



US 20030102702A1

(19) **United States**

(12) **Patent Application Publication**  
**Daley et al.**

(10) **Pub. No.: US 2003/0102702 A1**

(43) **Pub. Date: Jun. 5, 2003**

(54) **BOOSTER SEAT**

**Publication Classification**

(76) Inventors: **Rick Daley**, North Scituate, RI (US);  
**Charles Keegan**, Watertown, MA (US)

(51) **Int. Cl.<sup>7</sup> ..... A47D 1/10**

(52) **U.S. Cl. .... 297/250.1; 297/256.13; 297/153**

Correspondence Address:  
**George L. Greenfield**  
**Wolf, Greenfield & Sacks, P.C.**  
**Federal Reserve Plaza**  
**600 Atlantic Avenue**  
**Boston, MA 02210 (US)**

(57) **ABSTRACT**

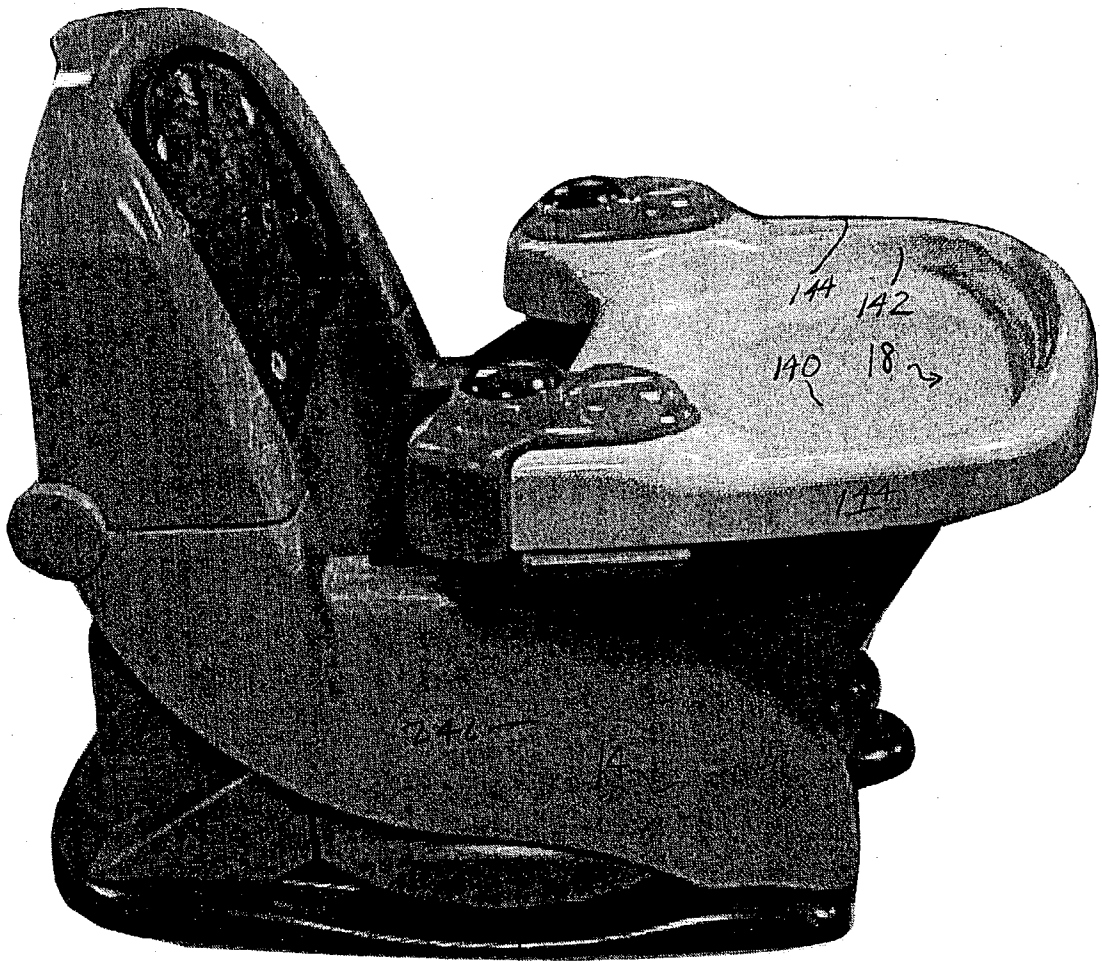
(21) Appl. No.: **10/217,702**

(22) Filed: **Aug. 13, 2002**

**Related U.S. Application Data**

(60) Provisional application No. 60/312,016, filed on Aug. 13, 2001.

An adjustable booster-type seat having a base **10** for supporting the seat on a flat surface, a riser **12** mounted for height adjustment on the base, a body support **14** having a seat and back mounted for arcuate motion on the riser **12** for changing the angular position of the body support **14** and being adjustable in height by virtue of the adjustability of the riser on the base. A restraint bar **16** is detachably connected to the body support and in turn adjustably carries a tray **18** enabling the tray to be moved toward and away from the back and to be mounted at different angles with respect to the body support **14**.



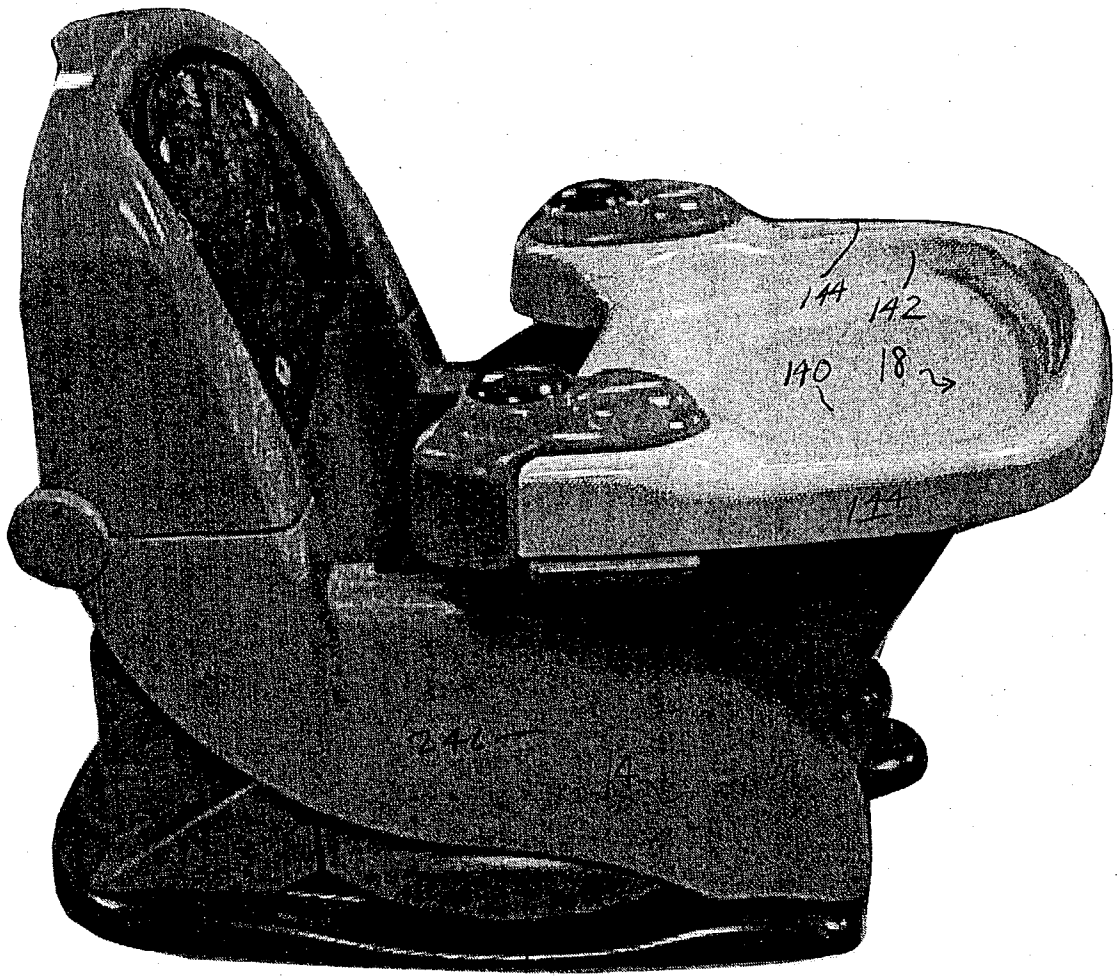


FIG 1

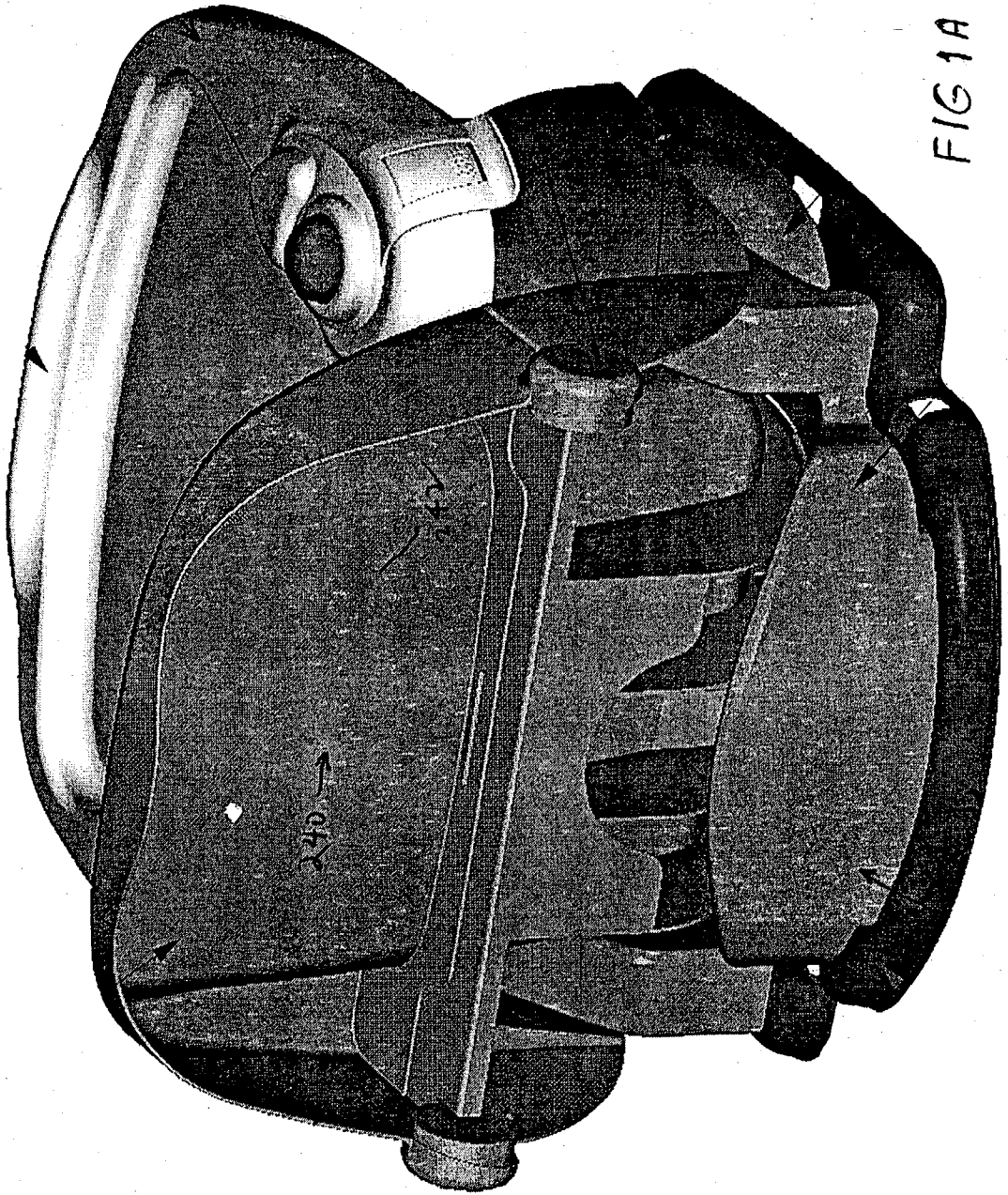


FIG 1A

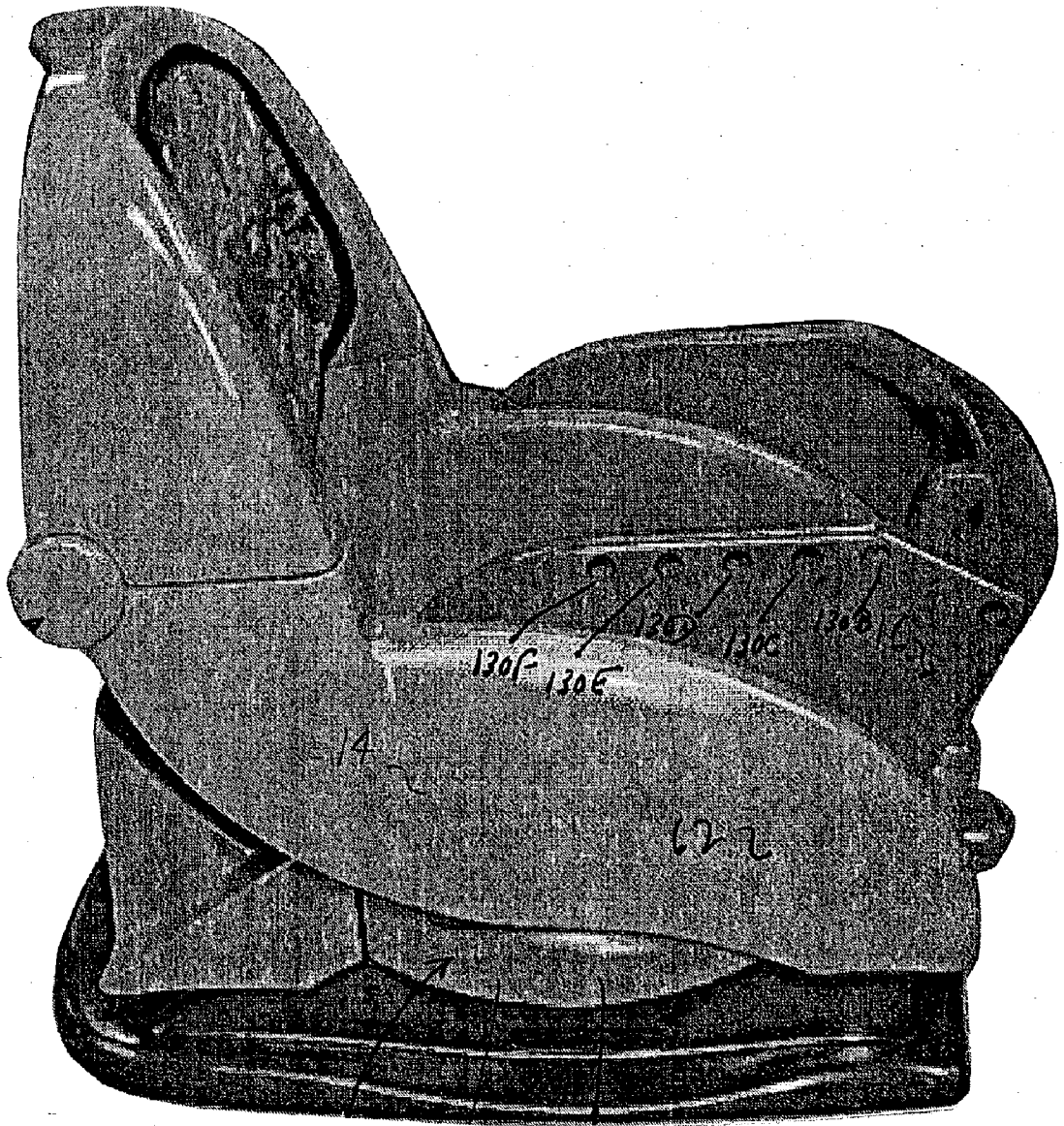


FIG 1B

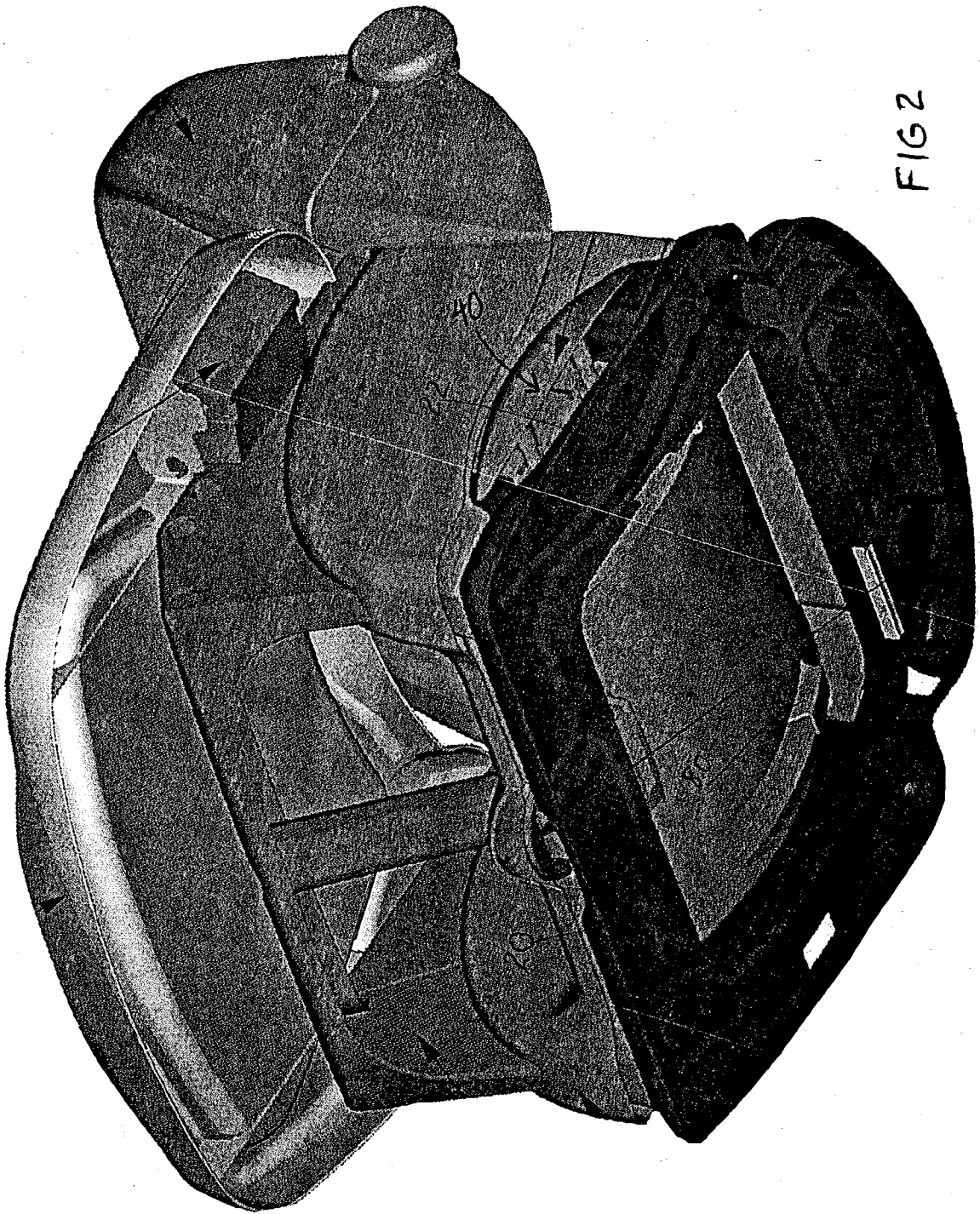
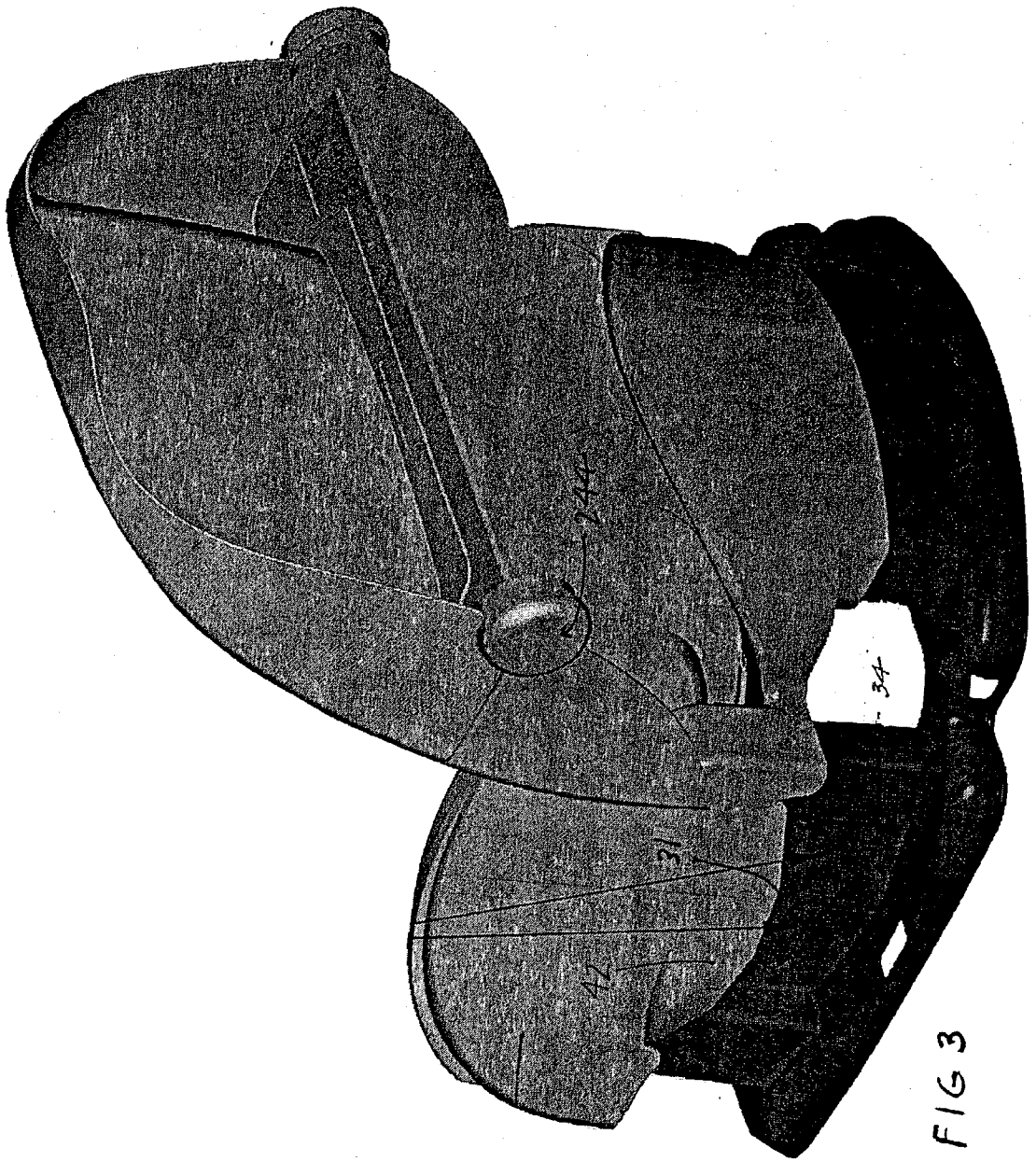


FIG 2



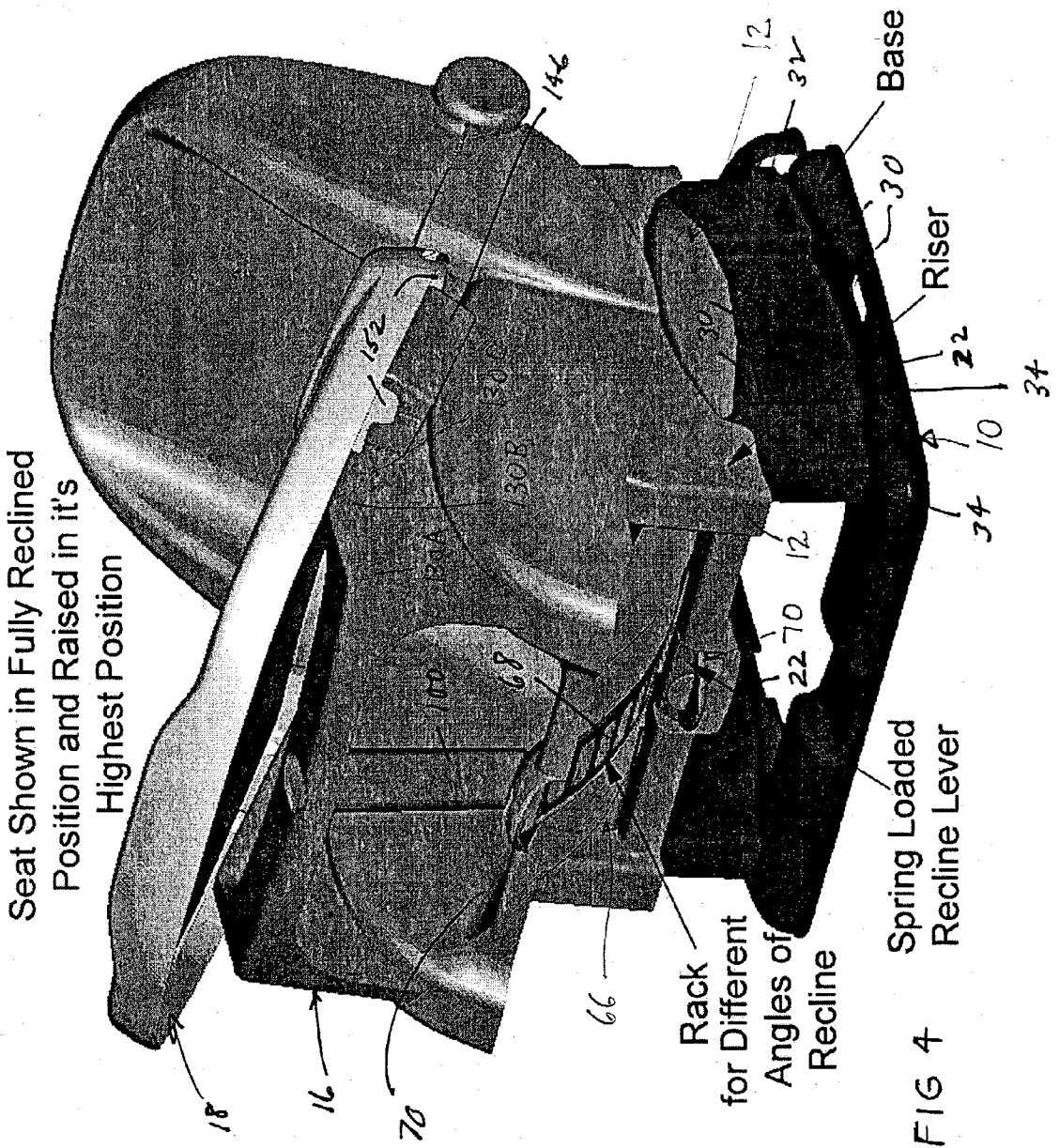


FIG 4

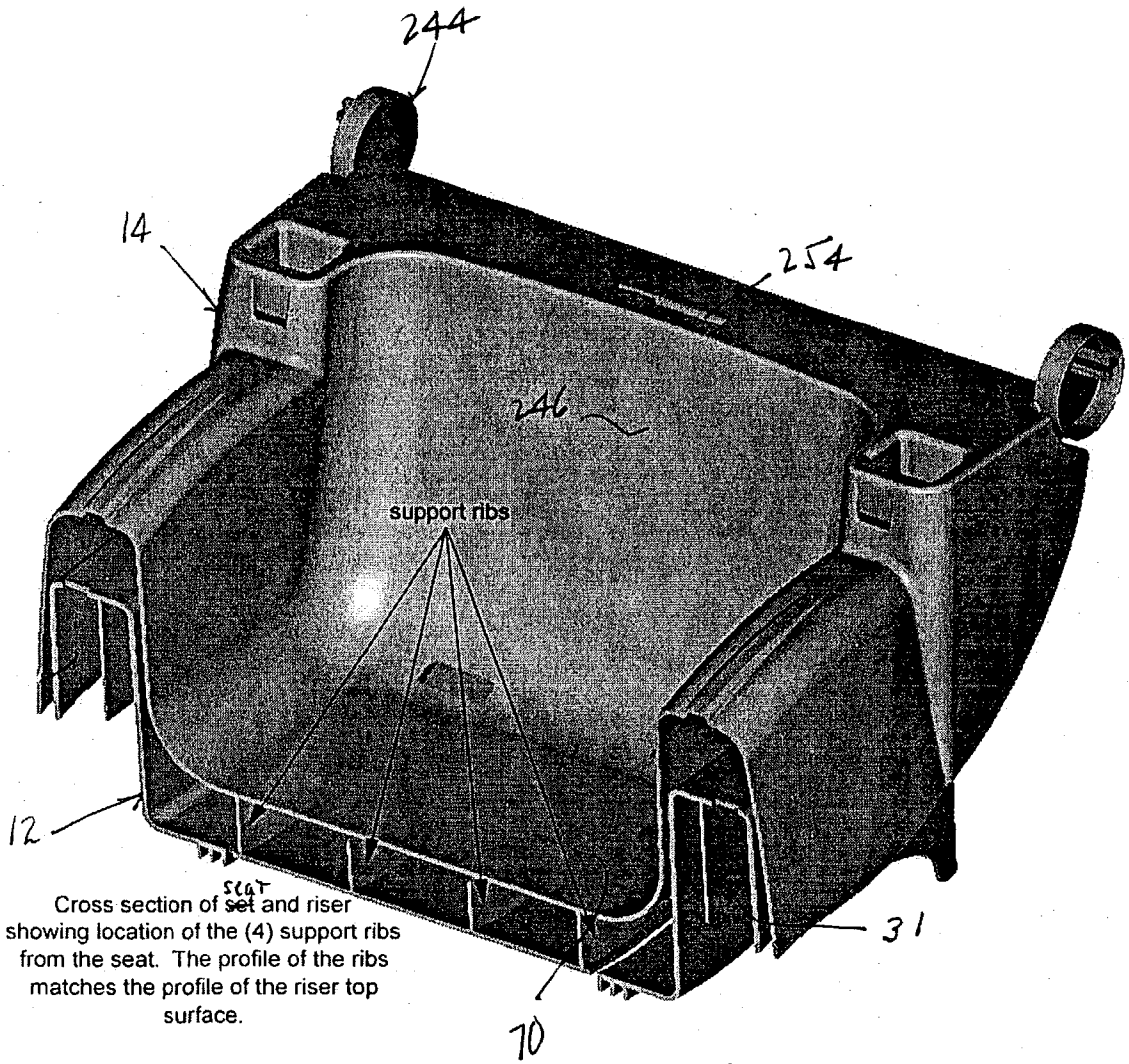
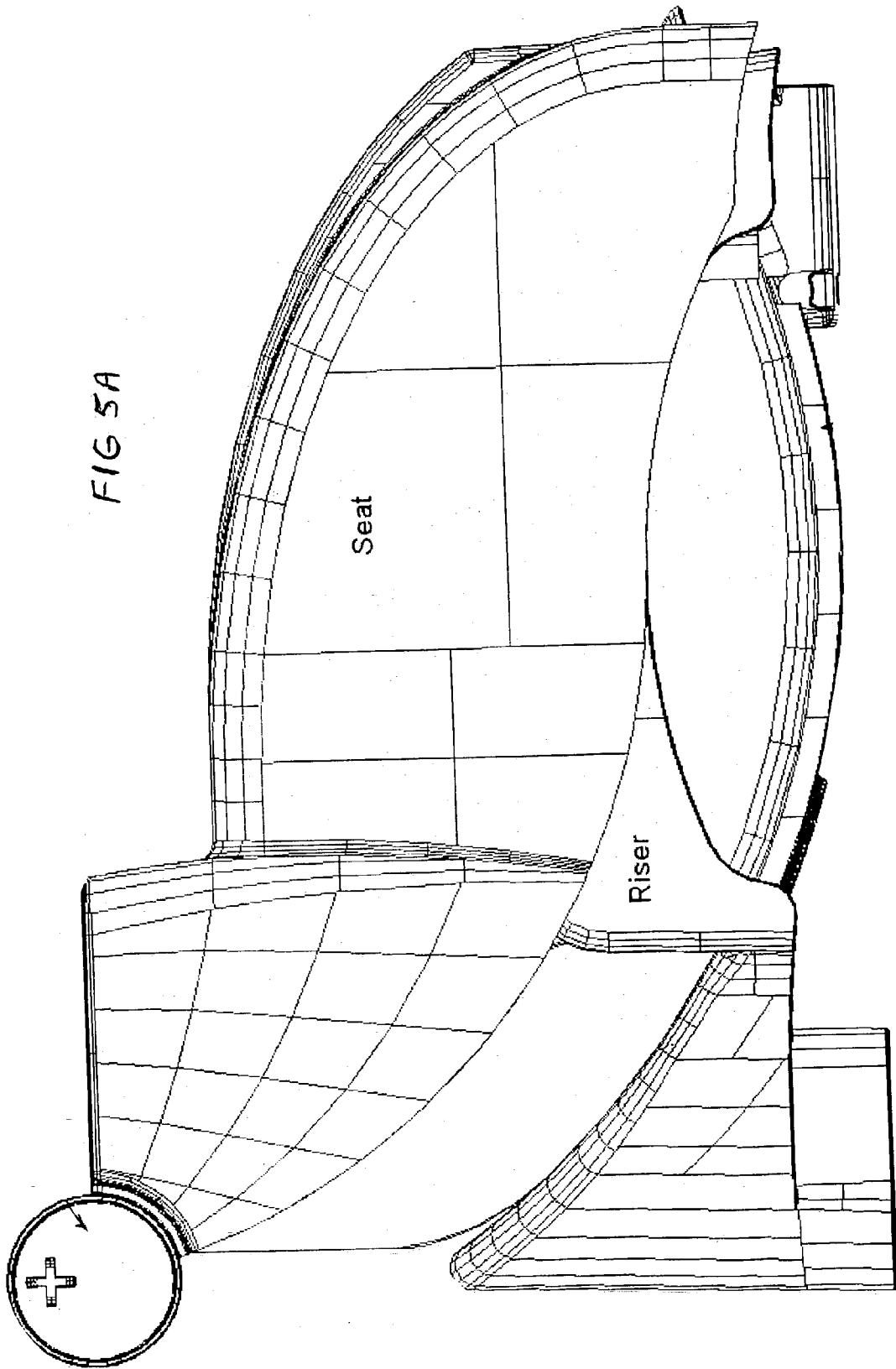
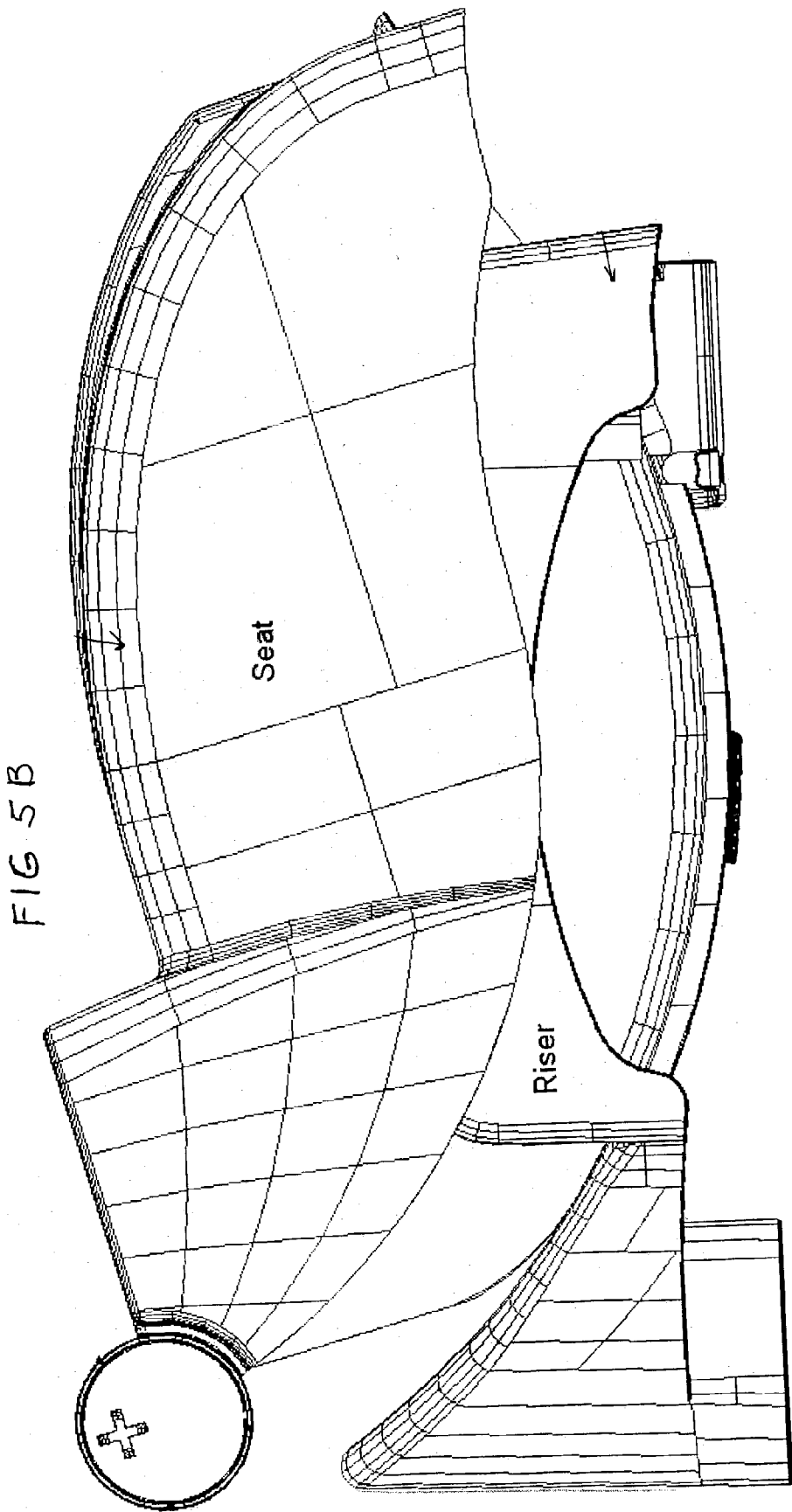


FIG 4A





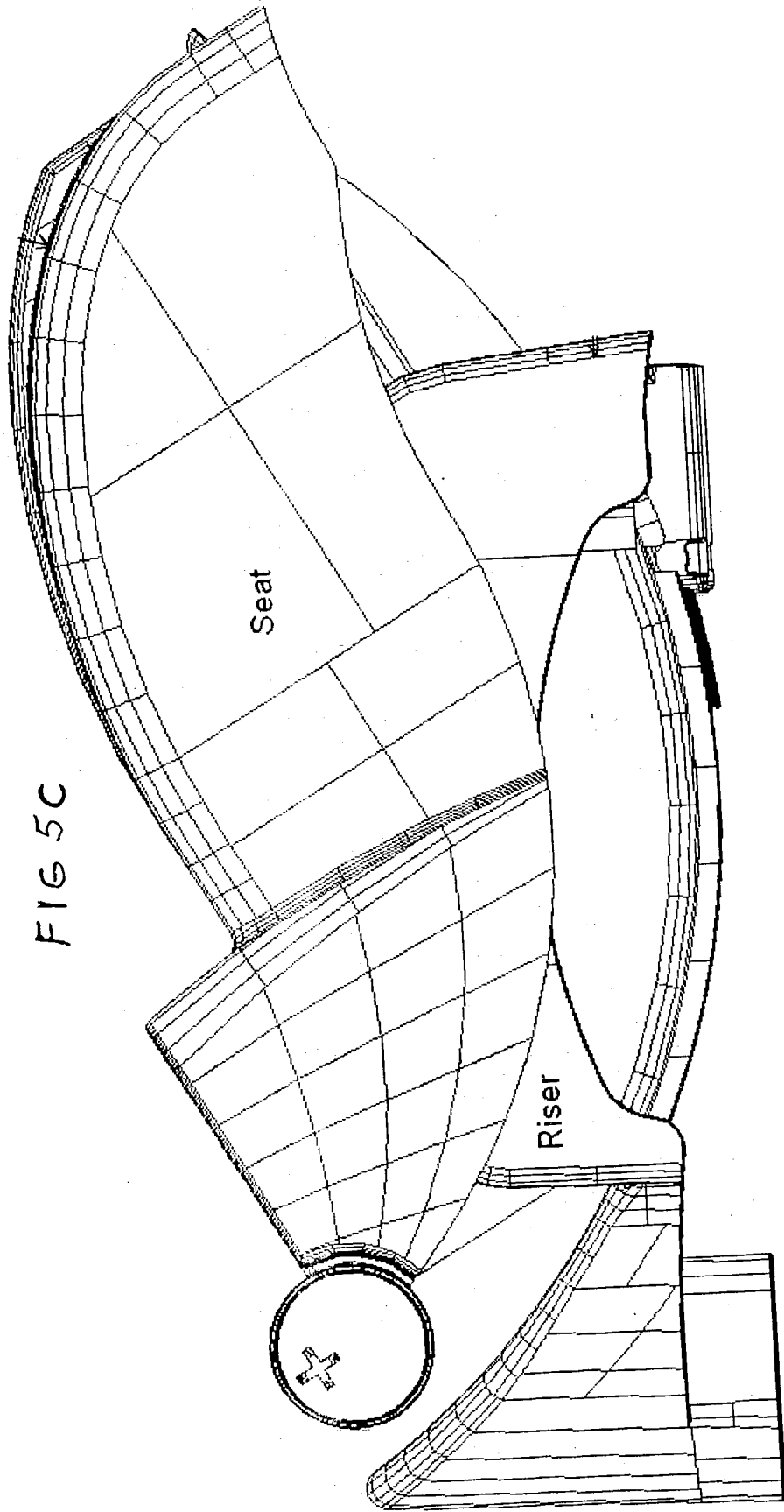


FIG 6

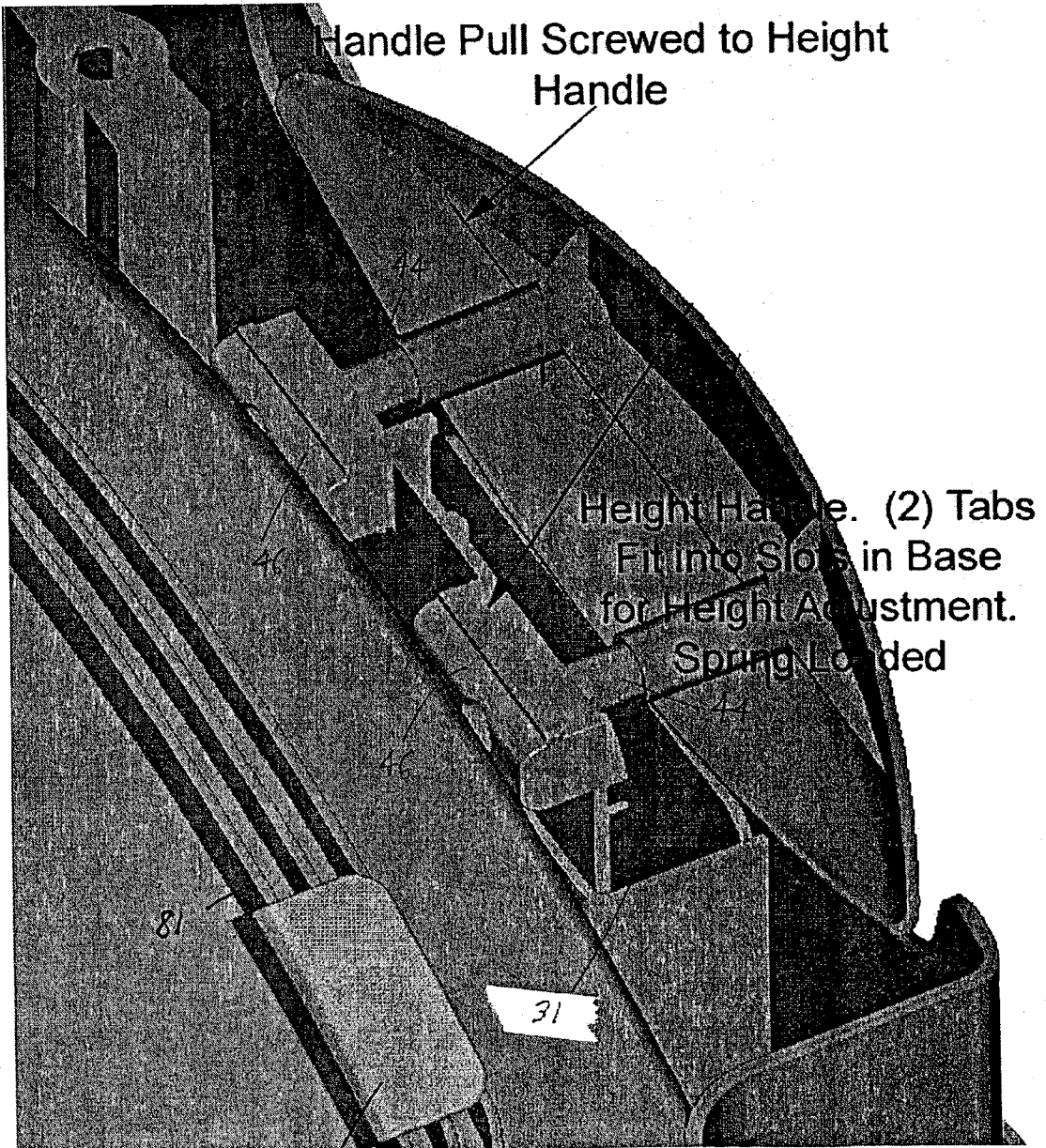
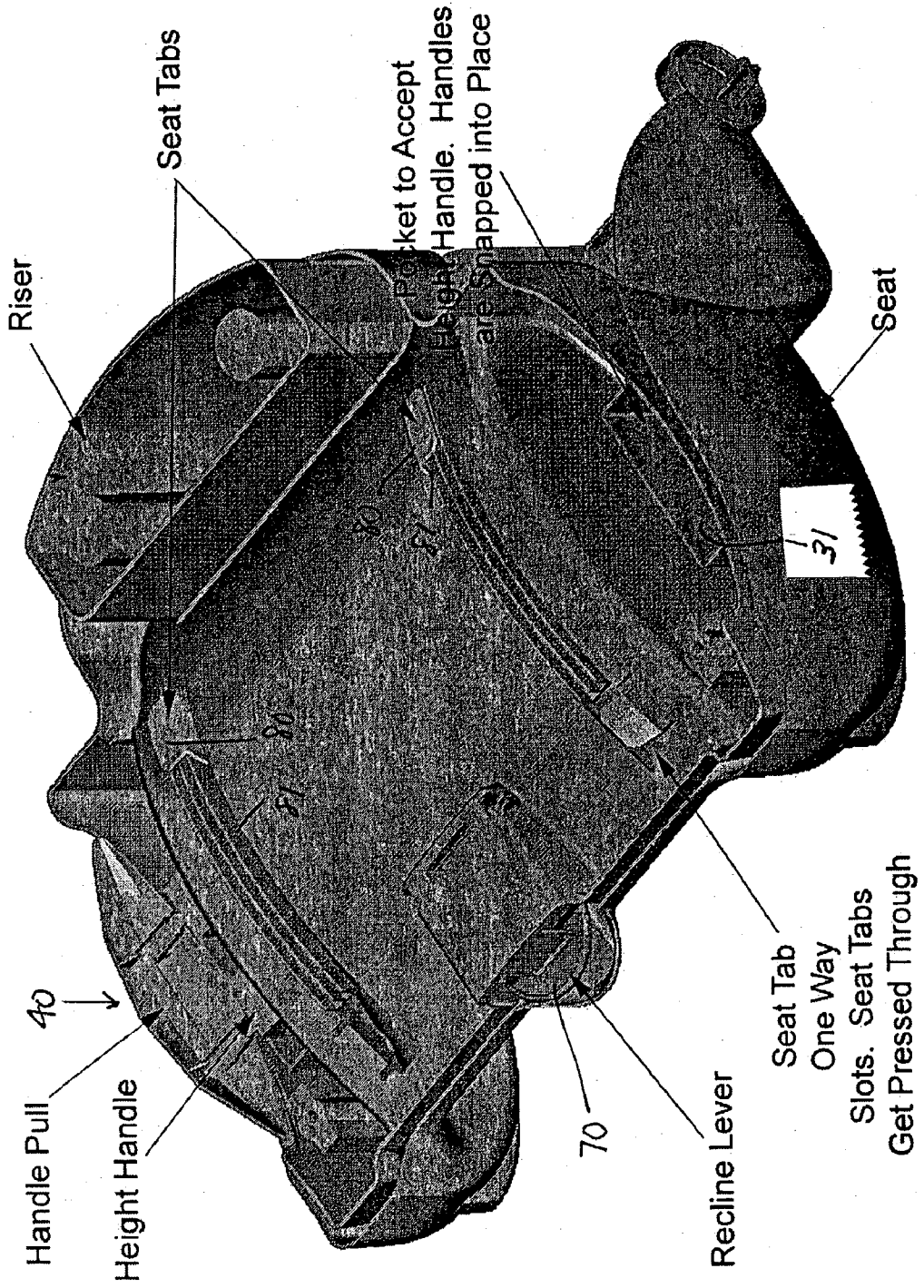


FIG 6A



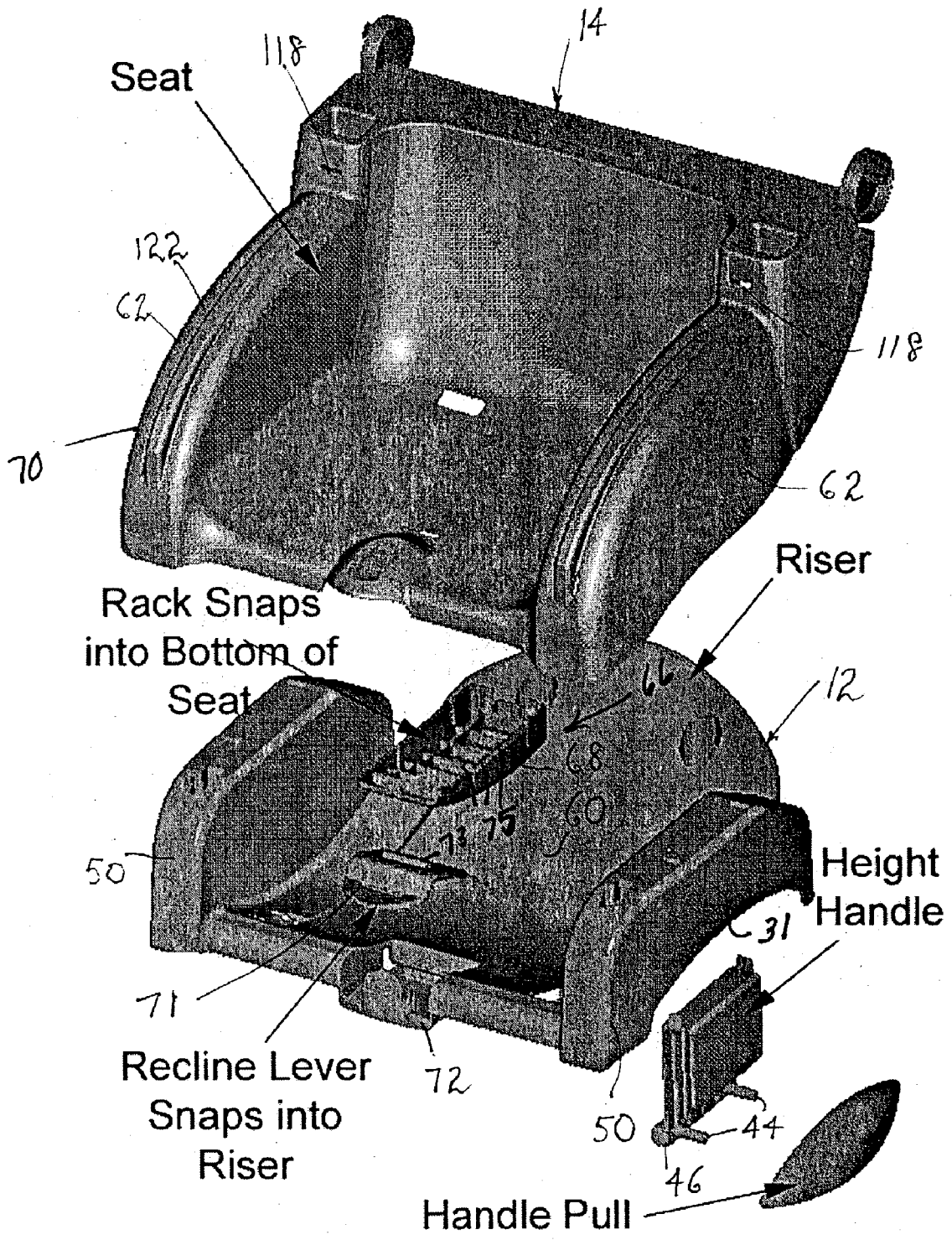
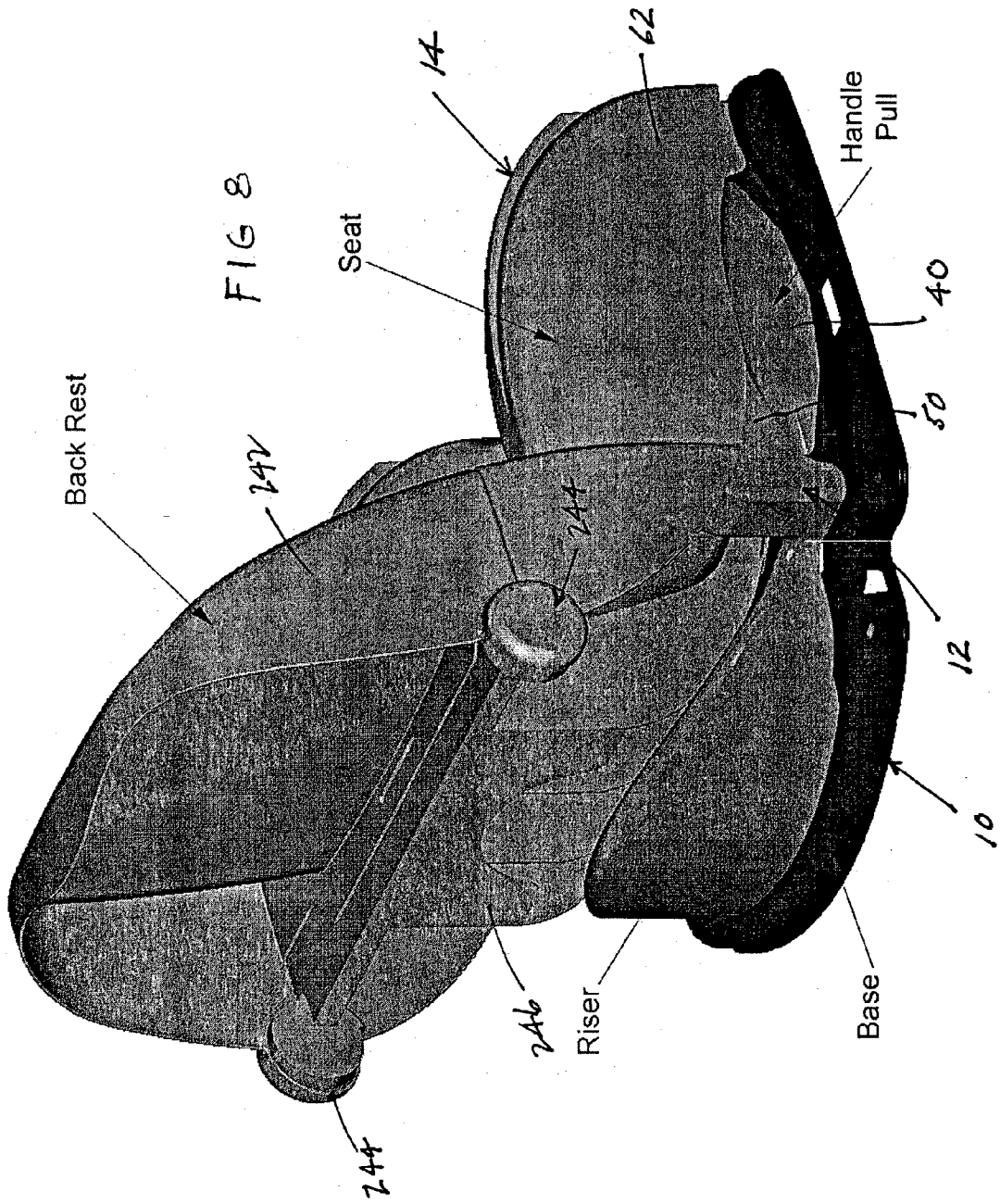
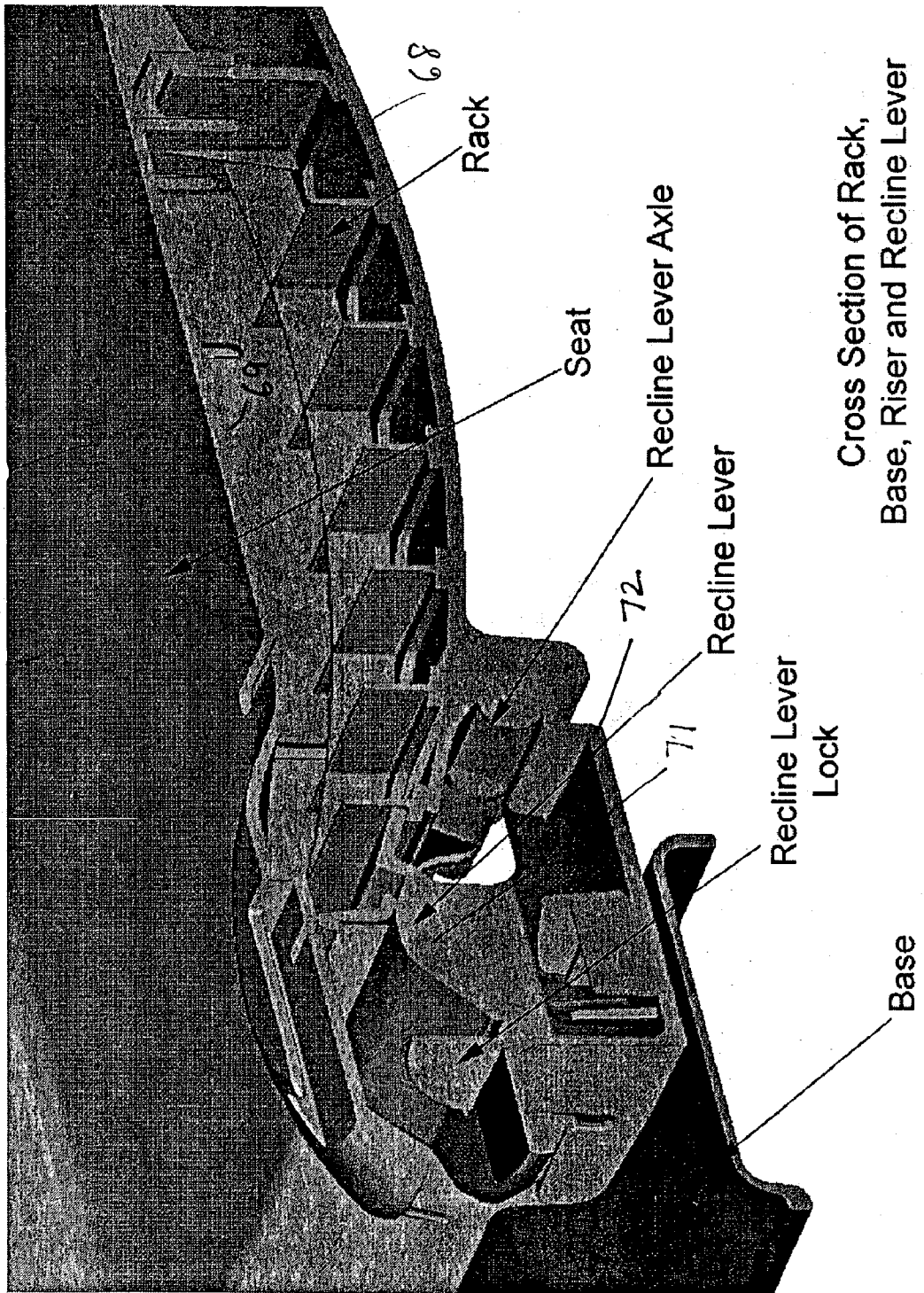


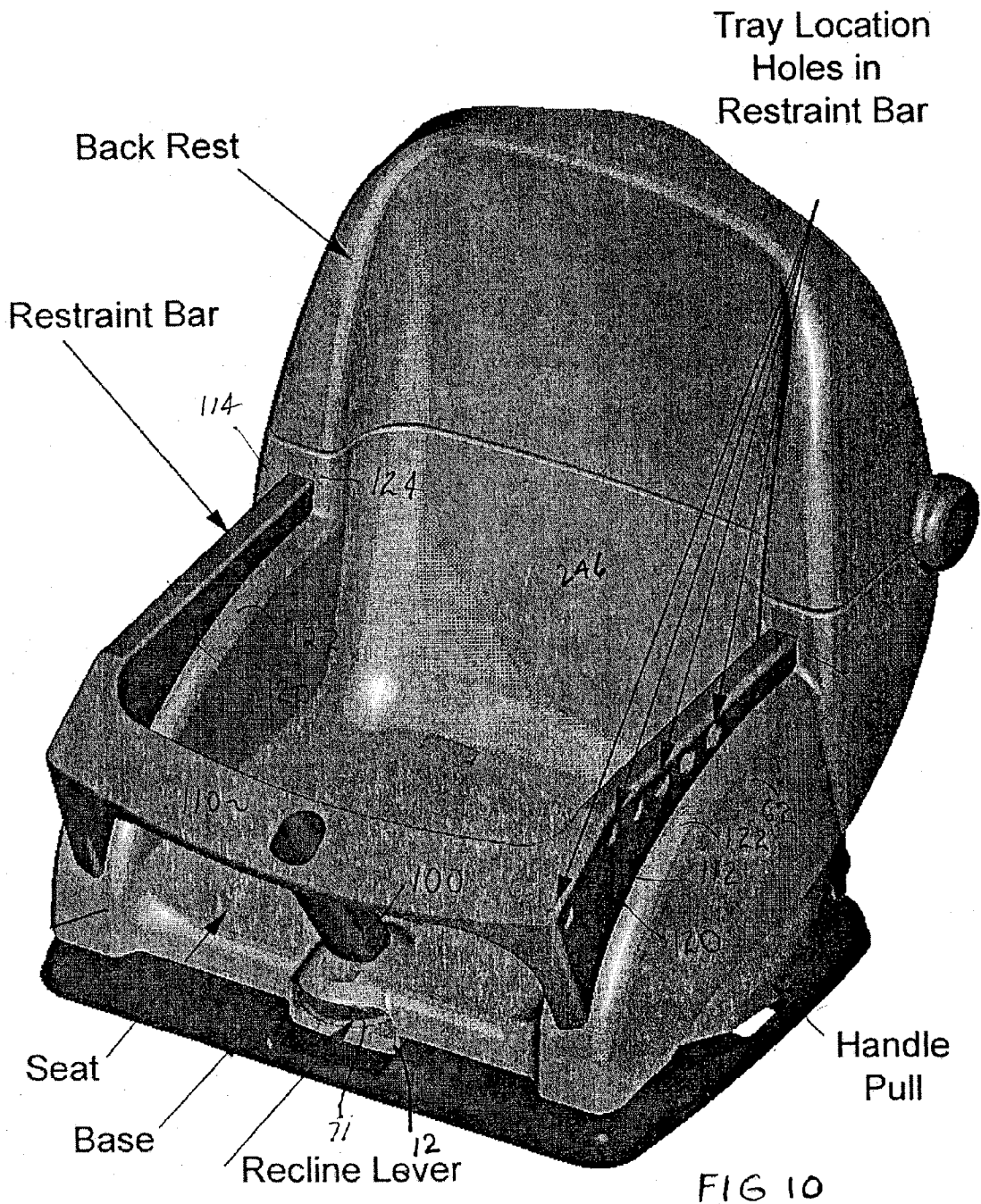
FIG. 7





Cross Section of Rack,  
Base, Riser and Recline Lever

FIG 9



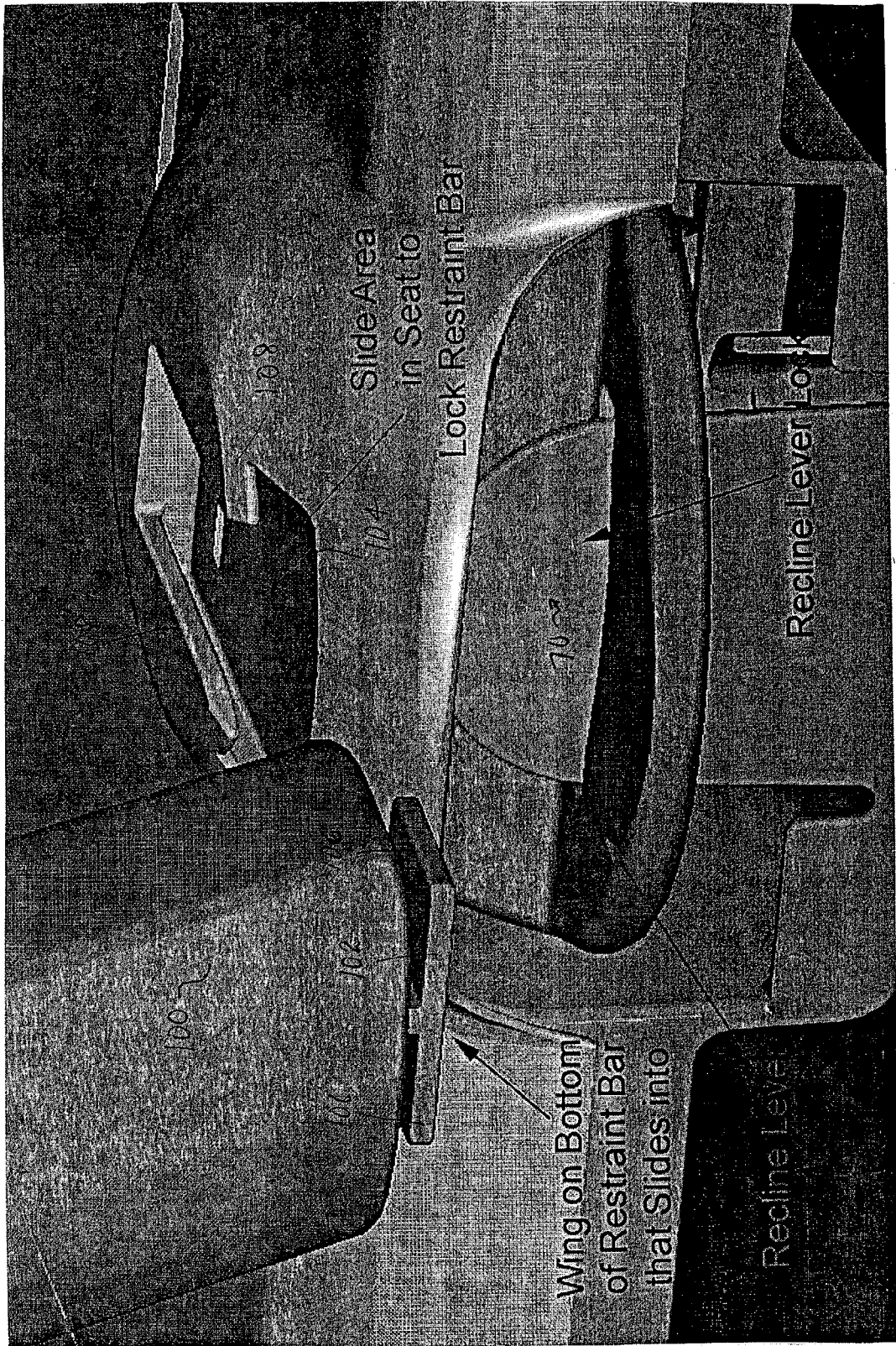


FIG 11

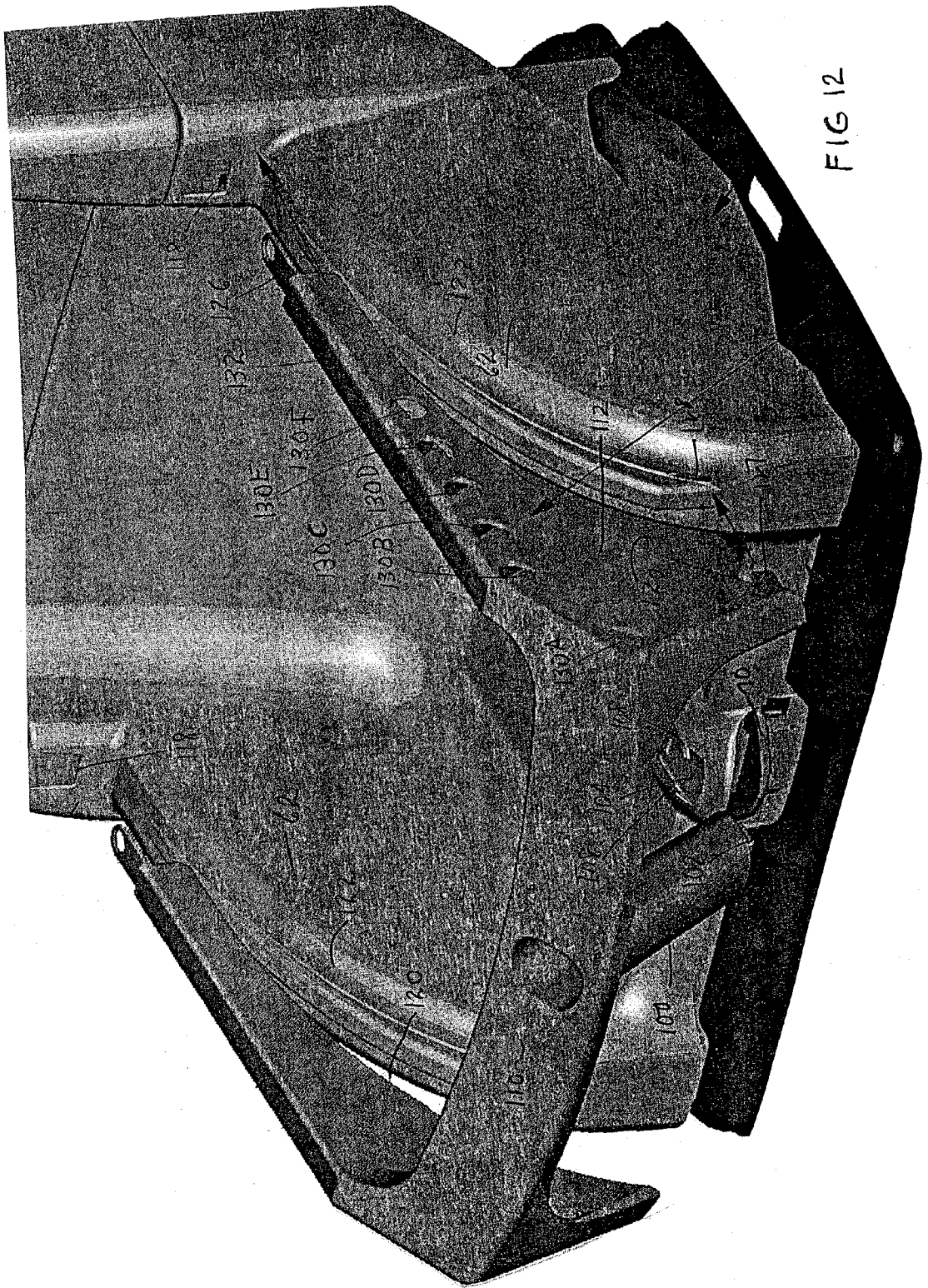
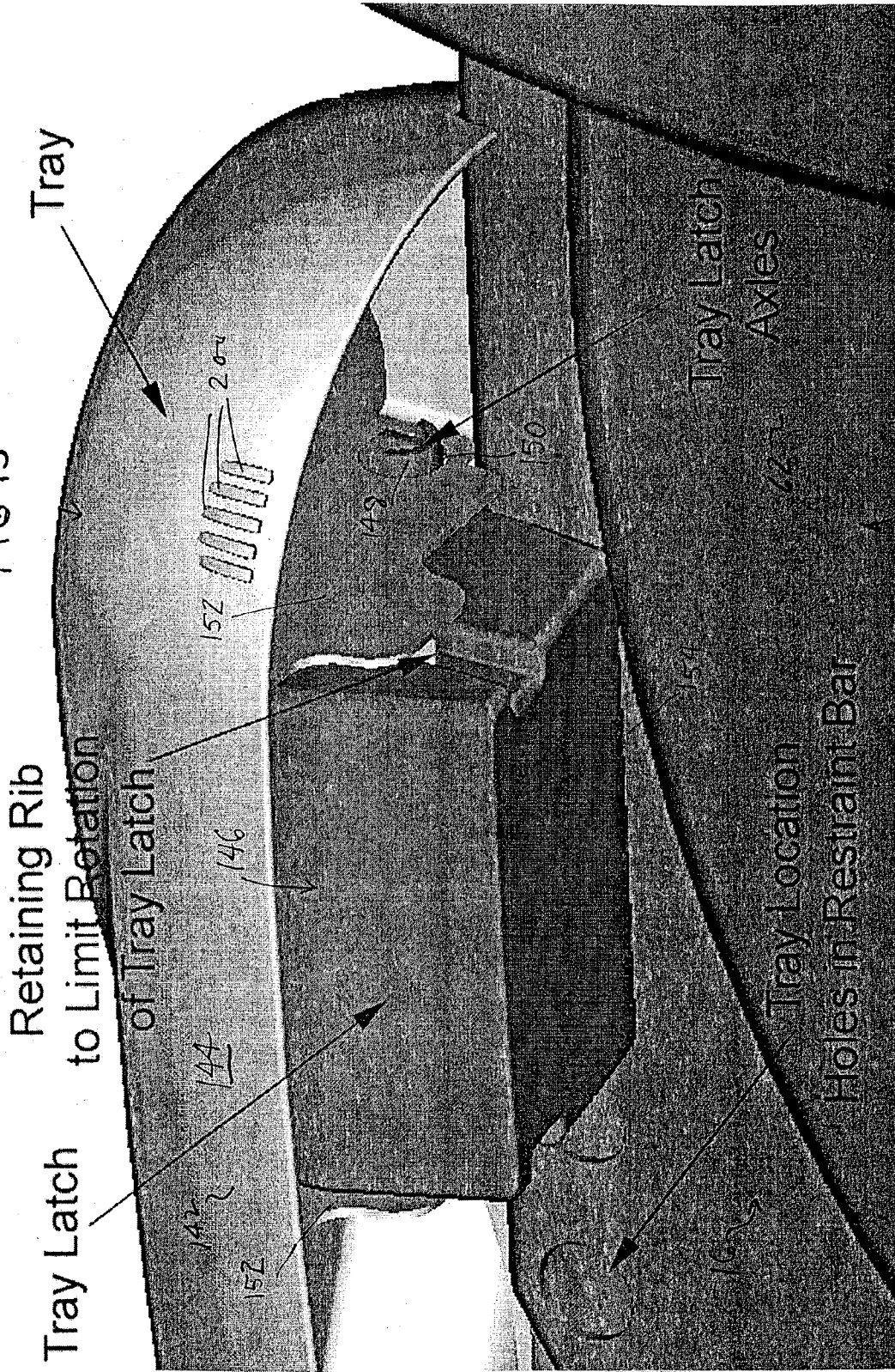


FIG 12

FIG 13



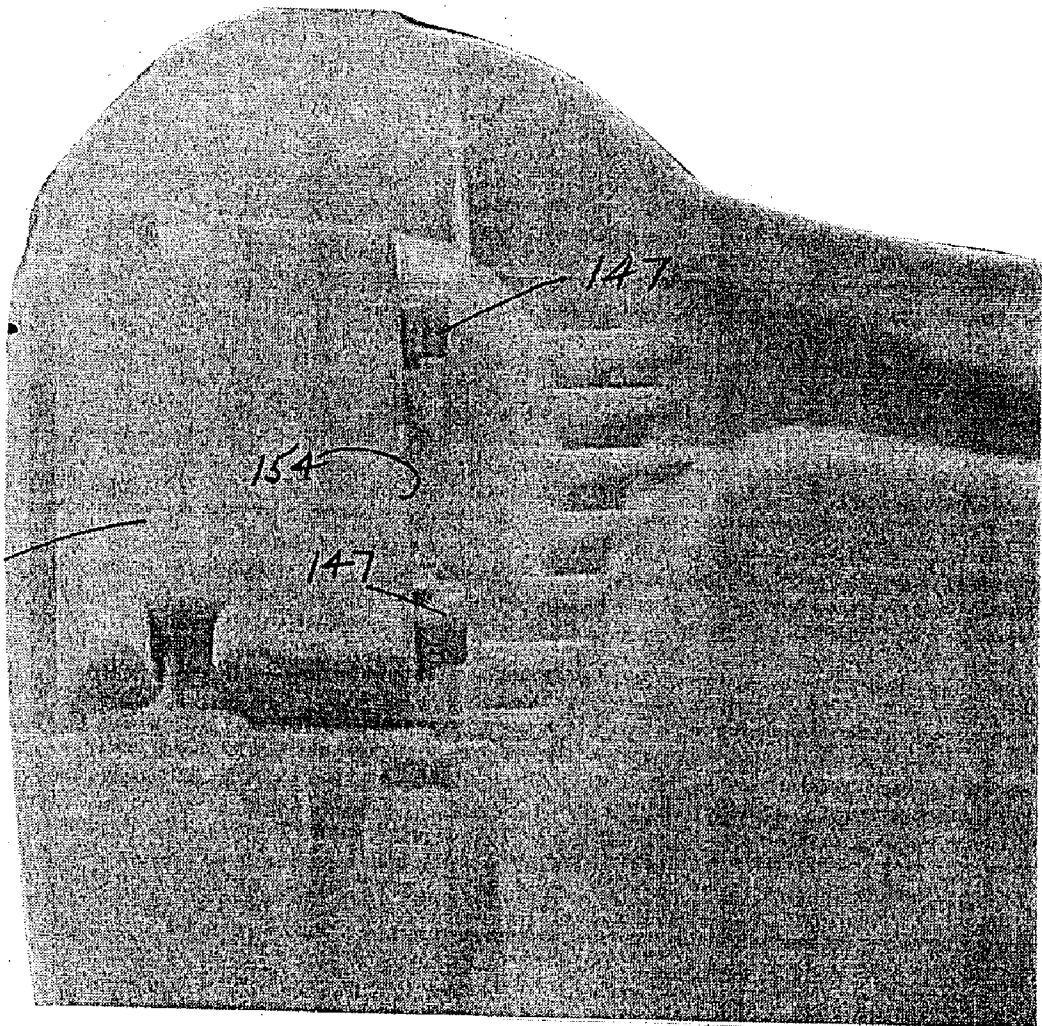


FIG 13A

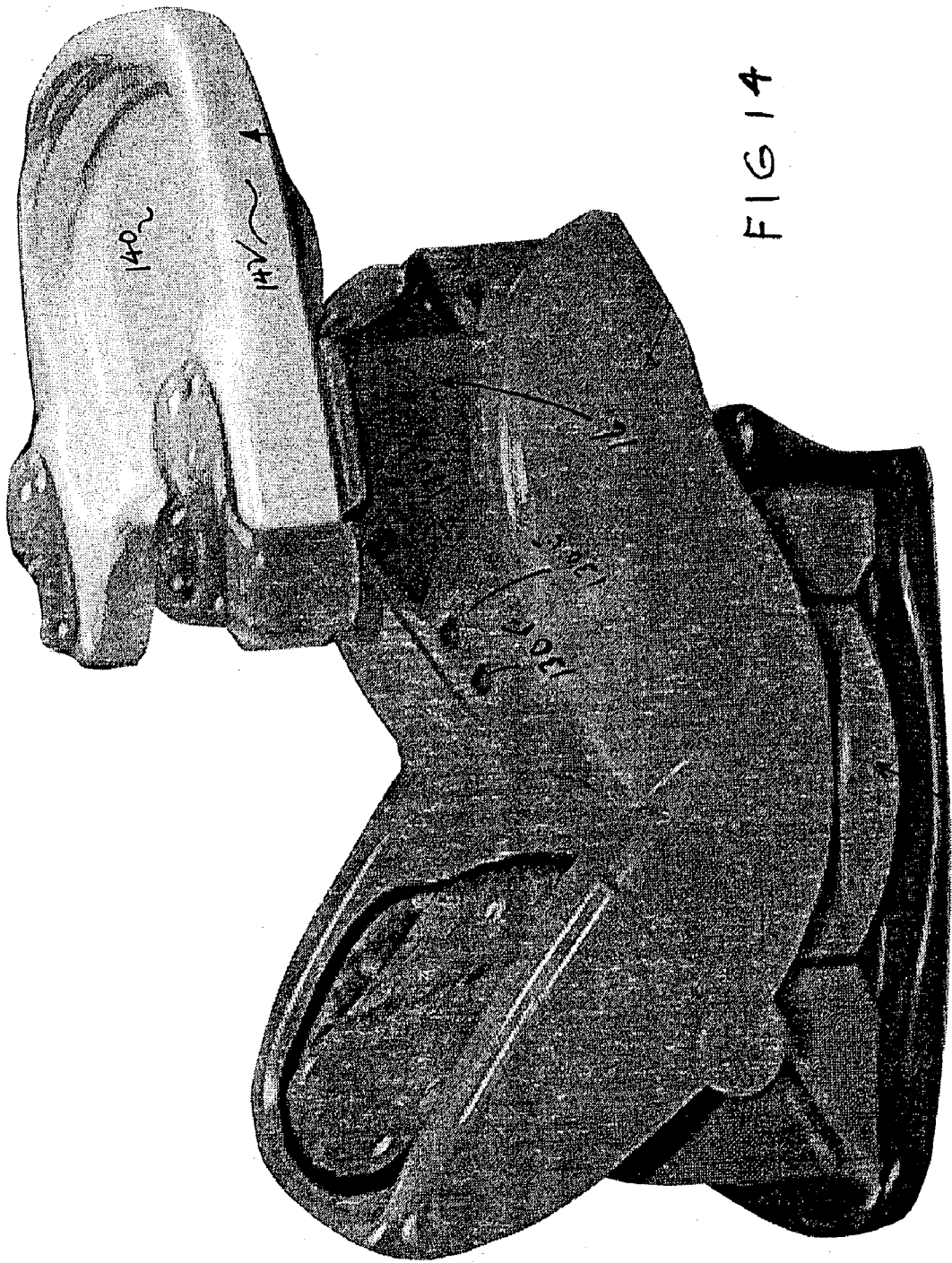


FIG 14

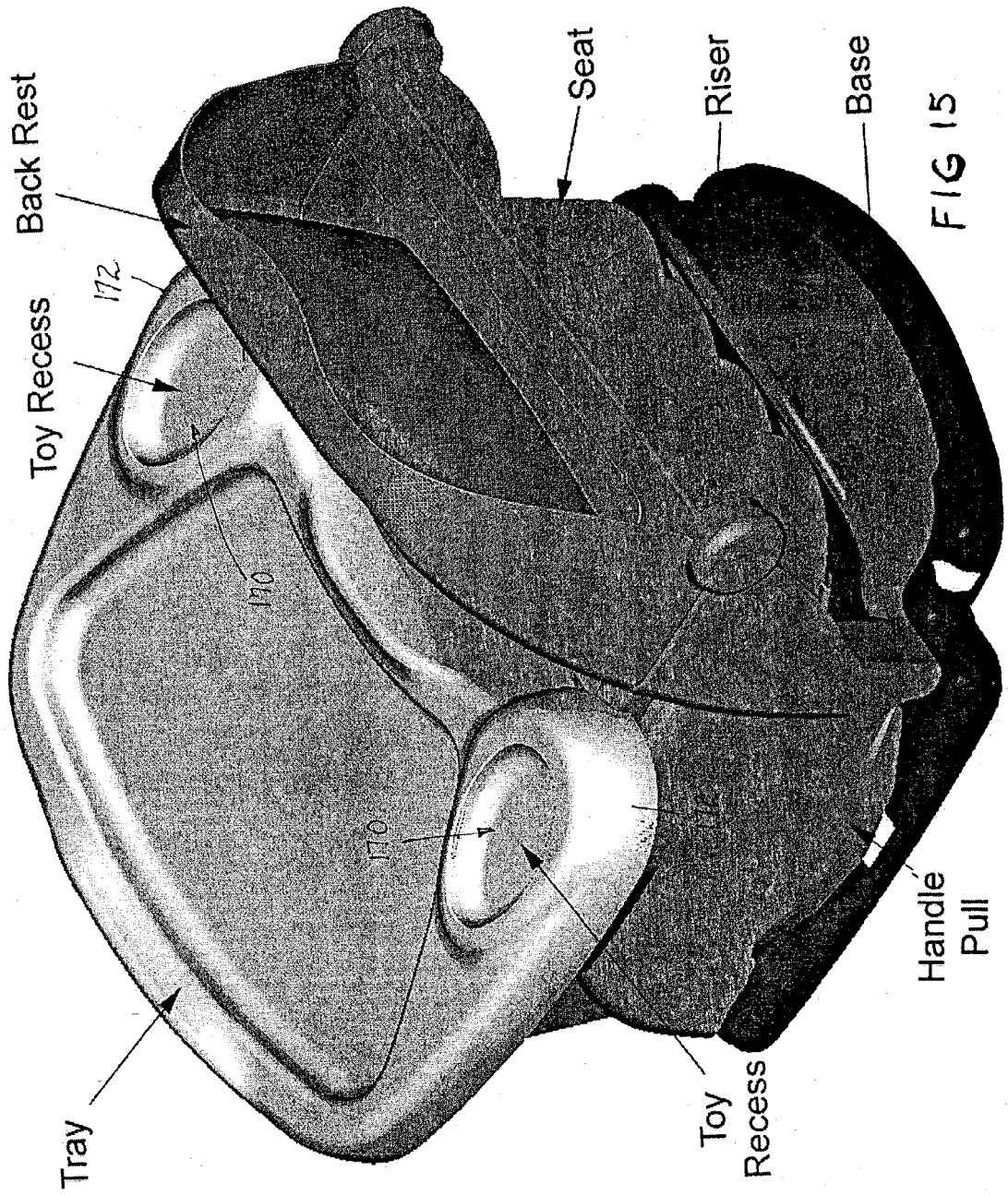


FIG 15

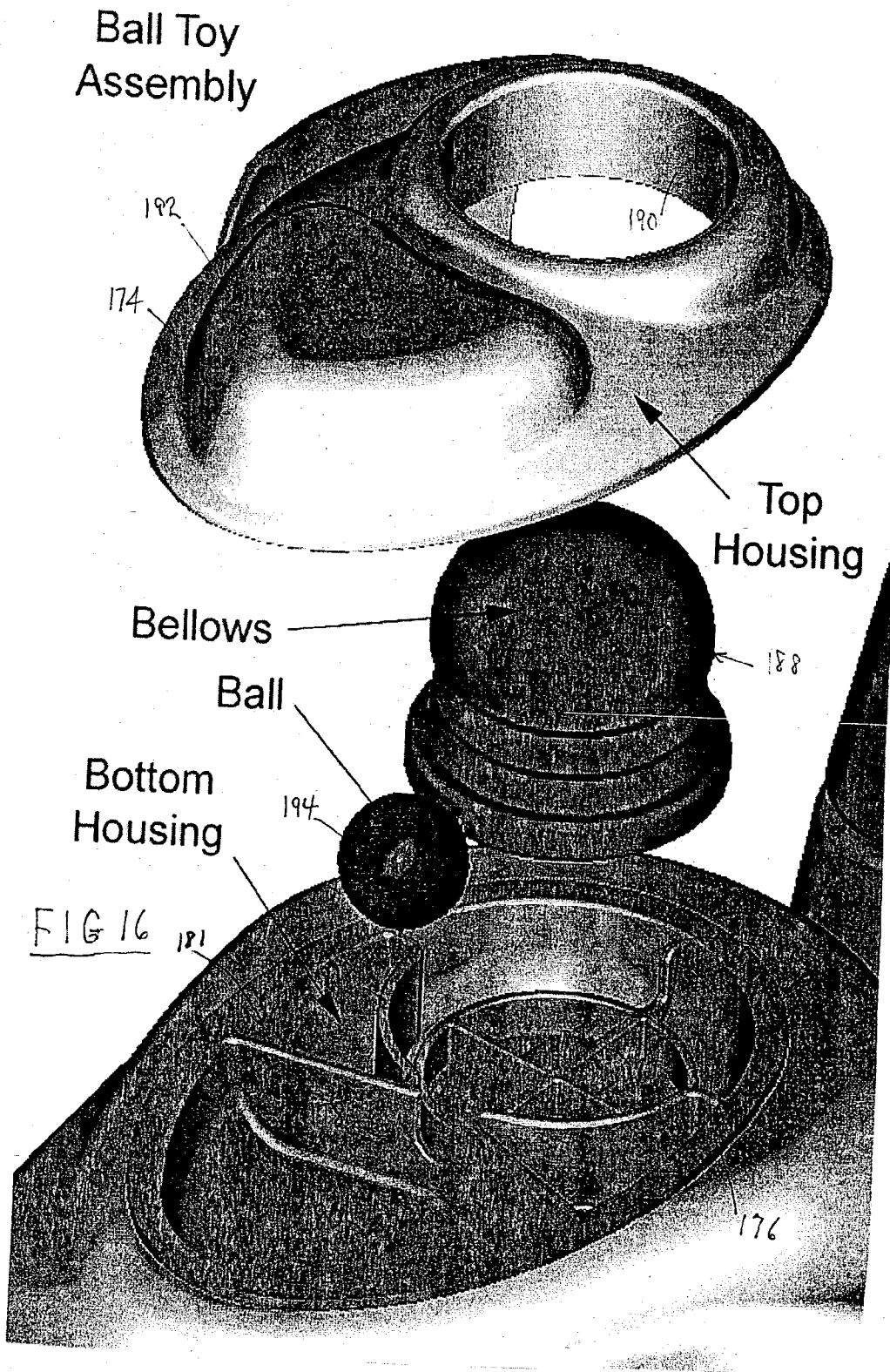


FIG 16

FIG 16

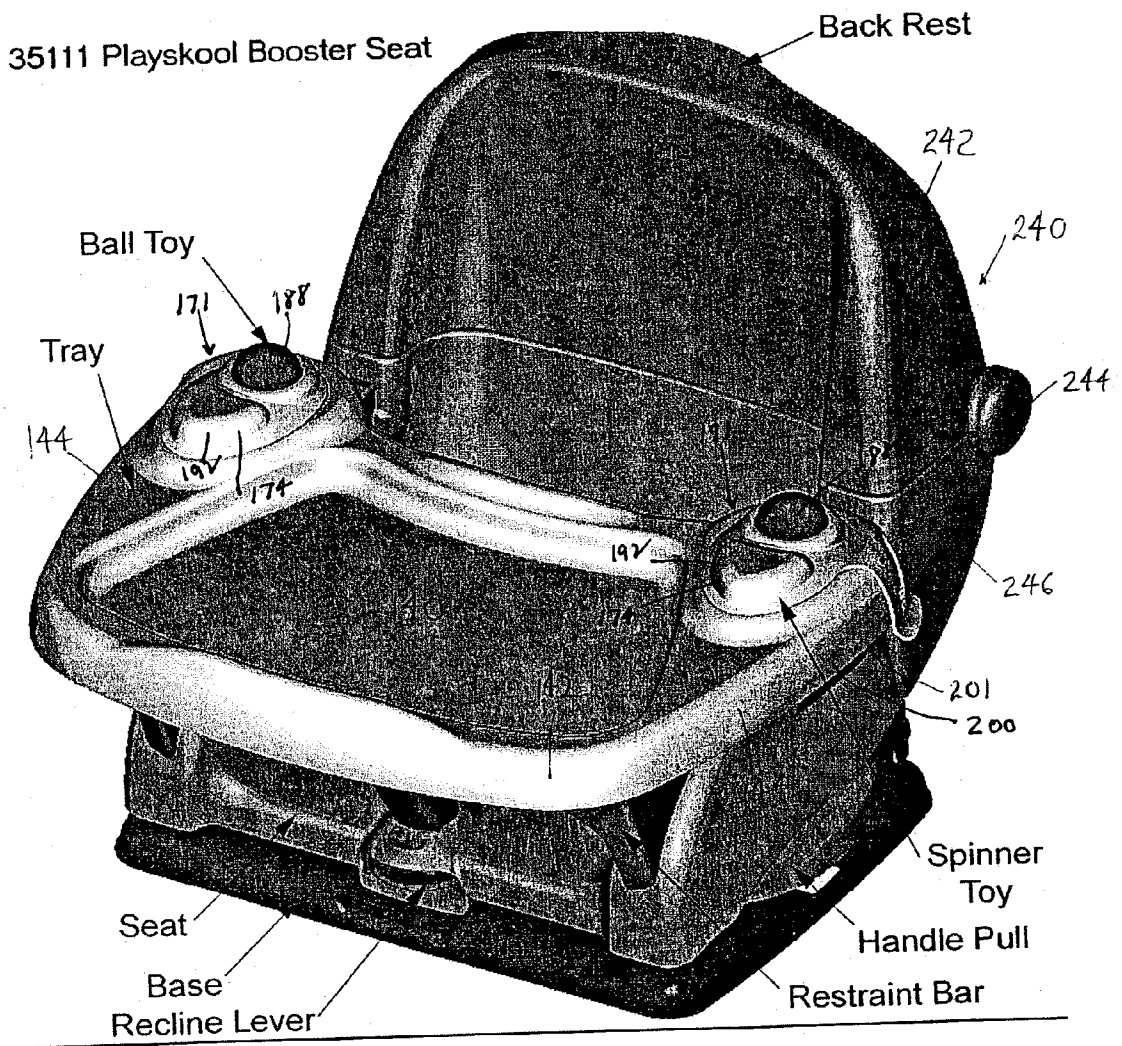


FIG 17

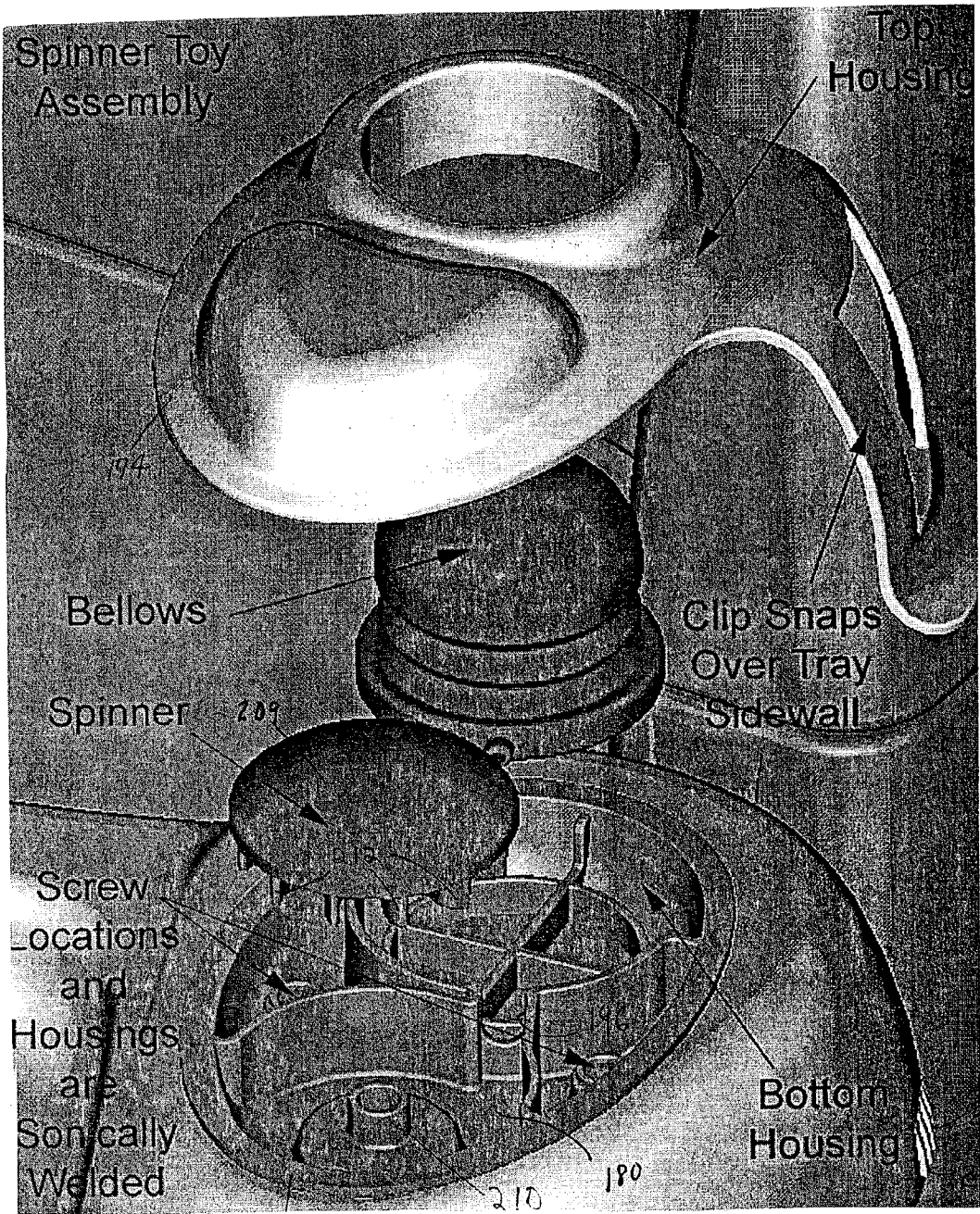


FIG 18

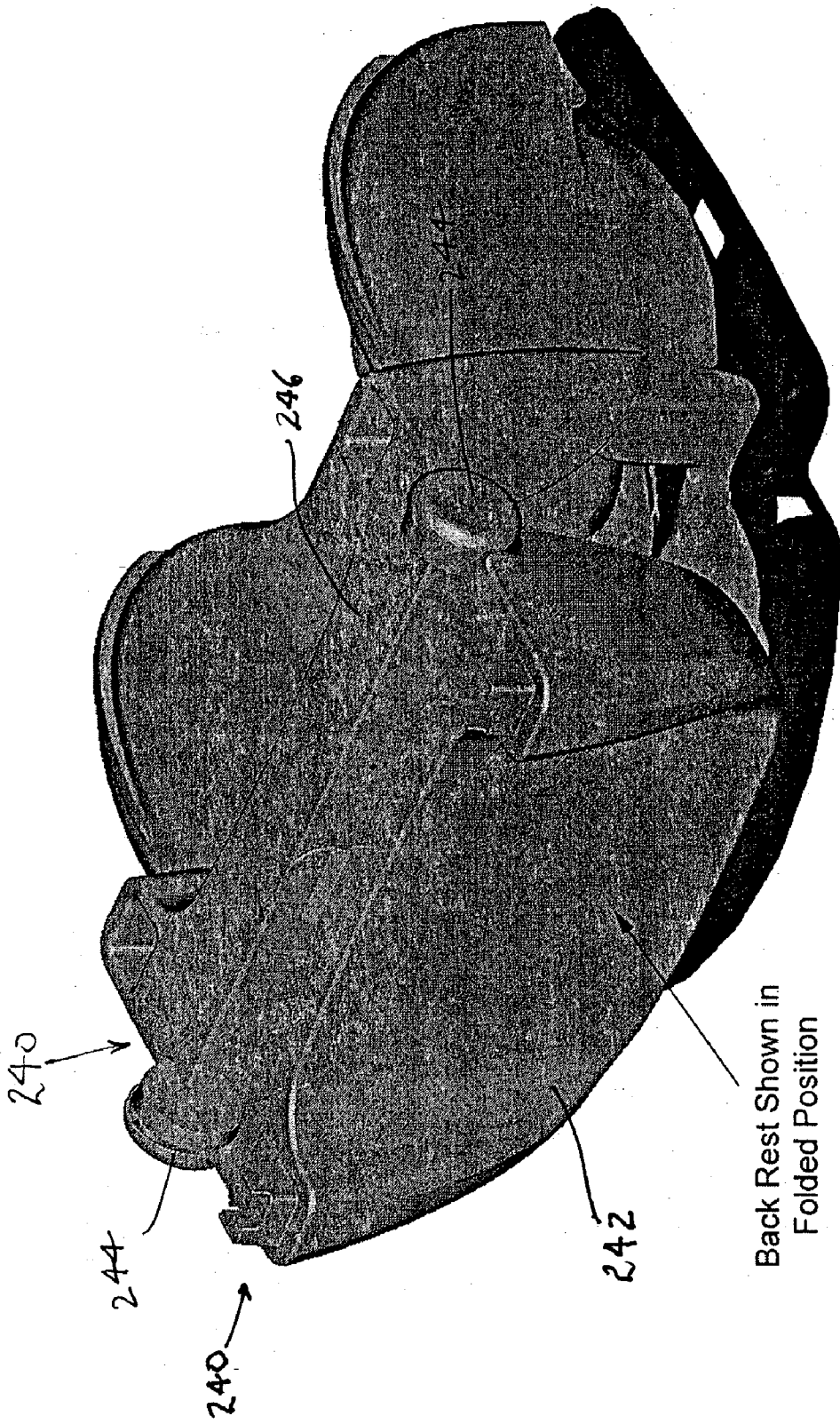
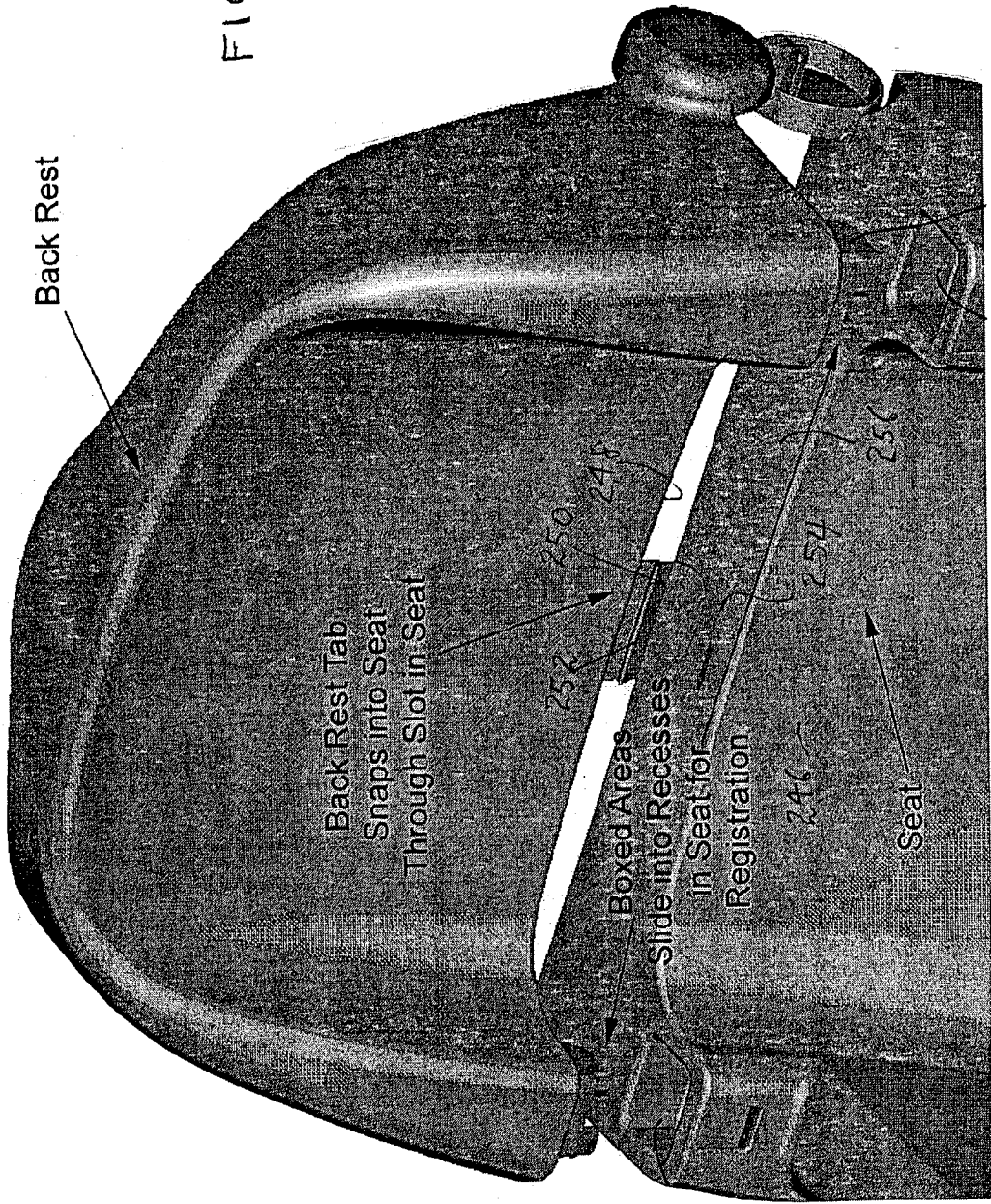


FIG 19

FIG 20



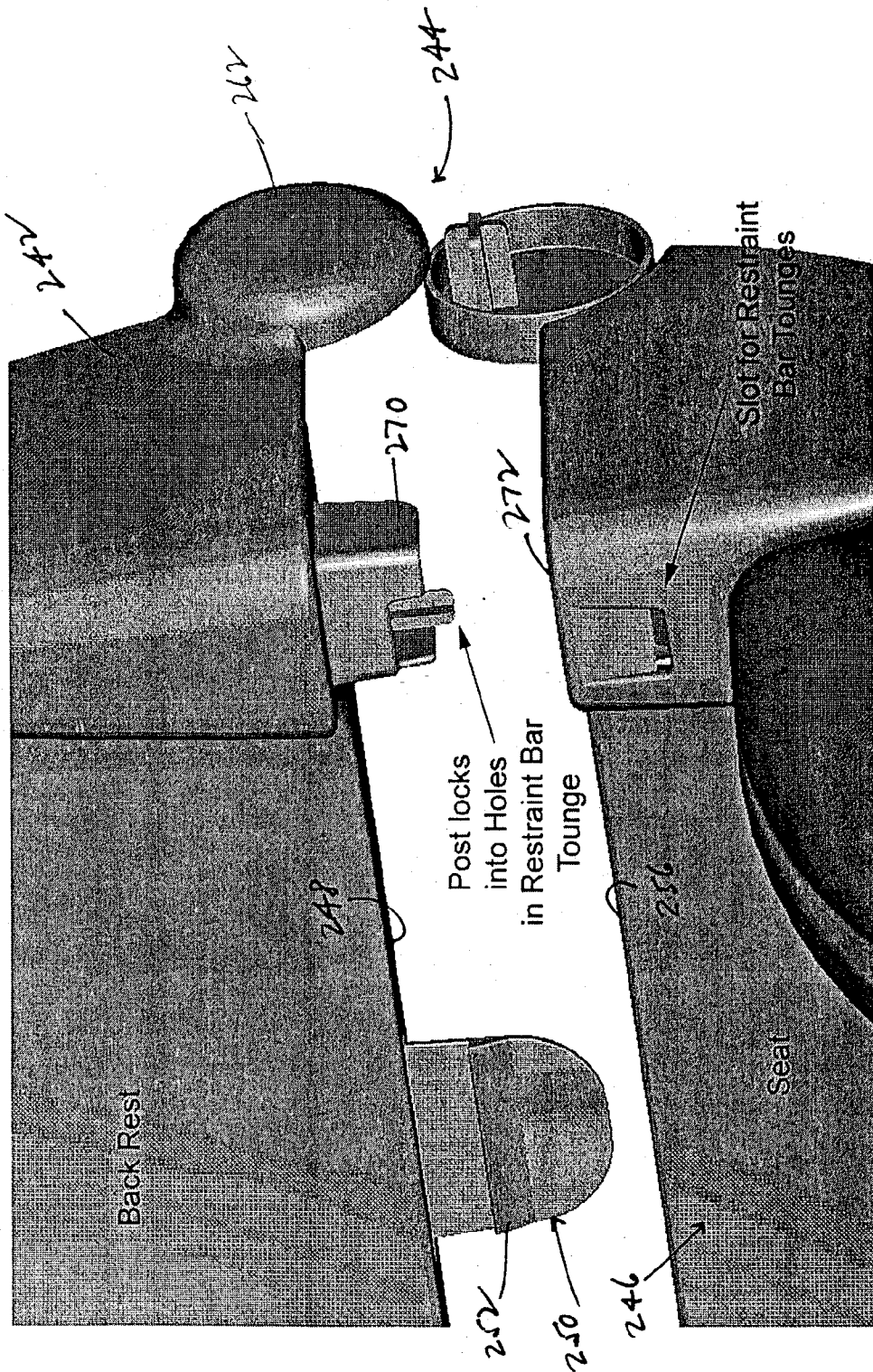


FIG 20 A



## BOOSTER SEAT

### RELATED APPLICATION

[0001] This application claims the benefits of applicants' earlier filed, copending provisional application Serial No. 60/312,016 filed Aug. 13, 2001 and incorporated herein in its entirety by reference.

### INTRODUCTION

[0002] This invention relates to booster-type seats. In accordance with one aspect of the invention, the elevation of the body support may be varied. In accordance with another aspect of the invention, the angular disposition of the body support may be varied. These features enable the seat to accommodate newborns who are fed by a caregiver and toddlers seated at a table. Another aspect of the present invention is the adjustability of the tray with respect to the body support so as to move the tray toward and away from a child in the seat to accommodate the child's size, as well as to change the angular disposition of the tray with respect to the body support so that the tray may be placed in a substantially horizontal position when the body support is in its reclined position. This feature enables a caregiver to place food on the tray while feeding a young child without the food sliding off the tray. Yet another aspect of the present invention is the unitized construction of the seat and backrest that comprise the body support so that the two move together as the body support is adjusted. And yet another aspect of the present invention is the collapsibility of the backrest so as to accommodate storage and transporting of the seat. This is particularly advantageous in seating that has a unitized seat and backrest.

### BRIEF FIGURE DESCRIPTION

[0003] FIG. 1 is a side perspective view of a booster seat embodiment disposed on a flat surface in accordance with this invention;

[0004] FIG. 1A is a rear perspective view of the booster seat of FIG. 1;

[0005] FIG. 1B is a side perspective view of the booster seat of FIG. 1 with the tray removed;

[0006] FIG. 2 is a bottom perspective view of the booster seat of FIG. 1;

[0007] FIG. 3 is a rear perspective view of the booster seat with the tray removed and the seat and back in an elevated position as compared to the earlier figures;

[0008] FIG. 4 is a three quarter front perspective view of the booster seat shown in a reclined position;

[0009] FIG. 4A is a fragmentary view of the seat and back assembly and the riser of the booster seat in assembled relationship;

[0010] FIGS. 5A, 5B and 5C are side views of the seat and back assembly and riser with the assembly in the upright, intermediate reclined and a fully reclined positions respectively on the riser;

[0011] FIG. 6 is a bottom perspective view of the base and riser of the booster seat illustrating one embodiment of the latching mechanism for adjusting the height of the riser on the base;

[0012] FIG. 6A is a bottom perspective view of the riser and seat and back assembly showing the slide arrangement for the assembly on the riser;

[0013] FIG. 7 is an exploded perspective view of seat and back assembly, riser and portions of the tilting mechanism and latch for changing the angular position of the assembly on the riser and for raising and lowering the riser on the base;

[0014] FIG. 8 is a rear perspective view of the booster seat with the backrest in the operative position;

[0015] FIG. 9 is a detail perspective view of the tilting mechanism;

[0016] FIG. 10 is a front perspective view of the booster seat with the tray removed showing the mechanism for releasing the tilt mechanism and the holes in the restraint bar for adjusting the position of the tray;

[0017] FIG. 11 is a fragmentary perspective view of the front of the booster seat and showing one method by which the restraint bar may be connected to the seat and back assembly;

[0018] FIG. 12 is a front perspective view of the booster without the tray and the restraint bar detached from the seat and back assembly, and showing the series of holes in the restraint bar that provide adjustment for the tray;

[0019] FIG. 13 is a fragmentary bottom perspective view of the tray, restraint bar and latch for engaging the holes in the bar;

[0020] FIG. 13A is a bottom fragmentary perspective view of the tray and particularly illustrating the one latch for attaching the tray to the assembly;

[0021] FIG. 14 is a side perspective view of the booster seat with the seat and back assembly in the maximum or fully reclined position and the tray in the forward and horizontal position;

[0022] FIG. 15 is a rear quarter perspective view showing toy recesses in the tray;

[0023] FIG. 16 is an exploded perspective view of a toy partially assembled in one toy recess of the tray;

[0024] FIG. 17 is a front perspective view of the assembled toy of FIG. 16 fully mounted in the recess;

[0025] FIG. 18 is an exploded perspective view of another toy partially assembled in one recess of the tray;

[0026] FIG. 19 is a rear perspective view of the booster seat without a tray and with the upper portion of the back in its collapsed position;

[0027] FIG. 20 is a fragmentary perspective view illustrating one embodiment of the attachment of the upper portion to the lower portion of the back; and

[0028] FIGS. 20A and 21 are further detail perspective views of the upper and lower portions of the back and showing one embodiment of the attachment for joining the sections together.

### DETAILED DESCRIPTION

[0029] The present invention relates to booster seats and feeding seats (hereinafter collectively called boosters or booster seats) used by babies and toddlers. The booster seat

shown in the accompanying drawings includes as its major parts, a base **10**, riser **12** and seat and back assembly (sometimes called a body support) **14**. The device also includes a restraint bar **16** and tray **18**. All of these parts typically may be injection molded of suitable plastic material such as polypropylene. The base **10** serves as a bottom support for the assembly and is particularly designed to be placed on a flat surface orienting the base in a substantially horizontal plane. The riser **12** is essentially permanently connected to the base **10** although its height is adjustable on the base so as to in turn provide an adjustment for the elevation of the seat and back assembly **14**. The riser **12** also provides a track-like surface for the seat and back assembly so as to enable the seat to be moved through an arc of perhaps  $30^\circ$  so that the child in it may be seated in an upright position or in a number of different reclined positions. This feature is illustrated in FIGS. 5A-5C. As explained below, the embodiment shown provides a number of different settings for the seat assembly on the riser that allows incremental adjustments in the orientation of the seat and backrest assembly of approximately  $5^\circ$  so that six or seven different angular reclined positions are available. The restraint bar **16** is removably connected to the seat and back assembly **14** and will restrain the baby or toddler in the booster from sliding off the seat and beneath the tray **18**. In addition, the restraint bar **16** provides the support for the tray **18** and also provides means for orienting the angular relationship of the tray with respect to the seat and backrest assembly.

[0030] The base **10** is shown in FIGS. 2 and 3 to be generally rectangular in the shape having a front bar **20**, side bars **22** and a rear bar **24**. The rear bar **24** carries an anti-skid foot **26** to restrain the base from sliding on the surface upon which it rests. The restraint bar may take any number of forms and be attached to some or all of the members that define the frame-like shape. The lower surface of the base **10** defines a uniform supporting plane so that the base will not tip or rock when placed on a flat surface. The bar **10** also includes a pair of upwardly extending generally vertical side walls **30** and a rear generally vertical wall **29** that in this embodiment are telescopically received in cavities **31** in the riser **12**. In FIGS. 3 and 4, the riser **12** is shown in its elevated position on the panels **34** and **29** of base **10**, while in FIG. 1 the riser is shown in its lowermost position on the base. The height adjustment of the riser on the base is achieved by virtue of three tiers of slots **30** formed on the outside surfaces **32** of the side walls **34** that extend upwardly from the side bars **22** of the base. While preferably three pairs of slots **30** are provided in the walls **34** to provide three adjustments in the height of the riser, obviously, a different number may be employed and the connections may be provided on the inner sides or the ends of the side walls **34**. The slots **30** cooperate with the height adjustment mechanisms **40** carried on each side of the riser, to support the riser on the base at the appropriate elevation for the baby or toddler to be seated in the booster. FIG. 6 which is a fragmentary perspective view of the underside of one side of the riser shows a handle **42** that carries a pair of posts **44** that are biased to their extended positions. The posts **44** in accordance with this embodiment in turn carry a pair of tabs **46** that are sized to register with the slots **30**. When the tabs **46** are disposed in one of the selected pairs of slots, they rigidly retain the riser in a fixed position on the base. It is to be appreciated that the height adjustment mechanisms are

provided on each side of the riser and cooperate with the slots **30** on each wall **34** of the base. In FIG. 6 the cavity **31** is shown in association with the mechanism **40**, which cavity receives the side wall **34** of the base. In order to change the position of the riser **12** on the base, the handles **42** on each side of the riser must be pulled outwardly so as to free the tabs **46** from the slots **30**. When that is done, the riser may be raised and lowered as desired, and the handles are released when the tabs are aligned with the desired pair of slots **30**. While not illustrated, a connection is made between the riser and base that prevents the riser from being removed from the base. The riser is free to be adjusted between the various elevations afforded by the pairs of slots **30**, but the connection between the base and riser prevents the riser from being lifted off the base. That mechanism may conveniently be disposed in the arms **50** of the riser and in the walls **34** of the base.

[0031] As shown in FIG. 7 the riser **12** has an arcuate platform **60** that forms a track-like support for the seat and back assembly **14**. (In FIG. 7, the top portion of the back has been removed as described more fully below.) The platform **60** directly supports the seat and back assembly **14** for sliding motion between the upright and most reclined position of the assembly (see FIGS. 5A and 5C). When the seat and back assembly **14** is placed on the riser, the arms **62** that are open on the bottom receive the arms **50** of the riser as is evident from an inspection of the rear of the unit as shown for example, in FIG. 8. The rocking motion of the seat and backrest assembly **14** on the riser, as illustrated in FIGS. 5A-5C is controlled by the mechanism **66** shown in FIGS. 4, 7 and 9. That mechanism includes a rack **68** attached to the bottom surface **69** of the seat **70** of assembly **14**, and which is engaged by a lever **71** disposed on the front of the riser **12** in a well **72** provided for that purpose. The mechanism is shown in FIGS. 7 and 9. The rack **68** is connected to the bottom of the seat **70**, and the lever **71** is shown positioned to selectively engage any segment of the rack. The lever **71** is urged in a raised or operative rack engaging position. In FIG. 7 the lever is shown to carry a rib **73** on its upper surface in position to engage any of the openings **75** in the rack. The lever may be spring biased to that position or be formed to have a natural bias in that direction by its position in the well **72**. To slide the back and seat assembly **14** on the riser, the lever **71** must be moved to cause the rib **73** to disengage the rack and preferably when released it automatically re-engages the rack to hold the assembly **14** in a fixed position.

[0032] In FIGS. 5A-5C the upper portion of the backrest **240** of the seat and back assembly **14** is omitted, the lower portion **246** carrying a hinge at the top as described more fully below. In FIG. 5A the seat and back assembly **14** is shown in the most upright position and in FIGS. 5B and 5C the assembly is shown displaced in an intermediate reclined position and a maximum reclined position approximately  $15^\circ$  and  $30^\circ$  respectively from the upright position. As suggested above, additional positions may be set at  $5^\circ$ ,  $10^\circ$ ,  $20^\circ$  and  $25^\circ$  from the upright position. All of the positions are established by the rack **68** and lever **70**, and the seat and back **14** assembly is releasably locked in each. By moving the lever **70** out of engagement with rack **68**, the assembly **14** may be moved to any of the positions established by the rack. Tabs **80** is carried on the bottom of seat and back assembly **14** and extends through slots **81** in the riser to retain the assembly on the riser (see FIG. 6A). Note the

extreme positions of the tab **80** in **FIGS. 5A and 5C**. While a preferred arrangement is shown in **FIGS. 6, 6A and 7** for attaching the seat and back assembly to the riser so as to permit the tilt adjustment and locking of the assembly, other arrangements may also be used including tracks, rollers and roller brakes and swing-type linkages, both used in motion furniture.

[0033] **FIGS. 10-12** illustrate a preferred embodiment for attaching the restraint bar **16** to the seat **70**. The restraint bar locks to the seat and back assembly **14** but may be removed when not in use. The restraint bar **16** includes a crotch post **100** that carries on its lower end, a locking plate **102** (see **FIG. 11**) that is sized to fit within a T-shaped opening **104** in the seat. When inserted in the opening **104** and thereafter moved rearwardly with respect to the seat so that the side edges **106** of the plate pass beneath the flanges **108**, the crotch post **100** will be locked in position. As shown in **FIG. 10**, the crotch post extends downwardly from and is connected to the front rail **110** of the restraint bar **16**. The restraint bar also includes a pair of side panels **112** connected to the ends of the front rail **110**. The rear ends of the side panels **112** bear against the uprights **124** at the back of the arms **62** of the seat assembly **14** and include tongues **126** (see **FIG. 12**) that fit into the slots **118** to releasably hold the panels **112** of the restraint bar in place. Similar tongues **127** and grooves **128** are on the front bottom edge of the panels **112** and front of the arms **62** of the seat and back assembly **14**. The lower edge **120** of each panel **112** rests on the upper surfaces **122** of the arms **62**. Thus, the restraint bar **16** is held firmly on the seat. To free the restraint bar **16** from the seat, the restraint bar must be moved forward slightly to align the retaining plate **102** on the bottom of the crotch post **100** with the opening **104** so that its side edges **106** are freed from beneath the flanges **108**, and the restraining bar may be lifted from the front end by grasping the front rail **110** so as to free the tabs **126** and **127** from the slots **118** and **128**. This arrangement is also clearly shown in **FIG. 12**. In that figure the tongues **126** and **127** are shown freed from the slots **118** and **128**, and the retaining plate **102** is shown freed from the T-shaped opening **104** in the seat. While a preferred embodiment for attaching the restraint bar is illustrated, other types of fasteners may be used to join the bar to the seat and back assembly.

[0034] In **FIGS. 10 and 12**, a series of tray locating holes are shown provided in the outer sides of panels **112** of the restraint bar **16**. (The holes are visible only in one arm in those figures.) In the embodiment shown, six such holes are provided in each side panel, identified as **130A** through **130F**. The holes **130B** through **130F** are shown aligned along the top edge **132** of the panels, and the hole **130A** is shown disposed below the plane defined by the centers of the holes **130B** through **F**. The holes allow the angular orientation of the tray **18** with respect to the seat **70** to be varied and also allow the tray to be moved toward and away from the backrest **240** of the seat and back assembly **14**.

[0035] The tray **18** as shown in **FIGS. 1, 4, 13-15** and **17** includes a flat central table surface **140** and a surrounding lip **142** that will assist in retaining items placed on the surface **140**. On each side **144** of the tray, a latch mechanism **146** is disposed inside the lip **142** and pivotally supported on axles **148** (one shown in **FIG. 13**) mounted in openings **150** provided in the flanges **152** on the tray bottom. The pivotally supported tray latch mechanism **146** in the illustrated

embodiment includes a pair of pegs **147** on its inboard side **154** (see **FIG. 13A**) that are spaced apart to register with selected pairs of holes **130A** through **130F** on the sides of the restraint bar **16**. The pegs are spaced apart the same distance as the space between the holes **130A** and **130B**, and that spacing is the same as the spacing between pairs **130B** and **130D**, **130C** and **130E** and **130D** and **130F**. Thus, in the rearwardmost position of the tray on the restraint bar **16**, the pegs **147** engage the holes **130D** and **130F** but the tray may be incrementally moved away from the backrest (further forward with respect to the seat) by engaging pairs of holes **130C** and **130E** or **130B** and **130D**. In any of those three alternative positions, the tray will be at the same angular relationship with the seat and backrest assembly **14** but will simply be closer to or further away from the baby or toddler seated in the seat **70**. When the pegs register with the holes **130A** and **130B**, the tray will assume a different angular relationship with respect to the seat and backrest assembly **14**, that is, as shown in **FIG. 14**. The tray ordinarily will only be mounted in the holes **130A** and **130B** when the seat and backrest assembly is in the most rearwardly inclined orientation as in **FIGS. 5C and 14**. Because in the embodiment shown the seat and backrest assembly **14** is able to tilt approximately  $30^\circ$  rearwardly from its upright position, the different angular orientation for the tray with respect to the seat and backrest assembly is highly desirable as in that position the tray is more substantially horizontal. That orientation of the seat and backrest assembly **14** and the tray **18** is ordinarily used for feeding or otherwise attending newborns, and the tray may be utilized by the attendant to carry the food or other items, and they will not slide off the tray. The other positions of the tray ordinarily are used when the seat and backrest assembly is in the more upright positions. For example, in **FIGS. 1 and 4** where the seat is upright and partially reclined, the tray is shown connected in its rearwardmost position utilizing holes **130D** and **130F**. While in the illustrated embodiment the holes for mounting the tray are provided in the restraint bar, it should be appreciated that the holes may, as an alternative, be provided in the arms **62** of the seat **70**. In that arrangement the configuration of the arms and/or the rim **142** of the tray may require reconfiguration to enable the connection between the arms and tray to be made. As yet another modification, the tray may be carried by the crotch post **100** and a tilt mechanism may be provided to enable the plane of the tray to be varied.

[0036] When the booster seat is used by a toddler seated at a table, the restraint bar and tray are not ordinarily used and rather are detached from the body support so that the booster is configured as shown in **FIG. 3**.

[0037] It should also be appreciated that in other embodiments the connecting mechanism **146** may take other forms. For example, snap type latches, or rack type connectors (such as used to lock the seat and back assembly on the riser) may be employed for that purpose.

[0038] In **FIG. 15**, the tray is shown to include a pair of toy wells **170** at its rear corners **172**. The wells **170** are designed to receive a variety of different toys, two of which are shown in **FIGS. 16-18**. In **FIG. 17** one toy **171** is shown fully in each assembled well. Each variety of toy is retained in its well **170** by means of a top housing **174** that may be transparent, translucent or opaque depending on the nature of the toy. A bottom housing **176** fits within well **170**, and the two housing sections **174** and **176** together form a generally

egg-shaped chamber 181. In the embodiment of toy shown in FIG. 16, a rib 178 divides the chamber into two sections, 180 and 182. Chamber section 182 is defined in part by additional ribs 184, 186 and 187, and a bellows assembly 188 is sized to be supported on the ribs. The bellows in turn is exposed through the opening 190 in the top housing 174. A generally heart-shaped crown 192 also provided in the top housing 174 closes section 180, and a ball 194 is retained in but free to move about within it. In FIG. 16 a passage 196 is shown formed in the rib 178 so as to place the chamber sections 182 and 180 in communication with one another. When the bellows is compressed, pressure in the chamber section 182 causes air to flow through the passage 196 into the chamber section 180. The air flow through the small opening 196 causes the ball 194 to roll about in its chamber section and entertains the baby or toddler seated in the booster assuming, of course, that the top housing 174 is transparent or translucent.

[0039] The top housing 174 is provided with a clip 198 designed to engage the lower edges 201 of the flanges 200 on the side of the tray to releasably retain the top housing in place. The flexibility of the material of the top housing enables the clip to slide over the flanges and engage their lower edges. Alternatively, the clip may be hinged to the upper portion of the top housing body and latch onto the bottom of the flanges 200 or the bottom edge 201.

[0040] The toy shown in FIG. 18 differs from that shown in FIG. 16 simply by the fact that the ball 194 is replaced by a spinner 209. The spinner is mounted for rotation on the top of a post 210 in the well section 180 and carries ribs 212 on its bottom surface that are in the path of air discharged through opening 196. It should be understood that the material from which the heart shaped crown 192 is formed in the top housing is translucent or transparent so that the child or baby in the booster can see the motion of the ball or spinner. It should also be appreciated that the spinner and ball may be decorated with a variety of colors or other ornamental indicia that would appeal to and attract the attention of the child or baby.

[0041] In FIGS. 19, 20, and 21 the backrest 240 of the seat and back assembly 14 is shown to be foldable so as to reduce the overall size of the booster, particularly for purposes of packaging, travel or storage. The backrest is shown in FIG. 17 to be in the erect position, while in FIG. 19 the top portion 242 of the backrest is folded back so as to hang downwardly from the hinges 244 connecting the top portion with the lower portion 246 of the backrest 240. The hinges 244 on each side of the backrest enable the top portion 242 to fold backward in the manner shown in FIG. 19. However, a lock is provided so as to maintain the upper portion 242 of the backrest in the operative position of FIG. 17. In FIG. 20 the lower edge 248 of the upper portion 242 is shown to carry a locking tab 250 with a lip 252. The tab 250 when the backrest is in the operative position of FIG. 17 extends through a slot 254 in the top edge 256 of the lower portion 246 of the backrest to retain the upper portion in the operative position. To release the locking tab 250 one must engage the tab 250 from the back of the booster and pull the tab rearwardly to unhook the lip 252 from the edge of the slot 254.

[0042] As shown in FIGS. 20 and 21, the hinges 244 include mating hubs 260 and 262 connected to the lower and

upper portions 244 and 242 of the backrest 240. The hubs 260 on the sides of the backrest each carry a pin 264 that extends into a vertical track (not shown) in the hub 262. The pins 264 and tracks allow the upper portion of the backrest to be vertically raised to remove the locking tabs 250 from the slot 254 and the box-shaped feet 270 on the lower edge 248 of the upper portion from the recesses 272 on the top side 256 of the lower portion 246 of the backrest. Once they are disengaged, the upper portion 242 can be pivoted on the hinges 244 to the folded position of FIG. 19. While in the embodiment shown the hinges 244 are disposed on the side edges of the bottom and top portions 242 and 246 of the backrest, in other embodiments the hinges may be provided intermediate the side edges, and different types of latches may also be utilized to hold the backrest in its operative configuration, such as snap-type flanges utilized to hold the restraint bar on the arms of the seat.

[0043] From the foregoing description it will be appreciated that numerous other modifications may be made of the illustrated embodiment without departing from the spirit and scope of the invention. Therefore, it is not intended that the scope of the invention be limited to the embodiments illustrated and described. Rather, its scope is to be determined by the claims and their equivalents.

What is claimed is:

1. A booster seat comprising,
  - a base and a riser mounted on the base,
  - a track carried by the riser and a body support mounted on the track enabling said body support to move between an upright and reclined position,
  - a restraint including a post mounted on the body support for retaining a child in the support,
  - and a tray adjustably mounted on the restraint for enabling the tray to be moved toward and away from the body support and for changing the angular relationship of the tray with the body support.
2. A booster seat as defined in claim 1 wherein the body support includes a seat and backrest.
3. A booster seat as defined in claim 2 wherein the body support is a unitized structure that moves as a unit on the riser.
4. A booster seat as defined in claim 2 wherein the backrest is collapsible for reducing the size of the booster for travel and storage.
5. A booster seat as defined in claim 1 wherein the riser may be raised and lowered on the base for raising and lowering the body support with respect to the base.
6. A booster seat comprising,
  - a base assembly and a seat and back mounted on the base assembly,
  - an arcuate support on the base assembly enabling the seat and back to move as a unit between upright, intermediate, and fully reclined positions and to be raised and lowered with respect to the base,
  - and a tray carried by the seat movable toward and away from the back.
7. A booster seat as defined in claim 6 wherein the angular relationship between the tray and seat may be varied.

**8.** A booster seat as defined in claim 6 wherein the backrest is collapsible for reducing the size of the booster for travel and storage.

**9.** A booster seat as defined in claim 6 wherein the seat and back have a fixed angular relationship with one another.

**10.** A booster seat comprising,

a base and a riser attached to the base,

an adjustment mechanism operatively connecting the riser to the base for raising and lowering the riser on the base,

an arcuate track carried by the riser,

and a body support movable back and forth on the track for changing the angular orientation of the body support between upright and reclining positions.

**11.** A booster seat as described in claim 10 wherein the body support has an arcuate surface mating with the track.

**12.** A booster seat comprising,

a base and a support having a pair of arcuate tracks running fore and aft, one on each side of the base,

a seat and back assembly having a fixed angular relationship mounted on the tracks for fore and aft and tilting motion to selectively move the assembly between an upright, reclined and intermediate orientations,

an adjusting mechanism operatively connected to the base and support for raising and lowering the seat and back assembly with respect to the base,

a restraining member attached to the assembly,

a tray adjustably supported on the member for back and forth and tilting adjustment enabling the tray to be placed in a substantially horizontal orientation when the seat and backrest assembly is in both the upright and tilted positions,

said back having upper and lower portions enabling the upper portion to collapse down on the lower portion to reduce the volume of the booster seat for storage and travel.

**13.** A booster seat as described in claim 12 wherein the restraining member is detachable from the base.

**14.** A booster seat comprising

a base and a support adjustably mounted on the base for varying the height of the support with respect to the base,

a seat and back assembly mounted for tilting motion on the support enabling the assembly to move between upright and reclined positions,

and a tray movably mounted on the assembly enabling the tray to be horizontally oriented independent of the position of the assembly.

**15.** A booster seat comprising,

a base and a seat and backrest assembly movably supported by the base for tilting motion thereon between upright and reclined positions,

and a tray mounted on the seat and backrest assembly for movement to a horizontal orientation when the assembly is in a reclined position.

**16.** A booster seat as defined in claim 15 wherein a restraint attached to the seat and backrest assembly supports the tray.

**17.** A booster seat as defined in claim 16 wherein the tray is adjustably mounted on the restraint for changing the plane of the tray.

**18.** A booster seat as defined in claim 16 wherein the tray is movable toward and away from the backrest.

**19.** A booster seat as defined in claim 10 wherein a latching mechanism is operatively connected to the body support and riser for selectively locking the body support in the upright and reclining positions and in at least one intermediate position between the upright and reclining positions.

\* \* \* \* \*