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(54) **Bottom of a container or a vehicle**

(57) A bottom 1 for a container or a vehicle is provided with a mechanical and horizontal loading/unloading means 3, which is a conveyor belt 5 that is guided over guide rollers 7, 9 at its ends. There is a driving means 11 in one of the guide rollers 9, which is an electric motor for driving the guide roller.

The underside of the bottom 1 is provided with profiles 13 extending across its width, which have openings 15 for receiving the forks of a forklift truck. Furthermore, there are standardised coupling elements 17 on the underside of the bottom 1, which have been provided with elongated openings 19 for coupling with a lifting device.

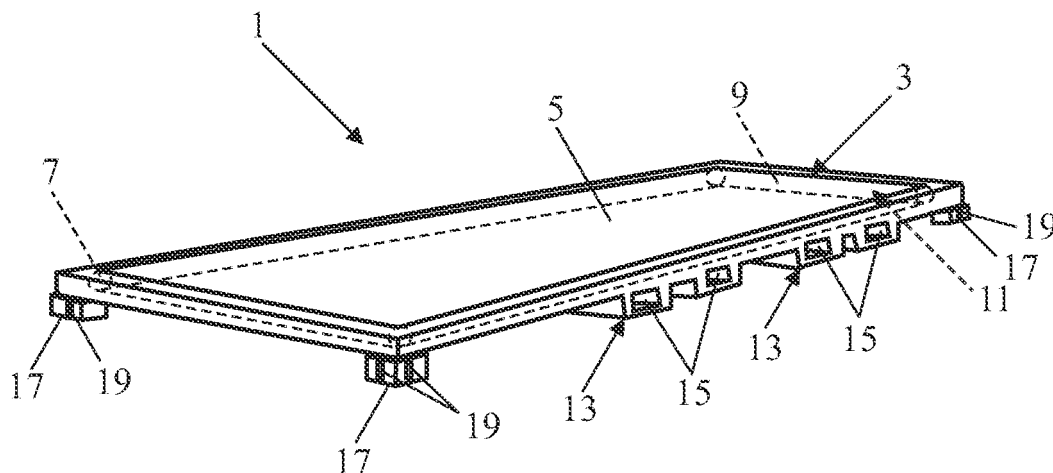


FIG. 1

Description

BACKGROUND OF THE INVENTION:

Field of the invention

[0001] The invention relates to a bottom for a container or a vehicle. More particularly, the invention relates to a bottom for a standardised container, for example, in accordance with ISO standards.

Prior art

[0002] Such standardised containers are generally known and are used worldwide for transporting goods. Loading and unloading goods into and out of the container should take place by means of machinery suitable to the purpose.

[0003] It may occur, however, that the goods are available or that it is desirable for them to be at a place where the container cannot be loaded or unloaded, for example, because the machinery for loading and unloading or the people at that place cannot get close to the container. In that case the container should be loaded or unloaded using machinery at another place and the goods then be moved to the place desired.

Summary of the invention

[0004] An objective of the invention is to provide a solution to the problem described above. The problem is solved according to the invention by providing a bottom for a container or a vehicle that has a mechanical and horizontal loading/unloading means. Walls can be attached to the bottom and then a top so that a container is obtained. Because the bottom of a container obtained this way is provided with a loading/unloading means, no external machines are necessary for loading and unloading, as a result of which the container can be loaded and unloaded at any place desired.

[0005] The mechanical and horizontal loading/unloading means is preferably formed by:

- roller conveyors with a lifting means in order to lift the rollers, or
- three or more carriers that can move back and forth horizontally, which are first repeatedly pulled back under the load one after the other where the load remains lying on the other carriers and then is moved together to the point of departure where the load is taken away, or
- a conveyor belt, conveyor chains or lamellas, which can be guided over guide wheels at its ends, with a driving means, for example, an electric motor or a hydro motor, for driving one or more of the guide wheels.

[0006] An embodiment of the bottom according to the

invention is characterised in that the bottom is provided with openings for receiving the forks of a forklift truck or teeth of a lifting device.

[0007] A further embodiment of the bottom according to the invention is characterised in that the bottom is provided with telescopic and/or swinging legs with which the bottom can be placed on legs above the ground.

[0008] Still another further embodiment of the bottom according to the invention is characterised in that it has standardised coupling elements on its underside, which coupling elements are provided with openings for coupling with a lifting device.

[0009] The invention also relates to a container provided with a bottom according to the invention with walls and a top.

[0010] Preferably the container has standardised coupling elements on its underside and topside, which coupling elements are provided with openings for coupling to a lifting device. It is preferable that these coupling elements be in accordance with ISO standardised elements.

Brief description of the drawings

[0011] The invention will be elucidated more fully below on the basis of drawings in which an embodiment of the bottom according to the invention and an embodiment of a container provided with a bottom according to the invention are shown. In these drawings:

Figure 1 shows an embodiment of a bottom according to the invention; and

Figure 2 shows an embodiment of a container provided with the bottom shown in figure 1.

Detailed description of the drawings

[0012] In figure 1 an embodiment of the bottom 1 according to the invention is shown. The bottom 1 is provided with a mechanical and horizontal loading/unloading means 3 which is a conveyor belt 5 that is guided over guide rollers 7, 9 at the ends. In one of the guide rollers 9 there is a driving means 11 which is an electric motor for driving the guide roller.

[0013] The bottom 1 is provided with profiles 13 extending across its width on the underside, which are provided with openings 15 for receiving the forks of a forklift truck. Furthermore, there are standardised coupling elements 17 at the corners on the underside of the bottom 1, which are provided with elongated openings 19 for coupling with a lifting device.

[0014] In figure 2, a container 21 is shown, provided with the bottom shown in figure 1. On the bottom, walls 23-29 are situated with a top 31. Furthermore, the container 21 has standardised coupling elements 33 at the corners on the container's upper side. These coupling elements 33 are also provided with openings 35 for coupling to a lifting device.

[0015] 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 embodiment shown in the drawings. The invention also extends to all embodiments deviating from the embodiment shown in the drawings within the context defined by the claims. 5

Claims

1. Bottom for a container or a vehicle, **characterised in that** the bottom is provided with a mechanical and horizontal loading/unloading means. 10
2. Bottom for a container or a vehicle according to claim 1, **characterised in that** the mechanical and horizontal loading/unloading means comprises roller conveyors as well as a lifting means for lifting the rollers. 15
3. Bottom for a container or a vehicle according to claim 1, **characterised in that** the mechanical and horizontal loading/unloading means comprises three or more carriers that can move back and forth. 20
4. Bottom for a container or a vehicle according to claim 1, **characterised in that** the mechanical and horizontal loading/unloading means comprises a conveyor belt, conveyor chains or lamellas, which are guided over guide wheels at the ends, as well as a driving means for driving one or more of the guide wheels. 25
5. Bottom for a container or a vehicle according to one of the preceding claims, **characterised in that** the bottom is provided with openings for receiving the forks of a forklift truck or the teeth of a lifting device. 30
6. Bottom for a container or a vehicle according to one of the preceding claims, **characterised in that** the bottom has standardised coupling elements on its underside, which coupling elements are provided with openings for coupling to a lifting device. 35
7. Bottom for a container or a vehicle according to one of the preceding claims, **characterised in that** the bottom is provided with telescopic and/or swinging legs with which the bottom can be placed on legs above the ground. 40
8. Container provided with a bottom according to one of the preceding claims with walls and a top. 45
9. Container according to claim 8, **characterised in that** the container, furthermore, has standardised coupling elements on its underside and topside, which coupling elements are provided with openings for coupling with a lifting device. 50

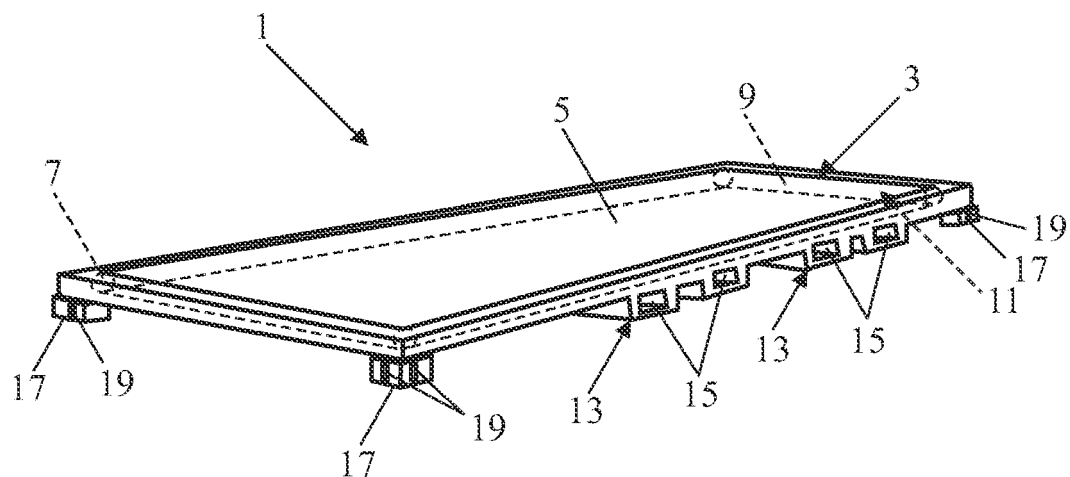


FIG. 1

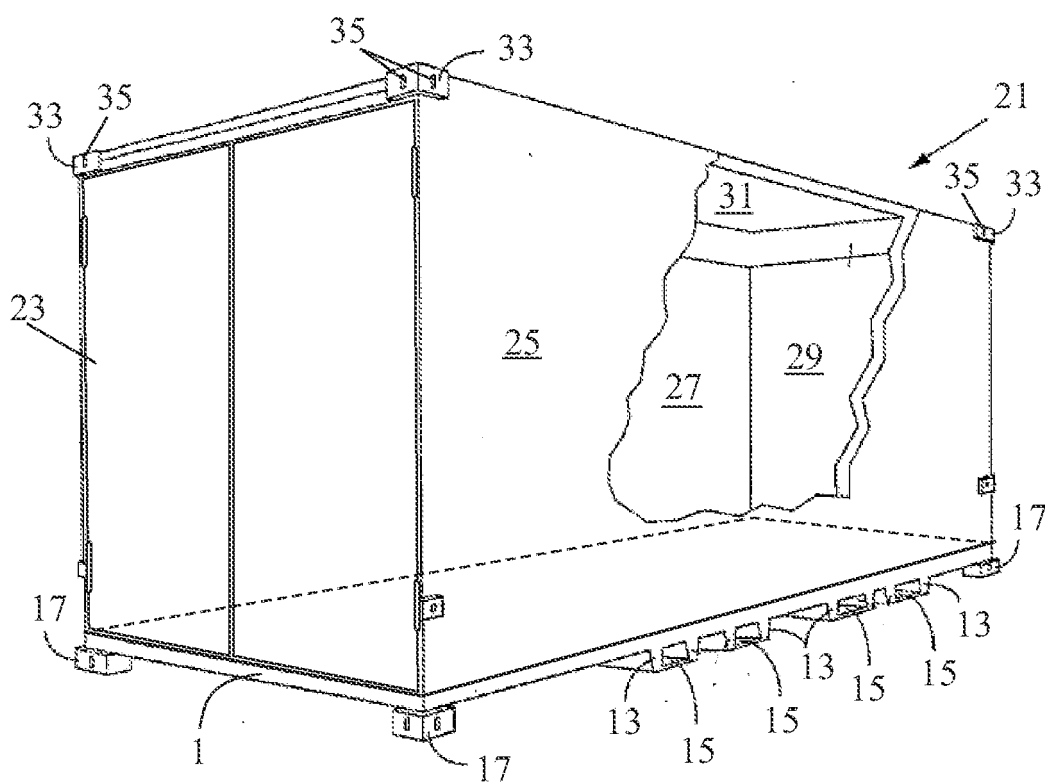


FIG. 2



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 07 11 8273

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	DE 92 03 806 U1 (TIM TRANSPORT INTERMODAL GMBH, 6800 MANNHEIM, DE) 15 April 1993 (1993-04-15) * page 5, line 26 - page 6, line 26 * * figures 1-3 *	1,2,4-9	INV. B65D88/60 B65G67/20 B60P1/38 B60P1/52
X	US 4 231 695 A (WESTON SR ROBERT M) 4 November 1980 (1980-11-04) * abstract; figures 1-3 *	1,3	
X	NL 1 027 518 C2 (MERCURIUS SCHEEPVAART B V [NL]) 17 May 2006 (2006-05-17) * page 4, lines 7-27 * * figure 1 *	1,4,6,8,9	
X	FR 2 108 899 A (BRETAGNE ATEL CHANTIERS) 26 May 1972 (1972-05-26) * page 1, lines 17-31 * * figure 1 *	1,8	
			TECHNICAL FIELDS SEARCHED (IPC)
			B65D B65G B60P
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 10 January 2008	Examiner Piolat, Olivier
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 07 11 8273

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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10-01-2008

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
DE 9203806	U1	15-04-1993	NONE	
US 4231695	A	04-11-1980	NONE	
NL 1027518	C2	17-05-2006	NONE	
FR 2108899	A	26-05-1972	NONE	