

Title (en)

SEALED AND THERMALLY INSULATING VESSEL COMPRISING A METAL MEMBRANE CORRUGATED ACCORDING TO ORTHOGONAL FOLDS

Title (de)

DICHTER UND WÄRMEISOLIERTER BEHÄLTER MIT EINER IN ORTHOGONALEN FALTEN GEWELLTEN METALLMEMBRAN

Title (fr)

CUVE ETANCHE ET THERMIQUEMENT ISOLANTE COMPORANT UNE MEMBRANE METALIQUE ONDULEE SELON DES PLIS ORTHOGONAUX

Publication

**EP 3940287 A1 20220119 (FR)**

Application

**EP 21194856 A 20131009**

Priority

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Abstract (en)

[origin: WO2014057221A2] Fluidtight and thermally insulated tank built into a bearing structure, the tank wall comprising: - a thermal insulation barrier held on the bearing wall and consisting of blocks of insulation (1, 13) that are juxtaposed in parallel rows and separated from one another by gaps (10), - a sealing barrier supported by the thermal insulation barrier and consisting of welded metal sheets (11, 15). Each block of insulation bears, on its opposite face to the bearing wall, two metal connecting strips (5, 6 and 14a, 14b) running parallel to the sides of the block of insulation. The sheets (11, 15) of the membrane which are supported by the block of insulation are welded to the strips. The connecting strips are secured to the block of insulation that bears them. The sheets (11, 15) each have at least two orthogonal folds (12a, 12b, 16a, 16b) parallel to the sides of the blocks of insulation (1, 13), said folds being inserted in the gaps (10) formed between the blocks of insulation.

Abstract (fr)

Cuve étanche et thermiquement isolante intégrée dans une structure porteuse, la paroi de cuve comportant : -une barrière d'isolation thermique retenue sur la paroi porteuse et constituée de blocs d'isolation (1,13) juxtaposés selon des rangées parallèles et séparés les uns des autres par des interstices (10); -une barrière d'étanchéité supportée par la barrière d'isolation thermique et constituée de tôles métalliques (11,15) soudées. Chaque bloc d'isolation porte, sur sa face opposée à la paroi porteuse, deux bandes de liaison (5,6 et 14a,14b) métalliques, disposées parallèlement aux côtés du bloc d'isolation. Sur les bandes sont soudées les tôles (11,15) de la membrane supportées par le bloc d'isolation. Les bandes de liaison sont solidaires du bloc d'isolation qui les porte, Les tôles (11,15) comportent chacune au moins deux plis orthogonaux (12a, 12b, 16a, 16b) parallèles aux côtés des blocs d'isolation (1,13), lesdits plis étant insérés dans les interstices (10) ménagés entre les blocs d'isolation.

IPC 8 full level

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**F17C 2270/0136** (2013.01 - EP US)

Citation (applicant)

FR 2724623 A1 19960322 - GAZTRANSPORT ET TECHNIGAZ [FR]

Citation (search report)

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- [A] KR 20100090036 A 20100813 - KOREA ADVANCED INST SCI & TECH [KR]
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CN 106499946 B 20190528; EP 2906867 A2 20150819; EP 2906867 B1 20210908; EP 3940287 A1 20220119; ES 2897745 T3 20220302;  
JP 2015535916 A 20151217; JP 2019052758 A 20190404; JP 6416768 B2 20181031; JP 6722250 B2 20200715; KR 102155819 B1 20200921;  
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