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(54) **Device for hanging a game board**

(57) The invention relates to a device for hanging a game board, in particular a dart board, which device comprises a holder (5) to be fixed to a wall or the like and a carrier (15) to be attached to the game board, said holder (5) and said carrier (15) being provided with means for disposing the holder and the carrier in various rotated positions relative to each other. The carrier is provided with two disc-shaped regular polygonal parts (16,17), wherein one polygonal part (16) projects outside the other

polygonal part (17), with the smaller polygonal part (16) of the carrier fitting between the legs (3,4) of the U-shaped holder (5) and the larger polygonal part (17) of the carrier fitting in a recess (12) formed on one side of the holder (5), all this in such a manner that the carrier (15) can be moved to and from a position between the legs (3,4) of the U-shaped holder (5), whilst at least a few edges (18) of a polygonal part of the carrier abut against edges (6-11) of the U-shaped holder (5) in the position in which the carrier (15) is connected to the holder (5).

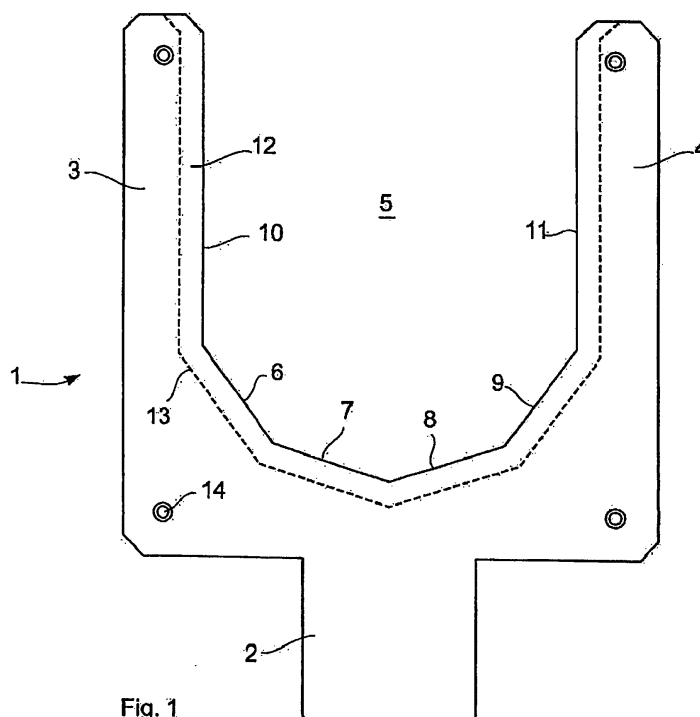


Fig. 1

Description

[0001] The invention relates to a device for hanging a game board, in particular a dart board, which device comprises a holder to be fixed to a wall or the like and a carrier to be attached to the game board, said holder and said carrier, being provided with means for disposing the holder and the carrier in various rotated positions relative to each other.

[0002] Generally, players throw their darts invariably at the same location on the dart board, generally the upper part of the dart board, when using a dart board, so that after some time said part of the dart board will be damaged to such an extent that this part of the dart board can no longer be used effectively. Consequently it is usual to manually rotate the dart board through a certain angle about an imaginary axis extending perpendicularly to the front surface of the dart board after part of the dart board has become damaged. Disposing the dart board in a correct, new position after rotation thereof is generally very time-consuming.

[0003] From GB 734,541 a device for hanging a dart board is known which comprises a holder to be fixed to a wall or the like, which holder is provided with a projecting, circular disc on its side remote from the wall, around which a support plate for a dart board is rotatable. Furthermore, a plate provided with a keyhole is fixed to one end of the disc, via which keyhole a dart board can be hung from the disc. As mentioned in said document, both the support plate and the dart board can be rotated, but in spite of the rather complex and voluminous construction of this known device, it is not possible to effect a simple and precise rotation of the game board through a desired angle.

[0004] WO 91/15729 and GB 503,045 also show devices for rotatably hanging a game board. The construction of these devices, too, is complex and voluminous, and the devices have a comparatively large dimension in a direction perpendicular to the front surface of the game board.

[0005] AU 656,646 shows an embodiment in which a game board can be attached to a wall by means of Velcro. With this construction, too, it is practically impossible to effect a simple and precise rotation of a game board through a desired angular distance.

[0006] From prior document NL 1030205, which was filed after the priority date of the present application, there is known a device for hanging a dart board wherein a positioning element provided with projections is attached to the rear side of the dart board. The projections of said positioning element fit in corresponding recesses formed in a holder that is fixed to a wall. To rotate the dart board relative to the holder, the dart board can be moved against the action of spring means in a direction perpendicular to the front surface of the dart board so as to move the projections out of the recesses. After a desired rotation of the dart board, the projections will be pressed into the recesses again under the influence of the spring

force.

[0007] This construction, too, is complicated, whilst the front surface of the game board is spaced a comparatively large distance from the wall or the like to which the holder is fixed.

[0008] The object of the invention is to provide a device of simple and compact construction, by means of which a game board supported by the device can be rotated through a desired angle in a precise and simple manner.

[0009] According to the invention, this object can be accomplished in that the carrier is provided with two disc-shaped regular polygonal parts, wherein one polygonal part projects outside the other polygonal part, with the smaller polygonal part of the carrier fitting between the legs of the U-shaped holder and the larger polygonal part of the carrier fitting in a recess formed on one side of the holder, all this in such a manner that the carrier can be moved to and from a position between the legs of the U-shaped holder, whilst at least a few edges of a polygonal part of the carrier abut against edges of the U-shaped holder in the position in which the carrier is connected to the holder.

[0010] When use is made of the device according to the invention, the game board can be easily rotated through a desired angle by moving the carrier out of the holder and moving it back into the holder again after rotation of the game board. The dimension of the carrier and the holder in a direction perpendicular to the front surface of the game board supported by the holder can be small in that case, so that the distance between the front surface of the game board and the wall the like to which the holder is fixed can be small.

[0011] The invention further relates to a game board provided with a carrier comprising two disc-shaped regular polygonal parts, wherein one polygonal part projects outside the other polygonal part, as well as to a combination of a game board provided with a carrier comprising two disc-shaped regular polygonal parts, one polygonal part projecting outside the other polygonal part, and with a U-shaped holder, between the legs of which U-shaped holder the smaller polygonal part of the carrier fits, whilst the larger part of the carrier fits in a recess formed on one side of the holder, all this in such a manner that the carrier can be moved to and from a position between the legs of the U-shaped holder, whilst at least a few edges of a polygonal part of the carrier abut against edges of the U-shaped holder in the position in which the carrier is connected to the holder.

[0012] The invention will be explained in more detail hereinafter with reference to an embodiment of a device according to the invention as shown in the appended figures.

[0013] Figure 1 is a front view of a holder for a device according to the invention.

[0014] Figure 2 is a side view of figure 1.

[0015] Figure 3 is a front view of a carrier for a device according to the invention.

[0016] Figure 4 is a side view of the carrier of figure 3.

[0017] The holder 1 shown in figure 1, which is usually made of plastic material, is substantially U-shaped, seen in front view, and comprises a projection 2 which extends below the U-shaped part. The two parallel legs 3 and 4 of the holder define a recess 5, which is bounded at the bottom side by four boundary edges 6-9 that join each other, which boundary edges include angles of $\pm 150^\circ$ with each other. The angles between the parallel edges 10 and 11 of the two legs 3 and 4 and their adjoining edges 6 and 9, respectively, are likewise $\pm 150^\circ$.

[0018] Furthermore, a groove or recess 12 is formed at the rear side of the holder 1, which groove or recess extends along the circumference of the recess 5 and whose boundary edge 13 remote from the recess 5 extends parallel to the edges 6-11 of the opening 5.

[0019] The holder 1 is further provided with a few holes 14, through which screws for fixing the holder 1 to a wall or the like can be passed.

[0020] The device according to the invention further comprises the carrier 15, for example of plastic material, that is shown in figures 3 and 4, which carrier comprises a first flat disc 16 and a second flat disc 17 attached to one side thereof. As will be understood, the flat disc 16 has the shape of a regular decagonal disc, with the magnitude of an angle between two successive boundary edges 18 of the disc being $\pm 150^\circ$.

[0021] The disc 17 is a correspondingly regular decagon, which, as figures 3 and 4 show, projects outside the disc 16 and which is disposed in such a manner that the edges 19 of the disc 17 extend parallel to the edges 18 of the disc 16.

[0022] A game board, such as a dart board, can be attached to the surface of the disc 16 remote from the disc 17, for example by means of screws or the like passed through holes 20 formed in the discs.

[0023] When the holder 1 is fixed to a wall or the like, the carrier 15 can be connected to the holder by moving the disc 16 into the space defined by the recess 5 and the disc 17 in the recess 12 formed in the rear side of the holder 1, which joins the recess 5. It will be understood that the carrier 15 is locked against rotation with respect to the holder 1 as a result of its unround shape, the decagonal shape of the discs 16 and 17 in the illustrated case, with the edges 18 of the disc 16 abutting against the edges 6-11 of the recess 5 and the edges 19 of the disc 17 abutting against the boundary edge 13 of the recess 12.

[0024] When the game board needs to be placed in a different position, the carrier 15 can be moved out of the holder 1 and be moved back into the holder 1 again after being rotated through a desired angle.

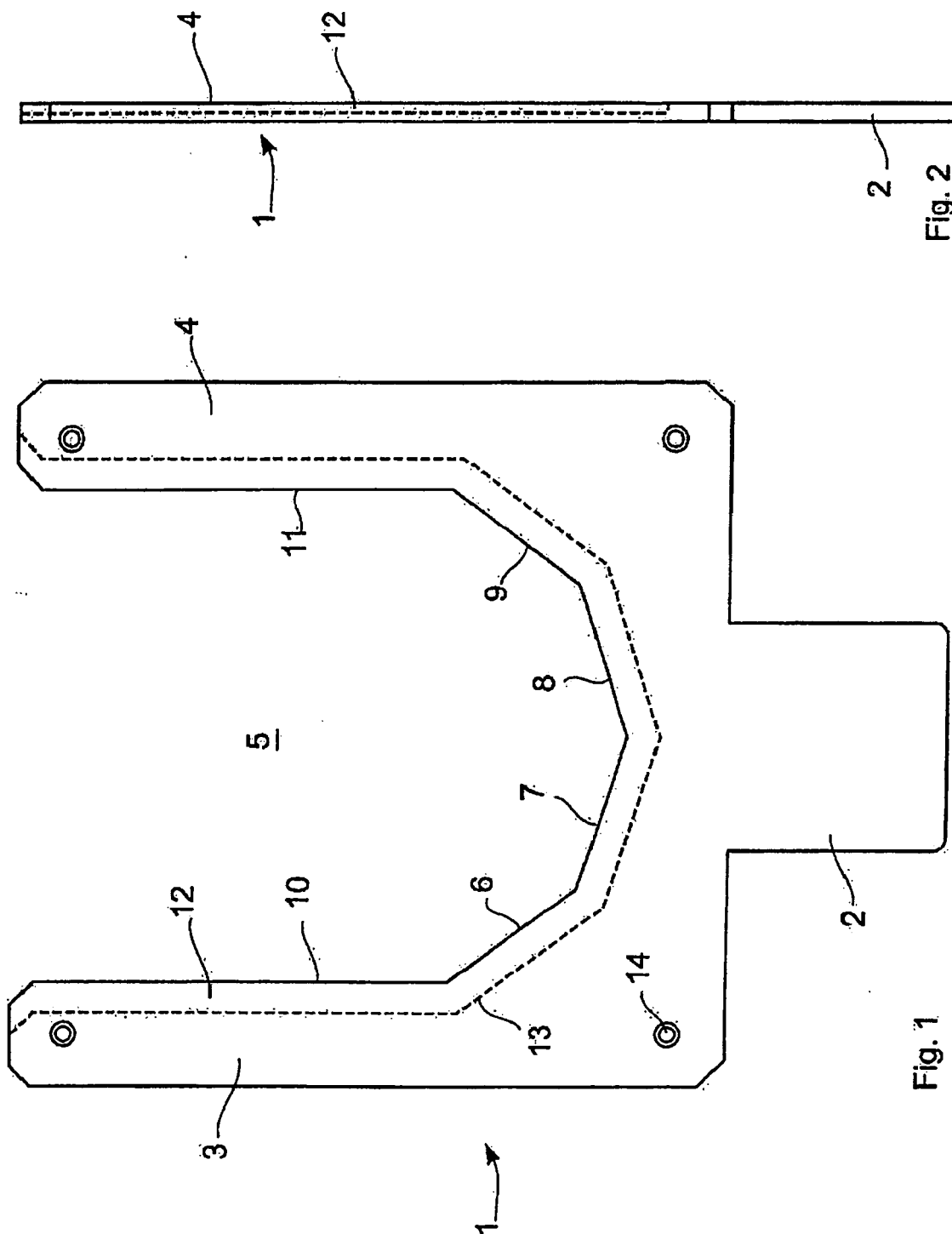
[0025] It will be understood that by using the device according to the invention, a game board attached to the carrier 15 will be held in a stable position when the game board is being used for playing, whilst the position of the game board can be changed in a simple manner, if desired, by rotating the board about an imaginary axis extending perpendicularly to the plane of the game board

after the carrier 15 has been taken out of the holder 1.

[0026] Although the invention has been explained in particular on the basis of the use thereof with a dart board, it will be apparent that the device according to the invention can also be used with other game boards.

Claims

1. A device for hanging a game board, in particular a dart board, which device comprises a holder to be fixed to a wall or the like and a carrier to be attached to the game board, said holder and said carrier being provided with means for disposing the holder and the carrier in various rotated positions relative to each other, **characterised in that** the carrier is provided with two disc-shaped regular polygonal parts, wherein one polygonal part projects outside the other polygonal part, with the smaller polygonal part of the carrier fitting between the legs of the U-shaped holder and the larger polygonal part of the carrier fitting in a recess formed on one side of the holder, all this in such a manner that the carrier can be moved to and from a position between the legs of the U-shaped holder, whilst at least a few edges of a polygonal part of the carrier abut against edges of the U-shaped holder in the position in which the carrier is connected to the holder.
2. A game board provided with a carrier comprising two disc-shaped regular polygonal parts, wherein one polygonal part projects outside the other polygonal part.
3. A combination of a game board provided with a carrier comprising two disc-shaped regular polygonal parts, one polygonal part projecting outside the other polygonal part, and with a U-shaped holder, between the legs of which U-shaped holder the smaller polygonal part of the carrier fits, whilst the larger part of the carrier fits in a recess formed on one side of the holder, all this in such a manner that the carrier can be moved to and from a position between the legs of the U-shaped holder, whilst at least a few edges of a polygonal part of the carrier abut against edges of the U-shaped holder in the position in which the carrier is connected to the holder.



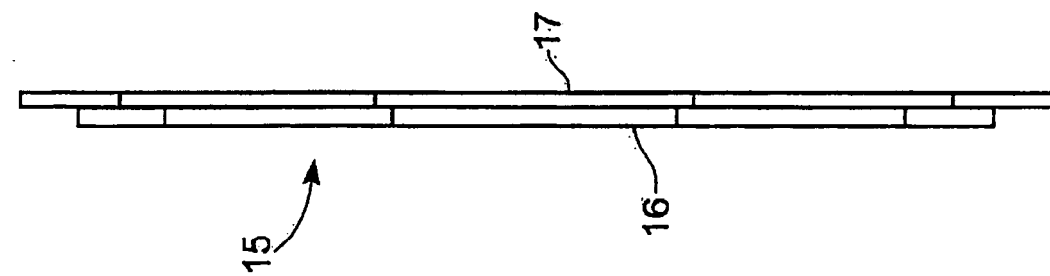


Fig. 4

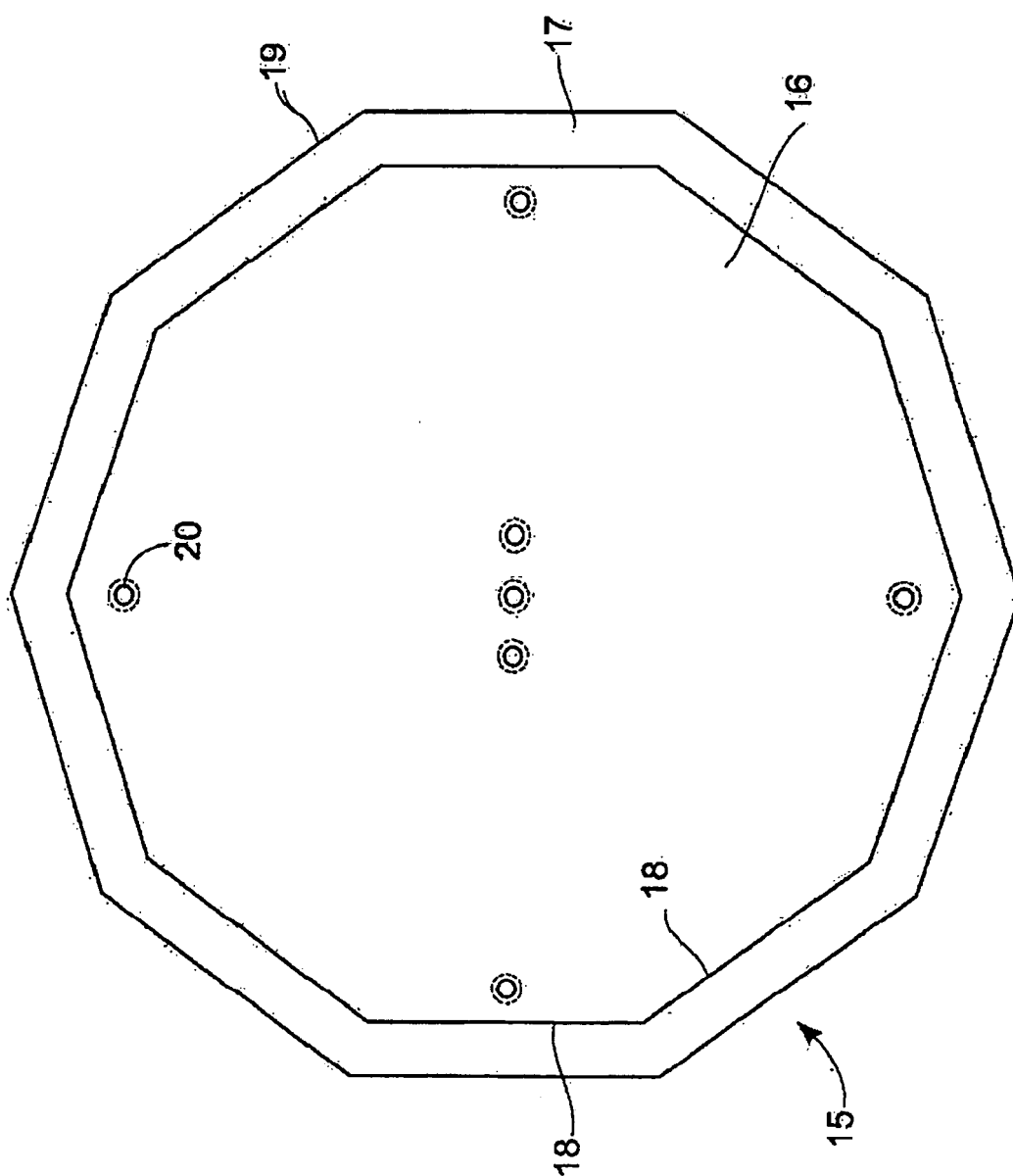


Fig. 3



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	GB 503 045 A (JOHN ARTHUR ELLAM) 30 March 1939 (1939-03-30) * page 1, line 94 - page 2, line 51 *	2	INV. F41J3/00
A	* figures * -----	1,3	
A	WO 91/15729 A (WELLOW LEISURE PRODUCTS LIMITE [GB]) 17 October 1991 (1991-10-17) * page 1, lines 18-26 * * page 4, line 19 - page 5, line 8 * * figures *	1,3	
A	----- GB 734 541 A (MAY WRIGHT) 3 August 1955 (1955-08-03) * page 1, lines 18-35 * * page 1, line 76 - page 2, line 36 * * figures *	1,3	
A	----- AU 656 646 B2 (THOMAS EDWARD GUY) 9 February 1995 (1995-02-09) * page 2, line 28 - page 3, line 2 * * page 7, line 10 - page 8, line 28 * * figures *	1,3	
	-----		TECHNICAL FIELDS SEARCHED (IPC) F41J
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 1 August 2008	Examiner Gex-Collet, A
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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EPO FORM 1503 03.82 (P04C01)



European Patent
Office

Application Number

EP 08 00 5796

CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

☒ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

☐ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

☐ The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).



The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1,3

Device for hanging a dartboard, comprising a holder and a carrier, provided with means for disposing the holder and carrier in various rotated positions relative to each other, wherein the carrier is provided with two disc-shaped regular polygonal parts, one projecting outside the other, with the smaller polygonal part of the carrier fitting between the legs of the U-shaped holder, whilst at least few of the edges of a polygonal part of the carrier abut against edges of the U-shaped holder in the position in which the carrier is connected to the holder.

2. claim: 2

A game board and a carrier, the carrier comprising two disc-shaped regular polygonal parts, one polygonal part projecting outside the other.

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 08 00 5796

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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01-08-2008

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REFERENCES CITED IN THE DESCRIPTION

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- WO 9115729 A [0004]
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