

Title (en)
High security lock core structure

Title (de)
Hochsicherheitsschlosskernanordnung

Title (fr)
Structure de noyau de serrure haute sécurité

Publication
EP 2500493 A1 20120919 (EN)

Application
EP 11158772 A 20110318

Priority
EP 11158772 A 20110318

Abstract (en)
A high security lock core structure includes a case, a core, multiple side bead units and multiple bead units. The case includes side holes for receiving the side bead units. The core includes bottom holes which communicate with the top holes. The bead units are located in the top holes and the bottom holes. Each side bead unit includes a side bead and a first resilient member. Each bead unit includes a bottom bead, a top bead, a second resilient member and a cover. The top bead of one of the bead units is replaced by a cone-shaped locking bead which has a cone-shaped base and located at the interfaces of the top and bottom holes to make the core be locked. When the core is in unlocked status by malicious ways, the bottom holes are moved to the side holes to lock the core again.

IPC 8 full level
E05B 27/00 (2006.01); **E05B 19/00** (2006.01)

CPC (source: EP)
E05B 27/0021 (2013.01); **E05B 27/0064** (2013.01); **E05B 27/0067** (2013.01); **E05B 19/0023** (2013.01); **E05B 47/0045** (2013.01)

Citation (search report)

- [IAY] WO 2008103515 A2 20080828 - MASTER LOCK CO [US], et al
- [YA] GB 2410292 A 20050727 - FED LOCK CO LTD [TW]
- [A] EP 0492041 A1 19920701 - NIEDERDRENK JULIUS KG [DE]
- [A] EP 1700980 A1 20060913 - KESO AG [CH]
- [A] US 2222027 A 19401119 - GOLDEN ABRAHAM H, et al
- [A] DE 19934883 C1 20010118 - WAGNER ALEXANDER JOSEF [DE]
- [A] US 2059129 A 19361027 - MAXWELL MAXWELL C, et al

Cited by
EP2811087A1; GB2558016A; GB2558016B; WO2017045242A1; TWI734184B

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 2500493 A1 20120919; EP 2500493 B1 20141105

DOCDB simple family (application)
EP 11158772 A 20110318