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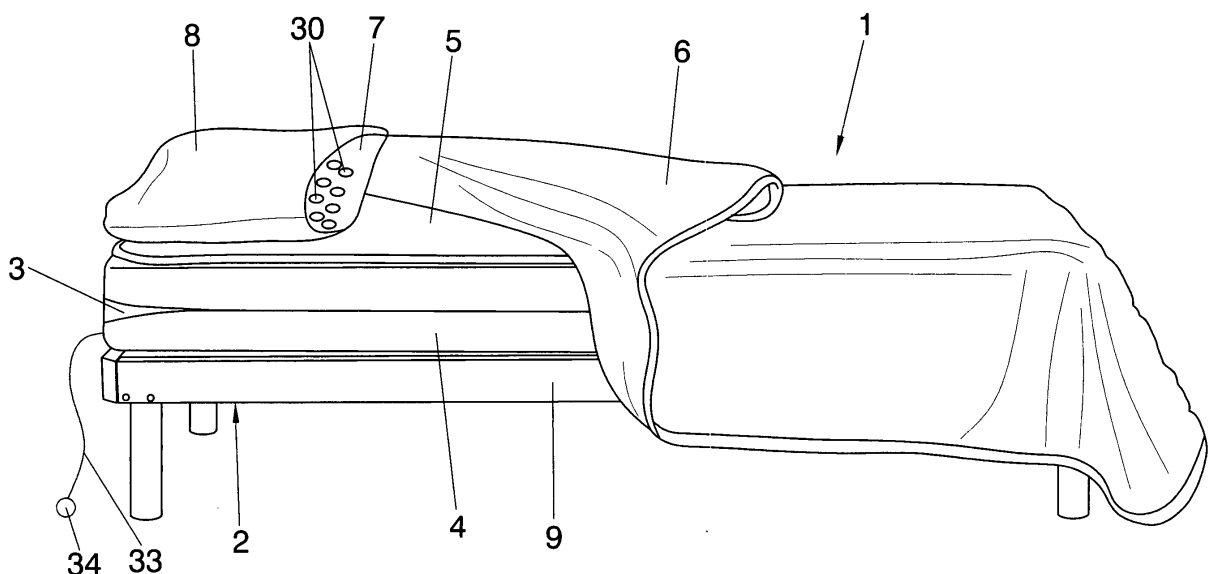
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(54) **THERAPEUTIC REST BED**

(57) Therapeutic rest bed, which comprises a bed base (2) of which the beechwood slats (12) are connected to the frame in movable groups of two or three slats, depending on the areas of the body to which they correspond, by means of pivot pieces (13), shock-absorbing supports (17), height-adjustable supports (22) and arm

rests (29), a mattress (3) made from 100% natural latex with holes (30) and a sheet (31) of coconut fibre, a mattress cover (4) with an organic-carbon mesh (32) connected to a wire (33) acting as earth, a mattress topper (5) that has another organic-carbon mesh (35), a blanket (6) with a merino-wool cover (8) with a heat-regulating effect, and a pillow (7) also made from 100% natural latex.



**FIG. 1**

## Description

### Object of the Invention

**[0001]** The invention relates, as expressed by the title of the present specification, to a therapeutic rest bed.

**[0002]** More specifically, the object of the present invention consists of a bed comprising a bed base, a mattress, a mattress topper, a mattress cover, a blanket, a pillow and a pillow cover, forming an assembly for rest which, completely manufactured with certain 100% natural materials and provided with certain innovative elements, such as a bed base of slats adaptable to the specific weight of each part of the body and a latex mattress with different densities depending on the area, incorporates an organic-carbon mesh and an earth connection, providing beneficial effects on sleep and on the physiological and cell regulation mechanisms, since in addition to reducing excess pressure at certain points and facilitating a correct posture, it protects the user from certain electromagnetic fields and furthermore increased the antioxidant capacity of the organism.

### Field of the Invention

**[0003]** The field of application of the present invention is that of the industry dedicated to manufacturing rest elements, specially beds, mattresses, bed bases, blankets and pillows.

### Background of the Invention

**[0004]** As is known, we spend at least one third of our life in bed, but furthermore the other two thirds are conditioned by how we sleep and rest. Furthermore, the current lifestyle and the different aggressive electromagnetic fields which we face every day seriously affect health.

**[0005]** According to recently conducted studies, investigators consider that oxidative stress, the immune system, stress and sexual hormones, as well as brain electrical activity, are altered by electromagnetic radiations. It has likewise been demonstrated that resting isolated from certain electromagnetic fields considerably improves health, the reduction in the organism of a number of free radicals being achieved upon stimulating the production of natural antioxidants.

**[0006]** On the other hand, it should be indicated that conventional beds and elements accompanying them for rest, in addition to often incorporating artificial materials in blankets, pillows or mattresses, which for example do not allow correct transpiration or which retain the moisture of the body causing a decrease of its temperature, generally comprise a bed base which, when it is made of slats, the latter are fixedly secured to the perimetral frame, which causes an considerable rigidity preventing a correct adaptation of the different parts of the body of the user.

**[0007]** It is therefore necessary to create a bed which

achieves eliminating the problem described, allowing counteracting the described negative factors of electromagnetic radiations on the organism, providing a correct rest with the suitable adaptability for each part of the body, this being one of the main objectives of the present invention, about which it should be indicated that the applicant does not know of any bed that has technical, structural and configurational features similar to those described in the present invention.

### Description of the Invention

**[0008]** Thus, the bed proposed by the invention is configured by itself as an evident novelty within its field of application since, according to its use, it is specifically configured as a true therapeutic rest element.

**[0009]** To that end, and specifically, the bed described herein which, as has been previously mentioned, forms an assembly for rest formed by a bed base, a mattress, a mattress topper, a mattress cover, a blanket, a pillow and a pillow cover, has constructive particularities aimed at improving said rest, such that it is made exclusively from natural raw materials, with the essential material minimum, each of the elements integrating it having the following specific features:

The bed base is made from articulated wood slats, the fixing to the frame of which is established by means of different support pieces, such that they are adapted to the different parts of the body according to the weight of each of them, being preferably made from beechwood, since said type of wood does not absorb negative ions, and the ionizing capacity of which is maintained due to the use of a completely natural plant varnish to not obstruct its pores, thus contributing to a more balanced environment at the time of sleeping.

**[0010]** To achieve its perfect adaptation, said bed base comprises different groups of two or three slats which are coupled to an articulated inner perimetral frame, which is in turn adjusted to an outer frame with bevelled cut corners, which groups are arranged in correspondence with the different parts of the body, such that the group of slats corresponding to the head is assembled individually and by means of natural rubber pivot pieces directly to the perimetral frame; the slats corresponding to the shoulders are assembled individually, by means of the aforementioned natural rubber pivot pieces, but coupled to shock-absorbing supports; those corresponding to the area of the back are assembled two by two or as double slats with adjustable bending to the frame by means of natural rubber pivot pieces; those corresponding to the support of the lumbar area are assembled by means of the mentioned rubber pivot pieces but coupled to height-adjustable supports; and finally, those of the legs, like those of the head, are assembled directly to the frame by means of the natural rubber pivot pieces.

**[0011]** The mattress is in turn made from 100% natural latex, like the pillow, with different densities depending on the part of the body resting on it, for which it has a plurality of holes with different diameters, which holes furthermore provide a suitable aeration thereof, having on the lower face thereof a natural coconut fibre acting as a moisture absorbent and ionizer.

**[0012]** The mattress further has, in a characterizing manner, a mattress cover made from ecological cotton and a mattress topper which allow, by means of an organic-carbon mesh, channelling the electromagnetic energy which the body could have accumulated over the day by the body after the continuous exposure to electric and electromagnetic fields generated by high-voltage towers, transformers, televisions, computers, domestic appliances, etc. installed around us, said load being eliminated through the ground due to an earth connection which is incorporated connected to said mesh.

**[0013]** Finally, the blanket and the pillow cover, as well as the mattress topper, provide the assembly of the bed with a heat-regulating effect due to its manufacture with merino sheep wool which, as is known, is the only one with demonstrable insulating properties and therapeutic qualities, since merino-wool fleece, wool in pure state, is formed by millions of small fibres with a characteristic warp, being capable of maintaining the same temperature of the body independently of the climate, furthermore being rich in lanolin, which softens and hydrates the skin.

**[0014]** The novel therapeutic rest bed therefore represents an innovative structure with structural and constitutive features unknown up until now for such purpose, which reasons, in addition to its practical usefulness, provide it with enough grounds to obtain the exclusivity privilege which is sought.

#### Brief Description of the Drawings

**[0015]** To complement the description which is being made and for the purpose of aiding to better understand the features of the invention, a set of drawings is attached to the present specification as an integral part thereof, in which the following has been depicted with an illustrative and nonlimiting character:

Figure 1 shows a perspective view of the bed of the invention as a whole, in which the main elements comprised are observed.

Figure 2 shows a perspective view of the bed base, in which its partial folding by means of a scissor mechanism has been depicted as a dotted line.

Figures 3 and 4 show corresponding perspective views of the rubber pivot pieces provided with three and two housings respectively.

Figure 5 shows an exploded view of the coupling of one of the groups of slats by means of the pivot pieces to the shock-absorbing supports, corresponding to the areas for the support of shoulders and legs.

Figure 6 shows a perspective view of the rear part

of the shock-absorbing support depicted in Figure 5. Figure 7 shows an exploded view of the coupling of one of the groups of double slats to the pivot pieces, corresponding to the area for the support of the back.

Figure 8 shows an exploded view of the coupling of one of the groups of slats by means of the pivot pieces to the height-adjustable supports, corresponding to the area for lumbar support.

Figure 9 shows a view of the rear part of the height-adjustable support depicted in Figure 8.

Figure 10 shows a suitably sectioned view in which the inner parts and elements comprised in the mattress, the mattress cover and the mattress topper are observed.

#### Detailed Description of the Invention

**[0016]** In view of the mentioned figures, and according to the adopted numbers, a preferred embodiment of the therapeutic rest bed, comprising the parts which are indicated and described in detail below can be observed therein.

**[0017]** Thus, as is seen in Figure 1, the bed (1) of the invention is essentially formed from a bed base (2) with wood slats, preferably beechwood slats, a mattress (3) made from 100% natural latex provided with a mattress cover (4) preferably made from cotton, a mattress topper (5) and a blanket (6) made with merino sheep wool, and a pillow (7), also made from 100% natural latex, provided with a pillow cover (8), likewise made with merino sheep wool.

**[0018]** As is observed in Figure 2, the bed base (2) has an outer frame (9) with bevelled corners and an inner frame (10) incorporating a scissor mechanism (11) suitable for allowing the manual folding of its respective portions (10a) and (10b).

**[0019]** The slats (12) forming the adaptable support of the bed base (2) are in turn attached to the inner frame (10) in different movable groups of two or three slats, being coupled in different ways depending on the different areas of the body to which they correspond, by means of the following elements:

- pivot pieces (13) and (13'), which are provided respectively, as appropriate, with two or three housings (14) for the slats (12), with lower assembly holes (15) and with intermediate portions (16) providing flexibility to the piece, as is seen in Figures 3 and 4;
- shock-absorbing supports (17) which, as is observed in Figures 5 and 6, comprise a support piece (18) provided on its rear face with lugs (19) for anchoring it to the frame, and on the front face with a movable piece (20), fixed to said piece (18) by means of inner springs, on which there are corresponding lugs (21) suitable for receiving the assembly holes (15) provided in the pivot pieces (13').
- and height-adjustable supports (22), as shown in Figures 8 and 9, which comprise a support piece (23)

provided at its rear part with lugs (24) for fixing it to the frame (10), which incorporates a piece (25) of vertical movement, provided with front lugs (26) suitable for receiving the assembly holes (15) provided in the pivot pieces (13), and the adjustment of which is performed through an operating screw (27) accessible through the upper hole (28).

**[0020]** Thus, the group (A) of slats (12) corresponding to the head are assembled three by three directly to the perimetral frame (10) by means of natural rubber pivot pieces (13'); the group (B) corresponding to the shoulders, by means of the aforementioned natural rubber pivot pieces (13'), but coupled to the shock-absorbing supports (17); the group (C) corresponding to the area of the back are assembled, as is seen in Figure 7, attached two-to-two by means of movable arm rests (29), resulting in double slats with adjustable bending, being fixed to the frame (10) by means of natural rubber pivot pieces (13); the group (D) corresponding to the support of the lumbar area assembled by means of the mentioned rubber pivot pieces (13') coupled to the described height-adjustable supports (22); and finally, the group (E) corresponding to the area of the legs and feet, like those of the head, directly to the frame by means of the natural rubber pivot pieces (13').

**[0021]** In Figure 10 it can be observed how the mattress (3) made from 100% natural latex as well as the pillow (7) have a plurality of holes (30) with different diameters suitably distributed to define areas of different resistance, depending on the part of the body occupying it, the mattress (3) incorporating, on its lower face, a sheet (31) of natural coconut fibre acting as a moisture absorbent, having a removable cover (4), made from cotton, under which it has an organic-carbon mesh (32) which is connected to an outer wire (33) provided at its end with an electrically conductive element, such as a copper ball (34), acting as earth.

**[0022]** The mattress topper (5) in turn likewise has another organic-carbon mesh (35) therein.

**[0023]** Finally, the blanket (6) and the pillow cover (8), as well as the mattress topper (5), have a padding made with merino sheep wool, which provides a heat-regulating effect to the assembly of the bed (1).

**[0024]** Having sufficiently described the nature of the present invention, as well as the way to put it into practice, it is not considered necessary to extend its explanation broader for any person skilled in the art to understand its scope and the advantages derived therefrom, stating that, within its essence, it may be put into practice in other embodiments which differ in detail from the one indicated by way of example, and which will likewise be covered by the protection sought provided that its essential principle is not altered, changed or modified.

## Claims

1. A therapeutic rest bed, of the type of those comprising a bed base (2) with wood slats, preferably beechwood slats, a mattress (3) made from 100% natural latex provided with a mattress cover (4) preferably made from cotton, a mattress topper (5) and a blanket (6) made with merino sheep wool, and a pillow (7), also made from 100% natural latex provided with a pillow cover (8) likewise made with merino sheep wool, **characterized by** the fact that:

- the bed base (2) comprises: an outer frame (9) with bevelled corners; an inner frame (10), a group (A) of slats (12) corresponding to the head assembled, directly to the perimetral frame (10), three by three by means of natural rubber pivot pieces (13'); a group (B) corresponding to the shoulders, by means of natural rubber pivot pieces (13'), coupled to shock-absorbing supports (17); a group (C) corresponding to the area of the back which are assembled, attached two by two by means of movable arm rests (29), resulting in double slats with adjustable bending, being fixed to the frame (10) by means of natural rubber pivot pieces (13); a group (D) corresponding to the support of the lumbar area, assembled by means of rubber pivot pieces (13') coupled to height-adjustable supports (22); and a group (E) corresponding to the area of the legs and feet, assembled to the frame by means of the natural rubber pivot pieces (13').

- the mattress (3) as well as the pillow (7) have a plurality of holes (30) with different diameters distributed depending on the part of the body occupying it, the mattress (3) incorporating, on its lower face, a sheet (31) of natural coconut fibre

- the removable mattress cover (4) has an organic-carbon mesh (32) which is connected to an outer wire (33) provided at its end with an electrically conductive element, such as a copper ball (34), acting as earth.

- the mattress topper (5) likewise has another organic-carbon mesh (35) therein.

- the blanket (6) and the pillow cover (8), as well as the mattress topper (5), have a padding made with merino sheep wool, which provides a heat-regulating effect to the assembly of the bed (1).

2. The therapeutic rest bed according to claim 1, **characterized by** the fact that the inner frame (10) is articulated and is formed by a front portion (10a) and a rear portion (10b) foldable with respect to the outer frame (9).

3. The therapeutic rest bed according to claim 2, **characterized by** the fact that the ends of the front and

rear portions of the inner frame (10) are linked to the ends of the outer frame (9) by means of respective manually actuatable scissor mechanisms (11) with an adjustable tilt.

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4. The therapeutic rest bed according to claim 1, **characterized by** the fact that the slats (12) forming the adaptable support of the bed base (2) are attached to the inner frame (10) in different movable groups of two or three slats, being coupled in different ways depending on the different areas of the body to which they correspond, by means of different elements. 10
5. The therapeutic rest bed according to claim 1, **characterized by** the fact that the pivot pieces (13) and (13') are provided respectively, as appropriate, with two or three housings (14) for the slats (12), with lower assembly holes (15) and with intermediate portions (16). 15
- 20
6. The therapeutic rest bed according to claim 1, **characterized by** the fact that the shock-absorbing supports (17) comprise a support piece (18) provided on its rear face with lugs (19) for anchoring it to the frame, and on the front face with a movable piece (20), fixed to said piece (18) by means of inner springs, on which there are corresponding lugs (21) suitable for receiving the assembly holes (15) provided in the pivot pieces (13'). 25
- 30
7. The therapeutic rest bed according to claim 1, **characterized by** the fact that the height-adjustable supports (22) comprise a support piece (23) provided at its rear part with lugs (24) for fixing it to the frame (10), which incorporates a piece (25) of vertical movement, provided with front lugs (26) suitable for receiving the assembly holes (15) provided in the pivot pieces (13), and the adjustment of which is performed through an operating screw (27) accessible through the upper hole (28). 35
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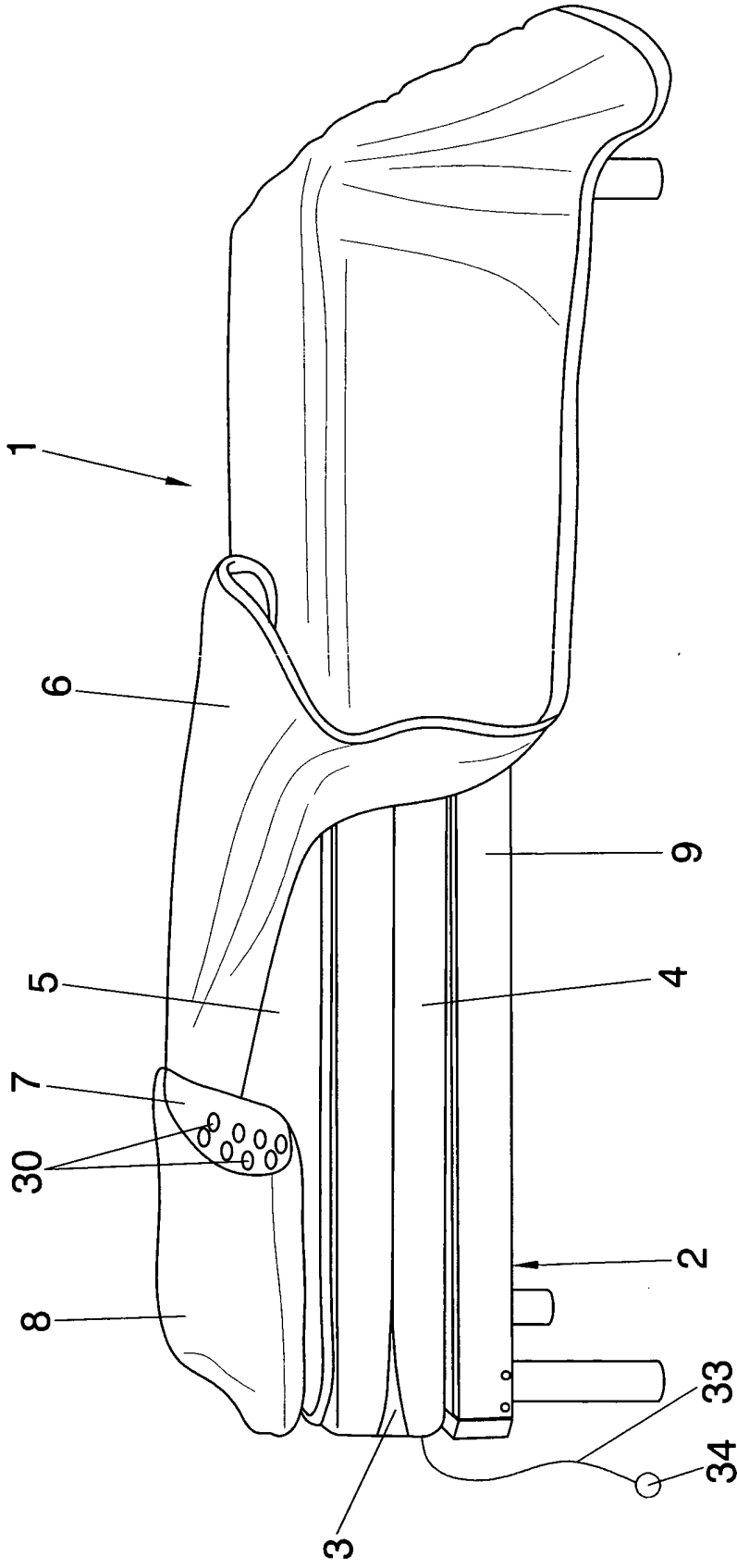


FIG. 1

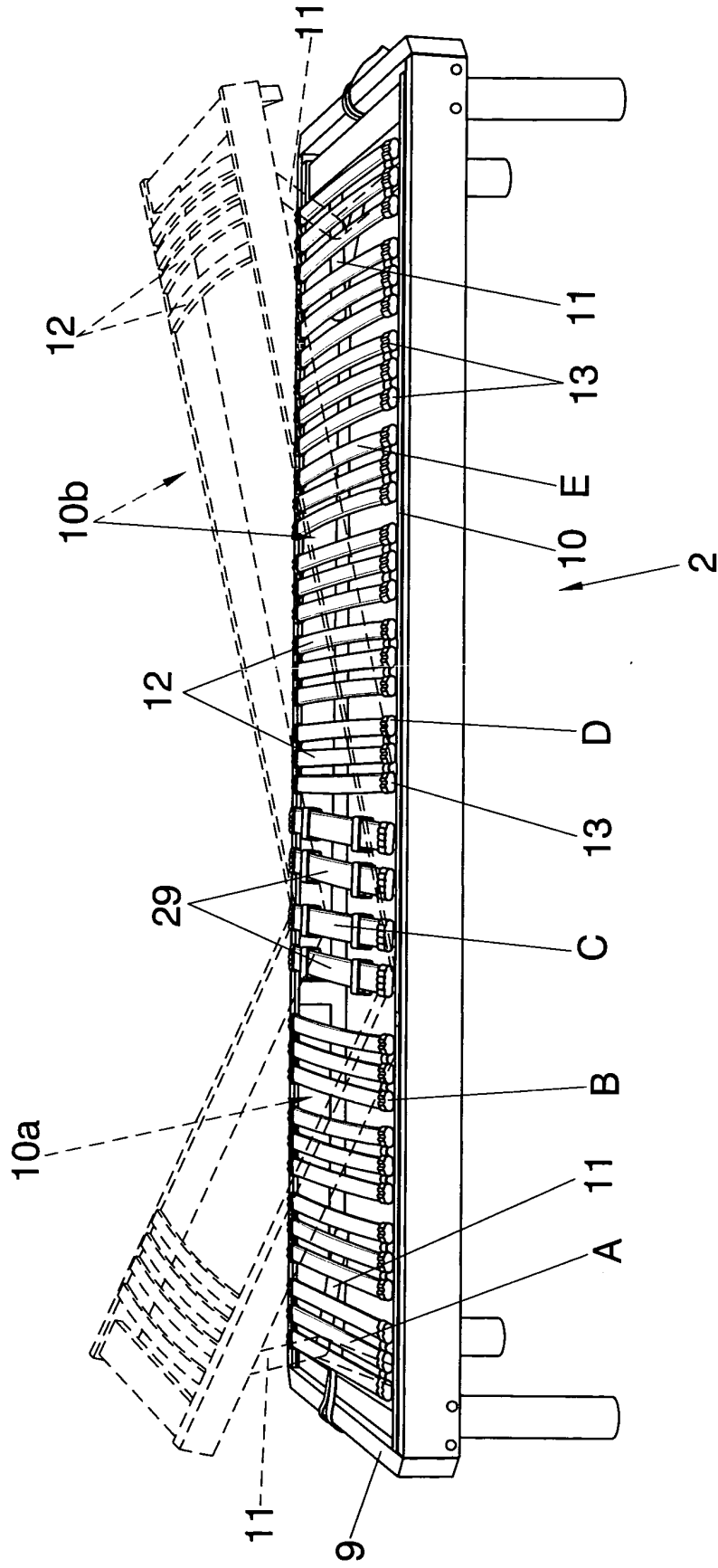
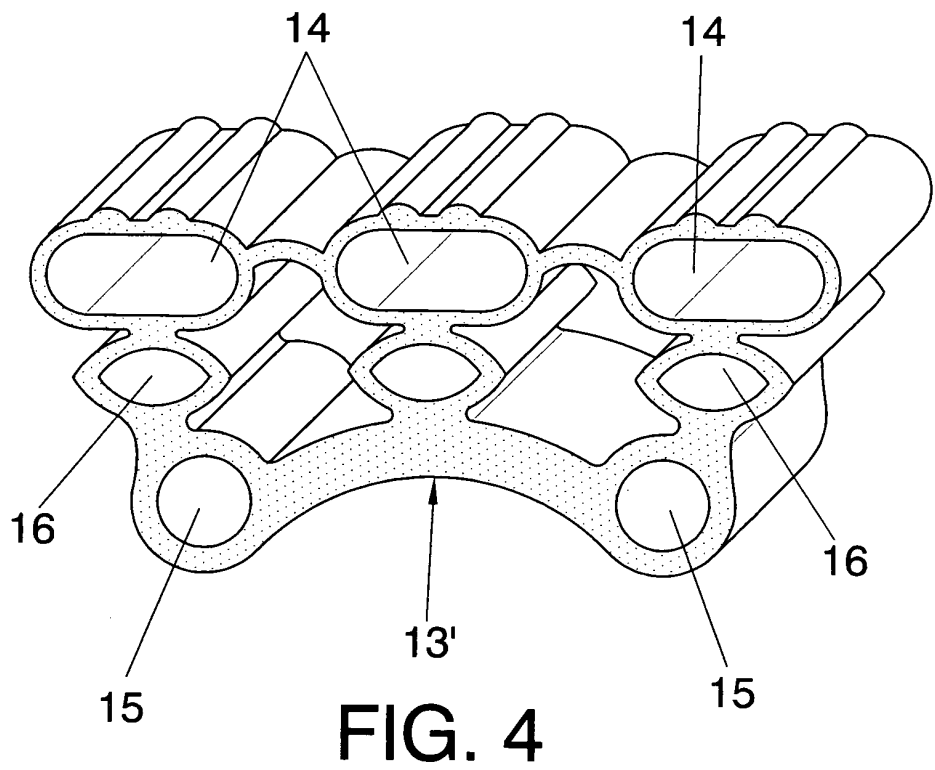
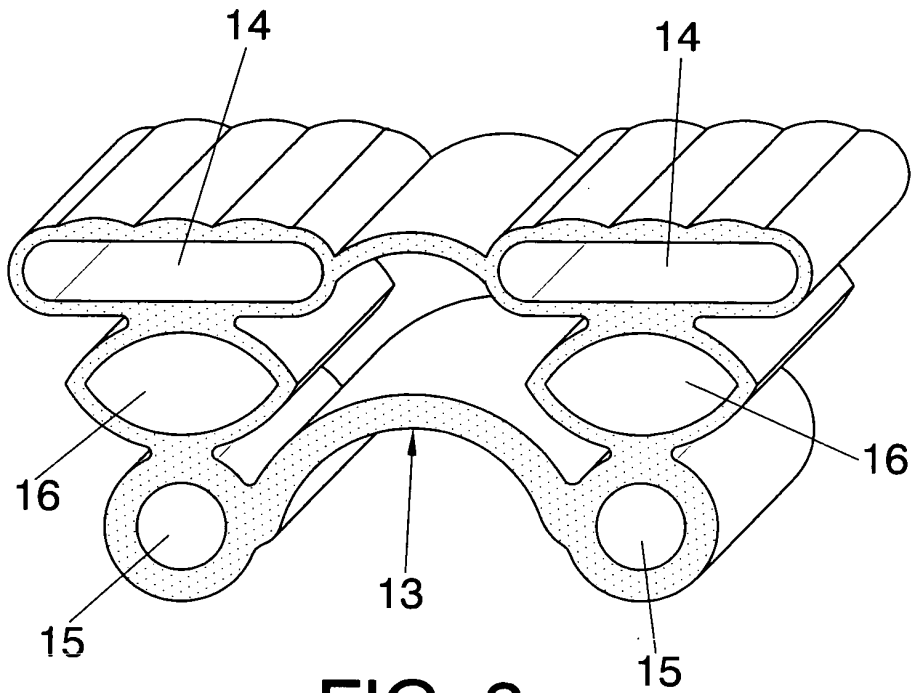
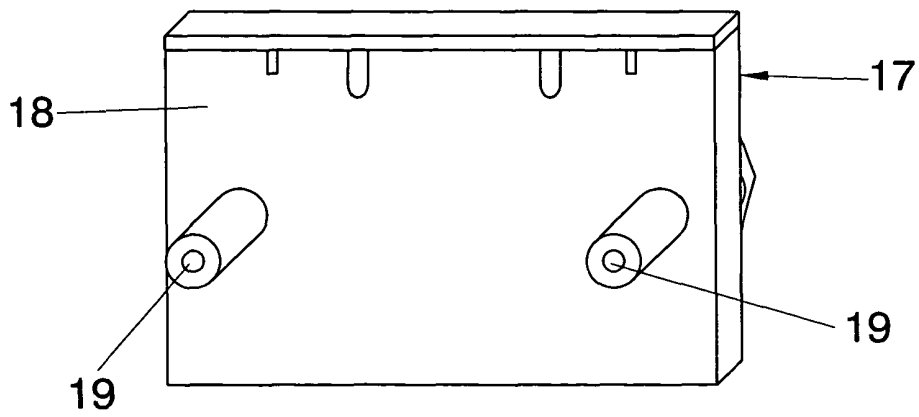
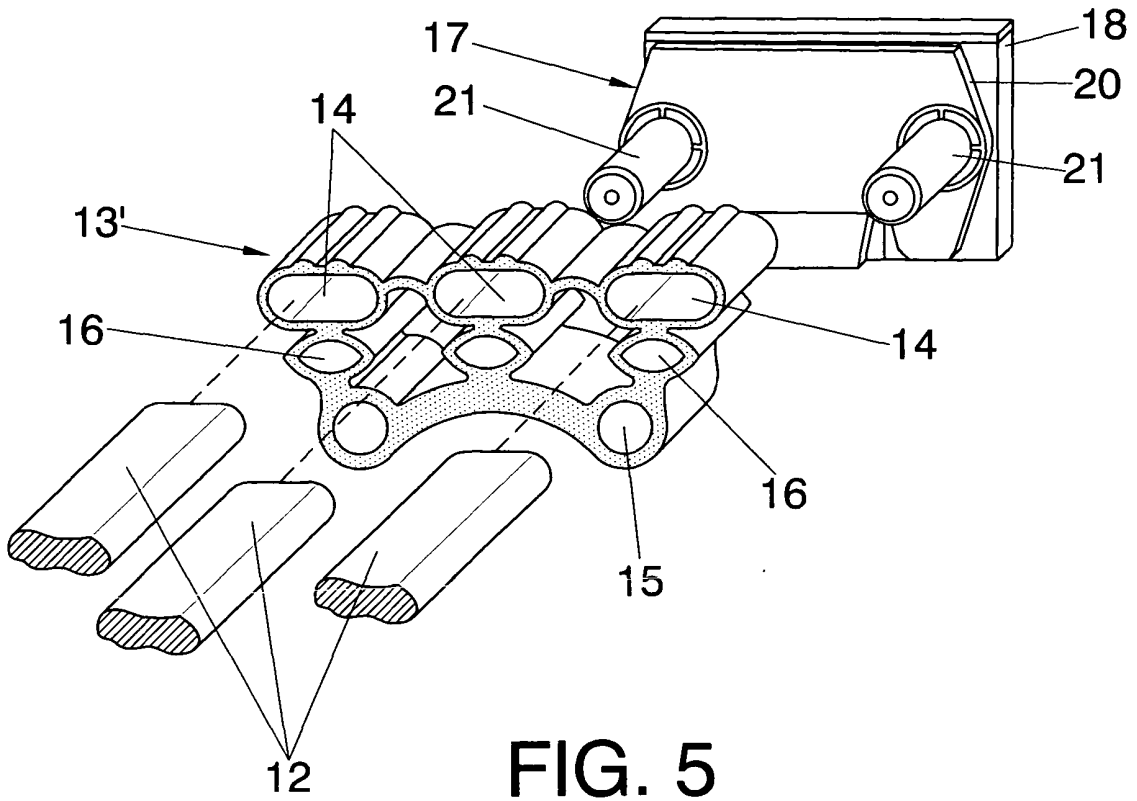
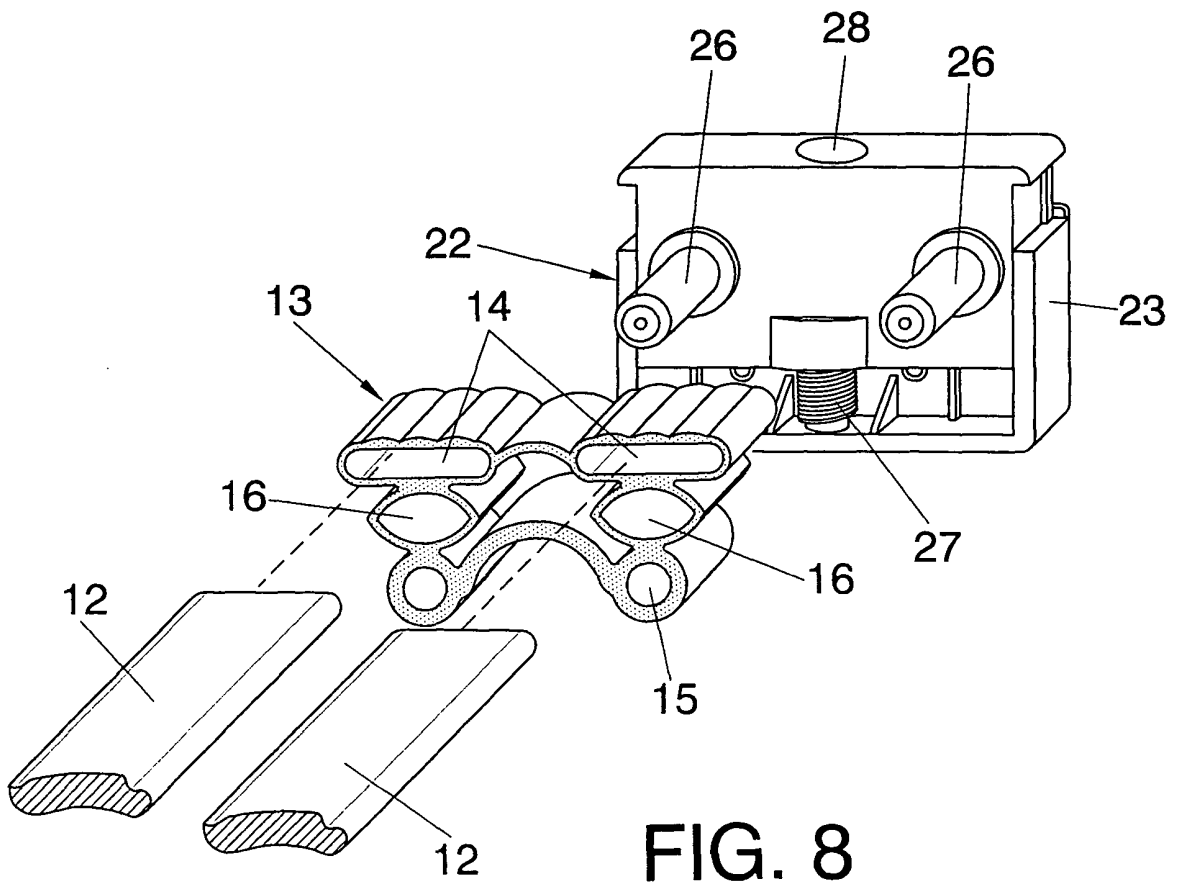
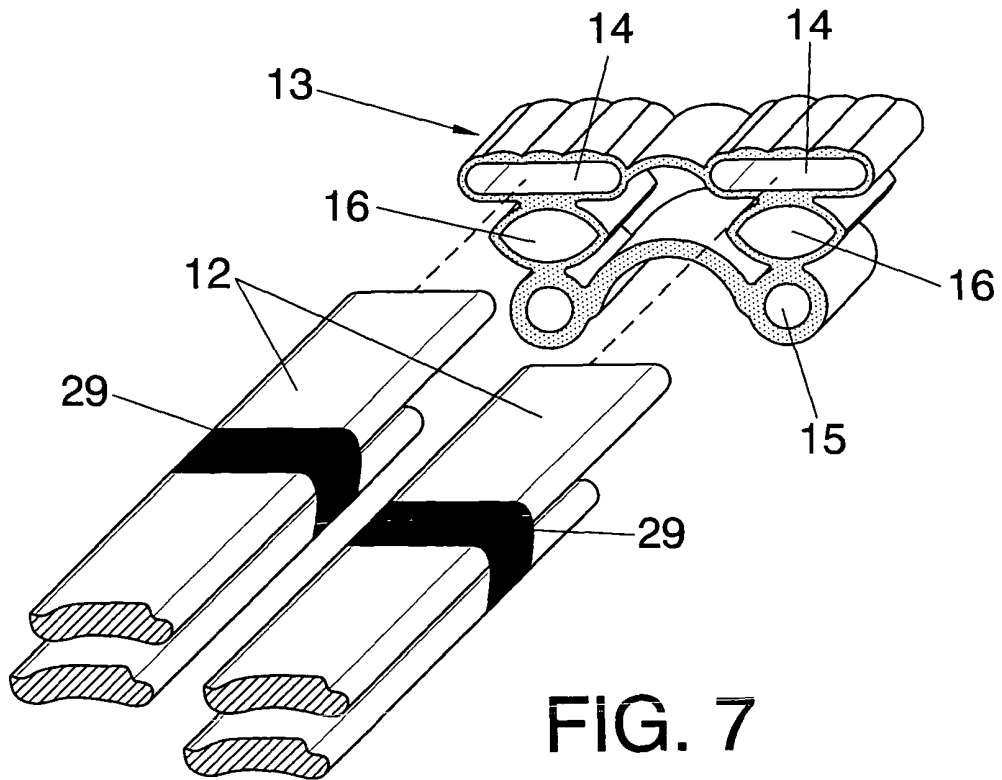


FIG. 2







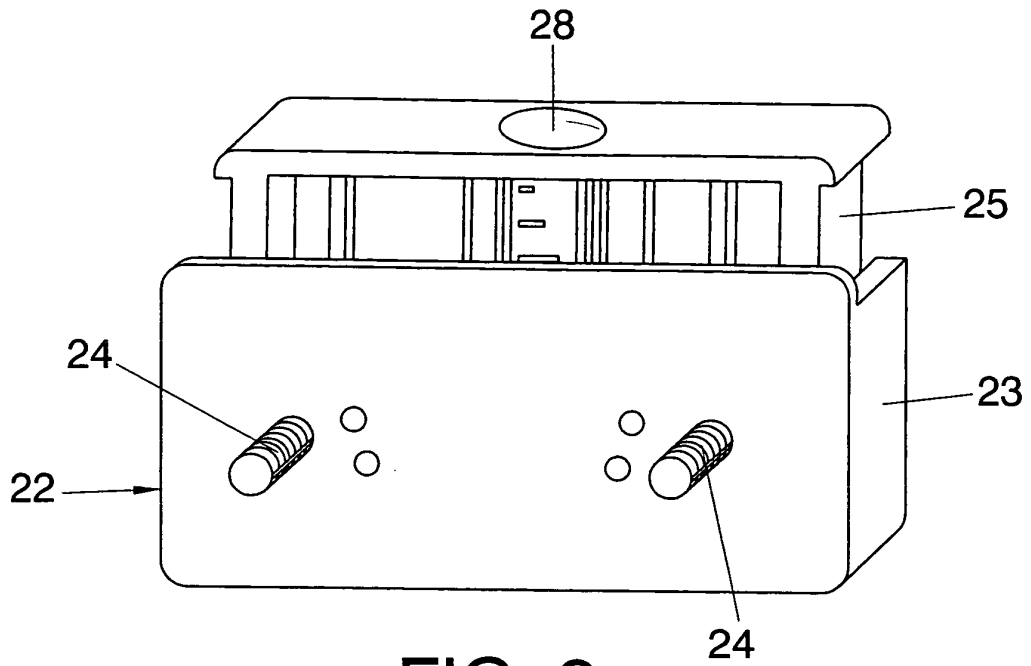


FIG. 9

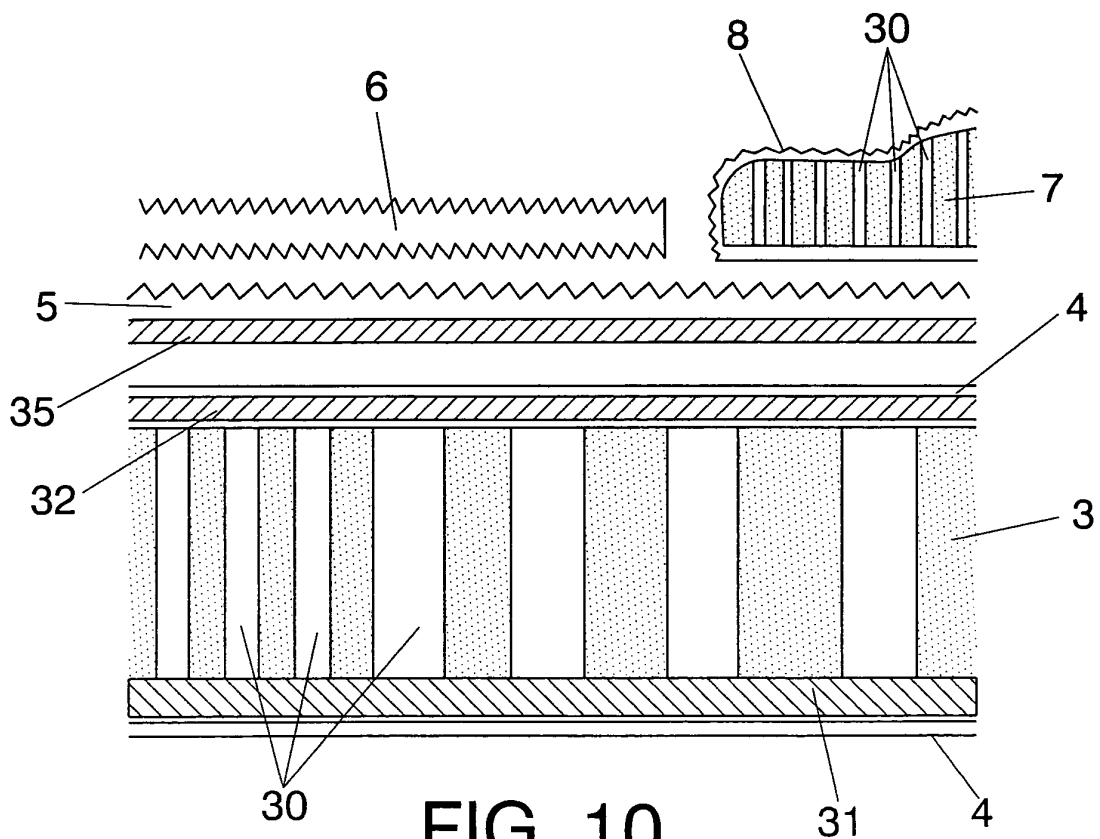


FIG. 10

INTERNATIONAL SEARCH REPORT

International application No.  
PCT/ ES 2007/000013

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) A47C 23/+, A47C27/+				
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) CIBEPAT,EPODOC,WPI				
C. DOCUMENTS CONSIDERED TO BE RELEVANT				
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.		
X	ES 1058937 U (BIO VITAL SORT CB) 16.02.2005, the whole document.	1-7		
A	US 5774911 A (STUEBE et al.) 07.07.1998, abstract; figures.	1,4		
A	FR 2638953 A1 (HARTMANN SIEGBERT) 18.05.1990, abstract; figures.	5		
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.				
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Date of the actual completion of the international search 06.August.2007 (06.08.2007)		Date of mailing of the international search report (22/08/2007)		
Name and mailing address of the ISA/ O.E.P.M. Paseo de la Castellana, 75 28071 Madrid, España. Facsimile No. 34 91 3495304		Authorized officer E. Álvarez Valdés Telephone No. +34 91 3498419		

**EP 2 103 233 A1**

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

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*A47C 27/14* (2006.01)