') do not go beyond the contour of the cylinder core. Said closing cylinder also has means for coupling the cylinder core (2) with an outlet element (3) when the cylinder core (2) is turned using the correct key and for decoupling the cylinder core (2) from the outlet element (3) of the closing cylinder when the cylinder core (2) is turned using an incorrect key or force. The invention is characterized in that the inner cylindrical cavity of the housing (1) has annular rotatable grooves (11), and in that at least one rib (12), which delimits said annular groove from a side that is located in a direction (o) opposite an axial displacement causing the decoupling of the cylinder core (2) and the outlet element (3), the flanks (130,131) of the blocking grooves extending in the direction (o) of the axial displacement which causes the decoupling of the cylinder core (2) and the outlet element (3), is interrupted by at least one blocking groove (13), wherein the flanks (130,131) of the blocking grooves extend in the direction (o) of the axial displacement which causes the decoupling of the cylinder core (2) and the outlet element (3).

IPC 1-7
E05B 1/00

IPC 8 full level
E05B 85/06 (2014.01); **B60J 5/00** (2006.01); **B60J 5/10** (2006.01); **E05B 17/04** (2006.01); **E05B 27/00** (2006.01); **E05B 29/04** (2006.01); **E05B 17/00** (2006.01)

CPC (source: EP KR US)
E05B 17/04 (2013.01 - EP US); **E05B 85/06** (2013.01 - KR); **E05B 17/0058** (2013.01 - EP US); **E05B 29/00** (2013.01 - EP US); **E05B 29/0026** (2013.01 - EP US); **Y10T 70/5805** (2015.04 - EP US); **Y10T 70/7599** (2015.04 - EP US); **Y10T 70/7706** (2015.04 - EP US)

Citation (search report)
See references of WO 02097222A2

Cited by
WO2011076661A1

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
WO 02097222 A2 20021205; WO 02097222 A3 20031106; AU 2002257516 A1 20021209; BR 0209611 A 20040330; BR 0209611 B1 20110920; CN 1298957 C 20070207; CN 1524152 A 20040825; DE 20221962 U1 20091029; EP 1389253 A2 20040218; EP 1389253 B1 20120201; ES 2282058 T1 20071016; ES 2282058 T3 20120503; HU 225253 B1 20060828; HU P0303726 A2 20040301; HU P0303726 A3 20050530; JP 2004529282 A 20040924; JP 4225483 B2 20090218; KR 100709441 B1 20070418; KR 20040005952 A 20040116; MX PA03010627 A 20040309; PL 205924 B1 20100630; PL 363642 A1 20041129; RU 2003136743 A 20050420; RU 2268978 C2 20060127; SK 13332003 A3 20040803; SK 287651 B6 20110506; US 2004250579 A1 20041216; US 7137280 B2 20061121

DOCDB simple family (application)
CZ 0200032 W 20020522; AU 2002257516 A 20020522; BR 0209611 A 20020522; CN 02809428 A 20020522; DE 20221962 U 20020522; EP 02727186 A 20020522; ES 02727186 T 20020522; HU P0303726 A 20020522; JP 2003500373 A 20020522; KR 20037014592 A 20031110; MX PA03010627 A 20020522; PL 36364202 A 20020522; RU 2003136743 A 20020522; SK 13332003 A 20020522; US 72081503 A 20031124