

Title (en)  
Shaft lid

Title (de)  
Schachtdeckel

Title (fr)  
Dispositif de levage de couvercle

Publication  
**EP 2431533 A3 20150909 (DE)**

Application  
**EP 11175754 A 20110728**

Priority  
DE 102010037641 A 20100917

Abstract (en)  
[origin: EP2431533A2] The cover (1) has a central portion rotated on an edge of a bearing portion for bearing a manhole opening. A base body (2) is formed from a composite material and reinforcement fibers that run in the central portion below the base body. Multiple layers of the reinforcement fibers are formed one above the other and extend along different directions from an edge to an opposite edge of the cover. The layers comprises strips (5) arranged one above the other at different angles. The base body is hardened from a sealing compound, where the cover extends the base body along a radial direction. The base body is formed from concrete material, polyester material and duroplastic polymeric material. The strips are made of plastic.

IPC 8 full level  
**E02D 29/14** (2006.01)

CPC (source: EP)  
**E02D 29/14** (2013.01); **E02D 29/1463** (2013.01)

Citation (search report)

- [AD] US 5378078 A 19950103 - LEWIS MICHAEL E [US], et al
- [A] DE 29921532 U1 20000203 - EHD EISENHAMMER DRESDEN GMBH & [DE]
- [A] DE 29801640 U1 19980520 - MEYER HEIKE [DE]

Cited by  
CN102852163A; EP2692951A1; EP2692952A1

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)  
**DE 202011050837 U1 20111021**; DE 102010037641 A1 20120322; EP 2431533 A2 20120321; EP 2431533 A3 20150909; EP 2431533 B1 20161116

DOCDB simple family (application)  
**DE 202011050837 U 20110728**; DE 102010037641 A 20100917; EP 11175754 A 20110728