



(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
06.06.2012 Bulletin 2012/23

(51) Int Cl.:
A47F 5/00 (2006.01)

(21) Application number: **11192231.6**

(22) Date of filing: **06.12.2011**

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR
 Designated Extension States:
BA ME

(71) Applicant: **Bertocco S.r.l.**
10090 Cascine Vica / Rivoli (Torino) (IT)

(72) Inventor: **Geromin, Sandro**
I-10090 Cascine Vica / Rivoli (Torino) (IT)

(74) Representative: **Marchitelli, Mauro Buzzi, Notaro & Antonielli d'Oulx Srl**
Via Maria Vittoria 18
10123 Torino (IT)

(30) Priority: **06.12.2010 IT TO20100970**

(54) **A device for delimiting display spaces on shelving in distribution centres**

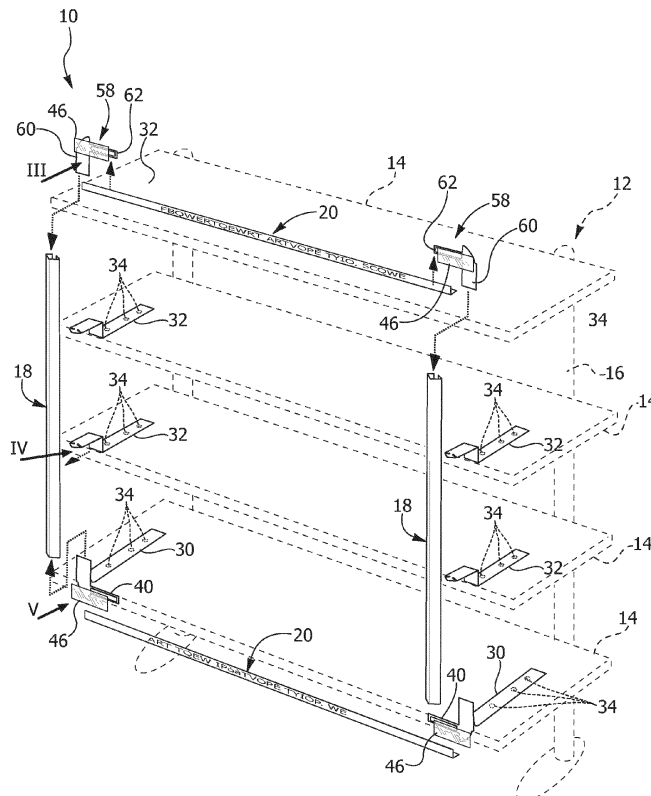
(57) A device for delimiting display spaces on shelving (12) in distribution centres, comprising:

- at least two vertical sectional elements (18) made of plastic material;
- a plurality of brackets (30, 32) provided with magnets (34) for fixing the brackets on respective shelves (14)

of the shelving (12) and with engagement portions (38, 52) for engagement to said vertical sectional elements (18); and

- at least two horizontal sectional elements (20) made of plastic material extending between the bottom and top ends of said vertical sectional elements (18).

FIG. 2



Description

Background of the invention

[0001] The present invention relates to a device for delimiting display spaces on shelving in distribution centres.

[0002] As is known, display spaces on shelving in distribution centres are divided according to the type of products and, in the framework of the same type of product, there is a further division according to the producers.

[0003] In aisles of the distribution centres the types of products displayed on the shelving are usually indicated in various way. However, usually there is no indication of the space assigned to a given producer amongst products of the same type. The indication of the display space assigned to a certain producer is usually entrusted to the graphic layout of the packages of the products displayed.

[0004] For producers it would be desirable to be able to highlight more clearly as compared to what is possible at present which are the display spaces of the shelving in a distribution centre in which their own products are presented.

[0005] Also the managing staff of distribution centres could be interested in delimiting and pointing out certain areas of the shelving, for example to highlight the position of products with particular offers or certain types of products.

[0006] A device for delimiting the display spaces of the shelving should meet the following requisites:

- not be invasive (it must not limit the display space);
- not interfere with neighbouring areas belonging to other producers;
- not hinder loading of the products on the shelves;
- enable immediate identification of the delimited area at a distance by consumers;
- remain solid and stable even following upon intensive use;
- not be set in place using fixed elements;
- be removable without leaving any trace on the shelving;
- be very stable and strong;
- be simple and fast to install;
- be light;
- be modular;
- be modifiable in size *in situ*;
- be installable *in situ* in successive steps;
- contain elements for communicating and recalling the trademark of the producer;
- enable possible replacement or installation of the communication elements;
- have a compact packaging for a shipping that meets standard storage parameters.

[0007] Some of the aforesaid requisites are in contrast with one another, such as, for example, the fact of providing a delimitation device that is stable and strong and

is not set in place using fixed elements and can be removed without leaving traces on the shelving.

Object and summary of the invention

[0008] The object of the present invention is to provide a device for delimiting display spaces of shelving that will meet the aforesaid requisites.

[0009] According to the present invention, the above object is achieved by a device having the characteristics forming the subject of Claim 1.

[0010] The claims form an integral part of the teaching provided herein in relation to the invention.

Brief description of the drawings

[0011] The present invention will now be described in detail with reference to the attached drawings, which are provided purely by way of non-limiting example and in which:

- Figure 1 is a perspective view of a device according to the present invention installed on a shelving;
- Figure 2 is an exploded perspective view of the device of Figure 1;
- Figures 3, 4, and 5 are perspective views of the parts indicated by the arrow III, IV and V in Figure 2; and
- Figure 6 is a cross section according to the line VI-VI of Figure 1.

[0012] With reference to Figures 1 and 2, designated by 10 is a device according to the present invention, which has the purpose of delimiting display spaces of shelving 12 in distribution centres. The shelving 12 comprises a plurality of metal shelves 14 supported by uprights 16.

[0013] The device 10 comprises at least two vertical sectional elements 18 and at least two horizontal sectional elements 20 that delimit the display space respectively in the horizontal direction and in the vertical direction. The sectional elements 18 and 20 are made of plastic material and can be cut to size using a saw to adapt the lengths of the sectional elements 18, 20 to the dimensions of the display space to be delimited. Preferably, the sectional elements 18, 20 are made of a cold-foldable plastic material, for example PET, and are obtained from initially plane plates of plastic material that are cold folded. This enables printing on the initially plane plates of images, trademarks, or wording of various types that will not get damaged by the process of cold folding of the sectional elements.

[0014] With reference in particular to Figures 2, 3 and 4, each of the vertical sectional elements 18 has a cross section substantially shaped like a rhombus, with two front faces 22 inclined with respect to one another that converge along a central front edge 24. The cross section of each vertical sectional element 18 moreover has two rear walls 26 having longitudinal edges facing one an-

other that define a vertical groove 28 opposite to the front edge 24. The rear walls 26 are joined to respective front walls 22 along edges 27.

[0015] The horizontal sectional elements 20 can have an L-shaped cross section, with two walls set at 90° with respect to one another.

[0016] The vertical sectional elements 18 are fixed to the shelves 14 of the shelving 12 by means of brackets made of bent sheet metal 30, 32. According to a particularly advantageous characteristic of the present invention, the brackets 30, 32 are provided with magnets 34 for fixing the brackets to the metal shelves 14. This characteristic enables fast installation of the brackets on the shelves in any position and without using any fixing element that would leave signs or marks on the shelves. The connection of the brackets 30, 32 by means of the magnets 34 is surprisingly stable and sturdy. The magnets 34 are preferably fixed on a face of an elongated fixing portion 36, 48 of the respective bracket 30, 32 and have a plane contact surface that engages the shelves 14 magnetically. The magnets 34 can have, for example, the shape of small disks.

[0017] The brackets for fixing the sectional elements 18, 20 to the shelves 14 can be of two types: end brackets 30 or intermediate brackets 32.

[0018] With reference to Figure 5, an end bracket 30 has a strip-shaped fixing portion 36 carrying the magnets 34 and an engagement portion 38 bent at 90° with respect to the fixing portion 36. The engagement portion 38 has a rectangular shape and is shaped so as to be inserted within the sectional element 18. The width of the engagement portion 38 is substantially equal to the internal distance between the opposite edges 27.

[0019] The end bracket 30 is also provided with a horizontal projection 40 having a front face applied on which is a layer of biadhesive tape 42 that has the purpose of fixing one end of the corresponding horizontal sectional element 20. Preferably, the end bracket 30 is also provided with a plate 44 on which there can be engaged an advertising plaque 46, which can be used, for example, for highlighting prices, offers, or characteristics of the products displayed.

[0020] The advertising plaque 46 is preferably engaged by snap-action on the plate 44 by means of formations 68 and can be replaced with a plaque with a different advertising message. With reference, in particular, to Figure 4, an intermediate plate has an elongated fixing portion 48 carrying the magnets 34, an intermediate portion 50 bent at 90° with respect to the fixing portion 48, and an engagement portion 52 parallel to, and set at a distance from, the fixing portion 48. The engagement portion 52 has an end 54 shaped like a rhombus that is inserted with shape fit into the vertical sectional element 18. The end 54 has two slits 56 that mate with the rear walls 26 of the vertical sectional element 18.

[0021] Figure 3 illustrates an advertising support 58 that can be used, for example, for positioning an advertising plaque 46 at the top end of the vertical sectional

elements 18. The advertising support 58 comprises an engagement portion 60 that is inserted between the edges 27 of the vertical sectional element 18, a horizontal projection 62 provided with a layer of biadhesive tape 64, and a plate 66 provided with formations 68 for engagement by snap-action of the advertising plaque 46.

[0022] With reference to Figure 2, assembly of the device 10 is carried out in the way described in what follows. The vertical sectional elements 18 and horizontal sectional elements 20 are cut to size according to the height and width of the display space to be delimited. Cutting to size is carried out using a saw for plastic materials. After the sectional elements 18, 20 have been cut to size, the bottom brackets 30 are positioned on the bottom shelf 14. Fixing of the brackets 30 to the shelf 14 occurs by magnetic attraction and does not require the use of screws, adhesives, or other fixing means. The vertical sectional elements 18 are inserted on the engagement portions 38 of the bottom brackets 30. Then, the intermediate brackets 32 are coupled to the vertical sectional elements 18, and the intermediate brackets 32 are fixed to the respective shelves 14. As illustrated in Figure 6, preferably the intermediate brackets 32 are positioned on the top surface of the shelves 14. Coupling of the engagement portion 52 of an intermediate bracket 32 with the sectional element 18 can be made by inserting the engagement portion 52 at one end of the sectional element 18 and sliding the bracket 32 axially or else inserting the engagement portion 52 sideways on inside the groove 28 of the sectional element 18 and then turning the bracket through 90° so as to engage the edges of the rear walls 26 of the sectional element 18 with the slits 56.

[0023] Applied to the top ends of the vertical sectional elements 18 are the advertising supports 58. There then follows application of the horizontal sectional elements 20, which are fixed on the portions of biadhesive tape 42, 64 provided on the horizontal projections 40 and 62 of the bottom brackets 30 and of the top advertising supports 58.

[0024] Assembly of the device 10 is particularly simple and fast, above all thanks to the magnetic coupling between the brackets and the shelves. Assembly can be carried out by sales agents and does not require intervention of skilled staff.

[0025] The device 10 does not reduce the display space and does not interfere with the neighbouring display areas belonging to other manufacturers. The device 10 highlights the delimited display area but does not hinder loading of the products on the shelves and picking-up of products from the shelves. The device 10 is particularly effective for enabling identification at a distance of the delimited area by the consumer. To render still more effective identification by the consumer there may be envisaged advertising wordings or images on the front faces 22 of the vertical sectional elements 18 and on the front faces of the horizontal sectional elements 20, and not only on the advertising plaques 46 applied at the vertices

of the area delimited.

[0026] The device 10 does not require permanent fixing elements and can be removed without leaving any trace on the shelving. The connection of the vertical sectional elements 18 is particularly stable and strong. In addition, the device 10 is light and easy to transport and install and can be modified in size *in situ* in a simple and fast way. The advertising messages can be replaced periodically in a fast way to keep the commercial communication aimed at the consumers updated.

[0027] The device 10 can be applied indifferently to refrigerated or non-refrigerated shelving.

[0028] Of course, without prejudice to the principle of the invention, the details of construction and the embodiments may vary widely with respect to what has been described and illustrated, without thereby departing from the scope of the invention as defined by the ensuing claims.

Claims

1. A device for delimiting display spaces on shelving (12) in distribution centres, **characterized in that** it comprises:

- at least two vertical sectional elements (18) made of plastic material;
- a plurality of brackets (30, 32) provided with magnets (34) for fixing the brackets on respective shelves (14) of the shelving (12) and with engagement portions (38, 52) for engagement to said vertical sectional elements (18); and
- at least two horizontal sectional elements (20) made of plastic material extending between the bottom and top ends of said vertical sectional elements (18).

2. The device according to Claim 1, **characterized in that** said vertical sectional elements (18) have a cross section substantially shaped like a rhombus with two front walls (22) joined to one another on a front vertical edge (24) and two rear walls (26) with facing edges that form a vertical groove (28) opposite to said front vertical edge (24).

3. The device according to Claim 2, **characterized in that** it comprises at least one pair of end brackets (30) each of which has a fixing portion (36) carrying said magnets (34) and an engagement portion (38) shaped like a plate that is inserted into said sectional element (18) between two opposite vertical edges (27) of the cross section shaped like a rhombus.

4. The device according to Claim 2, **characterized in that** it comprises at least one pair of intermediate brackets (32), each of which comprises a fixing portion (48) carrying said magnets (34) and an engage-

ment portion (52) having a pair of slits (56) designed to couple with the edges of said rear walls (26) adjacent to said vertical groove (28) of a respective vertical sectional element (18).

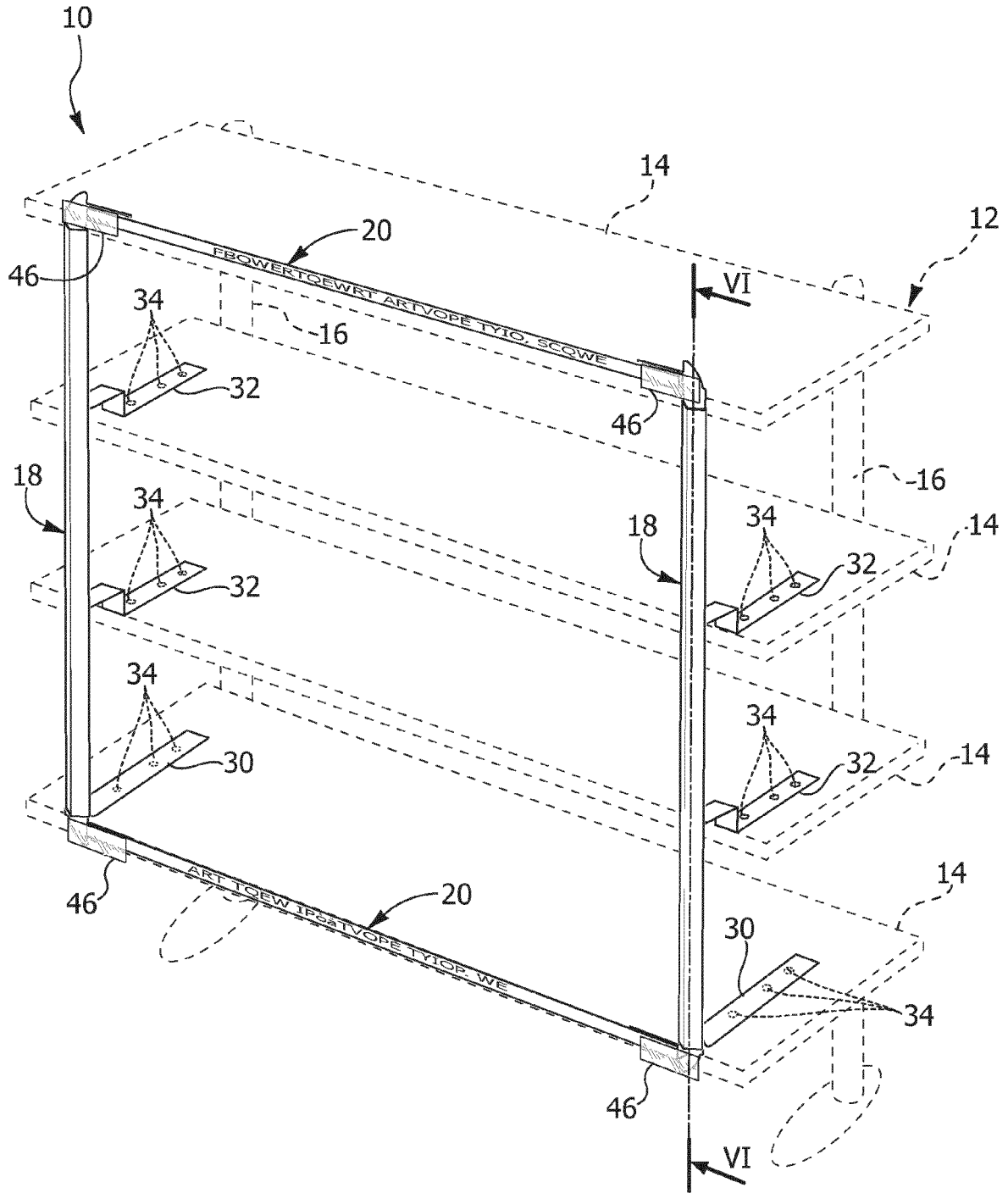
5. The device according to Claim 3, **characterized in that** said end bracket (30) comprises a horizontal projection (40) provided with a layer of biadhesive tape (42) for connection of one end of a respective horizontal sectional element (20).

6. The device according to Claim 3, **characterized in that** said end bracket (30) comprises a plate (44) provided with formations (68) for removable connection of an advertising plaque (46).

7. The device according to Claim 2, **characterized in that** it comprises an advertising support (58) including a plate-shaped engagement portion (60) that is inserted between two opposite edges (27) of the cross section shaped like a rhombus of said vertical sectional element (18), said advertising support (58) carrying a plate (66) provided with formations (68) for removable connection of an advertising plaque (46).

8. The device according to Claim 7, **characterized in that** said advertising support (58) comprises a horizontal projection (62) provided with a layer of biadhesive tape (64) for connection of one end of said horizontal sectional element (20).

FIG. 1



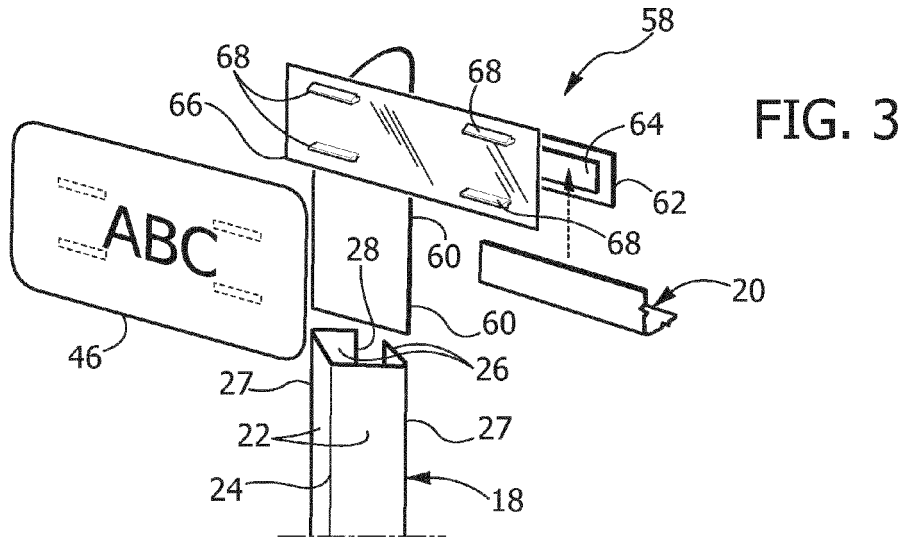


FIG. 3

FIG. 4

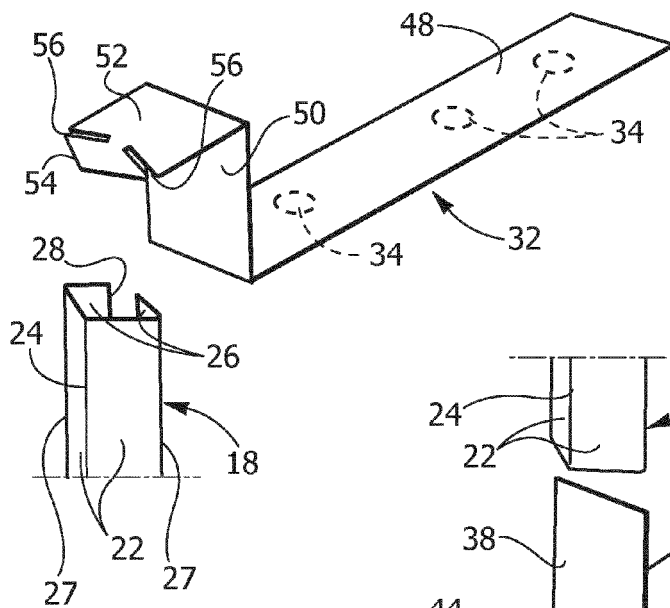


FIG. 5

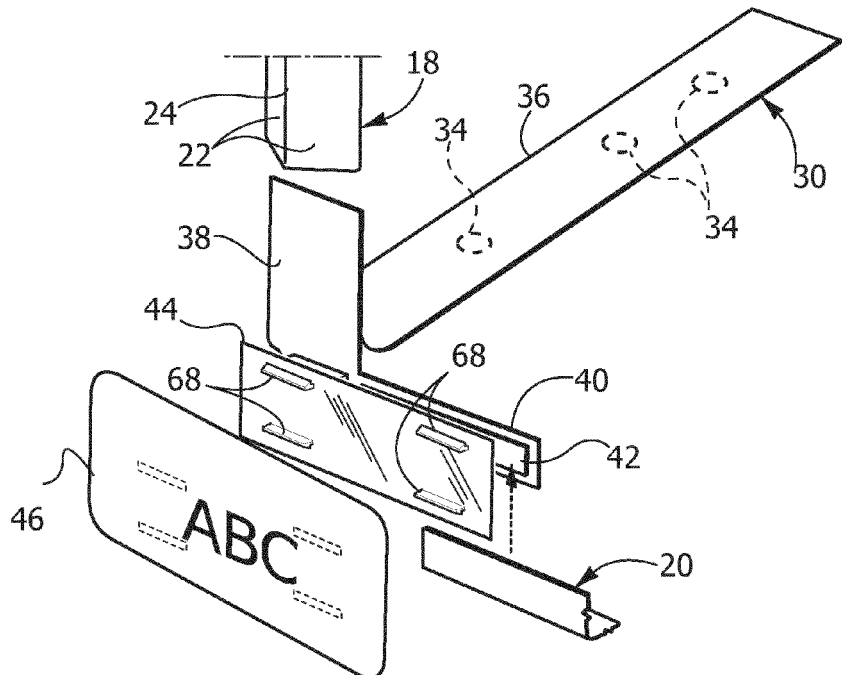
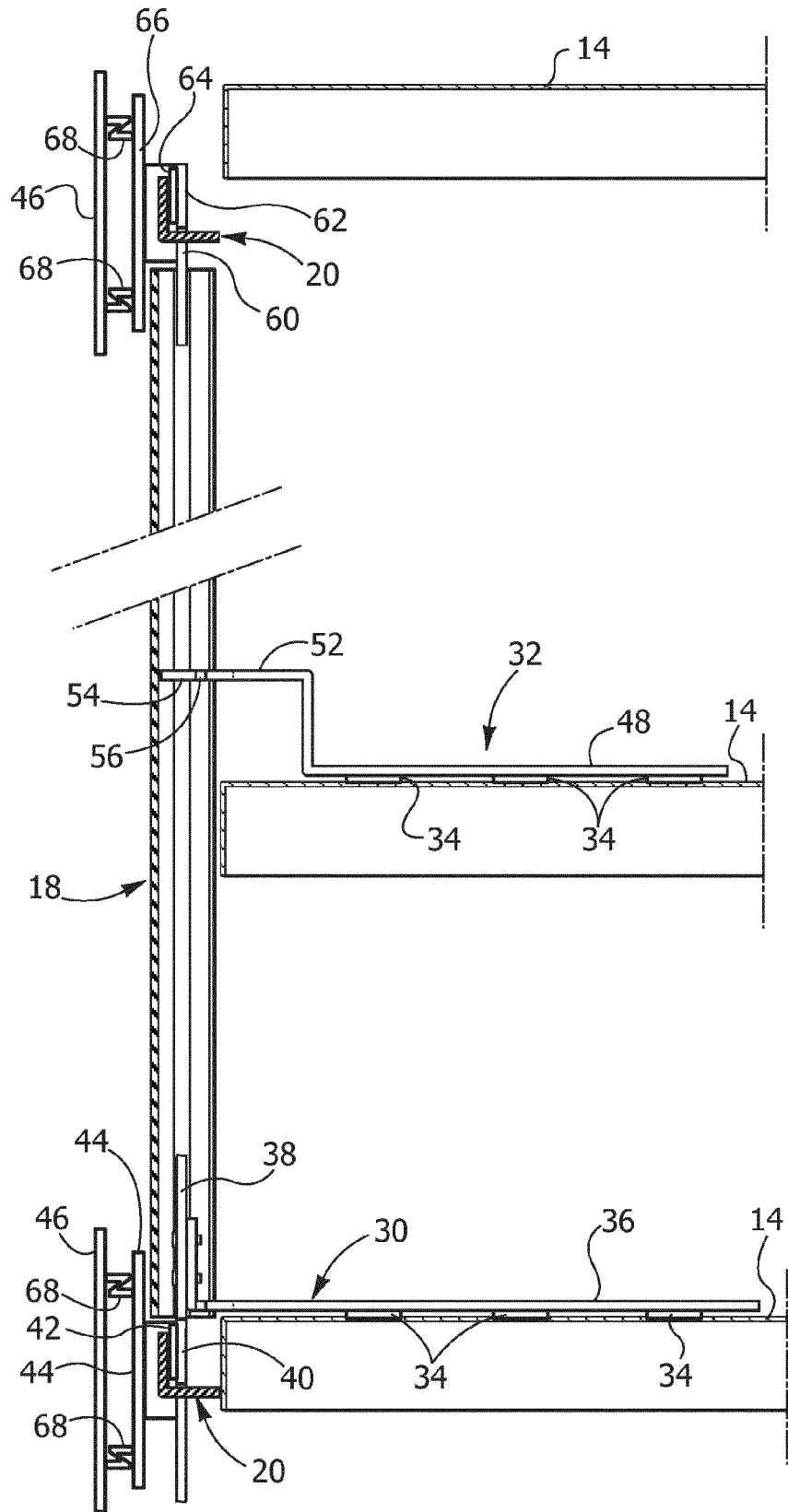


FIG. 6





EUROPEAN SEARCH REPORT

Application Number
EP 11 19 2231

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	US 3 815 519 A (MEYER A) 11 June 1974 (1974-06-11) * the whole document * -----	1	INV. A47F5/00
A	US 2008/251481 A1 (PUSTINGER JAMES MICHAEL [US] ET AL) 16 October 2008 (2008-10-16) * the whole document * -----	1	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC)
			A47F
Place of search		Date of completion of the search	Examiner
Munich		6 March 2012	Alff, Robert
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	

1
EPO FORM 1503-03.82 (PC/MC01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 11 19 2231

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 The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

06-03-2012

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 3815519	A	11-06-1974	NONE	

US 2008251481	A1	16-10-2008	NONE	

EPO FORM P0459

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