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(54) **MOUNTING FOR HANGING BAGS**

(57) A support mechanism for the elevated suspension from the upper edge of a kitchen cabinet door or any other horizontal support of a bag or similar is described, intended for the disposal of residues. The described support mechanism consists of three essential elements, which consist of a laminated main support, a clamping element and a coverage element. The first is of a general elongated form, moulded to a single piece, and it features two notches on the longitudinal upper edge, that divide it into three superficial portions, symmetrical regarding

the central transverse axis, determining the two sides the formation of tabs for the placement of the handles of a bag, showing the central portion an upper part that is divided into three longitudinal sections that once folded, provide an inverted U-shaped as a means of suspension and hanging; the clamping element is a channelled straight body, suitable for its attachment to the aforementioned folded sections of the middle portion, and the coverage element is a flat sheet, with a couple of longitudinal slits, shaped to be attached to both tabs on the outer portions of the principal element.

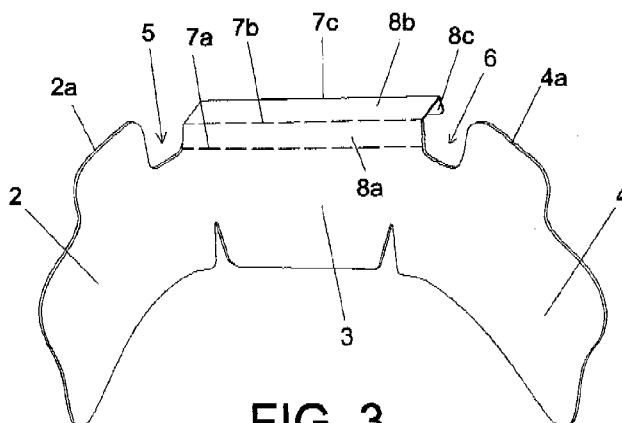


FIG. 3

Description

Object of the invention

[0001] The present invention relates to a support mechanism for elevated bags with the element of an insert for the opened bag, which provides essential novelty features and significant advantages in regards to resources known and used for the same purposes in the current state of the art.

[0002] More particularly, the invention proposes the development of a light material laminated element, flexible or semi-rigid, such as a plastic material or similar, with a substantially elongated shape, provided with notches in relation to both longitudinal edges, which enable the curving of the laminated element for the attachment of the bag on its outside, in a way that enables its adaptation while at the same time, offering tabs on the upper part of the sides for the suspension of the bag by its handles, being the central portion equipped with longitudinal folding lines and to some distance of, and parallel to, each of its respective upper edge, that outlines a strip or tab that may be folded, which constitutes a means for hanging the set from an appropriate horizontal support mechanism. The hanging feature of the support mechanism with the bag can be secured with the assistance of a rigid piece specifically designed to that effect, which is placed over the area for the attachment of the element in a way that the set is fixed to the support mechanism element, while the set may be hidden or embellished with the use of a covering element, formed by a laminated piece with a general flat shape, equipped with openings or slits designed to enable its hanging from the support mechanism tabs on the exterior of the set.

[0003] The field of application of the invention falls within the industrial sector dedicated to the manufacture and supply of moulded components, particularly laminated elements adequately formed.

Background and Summary of the Invention

[0004] The variety of uses that bags made of plastic, paper and other materials have found in the market, has been known throughout the last decades. In many occasions, it is recommended to keep bags in a heightened position to facilitate their use, and being open as a condition to allow for greater ease, convenience and quickness of depositing or extracting objects from inside.

[0005] Other devices, used combined with the aforementioned bags are already known in the current state of the art, to keep the latter in an open position, and which are also recoverable and reusable elements once the bags have been used. These existing devices usually consist of suspension and attachment rings, bins with integrated mechanical lids, mechanicals rings that require fixing or screwing to the attachment, etc., in a way that some require a space on the floor, and others require ironwork or anchoring elements for their placement, fi-

nally becoming fixed elements or of a complicated assembly and disassembly.

[0006] Given the above, the present invention has stated as its main objective the development of a support mechanism for bags of the aforementioned type that, being of a simple conception and easy, fast and economical manufacture, provide additional means of suspension and hanging of the bags, with a very easy attachment to the common existing elements, that allows to keep them open to facilitate an easy, fast and convenient access to their interior. This goal has been fully attained through the support mechanism that will be subject to the following description, whose main characteristics are contained within the characterizing portion of claim 1.

[0007] In essence, the support mechanism for bags is composed of a main element and two additional complementary elements of which the principal element, through which the real maintaining of the bag is accomplished, is conceived in a way that allows it to be attached or hung on any slit or appropriate horizontal support, such as the upper edge of a kitchen cabinet door or other type, as it consists of a moulded element with a sufficiently reduced thickness so as to allow its insertion through a horizontal opening or slit of reduced width, or its disposition to be hung from a strip or similar. The proposed support mechanism consists of a single piece, with a generally elongated shape, made of plastic material, flexible, semi-rigid or similar, obtained, as mentioned, through moulding (or even apt to be configured through a stamping operation), of a previously established width, at which the longitudinal edges exhibit notches that, on the one hand, facilitate the general bending of the element according to the longitudinal dimension, and on the other hand, allows the definition in relation to the rim that takes the upper position when the element is in its operative condition, of three consecutive portions, with symmetry in connection with the central transverse axis. This way, then the element is bent to adopt a nearly semi-circumferential configuration, both external portions, under the aforementioned notches, generally adopt a tab shape, pointed upwards to a certain height, and suitable to admit and resist the hanging of a bag and its load, by the insertion of the bag handles in each of the support's tabs, while the central portion of the main support element has been equipped with folding lines on the longitudinal direction of the support, parallel to the upper rim and at some distance of the latter, through which a longitudinal strip or tab with three adjacent sections is defined, which when folded square to the exterior, i.e. to the opposite side of the element curving, constitute the anchoring and attachment portion of the set for hanging on a drawer or door of a kitchen cabinet. Thereby, a support element is provided for the efficient and effective hanging of a bag, with the guarantee that its insert is kept in an open position for an easy access to its interior, with the possibility of the bag being conveniently unhooked and the support being reused for other bags. In addition, this main support element is complemented by a first clamp element, con-

figured in a straight channel, sized in a way that enables its attachment over the aforementioned longitudinal strip or support tab portion, when the latter has been formed and attached to the means of suspension (upper edge of a furniture door, hanging bar, etc.), ensuring that the suspension feature is maintained, increasing the resistance of the support, while a second element conceived with the intended purpose of improving the finish and exterior appearance of the support as an embellisher, is formed by a cover piece that consists of a laminated body of canvas material made of plastic, synthetic or any other material easily configured and sanitized by washing or similar means, which is equipped with two openings or slits placed close to the upper longitudinal rim, to enable its insertion in the respective tabs of the main support element, being a coverage piece placed over the set.

[0008] Therefore, not only all previously set forth inconveniences regarding the other existing support devices in the current state of the art are rectified, but it is also complemented with a simple and economical support element, that enables the supporting of a bag in an open and elevated position without the assistance of other equipment or tools, of very easy assembly and disassembly, ergonomic, reusable and with an exterior appearance substantially improved in the operative condition of the same, while disregarding the need for a space on the floor.

Brief Description of the Drawings

[0009] These and other characteristics and advantages of the invention will become more apparent with the detailed description arising from a preferred embodiment of the invention wherein the following drawings are shown as way of illustration but not limited to:

Figure 1 is a schematic view, in a frontal general elevation, of a main support element for bags according to the invention, shown as a unique moulded and formed piece;

Figure 2 shows both views (a) and (b) illustrative of schematized representations of both additional complementary elements of clamp and laminated canvas coverage, respectively usable together with the main support element in Figure 1;

Figure 3 is a schematic, top view, of the main support element for bags of Figure 1, bent and configured for immediate use;

Figure 4 illustrates a schematic top view of the main support element of Figure 1 in an embodiment by insertion through a slit and application on the top edge of a furniture door or similar, and

Figure 5 is a schematized representation, in perspective from one of the sides, of the main element

of support as used in Figure 4, with both complementary elements of Figure 2 applied over the first.

Description of a Preferred Embodiment

[0010] As mentioned above, the detailed description of the object of the invention will be performed with the assistance of the attached drawings, through which the same numerical references for the designation of equal or similar parts will be used. Thus, referring to Figure 1 in the first place, a general view in front elevation of a main support element for bags according to the invention can be seen, designed generally through numerical reference 1, consisting of one piece with a general elongated shape in which three consecutive portions are shown, identified by numerical references 2, 3 and 4, configured in a way that the piece as a whole, keeps symmetry with respect to the central transverse axis. The element exhibits a predefined width, defined by two longitudinal edges on which indentations have been executed in interspersed positions between the aforementioned consecutive positions 2, 3, 4, in a way that, in relation to the edge that occupies the top position during use of the piece, the respective tabs are shown identified with references 5, 6, they are of considerable width and have the double functionality that allows the definition of indentations 2a, 4a, in relations to portions 2, 4 respective from which they are projected, and also facilitating the bending of the support element with respect to its longitudinal axis. Meanwhile, central portion 3 includes the formation of several longitudinal folding lines, affecting its area, also next to the same longitudinal edge, separated and parallel to one another, identified through numerical references 7a, 7b, 7c, extended on the longitudinal direction of the piece and at the same time parallel to central exterior edge 3a of such portion, resulting in the formation of a strip or tab with a surface divided among three longitudinal sections 8a, 8b, 8c that through the successive folding with respect to lines 7a, 7b, 7c that define them, embody the formation of a means of attachment and hanging for this main element of support.

[0011] According to the configuration with which piece 1 has been equipped, forming the main support element of the present invention, such piece is susceptible to adopt a certain curvature in a longitudinal direction, following a general configuration that reaches a semi circumferential path, and that is depicted in the perspective view in Figure 3 of the drawings. In such view, each of the portions 2, 4 of the sides has been bent to the interior, i.e. in the direction in which each approaches the other according to the position shown in the drawing, which curvature action is facilitated, as mentioned before, by the areas with lower height in which notches 5, 6 have been made regarding the upper edge, while sections 8a, 8b, 8c, are presented successively folded backwards regarding to the position of the drawing, folded along respective lines 7a, 7b, 7c adopting such strips or tabs a position with the global configuration of an inverted U,

which materializes a means of attachment enabled to be adjoined to a means of suspension for the hanging of the set. In these conditions, the configuration of the attachment provided by the aforementioned section tabs 8a, 8b, 8c is positioned in a way that it may be inserted through any horizontal longitudinal slit or groove, or placed over an edge, a bar or similar means of suspension, serving as a means of support of the element curved in such way and ready to receive a bag to hold.

[0012] Figure 2 of the drawings shows two representations (a) and (b) that respectively identify a pair of elements which have been conceived as complementary components of the main support element 1 and which essentially consist of a clamp 12 and a laminated sheet 13 for coverage or embellishment. The clamp element 12 is configured as a straight channel, constructed on the basis of a rigid material or similar, sized to be attached by pressure over the inverted U shaped, forming from sections 8a, 8b, 8c of the main support element 1, this way ensuring that such attachment configuration is kept in its operating place on the support means (Drawer, upper edge of a furniture door, or other appropriate horizontal support element).

[0013] Meanwhile, the coverage element essentially consists of a flat, laminated sheet with a generally rectangular shape, as a plastic, synthetic or similar tarp or canvas, enabled to be washed for sanitation, and provided with a couple of slits or openings elongated in mutually aligned positions, parallel to the upper element's edge and separated from the latter by a short distance. These slits or openings 14 are sized in a way that enable an easy and fast insertion in the interior of tabs 2a, 4a, formed respectively in portions 2, 4 of the main support element 1.

[0014] The operative condition of the support mechanism for bags proposed by the invention is displayed as seen in Figure 4 of the drawings. This figure shows an example of use in which the main support element 1 of the invention is placed over the upper edge of a cabinet door, suspended over said edge, by insertion and placement of the inverted U configuration obtained through tab sections 8a, 8b, 8c through the existing groove between the upper edge of said door and the frame structure to which said door is attached 9. Under these conditions, tabs 2a, 4a of the respective portions 2, 4 sides of such support element 1 have advanced positions regarding the level of the cabinet door 9 mutually opposed to each other, and thus are suitable to be inserted through any bag 10 handles 11 such as shown in said Figure 4. In these conditions, it is guaranteed that the bag 10 is perfectly held and supported by the aforementioned portions 2, 3, 4 of the support element 1 keeping the mouth of said bag in an open position ensuring this way an easy, convenient and fast access to the inside space of the bag. Of course, the removal of the bag 10 enables the reutilization of the support of the invention in the same way with a new bag, as needed. This operative feature may be improved with regards to safety, resistance, ex-

ternal appearance and aesthetics, with the assistance of the complementary elements of the clamp piece and coverage sheet, together with said main support element 1 constitute the hanging set. The situation is shown clearly in Figure 5 of the drawings in the same operative condition as in Figure 4 obtained by hanging and suspension over the upper edge of a cabinet door 9 but the clamping element 12 covering the inverted U configuration provided by sections 8a-8c being clearly visible, guaranteeing the maintenance of such configuration, and with the coverage element 13 applied directly over the bag 10, which covers and hides most of it, and whose adaptation is produced by the configuration of the set, keeping the coverage in this position by the insertion of portions 2a, 4a of the main support element 1 through the slits or openings 14 provided for such coverage element 13.

[0015] It is not considered necessary to further extend the contents of the present description, in order for an expert to be able to understand its scope and the advantages derived from it, as well as to carry out the practical embodiment of its object.

[0016] Notwithstanding the above, and since the description made corresponds only to an example of a preferred embodiment, it will be understood that within its essentiality, there could be multiple modifications and variations introduced in detail, also comprised within the scope of the invention, and which could affect features such as the shape, size, manufacture materials or any other that do not alter the invention as it has been described and as defined in the claims that follow.

Claims

1. Support mechanism for elevated bags, in particular an element of support conceived to hold a bag (10) for residue disposal or similar elevated at some height, with an element of an insert for the opened bag, so that it can be placed on an existing horizontal support such a kitchen cabinet door (9) or another appropriate horizontal support, with no assistance from other equipment or tools, **characterized in that** it comprises there separate and complemented elements consisting of: a main support element (1) of a laminated sheet moulded into a single piece, with a general elongated shape, with notches on both longitudinal edges, of which one of said edges features a couple of notches (5, 6) defining a division of the laminated (1) element in three consecutive portions (2, 3, 4) configured symmetrically regarding a central transversal axis, of which each of the two side portions (2, 4) present, regarding the same longitudinal edge, a formation of respective tabs (2a, 4a) and these tabs constitute the means of attachment for each handle (11) of the bag (10) which wants to be suspended, while the central portion (3), presents the anchoring element of the support, formed as tabs by sections 8a, 8b, 8c defined after the square folding

by the folding lines (7a,7b,7c), to form an inverted U configuration that constitutes the means of hanging for the set; a clamping element (12) consisting of a body shaped like a straight channel, sized in a way that enables its attachment over the central portion (3) of the support (1) when the inverted U formation is attached over the means of suspension and hanging; and a coverage element, consisting of a plastic sheet or similar (13) with a general rectangular shape equipped with a couple of slits (14), aligned to one another and sized to hang from the tabs (2a, 4a) regarding the main support element (1) to cover and hide it.

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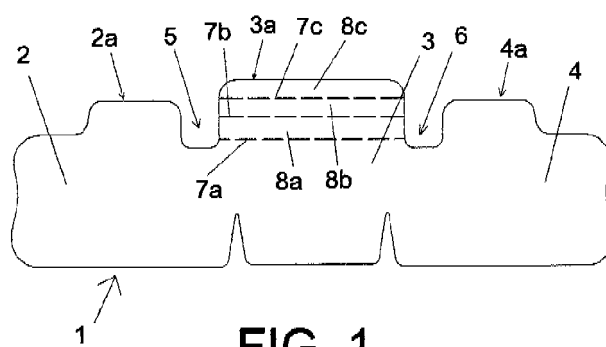


FIG. 1

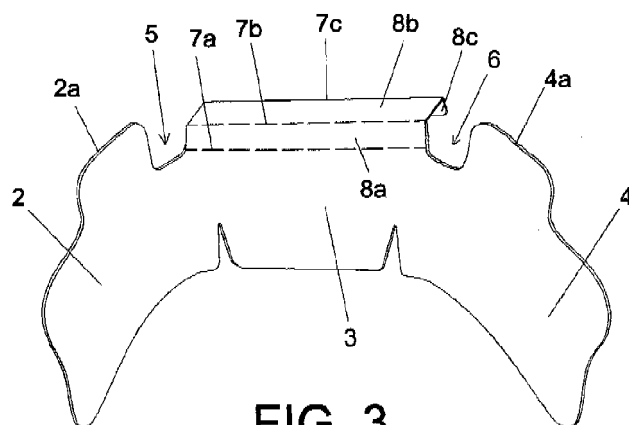
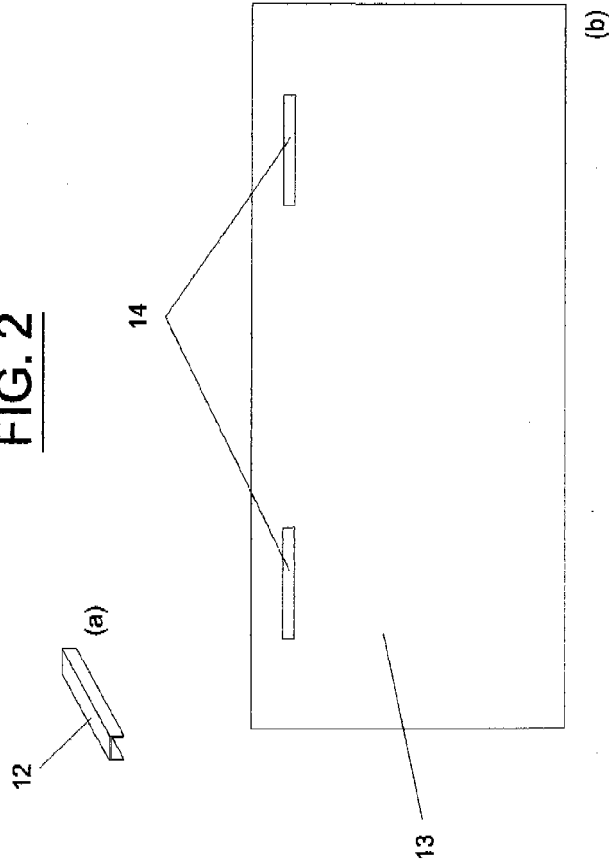


FIG. 3

FIG. 2



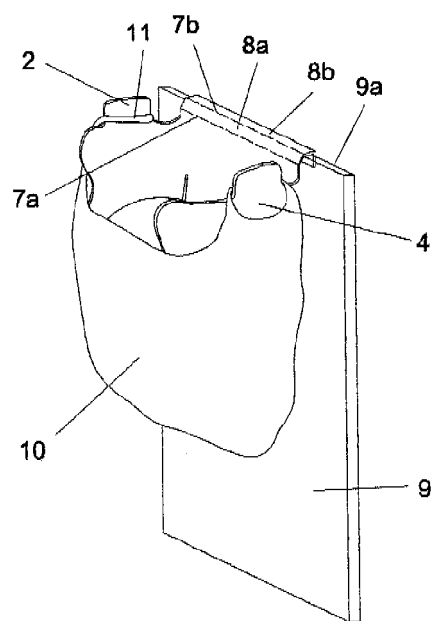


FIG. 4

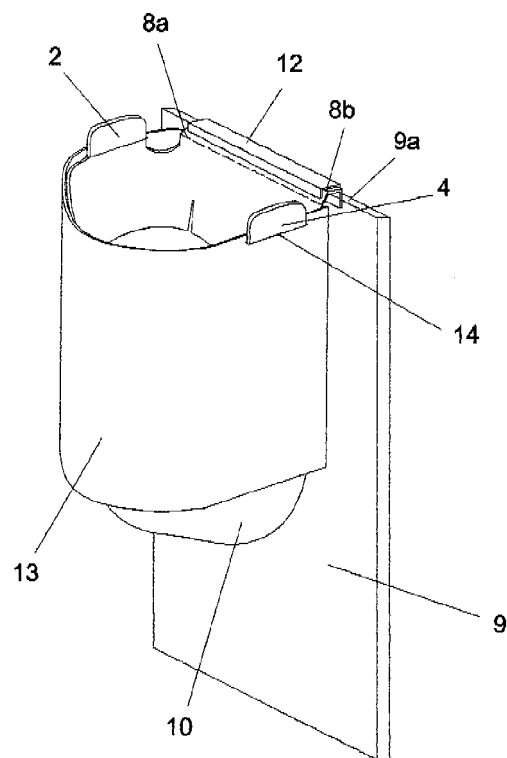


FIG. 5

INTERNATIONAL SEARCH REPORT

International application No.

PCT/ ES 2010/070109

A. CLASSIFICATION OF SUBJECT MATTER

see extra sheet

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

B65B67/, B65F1/,

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

INVENES, EPODOC, WPI

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 4664348 A (CORSAUT et al.) 12.05.1987, column 1, lines 44-49; column 1, line 65 - column 2, line 34; figures.	1
Y	ES 2105213 T3 (HACHENBERG BERNHARD) 16.10.1997, column 2, lines 2-8; column 2, lines 34-43; column 2, line 63 - column 3, line 3; column 3, line 28 - column 4, line 8; figures.	1
A	US 6679462 B1 (GAMEZ JORGE) 20.01.2004, abstract; figures.	1
A	FR 2519406 A1 (EPPENDAHL PETER) 08.07.1983, page 1, lines 25-42; page 2, lines 18-30; page 3, line 9 - page 4, line 27; figures.	1

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:	"I"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance.		
"E" earlier document but published on or after the international filing date		
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"O" document referring to an oral disclosure use, exhibition, or other means	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other documents, such combination being obvious to a person skilled in the art
"P" document published prior to the international filing date but later than the priority date claimed		
	"&"	document member of the same patent family

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INTERNATIONAL SEARCH REPORT

International application No.
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C (continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of documents, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	FR 2718117 A1 (DAVOUDI FARHOOMAN) 06.10.1995, page 4, figures.	1

Form PCT/ISA/210 (continuation of second sheet) (July 2009)

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/ ES 2010/070109

Patent document cited in the search report	Publication date	Patent family member(s)	Publication date
US 4664348 A	12.05.1987	NONE	-----
ES 2105213 T	16.10.1997	WO 9314980 A AU 3339693 A AU 667340 B EP 0621847 AB EP 19930901980 US 5480113 A DE 69311092 T	05.08.1993 01.09.1993 21.03.1996 02.11.1994 21.01.1993 02.01.1996 08.01.1998 08.01.1998
US 6679462 B	20.01.2004	NONE	-----
FR 2519406 A	08.07.1983	NONE	-----
FR 2718117 A	06.10.1995	NONE	-----

Form PCT/ISA/210 (patent family annex) (July 2009)

INTERNATIONAL SEARCH REPORT

International application No.

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CLASSIFICATION OF SUBJECT MATTER

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