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(54) **Sanitary fixture**

(57) A sanitary fixture (100) is disclosed for allowing a person standing on a surface adjacent the fixture to perform ablutions. The fixture (100) comprises a first ba-

sin (102) at a first level above the surface and a second basin (104) at a second, lower, level above the surface. The second basin has length (l) and width (w) adapted to receive a human adult foot.

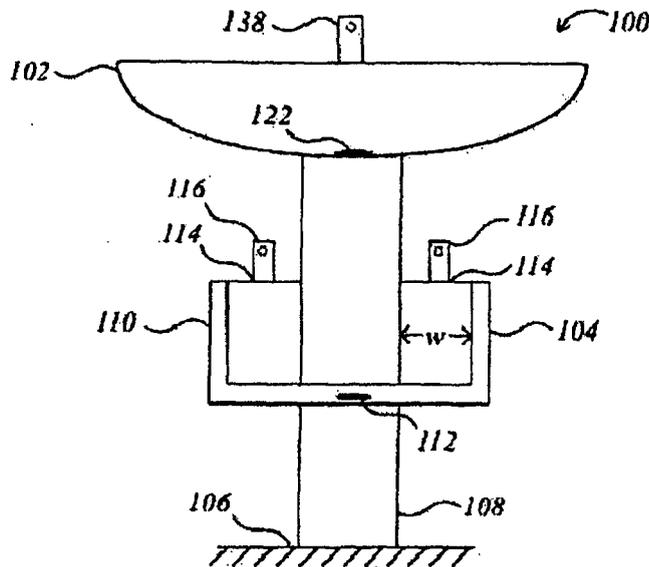


Figure 1

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Description

Technical Field

[0001] The invention relates to a sanitary fixture. More particularly, the invention relates to a sanitary fixture for allowing a user to perform ablutions.

Background

[0002] Muslims are required to perform ritual ablutions in preparation for prayers. The ablutions include the washing of the feet. In many mosques, such ablutions might typically be performed using ablution fountains, having seats at which a person could sit and taps for dispensing water. Often, however, ablutions are performed in the home for example using the bathroom sink, but this can be difficult for those who find it difficult to lift their feet high enough to wash them in the sink. This is due to reasons of lack of balance, lack of height or lack of flexibility, which may result in them failing to wash their feet satisfactorily. The performance of such ablutions have been known to be difficult for, say, the elderly and indeed even hazardous in that some persons performing the ablutions have been known to slip and fall during their performance. Further, the performance of such ablutions have been known to aggravate medical conditions such as back problems and the like.

[0003] As a result, when performing ablutions in the home, some people resort to washing their feet in the shower or the bidet. However, the former may add unnecessarily to the time required for the ablutions, and the latter is considered unclean.

[0004] A device for the performance of ablutions is disclosed in International Patent Publication No. W02006/064322. This Publication discloses a device consisting of a single piece which can be mobile or fixed and made of several elements which include a mobile seat, a waste water receptacle, a box supporting the receptacle, a drinking water tank and a device for discharging and recuperating wastewater which, for mobile devices consists of a reservoir, and for fixed devices consists of a pipe. The operation of the device is based on the manner of using the mobile seat and the washing of all the body parts concerned by the ablution in the water receiving chamber. However, such devices are not without their drawbacks. For instance, such devices require a relatively large footprint and therefore are undesirable to keep in a user's home. Further, because of their relatively complex nature, they are also relatively expensive to manufacture.

Summary

[0005] According to a first aspect of the invention, a sanitary fixture for allowing a person standing on a surface adjacent the fixture to perform ablutions is disclosed, the fixture comprising a first basin at a first level above

the surface and a second basin at a second level above the surface, the second level being lower than the first level.

[0006] According to a second aspect of the invention, it is disclosed a method of manufacturing a sanitary fixture comprising using a mould to produce, or otherwise forming, a fixture for allowing a person standing on a surface adjacent the fixture to perform ablutions, the fixture comprising a first basin at a first level above the surface and a second basin at a second level above the surface, the second level being lower than the first level.

[0007] According to a third aspect of the invention, it is disclosed a method of performing ablutions comprising washing a foot or other part of the body in a basin in a sanitary fixture, said basin being disposed at a lower height than another basin of the fixture.

[0008] Some optional features of the invention are defined in the dependent claims.

[0009] Various advantages may be realized with such a sanitary fixture. For instance, at least in one preferred form, it may assist the young, the elderly and those who are inflexible, for example because of back problems, in washing their feet.

[0010] Additionally, in at least one form, such a sanitary fixture may assist people with infants to wash their hands, as well as to teach infants how to wash hands at an early age without needing a step in front of the sink. This may reduce the likelihood of injury arising from a child falling from such a step. In addition, sanitary fixtures as disclosed herein may function as a teaching tool, whereby a child may mimic the adult by washing his/her hands at the same time as the adult does.

[0011] Such a sanitary fixture may furthermore be advantageous in households including an individual with dwarfism, by allowing all members of the household (and guests) to wash their hands using the same sanitary fixture.

[0012] In one form, such a sanitary fixture has a relatively small footprint, especially when compared with known ablution devices of the prior art, and may be installed in a space otherwise occupied by a traditional washbasin, thus allowing for the above advantages without increasing the space required. Furthermore, a device as herein described may be provided in a user's home with minimal or no disruption to the original layout or sanitary ware currently existing in the user's home. The device does not require additional complicated plumbing or fixtures and does not need to alter the existing infrastructure.

[0013] According to an exemplary embodiment of all aspects of the invention, the second basin is provided with a cut-away lip for facilitating access for the foot of the user therein.

[0014] According to an exemplary embodiment of all aspects of the invention, the first basin is supported by a stand, and the second basin is laterally disposed relative to the stand.

[0015] According to an exemplary embodiment of all

aspects of the invention, the sanitary fixture comprises a third basin which is laterally disposed relative to the stand such that the stand is disposed between the second and third basins.

[0016] According to an exemplary embodiment of all aspects of the invention, the second and third basins are formed such that water placed therein flows towards a common outlet aperture. According to an exemplary embodiment of all aspects of the invention, the second and third basins each comprise a drain opening.

[0017] According to an exemplary embodiment of all aspects of the invention, the drain openings in the second and third basins are formed such that water placed therein flows towards a common outlet aperture.

Brief Description of the Drawings

[0018] The invention will now be described, by way of example only, and with reference to the accompanying figures, in which:

Figure 1 is a front elevation of a sanitary fixture;

Figure 2 is a side elevation of the sanitary fixture shown in Figure 1;

Figure 3 is a front view of the sanitary fixture shown in Figures 1 and 2, also showing water drainage ducts;

Figure 4 is a side elevation of the sanitary fixture shown in Figure 3;

Figure 5 is a front elevation of the sanitary fixture shown in Figures 1 and 2, also showing water feed ducts; and

Figure 6 is a side elevation of the sanitary fixture shown in Figure 5.

Figure 7 is a front elevation of an embodiment of the sanitary fixture similar to that of Figure 1, including a separate drain for each lower basin.

Detailed Description

[0019] Turning now to Figure 1, a sanitary fixture generally referred to by 100 comprises a first basin 102 at a first level and a second basin 104 at a second level, the second level being lower than the first level relative to the surface 106 on which the fixture is placed.

[0020] To put it another way, sanitary fixture 100 for personal ablutions comprises a base (the part of stand 108 supported on a surface such as a floor), a first basin 102 at a first vertical distance from the base and a second basin 104 at a second vertical distance from the base, wherein the second vertical distance is less than the first vertical distance.

[0021] In the examples, the terms "level" and "vertical distance" in connection with the basins refer to the height at which the basins are accessible; for example, the height from a user's standing area adjacent the sanitary fixture. So, the second basin is at, and accessible from, a lower height than the first basin. Further, and for ex-

ample, if access to the first basin must be made over a peripheral lip, describing a second basin as lower, or at a lesser vertical distance, than a first basin means that at least a portion of the second basin is lower relative the standing area than the lowest portion of the peripheral lip of the first basin. For example, the lip of the second basin may be at a height which is less than the peripheral lip of the first basin. The same could be said about the lower internal surface - the lower surface on which water rests - of one basin being lower than the other. The term is not intended to imply that the entire second basin is necessarily lower than the entirety of the first basin.

[0022] The second basin 104 has length *l* (see Figure 2) and width *w* adapted to receive a human adult foot. For example, the length *l* may be between 25cm and 40cm, or more preferably between 30cm and 35cm, and the width *w* may be between 10cm and 20cm, or more preferably between 12cm and 15cm.

[0023] As is best shown in Figure 1, the first basin 102 is supported by a stand 108, and the second basin 104 is laterally disposed relative to the stand. It is also possible to provide a third basin 110 also laterally disposed relative to the stand 108 such that the stand is disposed between the second and third basins 104, 110. As viewed in Figure 1, second and third basins 104, 110 can be used, respectively, for a user's right and left feet.

[0024] In one form, the sanitary fixture 100 is provided with the second basin 104 being provided with a "cut-away" lip to provide easy access for a user's foot into the second basin 104. That is, in such a configuration, second basin 104 is not provided with a traditional peripheral lip such as the lip of first basin 102 over which a user will place his (or her) hands to access inside the basin. For instance, Figure 1 shows second basin 104 having this cut-away lip configuration. Thus, a user can place his foot into the second basin 104 without the additional effort of having to lift the foot higher to go over the peripheral lip traditionally provided in basins. In this example, the cut-away is a "full" cut-away in which the lower edge of the cut-away lip adjoins a front edge of the inner lower internal surface of basin 104. But it will be appreciated that a "full" cut-away is not necessary, and any reduction in height of the lip which facilitates access for a user's foot is contemplated.

[0025] The second basin 104 and (where provided) third basin 110 are formed with a sloping lower surface such that water placed therein flows towards a common outlet aperture 112. Advantageously, the sloping lower surface is shaped to slope away from the user so that any water used in the washing of feet does not flow over the lower edge of the cut-away lip onto the floor.

[0026] The second and third basins 104, 110 have, in respective edges thereof respective apertures 114 for receiving taps 116 for the delivery of water thereto.

[0027] In one configuration, the first, second and third basins 102, 104, 110 are integrally formed, for example by being slipcast in a ceramic material or by other forming techniques known to those skilled in the art. In an alter-

native configuration, the second and third basins 104, 110 and the stand 108 are integrally formed and the first basin 102 is formed separately and subsequently fixed on the adjacent wall against which the entire installation rests.

[0028] Turning now to Figures 3 and 4, for installation for example into a bathroom, respective drainage traps 118, 120 are fitted to an outlet aperture 122 in the first basin and the common outlet aperture 112 of the second and third basins 104, 110. Ducts 124 and 126 carry wastewater away, via a connector 128, to a drain (not shown).

[0029] Turning to Figures 5 and 6, hot and cold water feed pipes 130, 132 carry hot and cold water respectively, via connectors 134, 136 (see Figure 6) to mixer taps 116 (in the second and third basins), 138 (in the first basin). In other configurations, separate hot and cold water taps are used in one or more of the basins.

[0030] Turning to Figure 7, in one embodiment, each of the second basin 104 and the third basin 110 is provided with its own drain 112. Figure 7 is similar to Figure 1, except that there is a separate drain for each lower basin 104 and 110. The embodiments of Figures 3 and 5 may be similarly provided with separate drains. In an embodiment (not shown) corresponding to that of Figure 3, each drain 112 in the lower basins 104 and 110 may be provided with a trap 120, and the traps 120 may be connected to the duct 126 and thence to the connector 128 to the outfall drain (not shown).

[0031] In a further configuration, not shown, the taps 116 in the second and third basins 104, 110 are actuated by a pedal or button disposed in the basin for operation using the heel or toe of a foot inserted into the basin. In yet a further arrangement, the tap 116 in at least one of the second and third basins is actuated by a pedal or button disposed adjacent the surface 106 on which the fixture is located for operation using one foot while the other foot is inserted in the second or third basin.

[0032] To use the fixture for washing the feet in the sanitary fixture shown in the Figures, the tap in one of the second and third basins is first opened by hand, and then a foot to be washed is inserted into the basin. The foot may then be washed using one hand, perhaps using the other to hold the edge of the first basin for balance. This is repeated for the other foot, using the other of the second and third basins, if desired.

[0033] It will be appreciated that the invention has been described by way of example only and various modifications may be made to the techniques described herein without departing from the spirit and scope of the appended claims.

Claims

1. A sanitary fixture for allowing a person standing on a surface adjacent the fixture to perform ablutions, the fixture comprising a first basin at a first level

above the surface and a second basin at a second level above the surface, the second level being lower than the first level.

2. A sanitary fixture for personal ablutions, the sanitary fixture comprising a base, a first basin at a first vertical distance from the base and a second basin at a second vertical distance from the base, wherein the second vertical distance is less than the first vertical distance.

3. A sanitary fixture as claimed in claim 1 or claim 2, wherein the second basin has length and width adapted to receive a human adult foot.

4. A sanitary fixture as claimed in any preceding claim, wherein the second basin is provided with a cut-away lip for facilitating access for the foot of the user therein.

5. A sanitary fixture as claimed in any preceding claim, wherein the first basin is supported by a stand, and the second basin is laterally disposed relative to the stand.

6. A sanitary fixture as claimed in claim 5, comprising a third basin which is laterally disposed relative to the stand such that the stand is disposed between the second and third basins.

7. A sanitary fixture as claimed in claim 6, wherein the second and third basins are formed such that water placed therein flows towards a common outlet aperture.

8. A sanitary fixture as claimed in claim 7, wherein at least one of the second and third basins are provided with a sloped surface for the water placed therein to flow towards the common outlet aperture.

9. A sanitary fixture as claimed in any preceding claim, wherein the second basin has in an edge thereof an aperture for receiving a tap for the delivery of water thereto.

10. A sanitary fixture as claimed in any preceding claim, wherein the first and second basins are integrally formed.

11. A sanitary fixture as claimed in claim 6, wherein the second and third basins each comprise a drain opening.

12. A sanitary fixture as claimed in claim 11, wherein the drain openings in the second and third basins are formed such that water placed therein flows towards a common outlet aperture.

13. A sanitary fixture as claimed in claim 2, wherein the second basin is provided with a cut-away lip for facilitating access for the foot of the user therein.
14. A method of manufacturing a sanitary fixture comprising using a mould to produce, or otherwise forming, a fixture for allowing a person standing on a surface adjacent the fixture to perform ablutions, the fixture comprising a first basin at a first level above the surface and a second basin at a second level above the surface, the second level being lower than the first level.
15. A method of performing ablutions comprising washing a foot or other part of the body in a basin in a sanitary fixture, said basin being disposed at a lower height than another basin of the fixture.

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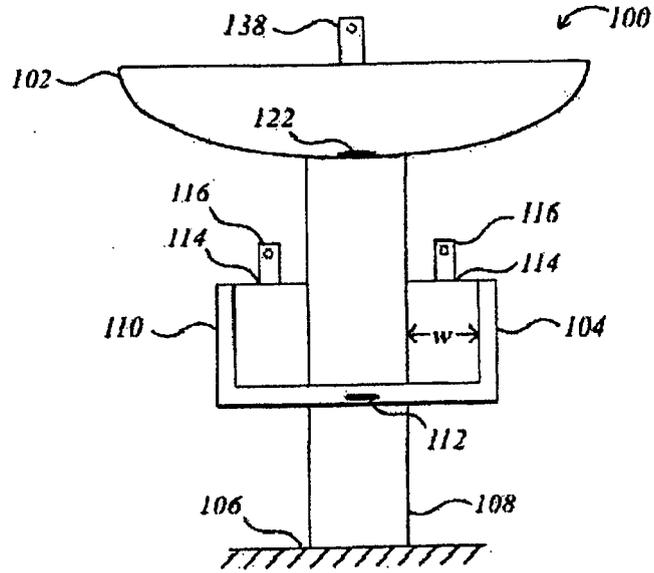


Figure 1

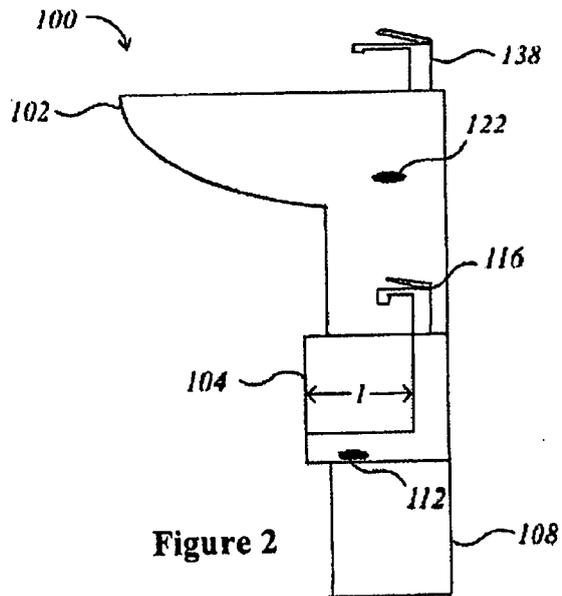


Figure 2

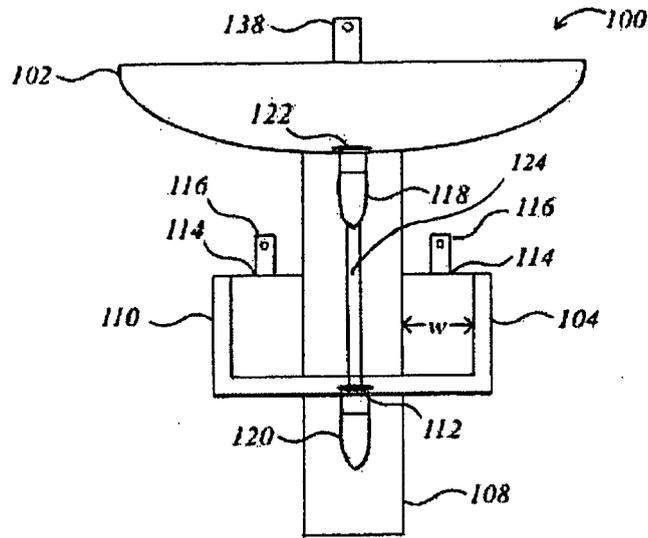


Figure 3

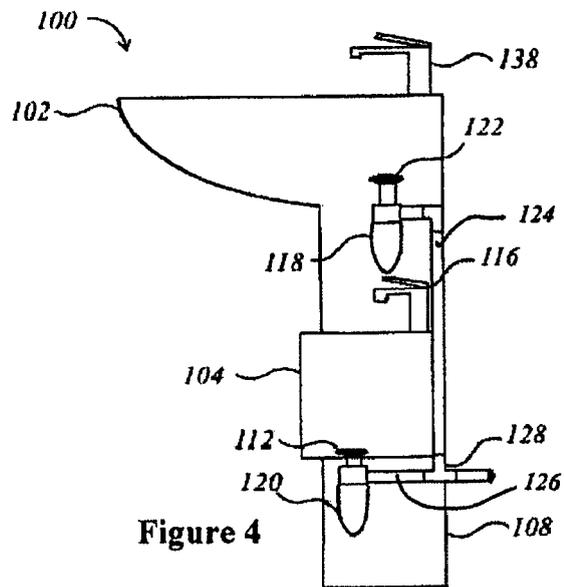


Figure 4

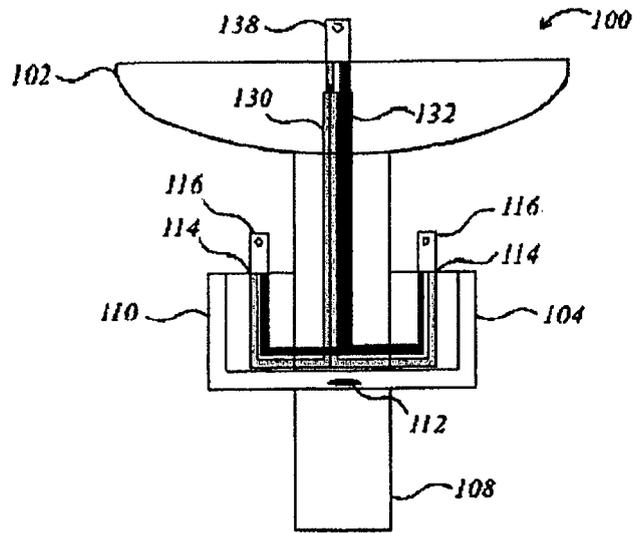


Figure 5

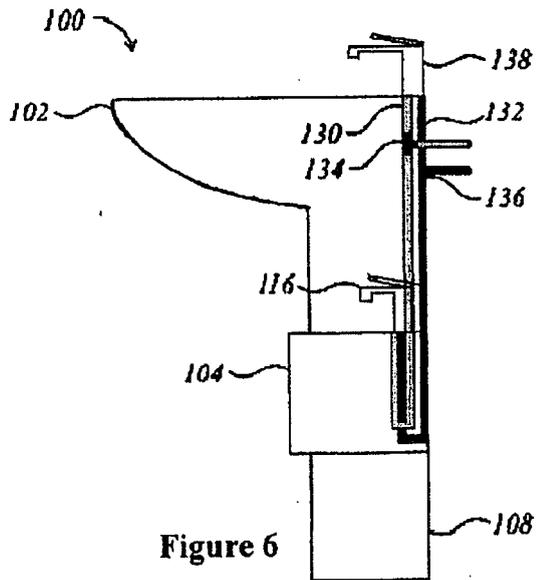


Figure 6

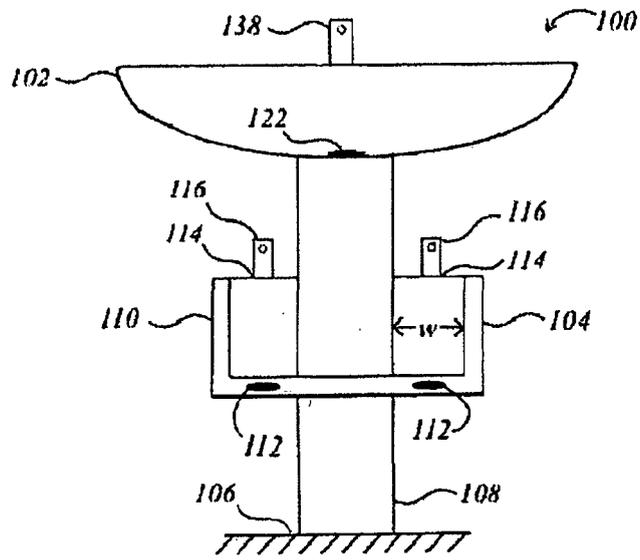


Figure 7



EUROPEAN SEARCH REPORT

Application Number
EP 11 00 7374

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 2 314 015 A (STEPHAN ALPHONSE JABBAR [GB]) 17 December 1997 (1997-12-17) * figures *	1-15	INV. E03C1/18 A47K1/04 A47K3/022
X	JP 6 154111 A (SEKISUI CHEMICAL CO LTD) 3 June 1994 (1994-06-03) * figures 1,4 *	1-3,5,9,14,15	
X	GB 27358 A A.D. 1898 (CASSELS WILLIAM [GB]) 27 May 1899 (1899-05-27) * abstract; figures 1,4 *	1,14,15	
X	GB 885 725 A (WALTHER LOEFFLER) 28 December 1961 (1961-12-28) * figures 1,4,5 *	1,14,15	
X	JP 2000 204619 A (SEKISUI CHEMICAL CO LTD) 25 July 2000 (2000-07-25) * abstract; figures 2,4,6 *	1,14,15	
X	KR 2005 0008448 A (JUNG JAE WEON) 21 January 2005 (2005-01-21) * figures *	1,14,15	
X	JP 4 061835 A (INAX CORP) 27 February 1992 (1992-02-27) * figure 1 *	1,14,15	E03C A47K
A	FR 2 657 519 A1 (OULD AHMED KHALIFA MOHAMED [FR]) 2 August 1991 (1991-08-02) * figures 2,4 *	1,14,15	
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 15 December 2011	Examiner Isailovski, Marko
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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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 11 00 7374

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15-12-2011

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
GB 2314015	A	17-12-1997	NONE	
JP 6154111	A	03-06-1994	NONE	
GB 189827358	A	27-05-1899	NONE	
GB 885725	A	28-12-1961	NONE	
JP 2000204619	A	25-07-2000	NONE	
KR 20050008448	A	21-01-2005	NONE	
JP 4061835	A	27-02-1992	JP 2109353 C	21-11-1996
			JP 4061835 A	27-02-1992
			JP 8013296 B	14-02-1996
FR 2657519	A1	02-08-1991	NONE	

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- WO 2006064322 A [0004]