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(54) **Display counter of the tray type**

(57) A display counter (1) of the tray type comprises a structure (3) for containing the tray (2), defining, on a trading side of the counter, a parapet formation (8), the top of which is profiled so as to facilitate access to the

tray (2). The parapet formation (8) comprises, over a part at least of the trading side, a surface which is chamfer-shaped and tapered towards the top so as to allow a trader to rest thereon with a zone of the pelvis when leaning into the tray.

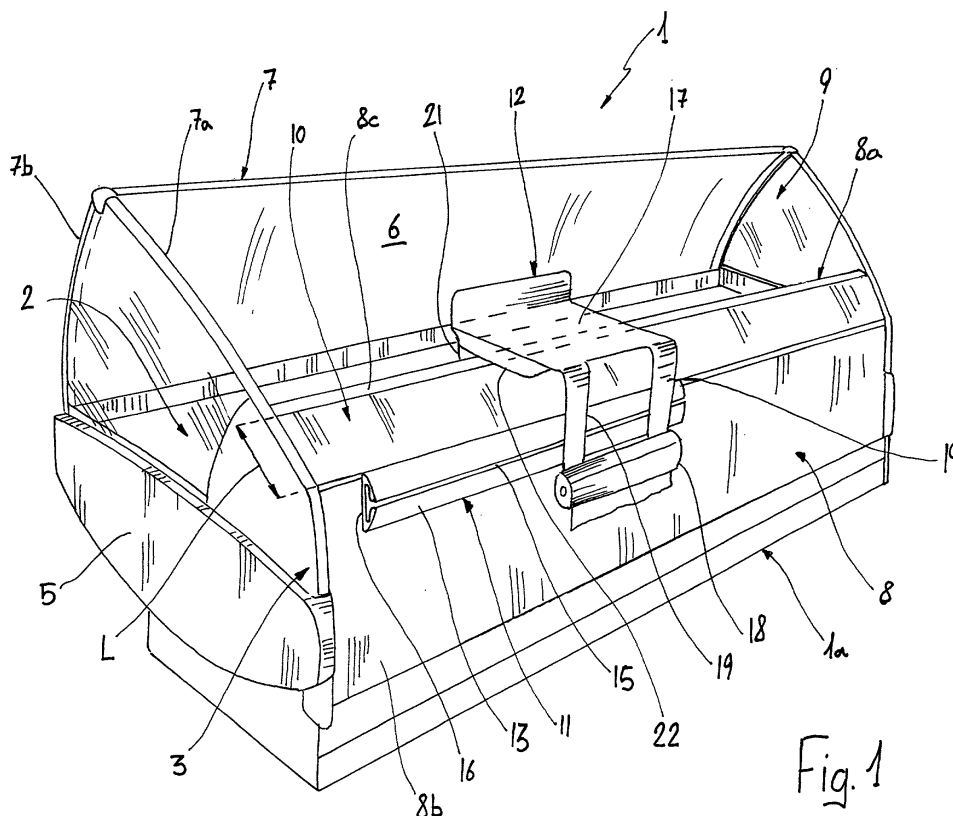


Fig. 1

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Description

[0001] The present invention relates to a display counter of the tray type, in accordance with the preamble of the main claim.

[0002] Counters of this type are used, albeit in a non-exclusive manner, in shops and/or sales departments where the merchandise on display cannot be directly accessed by the customer, for example owing to the presence of a separation window, but is instead served by the trader.

[0003] In these counters, therefore, a "customer side" and a "trading side" are precisely defined. The containing structure of the tray comprises, on the trading side, a parapet formation at the top of which a working surface for the trader is normally provided.

[0004] This parapet formation, although, on the one hand, it allows the trader to place, on the working surface, scales, containers or the merchandise itself before it is handed over to the customer, on the other hand inevitably hinders access to the tray. In fact, often the trader, in order to take out or put in a product, is obliged to lean forwards considerably towards the tray and, to avoid losing his/her balance, must hold onto the frame of the display window or the parapet formation with one hand.

[0005] In order to make this operating position for gaining access to the tray less uncomfortable, it is known, at the most, to round the edge of the working surface where the pelvis zone of the trader rests against the parapet formation.

[0006] A display counter of this type described above is known from German patent application No. 19606852.

[0007] A main object of the present invention therefore consists in providing a display counter of the tray type which is structurally and functionally designed to overcome the drawbacks described above with reference to the cited prior art.

[0008] A second object of the invention is that of ensuring a safe and stable support surface for the trader when leaning over inside the tray so that he/she is able to use freely both hands in order to perform operations inside said tray.

[0009] A further object of the invention is that of providing a refrigerating counter which can be equipped with accessory elements for supporting and/or containing objects and equipment which are normally used by the trader.

[0010] These and other objects are achieved by the present invention by means of a display counter provided in accordance with the claims which follow.

[0011] The characteristic features and advantages of the invention will emerge more clearly from the detailed description of a preferred example of embodiment thereof, illustrated by way of a non-limiting example with reference to the accompanying drawings in which:

- Fig. 1 is a perspective view of a display counter constructed in accordance with the present invention and equipped with an accessory element;
- Fig. 2 is a perspective side view of the display counter according to Fig. 1;
- Fig. 3 is a partial perspective view, on a larger scale, of a detail of the counter according to Fig. 1.

[0012] In the figures, 1 denotes overall a display counter constructed in accordance with the present invention.

[0013] The counter 1 is of the tray type 2 and comprises a base 1a from which a structure containing the tray 2, denoted by 3, extends. Opposite longitudinal sides 4a, 4b, respectively defined as trading side and customer side, are formed on the containing structure 3 and are closed at the ends by facing flanks 5.

[0014] The counter 1 also comprises a display window 6 which extends from the containing structure 3 along the whole of the longitudinal extension of the customer side 4b and is supported by a frame 7 including arms 7a, 7b extending from the flanks 5 and extending between the opposite longitudinal sides 4a, 4b. In this way access to the tray 2 is permitted only on the trading side 4a, where the containing structure 3 comprises a parapet formation 8 between the top 8a of which and the display window 6 an opening 9 providing access to the tray 2 by the trader is defined.

[0015] A substantially vertically extending face 8b and a substantially horizontal top surface 8c are defined on the parapet formation 8 and between them there extends, according to the invention, a surface 10 which is chamfer-shaped and tapered towards the top 8a of the parapet formation 8.

[0016] The surface 10 is inclined with respect to the face 8b at an angle A of between 45° and 70° and preferably 56° and has a transverse dimension L of between 100 and 300 mm, preferably 150 mm.

[0017] The chamfer-shaped surface 10 may also advantageously follow the upper profile of the flanks 5 with the same inclination as the arms 7a of the frame, thus providing the counter 1 with a pleasing aesthetic effect, in addition to reducing the presence of sharp edges and consequently the probability of accidental knocks.

[0018] A section of the parapet formation 8 is provided with an attachment device 11 which is able to constrain in a slidable and removable manner an accessory element 12. The attachment device 11 extends longitudinally along the face 8b, advantageously next to the surface 10 and forming substantially a continuation thereof (Figure 3) and comprises a visible surface 13 defining a rounded profile.

[0019] The attachment device 11 comprises a symmetrical groove 14 with a substantially T-shaped cross-section running along the whole longitudinal extension of the attachment device 11 and capable of keeping the accessory element 12 engaged with the parapet formation 8.

[0020] The groove 14 is open on the visible surface 13 along a longitudinal slit 15 and at its opposite ends 16 so that the accessory element 12 is engaged with the attachment device 11 in a slidable and removable manner.

[0021] The accessory element 12, with which the display counter 1 is equipped, comprises support means such as a working surface 17 and a roller carrying support 18 and means for engaging the accessory element 12 with the parapet formation 8. The engaging means comprise a pair of bracket elements 19 which extend on a front side from the working surface 17 and at the free ends of which are formed respective lips 20 able to engage inside the groove 14, and a toothed lug 21 extending on the opposite side of the working surface 17. Transverse flanges 22 are also provided symmetrically on the flanks of the working surface 17 for resting the accessory element 12 on the top 8a of the parapet formation 8.

[0022] The accessory element 12 is constrained to the parapet formation 8 by means of engagement of the lips 20 inside the groove 14 of the attachment device 11, resting of the pair of flanges 22 on the top surface 8c and securing of the toothed lug 21 on the top 8a of the parapet formation 8 on the opposite side to the attachment device 11.

[0023] In this way the trader may be provided, on the top of the parapet formation 8, with a working surface which can be easily displaced along it and used for placing merchandise, equipment or instruments and which, if necessary, can be removed.

[0024] It is understood that, using the same inventive principle, the accessory element 12 may assume configurations different from those described above, for example may be in the form of a container.

[0025] When the trader is leant over the parapet formation 8 in order to gain access inside the tray 2, he/she may advantageously rest with his/her pelvis zone against the chamfer-shaped surface 10. In view of the angle and the extension of the surface 10, supporting of the body is improved and made safer and more stable so that the trader, not requiring further supports, is able to work inside the tray 2 with both hands free.

[0026] It should be noted, moreover, that the trader, compared to conventionally shaped counters, is able to stand overall closer to the edge of the tray 2, thus being able to reach easily also the furthest-lying zones thereof.

[0027] It should also be noted that the rounded profile of the attachment device 11 is advantageously formed so as to facilitate access by the trader to the tray 2, making available, if necessary, a further supporting surface since the visible surface 13 forms an extension of the chamfer-shaped surface 10.

[0028] Should the accessory element 12 in any way obstruct access to the tray 2, it may be easily displaced along the trading side 4a, by sliding the lips 20 along the groove 14.

[0029] The present invention therefore achieves the

objects proposed, offering at the same time numerous other advantages, including the possibility of equipping the counter with accessory elements having different shapes and forms.

[0030] A further advantage consists in the improved ease with which the trader is able to rest against the parapet formation when leaning towards the tray.

10 Claims

1. Display counter of the tray type comprising a structure containing said tray, said containing structure defining, on a trading side of said counter, a parapet formation, the top of which is profiled so as to facilitate access to said tray, **characterized in that** said parapet formation comprises, over a part at least of said trading side, a surface which is chamfer-shaped and tapered towards said top so as to allow a trader to rest thereon with a zone of the pelvis when leaning into said tray.
2. Display counter according to Claim 1, in which at least one section of said trading side has, mounted along it, an attachment device for constraining to said parapet formation, along said chamfer-shaped surface, at least one supporting and/or containing accessory element.
3. Display counter according to Claim 2, in which said attachment device is designed to provide a system for slidably constraining said accessory element along said trading side section.
4. Display counter according to Claim 3, in which said attachment device comprises a groove able to receive in a slidable and removable manner corresponding engaging means of said accessory element.
5. Display counter according to Claim 4, in which said groove has a substantially T-shaped cross-section.
6. Display counter according to one or more of Claims 2 to 5, in which said attachment device has a rounded profile and is mounted on said parapet formation next to said chamfer-shaped surface.
7. Display counter according to one or more of the preceding claims, in which said chamfer-shaped surface is inclined with respect to a direction of vertical extension of the parapet configuration at an angle of between 45° and 70°.
8. Display counter according to Claim 7, in which said angle is 56°.
9. Display counter according to one or more of the pre-

ceding claims, in which said chamfer-shaped surface has a transverse dimension of between 100 and 300 mm.

10. Display counter according to Claim 9, in which said transverse dimension is equal to 150 mm. 5

11. Accessory element for a display counter of the tray type, comprising supporting and/or containing means and **characterized in that** it comprises means for engaging said accessory element with a parapet formation of said counter according to one or more of the preceding claims and/or with an attachment device mounted on said parapet formation in accordance with one or more of Claims 2 to 10. 10 15

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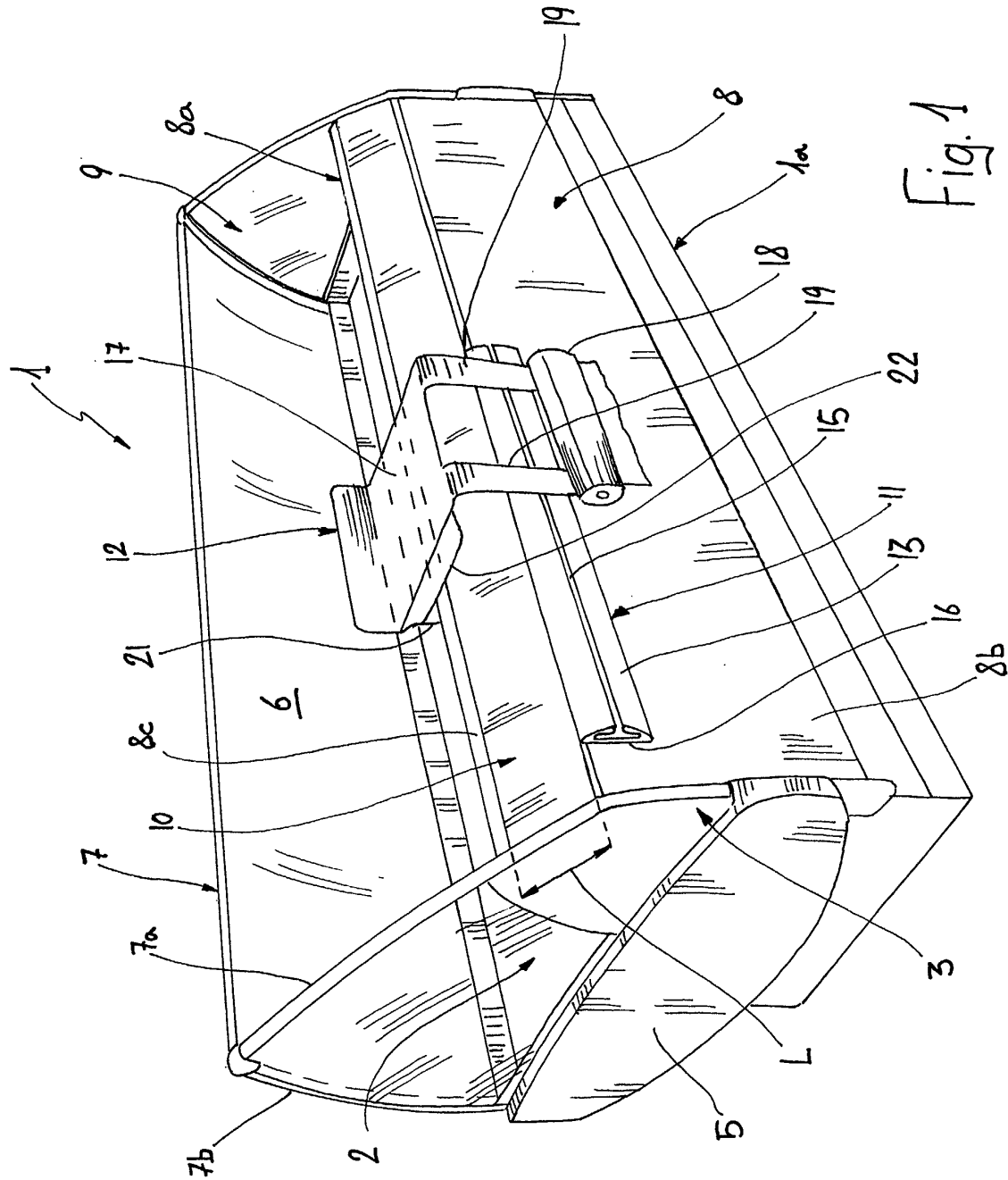
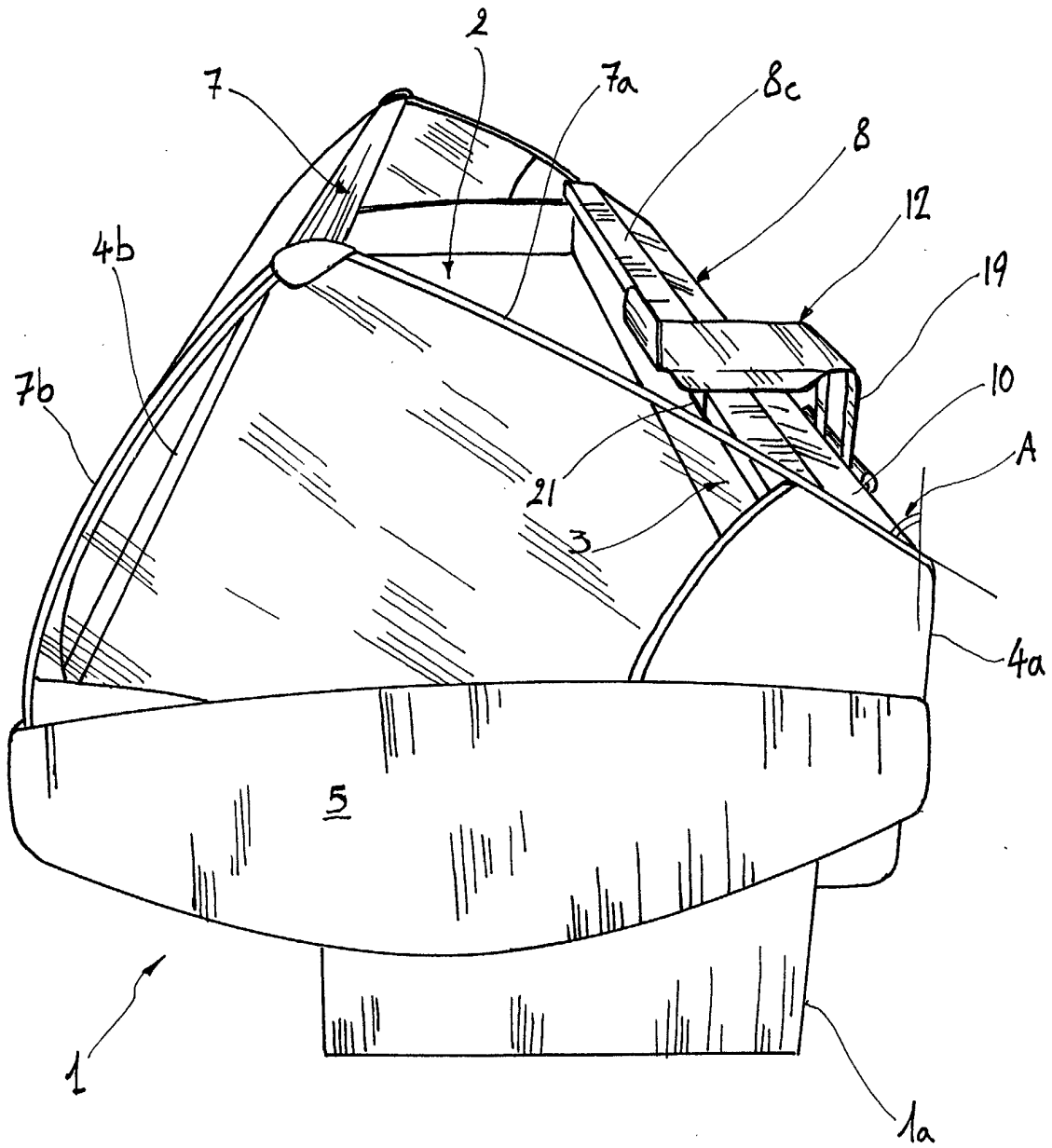
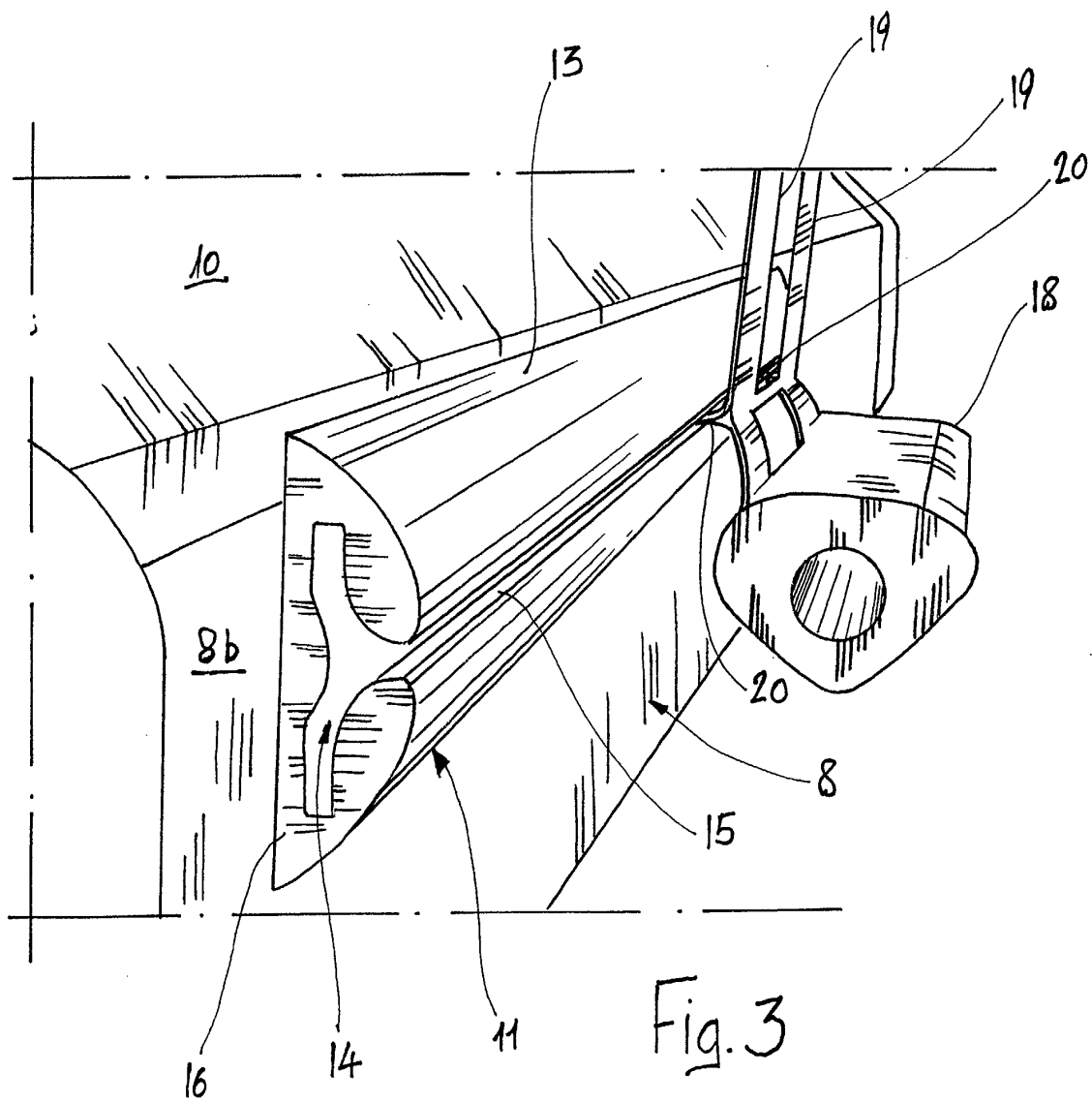


Fig. 1







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EUROPEAN SEARCH REPORT

Application Number
EP 02 07 6465

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X,D	DE 196 06 852 A (LINDE AG) 28 August 1997 (1997-08-28)	1	A47F3/04
A	* the whole document *	2-10	
X	DE 197 10 444 A (WESCHO HOLDING GMBH) 5 March 1998 (1998-03-05)	1	
A	* the whole document *	11	
P,X	DE 100 25 088 A (LINDE AG) 22 November 2001 (2001-11-22) * column 1, line 3 - column 3, line 38; figure 1 *	1	
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
MUNICH		2 July 2002	Klintebäck, D
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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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 02 07 6465

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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02-07-2002

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82