

Title (en)

Pressure vessel for storing cryogen fuel

Title (de)

Druckbehälter zur Speicherung von kryogenen Kraftstoffen

Title (fr)

Réservoir sous pression pour le stockage de carburant cryogénique

Publication

EP 1584859 A3 20110427 (DE)

Application

EP 05102649 A 20050404

Priority

DE 102004017392 A 20040408

Abstract (en)

[origin: EP1584859A2] A double skinned thermally insulating fuel tank for cryogenic fuel is assembled from two sets of half shells, but inner and outer, joined in a vertical or near vertical plane (2) and with matching concave profiles in both inner and outer skins to maintain an insulating spacing. Flexible tapes are strung across the inner concave profiles and around the outside of the tank to form simple spacers with a low thermal conduction. The tape spacers replace conventional fixed spacers and do not require any significant welded connections to the shells. The space between the skins is evacuated and/or filled with a thermally insulating material.

IPC 8 full level

F17C 3/02 (2006.01); **B60K 15/03** (2006.01); **F17C 1/00** (2006.01); **F17C 1/08** (2006.01); **F17C 1/12** (2006.01); **F17C 3/08** (2006.01)

CPC (source: EP)

F17C 3/08 (2013.01); **F17C 2201/0147** (2013.01); **F17C 2201/0152** (2013.01); **F17C 2201/054** (2013.01); **F17C 2201/056** (2013.01); **F17C 2203/012** (2013.01); **F17C 2203/016** (2013.01); **F17C 2203/0391** (2013.01); **F17C 2203/0629** (2013.01); **F17C 2209/228** (2013.01); **F17C 2209/232** (2013.01); **F17C 2221/01** (2013.01); **F17C 2221/03** (2013.01); **F17C 2223/0161** (2013.01); **F17C 2223/033** (2013.01); **F17C 2260/013** (2013.01); **F17C 2270/0168** (2013.01)

Citation (search report)

- [X] EP 1355107 A2 20031022 - DEUTSCH ZENTR LUFT & RAUMFAHRT [DE]
- [A] EP 0013624 A2 19800723 - OCEAN PHOENIX HOLDINGS NV [NL]
- [A] DE 3026116 A1 19820204 - AEG ISOLIER KUNSTSTOFF [DE]

Cited by

CN102954214A; DE102008004698B4; FR2919912A1; WO2021055319A1; WO2009019375A3; US8960482B2; US9829155B2; US10584828B2; US11346501B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR LV MK YU

DOCDB simple family (publication)

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