

12 **EUROPEAN PATENT APPLICATION**

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64 **Flotation bag assembly.**

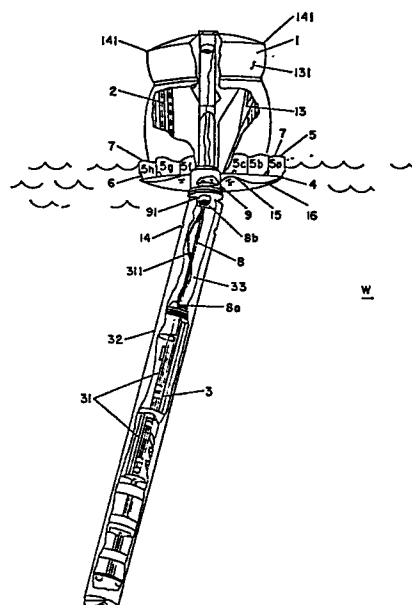
67 An apparatus for the stable support of a structure, such as an antenna (2), in a fluid medium (W), such as the ocean. A flotation bag (1) supporting an antenna is stabilized by the following features, which can be used individually or in combination.

1. A partially submerged ribbon fence (5) supported by a submerged damper skirt (4) dissipates the kinetic energy of the flotation bag caused by the movement of the ocean and water that encroaches upon the bag.

2. A flexible connection (8) between the bag and the payload (3) enables the bag and the payload to undergo limited motion without affecting each other. Thus, the bag's motion is decoupled and totally independent of the payload.

3. The housing (32) which supports the payload has a flooded chamber (33), lowering the center of mass of the apparatus.

4. The bottom (16) of the flotation bag is inwardly arched (15), moving the buoyancy away from the center of the bottom of the bag, enhancing stability and allowing the bag to float lower in the ocean, keeping the damper skirt submerged. The payload includes an r.f. signal source (31). The apparatus is designed to constrain the motion of the antenna to within very narrow operational limits.





European Patent
Office

EUROPEAN SEARCH REPORT

0145148

Application Number

EP 84 30 6473

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.4)
X	US-A-3 500 209 (W. FLETCHER et al.) * Column 2, line 7 - column 3, line 73; figures 4,5,6 *	1,2,4	B 63 B 22/18
Y	---	6,10-12	
A	---	3,5,9	
Y	GB-A-1 170 547 (SPARTON) * Page 3, lines 47-77; figures 2-5 *	6,12	
A	---	1,4,7,9	
Y	FR-A-2 404 413 (SEBAN) * Page 4, lines 24-28; figures 1-3 *	10,11	
A	---	1,8,9	
A	US-A-4 383 831 (CUPOLO et al.) * Abstract; column 5, line 61 - column 6, line 14; figures 1,3,6 *	10,11	

	US-A-2 917 755 (PECK) * Column 1, line 59 - column 2, line 28; figure 1 *		

			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
			B 63 B B 63 H
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 03-08-1988	Examiner DE SENA Y HERNANDORENA A
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 E : document cited for other reasons & : member of the same patent family, corresponding document	

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