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(71) Applicant: **Brunner S.r.l.**
39100 Bolzano (IT)

(72) Inventor: **Brunner, Roland**
39100 Bolzano (IT)

(74) Representative: **Ciceri, Fabio et al**
Perani & Partners
Piazza San Babila, 5
20122 Milano (IT)

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(54) **Drying rack with additional element for holding the laundry**

(57) The present invention refers to a drying rack comprising a support column (1), a base (2) for maintaining said column in vertical position, a first device (12) for supporting the hung laundry fixed to the column (1) at

the top part (11) thereof as well as an additional element (25) for holding the laundry fixed to the column (1) in a position between the base (2) and said first support device (12).

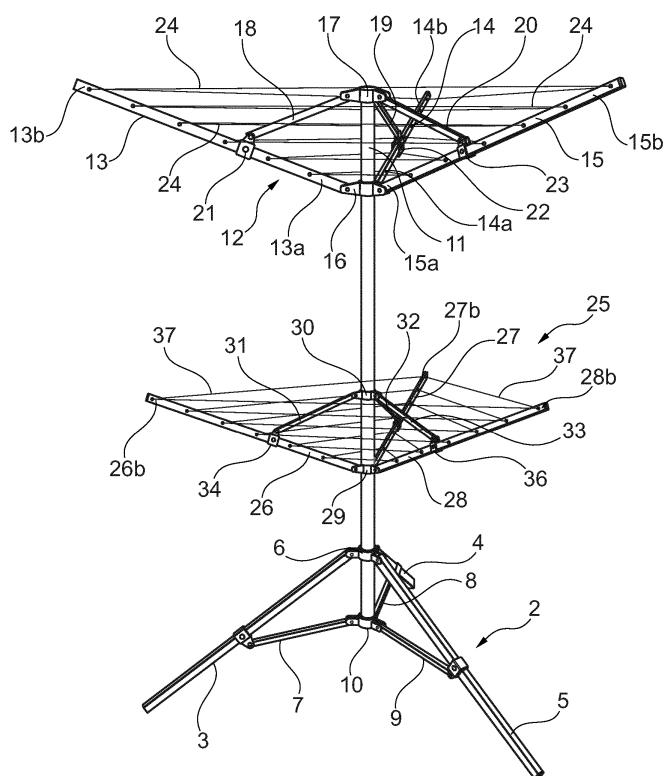


Fig. 3

Description

Field of application

[0001] The present invention refers to a drying rack of the type comprising a support column, a base for maintaining said column in vertical position and a device for supporting the hung laundry fixed to the column at the top part thereof, according to the preamble of claim 1.

Description of the prior art

[0002] There are known devices for supporting the hung laundry which comprise a plurality of arms, articulated with respect to the support column, among which there are arranged flexible wires which generate a web-like configuration.

[0003] Such types of drying rack are popular among users given that they are easy to mount and demount and, due to the web-like configuration with articulated arms with respect to the column, the device for supporting the laundry may be folded against the column with considerably saving the space occupied when not used.

[0004] Such drying racks are described for example in document DE19604424.

Problem of the prior art

[0005] Regardless of the advantages commonly recognised to laundry dry racks of the of the aforementioned type, they reveal a problem regarding the stability of the column on the base thereof, should one want to increase the capacity of accommodating the laundry to be hung by the support device of the latter in that this would imply a radial increase, with respect to the column, of the web-like configuration of the support which determines a considerable cantilever regarding the vertical axis of the column.

[0006] With hung laundry on one side possibly heavier than the hung laundry on the opposite side, there is the risk of the column capsizing and thus the hung laundry falling to the ground.

SUMMARY OF THE INVENTION

[0007] The object of the present invention is to extend the capacity to receive laundry by a drying rack of the previously described type without running the risk of the column, to which the laundry support is connected, to capsize.

Advantages of the invention

[0008] The object is attained through a drying rack according to the characteristics claimed in claim 1.

[0009] In particular the inventive drying rack comprises a support column, a base for maintaining said column in vertical position, a device for supporting the hung laundry

fixed to the column at the top part thereof and comprises an additional element for holding the laundry fixed to the column in a position between the base and said first support device.

BRIEF DESCRIPTION OF THE DRAWINGS

[0010] Now, the invention shall be described further in detail with reference to a preferred embodiment thereof, provided solely by way of non-limiting example, illustrated in the attached drawings, wherein:

- Figure 1 shows, in a schematic perspective view, a drying rack according to the known art;
- Figure 2 shows, in a schematic perspective view, the additional element for supporting the laundry according to the invention;
- Figure 3 shows, in a schematic perspective view, the drying rack with the additional element according to the invention.

DETAILED DESCRIPTION

[0011] With reference to the aforementioned figures and in particular to the contents of figure 1, according to the known art, a drying rack comprises a support column 1, maintained in vertical position by a base indicated in its entirety with 2 which can consist of, for example, as illustrated in figure 1, a tripod formed by the support arms 3, 4 and 5, connected to the column 1 through a collar 6 and of the stiffening rods 7, 8 and 9 also connected to the column 1 through a further collar indicated with 10.

[0012] At the top part 11 of the column 1, the drying rack, according to the known art, has a device for supporting the laundry generally indicated with 12, which is made up of a plurality of arms 13, 14 and 15 arranged radially with respect to the column 1 to which they are connected through a first collar 16.

[0013] The aforementioned arms, preferably three, are arranged around the column 1 spaced apart by 120° with respect to each other.

[0014] The ends 13a, 14a and 15a of the arms 13, 14 and 15 are connected to the collar 16 through a respective hinge, not shown in detail in the drawings due to the fact that it is conventional, while the opposite ends 13b, 14b and 15b are cantilevered with respect to the column 1.

[0015] A second collar 17, anchored to the top part of the column 1 and thus in an overlying position the collar 16, supports, through respective conventional hinges, a first end of the rods 18, 19 and 20 which, with the opposite end, are connected to the respective arms 13, 14 and 15 in an intermediate point 21, 22 and 23, between the ends thereof.

[0016] The length of the rods 18, 19 and 20 is such to determine the positioning of the arms 13, 14 and 15 with an inclination to make the structures flared upwards with respect to the vertical column 1.

[0017] The collars 16 and 17 are provided with a locking mechanism to the column 1 in the preselected position. Such mechanism (not illustrated in detail) in the drawings due to the fact that it is conventional, may include a simple screw the end of which is radially engaged with the column 1 or an eccentric mechanism with manual actuation through a control lever.

[0018] Extended between the arms 13, 14 and 15, there are provided wires 24 which generate a configuration similar to a web for supporting laundry garments (not illustrated).

[0019] As observable from the description, a possible increase of the capacity of supporting a larger number laundry garments, to be attributed to the device 12 would imply an extension of the arms 13, 14 and 15 with the ensuing moving away from the axis of the column 1 of the cantilevered end of the aforementioned arms thus determining a problem of stability to the overall structure of the drying rack.

[0020] According to the invention, the drying rack is provided with an additional element, indicated in the drawings in its entirety with 25, for holding the laundry, fixed to the column 1 in a position between the base 2 and said first support device 12.

[0021] The additional element 25, which may also be sold separately from the drying rack, comprises at least three arms 26, 27 and 28, with mainly longitudinal extension, which with the ends 26a, 27a and 28a thereof, are connected to a first collar 29 through conventional hinges (not illustrated). The arms 26, 27 and 28 are distributed around the collar 29 spaced apart from each other preferably by 120°.

[0022] The same additional element 25 comprises a second collar 30, in a position overlying the collar 29 and coaxial therewith, which supports, through respective conventional hinges, a first end of rods 31, 32 and 33 which, with the opposite end, are connected to the respective arms 26, 27 and 28 in an intermediate point 34, 35 and 36, between the ends thereof.

[0023] The length of the rods 31, 32 and 33 is such to determine the positioning of the arms 26, 27 and 28 with an inclination to make the structure flared towards the collar 30.

[0024] Actually, each rod 31, 32 and 33 of the additional element 25 for supporting the laundry connecting the respective arm 26, 27 and 28 to the second collar, has a greater length than that of the section comprised between the intermediate point 34, 35 and 36 in which it is connected to the respective arm and the point of connection of the latter to the first collar 29.

[0025] The collars 29 and 30 are provided with a respective mechanism through which the additional element 25 may be anchored to the column 1 in the preselected position between the base 2 and the first device for supporting the laundry generally indicated with 12. The mechanism for fixing the additional element 25 to the column 1, not illustrated in detail on the drawings due to the fact that it is conventional, may include a simple

screw the end of which is radially engaged with the column 1 or an eccentric mechanism with manual actuation through a control lever.

[0026] Extended between the arms 26, 27 and 28 there are provided wires 37 which generate a configuration similar to a web for supporting laundry garments, the latter not being illustrated.

[0027] According to the invention, the intermediate points 34, 35 and 36 of arms 26, 27 and 28, to which the rods 31, 32 and 33 are anchored, divide the longitudinal extension of the relative arm in two sections of different length, the smaller length being comprised between the said intermediate point and the cantilevered end 26b, 27b and 28b.

[0028] This allows preventing the application of the additional element 25 to the column 1 and the load of the laundry to be hung to dry determines the conditions which may cause the capsizing of the column 1 and thus the fall of the laundry present on the support devices.

[0029] The dimensions as well as the materials used may obviously be any according to the needs, without departing from the scope of protection of the present invention as described above and claimed hereinafter.

Claims

1. Drying rack comprising a support column (1), a base (2) for maintaining said column in vertical position, a first device (12) for supporting the hung laundry fixed to the column (1) at the top part (11) thereof, an additional element (25) for holding the laundry fixed to the column (1) in a position between the base (2) and said first support device (12), said additional element (25) for supporting the laundry comprises a first collar (29), adapted to be fixed around the support column (1) in a first point of the vertical extension thereof between the base (2) and said first device (12) for supporting the laundry, **characterised in that** said additional element (25) for supporting the laundry comprises at least three rod-like arms (26, 27, 28), with mainly longitudinal extension, which, with a first end thereof (26a, 27a, 28a), are connected to said collar (29) in respective three points distributed around the perimeter of the latter, through a respective hinge, while, with their second end (26b, 27b, 28b), they end cantilevered, a second collar (30), coaxial to the first, mounted around the support column (1) in a second point of the vertical extension of the latter in a position spaced apart from the said first collar (29) on the opposite side with respect to the base (2), a rod-like element (31, 32, 33) hinge-connected between a point arranged on the periphery of said second collar (30) and a point (34, 35, 36) of a relative arm, said point being intermediate between the end connected to said first collar and the cantilevered free end (26b, 27b, 28b) and dividing the longitudinal extension of the arm in two sec-

tions of different length, the smaller length being comprised between said intermediate point (34, 35, 36) and the said cantilevered end.

2. Drying rack according to any one of claims 1, wherein
each of said rod-like elements (31, 32, 33) of said
additional element (25) for supporting the laundry
connecting the respective arm (26, 27, 28) to said
second collar, has a greater length than that of the
section comprised between the intermediate point
(34, 35, 36) wherein it is connected to the respective
arm and the point of connection of the latter to the
first collar (29). 5 10

3. Drying rack according to any one of claims 1 to 2, 15
wherein at least one of said collars (29, 30) of the
additional element (25) for supporting the laundry is
provided with a locking mechanism for fixing and
loosening said collar in a predetermined position of
the extension of said vertical column support (1). 20

4. Drying rack according to any one of claims 1 to 3,
wherein both said collars (29, 30) of the additional
element (25) for supporting the laundry are provided
with a locking mechanism for fixing the respective
collar to the vertical column support (1) and for loos- 25
ening it from the latter.

5. Drying rack according to any one of claims 3 or 4,
wherein said locking mechanism for fixing and loos- 30
ening said collars (29, 30) with respect to the support
column (1) comprises an eccentric mechanism with
manual actuation through a control lever.

6. Drying rack according to any one of claims 1 to 5, 35
wherein said additional element (25) for supporting
the laundry comprises a plurality of flexible wires (37)
each of which extends between said three arms (26,
27, 28) with the formation of a substantially web-like
configuration. 40

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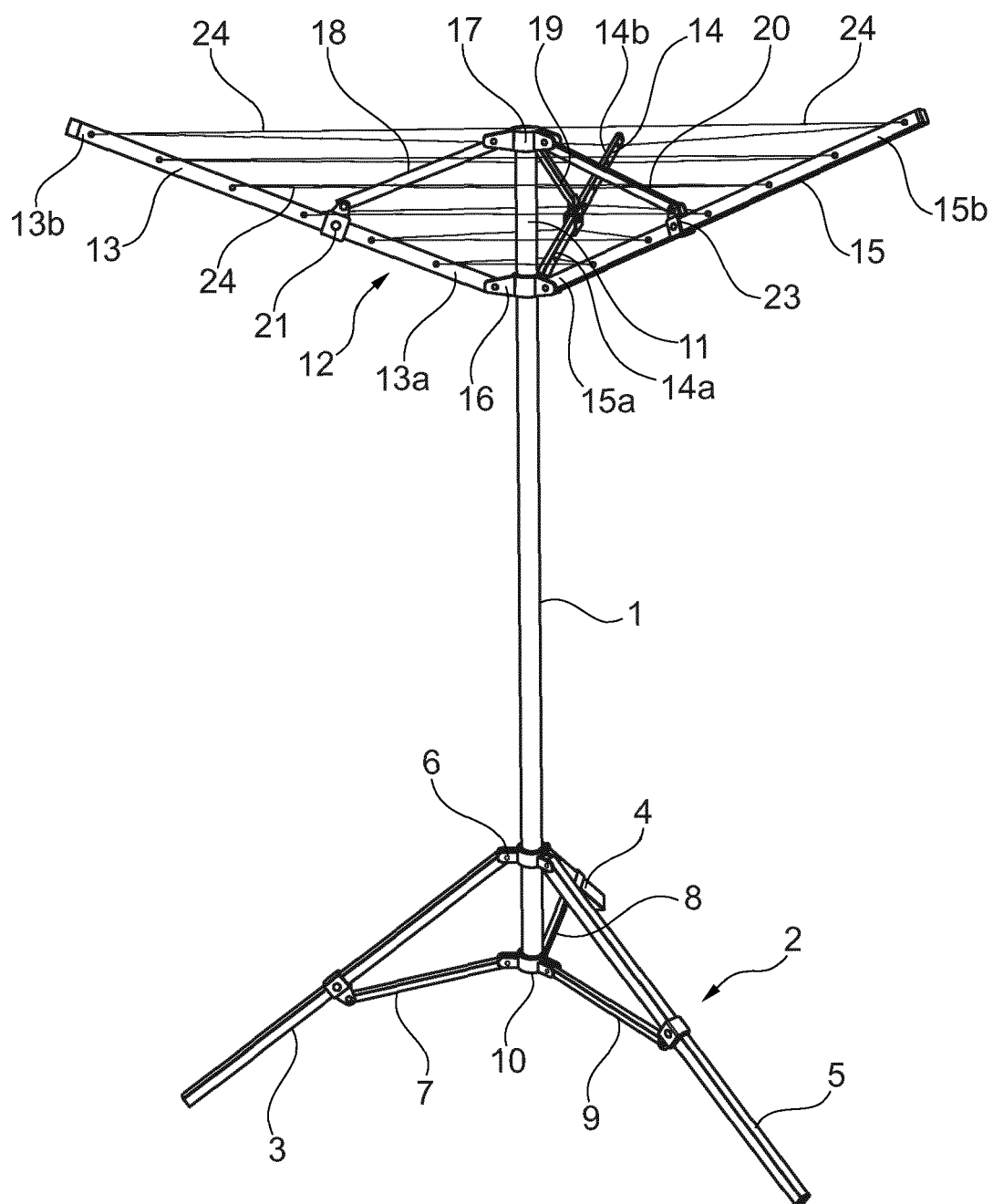


Fig. 1

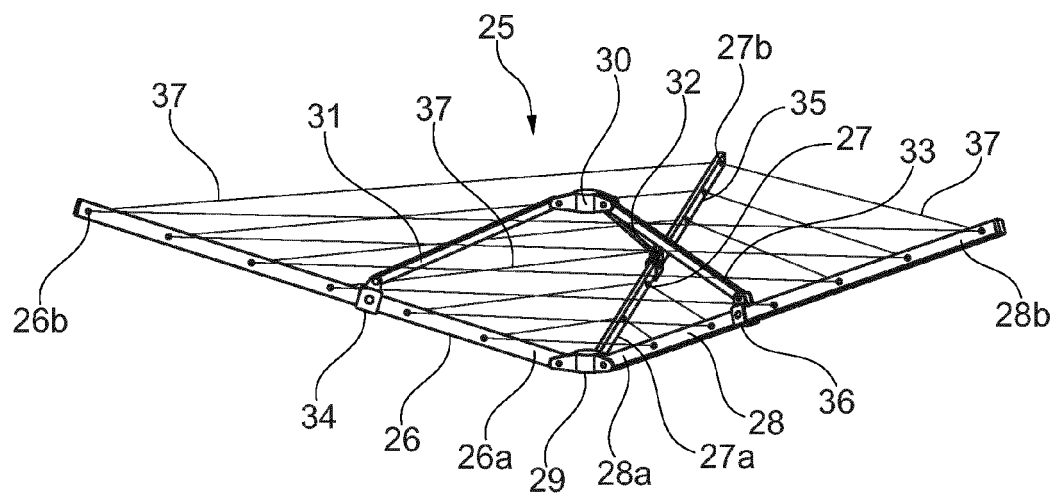


Fig. 2

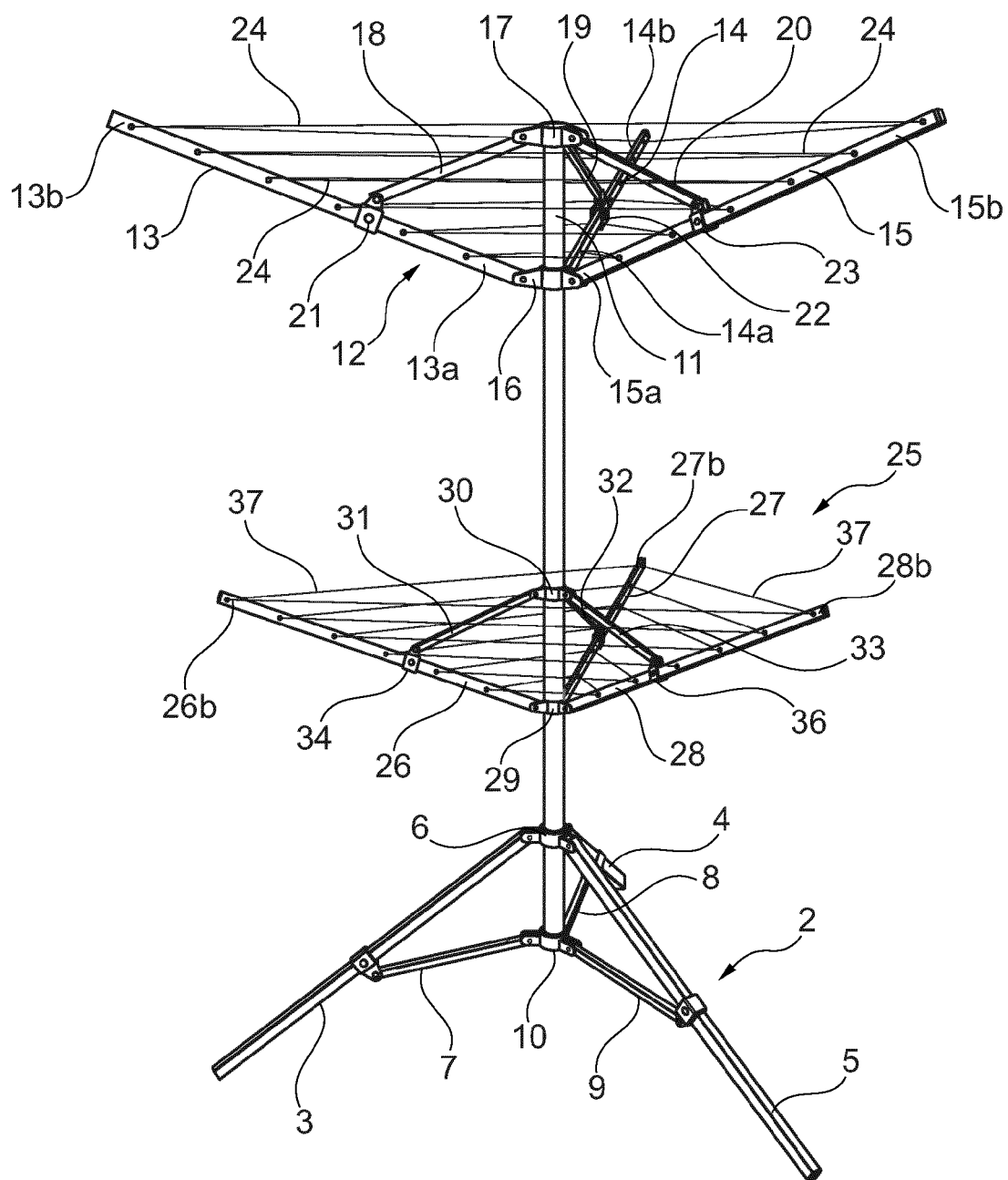


Fig. 3



EUROPEAN SEARCH REPORT

Application Number
EP 14 16 4462

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	DE 196 04 424 C1 (ROEMER DIETMAR [DE]) 14 August 1997 (1997-08-14) * column 1, lines 20-44; claim 1; figures * * column 2, lines 29-63 *	1-6	INV. D06F57/04
A	FR 345 155 A (MATHIEU DILLMANN [DE]) 23 November 1904 (1904-11-23) * the whole document *	1-6	
A	GB 2 406 268 A (COOPER SIMON JOHN [GB]) 30 March 2005 (2005-03-30) * page 2; figures * * page 1 - paragraph 3-6 *	1-6	
A	EP 1 783 265 A1 (REALITY PRODUCTS LTD [GB]) 9 May 2007 (2007-05-09) * figures *	1-6	
			TECHNICAL FIELDS SEARCHED (IPC)
			D06F
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 23 June 2014	Examiner Stroppa, Giovanni
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 14 16 4462

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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23-06-2014

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 19604424	C1	14-08-1997	NONE
FR 345155	A	23-11-1904	NONE
GB 2406268	A	30-03-2005	NONE
EP 1783265	A1	09-05-2007	AU 2006235912 A1 24-05-2007 EP 1783265 A1 09-05-2007

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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