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(72) Inventor: **Migliorini, Massimo**
47900 Rimini (IT)

(74) Representative: **Lanzoni, Luciano**
c/o BUGNION S.p.A.
Via A. Valentini, 11/15
47900 Rimini (IT)

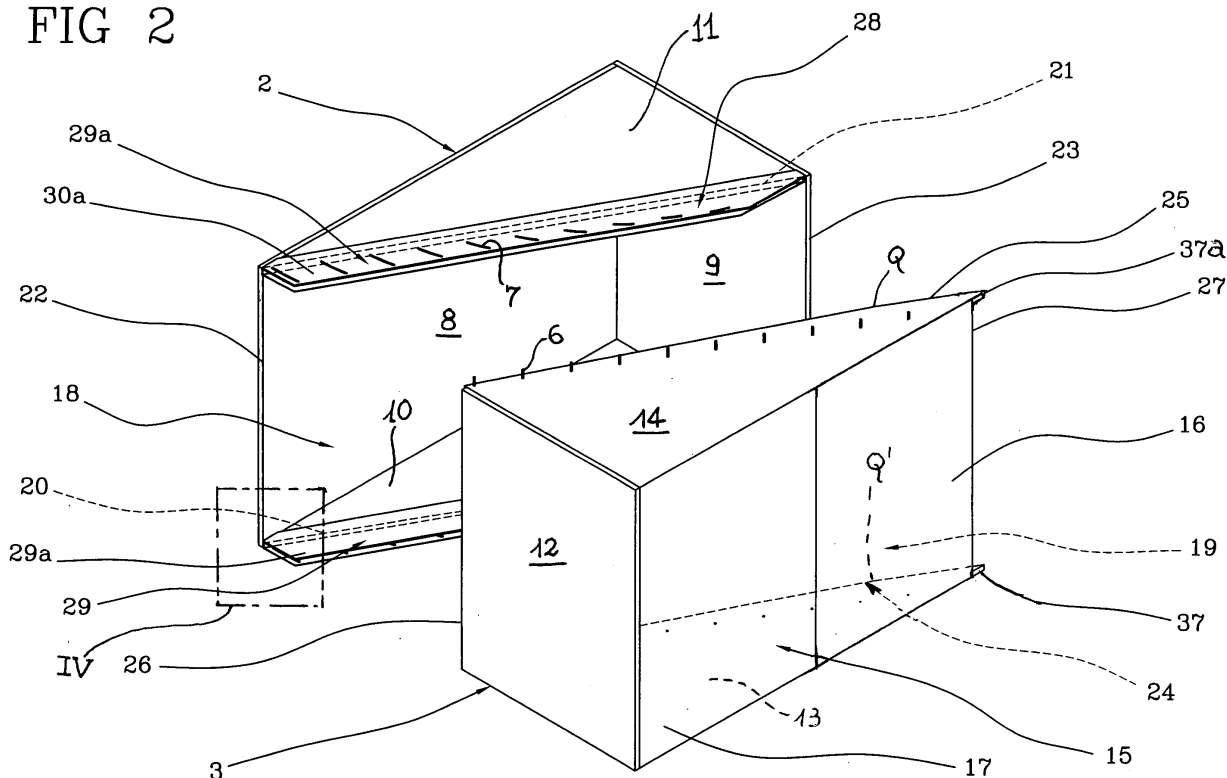
(71) Applicant: **Koblentz S.P.A.**
47853 Coriano (RN) (IT)

(54) **Piece of furniture**

(57) A piece of furniture (1) comprises a first half-part (2) and a second half-part (3) which are substantially box-shaped, connecting means (5) operating between the first half-part (2) and the second half-part (3) at least to join the first half-part (2) and the second half-part (3) and

to form a compartment (4). The second half-part (3) can be moved relative to the first half-part (2) between a plurality of relative angles formed by a plurality of operating positions of the connecting means (5) to adapt the piece of furniture (1) to any angle formed between two walls.

FIG 2



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Description

[0001] The present invention relates to a piece of furniture of the type which can be used close to walls.

[0002] In particular, the present invention relates to a piece of furniture which can be placed in a corner formed between two adjacent walls.

[0003] Pieces of furniture of this kind must adapt perfectly to the corner between the two walls, that is to say, they must precisely follow the corner, since for obvious reasons pieces of furniture adjacent to a wall which leave an unused and unusable space between the piece of furniture and the other wall are not acceptable.

[0004] In the prior art this type of furniture is normally made to measure, that is to say, each piece is unique, often in cases in which, due to special construction requirements or more simply production errors, the two walls do not form a right angle between them.

[0005] However, a made to measure piece of furniture is, by definition, only suitable for a single, predetermined specification, that is to say, it can only be placed in a predetermined corner.

[0006] The problem is even more noticeable in the case of modular furniture.

[0007] The modularity of furniture has allowed a significant reduction in the cost of furniture, since it is mass produced according to predetermined models.

[0008] The modular pieces of furniture in the prior art used close to a wall normally substantially have the shape of a parallelepiped so that two or more pieces of furniture can be placed alongside one another to form the required furniture.

[0009] Such pieces of furniture are also used when the furniture must be extended along two adjacent walls which form a right angle between them. In this case, the piece of furniture in the corner allows other pieces of furniture to be placed alongside both walls, avoiding unwanted gaps in the furniture.

[0010] One example is a modular kitchen which extends along two walls which form a right angle between them. In this situation, the most suitable and functional furniture certainly has the pieces of furniture close to the two walls and joined without a gap to the piece of furniture in the corner.

[0011] However, the modular pieces of furniture in the prior art cannot be used between two walls forming angles other than a right angle, due to their peculiar production characteristic according to predetermined geometries.

[0012] The production of pieces of furniture suitable for use between two walls which form an angle other than a right angle therefore involves high costs, for example making it very difficult to furnish a room with two or more walls that are not perfectly perpendicular.

[0013] In this context, the main technical purpose of the present invention is to propose a piece of furniture which overcomes the above-mentioned disadvantages.

[0014] In particular, the aim of the present invention is

to provide a piece of furniture which can be adapted to adjacent walls which between them form angles that are not right angles.

[0015] Another aim of the present invention is to propose a piece of furniture which can be adapted to walls which between them form angles which may even not be right angles and to which other pieces of furniture may be joined in order to complete the furniture.

[0016] The technical purpose indicated and the aims specified are substantially achieved by a piece of furniture comprising the technical features described in one or more of the claims herein.

[0017] Further features and advantages of the present invention are described in more detail in the description below, with reference to the accompanying drawings, which illustrate a preferred embodiment of a piece of furniture without limiting the scope of the inventive concept, and in which:

- Figure 1 is a perspective view of a piece of furniture made according to the present invention with some parts cut away to better illustrate others;
- Figure 2 is a partly exploded view of the piece of furniture illustrated in Figure 1;
- Figure 3 is an enlarged view of the detail labelled III in Figure 1;
- Figure 4 is a top view of the piece of furniture illustrated in Figure 1 in a first operating configuration;
- Figure 5 is a top view of the piece of furniture illustrated in Figure 1 in a second operating configuration;
- Figure 6 is a top view of the piece of furniture illustrated in Figure 1 in a third operating configuration;
- Figure 7 is an enlarged view of the detail labelled IV in Figure 2;
- Figure 8 is an enlarged view of the detail labelled V in Figure 1;
- Figure 9 is a top view of the piece of furniture illustrated in Figure 1 with the connecting means in a first end operating position;
- Figure 10 is a cross-section of the piece of furniture illustrated in Figure 9 in a horizontal plane passing through the thickness of the upper walls of the two half-parts of the piece of furniture;
- Figure 11 is a top view of the piece of furniture illustrated in Figure 1 with the connecting means in an intermediate operating position;
- Figure 12 is a cross-section of the piece of furniture illustrated in Figure 11 in a horizontal plane passing through the thickness of the upper walls of the two half-parts of the piece of furniture;
- Figure 13 is a top view of the piece of furniture illustrated in Figure 1 with the connecting means in a second end operating position;
- Figure 14 is a cross-section of the piece of furniture illustrated in Figure 13 in a horizontal plane passing through the thickness of the upper walls of the two half-parts of the piece of furniture.

[0018] With reference to Figure 1, the numeral 1 denotes a piece of furniture made according to the present invention.

[0019] The piece of furniture 1 comprises a first half-part 2 and a second half-part 3, substantially box-shaped, joined together to form a compartment 4 which can be used to store clothing, food, or anything else.

[0020] The join between the two half-parts 2, 3 of the piece of furniture is created by connecting means 5 which operate between the two half-parts 2, 3.

[0021] The second half-part 3 can be moved relative to the first half-part 2 between a plurality of relative angles defined by a plurality of corresponding connecting means 5 operating positions. These operating positions are reached by acting on the connecting means 5.

[0022] In particular, the connecting means 5 comprise at least two pins 6, integral with the second half-part 3 of the piece of furniture 1, and at least two respective slots 7 integral with the first half-part 2 of the piece of furniture 1, in which the two pins 6 engage to join the two half-parts 2, 3 and to move the second half-part 3 between the plurality of operating positions relative to the first half-part 2.

[0023] The connecting means 5 make the second half-part 3 mobile relative to the first half-part 2 according to a predetermined law of motion which is completely defined by the angle, by the shape and position of the slots 7, as well as by the position of the pins 6.

[0024] Advantageously, the slots 7 and the pins 6 are configured, as described in more detail below, in such a way that the law governing the motion of the second half-part 3 relative to the first half-part 2 is completely defined by a rotation of the second half-part 3 about a predetermined axis R.

[0025] In this way, the second half-part 3 can be angled relative to the first half-part 2 in such a way that the piece of furniture 1 can be positioned and adapted to the walls of a room forming any angles.

[0026] In detail, the first half-part 2 comprises a first side wall 8 and a second side wall 9. The first side wall 8 and the second side wall 9 are adjacent, integrally connected and between them form a predetermined angle A (Figures 4 to 6). The first half-part 2 also comprises a bottom wall 10 extending from the lower end of the side walls 8, 9 and a top wall 11, identical to and parallel with the bottom wall 10, extending from the upper ends of the side walls 8, 9.

[0027] The second half-part 3, substantially matching the first half-part 2, comprises at least one side wall 12 which joins a bottom wall 13 and a top wall 14. The bottom wall 13 and the top wall 14 of the second half-part 3 are also identical, that is to say, perfectly stackable, and parallel with one another. Moreover, the second half-part 3 comprises a wall 15 giving access to the compartment 4, said access wall extending between the top wall 14 and the bottom wall 13 and adjacent to and integral with the side wall 12, with which it forms a predetermined angle B (Figures 4 to 6). The access wall 15 comprises a

sliding door 16 for opening and closing the entrance to the compartment 4. The access wall 15 may comprise one or more sliding doors 16. The access wall 15 may also comprise at least one fixed portion 17 relative to which the one or more sliding doors slide. In particular, when the door 16 is completely open, it overlaps and is parallel with the fixed portion 17 of the access wall 15 and distanced from the second side wall 9 of the first half-part 2, whilst when the door 16 is completely closed, it is parallel with the fixed portion 17, distanced from it and at the second side wall 9 of the first half-part 2, in particular in contact against the second side wall 9 or (much more advantageously) covering the front of the thickness of the second side wall 9 (the sliding door 16 is stopped at the second side wall 9 for example by a suitable limit switch or brake located on the slideway of the sliding door 16).

[0028] By using a sliding door 16 the entrance to the compartment 4 can easily be closed without leaving any gaps, however small they may be, between the sliding door 16 and the second side wall 9, irrespective of the relative angle between the first half-part 2 and the second half-part 3 (a result which is extremely complicated to achieve using hinged wings or doors).

[0029] As illustrated in Figure 2, the two half-parts 2, 3 preferably have respective openings 18, 19 which are opposite one another after the two half-parts 2, 3 have been joined, to allow the formation of a single compartment 4.

[0030] In particular, the opening 18 in the first half-part 2 is delimited by a lower edge 20 which is part of the bottom wall 10, an upper edge 21 which is part of the top wall 11 and two side edges 22, 23 which are respectively part of the first side wall 8 and the second side wall 9.

[0031] Similarly, the opening 19 in the second half-part 3 is formed by a lower edge 24 which is part of the bottom wall 13, an upper edge 25 which is part of the top wall 14 and two side edges 26, 27 which are respectively part of the side wall 12 and the access wall 15.

[0032] Advantageously, to guarantee that in each relative angle between the two half-parts 2, 3 the compartment 4 is equally usable, that is to say, that the piece of furniture 1 can be used in each operating configuration, the piece of furniture 1 comprises means 28 linking and adapting the compartment 4 to the plurality of operating positions.

[0033] These linking and adapting means 28, operating between the two half-part 2, 3, comprise a first joint 29 extending parallel with and away from the bottom wall 10 and integral with the bottom wall 10 at least at one portion of the lower edge 20 of the opening 18 in the first half-part 2. The first joint 29 slidably engages the bottom wall 13 of the second half-part 3 at least at one portion of the lower edge 24 of the opening 19.

[0034] More specifically, as illustrated in Figure 7, the first joint 29 consists of a bar 30 having a first seat 31 and a second seat 32 separated by a partition 33. In other words, the bar 30 has a "H"-shaped cross-section. The

first seat 31 firmly and irremovably engages with the portion of the lower edge 20 of the opening 18 in the first half-part 2, whilst the second seat 32 forms a slideway for the portion of the lower edge 24 of the opening 19 in the second half-part 3.

[0035] Advantageously, as illustrated in Figures 1 and 2, the first joint 29 extends along the entire lower edge 20, 24 of the openings 18, 19 in the two half-parts 2, 3, in such a way that whatever the position assumed by the second half-part 3 relative to the first half-part 2, the lower edge 24 of the opening 19 in the second half-part 3 always remains hidden from view by the first joint 29 in each of the positions which constitute the plurality of operating positions. In particular, in the specific embodiment illustrated in Figures 1, 2, 7, the lower edge 24 of the opening 19 in the second half-part 3 always remains contained in the second seat 32 of the bar 30.

[0036] This guarantees the continuity of the bottom surface, understood to be the sum of the bottom walls 10, 13 of the two half-parts 2, 3 of the compartment 4.

[0037] Advantageously, to also guarantee continuity of the top surface, understood to be the sum of the top walls 11, 14 of the two half-parts 2, 3 of the compartment 4, the linking and adapting means 28 also operate between the top walls 11, 14 of the two half-parts 2, 3.

[0038] Similarly to what is described above for the first joint 29 and as illustrated particularly in Figure 3, the linking and adapting means 28 comprise a second joint 29a, integral with at least one portion of the upper edge 21 of the opening 18 in the first half-part 2, extending parallel with and away from the top wall 11. The second joint 29a slidably engages with at least one portion of the upper edge 25 of the opening 19 in the second half-part 3.

[0039] In particular, the second joint 29a also consists of a bar 30a having a first seat 31a and a second seat 32a separated by a partition 33a. The first seat 31a firmly and irremovably engages with at least one portion of the upper edge 21 of the opening 18 in the first half-part 2, whilst the second seat 32a forms a slideway for at least one portion of the upper edge 25 of the opening 19 in the second half-part 3.

[0040] As illustrated in Figure 2, the portions of the upper edges 21, 25 of the openings 18, 19 engaged by the second joint 29a also preferably extend along the entire respective upper edge 21, 25, in such a way that whatever the position assumed by the second half-part 3 relative to the first half-part 2, the upper edge 25 of the opening 19 in the second half-part 3 always remains hidden from view by the second joint 29a in each of the positions constituting the plurality of operating positions. In particular, in the specific embodiment illustrated in Figures 1, 2, 3, the upper edge 25 of the opening 19 in the second half-part 3 always remains contained in the second seat 32a of the bar 30a.

[0041] Advantageously, to allow use of the whole compartment 4, the linking and adapting means 28 also operate between the first side wall 8 of the first half-part 2 and the side wall 12 of the second half-part 3. The walls

8, 12 are adjacent but not integral and, following rotation of the second half-part 3 relative to the first half-part 2, the first side wall 8 of the first half-part 2 and the side wall 12 of the second half-part 3 move away from or towards one another forming, depending on the relative angle of the half-parts 2, 3, different relative angles C (see, amongst others, in particular Figures 4, 5, 6). To link the first side wall 8 of the first half-part 2 and the side wall 12 of the second half-part 3, the linking and adapting means 28 comprise a hinge 34 integral with the first side wall 8 extending along the entire side edge 22 of the opening 18 in the first half-part 2 and having an axis of rotation X parallel with the side edge 22. The hinge 34 is also integral with a third joint 35 substantially having the shape of a bar 36 with a "C"-shaped cross-section extending along the entire length of the hinge 34.

[0042] The third joint 35 slidably engages with the side wall 12 of the second half-part 3 at the side edge 26 of the opening 19 in the second half-part 3, accompanying the side wall 12 in its rotation relative to the axis of rotation R.

[0043] As already indicated, rotation of the second half-part 3 relative to the first half-part 2 is guaranteed by the shape and positioning of the slots 7 engaged by the pins 6.

[0044] In particular, said rotation is advantageously guaranteed by the fact that the slots 7 have the shape of a circular arc, angled in such a way that during the relative movement between the first half-part 2 and the second half-part 3 the pins 6 engaged describe circular arcs belonging to circles J which all have the same centre P (see, in particular, Figures 4, 5, 6).

[0045] The centre P is part of the axis of rotation R of the second half-part 3 relative to the first half-part 2 and the axis of rotation R coincides with the intersection of the first side wall 8 with the second side wall 9 of the first half-part 2.

[0046] Advantageously, the slots 7 and the pins 6 are located on the top walls 11, 14 of the two half-parts 2, 3. In particular, the top wall 11 of the first half-part 2 comprises at least two slots 7 and the top wall 14 of the second half-part 3 comprises at least two pins 6 which engage in the slots 7. There is preferably a plurality of pins 6 in the second half-part 3, engaged in as many slots 7 in the first half-part 2.

[0047] In the preferred embodiment, the slots 7 are made directly in the second joint 29a. There may also be slots 7 and pins 6 in the bottom walls 10, 13 of the two half-parts 2, 3 either simultaneously with or alternatively to the presence of slots 7 and pins 6 in the upper part of the piece of furniture 1. These additional slots 7 in the lower part of the piece of furniture 1 are preferably made directly in the first joint 29.

[0048] It should be noticed that the size of the circular arcs formed by the slots 7 determines the extent of the rotation of the second half-part 3 relative to the first half-part 2.

[0049] Therefore, according to the embodiments,

there may be more or less extended slots 7, that is to say, forming more or less large circular arcs. In the preferred embodiment, illustrated in the accompanying drawings, it was found that the optimum size of the circular arcs is between an overall angle of 4° around 90° , that is to say, the optimum size of the circular arcs varies between 2° and $+2^\circ$ relative to 90° . In this way, a variation between 88° and 92° is possible both for the angle C between the first side wall 8 of the first half-part 2 and the side wall 12 of the second half-part 3, and for the angle D formed by the access wall 15 of the second half-part 3 and the second side wall 9 of the first half-part 2 (the latter angle D is illustrated in particular in Figures 4, 5, 6). This size guarantees the best compromise between adaptability of the piece of furniture 1 to the angle formed between two walls and the compartment 4 capacity for adapting.

[0050] Circular arcs with a size in the range specified guarantee reciprocal engagement between the first joint 29 and the bottom wall 13 of the second half-part 3, as well as between the second joint 29a and the top wall 14 of the second half-part 3 in any relative angle allowed between the first half-part 2 and the second half-part 3.

[0051] Moreover, the shape and size of the slots 7, together with the linking and adapting means 28, create continuous contact between the first half-part 2 and the second half-part 3 at the portion of the piece of furniture 1 where the access wall 15 of the second half-part 3 and the second side wall 12 of the first half-part 2 are adjacent to one another. In particular, at this portion of the piece of furniture 1, the top walls 11, 14 and the bottom walls 10, 13 of the two half-parts 2, 3 are linked by the first joint 29 and the second joint 29a, whilst the access wall 15 of the second half-part 3 and the second side wall 9 of the first half-part 2 are linked to one another by the sliding door 16.

[0052] In the preferred embodiment the bottom walls 10, 13 and the top walls 11, 14 of both half-parts 2, 3 have a substantially triangular shape. In this case the linking and adapting means 28 advantageously operate on the hypotenuses of the triangles forming the bottom walls 10, 13 and the top walls 11, 14 of both half-parts 2, 3, the hypotenuses of the triangles forming the bottom wall 13 and the top wall 14 of the second half-part 3 and of the triangles forming the bottom wall 10 and the top wall 11 of the first half-part 2 being completely hidden from view by the linking and adapting means 28 in each of the plurality of operating positions of the connecting means 5. These conditions are illustrated in Figures 4 to 6 and in Figures 9 to 14.

[0053] The hypotenuses of these triangles respectively form the lower edges 20, 24 and the upper edges 21, 25 of the openings 18, 19 in the two half-parts 2, 3.

[0054] Advantageously, the second side wall 9 of the first half-part 2 and the side wall 12 of the second half-part 3 are substantially identical and therefore have the same dimensions, whilst the first side wall 8 of the first half-part 2 and the access wall 15 do not have the same

dimensions.

[0055] In particular, the access wall 15 is shorter than the first side wall 8.

[0056] This characteristic allows the second half-part 3 to rotate about the axis R both clockwise and anti-clockwise, that is to say, it allows the angle C formed between the first side wall 8 of the first half-part 2 and the side wall 12 of the second half-part 3 to assume sizes given by obtuse or acute angles.

[0057] Similarly, the size of the angle D formed between the access wall 15 of the second half-part 3 and the second side wall 9 of the first half-part 2 may also assume values forming obtuse or acute angles, as illustrated in Figures 4 to 6.

[0058] Moreover, advantageously, to further improve the characteristic which allows the two half-parts 2, 3 to rotate relative to one another about the axis R, the invention has the following features.

[0059] In particular, as illustrated in Figure 2 and in Figures 9 to 14, the hypotenuses of the triangles forming the top wall 14 and the bottom wall 13 of the second half-part 3 change direction at least at an intermediate point Q, Q' (the intermediate point Q' of the hypotenuse of the triangle forming the bottom wall 13 of the second half-part 3 is only illustrated in Figure 1, since Figures 9 to 14 only illustrate the upper part of the piece of furniture, but the reasoning relative to Figures 9 to 14 may also similarly and identically be extended to the lower part of the piece of furniture). Thus, the shape of the top wall 14 and of the bottom wall 13 of the second half-part 3 is transformed into that of a quadrilateral.

[0060] The quadrilateral may have an edge at the intermediate point Q, Q' which may be sharp or rounded (the perimeter portion at the intermediate point Q, Q' being rounded in this case).

[0061] Advantageously, in all of the plurality of operating positions of the connecting means 5 the hypotenuse of the triangle forming the top wall 14 of the second half-part 3 is always in contact with the hypotenuse of the triangle forming the top wall 11 of the first half-part 2 at least at the intermediate point Q of the hypotenuse of the triangle forming the top wall 14 of the second half-part 3, whilst the hypotenuse of the triangle forming the bottom wall 13 of the second half-part 3 is always in contact with the hypotenuse of the triangle forming the bottom wall 10 of the first half-part 2 at least at the intermediate point Q' of the hypotenuse of the triangle forming the bottom wall 13 of the second half-part 3.

[0062] Figures 9 to 14 illustrate the relative rotation of the two half-parts 2, 3 obtained with the latter characteristic, from a first end position (Figures 9 and 10) to a second end position (Figures 13 and 14), passing through intermediate positions, examples of which are illustrated in Figures 11 and 12.

[0063] The predetermined angle B between the first side wall 8 and the second side wall 9 is 90° , like the angle B between the side wall 12 and the access wall 15.

[0064] As described, to put the piece of furniture 1 into

use, that is to say, to adapt it so that it adheres to two walls which between them form any angle, the connecting means 5 have to be used. Said means operate on the angle between the two half-parts 2, 3, more specifically on the angle C formed between the first side wall 8 of the first half-part 2 and the side wall 12 of the second half-part 3.

[0065] Naturally, changing the above-mentioned angle C consequently results in a change in the angle and the distance between the upper edges 21, 25 and the lower edges 20, 24 of the openings 18, 19 in the two half-parts 2, 3 and, therefore, also in the angle D formed between the access wall 15 of the second half-part 3 and the second side wall 9 of the first half-part 2 (see Figures 4 to 6).

[0066] The shape and positioning of the slots 7 and the pins 6 which constitute the connecting means 5, or the positioning of the axis of rotation R between the first half-part 2 and the second half-part 3 at the angle A formed by the first side wall 8 and the second side wall 9 of the first half-part 2, guarantees that the angle D formed between the access wall 15 and the second side wall 9 assumes a size that, when added to the size of the angle C formed between the first wall 8 of the first half-part 2 and the side wall 12 of the second half-part 3, is exactly 180°.

[0067] Once the piece of furniture 1 has been adapted to the angle formed between the two walls by moving the connecting means 5, the latter can simply be locked in the position reached, to prevent any further change in the angle between the first half-part 2 and the second half-part 3. This locking is achieved using locking means, for example screws, of the known type and not illustrated, which, in a preferred embodiment, render the bar 36 with the "C"-shaped cross-section and the side wall 12 of the second half-part 3 integral with one another. These screws preferably engage with the above-mentioned two parts of the piece of furniture 1 from inside to outside, that is to say, the heads of the screws remain in contact with the side wall 12 of the second half-part 3 on the compartment 4 side.

[0068] It should be noticed that the access wall 15 operates with the connecting means 5 in any operating position.

[0069] The sliding door 16 allows the access wall 15 to be closed and opened since, even if the distance between the side wall 12 of the second half-part 3 and the second side wall 9 of the first half-part 2 varies according to the operating position reached by the connecting means 5, the sliding door 16 can be moved relative to the fixed portion 17 of the access wall 15 by the distance necessary to reach the second side wall 9 of the first half-part 2 (in particular in contact with the second side wall 9 of the first half-part 2, or, as already indicated, covering the front of the thickness of the second side wall 9 of the first half-part 2 and, therefore, completely covering the opening in the access wall 15. In the same way, a plate 37a may be used for masking in the portion of the piece

of furniture in which, at the bar 30a used to make the second joint 29a, the top wall 14 of the second half-part 3 and the second side wall 9 of the first half-part 2 are joined. In particular, once the piece of furniture has been adapted to the angle formed between the two walls close to which it will be placed or to which it will be fixed, the plate 37a can be fixed to the top wall 14 of the second half-part 3 on the access wall 15 side so that it is detached from the side wall 12 of the second half-part 3 and at the second side wall 9 of the first half-part 2 (in particular, either in contact with the second side wall 9 of the first half-part 2, or, preferably, covering the front of the thickness of the second side wall 9 of the first half-part 2). These details are illustrated in Figures 1, 2 and 8. A similar plate 37 may also be placed in the portion of the piece of furniture in which, at the bar 30 forming the first joint 29, the bottom wall 13 of the second half-part 3 and the second side wall 9 of the first half-part 2 are joined (see Figure 2).

[0070] More specifically, in the configuration in which the distance between the side wall 12 of the second half-part 3 and the second side wall 9 of the first half-part 2 is minimal, the sliding door 16 in the closed condition has a portion overlapping the fixed portion 17 of the access wall 15 and the opening in the latter is covered by the remaining portion of the sliding door 16, whilst in the configuration in which said distance is at its maximum, the sliding door 16 in the closed condition is completely inside the opening in the access wall 15.

[0071] The present invention fulfils the preset aims.

[0072] The connecting means, operating on the two half-parts constituting the piece of furniture 1 and angling them between a plurality of operating positions, allow the piece of furniture to be adapted to any angle formed between two walls in a room.

[0073] Moreover, the 90° angles used in the piece of furniture allow other pieces of furniture to be placed alongside the piece of furniture disclosed to complete the furniture.

[0074] The invention also brings important advantages.

[0075] The compartment created by joining the two half-parts allows the piece of furniture 1 to be used not just as an element for joining other pieces of furniture, but also as a container.

[0076] Moreover, the sliding door, able to close the wall that gives access to the inside of the piece of furniture with the connecting means in any configuration, allows the compartment to be used with the piece of furniture in any operating configuration.

Claims

1. A piece of furniture comprising a first half-part (2) and a second half-part (3) which are substantially box-shaped, connecting means (5) operating between the first half-part (2) and the second half-part

- (3) at least to join the first half-part (2) and the second half-part (3) and form a compartment (4); **characterised in that** the second half-part (3) can be moved relative to the first half-part (2) between a plurality of angles forming a plurality of operating positions of the connecting means (5) to adapt the piece of furniture to any angle formed between two walls.
2. The piece of furniture according to claim 1, further comprising means (28) for linking and adapting the compartment (4) to the plurality of active operating positions between the first half-part (2) and the second half-part (3).
 3. The piece of furniture according to claim 1 or 2, wherein the connecting means (5) comprise at least two pins (6) integral with the second half-part (3) and at least two slots (7) integral with the first half-part (2); the pins (6) slidably engaging in the slots (7) to join the two half-parts (2, 3) and to move the second half-part (3) between the plurality of operating positions relative to the first half-part (2).
 4. The piece of furniture according to claim 3, wherein the first half-part (2) comprises a first side wall (8) and a second side wall (9) which are adjacent and integral with one another, a top wall (11) and a bottom wall (10); the second half-part (3) comprising at least one side wall (12), a top wall (14) and a bottom wall (13); the slots (7) being integral with the top wall (11) of the first half-part (2) and the pins (7) being integral with the top wall (14) of the second half-part (3).
 5. The piece of furniture according to claim 3, wherein the first half-part (2) comprises a first side wall (8) and a second side wall (9) which are adjacent and integral with one another, a top wall (11) and a bottom wall (10); the second half-part (3) comprising at least one side wall (12), a top wall (14) and a bottom wall (13); the slots (7) being integral with the bottom wall (10) of the first half-part (2) and the pins (7) being integral with the bottom wall (13) of the second half-part (3).
 6. The piece of furniture according to claim 5, wherein the connecting means (5) further comprise at least another two pins (6) integral with the top wall (14) of the second half-part (3) and at least another two slots (7) integral with the top wall (11) of the second half-part (2).
 7. The piece of furniture according to any of the claims from 4 to 6, wherein the slots (7) have the shape of a circular arc so that, together with the pins (6), they allow the second half-part (3) to move relative to the first half-part (2) according to a law of motion completely defined by a rotation about an axis of rotation (R).
 8. The piece of furniture according to any of the claims from 4 to 7 when they are dependent on claim 2, wherein the compartment (4) linking and adapting means (28) operate at least between the bottom walls (10, 13) of the two half-parts (2, 3) and comprise a first joint (29) extending from the bottom wall (10) of the first half-part (2) parallel with and away from it, and slidably engaging with at least one portion of the bottom wall (13) of the second half-part (3).
 9. The piece of furniture according to claim 8, wherein the first and the second half-parts (2, 3) have respective openings (18, 19) which are opposite one another when the two half-parts (2, 3) are joined, forming a single compartment (4), the first joint (29) completely hiding from view the entire lower edge (20, 24) of the openings (18, 19) in the two half-parts (2, 3) in each of the plurality of operating positions of the connecting means (5).
 10. The piece of furniture according to any of the claims from 4 to 9 when they are dependent on claim 2, wherein the linking and adapting means (28) operate at least between the top walls (11, 14) of the two half-parts (2, 3) and comprise a second joint (29a) extending from the top wall (11) of the first half-part (2) parallel with and away from it, and slidably engaging with at least one portion of the top wall (14) of the second half-part (3).
 11. The piece of furniture according to claim 10, wherein the first and the second half-parts (2, 3) have respective openings (18, 19) which are opposite one another when the two half-parts (2, 3) are joined, forming a single compartment (4), the second joint (29a) completely hiding from view the entire upper edge (21, 25) of the openings (18, 19) in the two half-parts (2, 3) in each of the plurality of operating positions of the connecting means (5).
 12. The piece of furniture according to any of the claims from 4 to 11 when they are dependent on claim 2, wherein the linking and adapting means (28) also operate between the side wall (12) of the second half-part (3) and the first side wall (8) of the first half-part (2) and comprise a hinge (34) which is integral with the first side wall (8) and a third joint (35) slidably engaging with the side wall (12) of the second half-part (3); the second joint (35) being integral with the hinge (34).
 13. The piece of furniture according to any of the claims from 4 to 12 when they are dependent on claim 2, wherein the top walls (11, 14) and the bottom walls (10, 13) of the two half-parts (2, 3) are substantially triangular; the linking and adapting means (28) operating on the hypotenuses of the triangles, the hypotenuses of the triangles of the bottom wall (13)

and the top wall (14) of the second half-part (3) and the hypotenuses of the triangles of the bottom wall (10) and the top wall (11) of the first half-part (2) being completely hidden from view by the linking and adapting means (28) in each of the plurality of operating positions of the connecting means (5).

14. The piece of furniture according to claim 13, wherein the second half-part (3) comprises an access wall (15) for accessing the compartment (4) and wherein the second side wall (9) of the first half-part (2) and the side wall (12) of the second half-part (3) are substantially identical and have the same dimensions, whilst the access wall (15) of the second half-part (3) is shorter than the first side wall (8) of the first half-part (2).
15. The piece of furniture according to claim 13 or 14, wherein the hypotenuses of the triangles forming the top wall (14) and the bottom wall (13) of the second half-part (3) change direction at least at an intermediate point (Q, Q'), the shape of the top wall (14) and of the bottom wall (13) of the second half-part (3) thus transforming itself into a quadrilateral.
16. The piece of furniture according to claim 15, wherein the quadrilateral has a perimeter portion which is rounded at the intermediate point (Q, Q').
17. The piece of furniture according to claim 15 or 16, wherein, in all of the plurality of operating positions of the connecting means (5), the hypotenuse of the triangle forming the top wall (14) of the second half-part (3) is always in contact with the hypotenuse of the triangle forming the top wall (11) of the first half-part (2) at least at the intermediate point (Q) of the hypotenuse of the triangle forming the top wall (14) of the second half-part (3), whilst the hypotenuse of the triangle forming the bottom wall (13) of the second half-part (3) is always in contact with the hypotenuse of the triangle forming the bottom wall (10) of the first half-part (2) at least at the intermediate point (Q') of the hypotenuse of the triangle forming the bottom wall (13) of the second half-part (3).
18. The piece of furniture according to any of the claims from 4 to 17, wherein the second half-part (3) comprises an access wall (15) for the compartment (4), said wall being adjacent to and integral with the side wall (12); the access wall (15) for the compartment (4) comprising a sliding door (16).
19. The piece of furniture according to claim 20, wherein the sliding door (16) can be moved between a condition in which it is at the second side wall (9) of the first half-part (2), blocking access to the compartment (4) and a condition in which it is distanced from the second side wall (9) of the first half-part (2), al-

lowing access to the compartment (4).

20. The piece of furniture according to any of the claims from 4 to 19, wherein the first side wall (8) and the second side wall (9) of the first half-part (2) between them form an angle (A) of 90 degrees.
21. The piece of furniture according to claim 18 or 19 or 20, wherein the side wall (12) and the access wall (15) of the second half-part (3) between them form an angle (B) of 90 degrees.

FIG 1

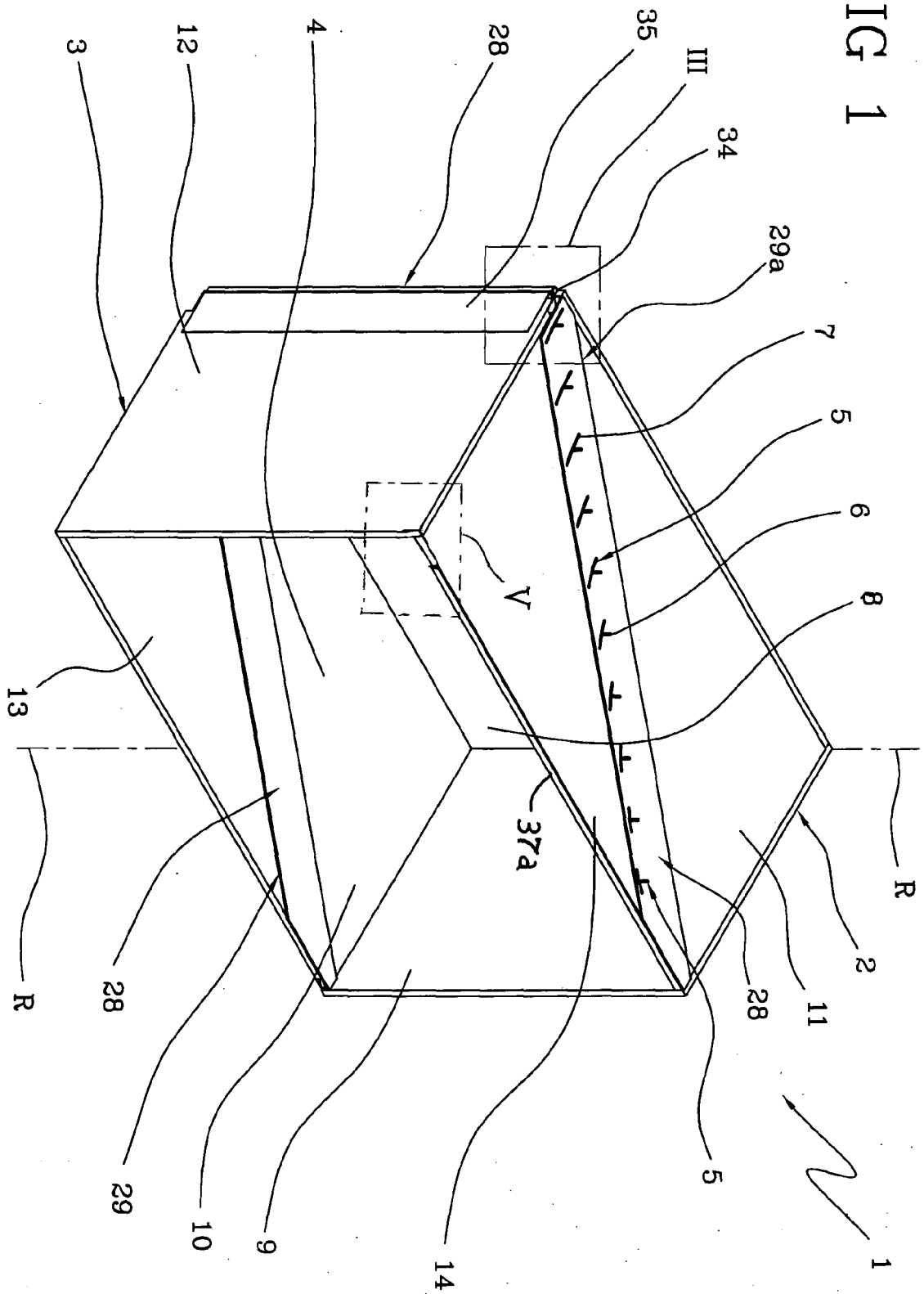


FIG 2

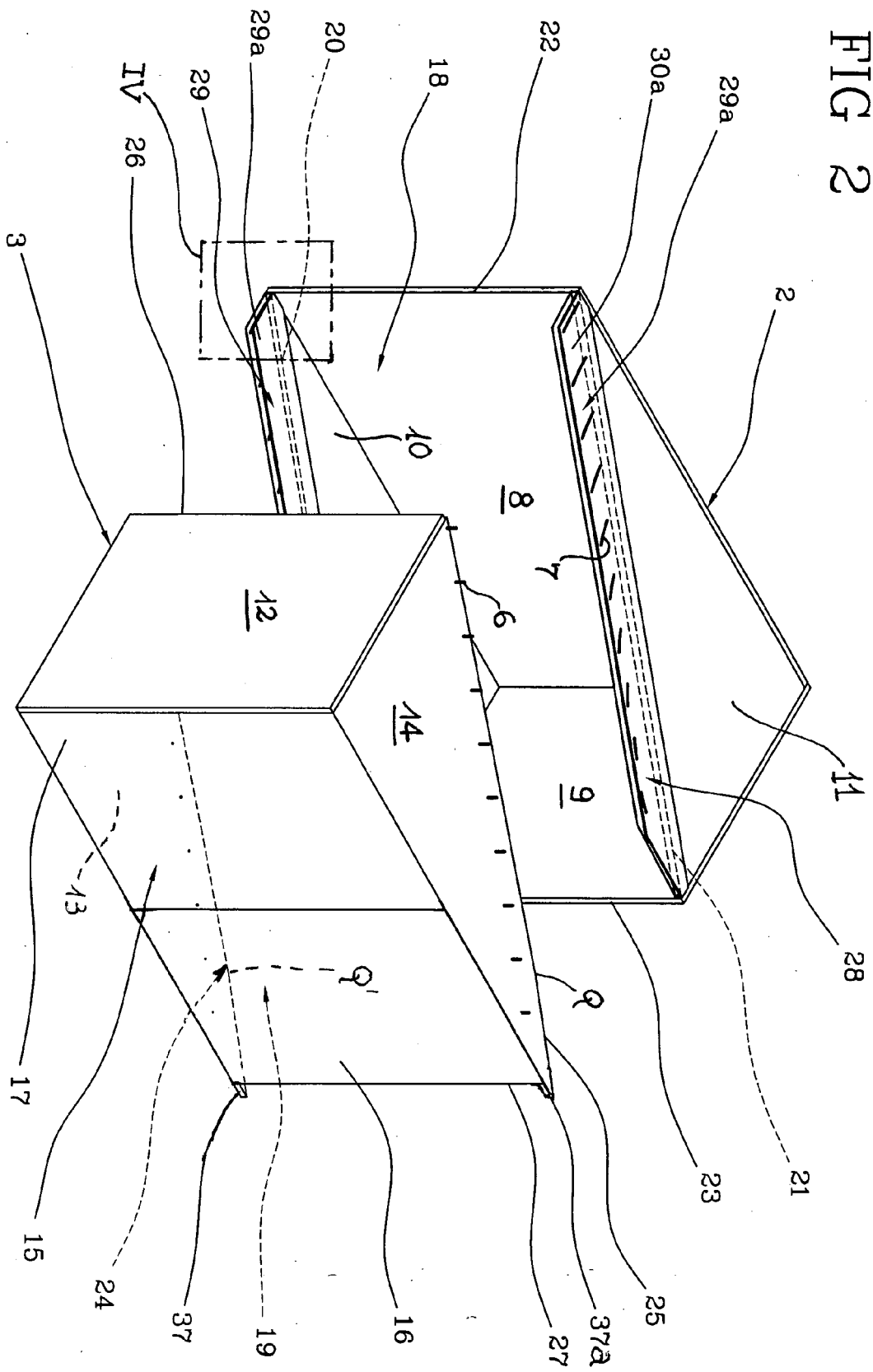


FIG 3

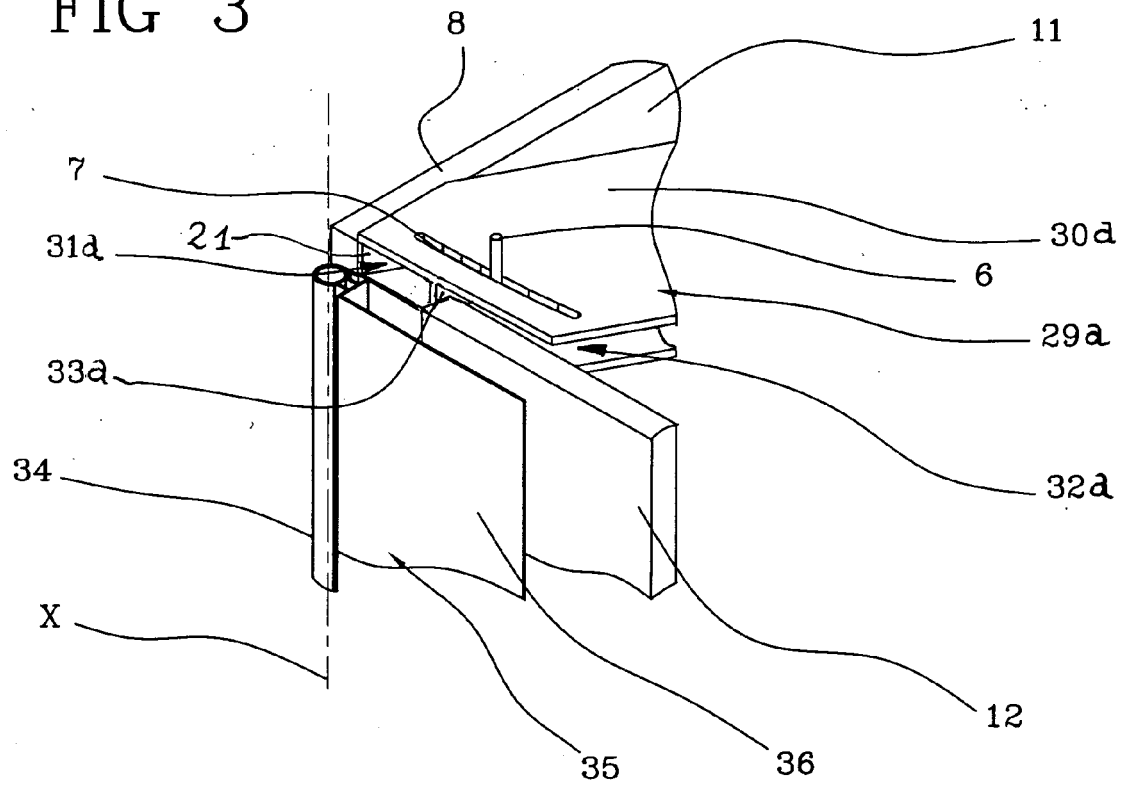


FIG 4

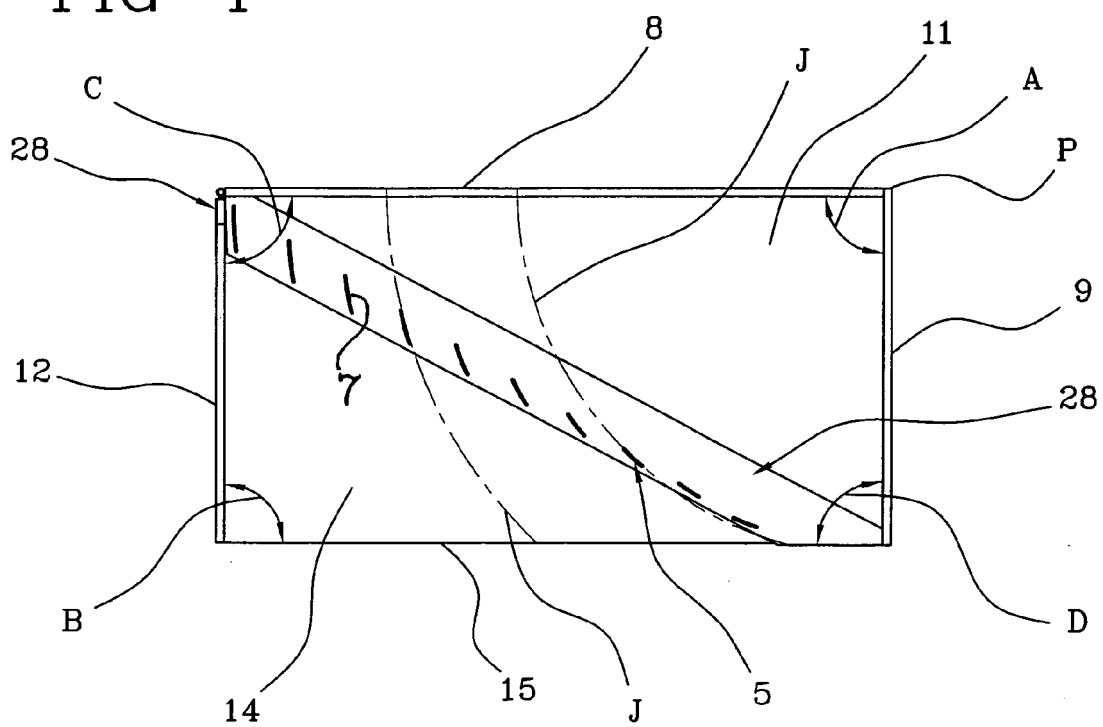


FIG 5

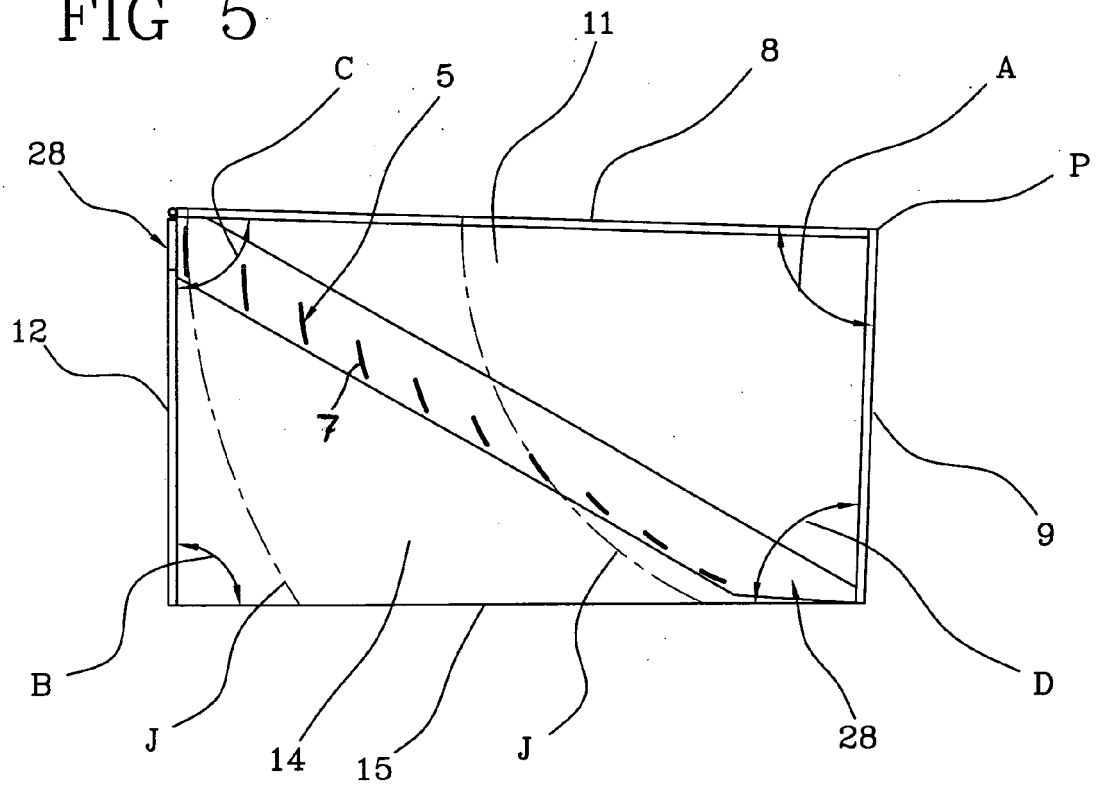
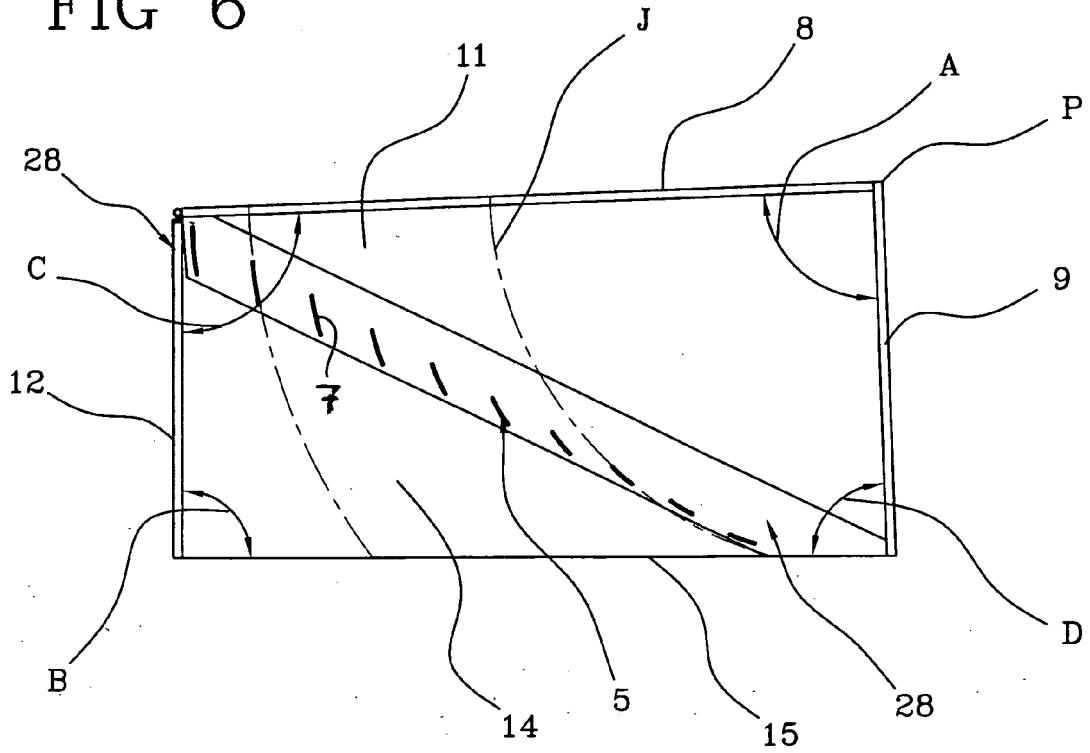
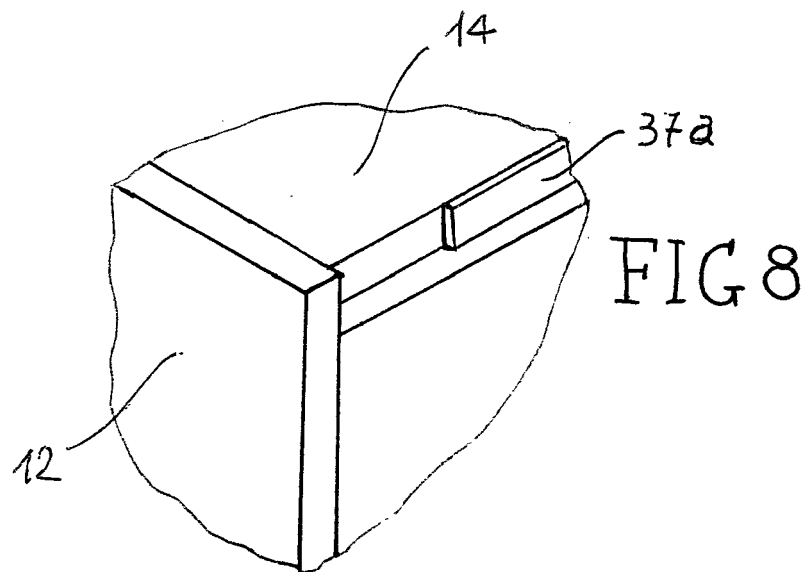
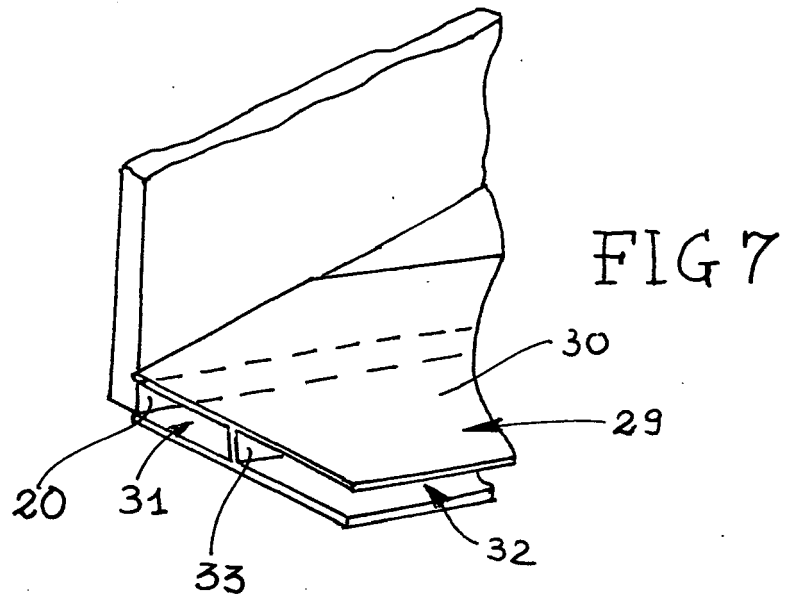
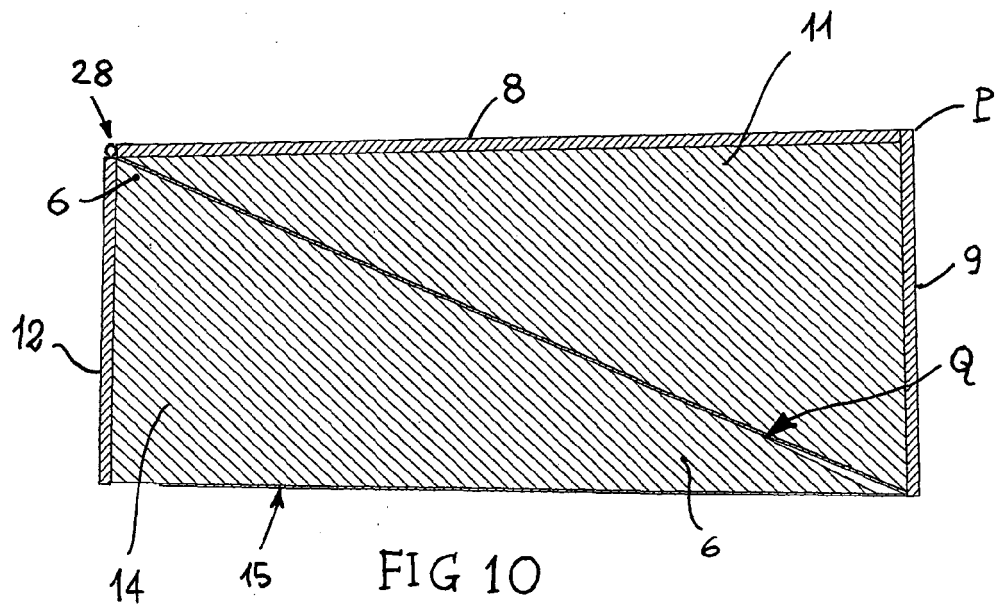
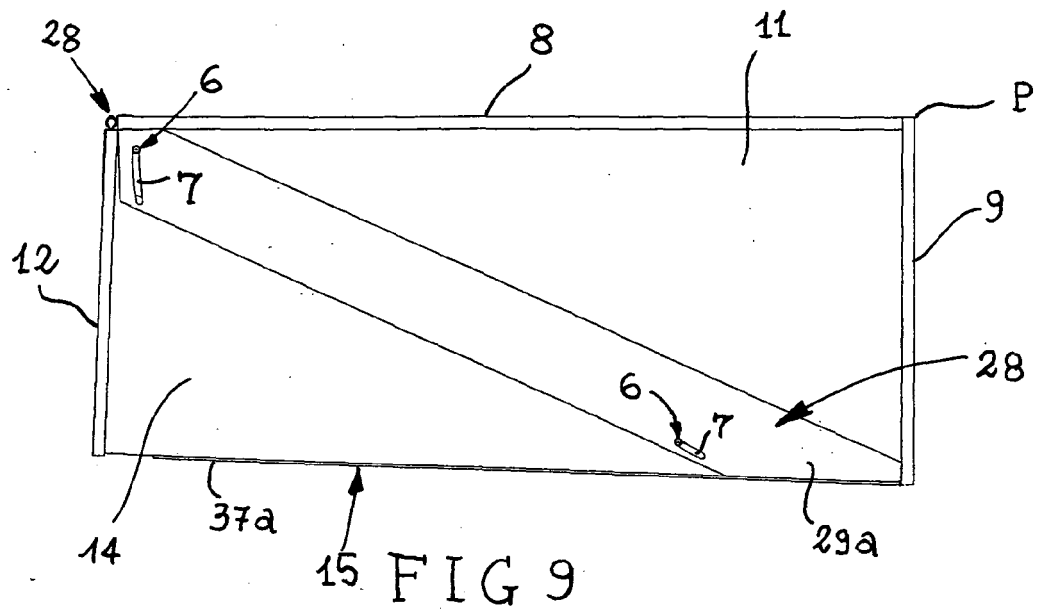
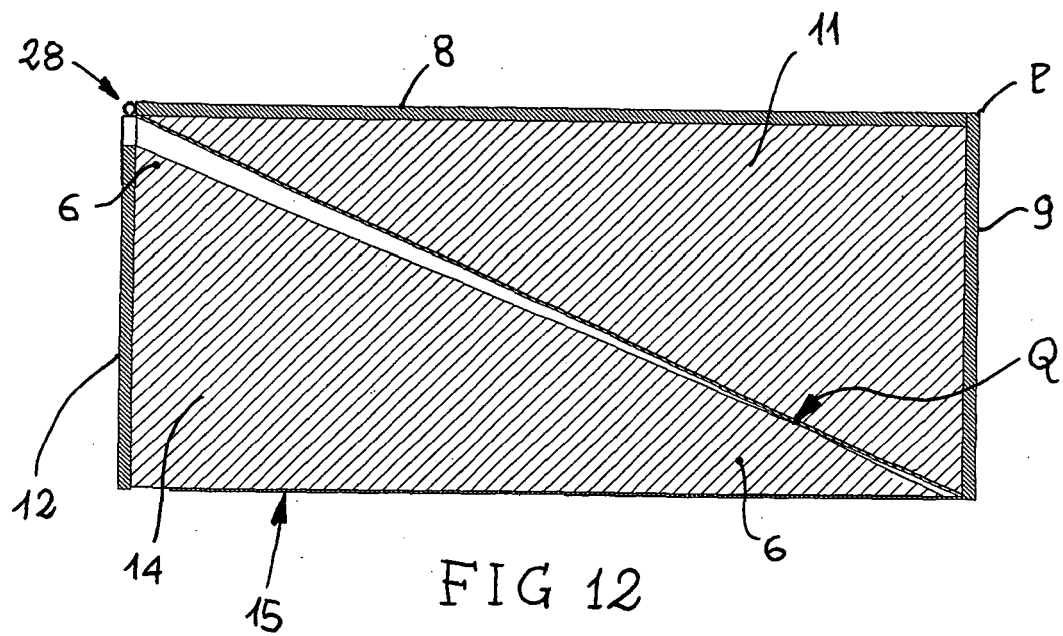
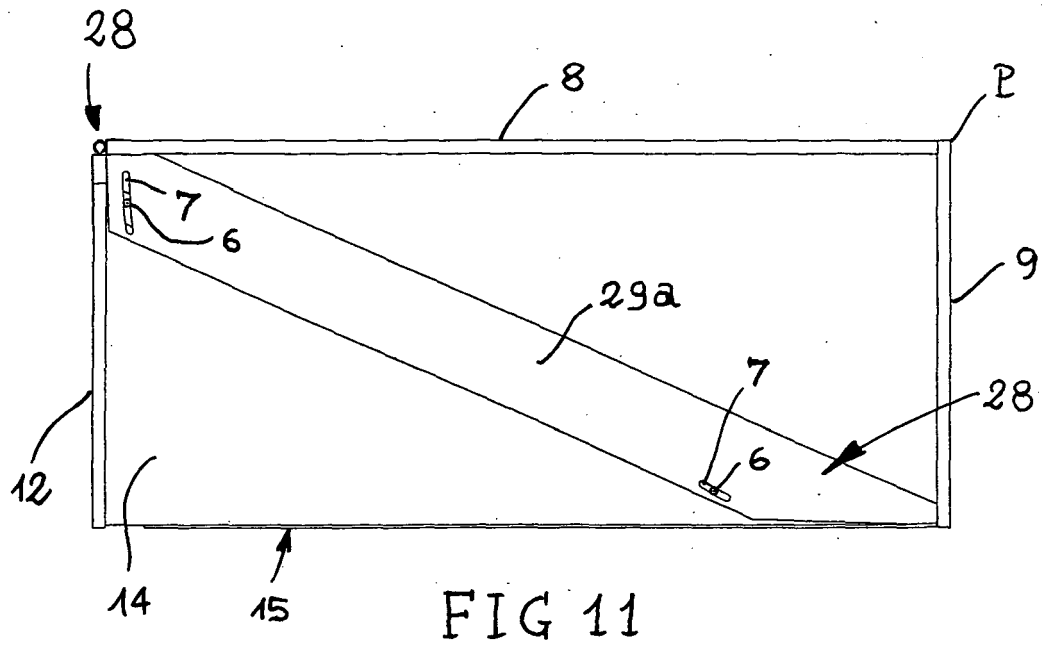


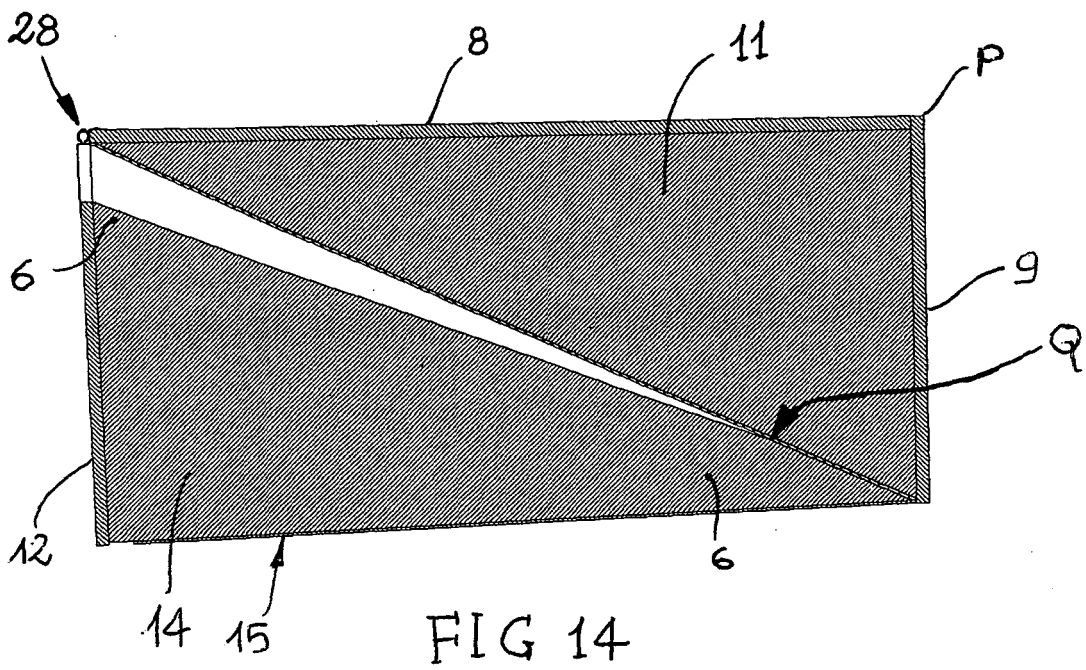
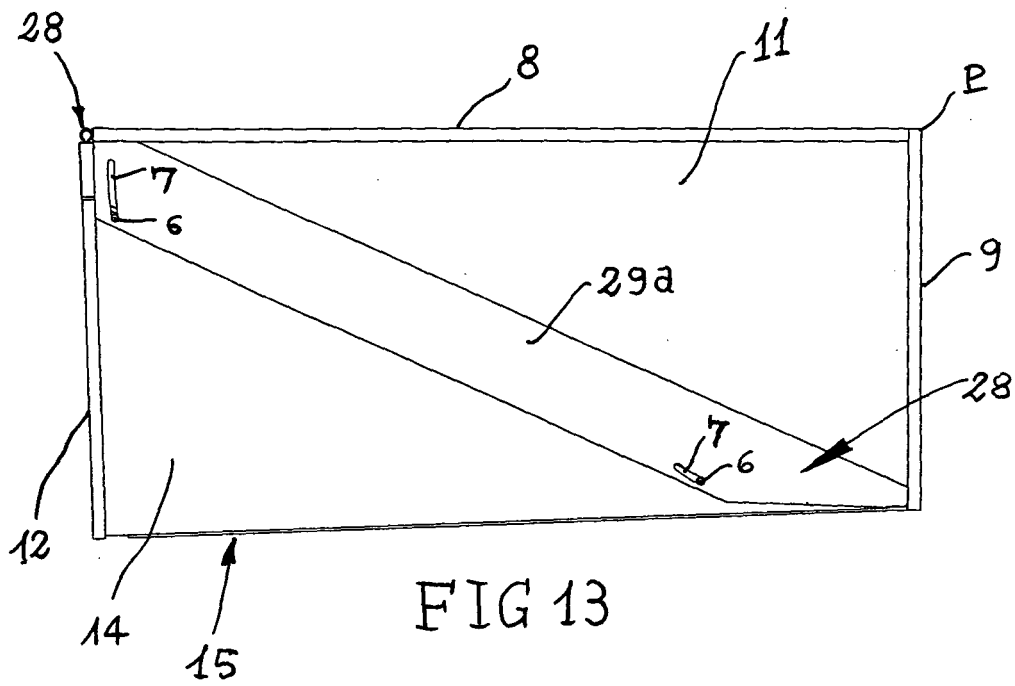
FIG 6













European Patent
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EUROPEAN SEARCH REPORT

Application Number
EP 04 42 5789

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	EP 0 722 679 A (MARTINEZ ESCRIBANO, FABIAN; MARTINEZ GARCIA, FABIAN ALEJO; MARTINEZ GA) 24 July 1996 (1996-07-24) * column 1, line 1 - line 50 * * column 3, line 11 - line 26 * * figures 1-6 * -----	1-3	A47B81/00
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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 21 March 2005	Examiner van Hoogstraten, S
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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21-03-2005

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