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(71) Applicant: **Gomez Taboas, María del Carmen**
Lezo-Bide, 15
E-20110 Pasajes de San Juan (Guipuzcoa)(ES)

(72) Inventor: **Gomez Taboas, Maria del Carmen**
Lezo-Bide, 15
E-20110 Pasajes de San Juan (Guipuzcoa)(ES)

(74) Representative: **Gomez-Acebo y Pombo, José Miguel**
c/o CLARKE, MODET & Co. Paseo de la Castellana 164
E-28046 Madrid(ES)

(54) Trailer-type container transformable into sailing vessel.

(57) Trailer-type container (3) transformable into a sailing vessel and comprising a hollow cavity formed by two modules (8, 9) which, when joined by hinges (10) at one side, are capable of being superposed on one another to form a container (3), whereas when they are opened out the two edges without hinges coincide and are joined and converted into a vessel. To facilitate transport, the container can be coupled to the platform (2) of a trailer (1).

A TRAILER-TYPE CONTAINER TRANSFORMABLE INTO A SAILING
VESSEL

0 The invention relates to a container formed by two superposed modules constituting a "complete assembly" and joined at the rear, where they are also joined when the assembly is opened out, so that the top module is completely continuous or aligned with the module forming the base, the two thus forming a vessel, and the joining partitions enclosing the line or axis of rotation, bear the boat by simple engagement and are in the area where sealing, water-tight and assembly means or elements are installed. At the place where the 5 stern joins and is superposed on the bow, the assembly comprises a safety lock for moving and holding the assembly in a primary position or "container" version at a place where an outboard motor can be fitted after the lock has been removed.

10 As a result of the described structural configuration, when the assembly has been locked, the rotation area is formed with an opening which has to be closed when the assembly forms a "container" which has to be locked previously by covers fitting in bevels 5 and securing means which are held or gripped by

lugs, with the feature that the covers when necessary can be made up of compact surfaces or can have orifices or gratings allowing access of air and light to the interior.

5 The assembly, in its "container" version, can be transported by being secured on a wheeled platform also equipped with all components and to the standards set by the legal regulations for vehicles, and with all components required for complete engagement
10 and coupling, to the aforementioned platform, of the chamber formed by the module when folded, securing and fastening means being provided as necessary and subsequently modified so as totally and completely to guarantee the water-tightness of the assembly
15 in the "vessel" version.

To give a better understanding of the described object, the present application is accompanied by sheets of drawings given by way of non-limitative example only and showing a preferred embodiment
20 which can be modified in detail without substantial alteration of its characteristics. In the drawings:

Figs. 1, 2 and 3 are views in front and side elevation and plan respectively of a container constructed according to the invention and mounted on a
25 wheeled platform;

Figs. 4 and 5 are a view in side elevation and plan respectively of the container in Figs. 1 - 3 when opened out and forming a vessel;

Fig. 6 shows a cross-section of Fig. 5 along line VI-VI, showing the central bearing and fastening means;

Fig. 7 is a rear elevation of the "container" assembly on the trailer, showing details of the locking covers;

Fig. 8 shows the detailed actuation of the hinges;

Figs. 9 and 10 show details of the method of assembling the locking covers, and

Fig. 11 shows a detail of the assembly of the separating partitions.

In the drawings, like elements are denoted by like references having the values enumerated hereinafter, together with the relation which they have between themselves and the assembly.

A container 3 comprises a bottom module 8 and a top module 9, forming the base and top respectively in the container version, or the stern 8 and bow 9 when the assembly is opened out to form a vessel.

The assembly can be folded on lateral hinges 10, used for conversion by moving in the appropriate

direction as indicated by arrows.

When container 3 is disposed above platform 2 of trailer 1, it forms an assembly specially designed for transport in question here, i.e. the platform is constructed so as to hold and engage the entire outer and inner periphery, and for this purpose comprises front and rear projections 5 and lateral projections 7 for guaranteeing lateral positioning and preventing uncontrolled motion of container 3 in transport, by co-operating with retaining means 4, 6 comprising front and rear bolts respectively.

When container 3 has been converted into a vessel by rotating as described, it is secured in its new position by bolts 11 co-operating with nuts 12 disposed in the top or bow region 9, the nuts 12 forming a rigid and very tight body.

The two vessel portions 8, 9 comprise a dividing partition 13 having a top area 14 disposed above the flotation line of the assembly when fully loaded so as to guarantee complete water-tightness of the assembly when formed. A bearing 20 is installed in zone 14, and joints or plates 15 made of suitable material help to seal the bolts 11. It is emphasized that elements 11 are the same as 6 which join modules 8 and 9 when the assembly forms a container 3, in

which case they co-operate with a locking means 16 which, when the assembly is opened out, can be removed and leaves a cavity for holding an outboard motor.

When the assembly operates as a container 3 it can be hermetically locked when transporting useful objects or goods, for which purpose compact covers 17 have been designed, whereas if a supply of air and/or light is for any reason required during transport, covers 17 will be replaced by others 18 formed with orifices or gratings as shown graphically in Fig. 7.

In all cases, the covers 17, 18 for locking the container 3 must be secured in their respective positions when the assembly is open, since they fit at one side in projections 19 received in orifices formed in bearing 20, whereas on the other side they are secured by a bevel which prevents members 17, 18 moving since they are secured by skegs 21 and by the shafts of hinges 10, which have a tongue 22 which is suitably moved by a lever 23 fitting in a recess 24 via an L-shaped groove formed in hinges 10, so that covers 17, 18 are inaccessible from the exterior.

The shape, materials and dimensions may be varied in any accessory secondary manner without

. altering, changing or modifying the essential features
of the object for which it was designed, and all
features should be interpreted in the widest sense
and never limitatively.

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CLAIMS

1. A trailer-type conveyor transformable into a sailing vessel, characterised in that it comprises a hollow chamber made up of two units or modules which exactly coincide when superposed, the two being joined at their geometrical centre and rigid hinges and safety joining means being provided to seal the assembly which, when locked, can be secured exactly above a platform constituting a trailer, and in addition to conforming to all the standards fixed by law for these vehicles or means of traction or transport, use is made of fastening means and elements which are perfectly matched in that they engage the projections and/or recesses formed in the bottom periphery of the container so as to hold it in stable position above the platform, which is reinforced by conventional mechanical means at both sides and in the longitudinal direction at its front and rear ends.

2. A trailer-type conveyor transformable into a sailing vessel according to claim 1, characterised in that when removed from the platform and opened out in suitable manner, the chamber formed by the previously-described container is converted into a vessel in that the dividing partitions of the

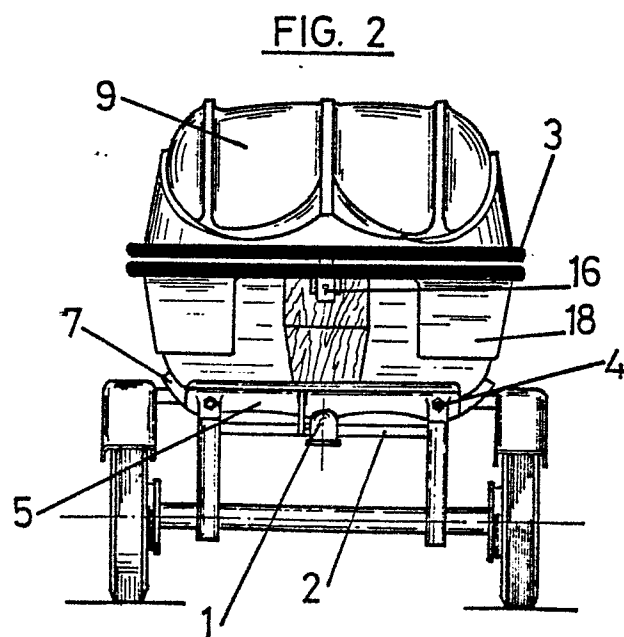
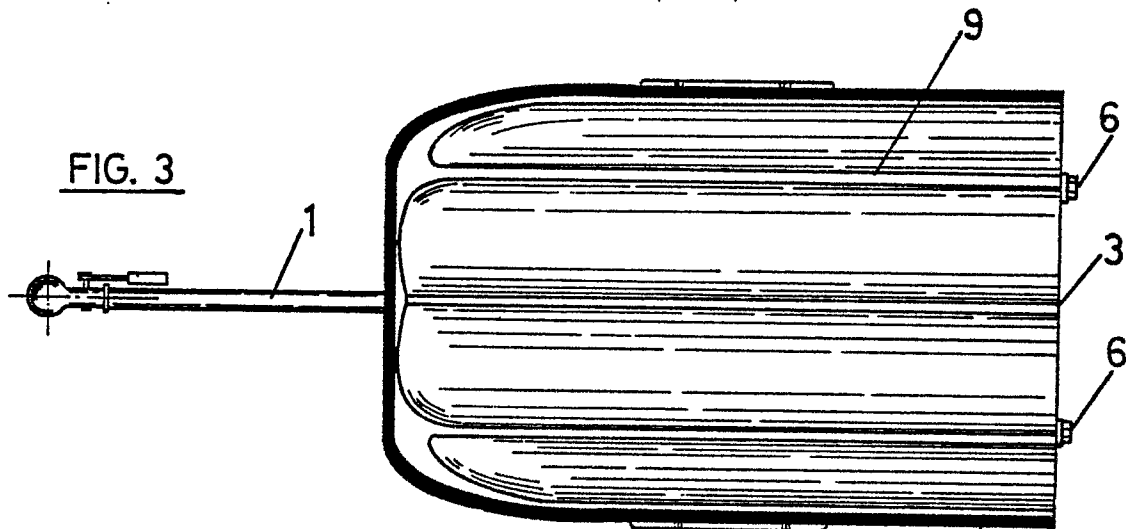
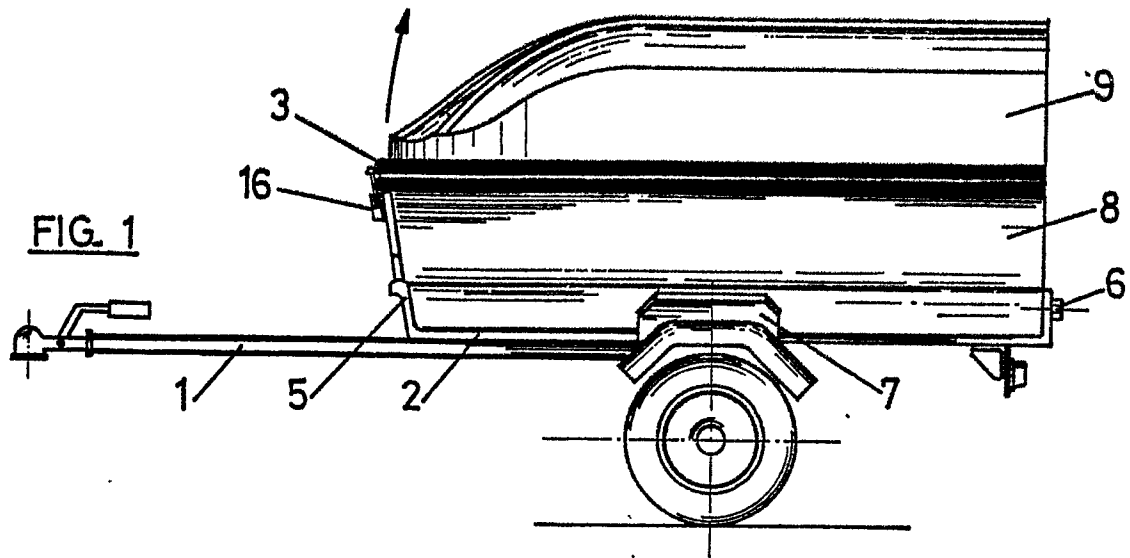
two parts, which perfectly coincide and are identical,
and reinforce the geometrical axis of the container
at which it is jointed, have a height such that
their top edge is situated above the flotation line
of the assembly when fully loaded, so as to prevent
water entering at the line or zone where the two
modules are joined, the mechanical joining means
being protected and provided with sealing-tight
plates and/or joints and serving the double purpose
of fastening and securing to the trailer platform
when the assembly is moving after being closed in
the "container" mode or version, and of ensuring
the unity and sealing-tightness of the assembly
formed by opening out.

3. A trailer-type container transformable
into a sailing vessel according to the preceding
claims, characterised in that when the container
is used as a vessel, a bearing support is disposed
by simple engagement above the dividing partitions
bounding the line or axis of rotation of the assembly,
and as a result of the described structural configuration
of the aforementioned joining zone, when the assembly
is in the form of a container, the partition bounding
the aforementioned zone has a portion formed with
openings for installing covers for completely closing

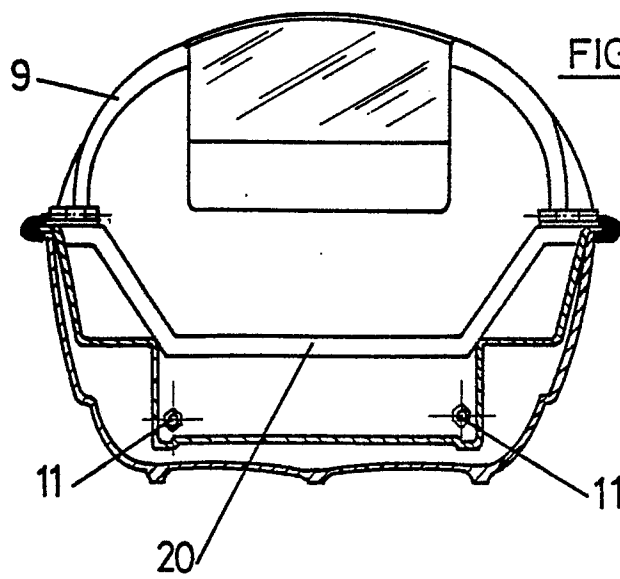
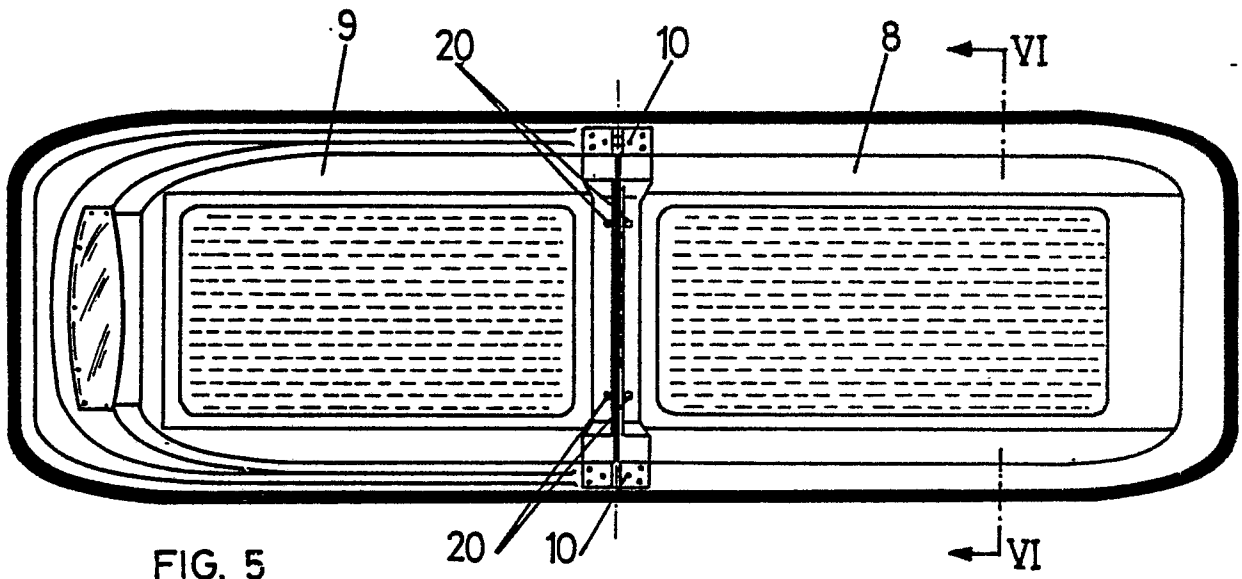
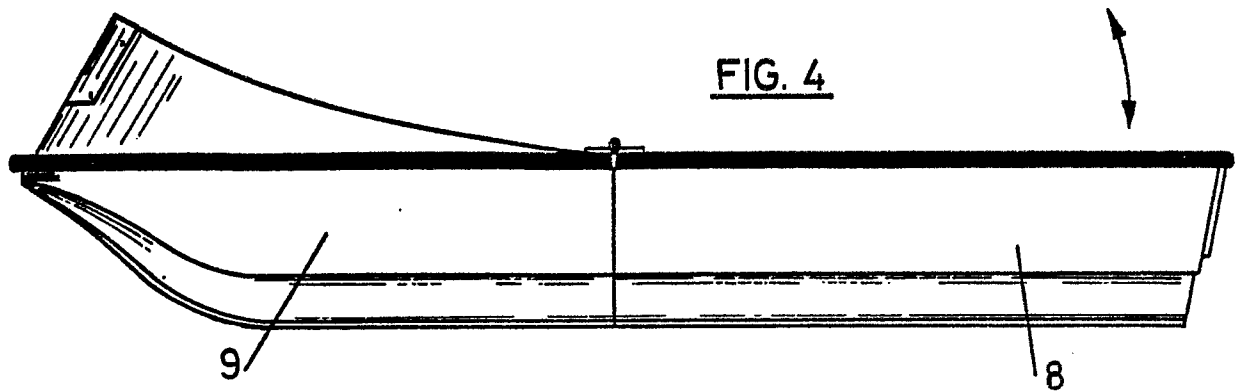
the assembly or space, the covers optionally being designed or bounded by compact surfaces or surfaces having perforations or gratings permitting air and light to enter the interior of the compartment, with the feature that the covers must inevitably be coupled to the assembly when opened out and are positioned by means of rails, bevels and skegs ensuring perfect sealing-tightness, the covers being engaged without possibility of accidental separation by projections which help to secure in position and prolong the axes of the hinges for rotating and jointing the assembly, which for this purpose co-operate with some moving and positioning levers inaccessible from the exterior when the assembly is folded together, and to ensure completely reliable opening and closing during transport and when stationary, the assembly co-operates with a front locking means disposed at the join of the edge of the stern with the bow, and once the locking means is removed it leaves a cavity at the stern for holding a motor.

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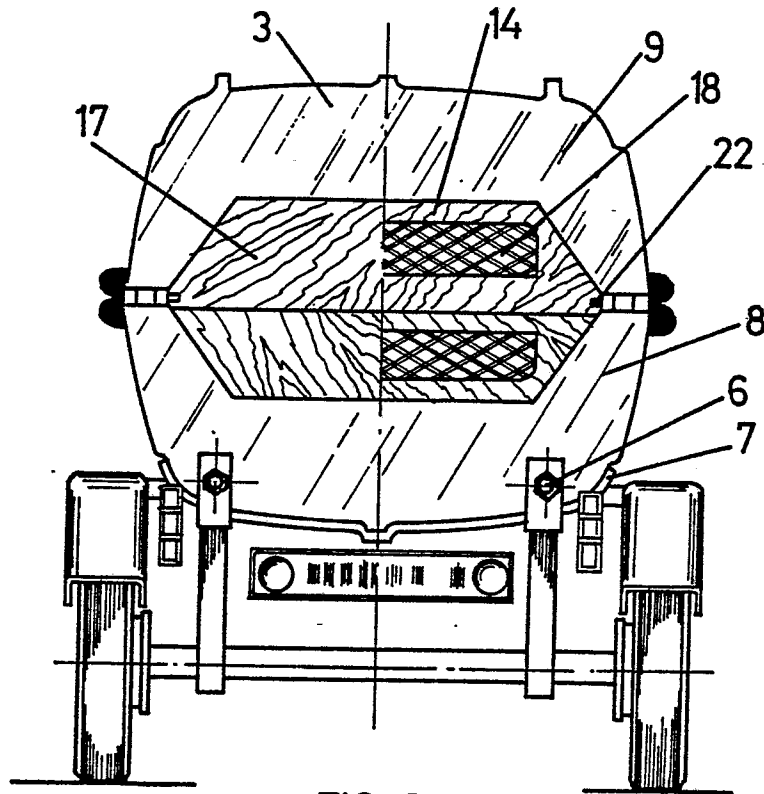


FIG. 7

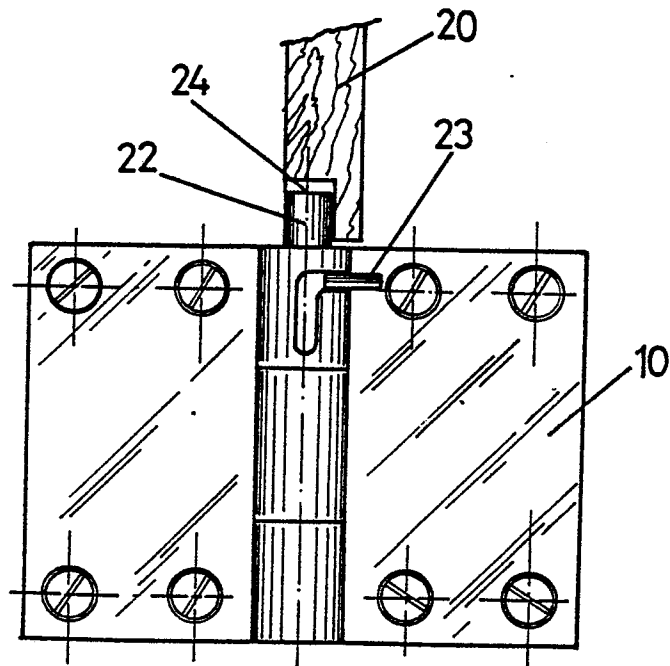


FIG. 8

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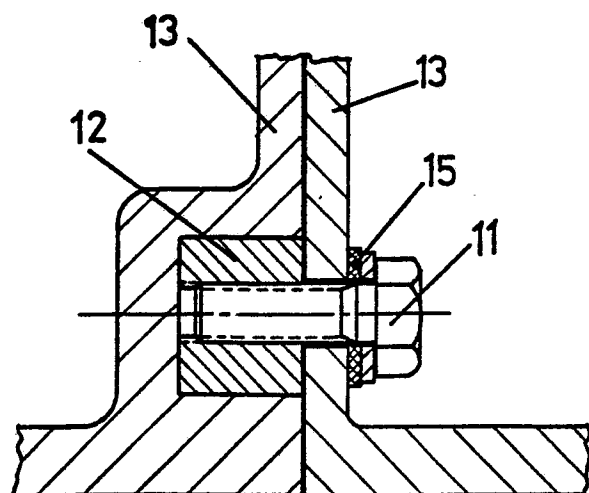
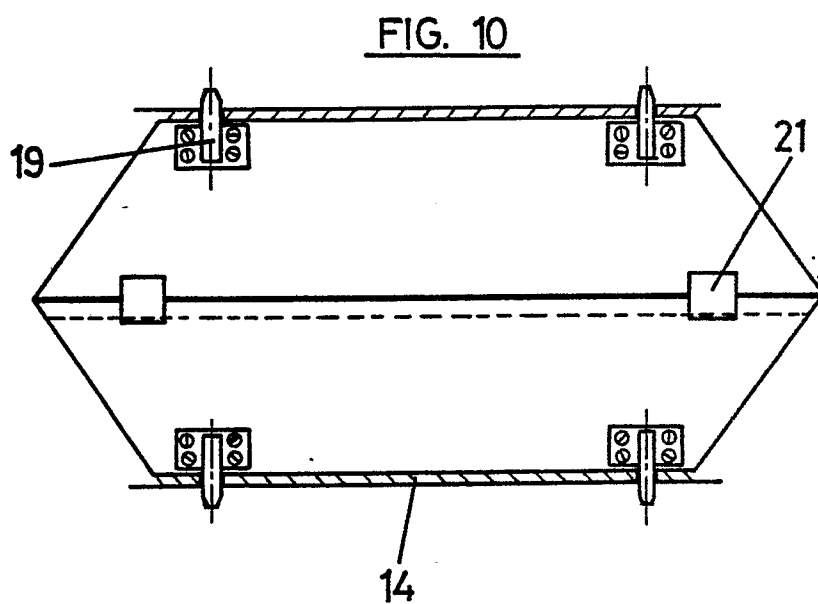
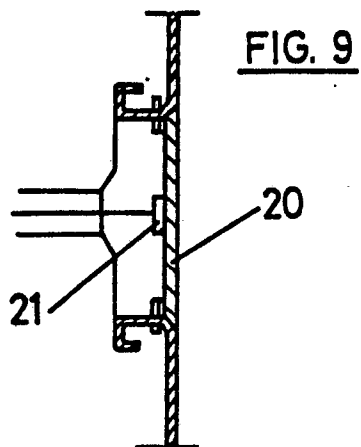


FIG. 11



European Patent
Office

EUROPEAN SEARCH REPORT

0241399

Application number

EP 87 50 0006

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.4)
X	GB-A-2 013 584 (C.P.MILLS) * Claims 1,3,4,9 *	1,2,3	B 60 P 3/10
X	FR-A-1 391 006 (CRUSSON) * The whole document *	1,2	
X	FR-A-2 300 008 (ARNAULT) * Claims 1-4; figure 1 *	1,2	
X	DE-U-7 433 843 (FLACH) * The whole document *	1,2	
X	FR-A-1 274 567 (GUILLEMIN) * Claims 1,2 *	1,2	
X	US-A-2 489 705 (DUBRIE) * The whole document *	1,2	TECHNICAL FIELDS SEARCHED (Int. Cl.4)
X	US-A-1 658 500 (TEWES) * The whole document *	1,2	B 60 P B 63 B B 63 C
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 05-06-1987	Examiner SCHMITTER J.M.
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 A : member of the same patent family, corresponding document	