

Title (en)

HIGH-PRESSURE FLUID STORAGE TANK AND CONSTRUCTION METHOD THEREOF

Title (de)

HOCHDRUCK FLÜSSIGKEITSSPEICHERBEHÄLTER UND KONSTRUKTIONSVERFAHREN DAFÜR

Title (fr)

RÉSERVOIR DE STOCKAGE DE FLUIDE SOUS HAUTE PRESSION ET PROCÉDÉ DE CONSTRUCTION ASSOCIÉ

Publication

EP 3091148 A4 20171011 (EN)

Application

EP 14866030 A 20140429

Priority

- KR 20130144887 A 20131126
- KR 20140007535 A 20140122
- KR 20140007534 A 20140122
- KR 2014003748 W 20140429

Abstract (en)

[origin: EP3091147A1] The present invention relates to a high-pressure fluid storage system and a construction method therefor. The high-pressure fluid storage system according to the present invention includes: a first horizontal tunnel formed at a predetermined depth in the underground in a lateral direction; a cavern formed by excavating the ground downwardly from the first horizontal tunnel; and a fluid storage reservoir including a tank body for storing fluid and inserted into the cavern; a backfill layer formed by a backfill material filled between the tank body and an inner wall of the cavern; and a first plug formed by filling the backfill material into the first horizontal tunnel to close an upper portion of the cavern.

IPC 8 full level

E04H 7/02 (2006.01); **F17C 1/00** (2006.01); **F17C 1/02** (2006.01); **F17C 1/10** (2006.01)

CPC (source: EP KR)

E04H 7/02 (2013.01 - EP KR); **F17C 1/00** (2013.01 - EP); **F17C 1/007** (2013.01 - EP); **F17C 1/02** (2013.01 - EP); **F17C 1/10** (2013.01 - EP); **F17C 1/12** (2013.01 - EP); **F17C 1/14** (2013.01 - EP); **F17C 2201/0104** (2013.01 - EP); **F17C 2201/0109** (2013.01 - EP); **F17C 2201/032** (2013.01 - EP); **F17C 2201/052** (2013.01 - EP); **F17C 2203/0304** (2013.01 - EP); **F17C 2203/0621** (2013.01 - EP); **F17C 2203/0624** (2013.01 - EP); **F17C 2203/0639** (2013.01 - EP); **F17C 2203/0646** (2013.01 - EP); **F17C 2203/0658** (2013.01 - EP); **F17C 2203/066** (2013.01 - EP); **F17C 2205/0107** (2013.01 - EP); **F17C 2205/0115** (2013.01 - EP); **F17C 2205/0126** (2013.01 - EP); **F17C 2205/0192** (2013.01 - EP); **F17C 2209/221** (2013.01 - EP); **F17C 2209/228** (2013.01 - EP); **F17C 2221/031** (2013.01 - EP); **F17C 2221/033** (2013.01 - EP); **F17C 2223/0123** (2013.01 - EP); **F17C 2223/035** (2013.01 - EP); **F17C 2260/046** (2013.01 - EP); **F17C 2270/0142** (2013.01 - EP); **F17C 2270/0147** (2013.01 - EP); **F17C 2270/0149** (2013.01 - EP); **F17C 2270/0581** (2013.01 - EP)

Citation (search report)

- [XYI] US 3307361 A 19670307 - WATERMAN WILLIS D
- [Y] EP 0712793 A1 19960522 - FERRARI NINO COSTR [IT]
- [Y] JP H0597179 A 19930420 - SHIMIZU CONSTRUCTION CO LTD
- [A] DE 864685 C 19530126 - NIEDERLAENDISCHE STAAT
- [AP] WO 2013188163 A1 20131219 - SUSTAINX INC, et al
- See references of WO 2015080353A1

Cited by

EP3792467A1; EP4311974A1

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

DOCDB simple family (publication)

EP 3091147 A1 20161109; EP 3091147 A4 20171115; CN 105934554 A 20160907; CN 105934554 B 20181123; CN 105940169 A 20160914; CN 105940169 B 20181211; EP 3091148 A1 20161109; EP 3091148 A4 20171011; KR 101548666 B1 20150902; KR 101550737 B1 20150909; KR 101558294 B1 20151015; KR 101558297 B1 20151020; KR 20150061530 A 20150604; KR 20150061531 A 20150604; KR 20150061532 A 20150604; KR 20150061533 A 20150604

DOCDB simple family (application)

EP 14865690 A 20140429; CN 201480074003 A 20140429; CN 201480074034 A 20140429; EP 14866030 A 20140429; KR 20140007534 A 20140122; KR 20140007535 A 20140122; KR 20140013808 A 20140206; KR 20140013809 A 20140206