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Europäisches Patentamt
European Patent Office
Office européen des brevets



11 Publication number:

0 333 969 B1

12

EUROPEAN PATENT SPECIFICATION

45 Date of publication of patent specification: **23.12.92** 51 Int. Cl.⁵: **B65D 88/16**

21 Application number: **88830223.9**

22 Date of filing: **19.05.88**

54 **Container for loose products in general, provided with raising means, adapted to be stored either in a horizontal or in a vertical position.**

30 Priority: **24.03.88 IT 1994188**

43 Date of publication of application:
27.09.89 Bulletin 89/39

45 Publication of the grant of the patent:
23.12.92 Bulletin 92/52

84 Designated Contracting States:
AT BE CH DE ES FR GB GR LI NL SE

56 References cited:
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FR-A- 2 583 720 GB-A- 952 511
US-A- 2 969 102 US-A- 4 603 432
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73 Proprietor: **SACCHERIA DEL VERBANO S.R.L.**
Via per Cittiglio, 18
I-21014 Laveno Mombello (Varese)(IT)

72 Inventor: **Manerba, Giancarlo**
Via per Cittiglio, 18
I-21014 Laveno Mombello (Varese)(IT)

74 Representative: **Cicogna, Franco**
Ufficio Internazionale Brevetti Dott.Prof.
Franco Cicogna Via Visconti di Modrone,
14/A
I-20122 Milano(IT)

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Description

BACKGROUND OF THE INVENTION

The present invention relates to a container for loose products in general, which is provided with raising means and is adapted to be stored either in a horizontal or in a vertical position.

As is known, several different types of containers are presently commercially available for holding loose products or material in general, which containers or vessels usually consist of an elongated parallelepipedal shape holding body which, at the end portions thereof, is respectively provided with a loading inlet and a discharging outlet.

Moreover, on the end including the loading inlet there are provided straps or handles adapted to be engaged for vertically raising and displacing the container.

These containers can be stored or stacked exclusively in a vertical position, because of their elongated parallelepipedal shape, and it is not possible to stack onto one another a plurality of containers. A fabric container similar to those described above is, for example, known from FR-A-2 583 720. A container which can be suspended either horizontally or vertically is known from GB-A-952 511

SUMMARY OF THE INVENTION

Accordingly, the main object of the present invention is to overcome the above mentioned drawbacks, by providing such a container for loose products or materials in general which can be raised both in a vertical position and in a horizontal position so as to be stacked, or stored, if desired, in both said positions.

Another object of the present invention is to provide such a container for loose products and the like which can be easily handled by conventional fork lifting devices and which, moreover, has a comparatively high strength so as to preserve its size.

Another object of the present invention is to provide such a container or vessel which is very safe and reliable in operation and which, moreover, can be made starting from easily commercially available elements and materials, at a comparatively low cost.

According to one aspect of the present invention, the above mentioned objects, as well as yet other objects, which will become more apparent hereinafter, are achieved by a container for loose products in general as defined in independent claim 1. The container includes raising means, for storing said container either in a horizontal or in a vertical position, and comprises an elongated paral-

lelepipedal shape holding body, made of a high strength fabric and provided, on its opposite ends, with respectively a discharging outlet and a loading inlet.

In particular, at an end there are provided straps for vertically raising the container whereas, at the middle region of the side surface there are provided belts, arranged at ring members, for horizontally the container raising.

BRIEF DESCRIPTION OF THE DRAWINGS

Further characteristics and advantages of the present invention will become more apparent hereinafter from the following detailed disclosure of a preferred though not exclusive embodiment of a container for loose products in general, which is illustrated, by way of an indicative but not limitative example, in the accompanying drawings in which:

Figure 1 is a schematic perspective view illustrating the container for loose products in general according to the present invention;

Figure 2 is another perspective view illustrating two containers, arranged with an adjoining vertical relationship;

Figure 3 illustrates a plurality of containers, arranged with a stacked horizontal relationship.

DESCRIPTION OF THE PREFERRED EMBODIMENT

With reference to the above figures, the container for loose products in general, according to the invention, which is generally indicated at the reference number 1, comprises holding body 2, which, preferably has an elongated parallelepipedal shape and, at its small ends, is respectively provided with a loading inlet 3 and a discharging outlet 4.

The holding body 2 is advantageously made of a fabric or a not woven fabric, having a high strength and able to resist stresses exerted thereon by the contained material.

In particular, the above mentioned fabric may be a plain fabric, or a circular fabric or a plasticized or thermally insulated fabric or, if desired, it may consist of a multiple layer fabric the layers of which are adhesively coupled to one another.

At a small end, preferably the end including the loading inlet 3, there are provided strips or handles 10, affixed to the container corners, and adapted to be engaged by raising means for handling and transporting the container with a vertical attitude.

A main feature of the invention is that, at the middle region of the side surface of the holding body 2, there are provided straps 11, of loop shape, which, practically, encompass the holding body and are arranged at ring members 12 made

of fabric materials or fibre materials, and provided at the longitudinal corners of the container.

In particular, the straps 11 are adapted to be engaged by fork lifting devices, the forks whereof can be engaged in said straps in order to raise and transport the container 1 with a horizontal attitude, thereby affording the possibility of stacking, with this attitude, a plurality of containers.

The straps 11, in addition to providing the possibility of easily handling the container in a horizontal attitude, also operate to prevent the contained material from stressing and tearing the container walls.

Accordingly, the provision of the mentioned straps affords the possibility of making well shaped containers and, moreover, affords the additional advantage that the container can be raised horizontally, and stacked in this attitude, with a remarkable reduction of the storing space.

The loading inlet 3 and discharging outlet 4 can be closed by cords or the like, 13, and may be easily opened as it is required.

From the above disclosure it should be apparent that the invention fully achieves the intended objects.

In particular, the fact is to be pointed out that the provision of the side straps affords the possibility of making a very flexible container which has a great strength and, moreover, the mentioned straps, which are reinforced by the ring members 12, afford the possibility of easily raising and transporting, with a horizontal attitude, the single containers.

Moreover, all of the details can be replaced by other technical equivalent elements.

In practising the invention, the used materials, provided that they are compatible to the intended use, as well as the contingent size and shapes, may be any according to requirements.

Claims

1. A container for loose products in general, in combination with a plurality of strap elements (11) and adapted to be stored either in a horizontal or in a vertical position, comprising an elongated parallelepipedal box-like body (2), defined by two small substantially rectangular opposite end sides and four substantially rectangular major elongate lateral sides, said small end sides and lateral sides being made of a high strength fabric, a discharging closable outlet (4) being formed through one of said small end sides and a loading closable inlet (3) being formed through the other of said small sides, wherein at each of the four corners of one of said small end sides there is fixedly restrained a closed loop outwardly projecting

strip (10) to be engaged by lifting means for raising said container with said box-like body in a vertical attitude, and wherein along each of the edges of each of said lateral sides of said box-like body (2) there are fixedly restrained a plurality of outwardly projecting ring member (12) pairs, each pair of said ring members (12) consisting of two aligned ring members (12) oppositely arranged along the two opposite edges of each said lateral side of said box-like body (2), a plurality of strap elements (11) being moreover provided each of which can be removably threaded through four of said successively aligned ring members (12) for allowing said container to be raised with said box-like body (2) in a horizontal attitude.

2. A container for loose products in general according to Claim 1, characterized in that said box-like body (2) is made of a not woven fabric.
3. A container for loose products in general according to Claims 1 and 2, characterized in that said fabric is a plain fabric, a circular fabric, a thermally insulated fabric, a plasticized fabric and the like.
4. A container for loose products in general according to one or more of the preceding claims, characterized in that said ring members (12) are made of a fabric, a fibre material or a metal material.

Patentansprüche

1. Behälter für Schuttgut im allgemeinen zusammen mit mehreren Schlaufenelementen (11), der für die Lagerung in waagerechter oder senkrechter Position geeignet ist, mit einem verlängerten parallelepipedförmigen Kastenkörper (2), der durch zwei kleinen entgegengesetzten wesentlich rechteckigen Endseiten und vier grösseren verlängerten wesentlich rechteckigen Seitenwände bestimmt wird, wobei die obengenannten kleinen Endseiten und Seitenwände aus einem hochkräftigen Textilgewebe bestehen, wobei ein schliessbarer Entleerungsausstritt (4) durch eine der obengenannten kleinen Endseiten und ein schliessbarer Belastungseintritt (3) durch die andere der obengenannten kleinen Endseiten gebildet sind, wo an jede der obengenannten kleinen Endseiten ein aussenwärts vorspringender ringmaschiger Streifen (10) festgestellt wird, der zum Anbringen von Aufhebeelementen zur Aufziehung des obengenannten Behälters mit dem obengenannten Kastenkörper in senkrechter Stel-

lung vorgesehen ist, und wo längs jeder oben-
genannten Kanten jeder obengenannten Sei-
tenwände des obengenannten Kastenkörpers
(2) mehreren Paare von aussenwärts vorsprin-
genden Ringelementen (12) festgehalten werden,
wobei jedes Paar von den obengenannten
Ringelementen (12) aus zwei aneinanderlie-
genden längs der zwei entgegengesetzten
Kanten jeder obengenannten Seitenwand des
obengenannten Kastenkörpers (2) entgegenge-
setzt angeordneten Ringelemente (12) besteh-
en, wobei ausserdem, mehreren Schlaufen
(11) vorgesehen sind, jeder eine durch vier
obengenannten folgend anliegenden Ringele-
menten (12) abnehmbar eingeführt wird, um so
die Aufhebung des obengenannten Behälters
mit dem obengenannten Kastenkörper (2) in
waagerechter Stellung zu ermöglichen.

2. Behälter für Schuttgut im allgemeinen, nach
Anspruch 1, dadurch gekennzeichnet, dass der
obengenannten Kastenkörper (2) aus einem
nicht gewebten Stoff besteht. 20
3. Behälter für Schuttgut im allgemeinen, nach
Anspruch 1 und 2, dadurch gekennzeichnet,
dass der obengenannte Stoff, einen flache
Stoff, eine Schlauchware, ein thermoisierte
Gewebe, ein plastizierte Gewebe und derglei-
chen ist. 25
4. Behälter für Schuttgut im allgemeinen, nach
einem oder mehreren vorigen Ansprüchen, da-
durch gekennzeichnet, dass die obengenann-
ten Ringelementen (12) aus einem Gewebe,
einem faserigen Material oder einem metalli-
schen Material bestehen. 30

Revendications

1. Conteneur pour produits en vrac en général,
en combinaison avec une pluralité d'éléments
en forme de sangles (11) et adapté au stocka-
ge soit dans une position horizontale soit dans
une position verticale, comprenant un corps (2)
en forme de boîte allongé parallélépipédique-
ment, défini par deux côtés d'extrémité oppo-
sés petits essentiellement rectangulaires et par
quatre côtés latéraux allongés plus grands es-
sentiellement rectangulaires, lesdits côtés pe-
tits d'extrémité et les côtés latéraux étant fabri-
qués avec un tissu présentant une résistance
élevée, une sortie (4) de vidage qui peut être
fermée étant formée à travers de l'un desdits
côtés petits d'extrémité et une entrée (3) de
charge qui peut être fermée étant formée à
travers de l'autre desdits côtés petits, où, sur
chacun des quatre coins de l'un desdits côtés
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petits d'extrémité il y a serré d'une manière
fixe une sangle (10) se projetant à l'extérieur, à
anneau clos, pour être engagée par des
moyens de levage pour soulever ledit conte-
neur avec ledit corps en forme de boîte dans
une attitude verticale, et où le long de chacun
des coins de chacun desdits côtés latéraux
dudit corps en forme de boîte (2) il y a serré
d'une manière fixe une pluralité de couples
d'éléments (12) annulaires projetant à l'exté-
rieur, chaque pair desdits éléments annulaires
(12) consistant de deux éléments annulaires
(12) alignés et opposés d'une position oppo-
sée le long de deux coins opposés de chacun
desdits côtés latéraux dudit corps en forme de
boîte (2), une pluralité d'éléments (11) en for-
me de sangle étant prévue en outre, chacun
desquels pouvant être fileté d'une manière
amovible à travers de quatre éléments (12)
annulaires alignés en succession pour permet-
tre que ledit conteneur soit soulevé avec ledit
corps en forme de boîte (2) se trouvant dans
une attitude horizontale.

2. Conteneur pour produits en vrac en général
selon la revendication 1, caractérisé en ce que
ledit corps en forme de boîte (2) est fait d'un
tissu non tissu. 25
3. Conteneur pour produits en vrac en général
selon les revendications 1 et 2, caractérisé en
ce que ledit tissu est un tissu uni, un tissu
circulaire, un tissu isolé thermiquement, un tis-
su plastifié ou similaires. 30
4. Conteneur pour produits en vrac en général
selon une ou plusieurs des revendications pré-
cédentes, caractérisé en ce que lesdits élé-
ments annulaires (12) sont faits d'un tissu, d'un
matériel fibreux ou d'un matériel métallique. 35



