(11) EP 1 626 386 A1

(12)

EUROPEAN PATENT APPLICATION published in accordance with Art. 158(3) EPC

(43) Date of publication: 15.02.2006 Bulletin 2006/07

(21) Application number: 04727917.9

(22) Date of filing: 16.04.2004

(51) Int Cl.: **G09F** 3/20 (1968.09)

(86) International application number: PCT/ES2004/000167

(87) International publication number: WO 2004/102510 (25.11.2004 Gazette 2004/48)

(84) Designated Contracting States:

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR
HU IE IT LI LU MC NL PL PT RO SE SI SK TR

(30) Priority: 14.05.2003 ES 200301115

(71) Applicant: Yudigar S.L. 50400 Carinena (Zaragoza) (ES)

(72) Inventor: ARTERO RUIZ, Fernando E-50400 Carinena (Zaragoza) (ES)

(74) Representative: Schäfer, Matthias W. Patentanwalt
Schwanseestrasse 43
81549 München (DE)

(54) IMPROVED LABEL-BEARING SECTION

The invention relates to an improved label-bearing section of the type that is used with shelves in commercial establishments and warehouses, in order to support and protect labels containing the prices, characteristics, etc. of the products stored thereon. The invention is characterised in that it comprises: separate, independent anchoring elements which are used to fix same to the shelf and to determine the positioning angle of the label; and a double sheet comprising a transparent front part, which is used to house the label and which can move independently of the two anchoring elements. The main advantages offered by the invention lie in the fact that it comprises only one type of label-bearing section which can be fixed to the shelf using various inclination angles which can be easily selected and altered. In this way, the front label-bearing sheet is provided with extensive mobility such as to prevent the assembly from falling or breaking accidentally.

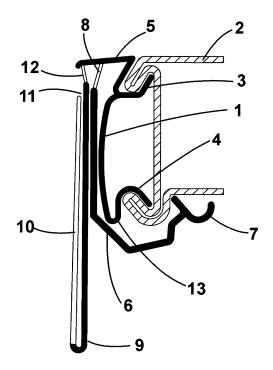


Fig. 1

EP 1 626 386 A1

20

25

30

35

40

45

50

Description

[0001] As its title indicates, this patent describes an improved label-holder, of the type used on shelving at commercial establishments and warehouses to support and protect the labels that indicate the prices, features, etc. of the products placed on the shelves, characterized in that it has separate and independent anchors for fastening to the shelves and for determining the angle at which the label is positioned, and a double plate with a transparent front to house the label, with independent movement of the two anchors mentioned above.

1

[0002] Currently, there are several different well-known types of label-holders and systems for fastening them to the shelves, of which the most technically advanced is probably the one described in Patent W0100465ES "Anchoring system for label-holders and shelving," which uses a configuration with a dovetail bend on the front of the shelf, inside of which the pins that hold the rear faces of the different types of label-holders are anchored.

[0003] These label-holders can be of various types: some bulky and rigid that anchor to the dovetail on the shelving and entail the major problem that, given their structural rigidity, there is a high probability that, with any accidental contact or friction with the merchandise stored on the shelves when that merchandise is deposited or removed, the label-holder will come off the shelf, with the resulting possibility that it will break, because these label-holder configurations are quite long. Also, given their rigidity, the front of this type of label-holder where the paper label is fastened can only tilt at a single angle, which adds the further problem that when the labels have to tilt at different angles, for example, in order to compensate for the different heights of the shelves and thus make it easier for the customer or user to read them, label-holders have to be manufactured with different angles in the front, with the resulting increase in cost because different models are needed.

[0004] Other types of existing label-holders attempt to resolve these problems by separating the front band that serves to support the informative label from the rear part that is fastened to the edge of the shelving. Both parts are then connected using a neck in the label-holder in the form of a flexible element that allows the front label-holder band to move relative to the rear part anchored to the shelf. This is a way of solving the problem of the label-holder being pulled off or broken in the event of accidental contact, but the angle at which the front band of the label-holder tilts cannot be varied, which leaves the major problem of the need to manufacture different models with different tilt angles for different shelf heights. [0005] There are also other types of label-holders that, in addition to separating the front band from the rear part with a neck in the label-holder, as in the above case, add a position anchor that emerges from the rear of that front band and that, thanks to the combination of the movement of the front band achieved with the neck and the

different interlocks provided with the position anchor, makes it possible to fasten the front band in various angles with regard to the shelf. Thus, the problem of tilt angles is partially solved, but the front band continues to be fixed to the edge of the shelf, which means that there are still significant problems with accidental dismounting or breakage, in addition to the fact that there is now the problem that the accidental contact with the merchandise can also easily alter the position of the position anchor, therefore changing the tilt angle of the front band and forcing maintenance personal to correct its position frequently.

[0006] The improved label-holder configuration covered by this invention has been designed to solve the difficulties that currently exist with regard to problem of fastening informative labels to shelving. It is intended for use in shelving equipped with a dovetail edge, such as in the above cases, and consists of a single piece of variable length in which there are three clearly differentiated parts:

- Shelf anchor: the back part that performs the function of anchoring and interlocking to the edge of the shelf using rounded lugs or flanges, staying firmly in the set position due to the intrinsic elasticity of the material of construction, at the same time serving as firm support for the other two parts through a top "T" termination.
- Position anchor: the middle part used to anchor the label-holder in position by selectively interlocking a semi-cylindrical bottom termination into different parts provided for that purpose, staying firmly in the set position due to the intrinsic elasticity of the material of construction. This position anchor is connected to the upper horizontal end of the shelf anchor, or back part, with a flexible area formed by a neck that gives it a swinging movement with regard to that part.
- Visor: the front part that performs the function of the label-holder band, formed by a parallel double plate with the outermost part made of transparent material. The parallel double plate is open on the top to allow the informative label to be slipped inside. The visor is also connected to the aforementioned upper horizontal end of the shelf anchor or back part with a flexible area formed by a neck emerging from the upper part of the inside plate of the visor, which gives it a swinging movement with regard to the back part and therefore also with regard to the middle part.

[0007] The back part allows firm and secure anchoring to shelving equipped with a dovetail anchor, while the position anchor makes it possible to safely select the tilt of the middle part from the vertical up to angles of approximately 45° by selectively interlocking it in different positions. The visor, or front part, rests on the front the

20

25

30

35

40

45

position anchor by gravity, thus assuming approximately the same tilt angle as the front of the position anchor, but still moving freely both with regard to the both the position anchor and the shelf anchor.

[0008] The improved label-holder described here provides several advantages over the systems that are currently available due to the fact that the three component parts have movement between them provided by their flexible connections.

[0009] The most significant of these advantages is that this label-holder combines all the advantages and functions of all known types in a single piece. The back part allows firm and secure anchoring to shelving equipped with a dovetail anchor, while the middle part makes it possible to select the tilt angle of the front visor that, in turn, has independent movement from the above two parts.

[0010] Another significant advantage is that, because the visor has independent movement, even if it is accidentally struck or shifted by the materials stored on the shelving or by the users, this does not affect either the preset angle or the shelf anchor, thus avoiding the breakage or frequent alterations inherent to other configurations.

[0011] It should also be emphasized that the position anchor makes it possible to quickly and safely set the assigned position for the visor from among the various possible angles by quick interlocking of the end of the visor into the points provided for that purpose. This position can be easily changed at any time by simply varying the anchoring point.

[0012] Another advantage of this invention is that personnel can place or change the identifying labels quickly because the visor has independent movement from the other parts and can be handled comfortably, since the preset angle for the visor is not altered. When the visor is released, it always automatically returns to its resting position on the position anchor, which, in turn, is independent of the shelf anchor. This means that any operation can be done with label-holder without the need to either release it or to readjust or change the tilt angle.

[0013] Furthermore, another added advantage is that combining all the necessary functions into one configuration greatly reduces the need to manufacture and store different types of label-holders, thus allowing serial manufacturing in much greater numbers, with the resulting greater cost-effectiveness of the manufacturing process.

[0014] In order to better understand the object of this invention, the attached drawings illustrate a preferred practical implementation of an improved label-holder, showing the different positioning angles of the visor, and several alternative practical implementations of the improved label-holder.

[0015] In the drawings, Fig. 1 shows an improved label-holder with a flat visor in vertical position.

[0016] Fig. 2 shows an improved label-holder with a flat visor in intermediate tilt position.

[0017] Fig. 3 shows an improved label-holder with a

flat visor in maximum tilt position.

[0018] Fig. 4 shows an alternative implementation of the improved label-holder with a visor that is curved over its entire length.

[0019] Fig. 5 shows an alternative implementation of the improved label-holder with a visor that has a curved bend that separates it into two straight lengths at different angles.

[0020] Fig. 6 shows an alternative implementation of the improved label-holder that has a visor with a straight bend that separates it into two straight lengths at different angles.

[0021] As shown in the attached drawing, in its preferred practical implementation with a straight visor, the improved label-holder covered by this invention basically consists of a single piece of variable length, preferably made of thermoplastic materials, in which there are three clearly differentiated parts:

- Shelf anchor (1), the back part that performs the function of anchoring and interlocking to the edge of the shelving (2) using rounded lugs or flanges (3 and 4), at the same time serving as firm support for the other two parts through a top "T" termination (5).
- Position anchor (6), the middle part intended for anchoring the label-holder in position by selectively interlocking a semi-cylindrical bottom termination (7) into different parts provided for that purpose. This position anchor is connected to the upper horizontal end (5) of the shelf anchor (1), or back part, with a flexible area (8) that gives it swinging movement with regard to that part (5).
- Visor (9), the front part that performs the function of label-holder band, made of a parallel double plate, mostly straight, with the outermost part (10) made of transparent material. The parallel double plate is open on top (11) to allow the informative label to be slipped inside. This visor (9) is also connected to the aforementioned horizontal upper end (5) of the shelf anchor (1), or back part, with a flexible area (12) formed by a neck emerging from the upper part of the inside plate of the visor (9) which gives it swinging movement with regard to the back part (1) and therefore also with regard to the middle part (6).

[0022] As we can see in Fig. 1, if the semi-cylindrical bottom termination (7) of the position anchor (6) is interlocked into the lower angle of the shelf configuration (2), most of its length is approximately parallel to the shelf anchor (1), and therefore in an approximately vertical position. Consequently, the (9) visor also sits in vertical position.

[0023] In Fig. 2, we see that if the semi-cylindrical bottom termination (7) of the position anchor (6) is interlocked between the bottom termination of the shelf configuration (2) and the bottom part (13) of the shelf anchor

55

10

15

20

25

35

40

(1), in this case most of its length forms an angle with the shelf anchor (1). The visor (9) is supported on the position anchor (6) by gravity, and therefore sits at approximately the same angle as the position anchor.

[0024] Finally, in Fig. 3, we see that if the semi-cylindrical bottom termination (7) of the position anchor (6) is interlocked into the bottom part (13) of the shelf anchor (1), where it fits perfectly, in this case it forms a nearly 45° angle with the shelf anchor (1). The visor (9) is supported on the position anchor (6) by gravity, and therefore sits at approximately the same angle as the position anchor.

[0025] A detailed description of the rest of the features of the system described here or the components that comprise it is voluntarily omitted because, on our part, we believe that those features are not covered by any claim.

[0026] Now that the nature of this invention has been sufficiently described, as well as four ways of putting it into practice, the only thing left to add is that the description is not restrictive, and several variations are possible, both in materials and in forms or sizes, provided such variations do not alter the essential characteristics claimed below.

Claims

- 1. An improved label-holder, of the type used on shelving in commercial establishments and warehouses to support and protect the labels that indicate the prices, characteristics, etc. of the products placed on that shelving, characterized in that it consists of a single piece of variable length and preferably manufactured from thermoplastic materials, made up of three differentiated parts: a shelf anchor (1), a position anchor (6) and a visor (9), interconnected with flexible areas (8) and (12) that allow independent swinging movement between them.
- 2. Improved label-holder as in the previous claim, characterized in that the shelf anchor (1) has rounded lugs or flanges (3 and 4) for anchoring and interlocking to the edge of the shelf (2), serving at the same time as support for the other two parts through a top "T" termination (5).
- 3. Improved label-holder as in the previous claims, characterized in that the position anchor (6) has a semi-cylindrical bottom termination (7) for interlocking and is connected to the upper horizontal end (5) of the shelf anchor (1) through a flexible area (8) that gives it swinging movement with regard to that part (5).
- 4. Improved label-holder as in the previous claims, characterized in that the visor (9) is made of a parallel double plate, mostly straight, open on top (11),

with the outermost part (10) made of transparent material, and is connected to the aforementioned horizontal upper end (5) of the shelf anchor (1) with a flexible area (12) that gives it swinging movement with regard to the back part (1) and therefore also with regard to the middle part (6).

- Improved label-holder as in the previous claims, characterized in that the position anchor (6) can be positioned at different angles by interlocking the semi-cylindrical bottom termination (7) into the lower angle of the shelf configuration (2), between the bottom termination of the shelf configuration (2) and the bottom part (13) of the shelf anchor (1), or into the bottom part (13) of the shelf anchor (1).
- 6. Improved label-holder as in the previous claims, characterized in that the visor (9) is supported on the position anchor (6) by gravity, therefore sitting at approximately the same angle as the position anchor.
- 7. Improved label-holder as in the previous claims, characterized in that an alternative implementation of the visor is curved along its entire length, as seen in Fig. 4.
- 8. Improved label-holder as in the previous claims, characterized in that in an alternative implementation, the visor has a curved bend that separates it into two straight lengths of different angles, as seen in Fig. 5.
- Improved label-holder as in the previous claims, characterized in that in an alternative implementation, the visor has a straight bend that separates it into two straight lengths of different angles, as seen in Fig. 6.

55

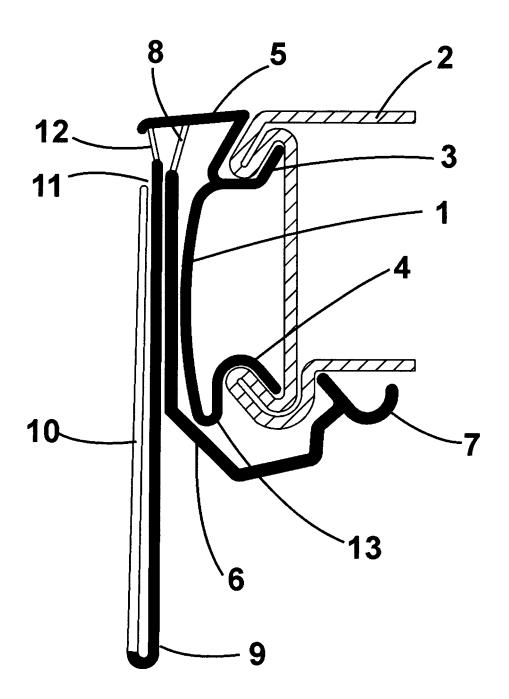


Fig. 1

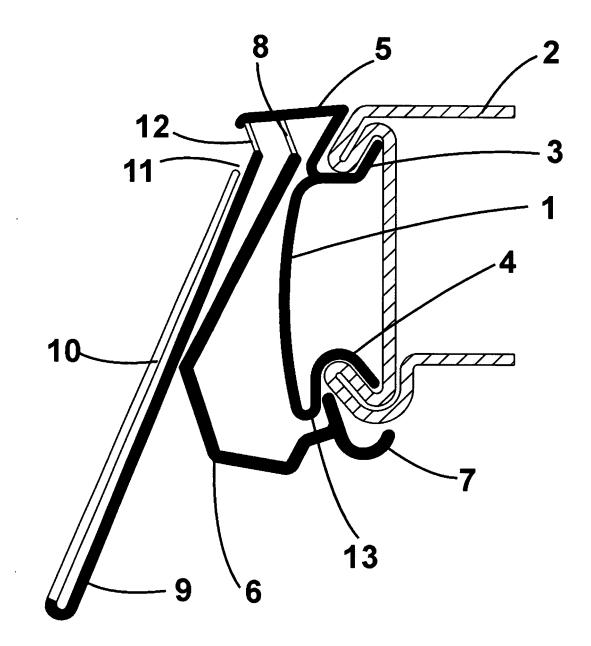


Fig. 2

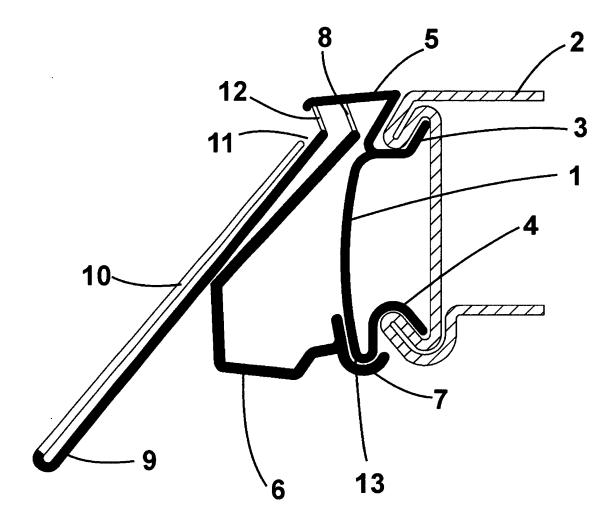


Fig. 3

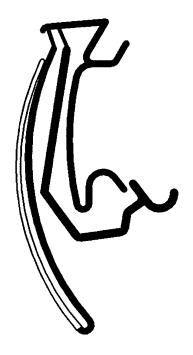


Fig. 4

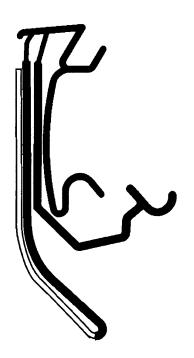


Fig. 5

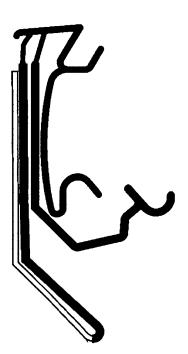


Fig. 6

EP 1 626 386 A1

INTERNATIONAL SEARCH REPORT

International application No. PCT/ ES 2004/000167

A. CLASSIFICATION OF SUBJECT MATTER IPC' GOOPF3/20 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) IPC' GOOPF Documentation searched other than minimum documentation to the extent that such documents are included in the fisles searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) CIBEPAT, EPODOC, WPI, PAJ C. DOCUMENTS CONSIDERED TO BE RELEVANT Category* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. Page 6, line 4 – page 9, line 5; figures 3 and 4 Y. WO 0245055 A1 (Yudigar, S.L.) 06.06.2002 Page 6, line 4 – page 9, line 5; figures 3 and 4 I - 6 FP 0811962 A1 (Meto, B.V) 10.12.1997 Abstract, figure 2, Claim 1 A FR 2806824 A1 (Driver) 28.09.2001 Claim 1, figure 2 Province document but published one or after the international filing data to be 6 or principalized relevance of the subject of the surface of th					
According to International Patent Classification (PC) or to both national classification and PC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC GOSF 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, PAJ C. DOCUMENTS CONSIDERED TO BE RELEVANT Category* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. Y WO 0245055 A1 (Yudigar, S.L.) 06.06.2002 Page 6, line 4 – page 9, line 5; figures 3 and 4 I - 6 Y EP 0811962 A1 (Meto, B.V) 10.12.1997 Abstract, figure 2, Claim 1 A FR 2806824 A1 (Driver) 28.09.2001 Claim 1, figure 2 Further documents are listed in the continuation of Box C. X See patent family annex. "" Special estegories of cited documents: "A document defining the general rate of the art which is not considered in conflicts with the application but to did to understand the practical resource of the same patent family The document polithed on or after the international filing date or other special resource, the claimed invention cannot be considered to involve an investive when the document with the application and continuation of the means and continuation of the international filing date but later than the practicy date claimed To document experience of the actual completion of the international filing date but later than the practicy date claimed Date of the actual completion of the international search report Electronic data base consulted to incorder and invention cannot be considered to involve an investive step when the document in the practicy date claimed To document with the application and continuation of the international search report """ document may be in wards or a investive special resource, the claimed in the actual completion	A. CLAS	SSIFICATION OF SUBJECT MATTER			
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC 7 G09F 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, PAJ C. DOCUMENTS CONSIDERED TO BE RELEVANT Category* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. Y WO 0245055 A1 (Yudigar, S.L.) 06.06.2002 Page 6, line 4 - page 9, line 5; figures 3 and 4 Y EP 0811962 A1 (Mcto, B.V) 10.12.1997 Abstract, figure 2, Claim 1 A FR 2806824 A1 (Driver) 28.09.2001 Claim 1, figure 2 X See patent family armex. X See patent family armex. Interdocument published after the international fling data or priority data claimed investion cannot be special caused on the special reason (us specified) with a model of another claim or other special reason (us specified) we all investion and the priority data claimed investion cannot be considered to decimed investion cannot be repeated reason (us specified) when the document is taken alone considered from your cannot be considered to be considered to decimed investion cannot be considered to the considered of model or model or other special reason (us specified) when the document is taken alone considered from your cannot be considered to the considered for model or model or of the second or purchase the publication cannot be considered to the considered or word or cannot be considered to the considered to disting distingt in the art """ "" "" "" "" "" "" "" ""	IPC ⁷ G09	F3/20			
Minimum documentation searched (classification system followed by classification symbols) IPC? GO9F 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, PAI C. DOCUMENTS CONSIDERED TO BE RELEVANT Category* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. Y WO 0245055 A1 (Yudigar, S.L.) 06.06.2002 Page 6, line 4 - page 9, line 5; figures 3 and 4 Y EP 0811962 A1 (Meto, B.V) 10.12.1997 Abstract, figure 2, Claim 1 A FR 2806824 A1 (Driver) 28.09.2001 Claim 1, figure 2 1, 4 See patent family annex. ** Special categories of cited documents: ** ** ** ** ** ** ** ** **	According to	International Patent Classification (IPC) or to both	national classification	and IPC	·
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, PAJ C. DOCUMENTS CONSIDERED TO BE RELEVANT Category* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. Y WO 0245055 A1 (Yudigar, S.L.) 06.06.2002 Page 6, line 4 - page 9, line 5; figures 3 and 4 Y EP 0811962 A1 (Meto, B.V) 10.12.1997 Abstract, figure 2, Claim 1 A FR 2806824 A1 (Driver) 28.09,2001 Claim 1, figure 2 X See patent family amnex. "I" later document published after the international filing date or priorit date and not in conflict with the application but cited to understand in conflict with the application but cited to understand in the priority date claimed invention cannot be considered to revolve an inventive appeal resonance in sepecial resonanc					
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, PAJ C. DOCUMENTS CONSIDERED TO BE RELEVANT Category* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. Y WO 0245055 A1 (Yudigar, S.L.) 06.06.2002 Page 6, line 4 – page 9, line 5; figures 3 and 4 Y EP 0811962 A1 (Meto, B.V) 10.12.1997 Abstract, figure 2, Claim 1 A FR 2806824 A1 (Driver) 28.09.2001 Claim 1, figure 2 X See patent family annex. *** Special categories of cited documents: **a* document defining the general state of the art which is not considered to be of particular relevance, the claimed inventions cannot be originated to involve an investive in the special reason (as specified) to involve an investive step when the document step the document of the international filing date to the actual completion of the international filing date but later than the priority date claimed Date of the actual completion of the international search Date of the actual completion of the international search Date of the actual completion of the international search Date of the actual completion of the international search Date of the actual completion of the international search Date of the actual completion of the international search Date of the actual completion of the international search Date of the actual completion of the international search Date of the actual completion of the international search Date of the actual completion of the international search Date of the actual completion of the international search Date of the actual completion of the international search Date of the actual completion of the international search Date of the actual completion of the international search Date of the actual completion of the international search Date of the act		•	classification symbols)		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) CIBEPAT,EPODOC, WPI, PAJ C. DOCUMENTS CONSIDERED TO BE RELEVANT Category* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. Y WO 0245055 A1 (Yudigar, S.L.) 06.06.2002 Page 6, line 4 – page 9, line 5; figures 3 and 4 Y EP 0811962 A1 (Meto, B.V) 10.12.1997 Abstract, figure 2, Claim 1 A FR 2806824 A1 (Driver) 28.09.2001 Claim 1, figure 2 ** Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of practical relevance to to be of practical relevance to the object of the centre of the content of the published on or after the international filing date to earlier document by tublished prior to the international filing date to considered the vestbolish the published of another claim or other claims of the published prior to the international filing date but later than """ document referring to an oral disclosure, use, exhibition or other class of the priority date claimed investion cannot be considered to involve an investive step when the document of comess." """ document referring to an oral disclosure, use, exhibition or other class of the priority date claimed investion cannot be considered to involve an investive step when the document of comess." """ document open states and investion cannot be combined with one or more other such combinated being of the international filing date but later than """ document member of the same patent family Date of the actual completion of the international search Date of the international search proport	IPC ⁷ G0	99F			
C. DOCUMENTS CONSIDERED TO BE RELEVANT Category* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. Y WO 0245055 A1 (Yudigar, S.L.) 06.06.2002 Page 6, line 4 – page 9, line 5; figures 3 and 4 Y EP 0811962 A1 (Meto, B.V) 10.12.1997 Abstract, figure 2, Claim 1 A FR 2806824 A1 (Driver) 28.09.2001 Claim 1, figure 2 X See patent family amex. ** ** ** ** ** ** ** ** **	Documentation	on searched other than minimum documentation to the ex	xtent that such documer	ts are included in th	ne fields searched
C. DOCUMENTS CONSIDERED TO BE RELEVANT Category* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. Y WO 0245055 A1 (Yudigar, S.L.) 06.06.2002 Page 6, line 4 – page 9, line 5; figures 3 and 4 1 - 6 Y EP 0811962 A1 (Meto, B.V) 10.12.1997 Abstract, figure 2, Claim 1 A FR 2806824 A1 (Driver) 28.09.2001 Claim 1, figure 2 Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance to be of particular relevance in cited to establish the published on or after the international filing date and not in conflict with the application but cited to understant to be of particular relevance in cited to establish the published on or after the international filing date or other special reason (as specified) "C" document referring to an oral disclosure, use, exhibition or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed The province of the actual completion of the international search Date of the actual completion of the international search To do and the priority date claimed To document the published or or after the international filing date or priority claim. The published or or after the international filing date or priority claim. The published on or after the international filing date or priority claim. The published on or after the international filing date or priority claim. The published on or after the international filing date or priority claim. The published on or after the international filing date or priority claim. The published on or after the international filing date or priority claim. The published on or after the international filing date or priority claim. The published or or after the international filing date or priority claim published after the international filing date or priority clai	Electronic dat	ta base consulted during the international search (name of	of data base and, where	practicable, search t	erms used)
Category* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. Y WO 0245055 A1 (Yudigar, S.L.) 06.06.2002 Page 6, line 4 - page 9, line 5; figures 3 and 4 Y EP 0811962 A1 (Meto, B.V) 10.12.1997 Abstract, figure 2, Claim 1 A FR 2806824 A1 (Driver) 28.09.2001 Claim 1, figure 2 ** Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "B" 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 a nother citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed The document published prior to the international filing date but later than the priority date claimed The document published prior to the international filing date but later than the priority date claimed The document published prior to the international filing date but later than the priority date claimed The document published prior to the international filing date but later than the priority date claimed The document published prior to the international filing date but later than the priority date claimed The document published prior to the international filing date but later than the priority date claimed The document published prior to the international filing date but later than the priority date claimed The document published prior to the international filing date but later than the priority date claimed The document published prior to the international search proof the same patent family	CIBEPAT	Г,EPODOC, WPI, PAJ			
Y WO 0245055 A1 (Yudigar, S.L.) 06.06.2002 Page 6, line 4 – page 9, line 5; figures 3 and 4 Y EP 0811962 A1 (Meto, B.V) 10.12.1997 Abstract, figure 2, Claim 1 A FR 2806824 A1 (Driver) 28.09.2001 Claim 1, figure 2 1, 4 Special categories of cited documents: "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 or which is crited to establish the publication due of another claimon or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "B" document published prior to the international filing date but later than the priority date claimed "O" document published prior to the international filing date but later than the priority date claimed "A" document published prior to the international filing date but later than the priority date claimed "A" document published prior to the international filing date but later than the priority date claimed "B" ending of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is taken alone "C" and of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is taken alone "C" and of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is taken alone "C" and of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is taken alone "A" document published prior to the international filing date but later than the priority date claimed "A" document member of the same patent family Date of the actual completion of the international search report	C. DOCUN	MENTS CONSIDERED TO BE RELEVANT			
Page 6, line 4 - page 9, line 5; figures 3 and 4 Y EP 0811962 A1 (Meto, B.V) 10.12.1997 Abstract, figure 2, Claim 1 A FR 2806824 A1 (Driver) 28.09.2001 Claim 1, figure 2 **Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "I" 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) "O" document referring to an oral disclosure, use, exhibition or other means document published prior to the international filing date but later than the priority date claimed "Date of the actual completion of the international search Date of the actual completion of the international search Date of the actual completion of the international search Date of the actual completion of the international search To abstract figure 2, Claim 1 1 - 6 1 - 6 1 - 6 1 - 7 1 - 6 1 - 6 1 - 7 1 - 6 1 - 7 1 - 6 1 - 7 1 - 6 1 - 4 1 - 6 1 - 6 1 - 7 1 - 8 1 - 9	Category*	Citation of document, with indication, where ap	opropriate, of the relev	ant passages	Relevant to claim No.
Page 6, line 4 - page 9, line 5; figures 3 and 4 Y EP 0811962 A1 (Meto, B.V) 10.12.1997 Abstract, figure 2, Claim 1 A FR 2806824 A1 (Driver) 28.09.2001 Claim 1, figure 2 1, 4 Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier 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) "O" document referring to an oral disclosure, use, exhibition or other means" "P" document published prior to the international filing date but later than the priority date claimed "Countent published prior to the international filing date but later than the priority date claimed "Countent published prior to the international filing date but later than the priority date claimed "Countent published prior to the international filing date but later than the priority date claimed "Countent published prior to the international filing date but later than the priority date claimed "E" document published prior to the international filing date but later than the priority date claimed Date of the actual completion of the international search Date of the actual completion of the international search Date of the actual completion of the international search report					
Abstract, figure 2, Claim 1 FR 2806824 A1 (Driver) 28.09.2001 Claim 1, figure 2 * Special categories of cited documents: "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 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) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed Date of the actual completion of the international search A See patent family annex. It alter document published after the international filing date or priority date and not in conflict with the application but cited to understant 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) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed Date of the actual completion of the international search Thus 2004 (05 07 04)	Y				1 - 6
Further documents are listed in the continuation of Box C. * Special categories of cited documents: "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 or priority date and not in conflict with the application but cited to understant to be of particular relevance; the claimed invention cannot be considered to involve an inventive step when the 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) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed The document published after the international filing date or priority date and not in conflict with the application but cited to understant the principle or theory underlying the invention cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is minerally step when the document is considered to involve an inventive step when the document is obtained with one or more other such documents, such combination being obvious to a person skilled in the art "E" alter document published after the international filing date or priority date and not in conflict with the application but cited to understant the principle or theory underlying the invention considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document istep when the document is taken alone "Y" document of particular r	Y				1 - 6
* Special categories of cited documents: "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 and not in conflict with the application but cited to understand the principle or theory underlying the invention document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other means "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "E" alter 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 cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is one of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document of particular relevance; the claimed invention cannot be considered novel or cannot be conside	A				1, 4
* Special categories of cited documents: "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 means "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "E" later document published after the international filing date or priority date and not in conflict with the application but cited to understant the principle or theory underlying the invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone 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 such documents, such combination being obvious to a person skilled in the art document member of the same patent family Date of the actual completion of the international search Date of mailing of the international state or priority date and not in conflict with the application but cited to understant the principle or theory underlying the invention cannot be considered novel or cannot be considered to involve an inventive step when the document is alken alone """ document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is alken alone document of particular relevance; the claimed invention cannot be considered novel or cannot be considered novel					
* Special categories of cited documents: "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) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "E" later document published after the international filing date or priority date and not in conflict with the application but cited to understant the principle or theory underlying the invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone 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 such documents, such combination being obvious to a person skilled in the art document member of the same patent family Date of the actual completion of the international search Date of the actual completion of the international search priority date or priority date and not in conflict with the application but cited to understant the principle or theory underlying the invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone """ document referring to an oral disclosure, use, exhibition or other means """ document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is taken alone """ document of particular relevance; the claimed invention cannot be considered novel or cannot be					
* Special categories of cited documents: "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 means "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "E" alter document published after the international filing date or priority date and not in conflict with the application but cited to understant the principle or theory underlying the invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is one of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document of particular relevance; the claimed invention cannot be considered novel or canno					
* Special categories of cited documents: "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 and not in conflict with the application but cited to understand the principle or theory underlying the invention document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other means "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "E" alter 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 cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is one of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document of particular relevance; the claimed invention cannot be considered novel or cannot be conside					
"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) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed Date of the actual completion of the international search Date of the actual completion of the international search document defining the general state of the art which is not considered to understant the principle or theory underlying the invention cannot be considered novel or cannot be considered to involve an invention cannot be considered novel or cannot be considered to involve an invention cannot be considered novel or cannot be considered to involve an invention cannot be considered novel or cannot be considered novel	Further	r documents are listed in the continuation of Box C.	X See patent	family annex.	
"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) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed Date of the actual completion of the international search "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 "Y" document referring to an oral disclosure, use, exhibition or other means "E" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered novel	"A" documer	nt defining the general state of the art which is not considered	"T" later document p	ublished after the inte	rnational filing date or priority cation but cited to understand
crited to establish the publication date of another channol of other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "Et al., 2004 (05.07.04)	"E" earlier d	locument but published on or after the international filing date nt which may throw doubts on priority claim(s) or which is	"X" document of par considered nove	ticular relevance; the l or cannot be consid	claimed invention cannot be lered to involve an inventive
"P" document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search patent family Date of mailing of the international search family	special r "O" document	reason (as specified)	"Y" document of par considered to in combined with o	ticular relevance; the nvolve an inventive ne or more other such	claimed invention cannot be step when the document is documents, such combination
5 July 2004 (05 07 04)				-	
24 June 2004 (24.06.2004) 5 July 2004 (05.07.04)	Date of the a	actual completion of the international search	-		=
	24 Jui	ne 2004 (24.06.2004)	5 July 20	04 (05.07.04))
Name and mailing address of the ISA/ Authorized officer	Name and m	nailing address of the ISA/	Authorized officer		
SPTO		SPTO			
Facsimile No. Telephone No.	m · · · · · · · · · · · · · · · · · · ·		Telephone No		

Form PCT/ISA/210 (second sheet) (July 1992)

EP 1 626 386 A1

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/ ES 2004/000167

Publication date		Patent fami member(s	Publication date	Patent document
	NONE			ed in search report
	NONE	28.09.2001		FR2806824 A
05.06.19 05.06.19 05.06.19	EP 19960109009	10.12.1997		EP 0811962 A
AB 11.06.20 AB 16.02.20 A 01.10.20	CA 2430160 A AU 2196002 A ES 2181558 AB EP 1349133 A EP 20010998956	06.06.2002		WO 0245055 A
A 1: AB 16 A 0:	AU 2196002 A ES 2181558 AB EP 1349133 A	06.06,2002		

Form PCT/ISA/210 (patent family annex) (July 1992)