

Title (en)
Locking cylinder for a motor vehicle

Title (de)
Schließzylinder für ein Kraftfahrzeug

Title (fr)
Serrure cylindrique pour un véhicule automobile

Publication
EP 2241705 A3 20120711 (DE)

Application
EP 10159815 A 20100413

Priority
DE 102009016955 A 20090414

Abstract (en)
[origin: EP2241705A2] The locking cylinder has a cylinder core (2), which is adjusted in cylinder housing in rotary manner. A safety element (7) is provided, which is made of a material of high hardness. The safety element is arranged within the range of a key channel (5) in such a manner that a penetration of a foreign material is hindered in the cylinder core. The safety element is made of alloy tool steel, or other alloy steel or ceramic.

IPC 8 full level
E05B 9/04 (2006.01); **E05B 15/16** (2006.01); **E05B 17/00** (2006.01); **E05B 65/12** (2006.01); **E05B 29/00** (2006.01)

CPC (source: EP)
E05B 9/04 (2013.01); **E05B 15/1614** (2013.01); **E05B 17/0062** (2013.01); **E05B 29/00** (2013.01)

Citation (search report)

- [XA] US 1422515 A 19220711 - AUGENBRAUN PETER F
- [XAYI] US 1422519 A 19220711 - AUGENBRAUN PETER F
- [YA] US 2059129 A 19361027 - MAXWELL MAXWELL C, et al
- [XAI] US 2003154752 A1 20030821 - PRICE DENNIS C [US]
- [XAI] DE 2536804 A1 19760318 - VIRO INNOCENTI SPA
- [A] DE 19635662 C1 19980305 - SCHULTE C E GMBH [DE]

Cited by
CN107269124A; WO2016135717A1; EP3117056B1

Designated contracting state (EPC)
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)
AL BA ME RS

DOCDB simple family (publication)
EP 2241705 A2 20101020; EP 2241705 A3 20120711; EP 2241705 B1 20150225; CN 101864862 A 20101020; CN 101864862 B 20150121; DE 102009016955 A1 20101021

DOCDB simple family (application)
EP 10159815 A 20100413; CN 201010148704 A 20100414; DE 102009016955 A 20090414