

Description

[0001] The present invention relates to a product display stand, particularly of the type with increased functionality.

[0002] In the retail sale sector, product display stands are known which have various dimensions according to the format of the product to be displayed.

[0003] Among these, product display stands are known which are provided by joining together die-cut cardboard sections which are shaped and dimensioned according to the specific geometric peculiarities of the product to be displayed and which have printed designs on the outer walls so as to act as an instrument for advertising relating, for example, to the nature of the displayed product.

[0004] Generally, such product display stands made of cardboard are obtained from a die-cut element adapted to define the supporting structure of the product display stand and from a plurality of shelves which are fixed in place by special couplings to the inner walls of the product display stand.

[0005] In this way, it is possible to provide product display stands in the form of stacks of die-cut elements, suitably organized on pallets for transport and for storage, which are then assembled as needed.

[0006] However, such conventional product display stands are not devoid of drawbacks, including the fact that they require a number of die-cut elements directly proportional to the combination of products to be displayed, subdivided by format and by type.

[0007] In fact, because of the dimensional constraints described above and because of customization of the individual product display stand as a function of the product to be displayed, it is necessary to have one format of die-cut element for each size desired and for each type of product envisaged.

[0008] All this implies a multiplication of all the costs associated with the production, logistics and storage as the range of products to be displayed increases.

[0009] The aim of the present invention consists in providing a product display stand, particularly of the type with increased functionality, which overcomes the above mentioned drawbacks.

[0010] Within this aim, an object of the present invention consists in providing a product display stand that makes it possible to reduce the number of die-cut elements necessary to provide a range of products that can vary in dimensions and in brand.

[0011] Another object of the present invention consists in providing a product display stand that can be provided with conventional technologies in the sector.

[0012] A further object of the present invention is to provide a product display stand that offers the widest guarantees of operation and load-bearing capacity during use.

[0013] This aim and these and other objects which will become better apparent hereinafter are achieved by a

product display stand, particularly of the type with increased functionality, which comprises a back, two side shoulders and a plurality of shelves which are associated with at least one of said back and said two side shoulders, characterized in that it comprises at least two supporting bodies, each one defining part of said back and at least one of said two side shoulders; said at least two supporting bodies being mutually associated so that they can slide in a direction that is substantially parallel to the orientation of said shelves in such a way as to be moveable between at least one first configuration, in which said side shoulders have a width of minimum space occupation, and at least one second configuration, in which said side shoulders have a width of maximum space occupation; said shelves comprising at least one first type of shelf, having a depth that is compatible with the width of said side shoulders in said first configuration, and at least one second type of shelf, having a depth that is compatible with the width of said side shoulders in said second configuration, in such a way as to be selectively associated, each as an alternative to the other, with at least one of said back and said two side shoulders according to the configuration chosen.

[0014] Further characteristics and advantages of the invention will become better apparent from the detailed description of a preferred, but not exclusive, embodiment of a product display stand, particularly of the type with increased functionality, according to the invention, illustrated by way of non-limiting example in the accompanying drawings wherein:

Figures 1 to 3 are three perspective views of a product display stand in a first configuration thereof, according to the present invention, showing its assembly in sequence;

Figures 4 and 5 are two perspective views of the product display stand shown in the previous figures during its switching from the first to the second configuration;

Figures 6 to 8 are three perspective views of the product display stand shown in the previous figures in a second configuration thereof, according to the present invention, showing its assembly in sequence.

[0015] With reference to the figures, a product display stand, particularly of the type with increased functionality, generally designated by the reference numeral 1, comprises a back 2, two side shoulders 3 and a plurality of shelves which are associated with one of the back 2 and the two side shoulders 3.

[0016] According to the invention, the product display stand 1 comprises at least two supporting bodies, each one defining part of the back 2 and at least one of the two side shoulders 3, with the two supporting bodies mutually associated so that they can slide in a direction that is substantially parallel to the orientation of the shelves in such a way as to be moveable between at least one

first configuration, in which the side shoulders 3 have a width of minimum space occupation, and at least one second configuration, in which the side shoulders 3 have a width of maximum space occupation.

[0017] Advantageously, the shelves comprise at least one first type of shelf 4a, having a depth compatible with the width of the side shoulders 3 in the first configuration, and at least one second type of shelf 4b, having a depth compatible with the width of the side shoulders 3 in the second configuration, in such a way as to be selectively associated, each as an alternative to the other, with at least one of the back 2 and the two side shoulders 3 according to the configuration chosen.

[0018] In the embodiment proposed, as will be better described later, each shelf 4a or 4b is associated both with the back 2 and with the two side shoulders 3, thus contributing to the load-bearing capacity of the structure of the product display stand 1. However, the possibility is not ruled out that in an alternative embodiment the shelves 4a and 4b could be fixed at different points such as, for example, to only the side shoulders 3.

[0019] Moreover, as will be better described later, in the embodiment proposed there are only two possible configurations of the product display stand 1 which have shelves 4a and 4b that have the same width but with the first shelves shallower than the second shelves. However, the possibility is not ruled out that, in an alternative embodiment, there could be intermediate configurations with depth and width of the shelves other than the ones described here.

[0020] More specifically, each supporting body comprises two end portions 5a and 5b and a central portion 5c.

[0021] With particular reference to the first configuration, shown in Figures 1 to 3, the two end portions 5a and 5b are, respectively, adapted to define at least some of the back 2 and at least part of a side shoulder 3 with the central portion 5c adapted to complete the back 2.

[0022] With particular reference to the second configuration, shown in Figures 6 to 8, the two end portions 5a and 5b are again adapted to define at least some of the back 2 and at least part of a side shoulder 3 but with the central portion 5c adapted to complete the side shoulder 3.

[0023] Advantageously, such portions 5a, 5b and 5c of each supporting body are mutually hinged along two hinging axes 6 and 7 which are mutually parallel and substantially perpendicular to the shelves 4a or 4b.

[0024] Furthermore, the portions 5b and 5c which are adapted to define the back 2 are staggered and mutually overlappable in such a way that one can slide over the other.

[0025] In order to allow the switching of the back 2 from the first configuration to the second configuration and vice versa, there is at least one slot 8 and at least one slider 9 which are defined, respectively, on the supporting bodies at the mutually overlappable end portions 5b and are mutually and slideably associated with each other.

[0026] Conveniently, in the embodiment proposed, there are several pairs of slots 8 and sliders 9 provided at different heights of the product display stand 1 so as to give it a better structural stability.

[0027] In order to allow an easy removable fixing of the shelves 4a or 4b to the supporting bodies or vice versa, there are interlocking means which are defined by the shelves 4a or 4b themselves and by supporting bodies which comprise, for each shelf 4a or 4b, at least three pocket-flap cuts 10 defined on the inner walls of the back 2 and of the side shoulders 3 and at least three respective tabs 11 which protrude from each shelf 4a or 4b and are configured for the insertion thereof into the pocket-flap cuts 10.

[0028] Conveniently, for each configuration of the configurations described previously, there is at least one covering element 12 which can selectively be associated with at least one of the shelves 4a and 4b, the side shoulders 3 and the back 2, via surface adhesion devices, such as Velcro® or double-sided adhesive tape, in order to define a decorative facade for the purposes of explaining, identifying the displayed product and/or advertising.

[0029] In the embodiment proposed, the covering elements 12 have substantially three wings, one central wing 13 and two lateral wing 14, which are contoured in such a way as to embrace the product display stand 1 at its front portion while covering the side shoulders 3, and which have windows 15 defined at each shelf 4a and 4b.

[0030] In order to ensure the correct alignment of the covering elements 12 and in order to further embellish the product display stand 1, from each window 15 a flap 16 extends which is adapted to lay flat on the individual shelf 4a or 4b at the resting surface thereof.

[0031] In this way, the load-bearing structure of the product display stand 1, constituted by the back 2 and by the side shoulders 3, can be aesthetically neutral and therefore adapted to be used for different products, it being possible to substitute the covering element 12 as needed.

[0032] Advantageously, the product display stand 1 is made of cardboard and comprises creasing lines defined at the hinging axes 6 and 7 for the relative mobility of the portions 5a, 5b and 5c of the supporting bodies.

[0033] In this way, each component of the product display stand 1, like the shelves 4a and 4b, the supporting bodies and the covering elements 12, can be provided with die-cut elements of cardboard, either flat or folded according to the structural solidity required.

[0034] Operation and assembly of the product display stand 1 described above is explained below.

[0035] Initially, the two supporting bodies are coupled together by inserting the sliders 9 into the slots 8.

[0036] Subsequently, according to the configuration desired, the end portions 5b of the supporting bodies are moved apart or are overlapped simply by sliding each slider 9 along the respective slot 8.

[0037] At this point, the hinging axes 6 and 7 of the supporting bodies are bent, in order to define the side

shoulders 3 in order to then insert and interlock the corresponding shelves 4a or 4b.

[0038] The product display stand 1 is then completed with the desired covering element 12.

[0039] If it is desired to change the configuration, as shown in Figures 4 and 5, it is possible to remove the covering element 12 and the shelves 4a or 4b, so as to permit the mutual sliding of the supporting bodies and the bending thereof in order to define a new width for the side shoulders 3.

[0040] At this point, it is sufficient to interlock the corresponding shelves 4a or 4b in order to immobilize the structure, completing the product display stand 1 with the desired covering element 12.

[0041] In this way it is possible to pass from the first configuration, shown in Figures 1 to 3, to the second configuration, shown in Figures 6 to 8, and vice versa in a simple and rapid manner.

[0042] In practice it has been found that the product display stand, particularly of the type with increased functionality, according to the invention, responds to the technical problem and to the set objects.

[0043] In fact, thanks to the ability to be switched to at least two configurations of equal width but with different depths of the shelves, it is possible to optimize the number of die-cut elements necessary for providing two product display stands conforming to different sets of dimensions.

[0044] Similarly, thanks to the presence of a covering element adapted to "dress" the product display stand and therefore the ability to customize its appearance in each instance, for the same dimensions, it is possible to make the die-cut elements aesthetically neutral and therefore adapted to be used in product display stands intended for different products. This entails a further reduction of the number of die-cut elements necessary for providing product display stands of equal dimensions but with different appearances.

[0045] In other words, the product display stand according to the present invention makes it possible to reduce the number of die-cut elements necessary to provide a range of products that can vary in dimensions and in brand with an inevitable lowering of the production and storage costs.

[0046] Another advantage of the present invention consists in that by virtue of the particular structure of the product display stand and of the numerous interlocking couplings between shelves, back and side shoulders, the product display stand presents a high mechanical strength for loads, as well as a high level of structural stability.

[0047] The product display stand, particularly of the type with increased functionality, thus conceived, is susceptible of numerous modifications and variations, all of which are within the scope of the appended claims.

[0048] Moreover, all the details may be substituted by other, technically equivalent elements.

[0049] In practice, the materials used, as well as the

contingent shapes and dimensions, may be any according to the requirements and to the state of the art.

[0050] Where the technical features mentioned in any claim are followed by reference numerals and/or signs, those reference numerals and/or signs have been included for the sole purpose of increasing the intelligibility of the claims and accordingly, such reference numerals and/or signs do not have any limiting effect on the interpretation of each element identified by way of example by such reference numerals and/or signs.

Claims

1. A product display stand (1), particularly of the type with increased functionality, which comprises a back (2), two side shoulders (3) and a plurality of shelves (4a, 4b) which are associated with at least one of said back (2) and said two side shoulders (3), **characterized in that** it comprises at least two supporting bodies, each one defining part of said back (2) and at least one of said two side shoulders (3); said at least two supporting bodies being mutually associated so that they can slide in a direction that is substantially parallel to the orientation of said shelves (4a, 4b) in such a way as to be moveable between at least one first configuration, in which said side shoulders (3) have a width of minimum space occupation, and at least one second configuration, in which said side shoulders (3) have a width of maximum space occupation; said shelves (4a, 4b) comprising at least one first type of shelf (4a), having a depth that is compatible with the width of said side shoulders (3) in said first configuration, and at least one second type of shelf (4b), having a depth that is compatible with the width of said side shoulders (3) in said second configuration, in such a way as to be selectively associated, each as an alternative to the other, with at least one of said back (2) and said two side shoulders (3) according to the configuration chosen.
2. The product display stand (1) according to claim 1, **characterized in that** each one of said supporting bodies comprises two end portions (5a, 5b), each one respectively adapted to define at least part of said back (2) and at least part of one of said side shoulders (3) in said first configuration, and a central portion (5c) which is adapted to complete said side shoulder (3) in said first configuration and said back (2) in said second configuration; said portions (5a, 5b, 5c) of each one of said supporting bodies being mutually hinged along two hinging axes (6, 7) which are mutually parallel and substantially perpendicular to said shelves (4a, 4b); said portions (5b, 5c) adapted to define said back (2) being staggered and mutually overlappable in such a way that one can slide over the other.

3. The product display stand (1) according to claim 2, **characterized in that** it comprises at least one slot (8) and at least one slider (9) which are defined, respectively, on said supporting bodies at said mutually overlappable end portions (5b) and are mutually and slideably associated with each other for the switching of said back (2) from said first configuration to said second configuration and vice versa. 5
4. The product display stand (1) according to one or more of the preceding claims, **characterized in that** it comprises interlocking means which are defined by said shelves (4a, 4b) and said supporting bodies for the removable fixing thereof with respect to each other. 10 15
5. The product display stand (1) according to one or more of the preceding claims, **characterized in that** said interlocking means comprise, for each one of said shelves (4a, 4b), at least three pocket-flap cuts (10) defined on the inner walls of said back (2) and of said side shoulders (3) and at least three respective tabs (11) which protrude from each one of said shelves (4a, 4b) and are configured for the insertion thereof into said at least three pocket-flap cuts (10). 20 25
6. The product display stand (1) according to one or more of the preceding claims, **characterized in that** it comprises, for each one of said configurations, at least one covering element (12) which can selectively be associated with at least one of said shelves (4a, 4b), said side shoulders (3) and said back (2) in order to define a decorative facade for the purposes of explaining, identifying the displayed product and/or advertising. 30 35
7. The product display stand (1) according to one or more of the preceding claims, **characterized in that** said covering elements (12) can selectively be associated with at least one of said shelves (4a, 4b), said side shoulders (3) and said back (2) via surface adhesion devices. 40
8. The product display stand (1) according to one or more of the preceding claims, **characterized in that** it is made of cardboard and **in that** it comprises creasing lines defined at said hinging axes (6, 7) for the relative mobility of said portions (5a, 5b, 5c). 45
9. The product display stand (1) according to one or more of the preceding claims, **characterized in that** said shelves (4a, 4b), said supporting bodies and said covering elements (12) are die-cut from cardboard. 50 55

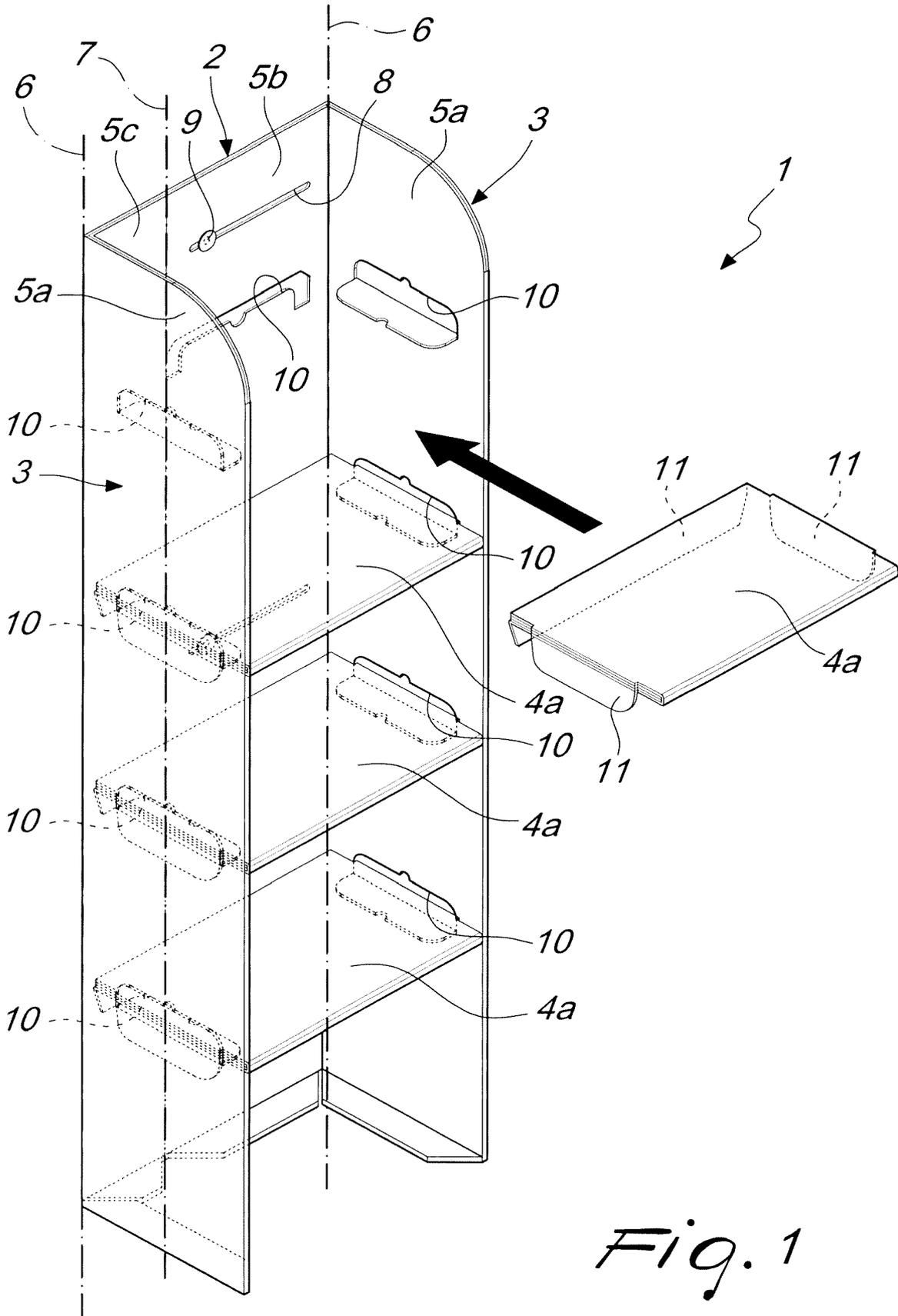


Fig. 1

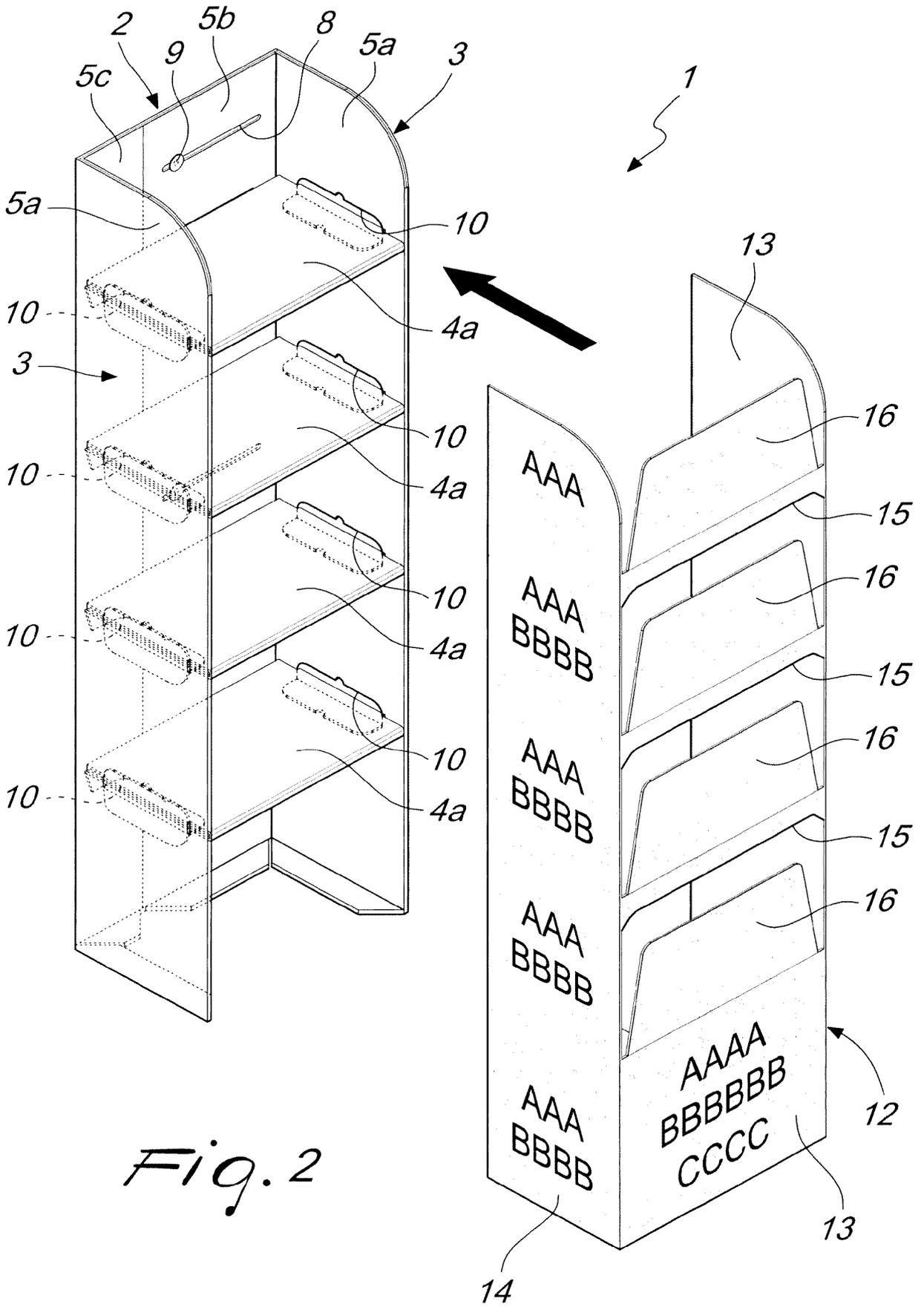


Fig. 2

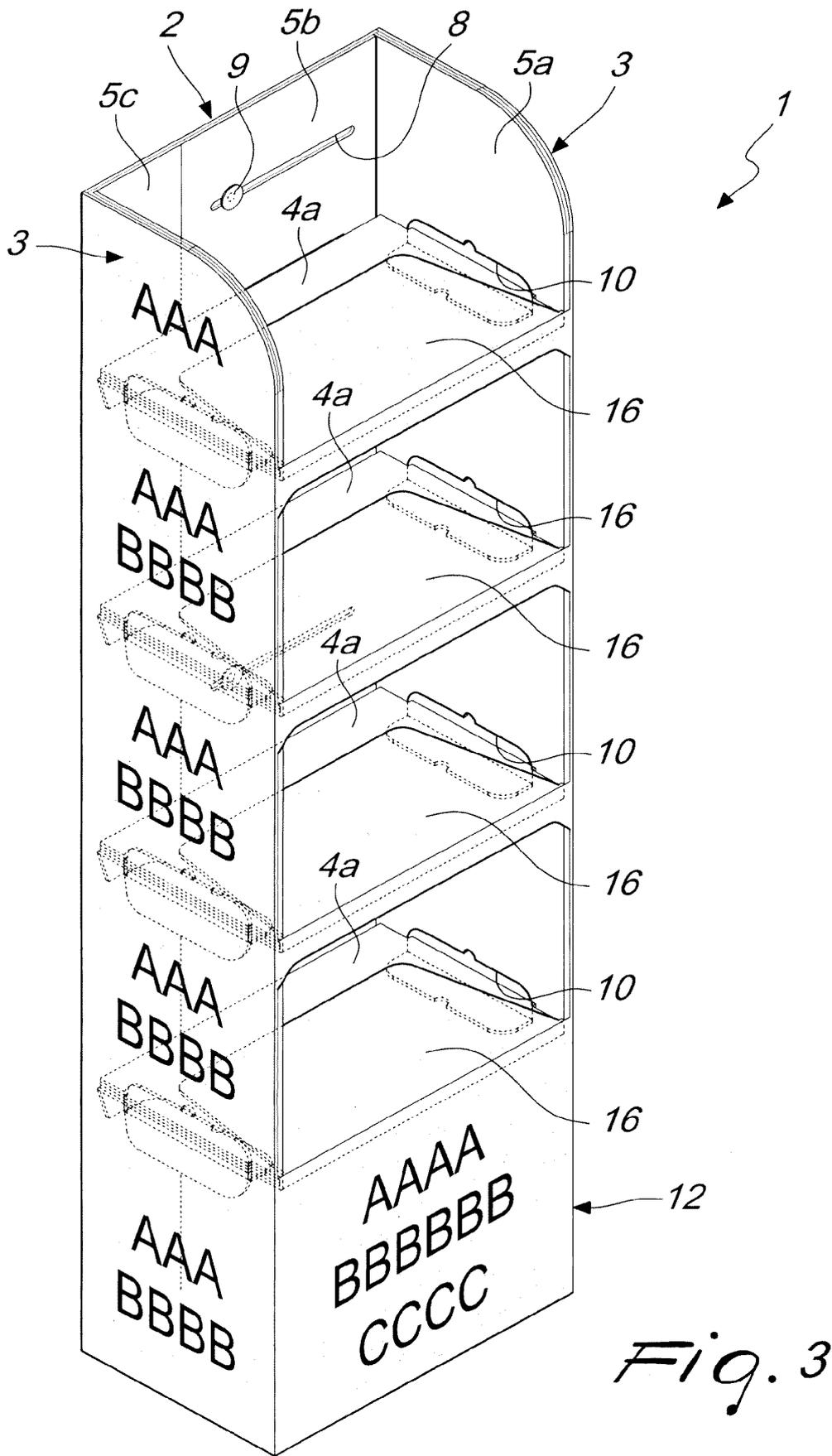


Fig. 3

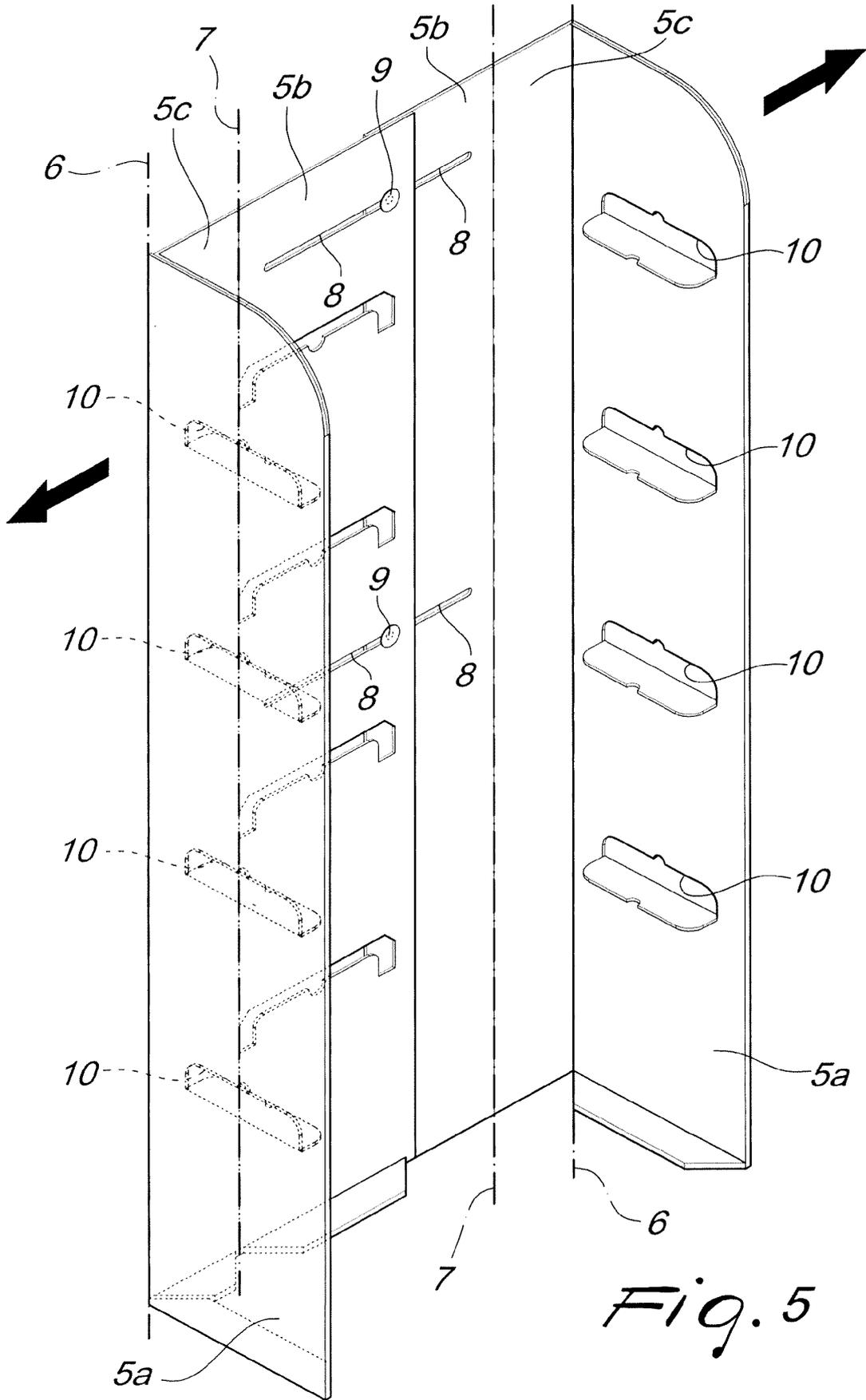


Fig. 5

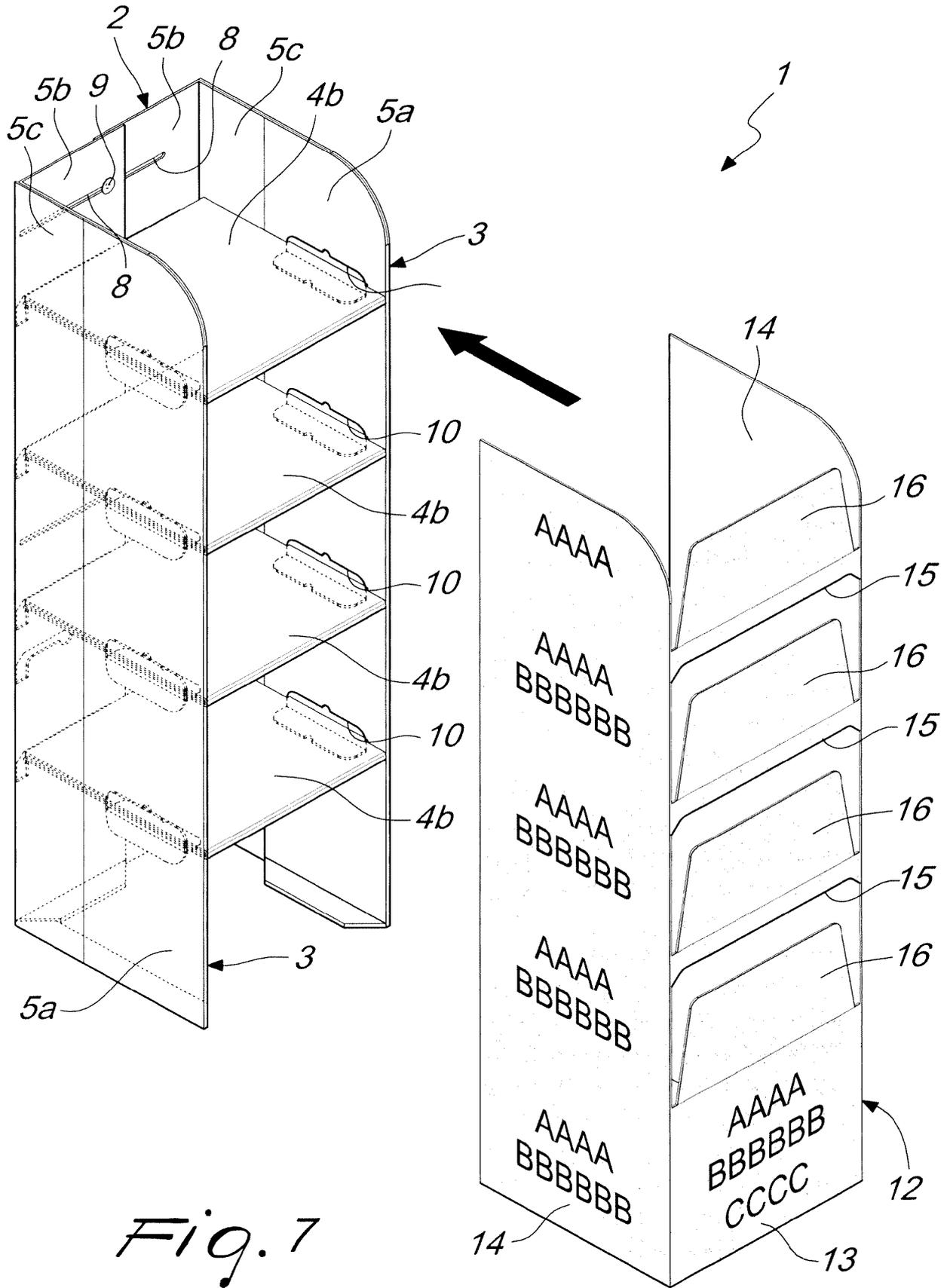


Fig. 7



EUROPEAN SEARCH REPORT

Application Number
EP 20 42 5006

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	FR 2 957 502 A1 (STI DISPLAY EMBALLAGE CREATION [FR]) 23 September 2011 (2011-09-23) * figures 1-5 *	1-9	INV. A47F5/00 A47F5/11 A47B45/00
X	JP 2017 192671 A (DAINIPPON PRINTING CO LTD) 26 October 2017 (2017-10-26) * figures 1-3 *	1,8,9	
X	WO 2018/129427 A1 (KOUTNY ROBERT J [US]) 12 July 2018 (2018-07-12) * figures 1-25 *	1	
A	EP 2 589 318 A1 (DRUKARNIA ELLERT SP Z O O [PL]) 8 May 2013 (2013-05-08) * figure 4 *	5	
A	US 2008/105594 A1 (LUBERTO MICHAEL D [US]) 8 May 2008 (2008-05-08) * figures 1-2 *	1	
A	DE 20 2014 001505 U1 (STOREBEST GMBH & CO KG [DE]) 10 April 2014 (2014-04-10) * figures 1-7 *	1	TECHNICAL FIELDS SEARCHED (IPC) A47F B65D A47B
A	US 2014/175037 A1 (DART DEDEE [US] ET AL) 26 June 2014 (2014-06-26) * figures 1-19 *	1	
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 3 August 2020	Examiner Ibarrodo, Borja
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 20 42 5006

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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.

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
FR 2957502 A1	23-09-2011	NONE	
JP 2017192671 A	26-10-2017	JP 6717030 B2 JP 2017192671 A	01-07-2020 26-10-2017
WO 2018129427 A1	12-07-2018	CN 110234252 A US 10264880 B1 WO 2018129427 A1	13-09-2019 23-04-2019 12-07-2018
EP 2589318 A1	08-05-2013	NONE	
US 2008105594 A1	08-05-2008	US 2008105594 A1 US 2010170825 A1	08-05-2008 08-07-2010
DE 202014001505 U1	10-04-2014	NONE	
US 2014175037 A1	26-06-2014	CN 104042048 A US 2014175037 A1 US 2015223603 A1 WO 2014152499 A1	17-09-2014 26-06-2014 13-08-2015 25-09-2014

EPO FORM P0459

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