

Title (en)
Locking device

Title (de)
Absperrvorrichtung

Title (fr)
Dispositif de fermeture

Publication
EP 1826321 B1 20091118 (FR)

Application
EP 07290231 A 20070222

Priority
FR 0601799 A 20060228

Abstract (en)
[origin: US7160051B1] A fixed frame (4) and a covering element (6), the frame (4) defining a frame plane (P-P). A first latch (30) has two latch surfaces (32, 34) which cooperate and which are inclined relative to the frame plane (P-P). The covering element (6) and the frame (4) comprise cooperating stop surfaces (52, 56) which limit a displacement of the lid (6) within the frame (4) in the frame plane (P-P). The stop surfaces (52, 56) are inclined relative to the frame plane (P-P) by an angle of from 30° to 80° and they maintain the covering element flat on the frame. Application to manhole covers for closing manholes.

IPC 8 full level
E02D 29/14 (2006.01)

CPC (source: EP NO US)
E02D 29/14 (2013.01 - EP NO US); **E02D 29/1427** (2013.01 - EP NO US)

Cited by
WO2019186211A1; EP3775395B1

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 LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR MK RS

DOCDB simple family (publication)
US 7160051 B1 20070109; AT E449217 T1 20091215; CN 101029492 A 20070905; CN 101029492 B 20100707; DE 602007003242 D1 20091231; EP 1826321 A1 20070829; EP 1826321 B1 20091118; ES 2335052 T3 20100318; FR 2897880 A1 20070831; FR 2897880 B1 20091106; NO 20071103 L 20070829; NO 340103 B1 20170313; PL 1826321 T3 20100430; PT 1826321 E 20100119

DOCDB simple family (application)
US 27780506 A 20060329; AT 07290231 T 20070222; CN 200710084235 A 20070227; DE 602007003242 T 20070222; EP 07290231 A 20070222; ES 07290231 T 20070222; FR 0601799 A 20060228; NO 20071103 A 20070227; PL 07290231 T 20070222; PT 07290231 T 20070222