

Title (en)

THERMALLY INSULATING SEALED TANK COMPRISING A REINFORCING INSULATING PLUG

Title (de)

WÄRMEISOLIERENDER ABGEDICHTETER BEHÄLTER MIT VERSTÄRKUNGSISOLIERSTOPFEN

Title (fr)

CUVE ÉTANCHE ET THERMIQUEMENT ISOLANTE COMPORTANT UN BOUCHON ISOLANT DE RENFORT

Publication

EP 3596383 A1 20200122 (FR)

Application

EP 18712978 A 20180308

Priority

- FR 1752116 A 20170315
- FR 2018050537 W 20180308

Abstract (en)

[origin: WO2018167403A1] The invention concerns a thermally insulating sealed tank for storing a fluid, having a wall (1) comprising, in a thickness direction, from the outside to the inside of the tank, a support structure (3), a primary thermal insulation barrier (5) and a primary sealing membrane (6) that rests against the primary thermal insulation barrier (5) and is intended to be in contact with the fluid stored in the tank; the primary thermal insulation barrier (5) comprising a primary insulating panel (16) that comprises a bearing area (37) cooperating with an anchoring device (38), the anchoring device (38) bearing against the bearing area (37) of the external rigid plate (19) in such a way as to hold it towards the support structure (3), the primary thermal insulation barrier (5) comprising a reinforcing insulating plug (43) that extends, in the thickness direction, from the bearing area (37) of the external rigid plate (19) to a specific area of the primary sealing membrane (6) so as to take up the compressive forces likely to be exerted on the specific area (26) of the primary sealing membrane (6); said reinforcing insulating plug (43) comprising a polymer foam layer (45) having a compressive yield strength greater than that of the polymer foam layer (17) of the primary insulating panel (16).

IPC 8 full level

F17C 3/02 (2006.01)

CPC (source: EP KR RU US)

B63B 25/16 (2013.01 - KR); **B67D 9/00** (2013.01 - US); **F17C 3/02** (2013.01 - RU); **F17C 3/027** (2013.01 - EP KR US);
F17C 6/00 (2013.01 - US); **F17C 2201/0157** (2013.01 - EP KR US); **F17C 2201/052** (2013.01 - EP KR US); **F17C 2203/0329** (2013.01 - US);
F17C 2203/0358 (2013.01 - EP KR US); **F17C 2203/0631** (2013.01 - EP KR US); **F17C 2205/0355** (2013.01 - US);
F17C 2221/033 (2013.01 - EP KR US); **F17C 2223/0161** (2013.01 - EP KR); **F17C 2223/033** (2013.01 - EP KR); **F17C 2227/0135** (2013.01 - US);
F17C 2260/011 (2013.01 - EP KR); **F17C 2270/0107** (2013.01 - EP KR US)

Citation (search report)

See references of WO 2018167403A1

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)

WO 2018167403 A1 20180920; CN 110537051 A 20191203; CN 110537051 B 20221202; EP 3596383 A1 20200122; EP 3596383 B1 20210331;
EP 3596383 B8 20210428; FR 3064042 A1 20180921; FR 3064042 B1 20211022; JP 2020514643 A 20200521; JP 7142024 B2 20220926;
KR 102447121 B1 20220926; KR 20190126236 A 20191111; RU 2019128016 A 20210415; RU 2019128016 A3 20210415;
RU 2749087 C2 20210603; SG 11201908446Y A 20191030; US 2020049314 A1 20200213

DOCDB simple family (application)

FR 2018050537 W 20180308; CN 201880025172 A 20180308; EP 18712978 A 20180308; FR 1752116 A 20170315;
JP 2019550822 A 20180308; KR 20187017814 A 20180308; RU 2019128016 A 20180308; SG 11201908446Y A 20180308;
US 201816492645 A 20180308