(54) PORTABLE CHILD SEAT
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CHANTILLY, VA 20153 (US)
(21) Appl. No.: $\quad 11 / 218,931$
(22)

Filed:

Publication Classification
(51) Int. Cl.

A47D 13/08 (2006.01)
(52) U.S. Cl. $\qquad$ 297/485; 297/467

## (57)

ABSTRACT

A portable child seat is provided. The portable child seat can be easily mounted upon an existing chair or seat to convert it into use for a child. The portable child seat can be used on different chairs or seats by altering a length or size as required.





FIG. 5


## PORTABLE CHILD SEAT

[0001] The present invention relates to a portable child seat that can be easily mounted upon an existing chair or seat to convert it into use for an infant.
[0002] Typically, when providing seating for infants, it is necessary to provide seating in the form a high chair. Most often this type of chair comprises a seated area, along with a supporting back section, as well as a moveable feeding tray and some manner of securing the infant into position. In most cases, the high chairs are provided with a wooden, plastic or metal frame, which includes legs to raise the infant seat up to standard table height. Whilst the chairs are very effective and useful for seating a child in the home, they are not appropriate for transporting around, as their bulky size and weight means that they are not easily portable.
[0003] Attempts have been made to try and overcome the problems caused by a standard high chair, by providing infant seats that can be used in conjunction with ordinary chairs and seats, and in particular dining chairs.
[0004] Patent No GB2274581 entitled "Portable Infant Seat" describes a lightweight seat that has a fabric sleeve and a fabric pouch with openings for an infant's legs. This type of infant seat can be used in conjunction with an ordinary dining chair, and the fabric pouch can be extended such that a child can be placed inside. However, one drawback of this invention is that it is only appropriate for use on one size of dining chair and typically chairs, particularly in restaurants, do not come in a single size. There is also an issue that, in many cases, chairs have an open section in the chair back. The earlier described invention does not account for this, and there is the possibility that the fabric pouch can slip backwards through the aperture in the chair back causing discomfort for the infant.
[0005] It can be seen that it would be beneficial to provide a portable child seat that improves upon typical high chairs and portable seats that have been described previously.
[0006] According to a first aspect of the present invention, there is provided a portable child seat for use with the chair back of an existing chair, wherein the child seat comprises an upper section adapted to be attachable to the existing chair and a lower section arranged to form a pouch seat, and wherein at least part of the child seat is provided with means for altering the length of the seat.
[0007] According to a second aspect of the present invention, there is provided a portable child seat for use with the chair back of an existing chair, wherein the child seat comprises an upper section adapted to be attachable to the existing chair, a lower section arranged to form a pouch seat and a back support means adapted to be attachable to the existing chair back.
[0008] Preferably, the upper and lower sections are connected by an elongate body section.
[0009] Preferably, the pouch seat is formed by the lower section folding such that it can fit through a child's legs and be secured around the child's torso.
[0010] Optionally, the pouch seat is secured around the child's torso using fasteners that are attachable to the elongate body section.
[0011] Preferably, the pouch seat attaches to the elongate body section using co-operative male and female fastening means.
[0012] Preferably, the elongate body section is provided with a plurality of female fastening means.
[0013] Preferably, the fastening means are press studs comprising male and female sections.
[0014] Alternatively, the fastening means are buttons and apertures.
[0015] A further alternative is that the fastening means are in the form of a zip.
[0016] Optionally, the portable child seat is provided with binding ties.
[0017] Preferably, the binding ties are attached to the pouch seat in an area that will be positioned under the child's armpits during use.
[0018] Preferably, the binding ties are secured around both the child and the chair back during use.
[0019] Optionally, the binding ties may be secured using a clasp or tie.
[0020] Optionally, the pouch seat is provided with means for altering its size.
[0021] Preferably, the means for altering the size of the pouch seat are co-operative fasteners positioned on the inner surface of the pouch seat.
[0022] Preferably, the co-operative fasteners positioned on the inner surface of the pouch seat are arranged such that the pouch seat is smaller when they are fastened.
[0023] Alternatively, the means for altering the size of the pouch seat are protruding ties and apertures, such that the ties can be passed through an aperture and knotted in order to alter the length of the seat.
[0024] Optionally, the back support means is a strip of material adapted to be secured around the chair back.
[0025] Optionally, the back support means is separate from the upper section, elongate body section and pouch seat.
[0026] Alternatively, the back support means is attached to the elongate body section.
[0027] Optionally, the upper section is in the form of a pocket adapted to fit over the back of the existing chair.
[0028] Preferably, the upper section comprises apertures adapted to allow protruding chair uprights on the existing chair to fit through.
[0029] Preferably, the pocket is provided with securing means to secure it to an existing chair.
[0030] Preferably the securing means is a drawstring adapted to fit around the edge of the pocket.
[0031] Alternatively the securing means is elasticated material adapted to fit tightly around the chair.
[0032] In order to provide a better understanding of the present invention, embodiments will now be described by way of example only, and with reference to the following drawings, in which:
[0033] FIG. 1 shows a back view of a portable child seat according to a first embodiment of the present invention;
[0034] FIG. 2 shows a front view of a portable child seat according to a first embodiment of the present invention;
[0035] FIG. 3 shows a back view of a portable child seat according to a second embodiment of the present invention;
[0036] FIG. 4 shows a front view of a portable child seat according to a second embodiment of the present invention;
[0037] FIG. 5 shows a view of a portable child seat in use on an existing chair, according to a third embodiment of the present invention;
[0038] FIG. 6 shows a view of the pouch area of a portable child seat that has been extended fully, according to a fourth embodiment of the present invention; and
[0039] FIG. 7 shows a view of the pouch area of a portable child seat that has been shortened, according to a fourth embodiment of the present invention.
[0040] In a first embodiment of the present invention, there is provided a portable child seat $\mathbf{1}$, front and back views of which can be seen in FIGS. 1 and 2 respectively. The portable child seat 1 is made of fabric and has an upper section 2 which is in the form of a pocket which hooks over the back of an existing chair. In this embodiment the pocket also comprises an elastic section adapted to further secure the pocket to the chair. An elongate body section 3 extends from the upper section 2, which itself extends into a pouch seat arrangement 4 . The pouch seat $\mathbf{4}$ is shaped such that it can be fitted through a child's legs and then secured around the child's torso to form a secure harness using the binding ties 5. In this embodiment, the binding ties also pass around the back of the chair 9 such that the child is secured to the chair 9 . Additional security is provided by male and female fasteners 6,7 which can be fastened to secure the child in place.
[0041] As existing chairs 9 are provided in a wide range of shapes and sizes, there are provided a number of female fasteners 7 at different positions on the elongate body section 3. This means that the male fastener 6 can be securely fastened at a number of varying positions along the elongate body section 3 to allow for a range of different sized chairs 9.
[0042] In a second embodiment of the present invention, the back of which is shown in FIG. 3 and the front of which is shown in FIG. 4, the portable child seat $\mathbf{1 0}$ is adapted for use with existing chairs that have a cavity in the chair back according to the chair's design. In order to prevent a child using the portable child seat $\mathbf{1 0}$ from slipping back through the cavity in the chair back, the portable child seat $\mathbf{1 0}$ is provided with a back support means $\mathbf{8}$ in a form resembling a cummerbund. In use, the back support section is secured around the chair back, at least partially covering the cavity. Securing the back support means 8 in this manner ensures that the child cannot slip backwards through the cavity in the chair back.
[0043] FIGS. 3 and 4 also show apertures 11 in the upper section 2. These apertures $\mathbf{1 1}$ will allow the protruding chair uprights that are found on many chair backs to fit through the upper section 2, further assisting in holding the portable
child seat $\mathbf{1 0}$ in position. These apertures $\mathbf{1 1}$ are also shown in FIG. 5 in use on a chair 9.
[0044] In a third embodiment of the present invention, as shown in FIG. 5, the portable child seat 1 of the first embodiment is adapted for use on chairs with cavity backs in a similar manner to the second embodiment. However, rather than the back support means 8 being attached to the elongate body section $\mathbf{3}$, as in the second embodiment, the back support means $\mathbf{8}$ are in the form of a separate cummerbund type section 80 , which can be attached to the back of the chair $\mathbf{9}$, as shown in FIG. 5. This separate back support section 80 again prevents a child slipping backwards through a cavity in the back of a chair 9 .
[0045] According to a fourth embodiment of the present invention, the portable child seat $\mathbf{1 , 1 0}$ is provided with a different method of varying its length than that described previously. As can be seen in FIGS. 6 and 7, the pouch seat 4 is provided with co-operative male 6 and female 7 fastening means in the area that will be positioned below the child when the portable child seat $\mathbf{1 , 1 0}$ is in use. The male fastener 6 can be attached to any one of a plurality of female fasteners 7. Attaching the fasteners 6,7 together in this manner results in the portable child seat 1 altering in size.
[0046] Further embodiments may exist where the portable child seat is adjustable in length/size by other means. For example, the upper section of the portable child seat may be in the form of straps that can be lengthened or shortened depending upon requirements. Alternatively, the co-operative male and female fasteners may be replaced with an elongate tie and a plurality apertures, wherein the elongate tie can pass through a chosen aperture to change the size of the pouch seat/portable chair. Knotting the elongate tie prevents it from moving back through the aperture, holding the new size in place.
[0047] It can be seen that in all embodiments of the present invention the portable child seat allows an infant to be securely held in an existing seat, this has the benefit that existing chairs in restaurants, etc., can easily be converted by use of this very portable apparatus into a high chair for use by children.
[0048] As the portable child seat is adjustable in size, this means that it can be used in a range of settings on many different chairs.
[0049] Also, the portable child seat $\mathbf{1}$ or 10 can be made from any appropriate material, and can incorporate additional attachments for comfort or security, such as padding in the pouch seat 4 , or waterproofing etc.
[0050] The embodiments described above should not be considered as limiting, but should merely be taken as examples to teach one skilled in the art as to the various possibilities for the present invention.

1. A portable child seat for use with a chair, wherein the child seat comprises:
an upper section adapted to be attachable to a of a chair;
a lower section arranged to form a pouch seat;
an elongate body section adapted to connect the upper and lower sections; and
back support means adapted to be attached to the back of the chair, wherein the back support means comprises a strip of material separate from the upper and lower sections and the body section. and wherein at least part of the child seat is provided with means for altering a length of the seat.
2-3. (canceled)
2. The portable child seat as in claim 1 , wherein the pouch seat is formed by folding the lower section such that it can fit between a child's legs and be secured around the child's torso.
3. The portable child seat as in claim 4 , wherein the pouch seat is secured around the child's torso using fasteners that are attachable to the elongate body section.
4. The portable child seat as in claim 5 , wherein the pouch seat attaches to the elongate body section using co-operative male and female fasteners.

7-10. (canceled)
11. The portable child seat as in claim 1 , wherein the portable child seat is provided with binding ties for binding a child to the chair during use.
12. The portable child seat as in claim 11, wherein the binding ties are attached to the pouch seat.
13. The portable child seat as in claim 11, wherein the binding ties are secured around both the child and the back of the chair during use.
14. The portable child seat as in claim 1 , wherein the pouch seat is provided with means for altering its size.
15. The portable child seat as in claim 14, wherein the means for altering the size of the pouch seat are co-operative fasteners provided on an inner surface of the pouch seat.
16. The portable child seat as in claim 15 , wherein the co-operative fasteners provided on the inner surface of the pouch seat are arranged such that the pouch seat is smaller when the fasteners are co-operatively engaged.

17-19. (canceled)
20. The portable child seat as in claim 1, wherein the upper section is in the form of a pocket adapted to fit over the back of the chair.
21. The portable child seat as in claim 1, wherein the upper section comprises apertures adapted to allow chair uprights extending from the back of the chair to pass therethrough.
22. The portable child seat as in claim 20, wherein the pocket is provided with securing means to secure it to the chair.
23. The portable child seat as in claim 22, wherein the securing means is a drawstring provided at an edge of the pocket.
24. The portable child seat as in claim 1 , wherein the strip of material which is separate from the upper and lower sections and the body section is adapted to be wrapped around the back of the chair so as to at least partially block an opening in the back of the chair.
25. The portable child seat as in claim 24, wherein opposite ends of the strip of material are attached to each other so as to secure the strip of material around the back of the chair, wherein the strip of material so secured forms a back surface of the back of the chair which is configured to support an occupant of the chair.

