

Title (en)

MANHOLE COVER WITH LOCKED HINGE

Publication

EP 0420777 B1 19930721 (FR)

Application

EP 90470050 A 19900919

Priority

FR 8912939 A 19890929

Abstract (en)

[origin: EP0420777A1] Locking device for a manhole, equipped with a hinge device (3) removably connecting a cover (2), equipped with at least one projecting pivot (8), to a frame (1), the skirt (4) of which is provided with at least one receptacle (7) cooperating with the projecting pivot (8), in which an elastic member (13), for example a spring or a piece of elastomer, which has to be compressed and then released in order to lock the cover, is fastened in each receptacle (7) and exerts a resistance to the unlocking of the cover. <IMAGE>

IPC 1-7

E02D 29/14

IPC 8 full level

E02D 29/14 (2006.01); **E02D 29/12** (2006.01)

CPC (source: EP)

E02D 29/1427 (2013.01); **E02D 29/1463** (2013.01)

Cited by

US7744304B2; ITPI20110047A1; EP0537552A1; CN110067115A; US7094000B2; EP0533533A1; FR2681356A1; DE10046045C1; ES2100785A2; US6722813B2; US6640495B1; US6718692B2; WO0014340A1; US7144189B1; US7726902B1; US7108447B2

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)

EP 0420777 A1 19910403; EP 0420777 B1 19930721; AT E91739 T1 19930815; DE 69002297 D1 19930826; DE 69002297 T2 19931202; DK 0420777 T3 19930830; ES 2038113 T1 19930716; ES 2038113 T3 19931216; FR 2652598 A1 19910405; FR 2652598 B1 19911213; GR 3008586 T3 19931029; IE 64122 B1 19950712; IE 903498 A1 19910410; NO 178635 B 19960122; NO 178635 C 19960502; NO 904181 D0 19900926; NO 904181 L 19910402; PT 8468 T 19920930; PT 8468 U 19950912

DOCDB simple family (application)

EP 90470050 A 19900919; AT 90470050 T 19900919; DE 69002297 T 19900919; DK 90470050 T 19900919; ES 90470050 T 19900919; FR 8912939 A 19890929; GR 930400604 T 19930722; IE 349890 A 19900928; NO 904181 A 19900926; PT 846892 U 19920409