

Title (en)

Prefabricated, fluid-tight and heat-insulating wall structure for vessels for cryogenic fluids

Title (de)

Vorgefertigte, flüssigkeitsdichtende und thermisch isolierende Wandstruktur für Behälter für cryogene Fluide

Title (fr)

Structure préfabriquée de formation de parois étanches et thermiquement isolantes pour enceinte de confinement d'un fluide à très basse température

Publication

EP 0573327 B1 19990127 (FR)

Application

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Priority

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Abstract (en)

[origin: WO9323699A1] The present invention relates to a prefabricated structure providing fluid-tight and thermo-insulated walls for a heat-insulated confinement container such as a fluid-tight reservoir for storage and/or transport of a very low temperature fluid. Said structure (1) comprised of an internal flexible and fluid-tight barrier (2), a heat insulation system (4) and an external wall (3) forming support for the structure (1), is characterized in that distribution walls (53) integral with the external wall (3) are fixed to the latter particularly by means of screws or the like (35) arranged facing holes (435) drilled in an external insulation layer (43) at a distance from the joints (63) between plates (43a) forming said layer, a fluid-tight connector (80) being sealingly arranged in each of the holes (435) and joints (63). The invention applies to the construction of structures forming fluid-tight reservoirs, for example for tankers which transport cryogenic liquids such as methane tankers.

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Cited by

CN111656083A; CN111503509A; DE102006020699B4; CN111630311A; CN110892189A; DE102006016796A1; DE102006016796B4; DE102004047551B4; HRP20040928B1; FR2931535A1; FR2724623A1; US5586513A; AU2009259099B2; EP1698649A2; WO2013083892A1; WO2009150366A1; FR3092837A1; FR2861060A1; DE102007061367A1

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