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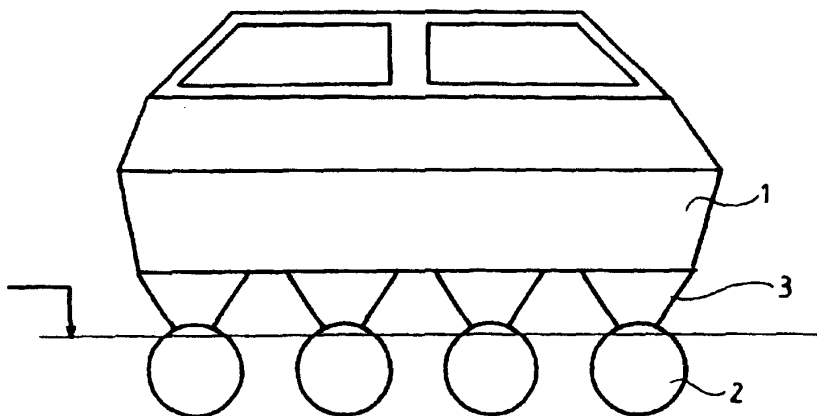
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(54) **A vessel with a hull supported by totally submerged ellipsoidal floats**

(57) This invention relates to a vessel whose hull (1) is above the surface of the water, and whose submerged and semi-submerged parts are oblong antirolling propelling floats (2,3) whose axes are parallel to the longi-

tudinal axis of the vessel. There are at least two floats (2,3) designed in such a way that driving resistance is minimum, righting moment is increased, and the vessel is more stable and easier to manoeuvre (Fig. 1).

**FIG. 1**



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## EUROPEAN SEARCH REPORT

Application Number  
EP 98 30 2988

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	GB 2 058 678 A (MITSUI SHIPBUILDING ENG) 15 April 1981 (1981-04-15)	1,2,4,5, 7-10,12, 13	B63B1/10 B63B1/12
Y	* figures 3-5 * * page 4, line 63 - page 5, line 6 * * page 6, line 30 - page 7, line 36 * ---	3,6,11	
Y	"A semisubmerged ship" PRODUCT ENGINEERING, vol. 37, no. 14, 4 July 1966 (1966-07-04), page 30 XP002116524 MCGRAW-HILL PUBLICATION, NEW YORK, NY., US * the whole document * ---	3	
Y	GB 2 047 631 A (DODERO M L) 3 December 1980 (1980-12-03)	6	
A	* abstract; figures 1-3 * ---	1,7,9	
Y	US 3 830 178 A (LANG T) 20 August 1974 (1974-08-20)	11	TECHNICAL FIELDS SEARCHED (Int.Cl.6)
A	* abstract; figures 1,2,8-10 * * column 3, line 15 - line 18 * * column 4, line 22 - line 32 * ---	1,7,9,12	B63B
X	EP 0 161 953 A (INNOMER INNOVATION ET TECH DE) 21 November 1985 (1985-11-21) * abstract; figures 1-3 * ---	1,2,4,5, 7,9	
X	US 4 867 090 A (HALL NELSON W ET AL) 19 September 1989 (1989-09-19)	1,4,7,9	
A	* figure 2 * --- -/--	3	
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 24 September 1999	Examiner Häusler, F.U.
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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Application Number  
EP 98 30 2988

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	EP 0 335 345 A (SWATH OCEAN SYSTEMS INC) 4 October 1989 (1989-10-04)  * figures 1-5 * * column 5, line 20 - line 46 * * column 6, line 19 - line 50 * ---	1,2,4,5, 7,9,10, 12,13	
X	US 4 944 238 A (LANG THOMAS G) 31 July 1990 (1990-07-31)  * figures 1,2,10,15 * * column 3, line 47 - line 63 * * column 4, line 40 - line 59 * * column 6, line 17 - line 29 * * column 6, line 62 - line 65 * ---	1,2,4,5, 7,9,10, 12,13	
X	PAPANIKOLAOU A: "Hydrodynamic Aspects and Conceptual Design of a SWATH-Passenger-Car Ferry" JAHRBUCH DER SCHIFFBAUTECHNISCHEN GESELLSCHAFT., vol. 82, 1989, pages 14-19, XP002116525 BERLIN, DE ISSN: 0374-1222 * figures 1,2 * ---	1,2,4,5, 7,9,10	
A	US 3 063 397 A (BOERICKE JR. HAROLD) 13 November 1962 (1962-11-13) * figures 1-5 * -----	1-3,5,7	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
Place of search THE HAGUE		Date of completion of the search 24 September 1999	Examiner Häusler, F.U.
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**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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24-09-1999

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
GB 2058678 A	15-04-1981	JP 56043079 A	21-04-1981
		AU 529424 B	09-06-1983
		AU 5258979 A	19-03-1981
GB 2047631 A	03-12-1980	NONE	
US 3830178 A	20-08-1974	NONE	
EP 0161953 A	21-11-1985	FR 2562026 A	04-10-1985
		CA 1256324 A	27-06-1989
		FI 851295 A	03-10-1985
		JP 60226385 A	11-11-1985
US 4867090 A	19-09-1989	NONE	
EP 0335345 A	04-10-1989	US 4919063 A	24-04-1990
		AU 625860 B	16-07-1992
		AU 3861789 A	03-11-1989
		JP 3503513 T	08-08-1991
		WO 8909721 A	19-10-1990
US 4944238 A	31-07-1990	NONE	
US 3063397 A	13-11-1962	NONE	