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(54) **GLIDER ROCKER**

(57) A system and apparatus for gliding rocking chairs comprises an adult rocking chair (1), a gliding base (6), a bassinet (4), and a latching mechanism (3), where the chair is attached to the base and a bassinet is placed on the base (5) to transfer the rocking motion of said chair to the bassinet. A system and method is disclosed in which a bassinet is attached to the stool and the stool is further attached to the rocker. The rocking motion allows the bassinet to be rocked in a hands free manner by the person sitting in the chair. Because the bassinet is placed on the footstool, both the bassinet and rocking chair thereafter move as one unit. The rocker has complete control of the bassinet; by simply slowing or speeding up their own rocking, the person in the rocker can control the rocking of the bassinet, hands free. Furthermore, the chair should have attachment points on both sides, so that the stool can be attached to either side of the chair, depending on the user's needs, allowing a different stool to be attached to each side if a parent has twins.

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Description

FIELD OF THE INVENTION

[0001] The present invention relates to the field of gliding rocking chairs connected to a footstool to facilitate nursing activity by attaching to a rocking cradle or bassinet to provide a gentle, soothing rocking motion. More particularly, the present invention relates to a bassinet rocking device that easily installs onto the rocker and the bassinet and creates the desired rocking motion without creep or travel, i.e., without the device causing the bassinet to move across the floor.

BACKGROUND OF THE INVENTION

[0002] The art is repleted with conventional rocking devices that may be used in connection with a cradle, or in some cases with a rocking chair or other furniture, that are typically clamped onto the base of the cradle or other item, and typically have a bar or arm or leg that moves up and down and pushes against the floor to create a rocking or "see-saw" motion. Because the reciprocating arm is moving against the floor, the device can produce a forward force, or sometimes a transverse force, that tends to move the cradle gradually across the floor. Some alternative arrangements are employed with cradles that are suspended in a frame and do not employ the conventional (curved) rocker bars at the base. The rocking device is typically built in or has to be permanently installed in a retrofit fashion.

[0003] For most parents and other childcare providers, child pacification devices are a necessity. For convenience, most parents and childcare providers set up and store such pacification devices in the household family room or living room, which typically also contains adult-size comfort furniture. The combination of such child pacification devices and adult size comfort furniture causes an overcrowded appearance in the room. It would be desirable to provide a single device that is designed to safely contain and pacify an infant and is also designed to comfortably support an adult.

[0004] Windup swings, walkers, rockers, and jumpers are a few devices known in the prior art for pacifying infants. The reciprocating action of such devices provides gentle motion and a continuous change of scenery, both of which generally soothes and pacifies an infant. However, none of the above-listed child pacification devices can serve as furniture to comfortably support an adult. While an electrically powered rotating seat capable of supporting an adult is described in Chihaya et al. U.S. Pat. No. 4,969,685, the rotatable seat described by Chihaya is not designed to safely contain an infant, provide continuous rotation, or to accept infant accessories, as required by a child pacification device. Furthermore, the chair described in Chihaya must be mounted to the floor and requires extensive gearing to be built into the rotating members. This gearing arrangement is expensive to construct.

In addition, not one has previously provided a compact, affordable, self-contained, attachable unit that can be employed with all or most types of bassinets or cradles, and can provide a sustained, gentle, and soothing rocking motion to satisfy the infant's comfort needs.

Various prior arts have disclosed gliding rocking chairs that provide a soothing motion to the infant bassinet. Patent No US 20120126595 A1 discloses systems and methods for easily and safely changing the operating modes for gliding rocking chairs and ottomans. US 5931534 A discloses an electrically-powered, continuously rotating carrier constructed to safely contain and pacify an infant and comfortably support an adult. Similarly, other prior arts, US 6761671 B1, US 20130139313 A1, and US 8820834 B2, all disclose devices and methods for imparting a rocking motion to an infant bassinet and seat. All of the prior art system and apparatus suffer from the disadvantages that they are complicated, expensive, and/or not easy to operate.

[0005] The foregoing patents reflect the state of the art of which the applicant is aware, and are tendered with the view toward discharging the applicant's acknowledged duty of candor in disclosing information that may be pertinent in the examination of this application. It is respectfully stipulated, however, that none of these patents teach or render obvious, singly or when considered in combination, the applicant's claimed invention.

[0006] There is a need for a rocking chair connected to a bassinet device to cause gliding movement that can be sold and maintained as a separate unit, and which can be easily coupled to any existing bassinet or cradle of the type that has curved rocker bars or bases from which the main support legs rise to the body of the cradle or bassinet. The device should also be configured so that it can be coupled to a child's rocking chair for automatically providing a sustained, gentle rocking motion to that item of furniture.

SUMMARY

[0007] The present invention provides a new and improved gliding rocking chair that rocks a bassinet with its motion, such that the user provides motion to bassinet without use of his hands. As such, the general purpose of the present invention, which will be described subsequently in greater detail, is to provide a new and improved system and method for glider rocking chairs that has all the advantages of the prior art, and none of the disadvantages.

[0008] A primary objective of the invention is to provide an improved system for gliding rocking chairs attached to a footstool.

[0009] An objective of the invention is to provide an improved system for gliding rocking chairs with footstools that are used for rocking a bassinet using the rocking motion of an adult glider rocker.

[0010] It is another objective of the present invention

to provide a system for gliding rocking chairs with the bassinet sitting on a gliding base.

[0011] It is another objective of the present invention to provide a method for gliding rocking chairs with the bassinet sitting on a gliding base where the base is detachable from the bassinet to use the bassinet independent of the rocking glider.

[0012] It is another objective of the present invention to provide a method for gliding rocking chairs with the bassinet sitting on a gliding base where the base is detachable from the bassinet to use the base as a footstool independent of the rocking gliding chair.

[0013] It is another objective of the present invention to provide a method for gliding rocking chairs that are detachably attached to the bassinet and can be used even after the baby no longer needs to be rocked.

[0014] It is also an objective of the present invention to provide a method for gliding rocking chairs that frees the adult's hands while simultaneously allowing full control on the bassinet.

[0015] It is also an objective of the present invention to provide an improved system and method of attaching the gliding rocking chair to the foot stool on which the bassinet is placed.

[0016] Furthermore, it is an objective of the present invention to provide system and method that is much more flexible and economical to use which can be utilized in all kinds of rocking gliding chairs.

[0017] There has thus been outlined, rather broadly, the more important features of the invention in order that the detailed description thereof that follows may be better understood, and in order that the present contribution to the art may be better appreciated.

[0018] Numerous objectives, features, and advantages of the present invention will be readily apparent to those of ordinary skill in the art upon a reading of the following detailed description of presently preferred, but nonetheless illustrative, embodiments of the present invention when taken in conjunction with the accompanying drawings. The invention is capable of other embodiments, and of being practiced and carried out in various ways. Also, it is to be understood that the phraseology and terminology employed herein are for the purpose of description, and should not be regarded as limiting.

BRIEF DESCRIPTION OF THE DRAWINGS

[0019] To further clarify various aspects of some example embodiments of the present invention, a more particular description of the invention will be rendered by reference to specific embodiments thereof, which are illustrated in the appended drawing. It is appreciated that the drawing depicts only illustrated embodiments of the invention, and is, therefore, not to be considered limiting of its scope. The invention will be described and explained with additional specificity and detail through the use of the accompanying drawing, in which:

Fig.1 is a front view of the left side of the adult rocking chair with gliding base.

Fig.2 is a front view of the right side of the adult rocking chair with gliding base.

DETAILED DESCRIPTION OF THE INVENTION

[0020] The embodiments of the present disclosure, described below, are not intended to be exhaustive or to limit the disclosure to the precise forms disclosed in the following detailed description. Rather, the embodiments are chosen and described so that others skilled in the art may appreciate and understand the principles and practices of the present disclosure.

[0021] The following embodiments and the accompanying drawings, which are incorporated into and form part of this disclosure, illustrate embodiments of the invention, and, together with the description, serve to explain the principles of the invention. To the accomplishment of the foregoing and related ends, certain illustrative aspects of the invention are described herein in connection with the following description and the annexed drawing. These aspects are indicative, however, of but a few of the various ways in which the principles of the invention can be employed, and the subject invention is intended to include all such aspects and their equivalents. Other advantages and novel features of the invention will become apparent from the following detailed description of the invention when considered in conjunction with the drawing.

Glider rockers may also be provided with an accompanying ottoman to provide leg support for a user seated in the glider rocker. In some cases, the ottoman is a gliding ottoman that provides a greater range of gliding movement for the user.

This section summarizes some aspects of the present disclosure, and briefly introduces some preferred embodiments. Simplifications or omissions in this section, as well as in the abstract or the title of this description, may be made to avoid obscuring the purpose of this section, the abstract, and the title. Such simplifications or omissions are not intended to limit the scope of the present disclosure, nor imply any limitations.

Referring to figures now in more detail. **Fig.1** and **Fig.2** illustrates components of the gliding rocking chair including: an adult rocking chair **1** with the seat **7**, gliding base **6** and latching mechanism **3**, a bassinet **4**, stool with gliding base **5** and top **2**.

Further **Fig.1** illustrates the front view of the right side of the invention clearly showing the adult rocking chair with gliding base **6**. The chair used for the invention can be any conventional chair that rocks without using hands by the user. Further illustrated is latching mechanism **3** which latches the chair **1** with the stool **2**. The latching mechanism is attached to the underside of the stool **2** and rocking chair **1** and between the top of the stool **2** and seat **7** of the rocker chair **1** such that the stool **2** and

seat **7** are at same distance from the floor. The chair **1** glides forward and backwards, (along a horizontal plane).

[0022] **Fig.2** illustrates the front view of the left side of the invention. The system is so arranged that the gliding base **5** moves in symphony with gliding base **6**. Further the stool top **2** holds the bassinet **4**. The stool is set directly beside the chair **1** with no gap between the two, secured in place. The bassinet **4** has a slightly recessed bottom to allow sides of the bassinet to hang over the edges of the stool, creating an attachment point between the edges of the bassinet and the stool similar to those between the stool and chair.

Gliding rocking chairs, also known as glider rockers, are chairs that allow a user sitting in the chair to rock by gliding forward and backward. Glider rockers have become particularly popular among people with infants. In addition to comfortably supporting a person while holding an infant, glider rockers provide a smooth rocking motion that soothes the infant. Correspondingly, glider rockers are used when a person is nursing an infant.

The method of attachment is discrete and invisible in a way that would detract from the chair when the child is grown and the bassinet is no longer needed. In most preferred embodiment of the invention, the top of the stool and the seat of the rocker are at the same distance from the ground, thereby allowing any type of "male-female" latching mechanism to be attached to the undersides of the stool and chair. The stool is then set directly beside the rocker with no gap between the two and secured in place. The bassinet has a slightly recessed bottom that allows the sides of the bassinet to hang over the edges of the stool, creating an attachment point between the edges of the bassinet and the stool similar to those between the stool and chair.

In a preferred embodiment of the current invention the latching mechanism used is selected from latches, clips, clamps or buckles or the like. Further in another embodiment the chair of the invention is provided with attachment points on both sides, so that the stool can be attached to either side of the chair, depending on the user's needs. The latching points are located on at least one side or both sides of the rocking chair, allowing a different stool to be attached to each side if a parent has twins.

When the bassinet is attached to the stool and the stool is further attached to the rocker, the rocking motion allows the bassinet to be rocked in a hands free manner by the person sitting in the chair. The motion of the rocking gliding chair is transferred to the footstool, and the two rock together as one unit. Because the bassinet is placed on the footstool, both the bassinet and rocking chair thereafter move as one unit. The rocking chair has complete control of the bassinet rocking, simply by slowing or speeding up the rocking chair, the person in the chair can control the rocking of the bassinet, hands free.

Gliding rocking chairs glide forward and backwards, (along a horizontal plane), unlike traditional rocking chairs that roll forward and backwards. This makes the gliding rocking chair safer and advantageous for attaching a bassinet to, because the likelihood of over rocking the chair and causing the unit to tip over or the baby to roll in the bassinet is eliminated.

The method of installing the disclosed system allows full control of the bassinet with the said chair. The chair of the invention is safer for attaching a bassinet decreasing the likelihood of over rocking the chair and causing the unit to tip over or the baby to roll in the bassinet.

The material used in making the device in the invention is wood for the body of the rocker and base, nuts, bolts, and metal brackets for the chairs and base gliding attachments, plastic or wicker for the bassinet, and cotton, polyester, leather, or microfiber for the chair upholstery.

Although specific embodiments have been illustrated and described herein, it will be appreciated by those of ordinary skill in the art that any arrangement that is calculated to achieve the same purpose may be substituted for the specific embodiment shown. This application is intended to cover any adaptations or variations of the present invention.

[0023] Although the invention has been explained in relation to its preferred embodiment, it is to be understood that many other possible modifications and variations can be made without departing from the spirit and scope of the invention.

[0024] Plural instances may be provided for components, operations, or structures described herein as a single instance. Finally, boundaries between various components are somewhat arbitrary, and particular operations are illustrated in the context of specific illustrative configurations. Other allocations of functionality are envisioned, and may fall within the scope of the inventive subject matter. In general, structures and functionality presented as separate components in the exemplary configurations may be implemented as a combined structure or component. Similarly, structures and functionality presented as a single component may be implemented as separate components. These and other variations, modifications, additions, and improvements may fall within the scope of the inventive subject matter.

Claims

1. A system for gliding rocking chairs, comprised of:

an adult rocking chair;
at least one gliding base;
a bassinet;
a latching mechanism,
wherein said rocking chair is attached to said gliding base; wherein said bassinet is placed on said base to transfer the rocking motion of said chair to said bassinet.

2. A system for gliding rocking chairs as claimed in claim1, wherein said gliding base holds the bassinet.

3. A system for gliding rocking chairs as claimed in claim1, wherein said bassinet rocks with the rocking motion of the rocking chair.

4. A system for gliding rocking chairs as claimed in claim1, wherein said latching mechanism is attached to the underside of said stool and said chair.

5. A method of attachment for gliding rocking chairs comprising a latching mechanism between the top of the stool and seat of the rocker chair wherein said stool and seat are at same distance from the floor.

6. A method of attachment as claimed in claim 5, wherein said stool is used for placing bassinet to be rocked.

7. A method of attachment as claimed in claim 5, wherein said latching mechanism is attached to the underside of said stool and said chair.

8. A method of attachment as claimed in claim 5, wherein said stool is set directly beside said rocker with no gap between the two secured in place.

9. A method of attachment as claimed in claim 5, wherein said bassinet has a slightly recessed bottom to allow sides of the bassinet to hang over the edges of the stool, creating an attachment point between the edges of the bassinet and the stool similar to those between the stool and chair.

10. A method of attachment as claimed in claim 5, wherein said stool can be detached from said chair when the child is grown and the bassinet is no longer needed.

11. A method of attachment as claimed in claim 5, wherein said latching mechanism is latches.

12. A method of attachment as claimed in claim 5, wherein said latching mechanism is clips.

13. A method of attachment as claimed in claim 5, wherein said latching mechanism is clamps or buckles.

14. A method of attachment as claimed in claim 5, wherein said method rocks the bassinet along with said chair in a hands free way.

15. A method of attachment as claimed in claim 5, wherein said method allows full control of the bassinet with the said chair.

16. A method of attachment as claimed in claim 5, wherein said attachment points on both sides, so that the stool can be attached to either side of the chair, allowing a different stool to be attached to each side if a parent has twins.

17. A method of attachment as claimed in claim 5, wherein said chair glide forward and backwards, (along a horizontal plane).

18. A method of attachment as claimed in claim 5, wherein said chair is safer for attaching a bassinet decreasing the likelihood of over rocking the chair and causing the unit to tip over or the baby to roll in the bassinet.

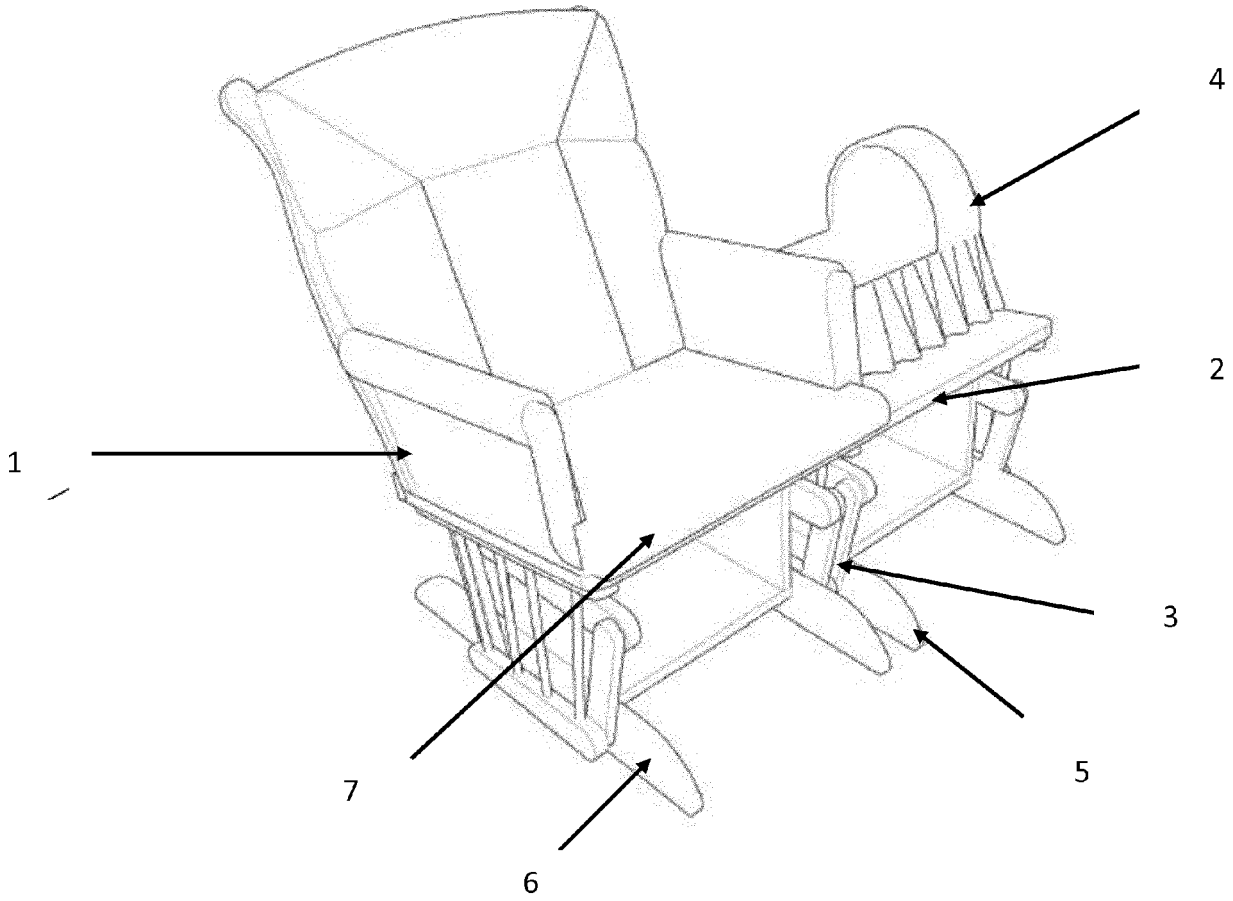

FIG-1

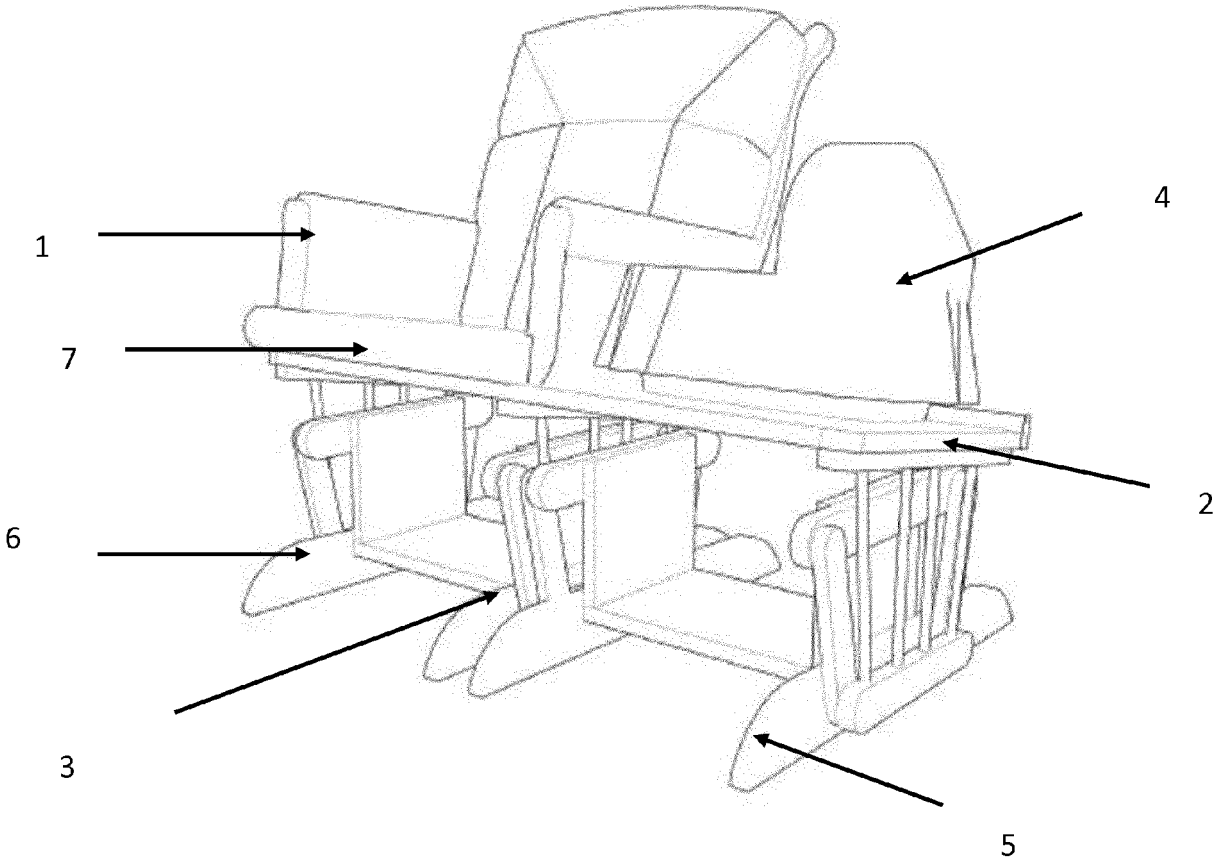

FIG-2

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EUROPEAN SEARCH REPORT

Application Number
EP 16 15 3759

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	CN 201 271 023 Y (CAIFU PAN [CN]) 15 July 2009 (2009-07-15) * the whole document *	1-18	INV. A47D9/02 A47D13/10
A	US 5 280 996 A (TRENT B C [US]) 25 January 1994 (1994-01-25) * column 3, line 10 - column 6, line 32; figures 1-6 *	1,5	
A	US 2003/222485 A1 (DWYER NEIL J [US]) 4 December 2003 (2003-12-04) * paragraph [0011] - paragraph [0019]; figures 1-3 *	1	

TECHNICAL FIELDS SEARCHED (IPC)

A47D

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	28 March 2017	Lehe, Jörn

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

EPO FORM 1503 03.82 (P04C01)

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 16 15 3759

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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28-03-2017

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
CN 201271023 Y	15-07-2009	NONE	
US 5280996 A	25-01-1994	NONE	
US 2003222485 A1	04-12-2003	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

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- US 20120126595 A1 **[0004]**
- US 5931534 A **[0004]**
- US 6761671 B1 **[0004]**
- US 20130139313 A1 **[0004]**
- US 8820834 B2 **[0004]**