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(54) Carrying device for children

(57) A carrying device for children, which is also intended for use as an insert in a child's car seat, is designed with a carrying part (2) of a soft, heat-insulating/heat-absorbent material. The carrying part has a pliability which permits it to enfold the child's body in the carrying position. The carrying part (2) is further extended

in the side areas (3, 4), which have to protect the child's hips and shoulder portion and furthermore has a pants-like portion (11) in the lower area together with a neck support (5) in the upper area. In the extended portions (3, 4) of the carrying part (2) a carrying strap (6) is attached on each side, preferably by attachment lugs (7).

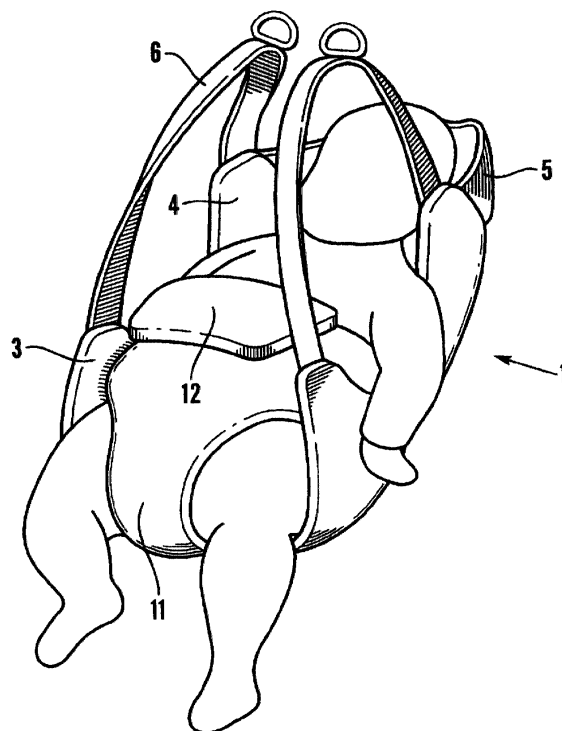


Fig.2

Description

[0001] The invention relates to a carrying device for children, also intended for use as an insert in a child's car seat.

[0002] When small children or babies have to be taken along or transported from one place to another, in today's society this usually means that the child has to be transported both "by hand" and also very often in a vehicle, where the child is placed in a child's car seat. These seats are often too big for babies and tiny children and the seats have to be replaced several times as the child grows, if due consideration is given to the child's safety. When the child is transferred to the vehicle or in other situations, one can choose between carrying the child in one's arms, wheeling it in a pram or transporting it in a child's car seat, whereupon the seat is installed in the car. This kind of combined transport is often time-consuming and relatively cumbersome.

[0003] In order to improve this situation, various types of carrying chairs have previously been developed which can be installed in vehicles. These are normally moulded and equipped with padding and take up a great deal of space while being relatively heavy to carry. Child seats of this kind have also been designed in such a manner that they can be mounted on a chassis and used as a pram. Another variant, which is known from Norwegian patent no. 302655 is a baby seat designed to be secured and mounted in a larger child's car seat. This baby seat may be equipped with carrying straps to enable it to be transferred from the vehicle. In this case too it is necessary to secure the baby seat in the child's car seat.

[0004] The disadvantages of the known devices is that they are usually relatively large, thus taking up a lot of space, they can be unwieldy and have to be secured or mounted in the car, or in another child's seat.

[0005] For transporting babies when one is out walking, various kinds of carrying frames have been developed and use is also made of fabric carrying devices with carrying straps, where the baby can be placed, the child thus being carried in a kind of rucksack or front sack. Such devices, however, are not sufficiently secure for use in vehicles, nor can they be placed in a child's car seat on account of their carrying construction.

[0006] The object of the present invention is to provide a new carrying device for children, which device is also intended for use in a child's seat. The carrying device should also be able to be used for children who are a little too small for a standard child's car seat, with the result that the device fills the child's car seat in such a manner that the safety requirements are still fulfilled. It is a further object of the invention that this device should be easy to place in the seat and easy to remove, thus making it easy to bring the child along and transport it over short distances, and possibly that the device can be mounted in a carrying harness of a suitable kind.

[0007] These objects are achieved with a carrying de-

vice which is characterized by what will be apparent from the patent claims.

[0008] The invention also comprises a special carrying harness for use in connection with the carrying device.

[0009] With the device according to the invention a simple and user-friendly carrying device for small children has been obtained, which simultaneously offers the possibility of placing the carrying device with the child comfortably and securely in a conventional child's car seat, thus enabling the child together with the carrying device to be strapped securely in the seat or the chair by means of the chair's safety belt device.

[0010] When a child is carried in winter from a warm house to a cold car, it is also important for the carrying device to keep the child warm during transport and preferably also during the first phase of transport in a car, until the effects of the car's or the vehicle's heater have been felt. The same also applies in the opposite direction when the child has to be taken out of a warm car and brought out into the cold. The carrying device according to the present invention also fulfils these requirements.

[0011] The fact that the device according to the invention is equipped with a single carrying strap on each side permits it to be gripped like an ordinary bag in the simplest possible manner. By equipping the carrying straps with suitable attachment means, e.g. rings or lugs, it will be a simple matter to hook the device on to a suitable hook in a carrying harness, on a rucksack frame or the like, thus enabling the carrying device to be carried in the same way as a bag or satchel on a person's chest. A particularly advantageous design for such a carrying harness is of the diagonal broad band type which is carried diagonally over one shoulder.

[0012] The invention will now be described in greater detail by means of an embodiment, which is illustrated in the drawing, in which:

fig. 1 is a perspective view of the carrying device according to the invention viewed from in front,

fig. 2 is the carrying device in fig. 1, with a child sitting in the device,

fig. 3 is the carrying device in fig. 2 with child, viewed in perspective from behind, and

fig. 4 is a perspective view illustrating the mounting of the carrying device according to the invention in a carrying harness.

[0013] The carrying device according to the invention is generally indicated by 1 and comprises a carrying part 2, in which the child lies, and which is made of a relatively thick, soft and flexible material, thus enabling the carrying part 2 to enfold the body of the child placed therein. In the areas surrounding the child's hip and at

the child's neck or shoulder portion, which areas are indicated by 3 and 4, the carrying part has extensions, on each side of which is attached a carrying strap 6. When these carrying straps are used to carry the device, the extended portions 3 and 4 will further enfold the child, holding it securely. The child is further secured in the device by means of the pants-like portion 11, as clearly illustrated in fig. 2. This portion 11 of the carrying device can either be permanently sewn on to the carrying part 2 or can be releasable on one or both sides. In the extension of this portion 11 a padded cushion 12 can be provided in order to protect against loads from a child's car seat's attaching mechanism, but this padding 12 is not a necessary part of the invention, even though it may be advantageous. In the upper end of the carrying part, i.e. the foot end thereof, there is attached a neck or head support 5, which is preferably adjustable, thus enabling it to be raised in order to give the child's head a more upright position or lowered again into a resting position or sleeping position. This adjustment can be performed by means of suitable devices such as a Velcro fastening or the like. In fig. 1 this part 5 is illustrated in a lowered position, while in figures 2-4 it is illustrated in a more upright position.

[0014] In the illustrated embodiment, in the carrying straps are mounted rings or lugs 7, which are intended to be able to be hooked into a loop 8 on a carrying harness which is generally indicated by 9. This carrying harness is of the diagonal type, which is carried diagonally over a shoulder down towards the user's hip portion, and on the back, for example, a bag may be mounted as indicated in fig. 4 or it may be purely in the form of a carrying harness. The rings 7 are passed in through a lock in the loop 8 as indicated by the arrows with A in fig. 4. These attachment means 7 and 8 are illustrated in an entirely schematic manner in the drawings and any suitable attachment method may be employed here according to the choice of a person skilled in the art. With regard to the carrying harness, it need not necessarily be a diagonal harness, as illustrated, but any kind of carrying harness may be suitable and it may also be fastened, e.g., to the strap of a rucksack or other carrying means. Many modifications may therefore be envisaged.

[0015] When the carrying device has to be placed in a child's car seat, it is quite simply lifted into the chair and placed on the seat of the chair. The soft carrying part 2 will thereby adapt to the chair and fill out the seat space, and the child together with the carrying device, which now forms an insert in the chair, will be able to be buckled into the chair by means of its safety belt in a conventional manner without the necessity of further securing of the carrying device. For this purpose the carrying part has only projecting or extended portions in the hip area and at the head area, thus enabling the child seat's safety belt to be inserted from the side into the intermediate portion between these areas, also with a strap up along the "pants portion" and with the shoulder

straps in past the preferably recessed neck part. The child with the insert/carrying device are thereby satisfactorily secured. By this means the easiest possible positioning of the child with the carrying device is achieved in the seat without the need for additional securing means, mounting or the like. At the same time a soft and flexible adaptation is achieved for the child which is thereby "padded" in the chair, even though the child may be a little too small for the chair size.

[0016] Since the device's carrying part 2 is designed from a material which provides a thermal effect, the carrying device will also provide special advantages in its role as an insert. The child will be protected against cold on a chilly day when it is placed in a cold child's seat in a cold car, since the device can be taken out of a warm house or have been heated in advance, thus keeping the child in safe, warm surroundings right up to the moment when the car's heater has increased the ambient temperature. This will also be highly advantageous during transport to and from the car. For this purpose the basic part is advantageously constructed from a cellular plastic material such as polyethene or use may be made of so-called heat-absorbent and heat-storing materials, which, e.g., can be preheated in a microwave oven.

There are a number of such materials on the market.

[0017] The illustrated embodiment is only an example of the design of the device according to the invention and many modifications will be possible both with regard to material use, design, fitting of attachment devices, etc. All such modifications are intended to fall within the scope of the invention. Thus, e.g., instead of rings or lugs 7, it will be possible to use hooks, which can be permanently or slidably mounted on the straps, additional adjustment facilities may be introduced apart from the neck support, but the essence of the invention will be to provide the flexible adaptation facility for the device, thus enabling it to be employed as an insert which takes the shape of a child's car seat and fills it out, while at the same time when it is carried, the carrying part will enfold the child and hold it securely and comfortably.

Claims

1. A carrying device for children, also intended for use as an insert in a child's car seat,
characterized in that the device (1) comprises the following features:

a) a carrying part (2) of a soft, heat-insulating/heat-absorbent material, with a softness which permits the carrying part (2) to enfold the child's body,

b) the carrying part (2) is extended in the side areas (3, 4), which have to protect the child's hips and shoulders/neck portion, and furthermore the carrying part (2) has a pants-like (11)

portion in the lower area, and a neck support (5) in the upper area, and

c) in the extended portions (3, 4) a carrying strap (6) is attached on each side, preferably by attachment lugs (7) or the like. 5

2. A carrying device according to claim 1, **characterized in that** the pants-like portion (11) and the neck support (5) are of the same material as the carrying part (2). 10

3. A carrying device according to claim 1 and/or 2, **characterized in that** the material which is used in the carrying part (2) is a cellular polyethene material or a suitable heat-absorbent or storing material. 15

4. A carrying device according to claim 1, **characterized in that** the pants part (11) has a cushion-like extension (12) in the upper area. 20

5. A carrying device according to claim 2, **characterized in that** the neck support (5) is adjustable. 25

6. A carrying device according to claim 1, **characterized in that** the carrying straps (6) are equipped with attachment means (7) for interaction with a carrying harness (9), carrying straps on a bag or the like, preferably with attachment means (8) on the harness or the straps. 30

7. A carrying harness for use with the carrying device according to one of the claims 1-6, **characterized in that** the harness (9) is a known per se diagonal carrying harness with an attachment part (8) intended for interaction with the attachment parts (7) on the device (1). 35

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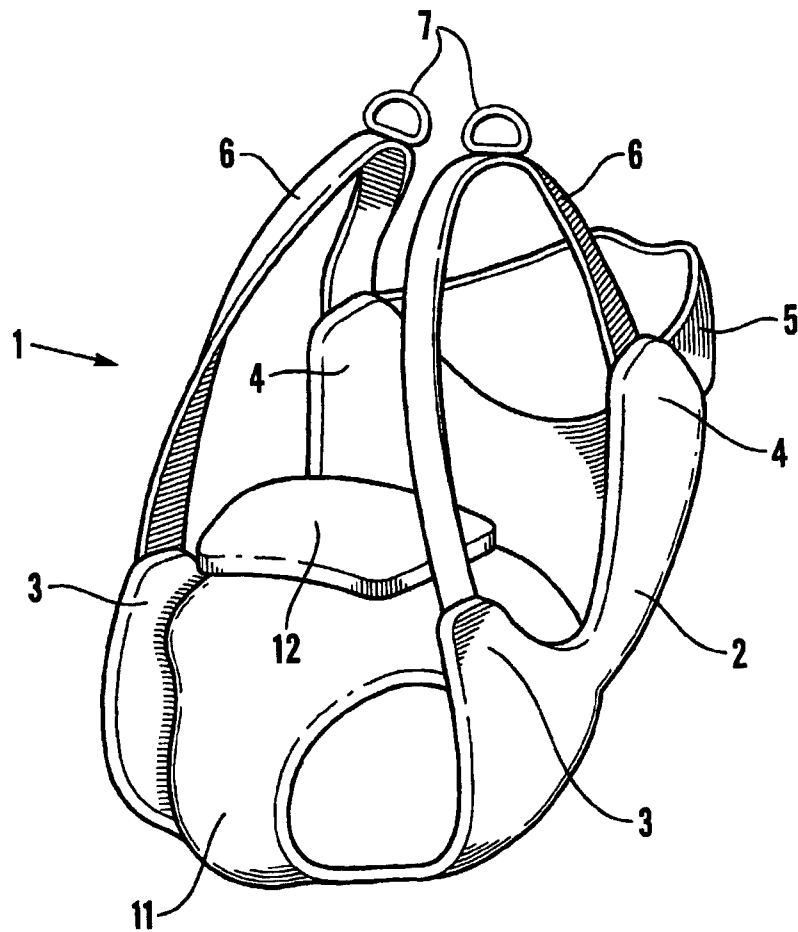


Fig. 1

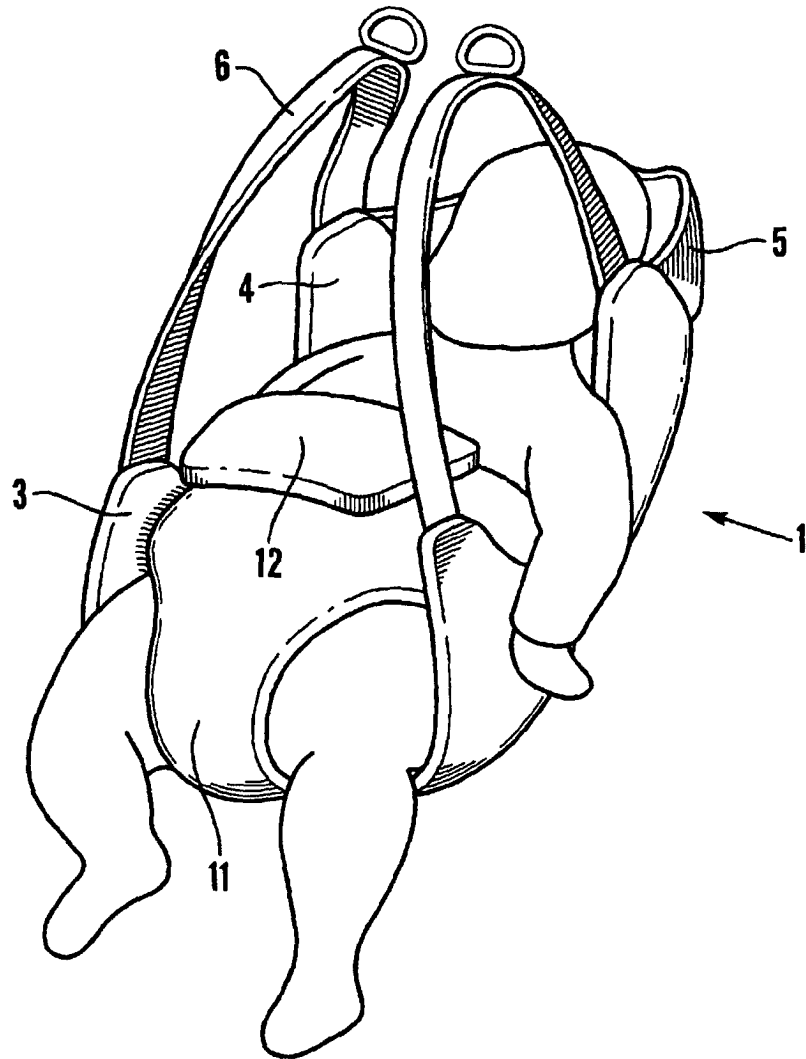


Fig.2

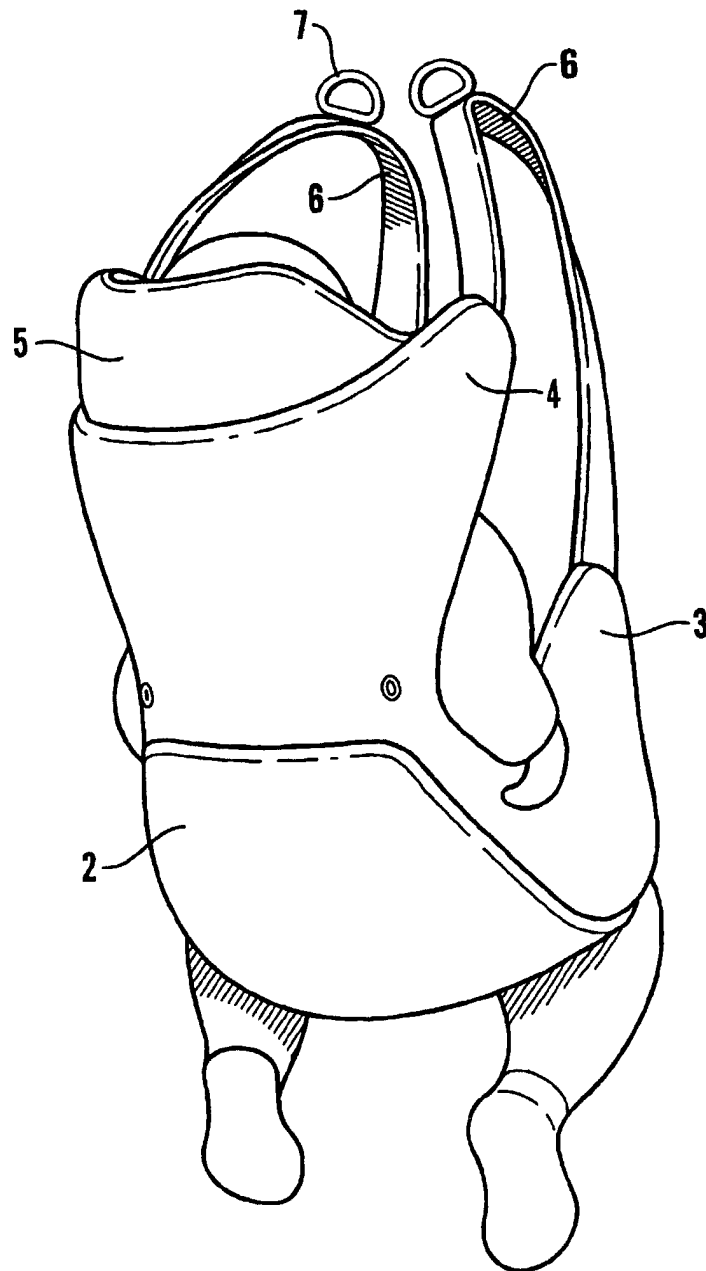


Fig.3

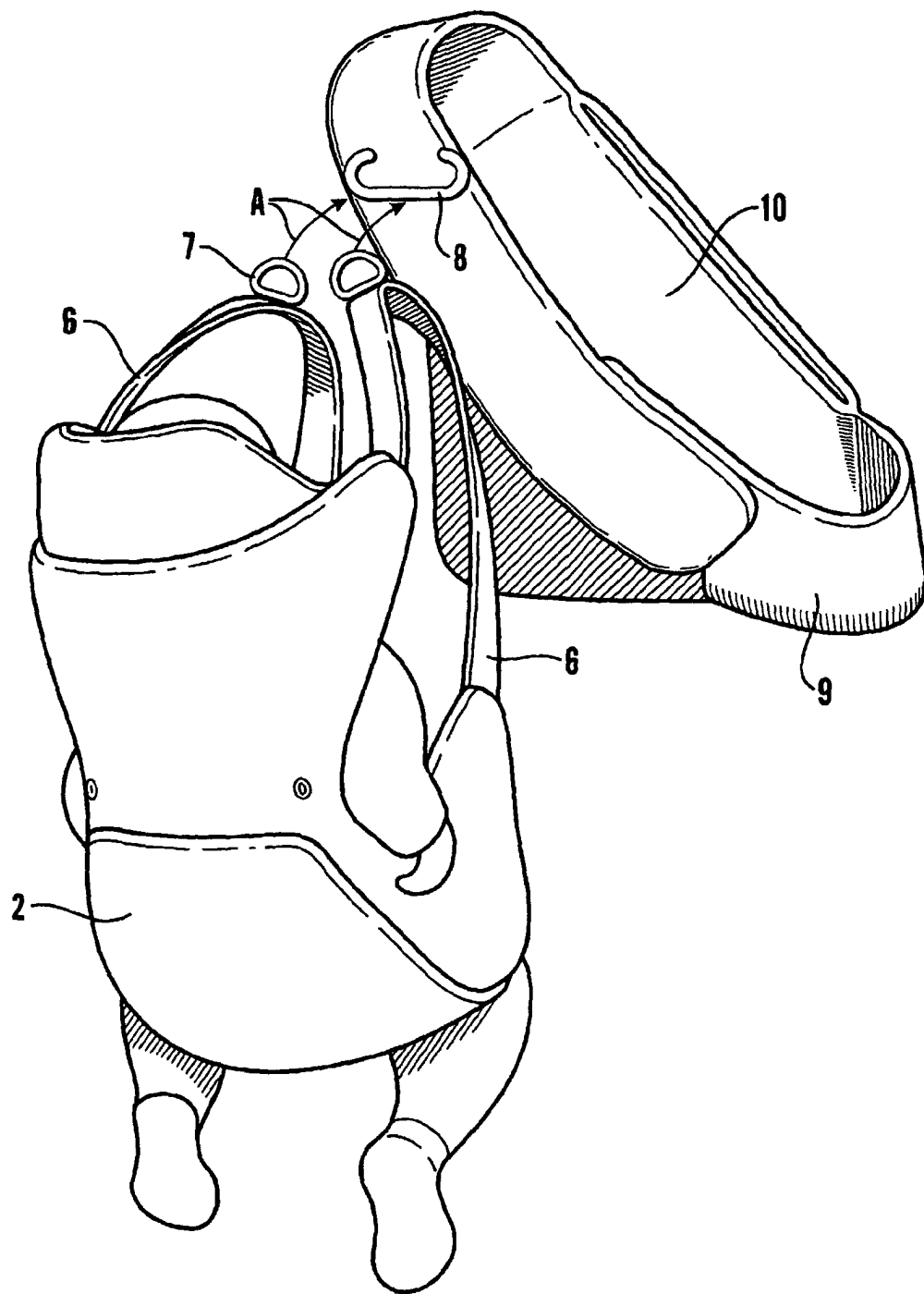


Fig.4