A comparison device comprises a doll provided with an internal cavity; and filling material 14 for insertion into the cavity; wherein the quantity of filling material is chosen so that when inserted into the cavity of the doll, the weight of the doll corresponds to that of a newborn baby. The device may include an electronic device (15, figure 3) including software, firmware and data storage. The doll may be provided with a USB connection port (16, figure 4) to the electronic device for the purpose of data transfer.
Growth comparison device

This invention relates to a growth comparison device in the form of a baby.

From the moment a baby is born it changes; these changes are relatively slow and as a result are subtle to any person in constant contact. It is therefore difficult to recall and evaluate what changes have taken place. To overcome this, the present invention proposes a series of models representing the size, shape and weight of newborns.

A first aspect of the present invention provides a comparison device comprising:

- a doll provided with an internal cavity; and
- filling material for insertion into the cavity;

wherein the quantity of filling material is chosen so that when inserted into the cavity of the doll, the weight of the comparison device corresponds to that of a newborn baby.

The model will provide a keepsake and comparison tool with which the baby’s growth and progress can be evaluated.

The various sizes, shapes and weights of the models will make sure that a comparison can be made.

The doll may be provided with a cover, to seal the internal cavity. The cover may comprise a plate, for example a metal plate. In one embodiment the plate contains the name and weight of the newborn baby.

The filling material may comprise a solid material. The filling material may comprise a particulate material, for example granules, which enables fine adjustment of the weight of the
doll. In one embodiment, the solid material comprises wheat, although other filling materials can be used.

The device may comprise a further filler which allows fine tuning of the weight of the device. The further filler is injectable. In one embodiment, the further filler comprises a gel polymer, for example cellulose.

The comparison device may further comprise an electronic storage device. In one embodiment the electronic storage device comprises firmware and data storage which allows information, variables and changes to be stored, including data such as birth statistics and images. The comparison device may comprise a port connected to the electronic storage device, for example a USB port, to allow data transfer to and from the electronic storage device. The port is preferably positioned in the body of the doll for ease of access.

The doll may be fabricated from silicone rubber, for example platinum cure silicone rubber.

A second aspect of the present invention provides a method of fabricating a comparison device which has a weight corresponding to a newborn baby, the method comprising:

- providing a doll with an internal cavity; and
- filling the internal cavity with filling material until the doll has the desired weight.

The method may comprise the step of sealing the internal cavity with a cover. The method may comprise the additional step of marking the cover with the name and weight of the newborn baby.

The method may include the step of fine tuning the weight of the doll by injecting an additional filler into the internal cavity.

The doll may be formed by casting from a mould. In one embodiment, a data storage device is inserted into the mould.
before casting the doll. A port may also be inserted into the mould before casting the doll.

Preferred features of the second aspect of the invention may be as described above in connection with the first aspect.

Throughout the description and claims of this specification, the words "comprise" and "contain" and variations of the words, for example "comprising" and "comprises", mean "including but not limited to", and do not exclude other moieties, additives, components, integers or steps.

Throughout the description and claims of this specification, the singular encompasses the plural unless the context otherwise requires. In particular, where the indefinite article is used, the specification is to be understood as contemplating plurality as well as singularity, unless the context requires otherwise.

Other features of the present invention will become apparent from the following example. Generally speaking the invention extends to any novel one, or any novel combination, of the features disclosed in this specification (including any accompanying claims and drawings). Thus features, integers or characteristics described in conjunction with a particular aspect, embodiment or example of the invention are to be understood to be applicable to any other aspect, embodiment or example described herein unless incompatible therewith.

Moreover unless stated otherwise, any feature disclosed herein may be replaced by an alternative feature serving the same or a similar purpose.
The invention will now be described solely by way of an example and with reference to the accompanying drawings in which:

Figure 1 shows a growth comparison unit,

Figure 2 shows a growth comparison unit with internal adjustment material,

Figure 3 shows a growth comparison unit with an electronic device,

Figure 4 shows a growth comparison unit with a means of connection.

Figures 1 to 4 illustrate embodiments of a growth comparison unit 10 comprising a doll 12. The doll 12 is typically cast from platinum cure silicon rubber, although other materials may be used. The doll 12 is the shape and size of a newborn baby.

Figure 2 shows an embodiment in which the doll 12 is provided with an internal cavity 14. The internal cavity can be filled with a filling material to adjust the weight of the comparison device so that it equals the weight of a particular newborn baby. The internal cavity is provided with a cover which will seal the filling material in place. A granular material such as wheat has the advantage of being easy to handle whilst providing fine adjustment of the weight.

Further fine tuning of the weight can be accomplished by injecting an additional filler into the cavity, for example cellulose gel.

The comparison device may also be provided with an electronic storage device, as illustrated in Figures 3 and 4. Figure 3
shows the electronic storage device 15, comprising firmware and
data storage, provided inside the doll 12. Figure 4 shows a
connection port 16 for instance a USB connected to the
electronic storage device positioned on the surface of the doll
for the purpose of data transfer. Whilst Figure 3 shows the
electronic storage device positioned inside the doll, it may
alternatively positioned exterior to or on the surface of the
doll. The electronic storage device allows data relating to the
birth of the baby to be recorded, for example weight, length and
time of birth, as well as photographs and video recordings of
the baby.

The comparison device is manufactured by casting. The data
storage device including the port is positioned in the mould and
the doll is cast with rotation. Once the doll has been removed
from the mould, the filling material may be added.

As the comparison device has a weight corresponding to the birth
weight of the baby and stored data relating to the birth of the
baby, the comparison device provides both a memento of the
baby’s early days as well as a device for comparing its
development.
Claims

1. A comparison device comprising:
   a doll provided with an internal cavity; and
   filling material for insertion into the cavity;
   wherein the quantity of filling material is chosen so that
   when inserted into the cavity of the doll, the weight of
   the comparison device corresponds to that of a newborn
   baby.

2. A comparison device according to claim 1, wherein the doll
   is provided with a cover, to seal the internal cavity.

3. A comparison device according to claim 2, wherein the cover
   comprises a plate.

4. A comparison device according to claim 3, wherein the plate
   contains the name and weight of the newborn baby.

5. A comparison device according to any of the preceding
   claims, wherein the filling material comprises a solid
   material.

6. A comparison device according to claim 5, wherein the
   filling material comprises a particulate material.

7. A comparison device according to any one of claim 5 or 6,
   wherein the solid material comprises wheat.

8. A comparison device according to any one of the preceding
   claims, wherein the device further comprises a further
   filler which allows fine tuning of the weight of the
   device.

9. A comparison device according to claim 8, wherein the
   further filler is injectable.
10. A comparison device according to claim 9, wherein the further filler comprises a gel polymer.

11. A comparison device according to claim 10, wherein the gel polymer comprises cellulose.

12. A comparison device wherein the comparison device further comprises an electronic storage device.

13. A comparison device according to claim 12, wherein the comparison device comprises a port connected to the electronic storage device.

14. A comparison device according to any one of the preceding claims, wherein the doll is fabricated from silicone rubber.

15. A method for fabricating a comparison device which has a weight corresponding to a newborn baby, the method comprising:

   providing a doll with an internal cavity; and

   filling the internal cavity with filling material until the doll has the desired weight.

16. A method according to claim 15, comprising the step of sealing the internal cavity with a cover.

17. A method according to claim 16, comprising the additional step of marking the cover with the name and weight of the newborn baby.

18. A method according to any one of claims 15 to 17, wherein the method includes the step of fine tuning the weight of the doll by injecting an additional filler into the internal cavity.
19. A method according to any one of claim 15 to 18 wherein the doll is formed by casting from a mould.

20. A method according to claim 19, wherein a data storage device is inserted into the mould before casting the doll.

21. A method according to any one of claims 19 or 21 wherein a port is inserted into the mould before casting the doll.

22. A method according to any one of claims 19 to 21, wherein the doll is formed from silicone rubber.

23. A comparison device substantially as herein described with reference to the accompanying illustrative drawings.
Application No: GB1117817.5  Examiner: Mr Paul Makin
Claims searched: 1-23 Date of search: 12 December 2011

**Patents Act 1977: Search Report under Section 17**

**Documents considered to be relevant:**

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<td>EP 1138360 A2 (FIRST PAGE CO LTD) see particularly paragraphs 0007, 0018 and 0023</td>
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<td>X</td>
<td>1,2,3,5,15, 16</td>
<td>US 4795397 A (STEVEN) whole document</td>
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<td>JP 11319329 A (IRIYAMA) see the figures and WPI Abstract Accession No. 2000-066848[06]</td>
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**Categories:**

- **X** Document indicating lack of novelty or inventive step
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**Field of Search:**
Search of GB, EP, WO & US patent documents classified in the following areas of the UK:

Worldwide search of patent documents classified in the following areas of the IPC:

- A63H

The following online and other databases have been used in the preparation of this search report:

- WPI, EPODOC

### International Classification:

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