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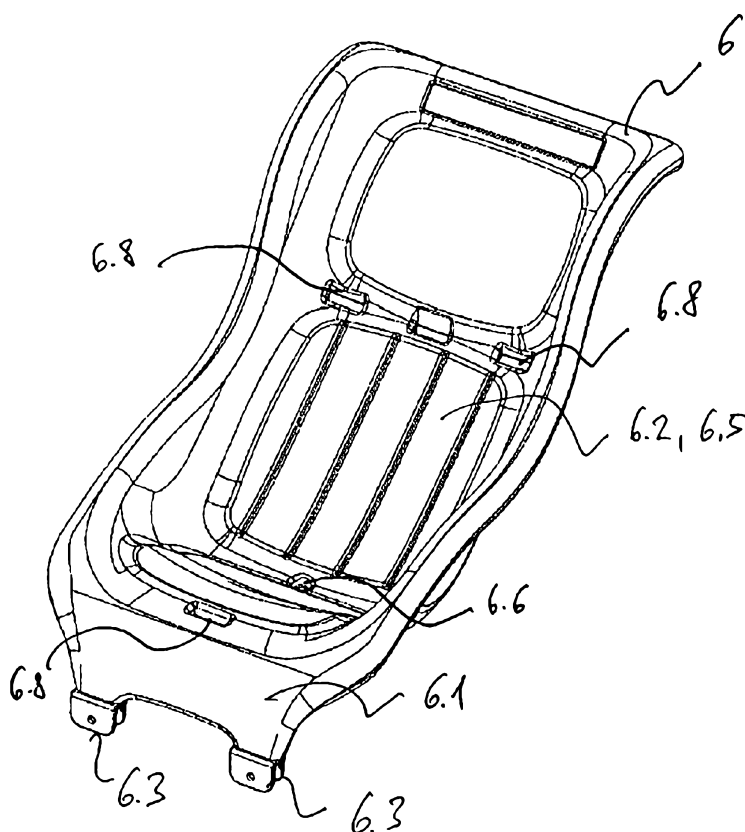
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(54) Title: SHOPPING TROLLEY

(54) Bezeichnung: EINKAUFSWAGEN



(57) Abstract: The invention relates to a shopping trolley (1) comprising a basket (2) and at least one baby seat (6) arranged above the basket (2). Said baby seat (6), with its foot end (6.1), is supported on the front (8) of the shopping trolley (1) and, with its rear end (6.2), on a cross member (4), and every baby seat (6) is provided with a padding (6.7). The invention is characterized in that every one-piece baby seat (6) forms a non-detachable unit with the padding (6.7).

(57) Zusammenfassung: Die Erfindung betrifft Einkaufswagen (1) mit einem Korb (2) und mit mindestens einer oberhalb des Korbes (2) angeordneten Babyschale (6), wobei die Babyschale (6) mit ihrem Fußende (6.1) an der Vorderseite (8) des Einkaufswagens (1) und mit ihrem Rückenteil (6.2) an einer Querverbindung (4) abgestützt ist und wobei jede Babyschale (6) eine Polsterung (6.7) aufweist. Die Erfindung zeichnet sich dadurch aus, dass jede einteilig gebildete Babyschale (6) mit der Polsterung (6.7) eine nichtlösbare Einheit bildet.

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Veröffentlicht:

— mit internationalem Recherchenbericht

— vor Ablauf der für Änderungen der Ansprüche geltenden Frist; Veröffentlichung wird wiederholt, falls Änderungen eintreffen

Zur Erklärung der Zweibuchstaben-Codes und der anderen Abkürzungen wird auf die Erklärungen ("Guidance Notes on Codes and Abbreviations") am Anfang jeder regulären Ausgabe der PCT-Gazette verwiesen.

Shopping trolley

Description

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The invention relates to a shopping trolley with a baby seat for self-service shops.

Shopping trolleys of this type are used in numerous self-service shops.

10 The aim of these shopping trolleys with baby seats is to arrange each baby seat so that a baby can lie in it comfortably. Therefore, the baby seats must be designed so that they are not too upright and also not too flat. In order to achieve this, a cross connection is arranged between the sides of the basket of the shopping trolley and serves as a support for

15 each baby seat. Therefore, the baby seats usually have devices which enable them to receive the cross connections and, in particular, the tubes of the cross connections. In addition to the cross connections, there are usually other supports which are normally utilised by an uppermost transverse wire of the shopping trolley. A baby seat of this

20 type is described in German utility model specification DE 203 08 804 U1.

In order to ensure that the baby lies comfortably in the baby seat, padding is provided. A baby seat with this type of padding is known

25 from EP 0 835 621 A3, for example. It is detachably connected to the baby seat. For this purpose, each padding has hook-and-loop fasteners. Hook-and-loop fasteners are also provided in a mirror-image arrangement on the baby seat.

30 Further examples from the prior art are two of the applicant's products, the Comfort and Eco baby seats. The Eco baby seat has a wire rod structure extending around the outer edge of the baby seat.

Furthermore, devices are provided which are used for supporting the baby seat on the uppermost wire of the basket at the front of a shopping trolley. Other supports are provided which are in the form of cross connections between two opposing side walls of the basket. The baby seat has devices
5 for receiving this cross connection.

For the purposes of this description, a "front" of a shopping trolley is intended to include at least an end of the shopping trolley closest to the handle by which a shopper pushes the shopping trolley.
10

In contrast, the Comfort baby seat has a rod structure inside the baby seat. Supports in the form of cross connections between two opposing side walls are likewise provided for supporting the baby seat on the basket of the shopping trolley. The baby seat has devices for receiving the cross
15 connections, and a further additional arrangement for supporting the baby seat 6 at the front of the shopping trolley.

Mounting the baby seat on the shopping trolley has proved complex for all types of baby seat and requires numerous additional components for
20 fastening the baby seat to the shopping trolley. Manufacturing the baby seat is itself also complex and expensive.

In accordance with the present invention there is provided a shopping trolley having a basket and having at least one baby seat arranged above
25 the basket, wherein the baby seat has a foot end and a back part and is supported by the foot end on a front of the shopping trolley and by the back part on a cross connection and wherein the foot end of the baby seat has at least one holder so as to be received in a positive-locking manner on the shopping trolley, wherein the baby seat has padding, wherein the baby
30 seat formed in one piece forms a non-detachable unit with the padding, wherein the padding is arranged on the inner surface of the baby seat, and wherein each holder is open downwards.

In accordance with the present invention there is provided a method of manufacturing a shopping trolley as described above, wherein the or each baby seat is manufactured by injection moulding.

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In accordance with the present invention there is provided a method of manufacturing a shopping trolley as described above wherein the or each padding is formed from a PUR foam.

10 Embodiments of the present invention may reduce the multiplicity of parts required to produce shopping trolleys incorporating a baby seat or seats. Furthermore, the mounting process is simpler. Owing to these two advantages, a cost saving can be achieved.

15 The invention will be further described with the aid of embodiments.

Fig. 1 shows a 3D view of a baby seat,

Fig. 2 shows a side view of the same baby seat,

Fig. 3 shows a further side view of the same baby seat, and

Fig. 4 shows a cross-section through the baby seat.

Each baby seat 6 is intended to carry a baby while shopping. It is intended to be detachably mounted on a shopping trolley 1 (not shown in further detail). The shape and size of each baby seat 6 is selected so that a baby can lie in it comfortably. To secure the baby against slipping down, a belt is preferably provided which is fixedly attached to the baby seat 6.

Each baby seat 6 has a foot end 6.1. This faces counter to the usual direction of travel. Consequently, the baby can be seen at all times by the person pushing the shopping trolley 1. To mount the baby seat 6 on a shopping trolley 1, each baby seat has at least one holder 6.3.

Each shopping trolley 1 has a basket 2. This is formed from wires. The uppermost wire of the basket 2 at the front of the shopping trolley 1 is preferably used for mounting the baby seat 6. The handle could also be used for receiving the holders 6.3 of the baby seats 6.

Fig. 1 shows a 3D view of a baby seat 6 with a holder 6.3. The holders 6.3 are provided at the foot end 6.1. Two holders 6.3 are shown. Both are formed so as to be downwardly open. Therefore, simple attachment to one of the uppermost wire bars of the basket 2 is possible. A screw connection is then advisable to prevent slipping. For this purpose, each holder 6.3 has at least one opening. A number of holders 6.3 other than that shown is also possible. Other means could also be used to prevent slipping.

Furthermore, each baby seat 6 has a back part 6.2. This ensures that the baby is comfortably positioned. On the rear surface of the baby seat 6, devices 6.4 are to be provided which allow the baby seat 6 to be additionally supported on the basket 2 of the shopping trolley 1.

Each shopping trolley 1 is provided with a cross connection 4 for mounting the baby seat 6. To fix the cross connection to the shopping trolley, two opposing and disengageable fastening members 7 are to be provided on the side walls 5 of the basket 2. Each cross connection 4 is then preferably provided with a supporting portion which is arranged on the basket 2 by means of the respective fastening member 7. This supporting portion carries a tube which is mounted so as to be rotatable about the longitudinal axis of the supporting portion. The baby seat 6 is to be arranged on this tube. For this purpose, each baby seat 6 has devices 6.4. The devices 6.4 must therefore be designed to receive this tube. The number can vary. Two devices 6.4 have been selected in the representation.

The inner surface 6.5 of the baby seat 6 is provided with padding 6.7. The baby seat 6 and the padding 6.7 form a unit. The padding 6.7 is fixedly connected to the inner surface 6.5 of the baby seat 6. Removal of the padding 6.7 is therefore not possible. The padding 6.7 is provided with a lacquer to protect it against UV radiation. This lacquer is applied to the upper surface of the padding 6.7 during the manufacturing process. The lacquer serves to protect the padding in particular against UV light. In order to ensure the resistance of the lacquer, the lacquer is preferably applied by means of in-mould coating. This method has the advantage that the padding 6.7 is already lacquered in the tool. The lacquer is applied to the side of the tool which forms the visible side of the moulded part. The prefabricated baby seat 6 is placed into the

mould. The mould is then closed and the foam for the padding 6.7 is sprayed in. A PUR foam is preferably used. After the reaction time has elapsed, i.e. after the foam has hardened, the finished baby seat 6 can be removed from the tool.

The thickness of the padding 6.7 can be formed differently as a function of the tool. The relationship between the baby seat 6 and the padding 6.7 is shown by way of example in fig. 4. The padding 6.7 preferably extends beyond the edge of the baby seat 6. This provides additional protection and prevents possible detachment of the padding 6.7.

Each baby seat 6 is formed in one piece. Each baby seat 6 is preferably manufactured by injection moulding. As a result, it is no longer necessary to stabilise the baby seat 6 by means of a steel rod structure, either inside the baby seat or extending around the baby seat, as was conventional hitherto. This saves material and permits more cost-effective manufacture.

The holder 6.3 and the device 6.4 are components of the baby seat 6 itself. As a result, the baby seat 6 can be mounted on the shopping trolley 1 in a simplified manner.

Furthermore, apertures are provided in the baby seat 6. These are shown in figures 1 to 3.

An aperture serves as a liquid drain 6.6. It should preferably be provided at the lowest point. Furthermore, openings 6.8 are provided. These are almost filled by the padding 6.7; they have room only to receive a belt.

In a further development, the baby seat is provided for attachment to plastics trolleys. The holders 6.3 are then to be adapted accordingly.

- 5A -

In the claims which follow and in the preceding description of the invention, except where the context requires otherwise due to express language or necessary implication, the word "comprise" or variations such as "comprises" or "comprising" is used in an inclusive sense, i.e.

- 5 to specify the presence of the stated features but not to preclude the presence or addition of further features in various embodiments of the invention.

- 10 It is to be understood that, if any prior art publication is referred to herein, such reference does not constitute an admission that the publication forms a part of the common general knowledge in the art, in Australia or any other country.

List of reference numerals

- 1 Shopping trolley
- 2 Basket
- 3 Handle
- 4 Cross connection
- 5 Side wall of the shopping trolley
- 6 Baby seat
 - 6.1 Foot end
 - 6.2 Back part
 - 6.3 Holder
 - 6.4 Device
 - 6.5 Inner surface
 - 6.6 Liquid drain
 - 6.7 Padding
 - 6.8 Openings
- 7 Fastening members for the cross connection
- 8 Front of the shopping trolley with handle

THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

- 5 1. A shopping trolley having a basket and having at least one baby seat arranged above the basket, wherein the baby seat has a foot end and back part and is supported by the foot end on a front of the shopping trolley and by the back part on a cross connection and wherein the foot end of the baby seat has at least one holder so as to be received in a positive-locking manner on the shopping trolley, wherein the baby seat has padding, wherein the baby seat formed in one piece forms a non-detachable unit with the padding, wherein the padding is arranged on the inner surface of the baby seat, and wherein each holder is open downwards.
- 15 2. A shopping trolley according to claim 1, wherein each holder provides at least one opening for securing means.
- 20 3. A shopping trolley according to claim 1 or 2, wherein the baby seat has devices for arrangement thereof on the shopping trolley.
4. A shopping trolley according to any one of claims 1 to 3, wherein the baby seat has a fluid outlet.
- 25 5. A shopping trolley according to any one of claims 1 to 4, wherein the baby seat has openings to receive a strap.
6. A shopping trolley according to any one of claims 1 to 5, wherein the baby seat is manufactured by injection moulding.

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7. A shopping trolley according to any one of claims 1 to 6, wherein the padding is provided with a finish by means of an in-mould coating process.
- 5 8. A shopping trolley according to any one of claims 1 to 7, wherein the padding is formed from a PUR foam.
10. A shopping trolley substantially as herein described with reference to the accompanying drawings.

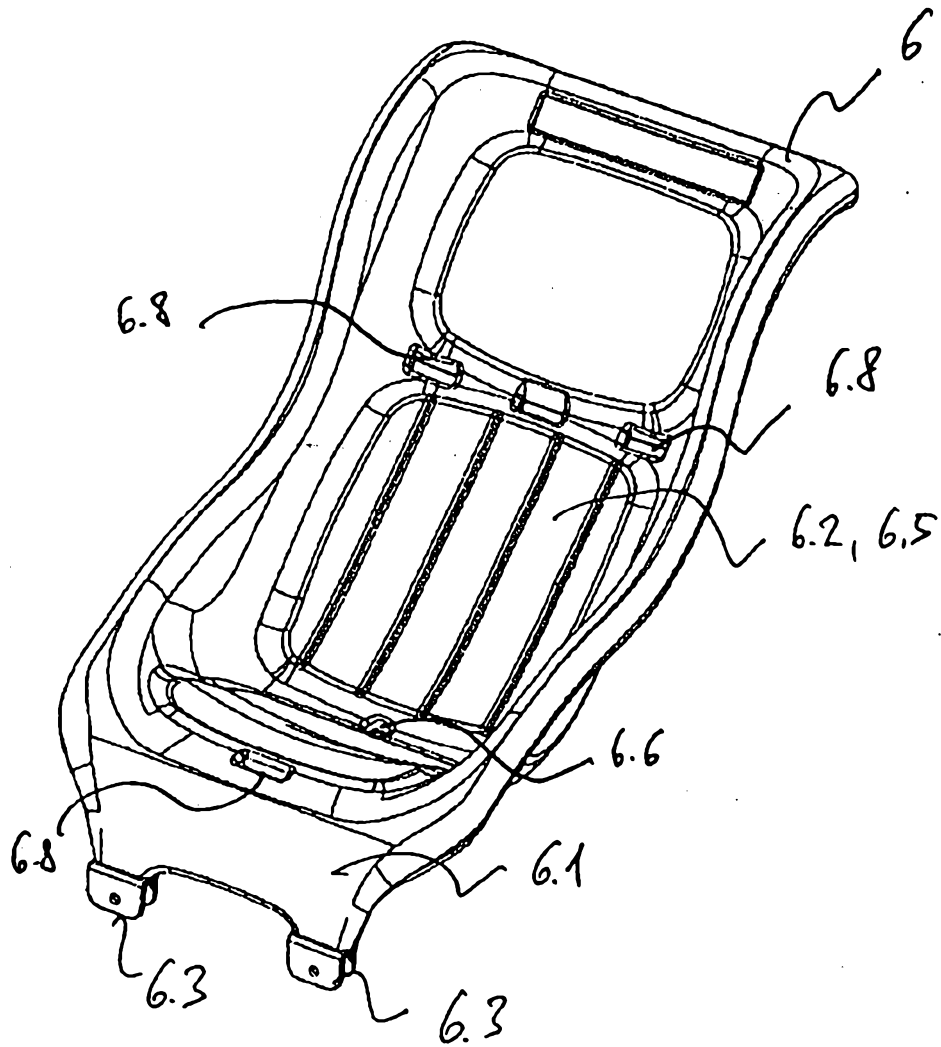


Fig. 1

