

Title (en)

Composite pressure vessel with a plastic liner for the storage of pressurized gaseous fluids

Title (de)

Composite-Druckbehälter zur Speicherung von gasförmigen Medien unter Druck mit einem Liner aus Kunststoff

Title (fr)

Réceptient sous pression en matériau composite pour le stockage de fluides gazeux sous pression

Publication

EP 0821194 A3 19981104 (DE)

Application

EP 97250216 A 19970721

Priority

DE 19631546 A 19960724

Abstract (en)

[origin: DE19631546C1] The bottle has two neck-sections, together with a winding of composite fibrous material reinforcing the liner (2). A valve with parallel thread screws into one or both sections, each of which has an end towards the bottle of flat truncated-cone section with a radiused edge and is inclined to match the liner at the join between the neck and the cylindrical casing. A clamping ring screws into the neck, having an external threaded portion onto which a plain truncated-cone one joins, working against the end of a seal so as to press it against the inside of the neck. The liner bears against the entire underside of the collar (6) on the neck (4). The collar contains two or more axial drillings (8) evenly spaced round the periphery and in which bosses on the liner fit. The cylindrical portion (14) of the neck section has one or more annular grooves (9,10) on the inside and in which the liner engages. The clamping ring (15) presses the portion (13) of the liner extending inside the neck section against the latter's inside surface.

IPC 1-7

F17C 1/16

IPC 8 full level

F17C 1/16 (2006.01)

CPC (source: EP)

F17C 1/16 (2013.01); **F17C 2203/0604** (2013.01); **F17C 2205/0305** (2013.01); **F17C 2223/0123** (2013.01)

Citation (search report)

- [A] WO 9423241 A1 19941013 - EDO CANADA LTD [CA]
- [A] FR 2193953 A1 19740222 - AIR LIQUIDE [FR]
- [A] EP 0550951 A1 19930714 - BRUNSWICK CORP [US]
- [A] DE 2152123 A1 19730503 - ELEK SCHE LICHT UND KRAFTANLAG
- [A] EP 0203631 A2 19861203 - DUKTRAD INT [BE]
- [A] EP 0714753 A2 19960605 - ESSEF CORP [US]

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WO2013020668A1; WO2013020694A1; DE102011056976A1; CN102865455A; DE112004002795B4; CN106224759A; CN108131555A; FR2962782A1; DE102009049948A1; DE102009049948B4; CN101832389A; CN116100841A; US8505762B2; EP2131095A2; EP1586807A2; WO0151844A3; DE102011052490A1; US7032767B2; DE202012101004U1

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EP 0821194 A2 19980128; EP 0821194 A3 19981104; EP 0821194 B1 20031203; AT E255706 T1 20031215; DE 19631546 C1 19971113; DK 0821194 T3 20040308; ES 2208820 T3 20040616

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