

Title (en)

AN IMPROVED STRUCTURE OF KEY CYLINDER

Title (de)

VERBESSERTE STRUKTUR EINES SCHLIESSZYLINDERS

Title (fr)

STRUCTURE AMÉLIORÉE DE BARILLET À CLÉ

Publication

**EP 2963209 A1 20160106 (EN)**

Application

**EP 15160487 A 20150324**

Priority

CN 201410308058 A 20140701

Abstract (en)

A key cylinder includes a first cylinder body 1 and second cylinder body 2, connected by a connection member 3, the first cylinder body 1 housing a first barrel 4, and the second cylinder body 2 housing a second barrel 5, an unlocking cam 6 located between the first cylinder body 1 and the second cylinder body 2. The connection member 3 features a fixed block 7 extending from its side, set between the first barrel 4 of key cylinder 1 and the unlocking cam 6. The key cylinder includes a first driving shaft 8 which extends through a bore in the fixed block 7 and torsionally connects the first cylinder barrel 4 and the unlocking cam 6 such that the first cylinder barrel 4 can drive the unlocking cam 6 between a locked and an unlocked position, and a second driving shaft 9 which torsionally connects the second cylinder barrel 4 and the unlocking cam 6 such that the first cylinder barrel 4 can drive the unlocking cam 6 between a locked and an unlocked position. A resilient member 10 and lifting pin 11 are in the second barrel 5 of key cylinder 2, while a restraining plug 12 is set inside the fixed block 7, and a sliding stop pin 13 is set at an eccentric position from the axis of rotation of the unlocking cam 6. One end of the sliding stop pin 13 abuts a lifting pin 11, the other end cooperates with the restraining plug 12. The sliding stop pin 13 features at least one circumferential groove 14. At least one lock-stopping channel 15 is formed in a radial direction in the unlocking cam 6, the lock-stopping channel 15 being equipped with a lock-stopping spring 16 and a lock shotpin 17. The mechanism is arranged such that when the first cylinder body 1 is broken off from the remainder of the key cylinder, the restraining plug is released, allowing the resilient member 10 to move the sliding stop pin 13 until the lock shotpin 17 engages with the lock-stopping channel 15, preventing the rotation of the unlocking cam 6 to an unlocked position.

IPC 8 full level

**E05B 17/20** (2006.01); **E05B 9/04** (2006.01)

CPC (source: EP)

**E05B 9/042** (2013.01); **E05B 17/2092** (2013.01)

Citation (search report)

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Designated contracting state (EPC)

AL 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 RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 2963209 A1 20160106; EP 2963209 B1 20200219; CN 104047473 A 20140917**

DOCDB simple family (application)

**EP 15160487 A 20150324; CN 201410308058 A 20140701**