A child car seat that provides a massaging vibration for soothing the child. A massage or vibration may be used to provide comforting to a fussy infant. A remote control may also be used to control the operation by the driver or other occupant with ease.
Embedded Seat Oscillation Device

- Cam
- Shaft
- Belt
- 12 Volt Motor

FIG. 9
FIG. 10

Pulley

Cam

Shaft
CHILD CAR SEAT

BACKGROUND OF THE INVENTION

[0001] The present invention relates to child and infant car seats. Typically, children under 3 years of age and 40 pounds must be restrained in a car seat. Recent laws require car seats to 8 years of age. During car rides, children can become upset or fussy with little opportunity for the driver to do anything to help the child.

DESCRIPTION OF THE PRIOR ART


[0003] Child car seats of the past have failed to provide additional benefits that would produce a superior seat. Additional features would make the product more marketable, and make the parents feel safer. If the child is more comfortable, the parents will be less distracted in driving, and need to attend to the child less.

SUMMARY OF THE INVENTION

[0004] The present invention provides a number of features, separately, or in combination, to enhance the performance of the child seat. A massaging device included within the seat soothes the child during driving. The invention provides a soothing massage and vibration to relax and comfort the child. Music can also be provided to soothe the baby.

DESCRIPTION OF THE DRAWINGS

[0005] FIG. 1 is a side view of an embodiment of the invention.
[0006] FIG. 2 is a rear view of an embodiment of the invention.
[0007] FIG. 3 is a side view of an embodiment of the invention.
[0008] FIG. 4 is a rear view of an embodiment of the invention with the access door open and a power cord.
[0009] FIG. 5 is a rear view cut-away drawing of an embodiment of the invention.
[0010] FIG. 6 is a side view of an embodiment of the invention with a child.
[0011] FIG. 7 is a front view of a remote control device.
[0012] FIG. 8 is a front view of an alternate embodiment of a remote control device.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0013] A massage device 1 is provided in a child’s car seat to comfort and relax the child. Music is provided to soothe and entertain the child. An indicator is provided to signal when the child has wet a diaper. A sensor would detect wetness in the seat and provide a light or sound, or other indication, that there is wetness, and the diaper may need changing.

[0014] The car seat may be provided with a weight sensor to detect the weight of the infant.

[0015] The seat may have a massager to calm and relax the child. The massaging speed would be adjustable to find the proper speed to quiet the child.

[0016] The seat may also have speakers for playing music or a lullaby, or other audio information.

[0017] A remote control may also be provided to operate the features of the seat. It may include the massager, the speakers, and the wetness indicator, and others. A flashing light on the remote may signal the child’s wetness. The remote control would also allow for a keychain.

[0018] The seat would also have the standard safety features of a car seat. This may also include an adjustable strap for locking the seat in place.

[0019] With an optional cord in the back of the child car seat, a car adapter would allow the rechargeable battery to charge during travel. An extension cord could be used to charge the batteries in the home or elsewhere electrical service was available.

[0020] The massaging unit 1 would be similar to those found in massaging chairs, but generally smaller. An acceptable unit would be similar to those massagers described in U.S. Pat. No. 6,629,939 to Jikiba, et al. or U.S. Pat. No. 6,213,962 to Shimizu. These massage units 1 are mounted below a cushioning pad and will engage the occupant to provide a soothing massage or vibration.

[0021] Each of the massaging units 1 would be connected by controlling channel 10 to a main controller 4. The main controller 4 could signal a variety of massaging units 1 to operate selectively. Each of the massaging units 1 could be operated simultaneously, individually, or as desired by the users.

[0022] Typically, an installation would include a decorative, washable outer layer, which the child would sit on. Below that may be a thin padding, possibly including a bubble plastic for cushioning, comfort, and safety. The massaging units 1 would lie beneath the outer layer, sufficiently to allow some cushioning of the massage, but not prevent the child from feeling the massaging units 1.

[0023] As the massaging units 1 create a massaging motion, they may wear on the cushioning or outer layer. A reinforced area may be necessary to prevent the massaging units 1 from damaging the cushioning or outer layer material. The cushioning may also require holes to allow the wiring to connect the massaging units 1 to the main controller 4.

[0024] The unit may be powered by a cigarette lighter adapter 12. An alternate version of the invention would utilize batteries or a rechargeable battery. The car seat may also include a 110 volt power cord for vehicles that have a source of electricity.
[0025] A possible remote control unit is shown in FIG. 7 and FIG. 8. As shown in the drawing, controls may be provided for providing music in the car seat. The embodiment shown in FIG. 8 includes an indicator light on top of the unit to signal the user on the operation of the remote and the child car seat. Music sources including compact disc, MP3 players, radios, pre-recorded tracks, DVD, etc. may be provided in the car seat for the infant.

1. A child car seat having a massaging device whereby an occupant may be massaged during usage.
2. The child car seat according to claim 1, wherein the car seat includes a remote control for selective operation of the massaging device.

3. The child car seat according to claim 1, wherein the car seat includes a car lighter adapter.
4. A child car seat having a vibrating unit for soothing an occupant.
5. The child car seat according to claim 4, wherein the car seat includes a remote control for selective operation of the vibrating unit.
6. The child car seat according to claim 4, wherein the car seat includes a car lighter adapter.

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