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(54) **Window construction with a pane placed against a frame**

(57) A window construction 1 is placed against a frame 3 of a ship's construction. The frame 3 has an upright 7 to which a strip 9 is welded. The window construction 1 has two parallel panes 11, 13 separated by a spacer 10, and connected together along the circumference. A main side 17 of one of the panes 11 is placed against the frame 3 near its edges 15. In this a mounting section 19 is glued to the main side 17, which is provided with a

groove 21 in which clamping blocks 23 are present. These clamping blocks are provided with holes with a screw thread in which clamping bolts 25 are present. These clamping bolts can be adjusted in a direction at right angles to the main side 17 of the pane 11, in which a part 27 of the mounting block 19 is present opposite the clamping bolts 25 in the adjustment direction of the clamping bolts, so that the strip 9 of the frame is clamped between this part 27 and the clamping bolts 25.

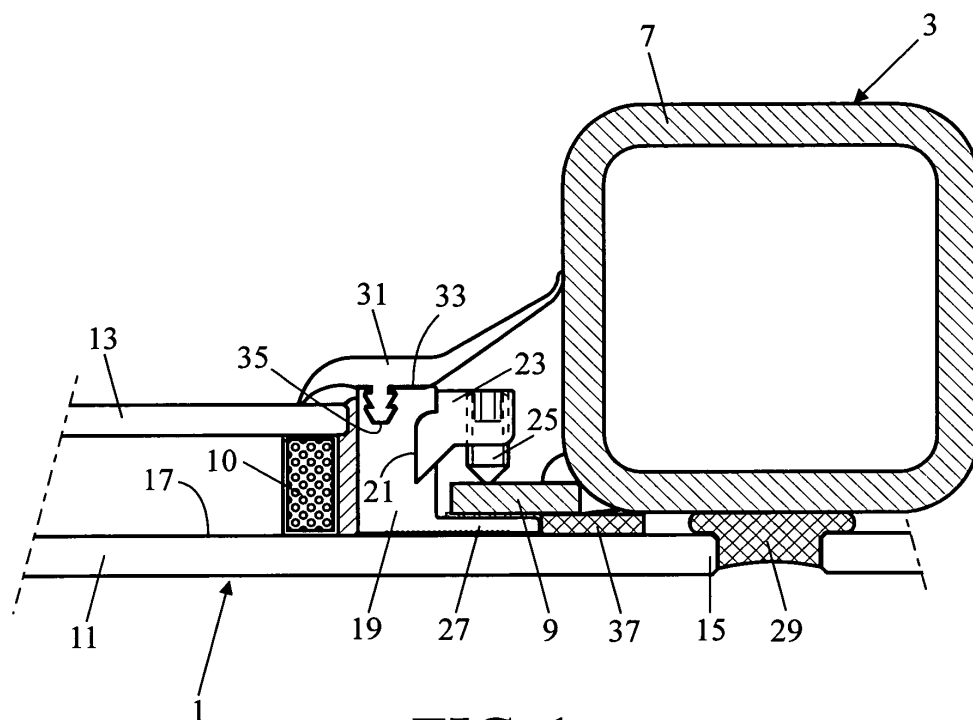


FIG. 1

Description

BACKGROUND OF THE INVENTION:

Field of the invention

[0001] The invention relates to a window construction comprising a pane with two main sides, which pane can be placed with one of the main sides against a frame of a ship's construction. Such a window construction is often used in ships so that of a whole wall only glass is visible on the outside. In this the pane is connected to the next pane via a thin cement layer.

Prior art

[0002] Such a window construction is generally known. In this a main side of the pane is glued near its edges to a frame of a ship's construction. The weight of the pane and the strain on the pane must therefore be fully taken up by the glued connection.

Summary of the invention

[0003] An objective of the invention is to provide a window construction of the sort described in the preamble with which the pane can be better placed on the frame of a ship's construction. For this purpose the window construction according to the invention is characterised in that the window construction also comprises at least one mounting section, which is fastened to the main side of the pane and which can be connected to the frame of a ship's construction. The pane present on the frame with its circumference edge can thus be connected via the mounting section fastened on the pane to a frame of a ship's construction and is not merely glued to the frame via the main side, as with the known window construction. In this way the pane can be fastened more securely to the frame than in the known window construction.

[0004] Preferably the window construction according to the invention, in addition to the pane mentioned, comprises a further pane, which is present parallel to the above pane and is kept at a distance from it by means of spacers, in which the circumference of the further pane lies within the circumference of the pane mentioned, so that a circumference edge of the pane mentioned protrudes past the further pane, and in which the main side mentioned, with which the pane mentioned can be placed against a frame of a ship's construction, is that side of the pane mentioned that is turned towards the further pane, in which the mounting section is present on the circumference edge of the pane mentioned. In these so-called double insulating panes, in the known window construction, the inside pane is glued to the frame of the ship, in which the weight of the thicker outermost pane and the strain on the spacer must be taken up fully by the relatively narrow glued connection between the spacer and the outer plate. This causes regular leakage in the

known window construction between both insulating panes. In double insulating panes the window construction according to the invention thereby offers even more advantages than in window constructions with a single pane.

[0005] In the window construction according to the invention the mounting section is preferably glued to the pane.

[0006] An embodiment of the window construction according to the invention is characterised in that the window construction comprises at least one clamping block, which is detachable from the mounting section and which is provided with a hole with a screw thread in which a clamping bolt is present, which can be adjusted in a direction that is mainly at right angles to the main side of the pane, so that the window construction can be clamped against a strip, which is present on the frame of a ship's construction, in which the strip is present between the pane and the clamping bolt. Preferably a part of the mounting section is present opposite the clamping bolt in the adjustment direction of the clamping bolt, so that the strip can be clamped between this part and the clamping bolt.

[0007] A further embodiment of the window construction according to the invention is characterised in that the mounting section is provided with a groove on a side turned away from the main side of the pane for mounting a section for a woodwork finish or for mounting a covering strip

Brief description of the drawings

[0008] The invention will be elucidated more fully below on the basis of drawings in which embodiments of the window construction according to the invention are shown. In these drawings:

Figure 1 shows a first embodiment of the window construction according to the invention; and
Figure 2 shows a second embodiment of the window construction according to the invention.

Detailed description of the drawings

[0009] Figure 1 shows a first embodiment of the window construction according to the invention. The window construction 1 is placed against a frame 3 of a ship's construction. The frame 3 has an upright 7 to which a strip 9 is welded. The window construction 1 has two parallel panes 11, 13 kept apart by a spacer 10 and connected together along the circumference. In this one of the panes 11, which is present on the outside of the window construction, is larger than the other pane 13. One of the main sides 17 of this largest pane 11 is placed near its edges 15 against the frame 3.

[0010] A mounting section 19 is glued to this main side 17 of the pane 11, which is connected to the strip 9 of the frame. For this purpose clamping blocks 23 have

been inserted in a groove 21 in the mounting section, which are provided with holes with a screw thread, in which clamping bolts 25 are present. These clamping bolts can be adjusted in a direction at right angles to the main side 17 of the pane 11. In this a part 27 of the mounting section 19 is present opposite the clamping bolts 25, in the adjustment direction of the clamping bolts, so that the strip 9 of the frame is clamped between this part 27 and the clamping bolts 25.

[0011] The window construction 1 is finished by applying a cement layer 29 to the edges 15 of the pane 11 and between the mounting section 19 and the window 5, as well as by clicking a flexible covering strip 31 into a protrusion 35 present in a side 33 of the mounting section 19 turned away from the main side of the pane. Moreover a flexible strip 37 is present between the pane 11 and the frame 3.

[0012] Figure 2 shows a second embodiment of the window construction according to the invention. All parts of this window construction 41, which are equal to those of the first embodiment, are indicated by the same reference numbers. In this window construction 39, the pane 11 is connected to a bottom 43 of the frame 3 of the ship's construction, in which strips 45 are fastened to the bottom 43. Moreover in this a section 47 has been provided in the protrusion 35 to provide a woodworking finish instead of a covering strip.

[0013] Although in the above the invention is explained on the basis of the drawings, it should be noted that the invention is in no way limited to the embodiments shown in the drawings. The invention also extends to all embodiments deviating from the embodiments shown in the drawings within the context defined by the claims.

Claims

1. Window construction comprising a pane with two main sides, which pane can be placed with one of the main sides against a frame of a ship's construction, **characterised in that** the window construction also comprises at least one mounting section, which is fastened on the main side of the pane and which can be connected to the frame of a ship's construction.
2. Window construction according to claim 1, **characterised in that** the window construction, in addition to the pane mentioned, comprises a further pane, which is present parallel to and is kept apart from the pane mentioned by means of spacers, in which the circumference of the further pane lies within the circumference of the pane mentioned, so that a circumference edge of the pane mentioned protrudes past the further pane, and in which the main side mentioned, with which the pane mentioned can be placed against a frame of a ship's construction, is the side of the pane mentioned that is turned towards

the further pane, in which the mounting section is present on the circumference edge of the pane mentioned.

3. Window construction according to claim 1 or 2, **characterised in that** the mounting section is glued to the pane.
4. Window construction according to claim 1, 2 or 3, **characterised in that** the window construction comprises at least one clamping block which is detachable from the mounting section and which is provided with a hole with a screw thread in which a clamping bolt is present, which can be adjusted in a direction that is mainly at right angles to the main side of the pane, so that the window construction can be clamped against a strip present on the frame of a ship's construction, in which the strip is present between the pane and the clamping bolt.
5. Window construction according to claim 4, **characterised in that** a part of the mounting section is present opposite the clamping bolt in the adjustment direction of the clamping bolt, so that the strip can be clamped between this part and the clamping bolt.
6. Window construction according to one of the preceding claims, **characterised in that** the mounting section is provided with a protrusion on the side turned away from the main side of the pane for mounting a section for a woodwork finish or for mounting a covering strip.

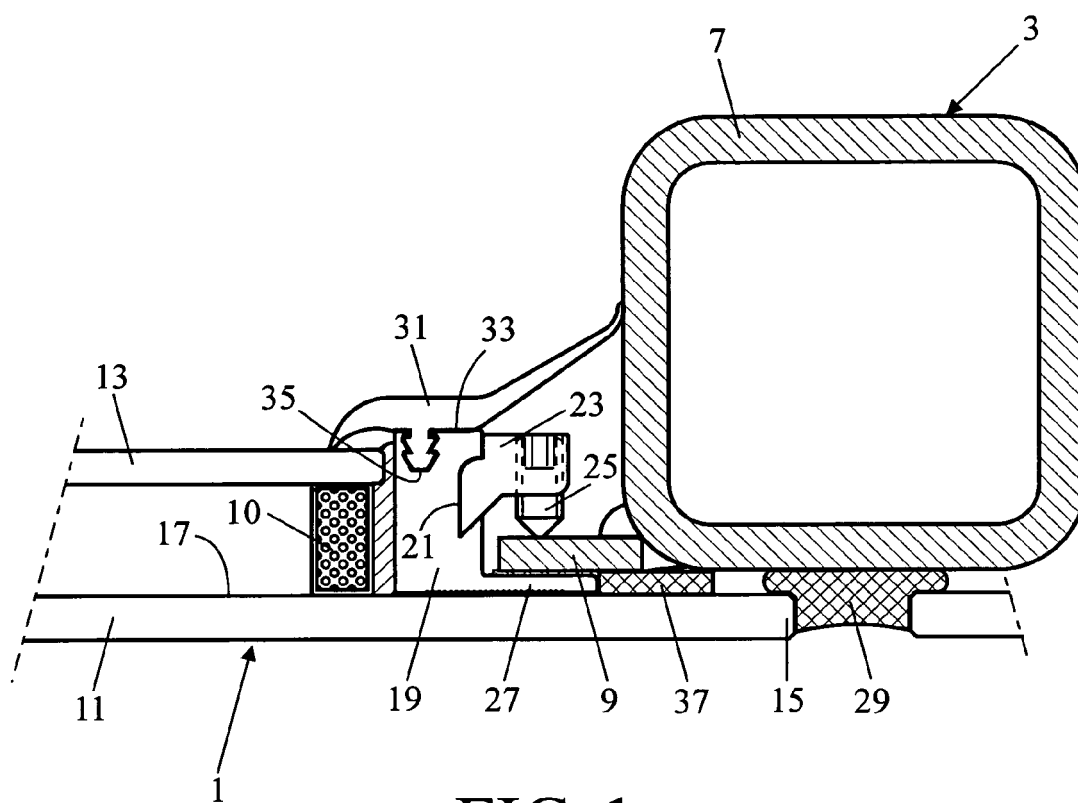


FIG. 1

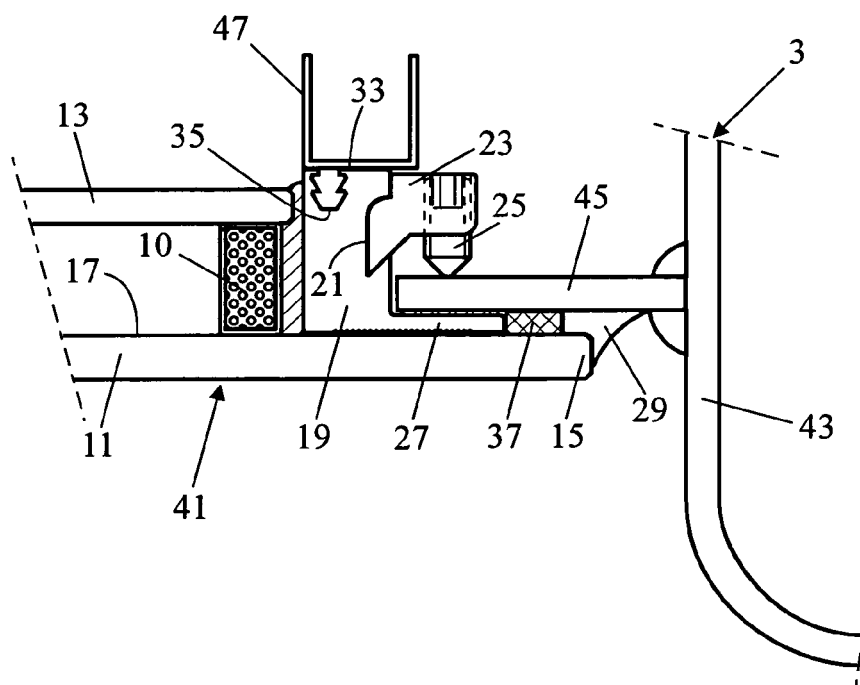


FIG. 2



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 06 02 2196

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 2003/110718 A1 (BOISVERT DANIEL) 19 June 2003 (2003-06-19) * figures 4a-4d *	1,3,6	INV. B63B19/00
X	US 3 093 844 A (BROCK HENRY W ET AL) 18 June 1963 (1963-06-18) * column 2, line 29 - line 59; figure 2 *	1,3,6	
X	US 6 105 320 A (BOOR ET AL) 22 August 2000 (2000-08-22) * figures 1,2 *	1,3,6	
X	US 3 978 535 A (SWAN ET AL) 7 September 1976 (1976-09-07) * figure 2 *	1,6	
X	US 3 016 548 A (TAYLOR WILLARD H) 16 January 1962 (1962-01-16) * figure 8 *	1	
A	PATENT ABSTRACTS OF JAPAN vol. 007, no. 279 (M-262), 13 December 1983 (1983-12-13) & JP 58 156478 A (YAMAHA HATSUDOKI KK), 17 September 1983 (1983-09-17) * abstract; figures *	1	TECHNICAL FIELDS SEARCHED (IPC)
A	FR 2 541 359 A (DALMAS ETS) 24 August 1984 (1984-08-24) * figure 1 *	1	B63B
A	US 6 557 480 B1 (NUSS W. PHILIP) 6 May 2003 (2003-05-06) * figures 1,5 *	1	
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 13 February 2007	Examiner van Rooij, Michael
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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EPO FORM 1503 03.82 (P04C01)

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

EP 06 02 2196

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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13-02-2007

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2003110718 A1	19-06-2003	CA 2410360 A1	17-06-2003
US 3093844 A	18-06-1963	NONE	
US 6105320 A	22-08-2000	AT 181540 T	15-07-1999
		DE 69700294 D1	29-07-1999
		DE 69700294 T2	16-12-1999
		EP 0874752 A1	04-11-1998
		NL 1002128 C2	22-07-1997
		WO 9726179 A1	24-07-1997
US 3978535 A	07-09-1976	NONE	
US 3016548 A	16-01-1962	NONE	
JP 58156478 A	17-09-1983	NONE	
FR 2541359 A	24-08-1984	NONE	
US 6557480 B1	06-05-2003	NONE	