

Title (en)  
Component for control- or maintenance-manholes

Title (de)  
Bauteil für Wartungs- und Kontrollschächte

Title (fr)  
Dispositif pour regard de contrôle ou de service

Publication  
**EP 0578044 B1 19970409 (DE)**

Application  
**EP 93109918 A 19930622**

Priority  
DE 9209027 U 19920706

Abstract (en)  
[origin: EP0578044A1] It is known to keep damaging forces away from manhole structures by a permanently elastic spacer ring (1) being inserted well up at the top between shaft rings. However, such rings are not inherently rigid and bend and become distorted at the installation site. In order to avoid this undesirable property of the intermediate rings (1), they are provided according to the invention with a metal reinforcement (2, 3), which, however, is embedded in such a way as to be set back from the contact surfaces. The metal reinforcement preferably has the form of an H-section (6), channel section (7) or angle section (4, 5). In addition, the Shore hardness of the elastomer is set at at least 75 to increase the bending rigidity.  
<IMAGE>

IPC 1-7  
**E02D 29/14**

IPC 8 full level  
**E02D 29/12** (2006.01); **E02D 29/14** (2006.01)

CPC (source: EP)  
**E02D 29/12** (2013.01)

Designated contracting state (EPC)  
AT BE CH DE FR IT LI LU NL

DOCDB simple family (publication)  
**EP 0578044 A1 19940112; EP 0578044 B1 19970409**; AT E151484 T1 19970415; DE 59306087 D1 19970515; DE 9209027 U1 19920910

DOCDB simple family (application)  
**EP 93109918 A 19930622**; AT 93109918 T 19930622; DE 59306087 T 19930622; DE 9209027 U 19920706