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(54) **Braking device, particularly for braking the descent of a life-boat**

(57) A braking device, in particular for braking the descent of a life-boat when lowered from a ship, of the type comprising a pair of braking discs (2, 9), of which a first disc (2) is connected to a fixed member (1) and the other (9) is connected to a rotating member to be braked, for example a winch, and brake means (13, 24; 23) arranged to urge the discs one against the other so as to brake said rotating member. The brake means comprise static braking means (13, 24) arranged to exert a constant thrust on the discs such as to maintain them in mutual contact and maintain the rotating member braked, means (17; 28) for at least partly counteracting the action of the static braking means and enabling the discs to be separated when it is required to enable the braking member to rotate, and dynamic braking means connected to the rotating member and comprising a loose mass (23) arranged to exert, by centrifugal effect, a thrust on the discs proportional to the rotational speed of said rotating member such as to bring the discs into mutual contact and brake the rotating member, cooling means (18, 19) being provided at least for the braking discs (2, 9).

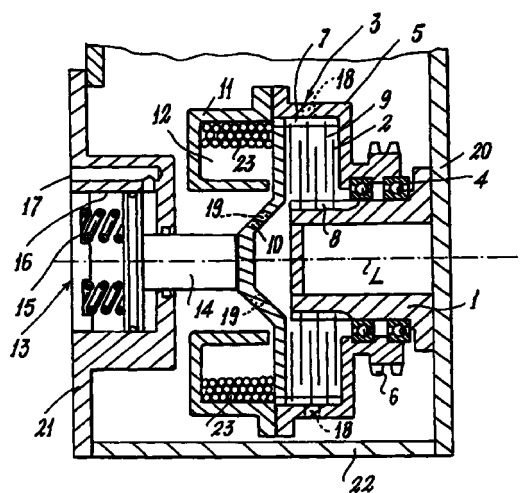


Fig. 1

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EUROPEAN SEARCH REPORT

Application Number
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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)
A,D	EP 0 443 149 A (GAMBINI) 28 August 1991 (1991-08-28) * the whole document *	1,4,6,13	B63B23/42 B66D5/04 B66D5/14
A	EP 0 734 995 A (NIHON BISO CO.,LTD) 2 October 1996 (1996-10-02) * column 7, line 15 - column 10, line 54; figure 2 *	2,6,8	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			B63B B66D F16C F16D
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 28 October 1999	Examiner DE SENA HERNAND.., A
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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</p>			

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

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The members are as contained in the European Patent Office EDP file on
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28-10-1999

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 443149 A	28-08-1991	IT 1240412 B	14-12-1993
		DE 69012979 D	03-11-1994
		DE 69012979 T	18-05-1995
EP 734995 A	02-10-1996	JP 8270212 A	15-10-1996
		CA 2172589 A	01-10-1996
		CN 1132175 A	02-10-1996
		US 5738339 A	14-04-1998

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