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OPI DATE 22/09/97 APPLN. ID 23793/97 IN PCT NUMBER PCT/DE97/00347 A0JP DATE 20/11/97 IN (51) Internationale Patentklassifikation 6: (11) Internationale Veröffentlichungsnummer: WO 97/32798 B65D 88/12 A2 (43) Internationales Veröffentlichungsdatum: 12. September 1997 (12.09.97) PCT/DE97/00347 (81) Bestimmungsstaaten: AU, CA, CZ, JP, KR, NO, US, europäisches Patent (AT, BE, CH, DE, DK, ES, FI, FR, (21) Internationales Aktenzeichen: GB, GR, IE, IT, LU, MC, NL, PT, SE). (22) Internationales Anmeldedatum: 27. Februar 1997 (27.02.97) Veröffentlicht (30) Prioritätsdaten: Ohne internationalen Recherchenbericht und erneut zu 196 08 645.0 6. März 1996 (06.03.96) DE veröffentlichen nach Erhalt des Berichts. MORITZ, Robert [DE/DE]; (71)(72) Anmelder und Erfinder: Zollernstrasse 8 Baderwiesenstrasse 27, D-71640 Ludwigsburg (DE). see D-70806 Kornwertheim Germany (74) Anwalt: BOEHMERT & BOEHMERT; Niemannsweg 133, D- $\int_{O} \int_{O} f$ 24105 Kiel (DE). 2 (54) Title: CONTAINER (54) Bezeichnung: CONTAINER (57) Abstract

The invention relates to a container, i.e. a standardised transport container, with a bottom surface (10) and a cover (18) removable from the bottom surface (10) and forming the two side surfaces (12), the two faces (14) and the roof surface (16). The cover (18) is constructed in one piece. Four uprights (20) extending at right angles to the bottom are provided in the corners of the container, and the upper ends of said uprights have a structure (22) fitted with cargo handling gear. The uprights (20) are rigidly connected to the bottom surface (10), and an engaging device is provided in the upper region of said uprights for locking the uprights (20) to the cover (18) and unlocking them therefrom. Alternatively, the uprights (20) are rigidly connected to the cover (18), and an engaging device in the lower region of the uprights (20) locks the uprights (20) to the bottom surface (10) and unlocks them therefrom.

(57) Zusammenfassung

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Container, d.h. normierter Transportbehälter, mit einer Bodenfläche (10) und einer die beiden Seitenflächen (12), die beiden Stirnflächen (14) und

eine Dachfläche (16) ausbildenden, von der Bodenfläche (10) abnehmbaren Haube (18), wobei die Haube (18) einstückig ausgebildet ist, vier in den Ecken des Containers senkrecht verlaufende Holme (20) vorgesehen sind, die im Bereich ihrer oberen Enden mit einer zum Zusammenwirken mit einem Ladegeschirr eingerichteten Struktur (22) versehen sind, und die Holme (20) mit der Bodenfläche (10) fest verbunden und mit einer im oberen Bereich der Holme (20) angreifenden Einrichtung zur Ver- und Entriegelung der Holme (20) an bzw. von der Haube (18) versehen sind, oder die Holme (20) mit der Haube (18) fest verbunden und mit einer im unteren Bereich der Holme (20) angreifenden Einrichtung zur Ver- und Entriegelung der Holme (20) an bzw. von der Bodenfläche (10) versehen sind.

The invention relates to a container, i.e. a standardized transportation having the features of the preamble of the independent claims 1 and 3.

Said container, known from DE 33 00 354 A1, has the advantage that it allows lateral access to the goods transported on displacing the hood or cover. It is not possible to grip the container with loading tackle acting from above.

The problem of the invention is to provide a container which can be carried by loading tackle acting from above and which is equipped with a removable cover.

According to a first aspect of the invention, there is provided a container having a bottom surface and a cover, removable from the bottom surface, and forming one of the two lateral surfaces, the two end surfaces and a top surface, characterized in that the cover is constructed in one piece, four struts running vertically in the corners of the container are provided and which in the vicinity of their upper ends have a structure set up for cooperating with a loading tackle and the struts are firmly connected to the bottom surface and

loading tackle and the struts are firmly connected to the bottom surface and provided with a device acting in the upper area of the struts for locking and unlocking said struts with respect to the cover.

According to a second aspect of the invention, there is provided a container having a bottom surface and a cover, removable from the bottom surface, and forming one of the two lateral surfaces, the two end surfaces and a top surface, characterized in that the cover is constructed in one piece, four struts running vertically in the corners of the container are provided and which in the vicinity of their upper ends have a structure set up for cooperating with a loading tackle and the struts are firmly connected to the cover and provided with a device acting in the lower area of the struts for locking and unlocking the struts with respect to the bottom surface.

In both embodiments, on raising the container by means of loading tackle acting from above, the force is applied via struts to the load-carrying bottom surface, so that there is no loading on the cover.

The invention is described in greater detail hereinafter relative to the attached drawings, wherein show:

Fig. 1 A perspective view of the container with the cover in place.

Fig. 2 A perspective view of the container with the cover raised.

Fig.3 A perspective view of the bottom surface of the struts resting thereon and the unlocking linkage.



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Fig. 4 A perspective view of an alternative embodiment corresponding to Fig. 3.

The container shown in Figs. 1 and 2 comprises a bottom surface 10 and a hood or cover 18 to be placed thereon, which forms the lateral surfaces 12, end surfaces 14 and top surface 16. In the vicinity of its corners, the



bottom surface 10 carries struts 20 mounted thereon and constructed as angle sections and which serve to stiffen the container. The upper ends of the struts 20 are provided with a structure 22, in which engage the grippers of a not shown loading tackle, if the container is to be raised.

Fig. 3 shows that in the first embodiment represented in figs. 1 to 3, the upper ends of the struts cooperate with an unlocking linkage 24, which is firmly connected to the not shown cover. The function of this unlocking linkage 24 is to use a not shown loading tackle to either raise the entire container when the linkage 24 is locked in the upper ends of the struts 20, or to merely raise the cover 18 on unlocking the linkage 24 by manual actuation of the reversing lever 26, so that the bottom surface 16 of the container is freely accessible from all sides. The unlocking linkage 24 is so constructed that when the reversing lever 26 is not actuated it brings about a locking of the cover 18 with the struts 20, which are only raised by and during an actuation of the reversing lever 26.

In the second embodiment shown in fig. 4, the struts 20 are firmly connected to the cover 18. The lower ends of the struts 20 cooperate with an unlocking linkage 24 located in the vicinity of the bottom surface 10. In this embodiment, the unlocking linkage 24 makes it possible to unlock the struts 20 from the state locked to the bottom surface 10, where the entire container, when using a not shown loading tackle can be raised in the upper area of the struts 20, so that the loading tackle only raises the cover 18, together with the struts 20, and renders the bottom surface 10 of the container freely accessible from all sides.

Other than what is shown in the drawings, the struts and, in the first embodiment the cover in the vicinity of its lower corners, or in the second embodiment the bottom surface in the vicinity of its upwardly pointing corners, can be outwardly bevelled, in order to facilitate the bringing together of the parts.



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CLAIMS

1. Container having a bottom surface and a cover, removable from the bottom surface, and forming one of the two lateral surfaces, the two end surfaces and a top surface, characterized in that the cover is constructed in

- one piece, four struts running vertically in the corners of the container are provided and which in the vicinity of their upper ends have a structure set up for cooperating with a loading tackle and the struts are firmly connected to the bottom surface and provided with a device acting in the upper area of the struts for locking and unlocking said struts with respect to the cover.
- 2. Container according to claim 1, characterized in that in the lower corner areas of the cover and in the vicinity of the upper ends of the struts, they are provided with bevels to facilitate locating the cover and the struts with respect to each other.

3. Container having a bottom surface and a cover, removable from the bottom surface, and forming one of the two lateral surfaces, the two end surfaces and a top surface, characterized in that the cover is constructed in one piece, four struts running vertically in the corners of the container are provided and which in the vicinity of their upper ends have a structure set up for cooperating with a loading tackle and the struts are firmly connected to the cover and provided with a device acting in the lower area of the struts for locking and unlocking the struts with respect to the bottom surface.

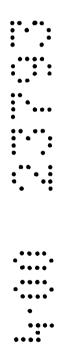
4. Container according to claim 3, characterized in that the upwardly directed corner areas of the bottom surface and the region of the lower ends of the struts are provided with bevels to facilitate locating the bottom surface and the struts with respect to each other.

5. Container according to any one of the preceding claims, characterized in that the struts are constructed as angle sections.

6. Container according to any one of the preceding claims, characterized in that the device for locking and unlocking the cover is manually operated.

7. Container substantially as described herein with reference to the accompanying drawings.





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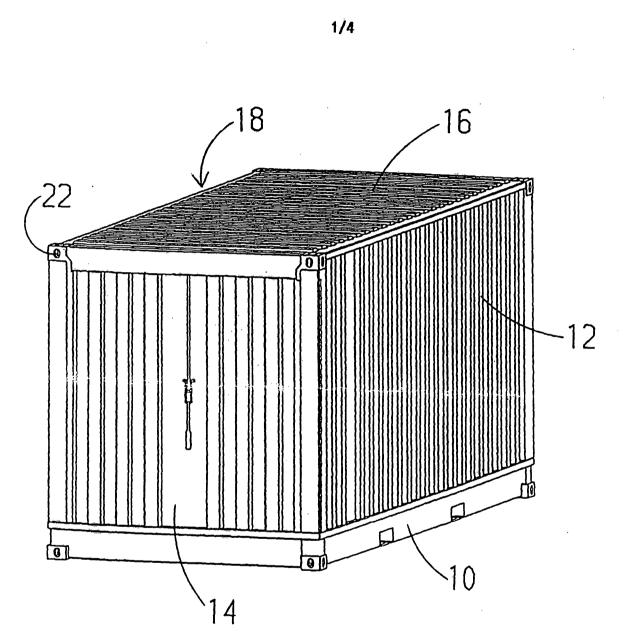
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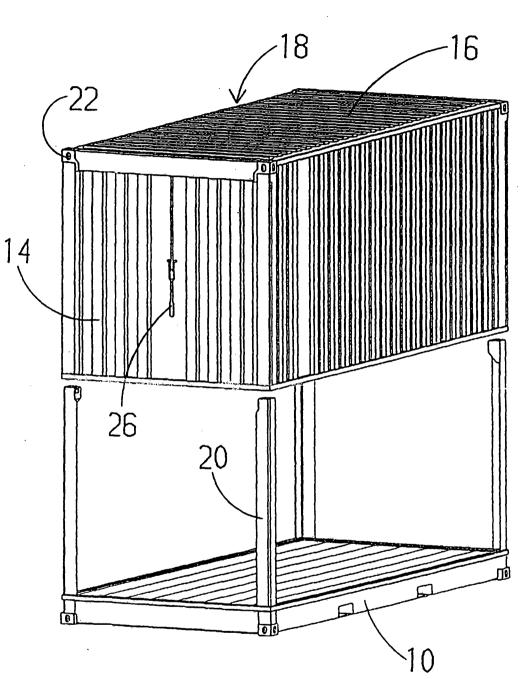


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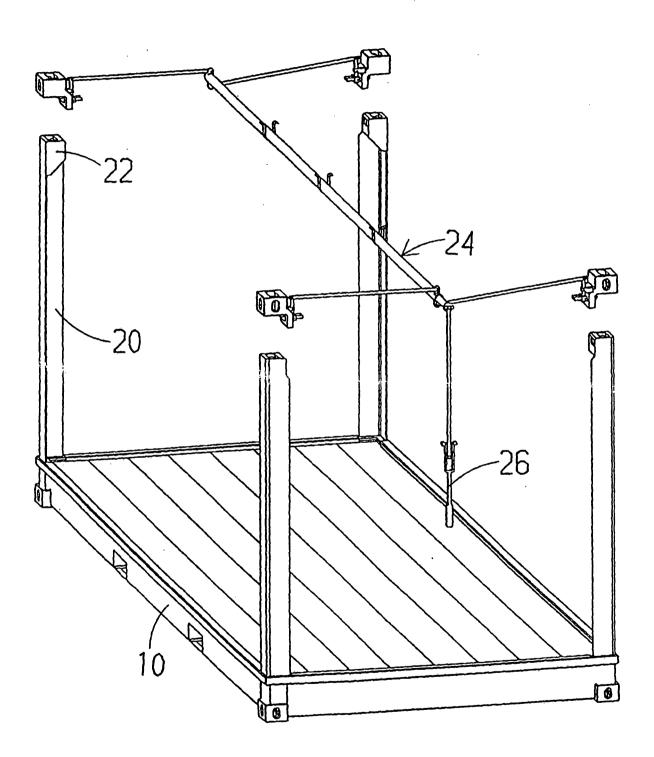


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