

Title (en)
Locking device for a manhole

Title (de)
Verriegelungsvorrichtung für Schachtrahmen

Title (fr)
Dispositif de verrouillage et déverrouillage avec clé d'un tampon sur un cadre

Publication
EP 1593780 A1 20051109 (FR)

Application
EP 05290704 A 20050330

Priority
FR 0403952 A 20040415

Abstract (en)
The device has a bolt (10) whose plate has notches supported on an inner side of base wall of a cavity (5) of a pad (1). Lateral surface of the cavity has two grooves (29), where width of each groove for passing a tang of a key bushing is lower than that of a notch as the grooves overhang the plate. The width difference permits a notch (14) to be inaccessible by a screwdriver in locked position of the pad with a frame.

Abstract (fr)
La présente invention concerne un dispositif de verrouillage et déverrouillage avec clé d'un tampon sur un cadre. Le dispositif est caractérisé en ce que le rotor du verrou comprend un fût cylindrique (17) monté à rotation dans le tampon (1) en étant solidarisé en rotation au pêne (10) et un axe cylindrique (18) à tête (21) monté fou dans le fût(17). L'invention trouve application dans le domaine de la voirie. <IMAGE>

IPC 1-7
E02D 29/14

IPC 8 full level
E03F 5/02 (2006.01); **E02D 29/14** (2006.01); **E05B 11/02** (2006.01); **E05B 35/00** (2006.01); **E05B 65/00** (2006.01); **E05C 3/04** (2006.01)

CPC (source: EP US)
E02D 29/1427 (2013.01 - EP US); **E05B 11/02** (2013.01 - EP US); **E05B 35/008** (2013.01 - EP US); **E05C 3/04** (2013.01 - EP US); **Y10T 70/5589** (2015.04 - EP US); **Y10T 70/7706** (2015.04 - EP US); **Y10T 292/0863** (2015.04 - EP US); **Y10T 292/20** (2015.04 - EP US)

Citation (search report)

- [A] WO 02059425 A1 20020801 - FITJAR BETONGINDUSTRI AS [NO], et al
- [A] EP 0305245 A1 19890301 - FONDERIE NORINCO [FR]
- [A] EP 0594468 A1 19940427 - GORDON & CO LTD H [GB], et al
- [A] EP 0761885 A1 19970312 - POLY BAUELEMENTE AG [CH]

Cited by
FR2925536A1; FR2919001A1; EP2075378A1; FR2925926A1; US8132436B2; WO2009019334A1; WO2017034430A1; EP2363555A1; WO2007119048A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 1593780 A1 20051109; EP 1593780 B1 20080903; AR 049800 A1 20060906; AT E407266 T1 20080915; AU 2005201524 A1 20051027; AU 2005201524 B2 20080918; BR PI0503006 A 20051206; CA 2503072 A1 20051015; CA 2503072 C 20090113; CN 100491682 C 20090527; CN 1683720 A 20051019; CY 1108624 T1 20140409; DE 602005009426 D1 20081016; DK 1593780 T3 20090105; EC SP055730 A 20060301; EG 24159 A 20080820; ES 2313245 T3 20090301; FR 2869053 A1 20051021; FR 2869053 B1 20060714; HK 1081611 A1 20060519; JP 2005299383 A 20051027; MA 27601 A1 20051101; MX PA05004082 A 20051019; MY 139143 A 20090828; NO 20051693 D0 20050405; NO 20051693 L 20051017; NO 337081 B1 20160118; PL 1593780 T3 20090331; PT 1593780 E 20081209; RU 2005109877 A 20061020; SG 116666 A1 20051128; SI 1593780 T1 20090228; US 2005241349 A1 20051103; US 7320236 B2 20080122; ZA 200503016 B 20051020

DOCDB simple family (application)
EP 05290704 A 20050330; AR P050101496 A 20050415; AT 05290704 T 20050330; AU 2005201524 A 20050411; BR PI0503006 A 20050415; CA 2503072 A 20050411; CN 200510064348 A 20050414; CY 081101388 T 20081202; DE 602005009426 T 20050330; DK 05290704 T 20050330; EC SP055730 A 20050412; EG 2005040189 A 20050413; ES 05290704 T 20050330; FR 0403952 A 20040415; HK 06101840 A 20060213; JP 2005110100 A 20050406; MA 28217 A 20050413; MX PA05004082 A 20050415; MY PI20051619 A 20050412; NO 20051693 A 20050405; PL 05290704 T 20050330; PT 05290704 T 20050330; RU 2005109877 A 20050406; SG 200502753 A 20050414; SI 200530444 T 20050330; US 10413405 A 20050412; ZA 200503016 A 20050414