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(54) **ASSEMBLY FOR THE FORMATION OF A MODULAR TANK AND MODULAR TANK**

(57) The present invention relates to an assembly for the formation of a modular tank (10) for containing a fluid, said assembly (10) comprising a first half-shell (1), and a second half-shell (2), each half-shell (1; 2) providing a body having a bottom wall and side walls ending in a terminal edge (11; 21) for coupling at a horizontal coupling plane (X) with the terminal edge (21; 11) of the other half-shell (2; 1). Said assembly (10) also comprises a gasket (4) that can be interposed between said two half-shells (1, 2) at the terminal edges (11, 21), and fastening means (6, 7, 8) for securing together said half-shells (1, 2) and prevent their movement along a vertical axis (y) perpendicular to the horizontal plane (X). Each half-shell (1; 2) at its respective terminal edge (11, 21) provides one or more protruding external flanges (12; 16; 22; 26), and each half-shell (1; 2) further provides a plurality of vertical extensions (13; 17; 23; 27) arranged externally on the respective terminal edge (11; 21) projecting along said vertical axis (y) in the opposite direction to the body of the respective half-shell (1; 2). Said assembly (10) is characterised in that each vertical extension (13; 17; 23; 27) of each half-shell (1; 2) has at least one portion parallel to said vertical axis (y), in that each semi-shell (1; 2) provides a plurality of housing seats, each housing seat being arranged externally on the respective terminal edge (11; 21) and corresponding to the interspace between two vertical extensions (13; 17; 23; 27) of the same half-shell (1; 2), said interspace having no vertical extensions. Said assembly (10) is configured

in such a way as to assume an assembled tank configuration by coupling together said two half-shells (1, 2) with their respective terminal edges (11, 21) in correspondence with said horizontal plane (X), arranging the vertical extensions (13; 17; 23; 27) of a first half-shell (1; 2) alternately to the vertical extensions (23; 27; 13; 17) of the second half-shell (2; 1) and so as to be projecting towards the mutual half-shell (2; 1) in such a way that each vertical extension (23; 27; 13; 17) of a half-shell (1; 2) fits into the respective space between two vertical extensions (23; 27; 13; 17) of the mutual half-shell (2; 1) so as to be adjacent to the side wall of the body of the mutual half-shell (2; 1), interposing said gasket (4) and securing together said one or more protruding external flanges (12; 16; 22; 26) of the two half-shells (1, 2) by means of said fastening means (6, 7, 8).

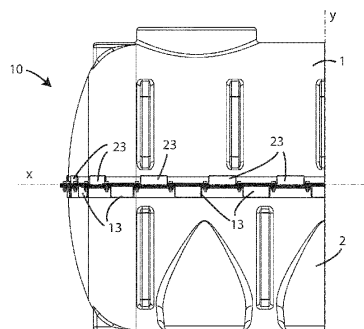


Fig. 1



EUROPEAN SEARCH REPORT

Application Number

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DOCUMENTS CONSIDERED TO BE RELEVANT

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The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 4 September 2023	Examiner Piolat, Olivier
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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EUROPEAN SEARCH REPORT

Application Number

EP 22 21 6002

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	JP S50 104213 U (?) 27 August 1975 (1975-08-27) * figures 1-3 *	10, 11	
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			TECHNICAL FIELDS SEARCHED (IPC)
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 4 September 2023	Examiner Piolat, Olivier
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

☒ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

1-13, 15, 17-21

☐ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

☐ The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).

**LACK OF UNITY OF INVENTION
SHEET B**

Application Number

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The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-9, 15, 18-21**Vertical extensions between half-shells of a modular tank**
---**2. claims: 10-13****Seal between half-shells of a modular tank**
---**3. claim: 14****Reinforcement of a modular tank**
---**4. claim: 16****Stackable half-shells of a modular tank**
---**5. claim: 17****Material of a modular tank**

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

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