

Title (en)

SEALED AND THERMALLY INSULATING TANK

Title (de)

ABGEDICHTETER UND WÄRMEISOLIERENDER TANK

Title (fr)

CUVE ÉTANCHE ET THERMIQUEMENT ISOLANTE

Publication

**EP 4182597 A1 20230524 (FR)**

Application

**EP 21746536 A 20210708**

Priority

- FR 2007477 A 20200716
- FR 2021051276 W 20210708

Abstract (en)

[origin: WO2022013493A1] The present invention relates primarily to a sealed and thermally insulating tank (1) having at least one structure (2) for storing a fluid and a load-bearing structure (4) encasing the storage structure (2), the storage structure (2) comprising a plurality of walls, namely at least a ceiling wall (6), a bottom wall (8) and a plurality of side walls (10a, 10b) extending between the ceiling wall (6) and the bottom wall (8), at least the ceiling wall (6) comprising a first portion (46) and a second portion (48), the first portion (46) having, in succession in the direction of the thickness from the outside to the inside of the tank (1), a sealed and thermally insulating secondary space (28) and a sealed and thermally insulating primary space (30), the secondary space (28) being configured to be in contact with the load-bearing structure (4), the primary space (30) delimiting an internal volume (44) configured to receive the fluid contained in the tank (1), the second portion (48) comprising a sealed and thermally insulating layer (50), characterized in that the sealed and thermally insulating layer (50) of the second portion (48) is in contact with the load-bearing structure (4) while being involved in delimiting the internal volume (44) of the tank (1), a ratio of the surface area of the second portion (48) of the ceiling wall (6) to the total surface area of the ceiling wall (6) being between 5% and 60%.

IPC 8 full level

**F17C 3/02** (2006.01); **F17C 13/06** (2006.01)

CPC (source: EP)

**F17C 3/027** (2013.01); **F17C 13/06** (2013.01); **F17C 2201/0157** (2013.01); **F17C 2201/052** (2013.01); **F17C 2203/0358** (2013.01); **F17C 2203/0379** (2013.01); **F17C 2203/0643** (2013.01); **F17C 2203/0651** (2013.01); **F17C 2203/0682** (2013.01); **F17C 2221/033** (2013.01); **F17C 2221/035** (2013.01); **F17C 2223/0153** (2013.01); **F17C 2223/0161** (2013.01); **F17C 2223/033** (2013.01); **F17C 2260/013** (2013.01); **F17C 2270/0107** (2013.01)

Citation (search report)

See references of WO 2022013493A1

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

**FR 3112586 A1 20220121**; **FR 3112586 B1 20220701**; EP 4182597 A1 20230524; WO 2022013493 A1 20220120

DOCDB simple family (application)

**FR 2007477 A 20200716**; EP 21746536 A 20210708; FR 2021051276 W 20210708