

Title (en)
Bilaterally operable locking mechanism for a manhole cover

Title (de)
Beidseitige bedienbare Verriegelungsvorrichtung für eine Schachtabdeckung

Title (fr)
Dispositif de verrouillage libérable des deux côtés d'un regard

Publication
EP 0737782 B1 19990721 (FR)

Application
EP 96420119 A 19960410

Priority
FR 9504857 A 19950414

Abstract (en)
[origin: EP0737782A1] The locking mechanism consists of a hook-shaped catch (10) on the inside of the manhole cover surrounding frame (2), designed to receive a peg (17) on one end of an inverted L-shaped arm pivoted to a bracket (14) on the underside of the cover (4). The arm is rotated to release the catch by a lever (13) with a cam-shaped end which is let into a recess in the cover or, from below, by a chain or cable (18) connected to the tip of the arm's upper horizontal section. When the manhole cover is closed, the control lever is fixed in place by a shutter (15) and a bolt (30) which screws into a nut (32) under a plate (28) in the cover recess. The cover can be equipped with a gas cylinder to facilitate lifting.

IPC 1-7
E02D 29/14; E05B 63/00; E05C 3/16

IPC 8 full level
E02D 29/14 (2006.01); E05B 63/00 (2006.01); E05C 3/16 (2006.01); E02D 29/12 (2006.01)

CPC (source: EP)
E02D 29/1427 (2013.01); E02D 29/1463 (2013.01); E05B 63/0069 (2013.01); E05C 3/162 (2013.01)

Cited by
US11001982B2; WO2007131941A1; CN107123437A; EP4032833A1; US2018142438A1; US10968595B2; US2018100286A1; GB2493852A; FR3104620A1; EP1734192A1; FR2887268A1; AU2006202543B2; EP1053378A4; EP0856611A1; FR2758836A1; GB2622368A; US10954649B2; US11414829B2; WO2016010475A1; KR101300700B1

Designated contracting state (EPC)
AT BE CH DE ES FR GB IT LI LU NL PT SE

DOCDB simple family (publication)
EP 0737782 A1 19961016; EP 0737782 B1 19990721; AT E182385 T1 19990815; DE 69603310 D1 19990826; DE 69603310 T2 19991111; ES 2136960 T3 19991201; FR 2732988 A1 19961018; FR 2732988 B1 19970613

DOCDB simple family (application)
EP 96420119 A 19960410; AT 96420119 T 19960410; DE 69603310 T 19960410; ES 96420119 T 19960410; FR 9504857 A 19950414