



(11) **EP 1 717 509 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
11.02.2015 Bulletin 2015/07

(51) Int Cl.:
F17C 3/02 (2006.01)

(43) Date of publication A2:
02.11.2006 Bulletin 2006/44

(21) Application number: **05290940.5**

(22) Date of filing: **29.04.2005**

(84) Designated Contracting States:
**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 States:
AL BA HR LV MK YU

(30) Priority: **29.04.2005 KR 2004103255**

(71) Applicant: **Korea Gas Corporation**
Kyonggi-do 463-754 (KR)

(72) Inventors:
• **Yang Young Myung**
Kyonggi-do 463-754 (KR)
• **Hong Seong Ho**
Kyonggi-do 463-754 (KR)

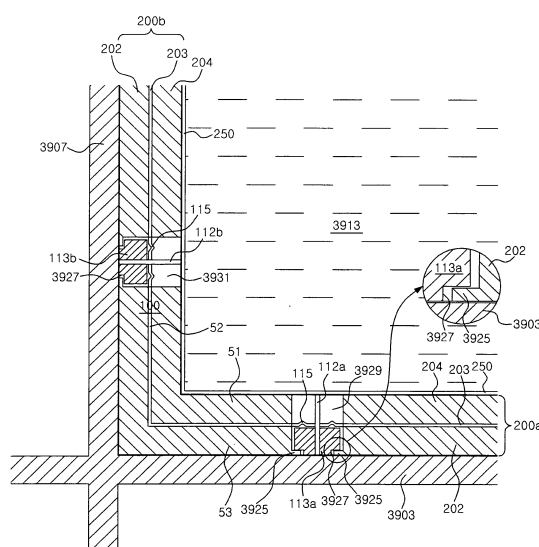
- **Yoon Ihn Soo**
Kyonggi-do 463-754 (KR)
- **Yang Young Chul**
Kyonggi-do 463-754 (KR)
- **Seo Hung Seok**
Kyonggi-do 463-754 (KR)
- **Kim Ji Hun**
Kyonggi-do 463-754 (KR)
- **Oh Byoung Taek**
Kyonggi-do 463-754 (KR)
- **Kim Young Kyun**
Kyonggi-do 463-754 (KR)

(74) Representative: **Intès, Didier Gérard André et al**
Cabinet Beau de Loménie
158, rue de l'Université
75340 Paris Cedex 07 (FR)

(54) **Liquefied gas tank**

(57) Disclosed is a liquid container adapted to store liquefied natural gas (LNG). The LNG storage container include a sealing wall (250) directly contacting liquid (3913) contained in the tank and a structural wall (3903, 3907), which is an exterior wall or inner structure integrated with the exterior wall. The container further includes a plurality of connectors (112a, 112b) mechanically connecting the sealing wall and the structural wall and an intermediate wall structure positioned between the structural wall and the interior wall. The intermediate wall structure is configured to move relative to at least one of the interior wall and the structural wall.

【Fig. 40】



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PARTIAL EUROPEAN SEARCH REPORT

Application Number

under Rule 62a and/or 63 of the European Patent Convention.
This report shall be considered, for the purposes of
subsequent proceedings, as the European search report

EP 05 29 0940

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 3 990 382 A (LOOTVOET ROGER ET AL) 9 November 1976 (1976-11-09)	1-13	INV. F17C3/02
Y	* figures 1-16 *	14,15	
X	DE 33 16 359 A1 (GAZ TRANSPORT [FR]) 1 December 1983 (1983-12-01)	1-13	
Y	* figures 1,6-9 *	14,15	
X	FR 2 413 260 A1 (GAZ TRANSPORT [FR]) 27 July 1979 (1979-07-27)	1-13	
Y	US 4 155 482 A (SWANEY WILLIAM A [US]) 22 May 1979 (1979-05-22)	14,15	
Y,D	WO 93/23699 A1 (TECHNIGAZ [FR]; CHAUVIN JEAN MICHEL [FR]; CLAUDE JEAN MAURICE [FR]) 25 November 1993 (1993-11-25) * figures 2,3 *	14,15	TECHNICAL FIELDS SEARCHED (IPC)
			F17C
INCOMPLETE SEARCH			
The Search Division considers that the present application, or one or more of its claims, does/do not comply with the EPC so that only a partial search (R.62a, 63) has been carried out. Claims searched completely : Claims searched incompletely : Claims not searched : Reason for the limitation of the search: see sheet C			
Place of search		Date of completion of the search	Examiner
Munich		19 December 2014	Nicol, Boris
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			

EPO FORM 1503 03.82 (P04E07)



**INCOMPLETE SEARCH
SHEET C**

Application Number
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Claim(s) completely searchable:
1-15

Claim(s) not searched:
16-23

Reason for the limitation of the search:

The search has been restricted to the subject-matter indicated by the applicant in his letter of 25.05.2011 filed in reply to the invitation pursuant to Rule 62a(1) and/or Rule 63(1) EPC.

**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
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19-12-2014

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 3990382 A	09-11-1976	BE 827008 A1	22-09-1975
		DE 2511498 A1	23-10-1975
		DK 116775 A	22-09-1975
		ES 435529 A1	16-12-1976
		FI 750820 A	22-09-1975
		FR 2264712 A1	17-10-1975
		GB 1456494 A	24-11-1976
		IT 1030385 B	30-03-1979
		JP S5511837 B2	27-03-1980
		JP S50128818 A	11-10-1975
		NL 7503350 A	23-09-1975
		NO 750944 A	23-09-1975
		SE 412562 B	10-03-1980
		US 3990382 A	09-11-1976
		YU 57175 A	31-08-1982

DE 3316359 A1	01-12-1983	BE 896896 A1	30-11-1983
		DE 3316359 A1	01-12-1983
		FR 2527544 A1	02-12-1983
		JP H0417303 B2	25-03-1992
		JP S58217898 A	17-12-1983
		NL 8301470 A	02-01-1984

FR 2413260 A1	27-07-1979	NONE	

US 4155482 A	22-05-1979	BE 847581 A1	14-02-1977
		US 4155482 A	22-05-1979

WO 9323699 A1	25-11-1993	AU 4076193 A	13-12-1993
		CA 2113822 A1	25-11-1993
		DE 69323240 D1	11-03-1999
		EP 0573327 A1	08-12-1993
		ES 2127799 T3	01-05-1999
		FI 940259 A	21-03-1994
		FR 2691520 A1	26-11-1993
		JP 3788808 B2	21-06-2006
		JP H07500406 A	12-01-1995
		KR 100258206 B1	01-06-2000
		PL 302155 A1	11-07-1994
		US 5501359 A	26-03-1996
		WO 9323699 A1	25-11-1993

EPO FORM P0459

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