



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
16.04.2008 Bulletin 2008/16

(51) Int Cl.:
B63B 22/00 (2006.01) **B63B 22/22** (2006.01)
B63G 9/02 (2006.01) **F42B 10/14** (2006.01)
F42C 15/00 (2006.01) **F41J 2/00** (2006.01)
F42C 15/24 (2006.01)

(43) Date of publication A2:
26.03.2008 Bulletin 2008/13

(21) Application number: **07150497.1**

(22) Date of filing: **01.09.2006**

(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 LV MC NL PL PT RO SE SI SK TR

Designated Extension States:
AL BA HR MK RS

(71) Applicant: **Whitehead Alenia Sistemi Subacquei S.p.A.**
16154 Genova Sestri Ponente (IT)

(72) Inventor: **Bastone, Francesco**
57127 Livorno (IT)

(62) Document number(s) of the earlier application(s) in accordance with Art. 76 EPC:
06425607.6 / 1 894 834

(74) Representative: **Jorio, Paolo et al Studio Torta S.r.l.**
Via Viotti, 9
10121 Torino (IT)

(54) **Float for a device air-launched into the sea, in particular for a countermeasure**

(57) A float (4), for a device (1) air-launched into the sea, in particular for a countermeasure, has a casing (6) and a bag (24), which is inflatable by two pressurized-gas cylinders (25) and is located, when inflated, at least partly outside the casing (6); inflation by the cylinders (25) is activated by an inertial mass (27) movable in response to deceleration of the casing (6) caused by immersion of the device (1) into the sea.

The float (4) further comprises flight stabilizing members (15) movable between a launch position, in which they are closed against a lateral wall (8) of said casing (6), and a flight position in which they extend outwards from said lateral wall (8).

The float (4) further comprises retaining means (21,22) for retaining a cover (7) closing an opening (10) defined by said lateral wall (8). The retaining means (21,22) are movable from a retaining configuration to a release configuration in response to movement of said flight stabilizing means (15).

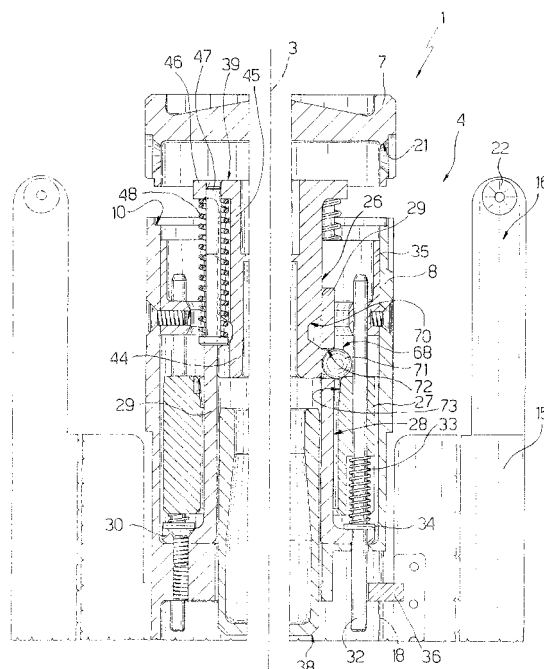


Fig.8



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 07 15 0497

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	US 5 341 718 A (WOODALL JR ROBERT C ET AL) 30 August 1994 (1994-08-30) * claim 1; figures 1-5 * * column 1, line 31 - line 42 * * column 2, line 14 - column 3, line 4 * * column 3, line 28 - line 63 * * column 4, line 18 - line 33 * -----	1-15	INV. B63B22/00 B63B22/22 B63G9/02 F42B10/14 F42C15/00
A	US 3 638 501 A (PRACHAR OTAKAR P) 1 February 1972 (1972-02-01) * claim 1; figures 1,2 * * column 1, line 2 - line 34 * * column 1, line 55 - line 73 * * column 2, line 33 - line 71 * * column 3, line 8 - line 46 * -----	1-10	ADD. F41J2/00 F42C15/24
A	US 4 044 684 A (GAGGINI GUIDO JOHN ET AL) 30 August 1977 (1977-08-30) * claim 1; figures 1-5 * * column 2, line 18 - line 46 * * column 2, line 62 - column 3, line 16 * -----	1,2,4,5, 10,13,14	TECHNICAL FIELDS SEARCHED (IPC)
A	US 5 973 994 A (WOODALL ROBERT) 26 October 1999 (1999-10-26) * claim 1; figures 1-5 * * column 1, line 63 - column 2, line 23 * * column 3, line 23 - column 4, line 21 * * column 4, line 51 - column 5, line 18 * * column 5, line 39 - line 55 * -----	1,5, 9-11,13	B63B B63G B63C F16K F42B F42C F41J
A	EP 0 542 161 A1 (OHM HANG SUP) 19 May 1993 (1993-05-19) * figures 3,4 * * column 5, line 26 - column 6, line 4 * * column 6, line 52 - column 7, line 5 * ----- -/--	1,2,5,6	
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 4 March 2008	Examiner HAEUSLER, F
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			

19

EPO FORM 1503 03.82 (P04C01)



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 07 15 0497

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	WO 99/14077 A (NO DAE SUNG [KR]) 25 March 1999 (1999-03-25) * figures 4A-7 * * page 1, line 14 - page 2, line 3 * * page 4, line 4 - line 11 * * page 6, line 4 - line 9 * * page 8, line 10 - page 9, line 14 *	1,2,5,6, 9,10		
A	US 3 613 944 A (ZEIGLER PHILIP B ET AL) 19 October 1971 (1971-10-19) * abstract; figures 1,2 * * column 1, line 4 - line 43 * * column 2, line 24 - column 3, line 13 * * column 3, line 61 - column 4, line 14 *	1-3,5,6, 9,10		
A	US 3 859 650 A (PRACHAR OTAKAR P) 7 January 1975 (1975-01-07) * abstract; figures 1-4 * * column 1, line 52 - column 2, line 51 *	1-4		
A	WO 99/51934 A (SPECIAL CARTRIDGE COMPANY LIM; ALCULUMBRE MICHAEL ET AL) 14 October 1999 (1999-10-14) * figures 4-6 * * page 14, line 7 - line 12 * * page 18, line 3 - page 19, line 17 *	1,13,14		TECHNICAL FIELDS SEARCHED (IPC)
A	WO 02/090870 A (OLYMPIC TECHNOLOGIES LTD; ALCULUMBRE MICHAEL ET AL) 14 November 2002 (2002-11-14) * figures 1,2,6A-6F *	1,13,14		
The present search report has been drawn up for all claims				
Place of search The Hague		Date of completion of the search 4 March 2008	Examiner HAEUSLER, F	
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				

19

EPO FORM 1503 03.02 (P04C01)

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

EP 07 15 0497

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.

04-03-2008

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5341718	A	30-08-1994	NONE	
US 3638501	A	01-02-1972	CA 919942 A1	30-01-1973
			DE 2117963 A1	18-11-1971
			FR 2086378 A5	31-12-1971
			GB 1312609 A	04-04-1973
			JP 52013104 B	12-04-1977
			SE 359263 B	27-08-1973
US 4044684	A	30-08-1977	NONE	
US 5973994	A	26-10-1999	NONE	
EP 0542161	A1	19-05-1993	AU 666503 B2	15-02-1996
			AU 2817592 A	13-05-1993
			DE 69213658 D1	17-10-1996
			DE 69213658 T2	17-04-1997
			DK 542161 T3	30-09-1996
			JP 5072607 U	05-10-1993
			JP 7051405 Y2	22-11-1995
			US 5322326 A	21-06-1994
WO 9914077	A	25-03-1999	AU 9188898 A	05-04-1999
US 3613944	A	19-10-1971	NONE	
US 3859650	A	07-01-1975	NONE	
WO 9951934	A	14-10-1999	AT 268000 T	15-06-2004
			AU 3339599 A	25-10-1999
			BR 9909431 A	11-09-2001
			CA 2326432 A1	14-10-1999
			DE 69917621 D1	01-07-2004
			EP 1068484 A1	17-01-2001
			ES 2222698 T3	01-02-2005
			HK 1030257 A1	11-03-2005
			MX PA00009711 A	24-04-2002
WO 02090870	A	14-11-2002	GB 2391923 A	18-02-2004
			US 2004217227 A1	04-11-2004