

Title (en)  
Cylinder lock

Title (de)  
Schliesszylinder

Title (fr)  
Serrure cylindrique

Publication  
**EP 0851079 B1 20031217 (DE)**

Application  
**EP 97110457 A 19970626**

Priority  
• DE 19654136 A 19961223  
• DE 29708308 U 19970509

Abstract (en)  
[origin: US5964112A] A locking cylinder (1) with a cylindrical housing (2) of which the core bore (7) receives a cylindrical core (8) having a key channel (9) with core pins provided in the cylindrical core and housing pins displaceably guided in housing pin bores, the housing pins being resiliently biased by springs in the direction of the core pins, and with at least one additional, core-adjacent tumbler element (15) adjacent the wide-side profile of the key, the element (15) being displaceable in a cavity (H) crossing the rotational interface of the cylindrical core, the tumbler element being spring biased in the outward direction of the core and having a control projection (22, 51) projecting sideways into the key channel (9, 43). In order to provide greater security, a locking recess (13', 48) is located in crossing or opposing relation to the housing pin bores, for receiving the additional tumbler element (15, 49) so as to block rotation, in which a housing-adjacent tumbler pin (14) biased in the inward direction of the core is able to project into the core cavity (13) when the tumbler pin (15) is withdrawn across the rotational interface (F), and in which the spring force of the spring (17) loading the additional tumbler element (15) is larger than that of the spring (18) which loads the housing-adjacent tumbler element (14).

IPC 1-7  
**E05B 27/00**; **E05B 19/00**

IPC 8 full level  
**E05B 19/00** (2006.01); **E05B 19/06** (2006.01); **E05B 27/00** (2006.01); **E05B 27/10** (2006.01); **E05B 15/04** (2006.01)

CPC (source: EP US)  
**E05B 19/0017** (2013.01 - EP US); **E05B 27/0021** (2013.01 - EP US); **E05B 27/0042** (2013.01 - EP US); **E05B 27/0064** (2013.01 - EP US); **E05B 27/0078** (2013.01 - EP US); **E05B 19/0041** (2013.01 - EP US); **E05B 19/0052** (2013.01 - EP US); **E05B 2015/0448** (2013.01 - EP US); **Y10T 70/7565** (2015.04 - EP US); **Y10T 70/7605** (2015.04 - EP US); **Y10T 70/7864** (2015.04 - EP US)

Cited by  
DE102009044207B4; FR2842236A1; CN103827417A; EP2390030A3; US6427506B1; WO2014127810A1; WO2013030077A1; WO2021213829A1; EP2309083A2; DE102009044207A1; US8505347B2

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

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**US 5964112 A 19991012**; AT E256806 T1 20040115; AT E266136 T1 20040515; CA 2226033 A1 19980623; CA 2226033 C 20060103; DE 19654136 A1 19980625; DE 19654136 C2 19991118; DK 0851079 T3 20040426; EP 0851079 A1 19980701; EP 0851079 B1 20031217; ES 2208786 T3 20040616; ES 2215952 T3 20041016; HK 1012198 A1 19990730; HK 1049197 A1 20030502; HK 1049197 B 20050208; NL 1005760 C1 19970422; NL 1007794 C1 19980624; PT 851079 E 20040331

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**US 99260697 A 19971217**; AT 02009902 T 19970626; AT 97110457 T 19970626; CA 2226033 A 19971223; DE 19654136 A 19961223; DK 97110457 T 19970626; EP 97110457 A 19970626; ES 02009902 T 19970626; ES 97110457 T 19970626; HK 03101456 A 20030227; HK 98113355 A 19981215; NL 1005760 A 19970408; NL 1007794 A 19971215; PT 97110457 T 19970626