# (11) **EP 1 908 680 A3**

(12)

## **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3: 03.08.2011 Bulletin 2011/31

(51) Int Cl.: **B63B 17/02** (2006.01)

(43) Date of publication A2: 09.04.2008 Bulletin 2008/15

(21) Application number: 07253783.0

(22) Date of filing: 25.09.2007

(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 MT NL PL PT RO SE SI SK TR

**Designated Extension States:** 

AL BA HR MK RS

(30) Priority: 26.09.2006 GB 0618937

(71) Applicant: Trend Marine Products Limited
Great Yarmouth
Norwich
NR29 5GB (GB)

(72) Inventors:

 Miller, David Frederick Great Yarmouth Norwich NR29 5GB (GB)

 Edwards, Lucien Fred Great Yarmouth Norwich NR29 5GB (GB)

(74) Representative: Harrison, Paul Richard Novagraaf Norwich Limited Willow Lane House Willow Lane Norwich NR2 1EU (GB)

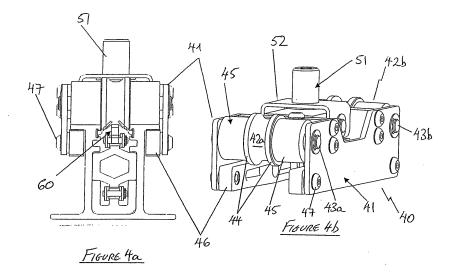
#### (54) A sunroof system

(57) The invention disclosed relates to a sunroof system designed primarily for a pleasure boat. The system includes a panel (12) moveable between an open and a closed position. A motor driven chain (17) is provided, held within a guide rail (10), to drive the panel (12) between positions.

A carriage means connects the panel (12) to the chain (17) and is supported on rollers (44) resting on

flanges (15, 16) or the guide rail (10). In order to dampen vibrations and minimise noise during operation of the panel (12), a block (46) incorporating resilient elements is incorporated into the carriage means. Moreover a tensioner (80) is also included to take up or provide slack in the chain and (17), to allow for differential thermal expansion between the rail 13 and the chain 17.

In order to prevent ingress of dirt, into the carriage, brushed (26) are included in the guide rails (10).





# **EUROPEAN SEARCH REPORT**

**Application Number** EP 07 25 3783

	DOCUMENTS CONSID	ERED TO BE RELEVANT			
Category	Citation of document with ir of relevant passa	ndication, where appropriate, ages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)	
4	EP 1 524 183 A1 (OF 20 April 2005 (2005 * column 2, paragra paragraph 29; figur	-04-20) ph 11 - column 8,	1	INV. B63B17/02	
٨	WO 92/04199 A1 (RIE 19 March 1992 (1992 * page 8, line 1 - figures 1-29 *	-03-19)	1		
۱	FR 1 417 270 A (GUY 12 November 1965 (1 * page 1, column 2, column 2, line 13;	965-11-12) line 7 - page 2,	1		
١	DE 199 51 619 A1 (k 26 April 2001 (2001 * column 2, line 11 figures 1,2 *		1		
1	EP 1 232 888 A1 (IN ROOF SYS GROUP BV [ 21 August 2002 (200 * column 1, paragra paragraph 29; figur	2-08-21) ph 16 - column 4,	1	TECHNICAL FIELDS SEARCHED (IPC) B63B	
P	WO 2007/017791 A1 (AZIMUT BENETTI S P A [IT]; BERTETTI PAOLO [IT]; LEUBE PHILIPP [IT]; VA) 15 February 2007 (2007-02-15) * page 2, line 21 - page 6, line 18; figures 1-9 *				
A,P	FR 2 892 377 A1 (TI EDOUARD [FR]) 27 Ap * page 2, line 30 - figures 1-6 *	NCELIN THIBAUT JEAN ril 2007 (2007-04-27) page 4, line 30;	1		
	The present search report has l	peen drawn up for all claims			
Place of search  Munich		Date of completion of the search  15 June 2011	len	Examiner  dfers, Paul	
X : parti Y : parti docu A : tech O : non	ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone icularly relevant if combined with anotiment of the same category inological background written disclosure mediate document	T : theory or principle E : earlier patent doo after the filing date D : document cited in L : document oited fo	underlying the in ument, but publis the application r other reasons	nvention shed on, or	

EPO FORM 1503 03.82 (P04C01)

1

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

EP 07 25 3783

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.

15-06-2011

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 1524183 A	20-04-2005	AT 324319 T DE 602004000750 T2 ES 2260741 T3 US 2005204994 A1	15-05-2006 11-01-2007 01-11-2006 22-09-2005
WO 9204199 A	19-03-1992	EP 0500850 A1	02-09-1992
FR 1417270 A	12-11-1965	NONE	
DE 19951619 A	26-04-2001	NONE	
EP 1232888 A	21-08-2002	DE 60200333 D1 DE 60200333 T2	13-05-2004 17-03-2005
WO 2007017791 A	15-02-2007	NONE	
FR 2892377 A	27-04-2007	NONE	

FORM P0459

 $\stackrel{\text{O}}{\text{u}}$  For more details about this annex : see Official Journal of the European Patent Office, No. 12/82