

Title (en)

METHOD OF REPAIRING A MANHOLE SHAFT

Title (de)

VERFAHREN ZUM SANIEREN EINES KANALSCHACHTES

Title (fr)

SYSTEM DE REPARATION D'UN REGARD DE CHAUSSÉE

Publication

**EP 2739791 A2 20140611 (DE)**

Application

**EP 13711047 A 20130321**

Priority

- DE 102012102433 A 20120322
- EP 2013055899 W 20130321

Abstract (en)

[origin: CA2868039A1] The method serves to renovate a sewer manhole and comprises the following steps: a. pulling of an inflatable film tube (40) onto a mould (38) which corresponds to the sewer manhole profile, b. wrapping and/or placing of at least one stretchable, textile strip (46, 46') of the film tube (40) which has been pulled onto the mould (38), wherein at least one non-stretchable longitudinal strip (48) which has tensile strength is also introduced in the axial direction between the strips (46, 46'), c. attaching a protective cover (52) which encloses the lining (50) which has been produced in this way, d. pulling of the lining (50) from the mould (38) which is reduced in the radial direction, e. inserting of the lining (50) into a sewer manhole (10) to be renovated and introducing a pressure-tight sack (66) into the inner film tube (40) of the lining (50), f. sealing of the lining (50) at the upper end and inflation until it bears against the manhole wall (34), g. curing of the lining (50) which is impregnated with resin. A variable mould (38) which is composed of modules (38-1, 38-2, 38-3) of different shape and size in accordance with the sewer manhole (10) to be renovated serves to produce the lining (50).

IPC 8 full level

**E02D 29/12** (2006.01)

CPC (source: CN EP US)

**E02D 29/12** (2013.01 - CN EP US); **E02D 29/125** (2013.01 - CN EP US); **E02D 29/128** (2013.01 - CN EP US)

Citation (search report)

See references of WO 2013139892A2

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 102012102433 A1 20130926; DE 102012102433 B4 20140116;** AU 2013237405 A1 20141009; AU 2013237405 B2 20170330;  
CA 2868039 A1 20130926; CA 2868039 C 20190409; CN 104321489 A 20150128; CN 104321489 B 20160622; DK 2739791 T3 20150803;  
EP 2739791 A2 20140611; EP 2739791 B1 20150506; ES 2544476 T3 20150831; HK 1206801 A1 20160115; JP 2015514168 A 20150518;  
JP 6067834 B2 20170125; KR 101941100 B1 20190412; KR 20140139573 A 20141205; PL 2739791 T3 20160531;  
US 2015023735 A1 20150122; WO 2013139892 A2 20130926; WO 2013139892 A3 20131121

DOCDB simple family (application)

**DE 102012102433 A 20120322;** AU 2013237405 A 20130321; CA 2868039 A 20130321; CN 201380015559 A 20130321;  
DK 13711047 T 20130321; EP 13711047 A 20130321; EP 2013055899 W 20130321; ES 13711047 T 20130321; HK 15107196 A 20150728;  
JP 2015500923 A 20130321; KR 20147029487 A 20130321; PL 13711047 T 20130321; US 201314383959 A 20130321