

Title (en)
Cylinder lock and associated key

Title (de)
Schliesszylinder und zugehöriger Schlüssel

Title (fr)
Serrure cylindrique et clé correspondante

Publication
EP 1355023 A1 20031022 (EN)

Application
EP 02013495 A 20020617

Priority
IT BO20020213 A 20020419

Abstract (en)
A cylinder lock with associated key, comprising a body (1), a cylindrical seat (4) formed in the body, a plug (5) that can rotate in the seat, an actuation cam that is rotationally rigidly coupled to the plug, a keyway (6) for the key (7) that is formed axially in the plug, a plurality of actuation tumblers which, when the key is extracted, prevent the rotation of the plug and, when the key is inserted in the keyway, are actuated into the position that allows the rotation of the plug, at least one auxiliary tumbler (23, 29), which is accommodated in a seat (11, 18) of the plug (5) that is connected to the keyway (6) and is actuated by a spring (22) so as to prevent the rotation of the plug when the key is extracted; the auxiliary tumbler (23, 29), when the key is extracted, does not protrude into the keyway and the key (7) has at least one transverse hollow (34) that accommodates a movable element (36) that is pushed by a spring (35) into a position that protrudes from one side of the key so as to assume, when the key is inserted, a position that is opposite to a respective auxiliary tumbler (23, 29), the spring (35), which acts on the movable element in the opposite position, being suitable to push the auxiliary tumbler (23, 29) into the position that allows the rotation of the plug (5). <IMAGE>

IPC 1-7
E05B 35/00; **E05B 27/10**

IPC 8 full level
E05B 27/00 (2006.01); **E05B 27/10** (2006.01); **E05B 35/00** (2006.01)

CPC (source: EP)
E05B 27/0042 (2013.01); **E05B 35/003** (2013.01)

Citation (applicant)
• AT 371883 B 19830810 - EVVA WERKE [AT]
• DE 1260340 B 19680201 - WINKHAUS FA AUGUST
• DE 2003059 A1 19710729 - WINKHAUS FA AUGUST
• EP 0416500 A1 19910313 - ITALIANA SERRATURE AFFINI [IT]
• US 4377082 A 19830322 - WOLTER HEINZ [DE]
• US 4667495 A 19870526 - GIRARD JOEL [FR], et al
• US 5520035 A 19960528 - EIZEN NOACH [IL], et al
• US 6125674 A 20001003 - ARAMBURU LUIS ANGEL RUANO [ES]
• WO 9949161 A1 19990930 - VACHETTE SA [FR], et al

Citation (search report)
• [XY] FR 2492872 A1 19820430 - VACHETTE SA [FR]
• [Y] US 5457974 A 19951017 - KELLER ERNST [CH]
• [Y] US 5050412 A 19910924 - ERRANI DEO [IT]
• [A] AT 395262 B 19921110 - EVVA WERKE [AT]
• [A] GB 2161204 A 19860108 - TALLERES ESCORIAZA SA
• [A] US 4377082 A 19830322 - WOLTER HEINZ [DE]
• [A] US 6125674 A 20001003 - ARAMBURU LUIS ANGEL RUANO [ES]

Cited by
EP3604718A1; EP1715122A3; DE102012013422B4; US8312749B2; WO2011028713A3; WO2006137070A1; WO2014005568A1

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)
EP 1355023 A1 20031022; IT BO20020213 A0 20020419; IT BO20020213 A1 20031020

DOCDB simple family (application)
EP 02013495 A 20020617; IT BO20020213 A 20020419