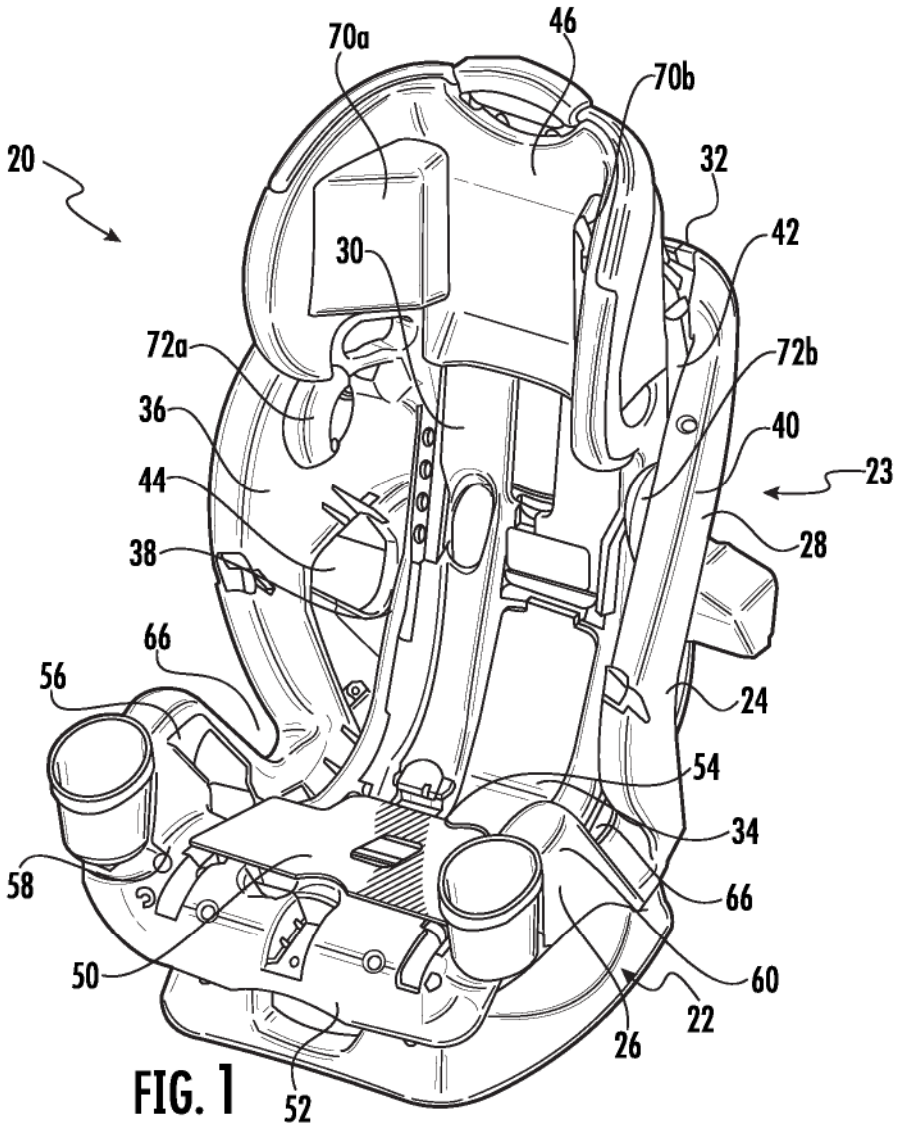
20
70a
46
70b
32
42
30
72a
72b
36
40
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44
28
38
66
56
24
54
34
58
66
50
60
22
26
52

FIG. 1

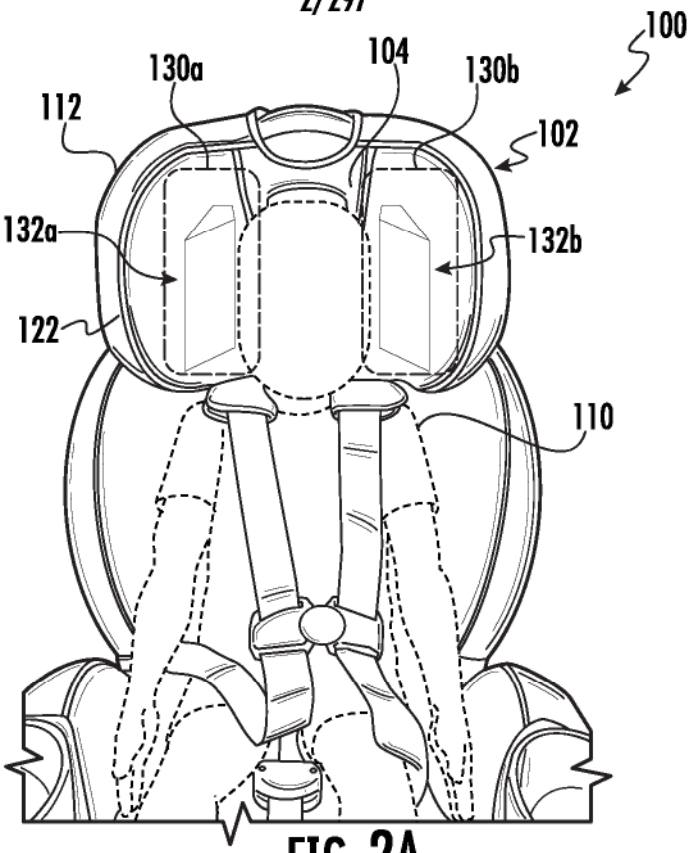

100
104
130a
130b
112
102
132a
132b
122
110

FIG. 2A

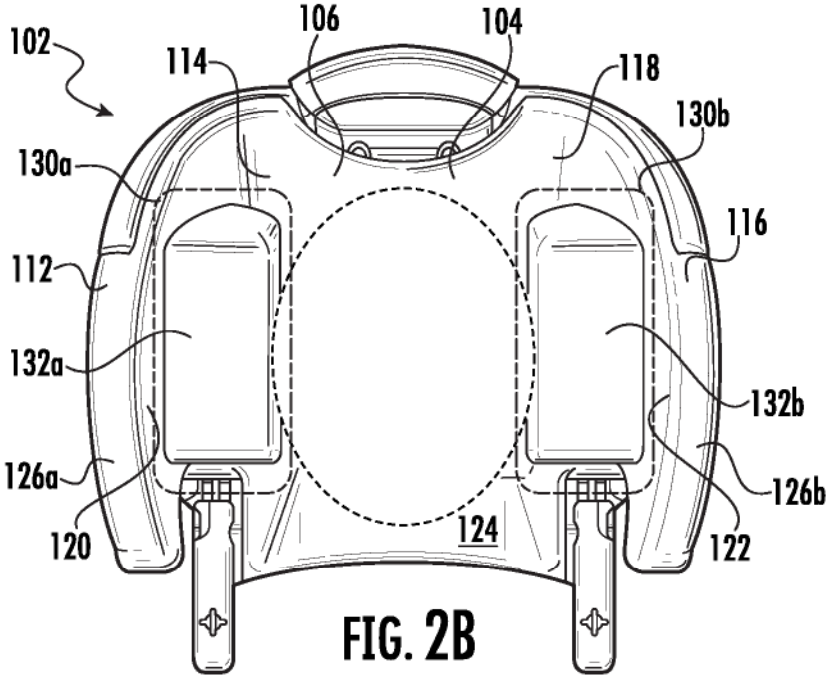
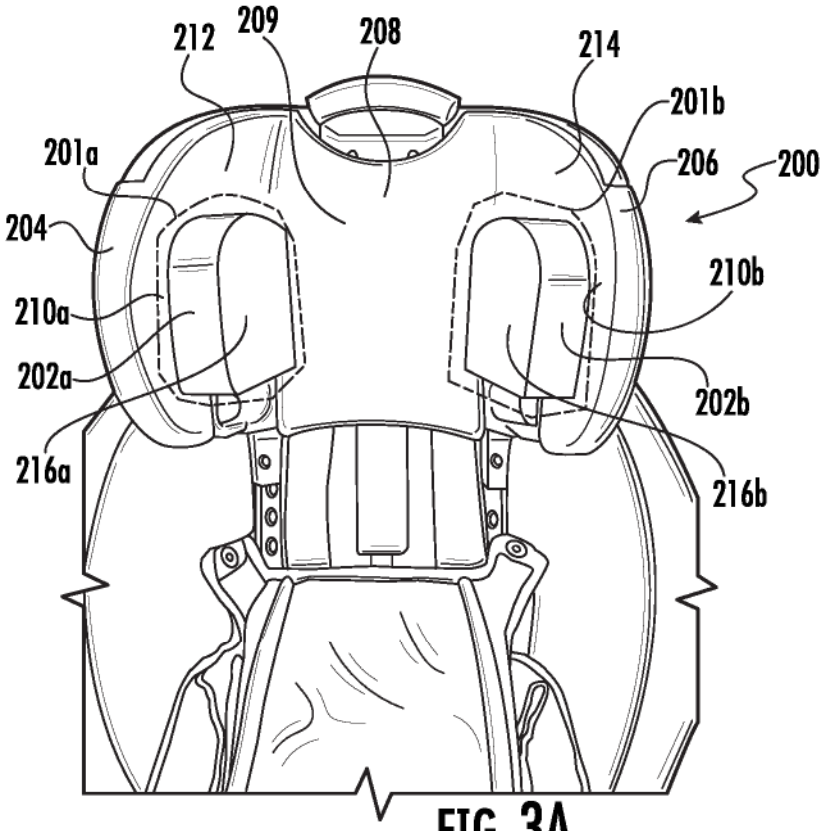

102
106
104
114
118
130b
130a
116
112
132a
132b
126a
126b
120
124
122

FIG. 2B


212
209
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214
201b
201a
206
200
204
210b
210a
202a
202b
216a
216b

FIG. 3A

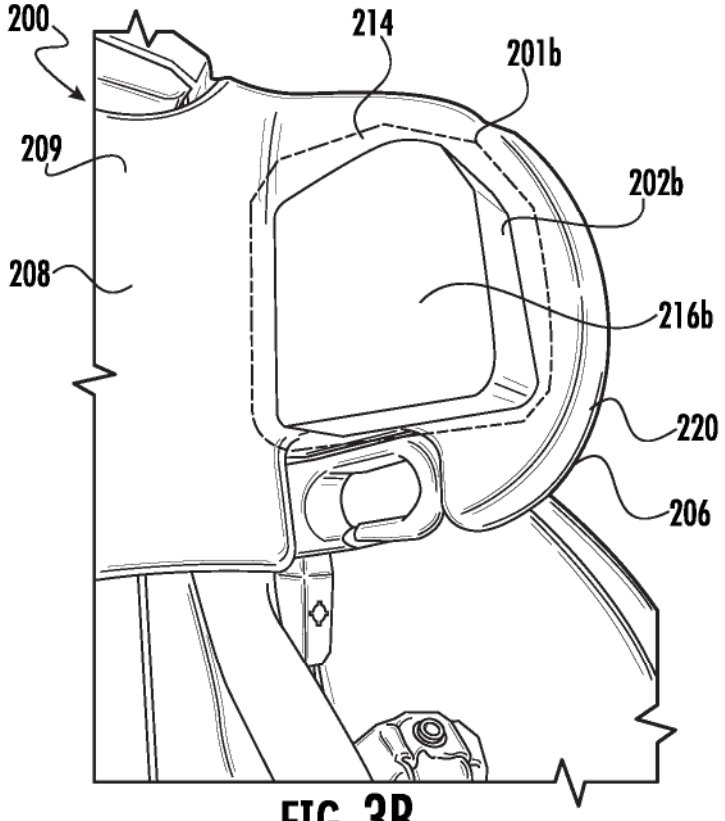
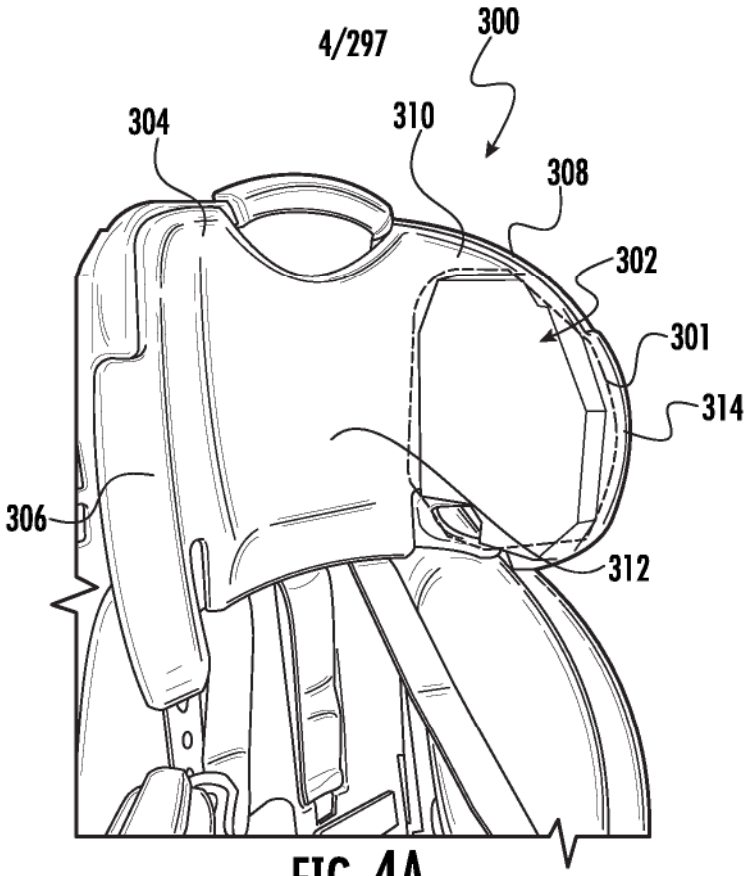

200
214
201b
209
202b
208
216b
220
206

FIG. 3B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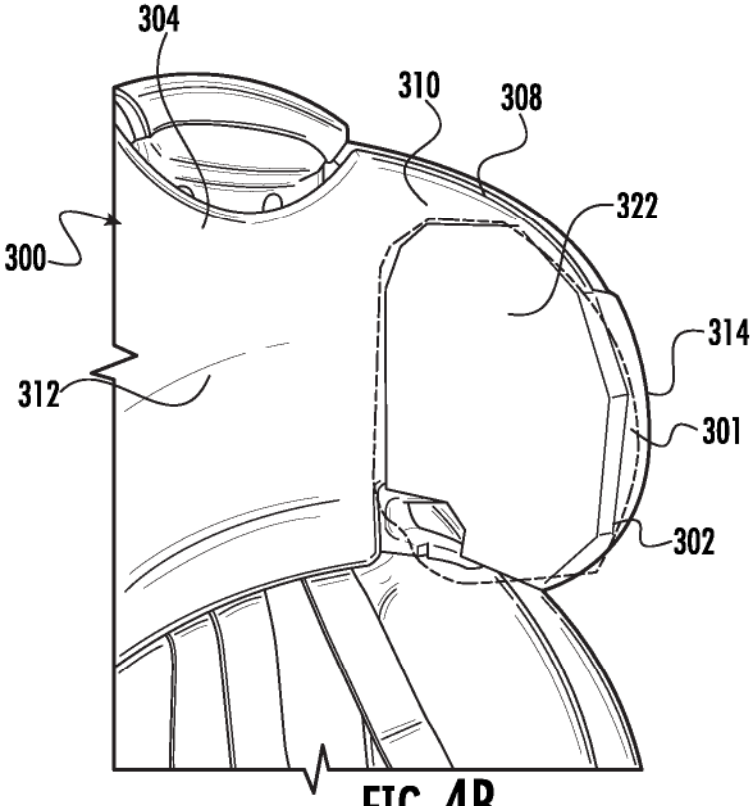
304
310
308
302
301
314
306
312

FIG. 4A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314
312
301
302

FIG. 4B

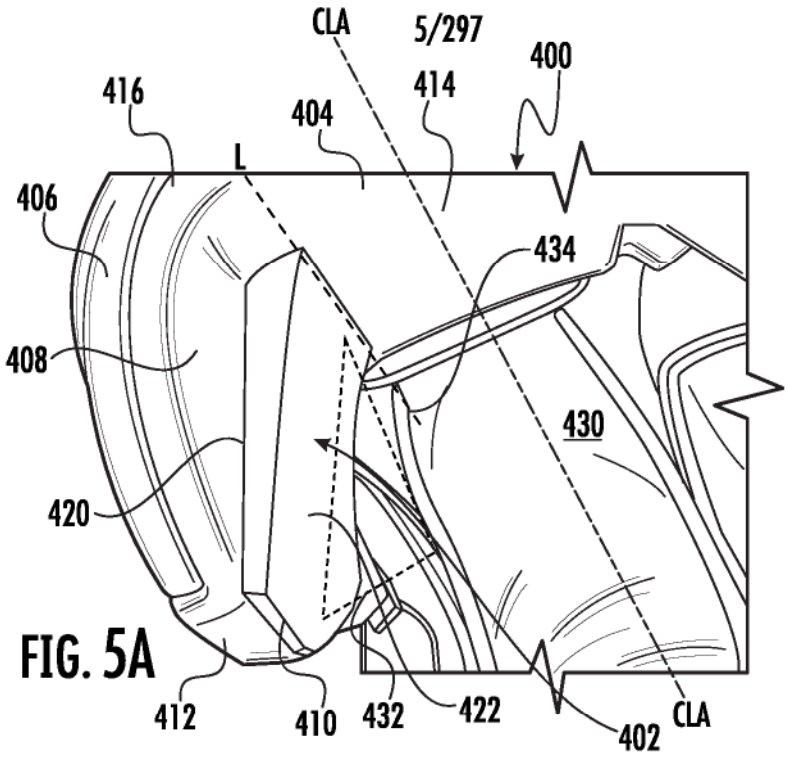
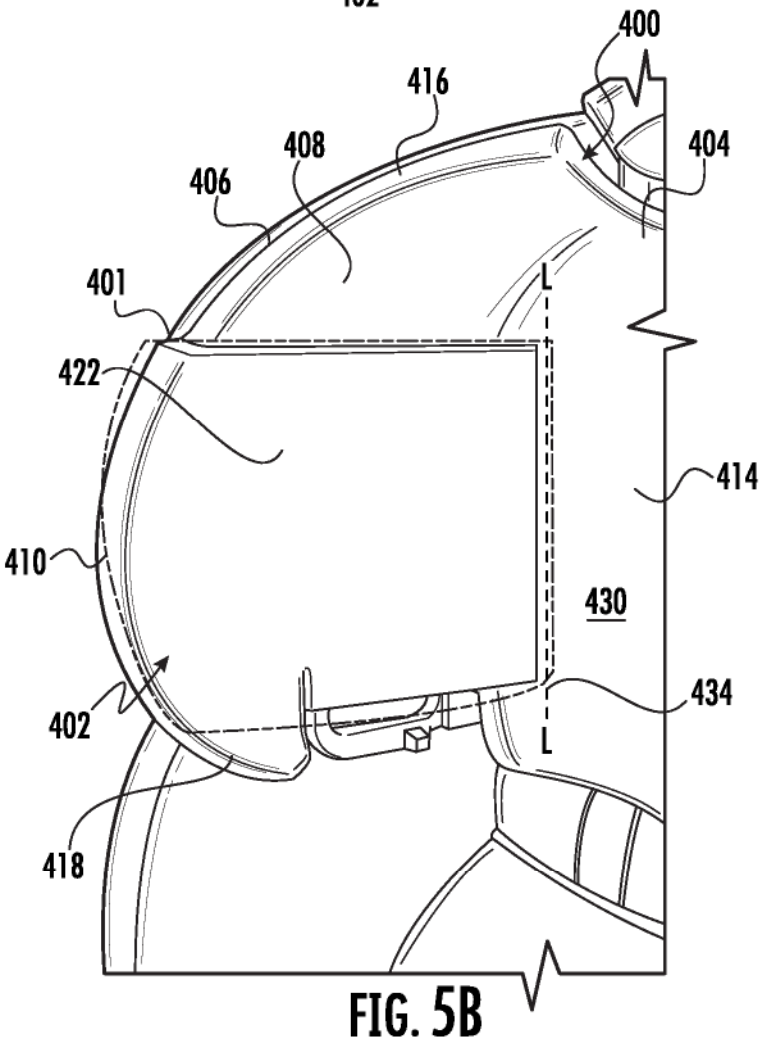

CLA
5/297
400
416
414
404
L
406
434
408
430
420
412
410
432
422
402
CLA

FIG. 5A


400
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406
401
L
422
414
410
430
434
402
L
418

FIG. 5B

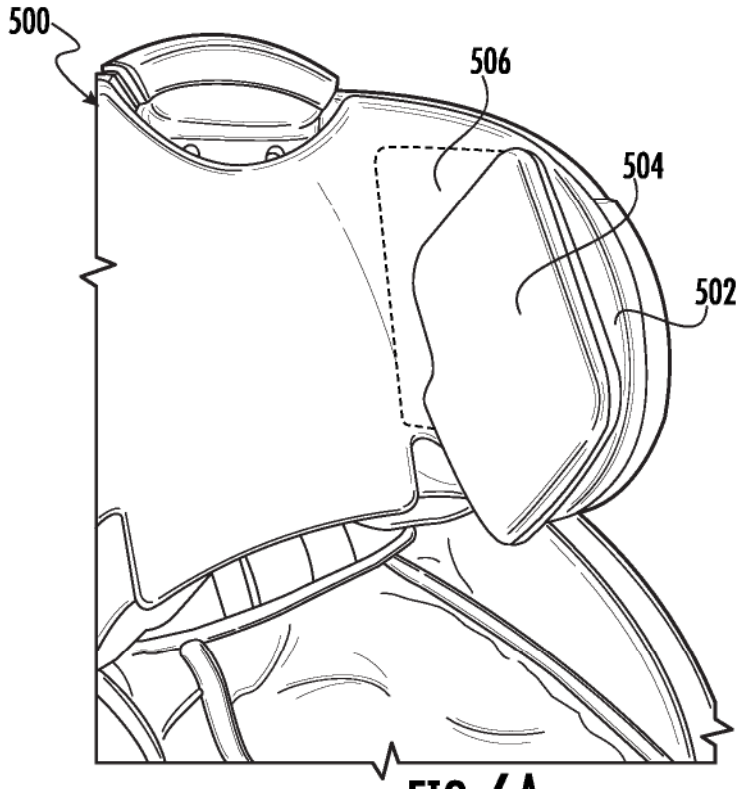


FIG. 6A

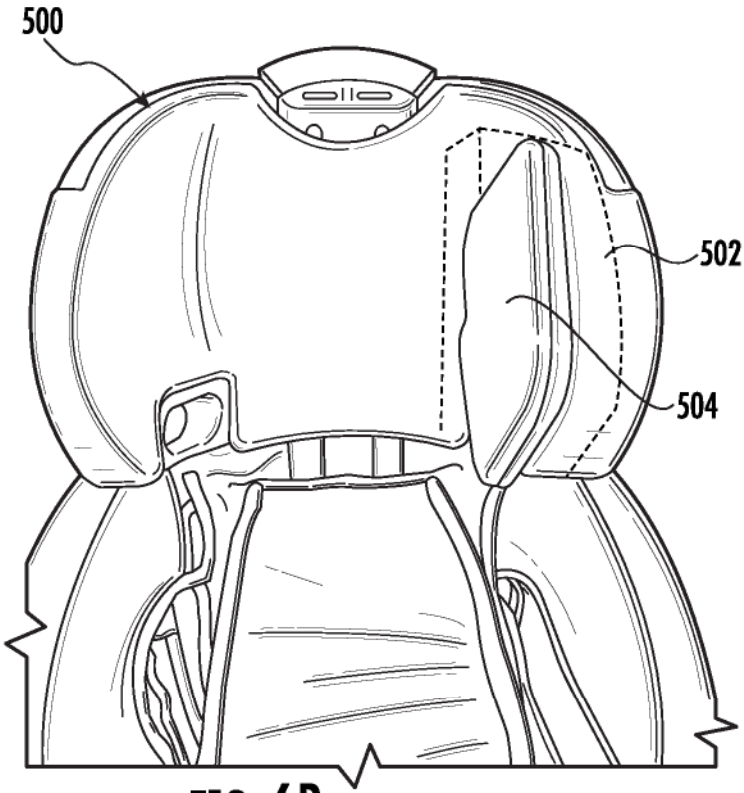
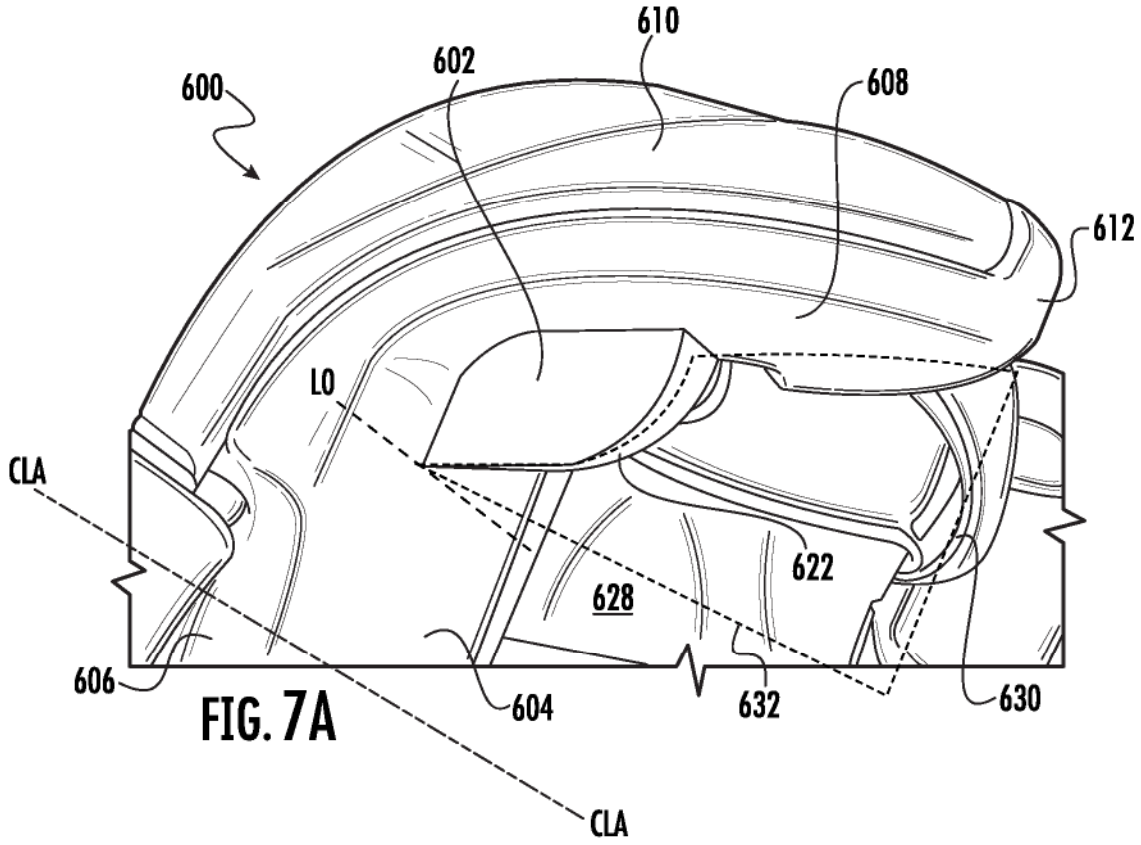


FIG. 6B


610
602
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608
612
LO
CLA
622
628
606
604
632
630
CLA

FIG. 7A

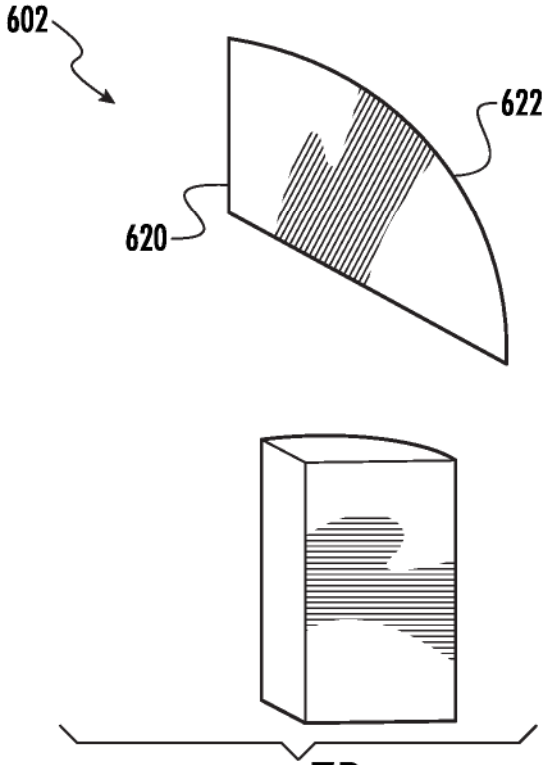

602
622
620

FIG. 7B

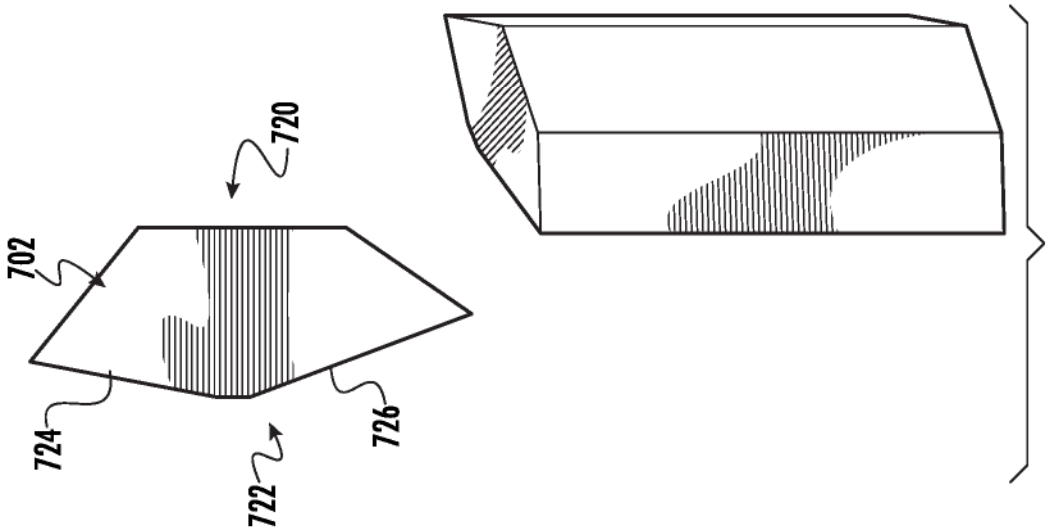

720
702
724
722
726

FIG. 8B

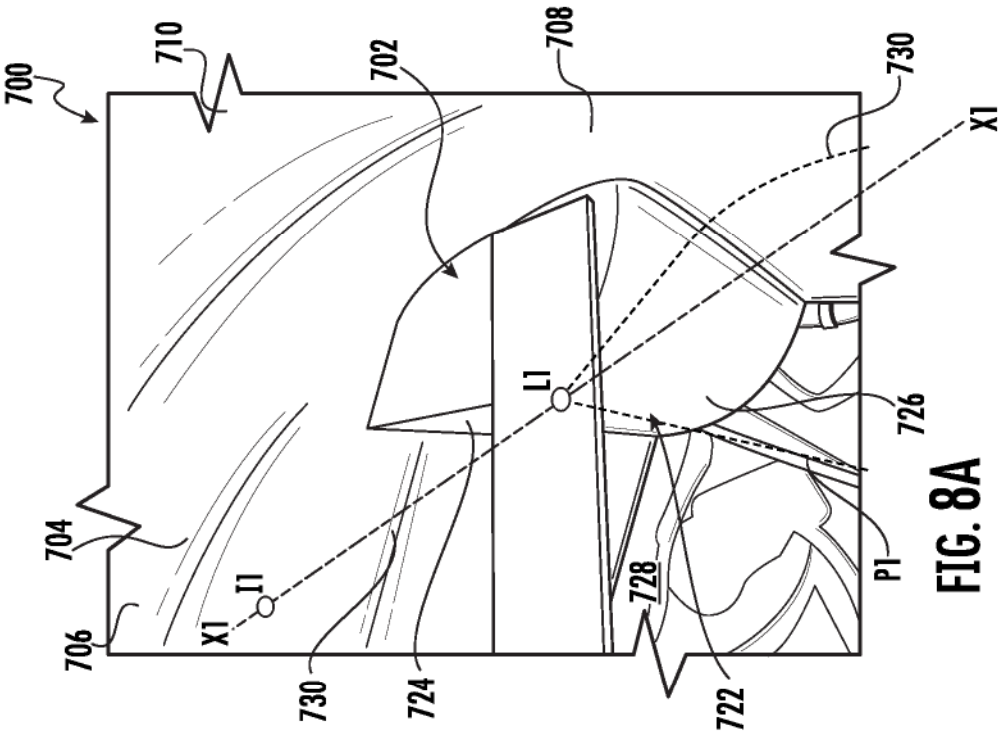
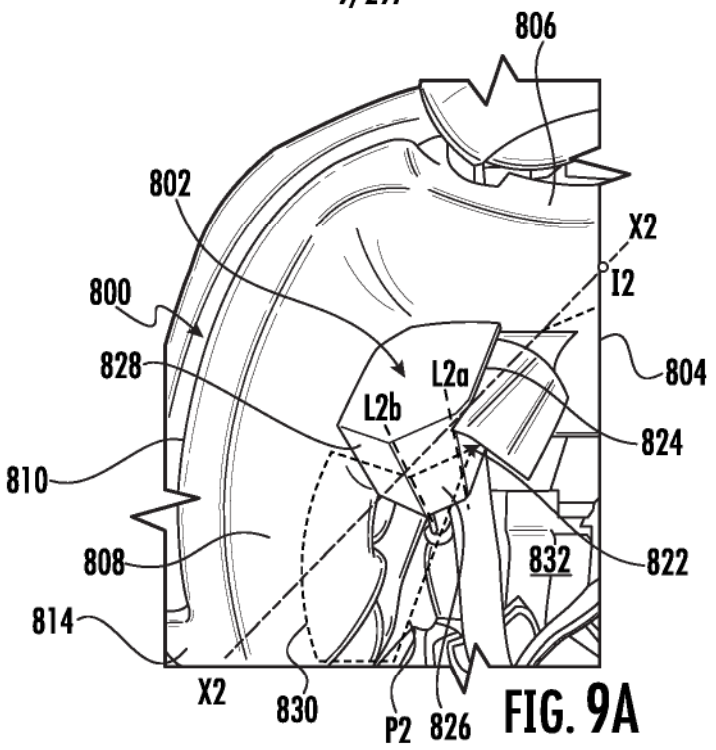

700
710
702
708
730
X1
704
L1
726
706
X1
I1
728
P1
730
724
722

FIG. 8A


806
802
X2
I2
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828
L2a
L2b
804
824
810
808
832
822
814
X2
830
P2
826

FIG. 9A

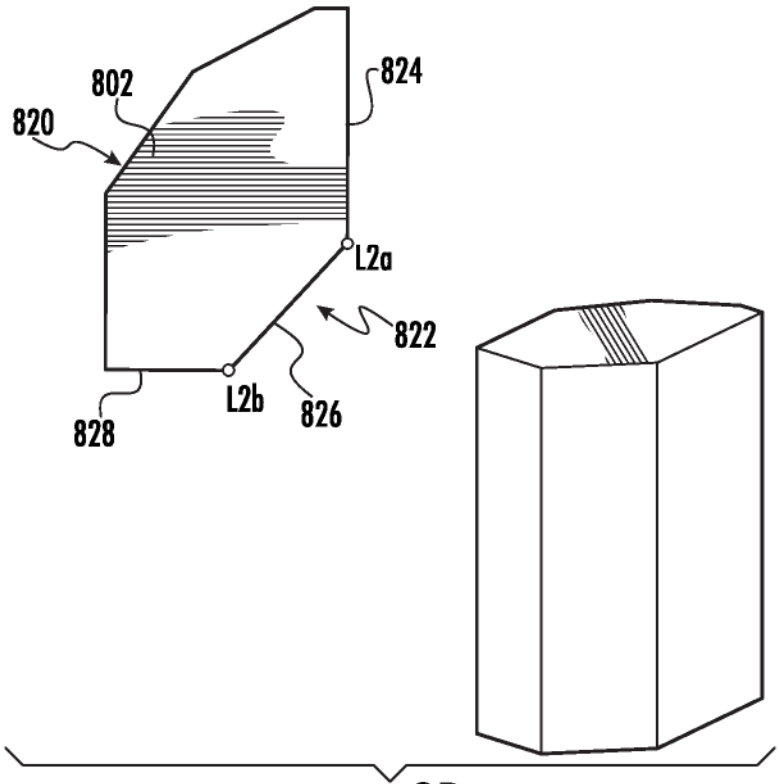

802
824
820
L2a
822
L2b
826
828

FIG. 9B

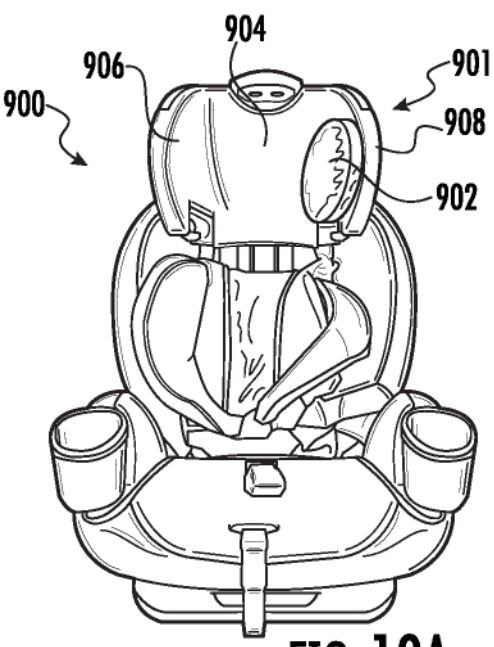


FIG. 10A

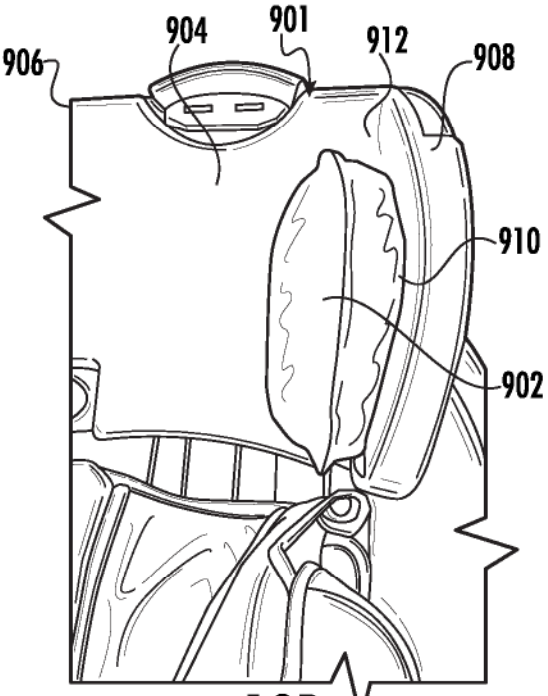


FIG. 10B

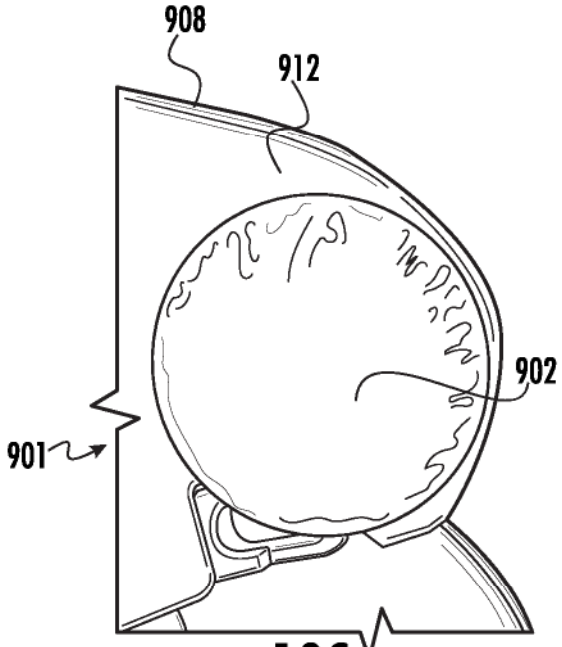


FIG. 10C

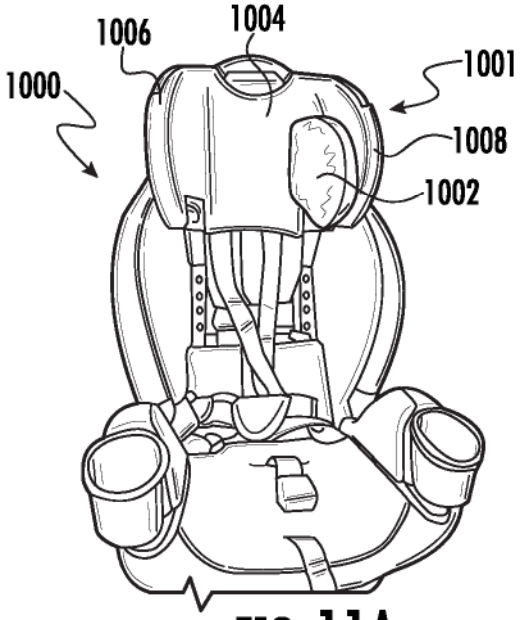


FIG. 11A

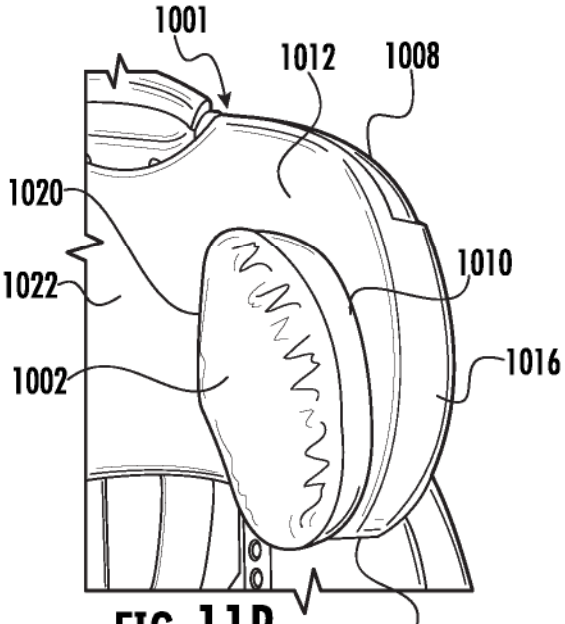


FIG. 11B

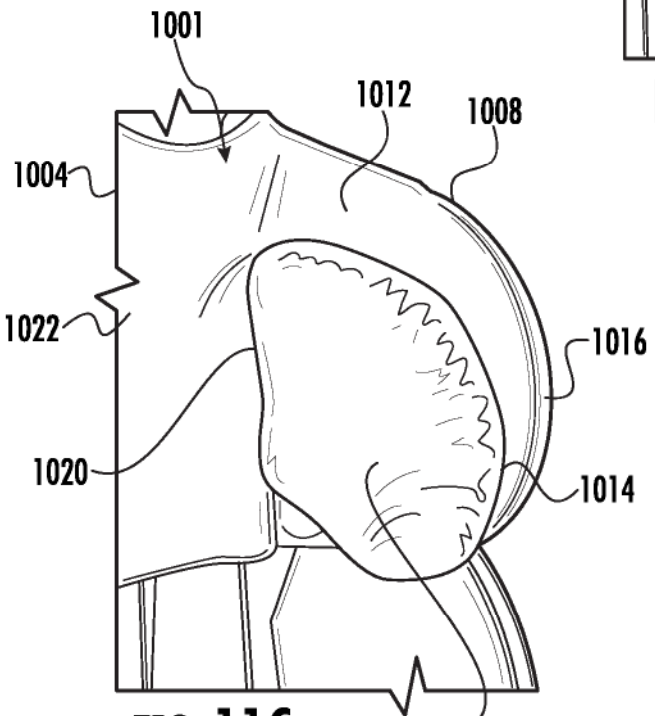


FIG. 11C

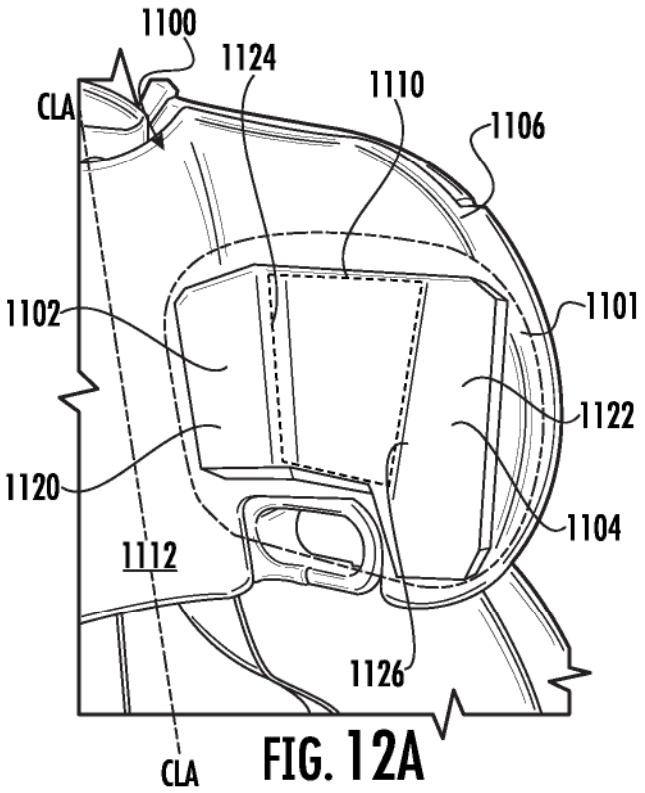


FIG. 12A

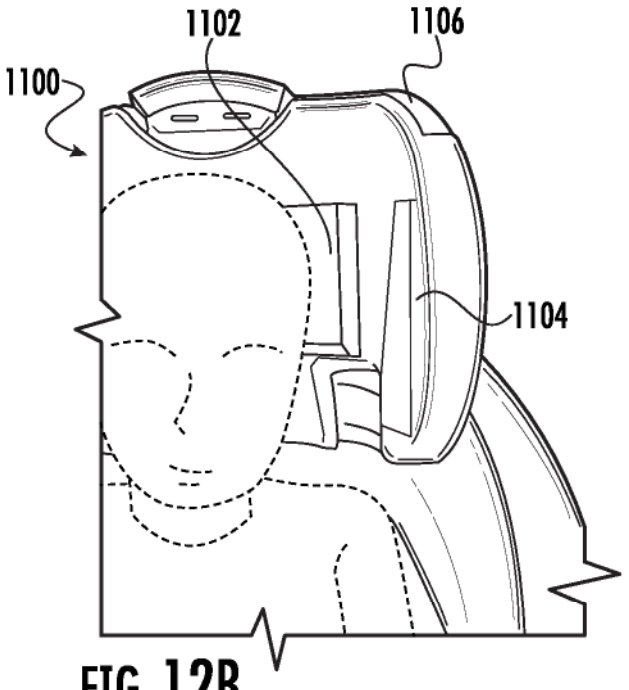


FIG. 12B

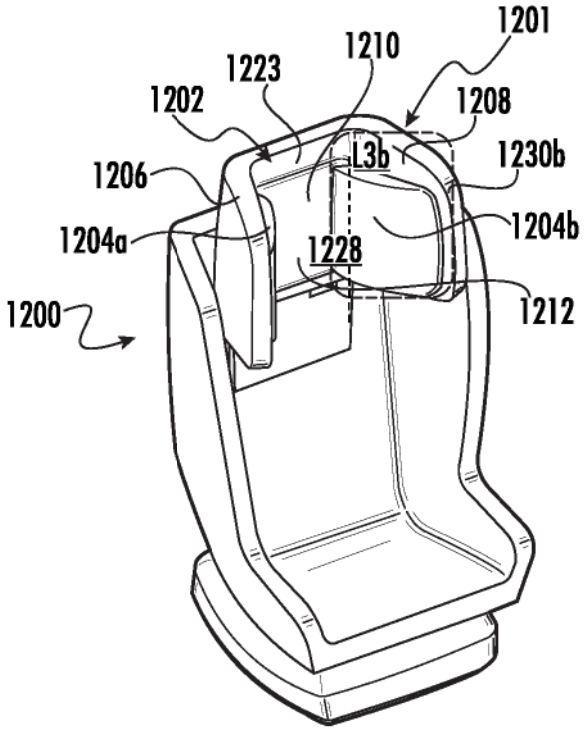


FIG. 13A

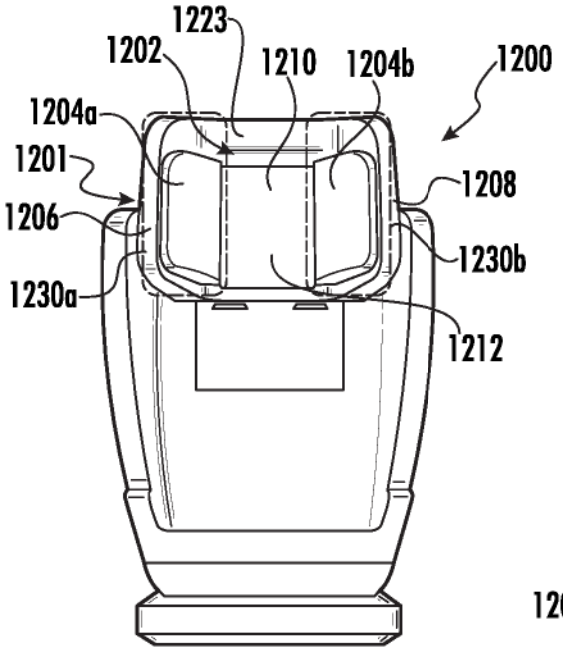


FIG. 13B

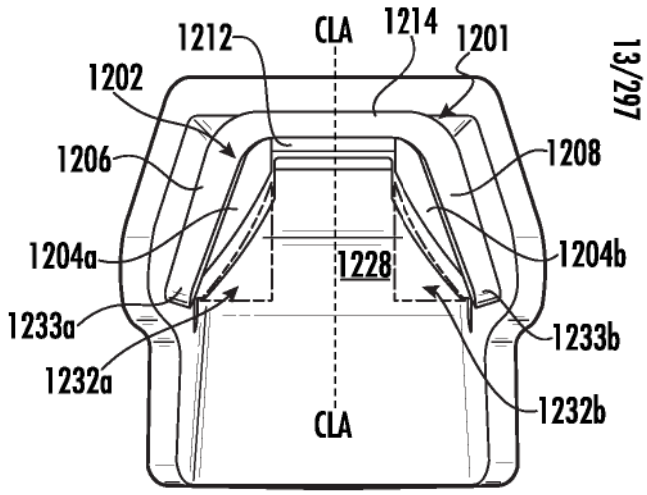


FIG. 13C

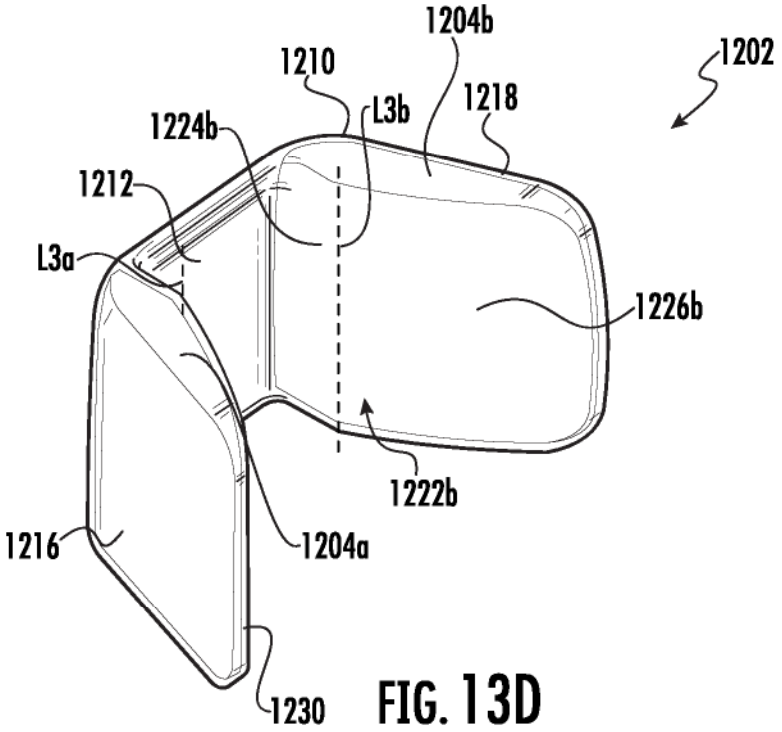


FIG. 13D

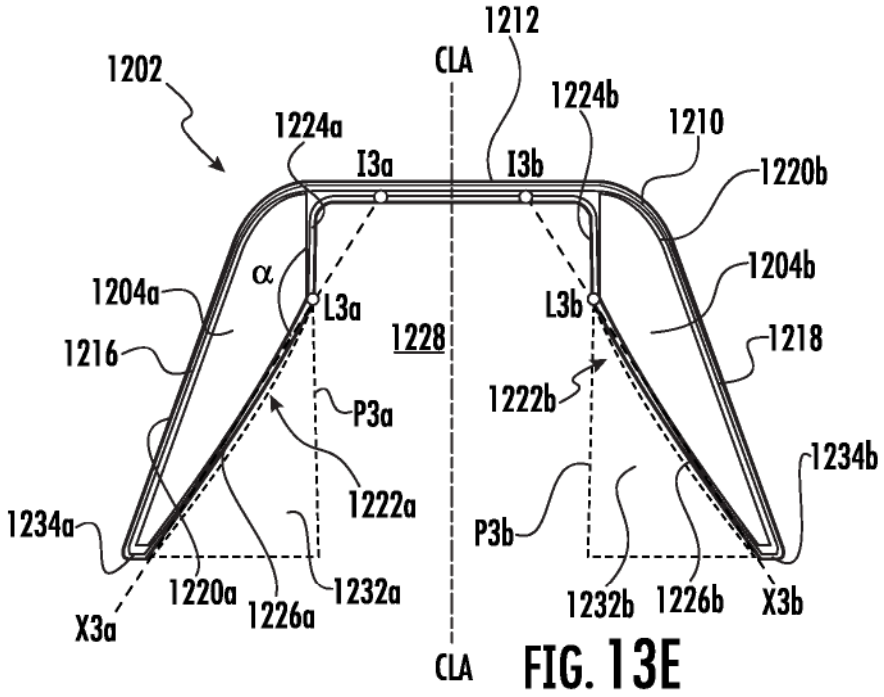
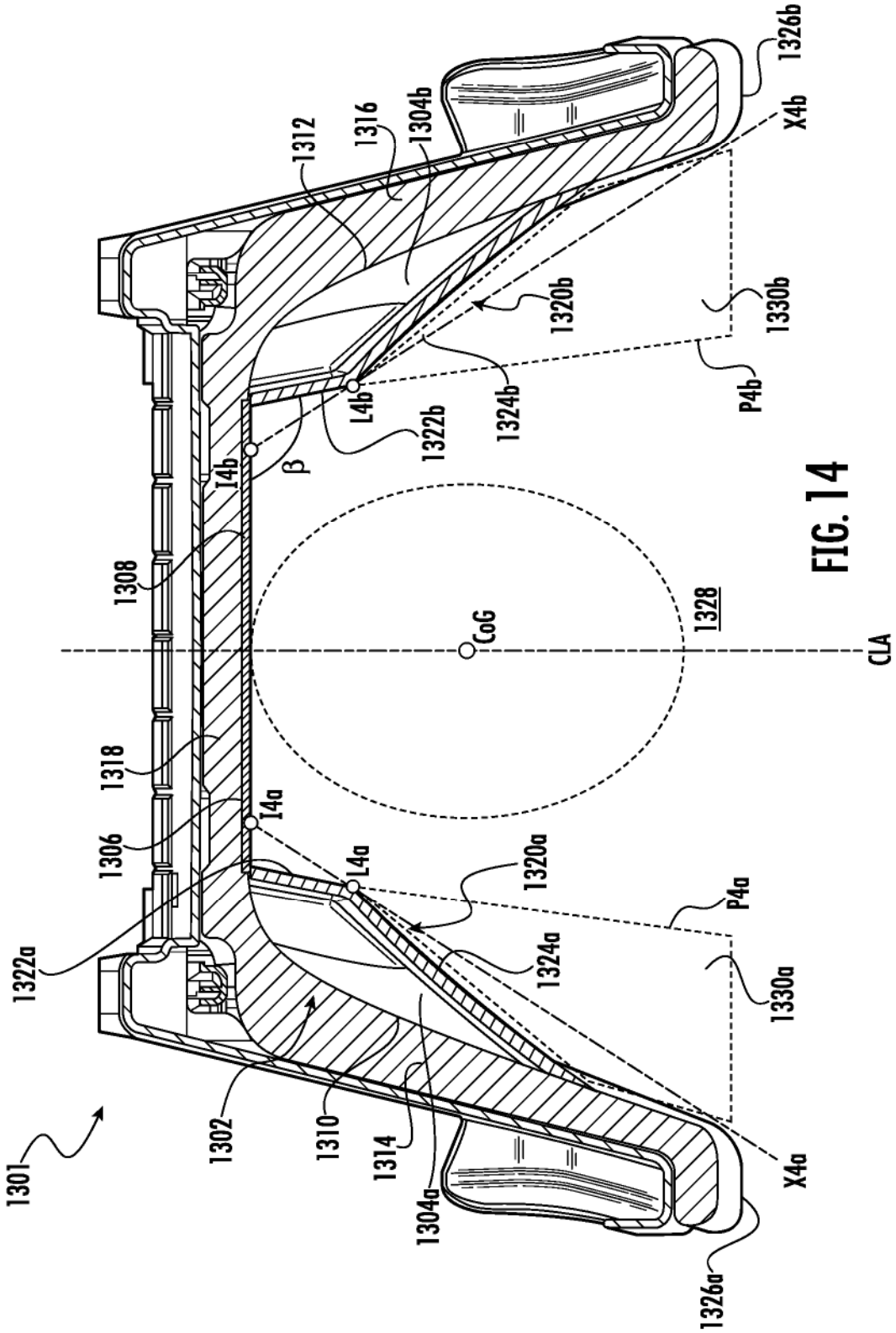


FIG. 13E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1322a
1322b
1324a
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1326b
1328
1330a
1330b
1304a
1304b
I4a
I4b
L4a
L4b
P4a
P4b
X4a
X4b
β
CoG
CLA

FIG. 14

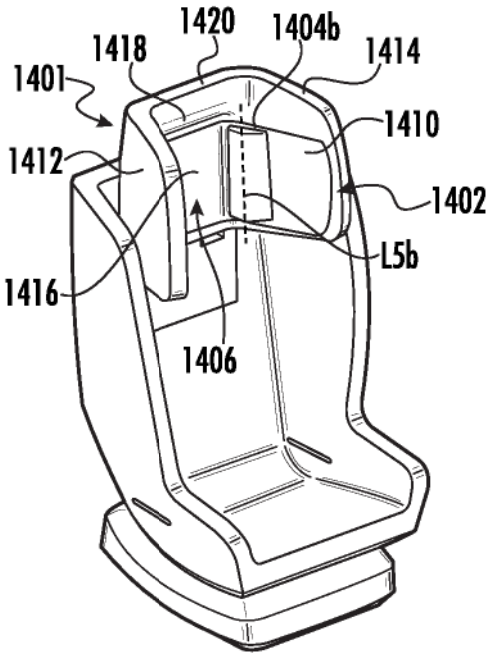


FIG. 15A

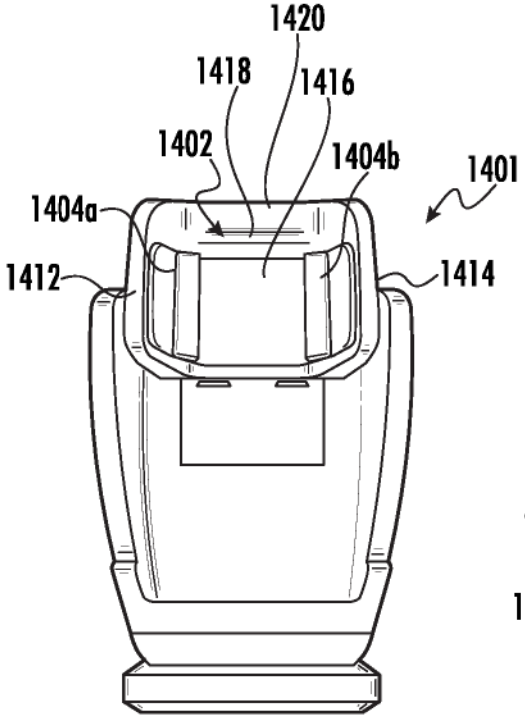


FIG. 15B

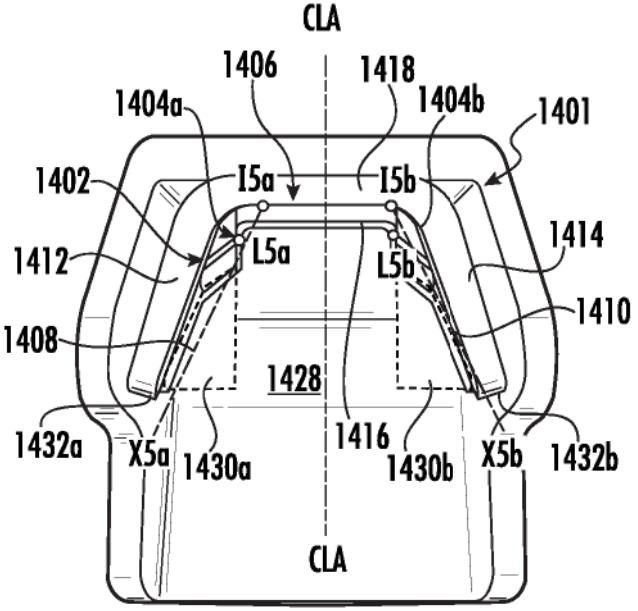


FIG. 15C

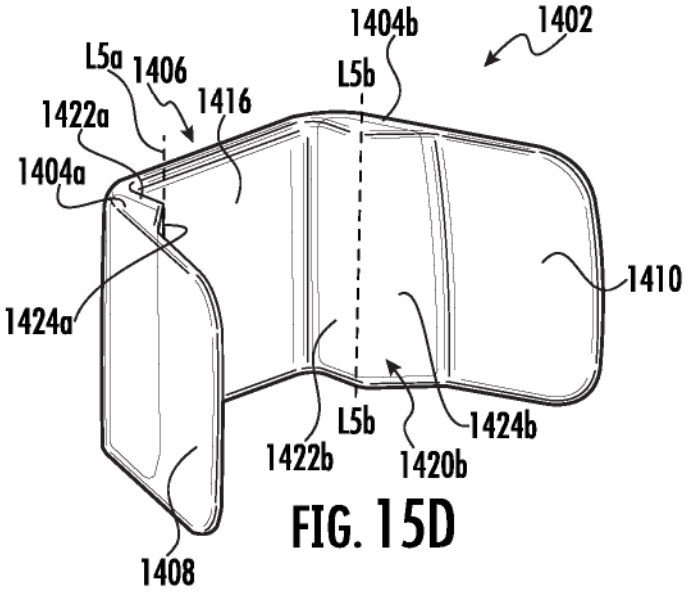


FIG. 15D

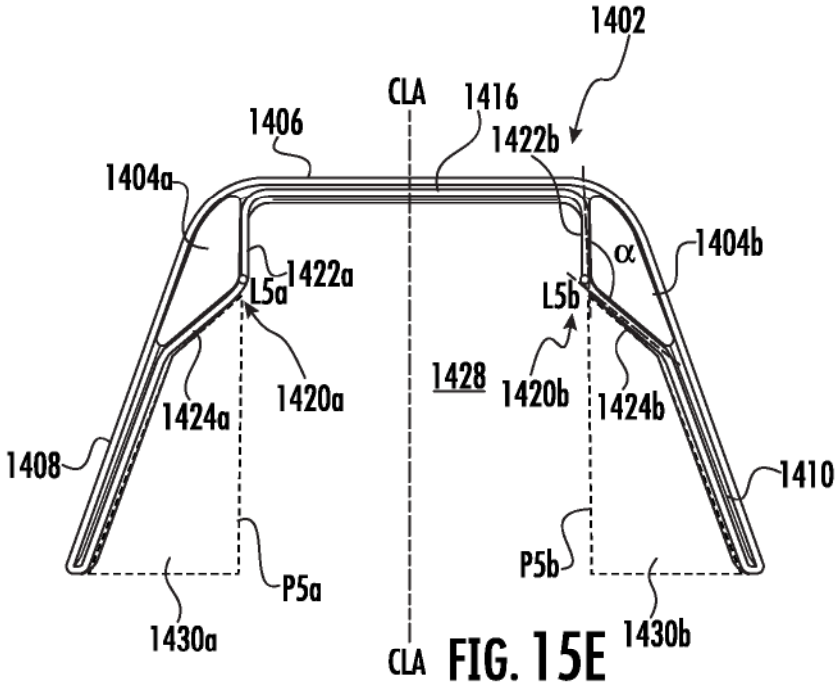


FIG. 15E

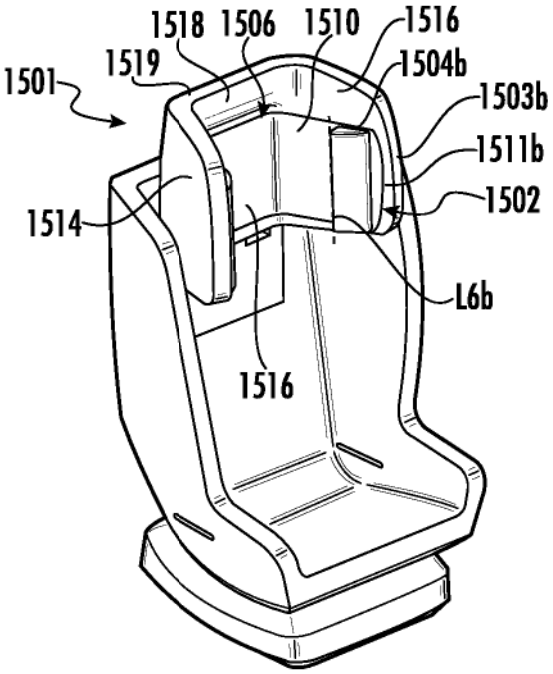


FIG. 16A

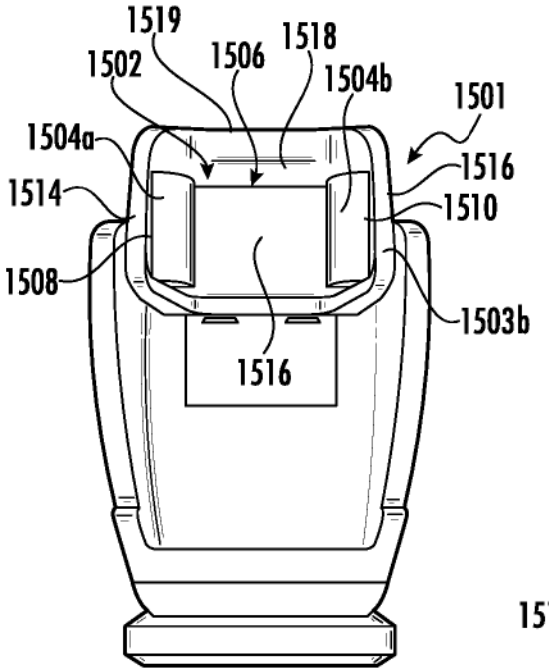


FIG. 16B

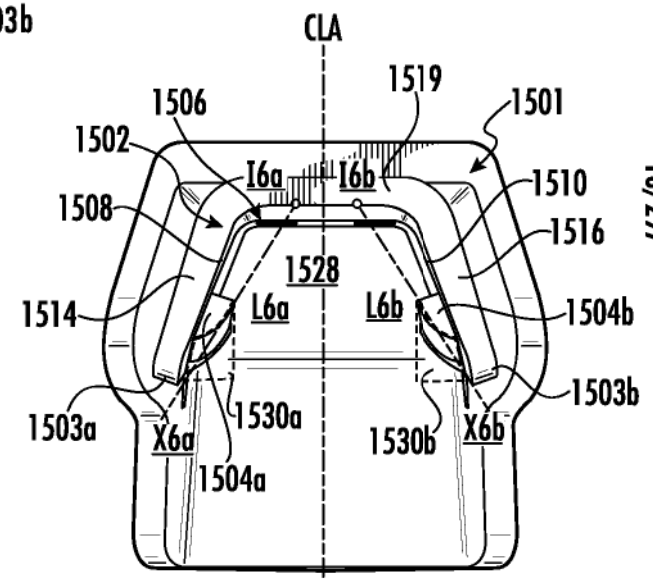


FIG. 16C

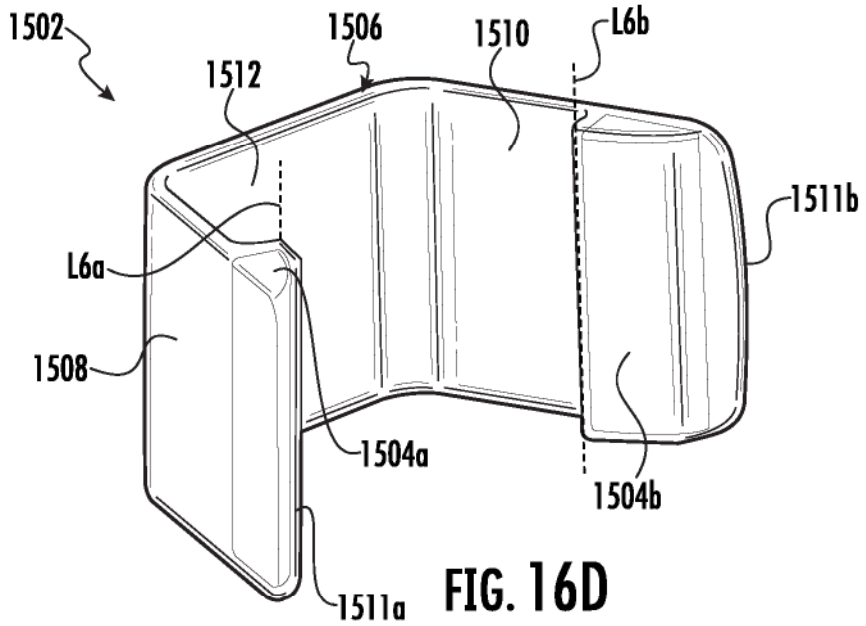


FIG. 16D

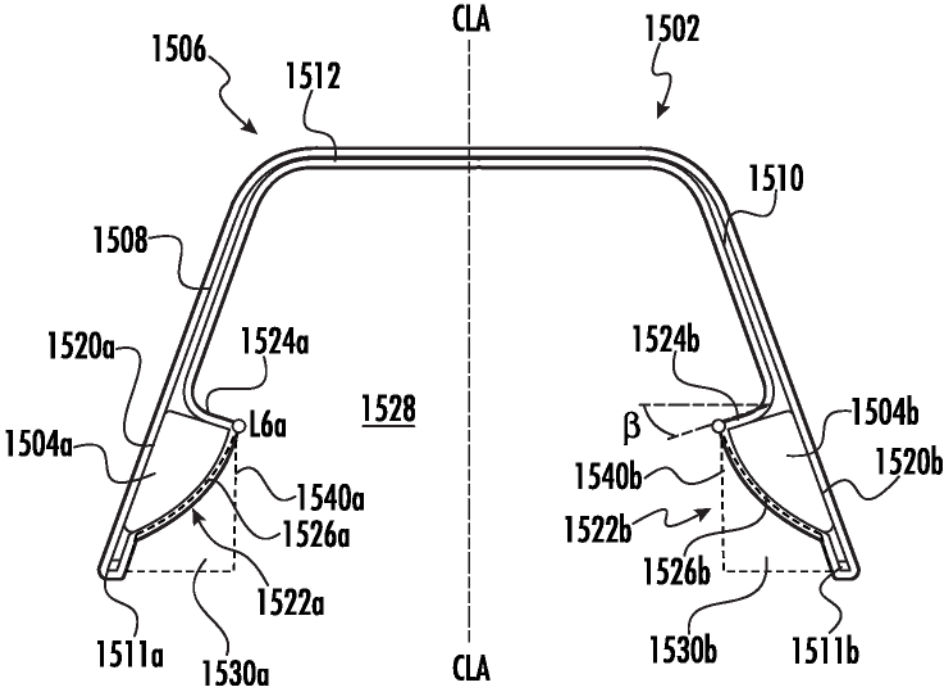


FIG. 16E

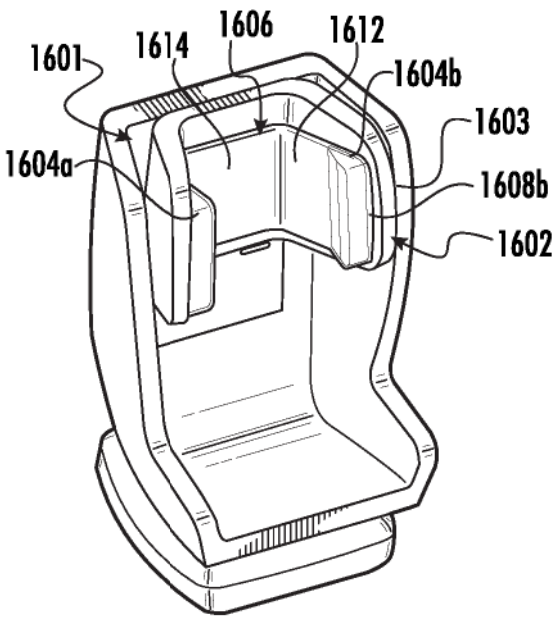


FIG. 17A

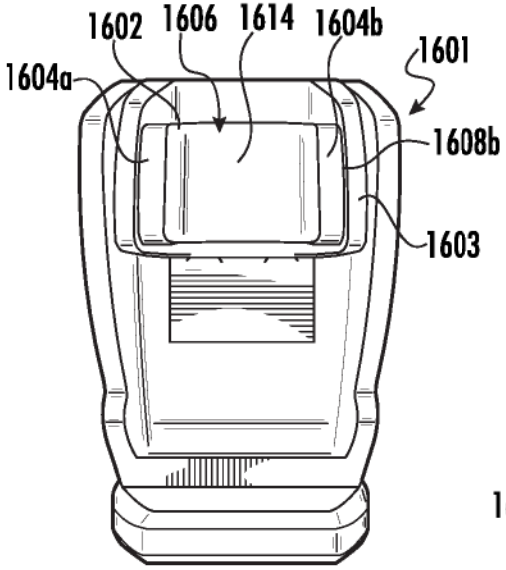


FIG. 17B

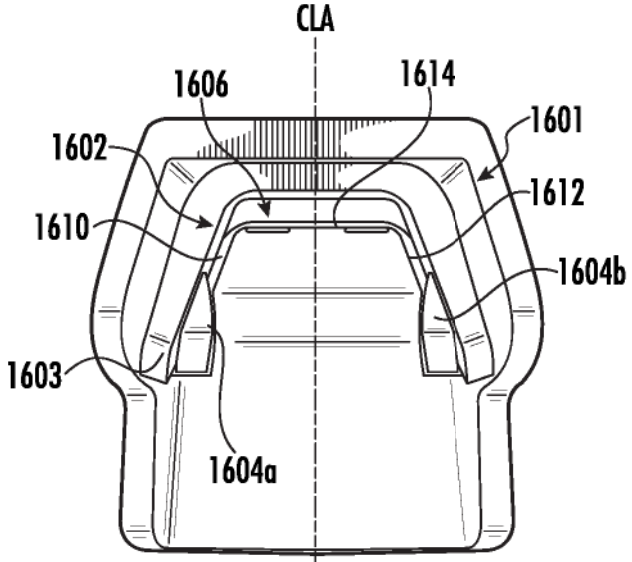


FIG. 17C

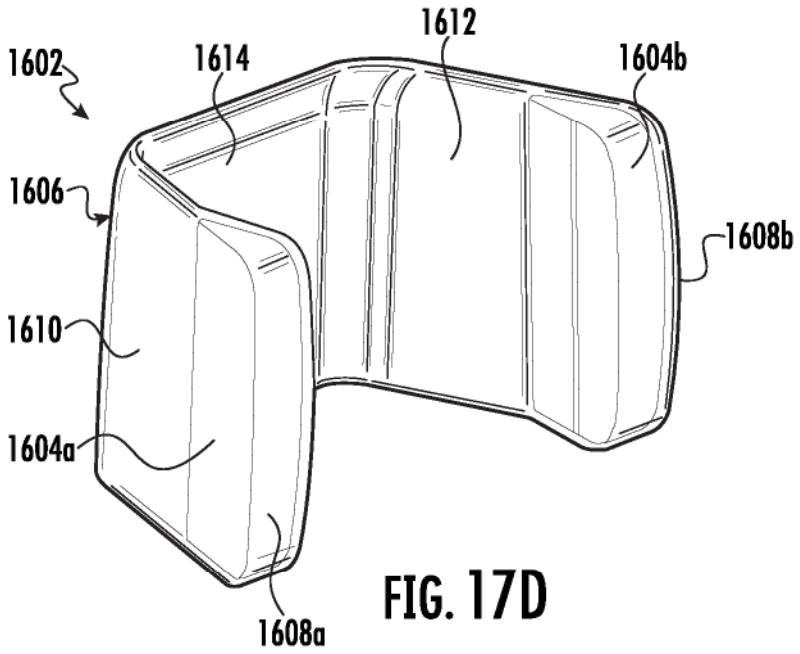


FIG. 17D

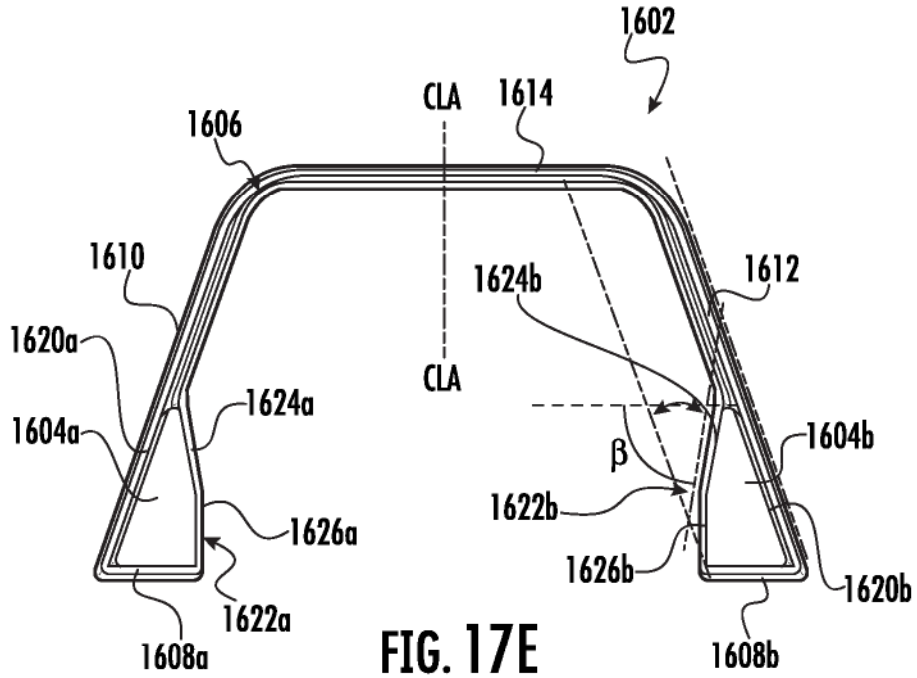


FIG. 17E

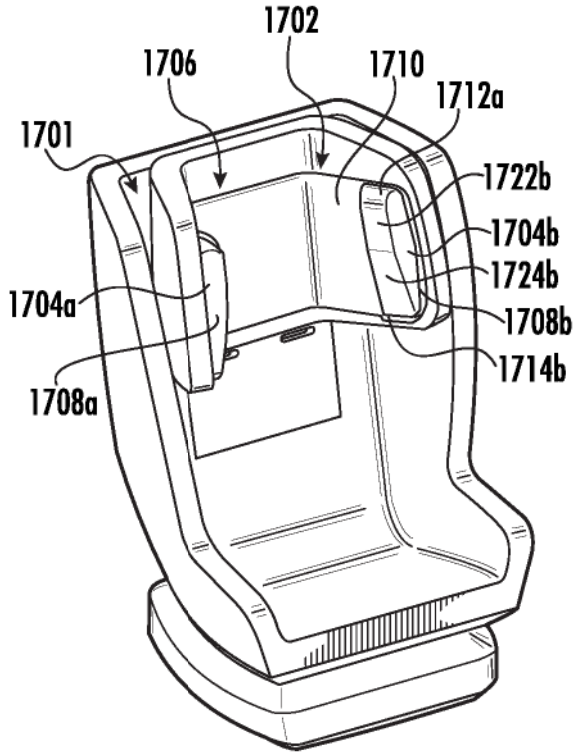


FIG. 18A

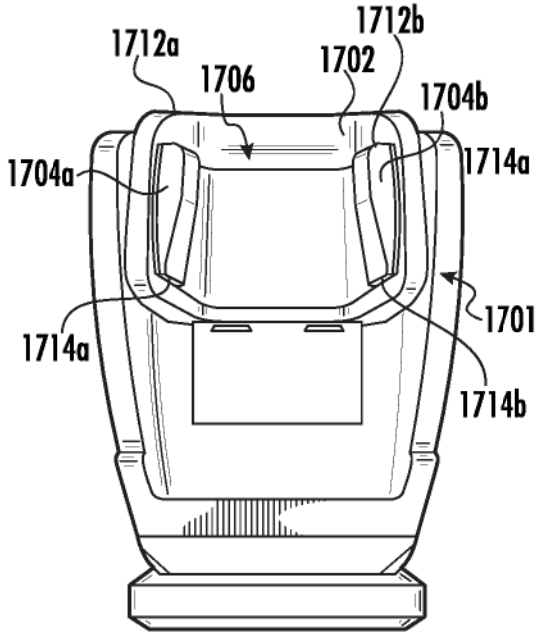


FIG. 18B

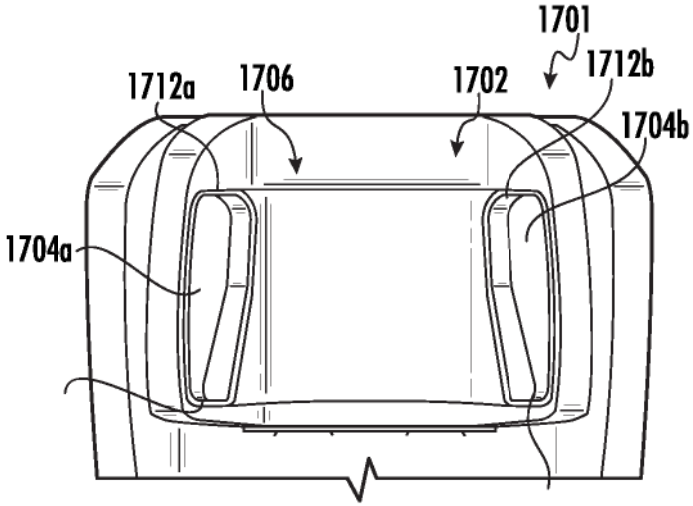


FIG. 18C

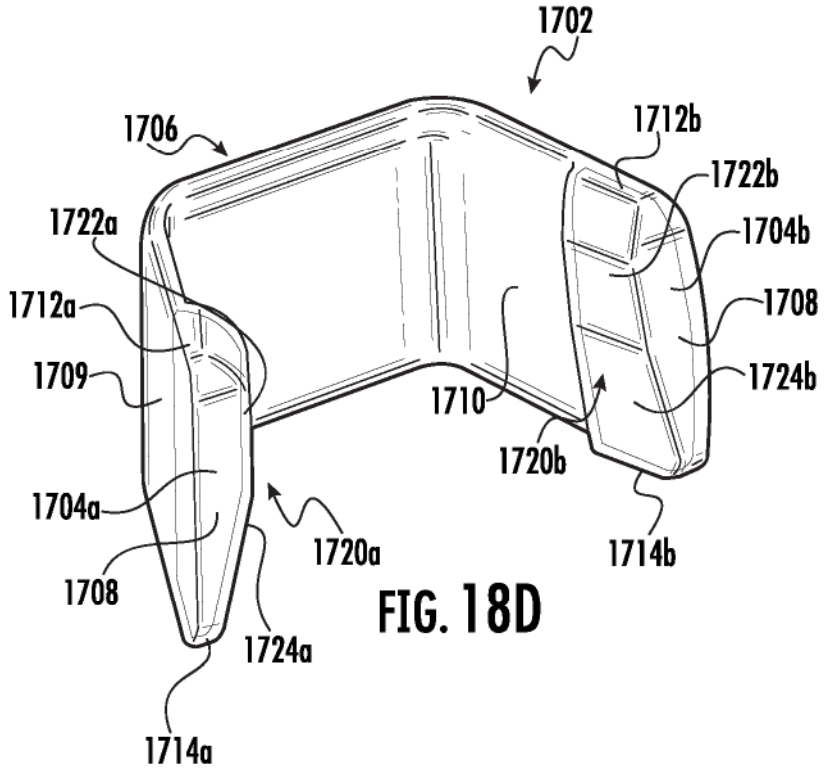


FIG. 18D

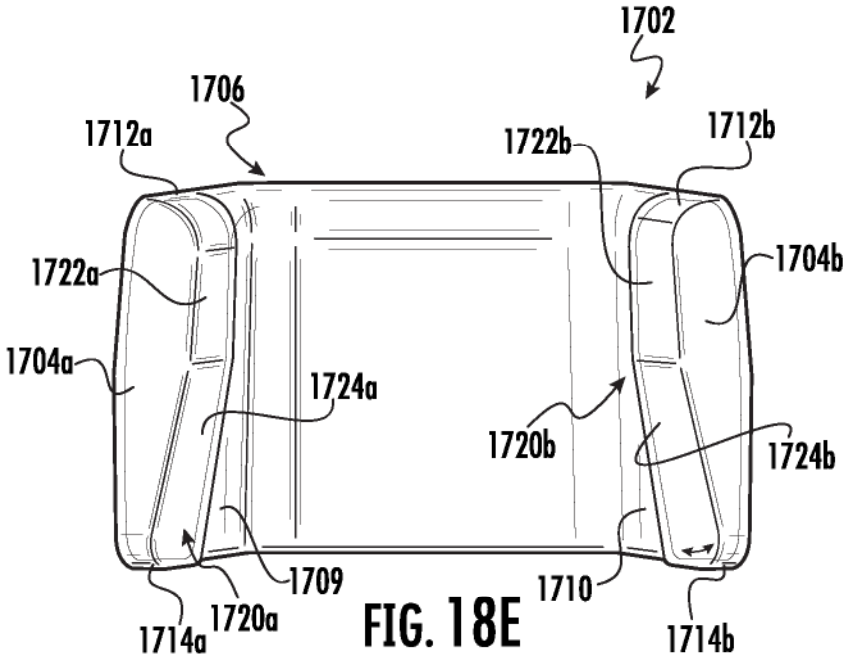


FIG. 18E

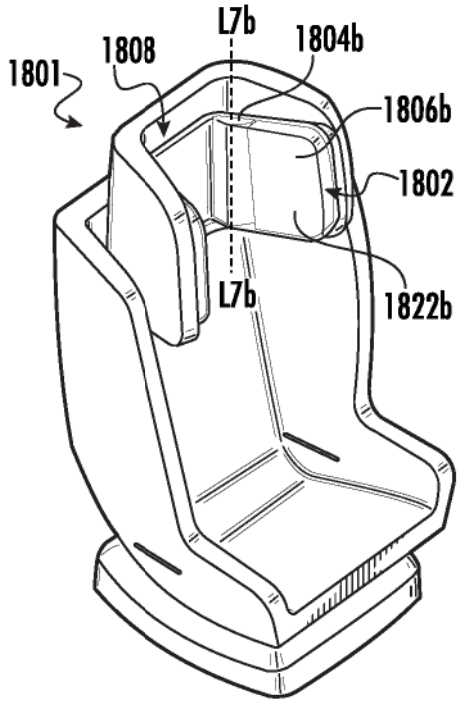


FIG. 19A

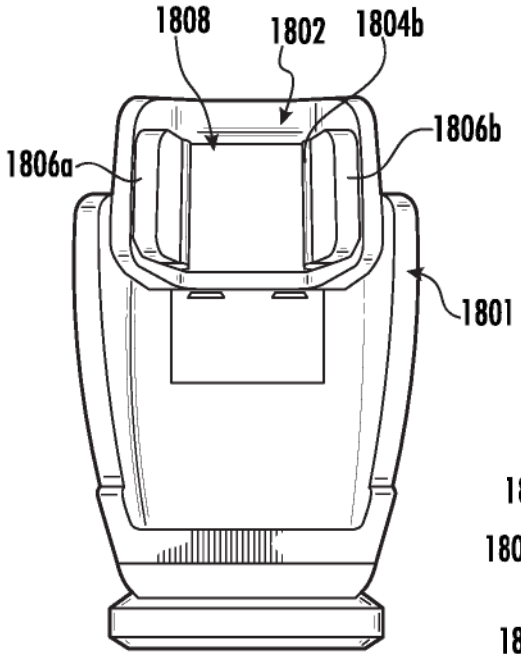


FIG. 19B

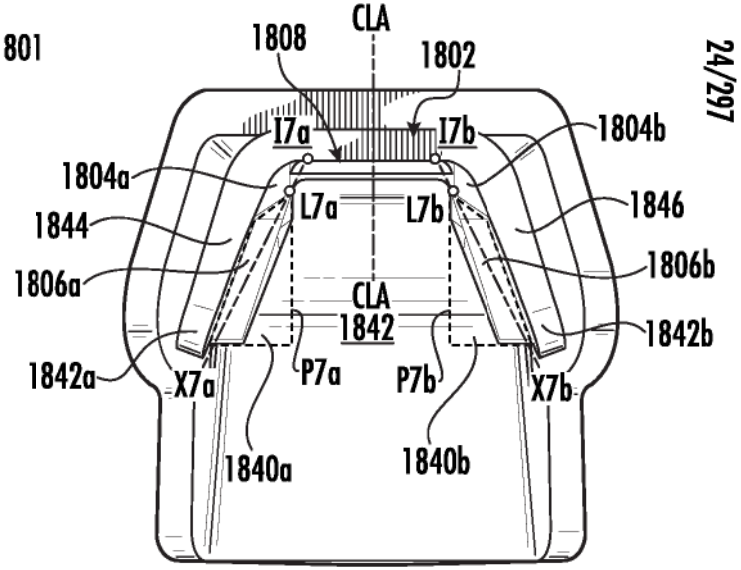


FIG. 19C

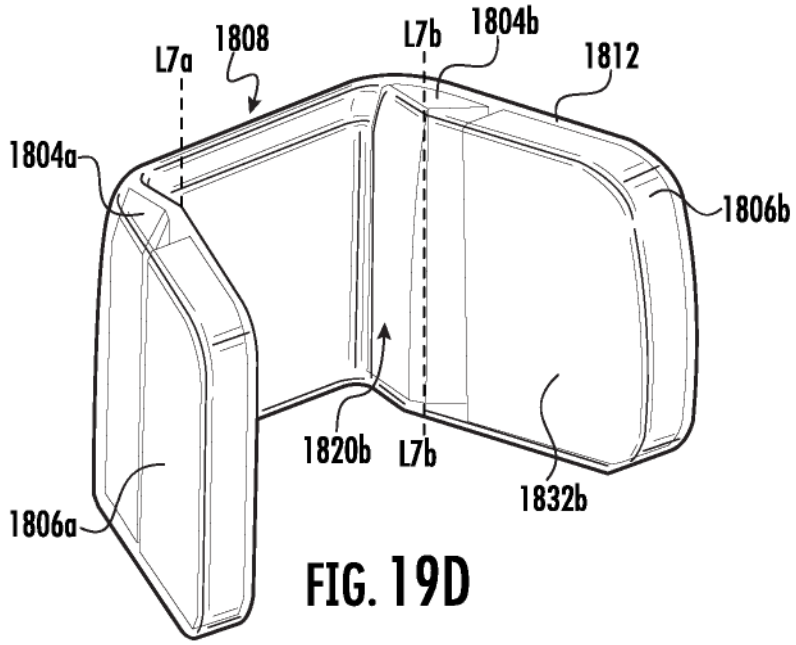


FIG. 19D

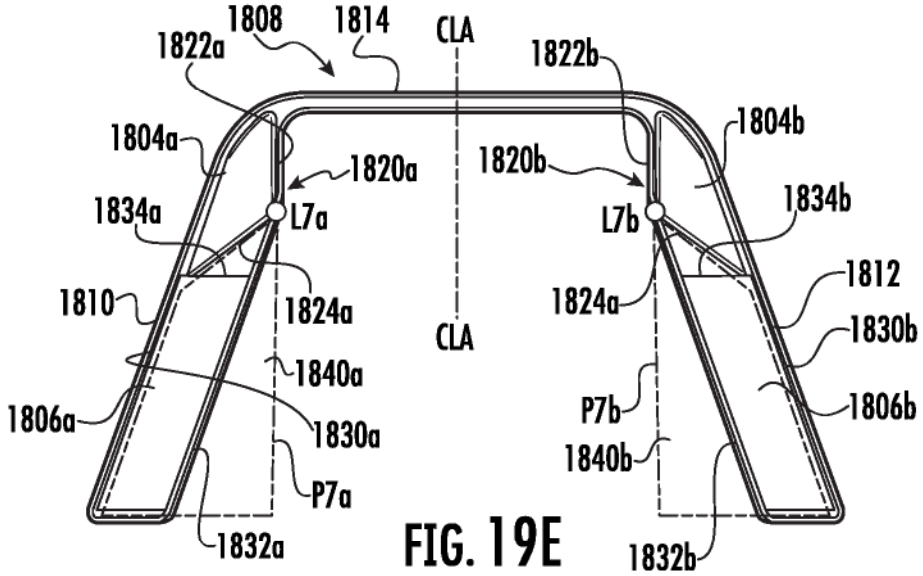


FIG. 19E

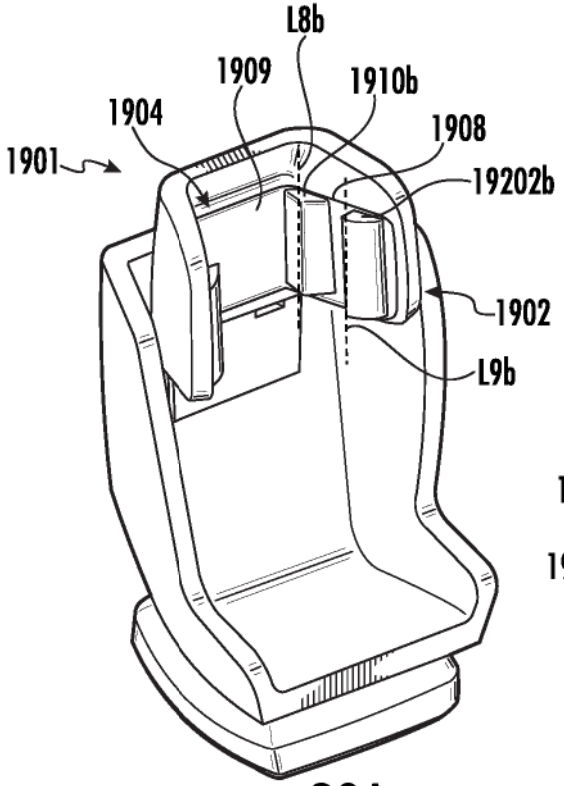


FIG. 20A

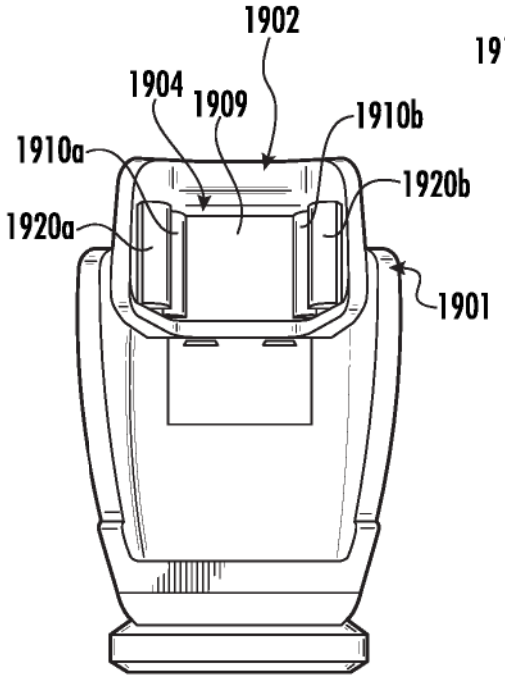


FIG. 20B

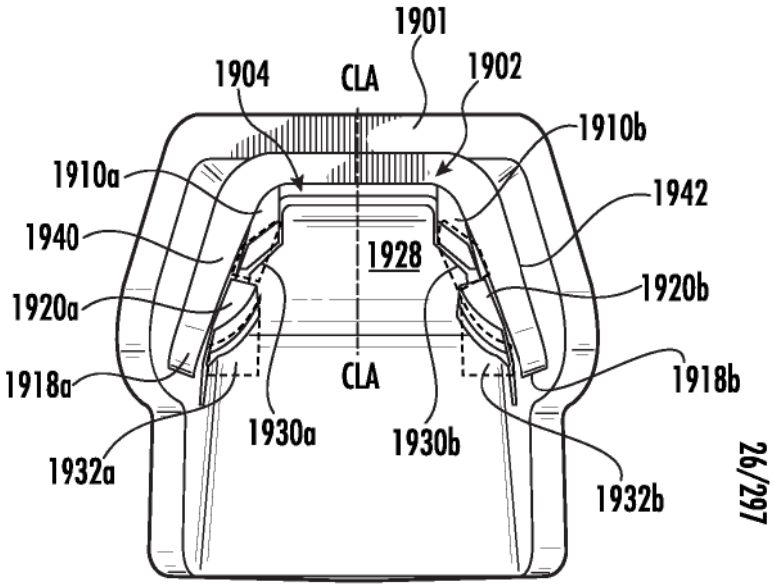


FIG. 20C

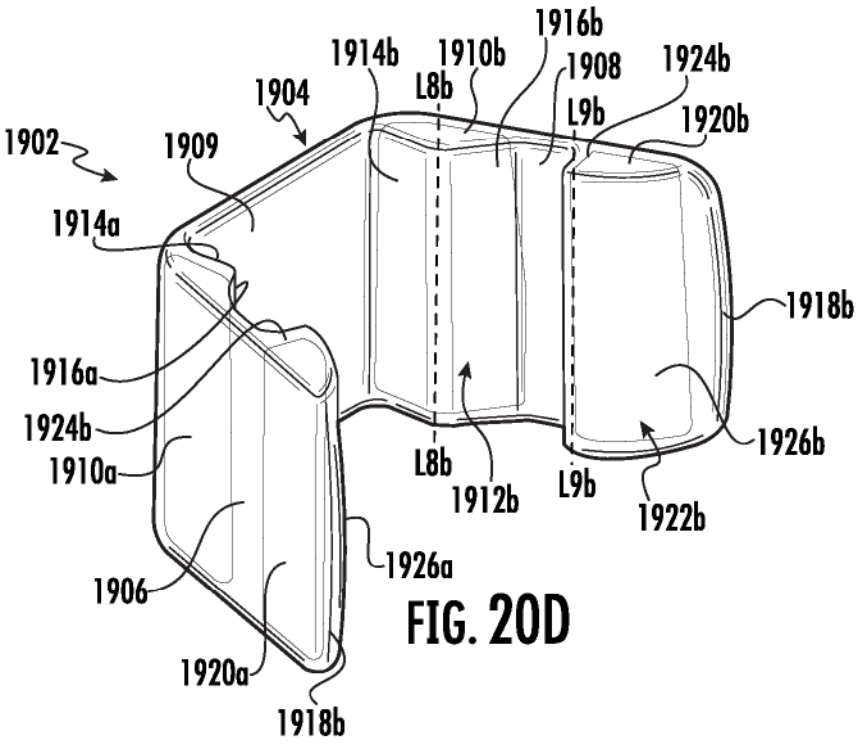


FIG. 20D

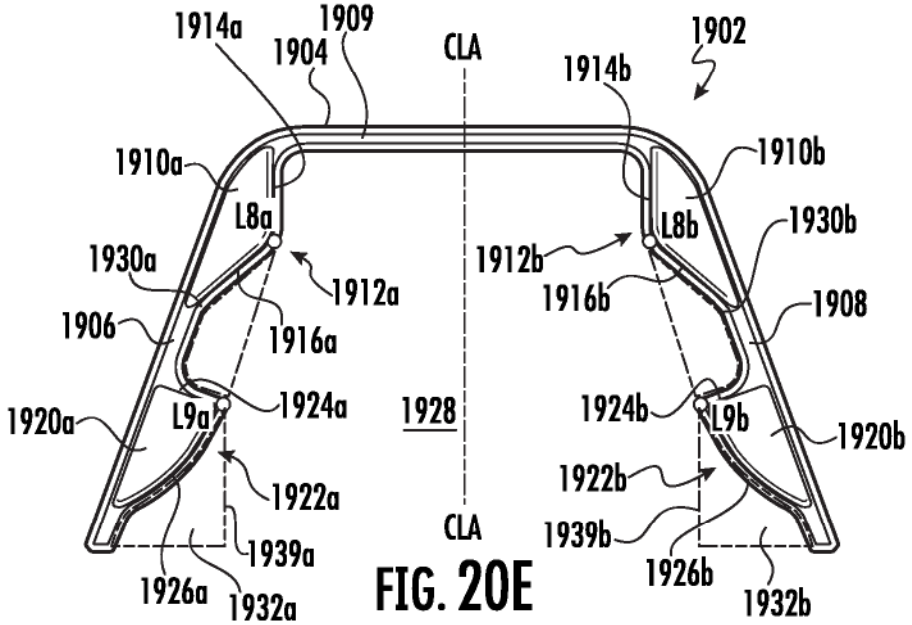


FIG. 20E

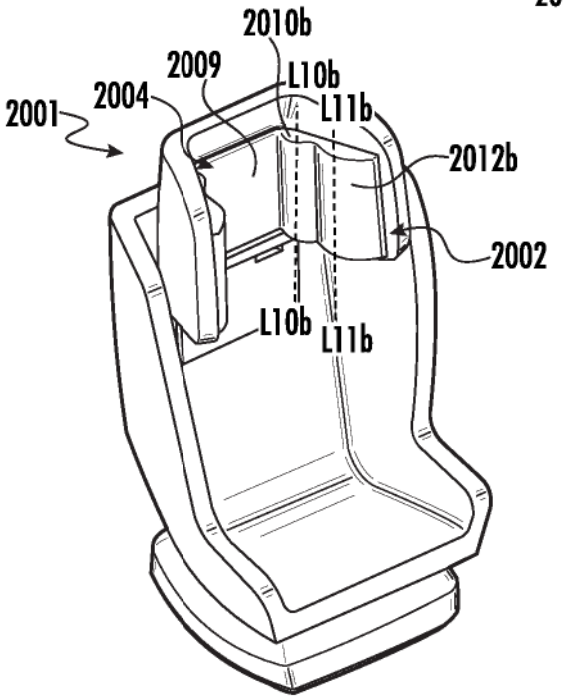


FIG. 21A

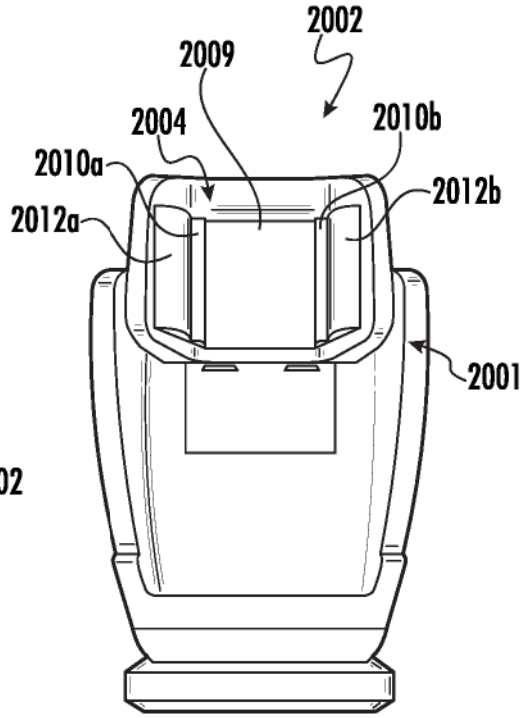


FIG. 21B

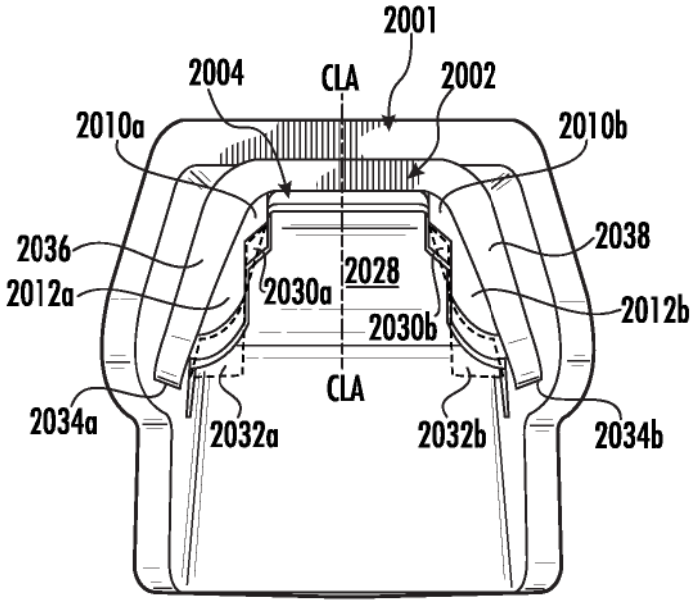


FIG. 21C

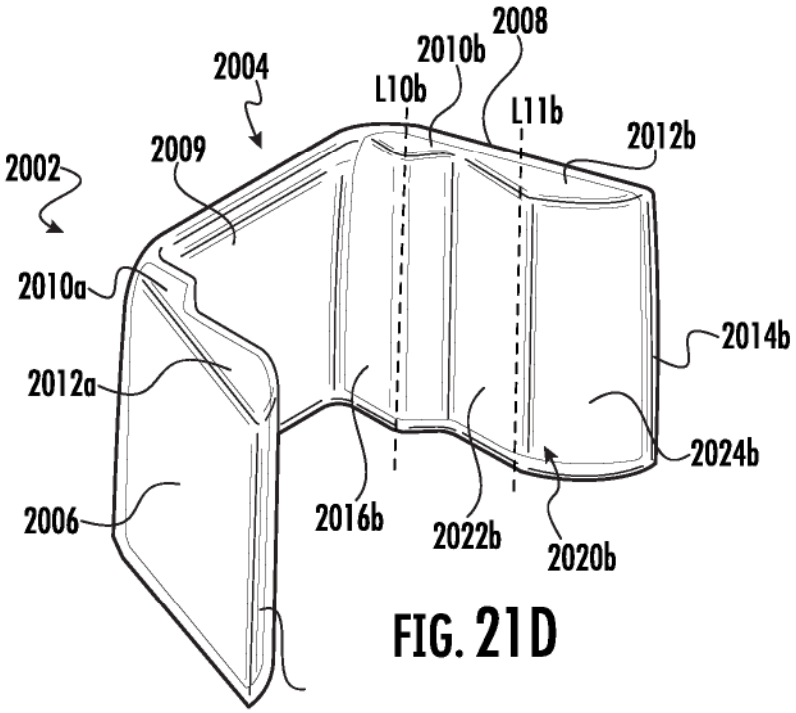


FIG. 21D

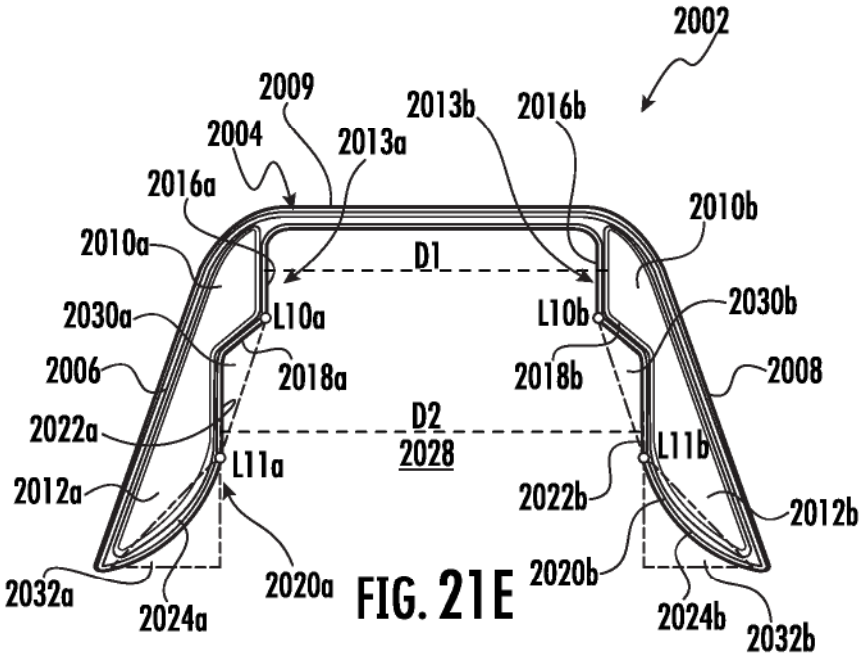


FIG. 21E

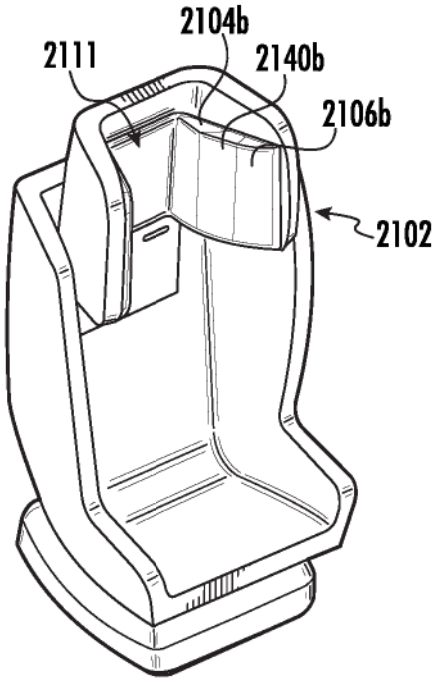


FIG. 22A

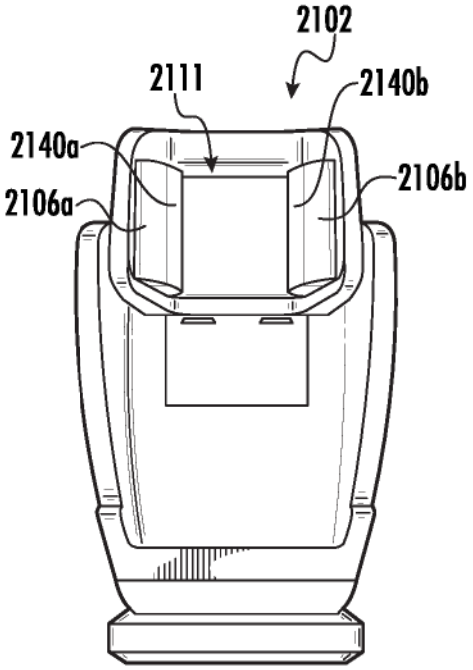


FIG. 22B

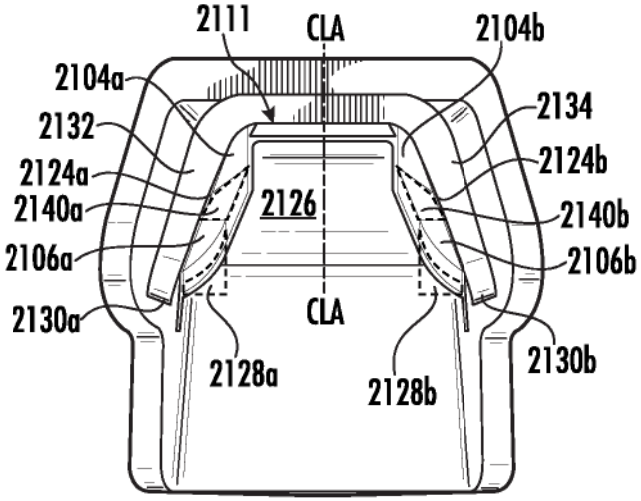


FIG. 22C

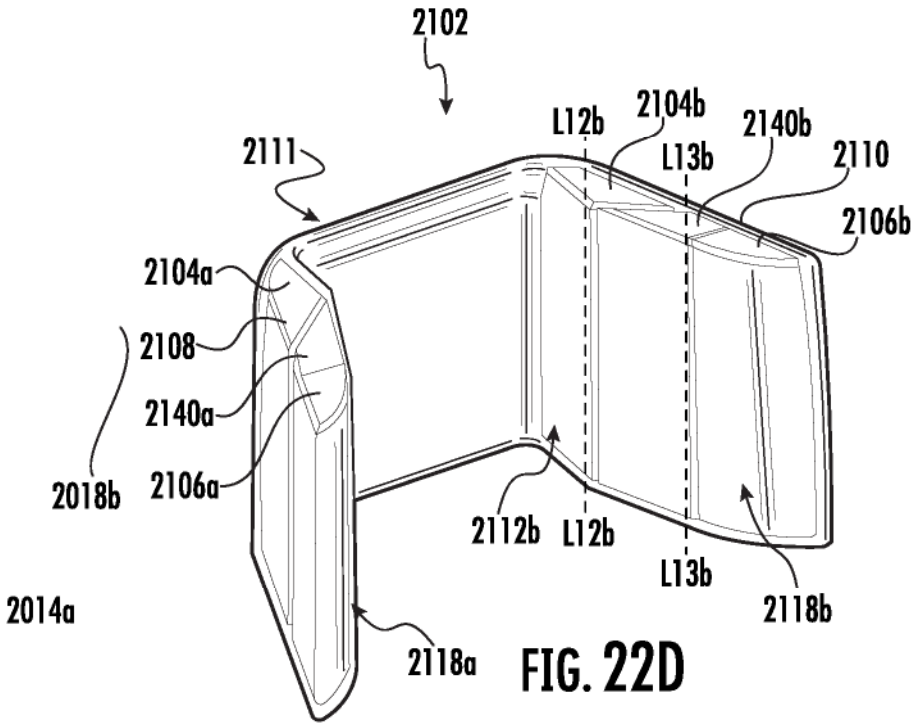


FIG. 22D

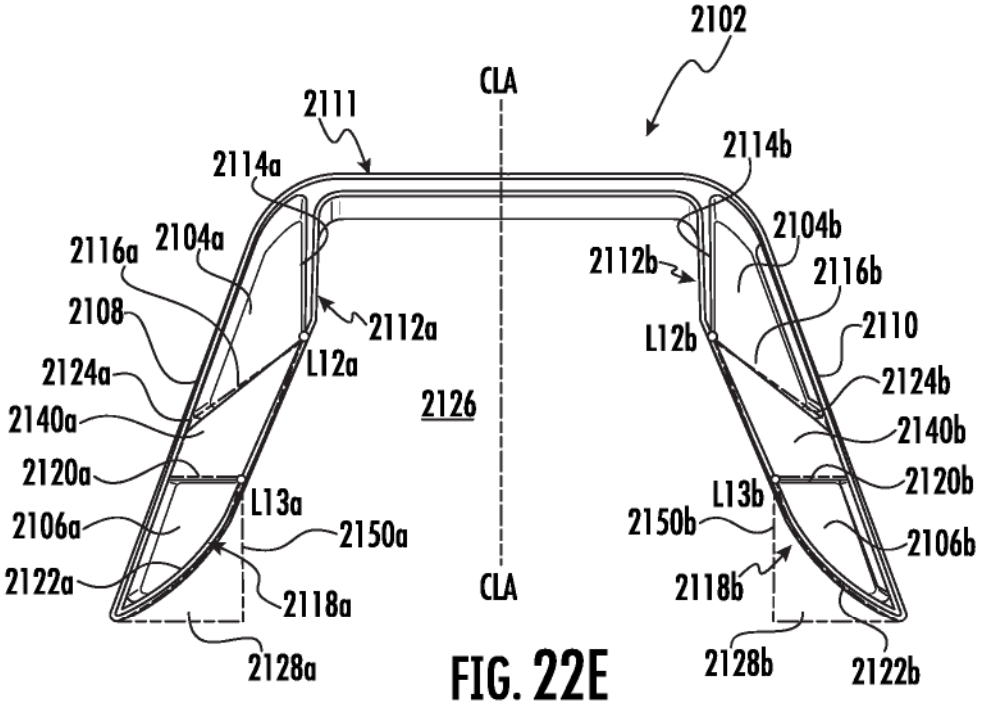


FIG. 22E

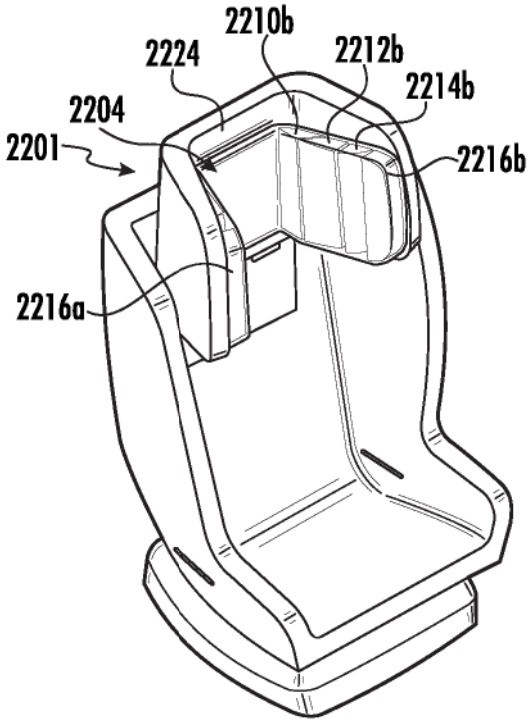


FIG. 23A

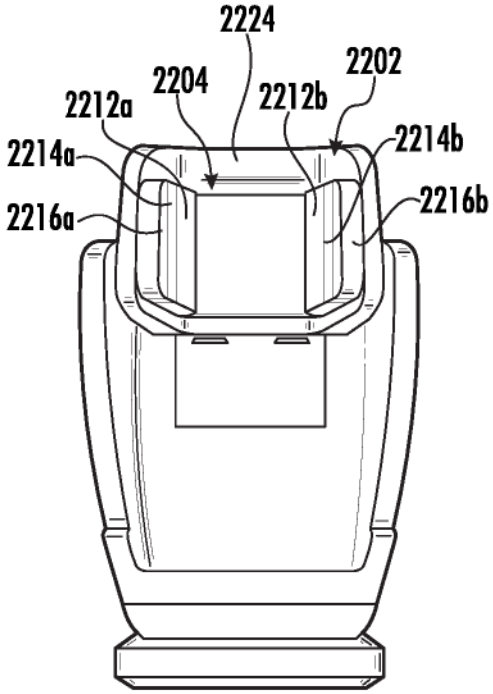


FIG. 23B

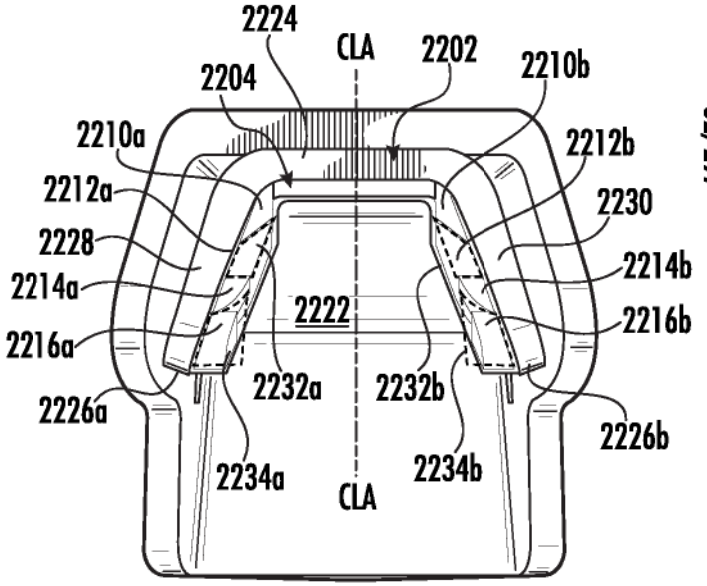


FIG. 23C

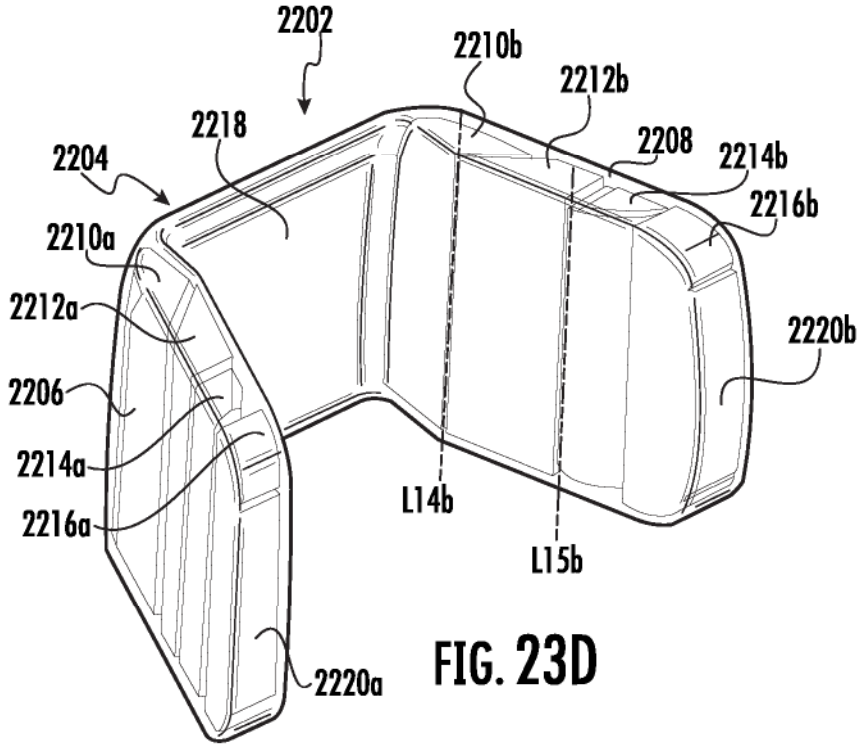


FIG. 23D

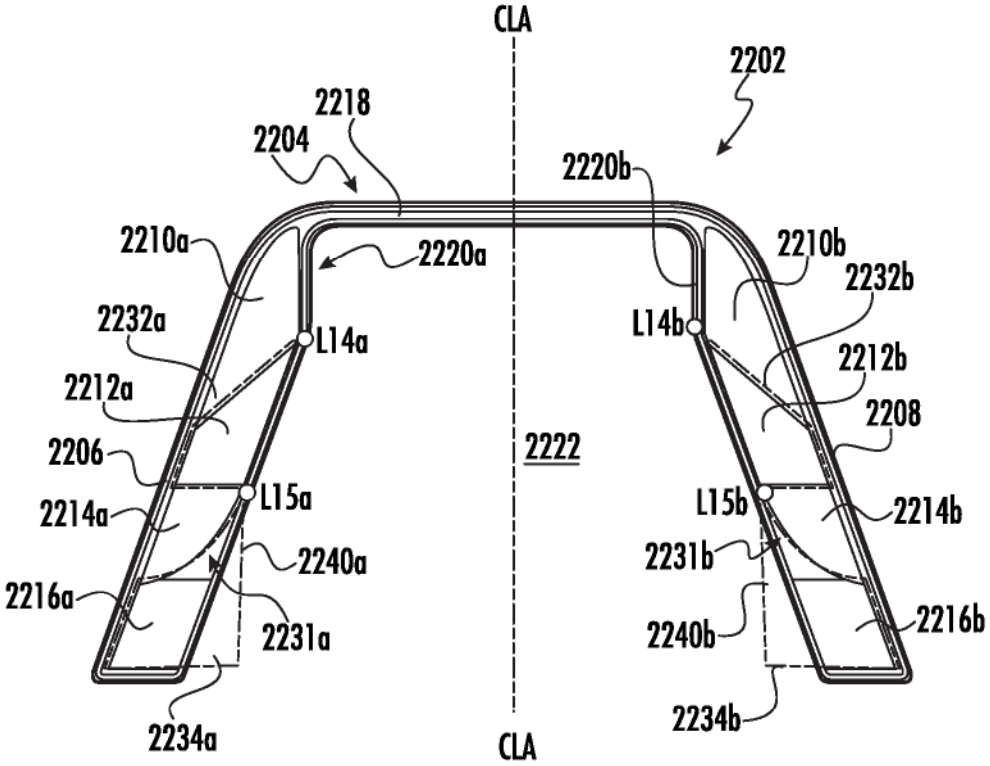


FIG. 23E

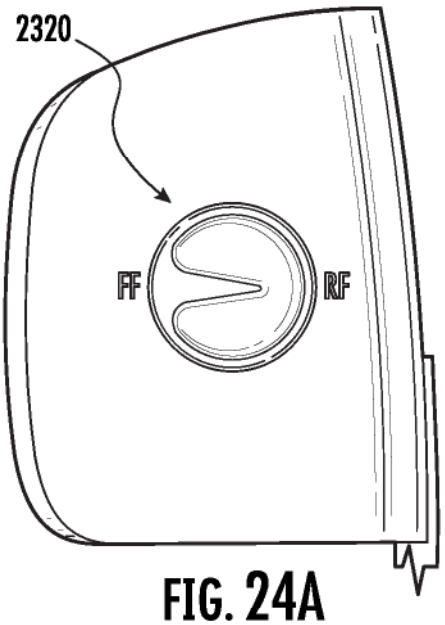


FIG. 24A

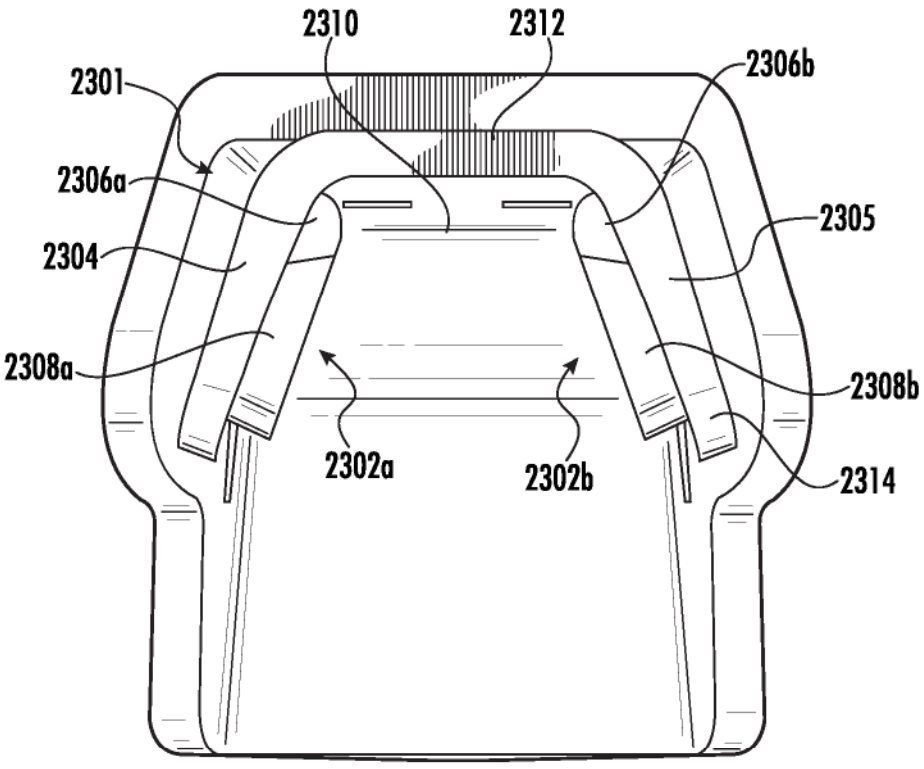


FIG. 24B

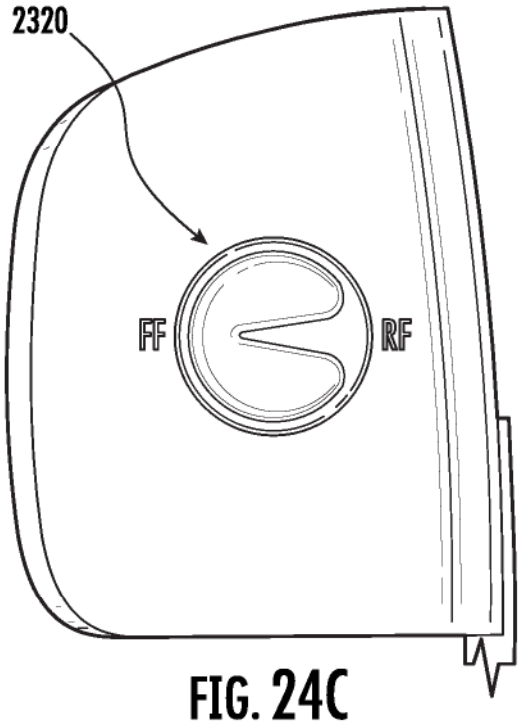


FIG. 24C

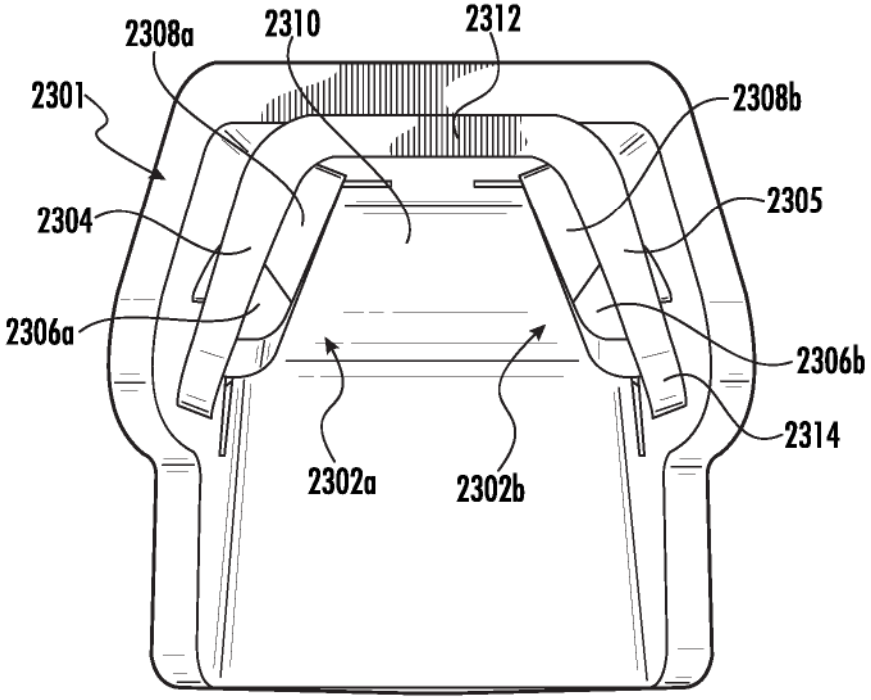


FIG. 24D

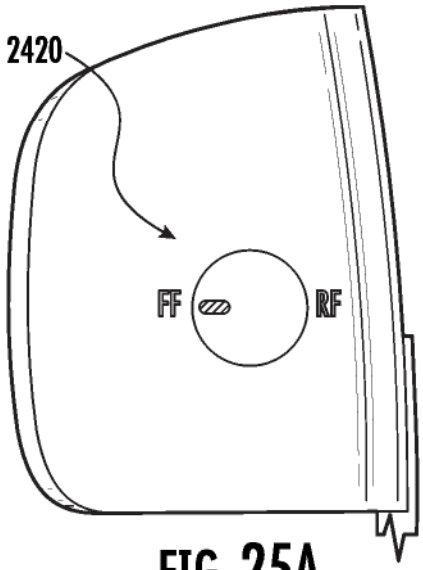


FIG. 25A

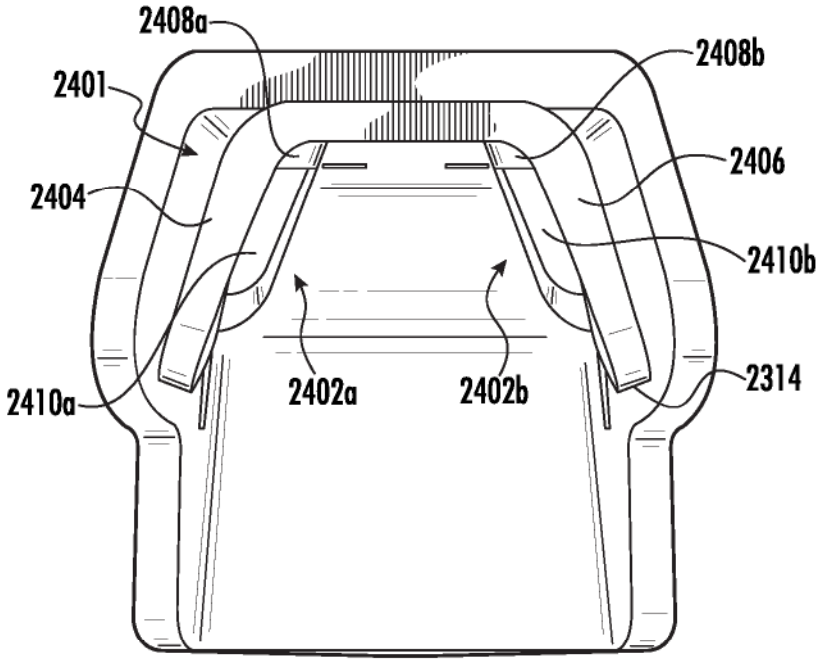


FIG. 25B

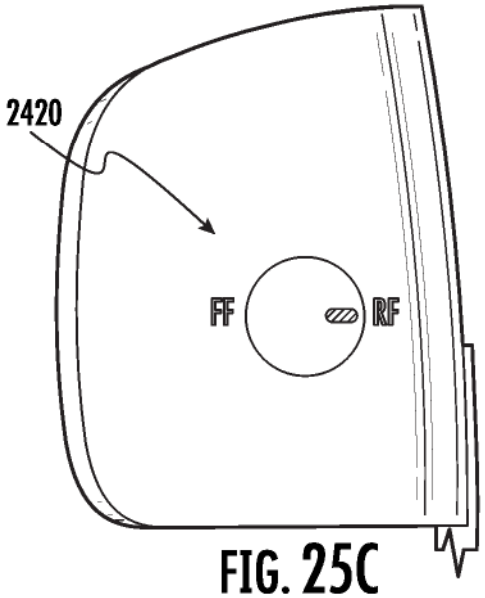


FIG. 25C

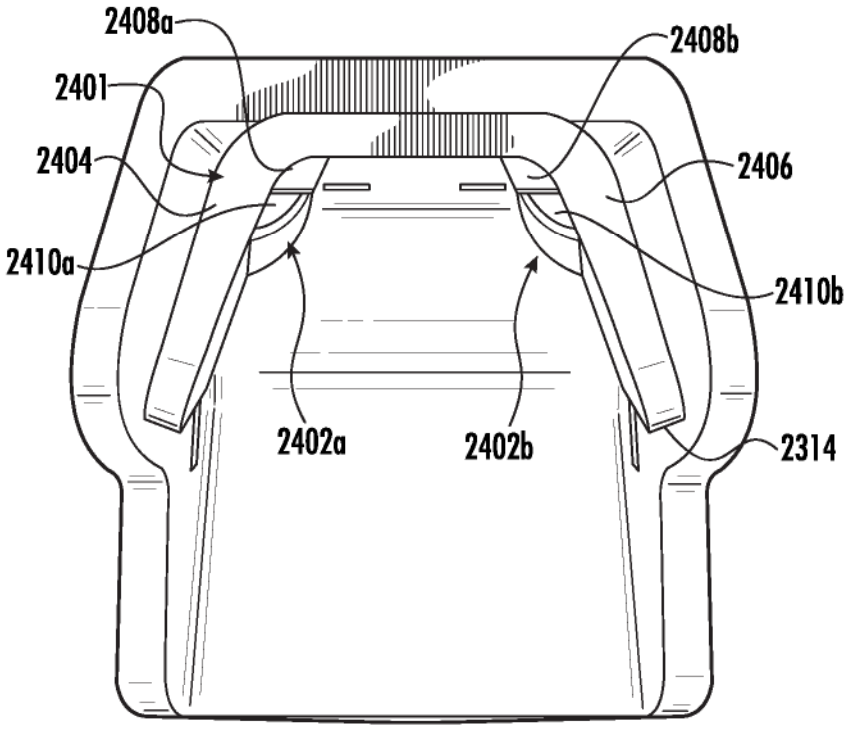


FIG. 25D

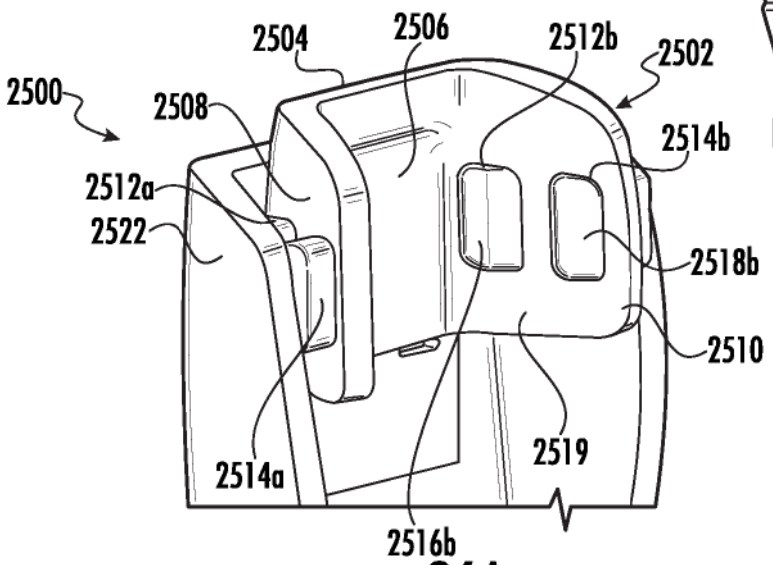


FIG. 26A

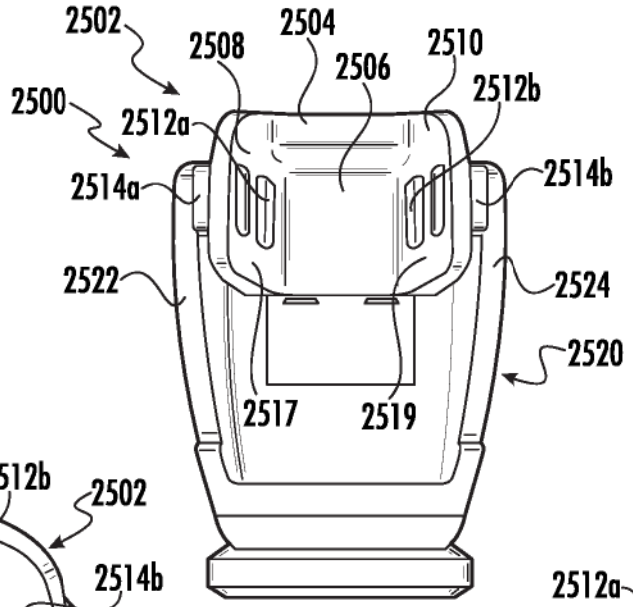


FIG. 26B

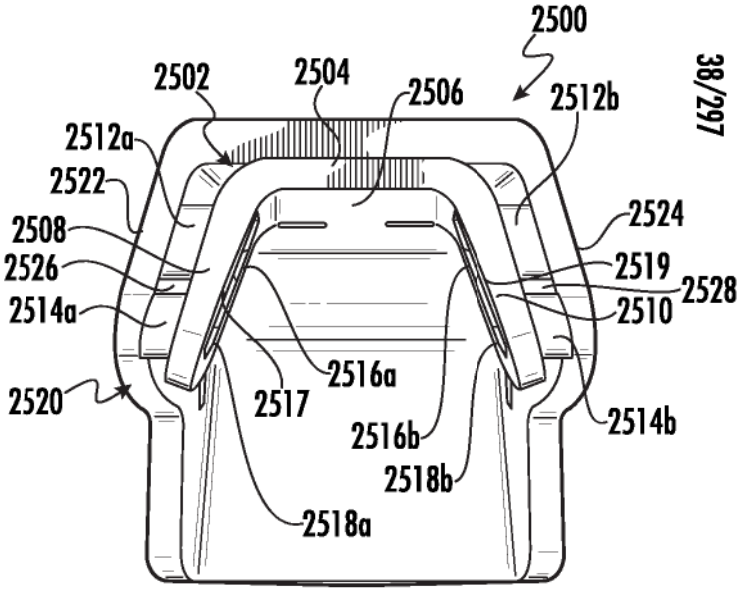


FIG. 26C

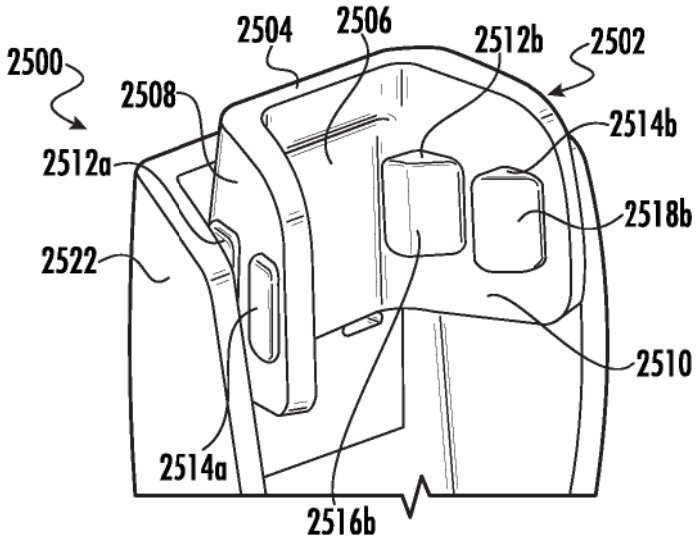


FIG. 26D

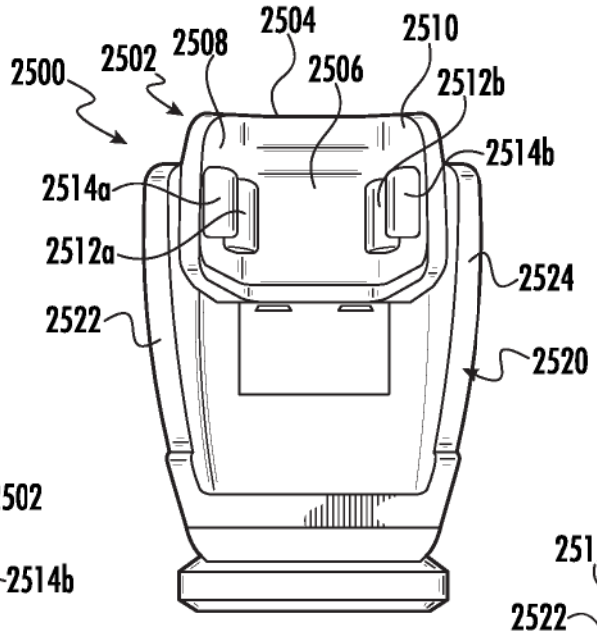


FIG. 26E

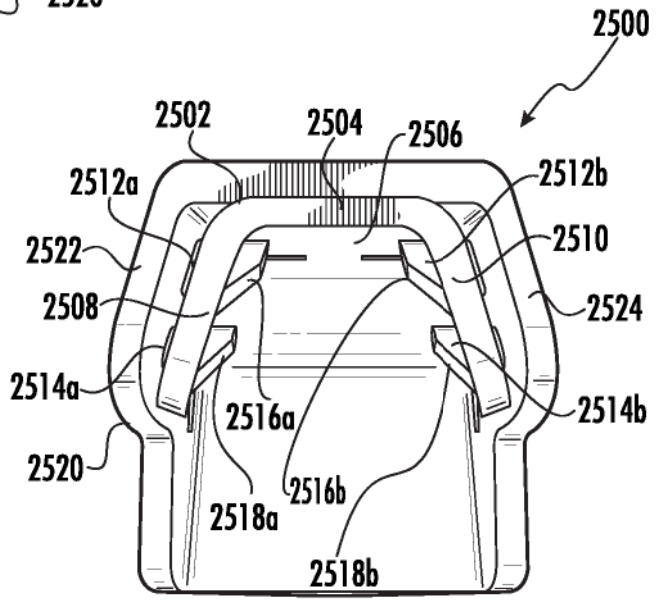


FIG. 26F

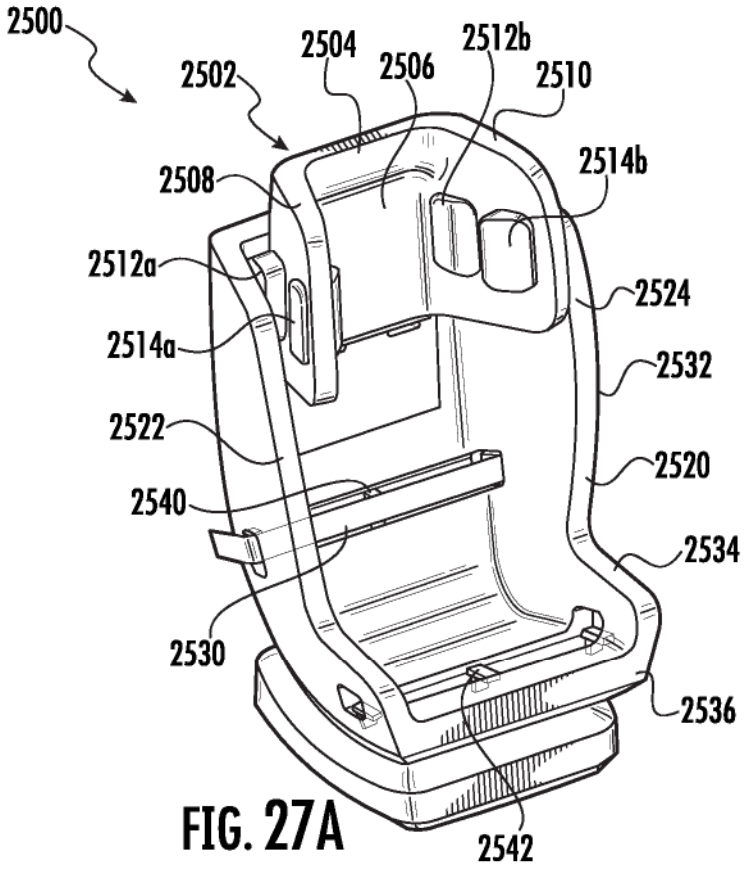


FIG. 27A

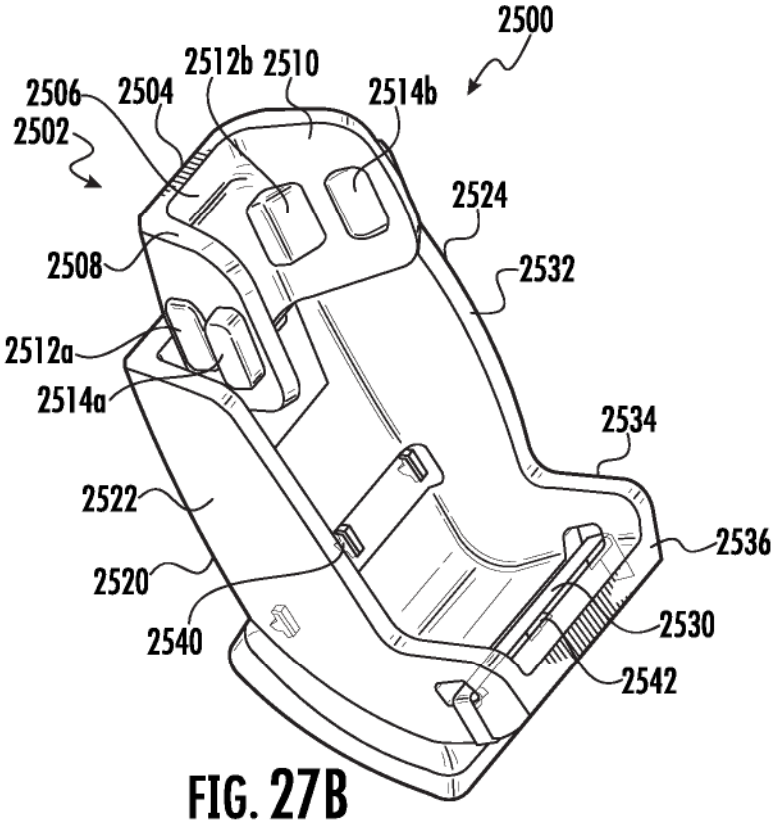


FIG. 27B

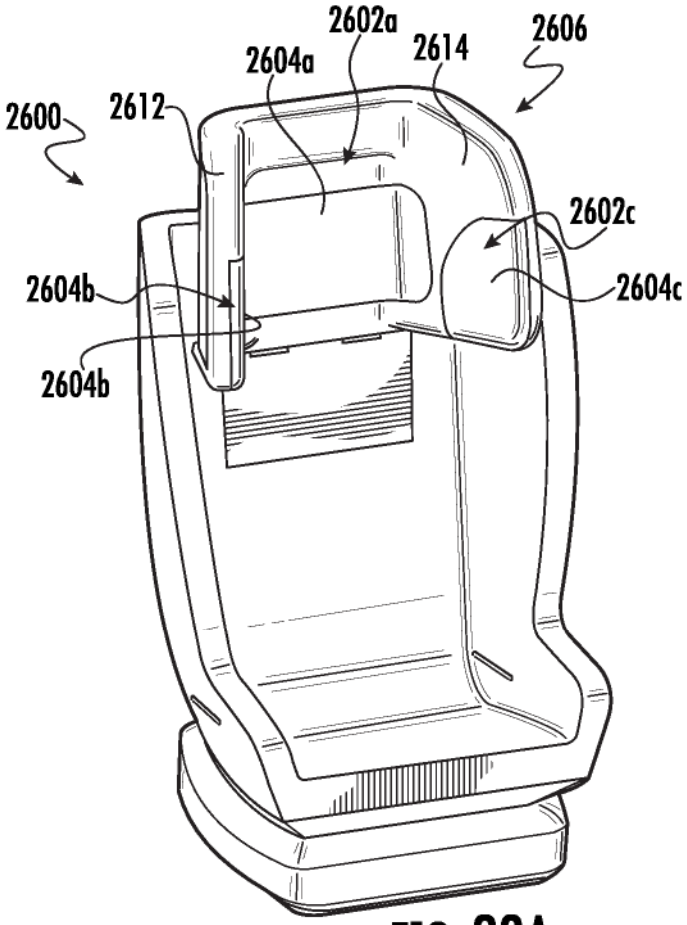


FIG. 28A

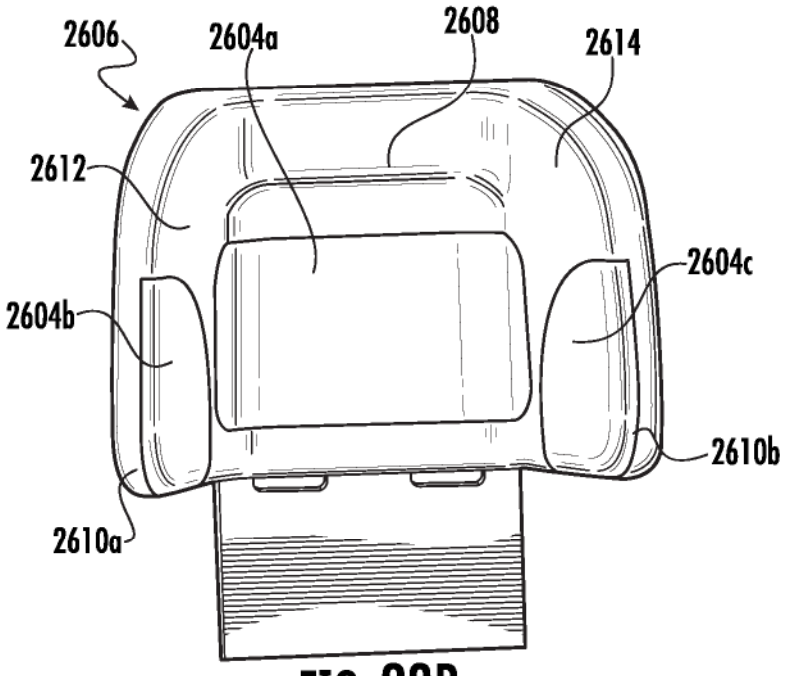


FIG. 28B

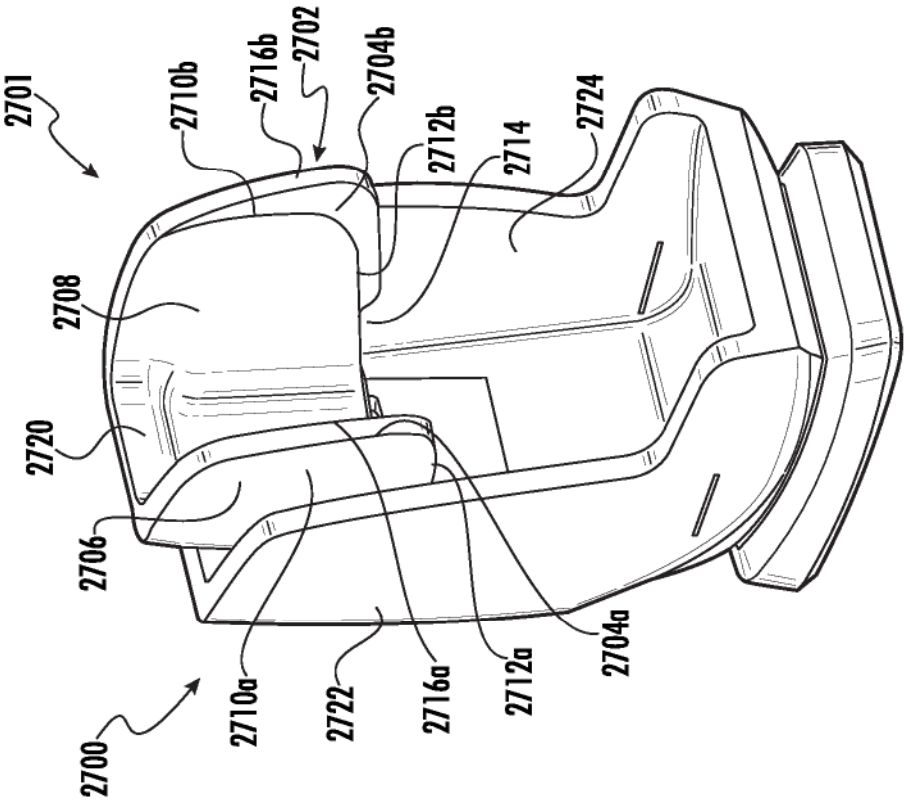


FIG. 29B

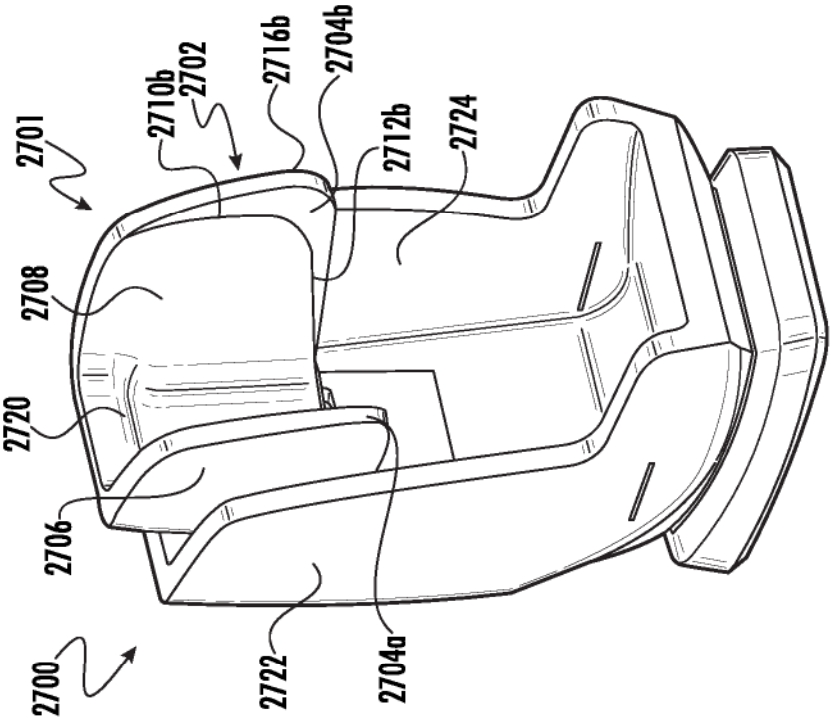


FIG. 29A

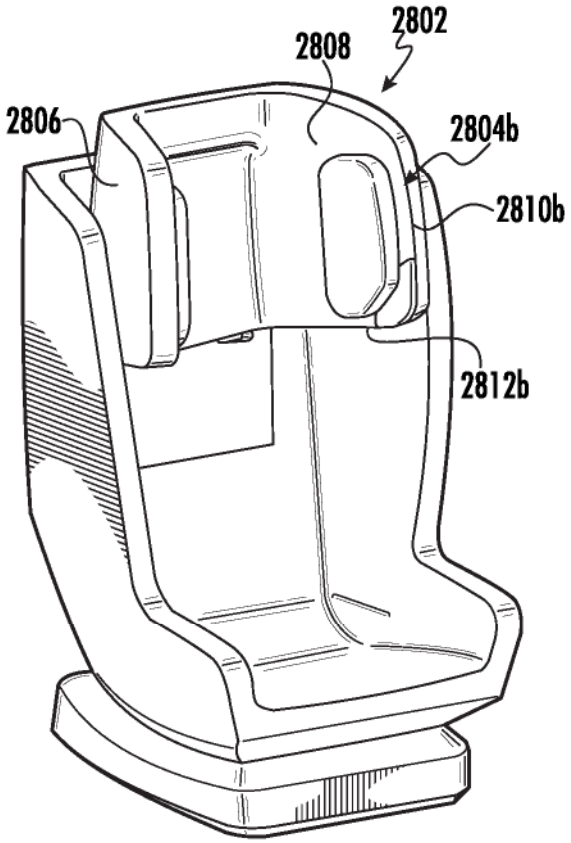


FIG. 30A

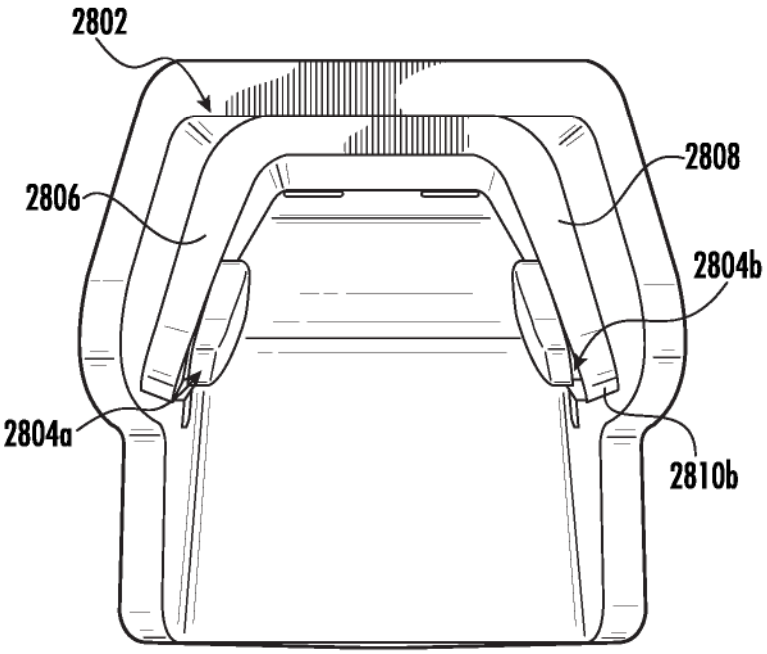


FIG. 30B

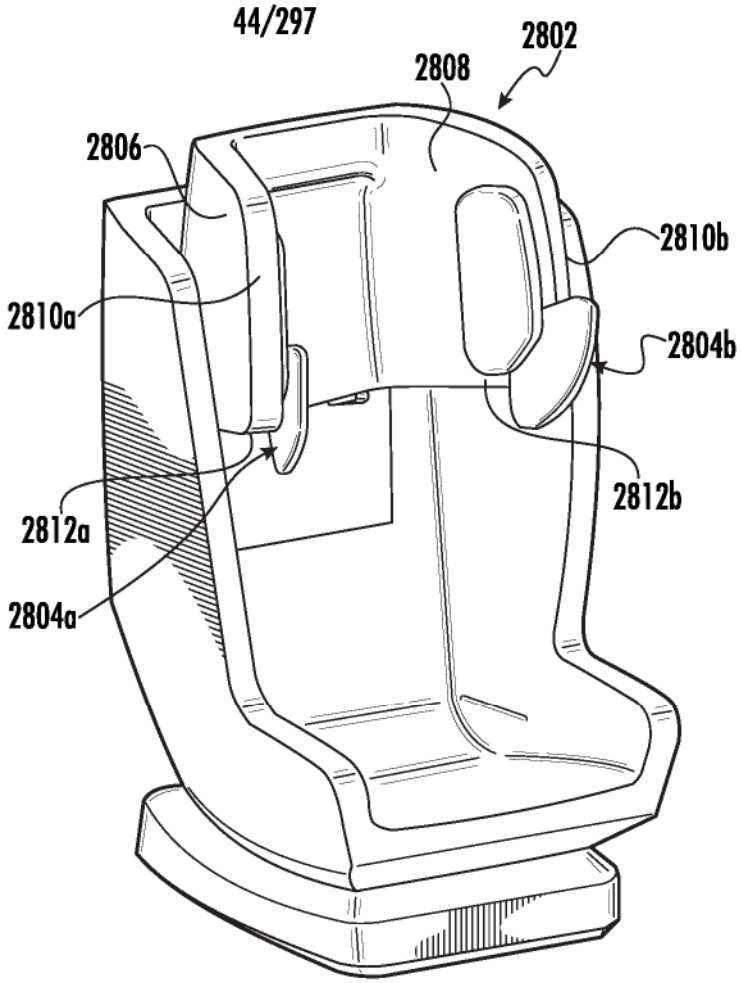


FIG. 31A

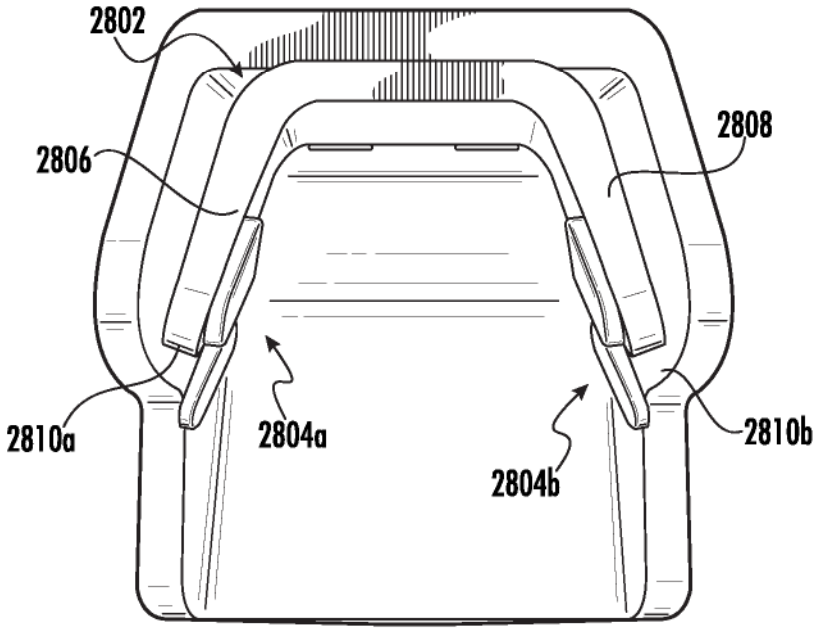


FIG. 31B

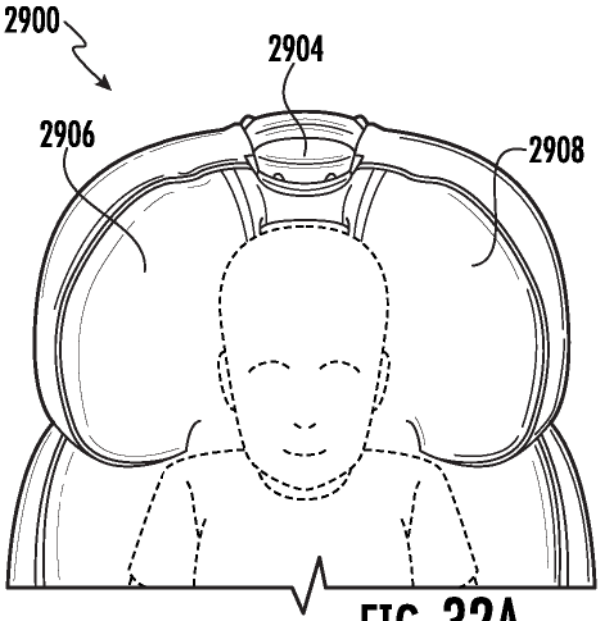


FIG. 32A

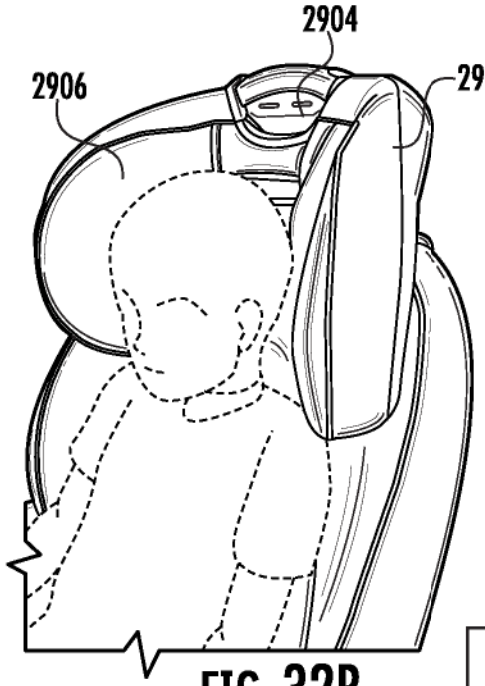


FIG. 32B

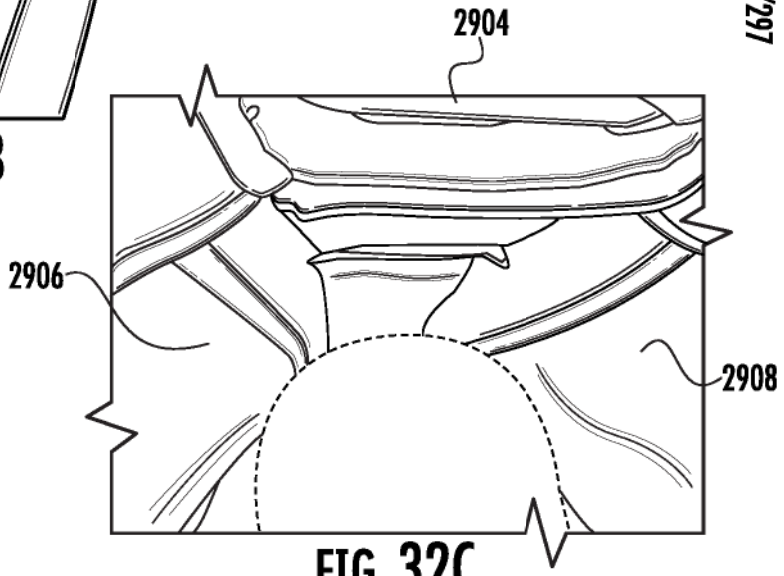


FIG. 32C

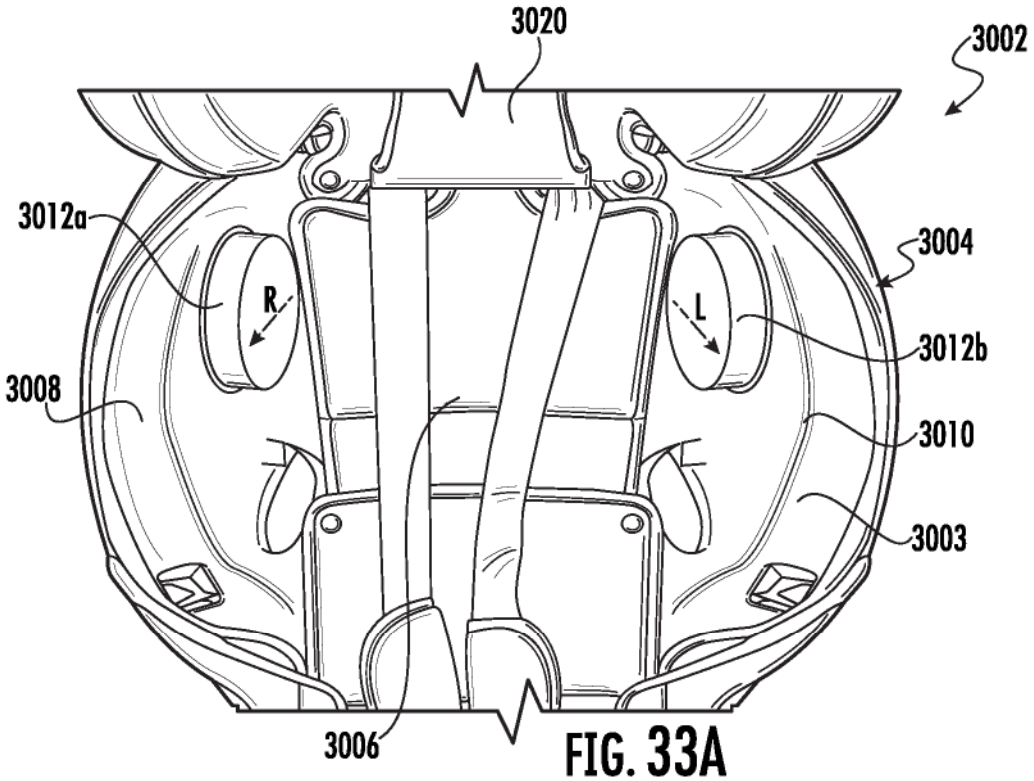


FIG. 33A

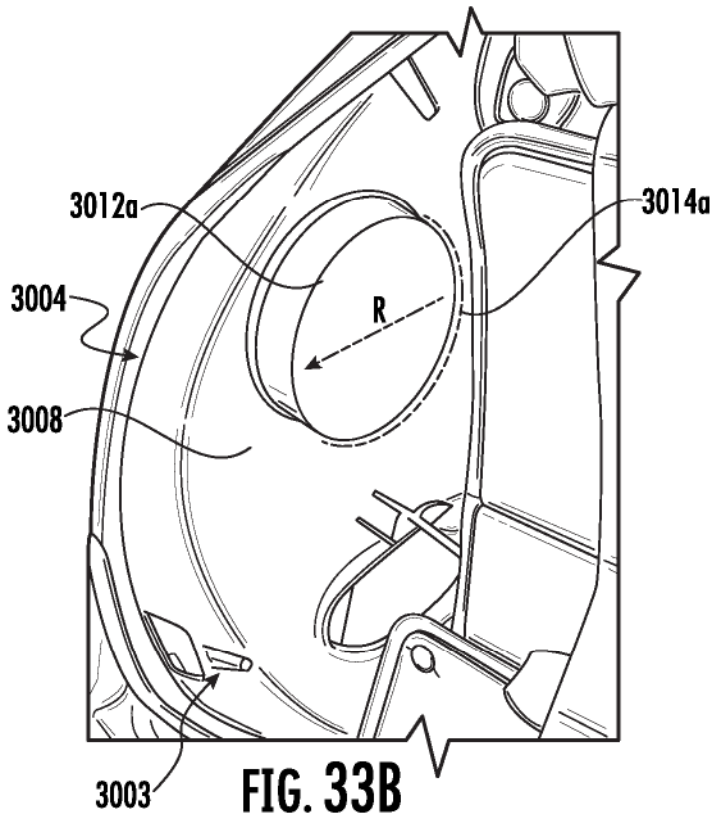


FIG. 33B

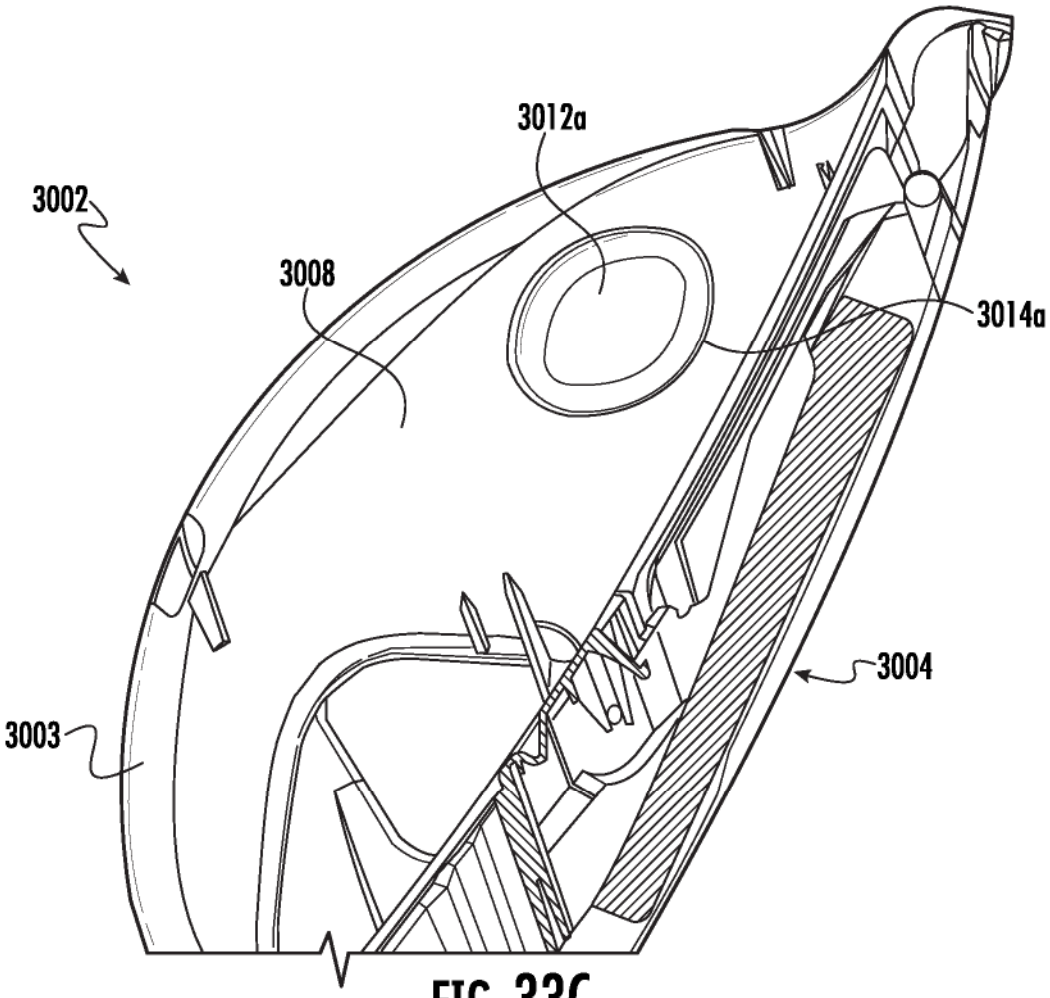


FIG. 33C

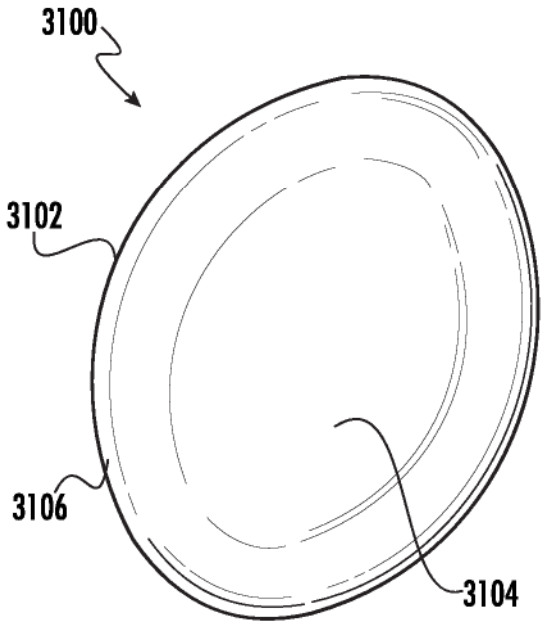


FIG. 34A

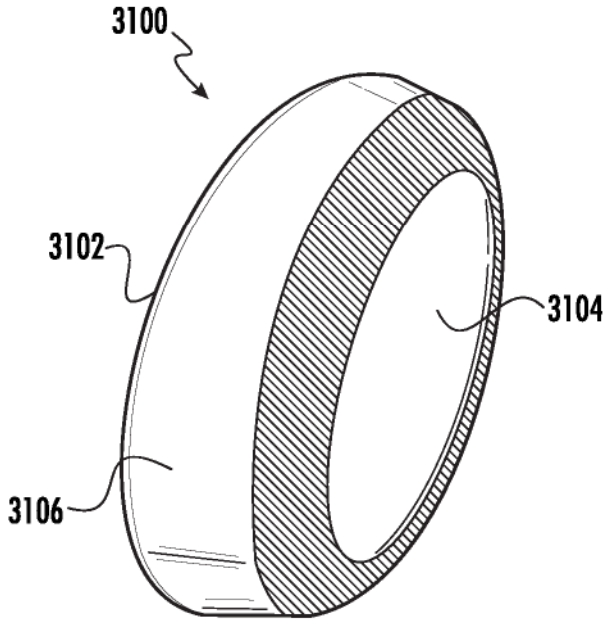


FIG. 34B

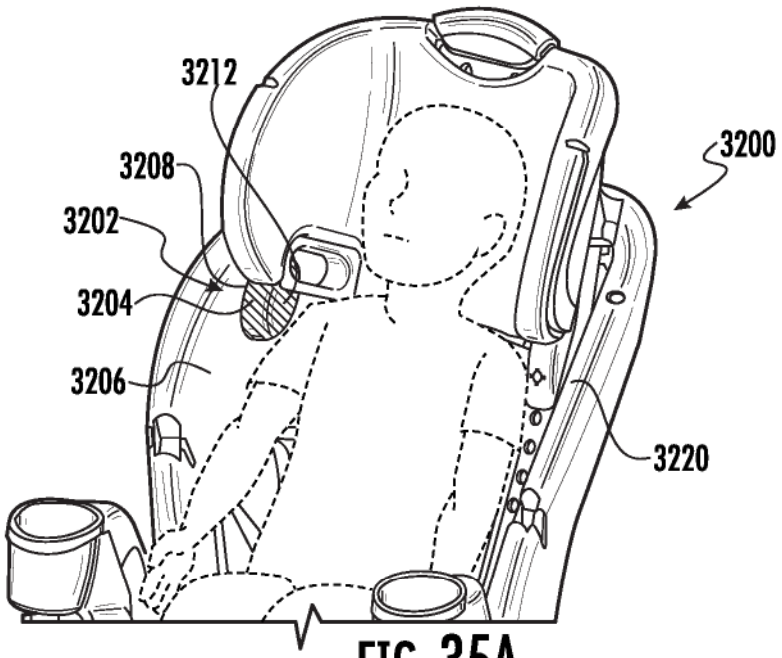


FIG. 35A

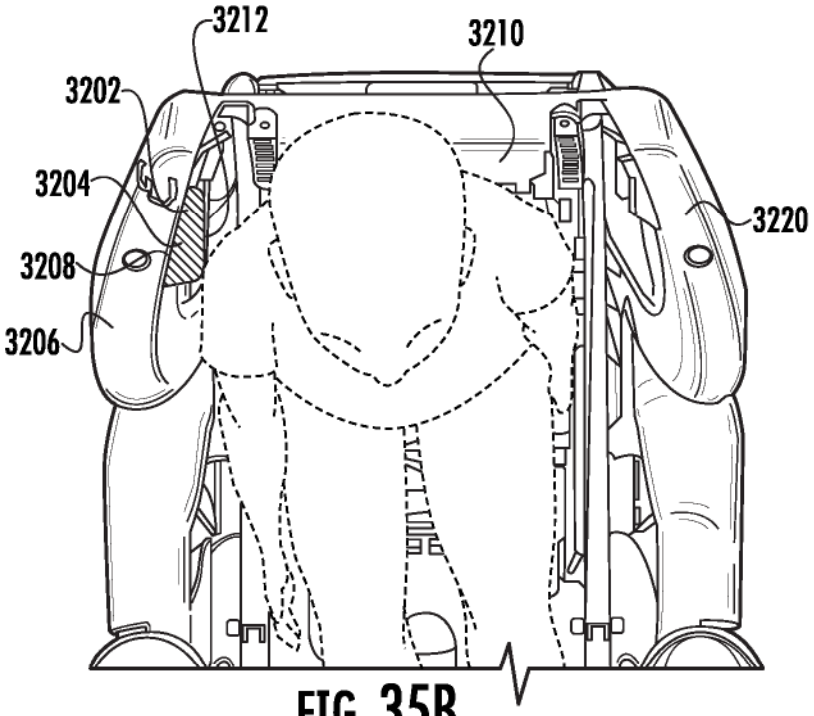


FIG. 35B

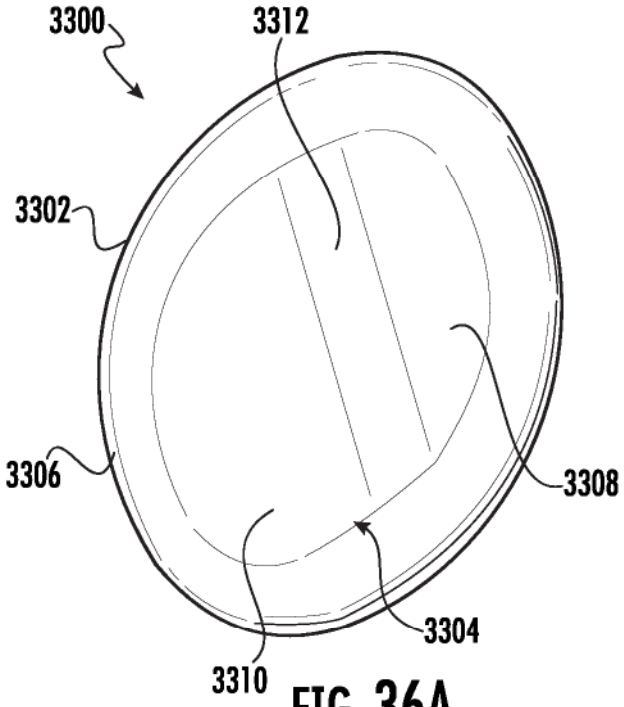


FIG. 36A

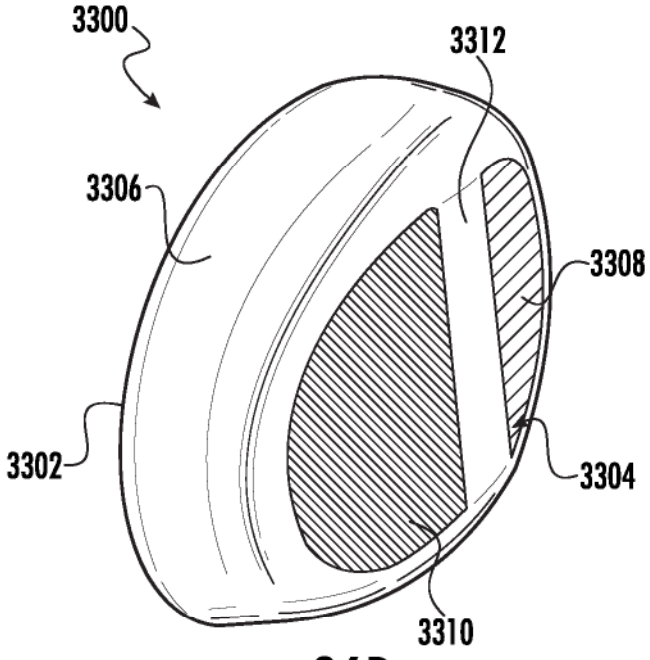


FIG. 36B

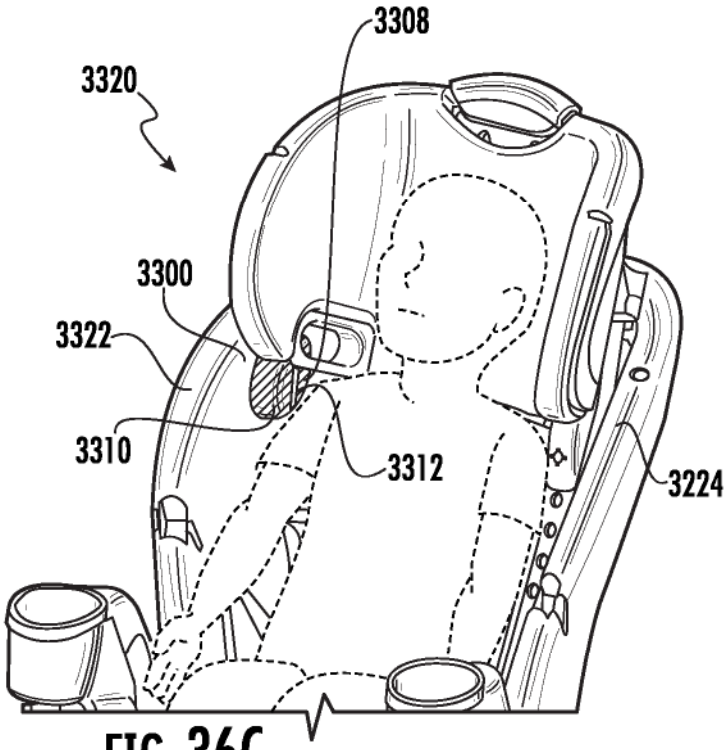


FIG. 36C

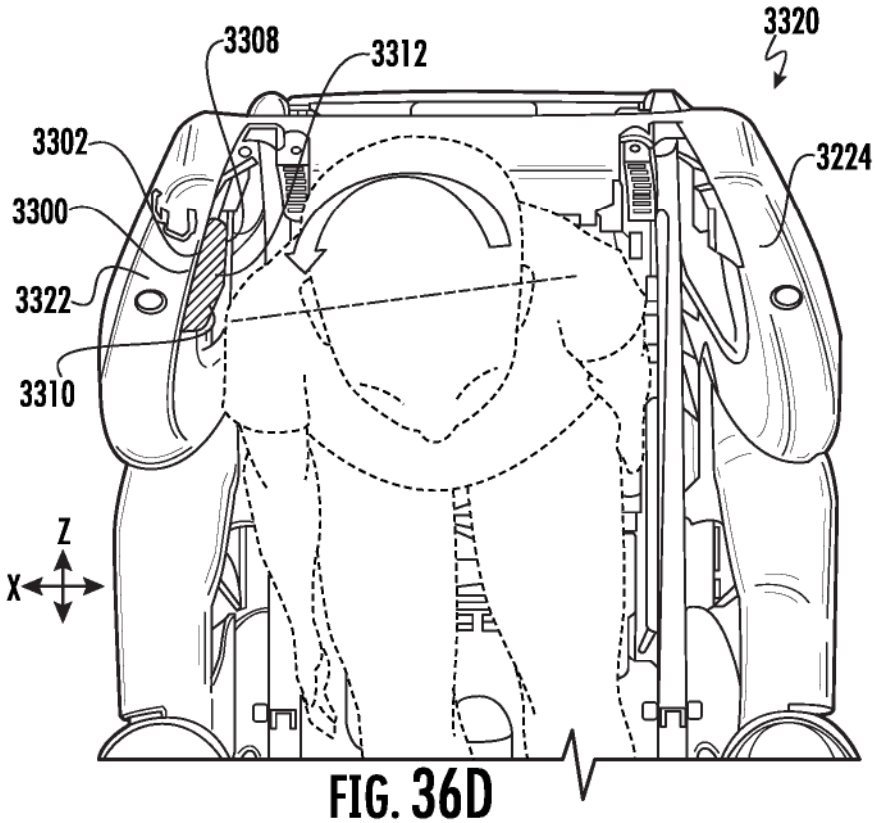


FIG. 36D

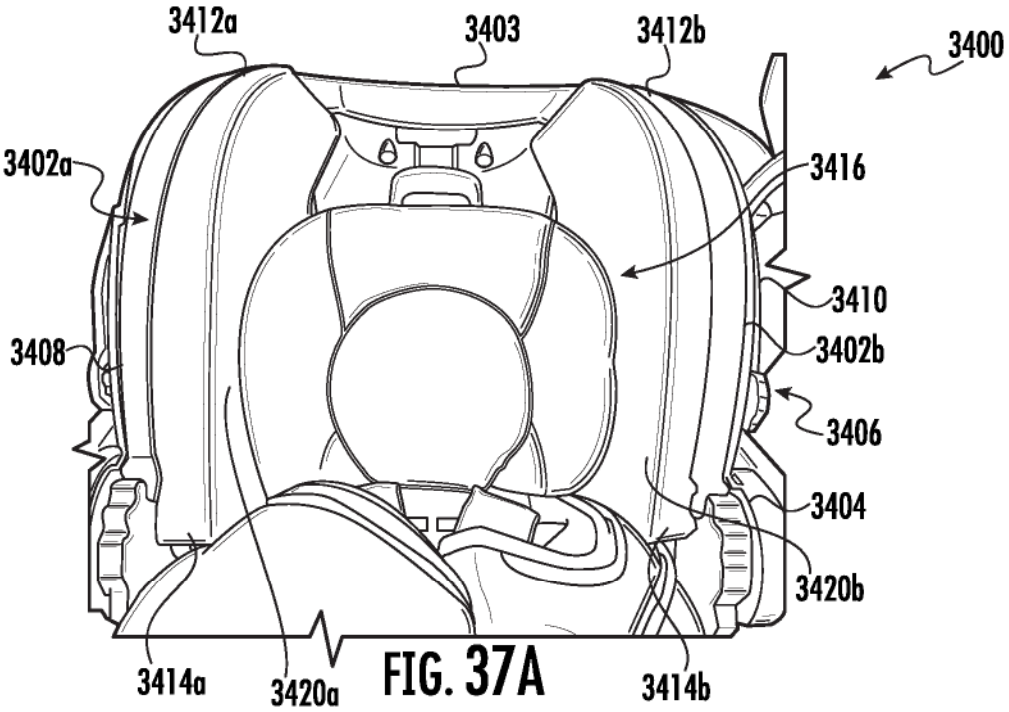


FIG. 37A

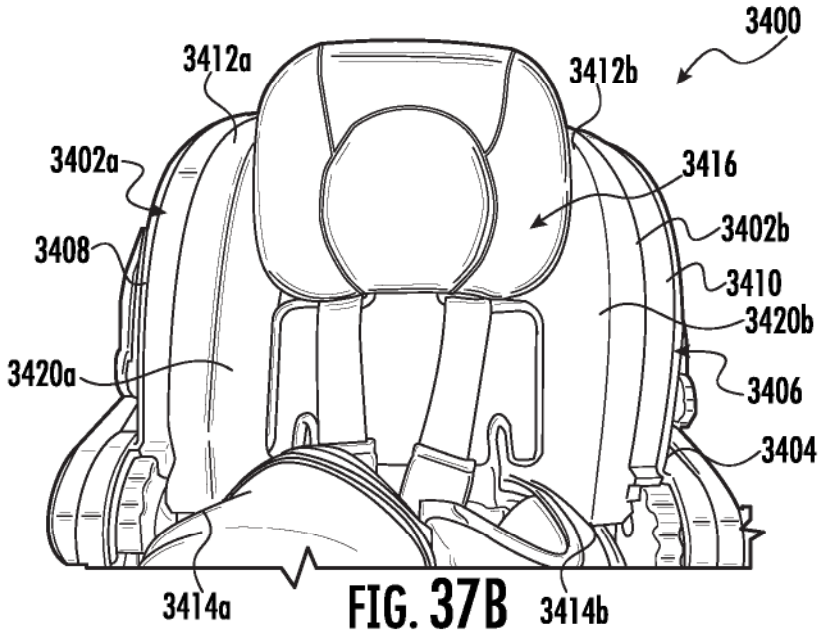


FIG. 37B

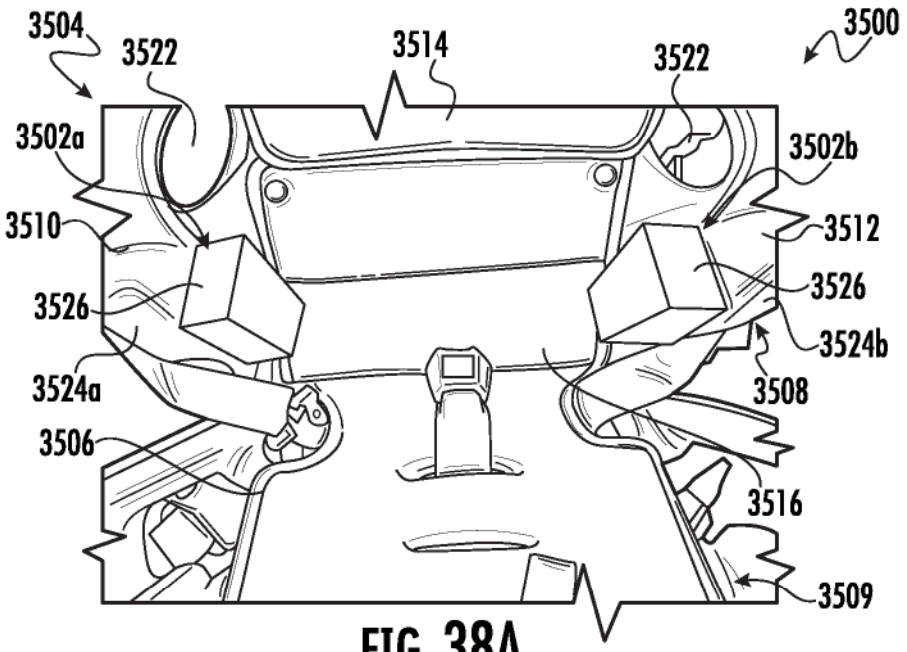


FIG. 38A

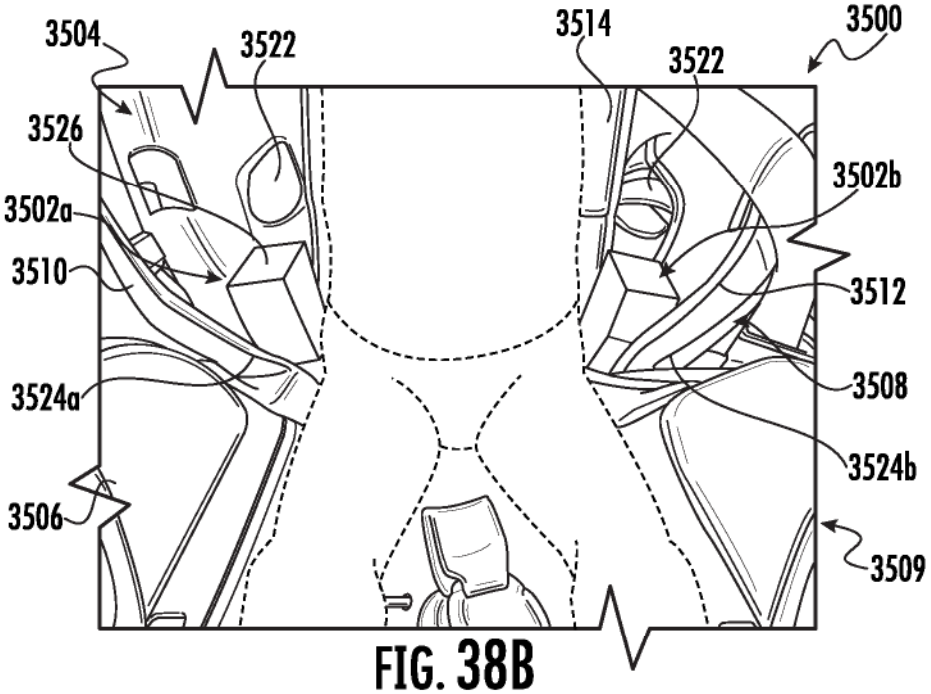


FIG. 38B

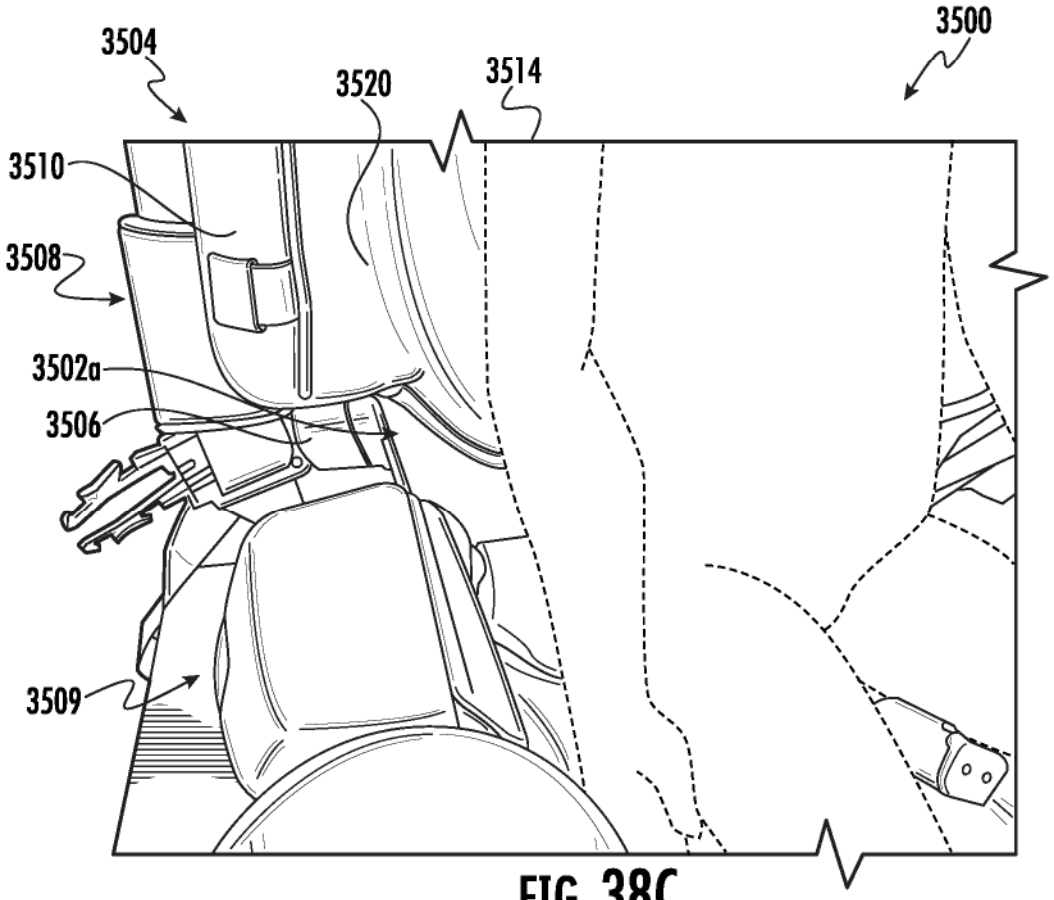


FIG. 38C

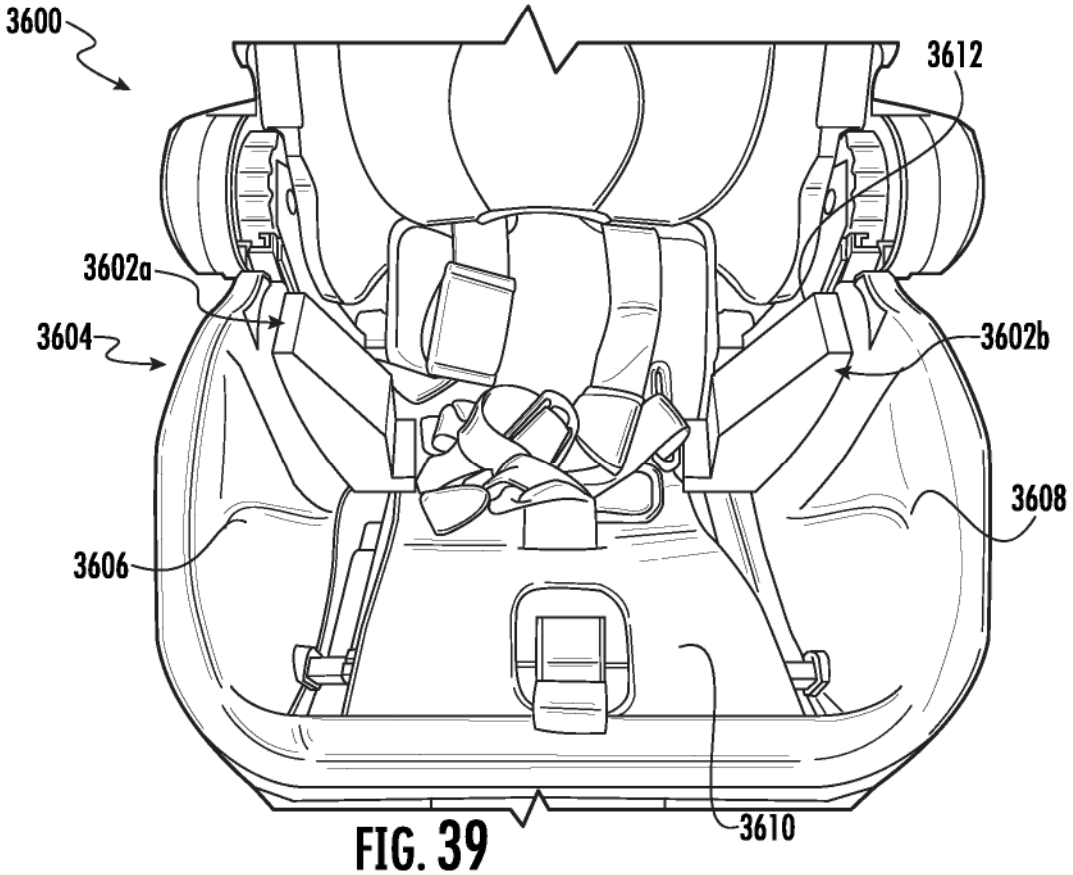


FIG. 39

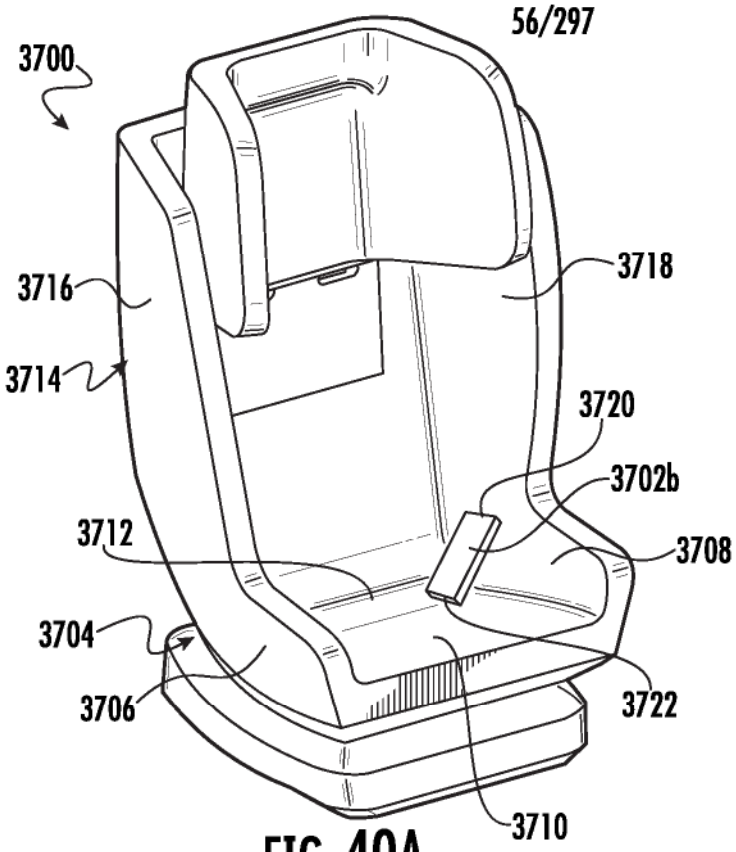


FIG. 40A

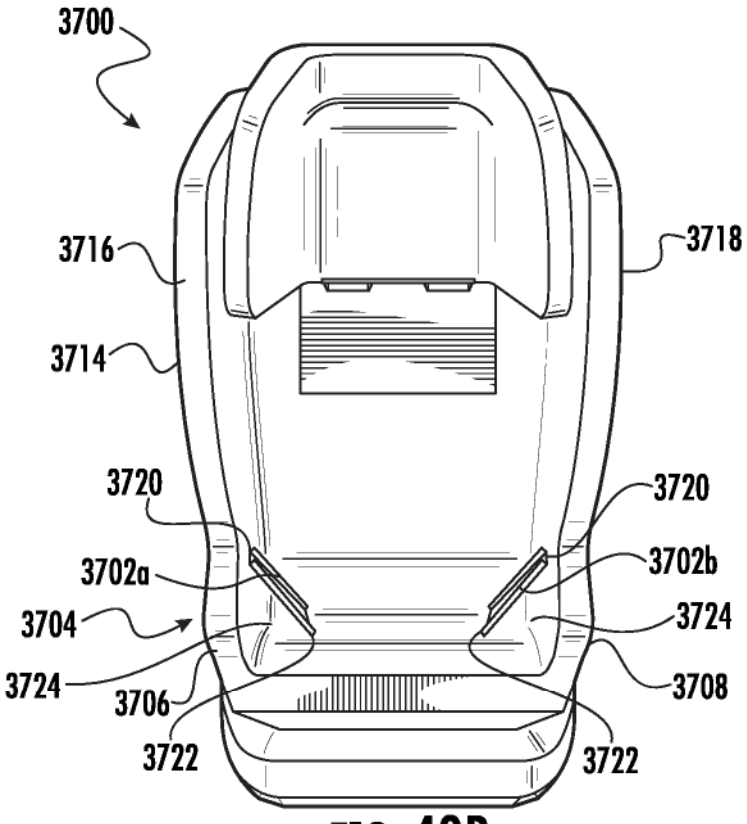


FIG. 40B

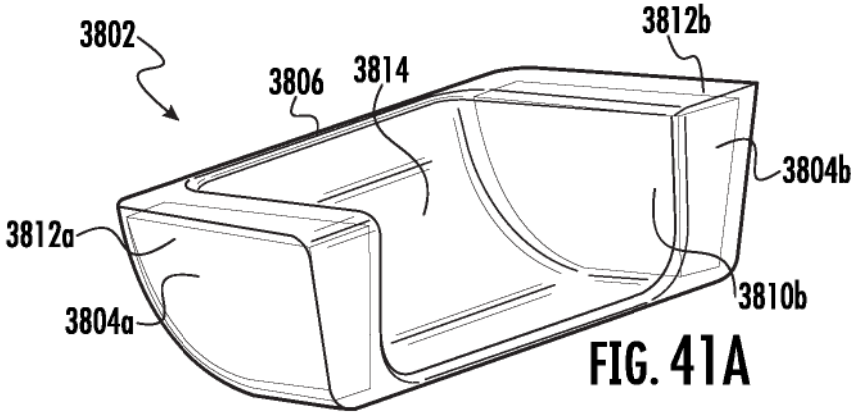


FIG. 41A

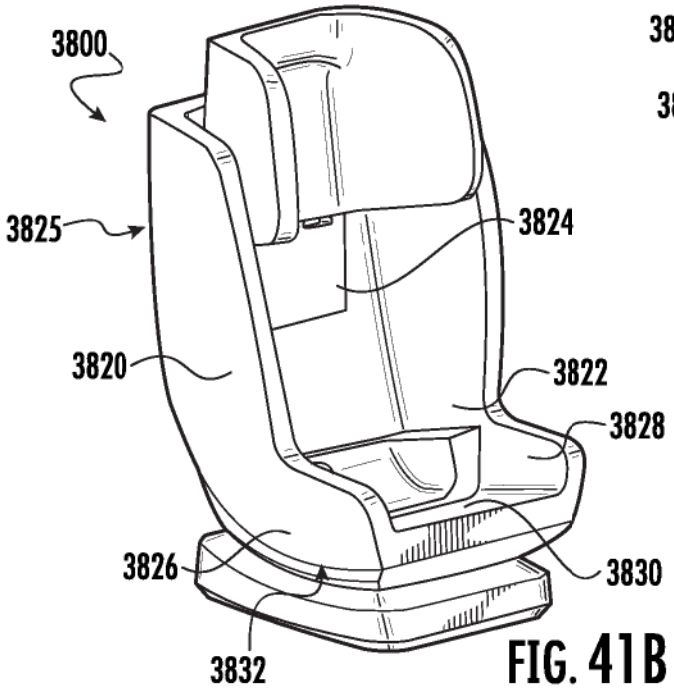


FIG. 41B

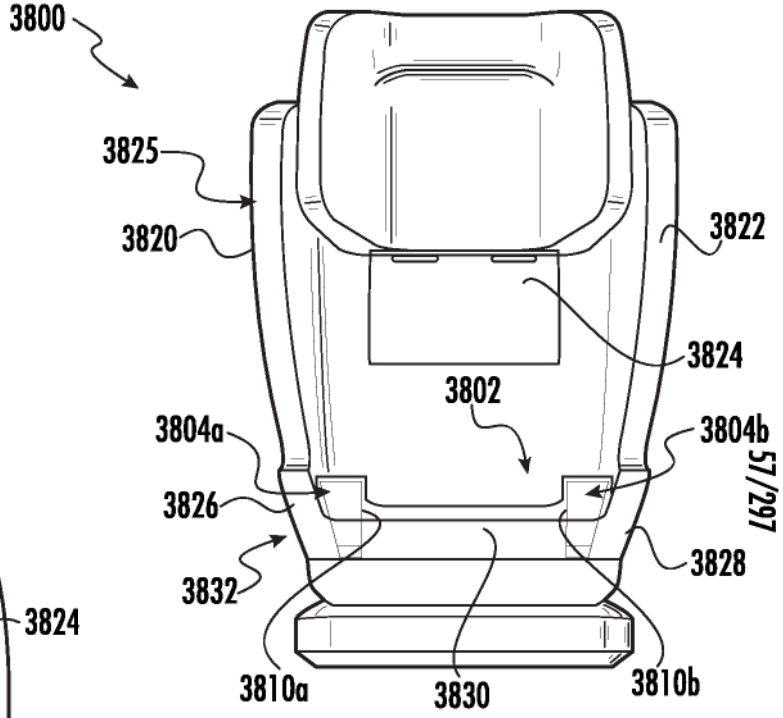


FIG. 41C

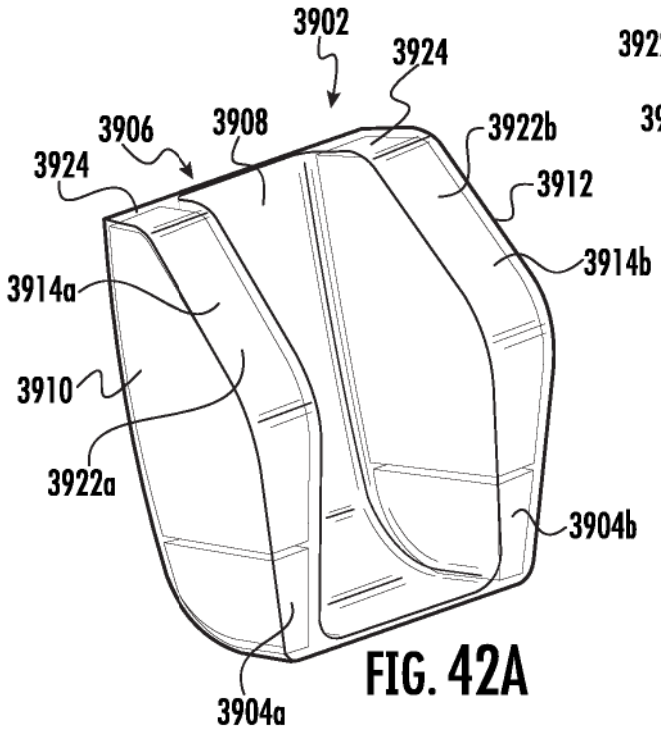


FIG. 42A

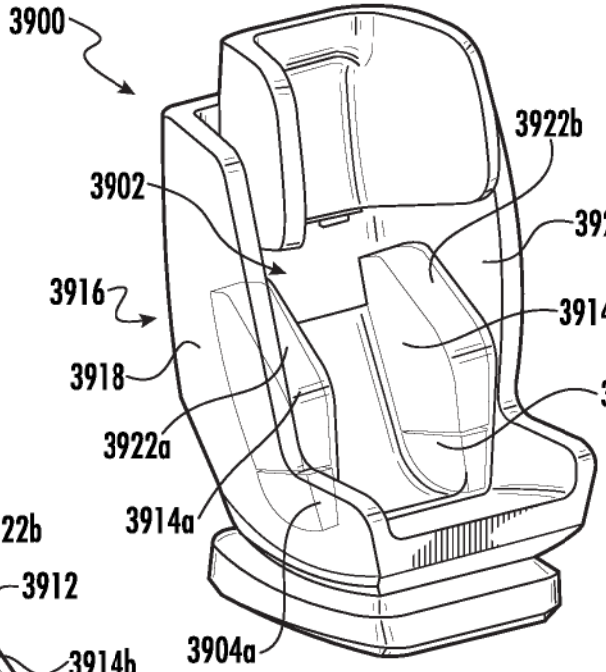


FIG. 42B

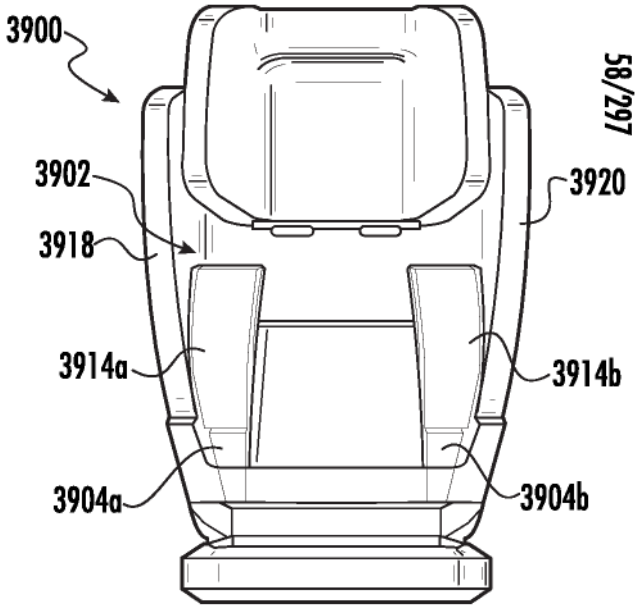


FIG. 42C

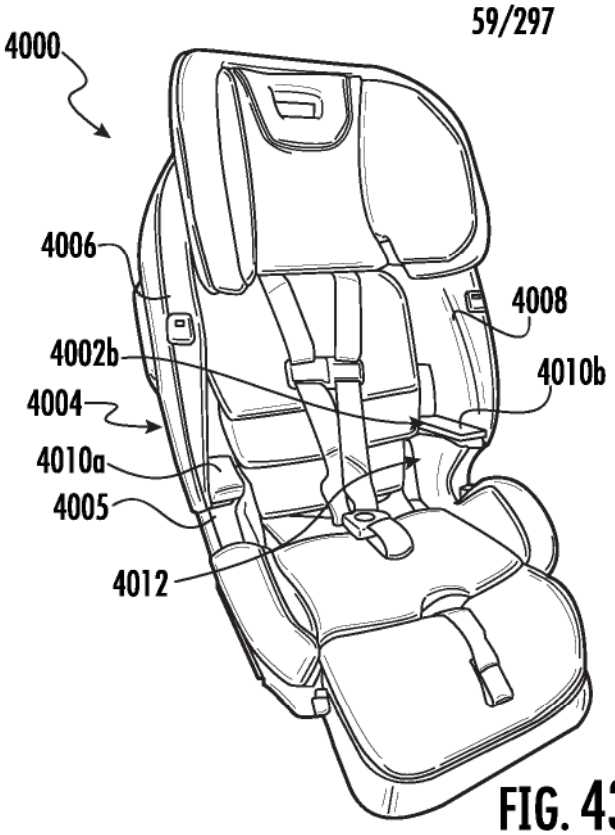


FIG. 43A

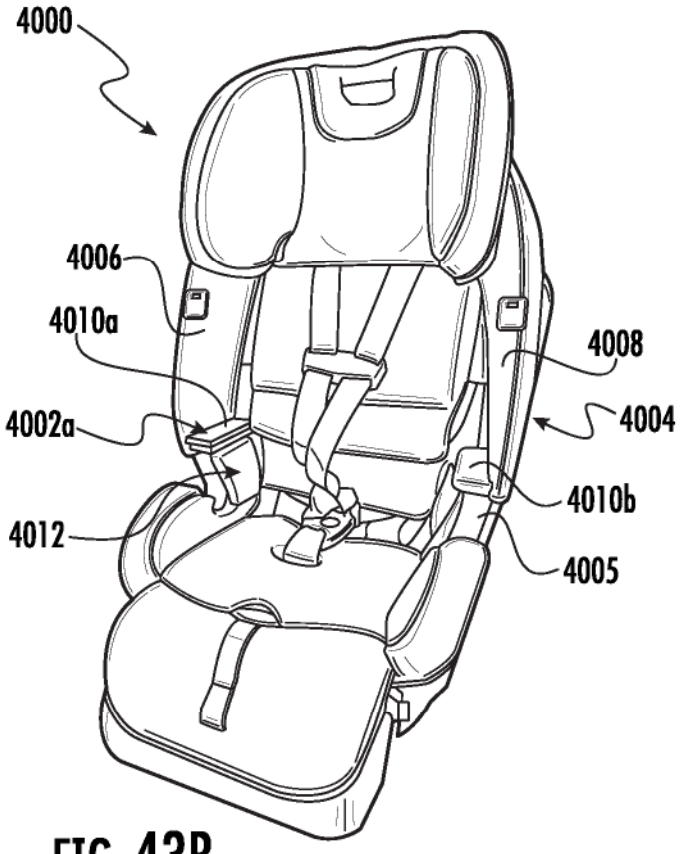


FIG. 43B

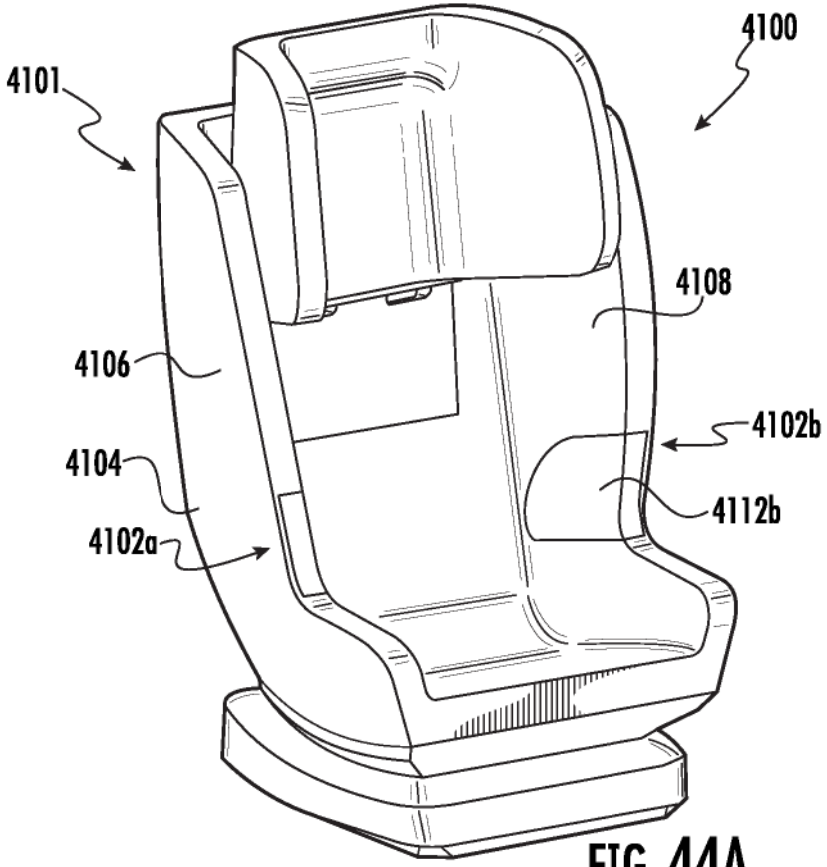


FIG. 44A

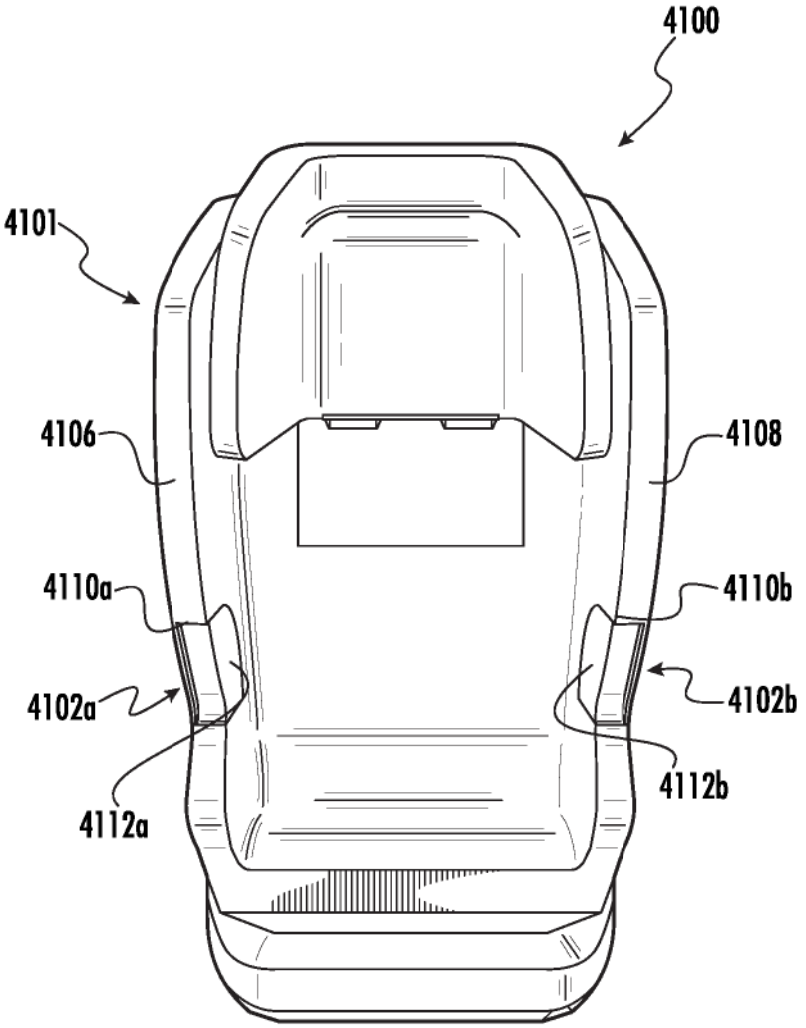


FIG. 44B

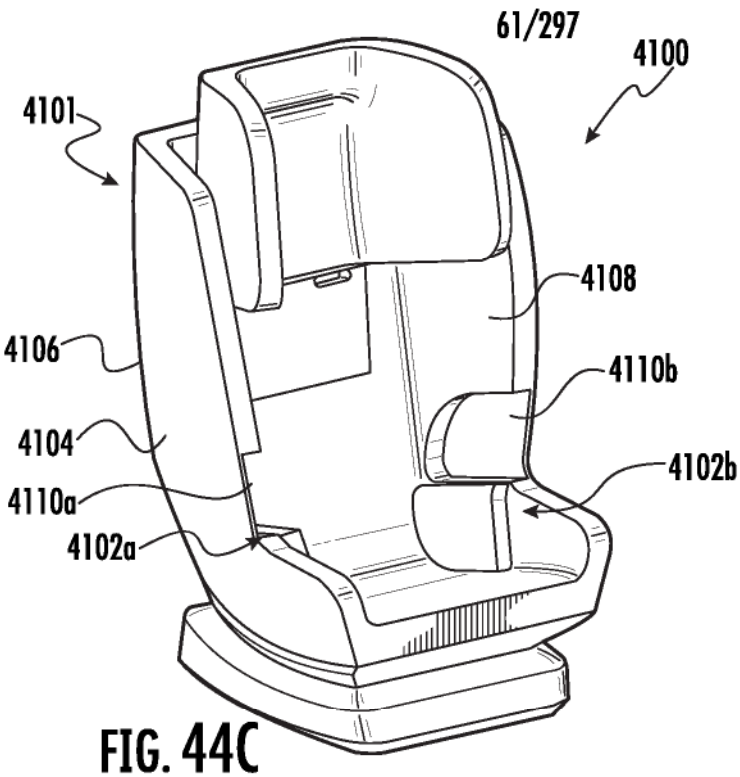


FIG. 44C

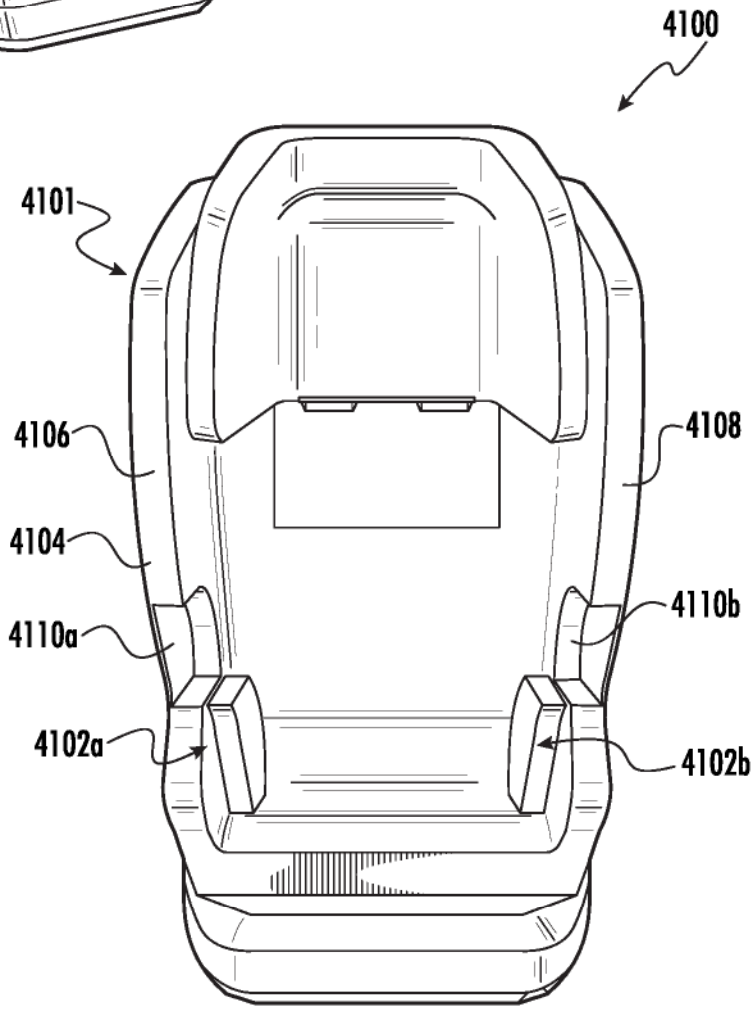


FIG. 44D

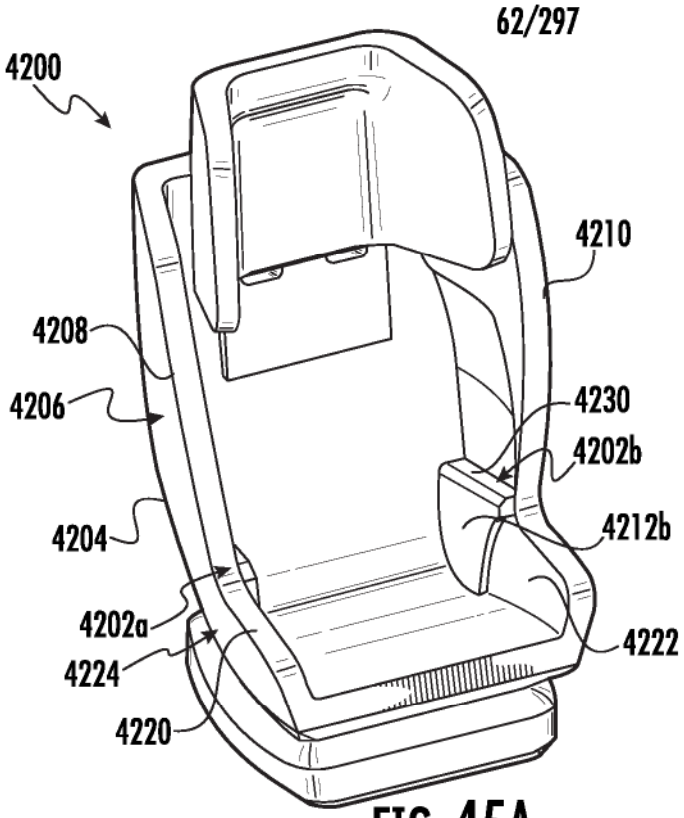


FIG. 45A

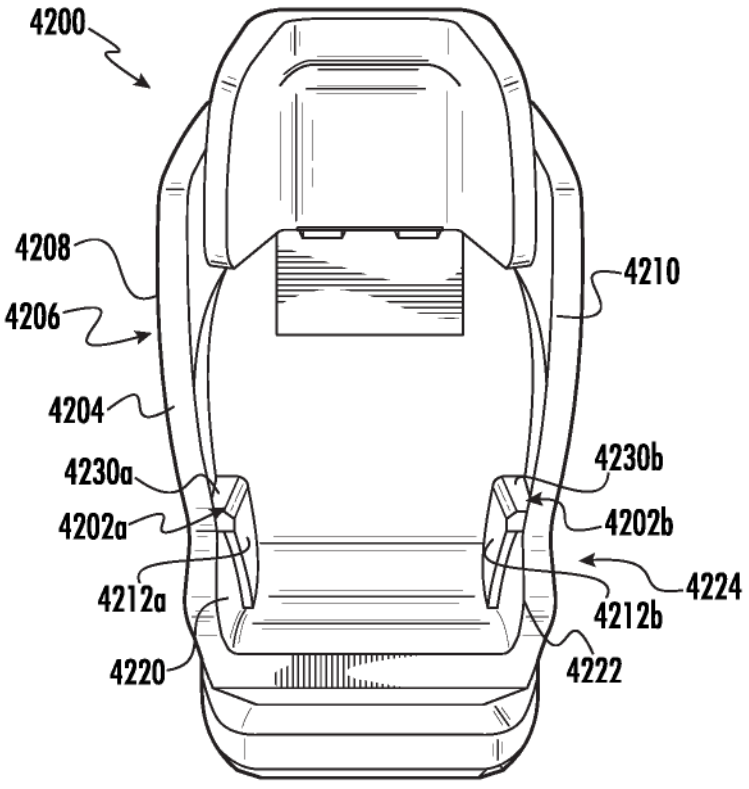


FIG. 45B

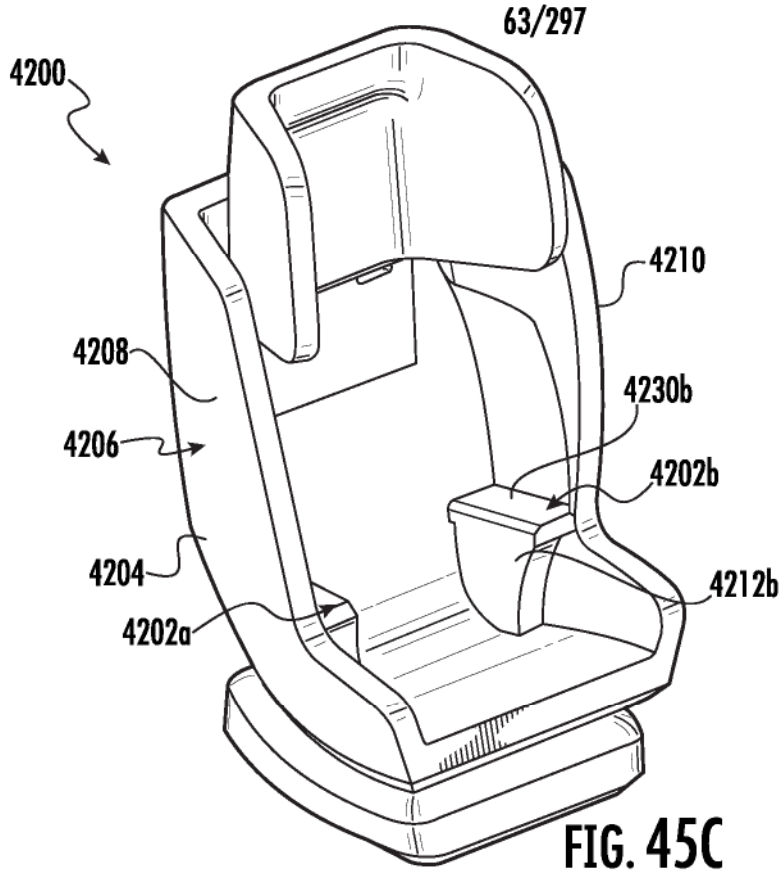


FIG. 45C

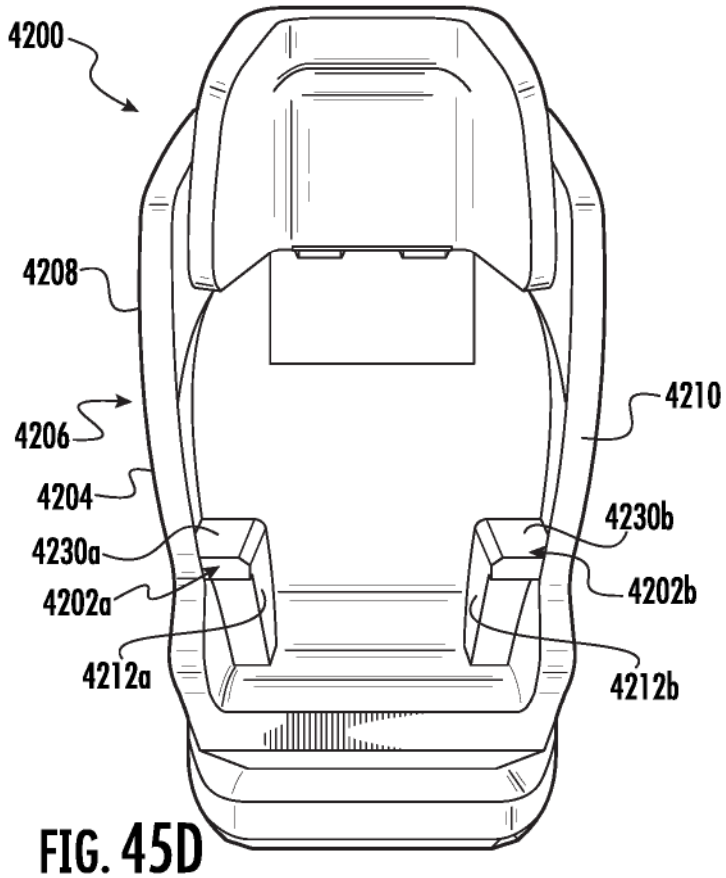


FIG. 45D

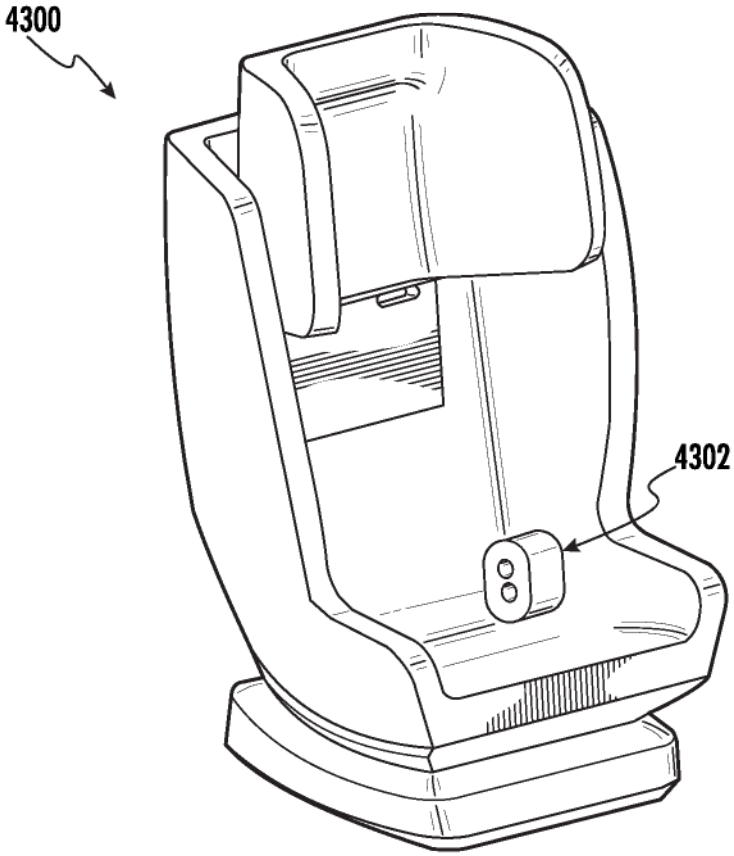


FIG. 46

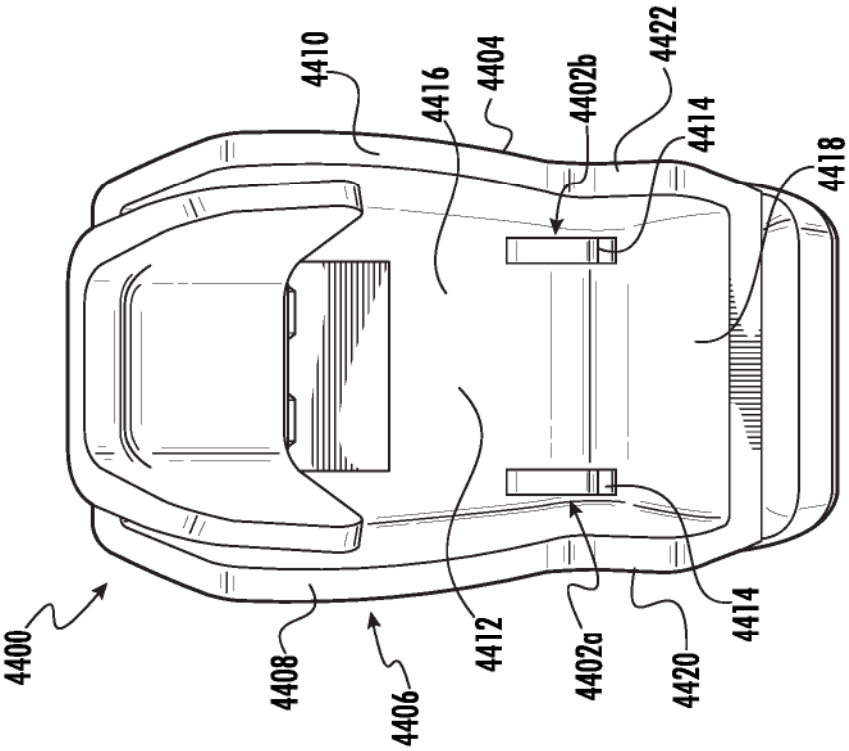


FIG. 47B

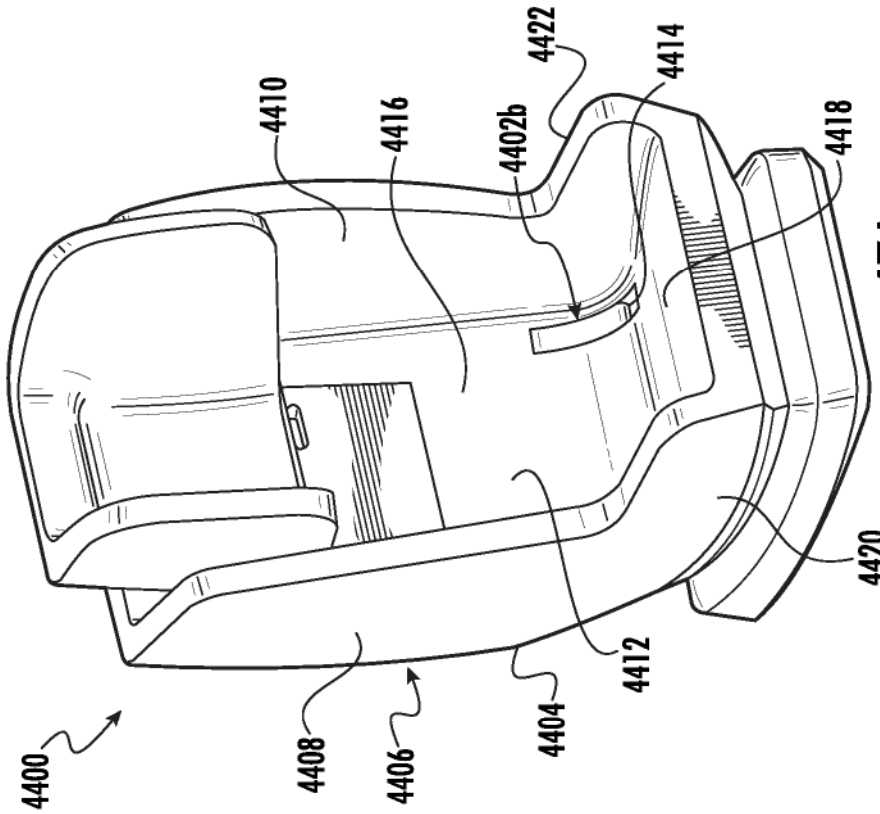


FIG. 47A

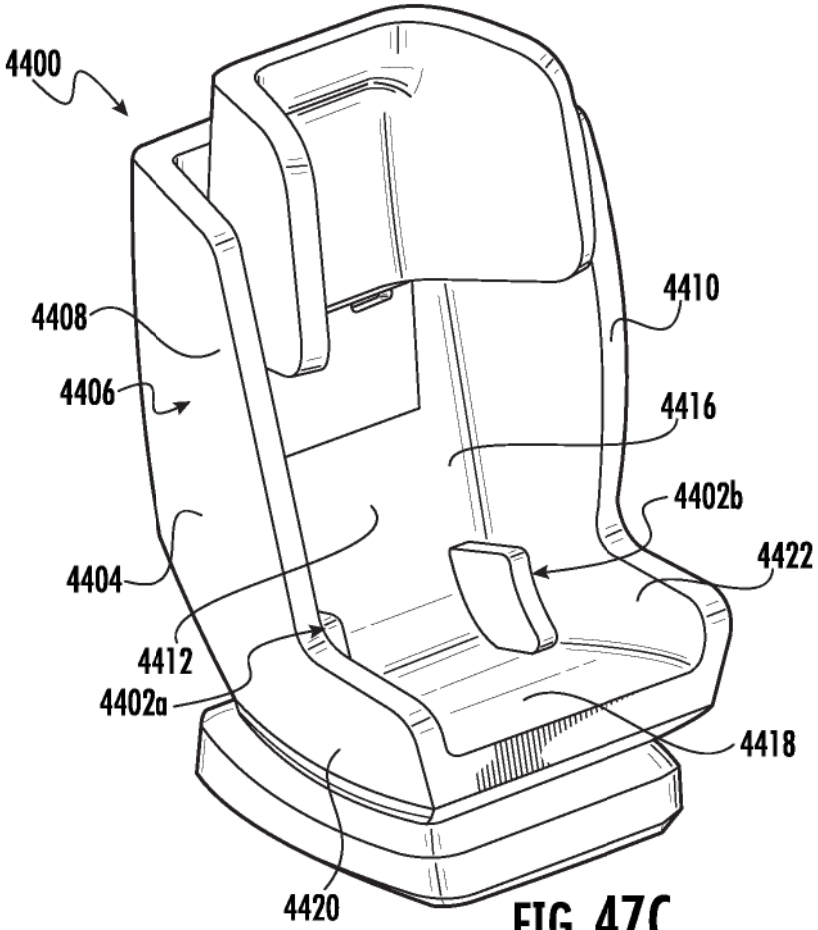


FIG. 47C

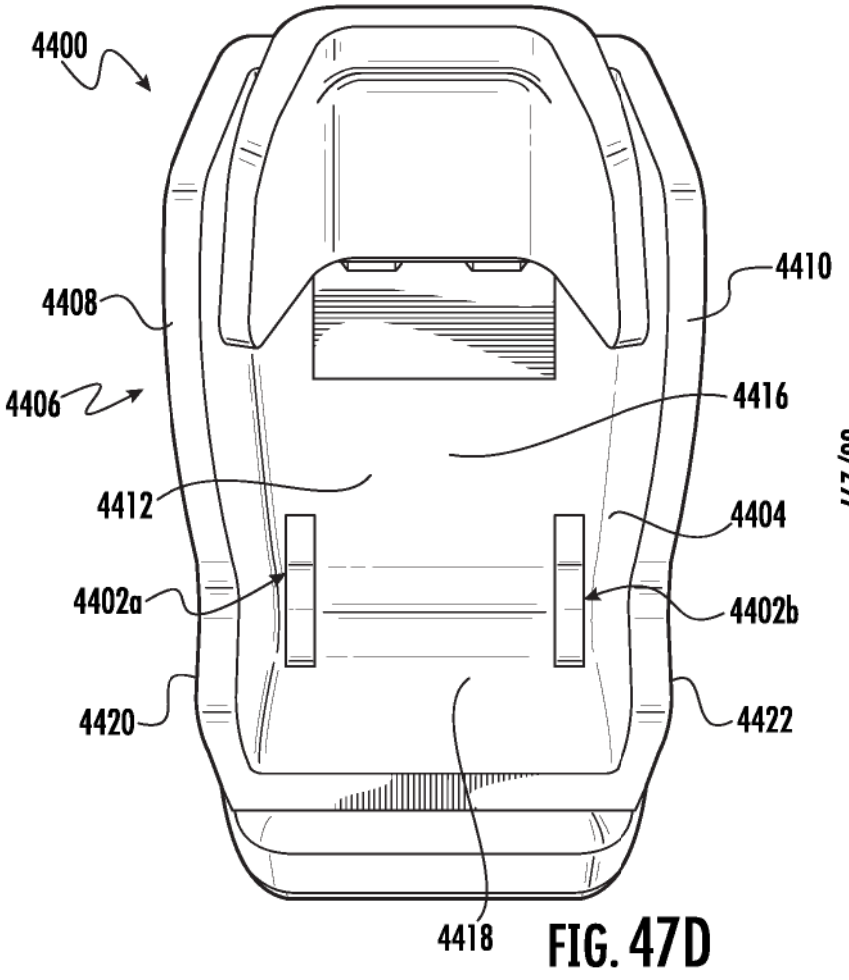


FIG. 47D

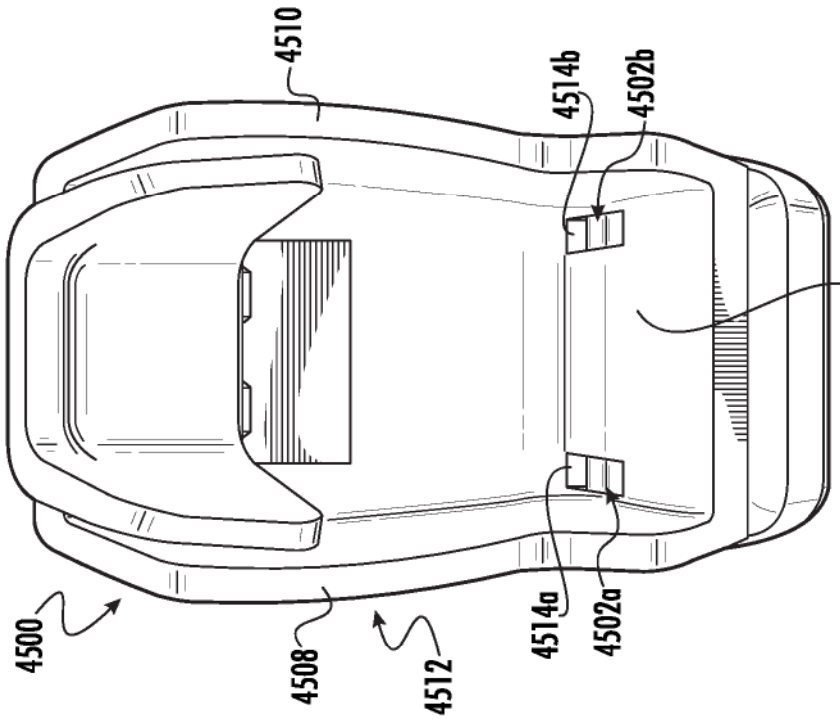


FIG. 48B

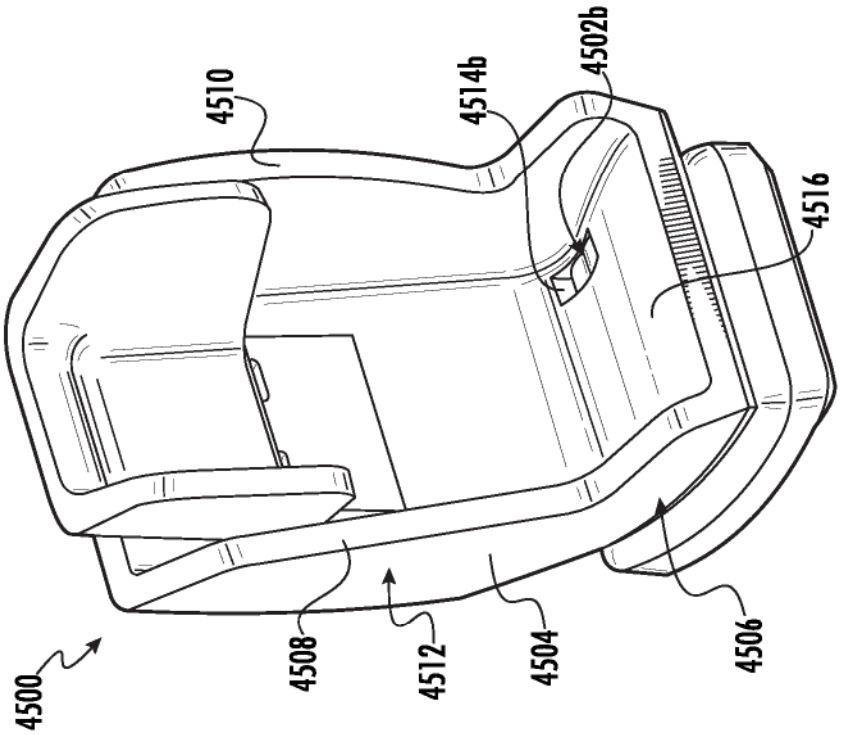


FIG. 48A

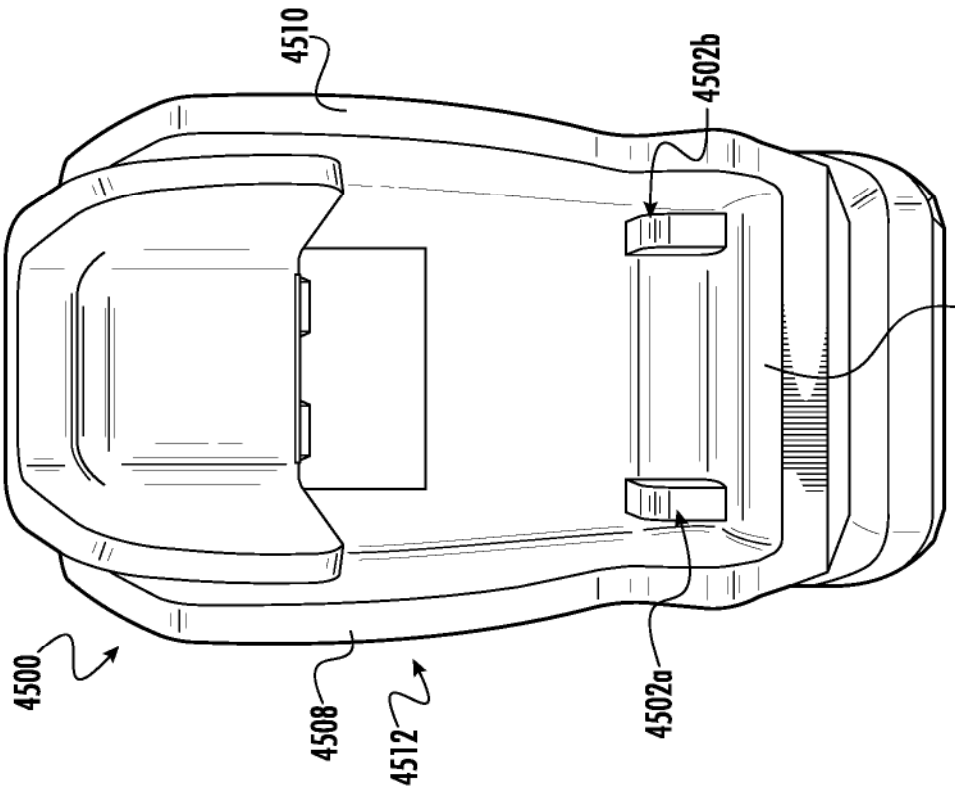


FIG. 48D

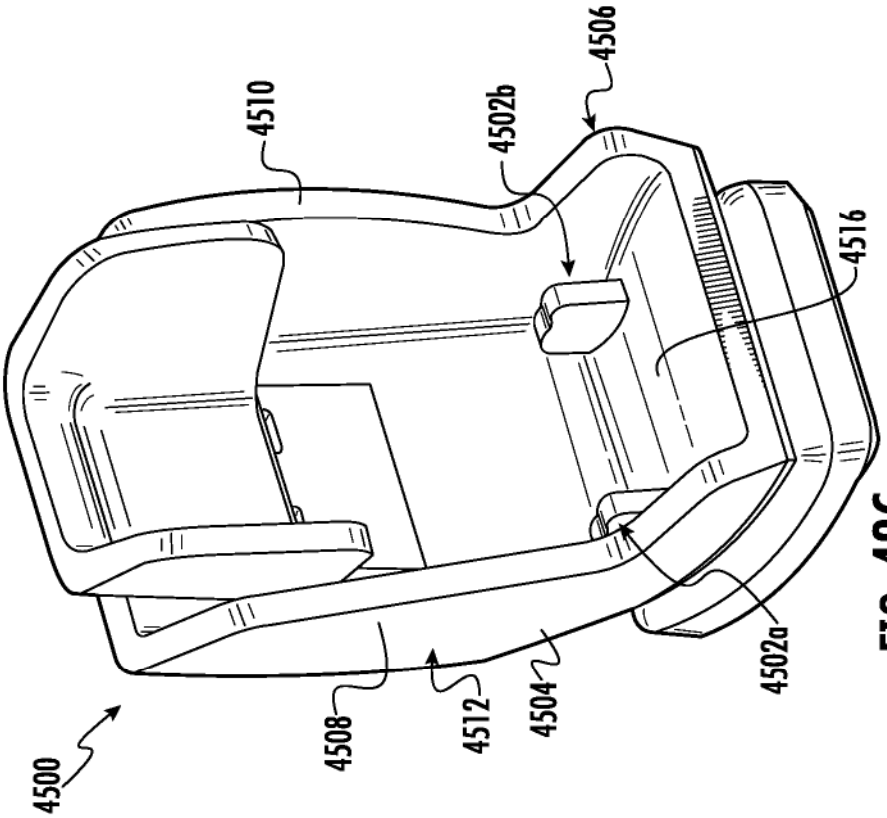


FIG. 48C

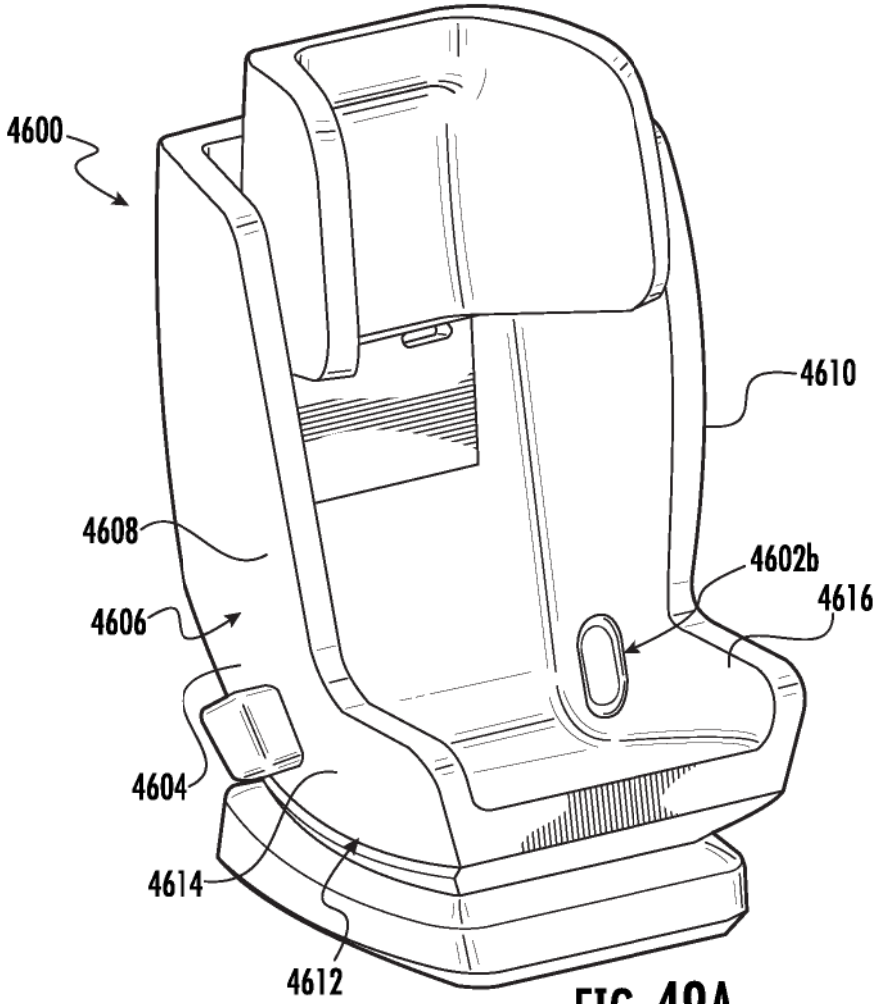


FIG. 49A

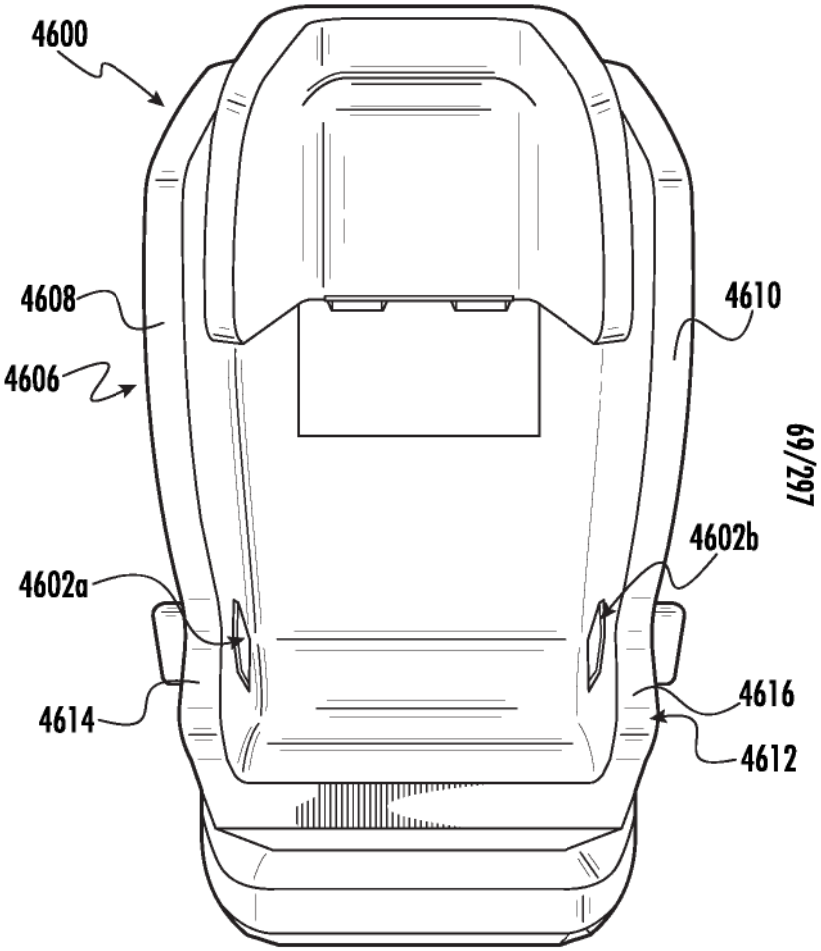


FIG. 49B

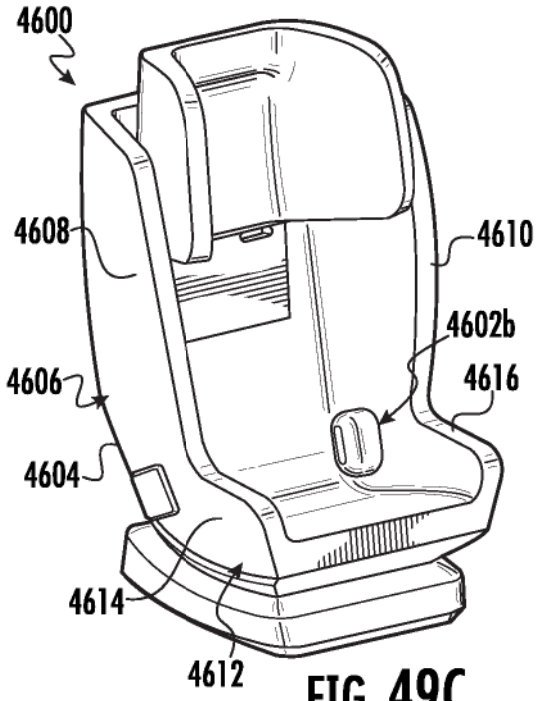


FIG. 49C

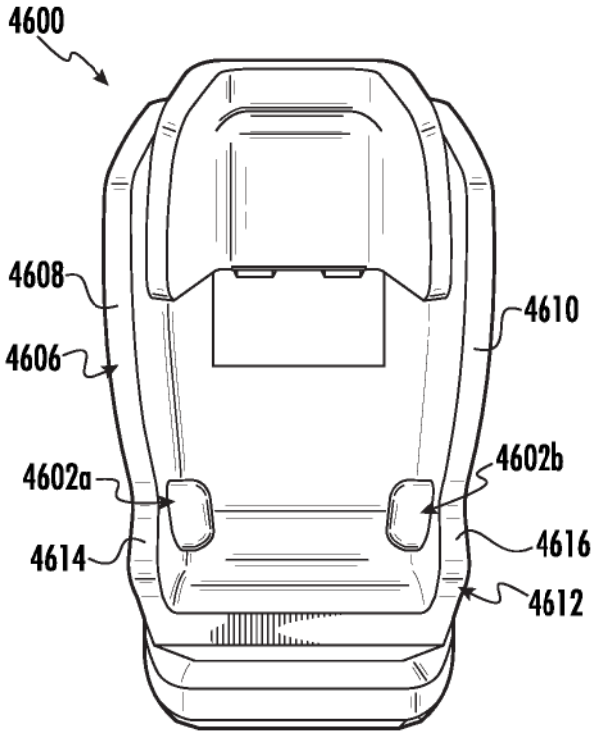


FIG. 49D

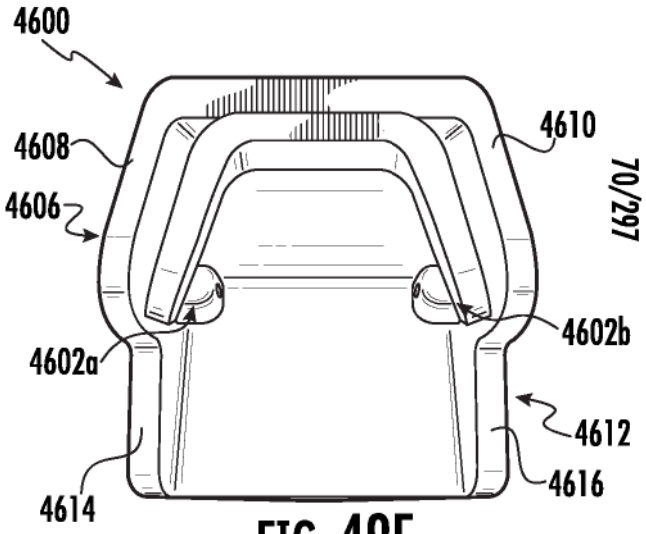


FIG. 49E

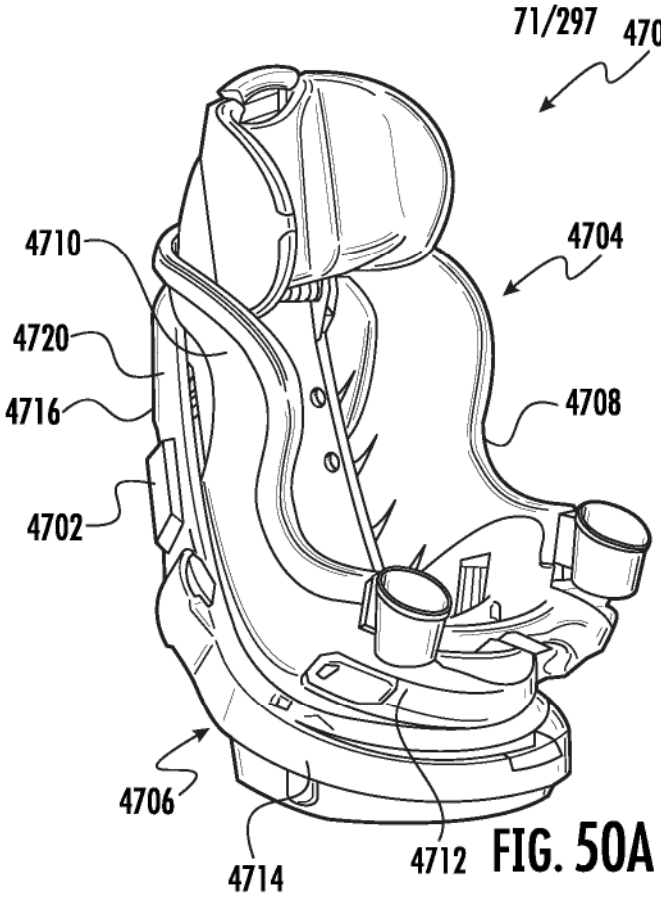


FIG. 50A

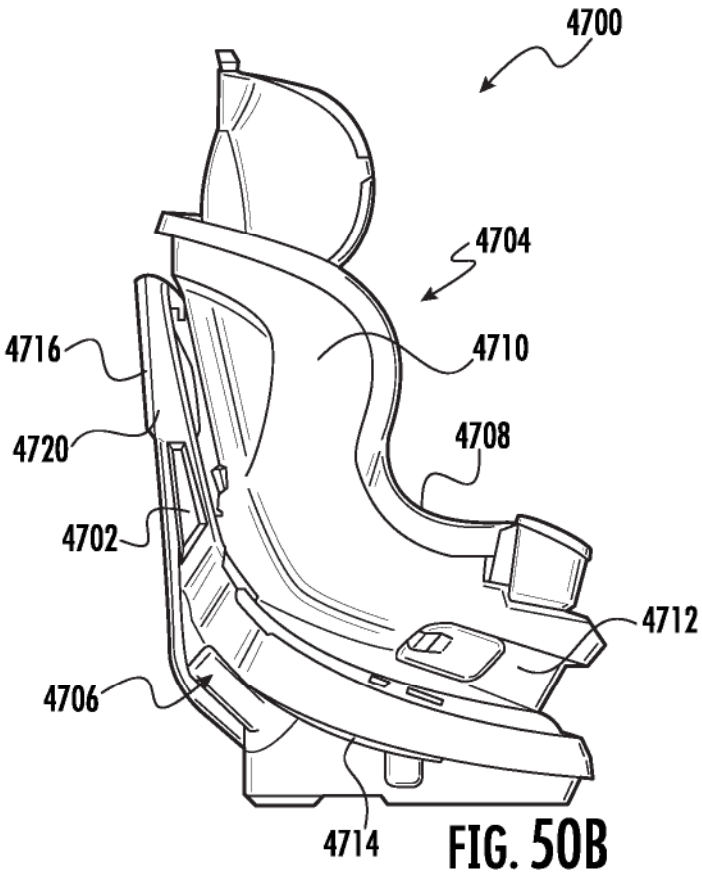


FIG. 50B

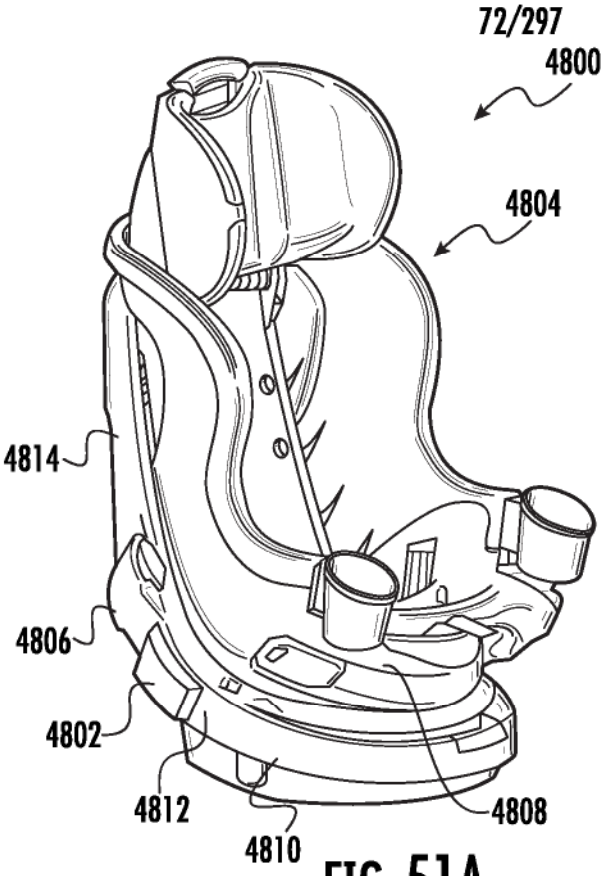


FIG. 51A

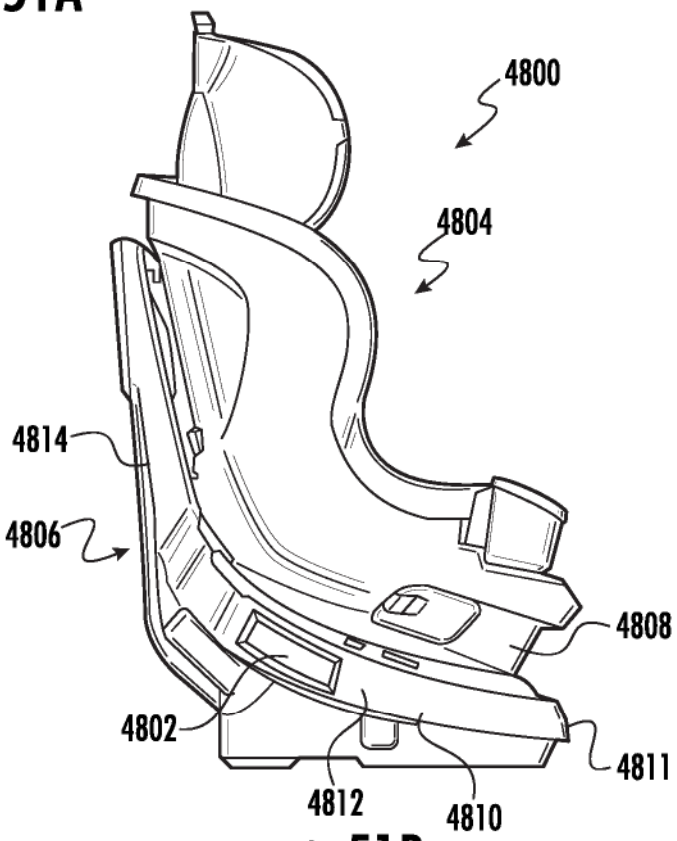


FIG. 51B

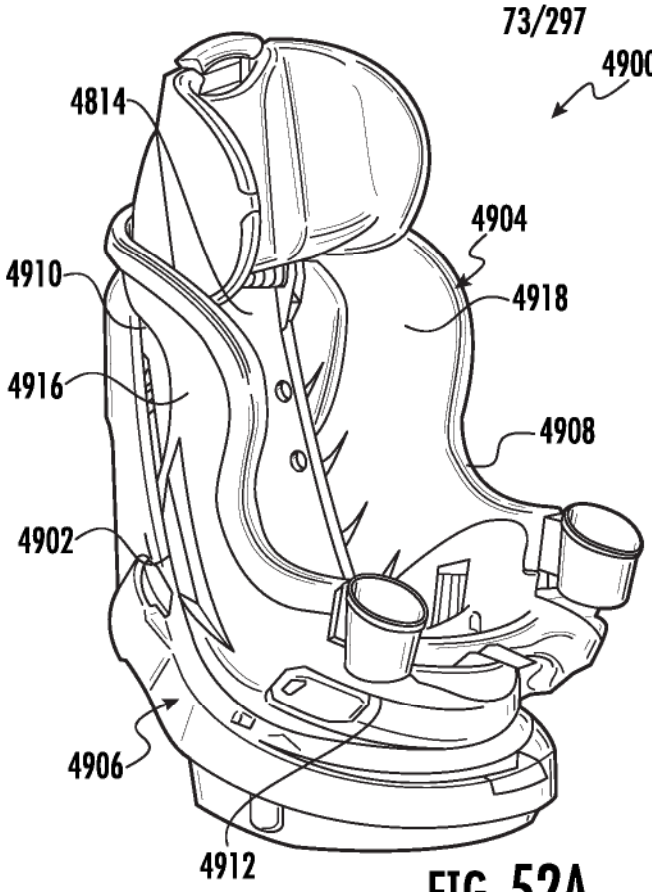


FIG. 52A

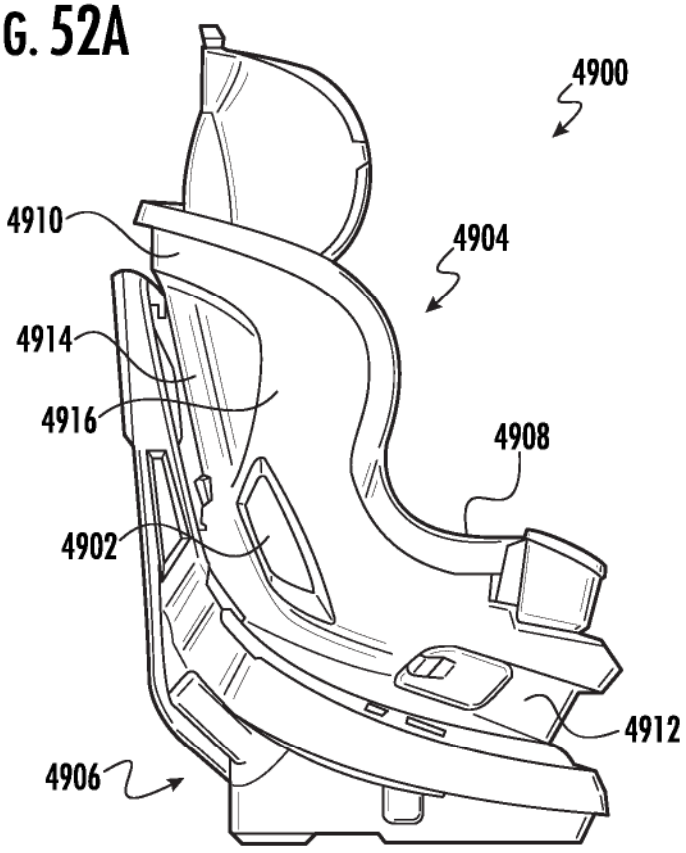


FIG. 52B

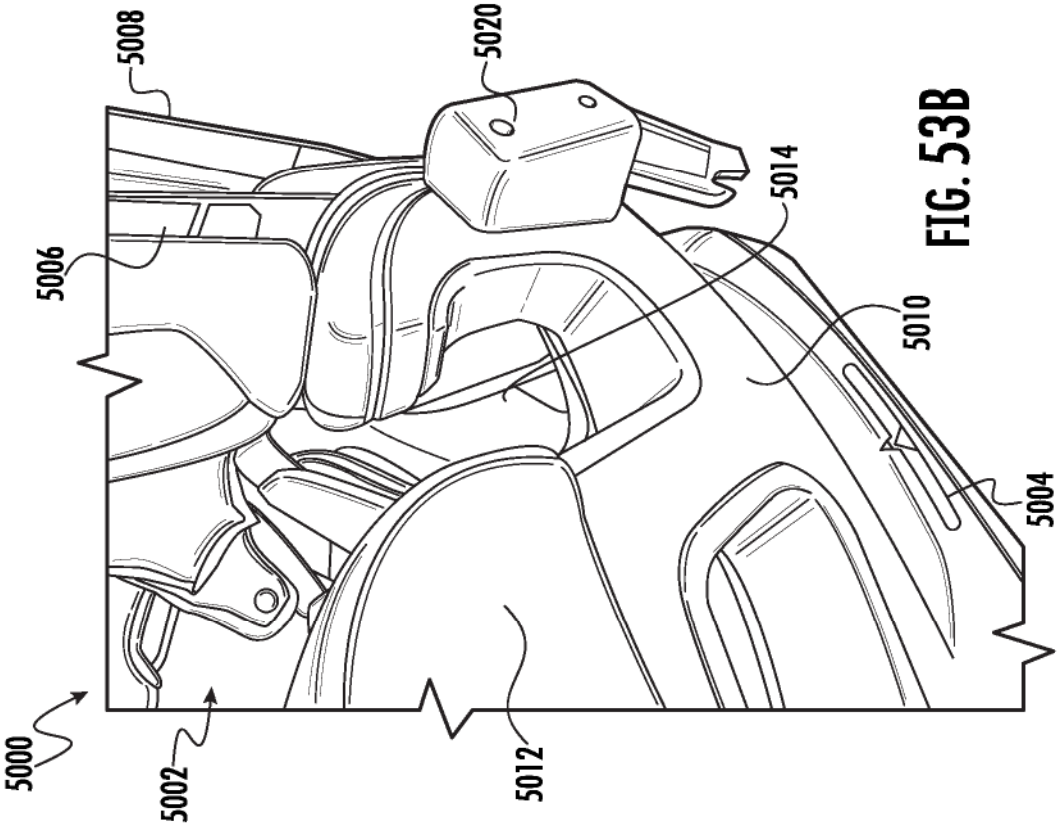


FIG. 53B

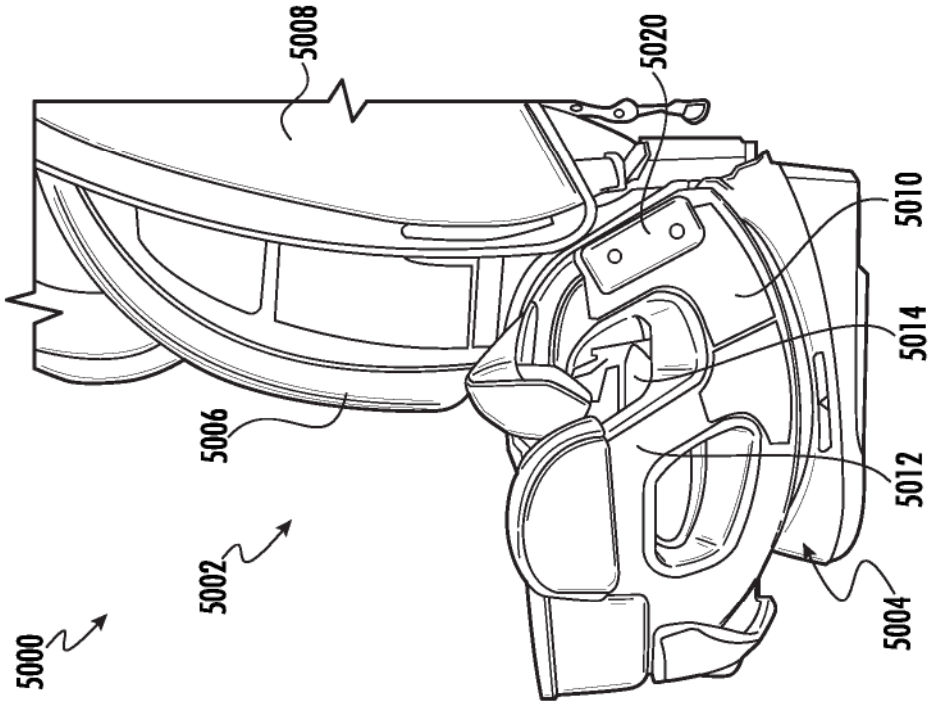


FIG. 53A

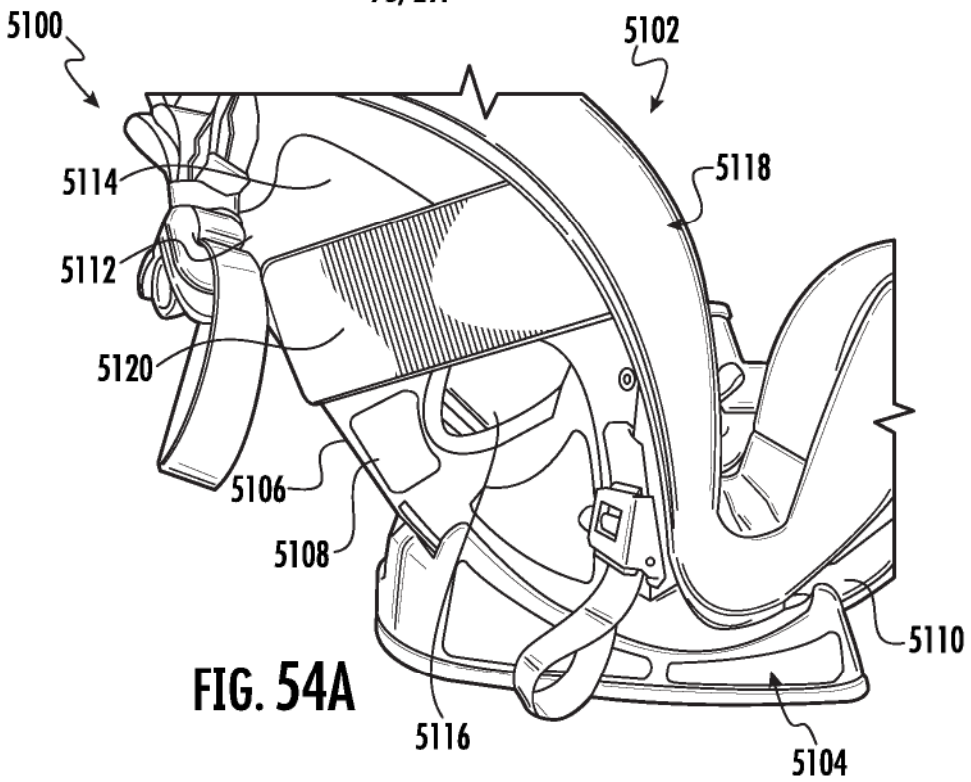


FIG. 54A

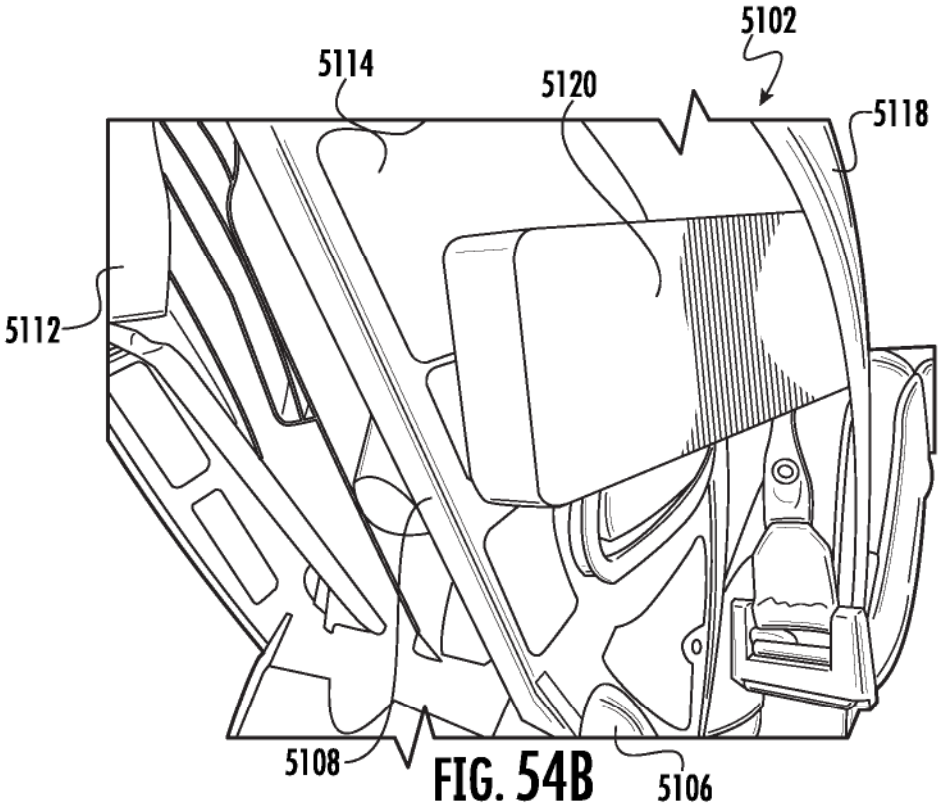


FIG. 54B

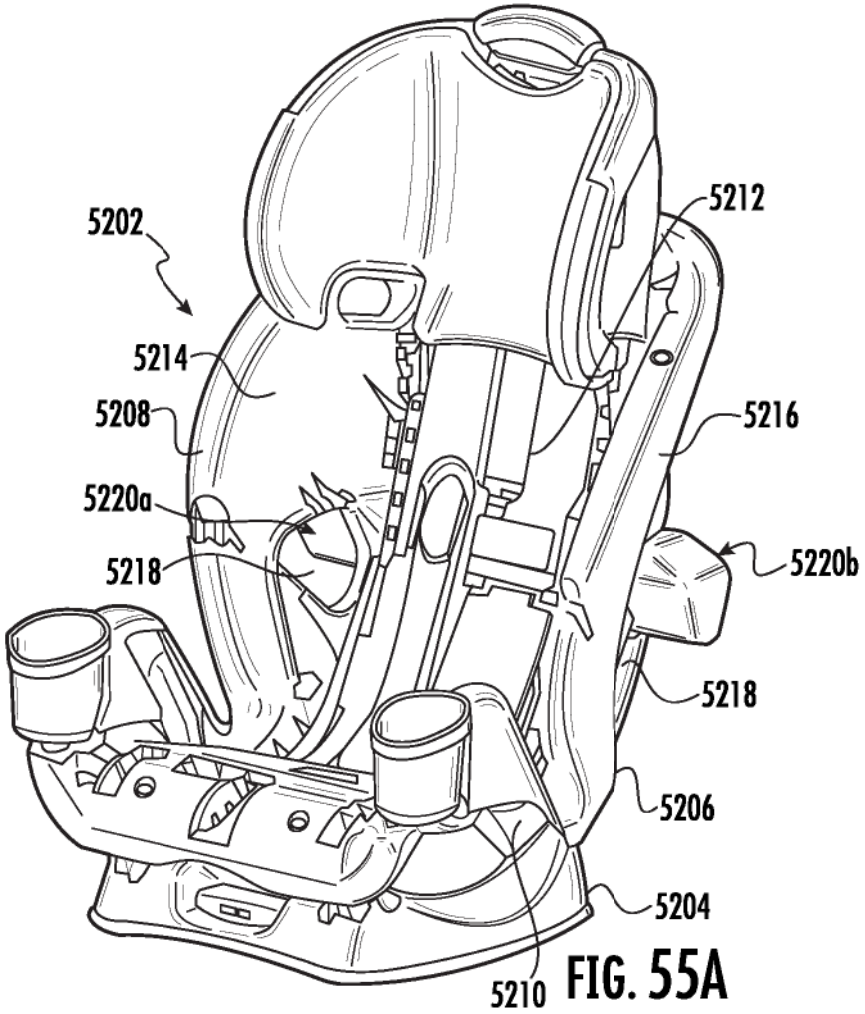


FIG. 55A

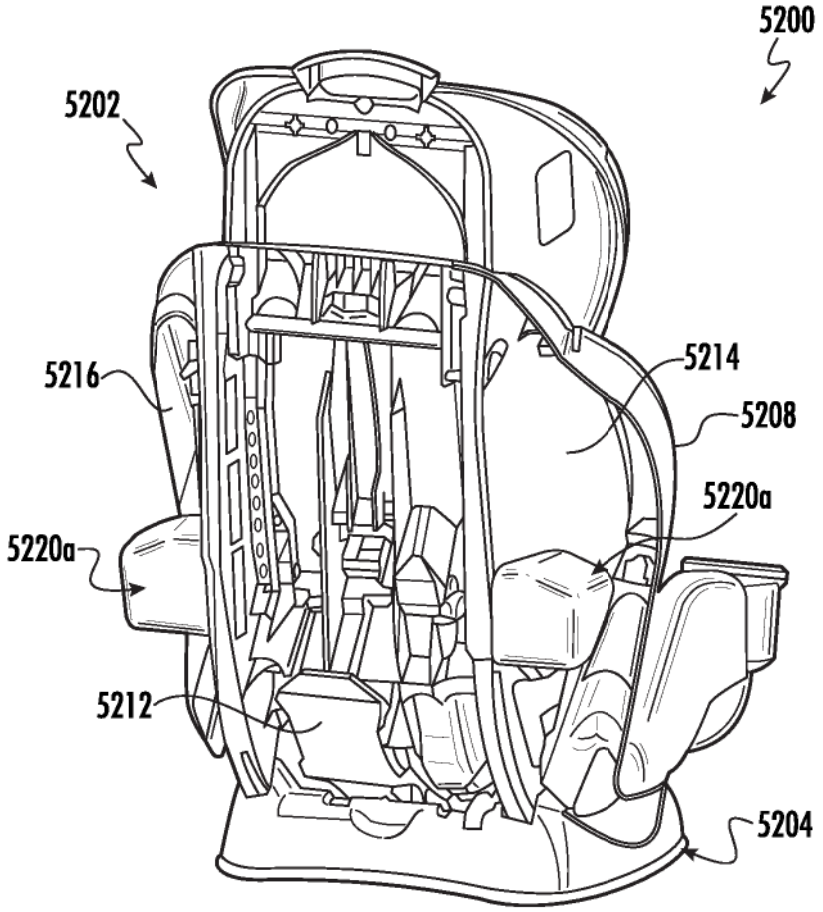


FIG. 55B

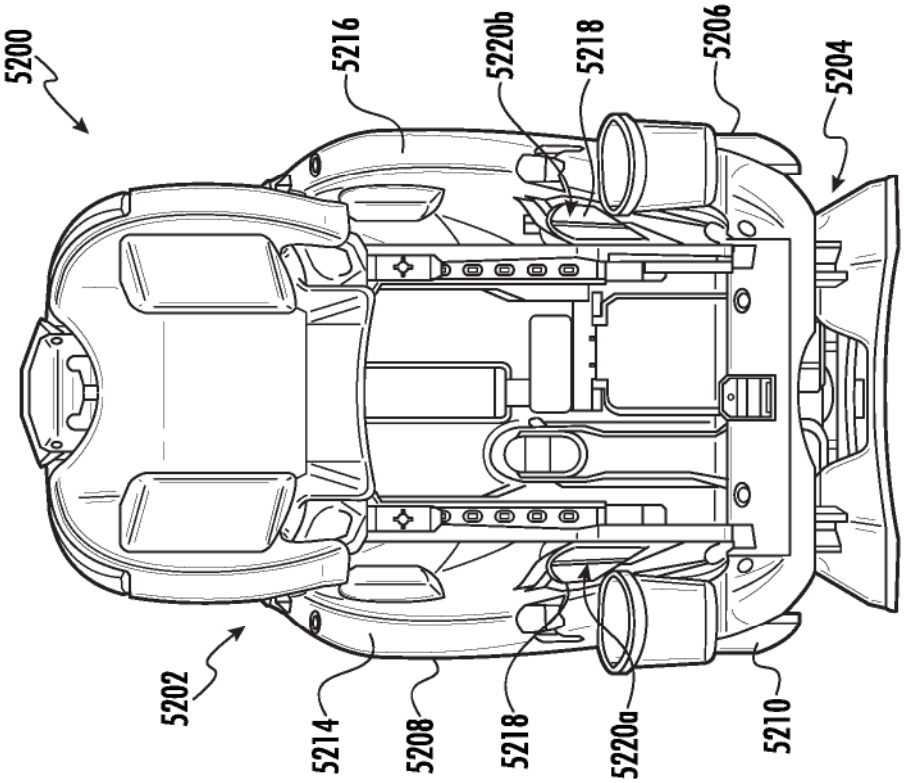


FIG. 55C

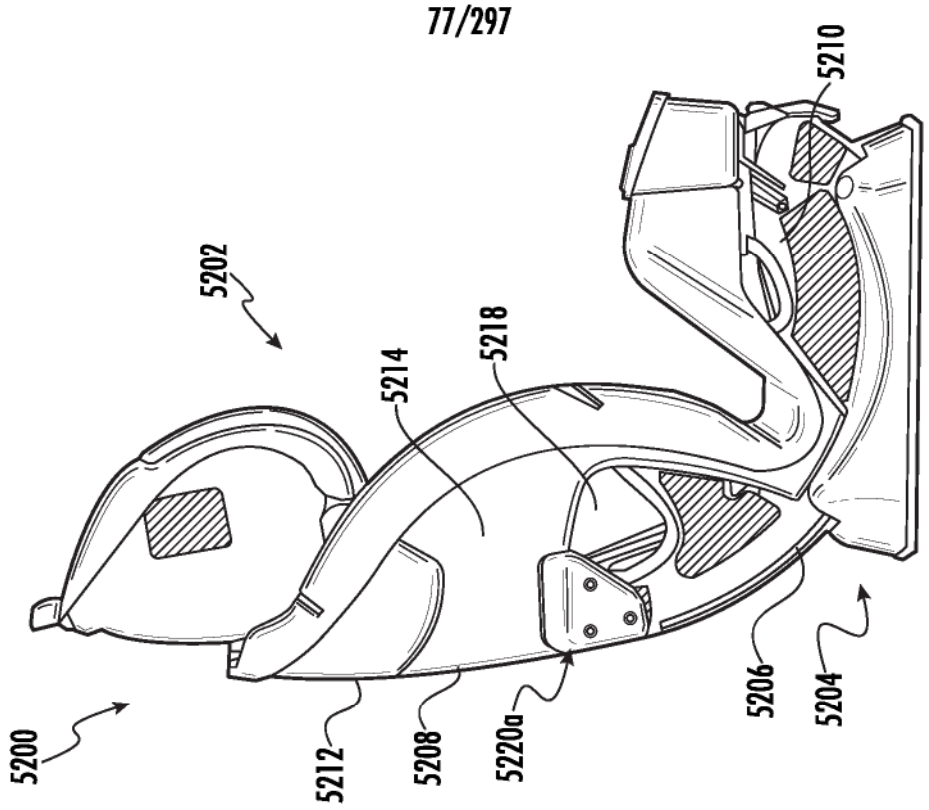


FIG. 55D

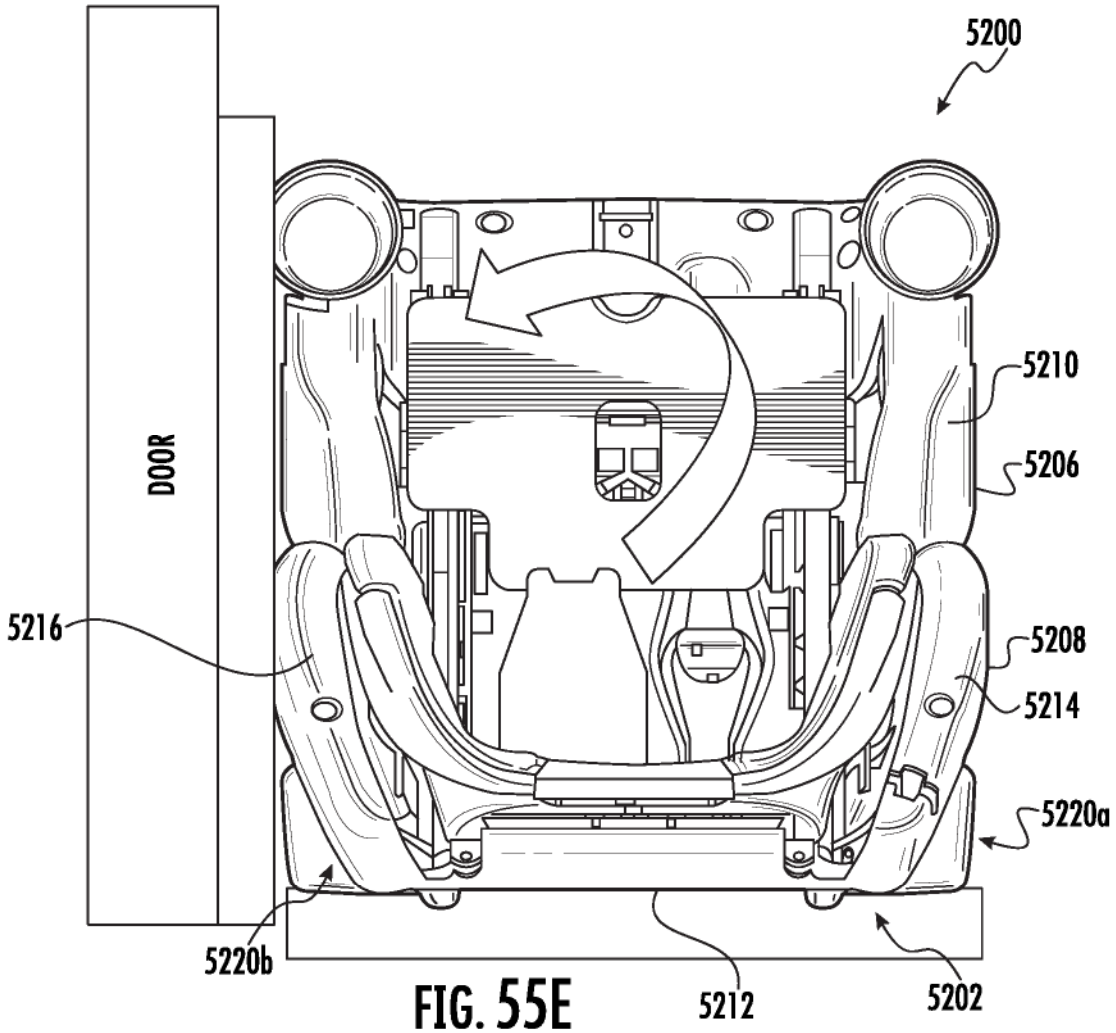


FIG. 55E

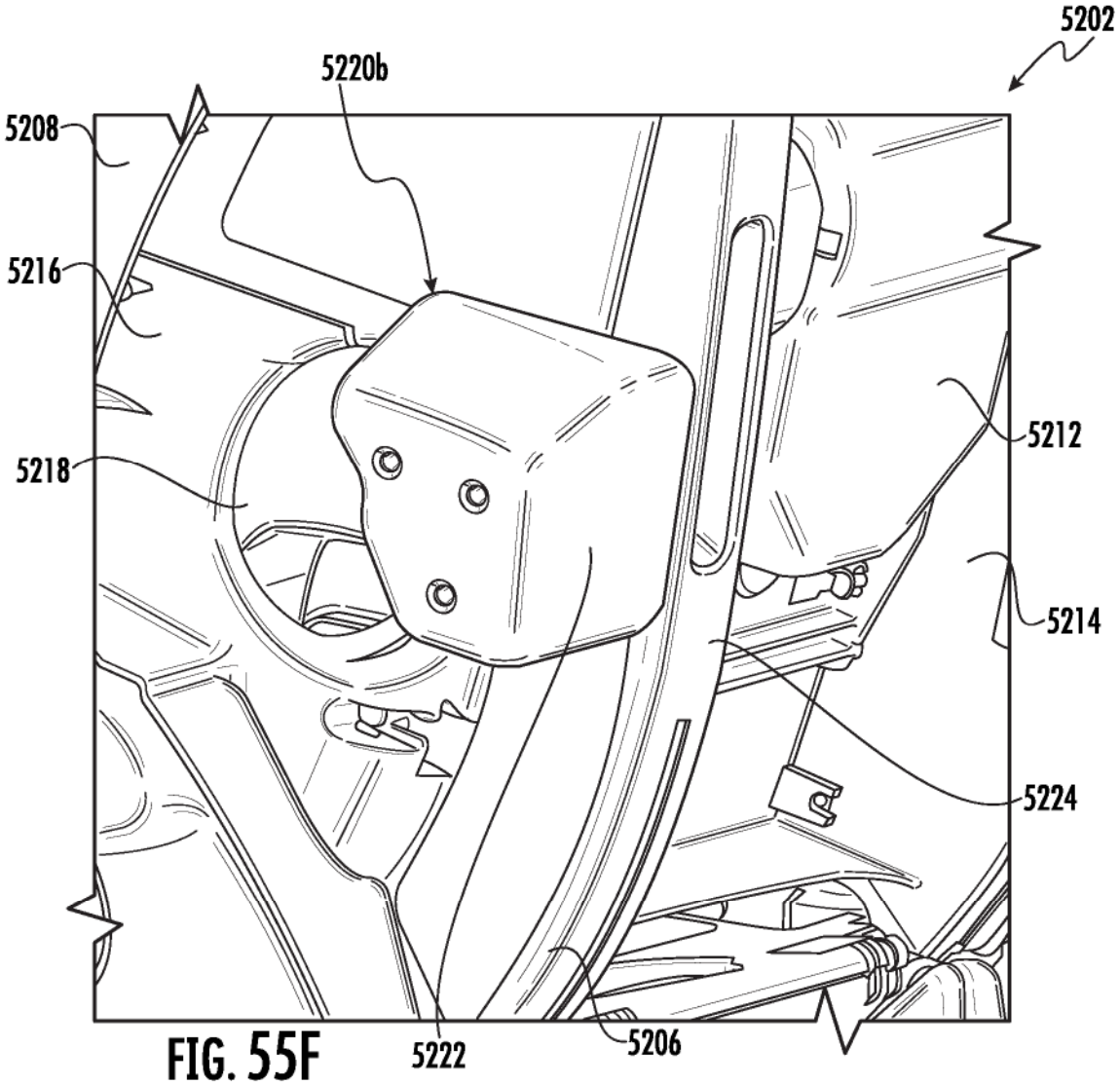


FIG. 55F

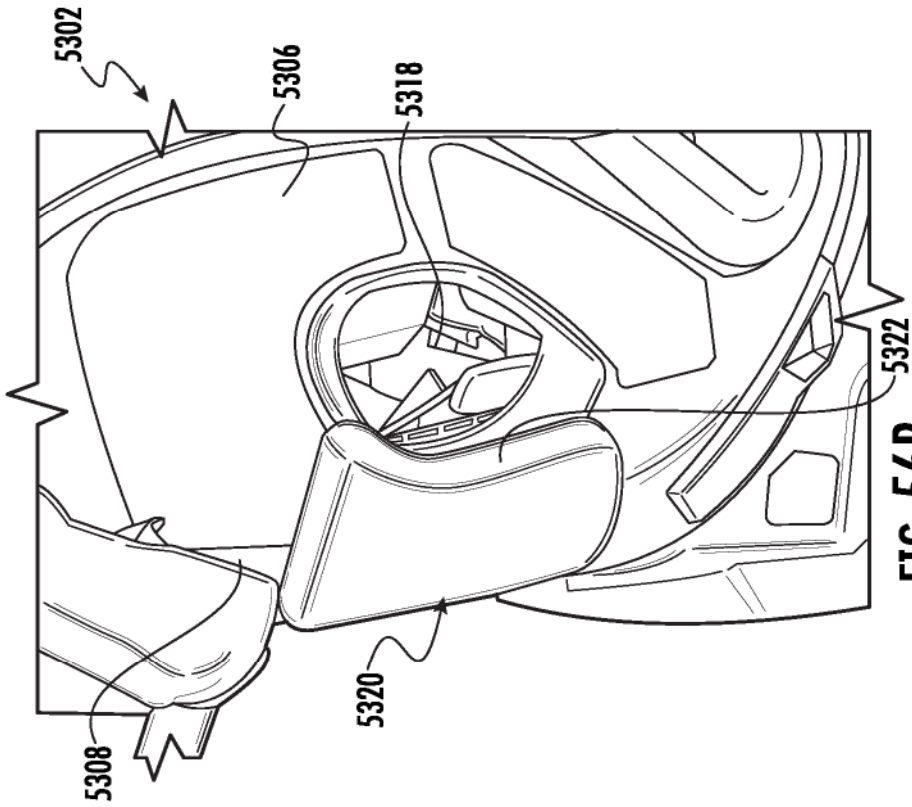


FIG. 56B

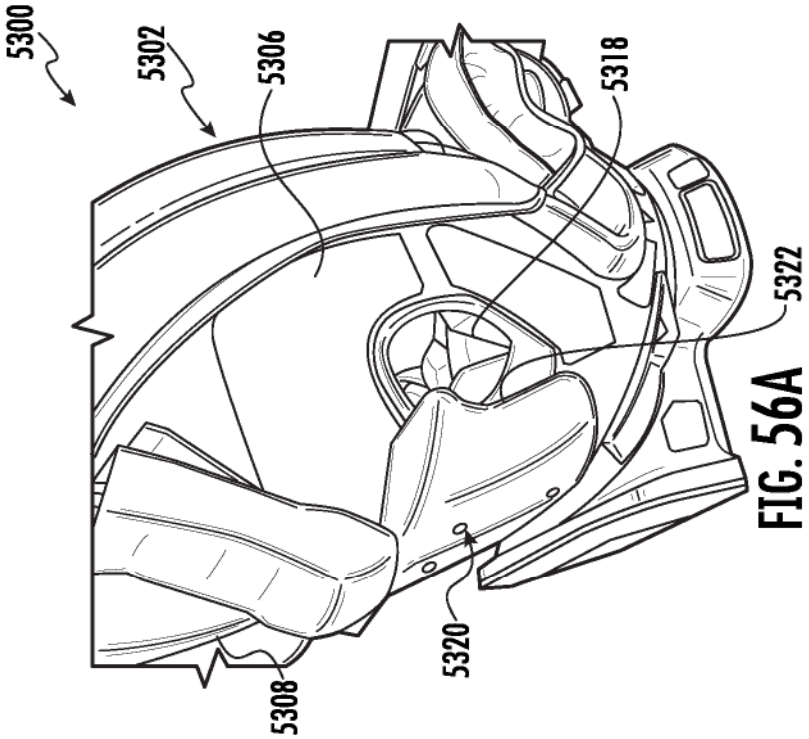


FIG. 56A

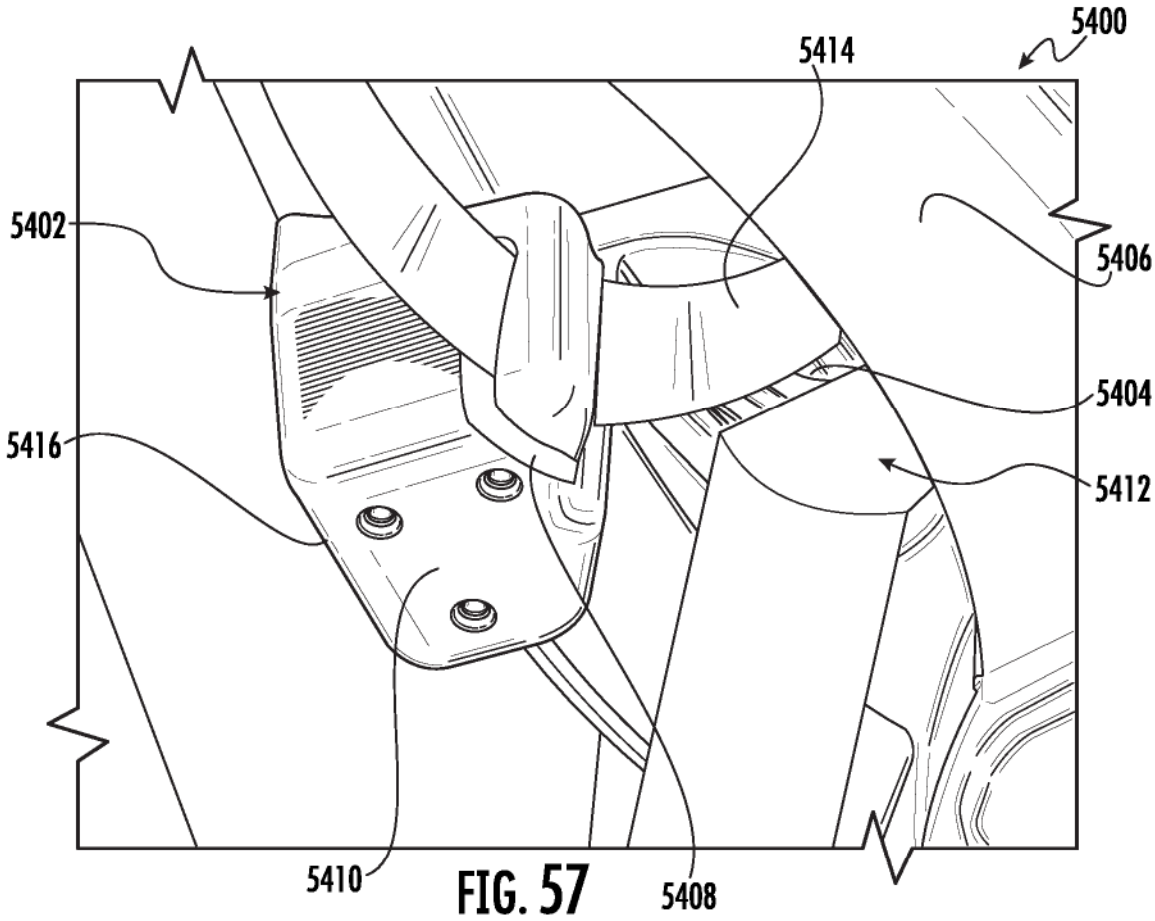


FIG. 57

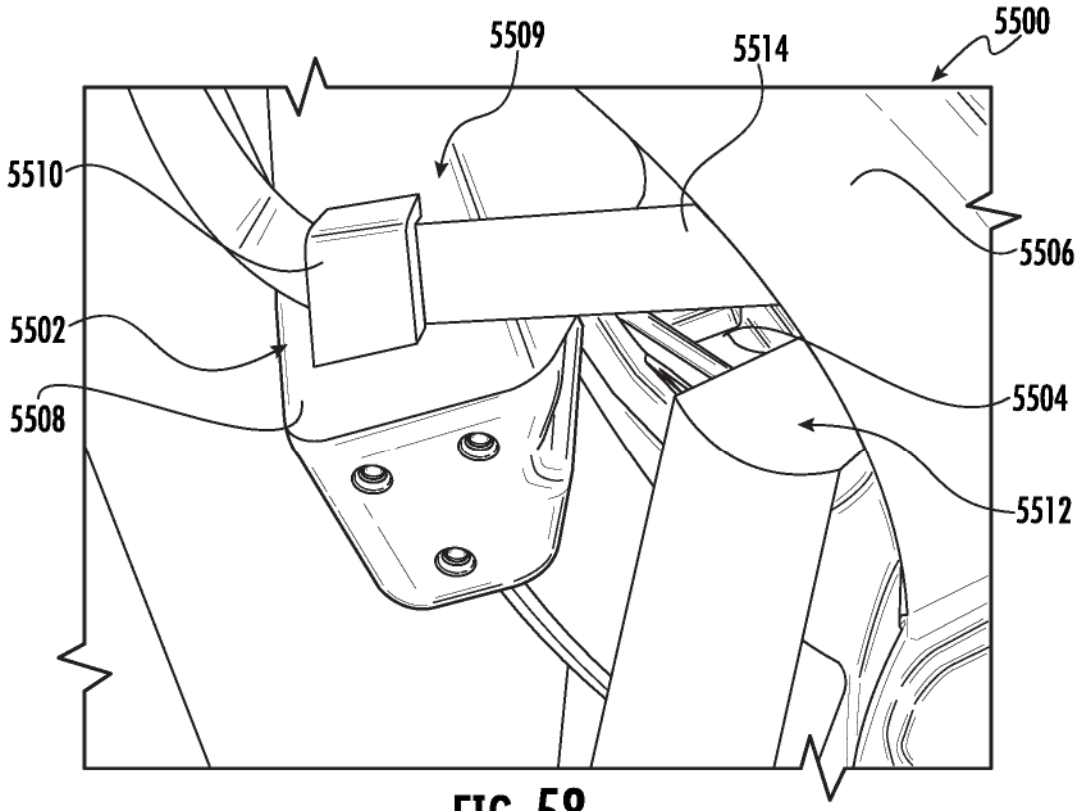


FIG. 58

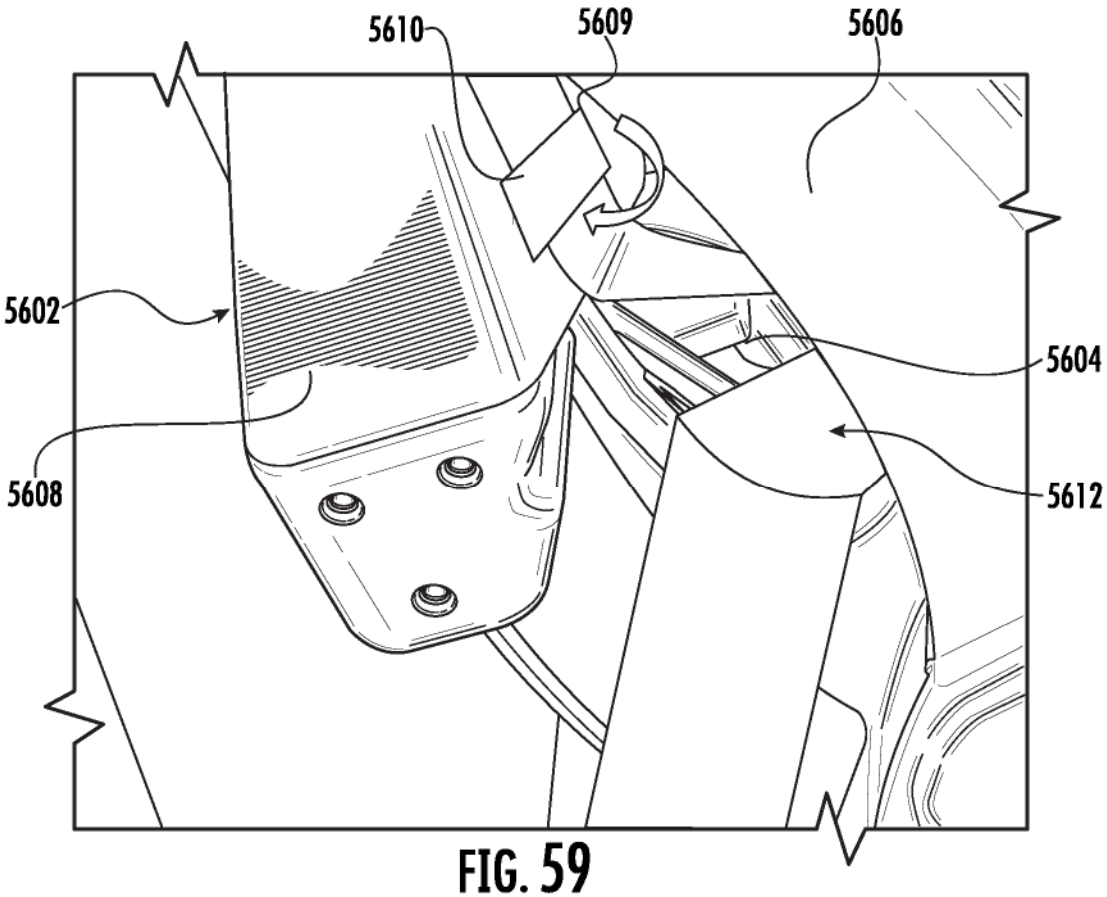


FIG. 59

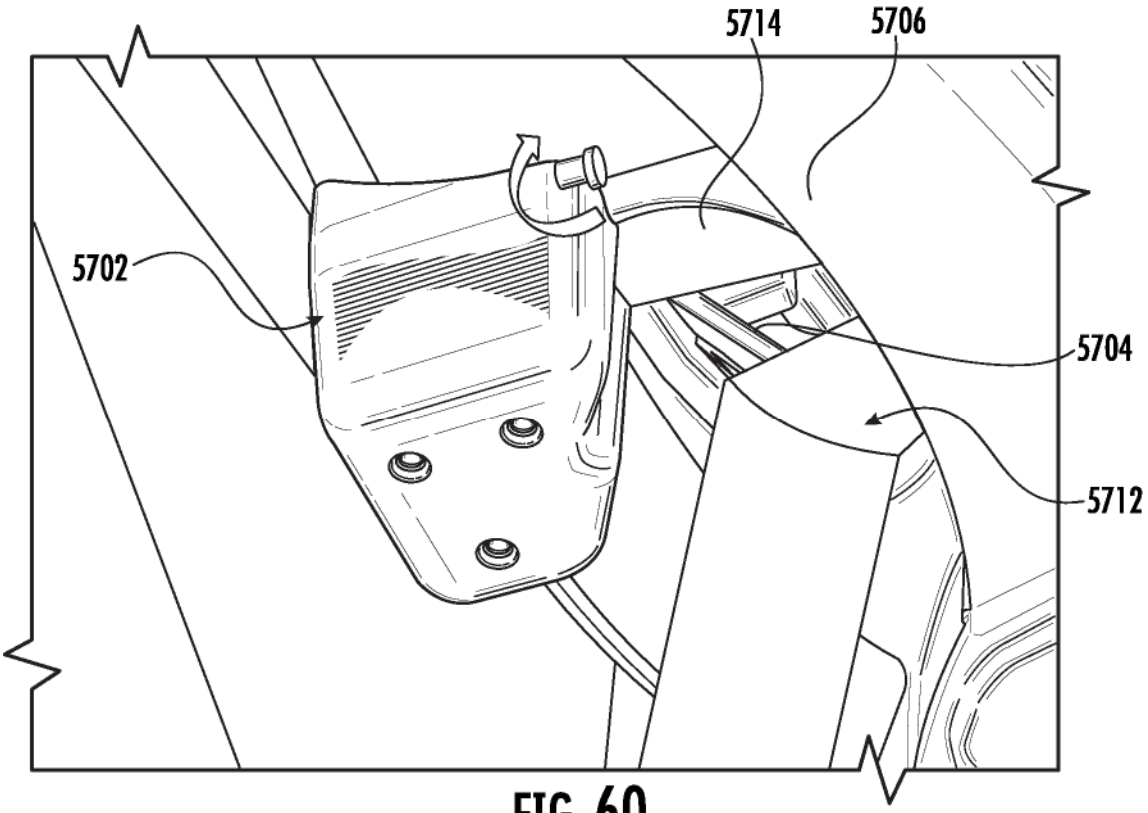


FIG. 60

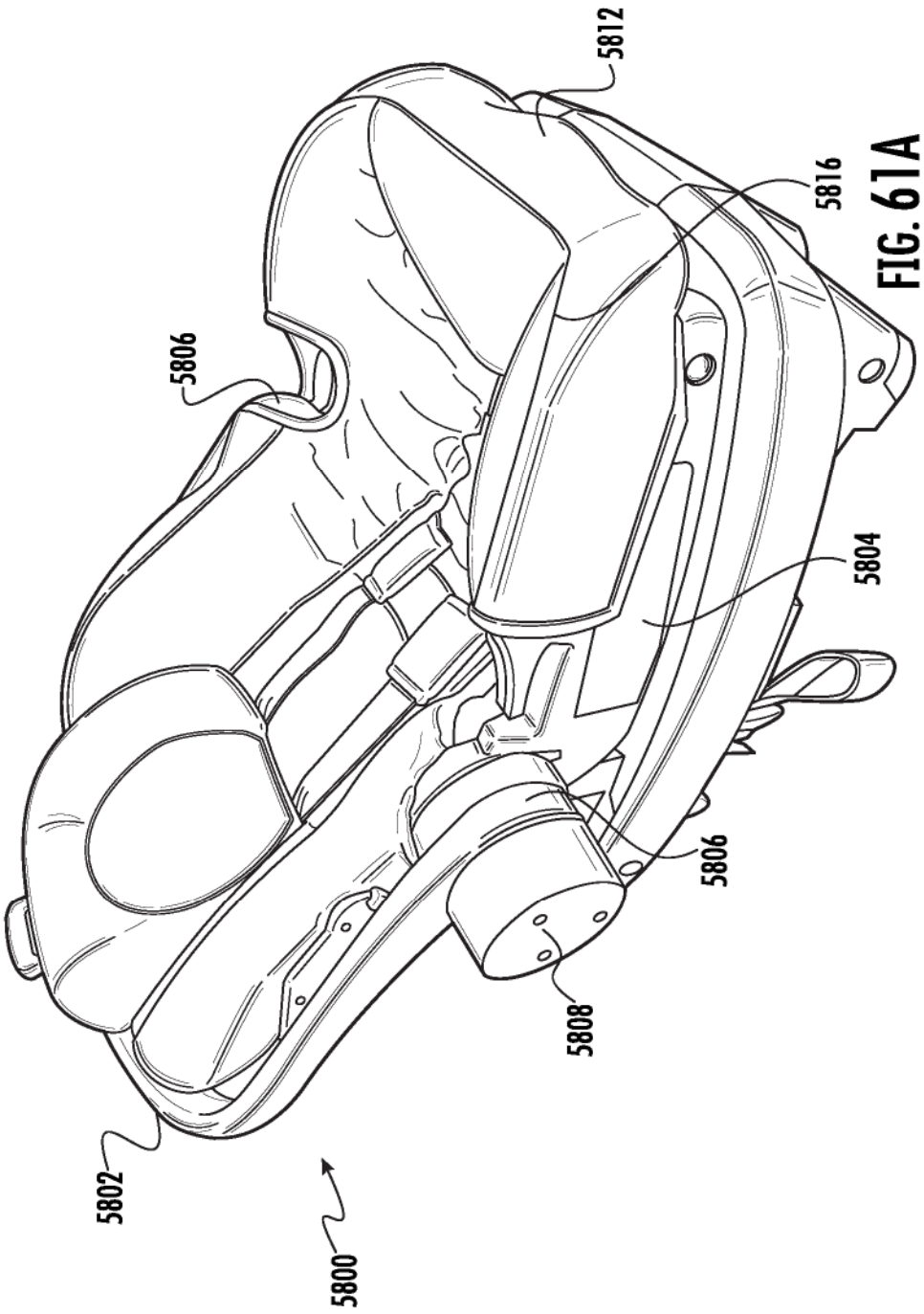


FIG. 61A

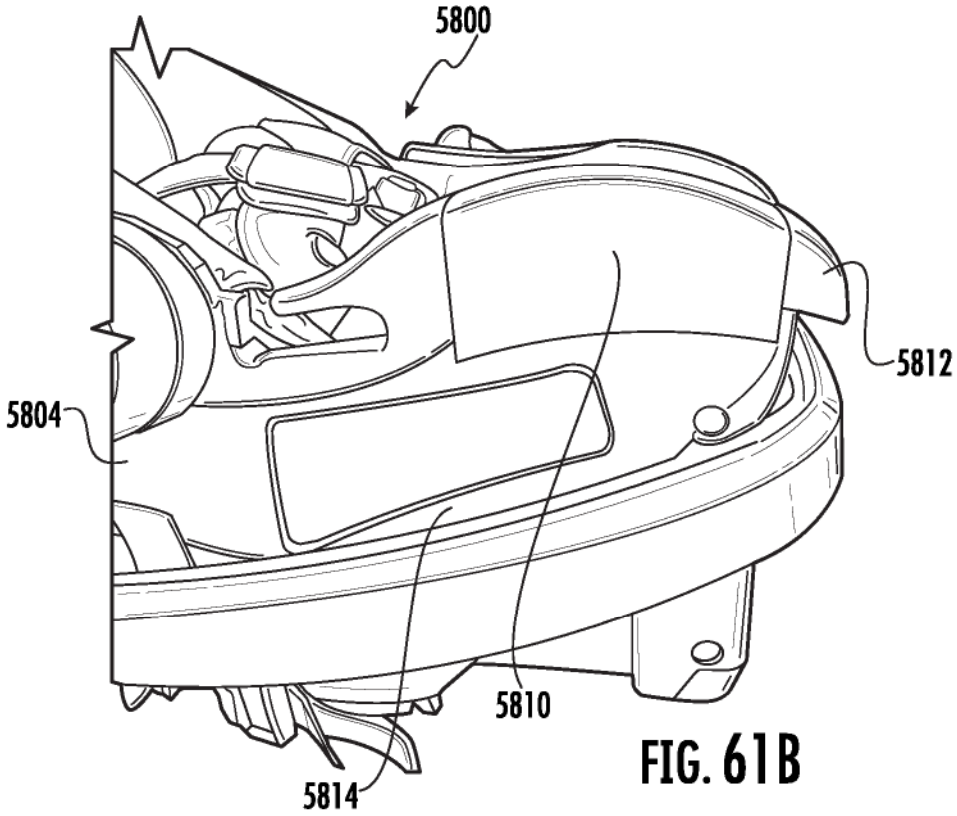


FIG. 61B

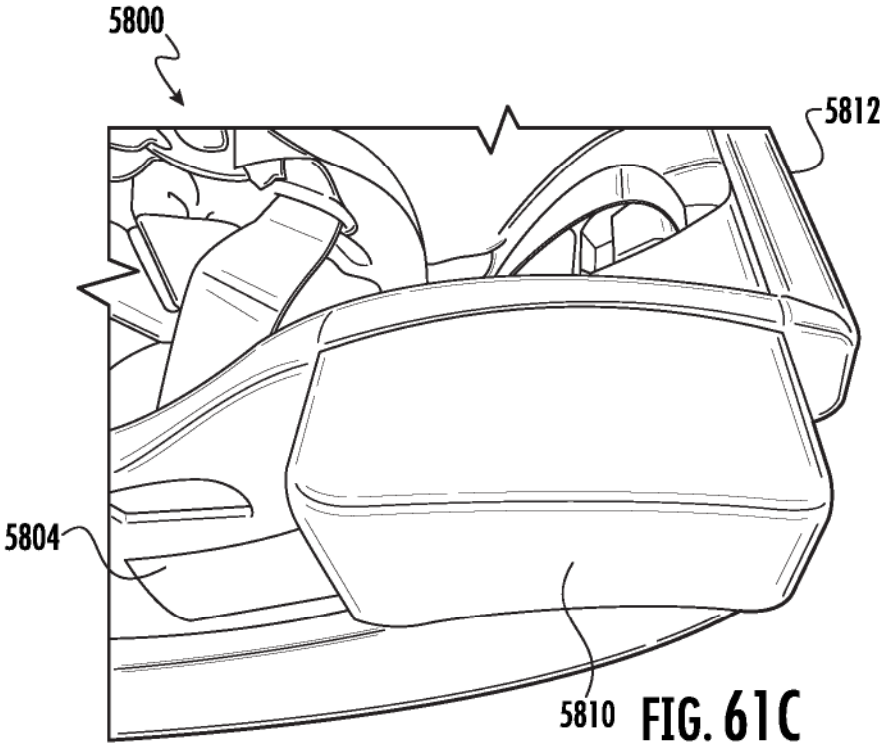


FIG. 61C

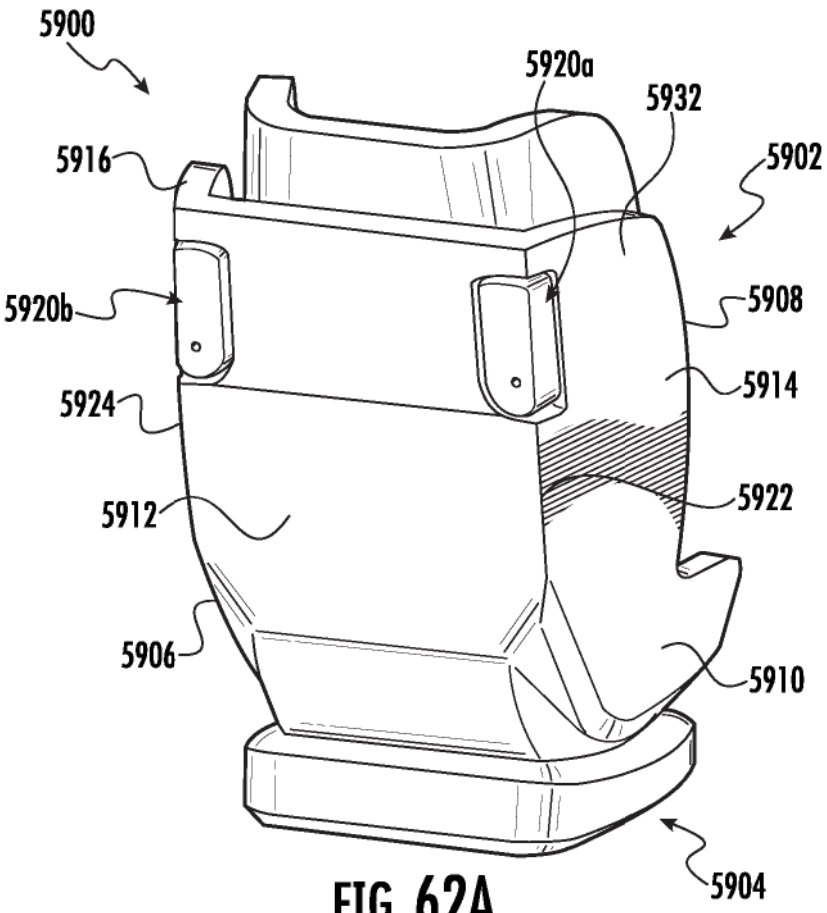


FIG. 62A

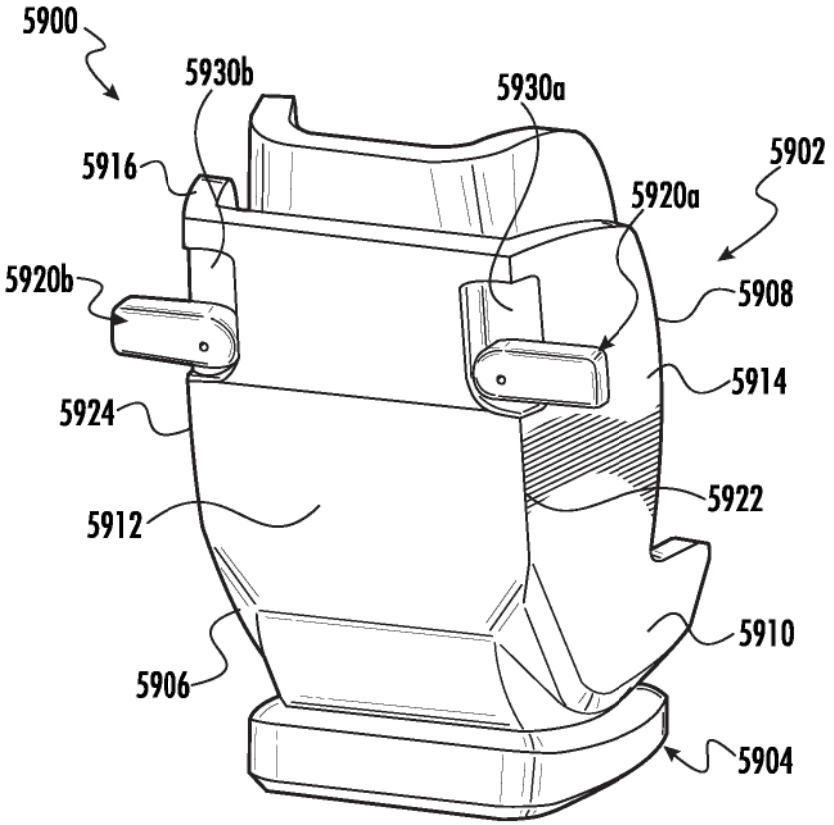


FIG. 62B

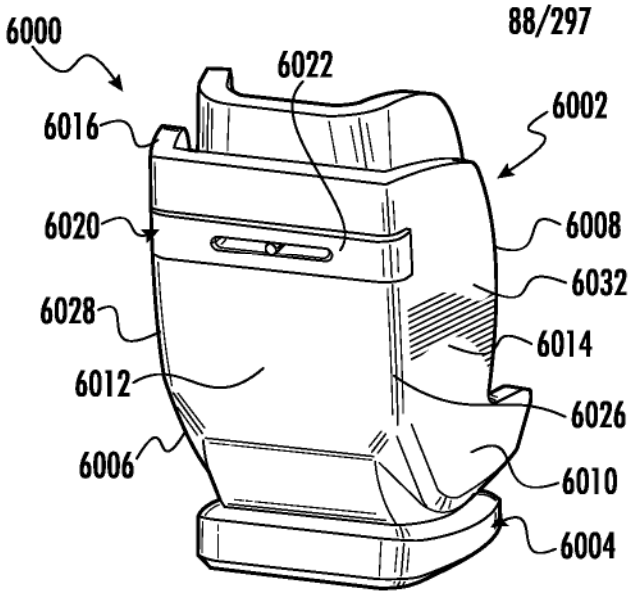


FIG. 63A

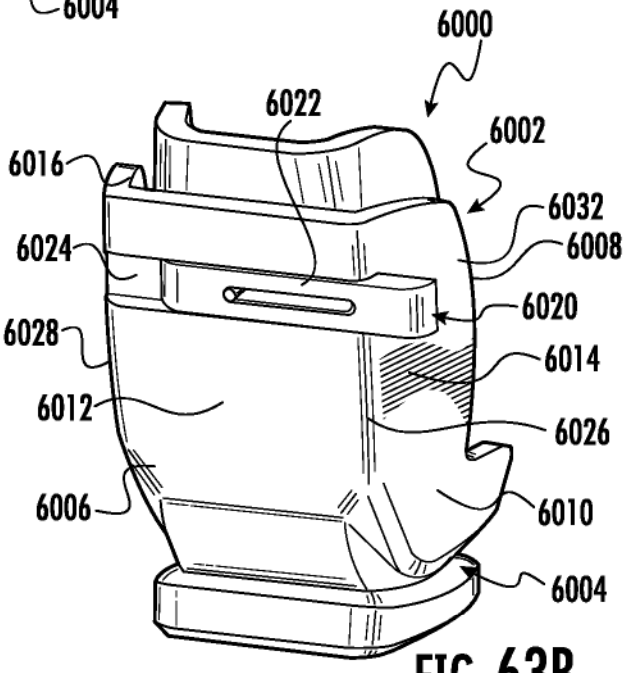


FIG. 63B

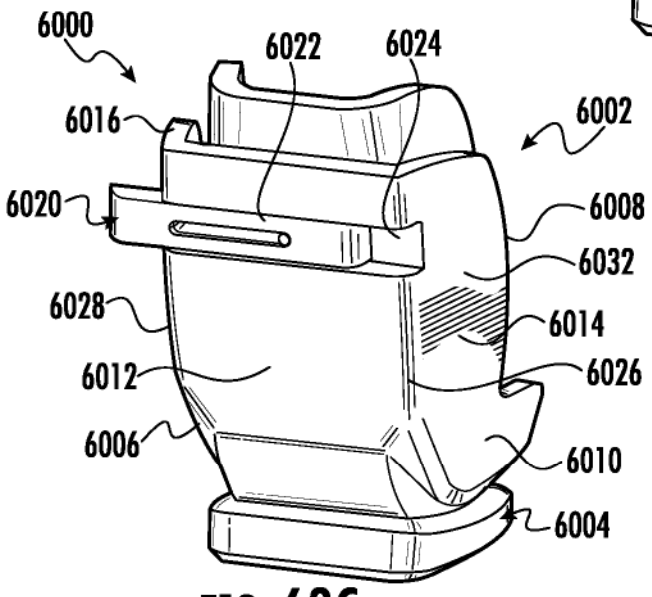


FIG. 63C

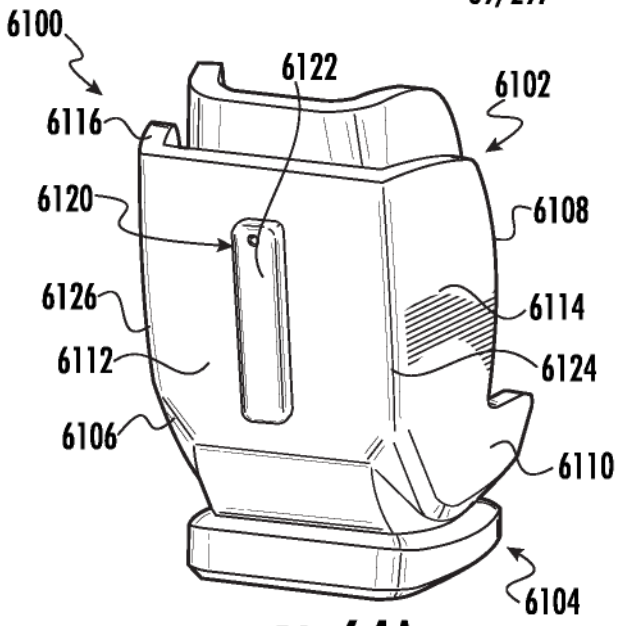


FIG. 64A

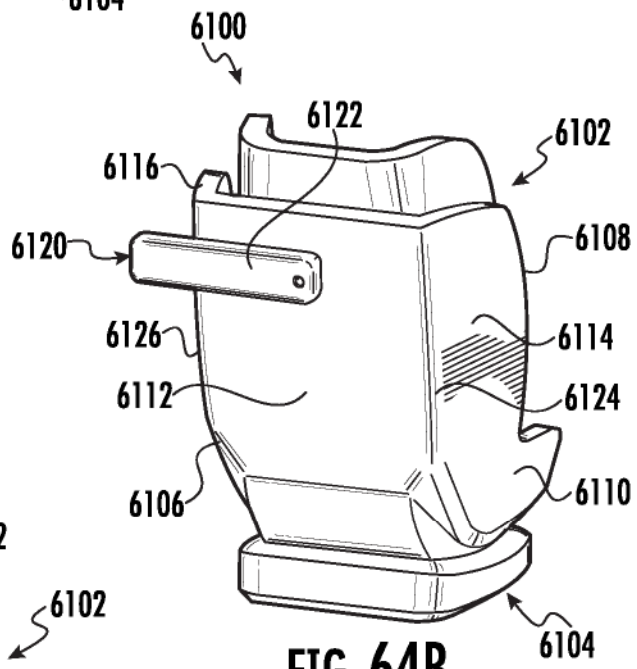


FIG. 64B

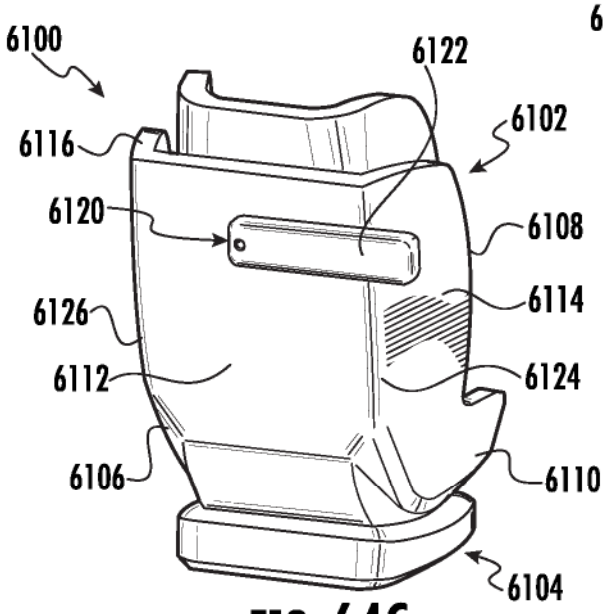


FIG. 64C

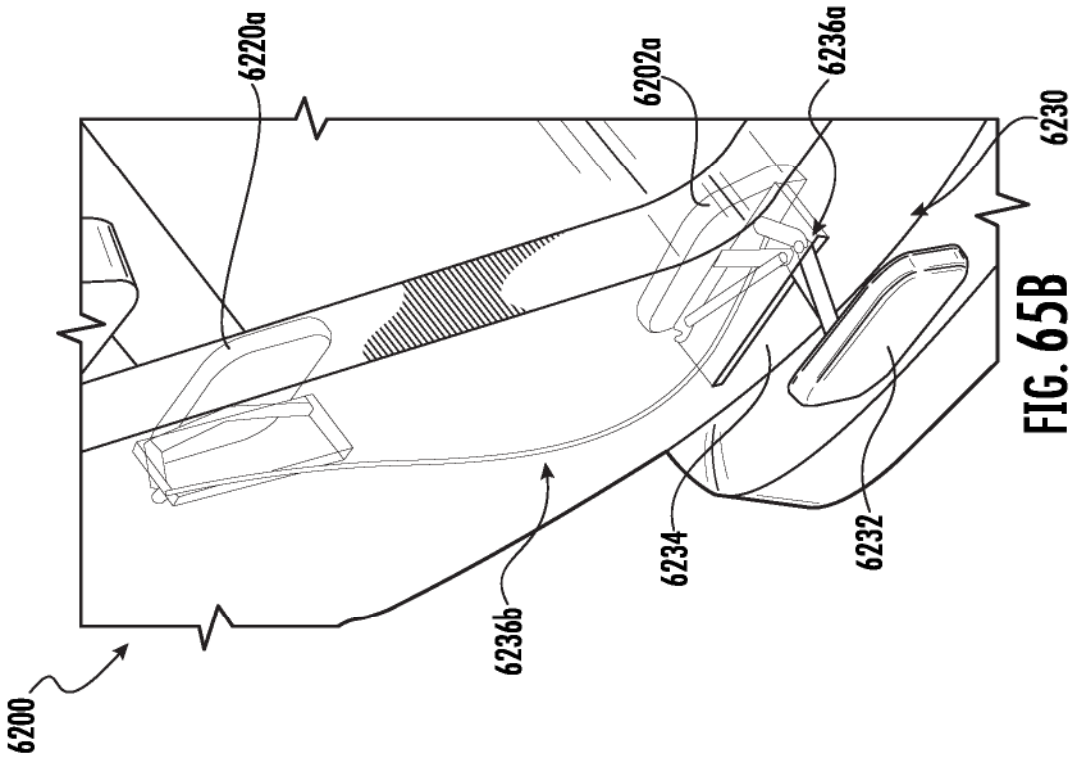


FIG. 65B

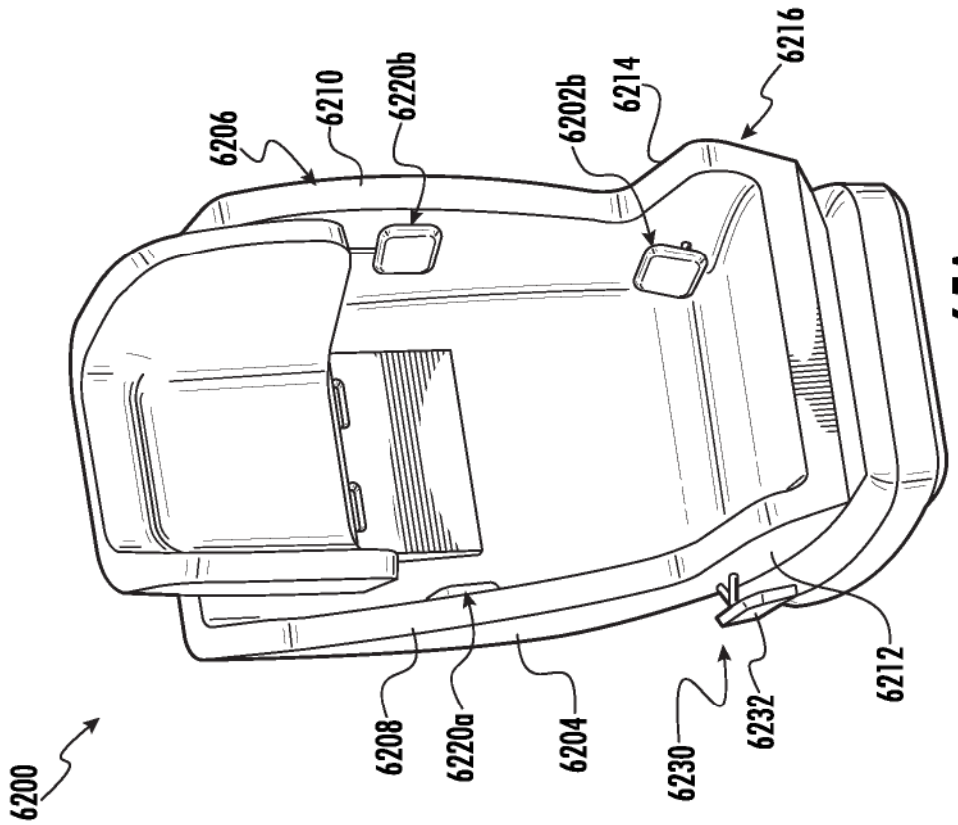


FIG. 65A

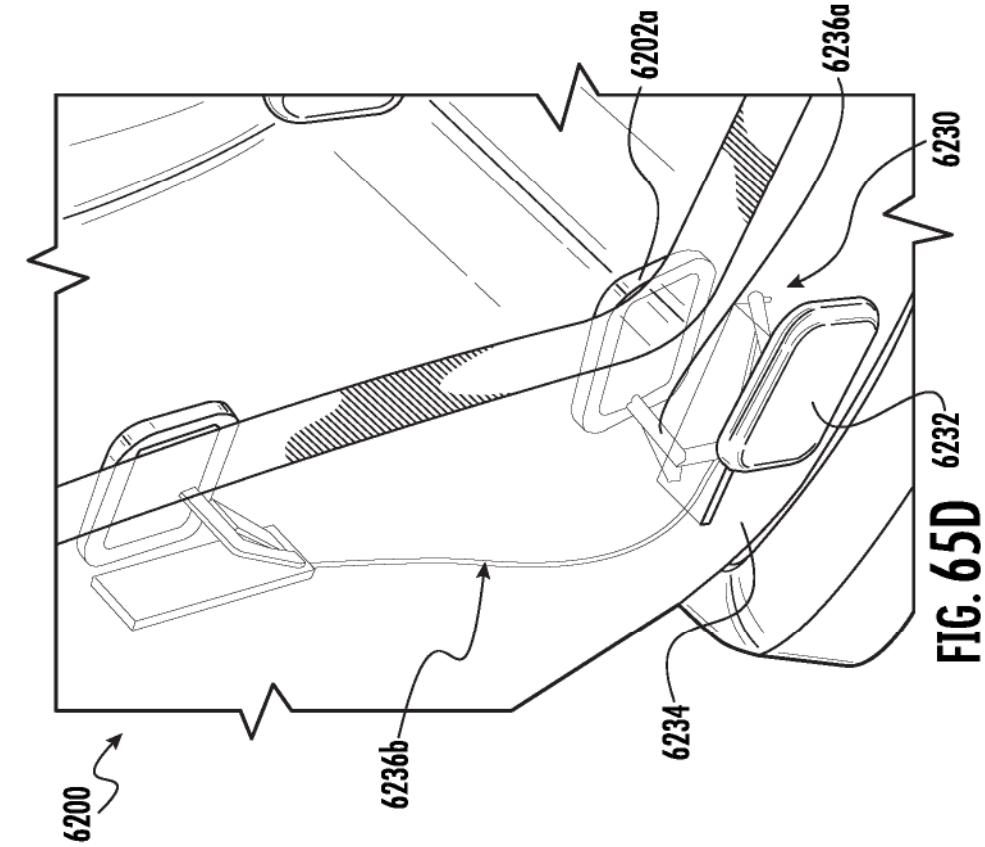


FIG. 65D

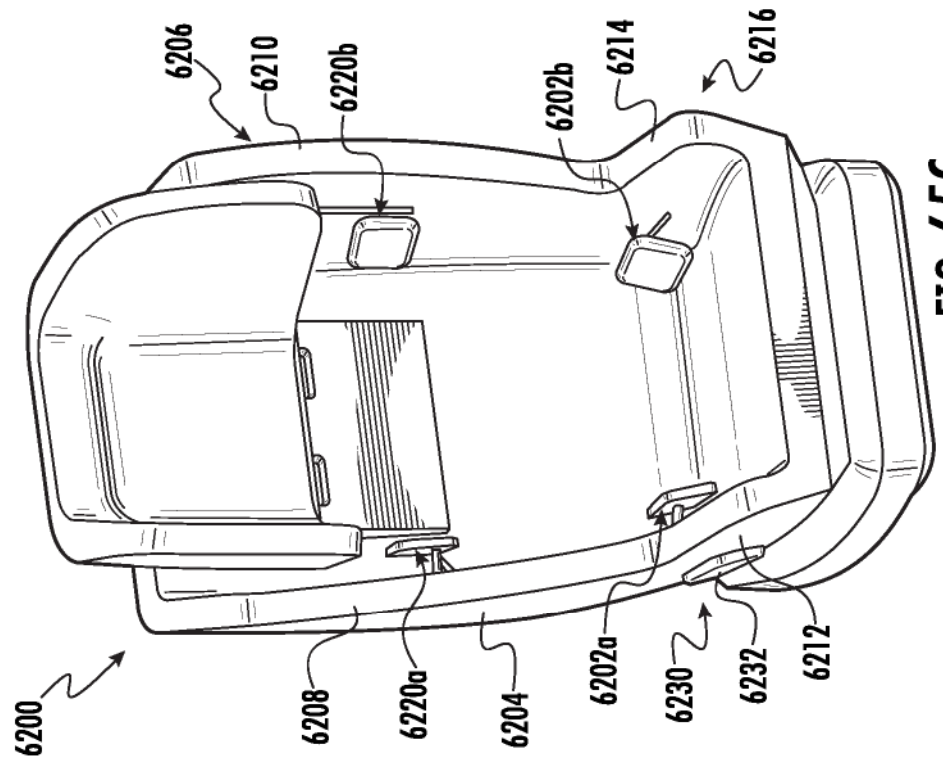


FIG. 65C

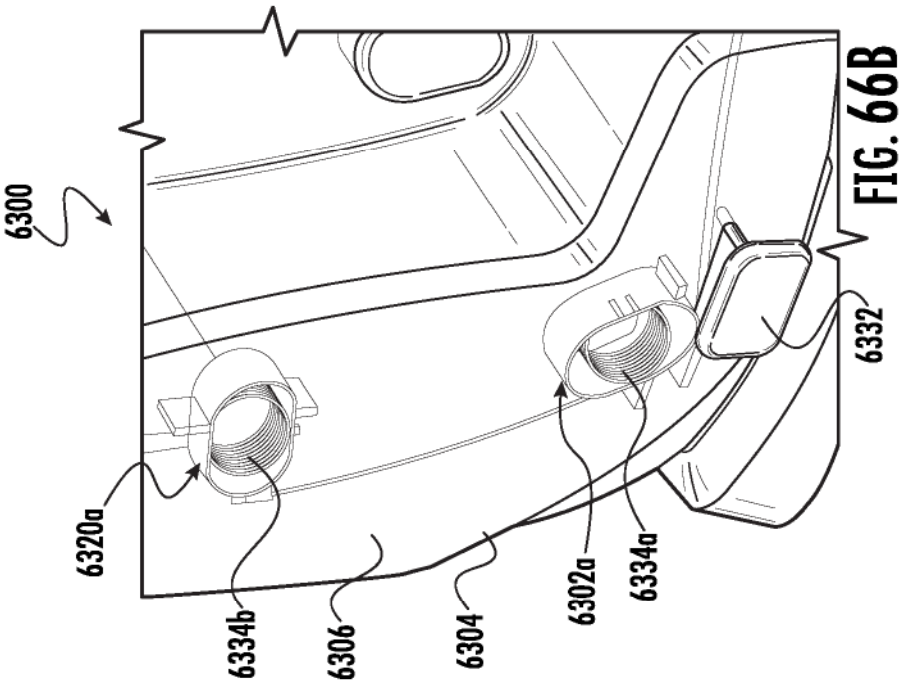


FIG. 66B

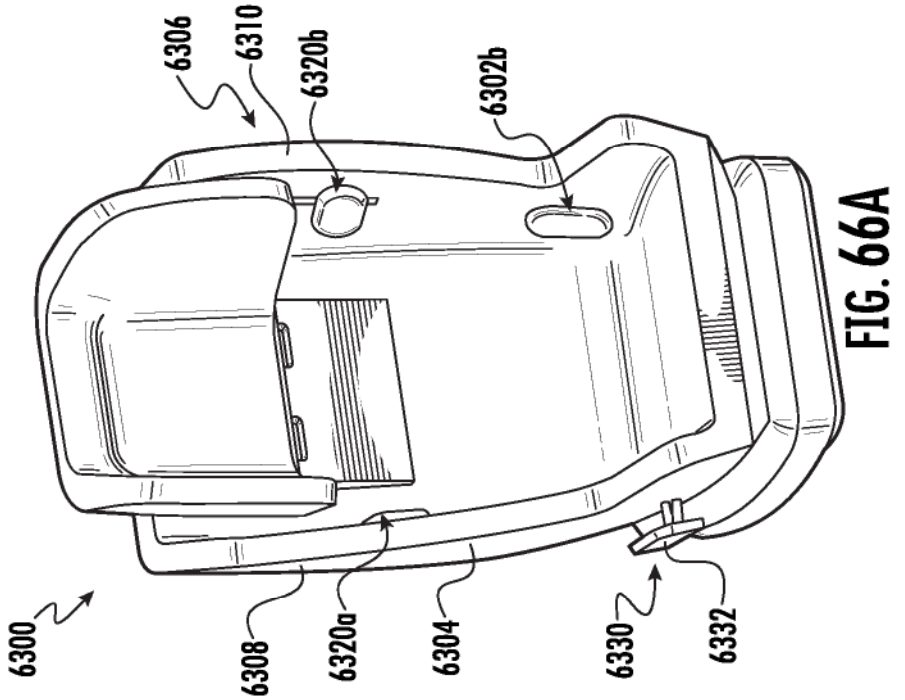


FIG. 66A

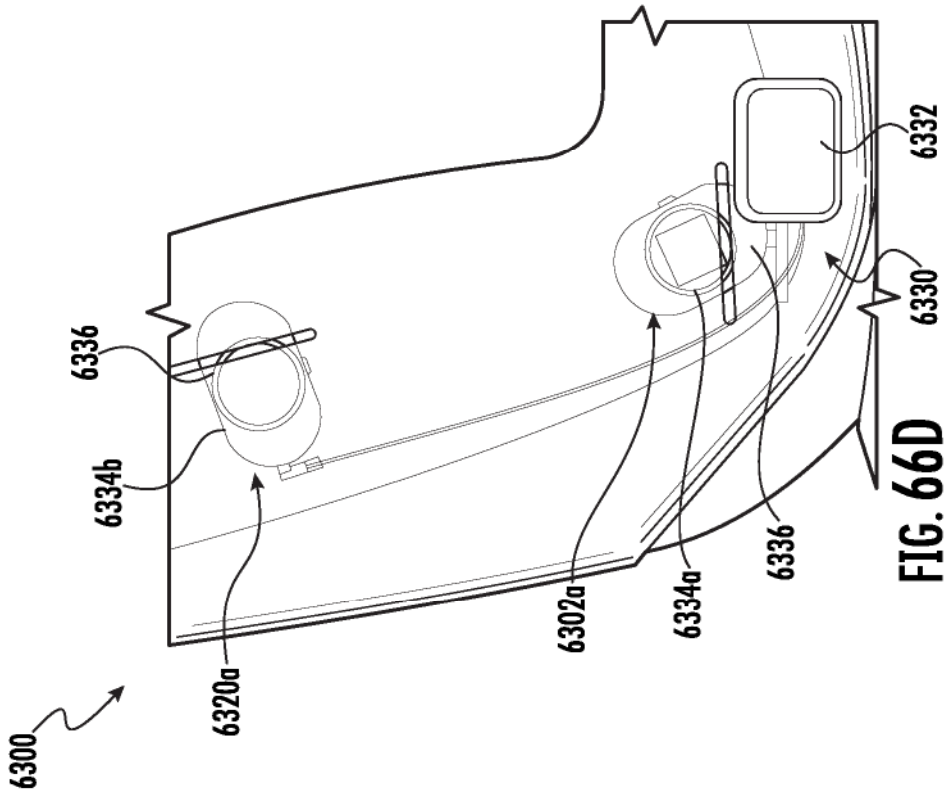


FIG. 66D

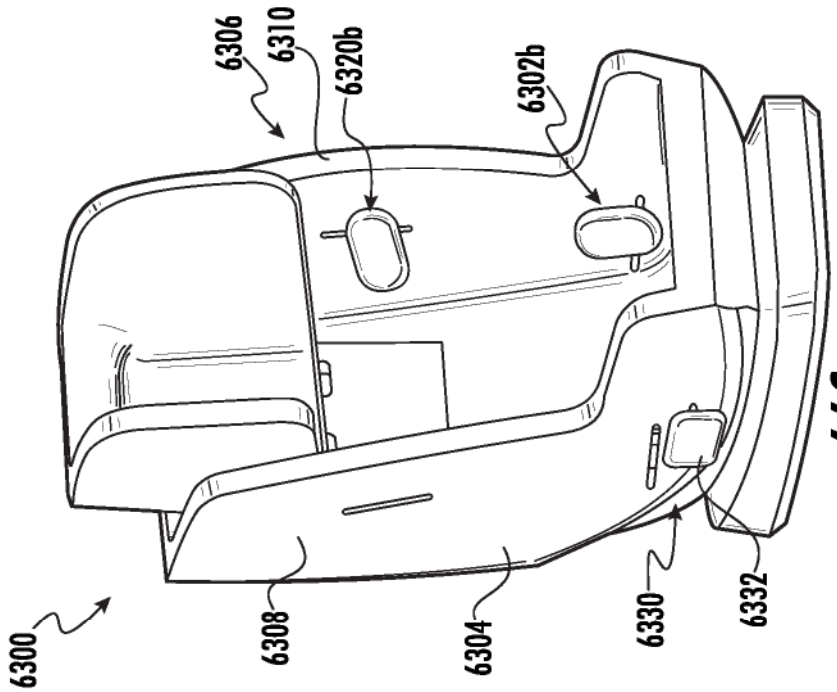


FIG. 66C

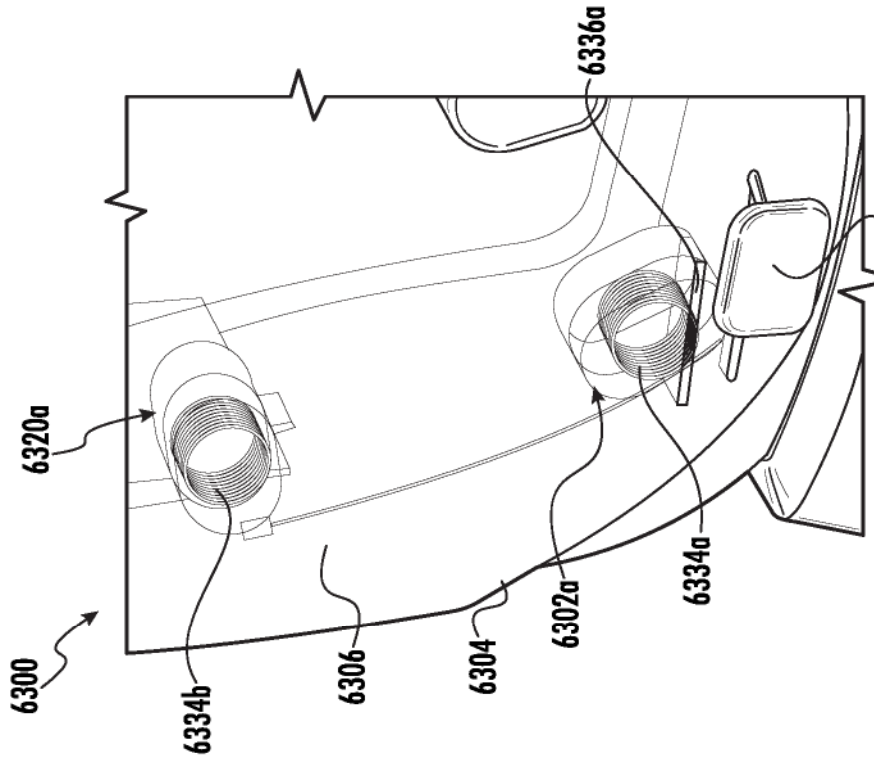


FIG. 66F

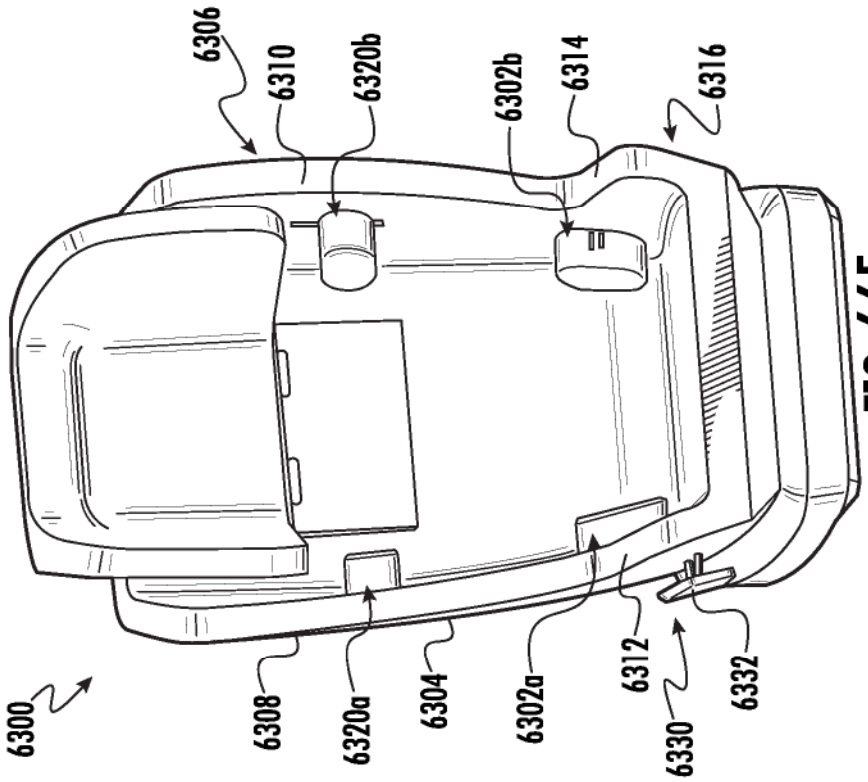


FIG. 66E

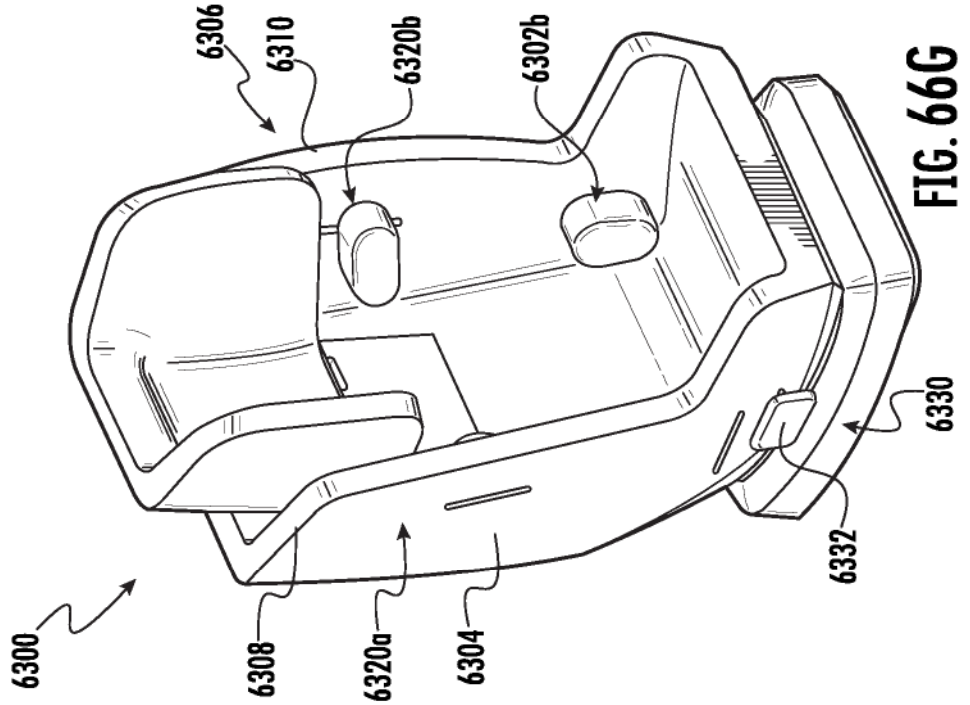


FIG. 66G

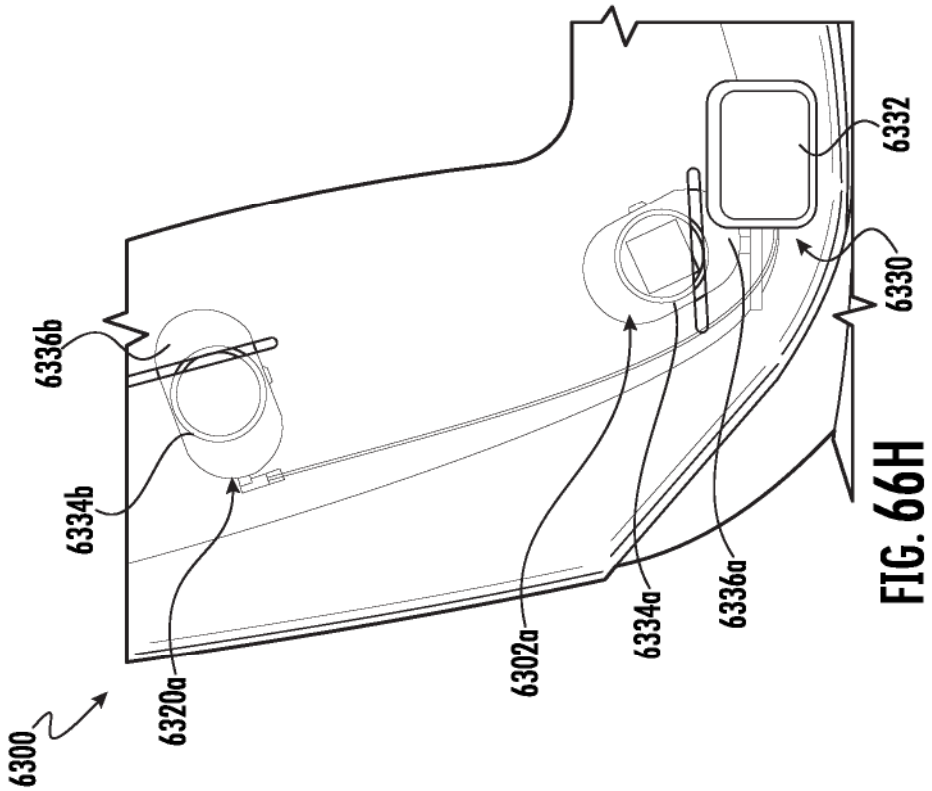


FIG. 66H

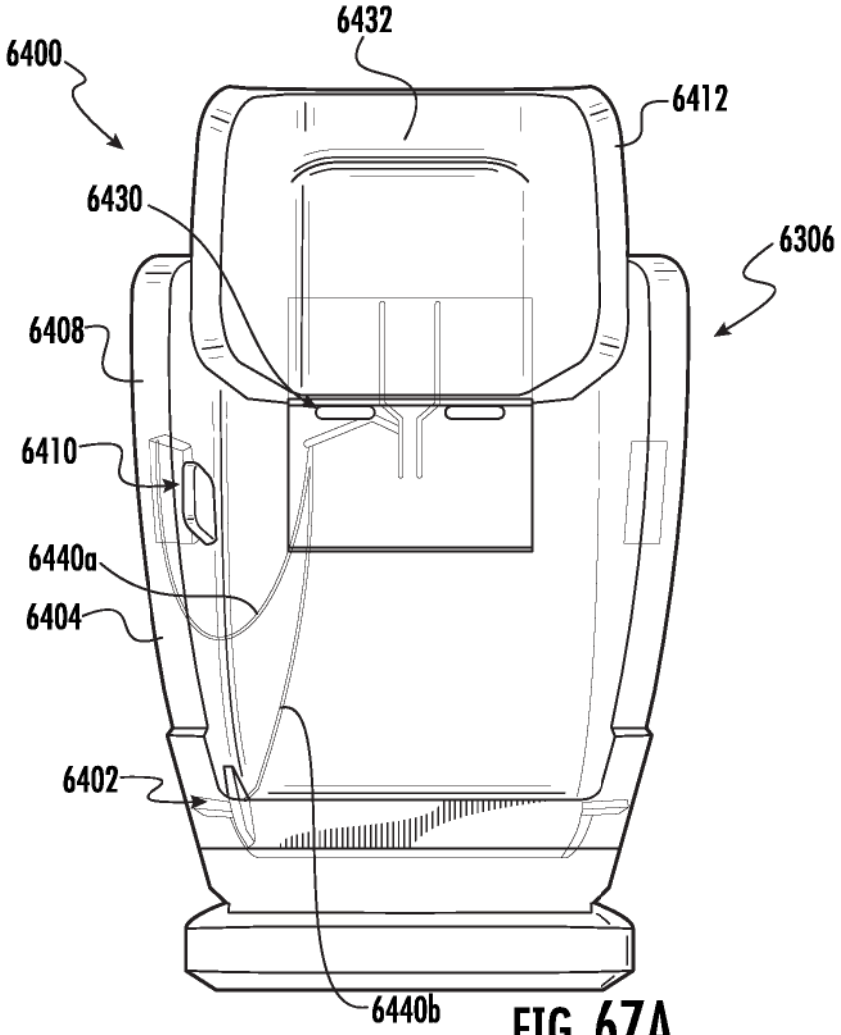


FIG. 67A

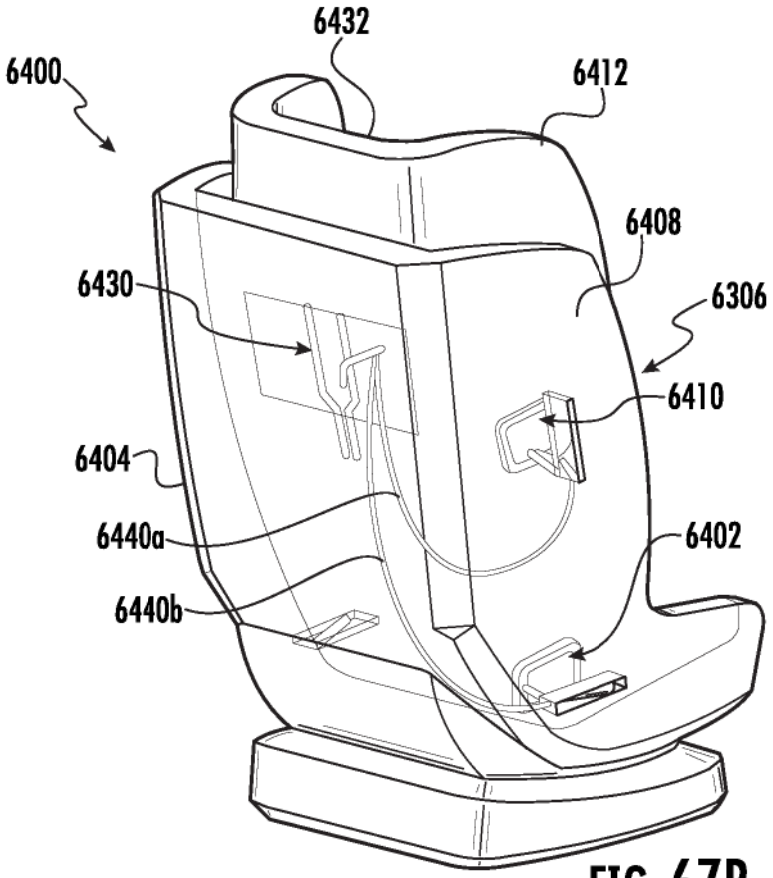


FIG. 67B

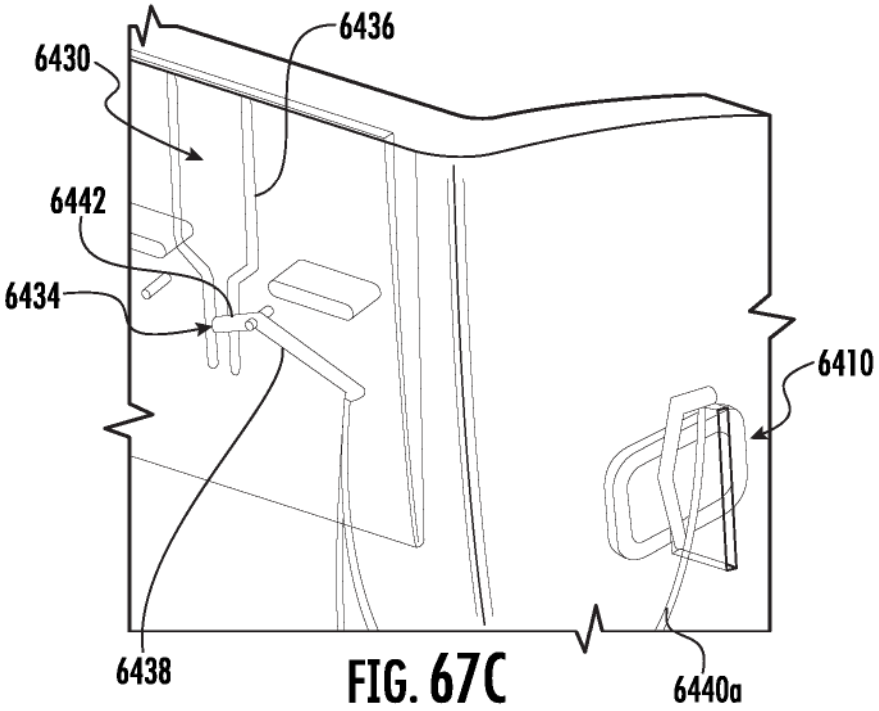


FIG. 67C

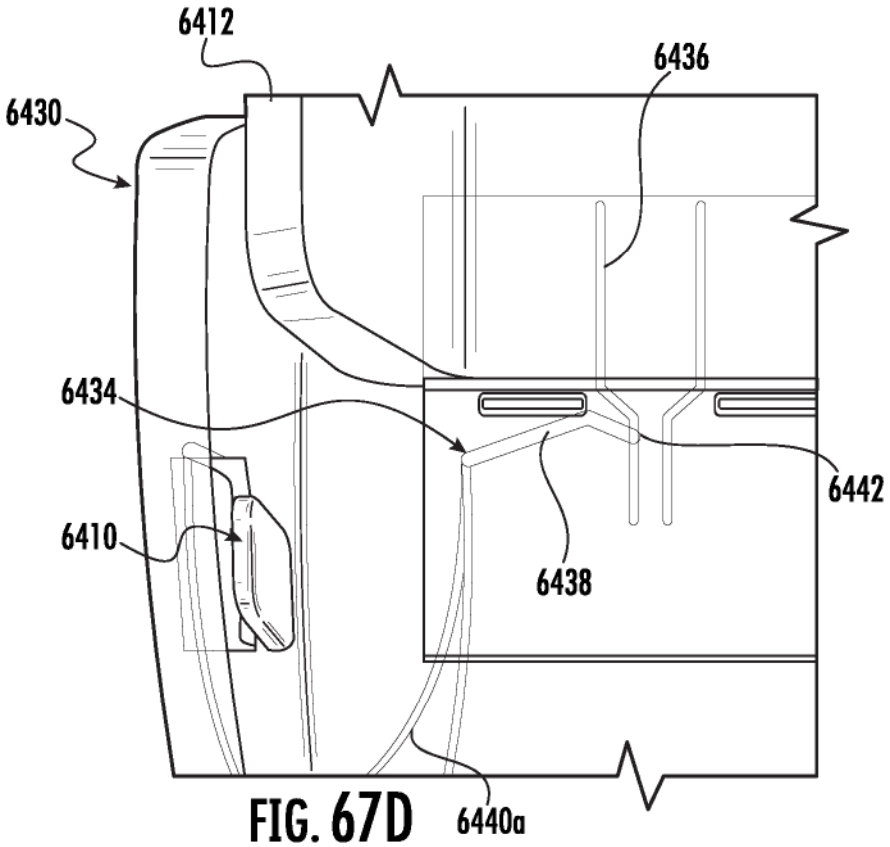


FIG. 67D

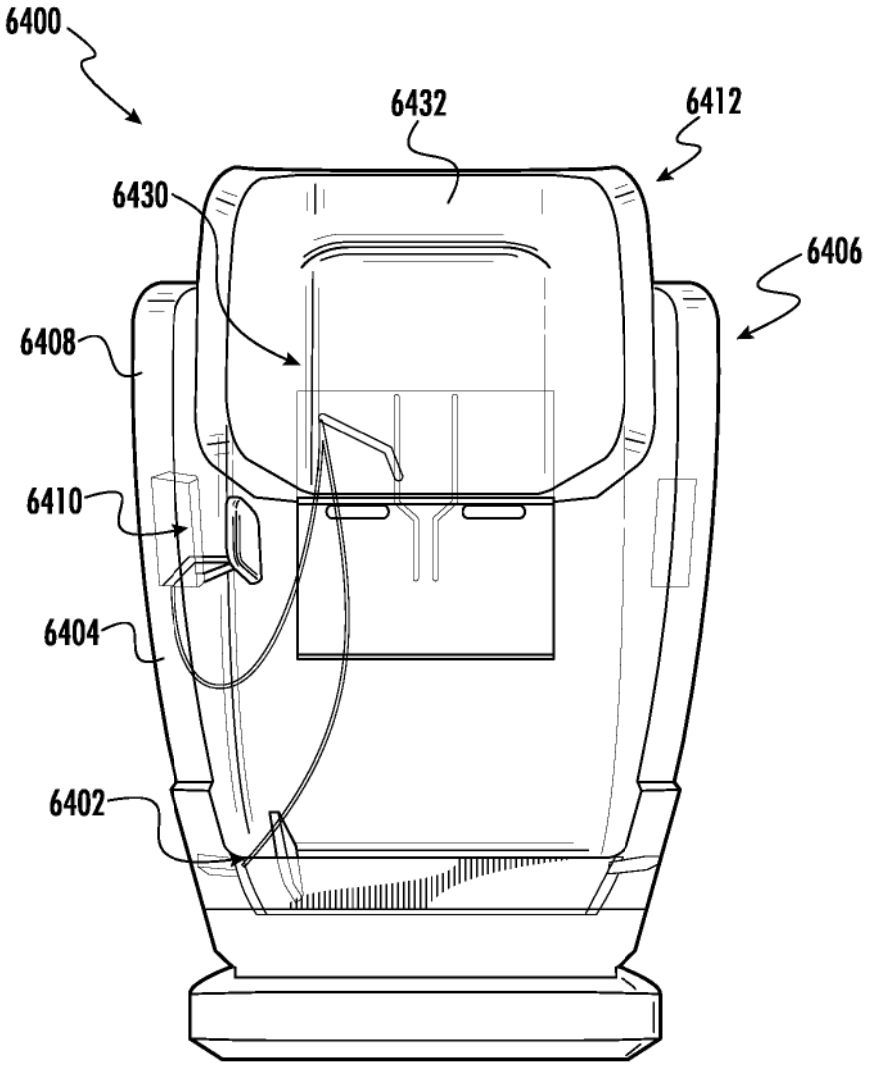


FIG. 67E

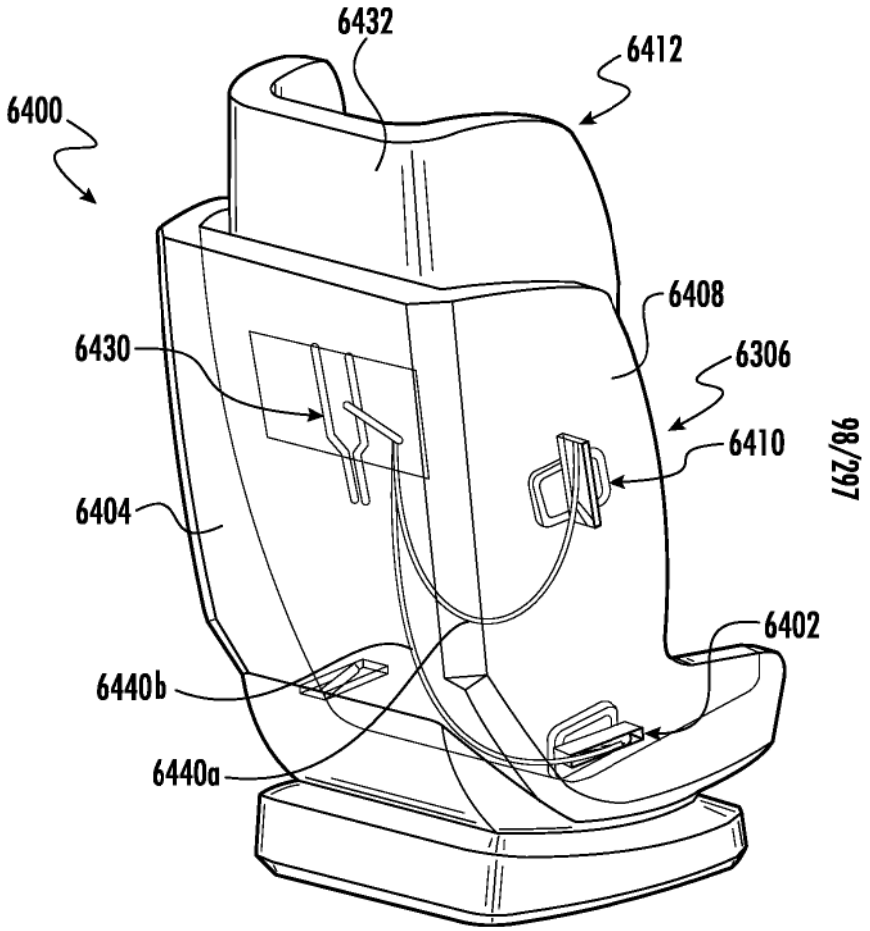


FIG. 67F

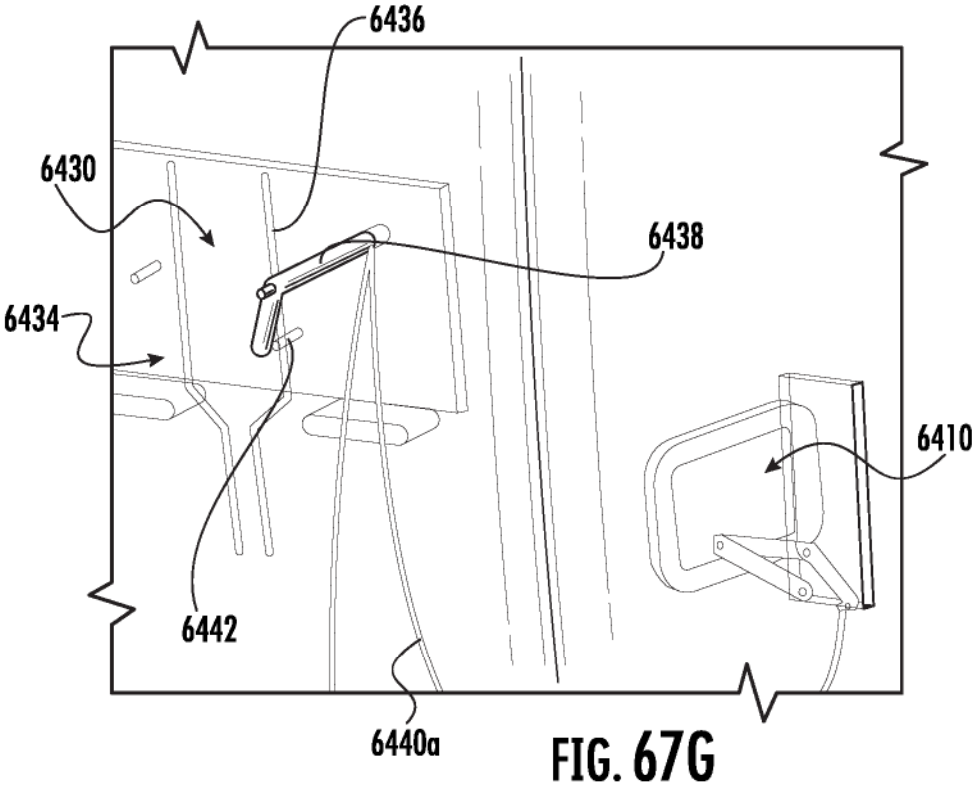


FIG. 67G

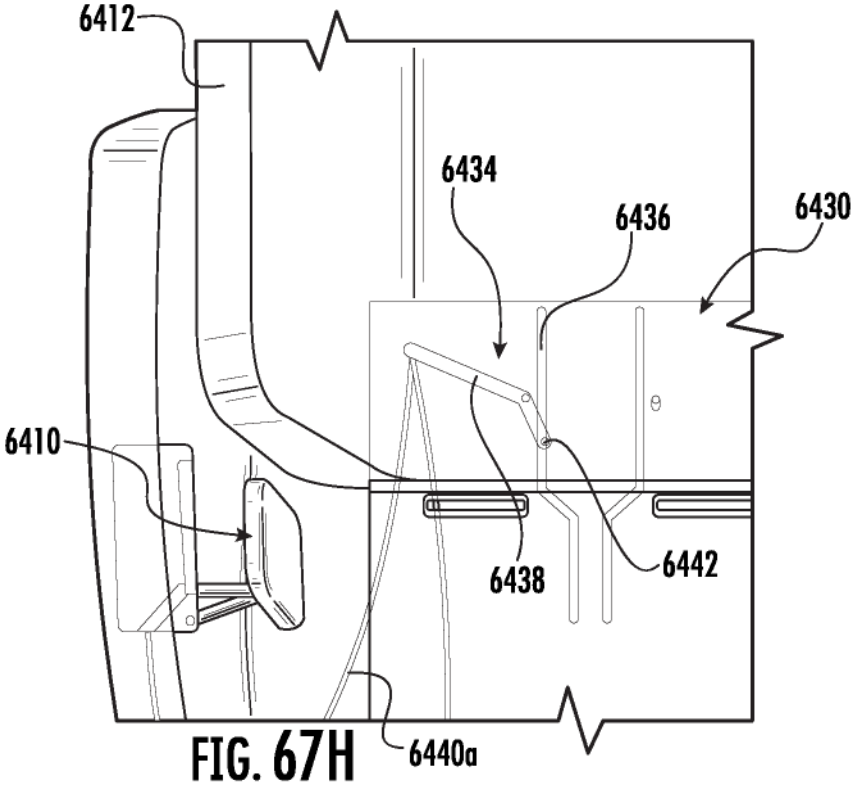


FIG. 67H

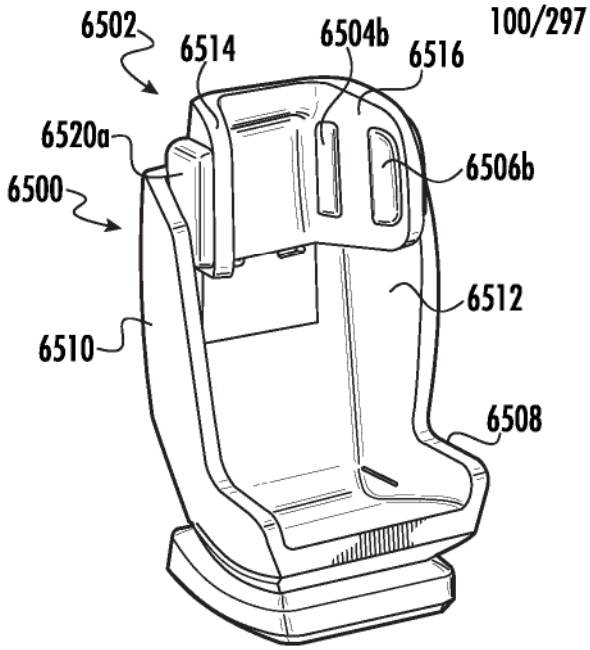


FIG. 68A

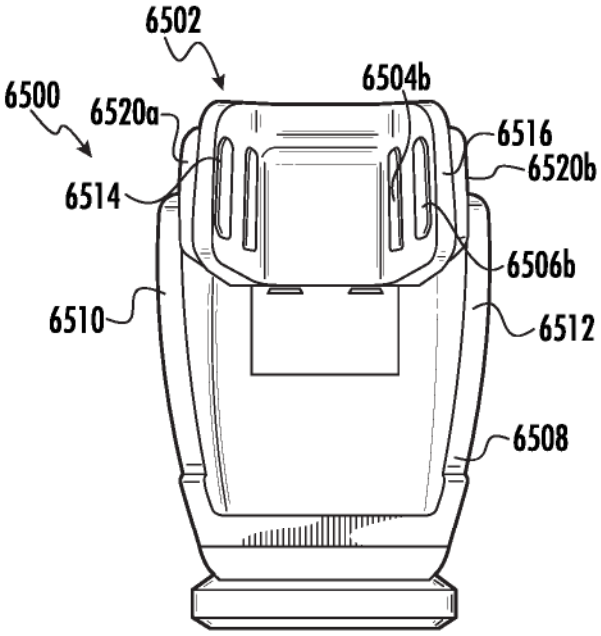


FIG. 68B

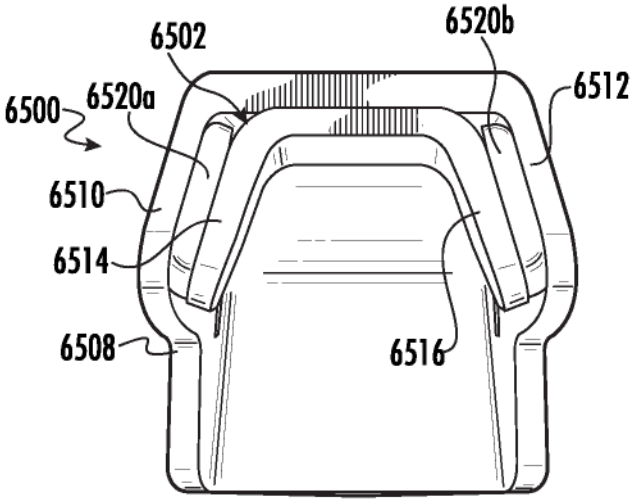


FIG. 68C

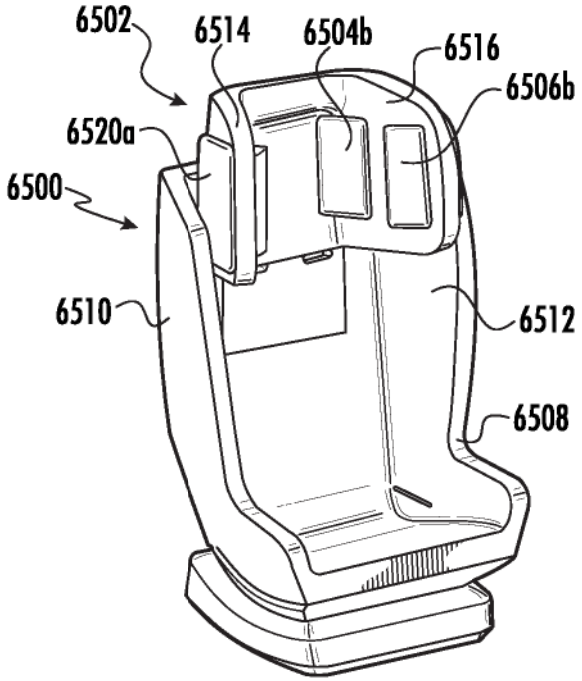


FIG. 68D

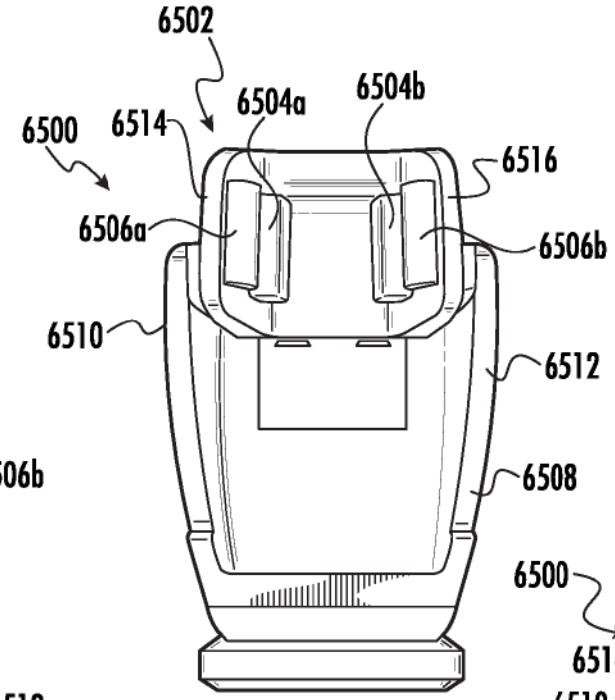


FIG. 68E

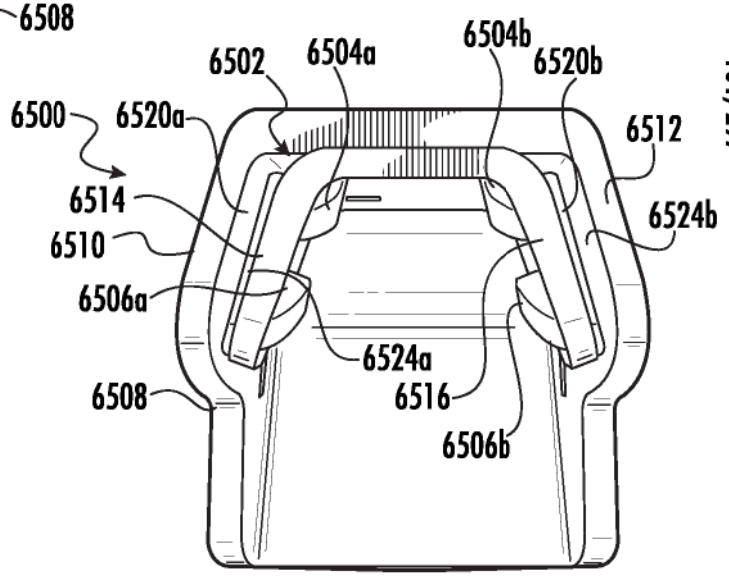


FIG. 68F

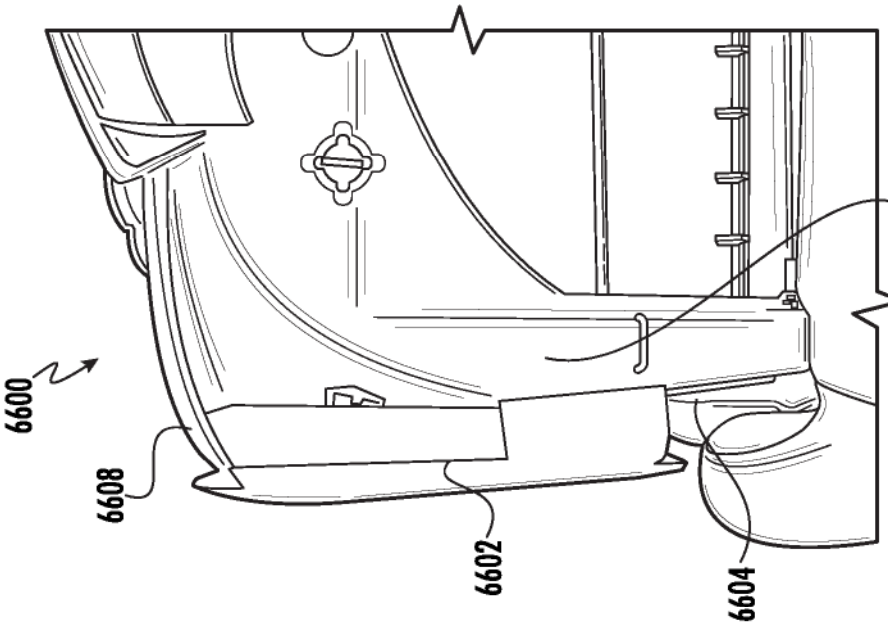


FIG. 69B

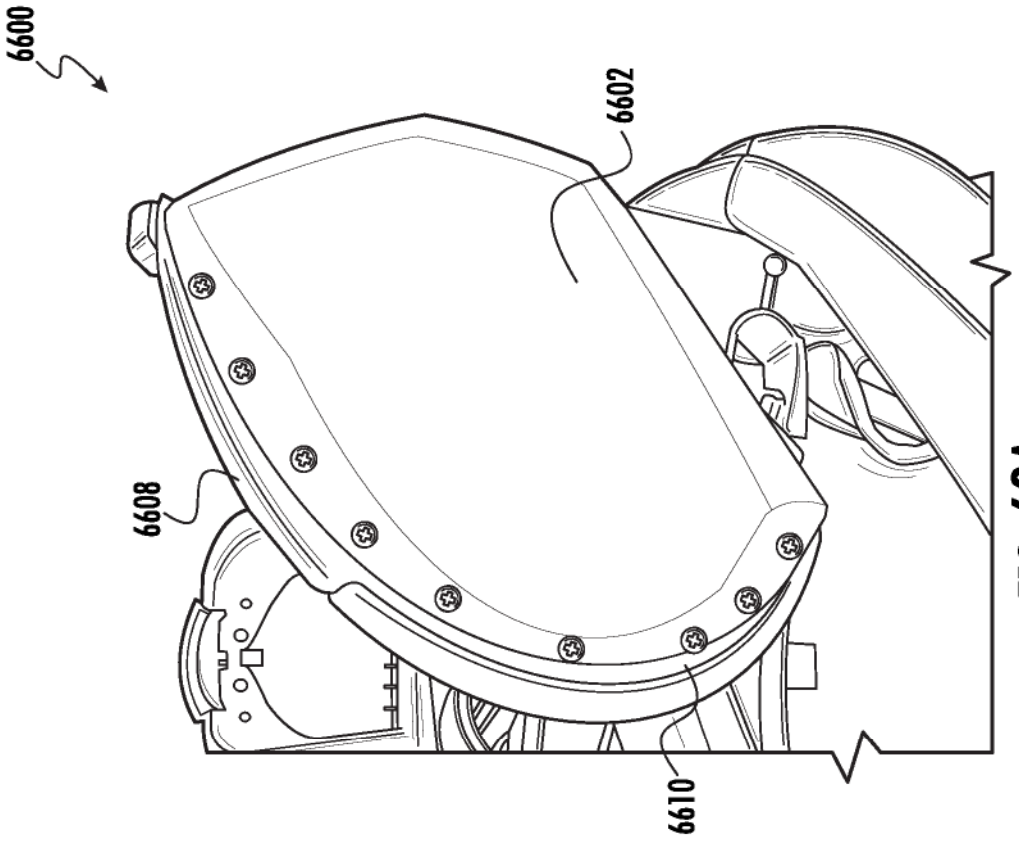


FIG. 69A

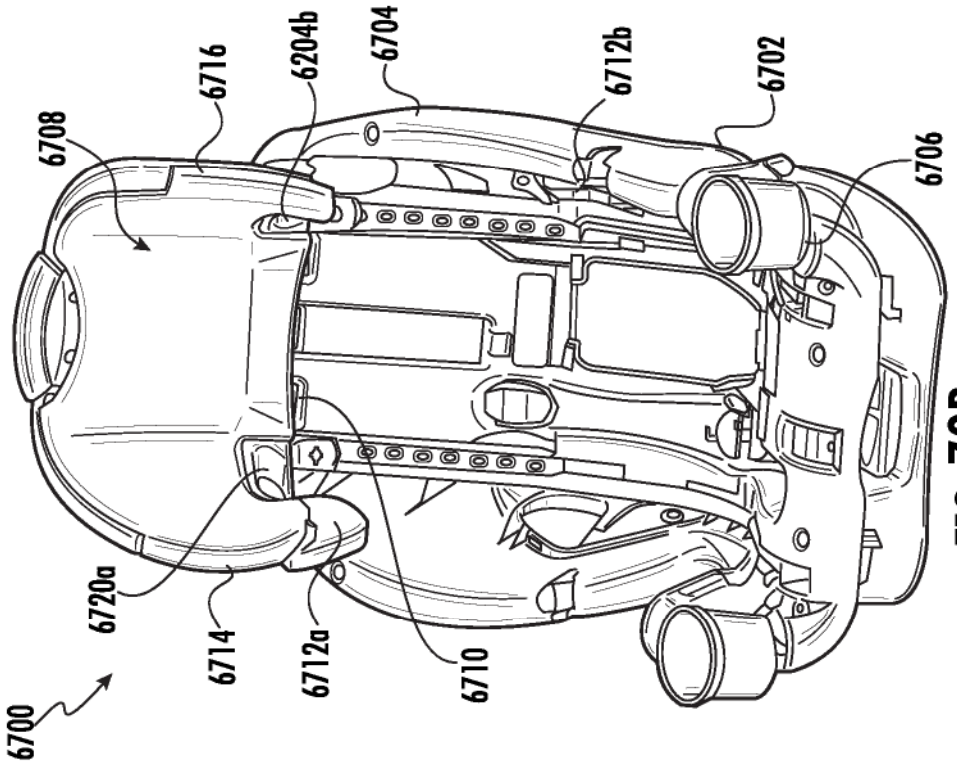


FIG. 70B

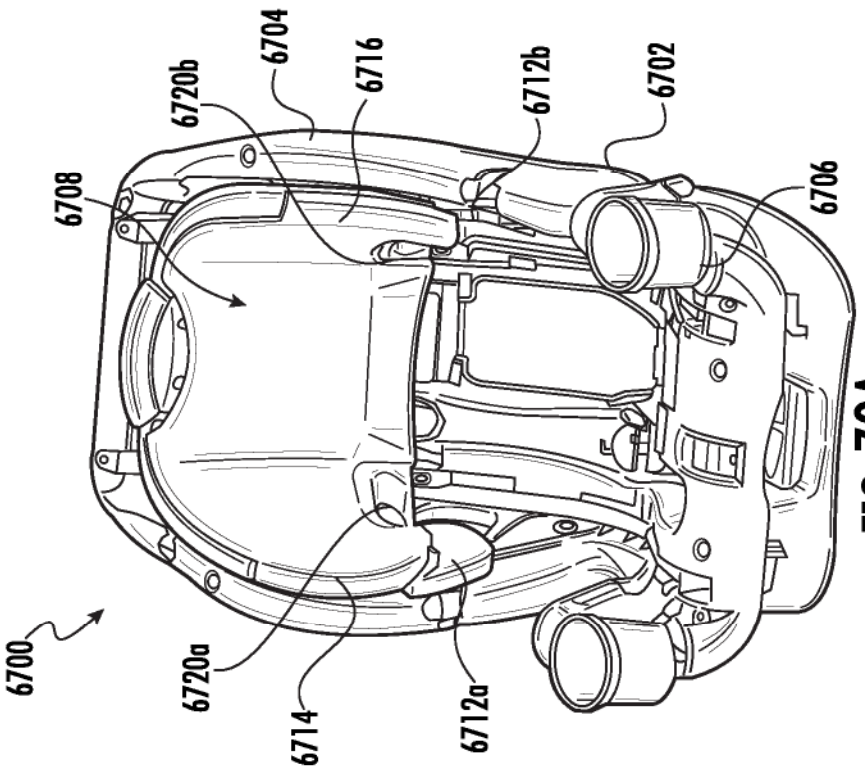


FIG. 70A

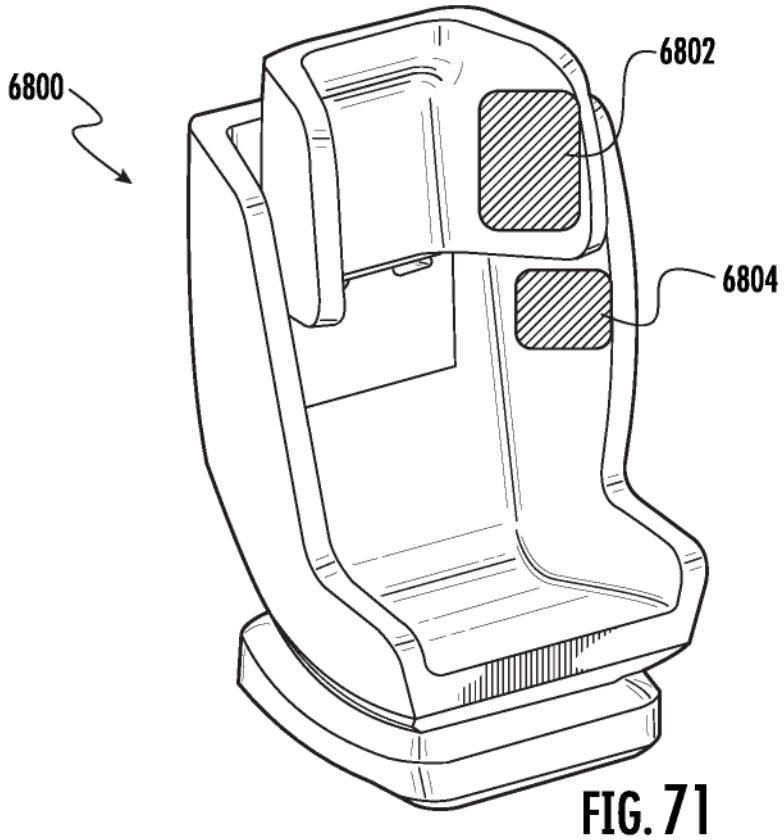


FIG. 71

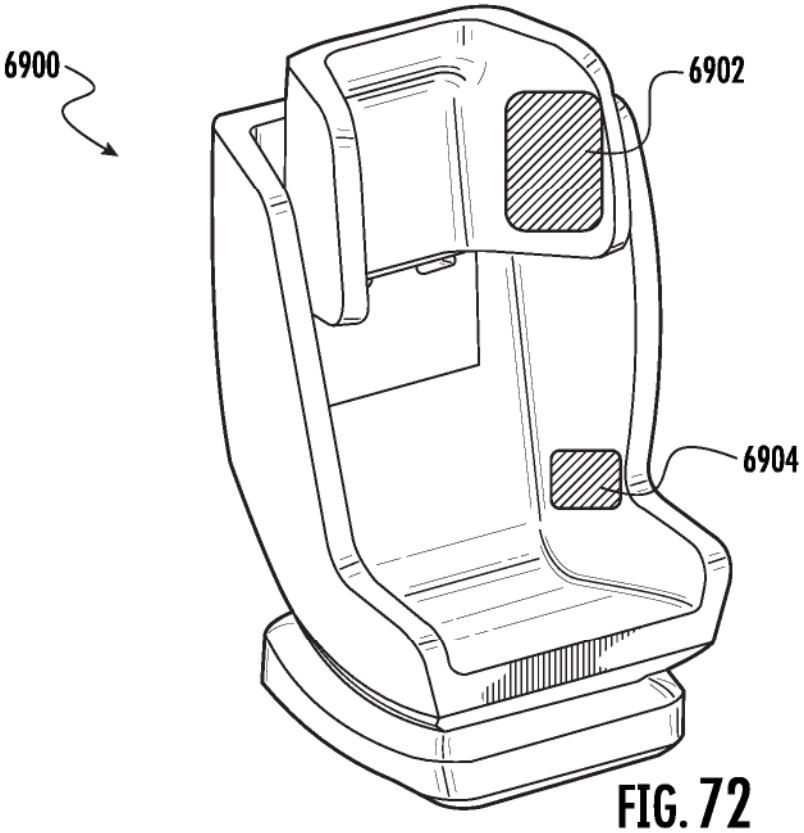


FIG. 72

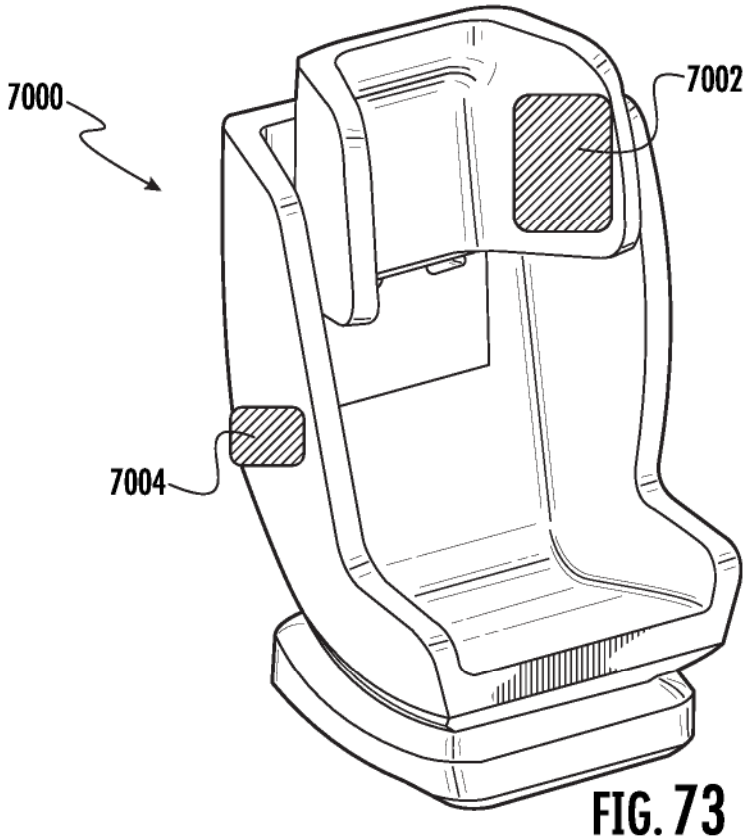


FIG. 73

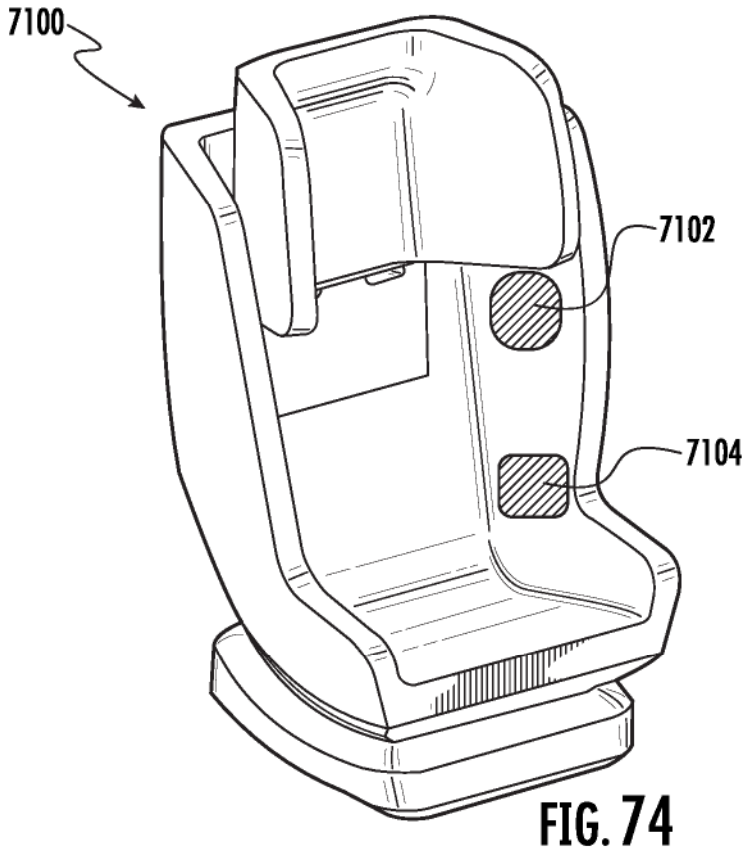


FIG. 74

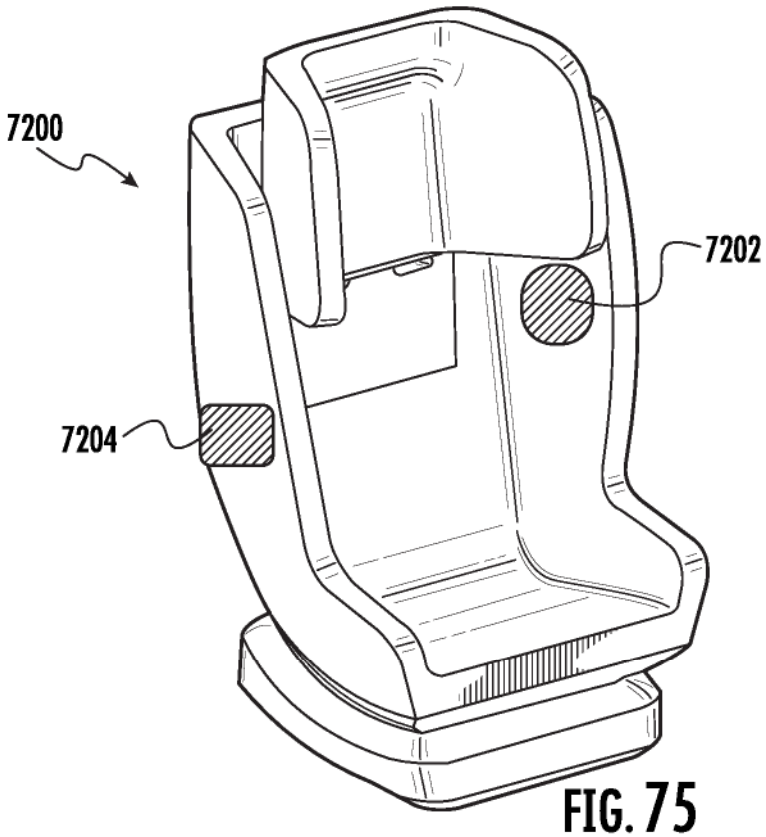


FIG. 75

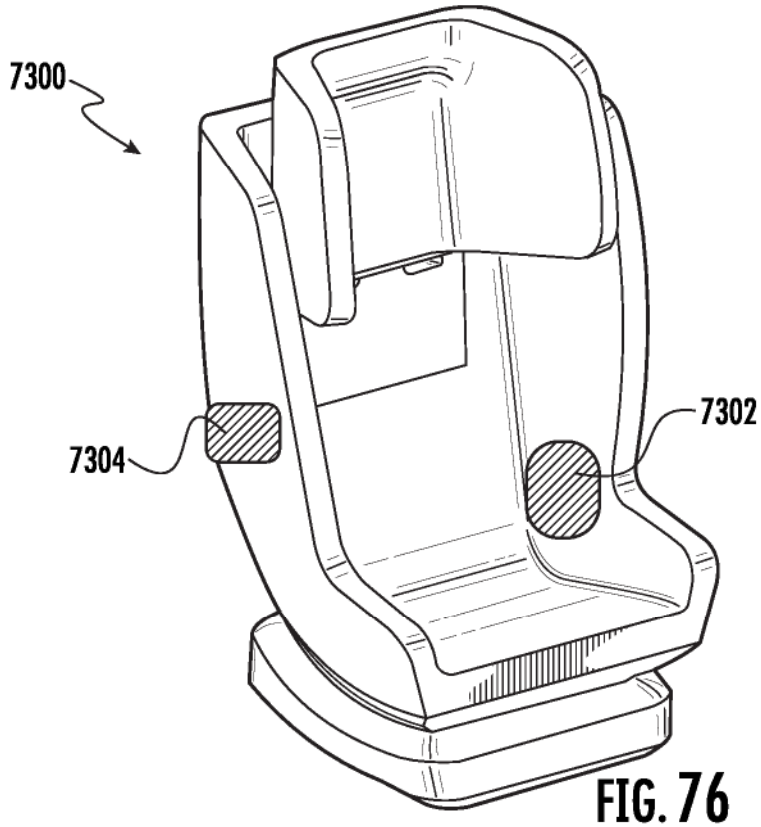


FIG. 76

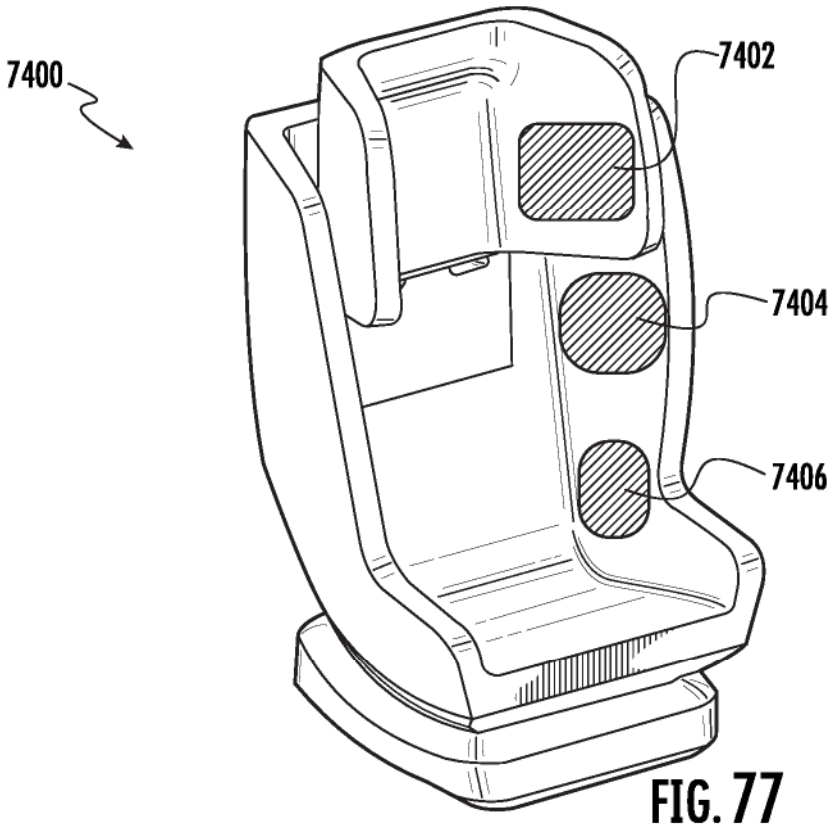


FIG. 77

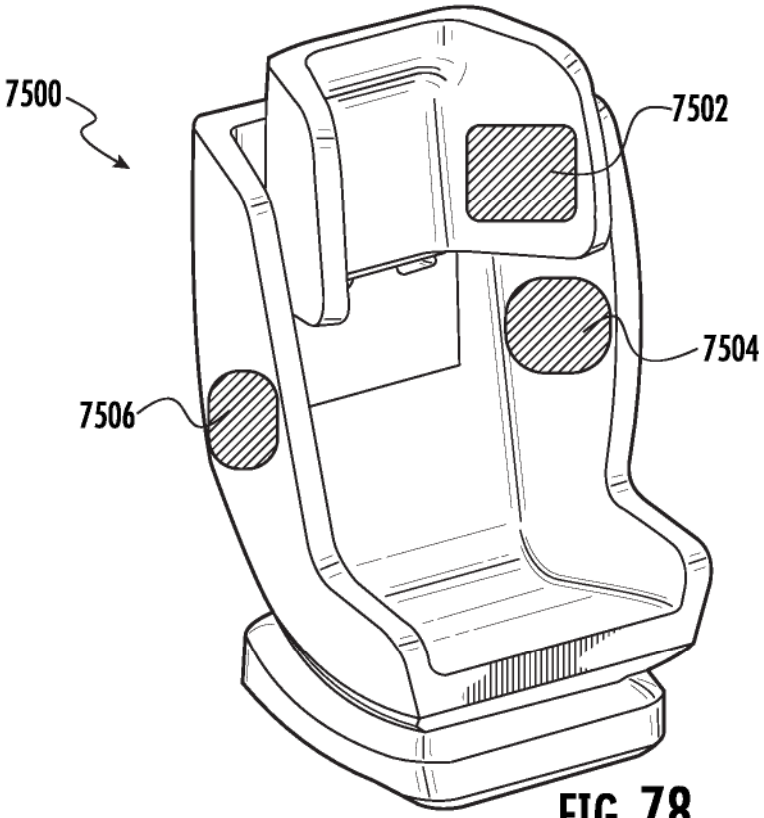


FIG. 78

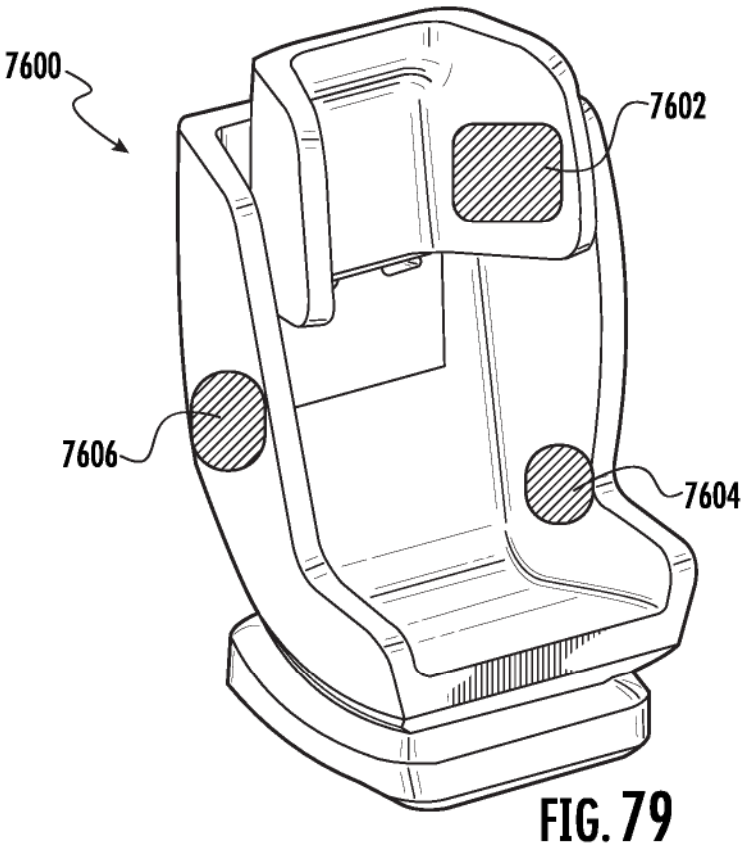


FIG. 79

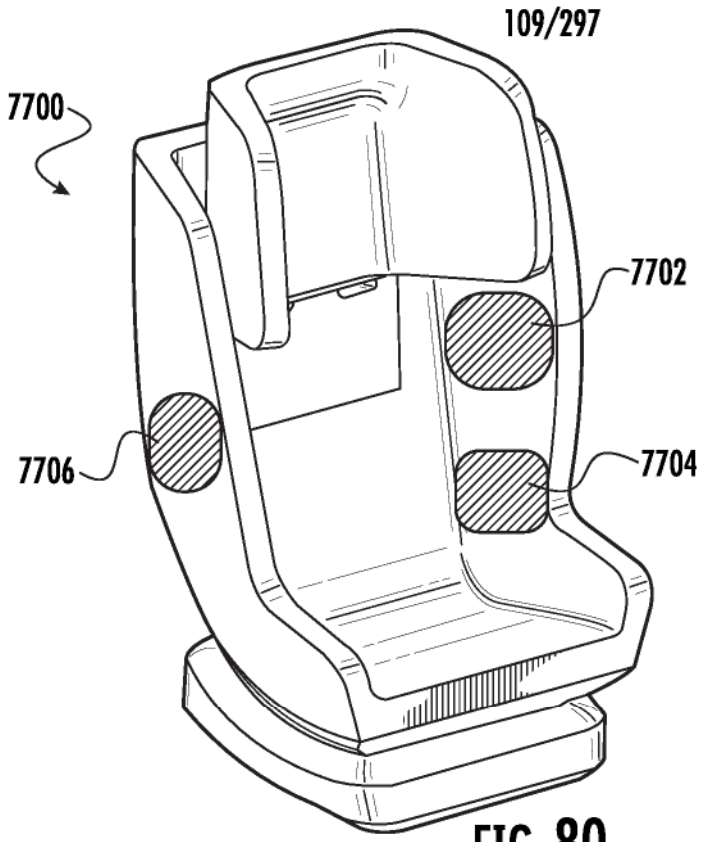


FIG. 80

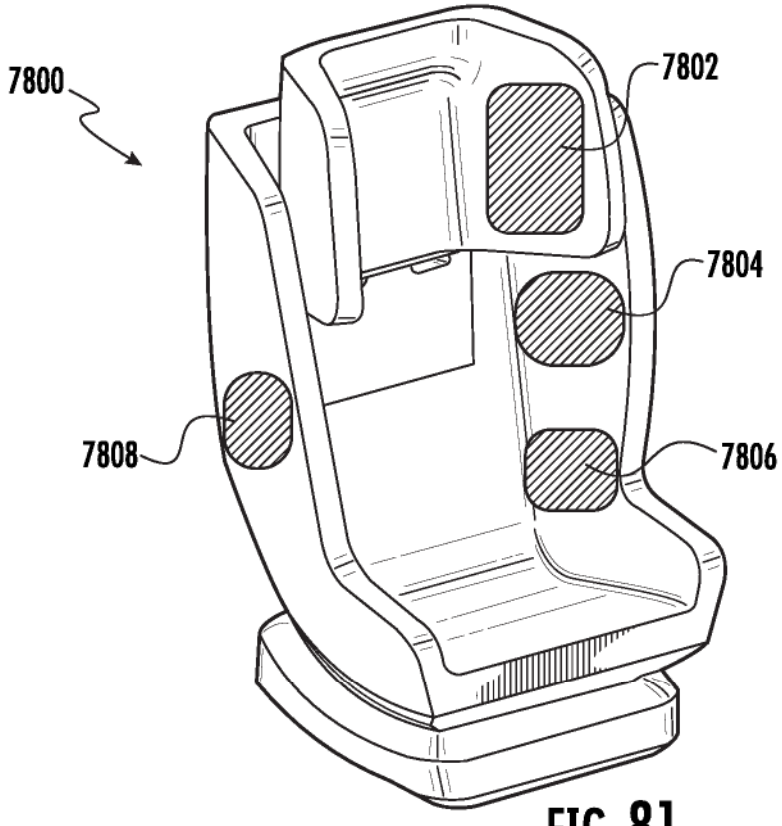
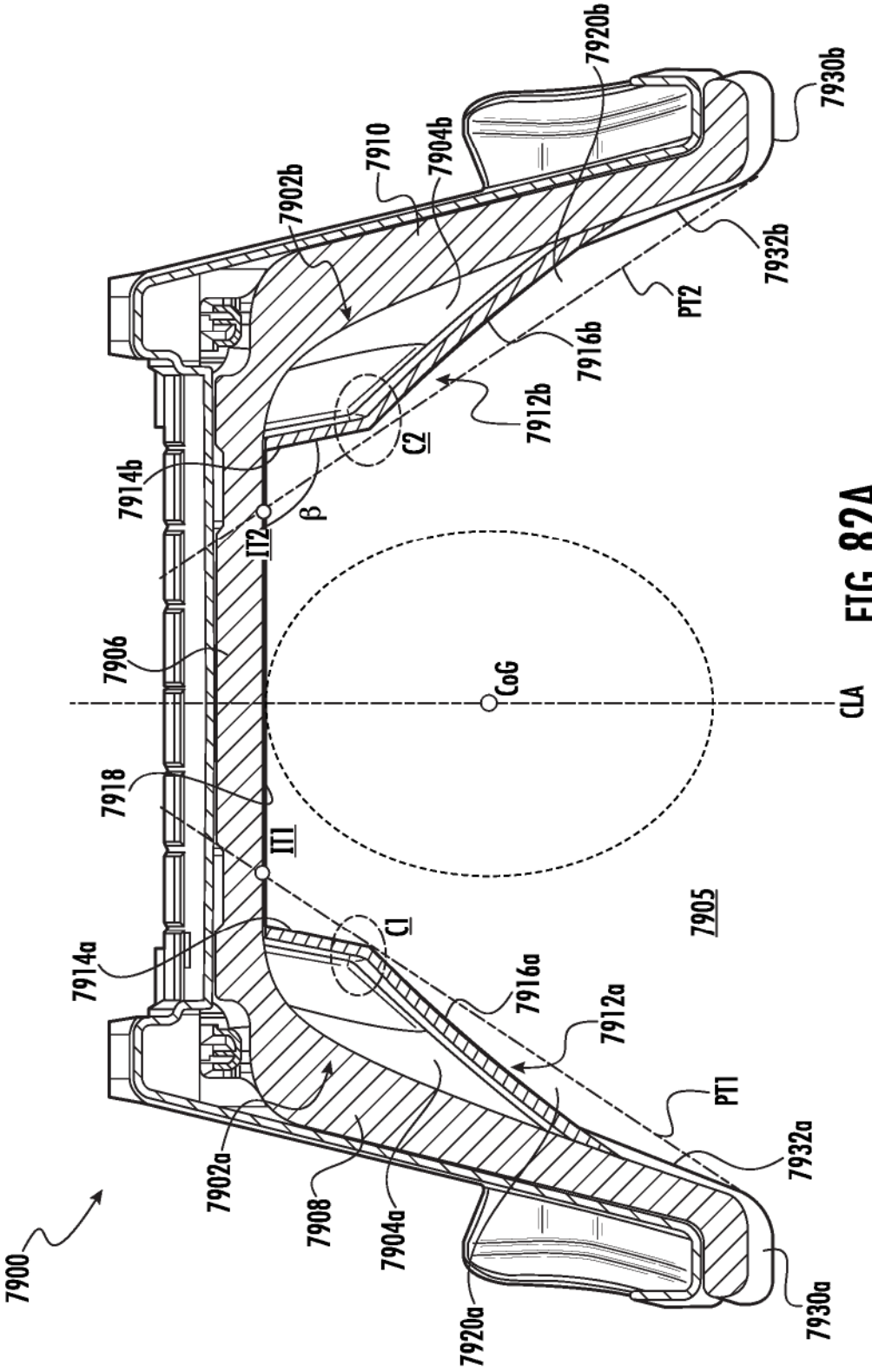


FIG. 81


7900
7902a
7904a
7906
7908
7910
7912a
7912b
7914a
7914b
7916a
7916b
7918
7920a
7920b
7930a
7930b
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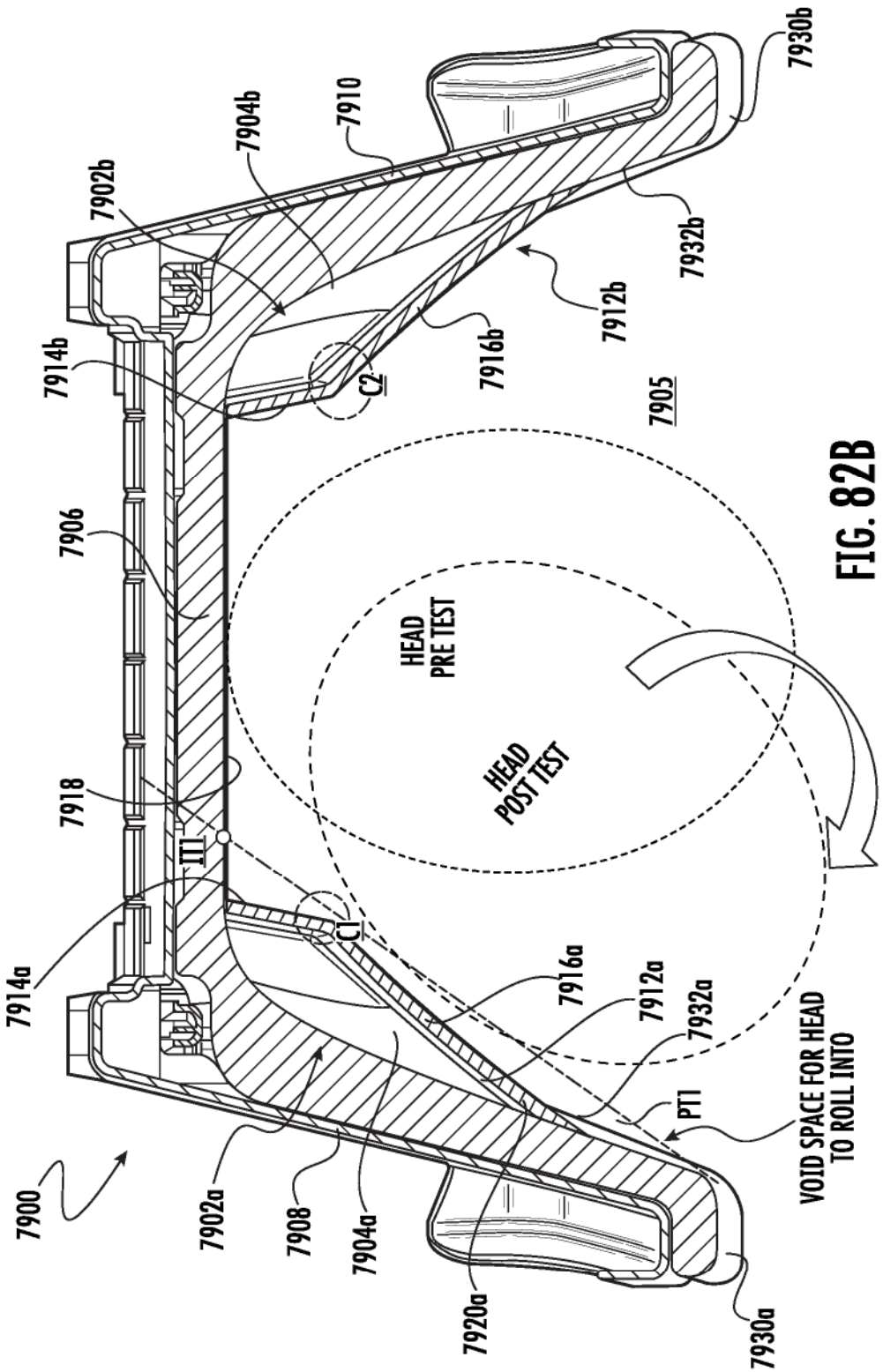
7932b
7905
C1
C2
IT1
IT2
PT1
PT2
β
CoG
CLA

FIG. 82A


7900
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7902b
7904a
7904b
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7906
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7910
7912a
7912b
7914a
7914b
7916a
7916b
7918
7920a
7930a
7930b
7932a
7932b
C1
C2
III
PT1
HEAD PRE TEST
HEAD POST TEST
VOID SPACE FOR HEAD TO ROLL INTO

FIG. 82B

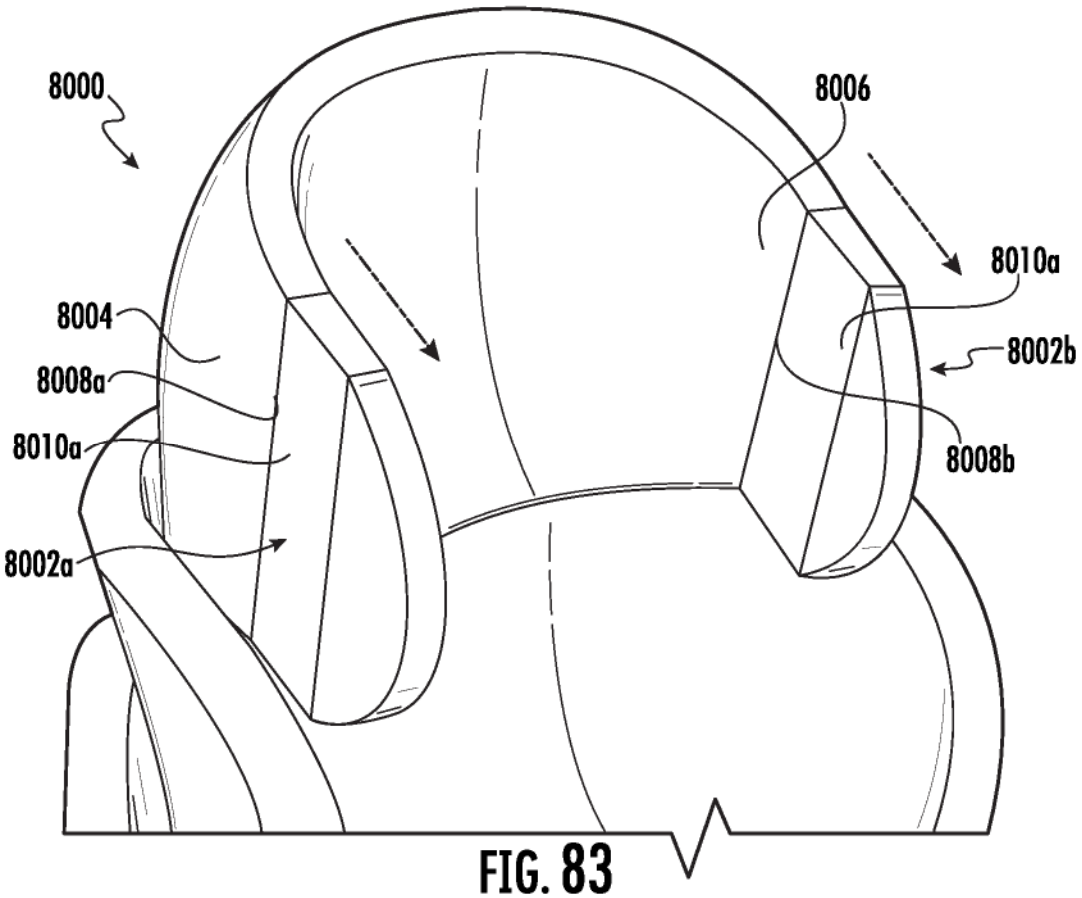


FIG. 83

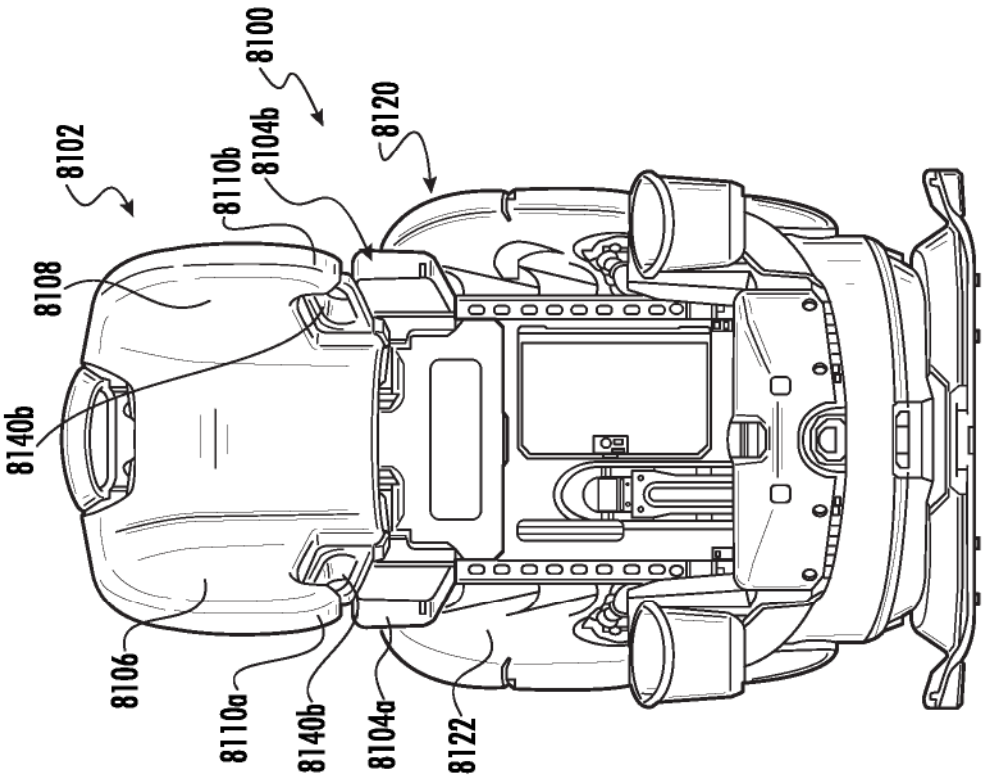


FIG. 84A

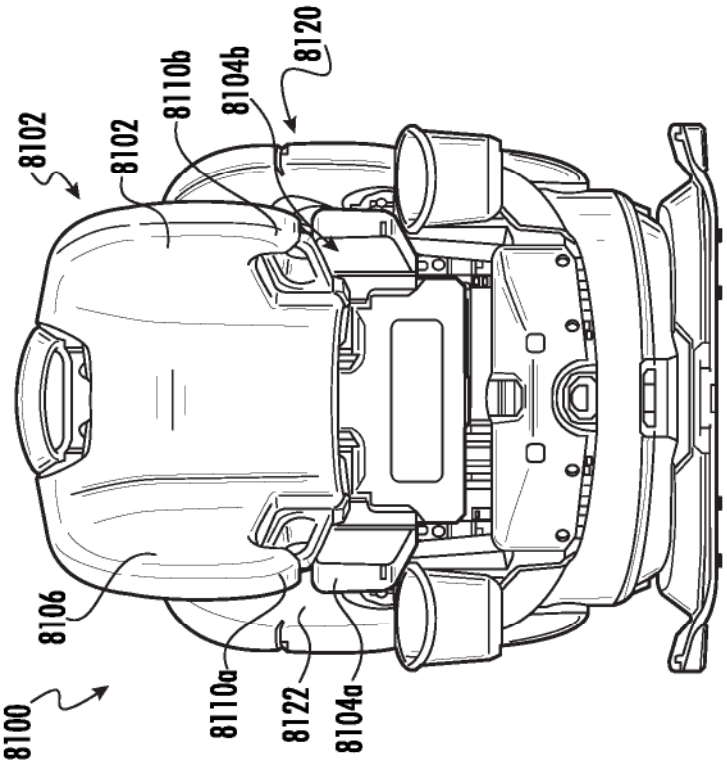


FIG. 84B

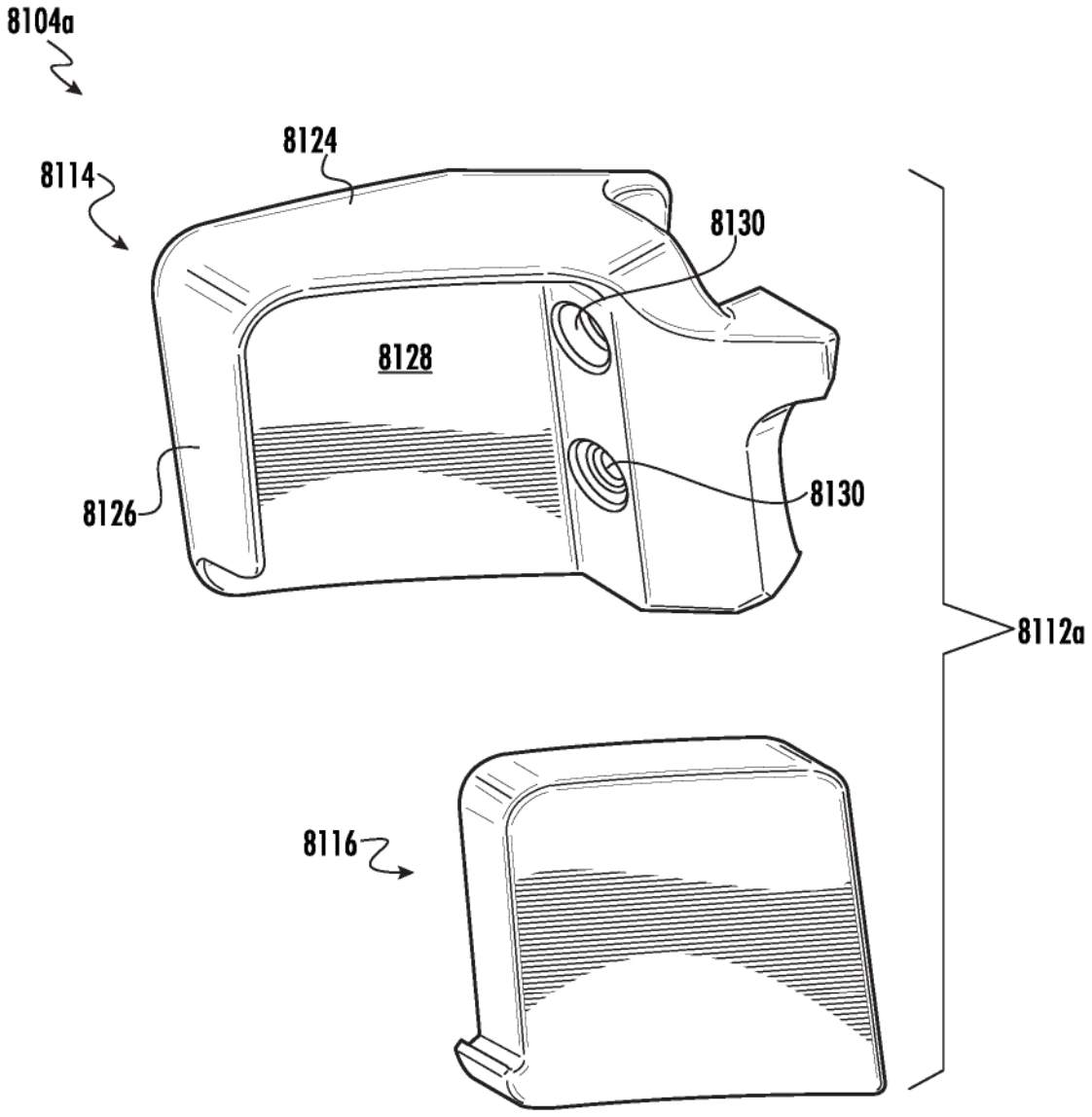


FIG. 85

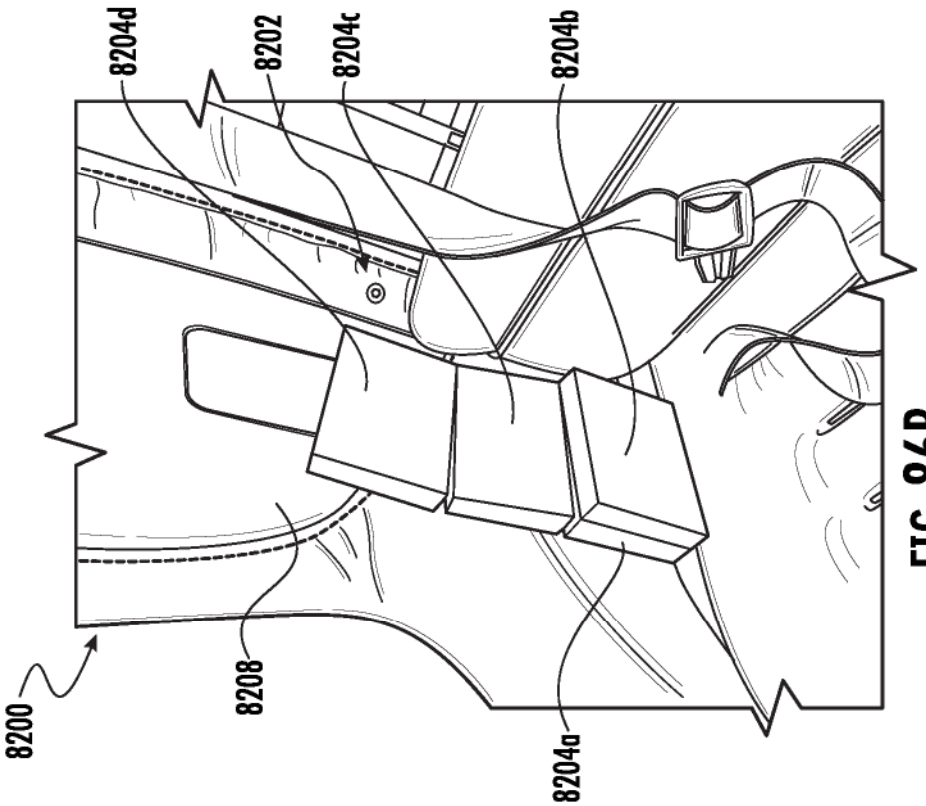


FIG. 86B

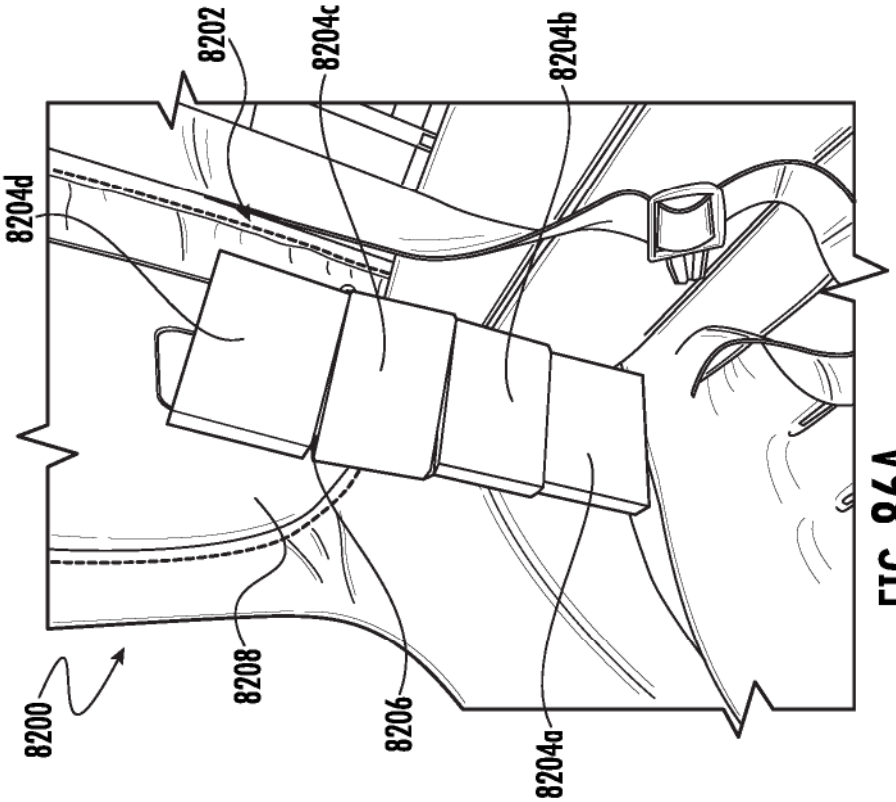


FIG. 86A

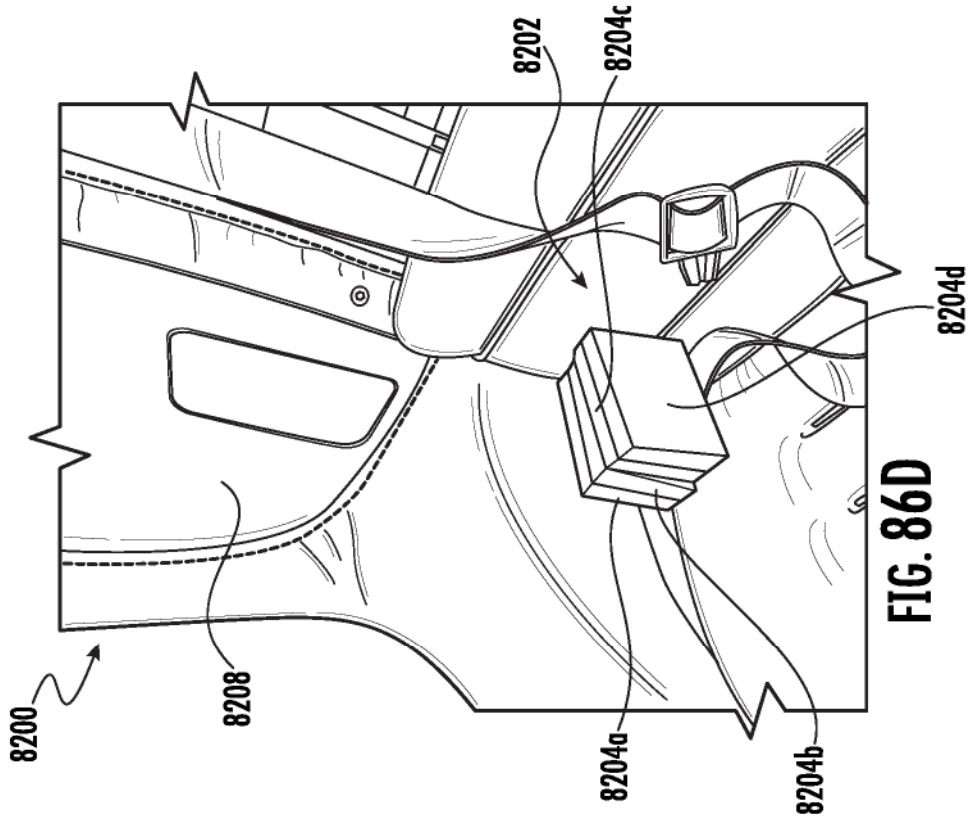


FIG. 86D

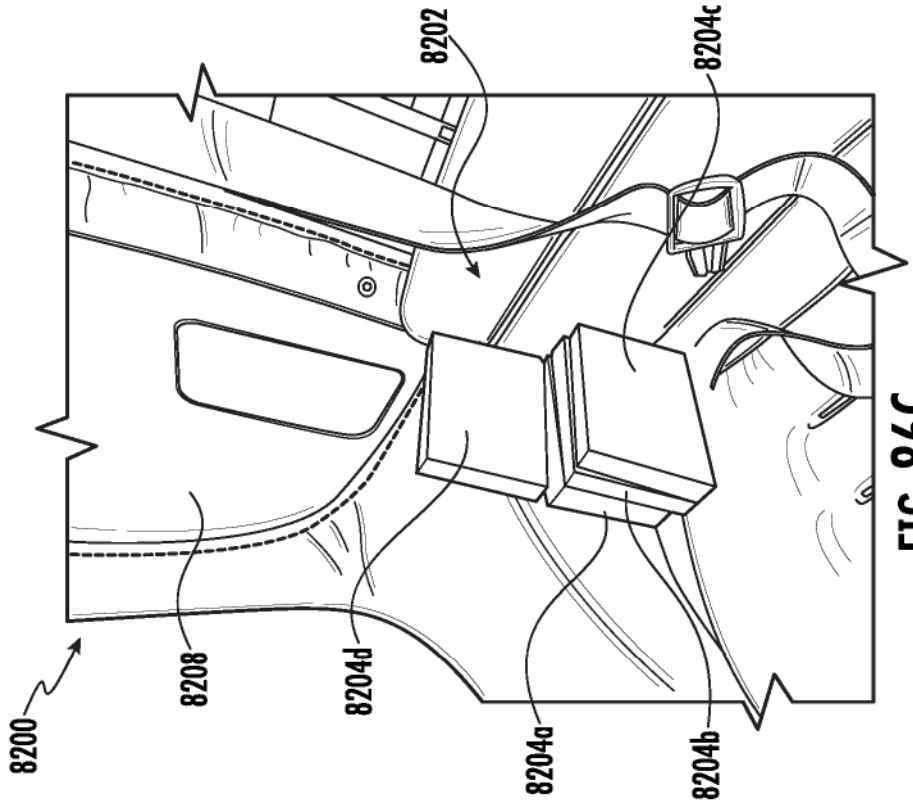


FIG. 86C

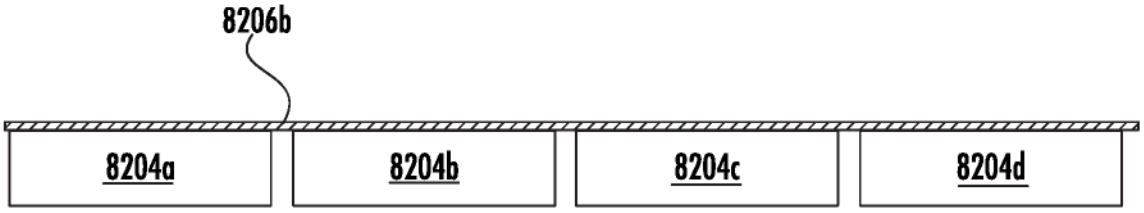


FIG. 86E

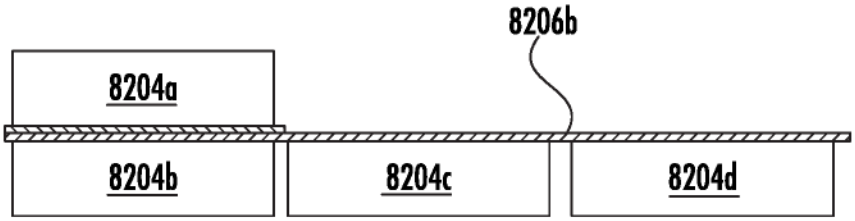


FIG. 86F

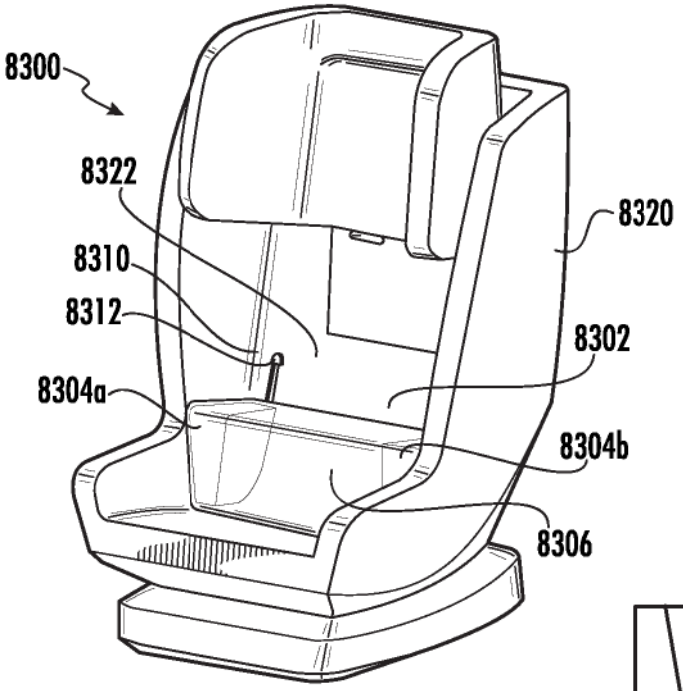


FIG. 87A

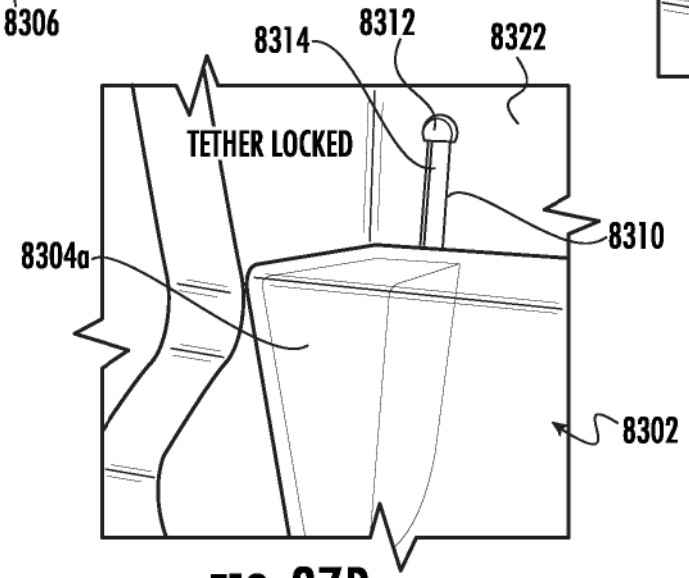


FIG. 87B

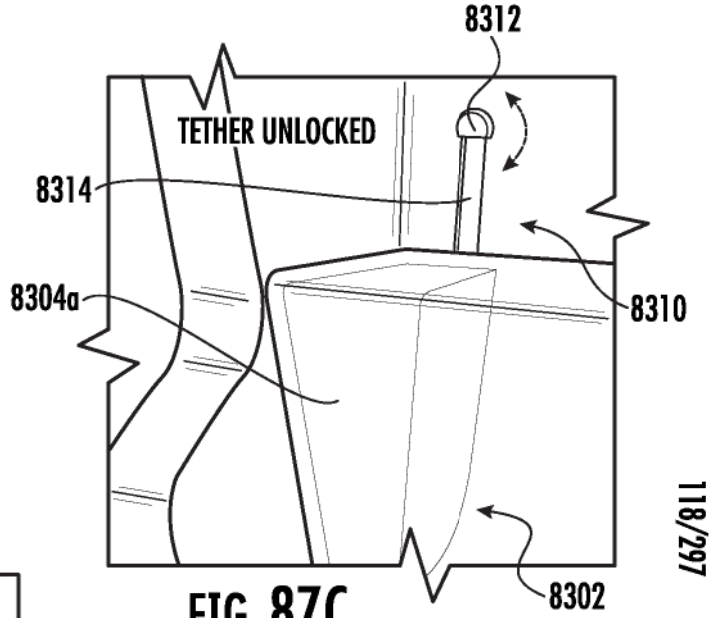


FIG. 87C

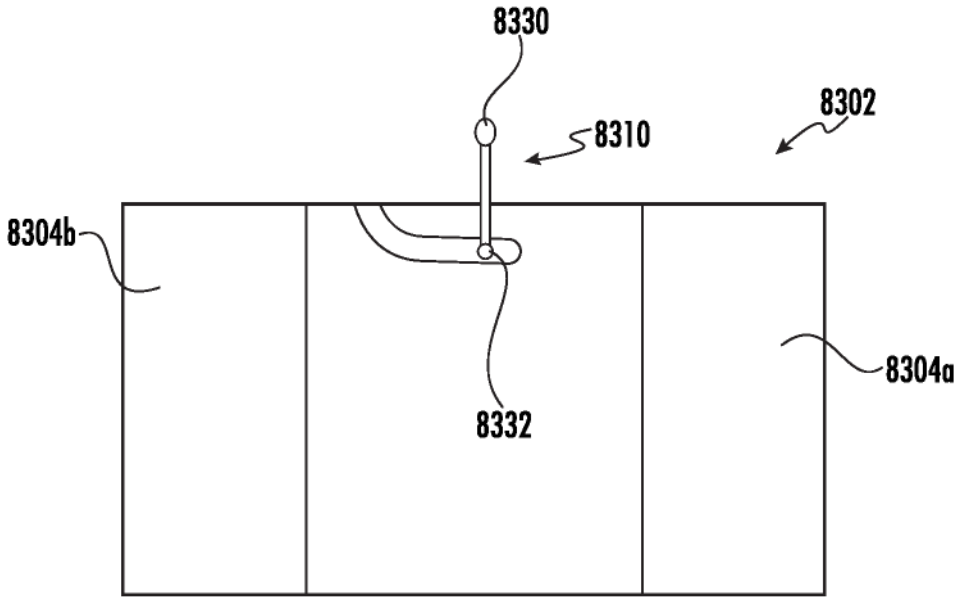


FIG. 88A

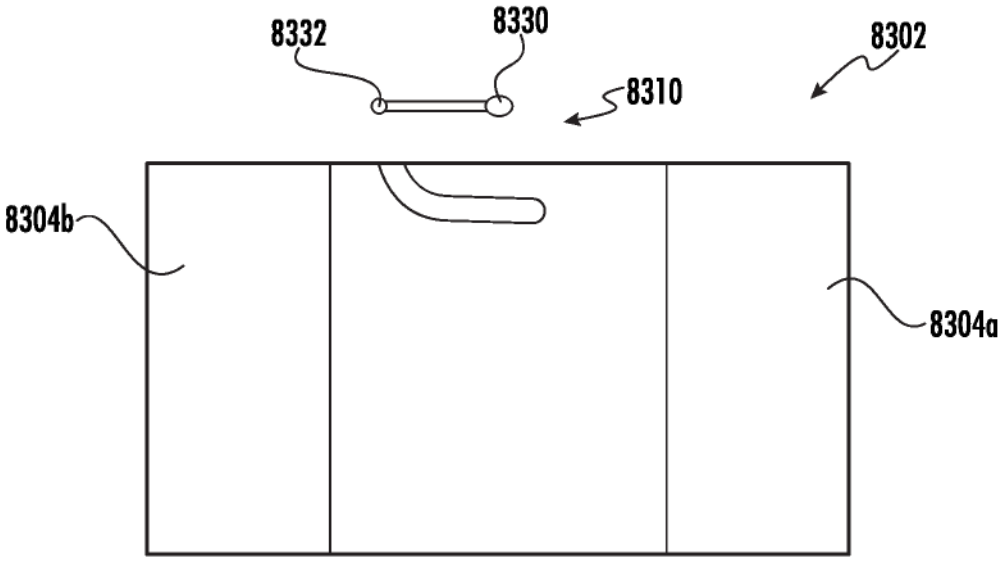


FIG. 88B

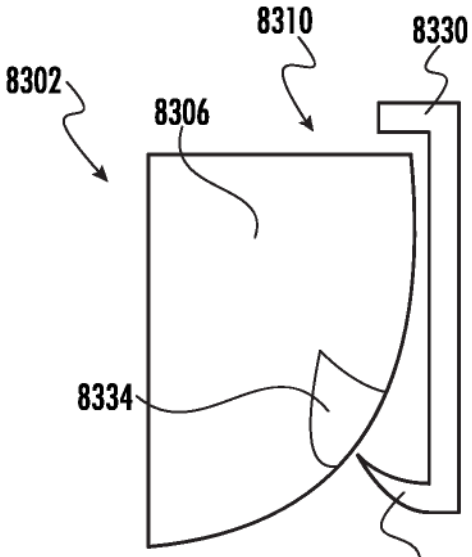


FIG. 88C

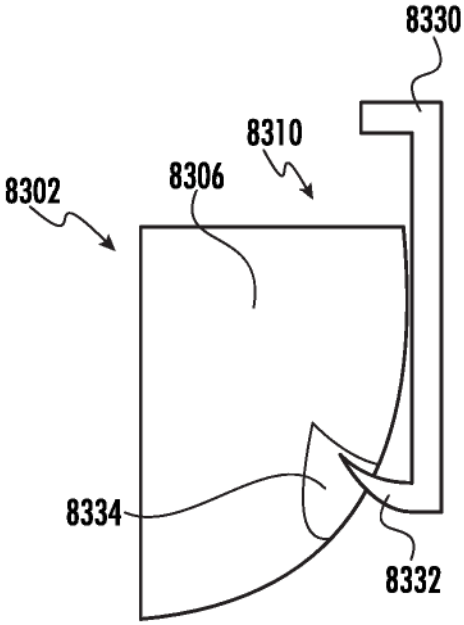


FIG. 88D

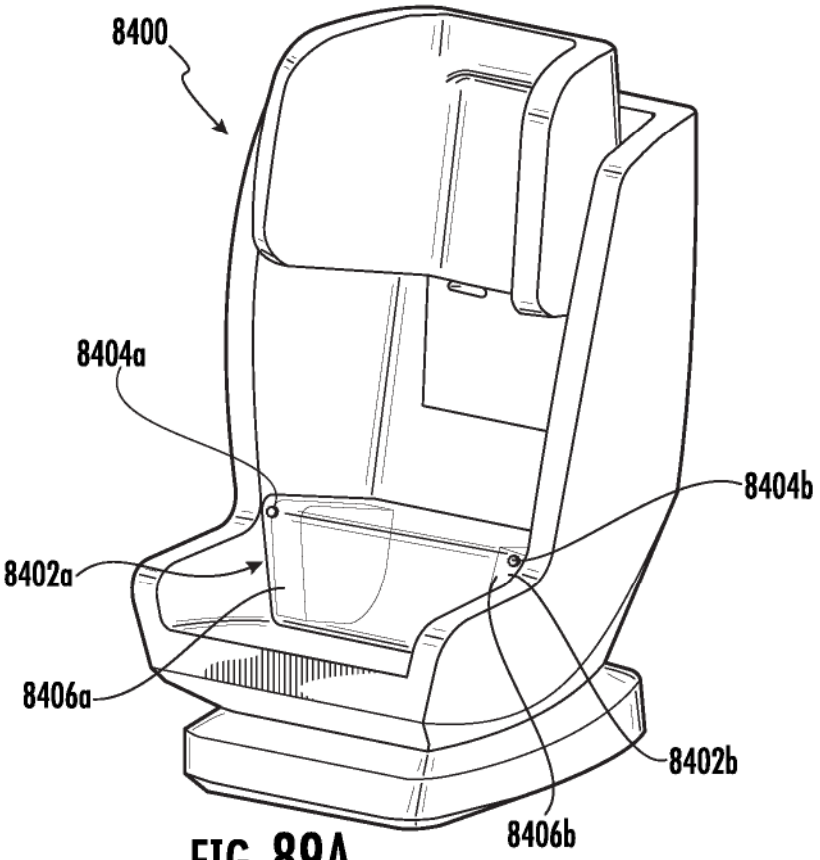


FIG. 89A

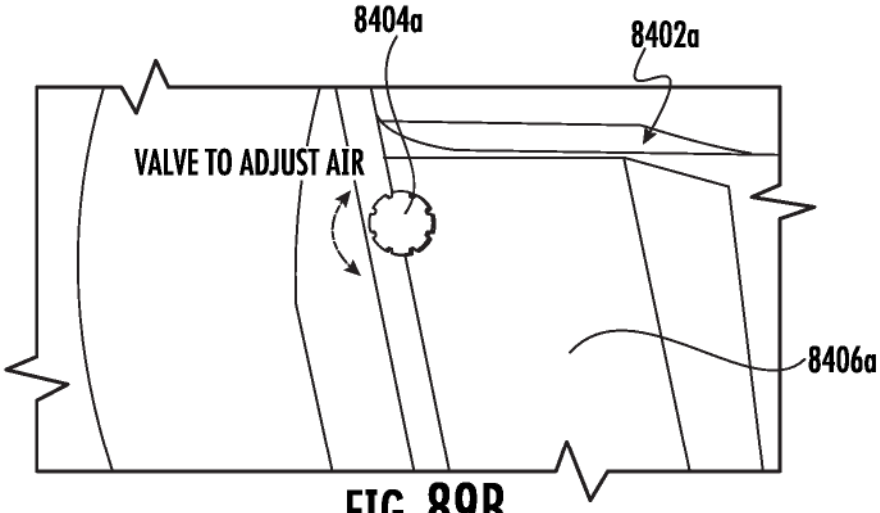
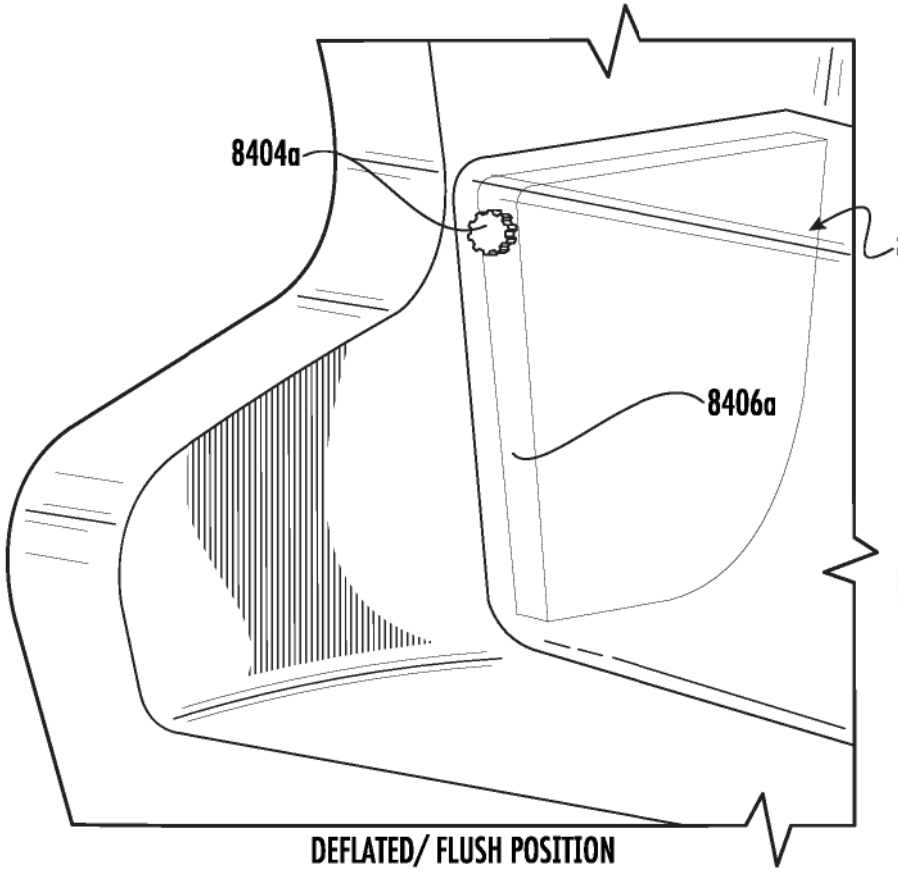
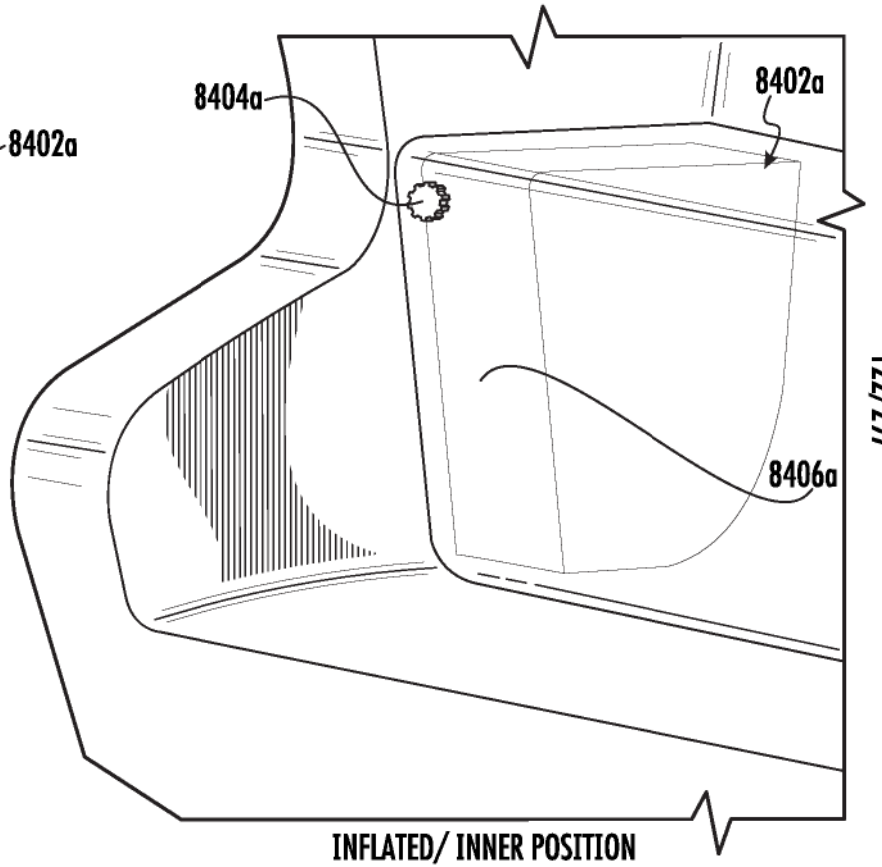


FIG. 89B



DEFLATED/ FLUSH POSITION

FIG. 89C



INFLATED/ INNER POSITION

FIG. 89D

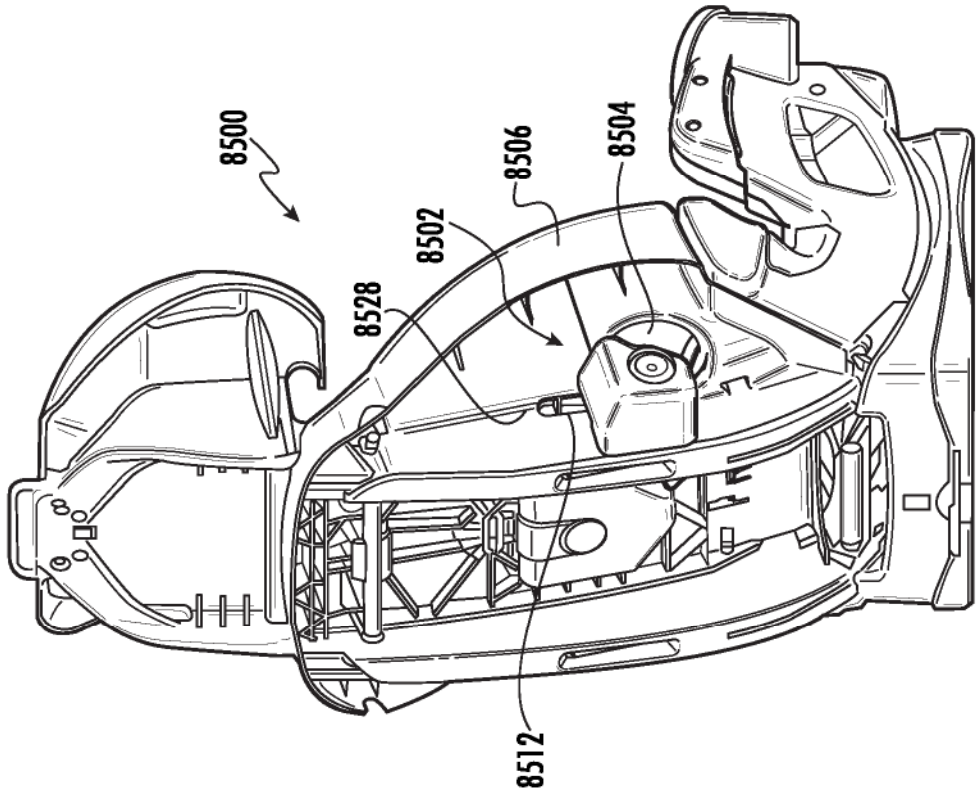


FIG. 90B

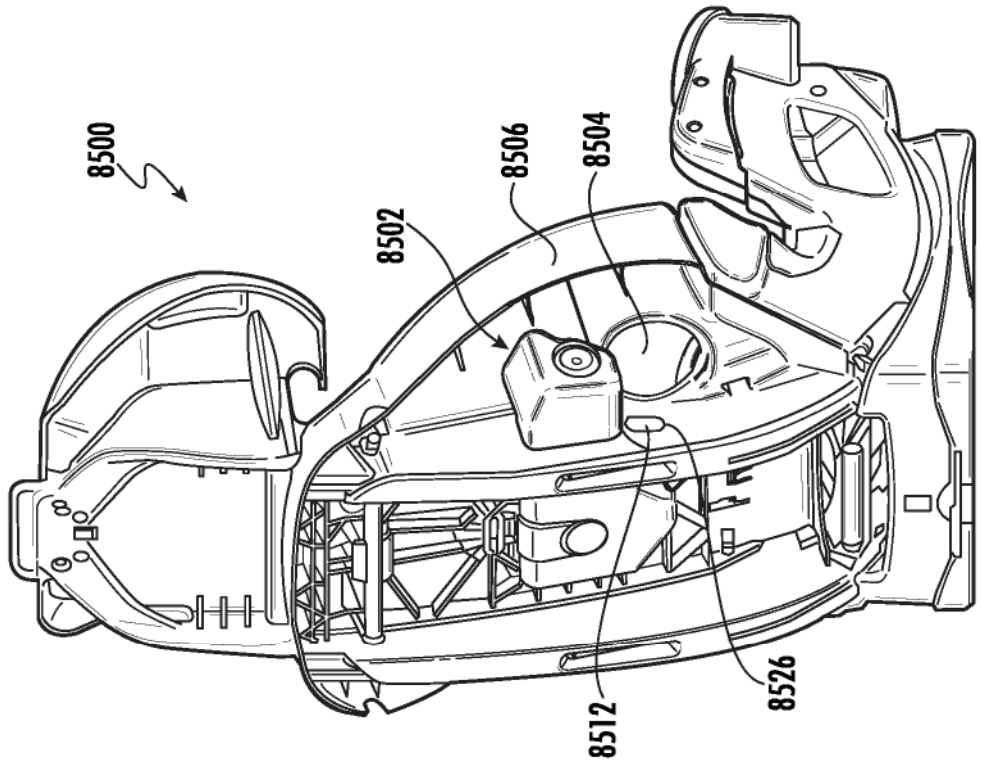


FIG. 90A

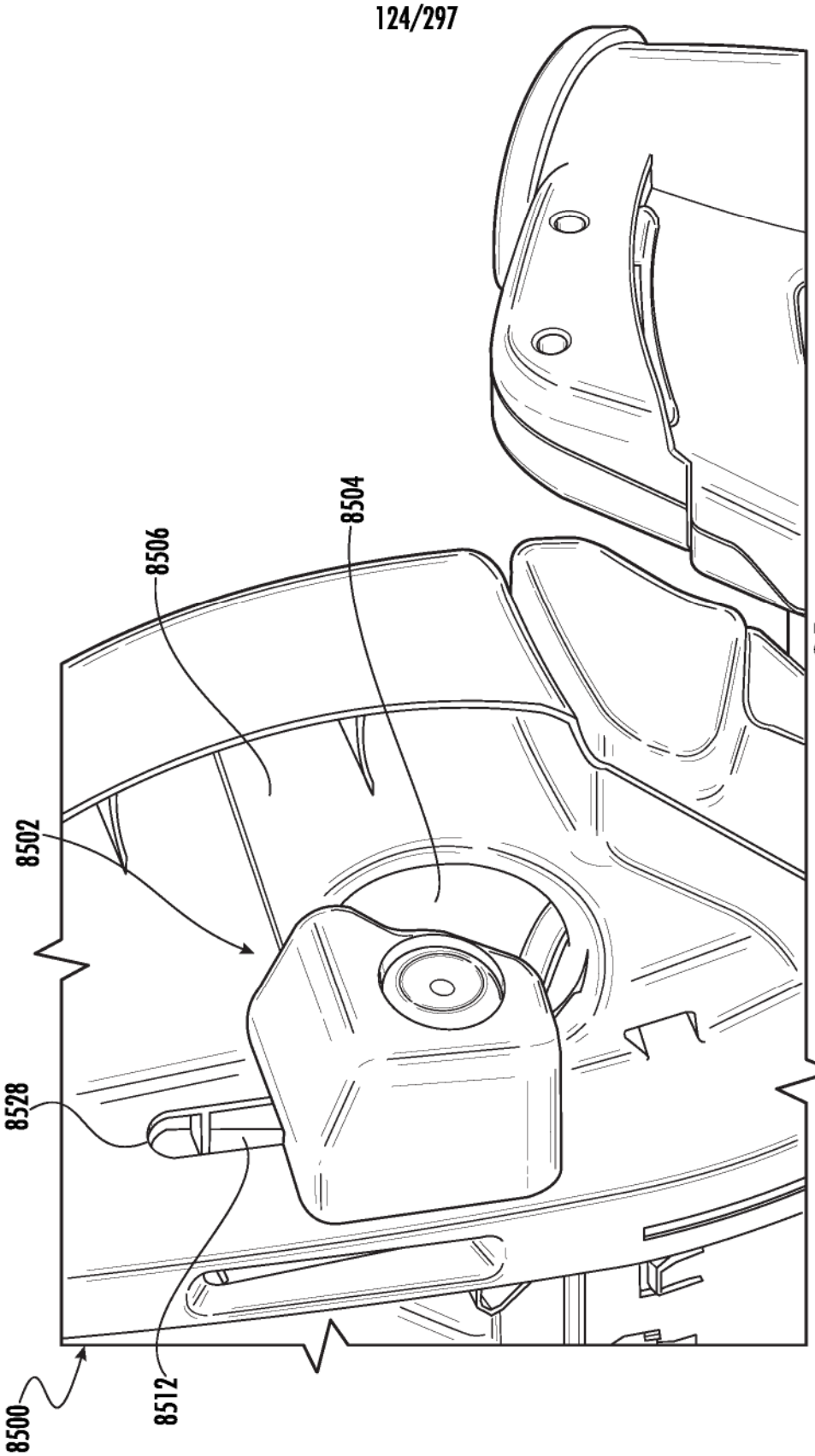


FIG. 91

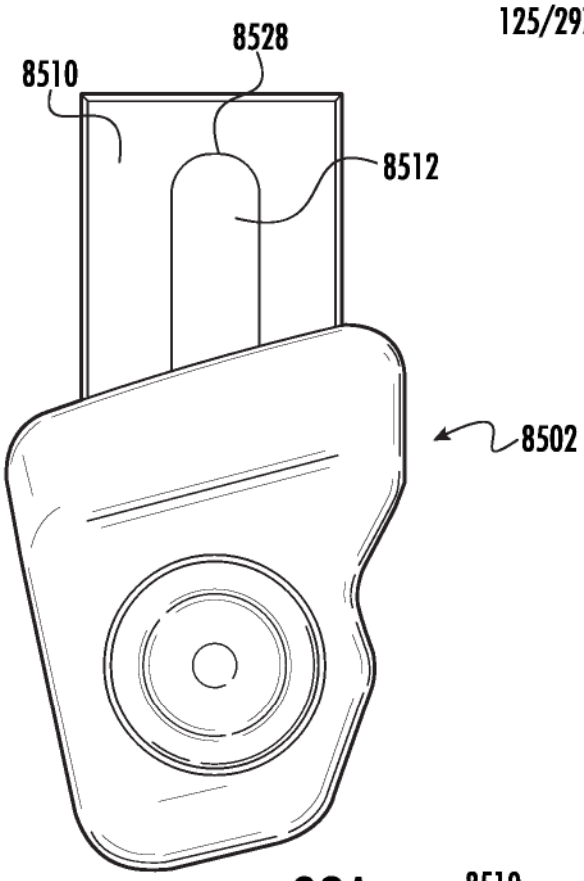


FIG. 92A

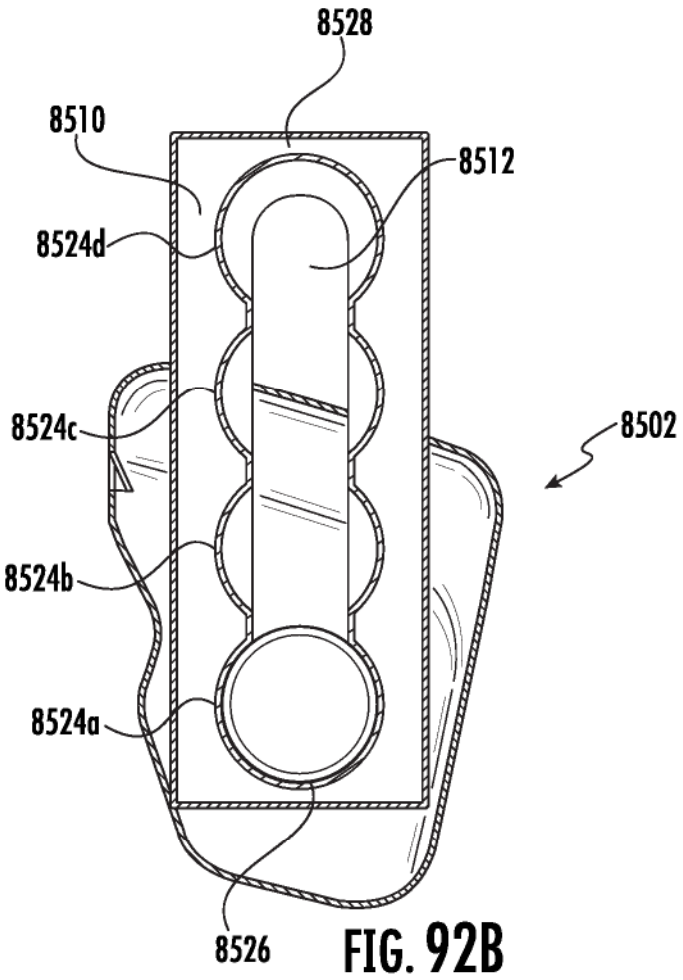


FIG. 92B

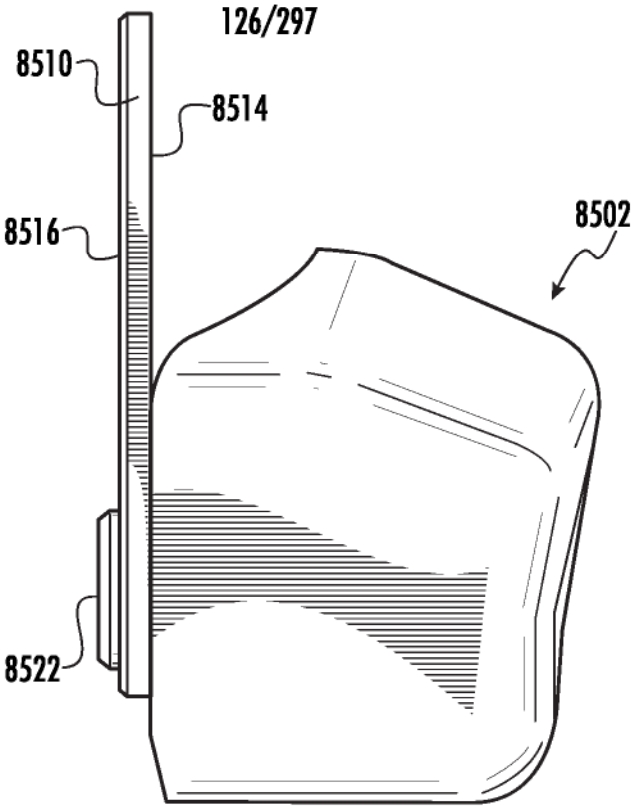

126/297
8510
8514
8516
8502
8522

FIG. 93

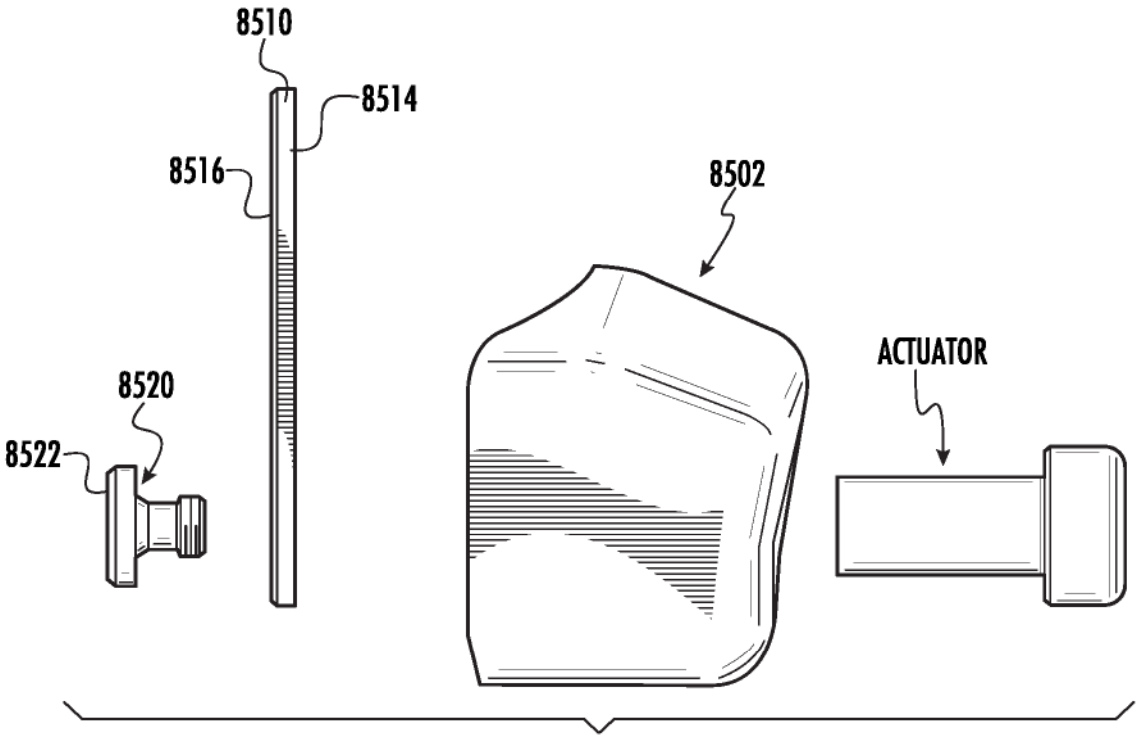

8510
8514
8516
8502
ACTUATOR
8520
8522

FIG. 94

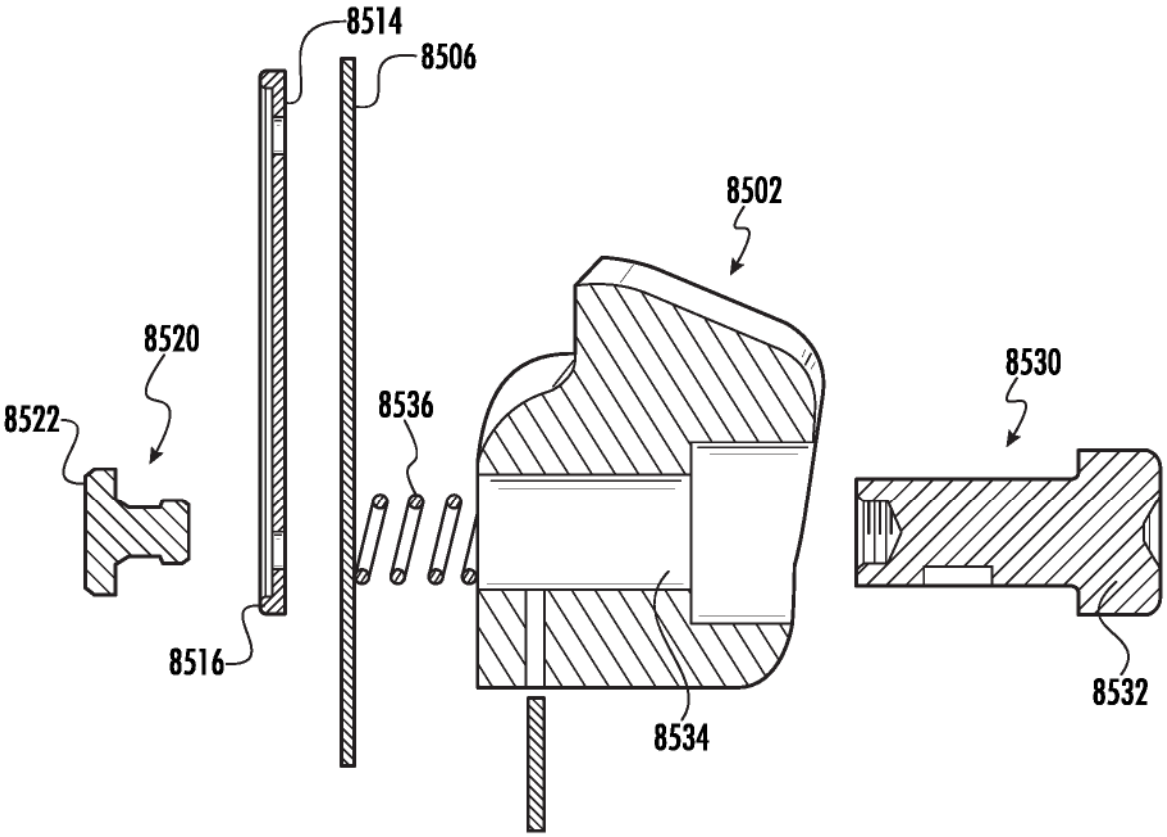


FIG. 95

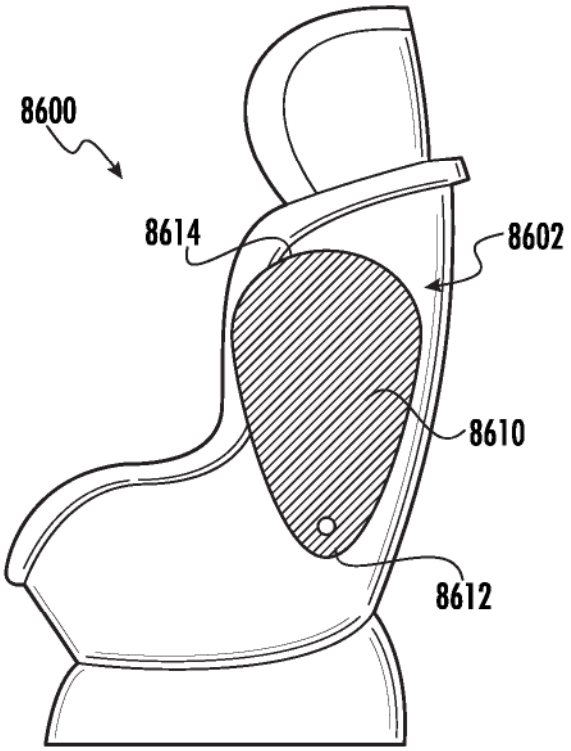


FIG. 96A

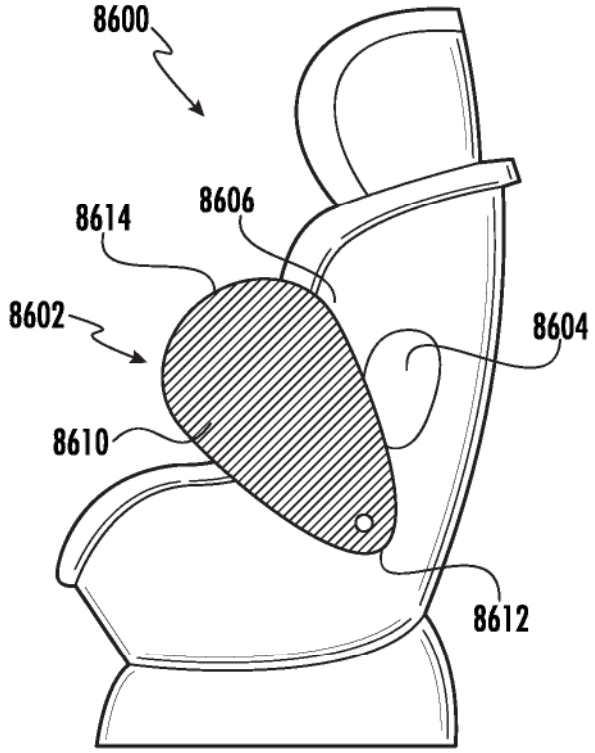


FIG. 96B

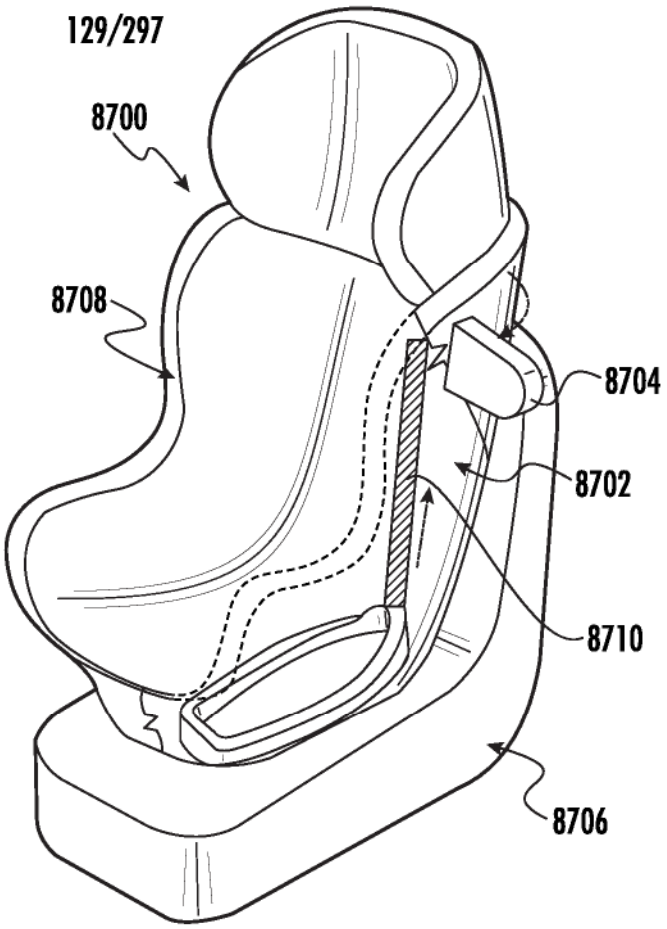


FIG. 97A

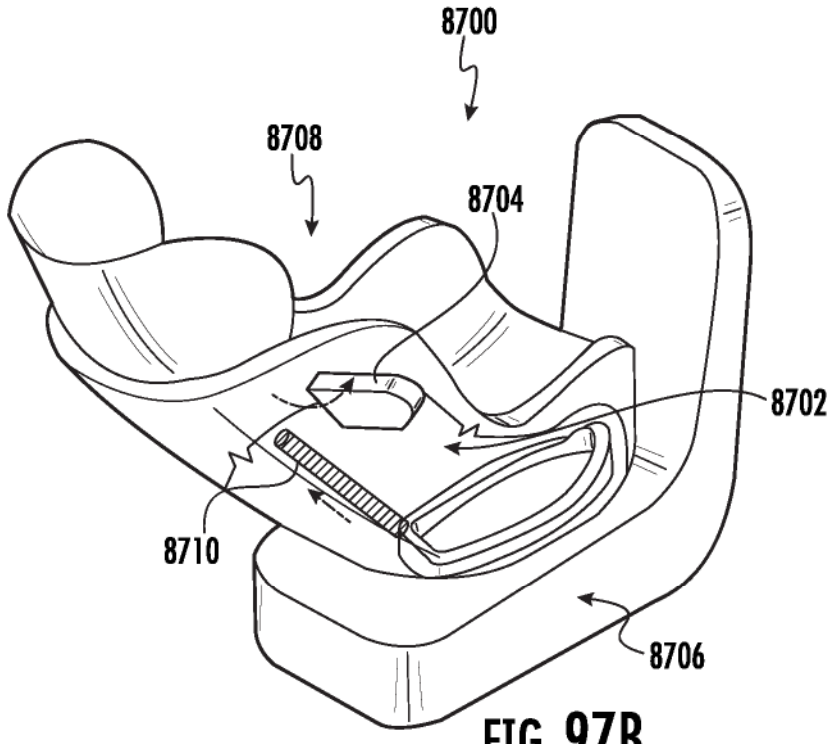


FIG. 97B

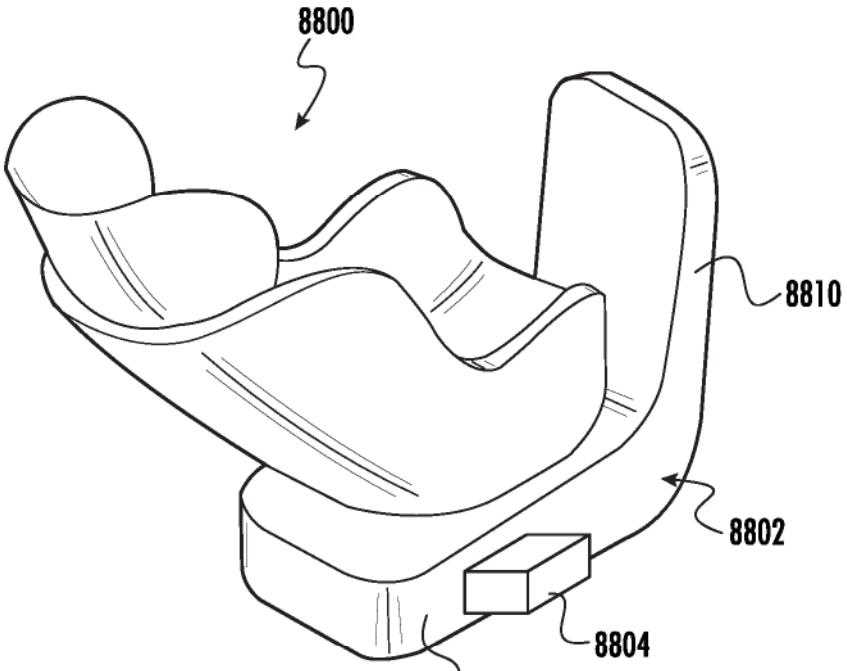


FIG. 98A

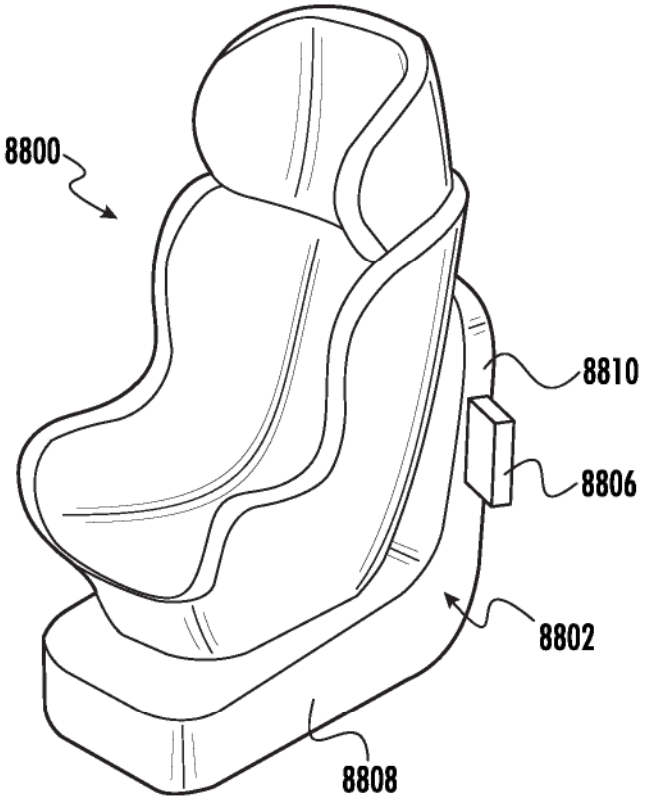


FIG. 98B

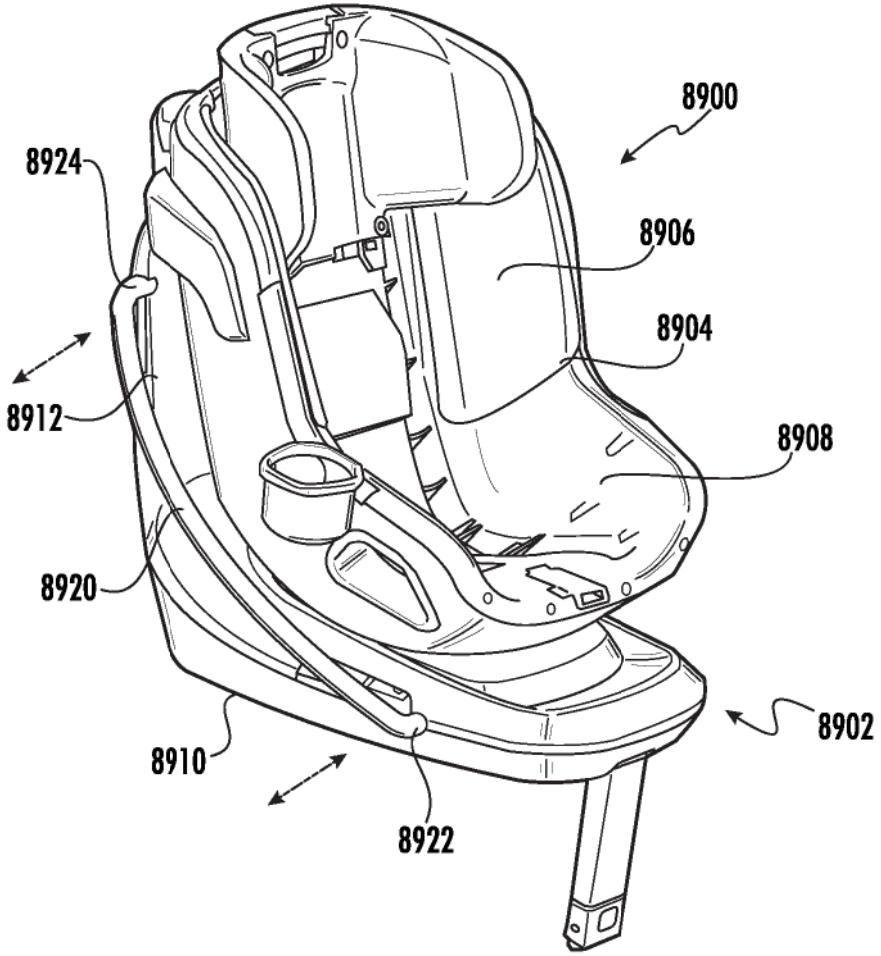


FIG. 99

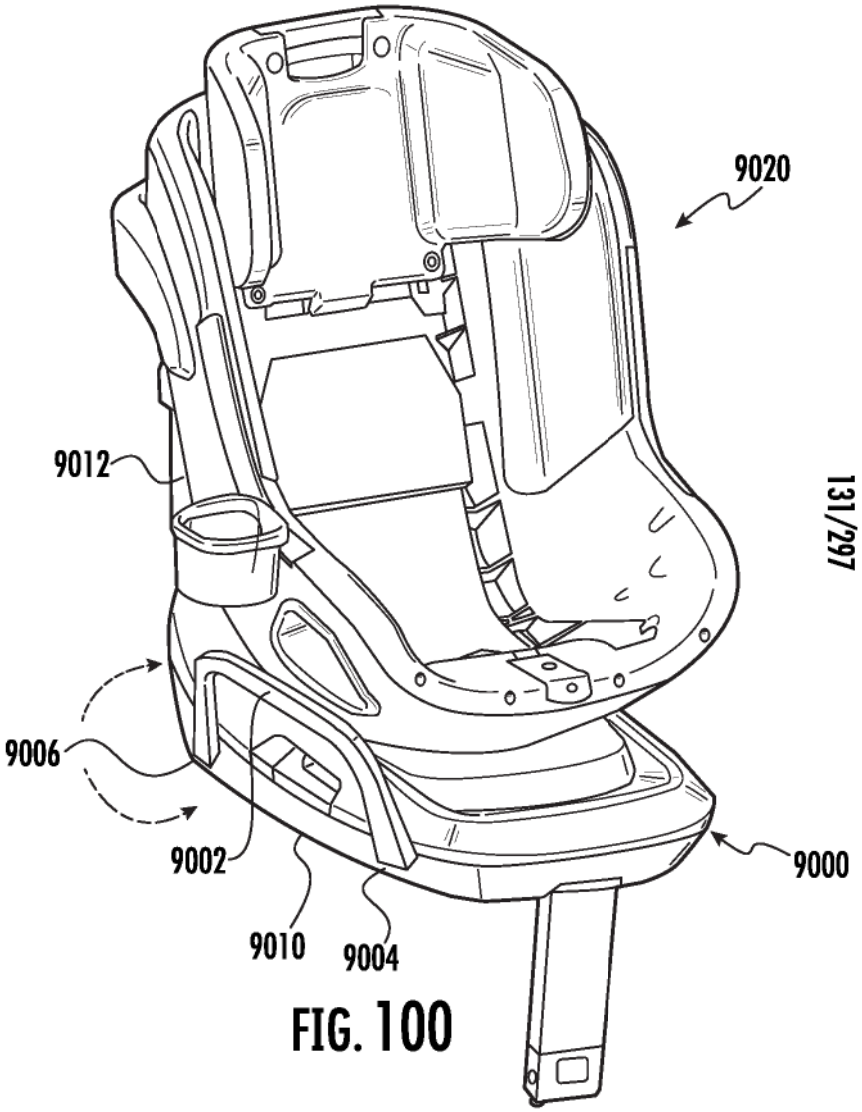


FIG. 100

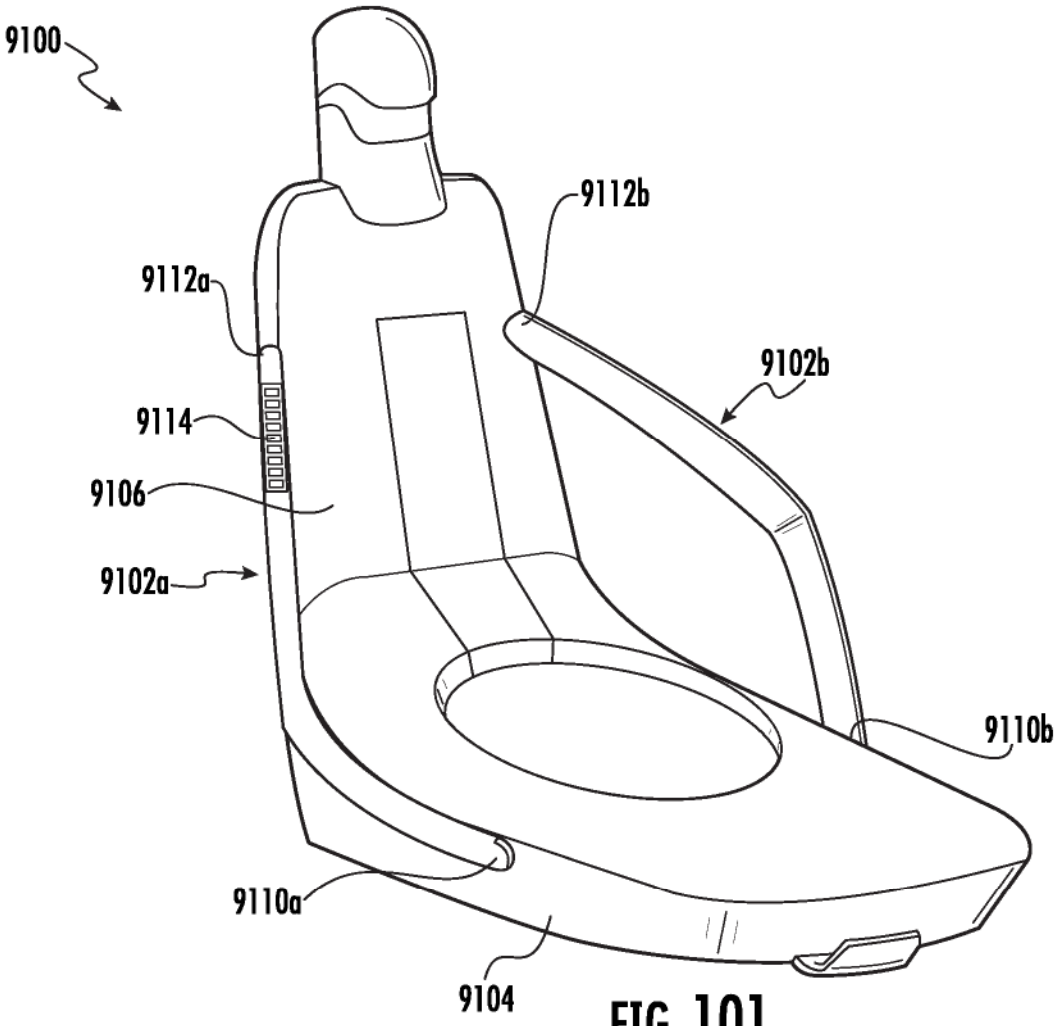


FIG. 101

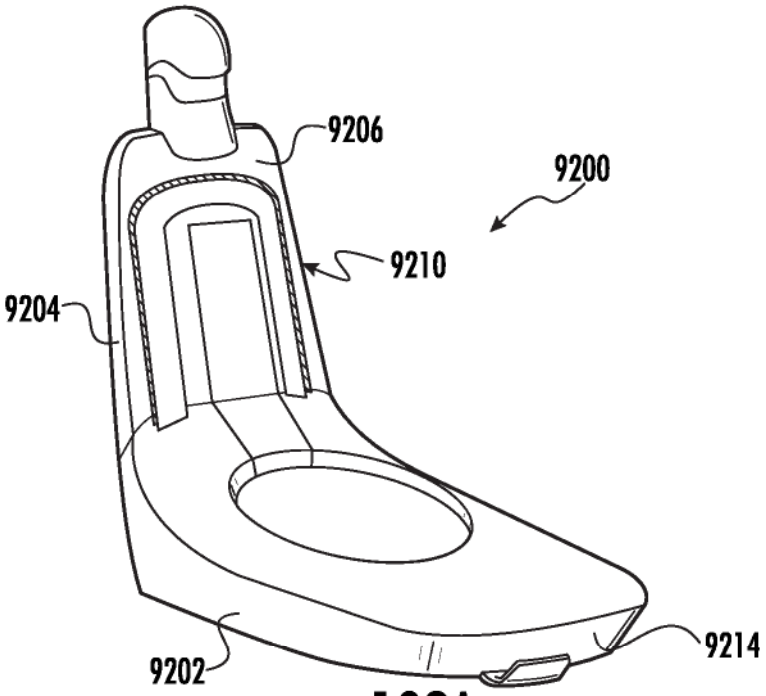


FIG. 102A

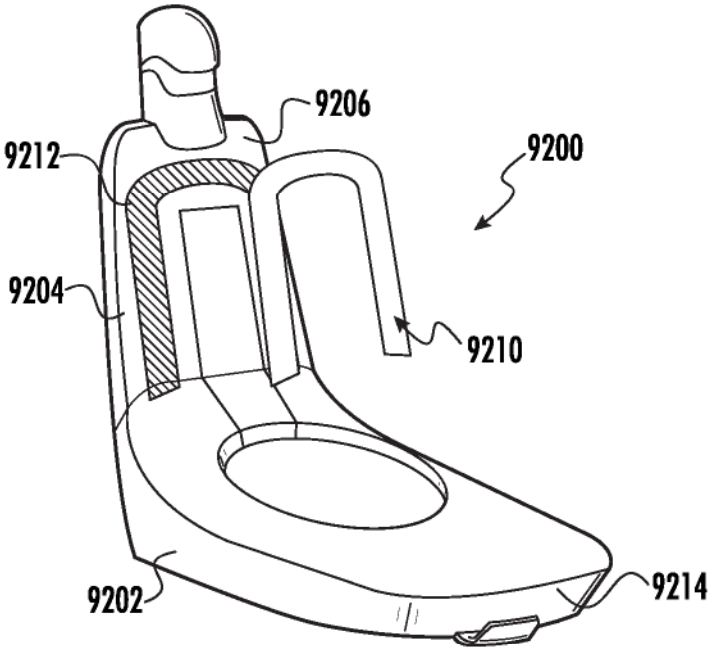


FIG. 102B

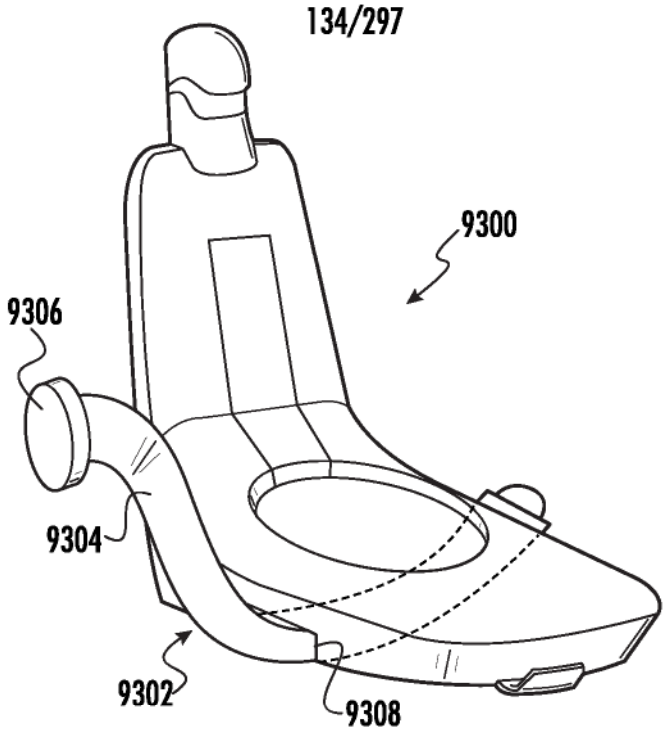


FIG. 103

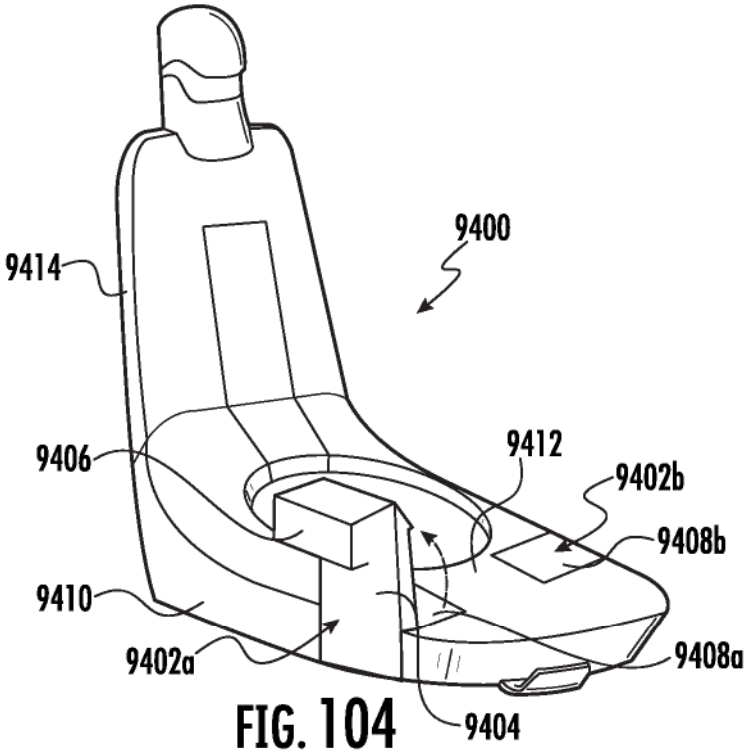


FIG. 104

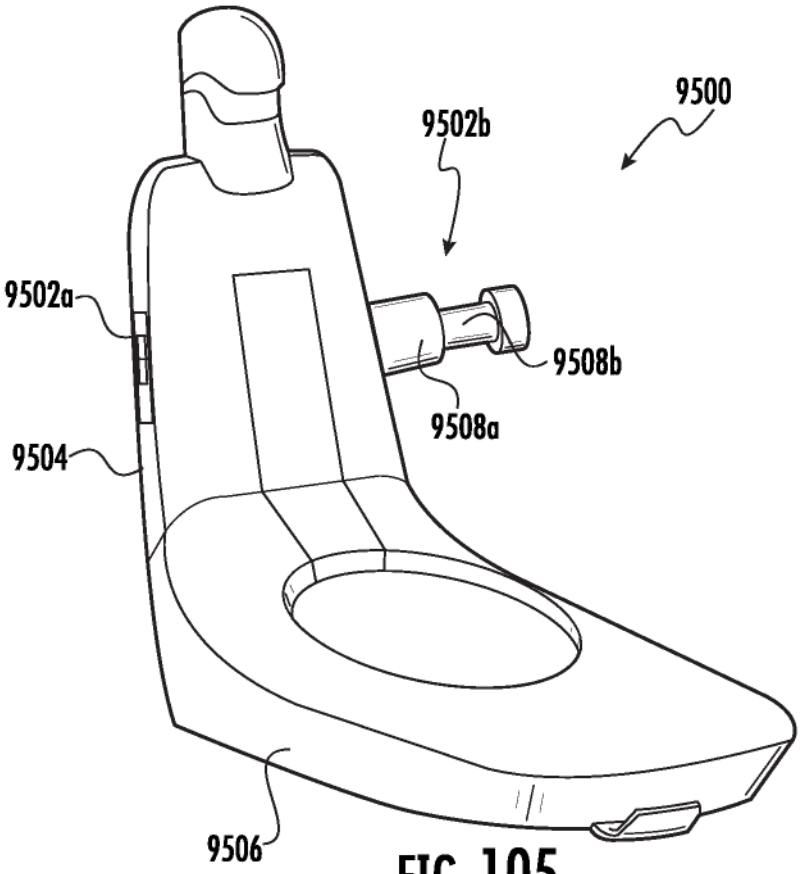


FIG. 105

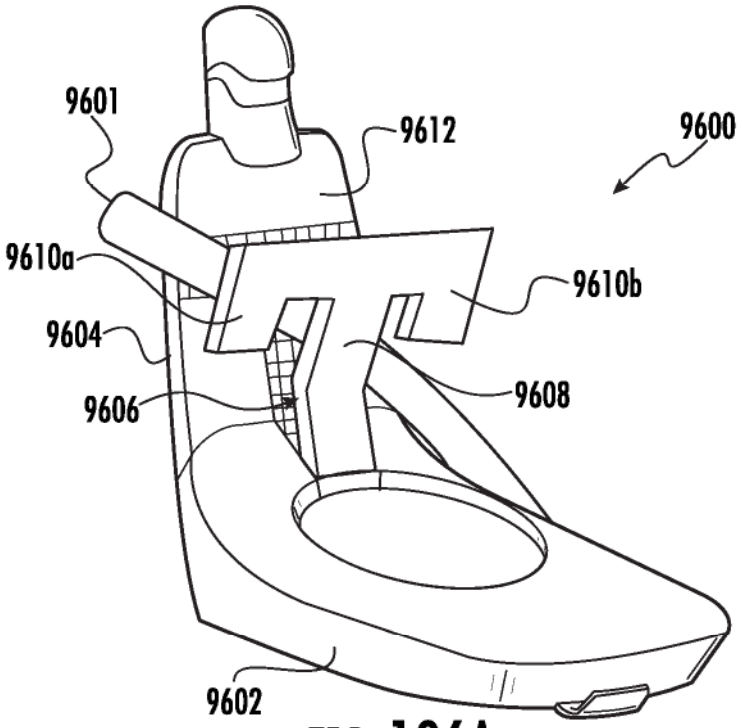


FIG. 106A

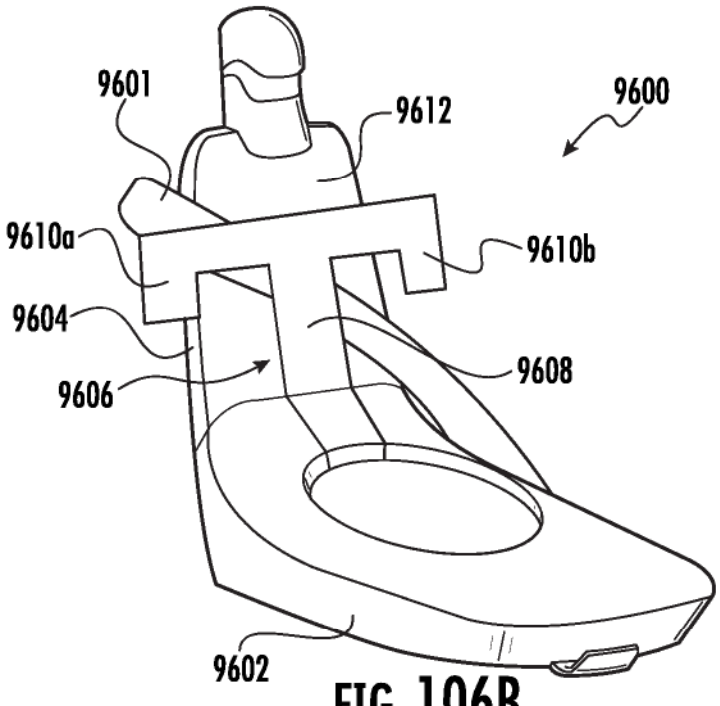


FIG. 106B

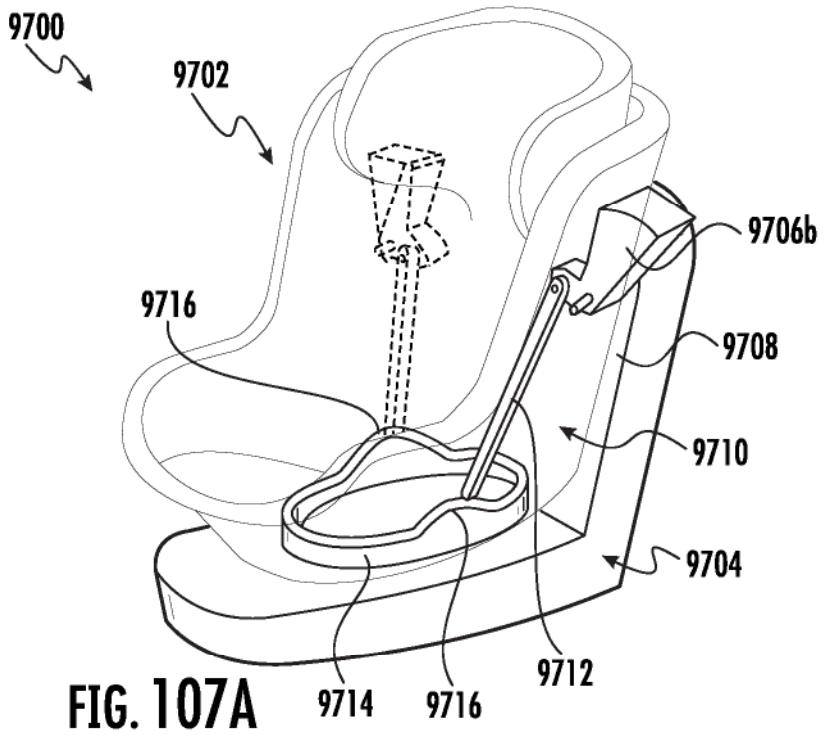


FIG. 107A

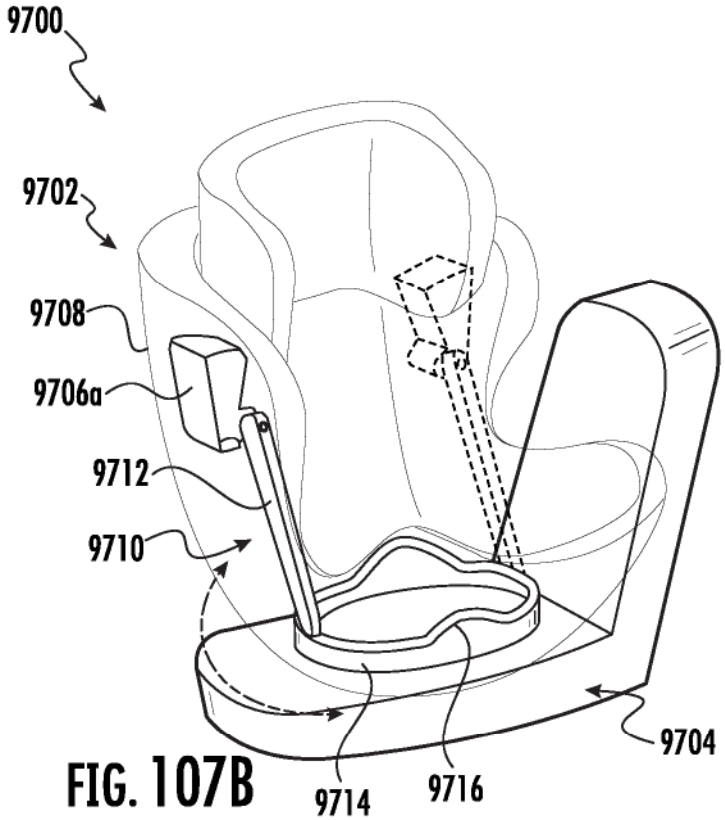


FIG. 107B

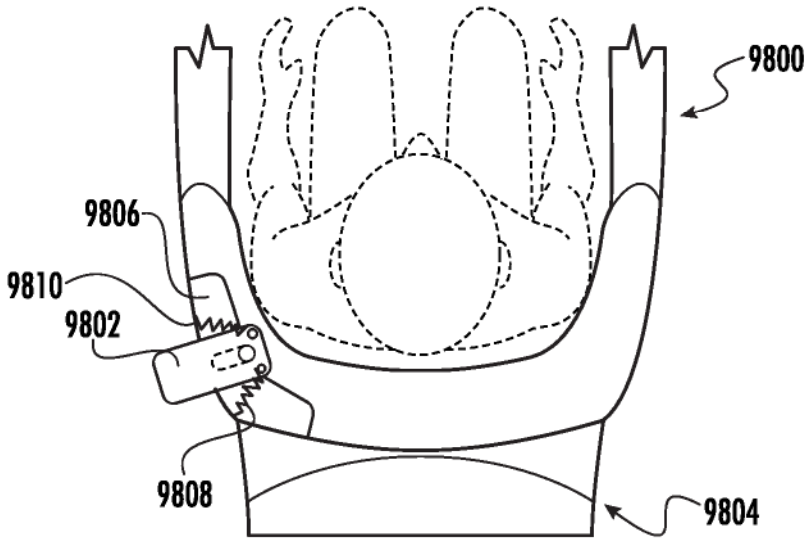


FIG. 108A

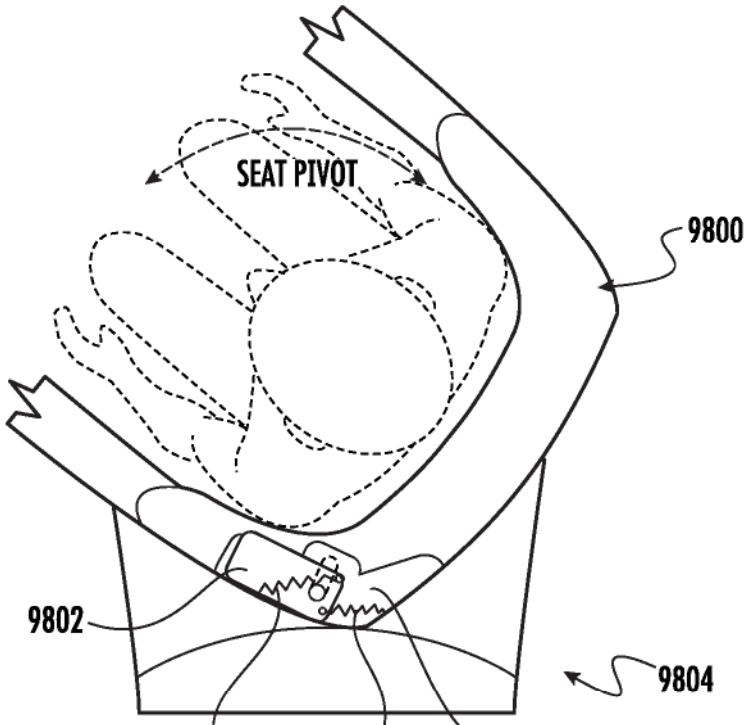


FIG. 108B

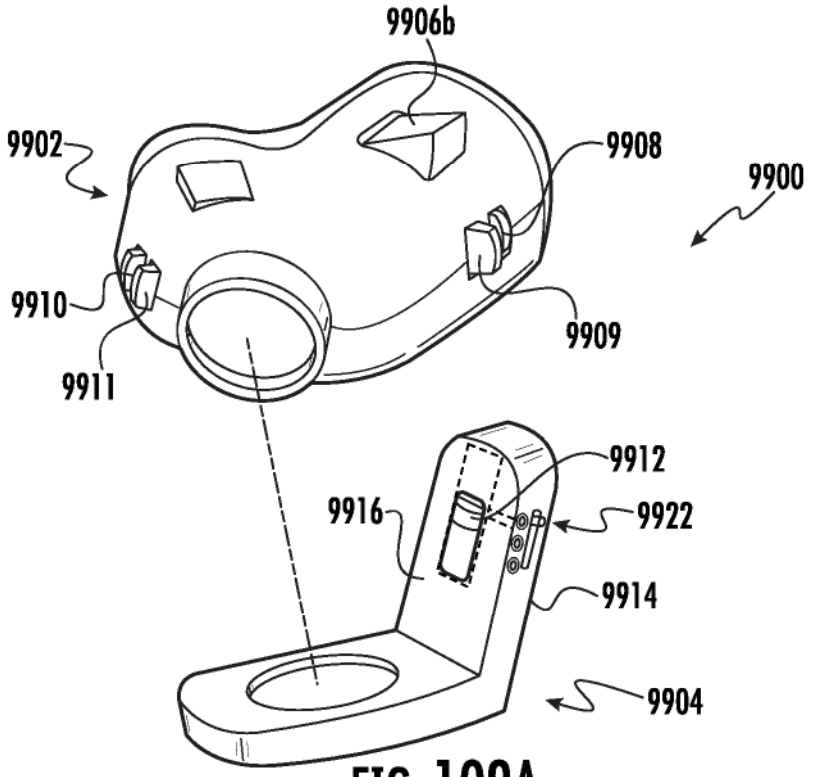


FIG. 109A

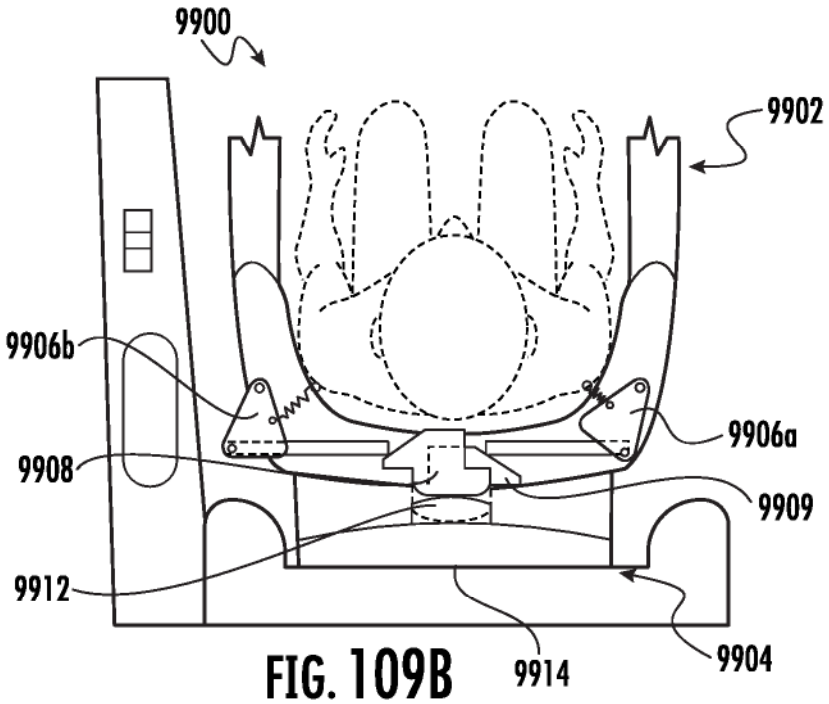


FIG. 109B

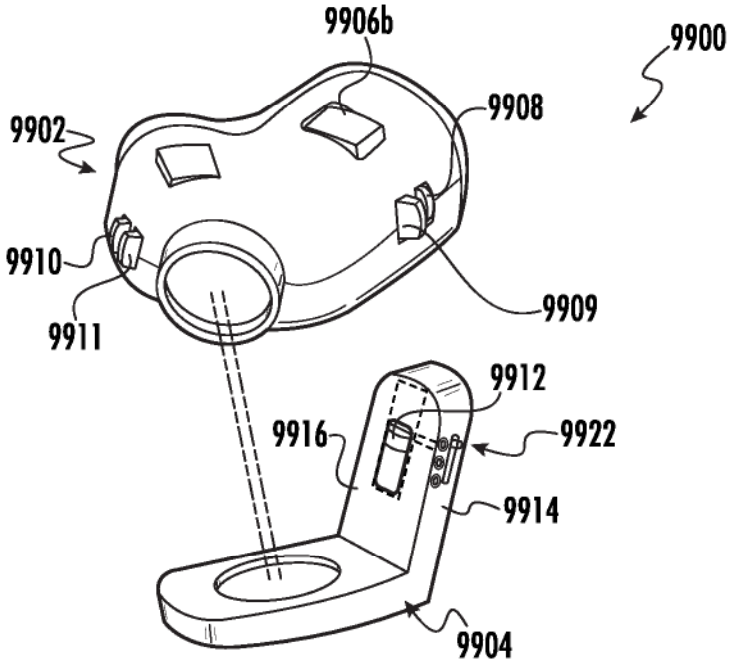


FIG. 110A

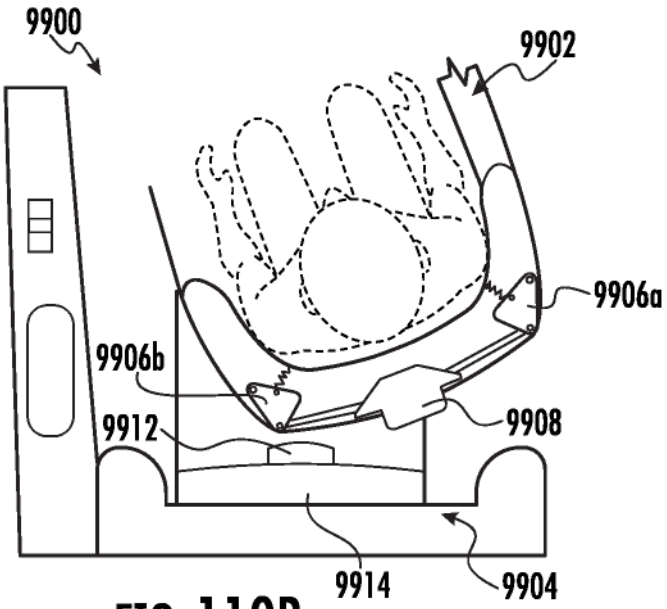


FIG. 110B

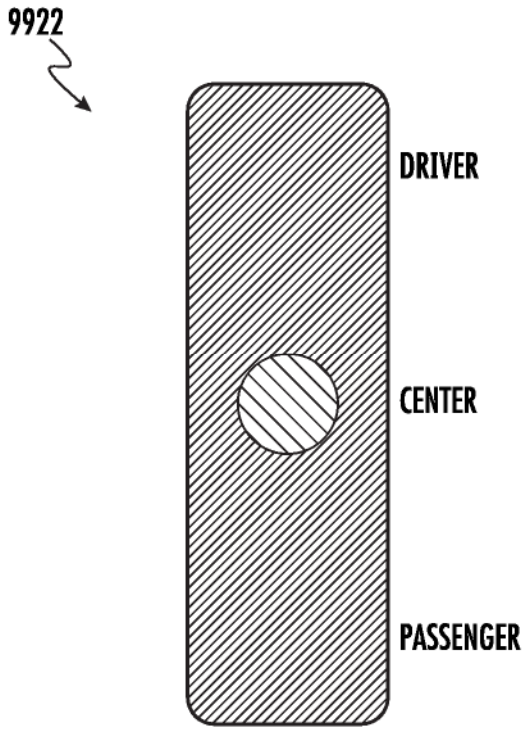
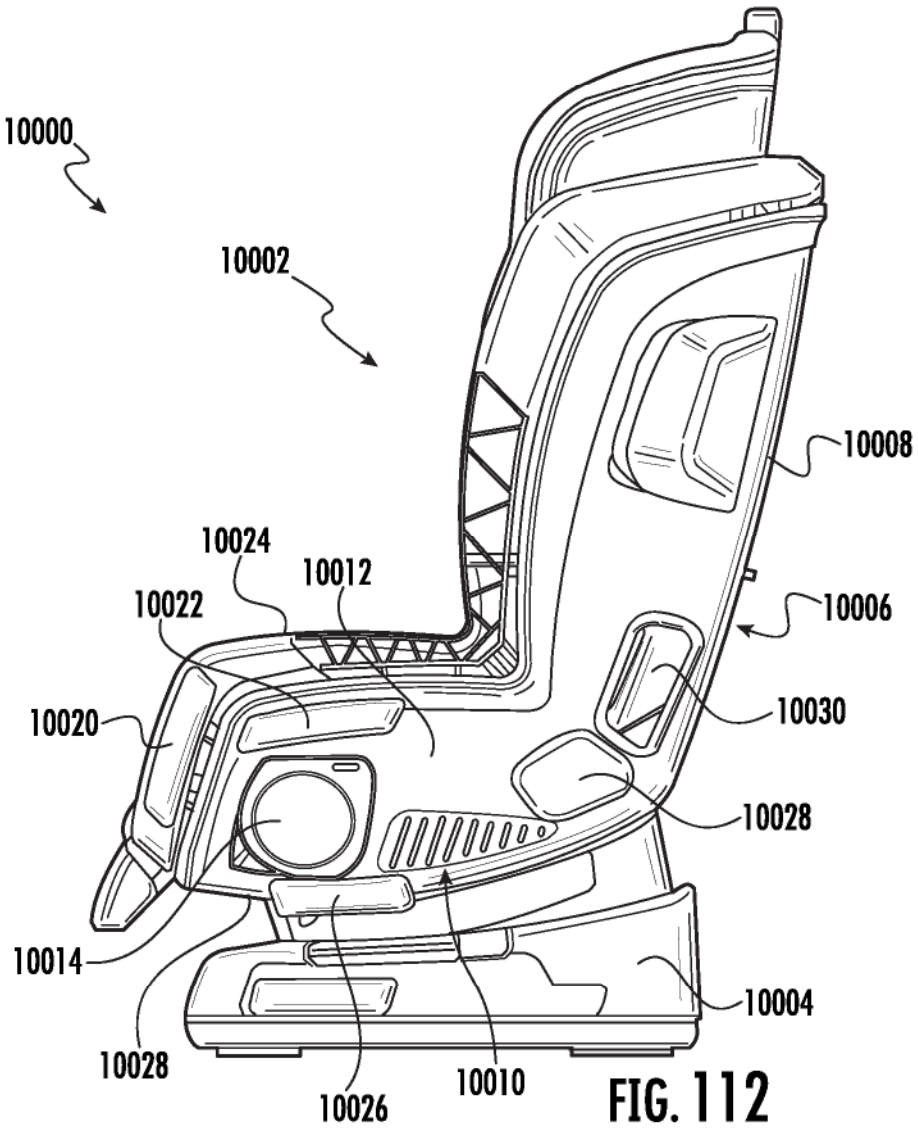


FIG. 111


10000
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10028
10014
10004
10028
10026
10010

FIG. 112

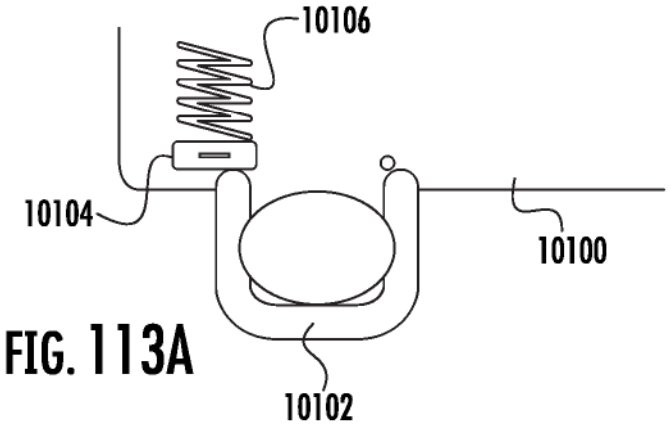


FIG. 113A

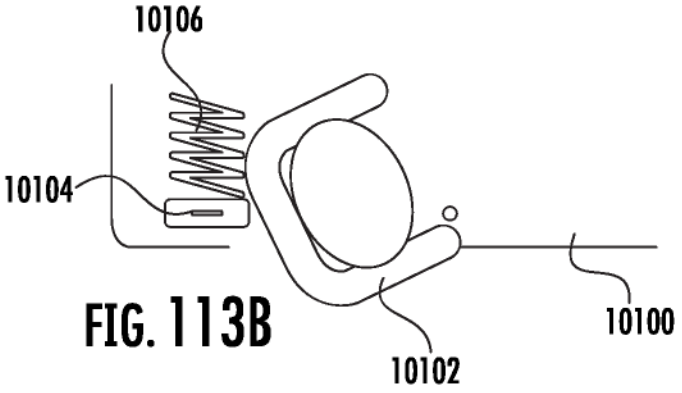


FIG. 113B

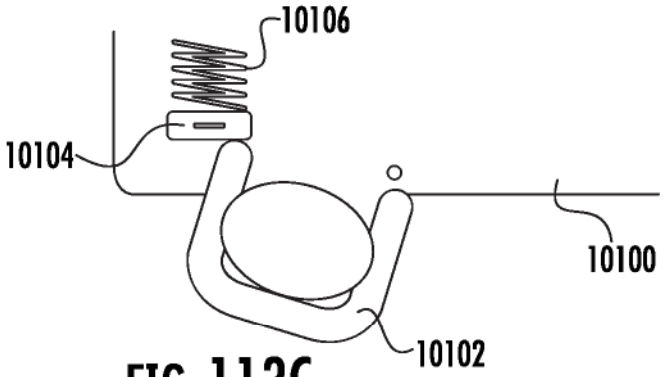


FIG. 113C

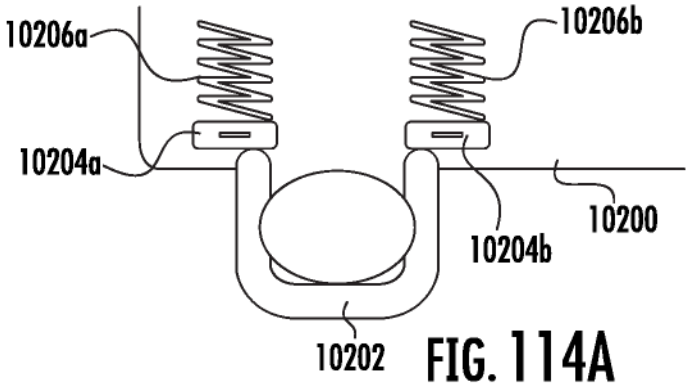


FIG. 114A

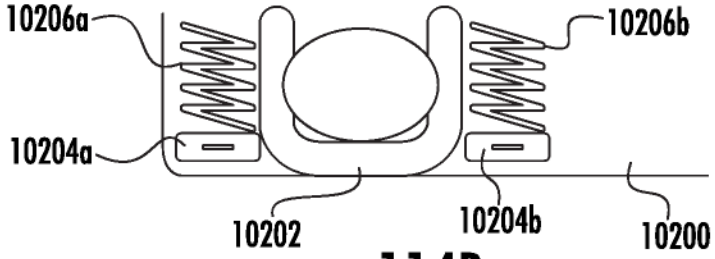


FIG. 114B

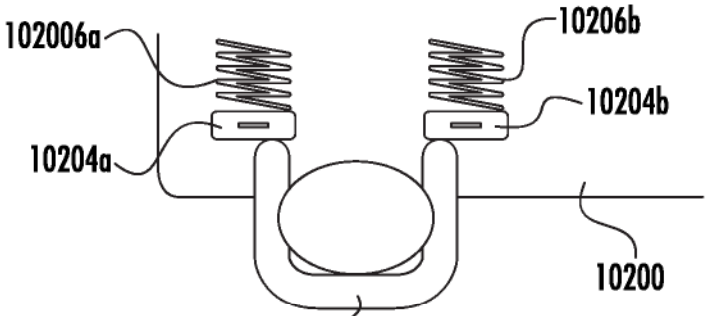


FIG. 114C

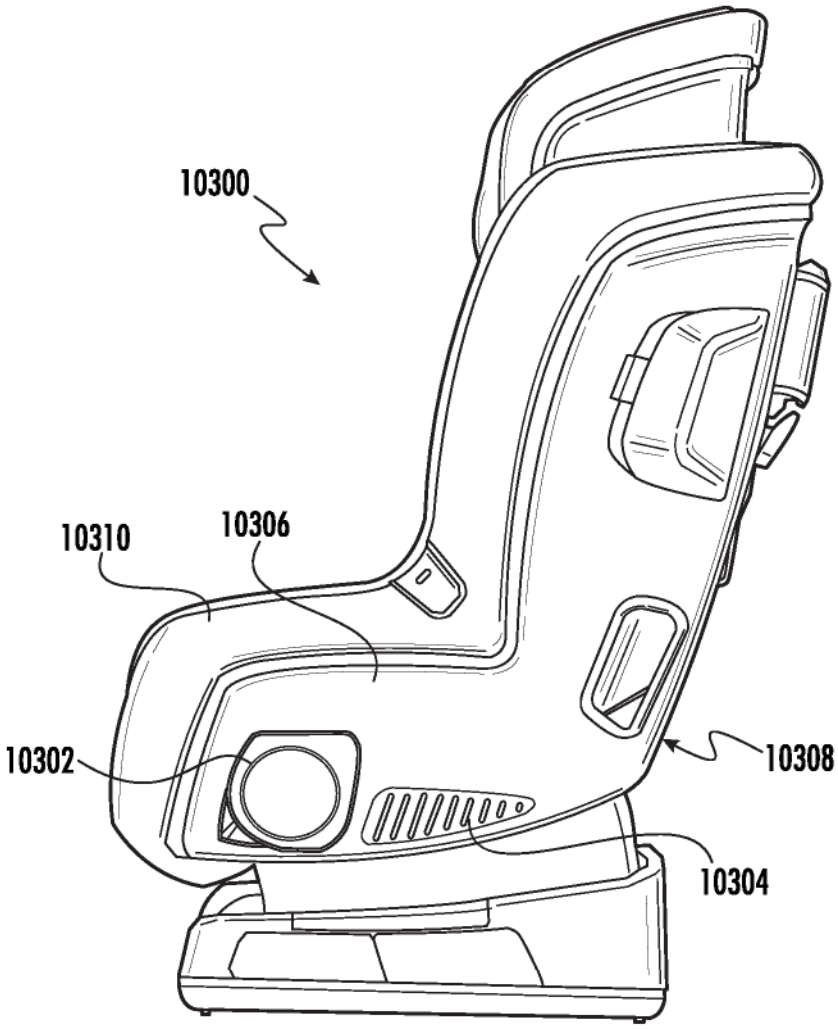


FIG. 115

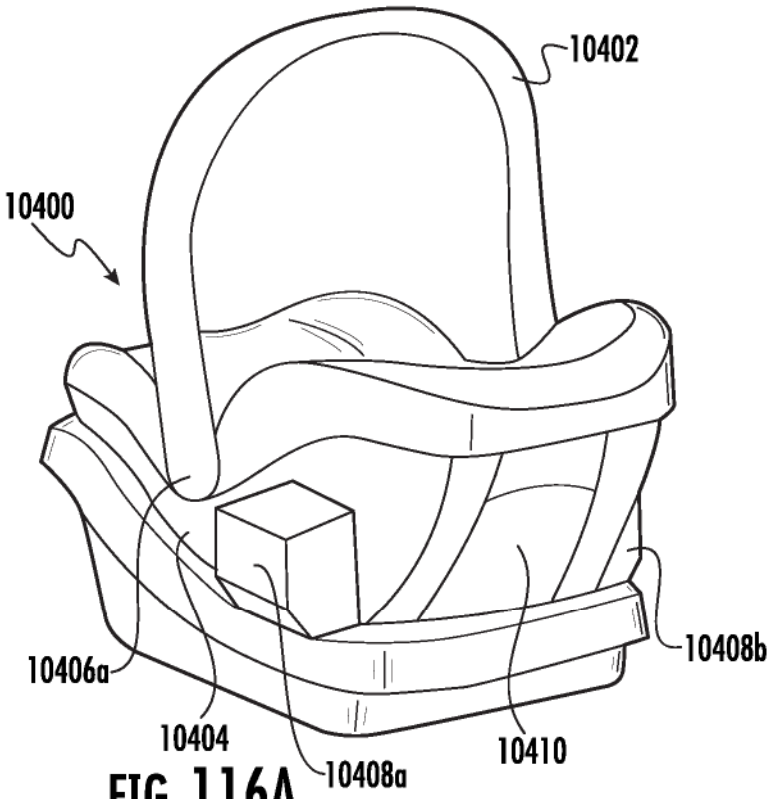


FIG. 116A

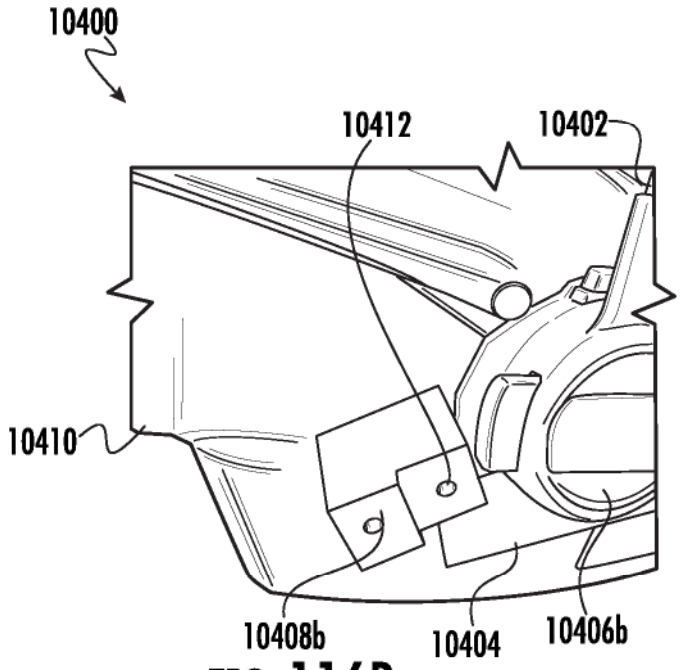


FIG. 116B

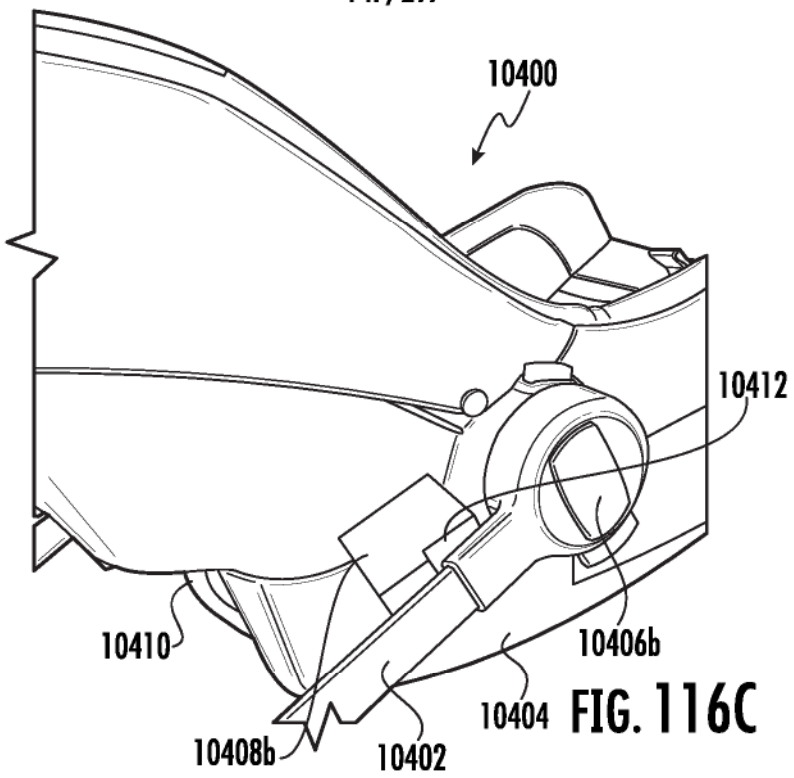


FIG. 116C

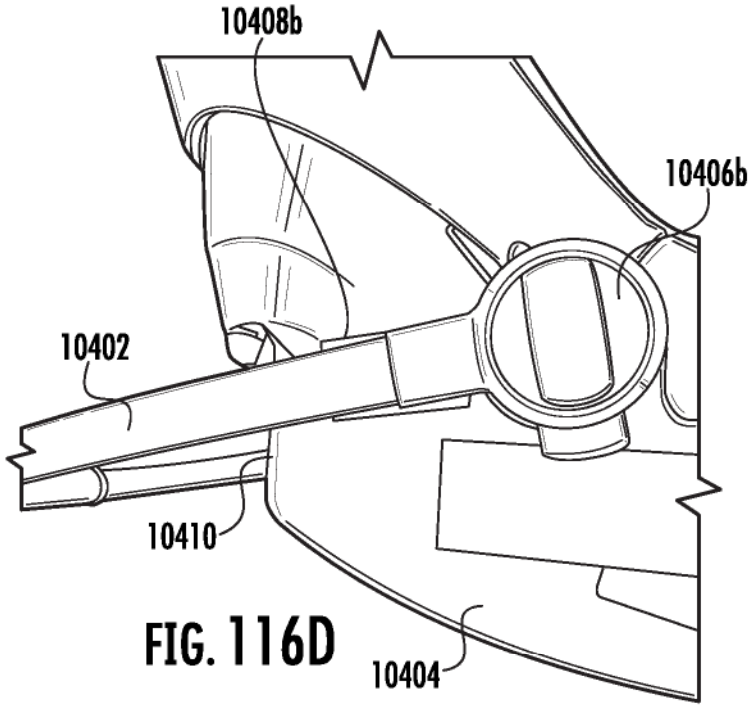


FIG. 116D

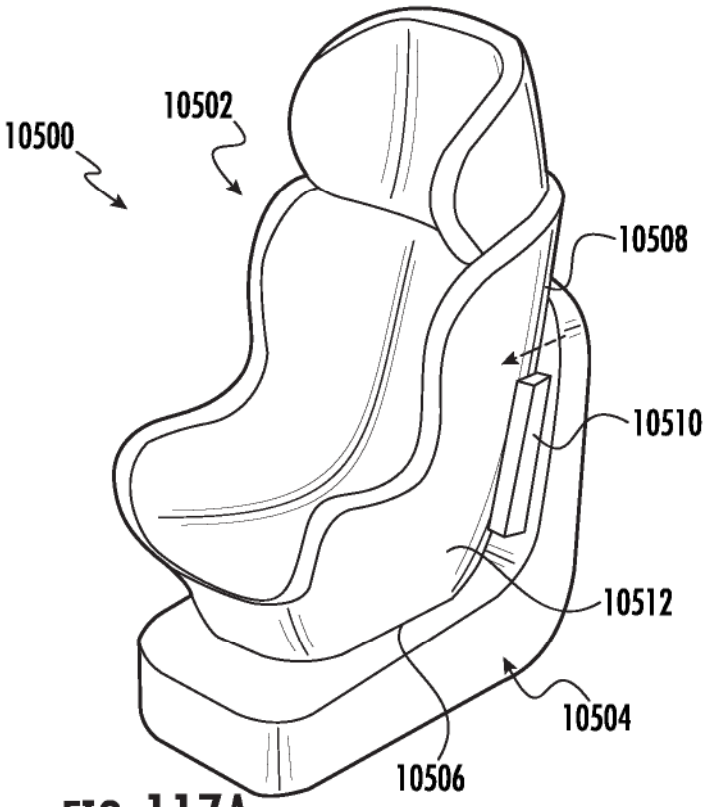


FIG. 117A

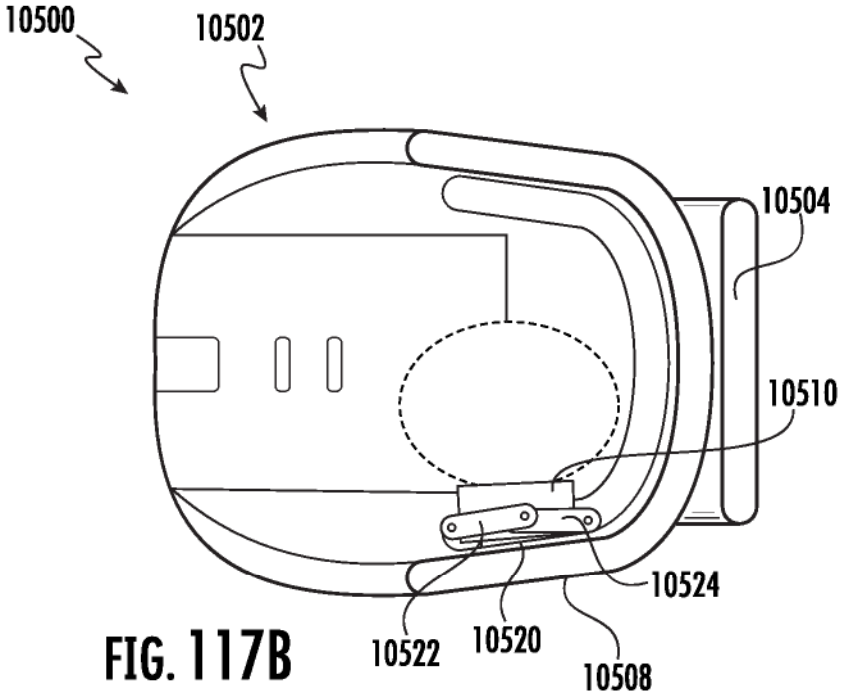


FIG. 117B

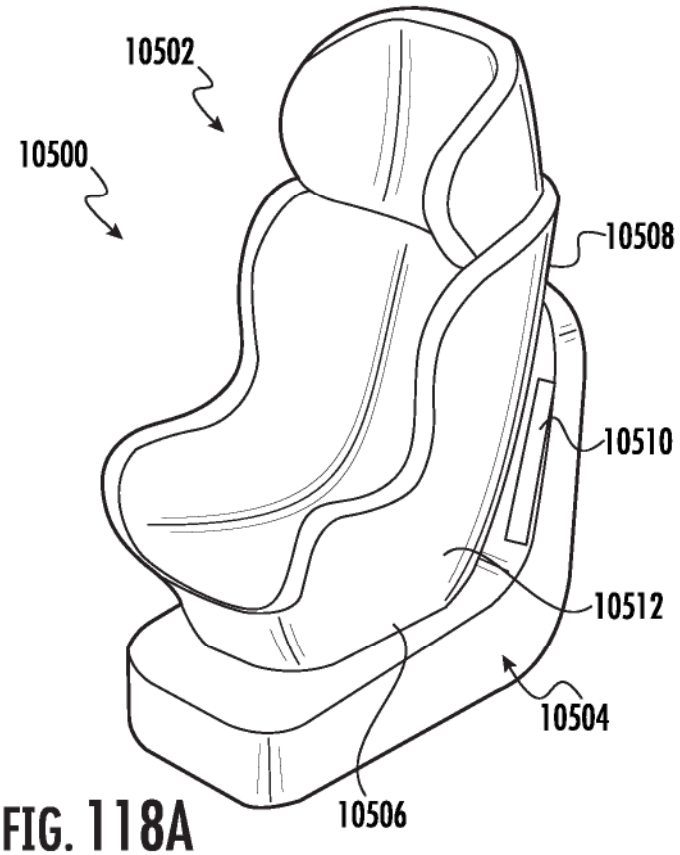


FIG. 118A

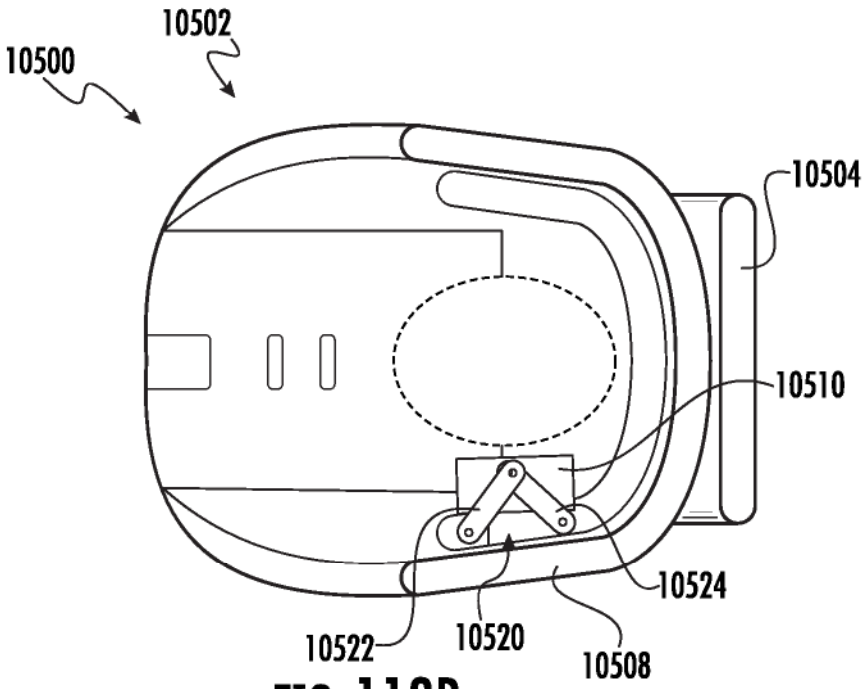


FIG. 118B

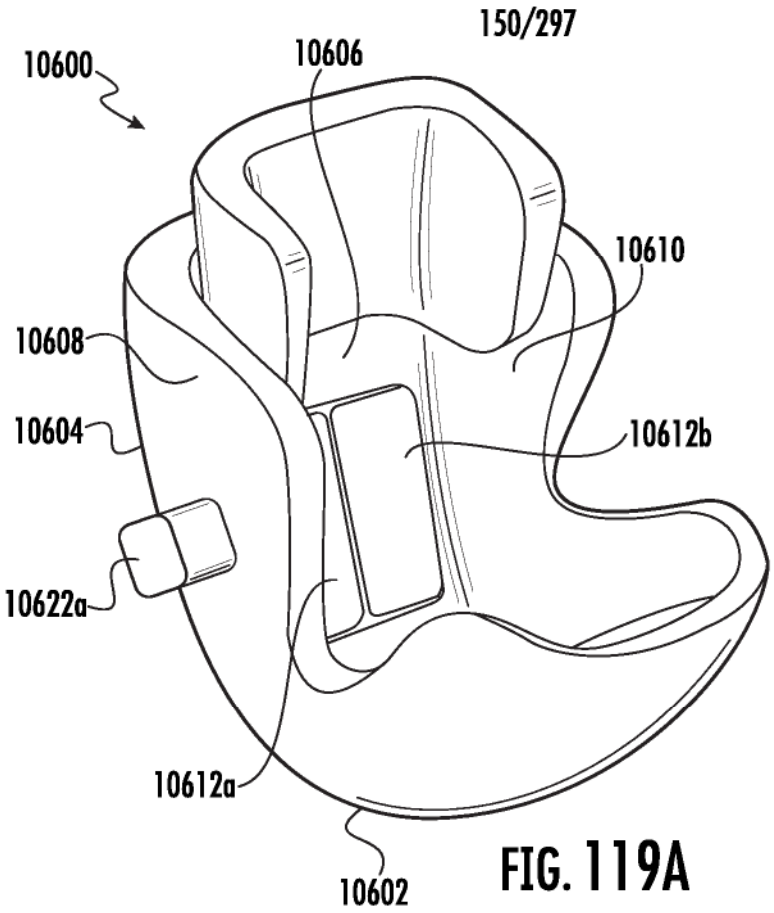


FIG. 119A

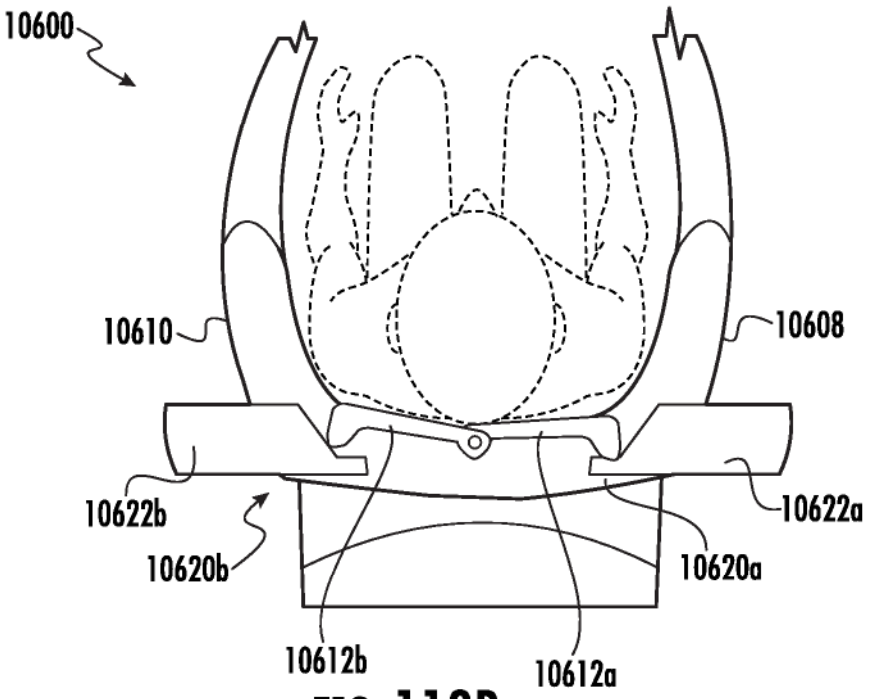


FIG. 119B

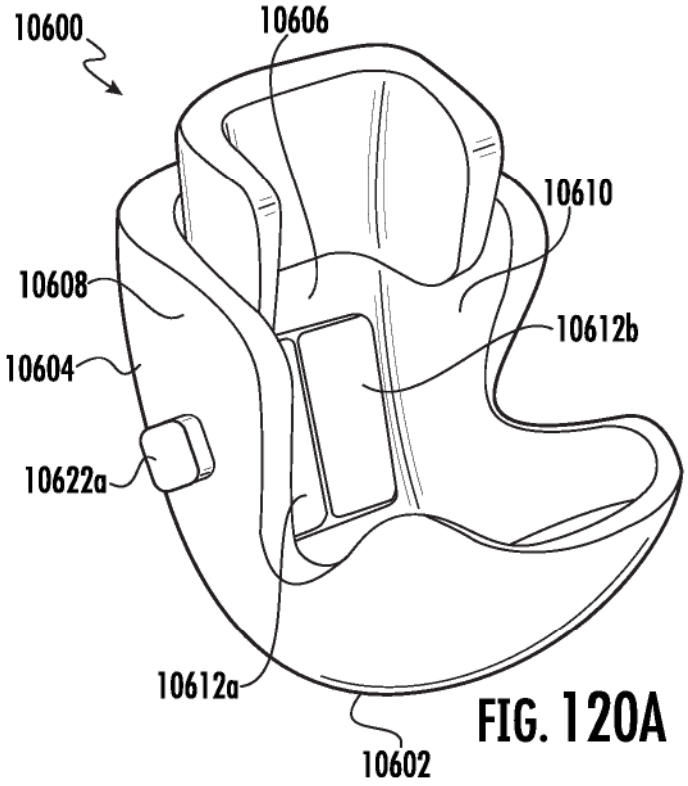


FIG. 120A

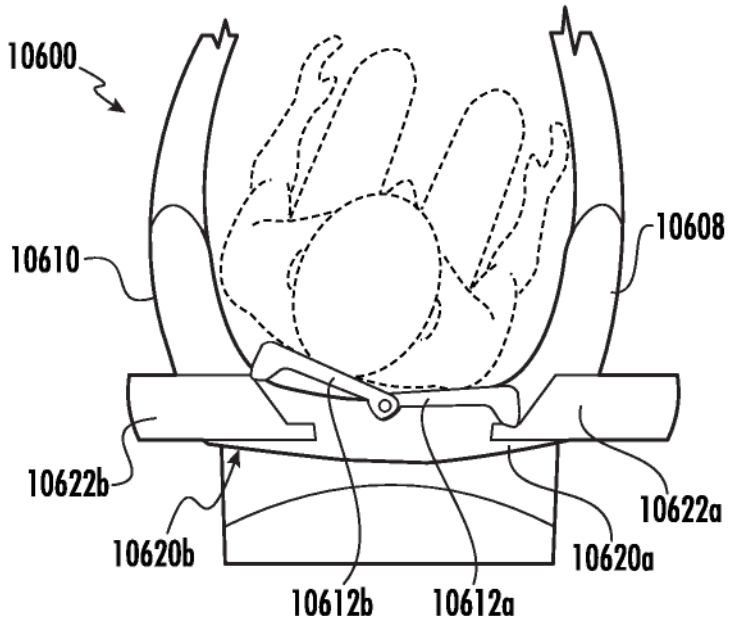


FIG. 120B

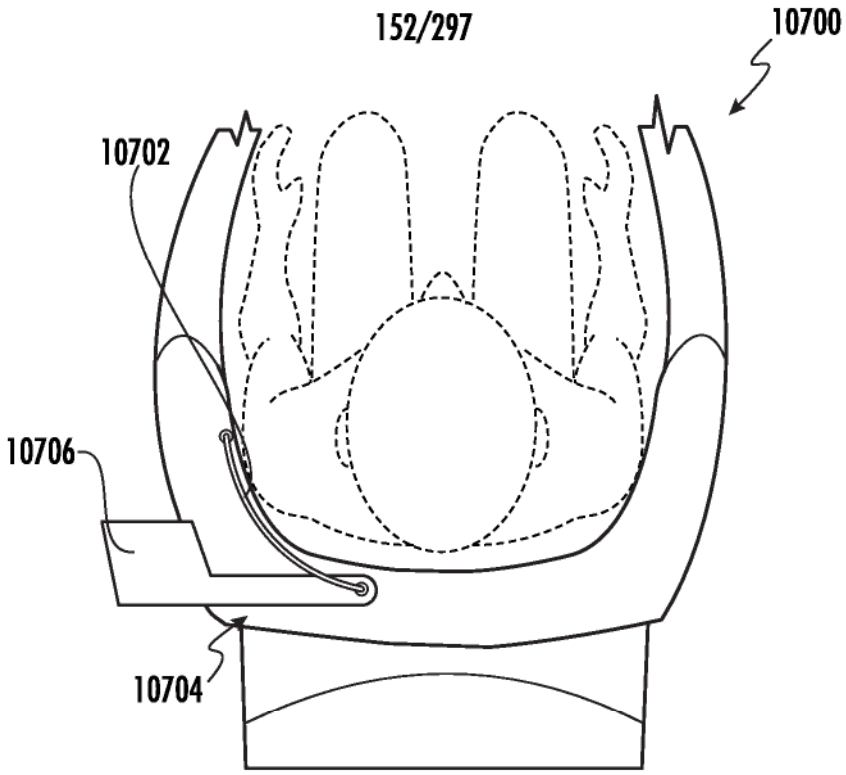


FIG. 121A

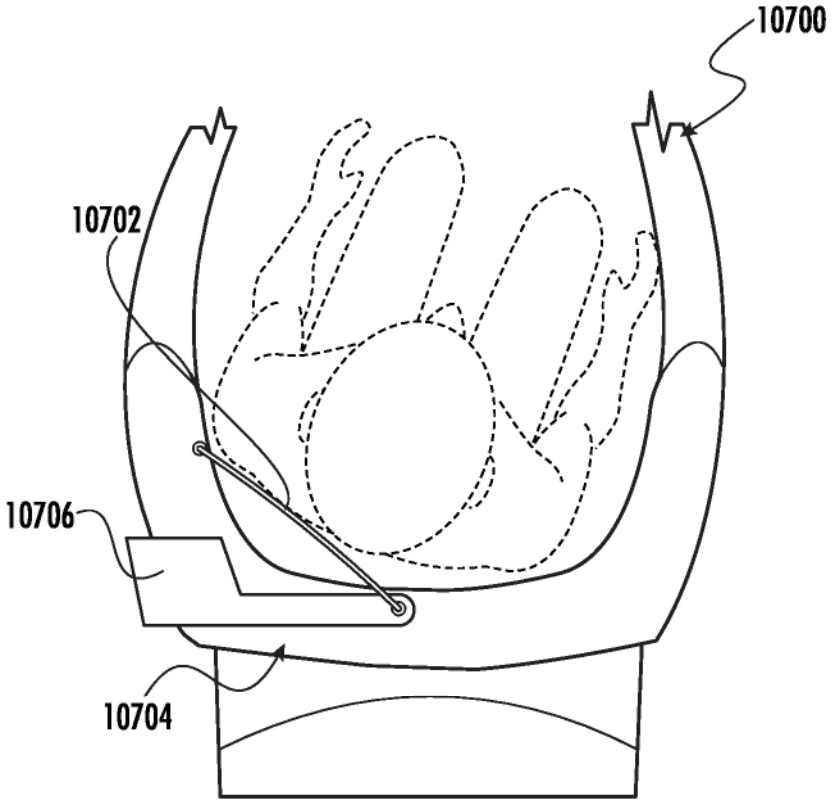


FIG. 121B

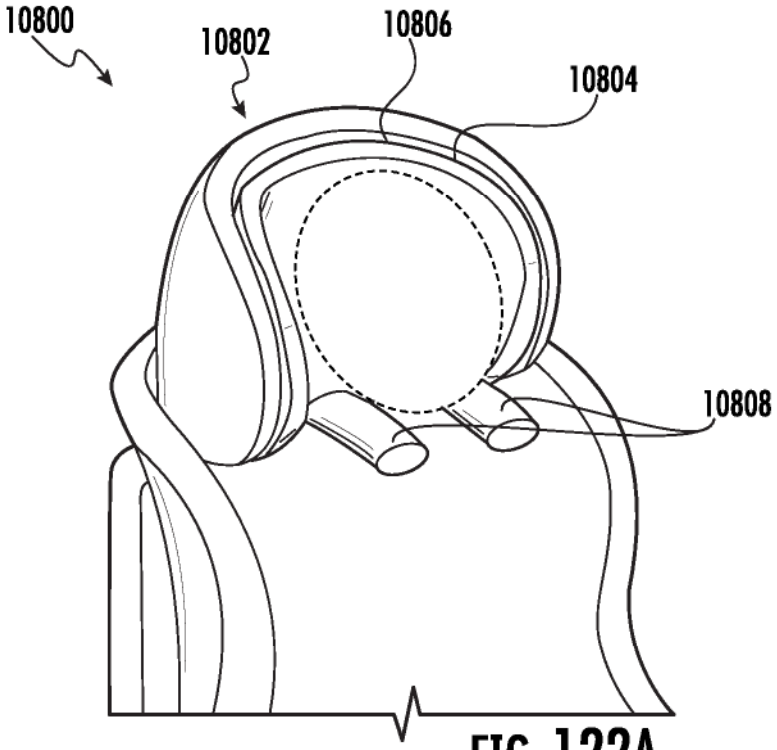


FIG. 122A

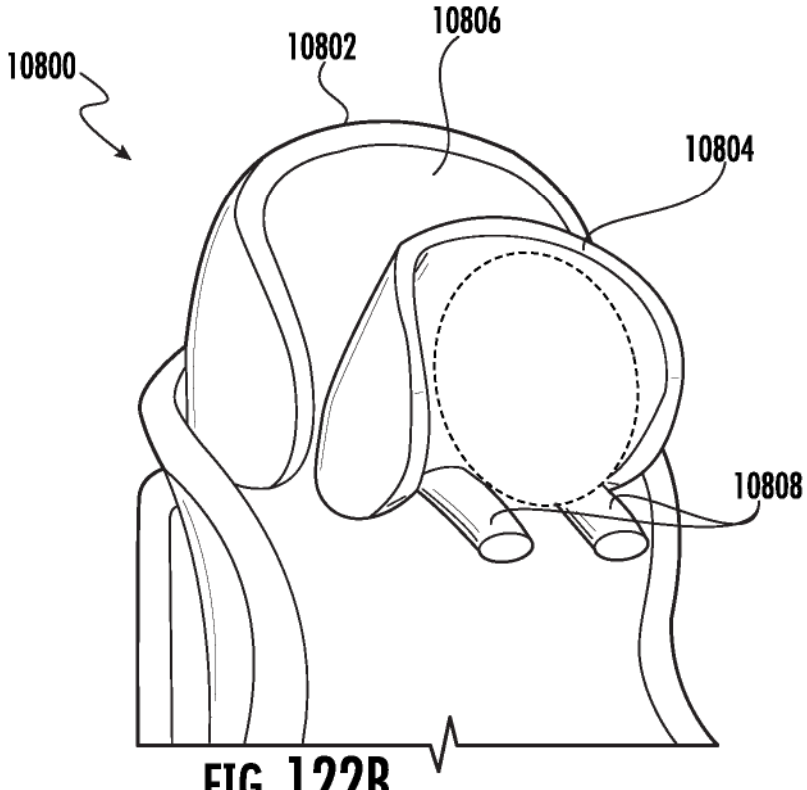


FIG. 122B

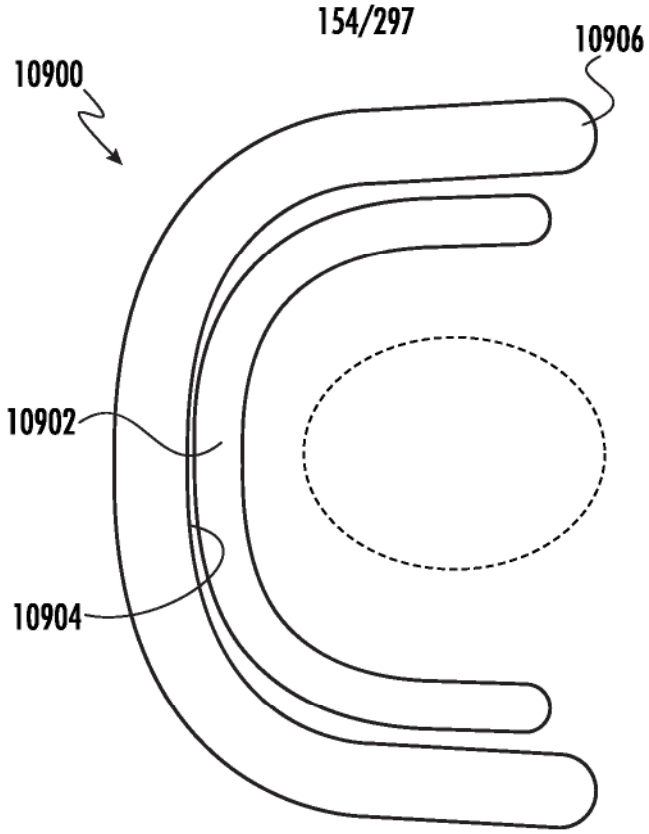


FIG. 123A

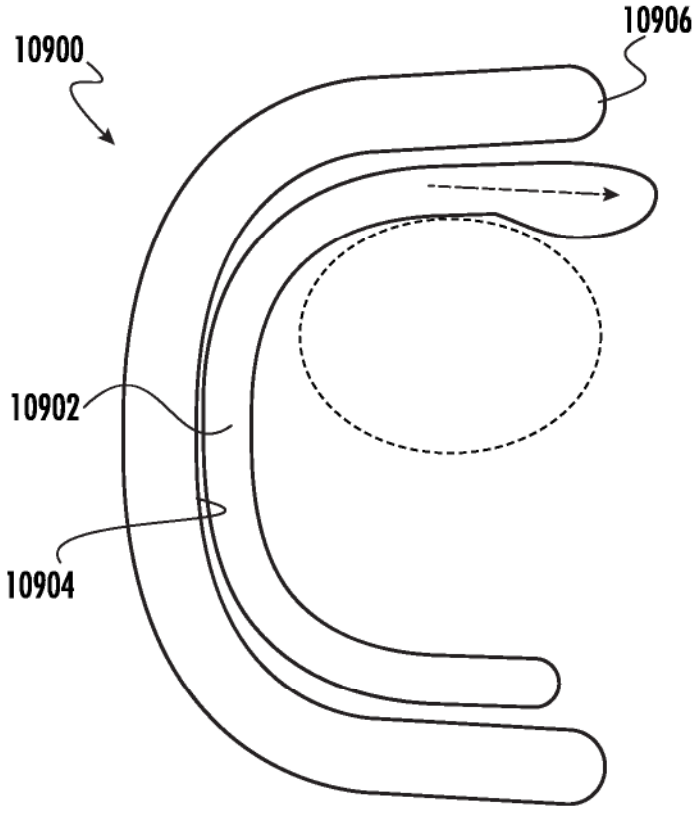


FIG. 123B

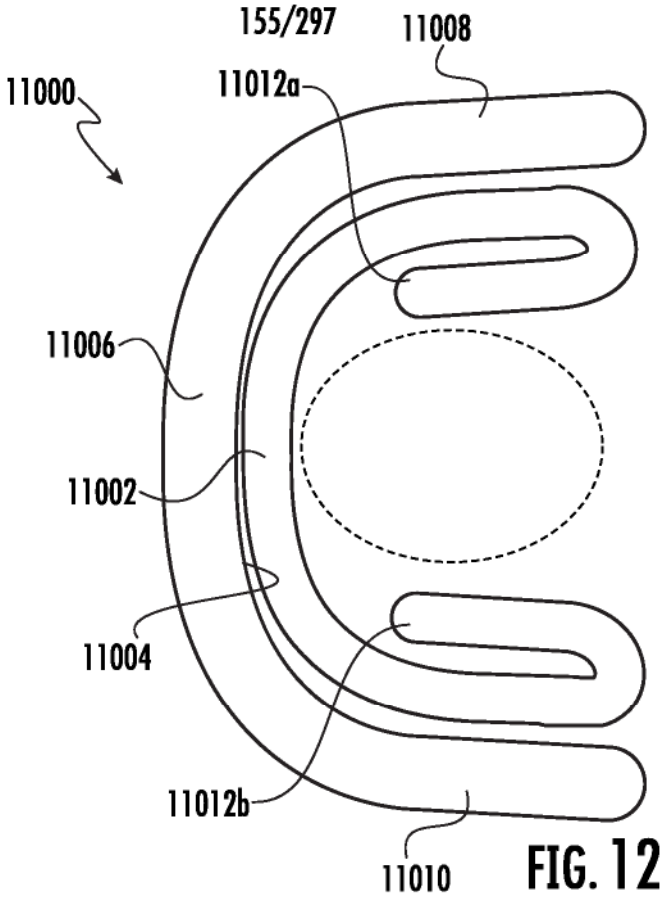


FIG. 124A

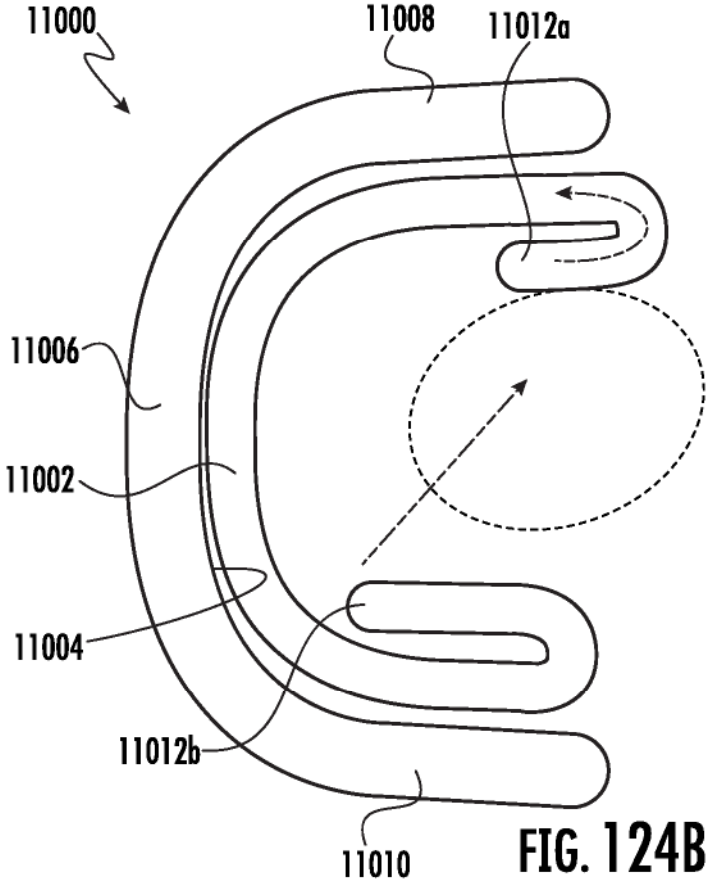


FIG. 124B

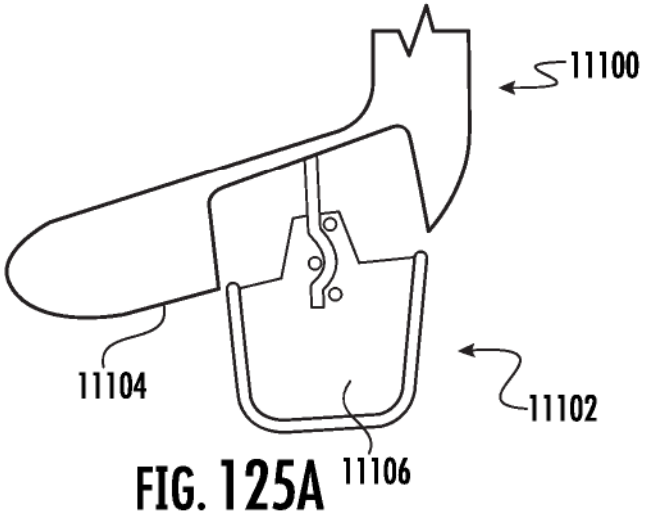


FIG. 125A

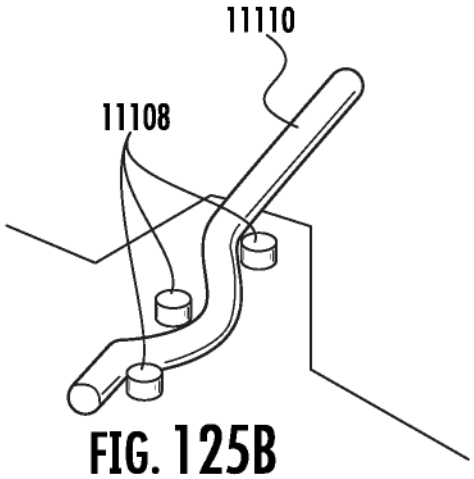


FIG. 125B

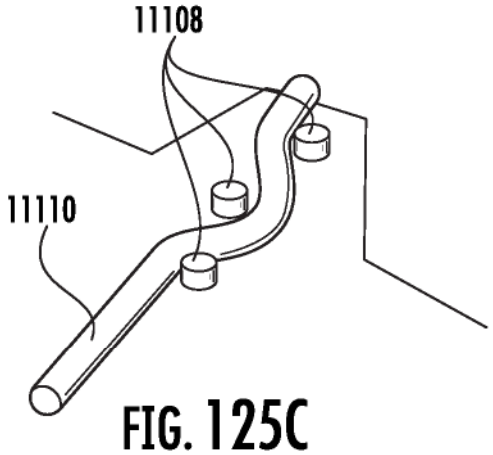


FIG. 125C

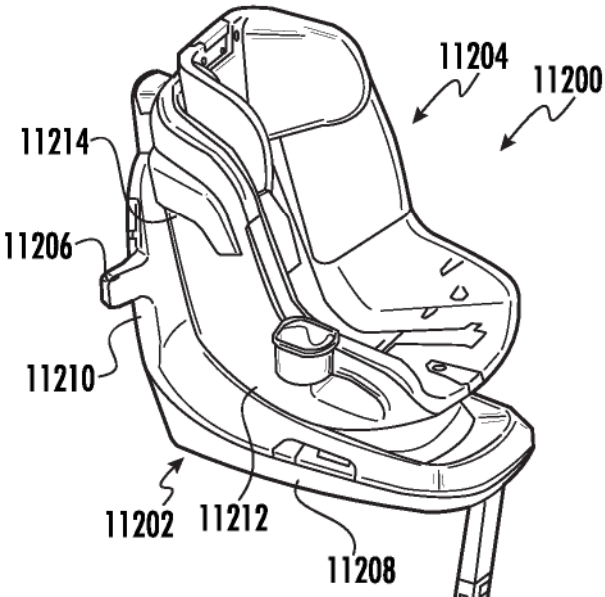


FIG. 126A

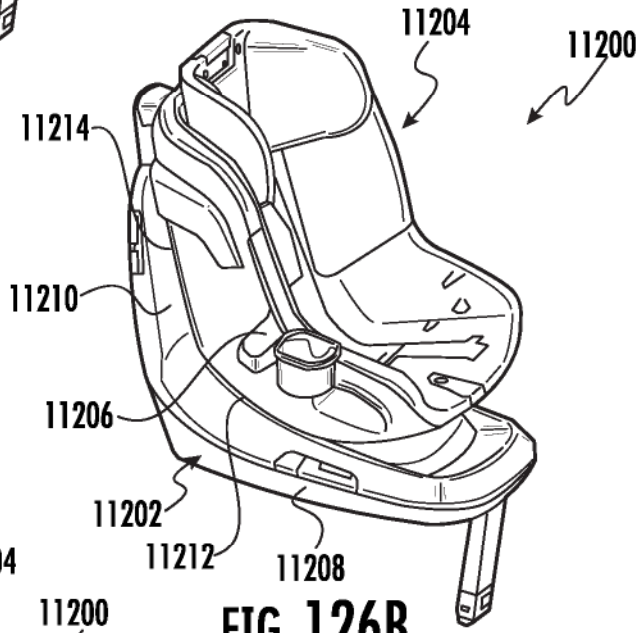


FIG. 126B

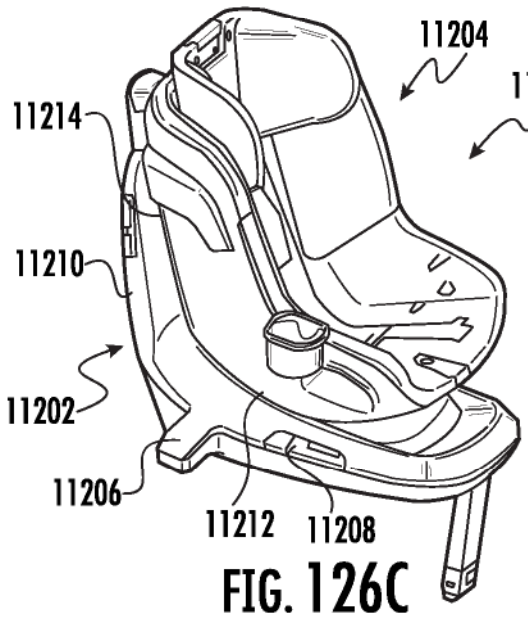


FIG. 126C

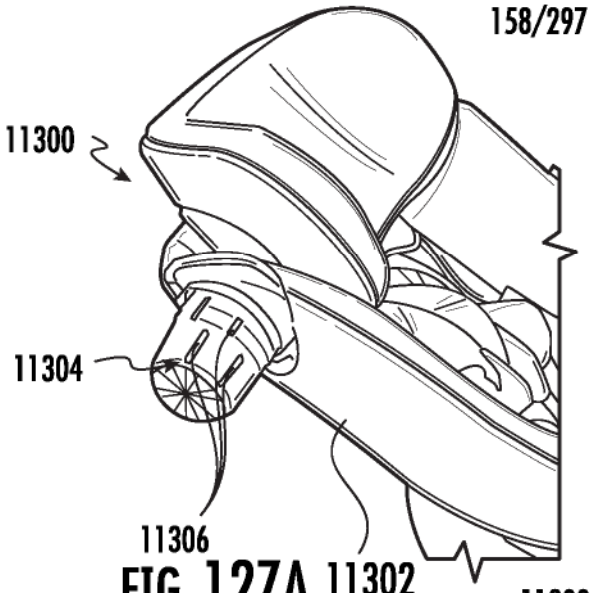


FIG. 127A

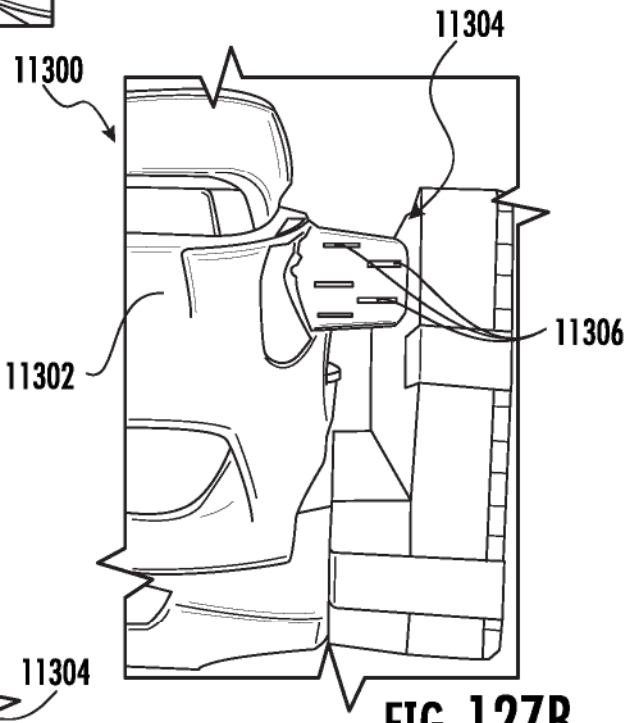


FIG. 127B

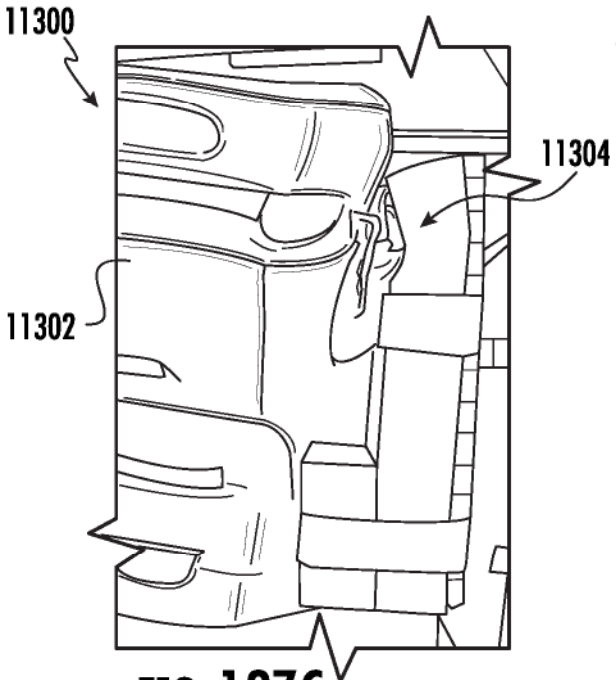


FIG. 127C

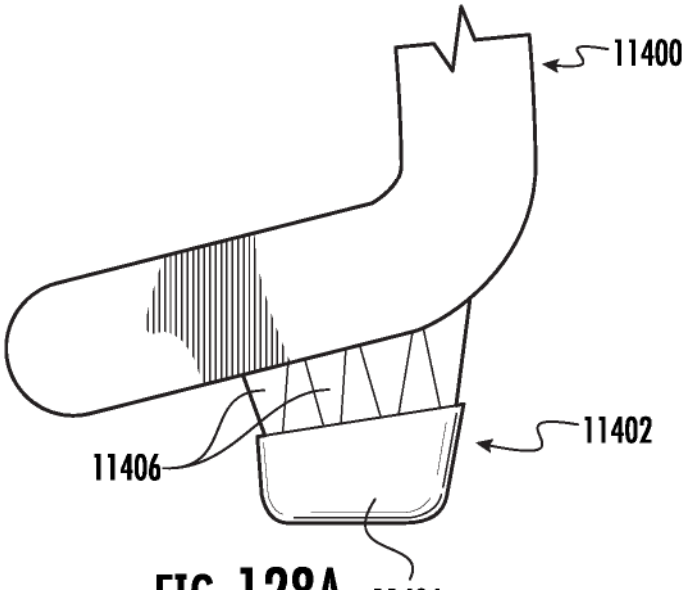


FIG. 128A

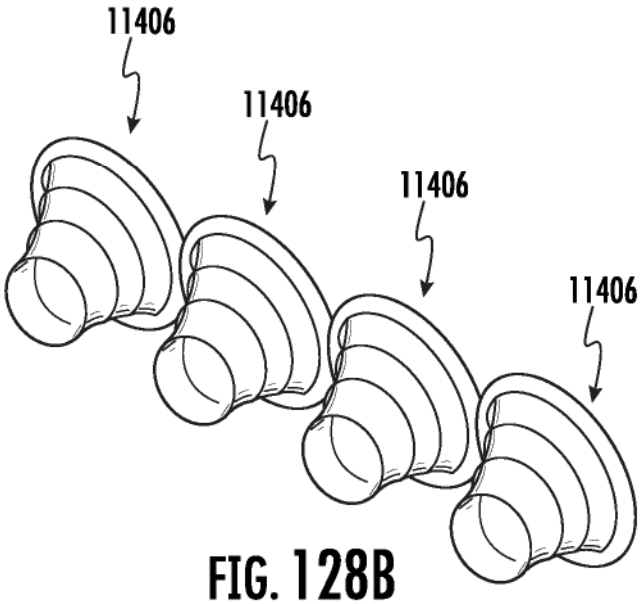
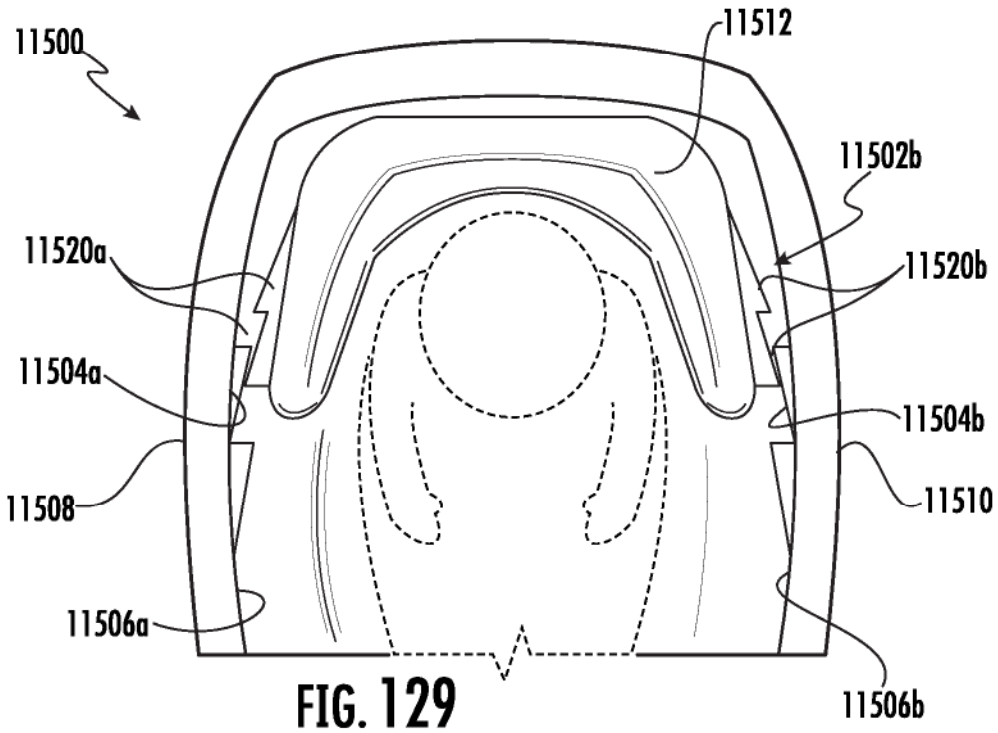


FIG. 128B


11500
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11504b
11508
11510
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11506b

FIG. 129

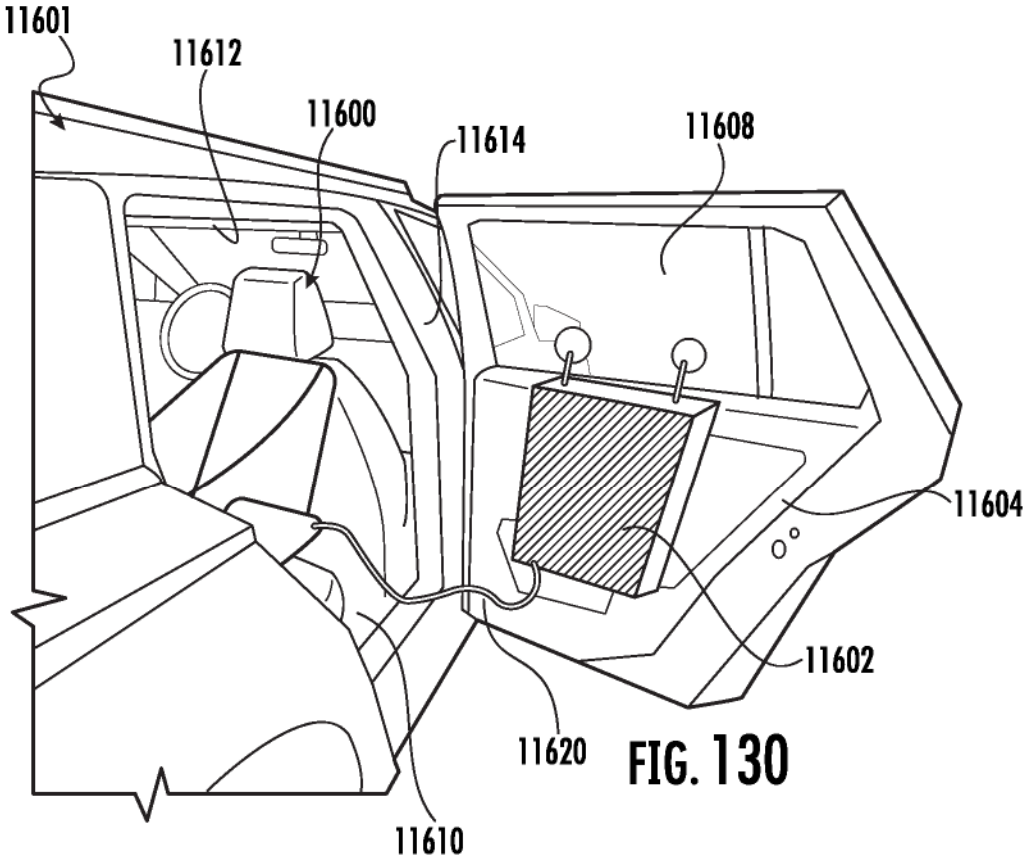


FIG. 130

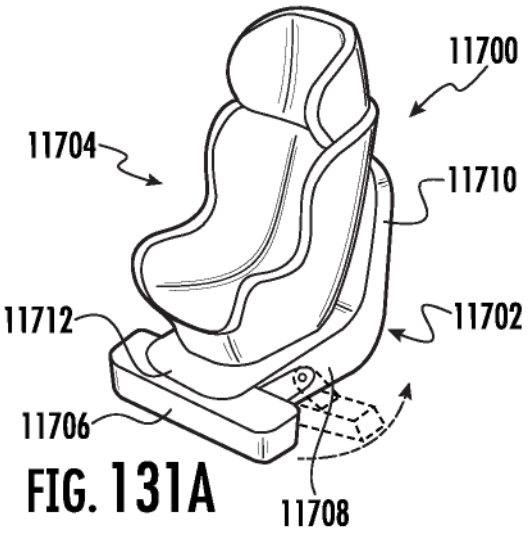


FIG. 131A

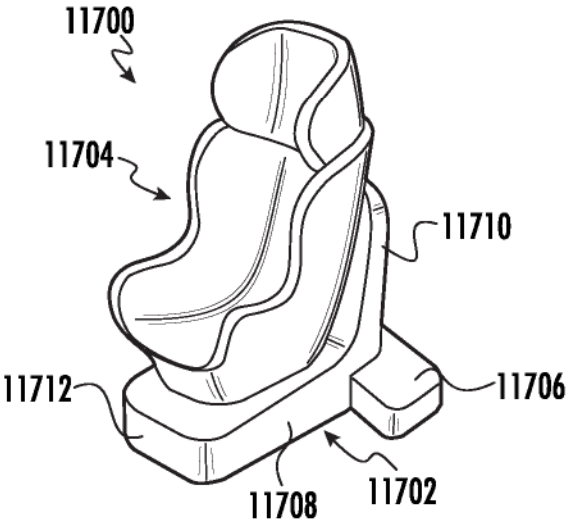


FIG. 131B

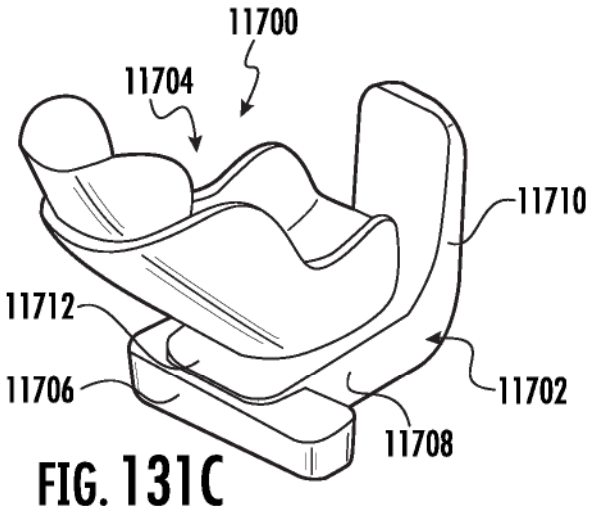


FIG. 131C

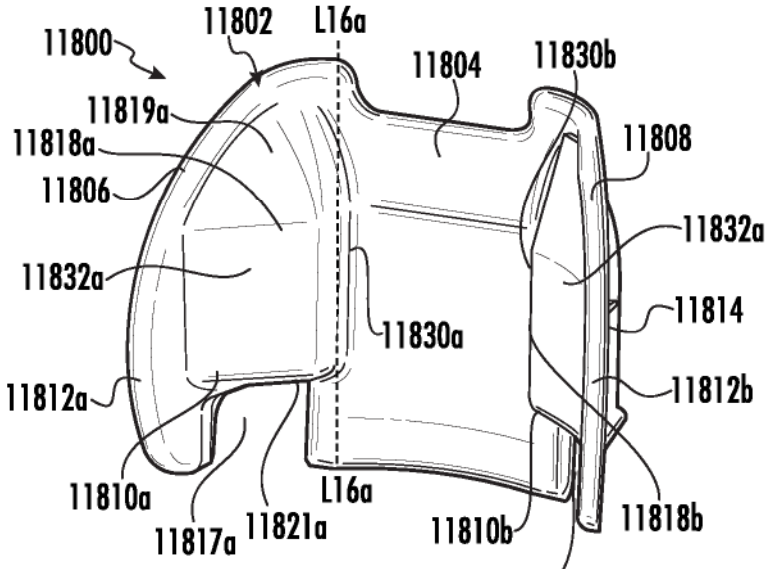


FIG. 132A

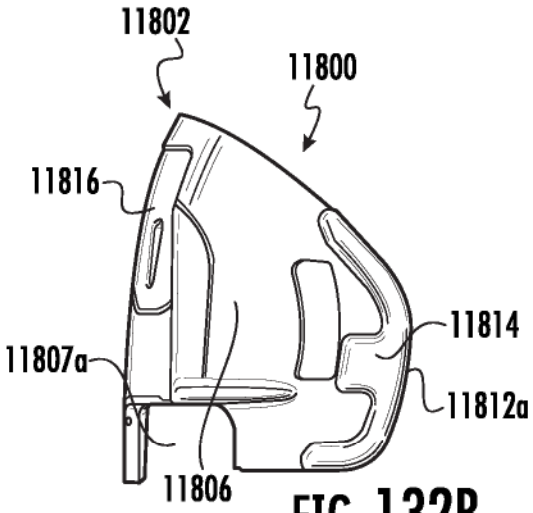


FIG. 132B

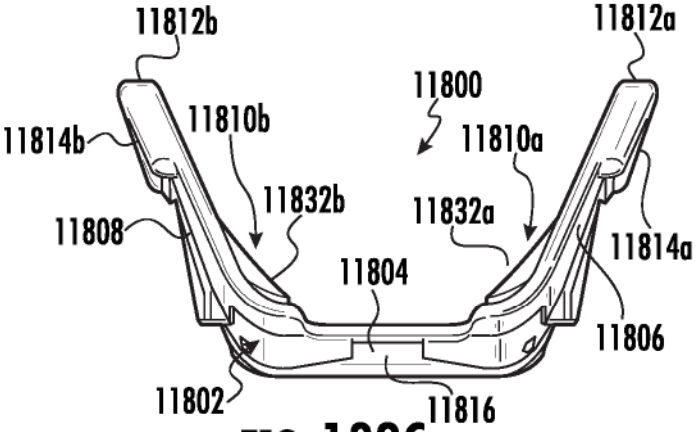


FIG. 132C

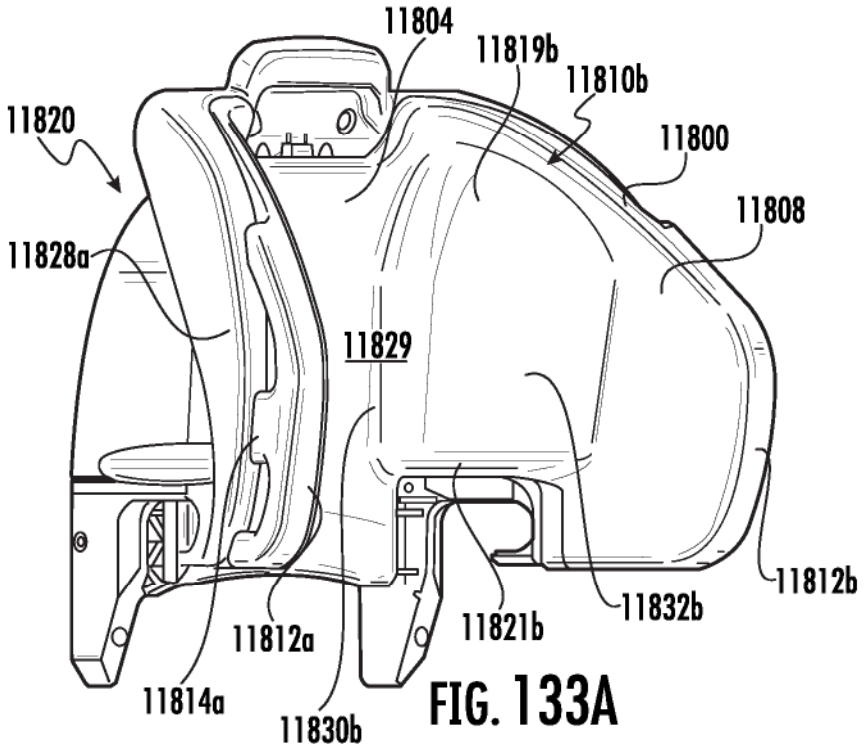


FIG. 133A

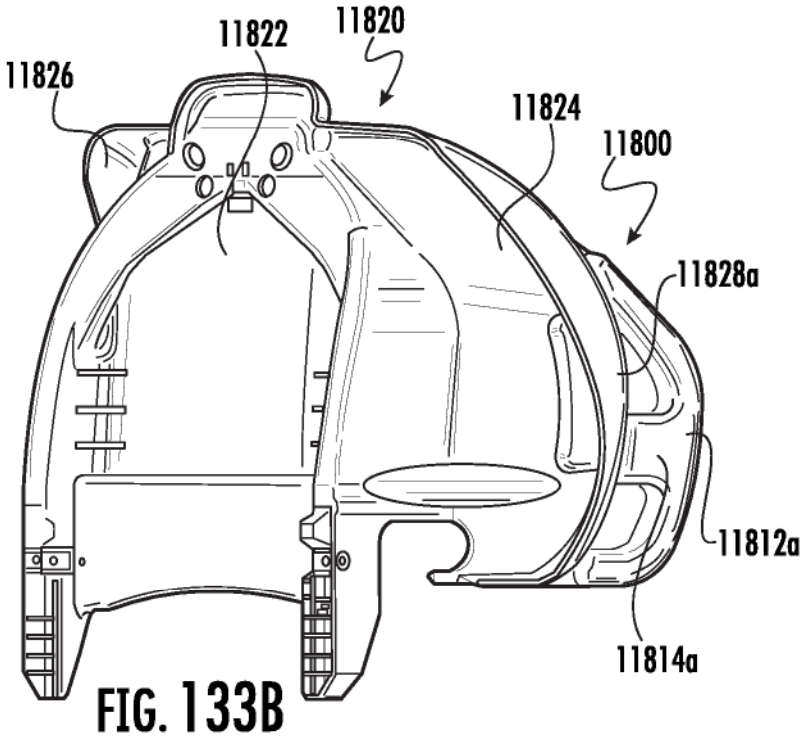
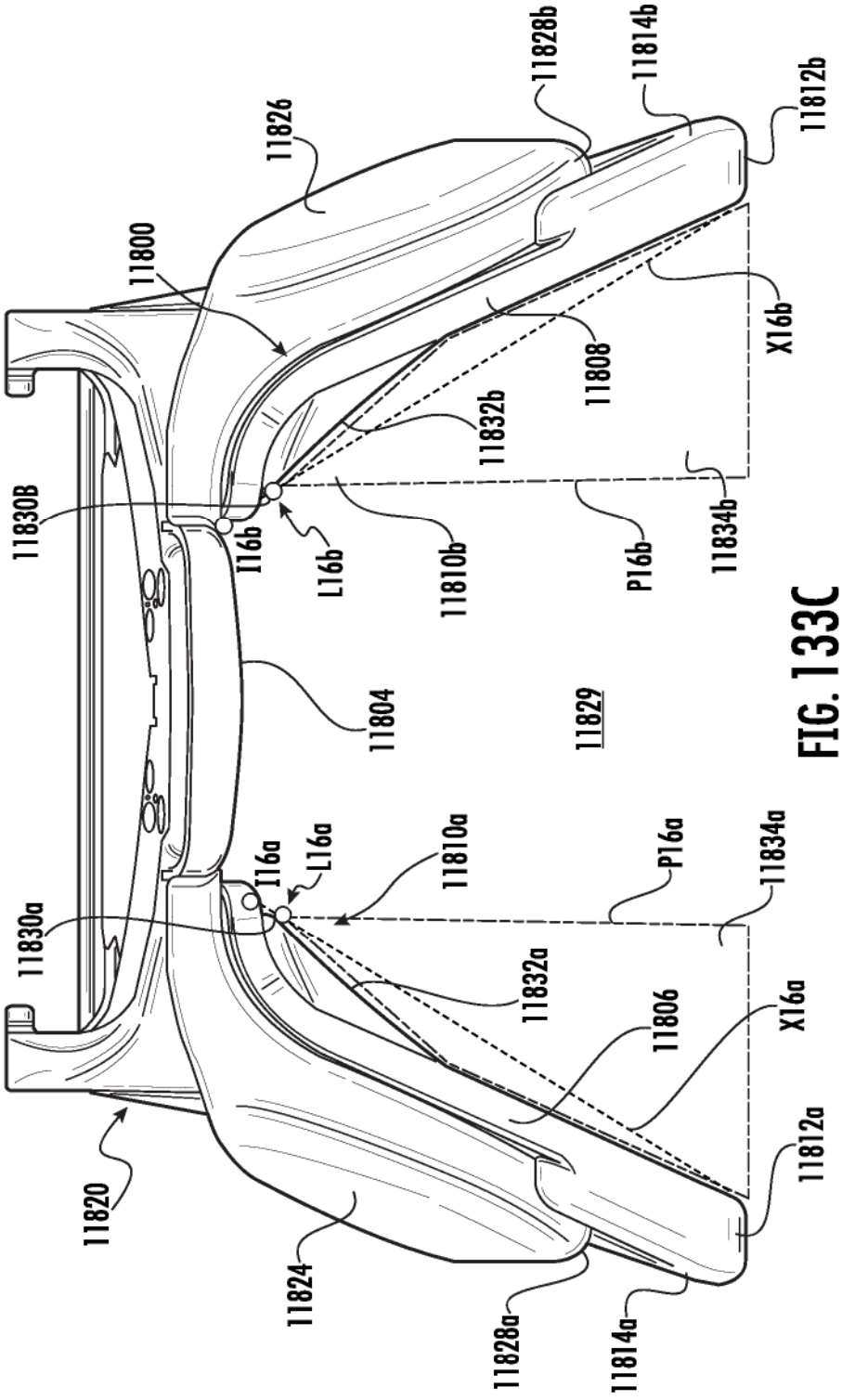


FIG. 133B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X16b
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L16b
11810b
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I16a
L16a
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X16a
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11820
11824
11828a
11814a

FIG. 133C

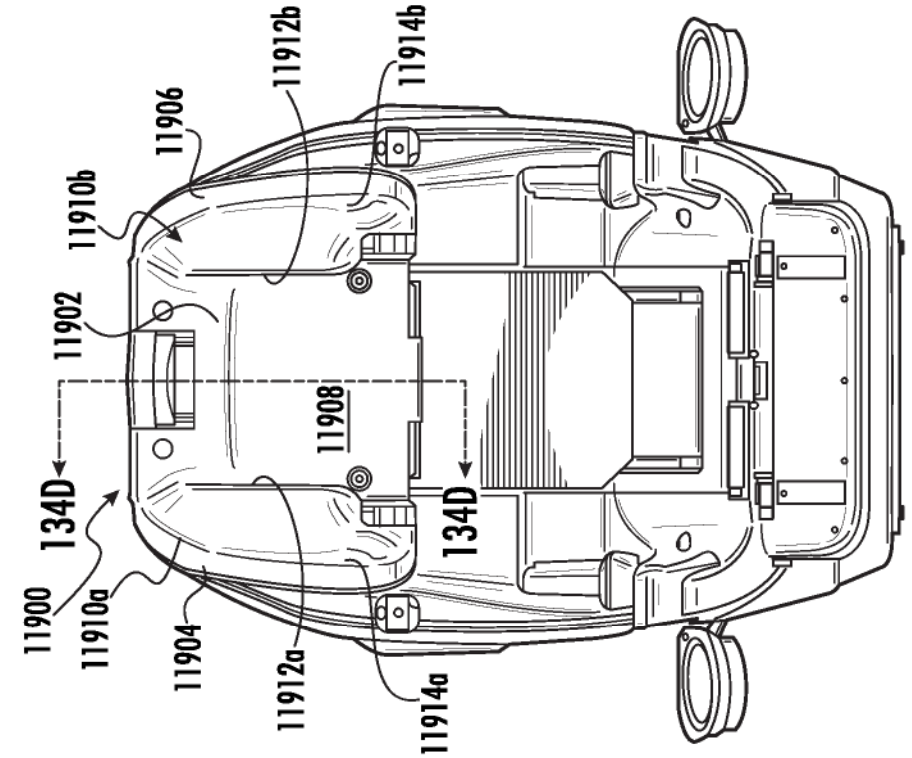


FIG. 134B

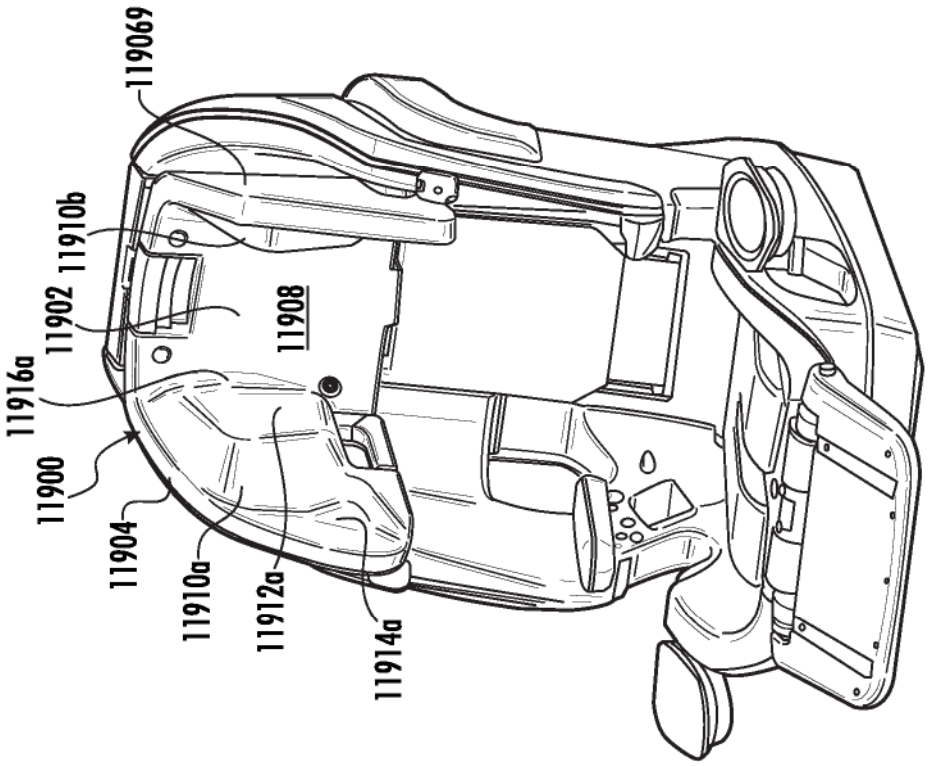


FIG. 134A

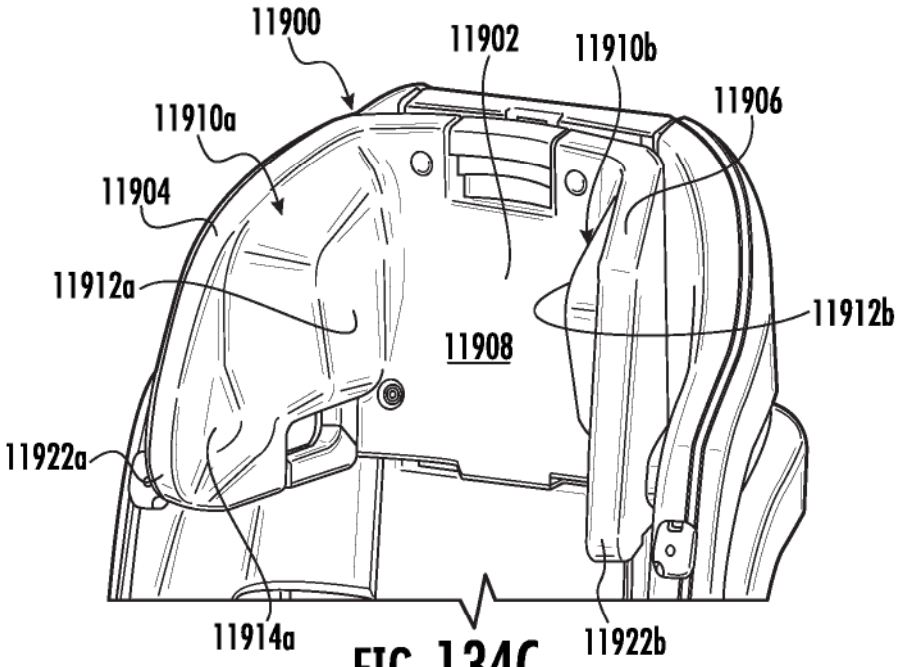


FIG. 134C

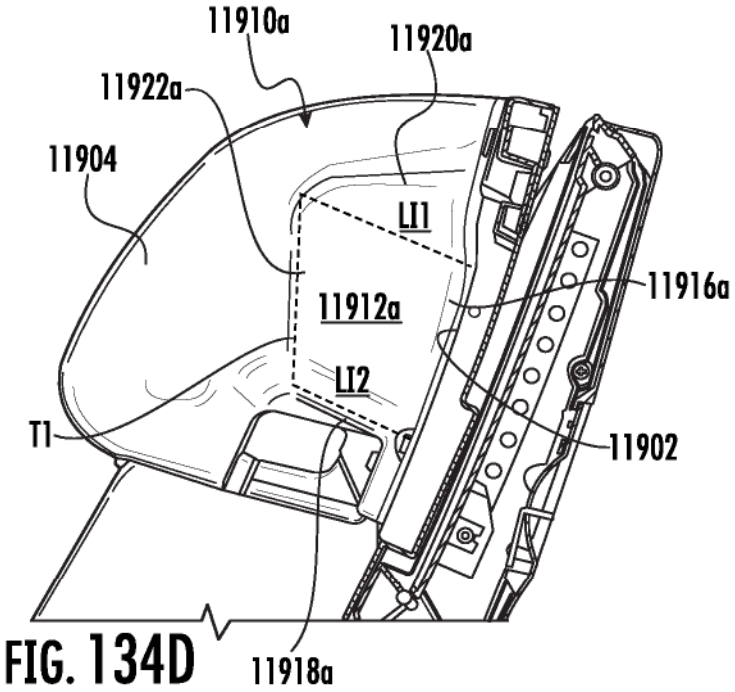
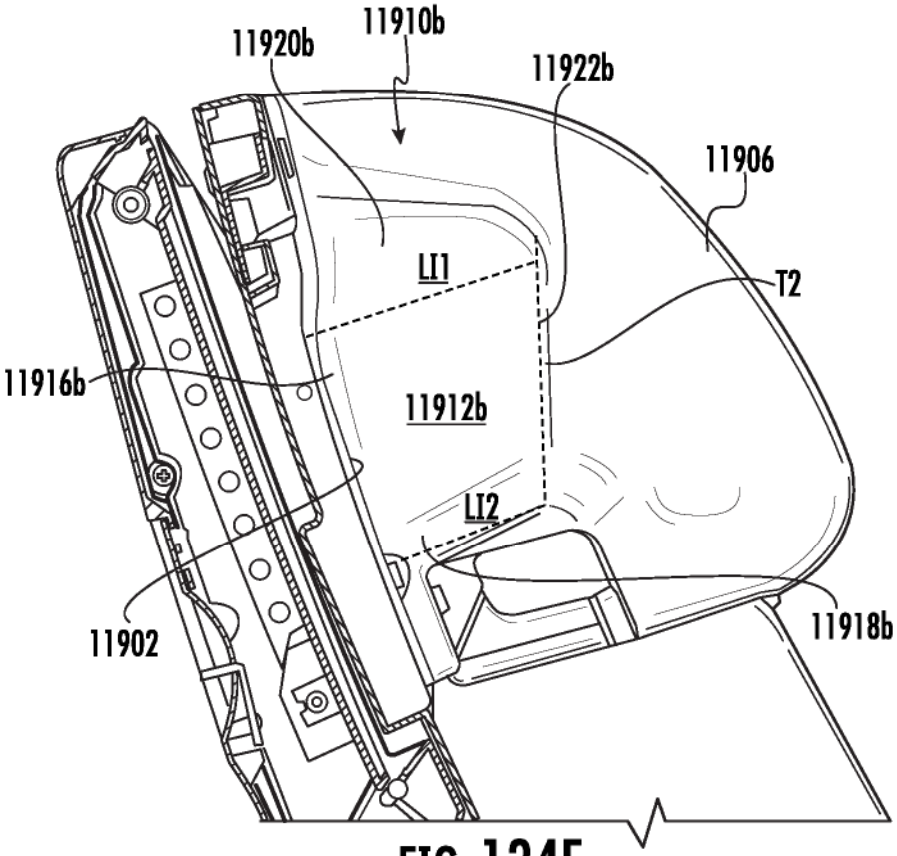


FIG. 134D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T2
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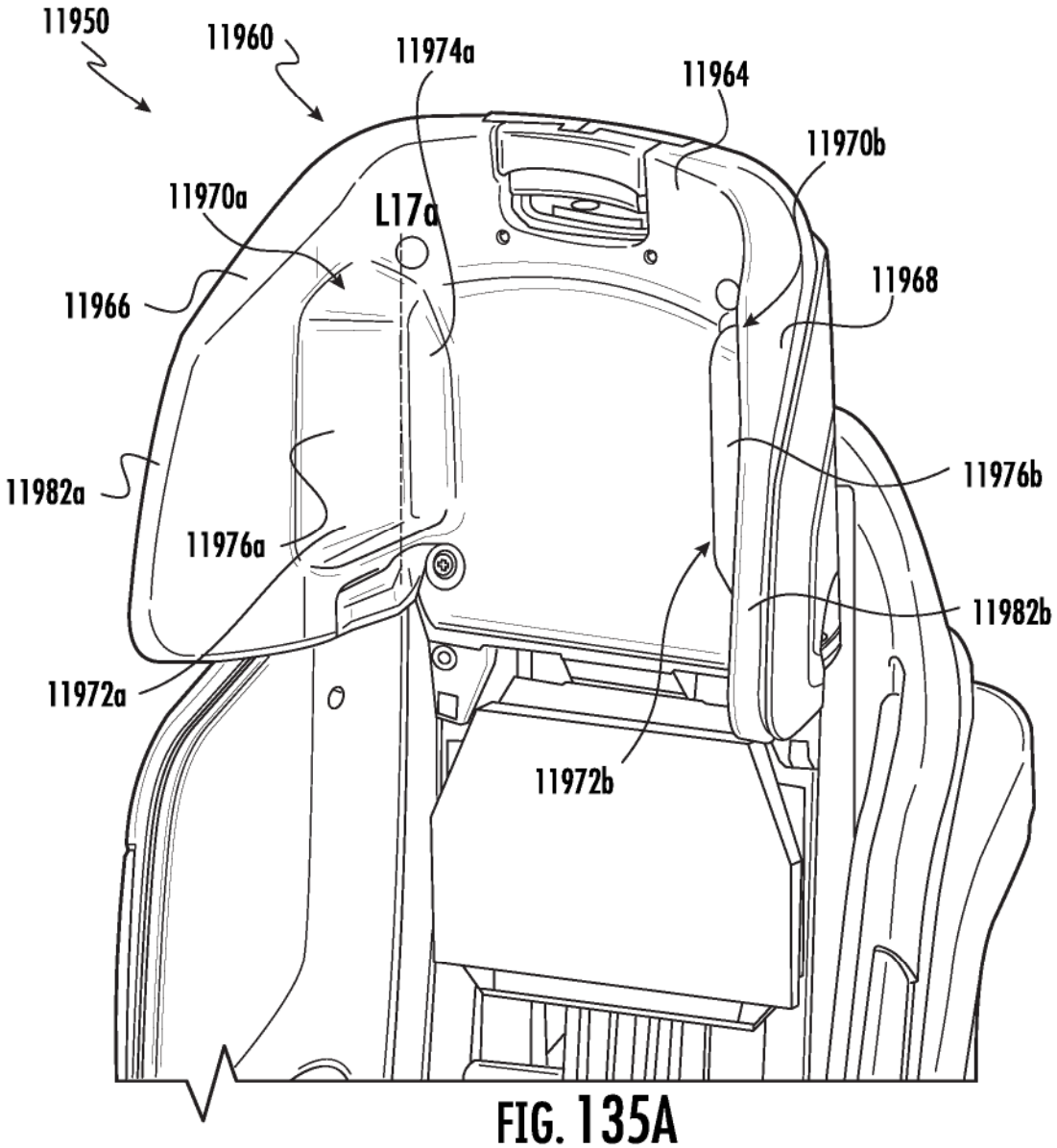
11912b
LI2
11902
11918b

FIG. 134E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11976a
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11972b

FIG. 135A

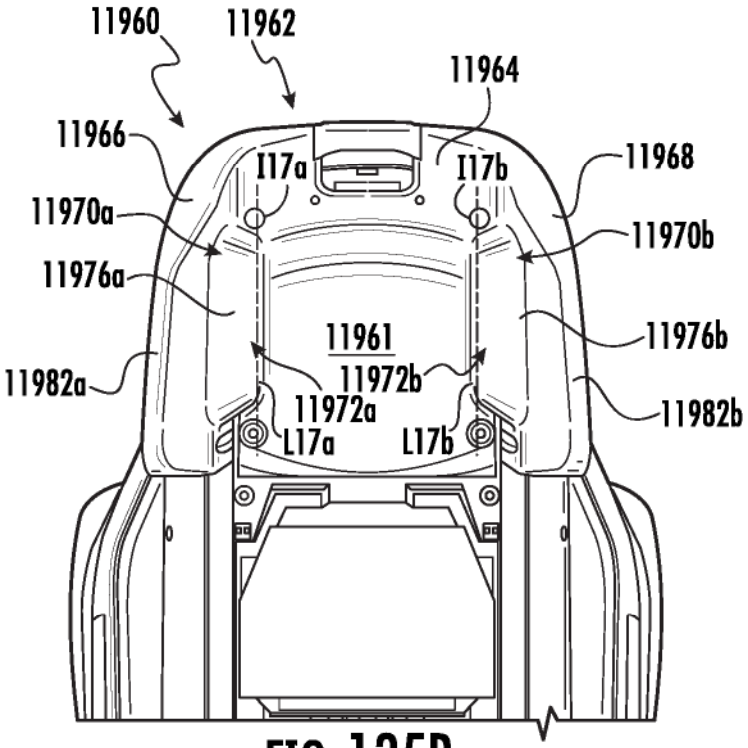


FIG. 135B

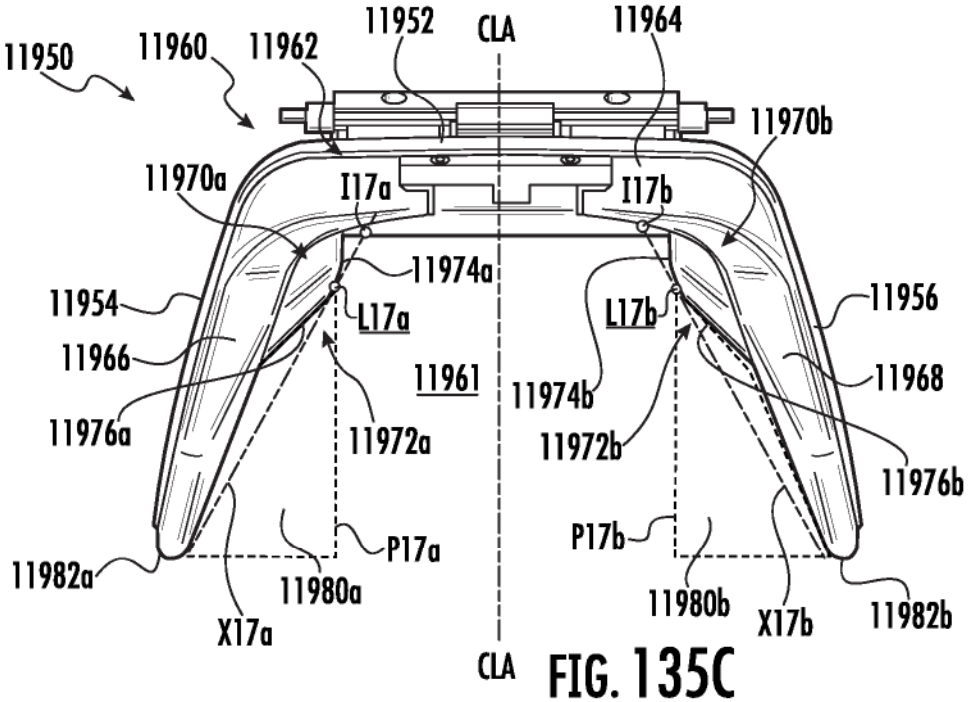


FIG. 135C

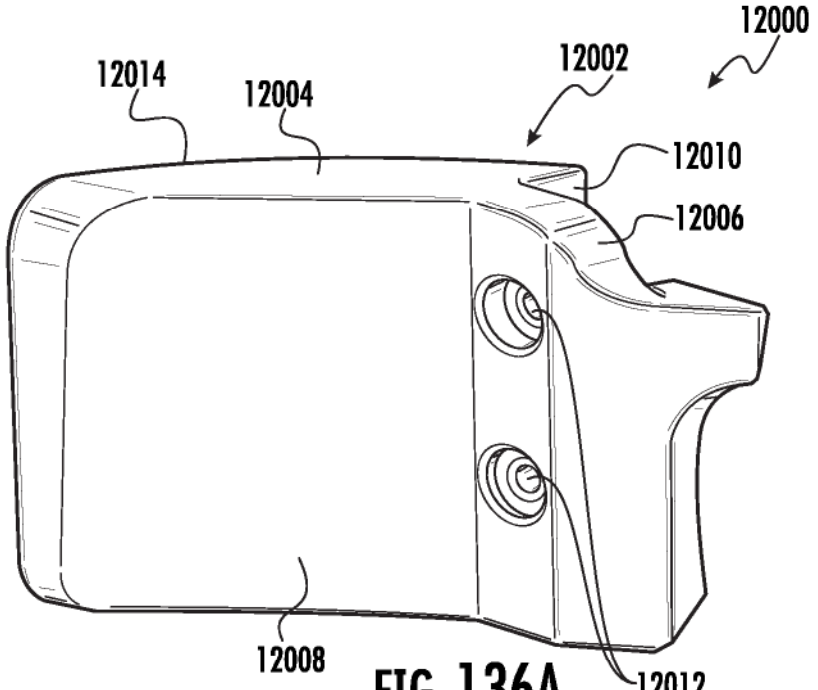


FIG. 136A

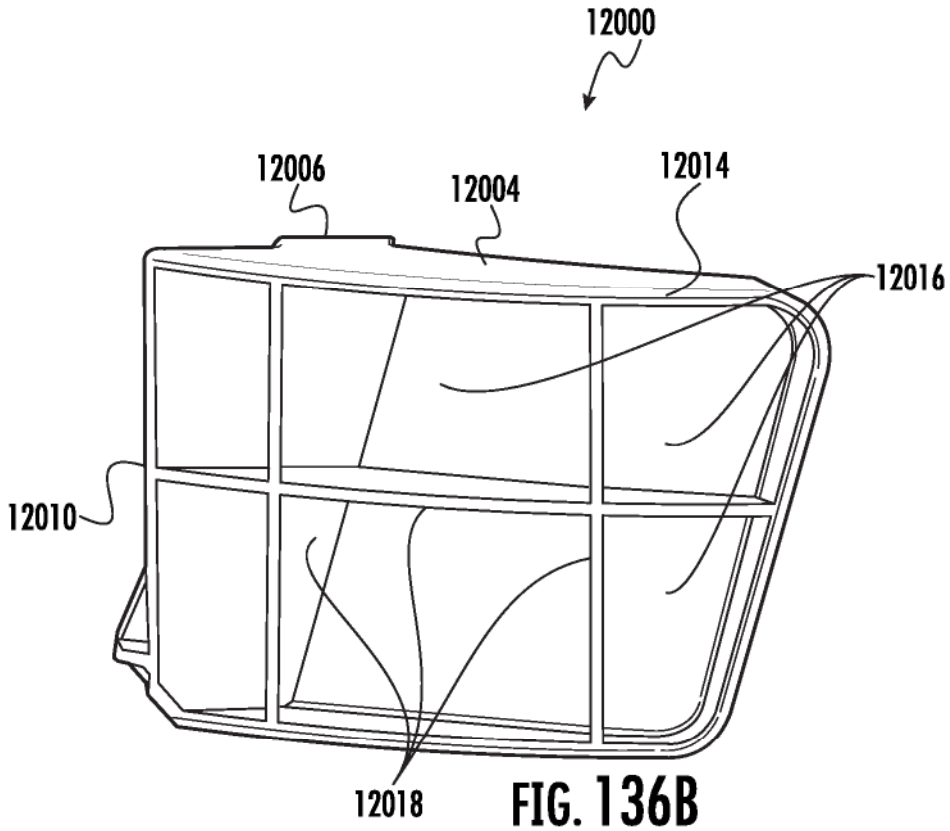


FIG. 136B

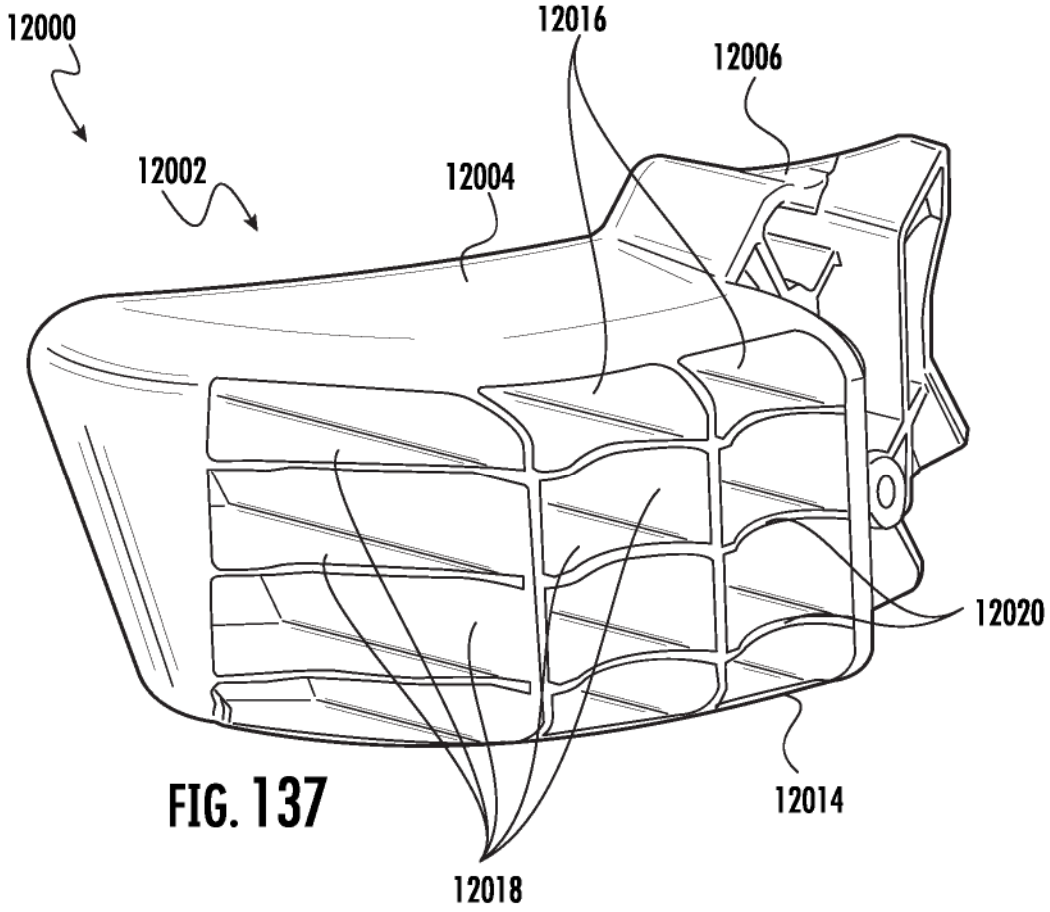


FIG. 137

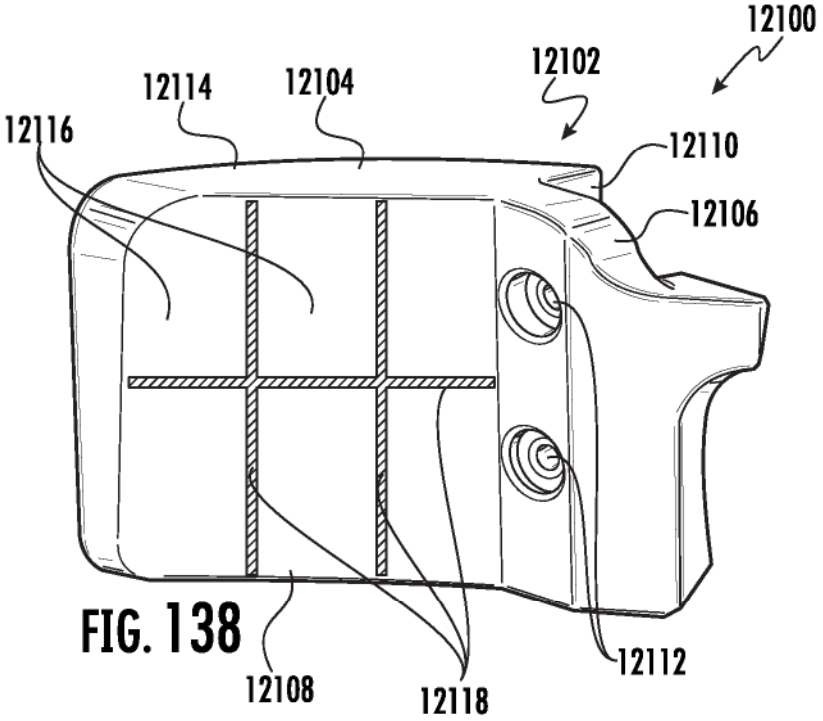


FIG. 138

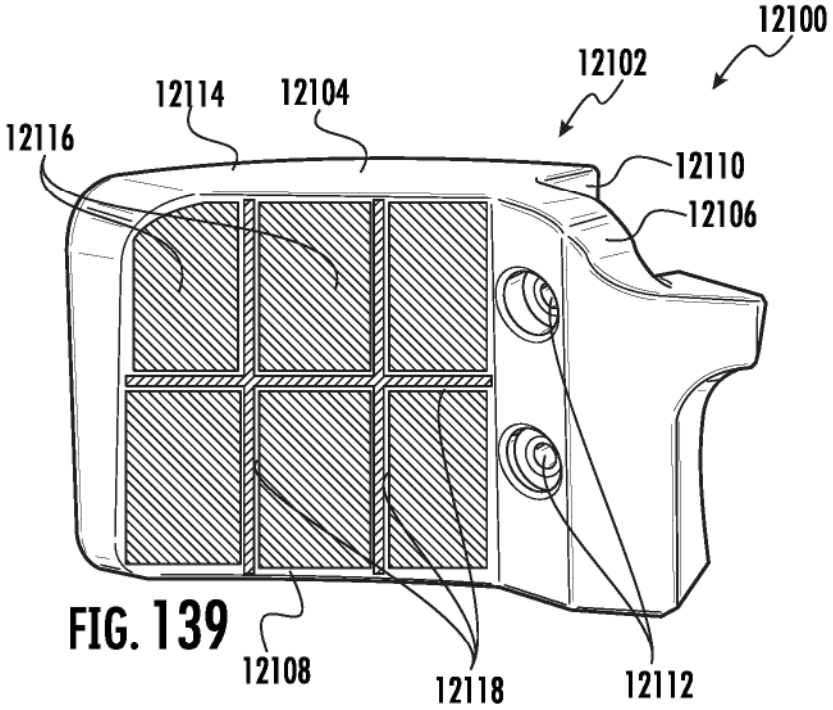


FIG. 139

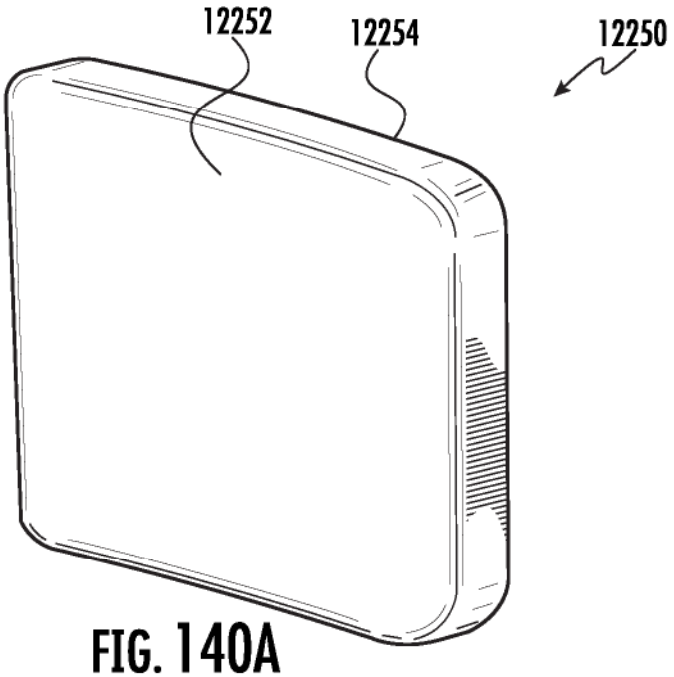


FIG. 140A

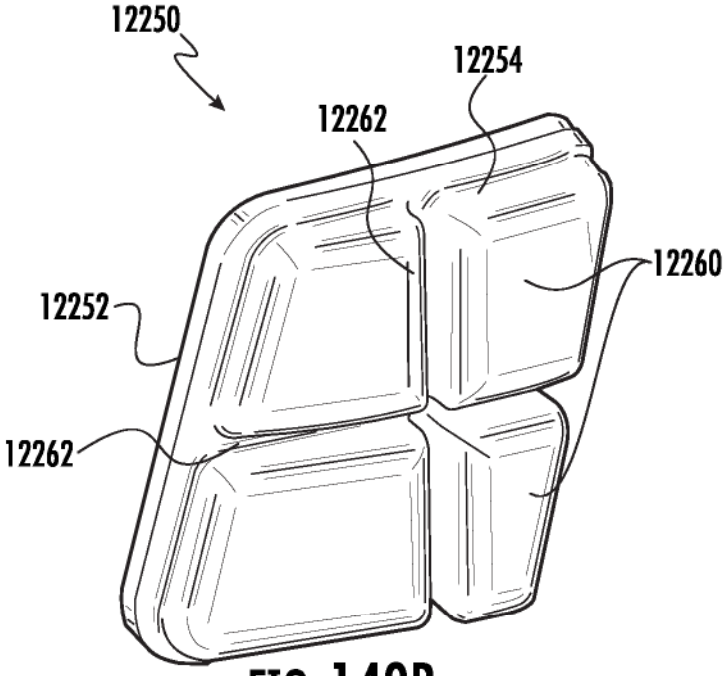


FIG. 140B

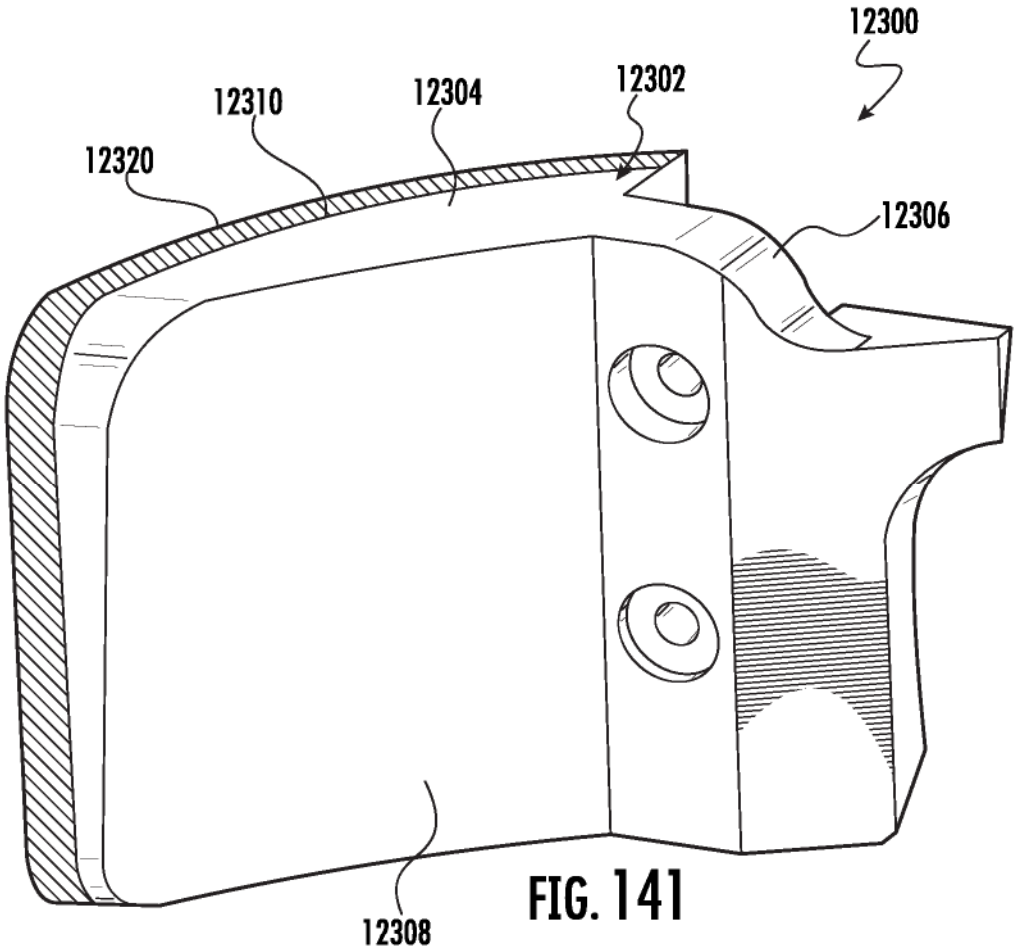


FIG. 141

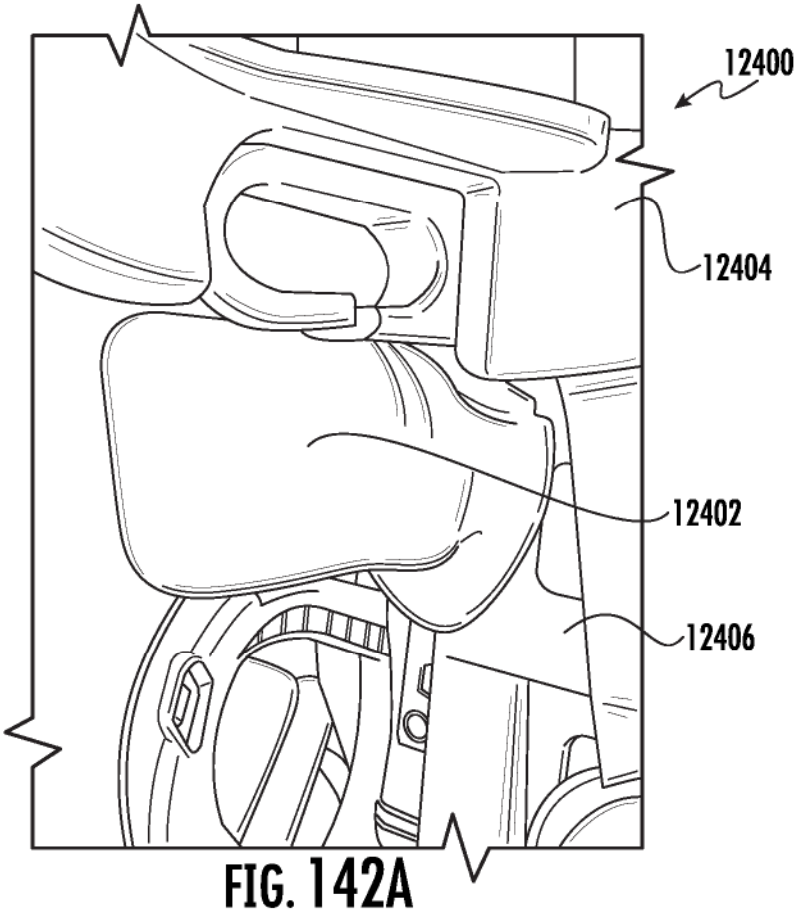


FIG. 142A

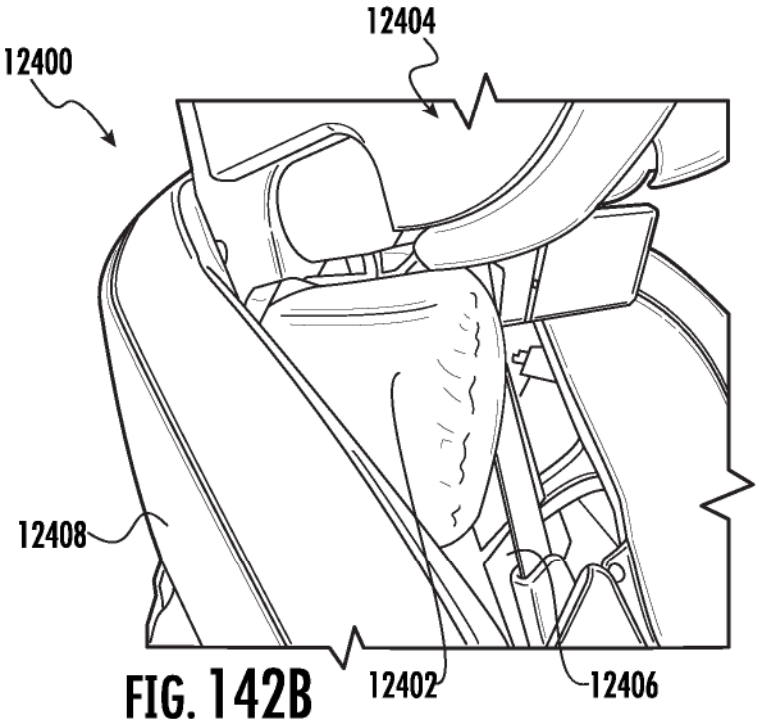


FIG. 142B

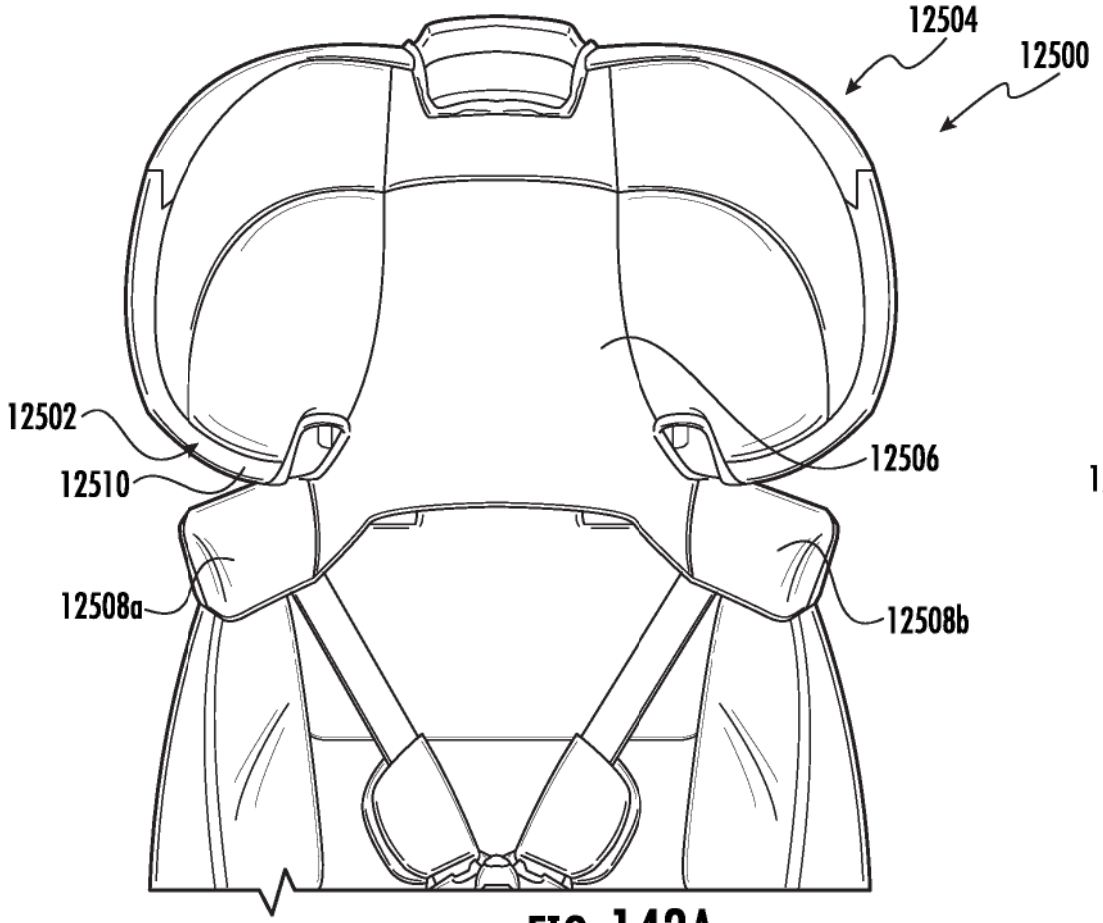


FIG. 143A

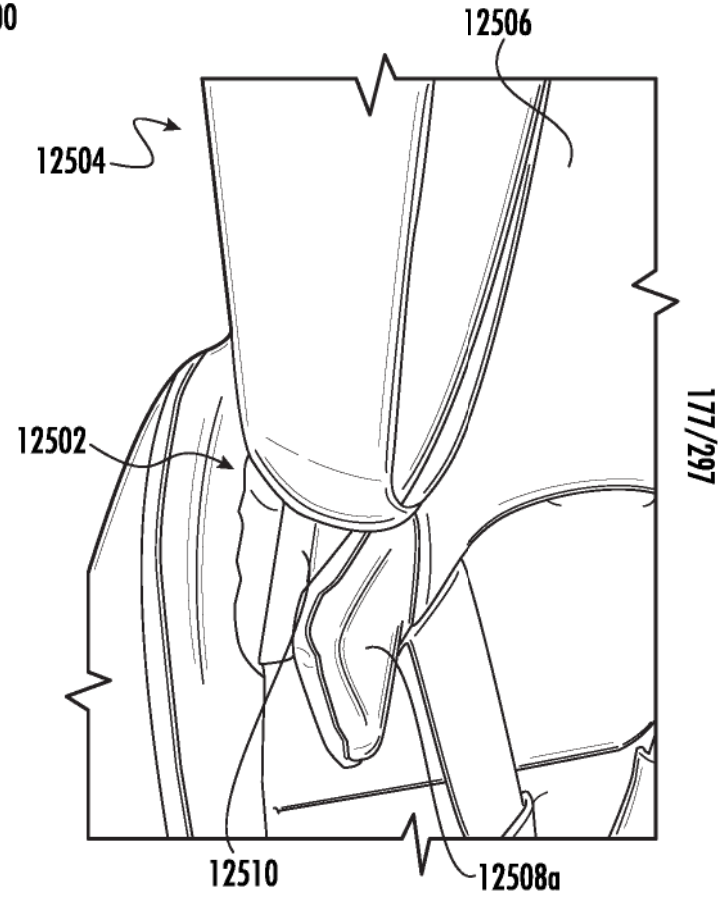


FIG. 143B

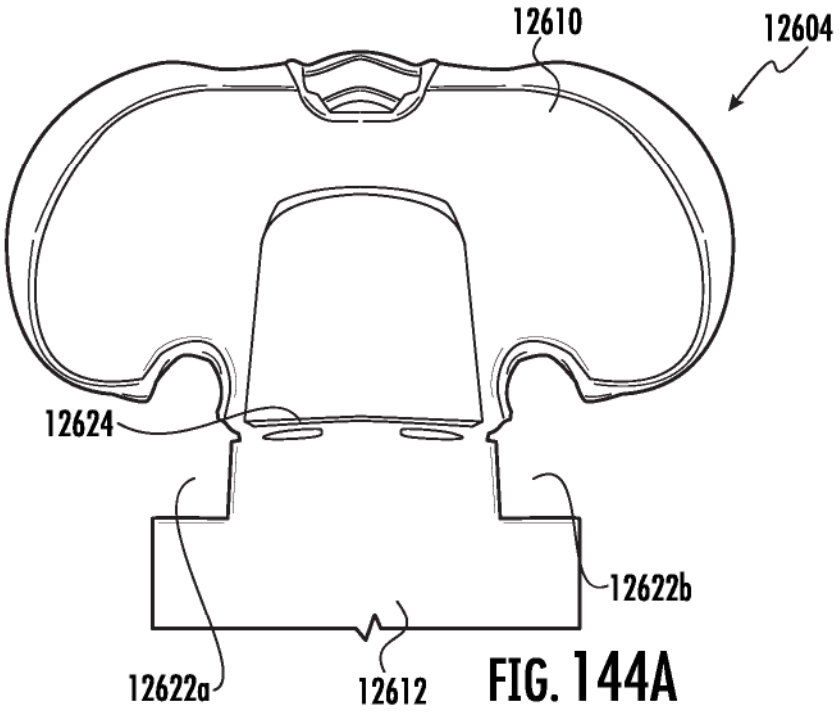


FIG. 144A

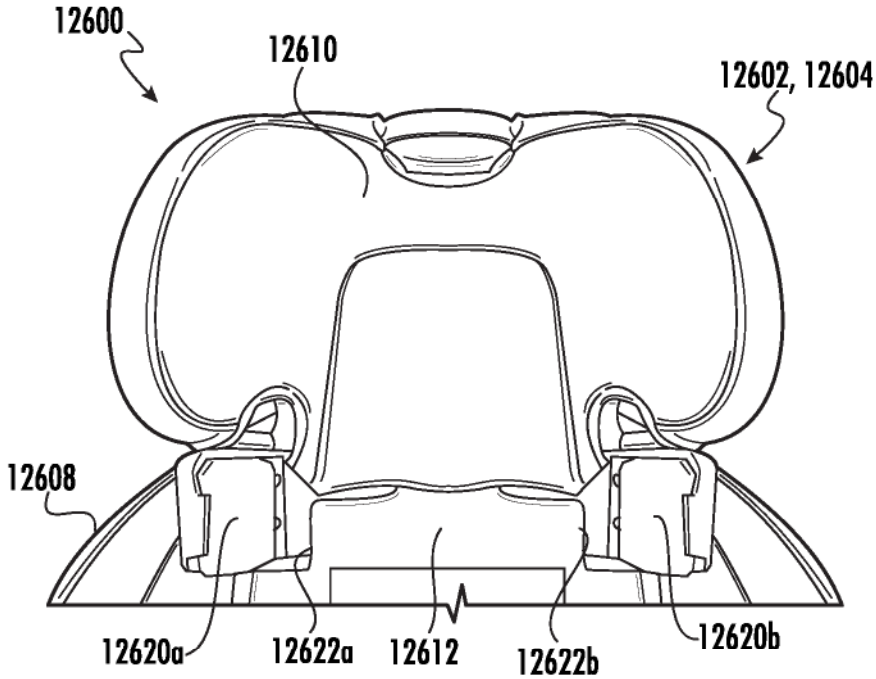


FIG. 144B

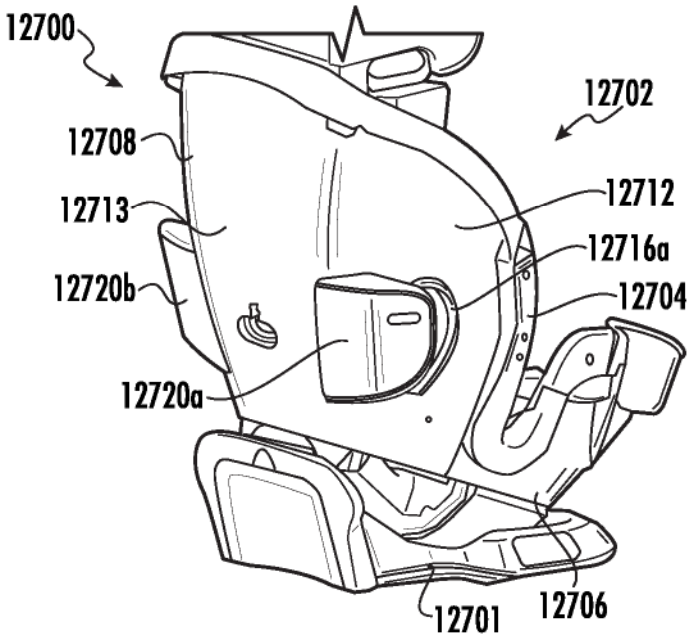


FIG. 145A

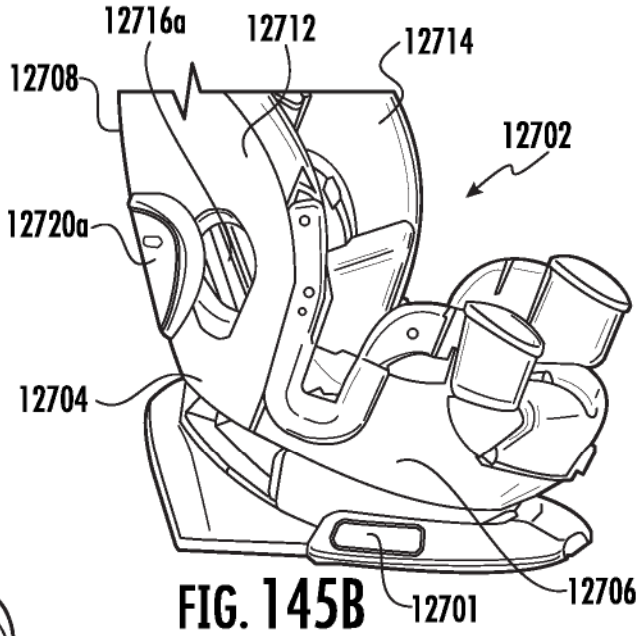


FIG. 145B

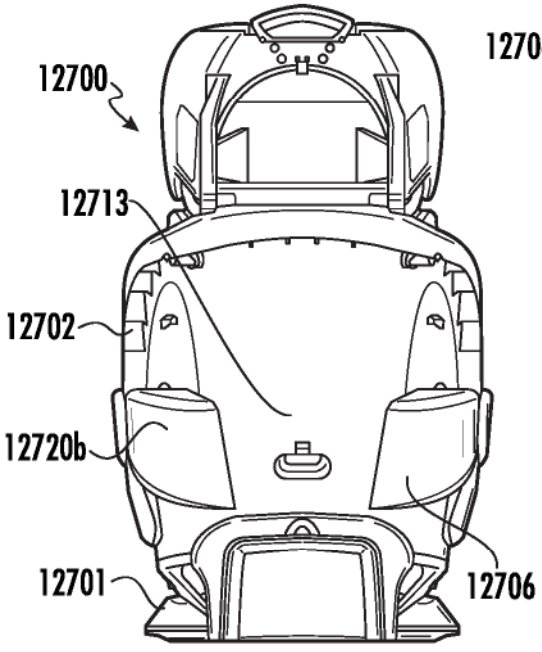


FIG. 145C

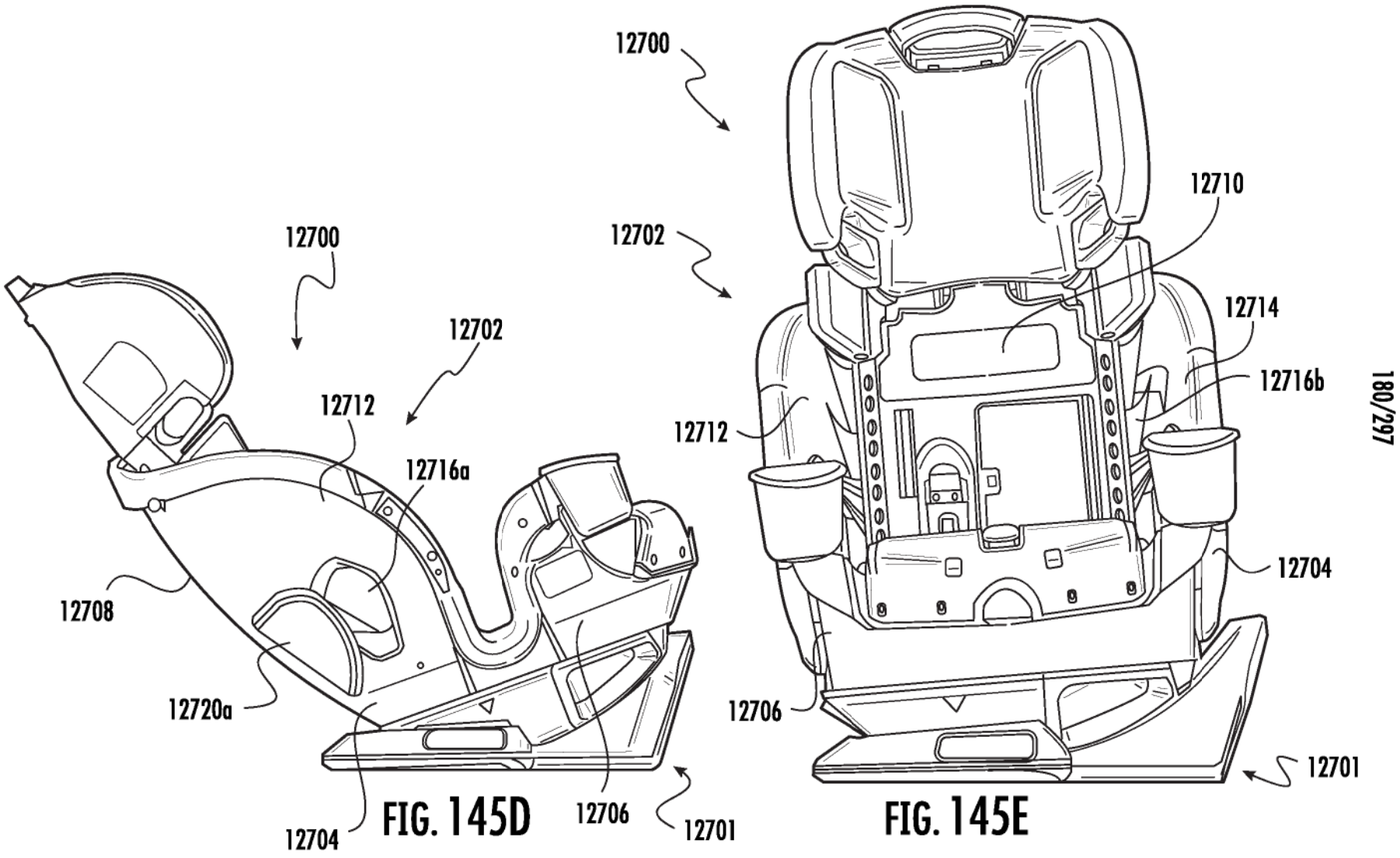


FIG. 145D

FIG. 145E

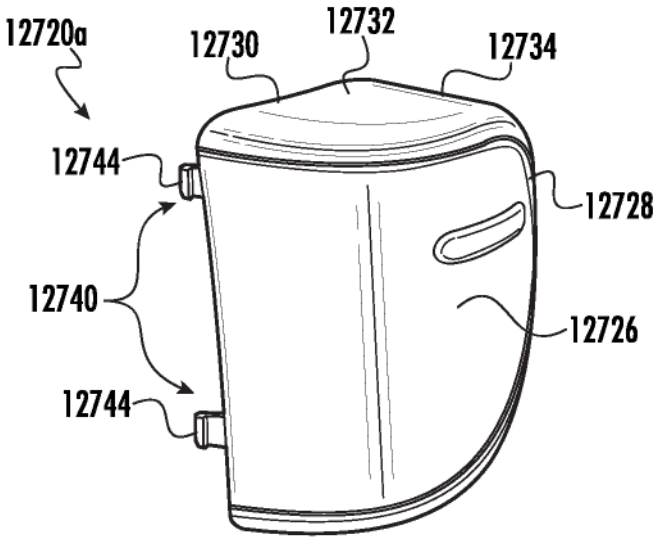


FIG. 146A

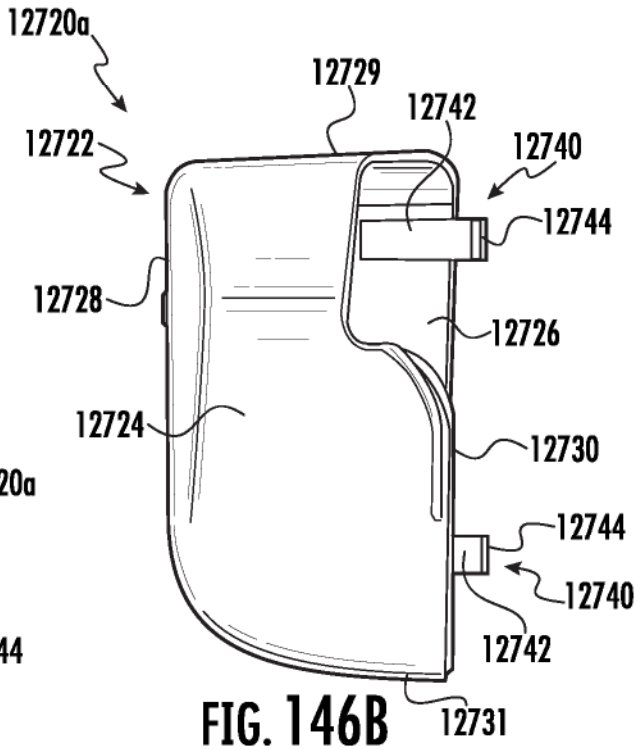


FIG. 146B

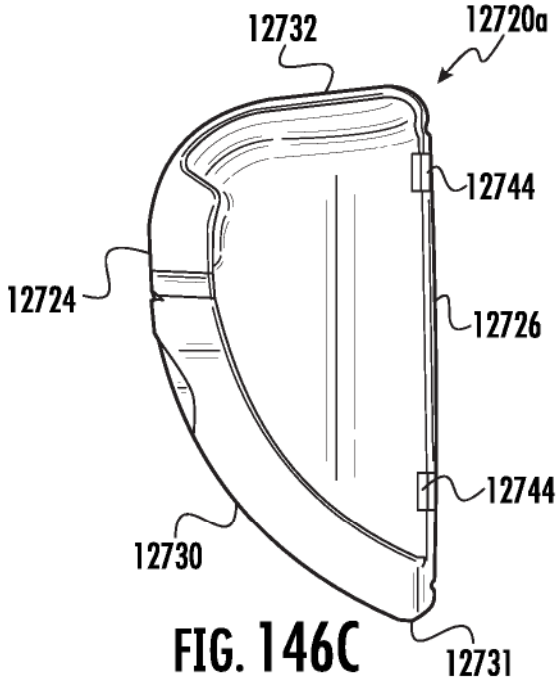


FIG. 146C

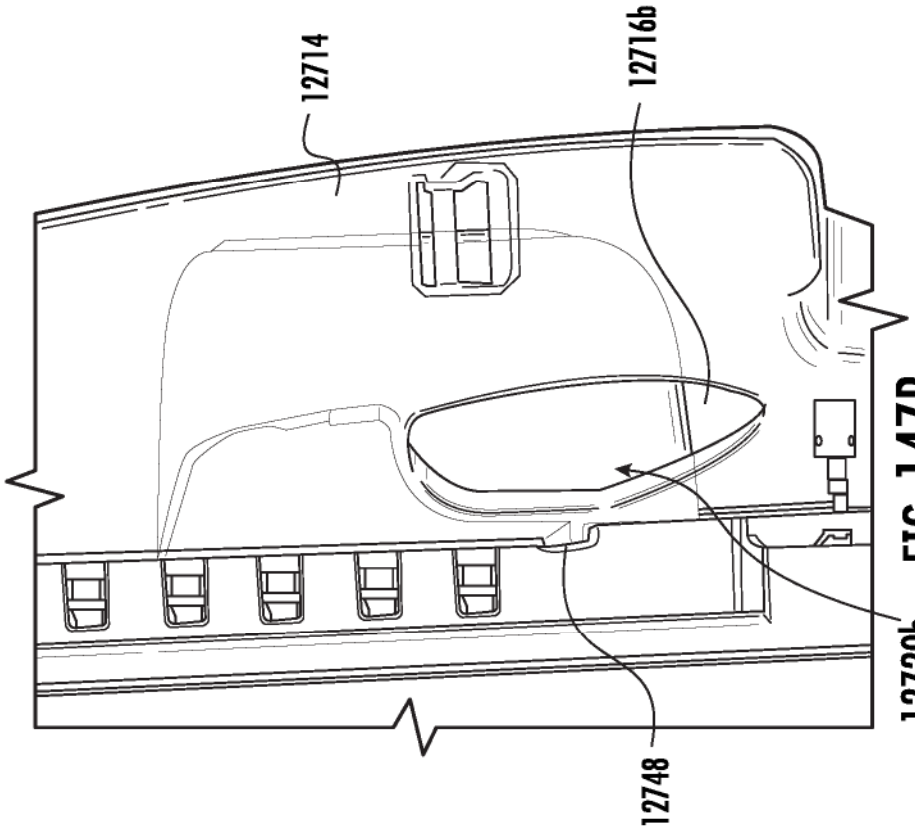


FIG. 147B

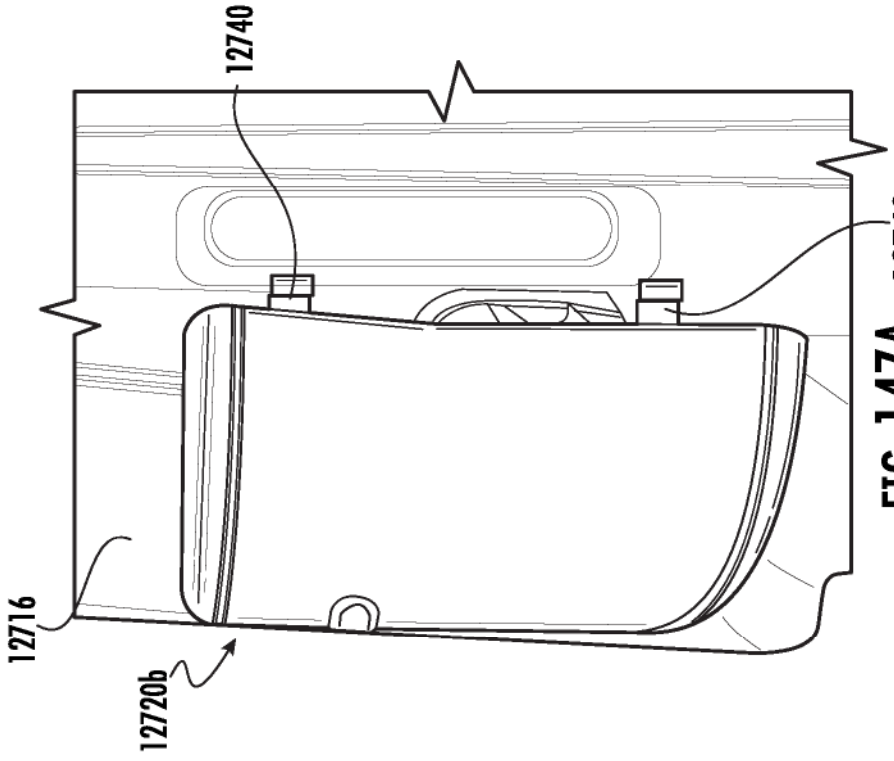


FIG. 147A

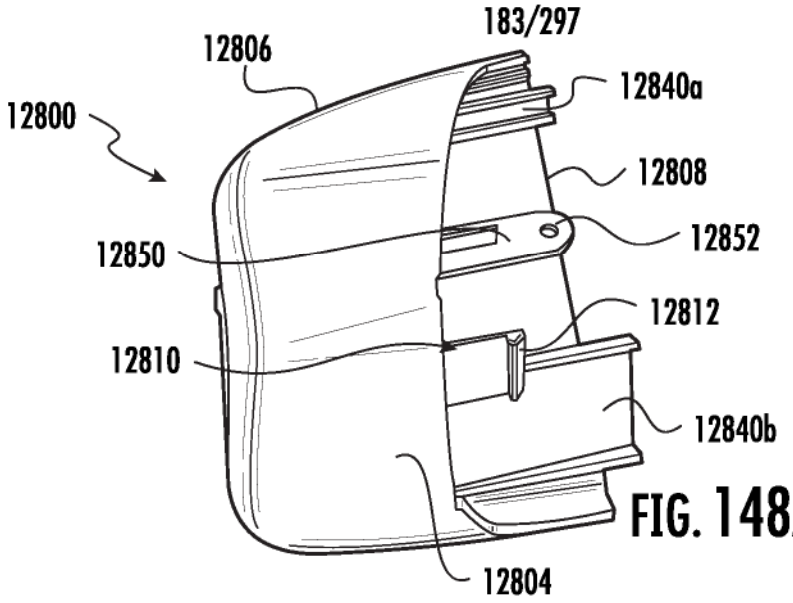


FIG. 148A

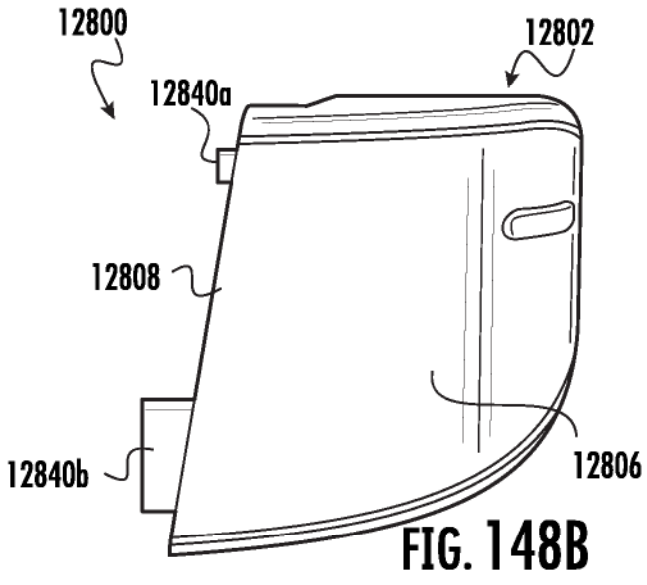


FIG. 148B

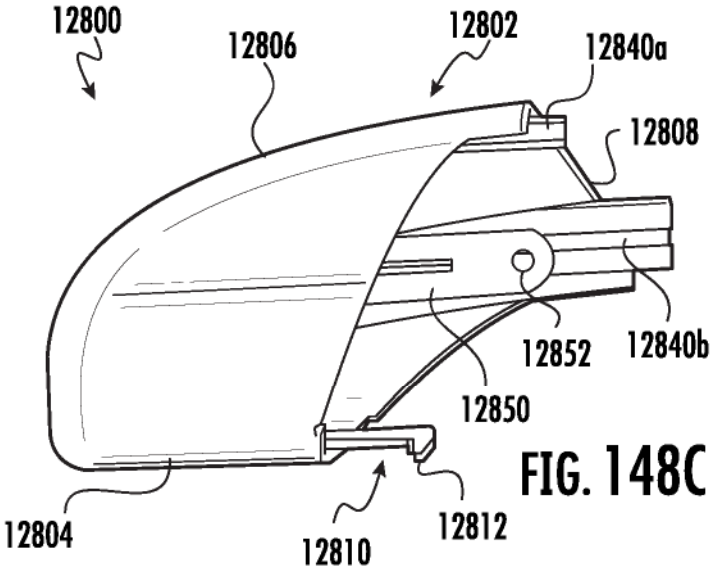


FIG. 148C

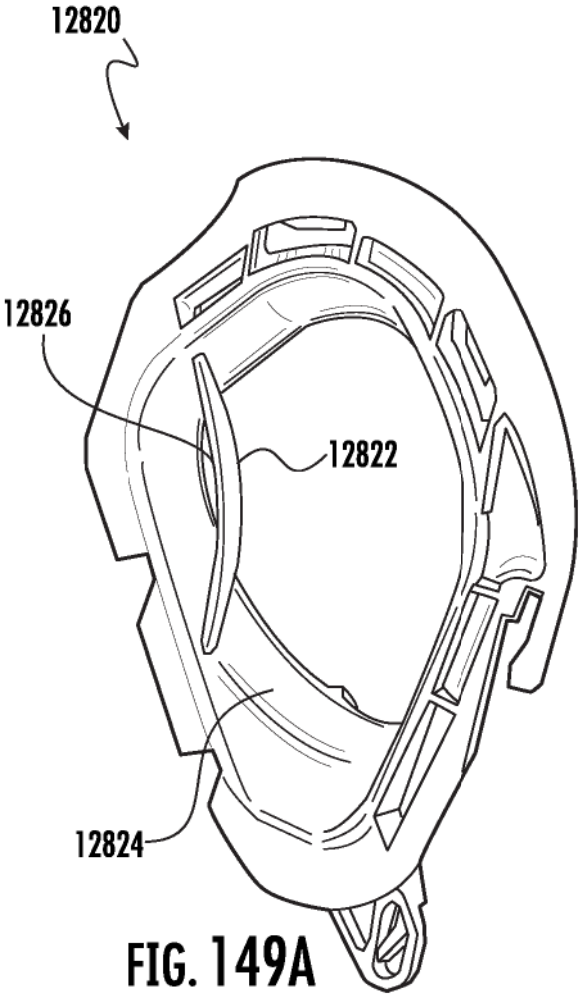


FIG. 149A

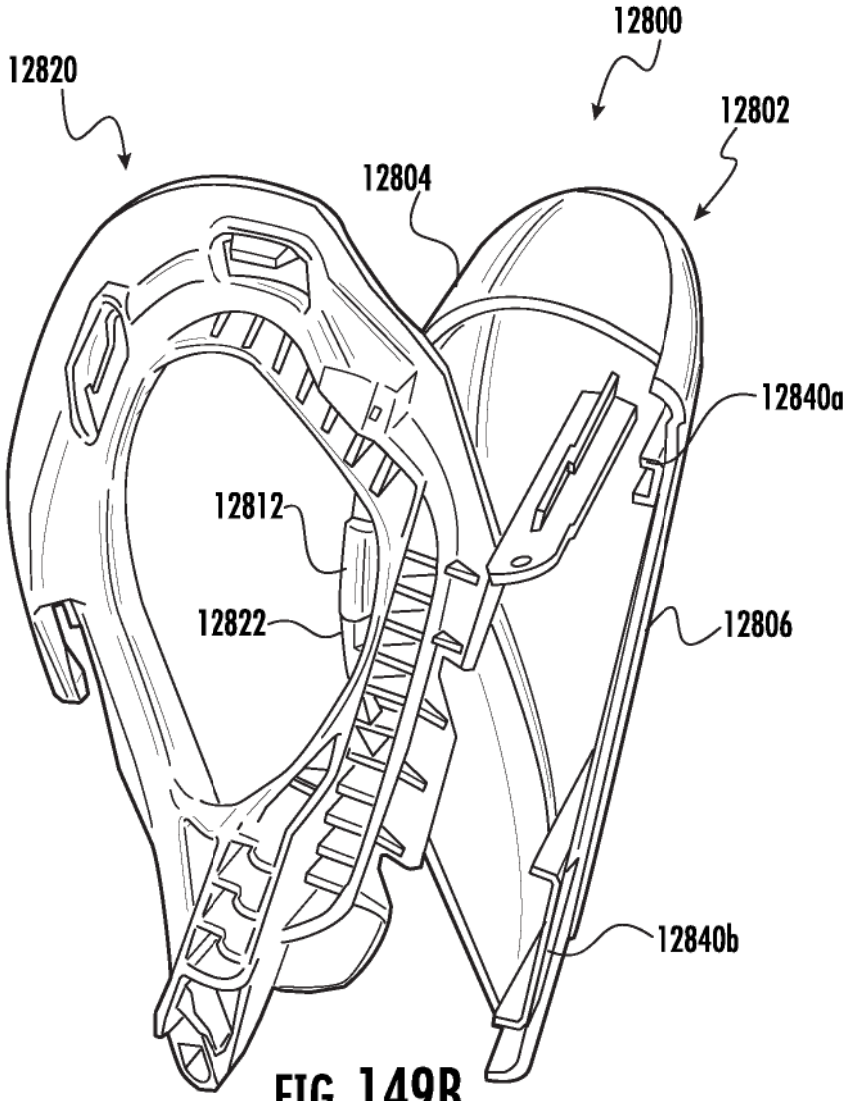
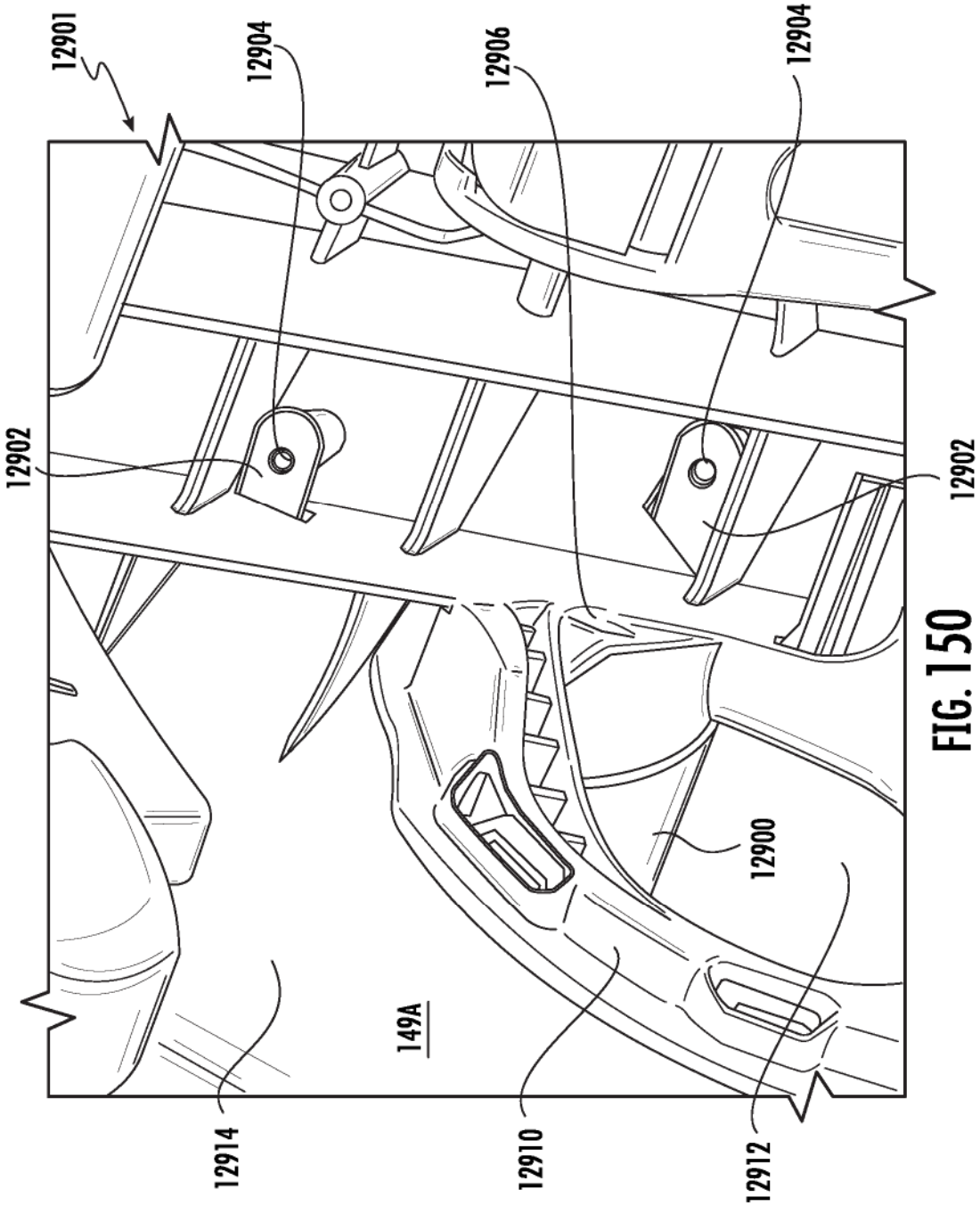


FIG. 149B


12901
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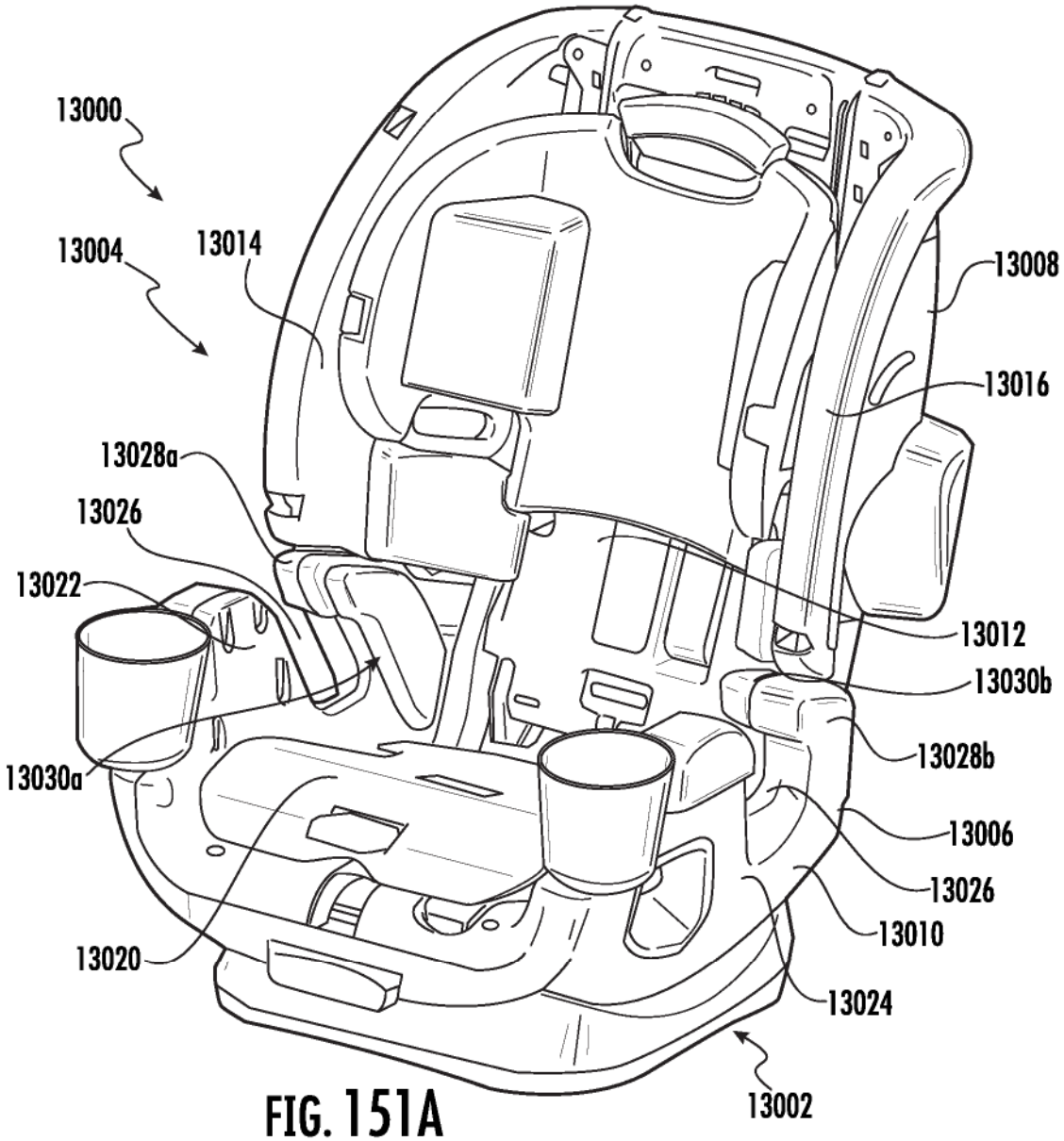
12904
12902
12902
12900
149A
12914
12910
12912

FIG. 150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13030b
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13026
13010
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13024
13002

FIG. 151A

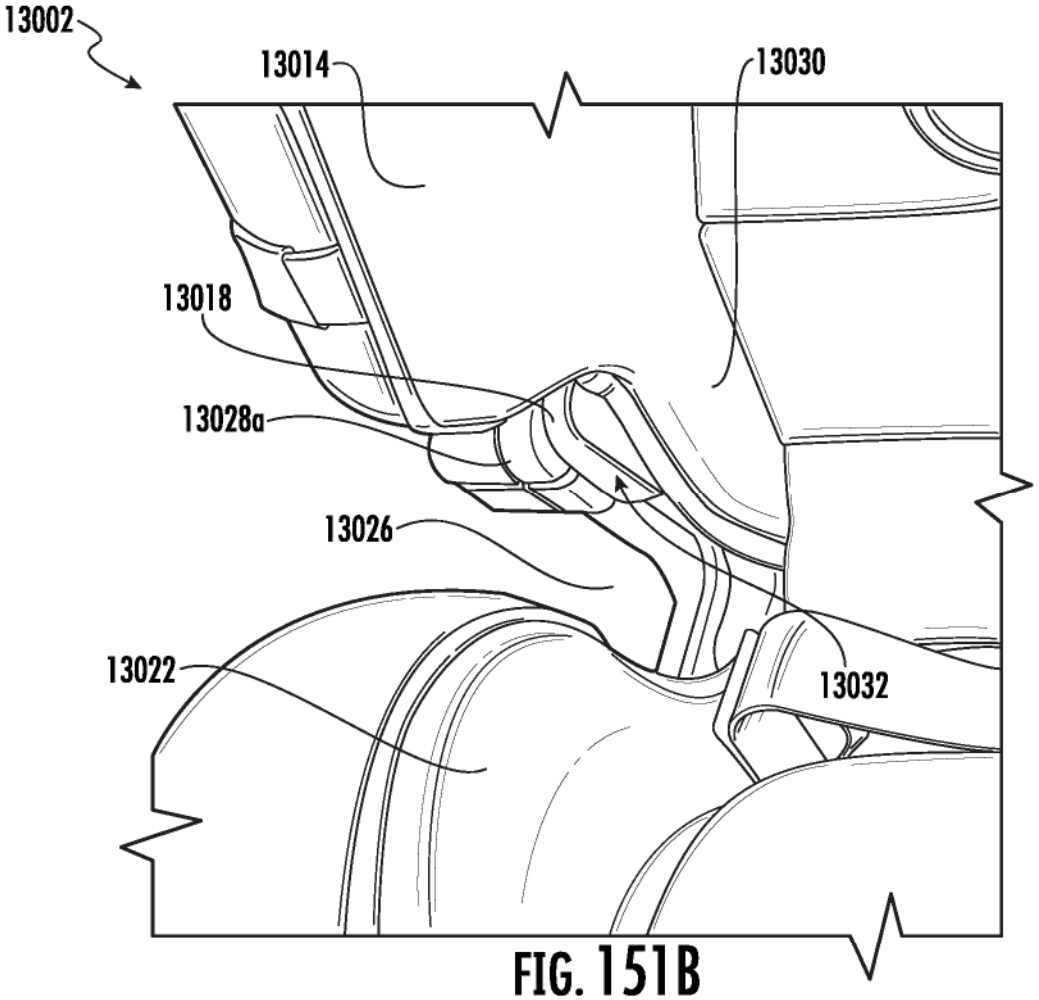


FIG. 151B

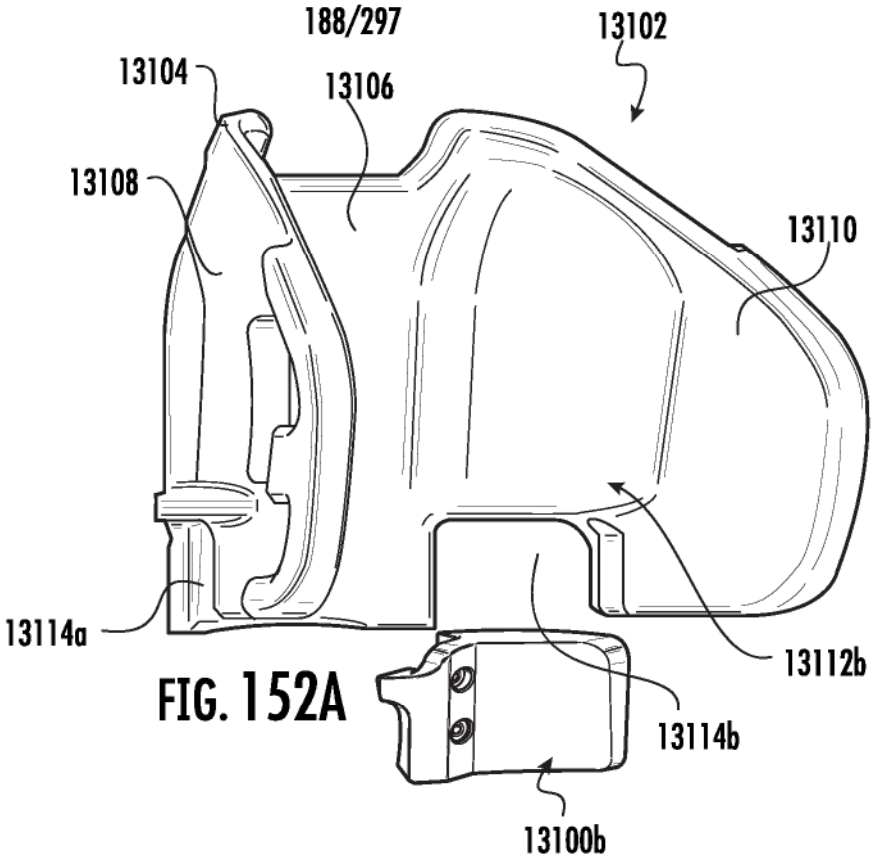


FIG. 152A

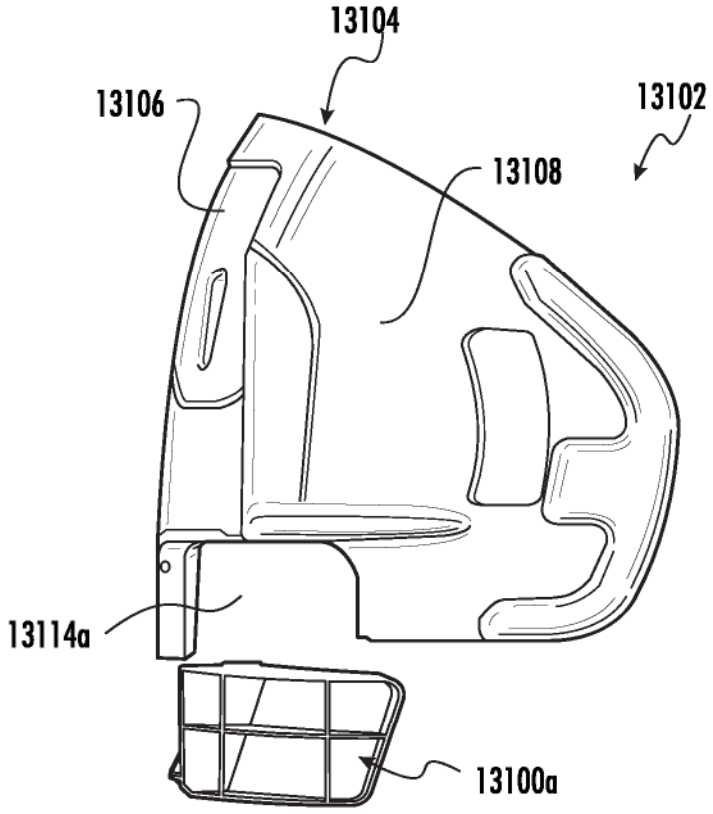
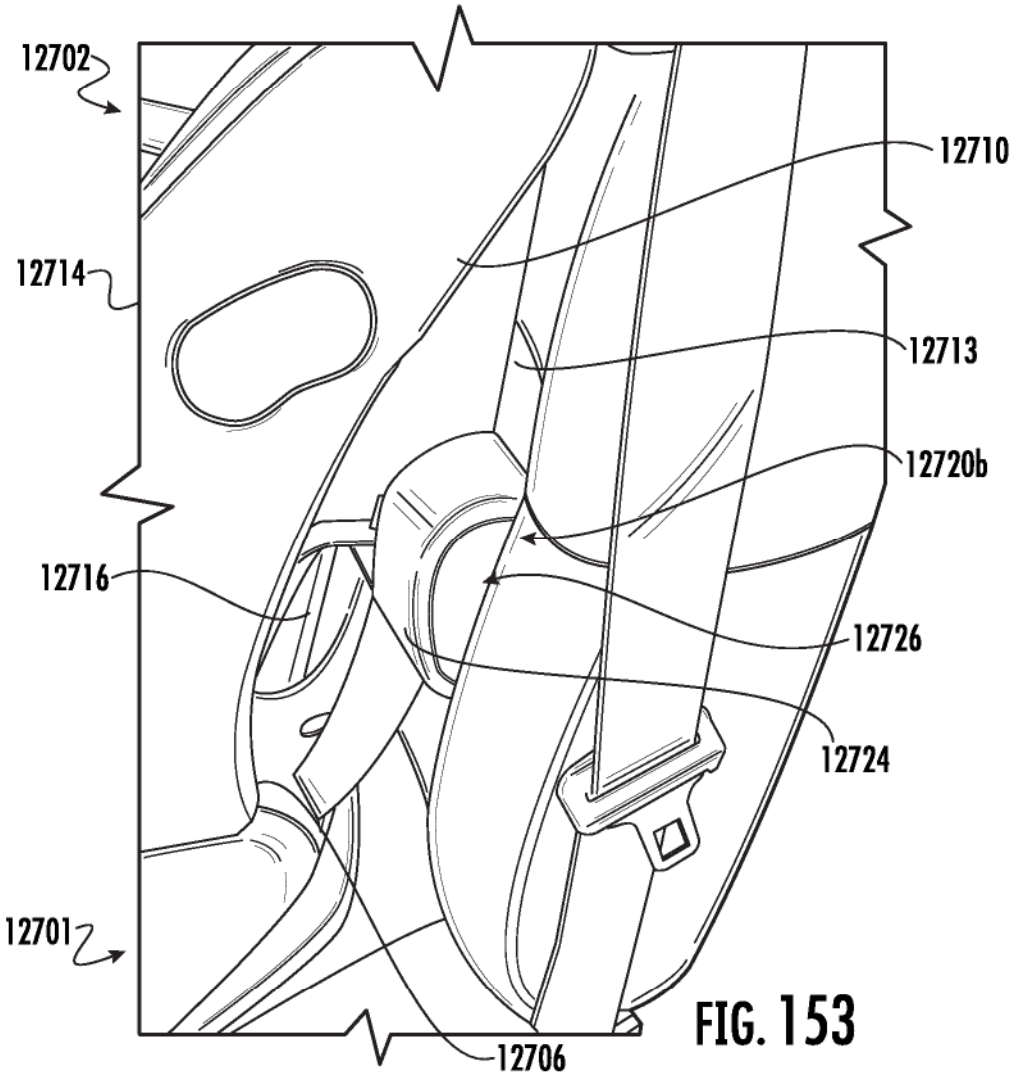


FIG. 152B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12724
12701
12706

FIG. 153

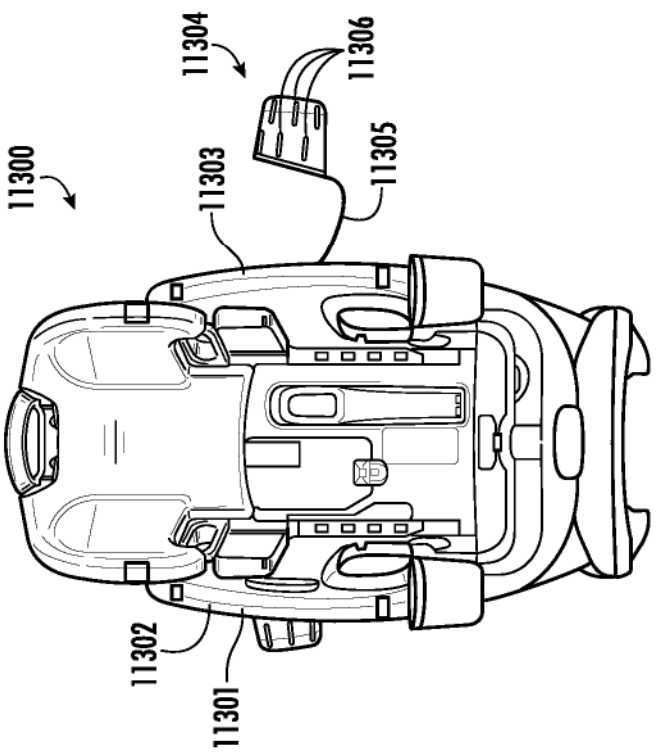


FIG. 154A

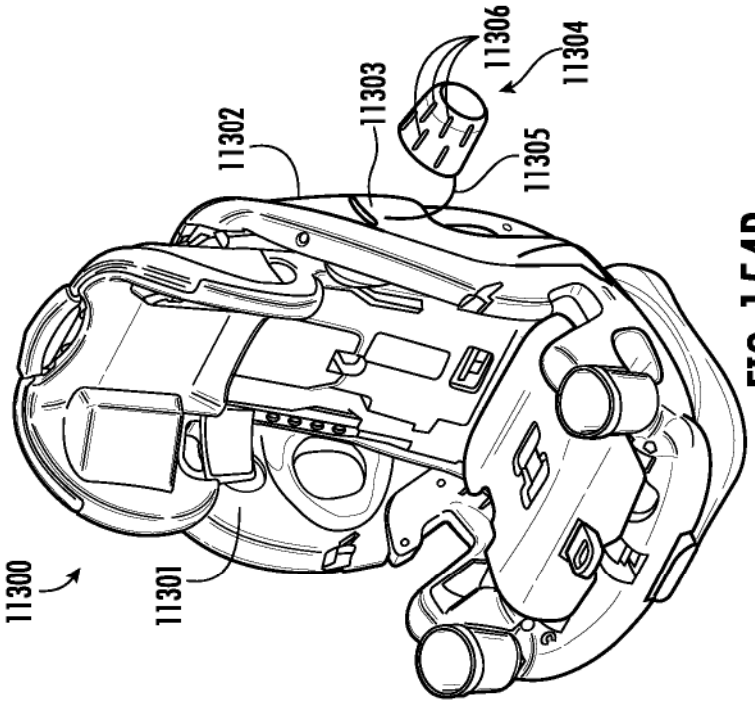
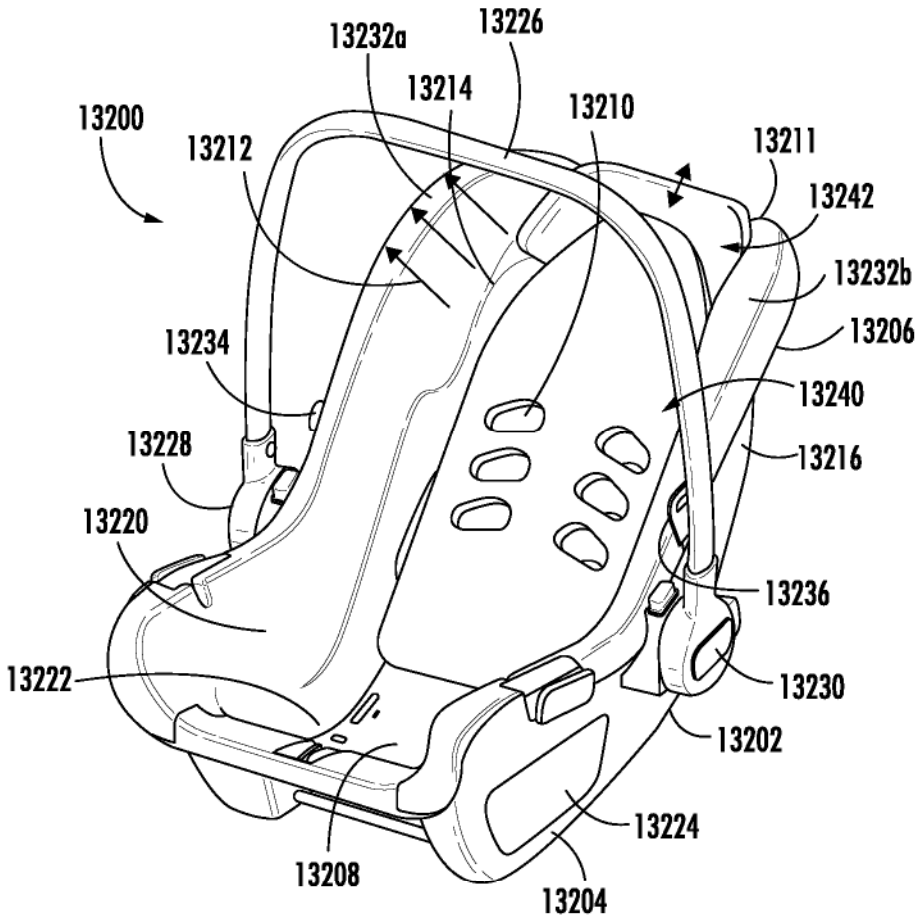


FIG. 154B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13208
13204

FIG. 155

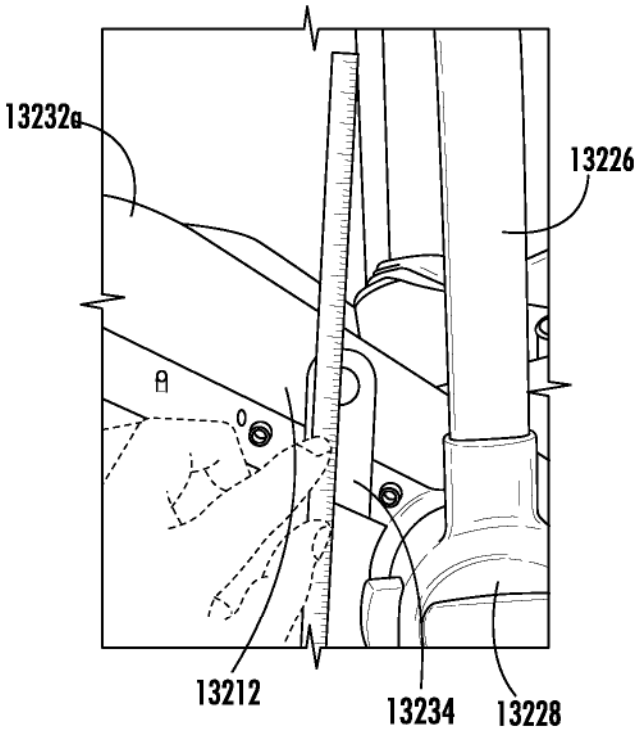


FIG. 156A

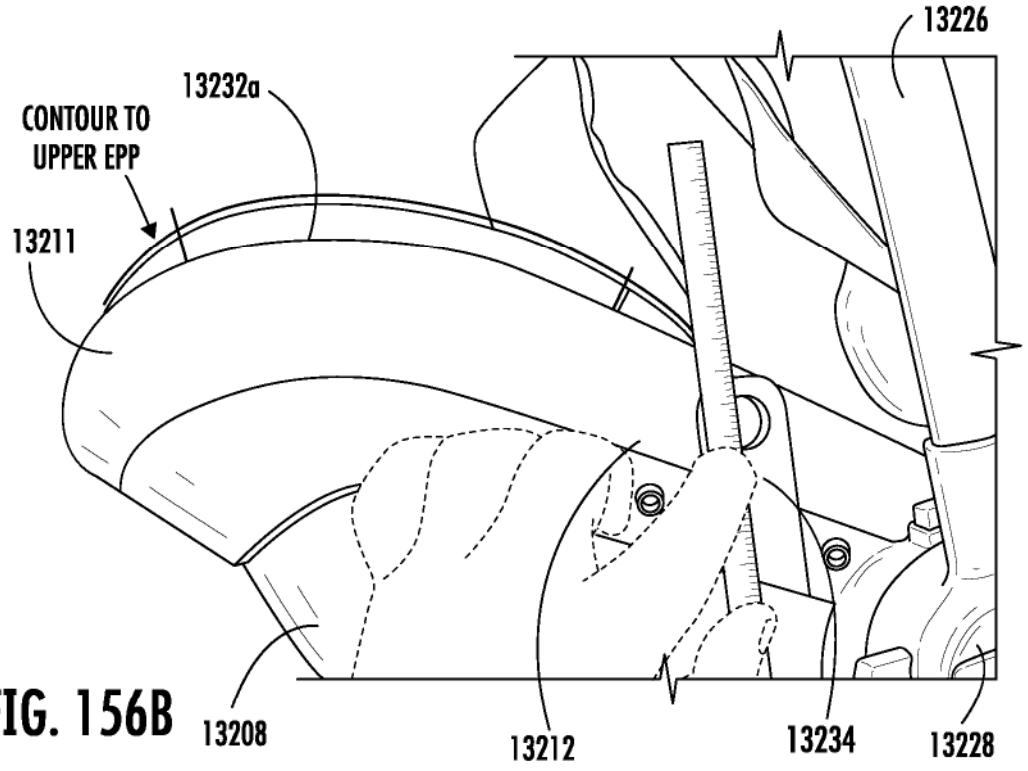


FIG. 156B

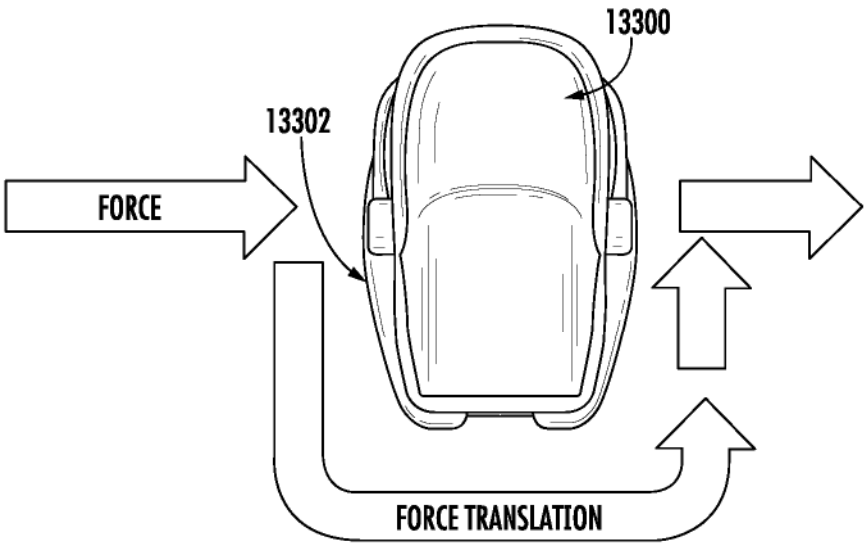


FIG. 157

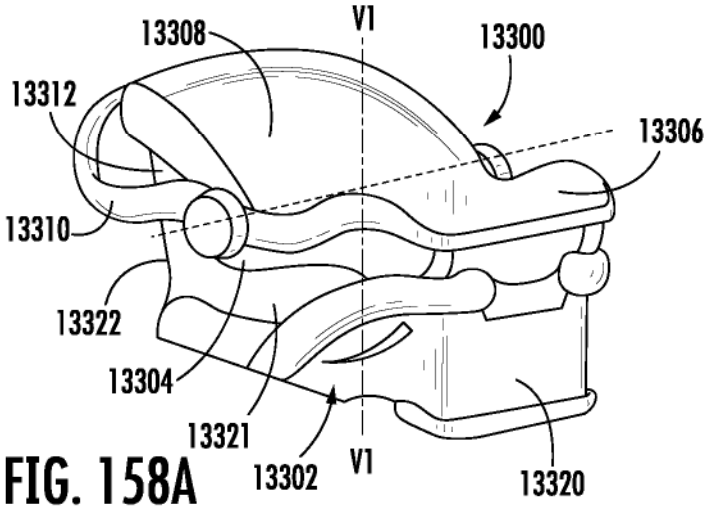


FIG. 158A

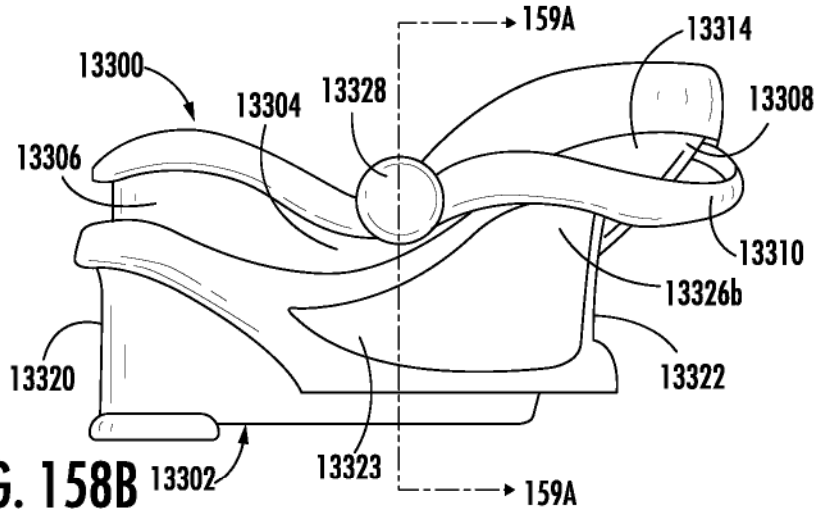


FIG. 158B

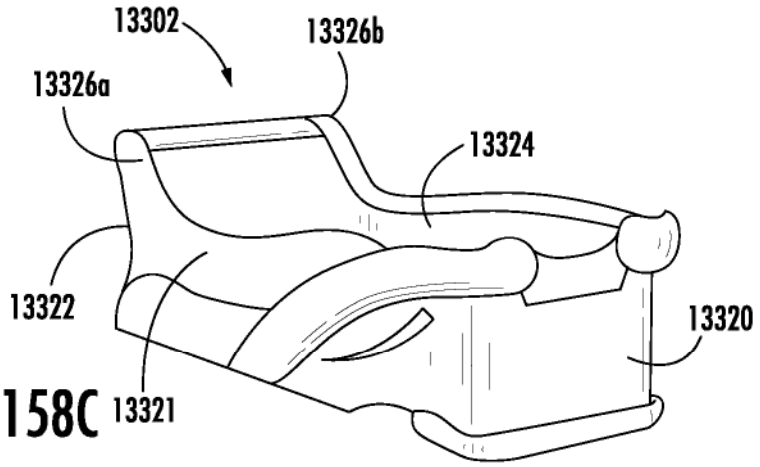


FIG. 158C

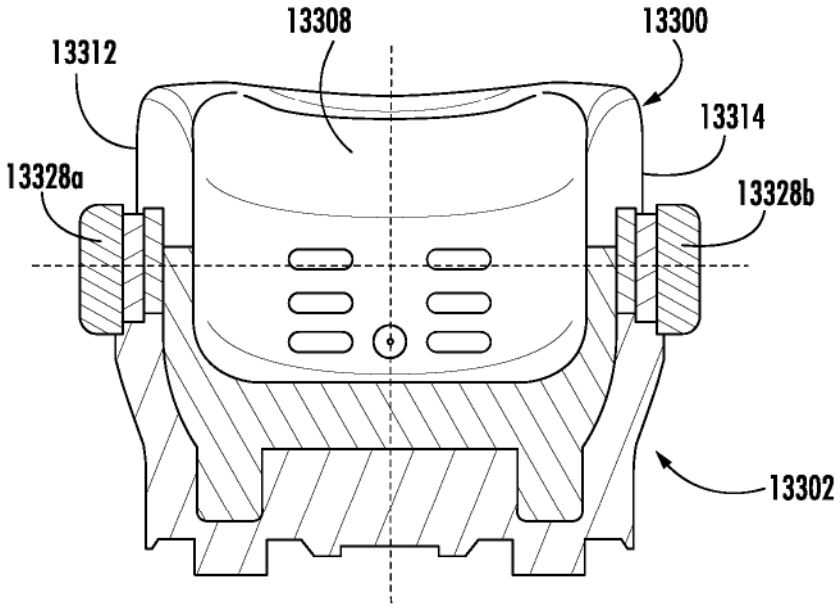


FIG. 159A

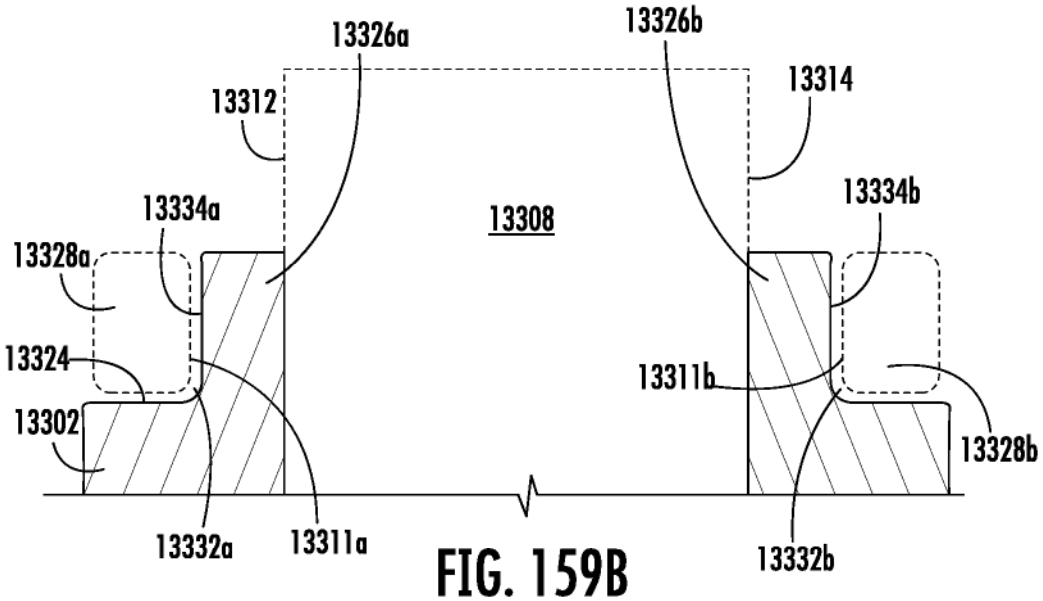


FIG. 159B

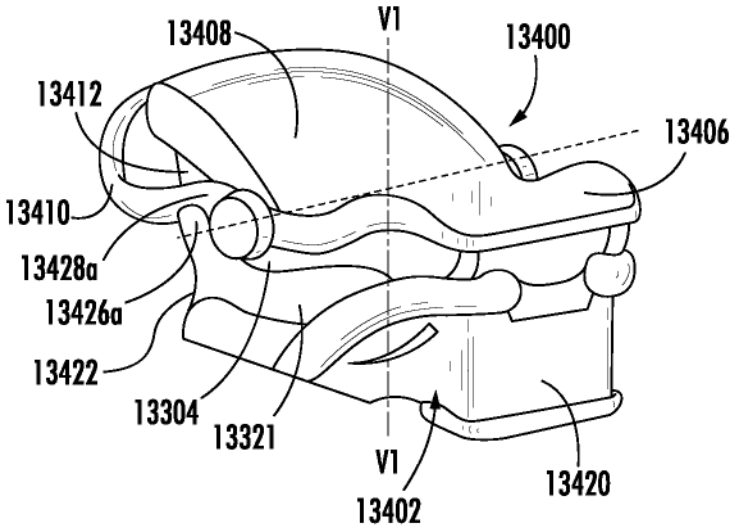


FIG. 160A

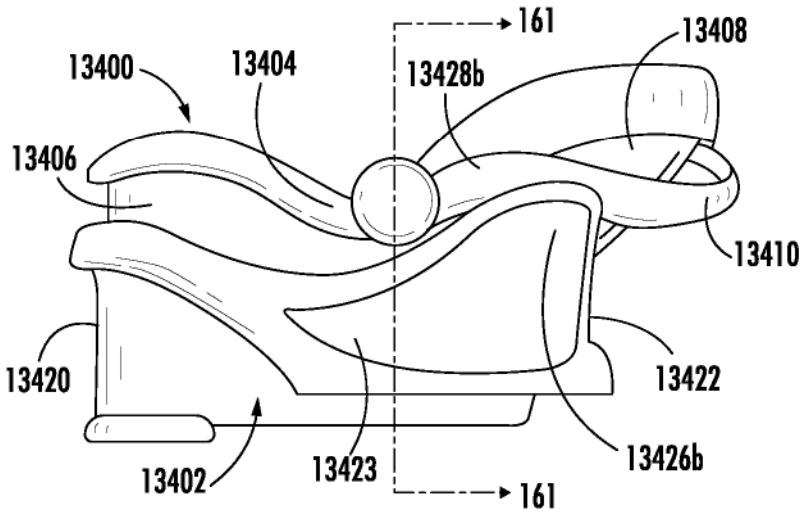


FIG. 160B

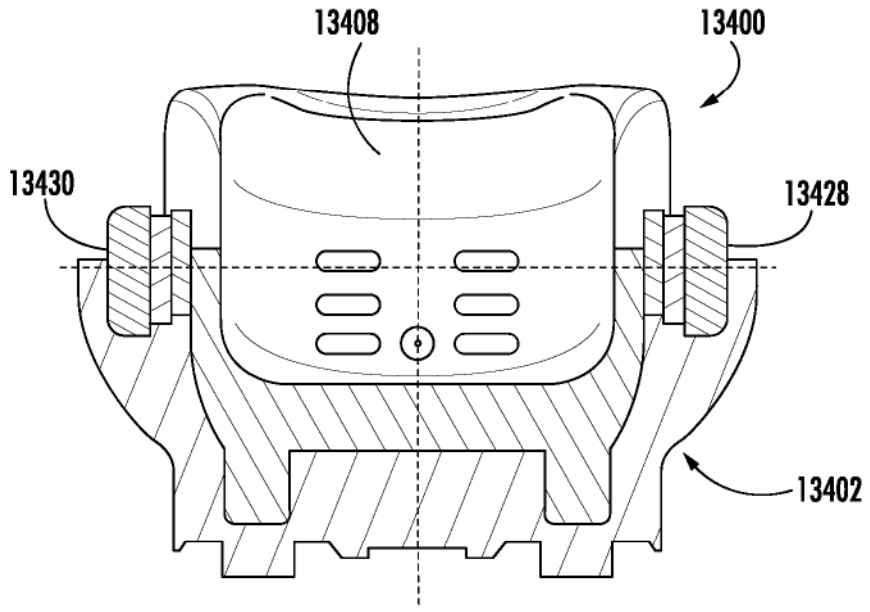


FIG. 161A

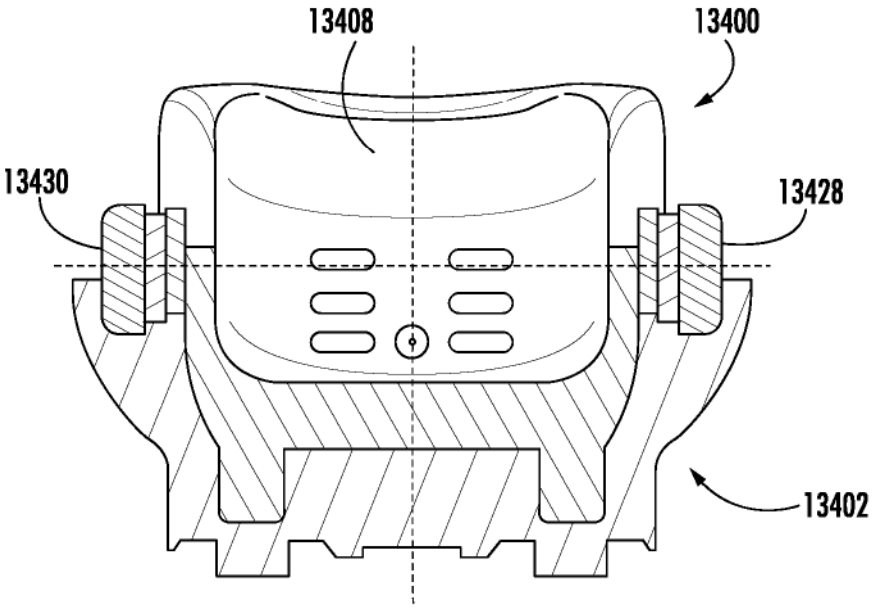
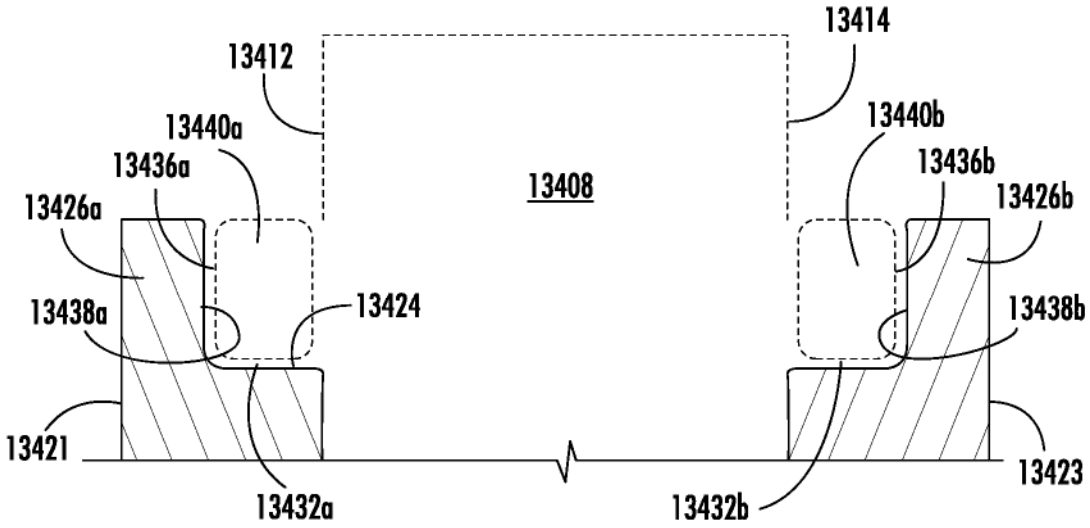


FIG. 161B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13438a
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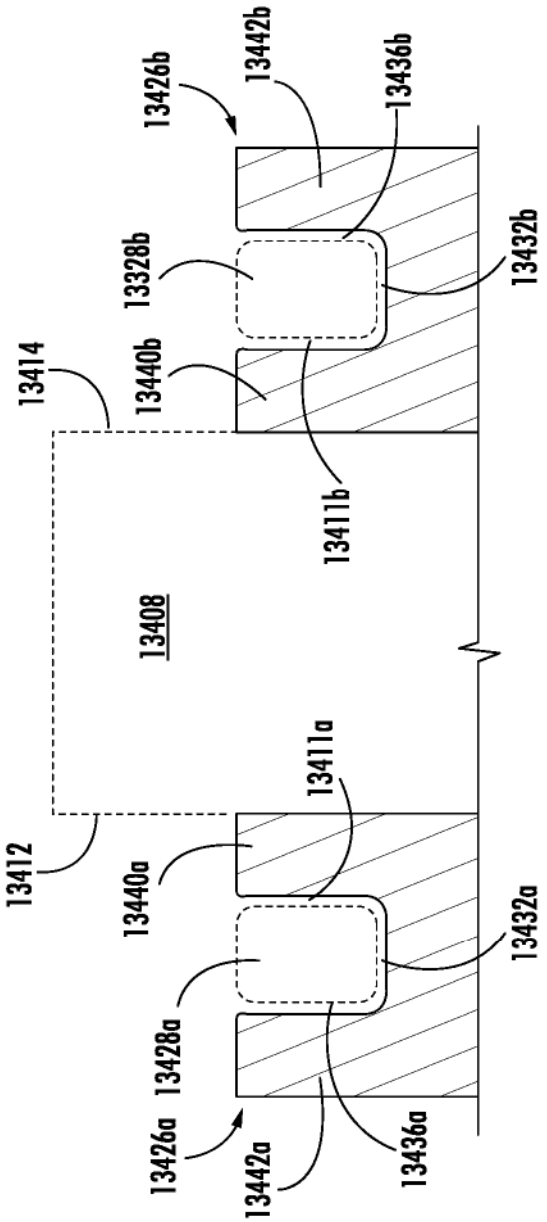
13432a
13432b

FIG. 162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13436a

FIG. 163

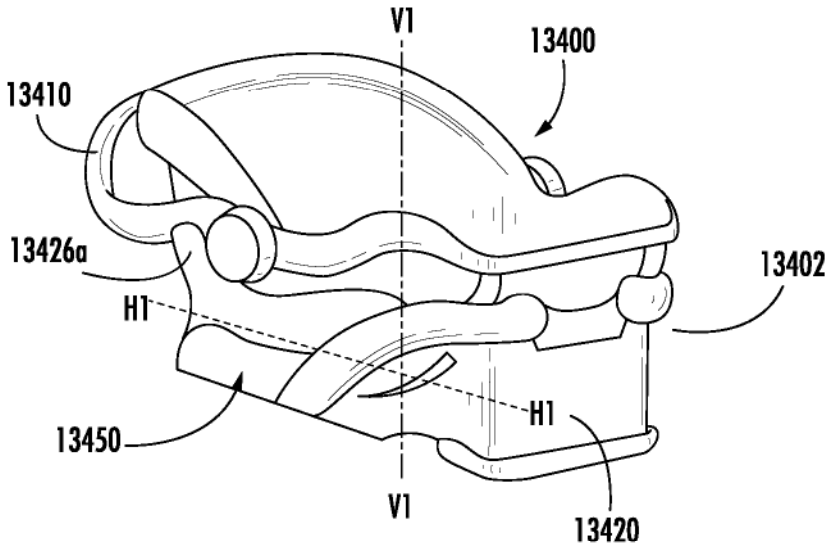


FIG. 164

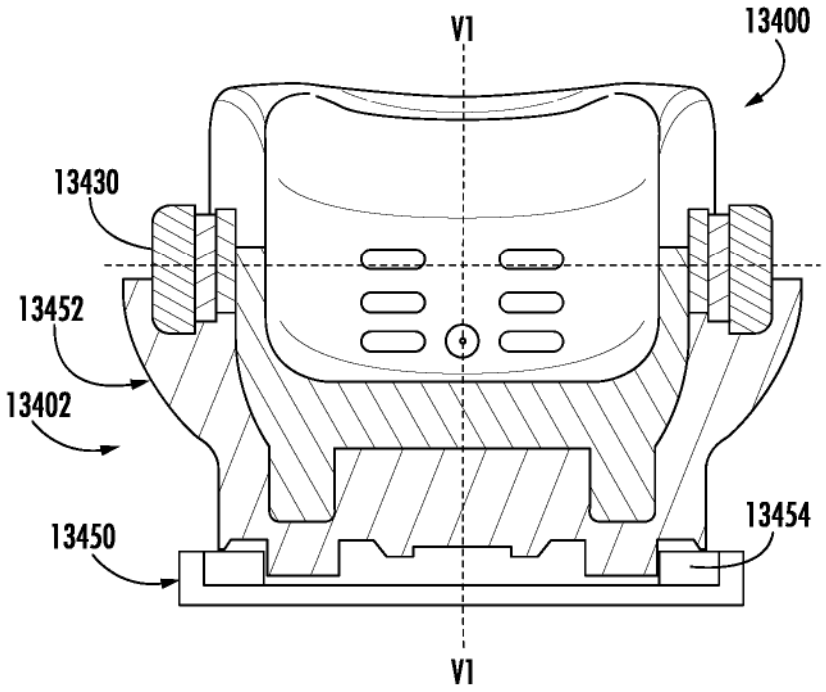


FIG. 165

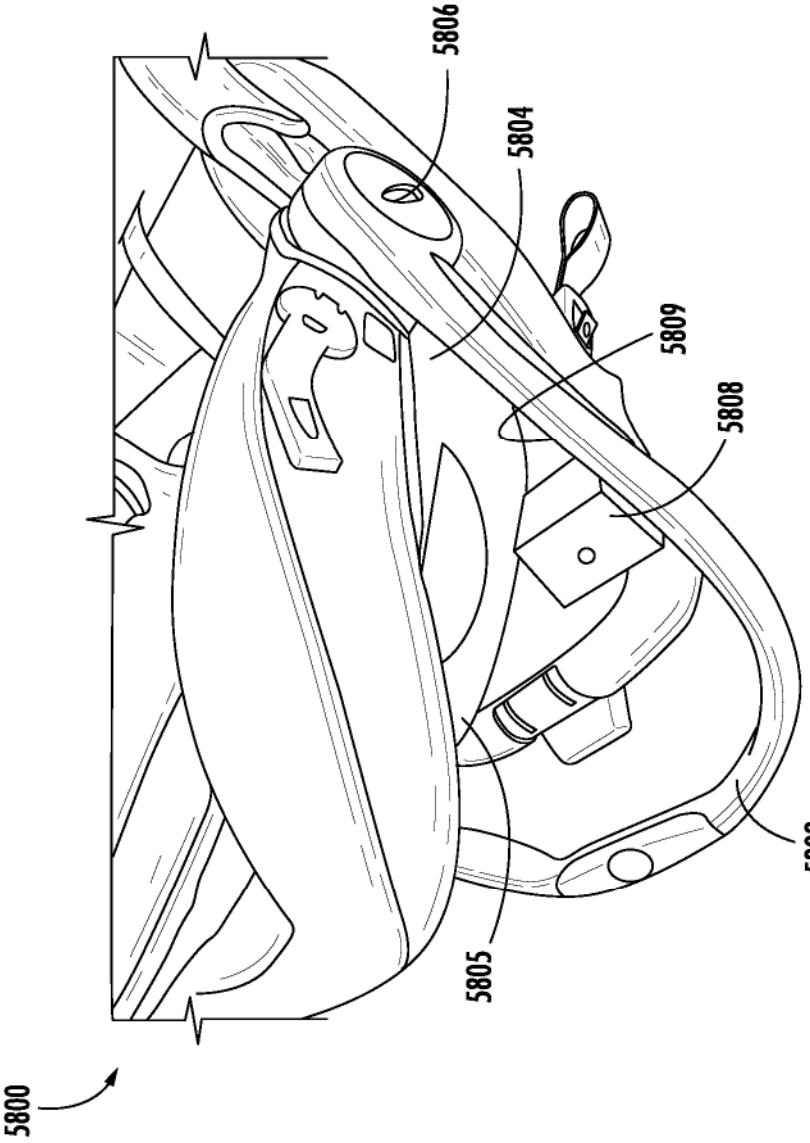


FIG. 166

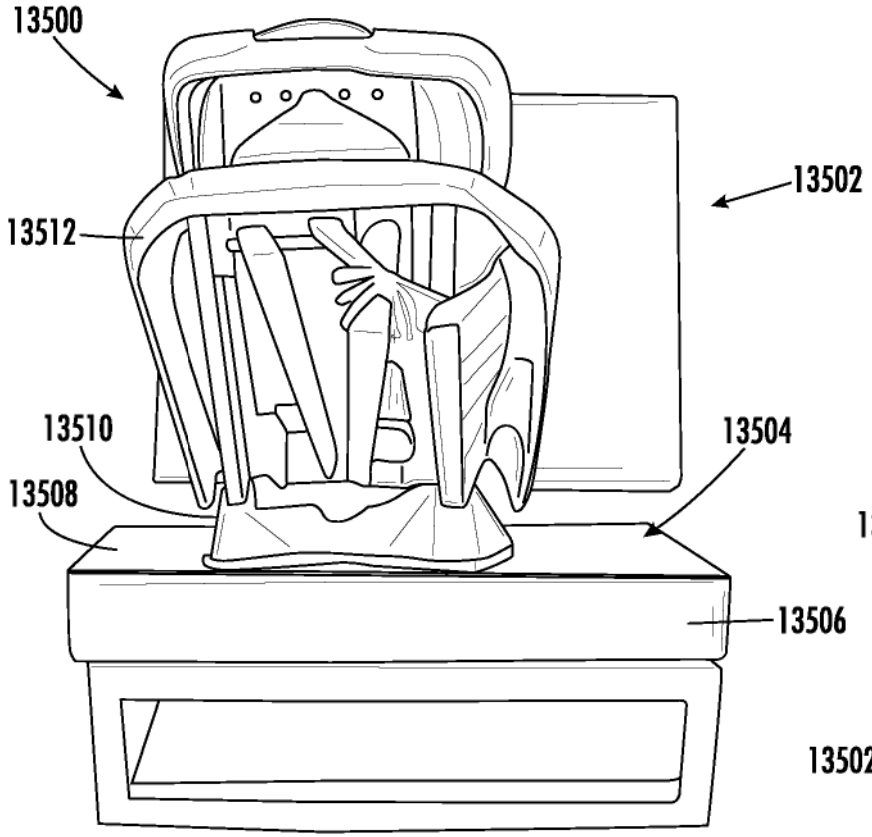


FIG. 167A

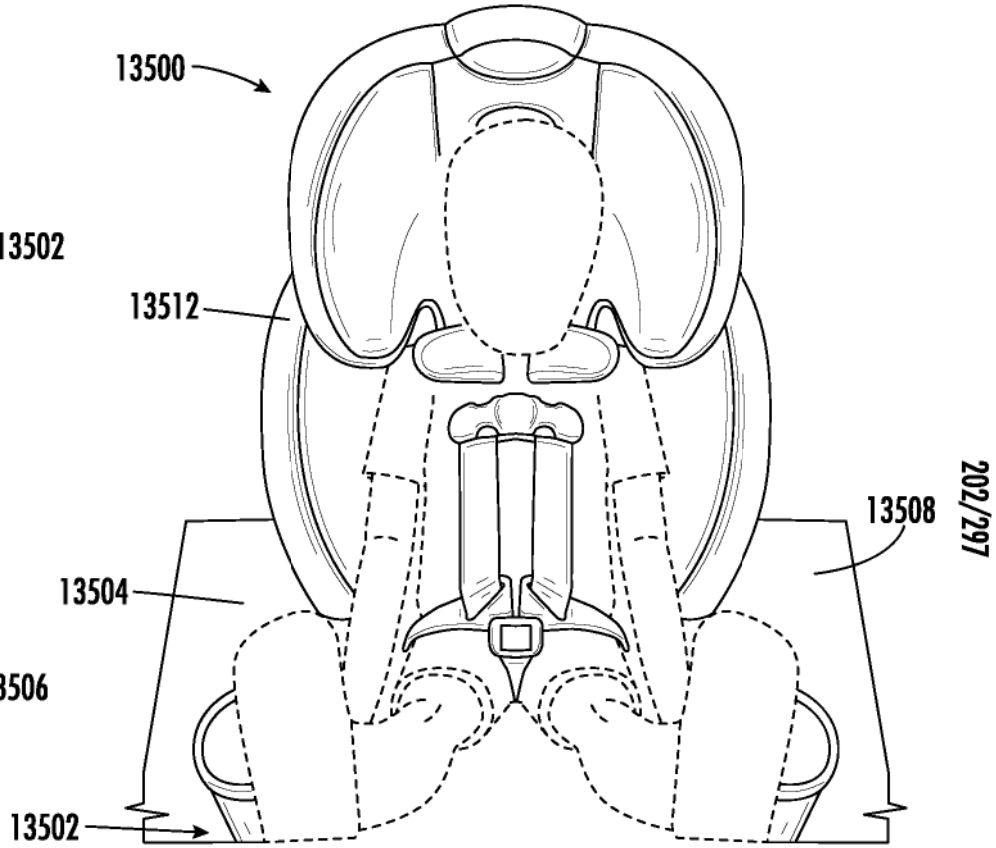


FIG. 167B

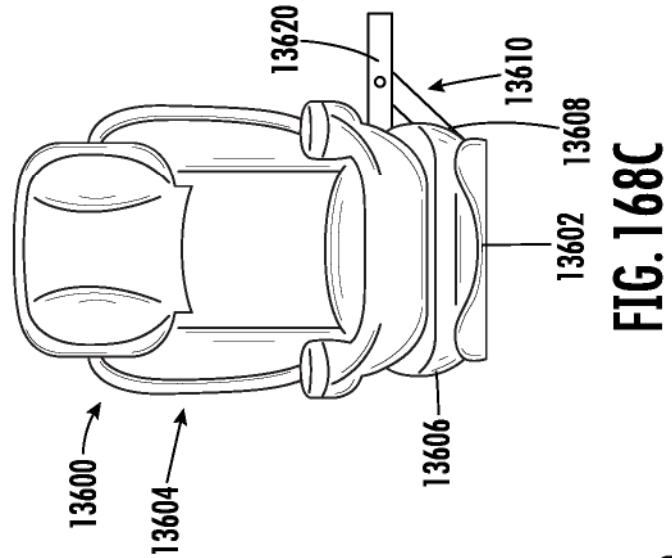


FIG. 168C

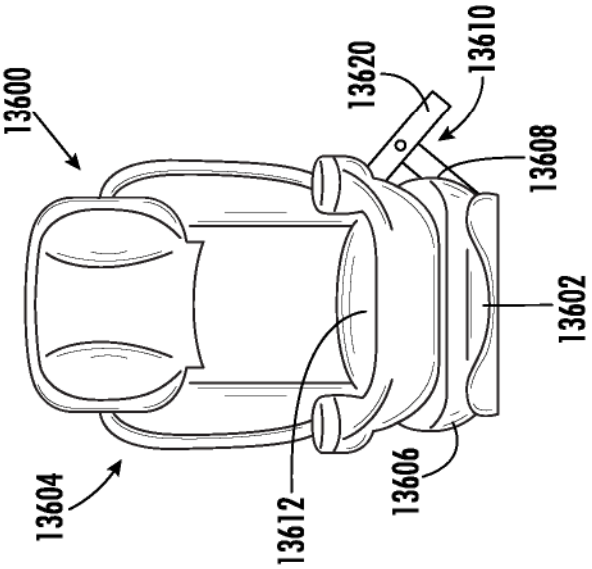


FIG. 168B

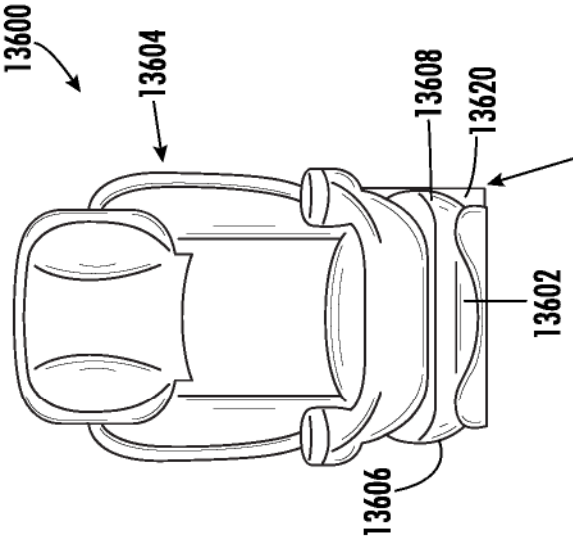


FIG. 168A

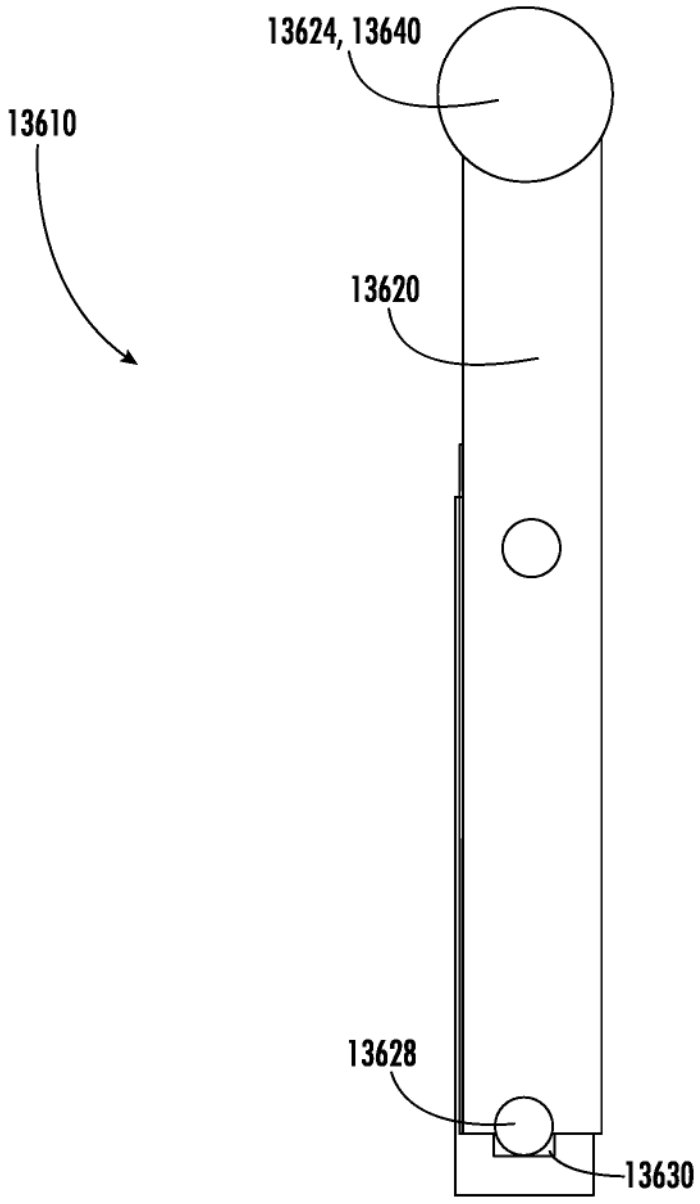


FIG. 169A

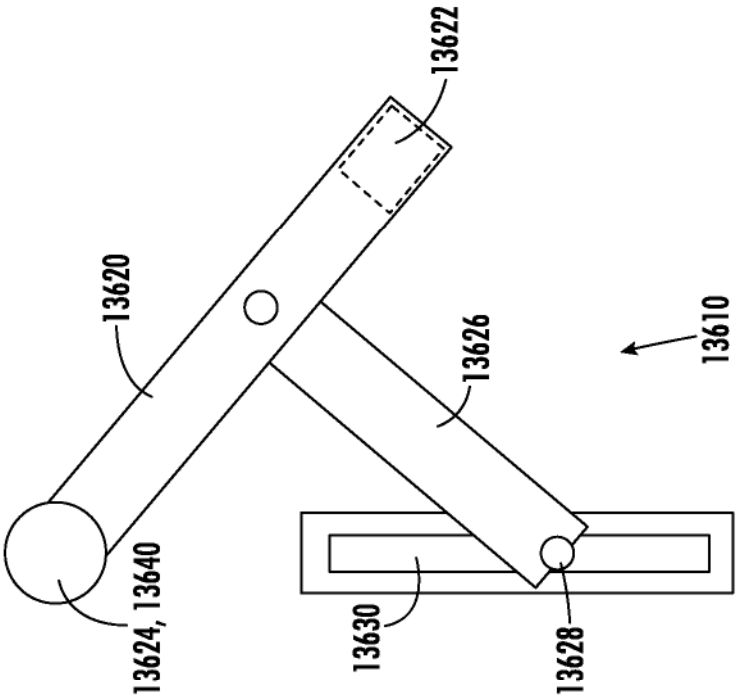


FIG. 169B

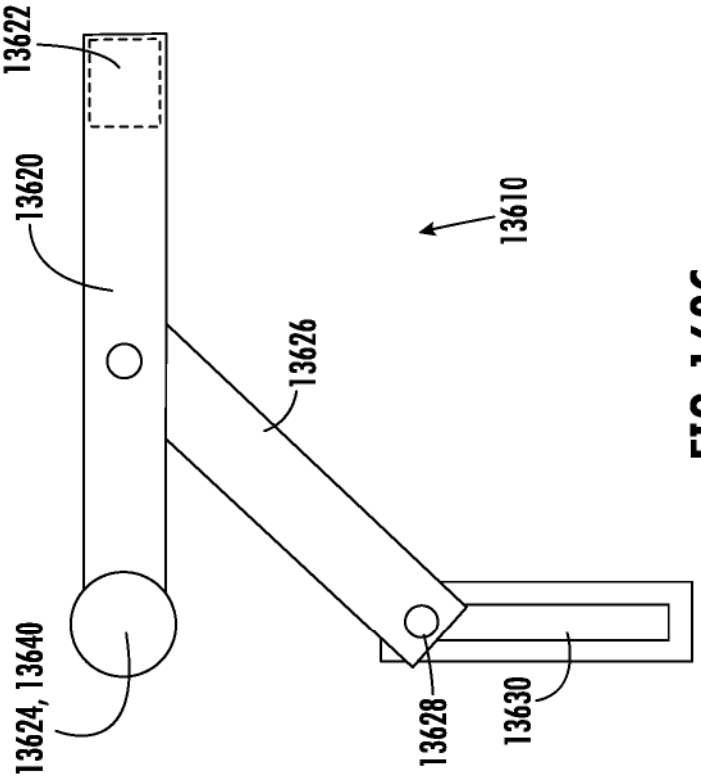
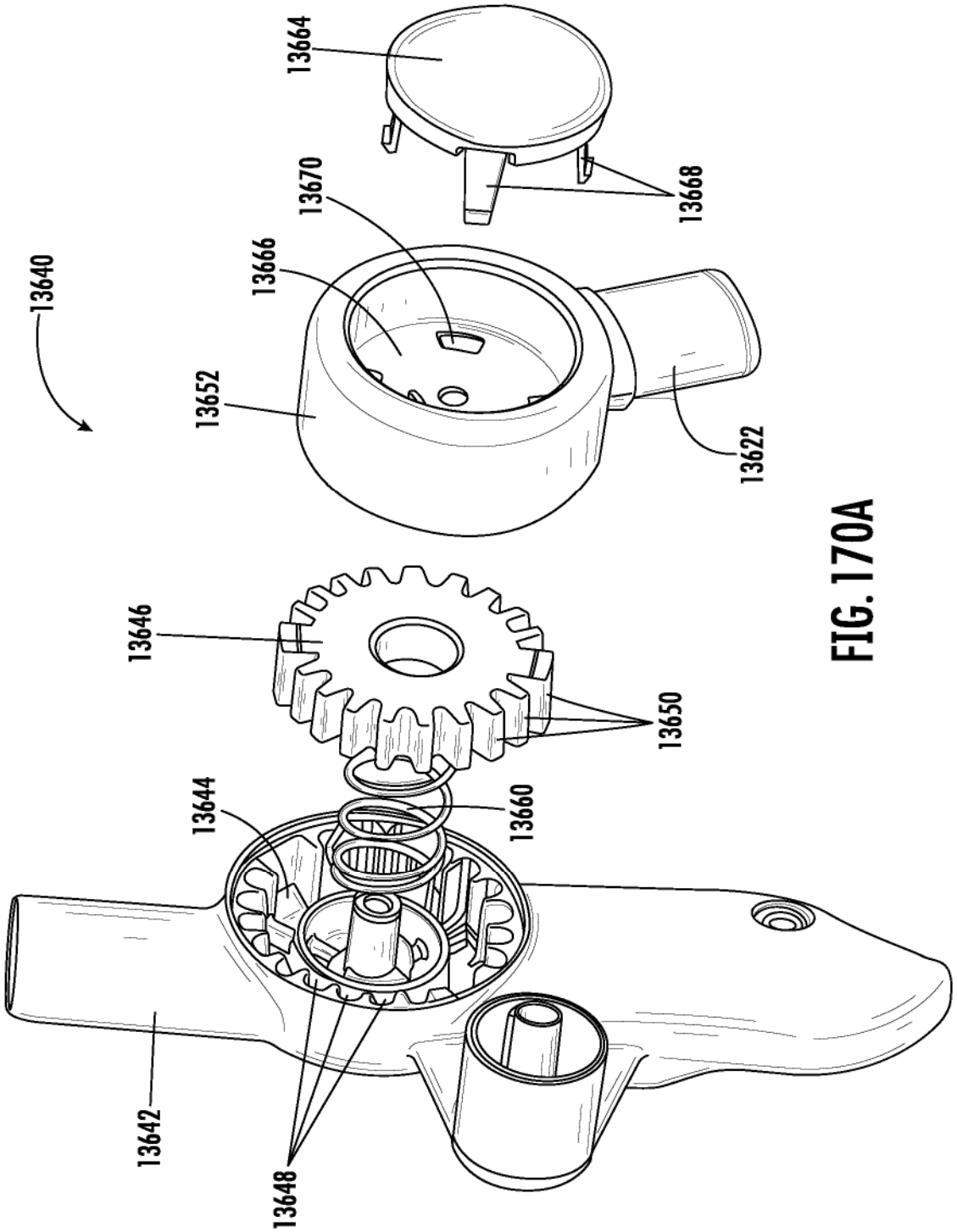


FIG. 169C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13648

FIG. 170A

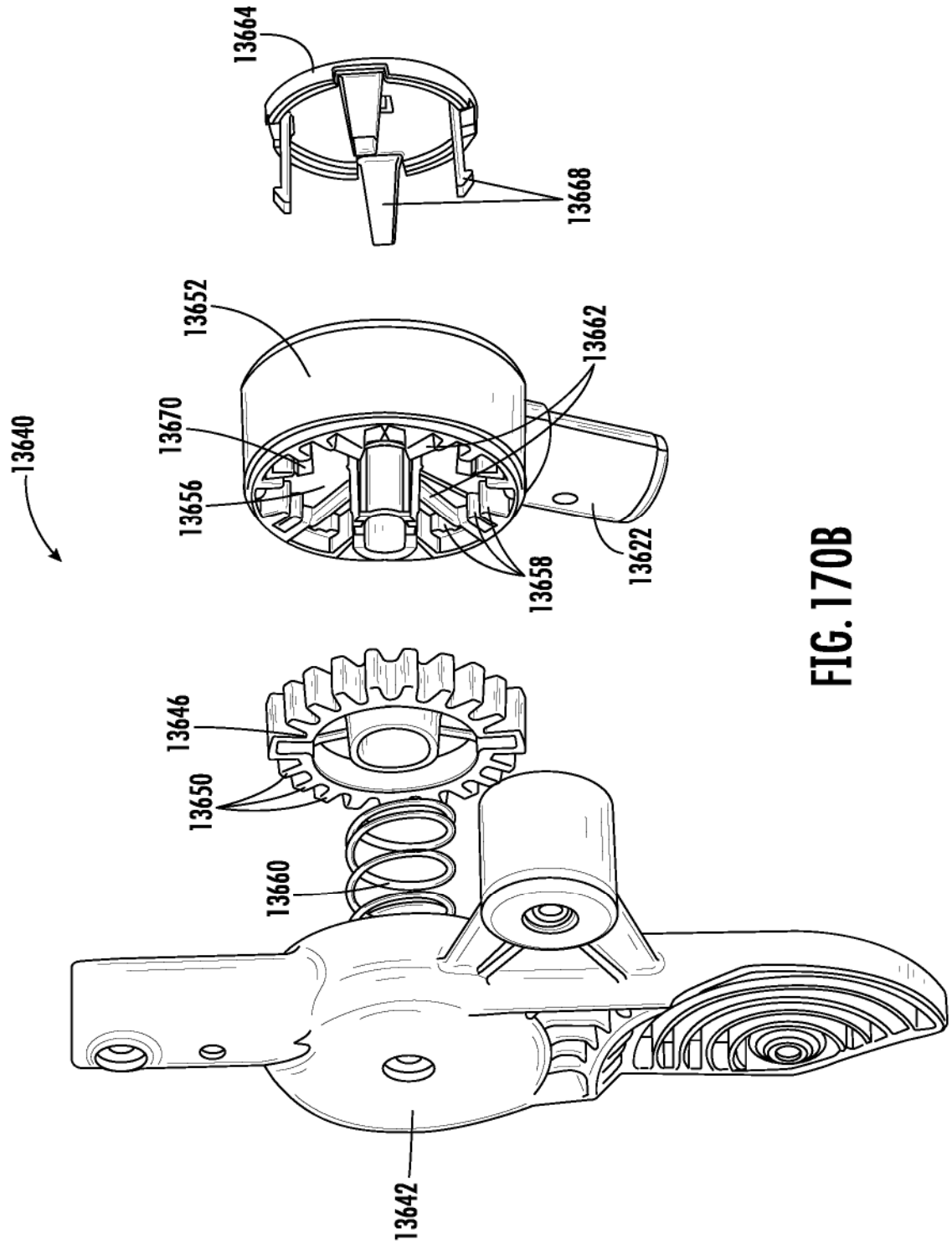
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FIG. 170B

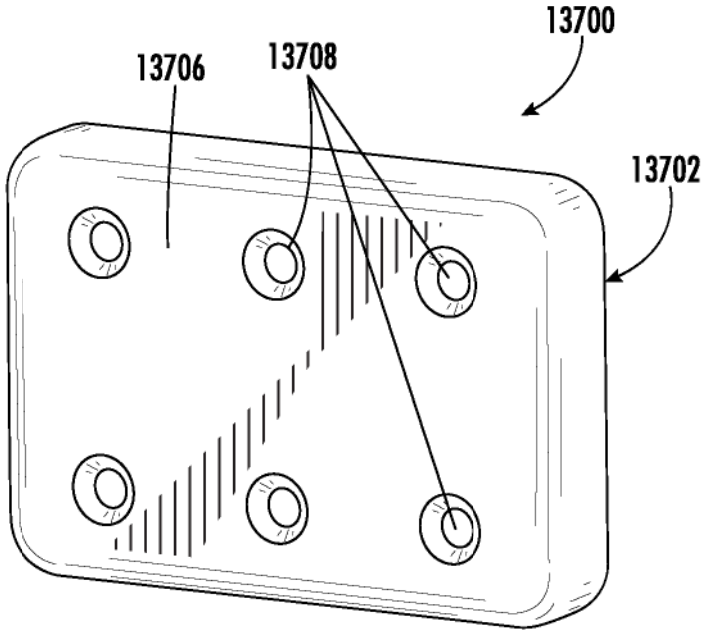


FIG. 171A

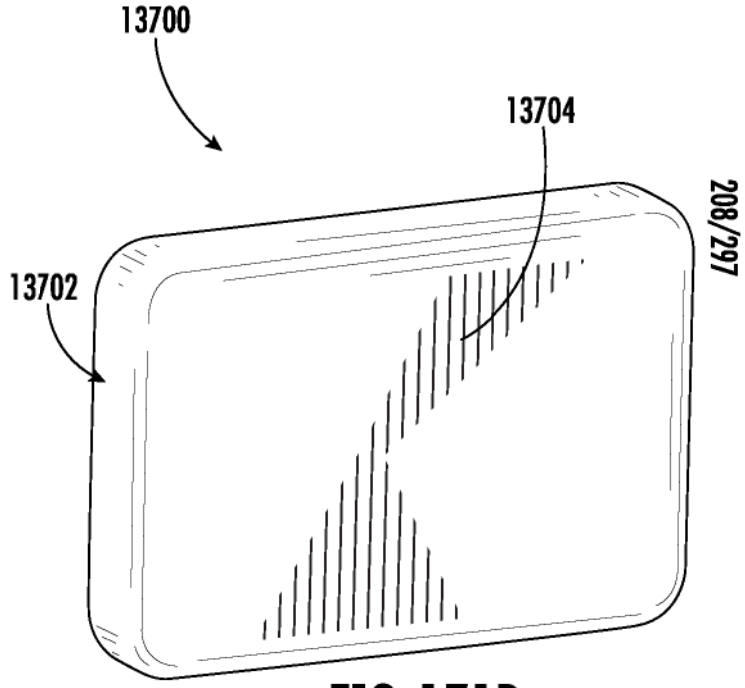


FIG. 171B

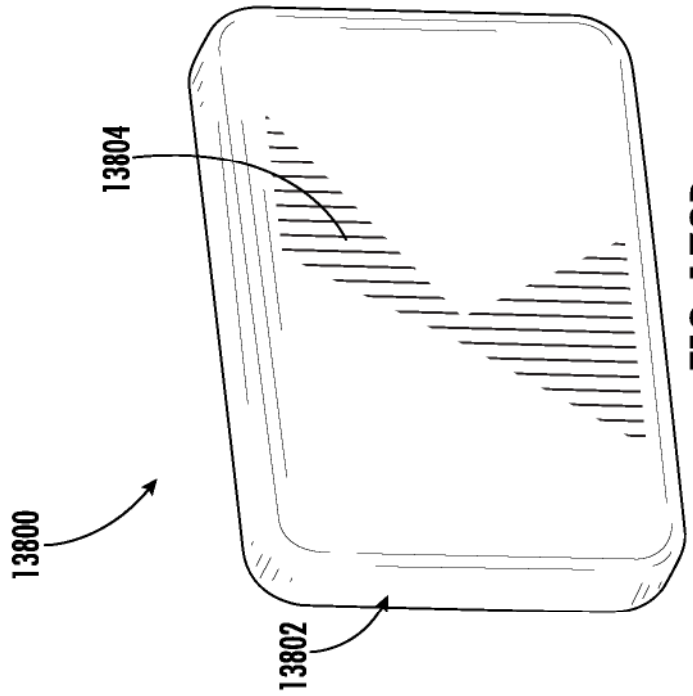


FIG. 172B

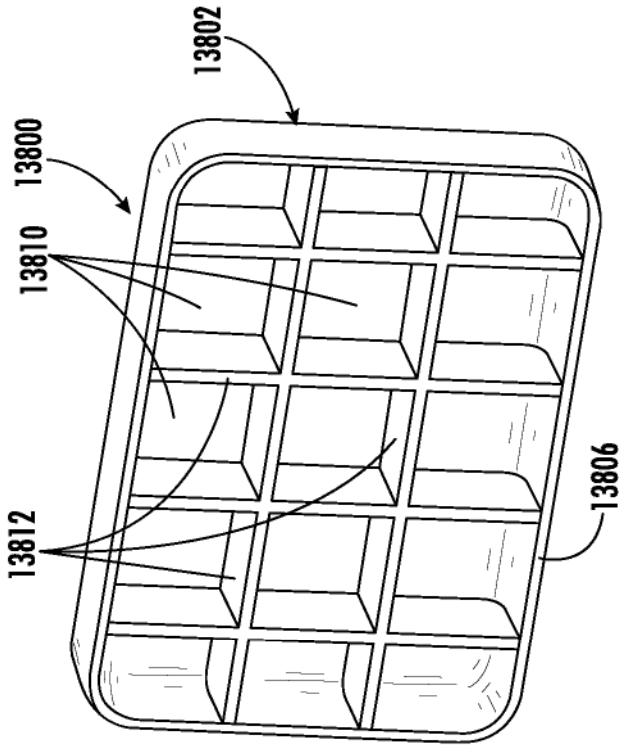


FIG. 172A

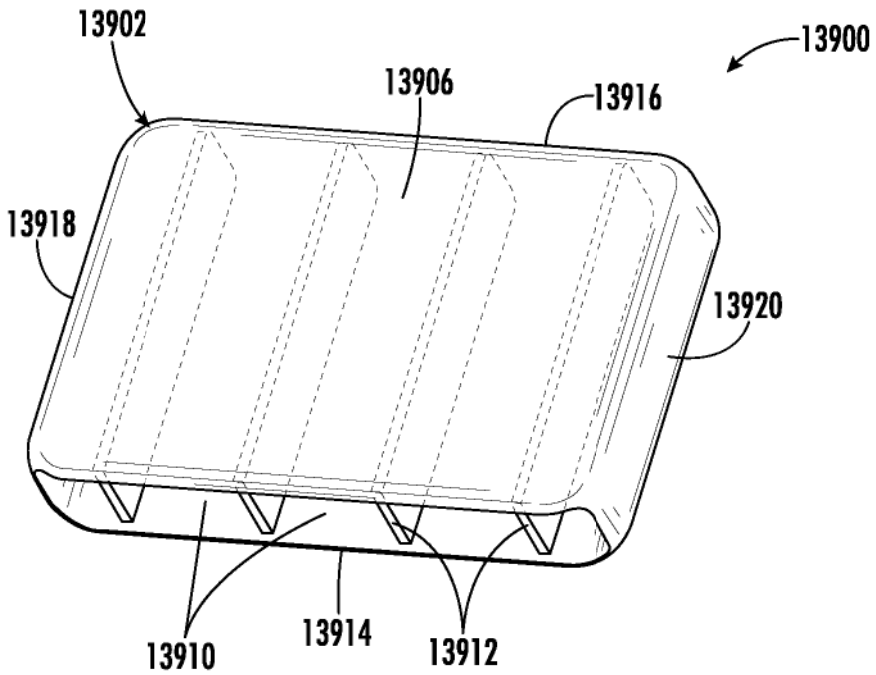


FIG. 173A

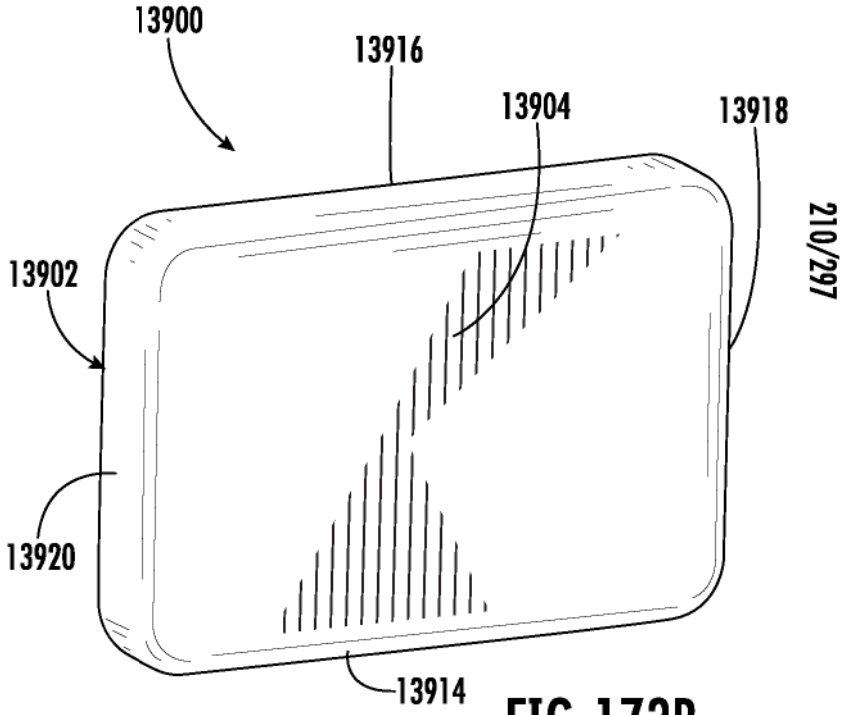


FIG. 173B

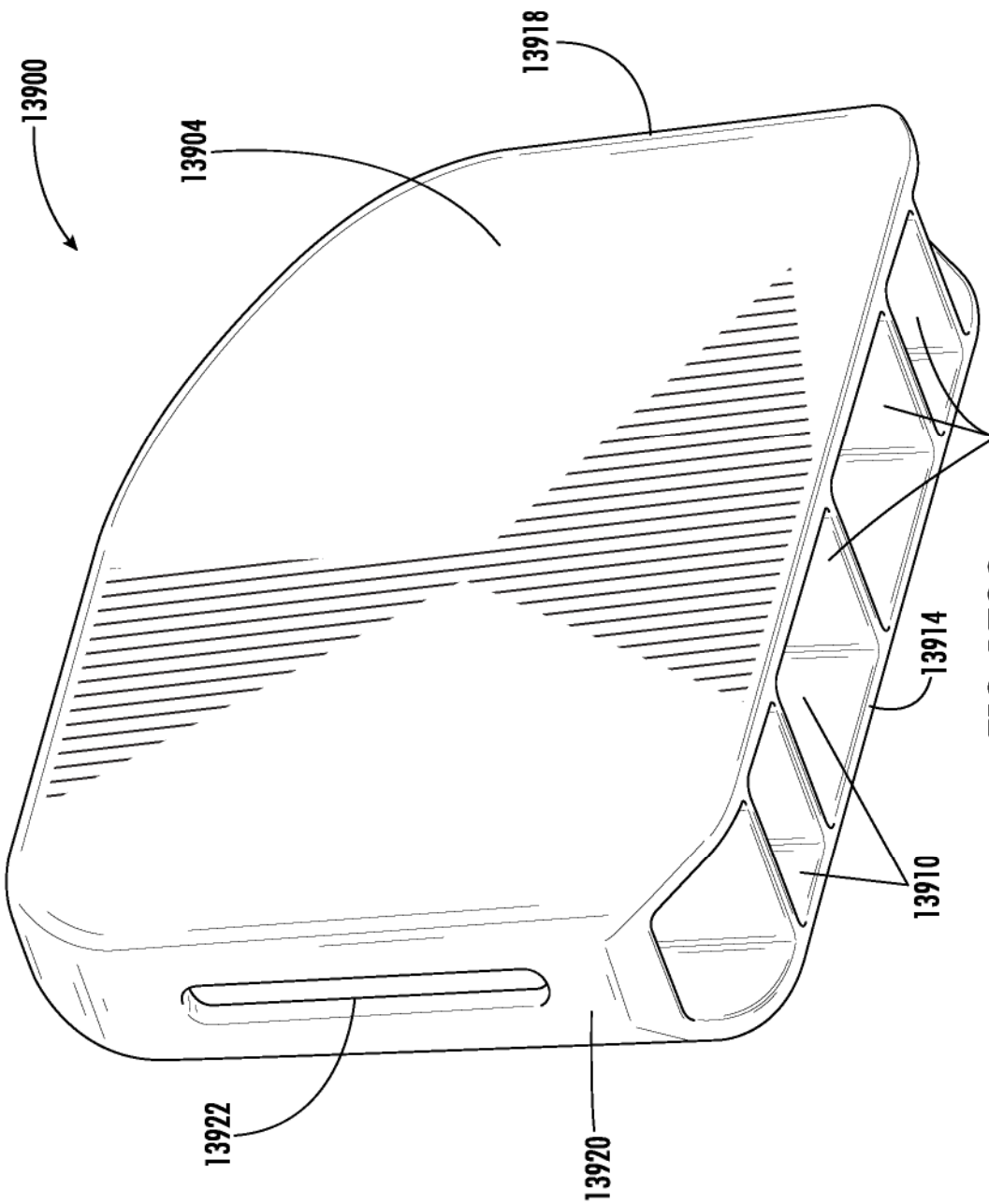


FIG. 173C

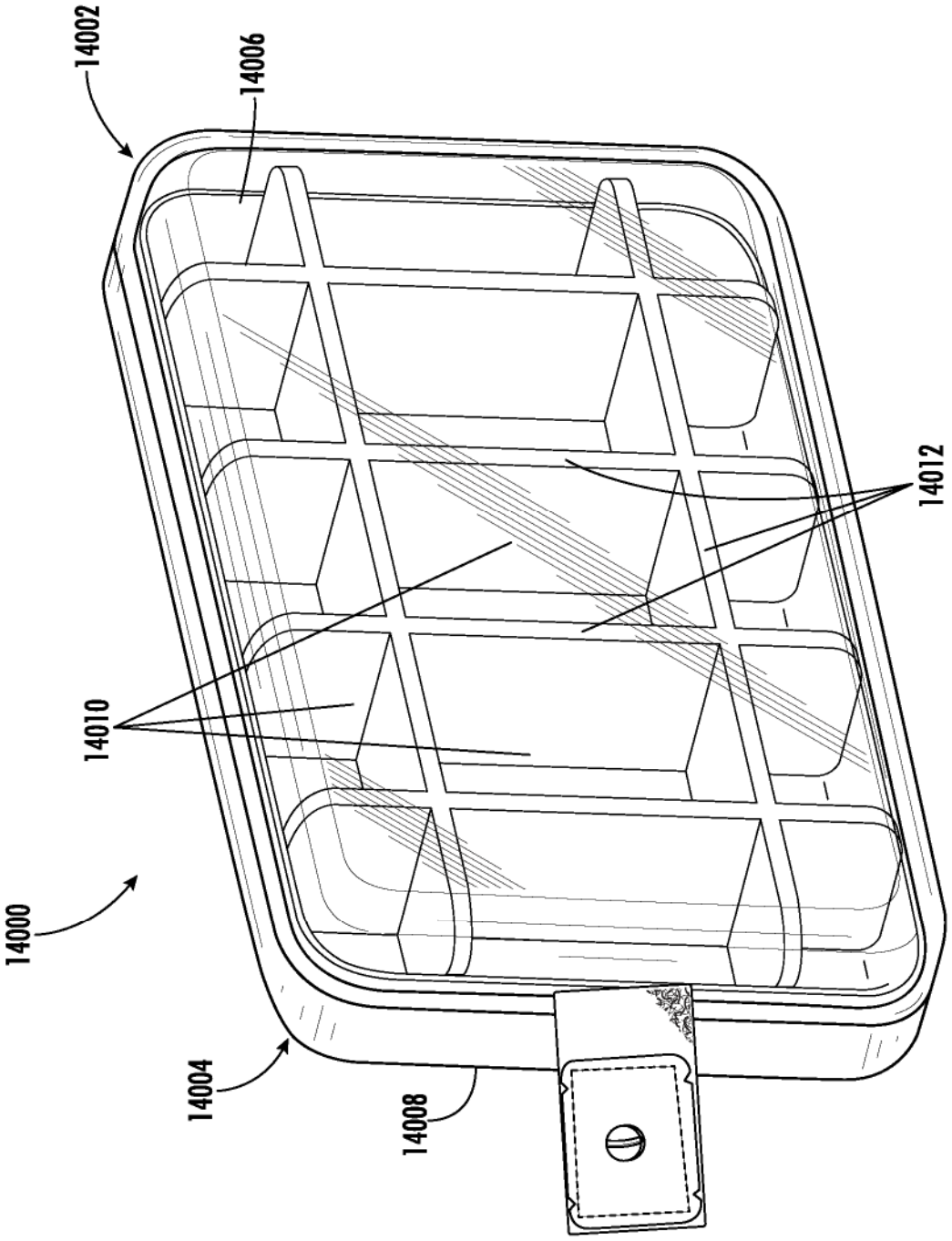


FIG. 174

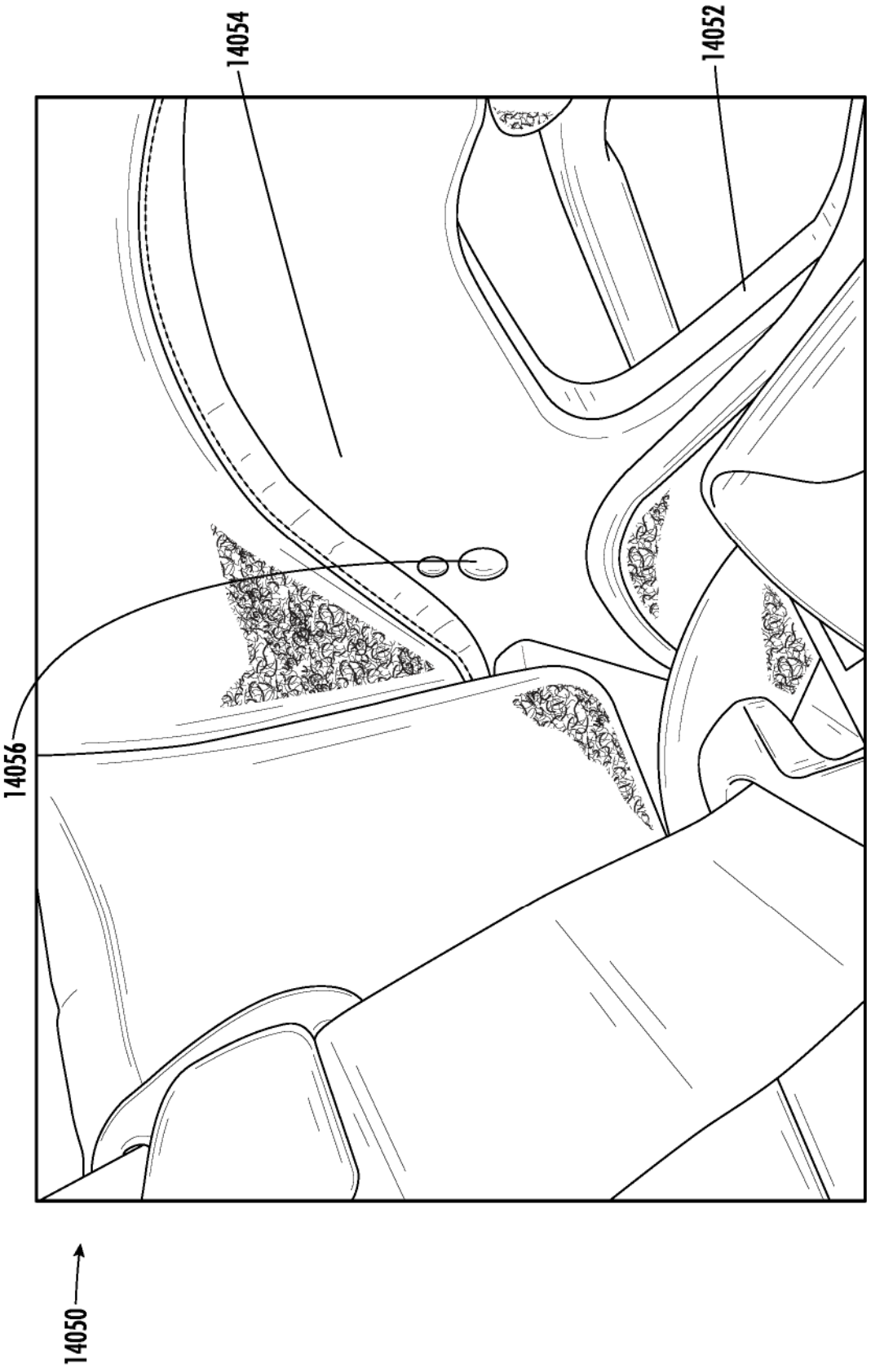


FIG. 175

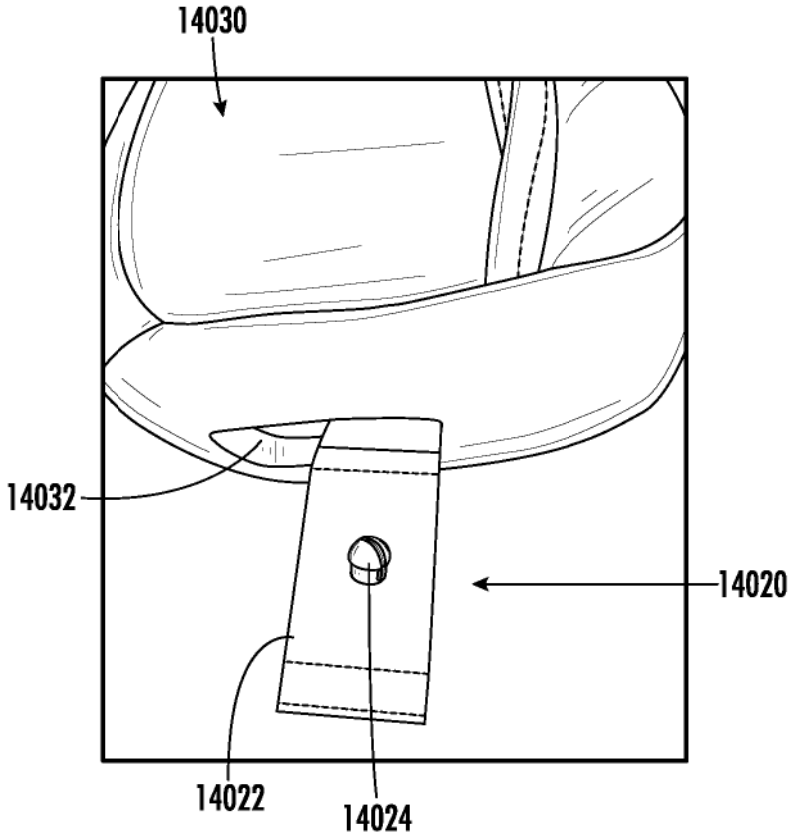


FIG. 176A

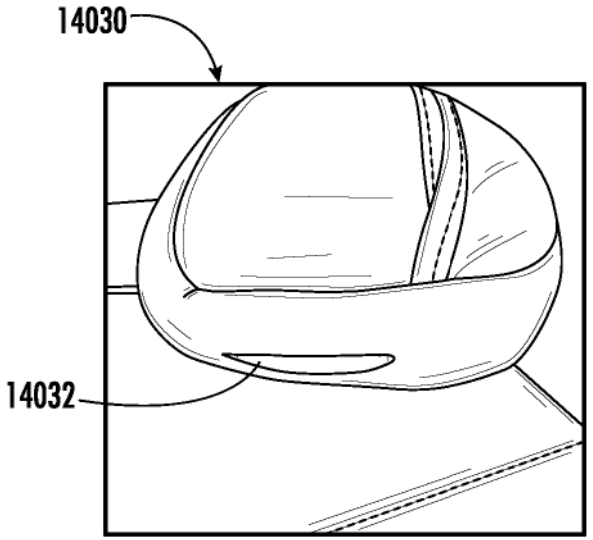


FIG. 176B

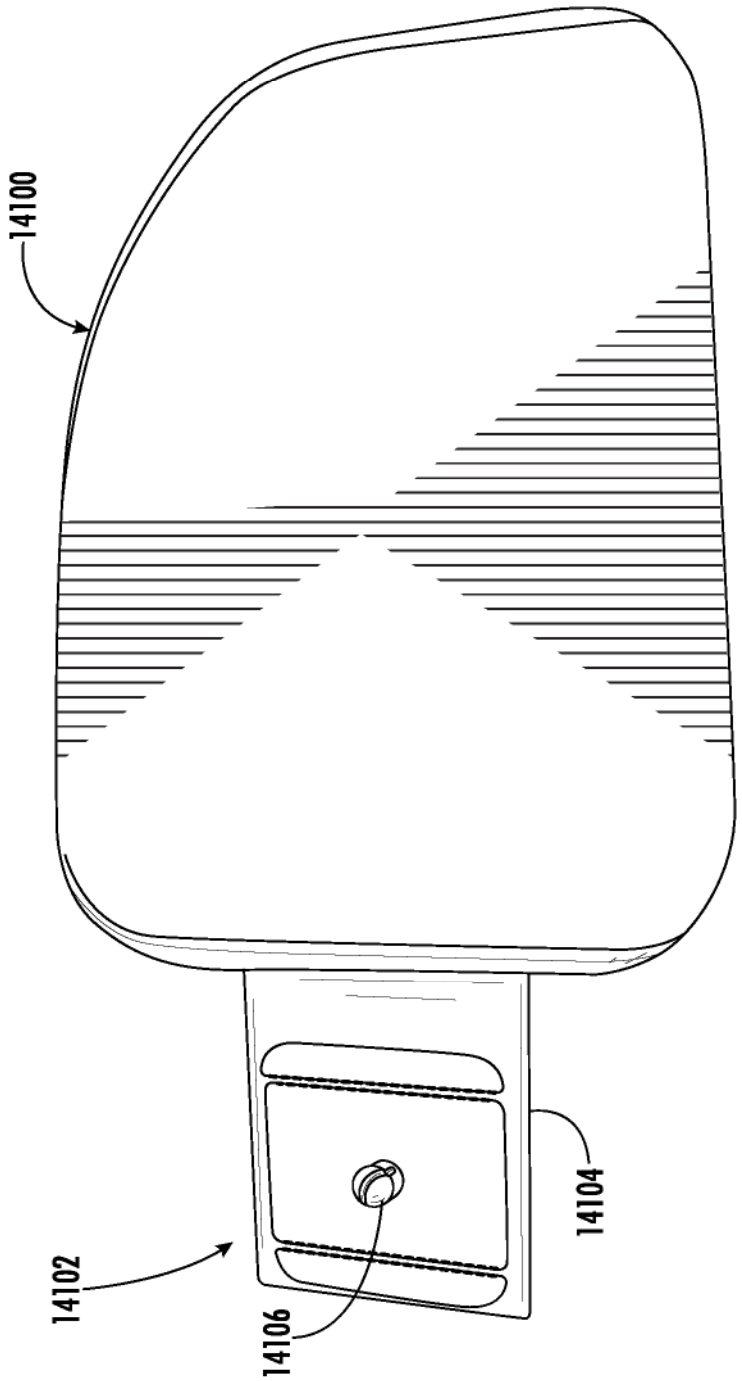


FIG. 177

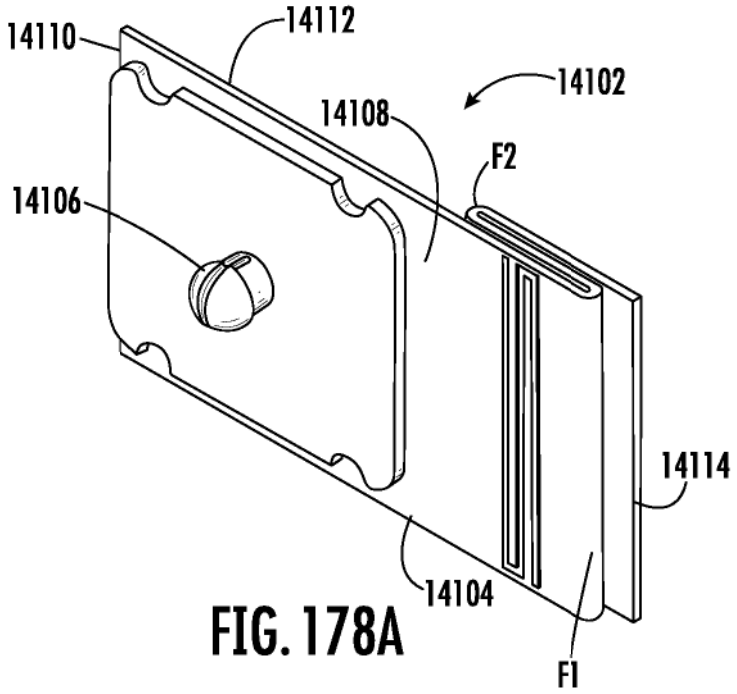


FIG. 178A

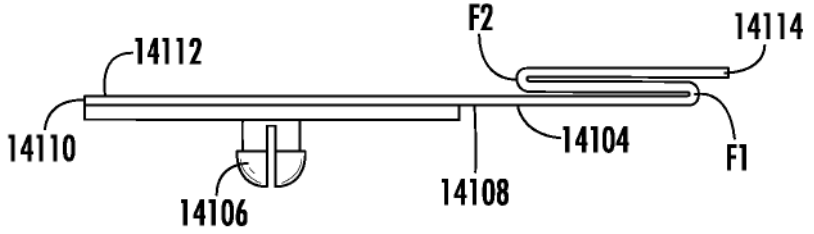


FIG. 178B

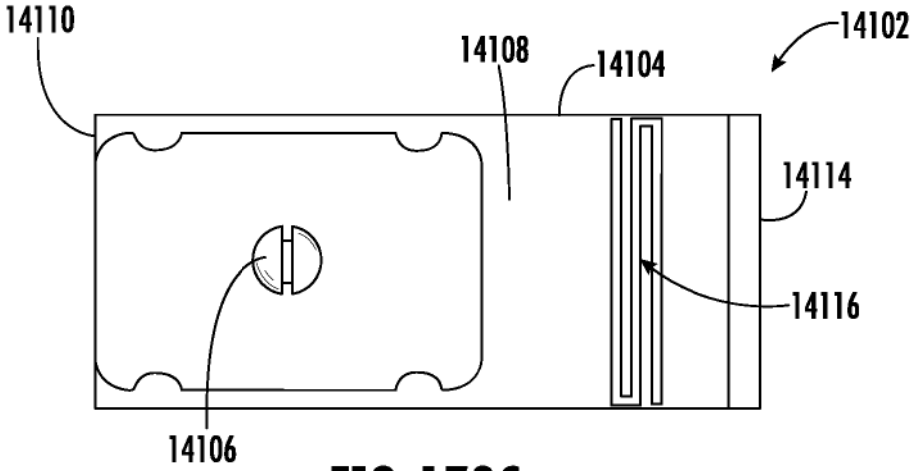


FIG. 178C

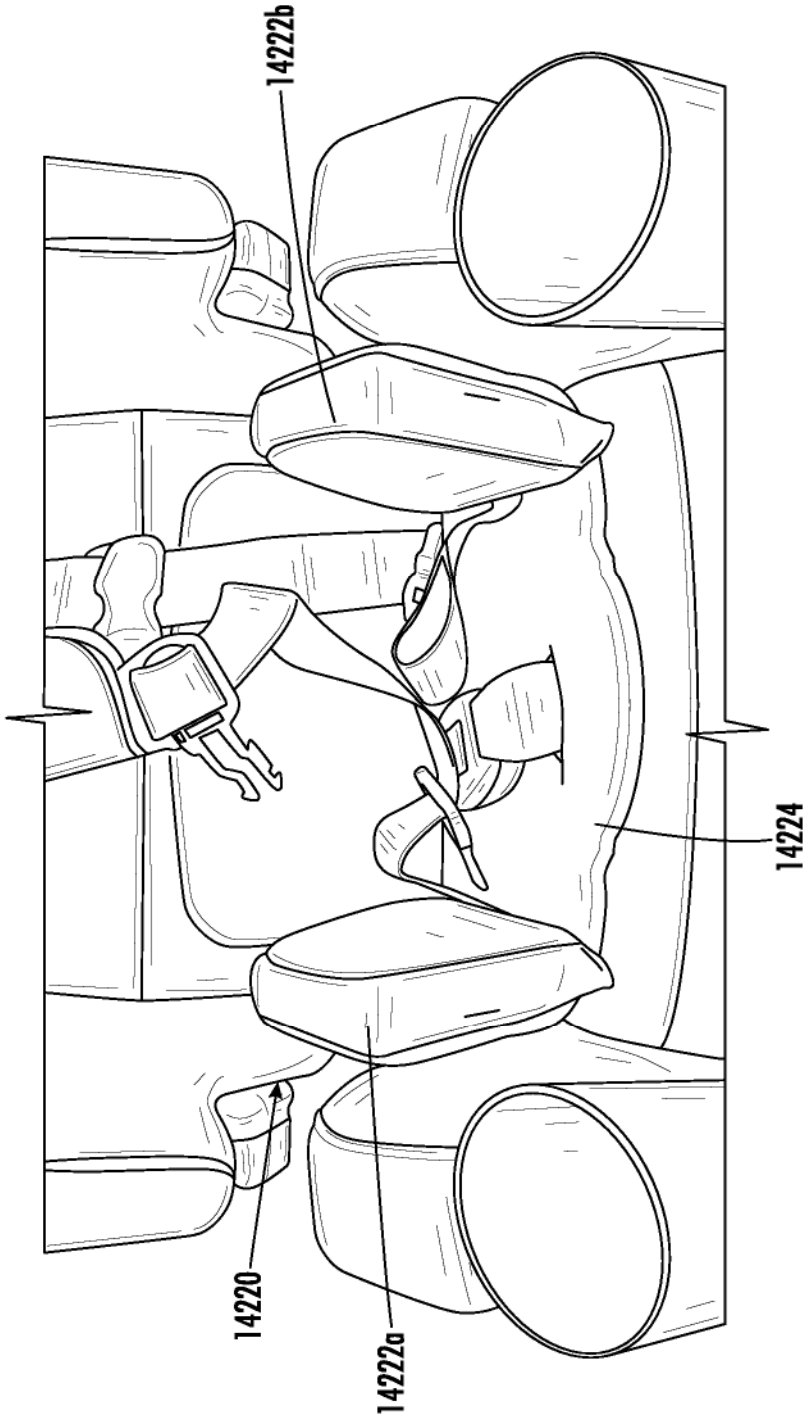


FIG. 179A

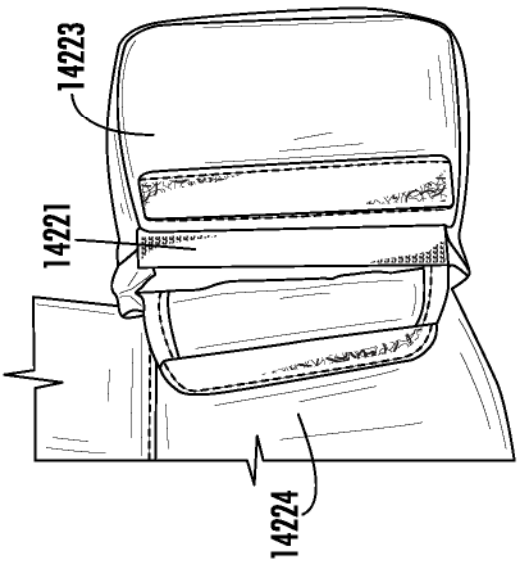


FIG. 179C

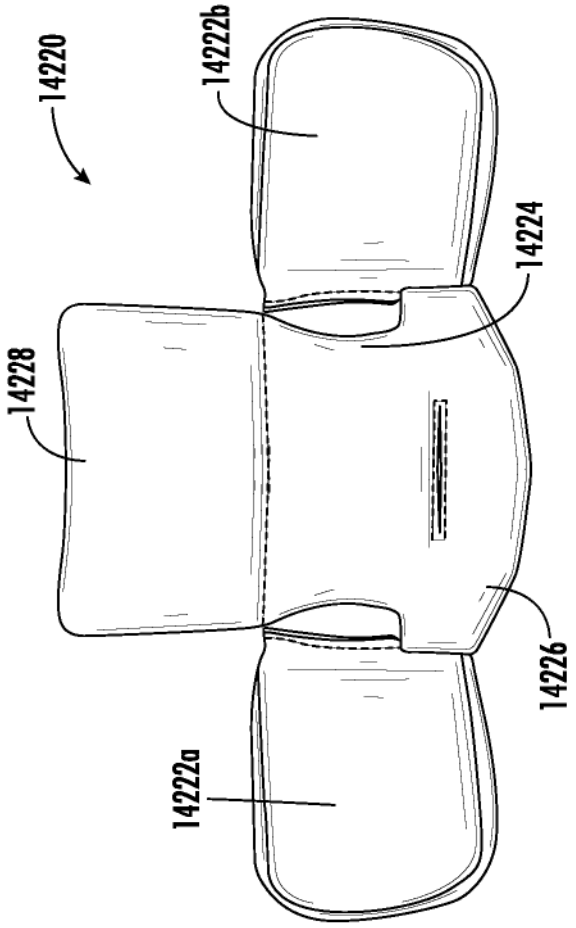


FIG. 179B

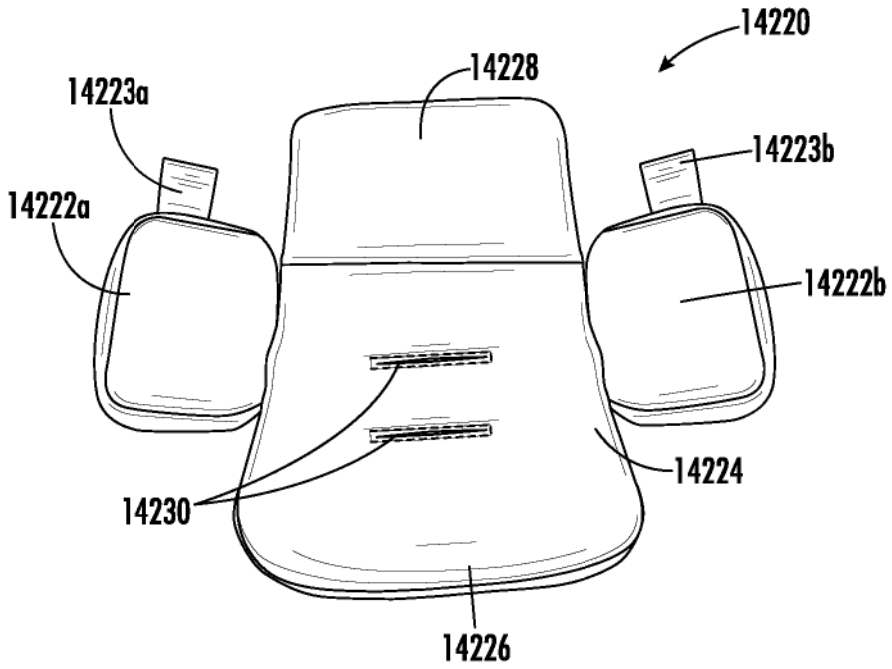


FIG. 180A

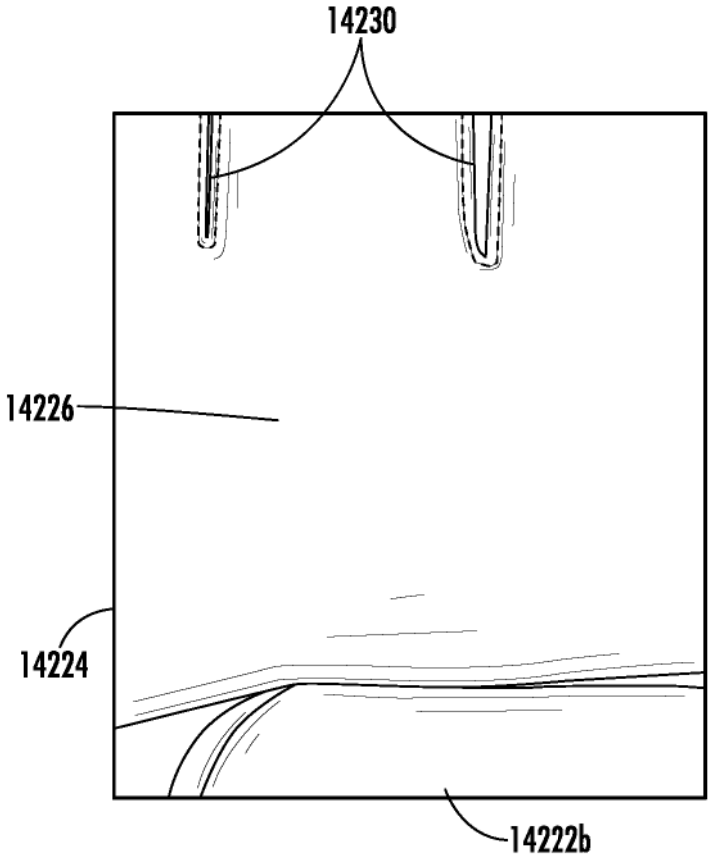


FIG. 180B

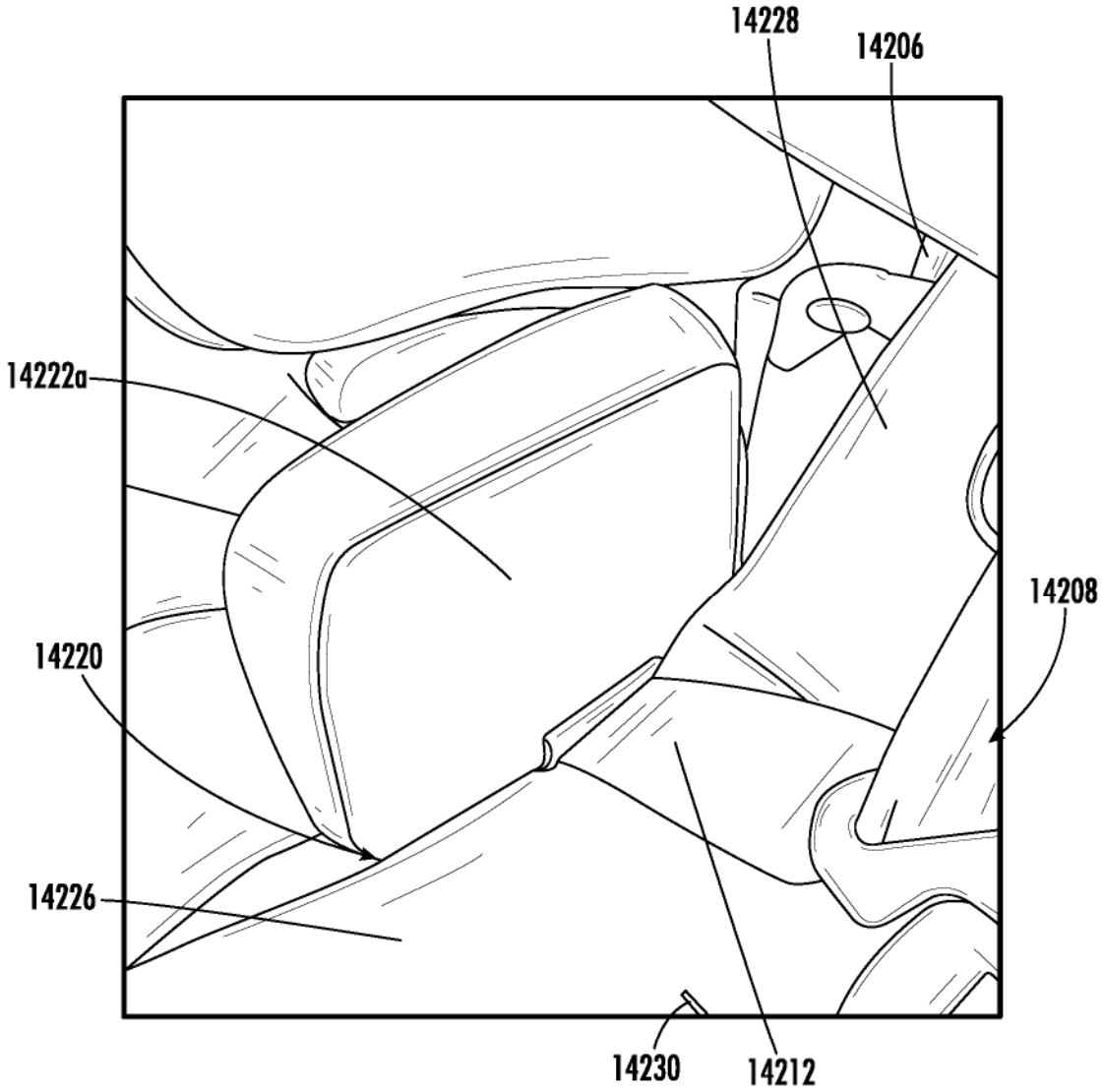


FIG. 180C

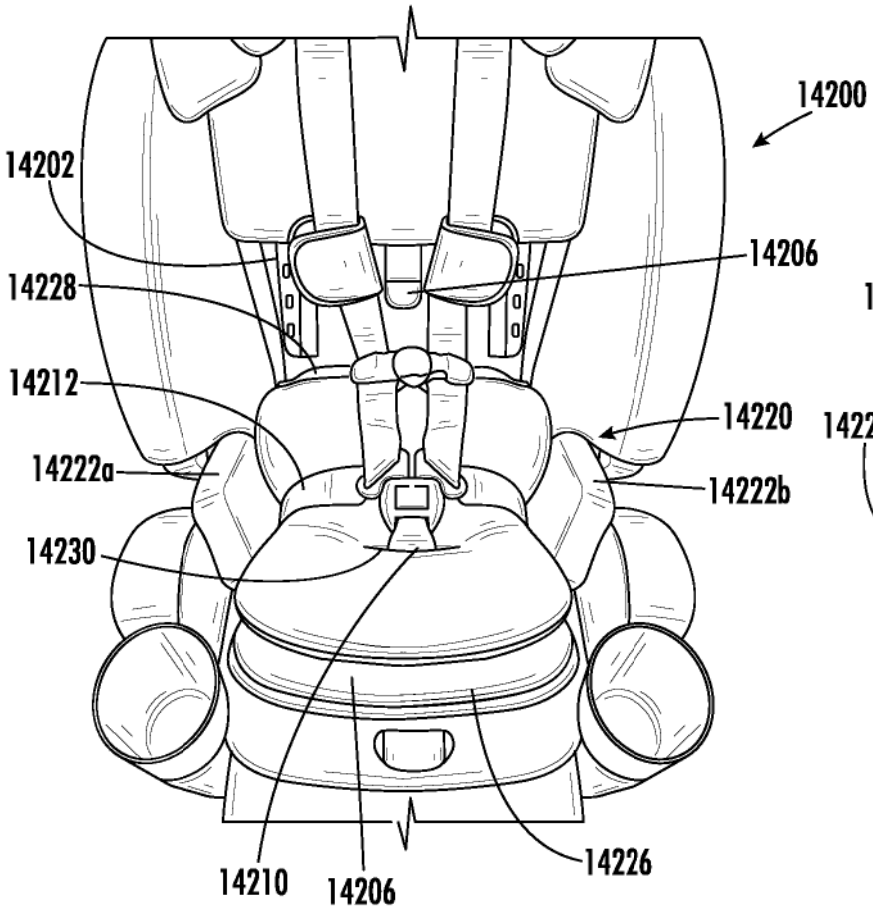


FIG. 180D

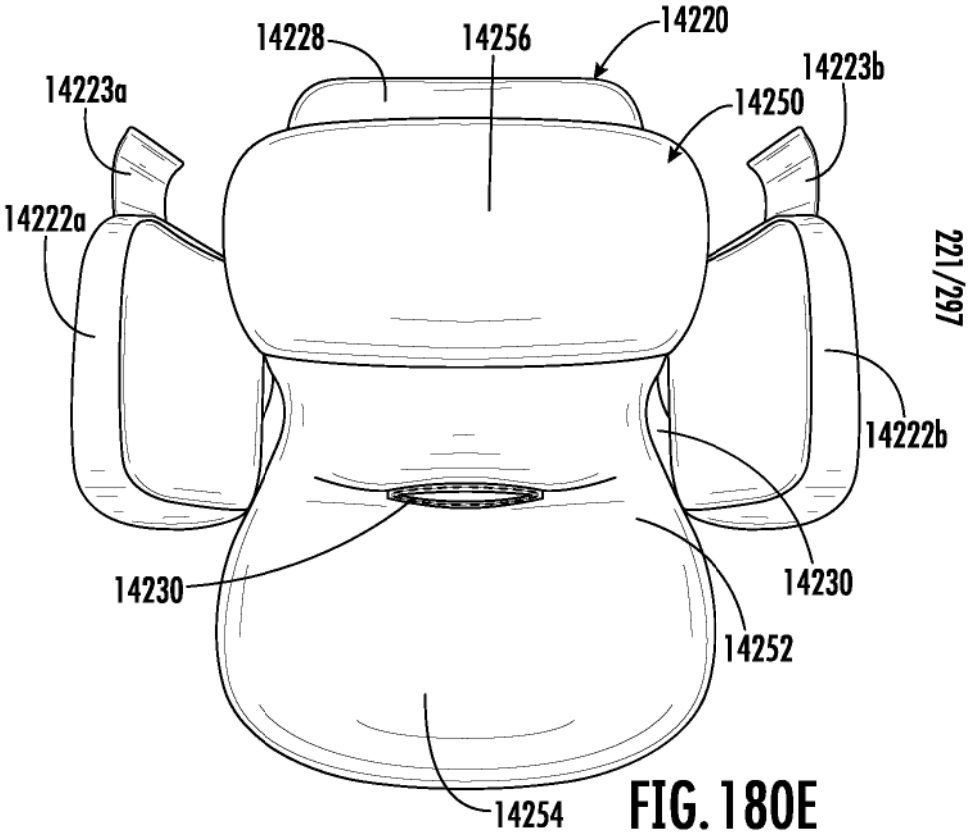
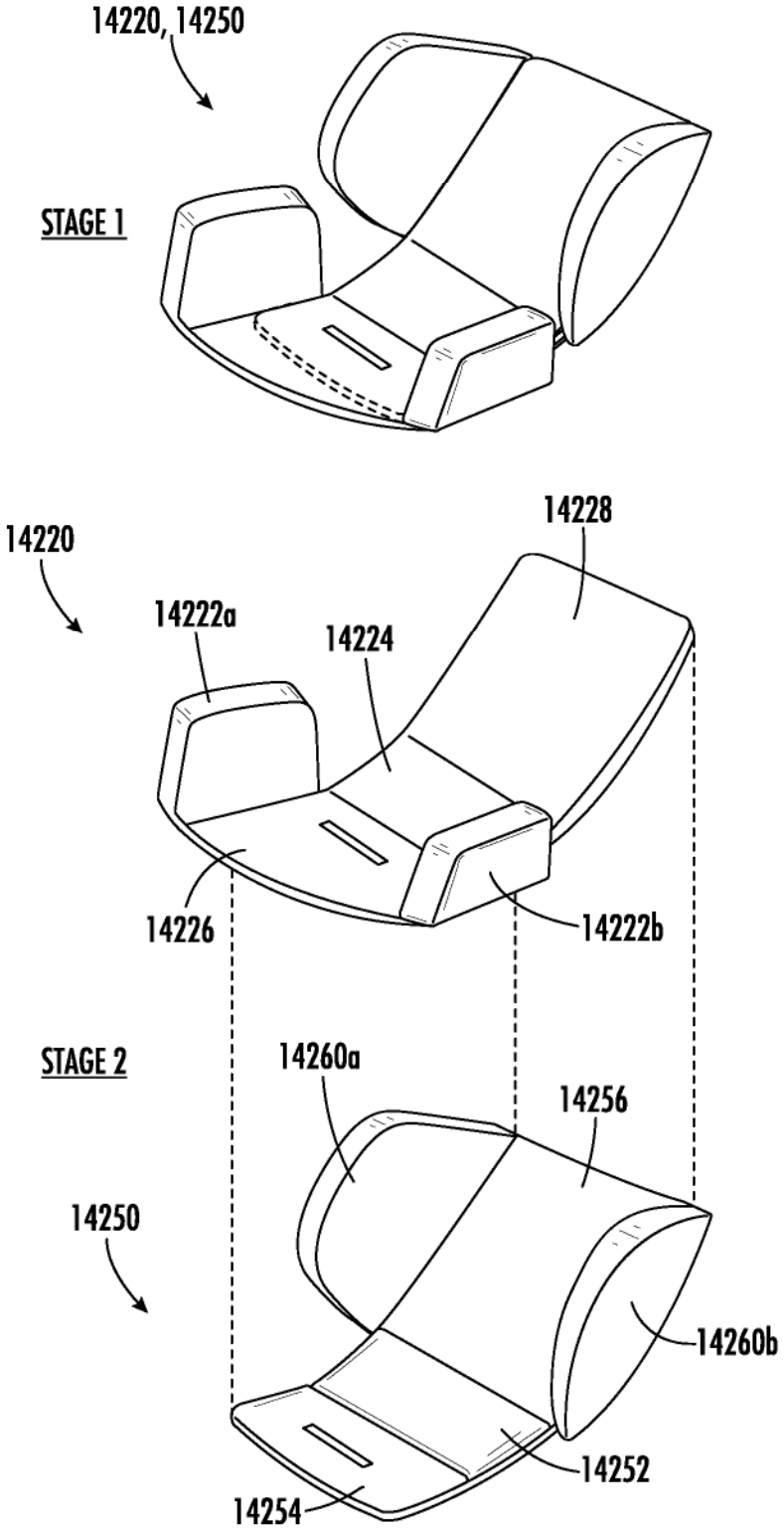


FIG. 180E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14226
14222b
STAGE 2
14260a
14256
14250
14260b
14252
14254

FIG. 180F

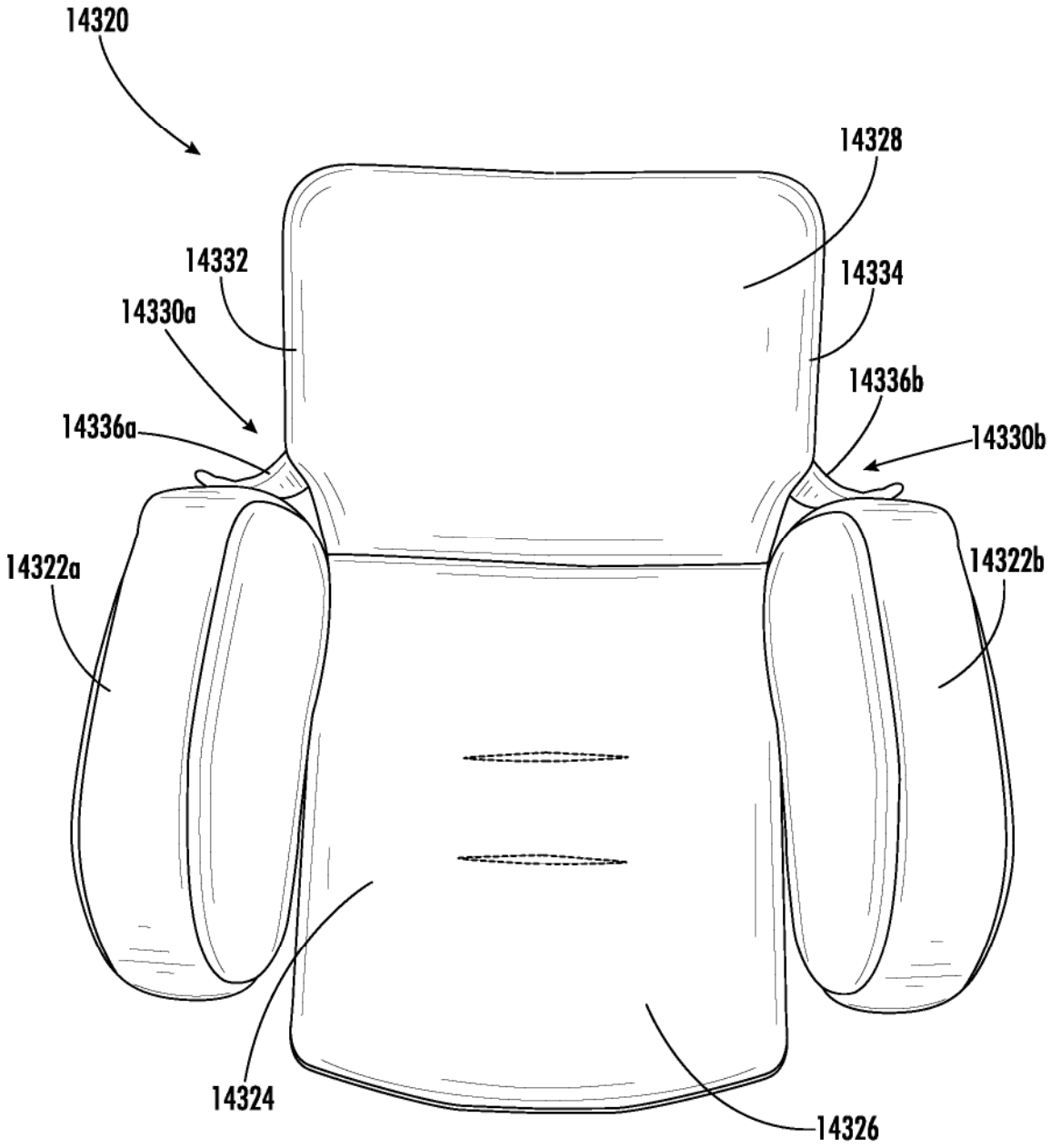
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FIG. 181A

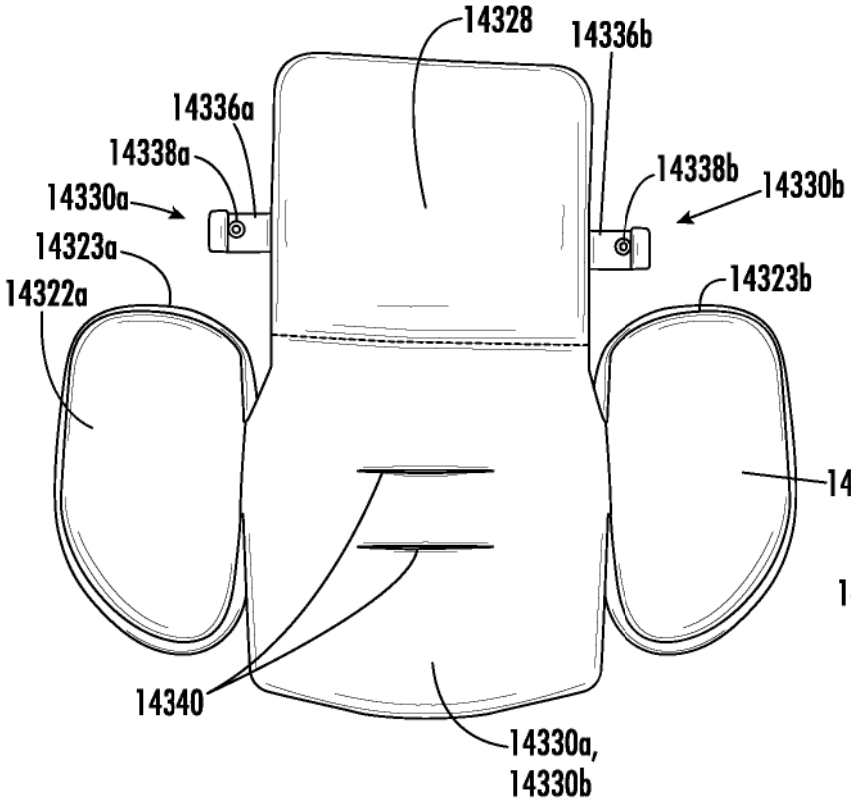

FIG. 181B

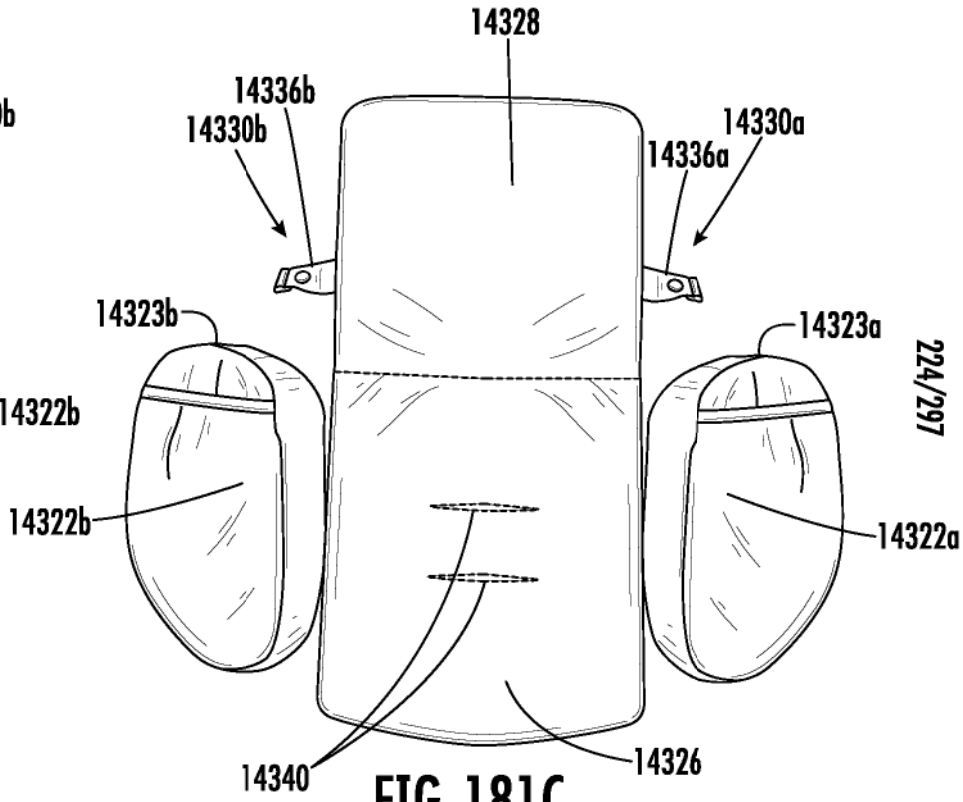

FIG. 181C

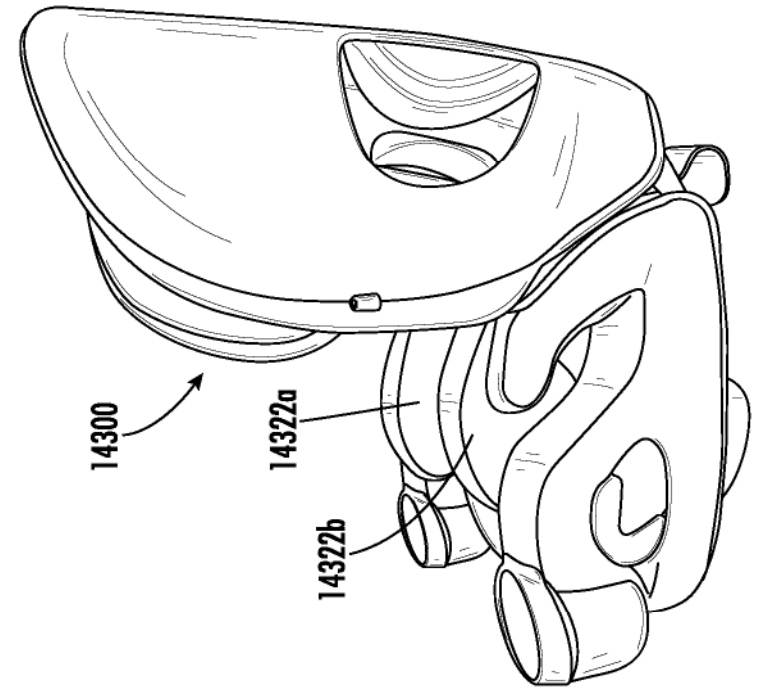

FIG. 182B

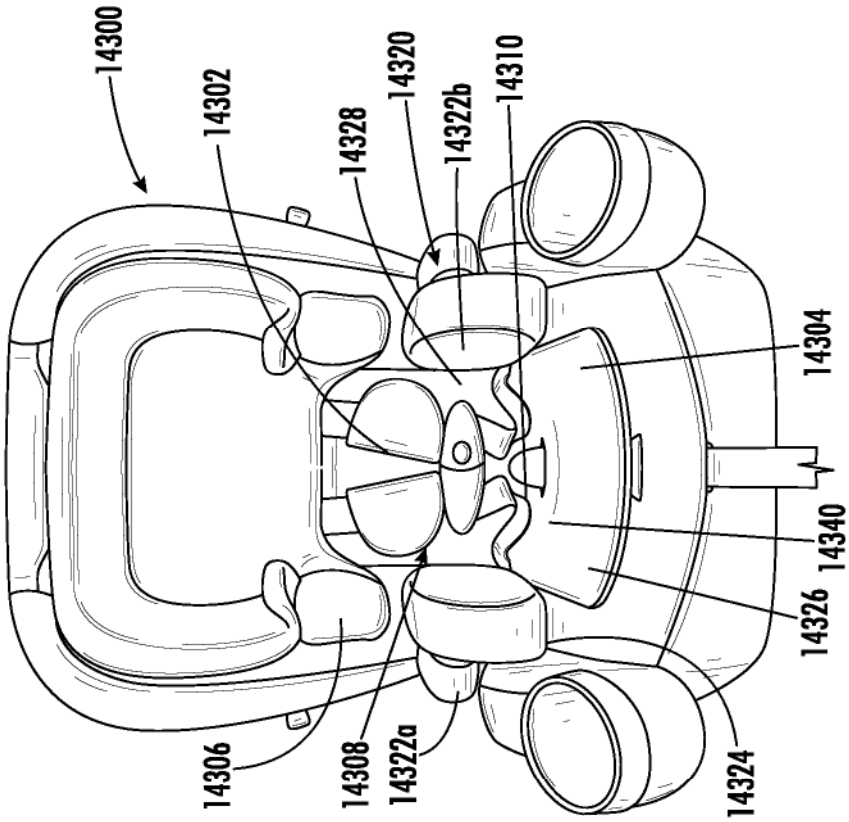

FIG. 182A

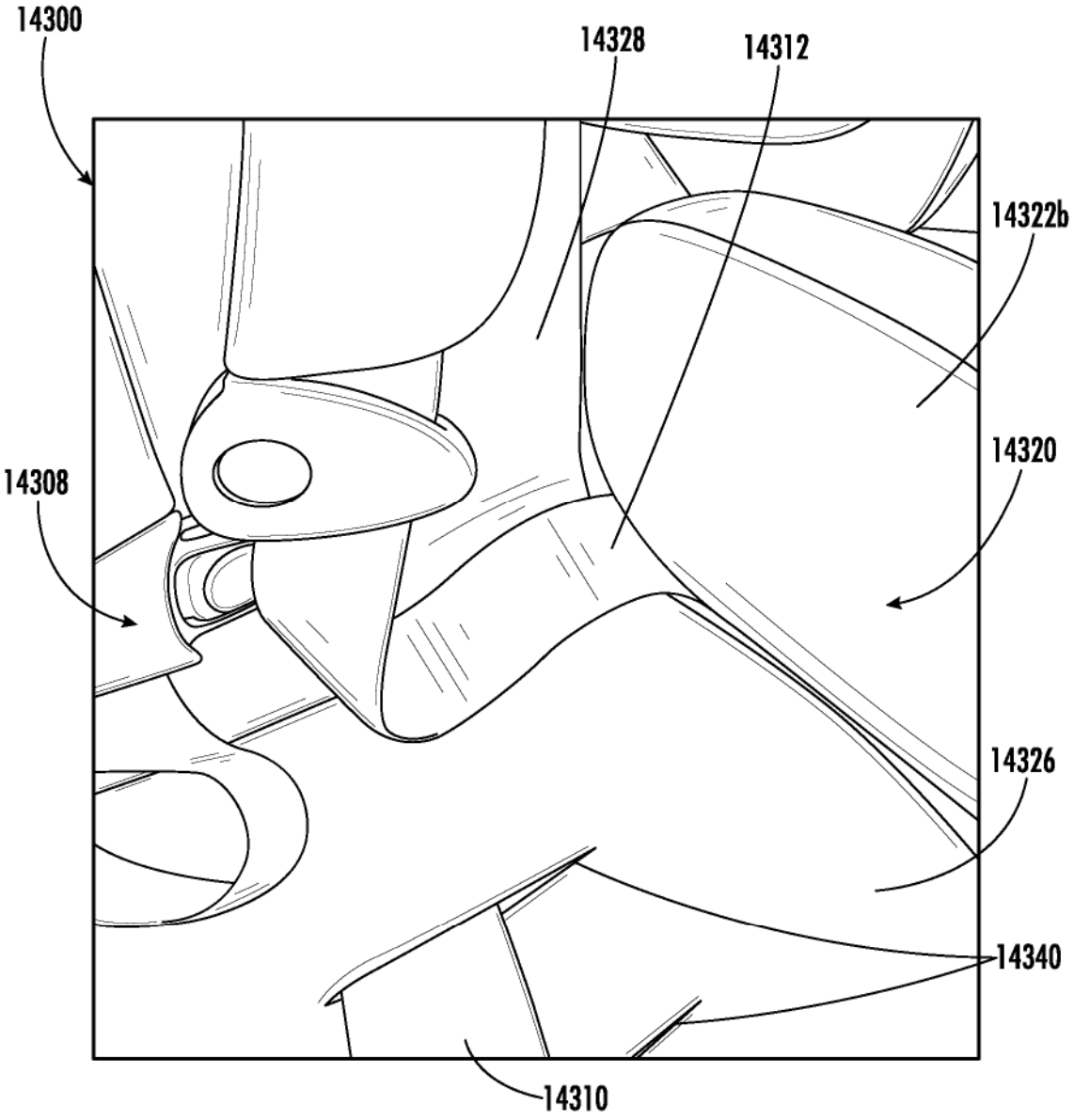

FIG. 182C

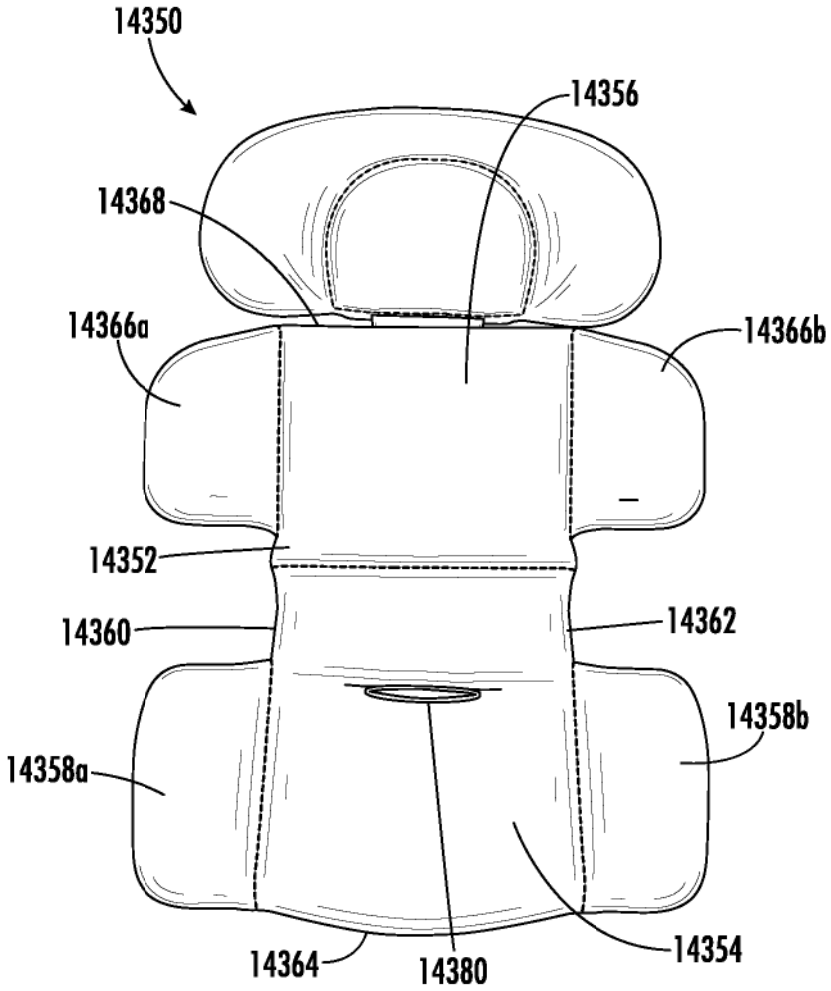

FIG. 183A

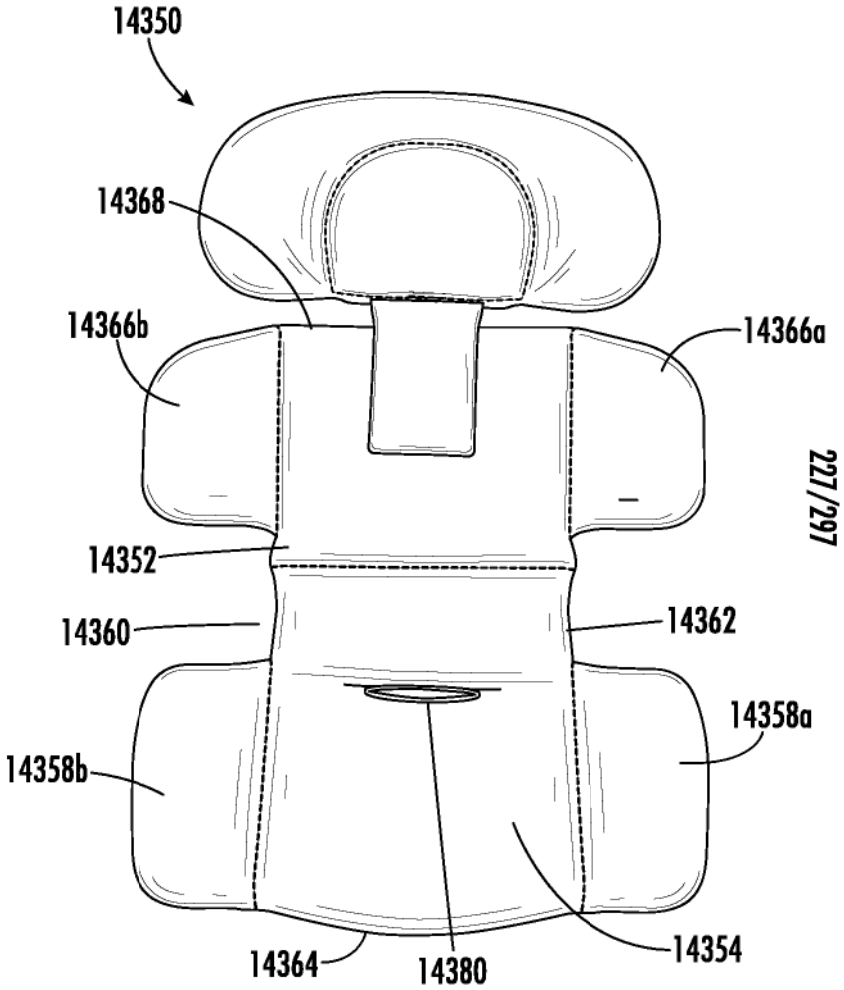

FIG. 183B

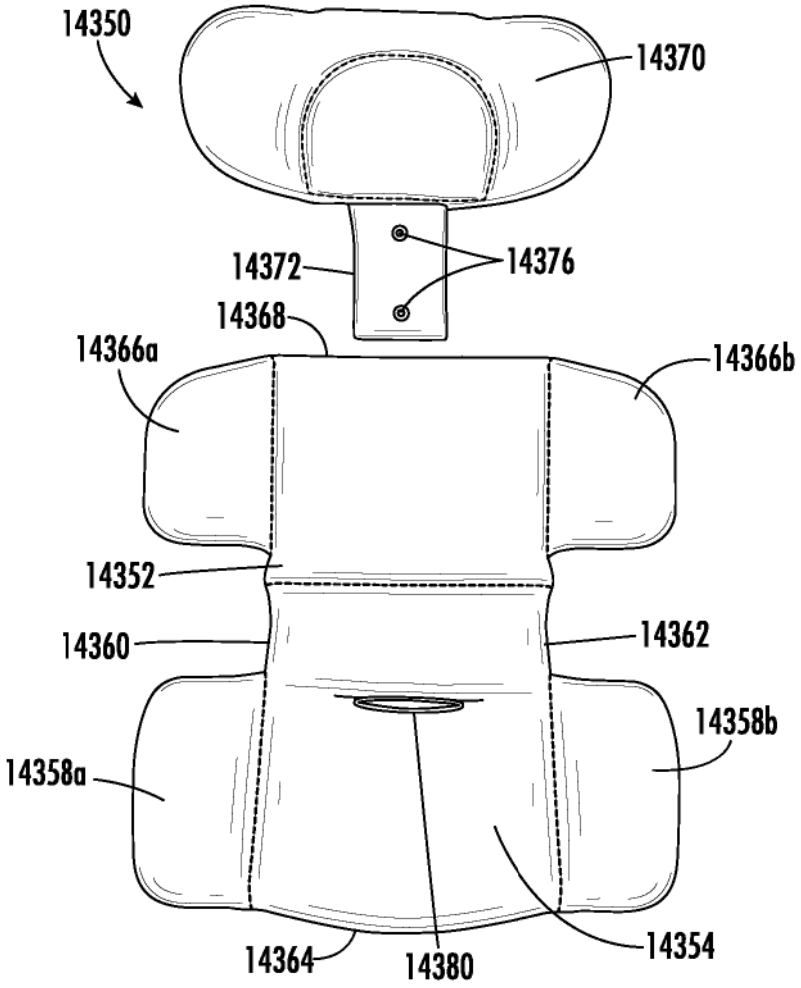

FIG. 184A

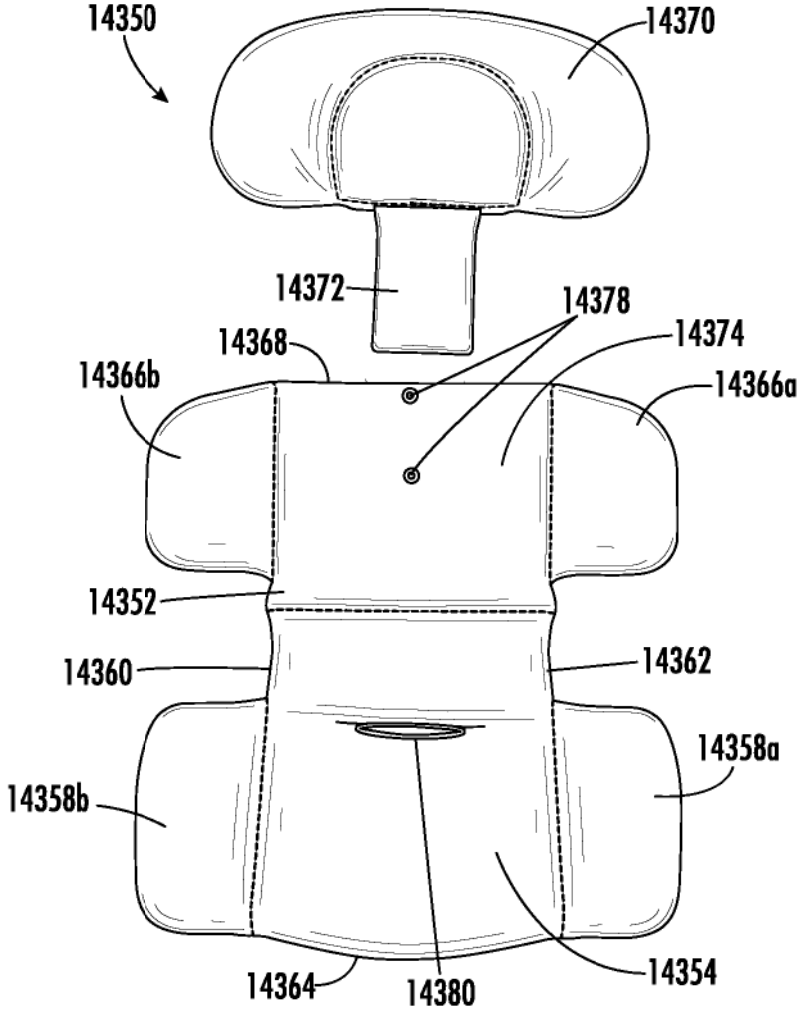

FIG. 184B

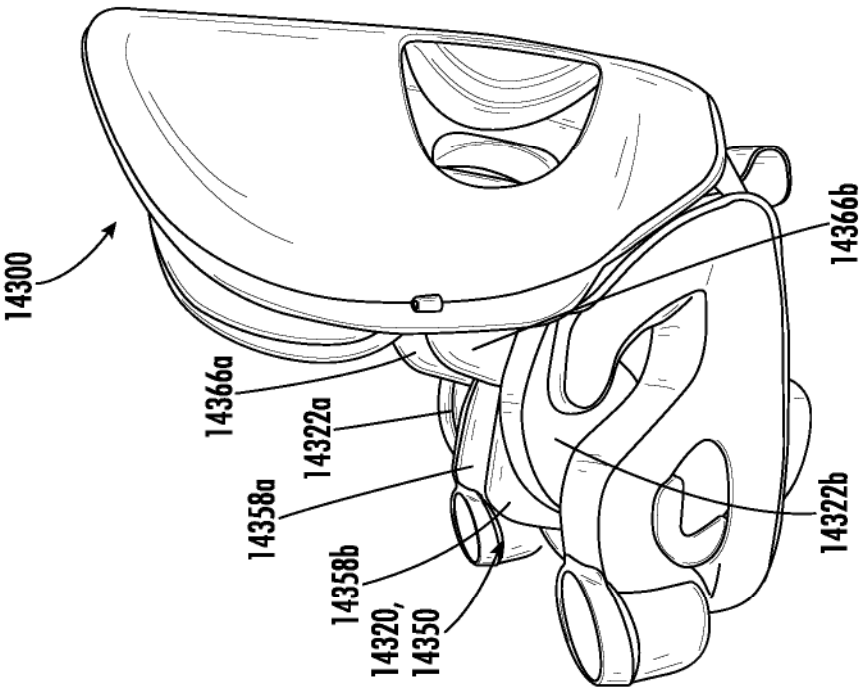

FIG. 185B

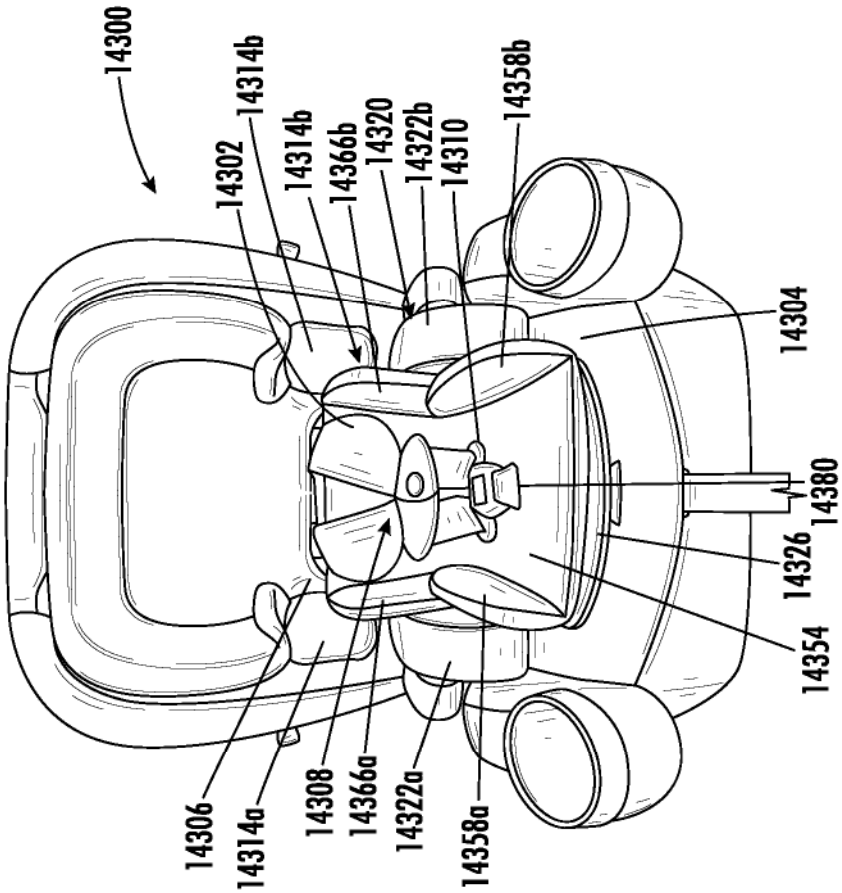

FIG. 185A

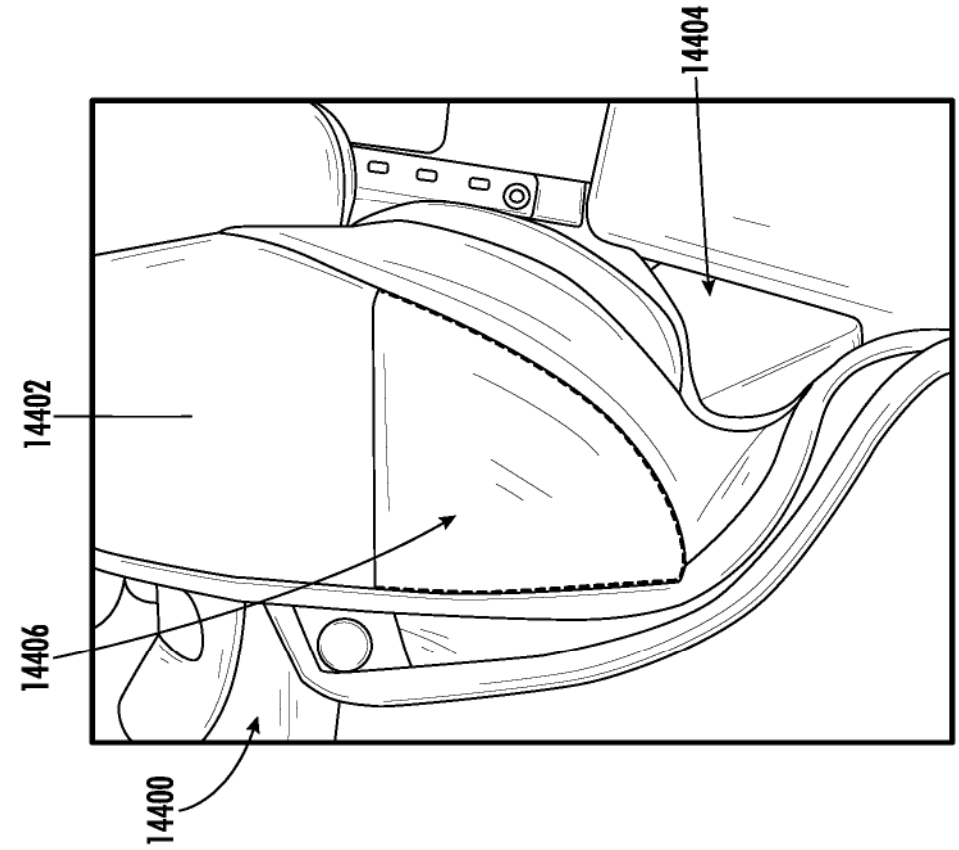

FIG. 186B

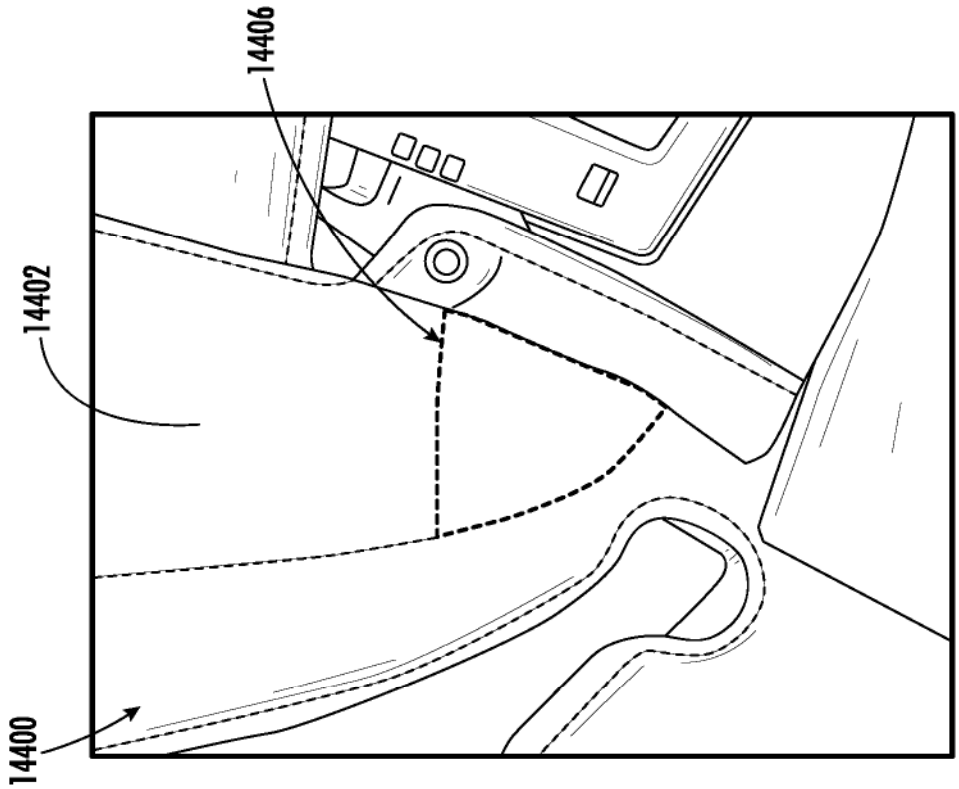

FIG. 186A

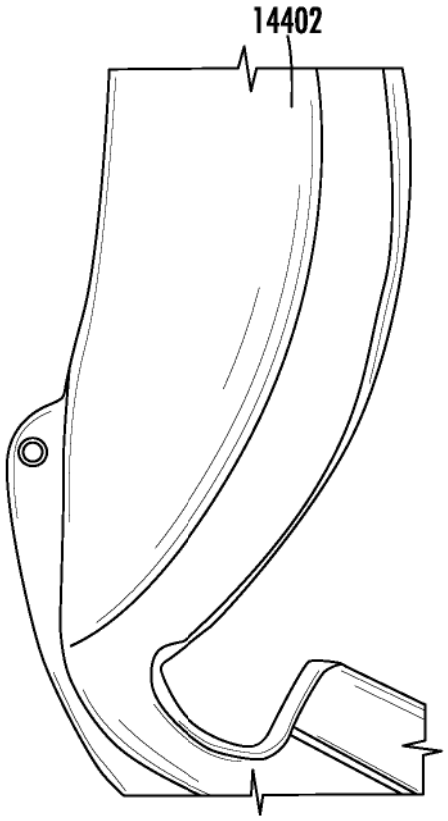

FIG. 187A

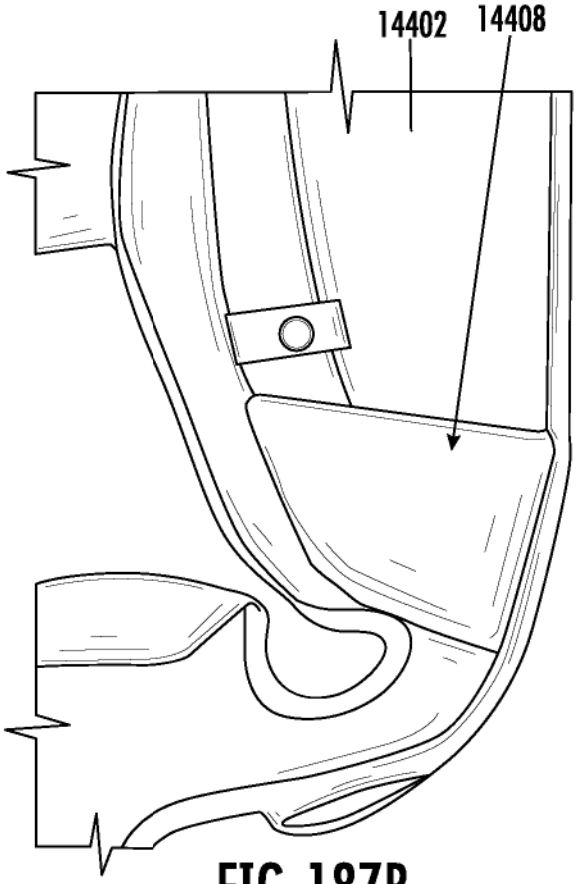

FIG. 187B

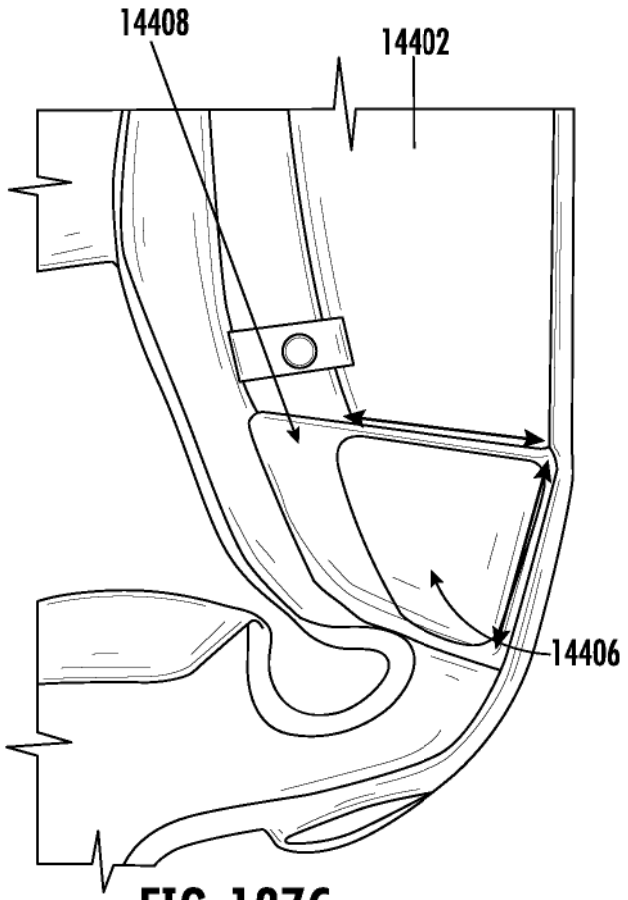

FIG. 187C

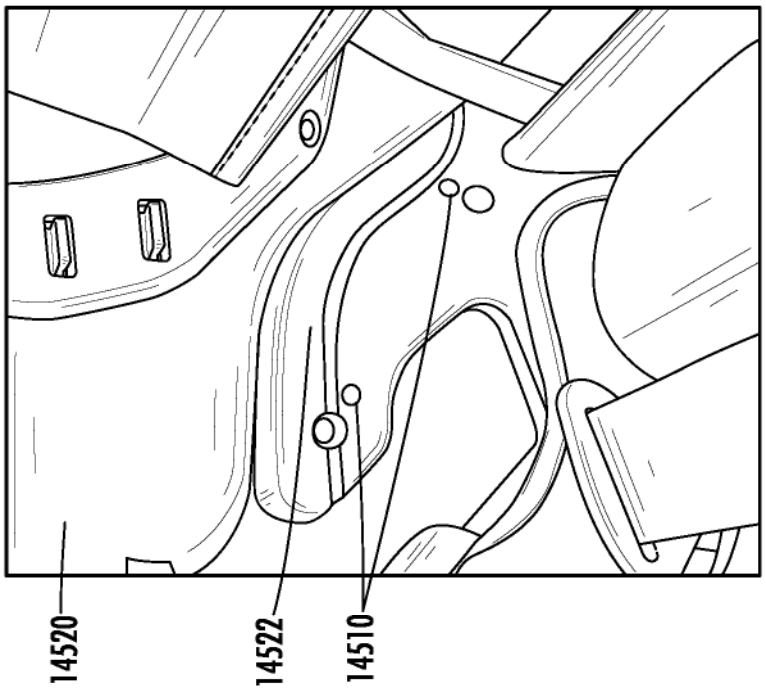

FIG. 188B

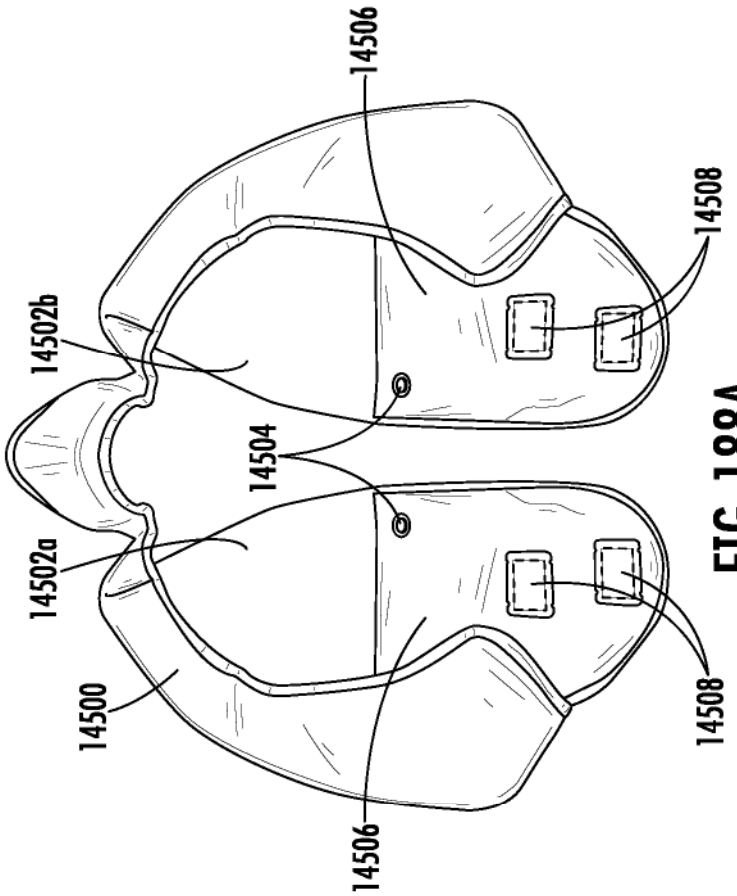

FIG. 188A

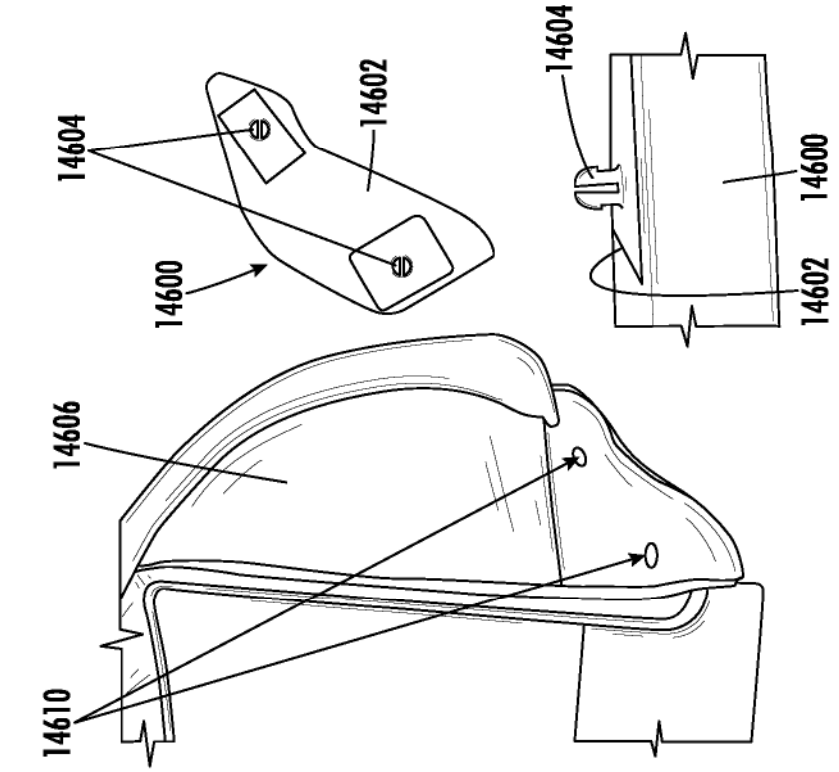

FIG. 189B

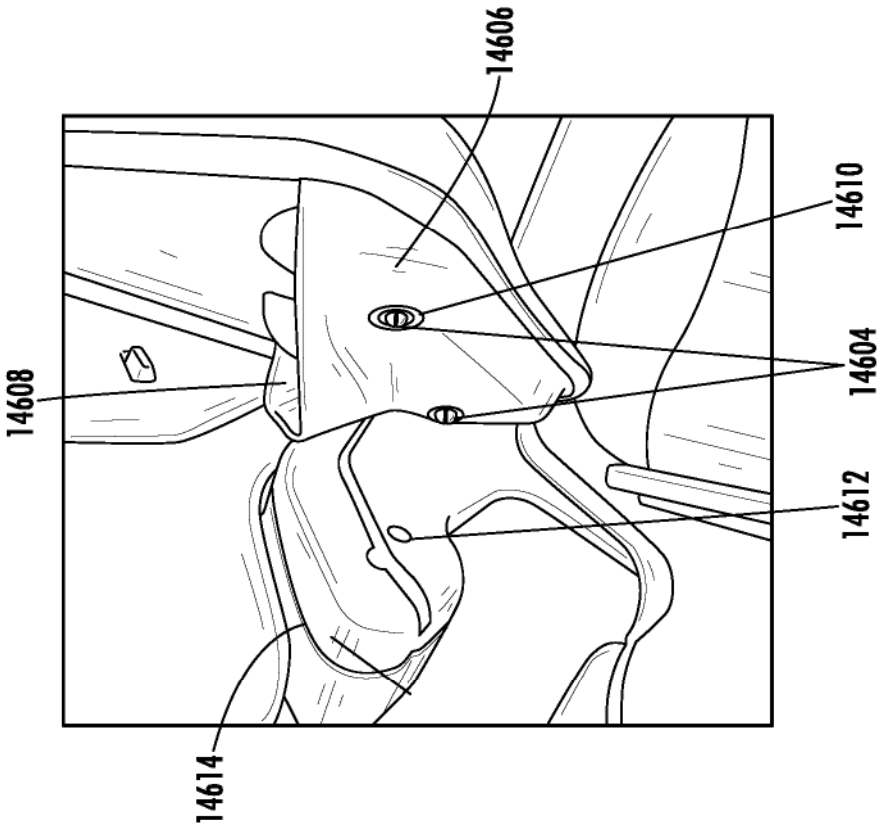

FIG. 189A

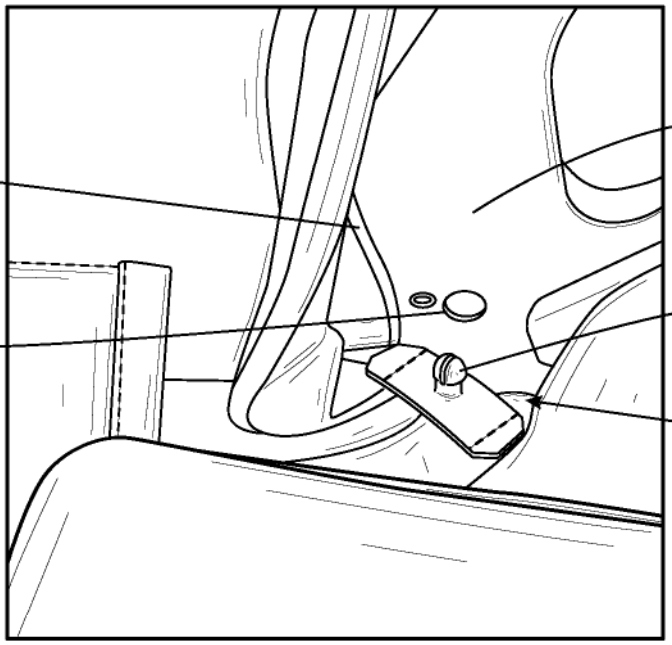

FIG. 190B

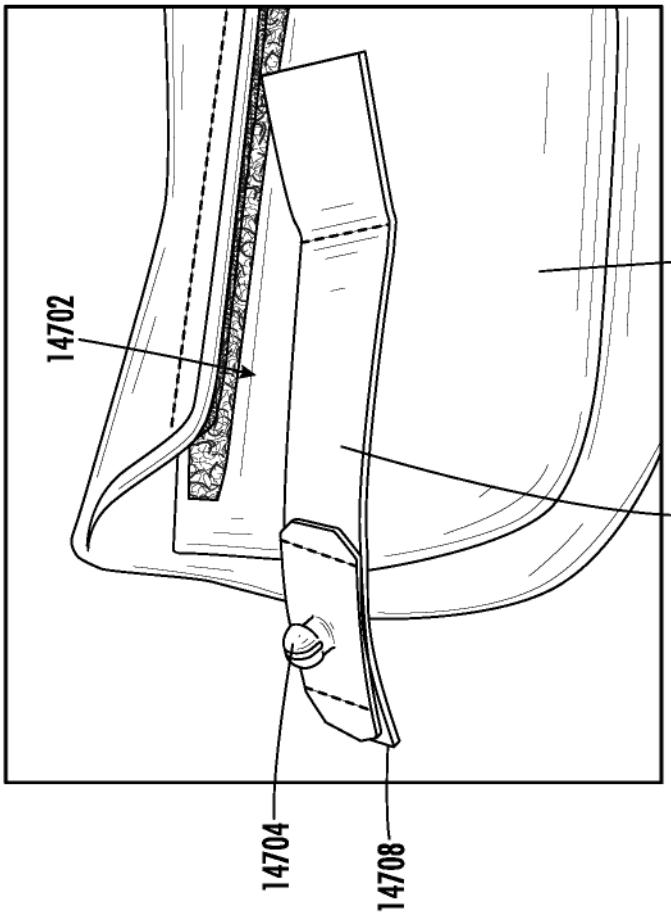

FIG. 190A

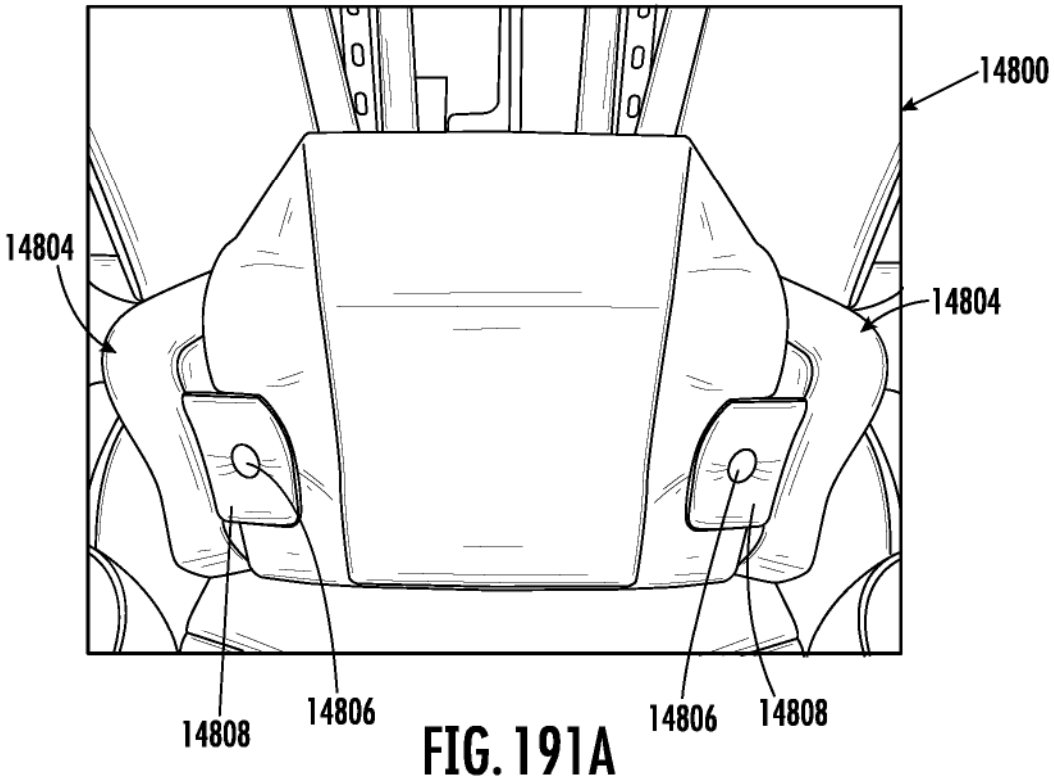

FIG. 191A

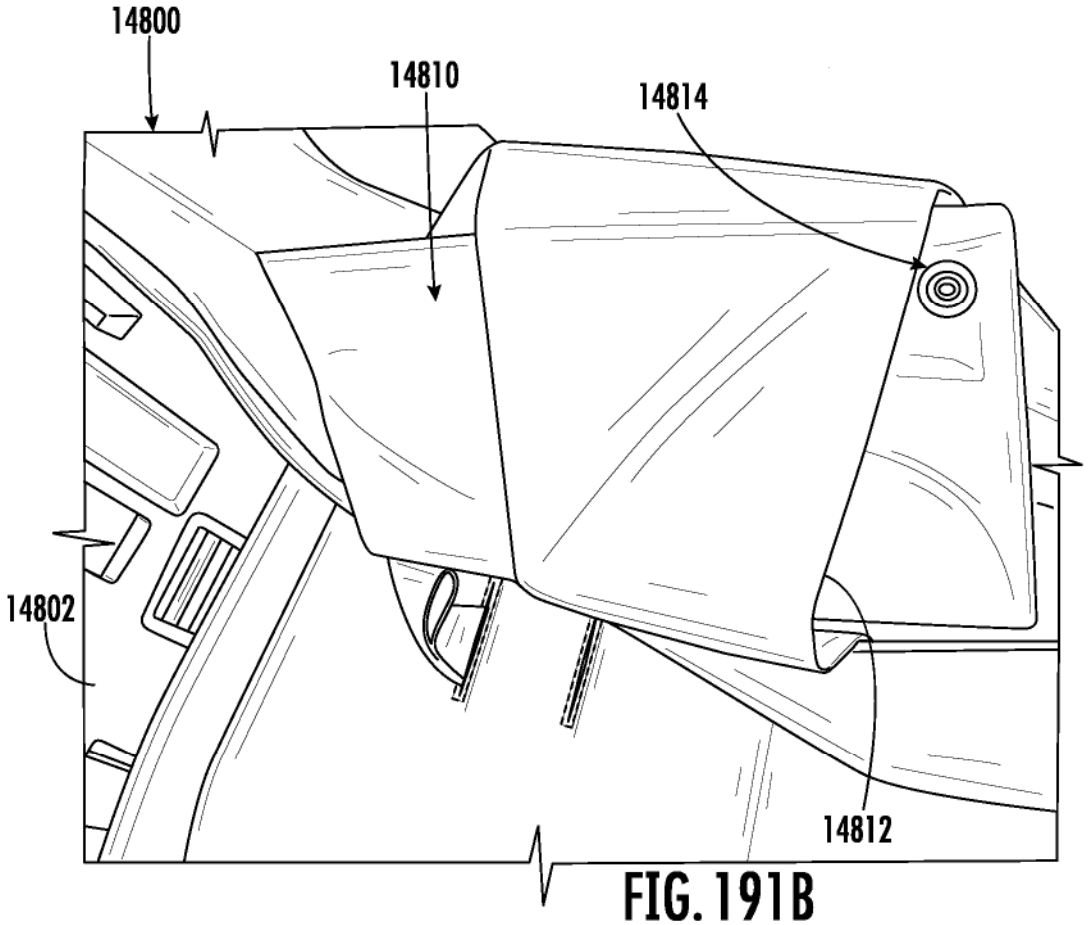

FIG. 191B

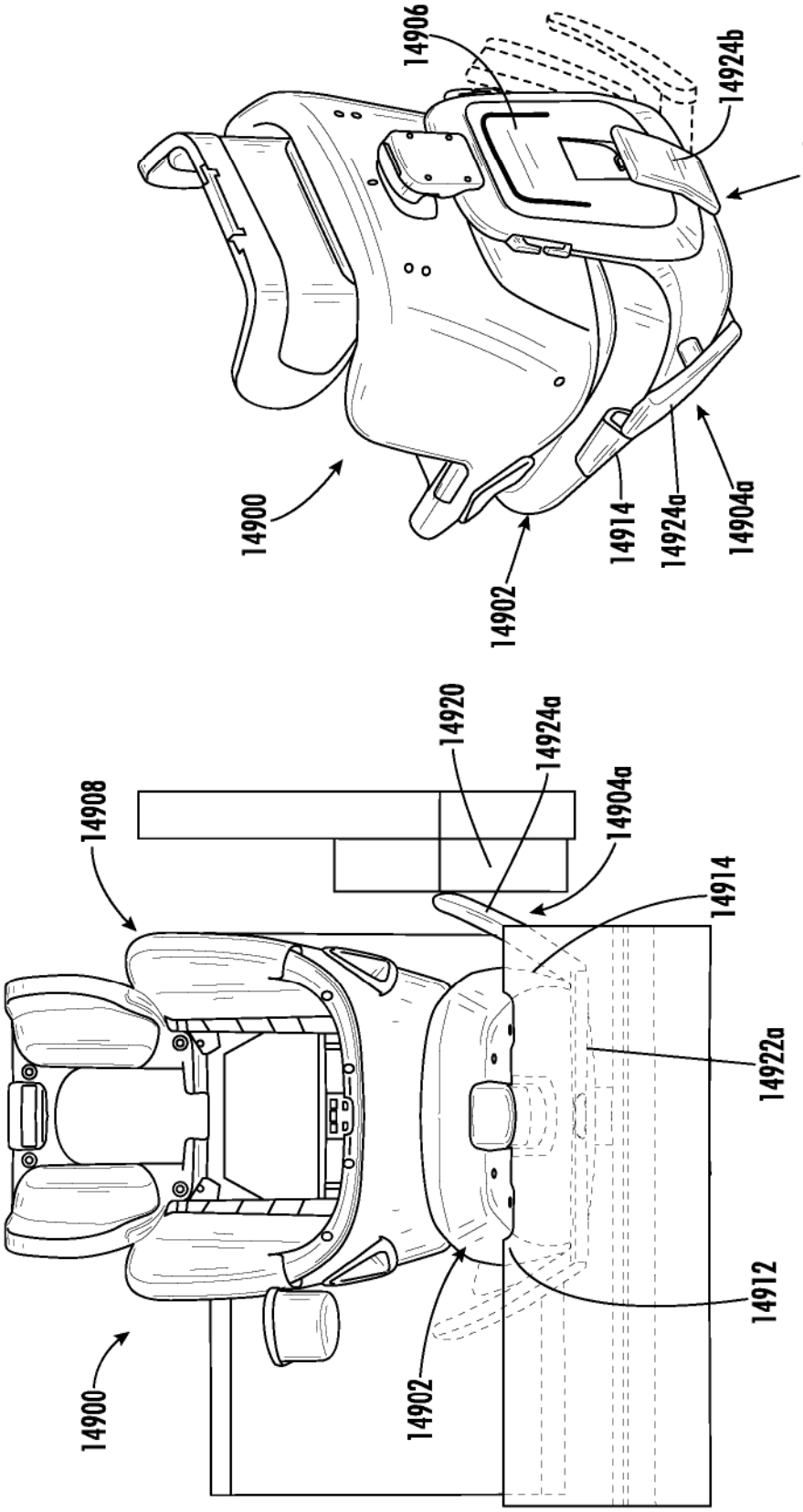

FIG. 192B

FIG. 192A

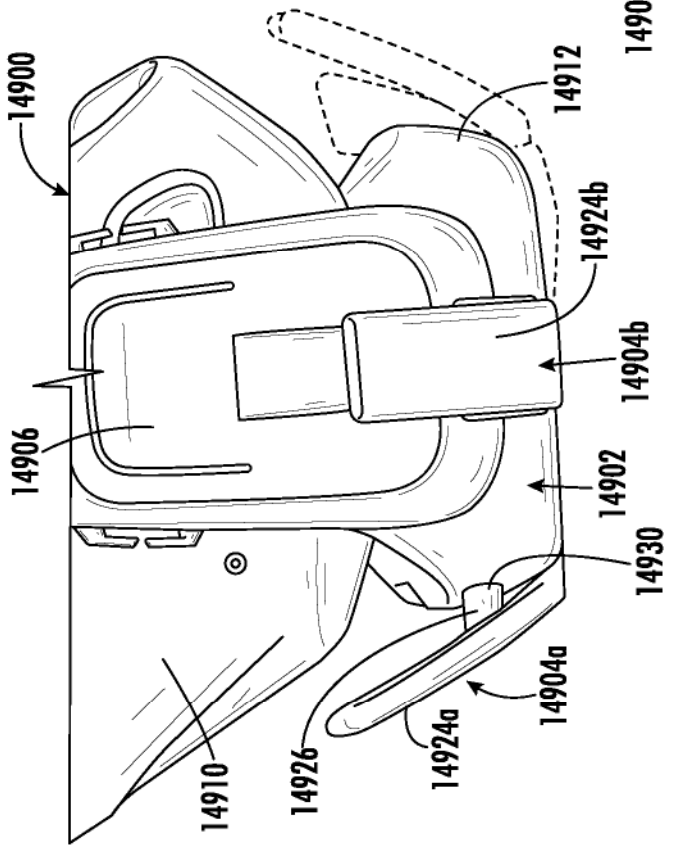

FIG. 192C

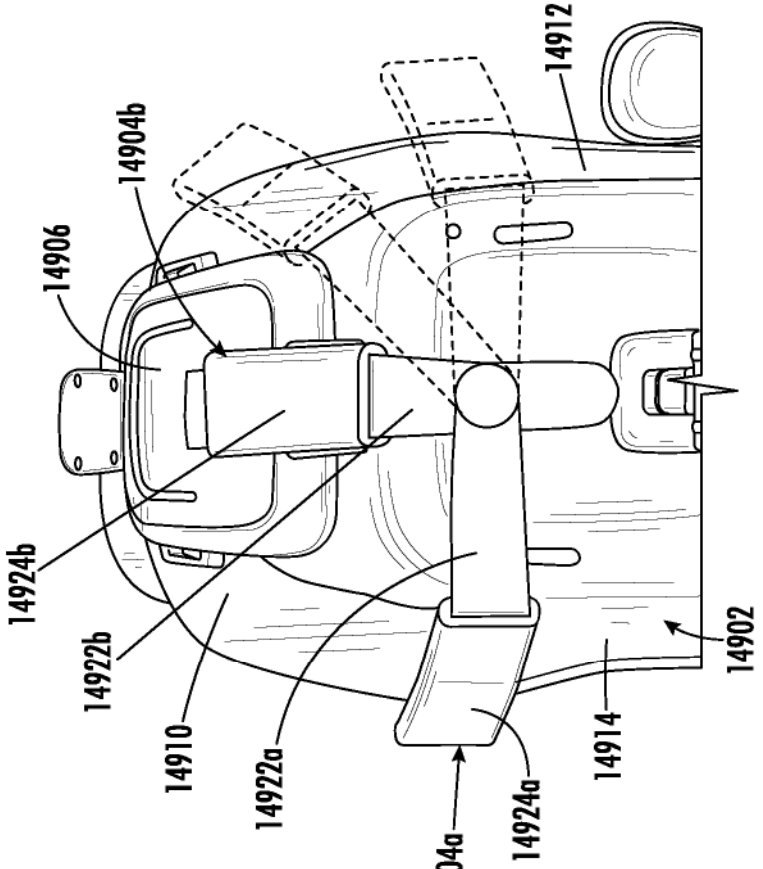

FIG. 192D

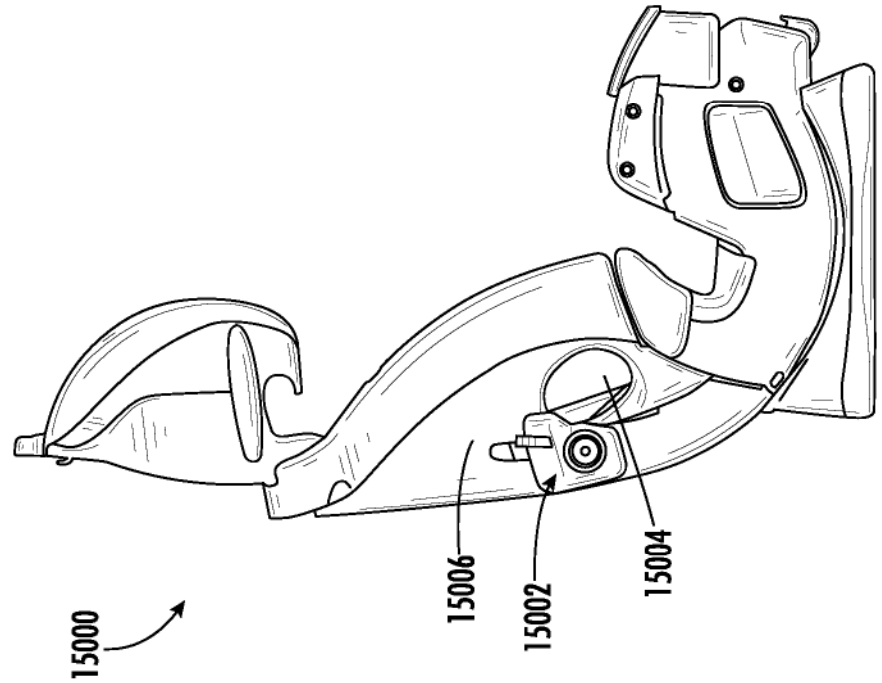

FIG. 193B

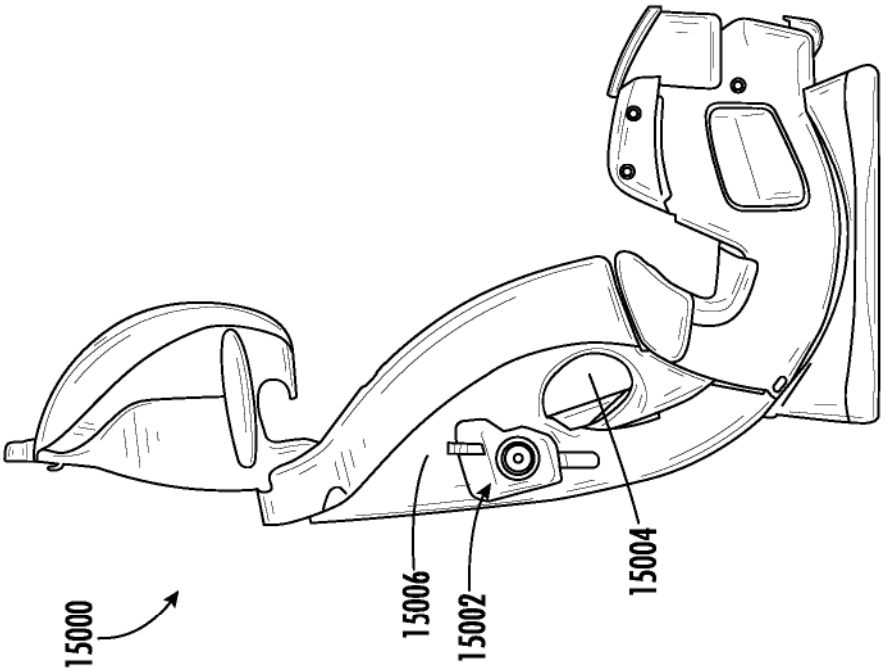

FIG. 193A

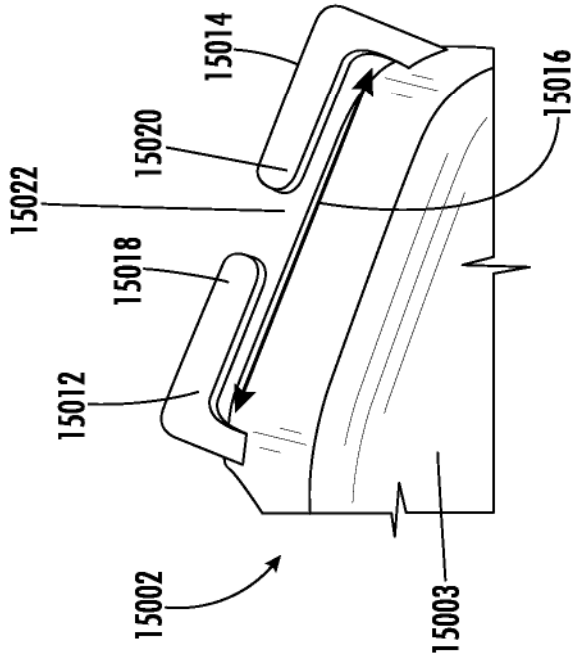

FIG. 194B

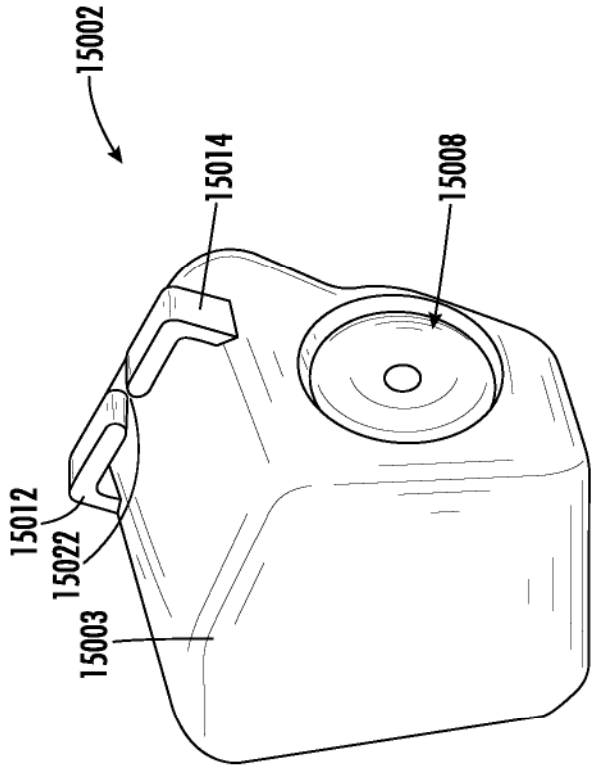

FIG. 194A

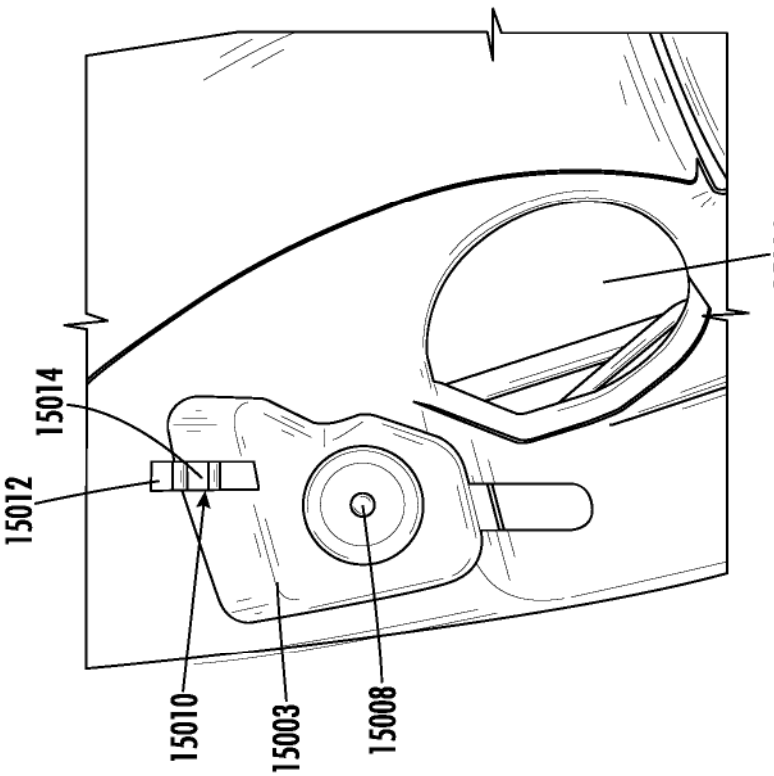

FIG. 195A

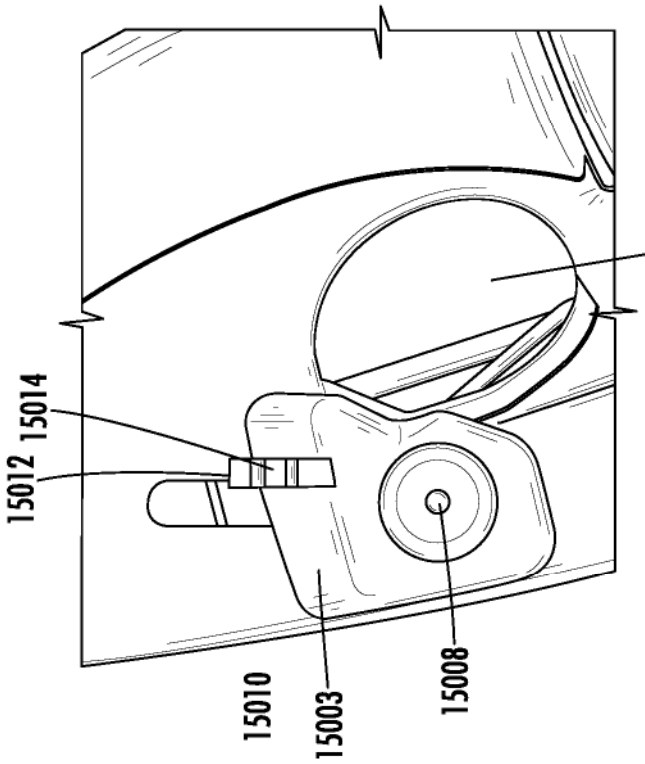

FIG. 195B

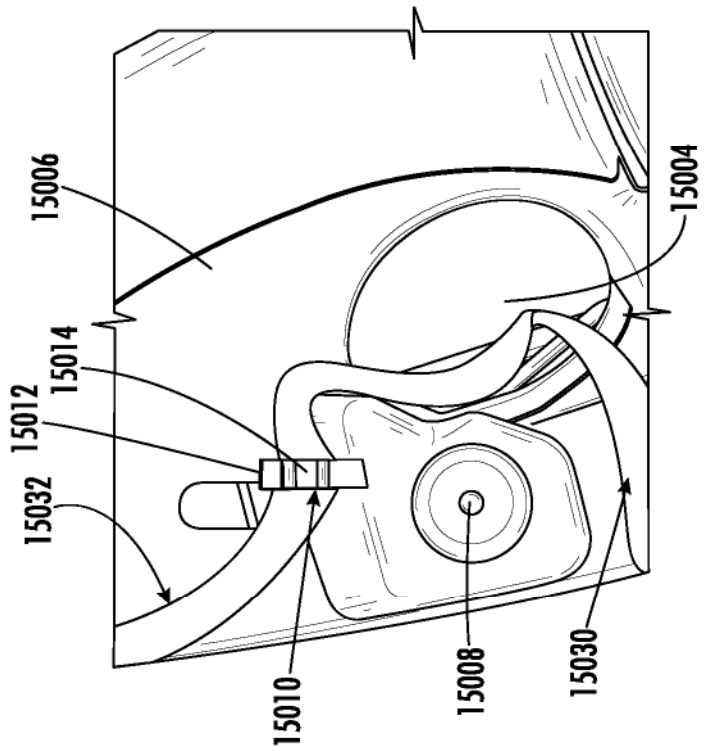

FIG. 195D

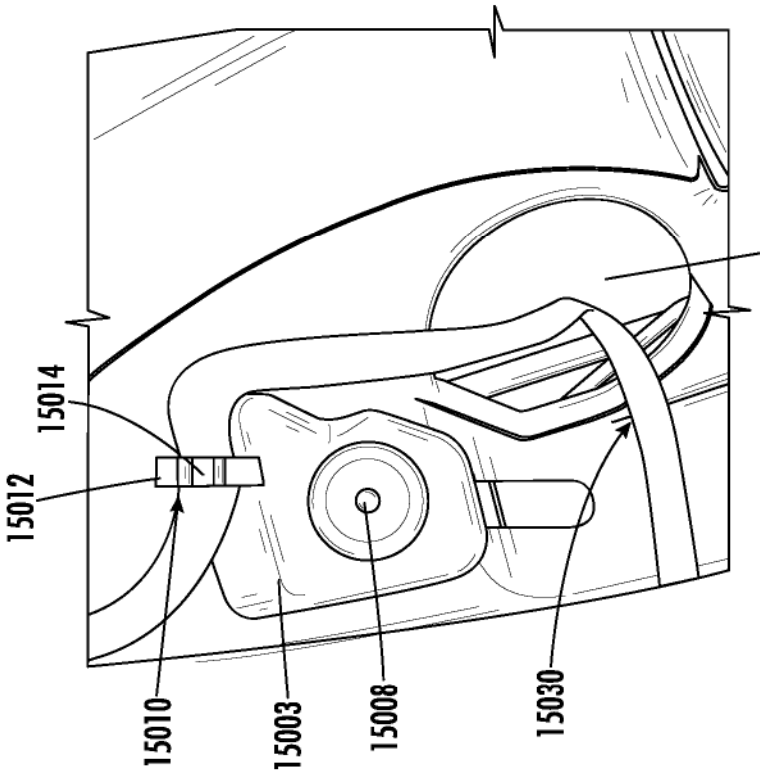

FIG. 195C

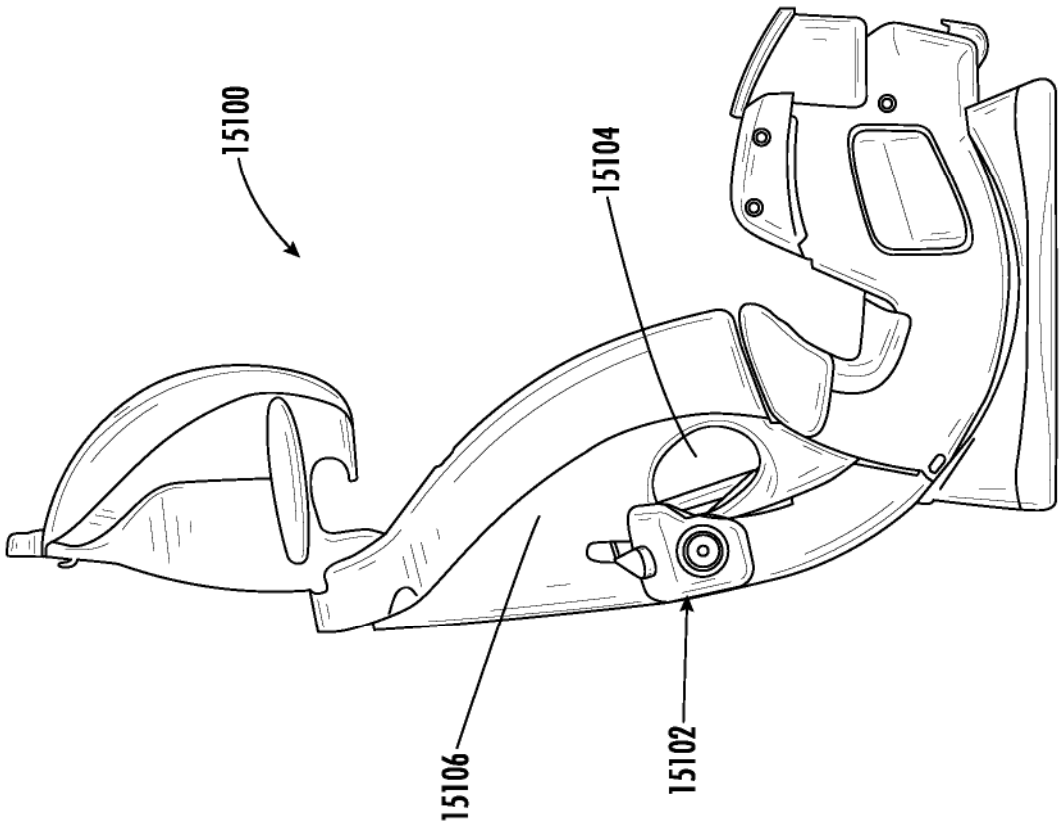

FIG. 196B

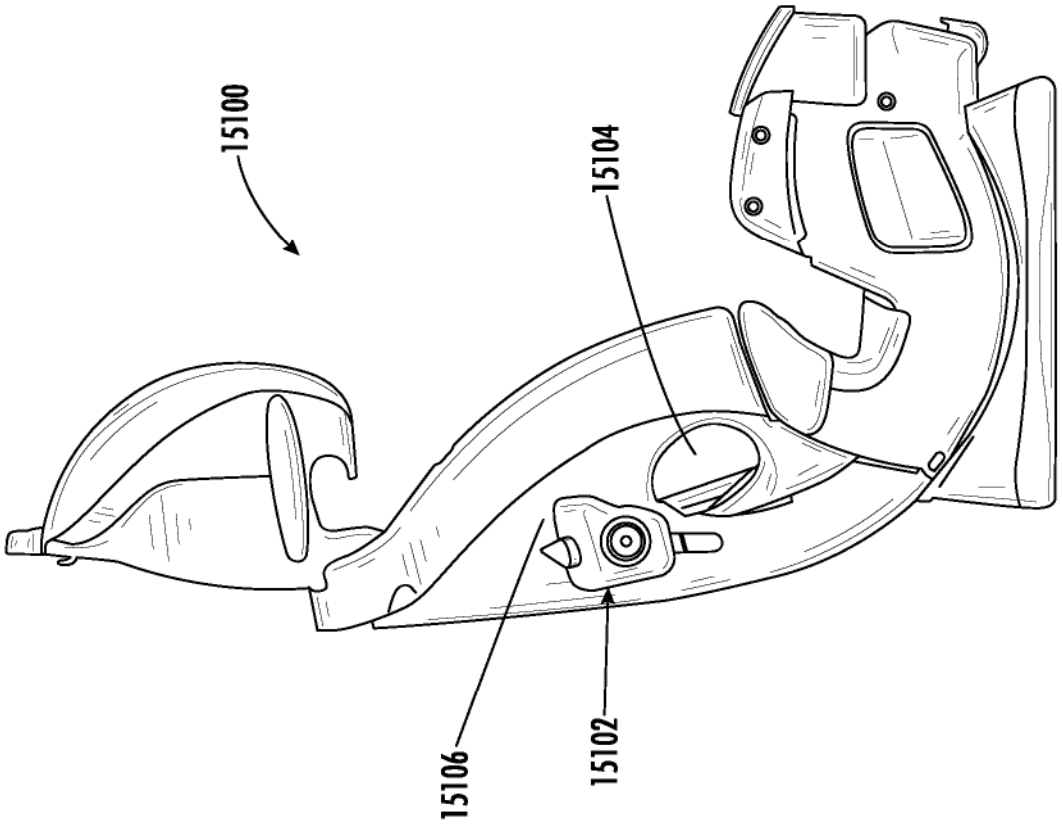

FIG. 196A

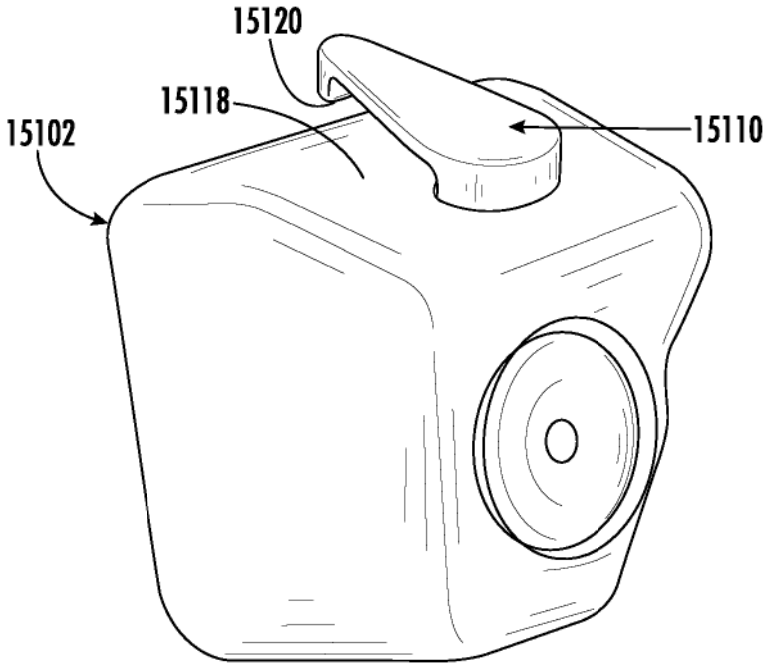

FIG. 196C

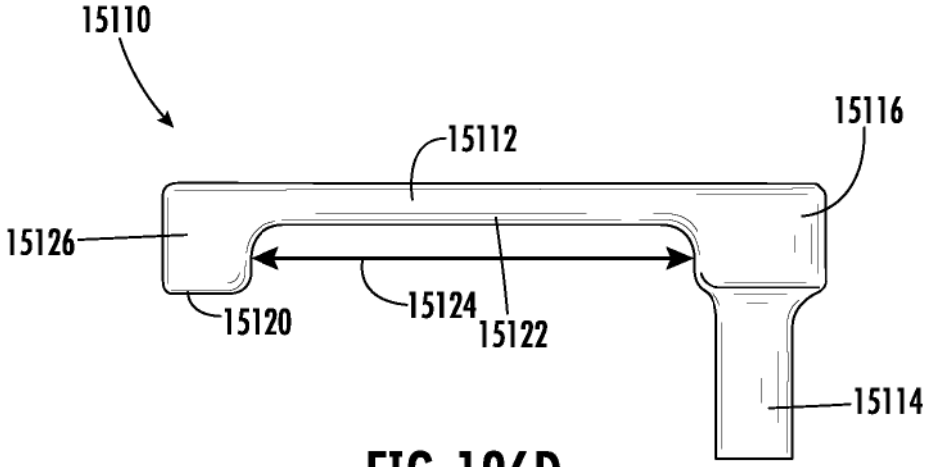

FIG. 196D

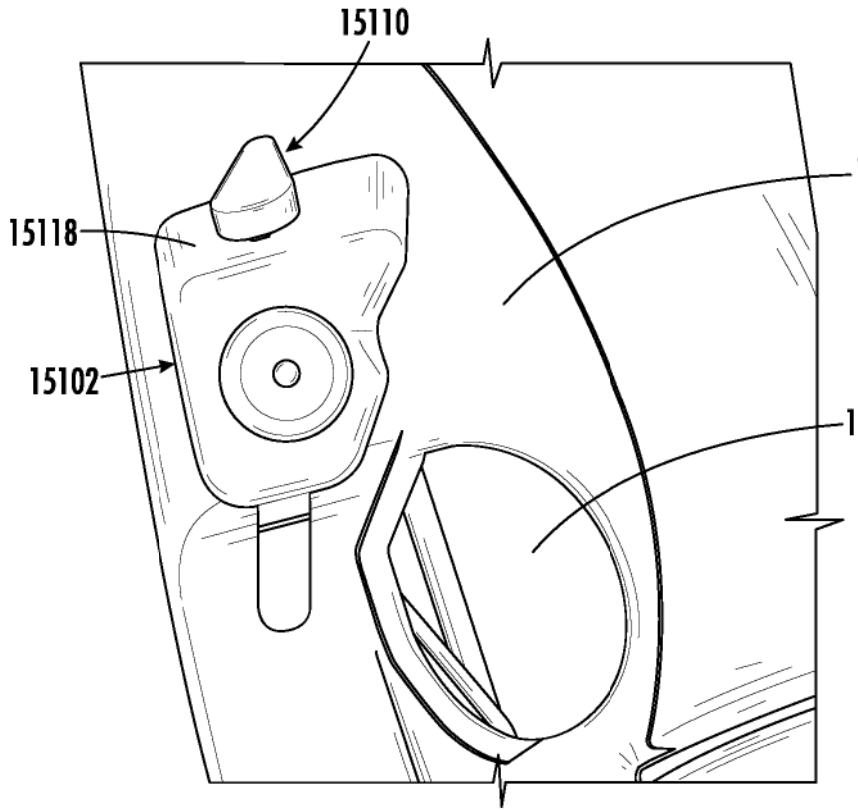

FIG. 197A

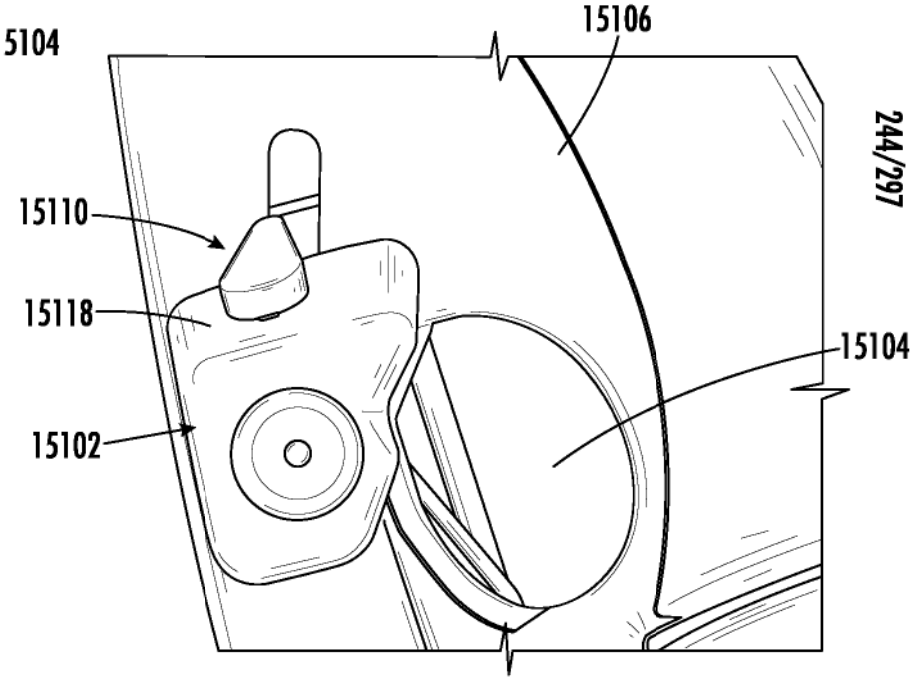

FIG. 197B

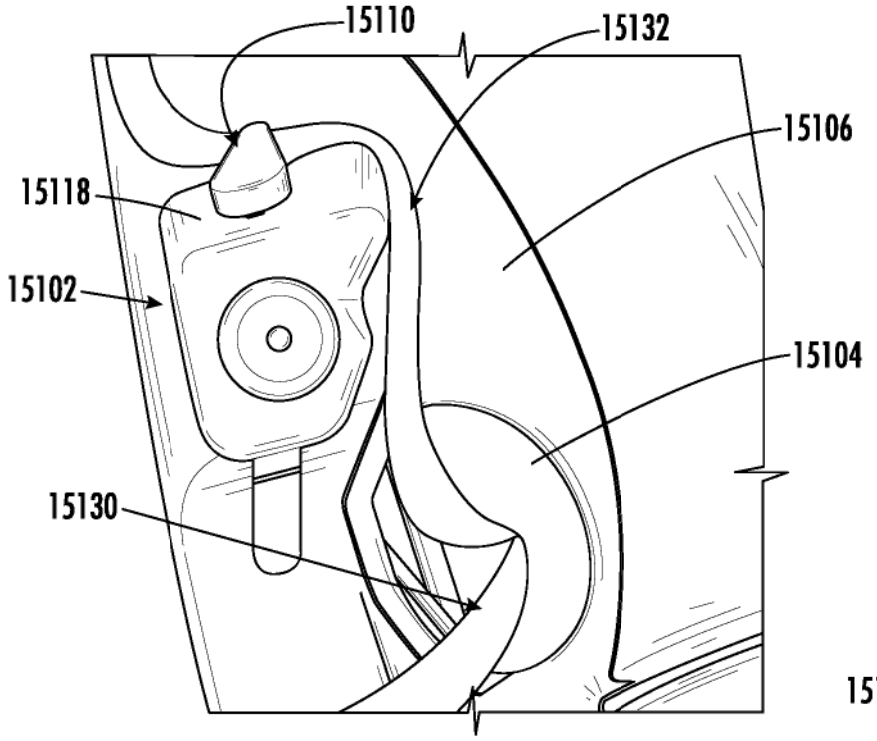

FIG. 197C

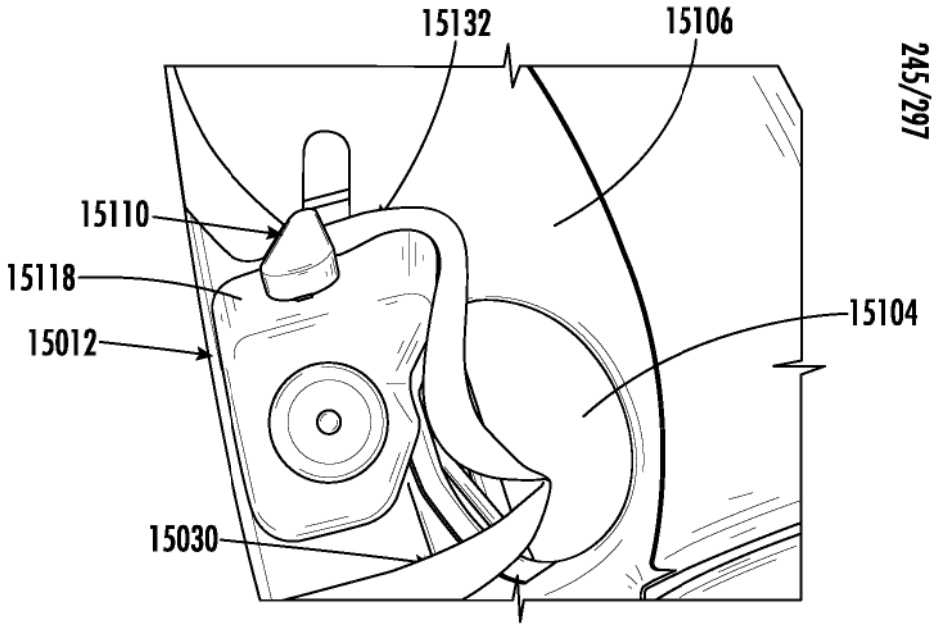

FIG. 197D

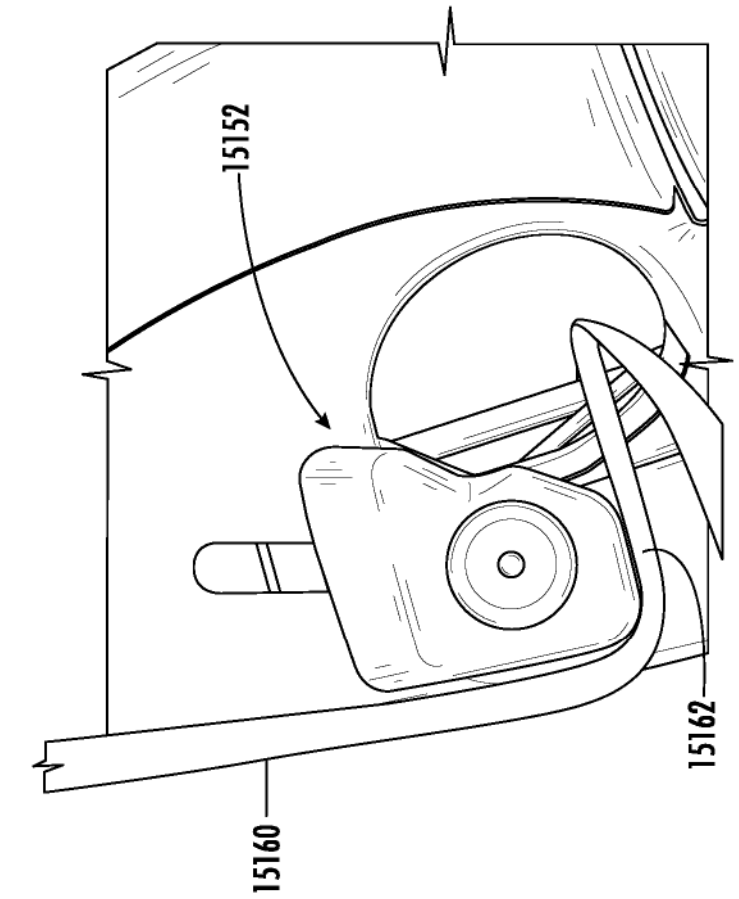

FIG. 198B

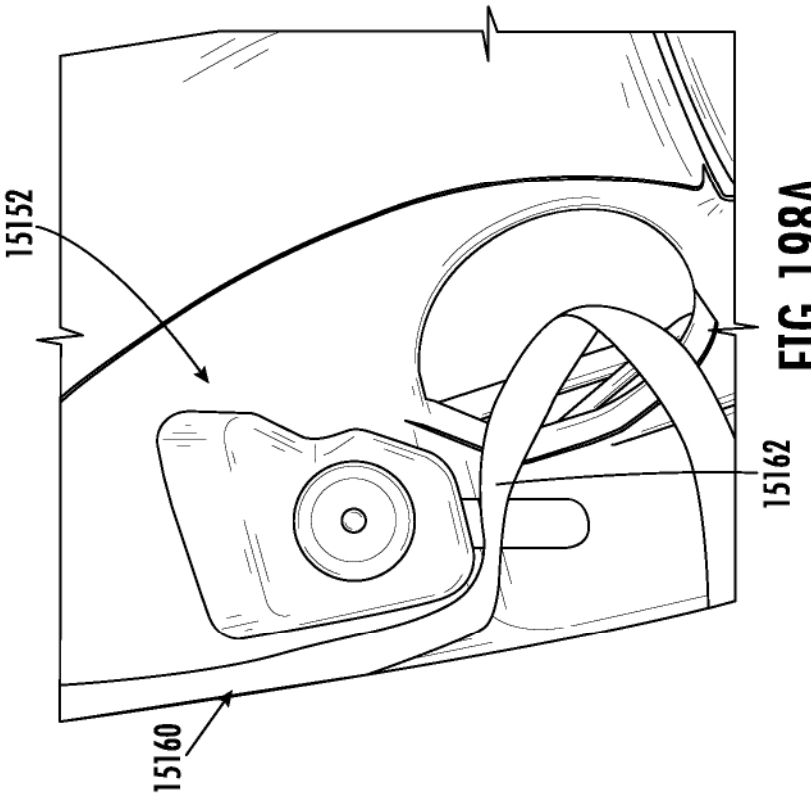

FIG. 198A

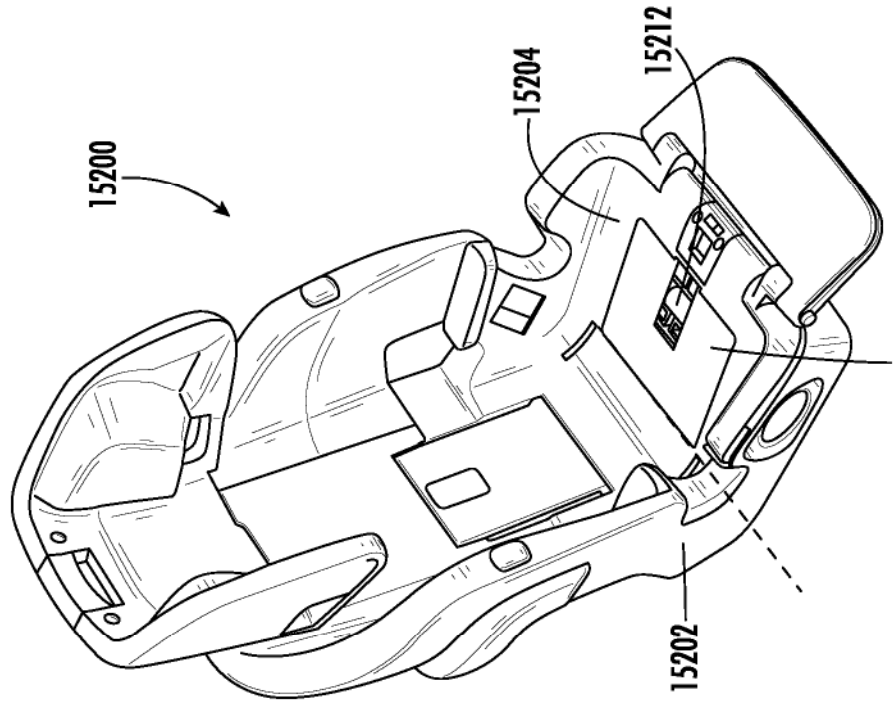

FIG. 199B

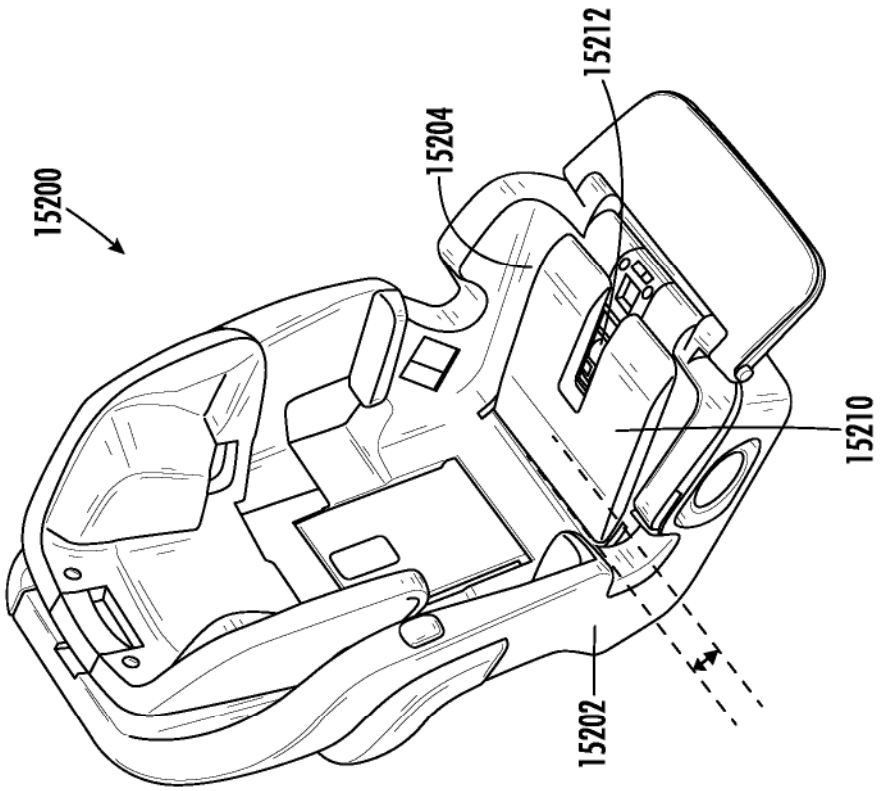

FIG. 199A

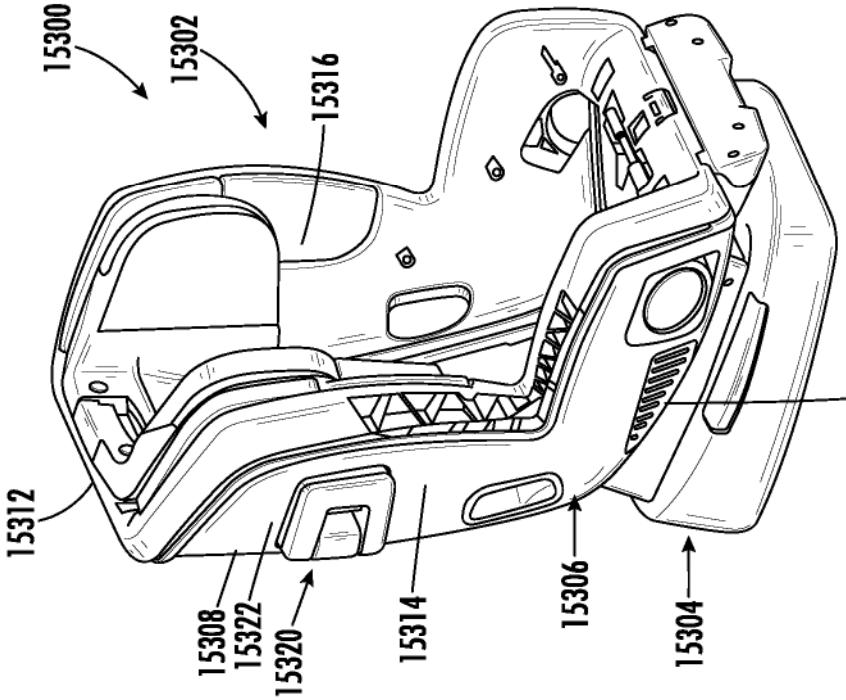

FIG. 200A

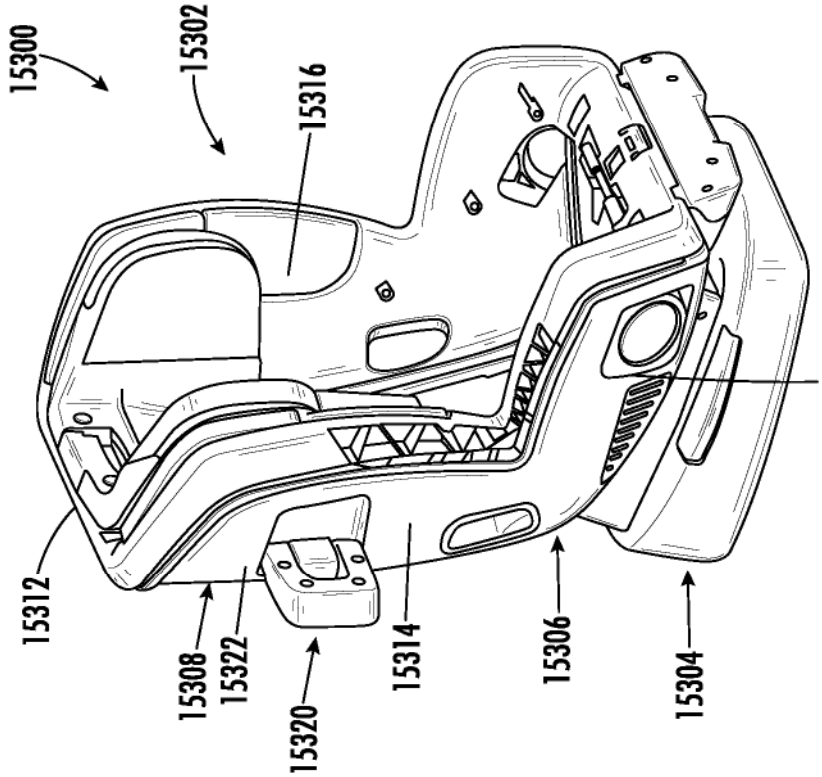

FIG. 200B

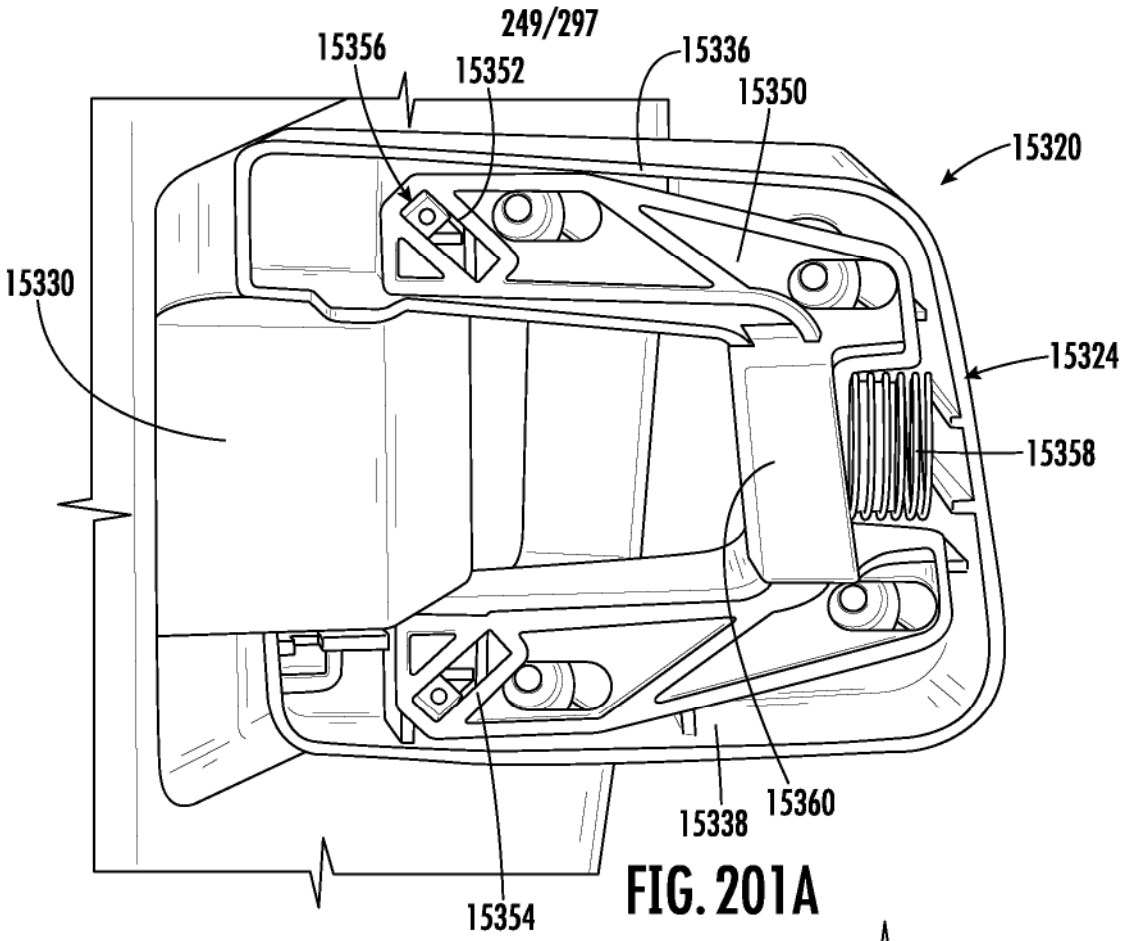

FIG. 201A

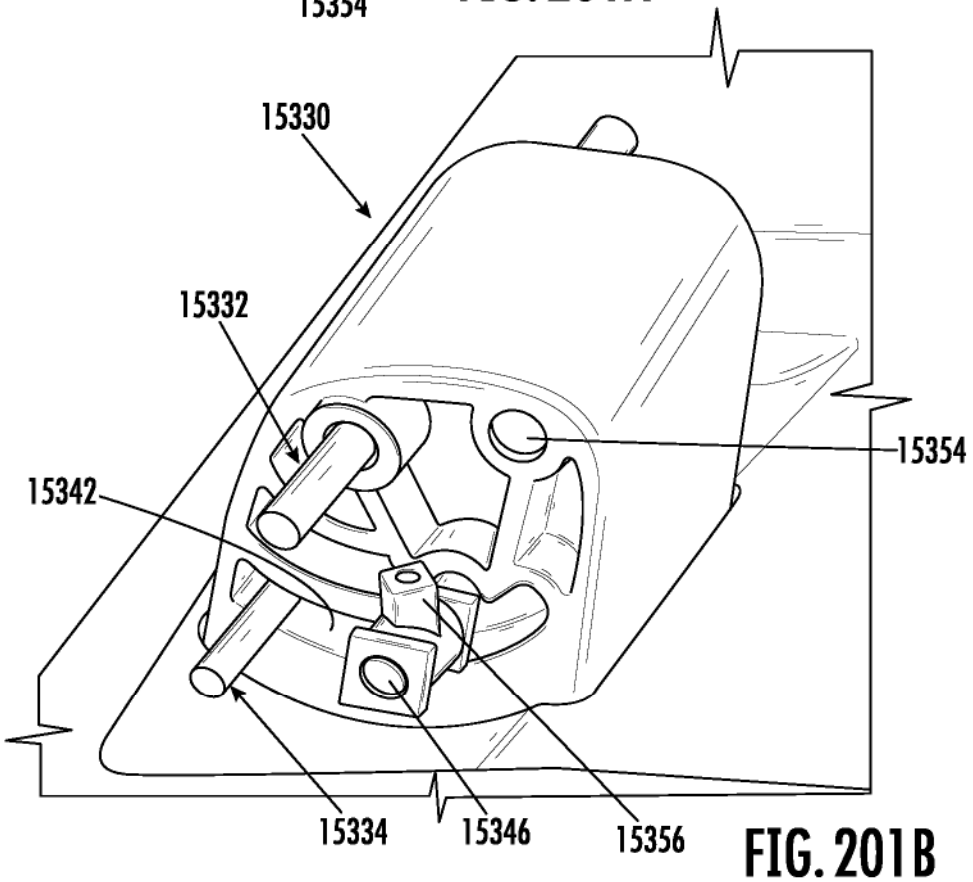

FIG. 201B

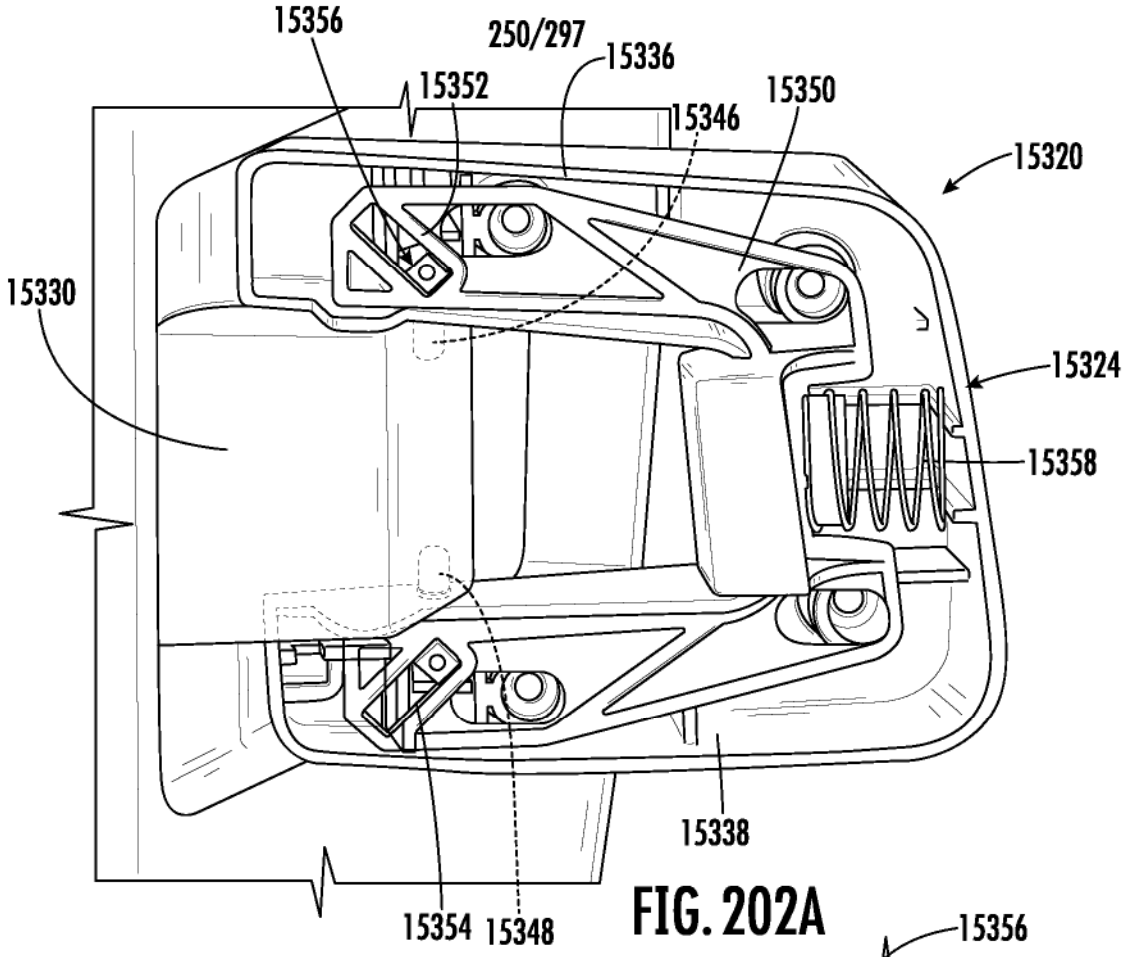

FIG. 202A

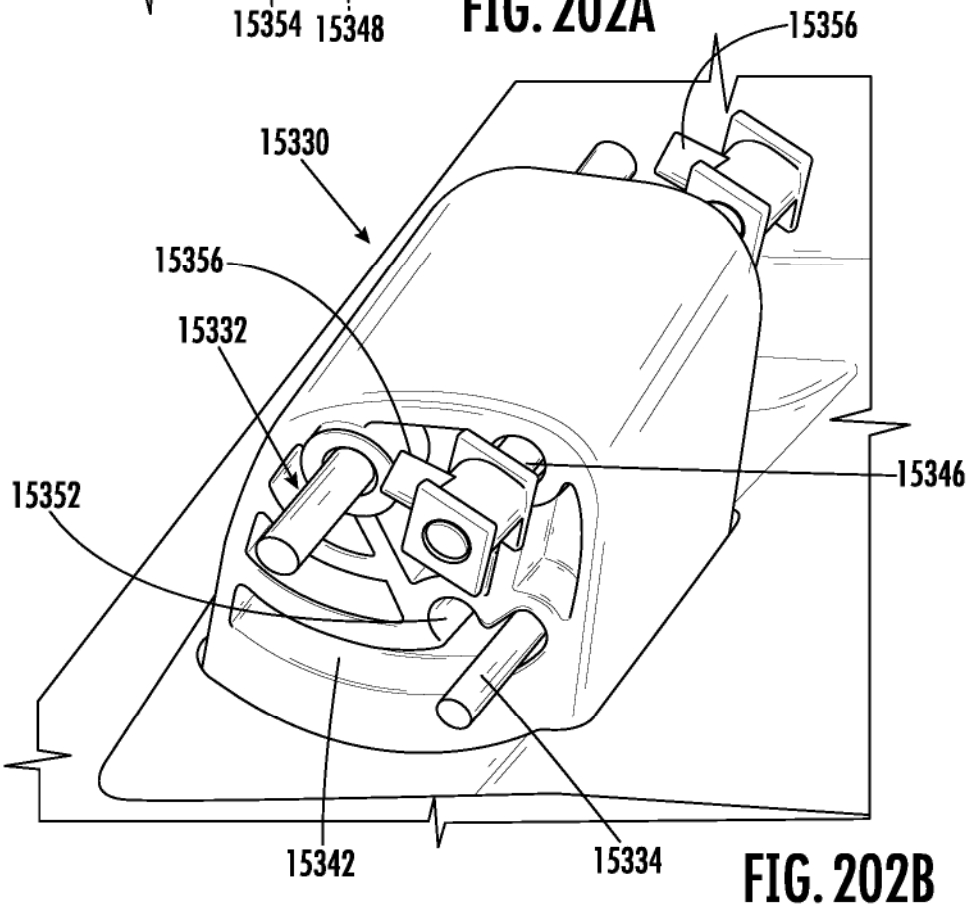

FIG. 202B

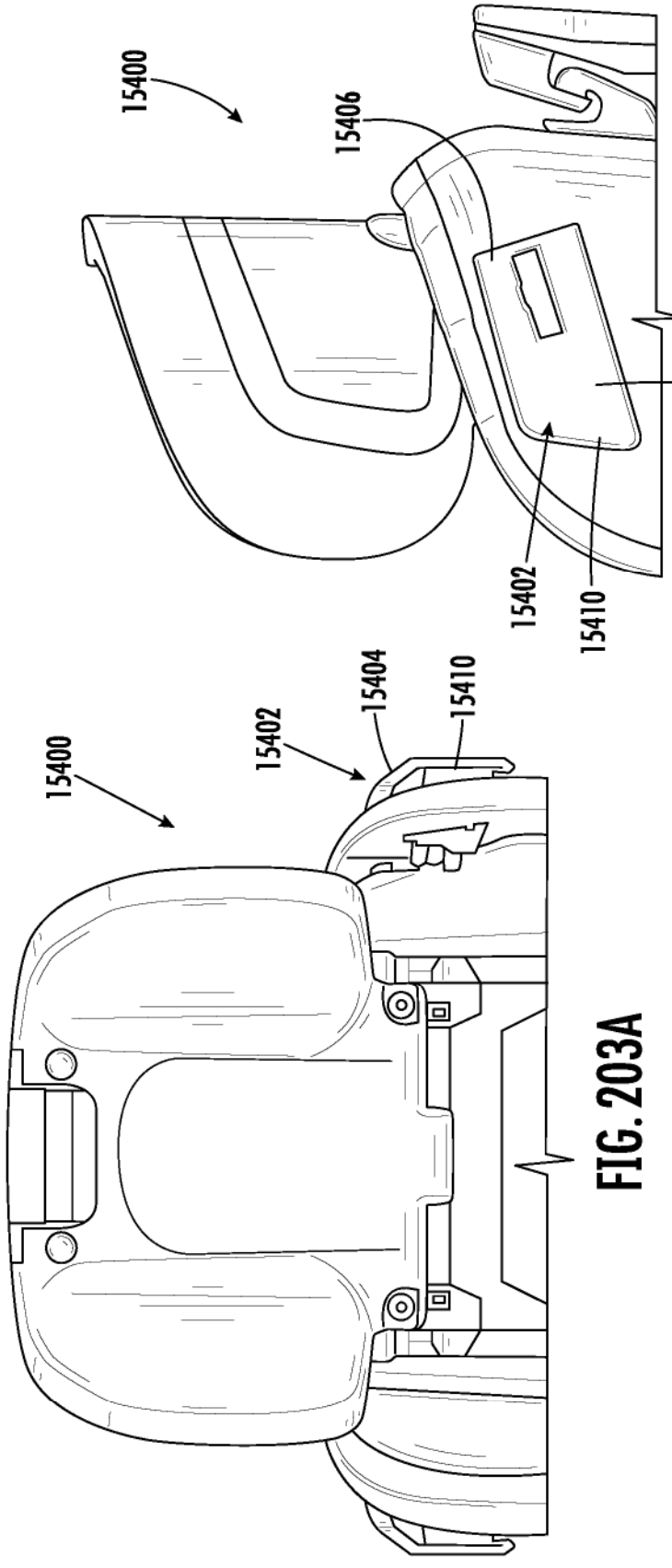

FIG. 203B

FIG. 203A

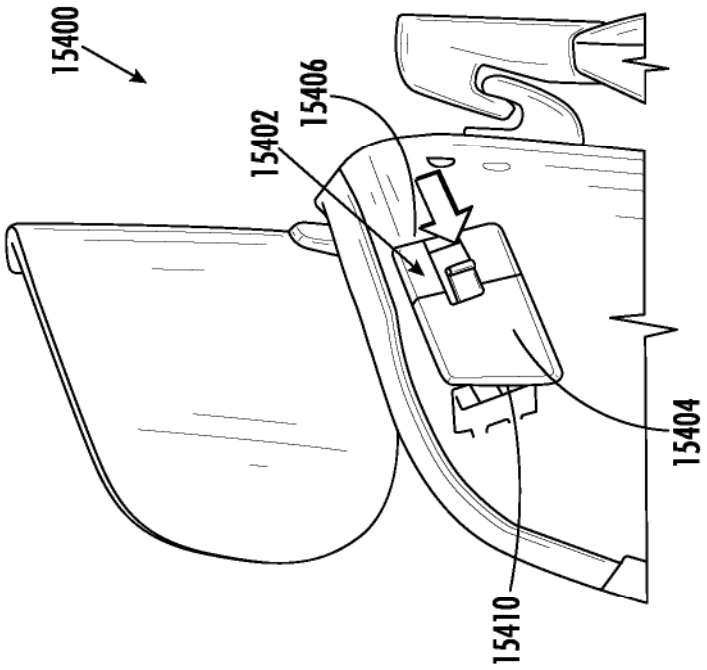

FIG. 204B

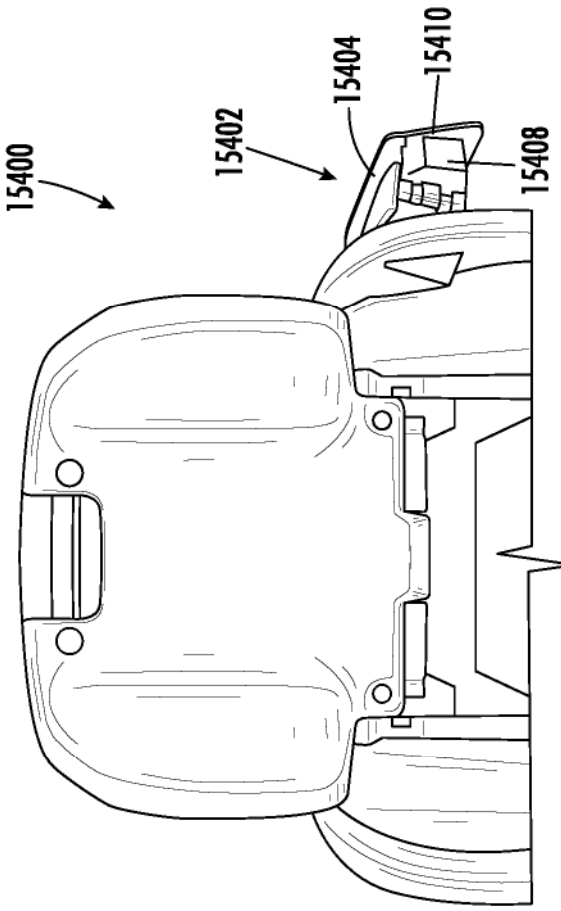

FIG. 204A

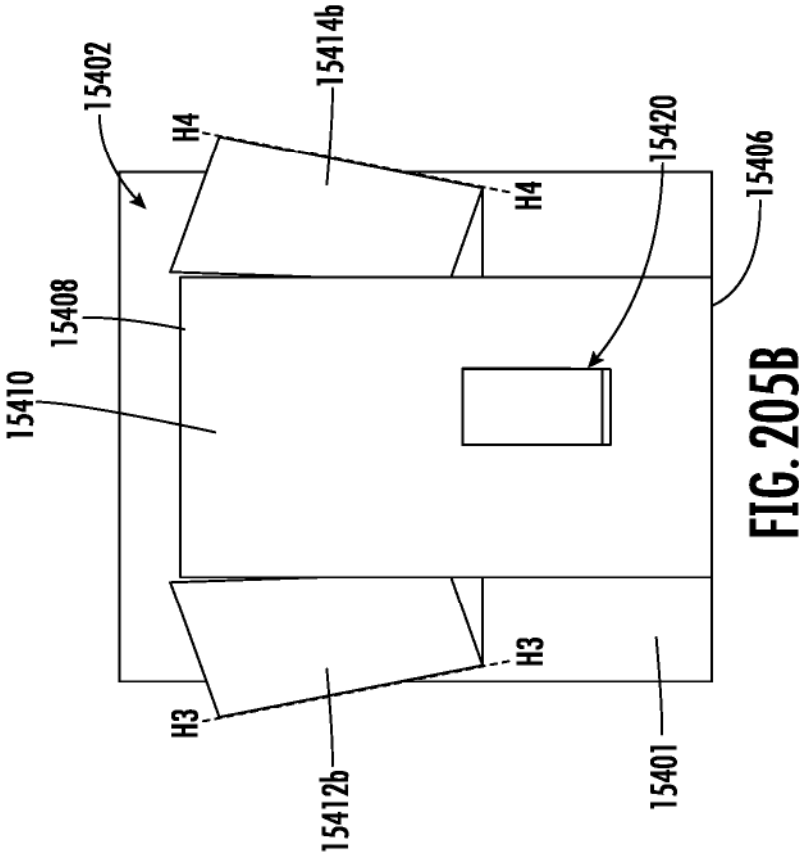

FIG. 205B

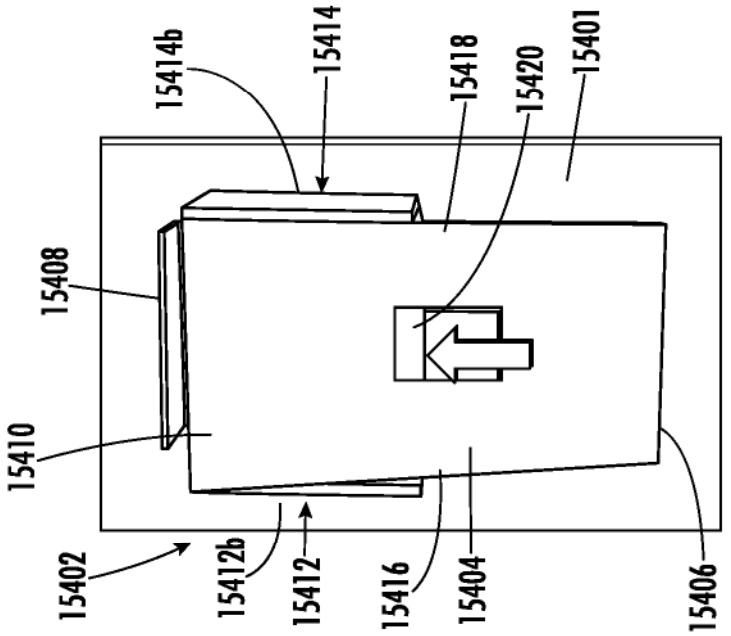

FIG. 205A

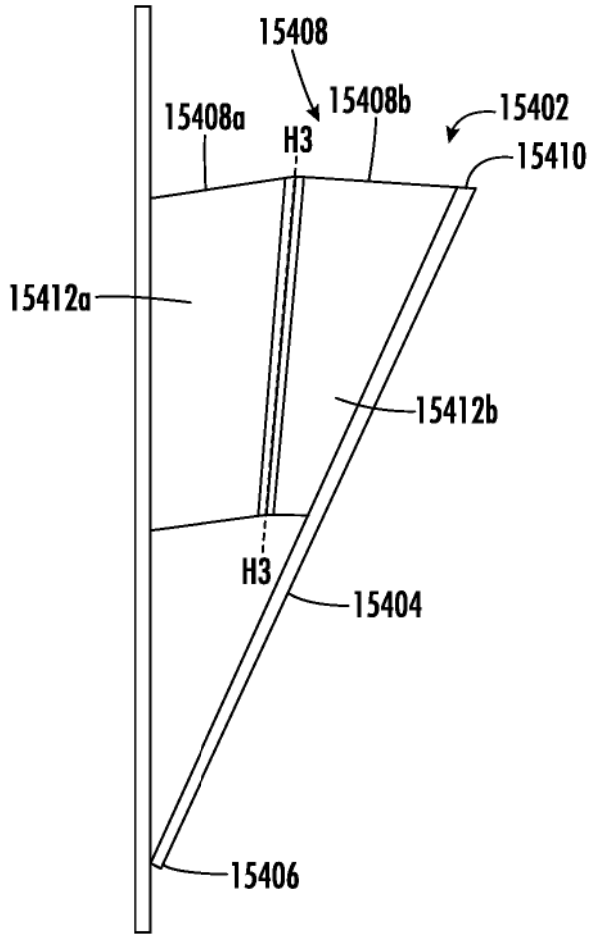

FIG. 206A

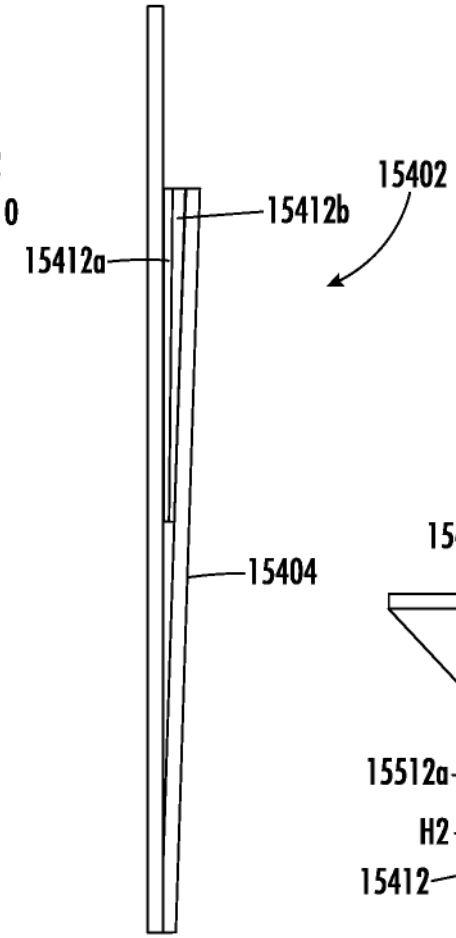

FIG. 206B

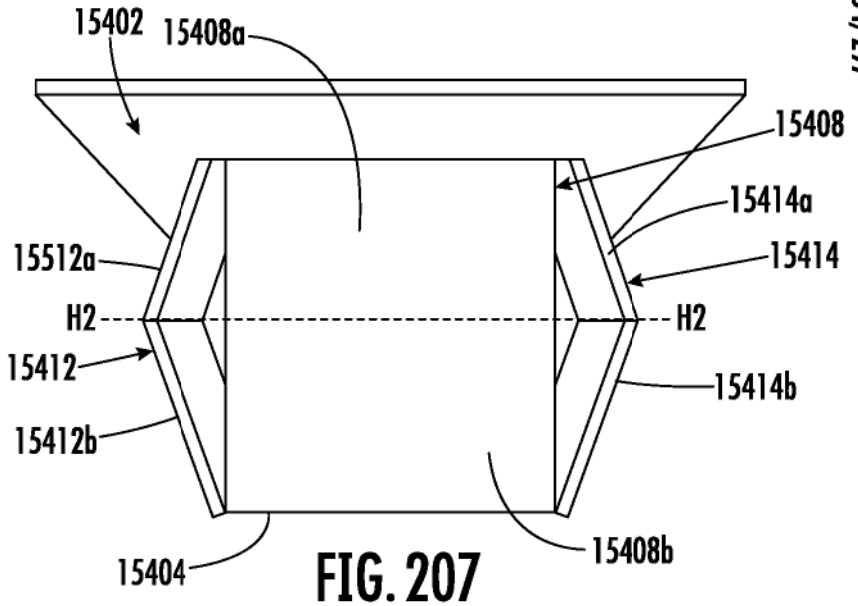

FIG. 207

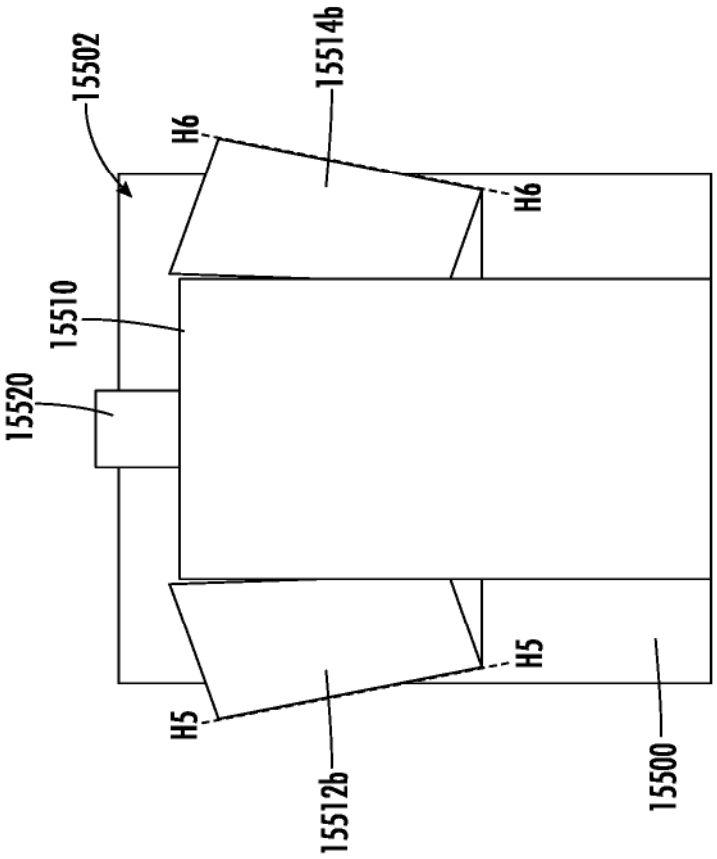

FIG. 208B

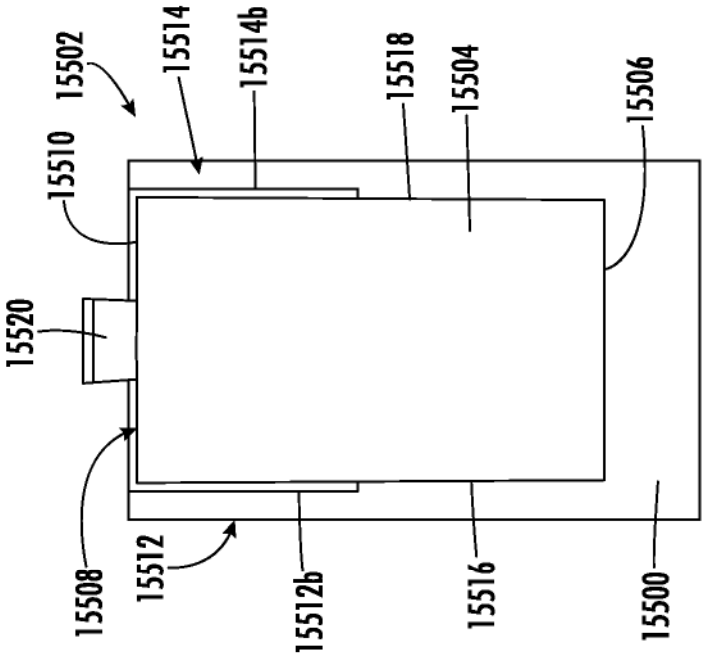

FIG. 208A

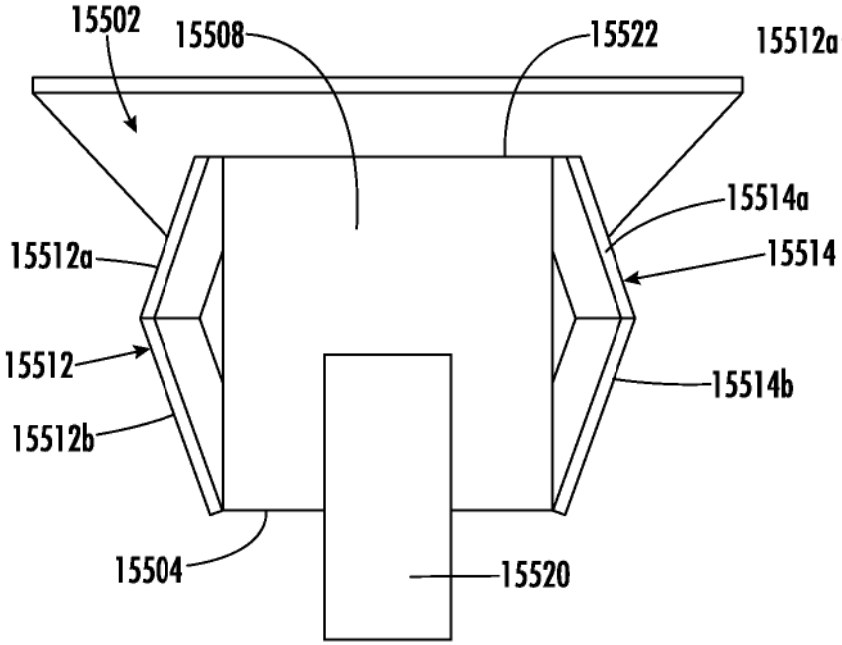

FIG. 210

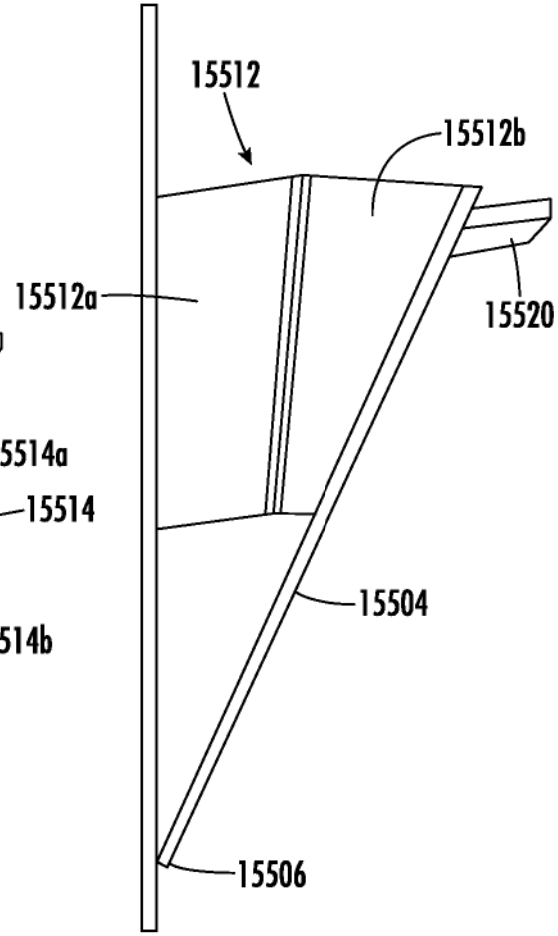

FIG. 209A

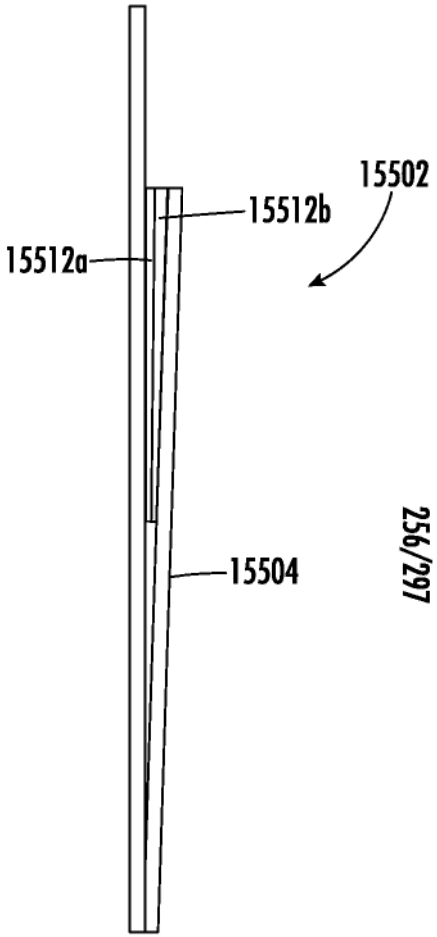

FIG. 209B

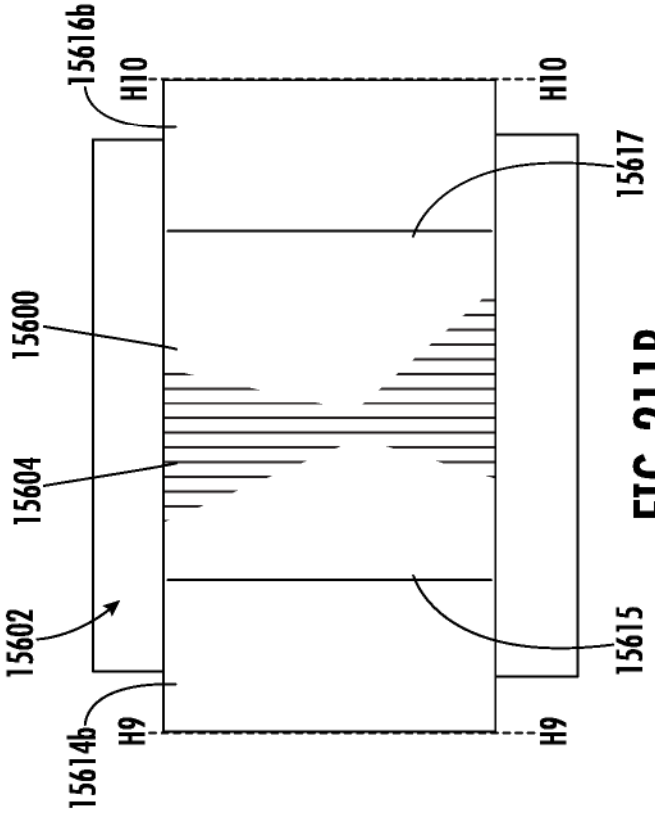

FIG. 211B

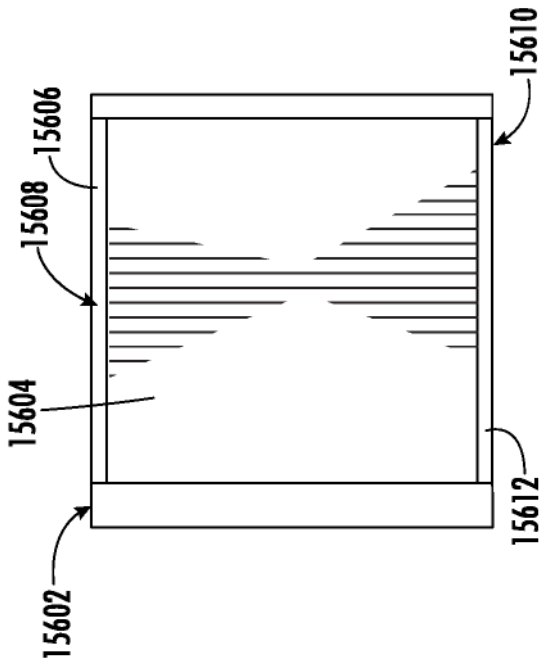

FIG. 211A

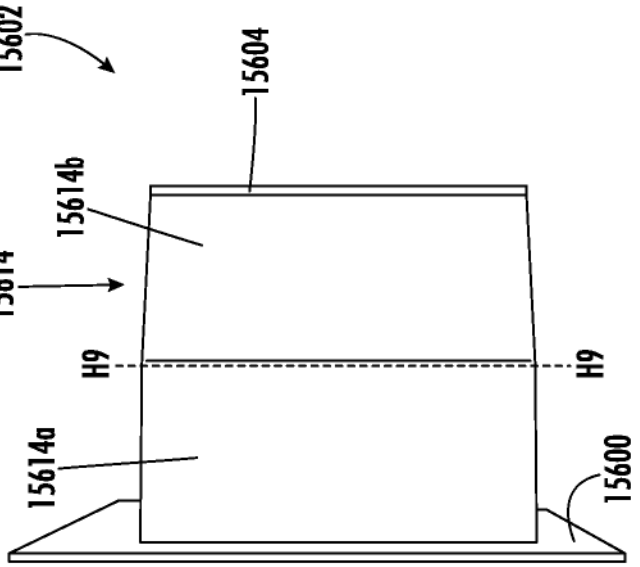

FIG. 212B

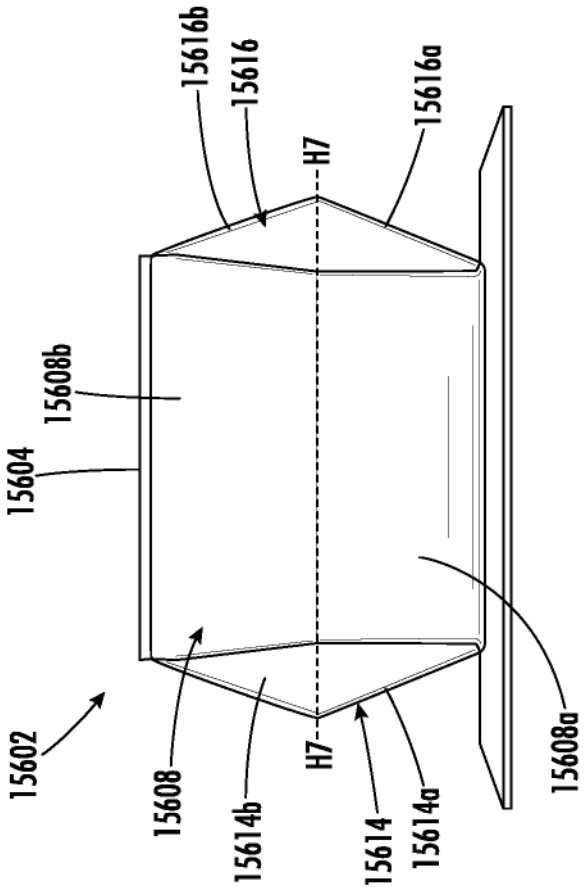

FIG. 212A

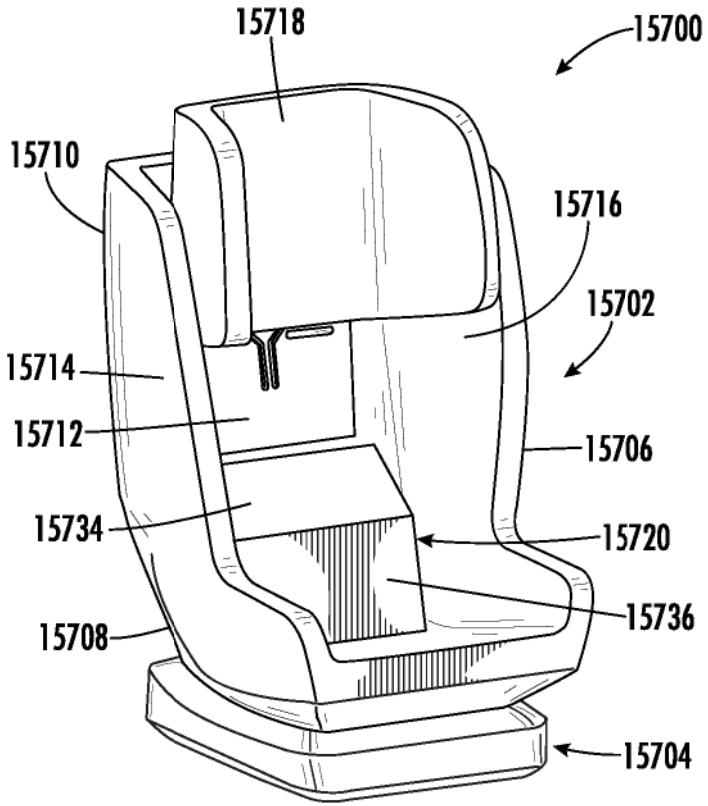

FIG. 213A

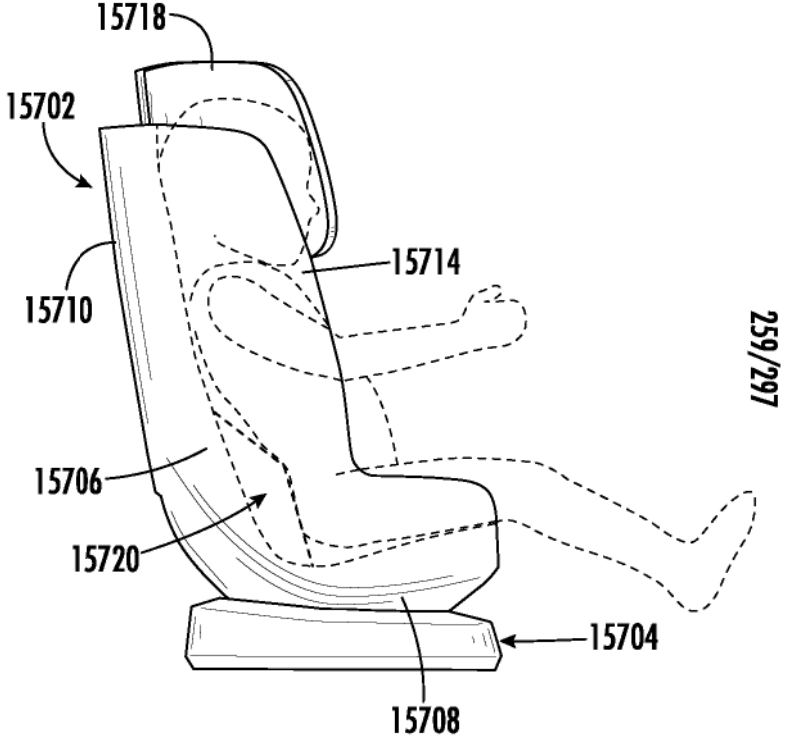

FIG. 213B

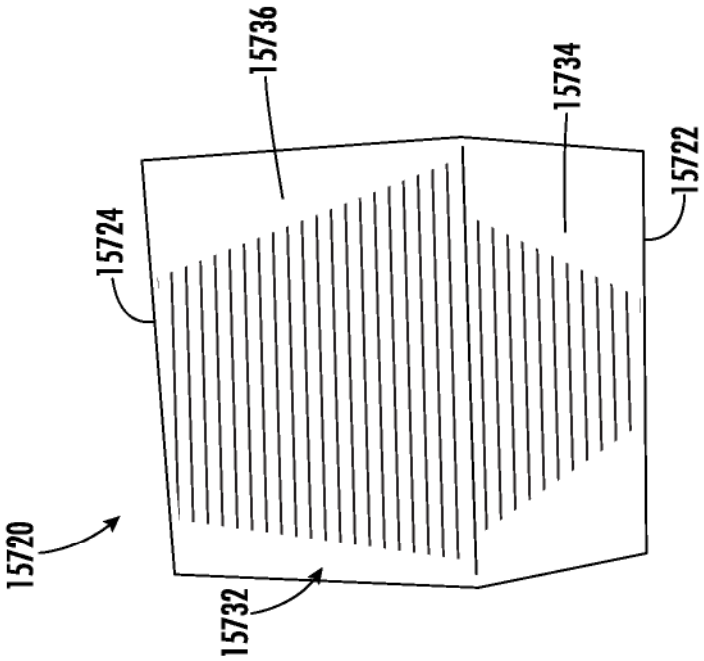

FIG. 214B

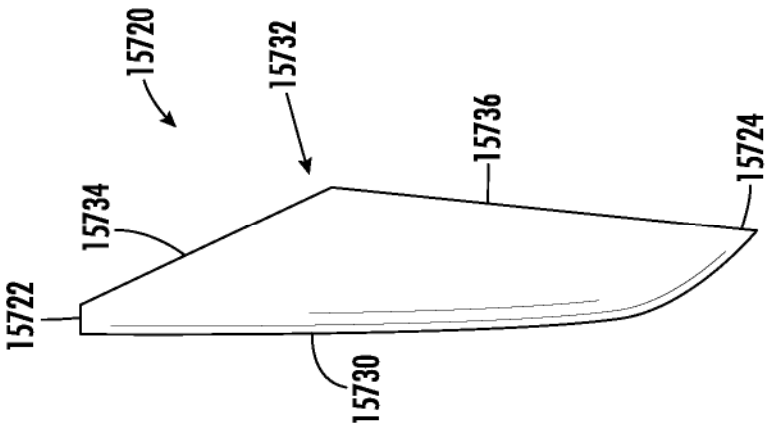

FIG. 214A

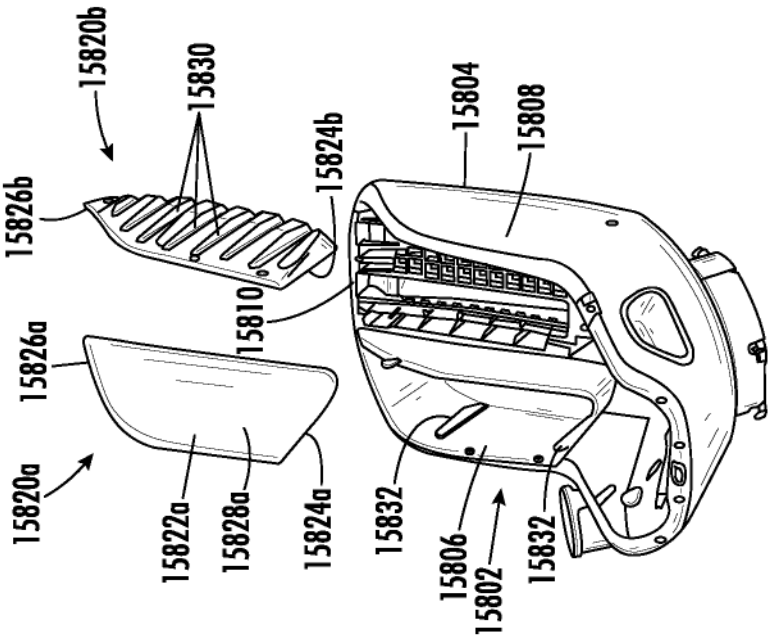

FIG. 215B

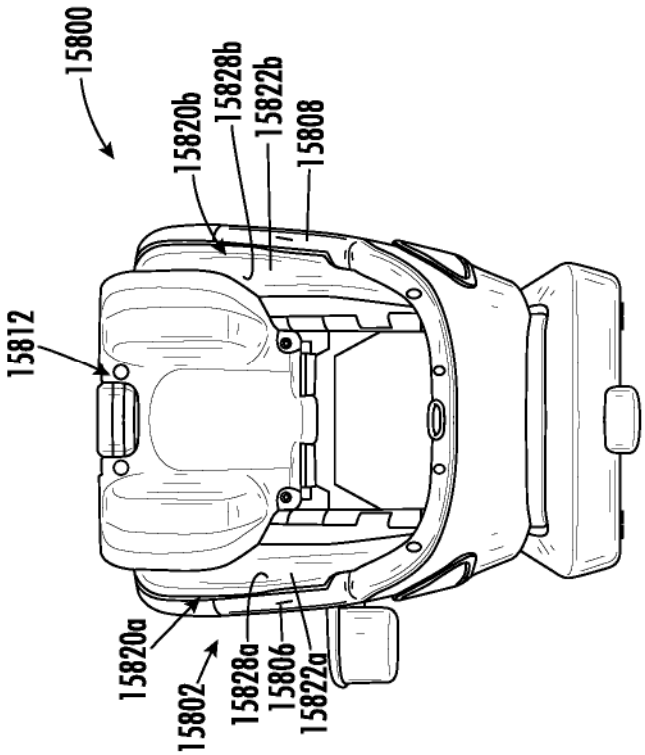

FIG. 215A

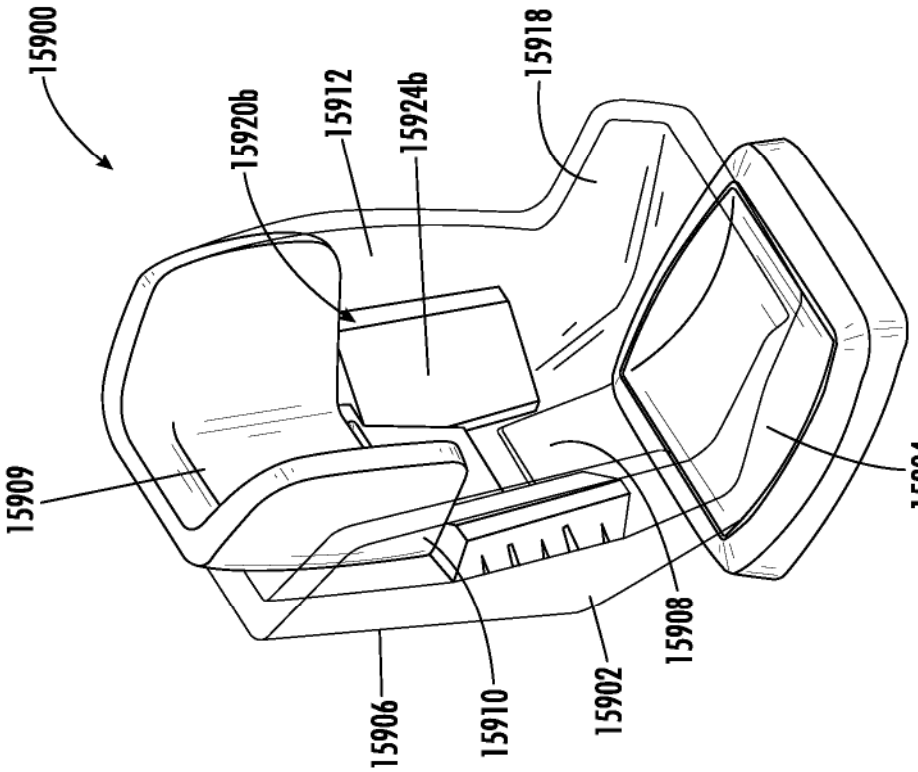

FIG. 216B

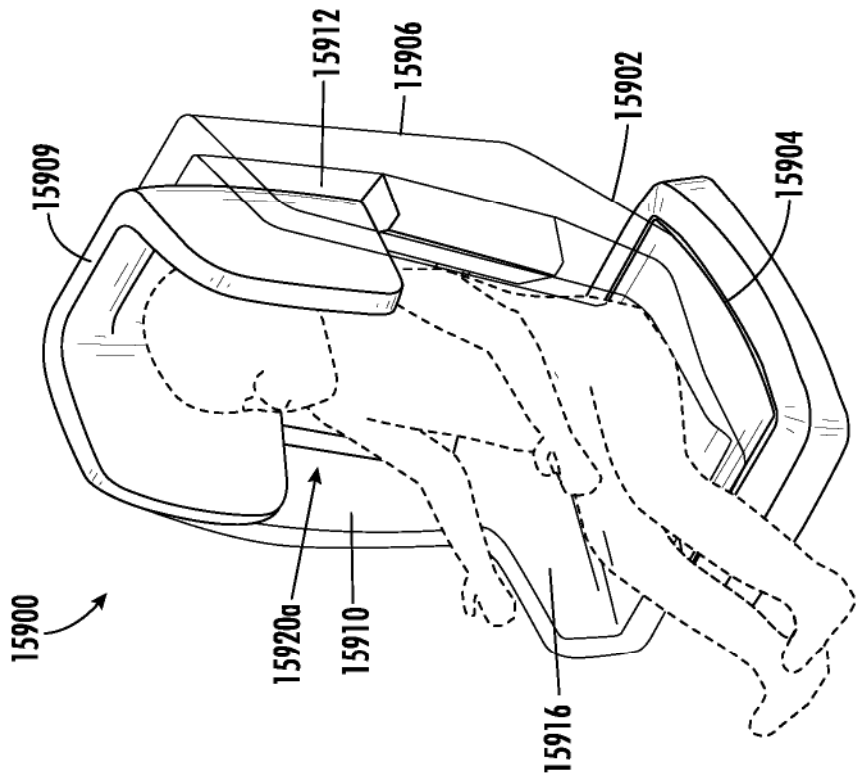

FIG. 216A

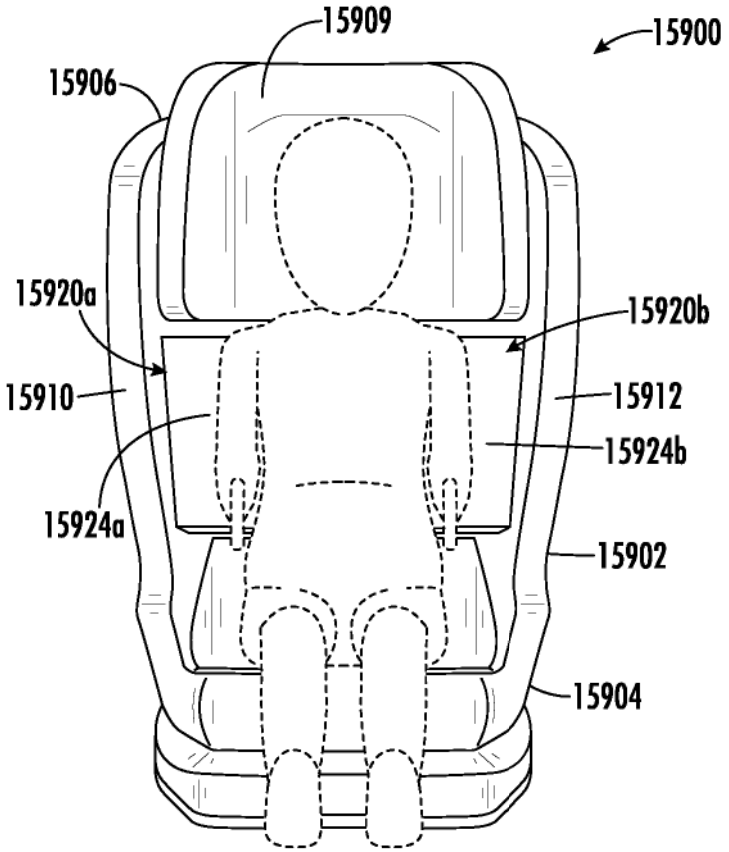

FIG. 216C

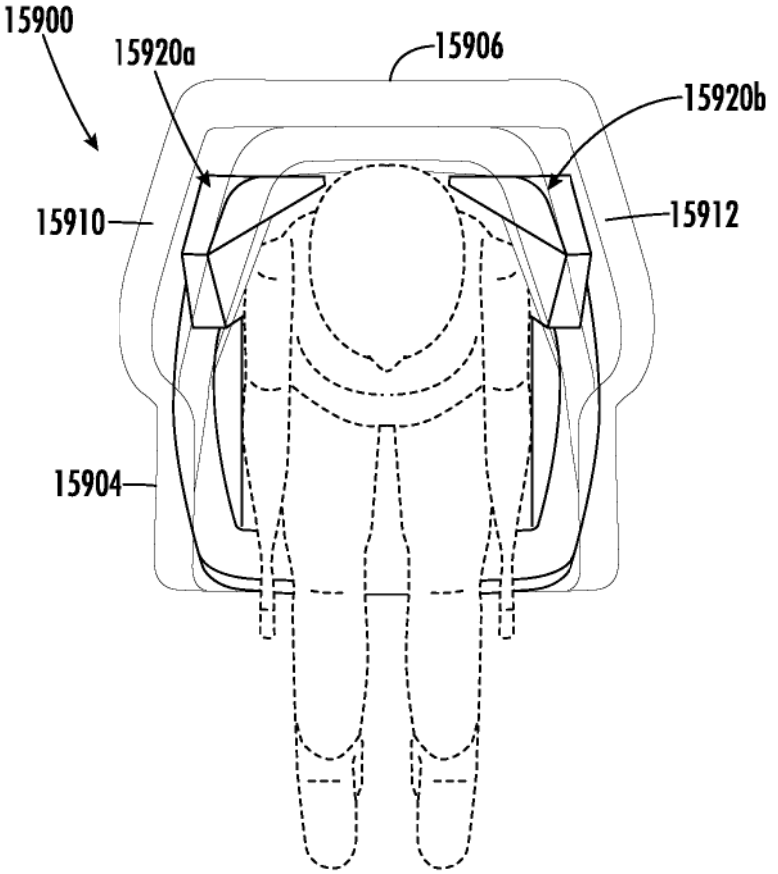

FIG. 216D

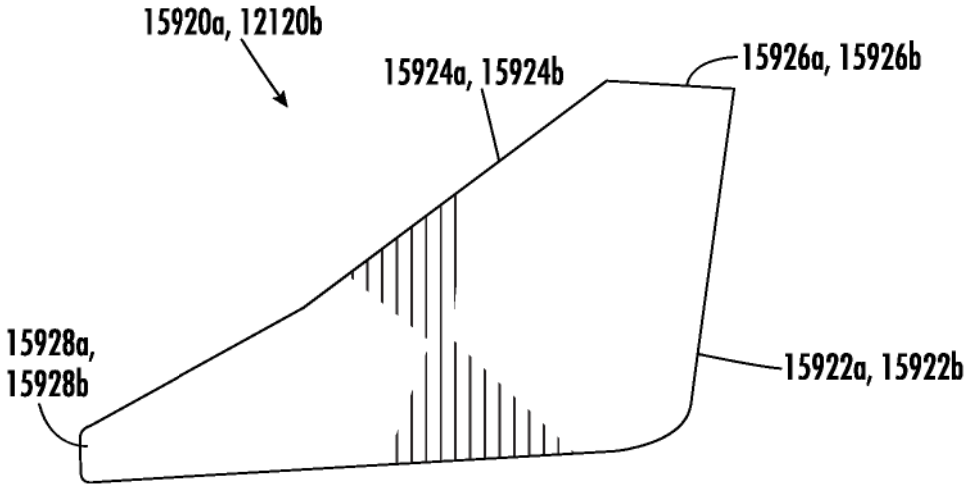

FIG. 217A

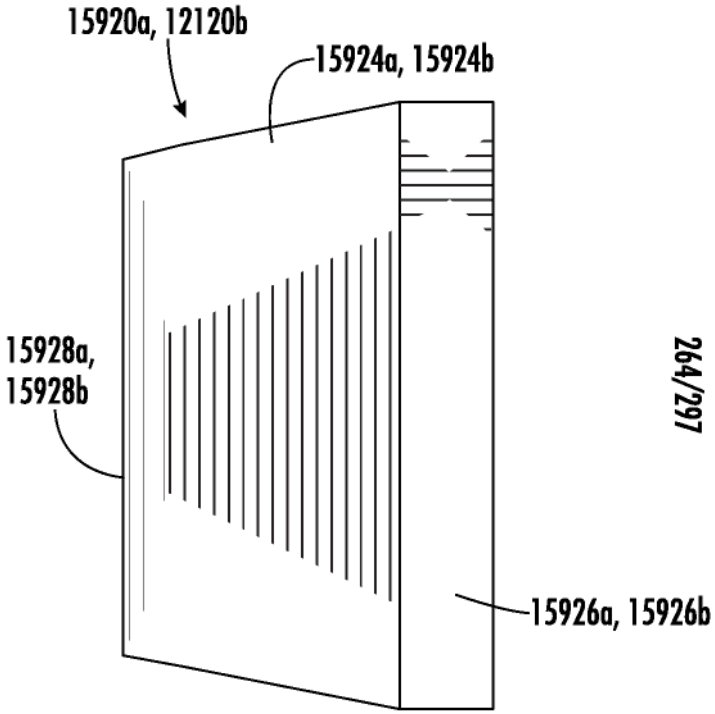

FIG. 217B

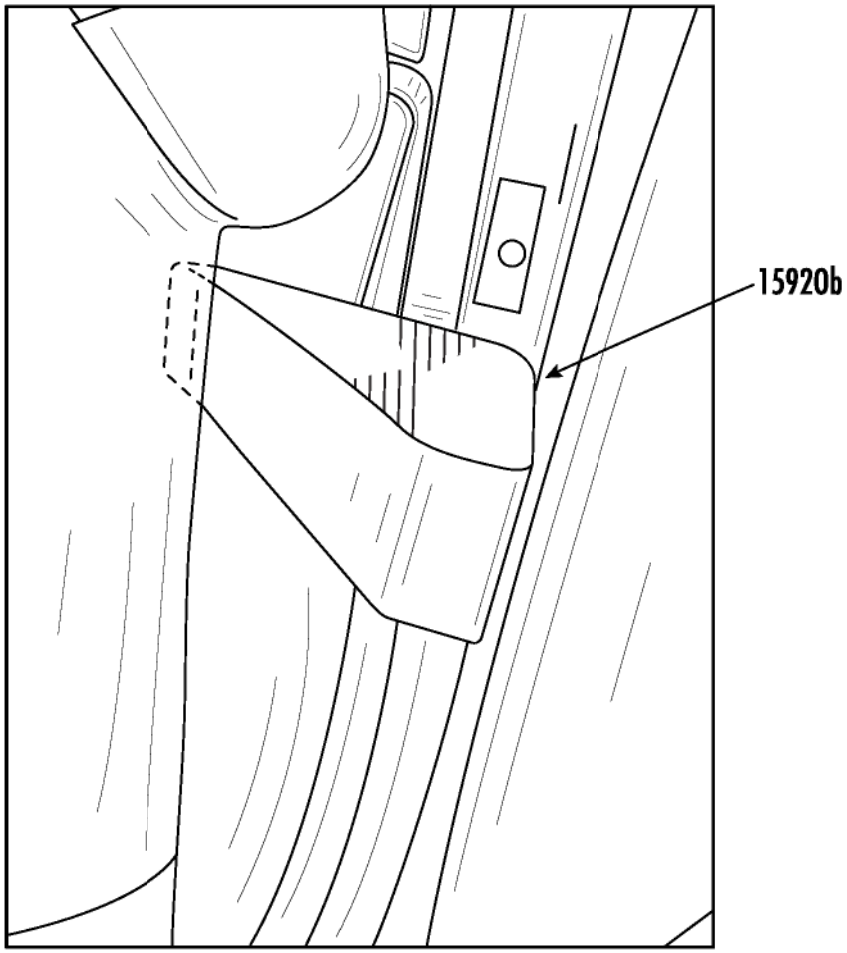

FIG. 218A

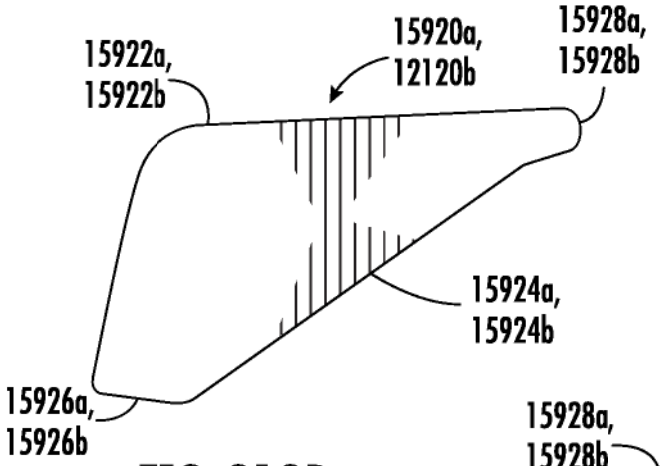

FIG. 218B

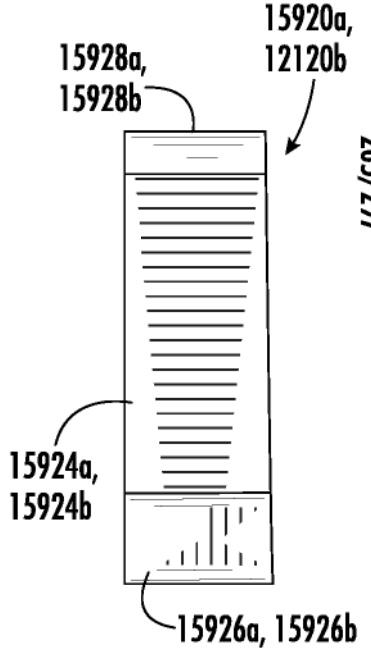

FIG. 218C

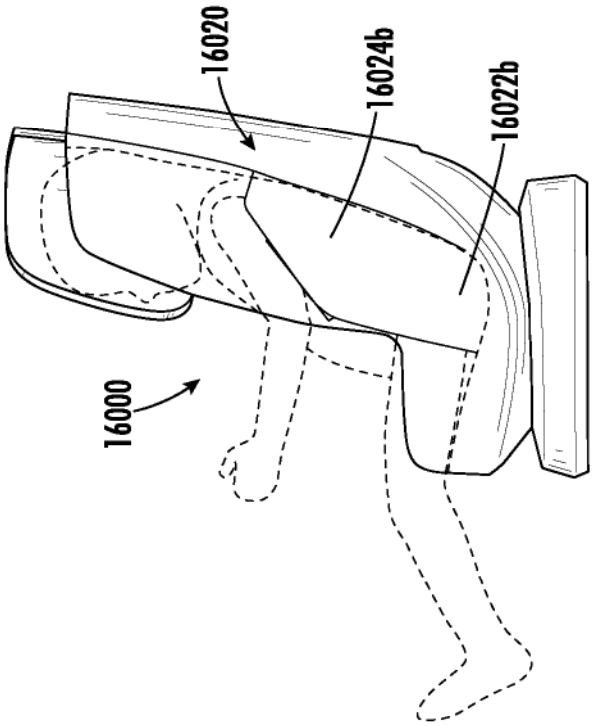

FIG. 219B

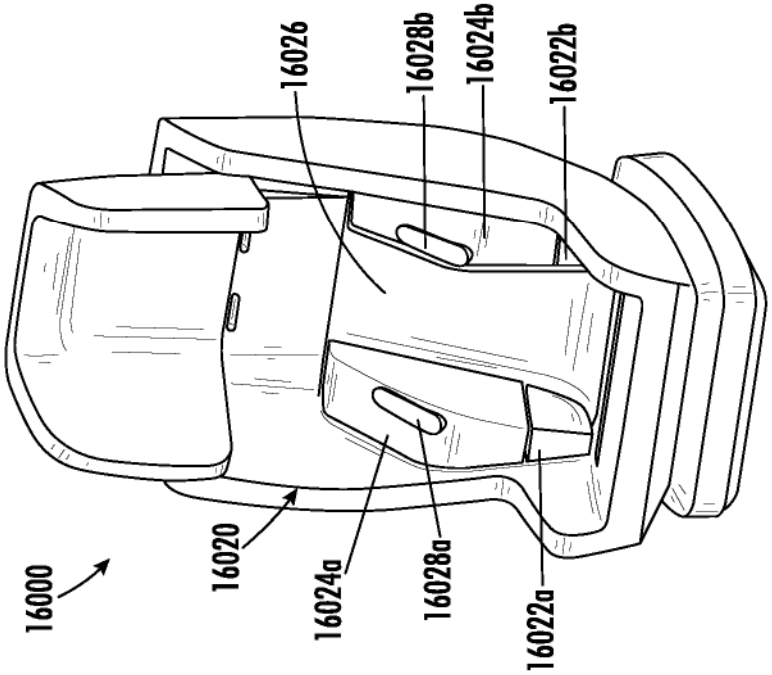

FIG. 219A

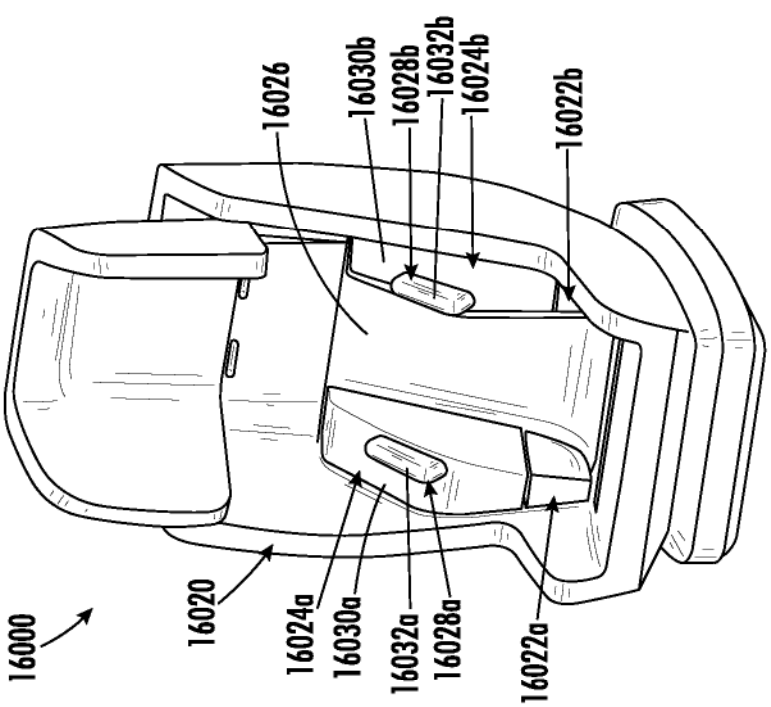

FIG. 219C

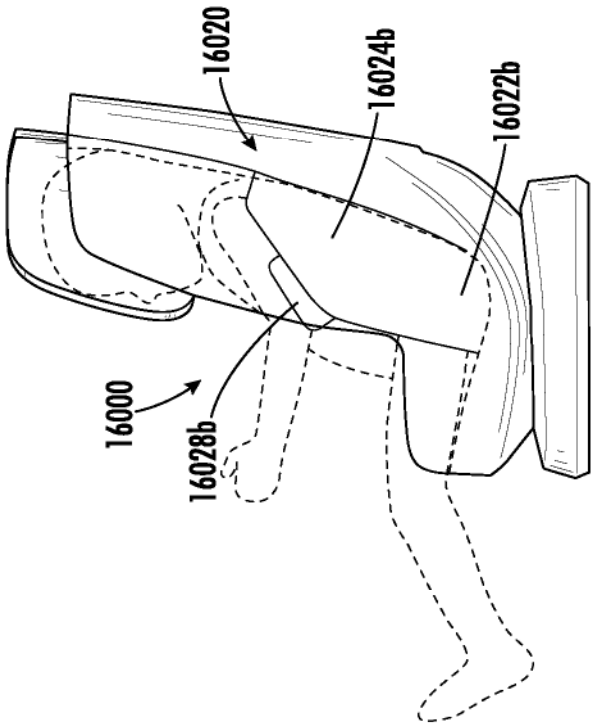

FIG. 219D

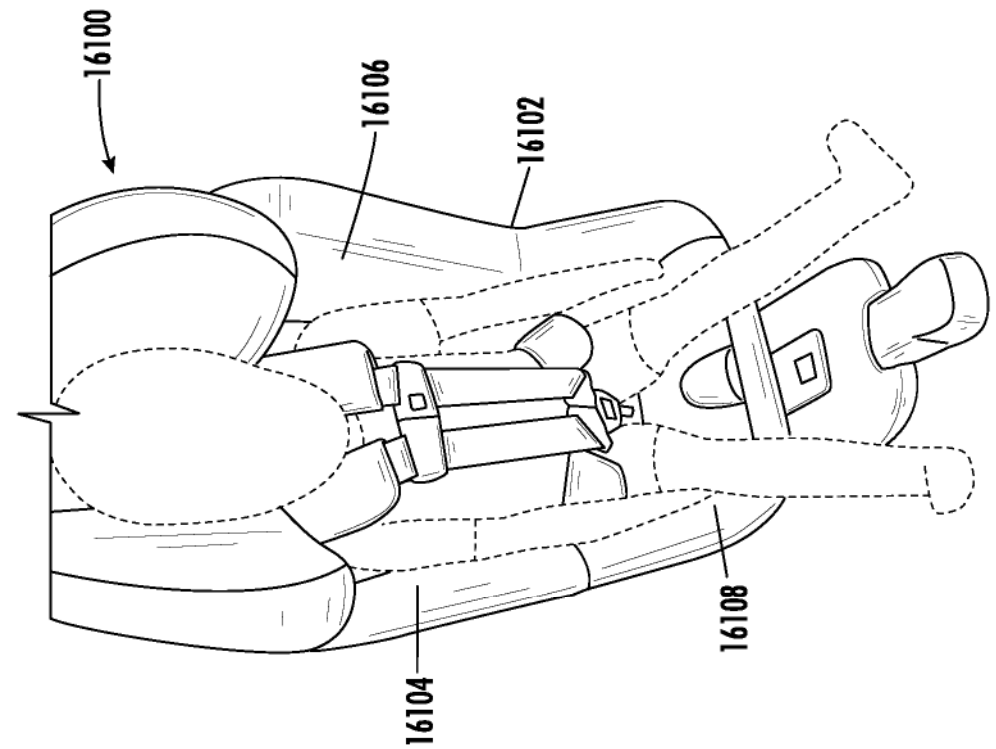

FIG. 220B

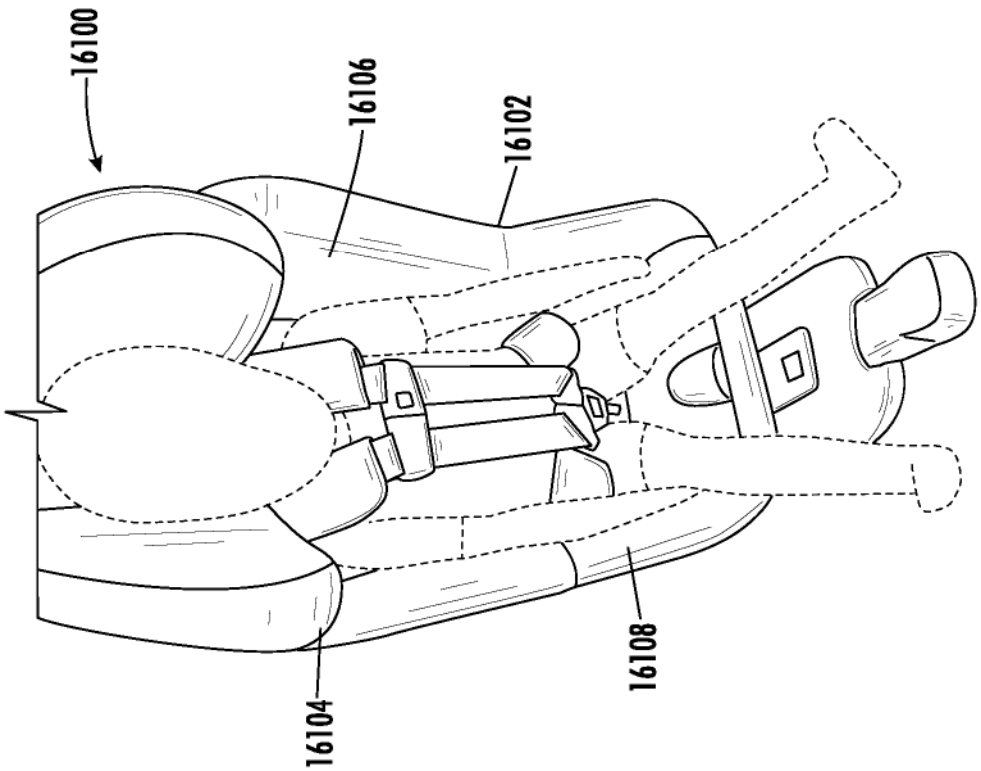

FIG. 220A

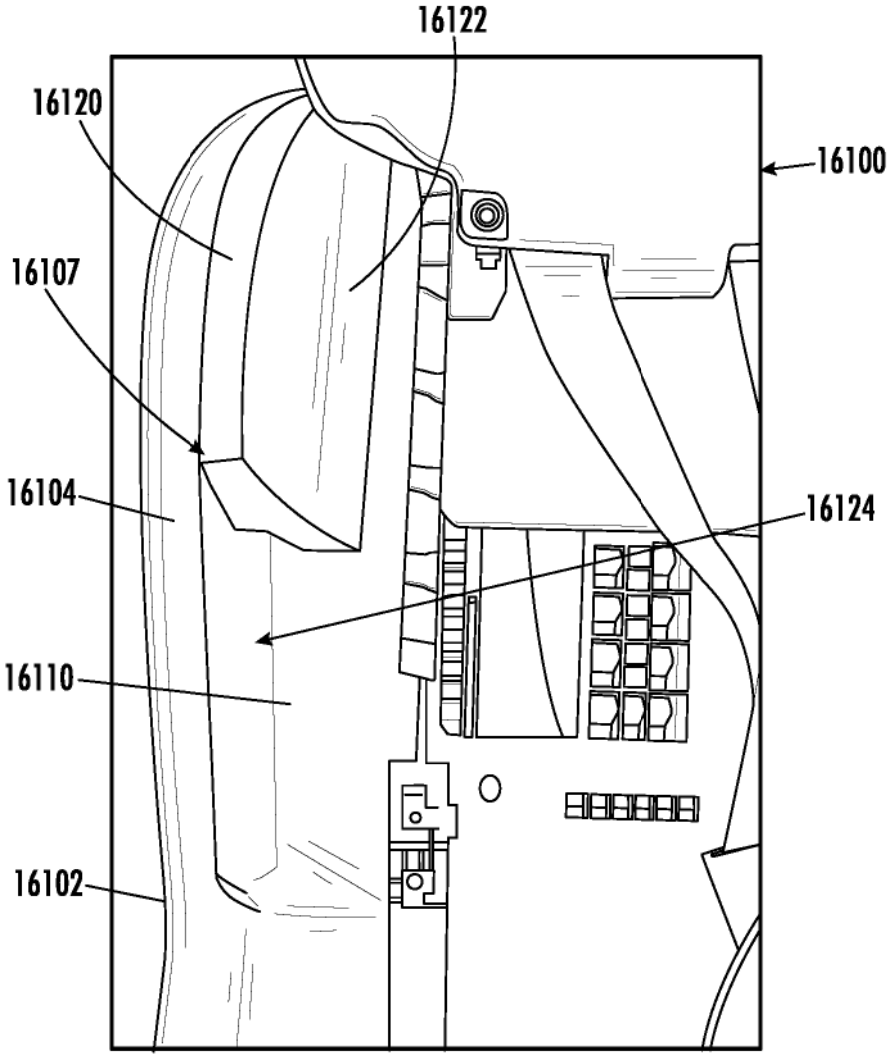

FIG. 221A

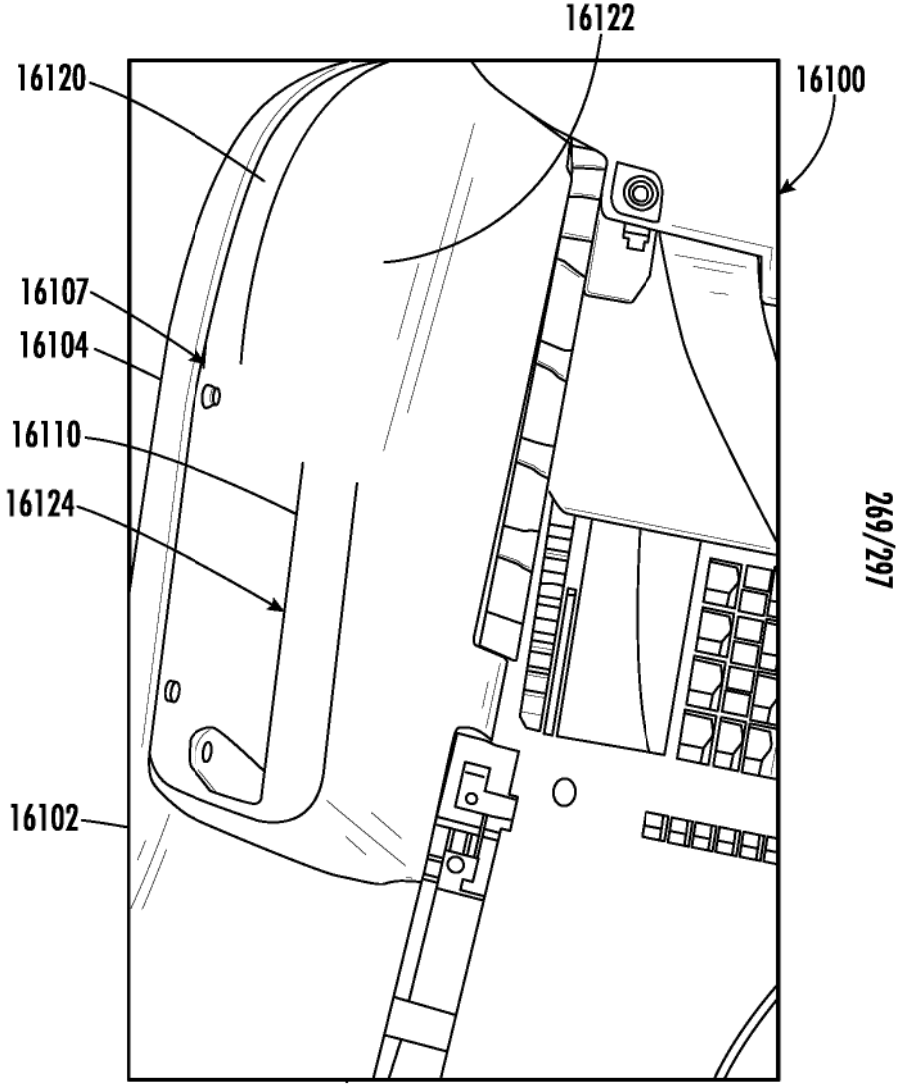

FIG. 221B

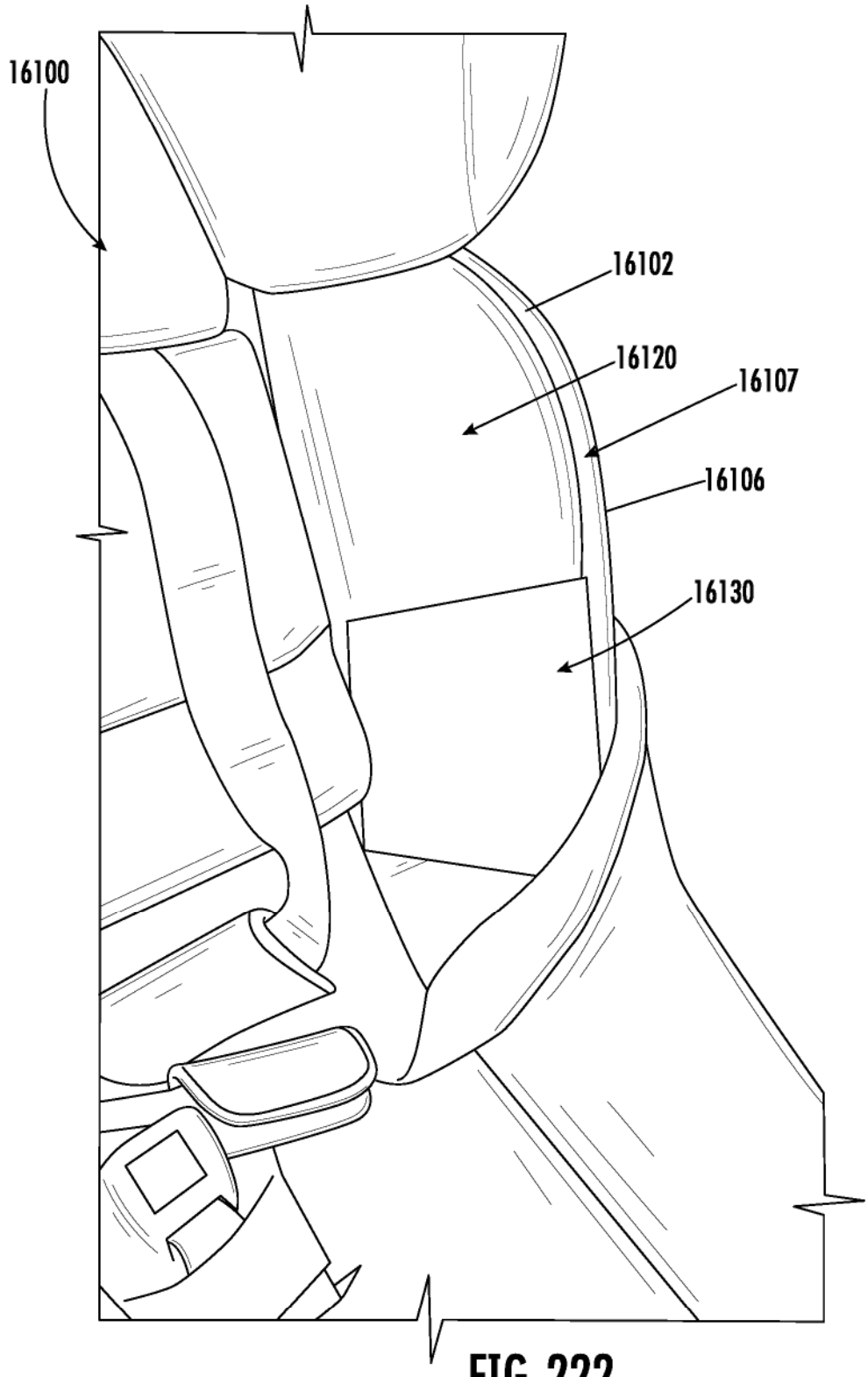

FIG. 222

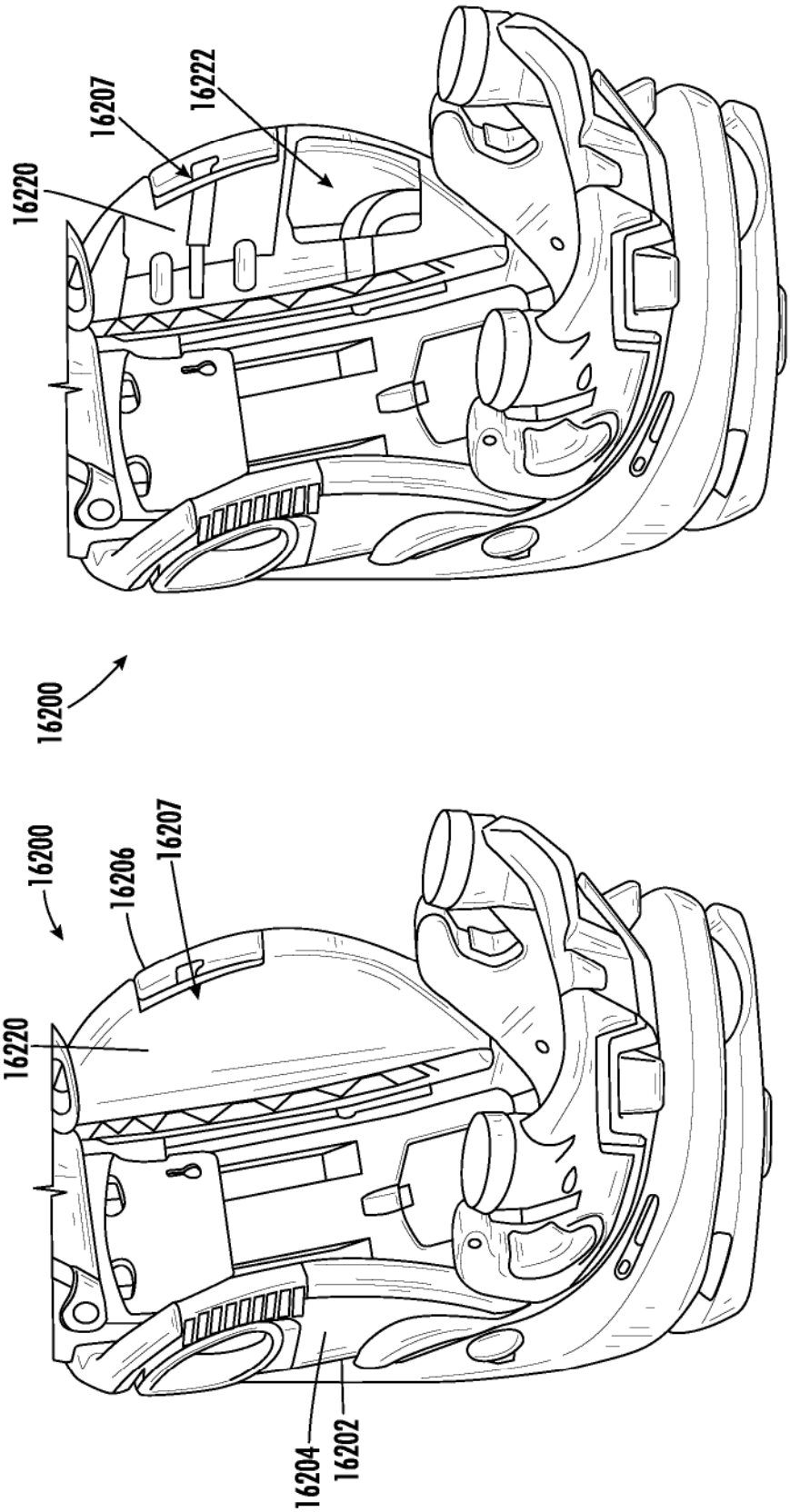

FIG. 223B

FIG. 223A

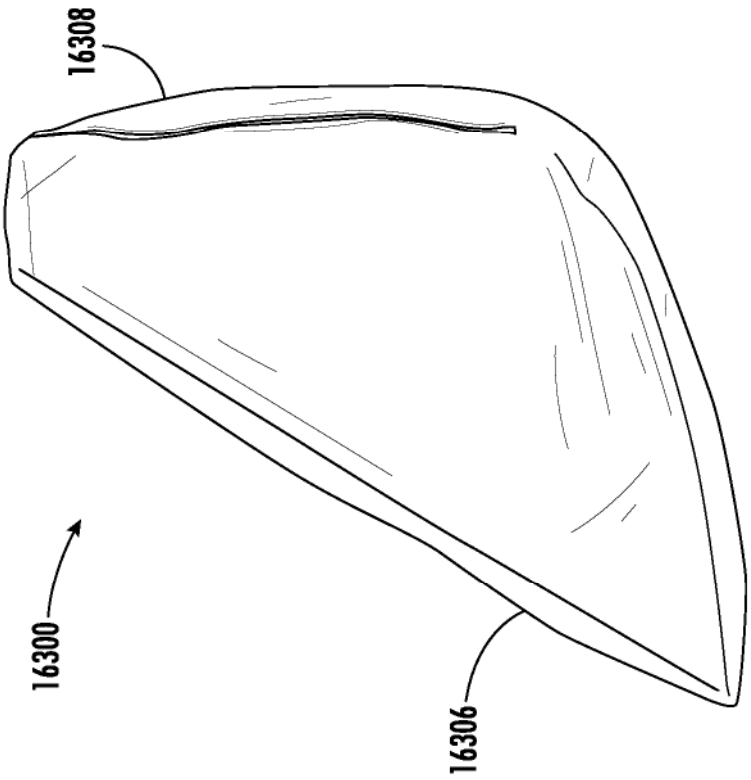

FIG. 224B

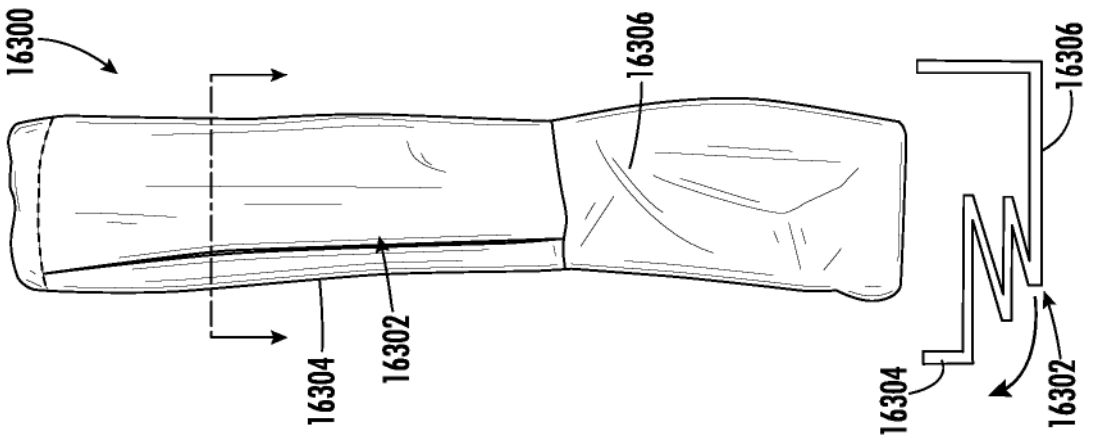

FIG. 224A

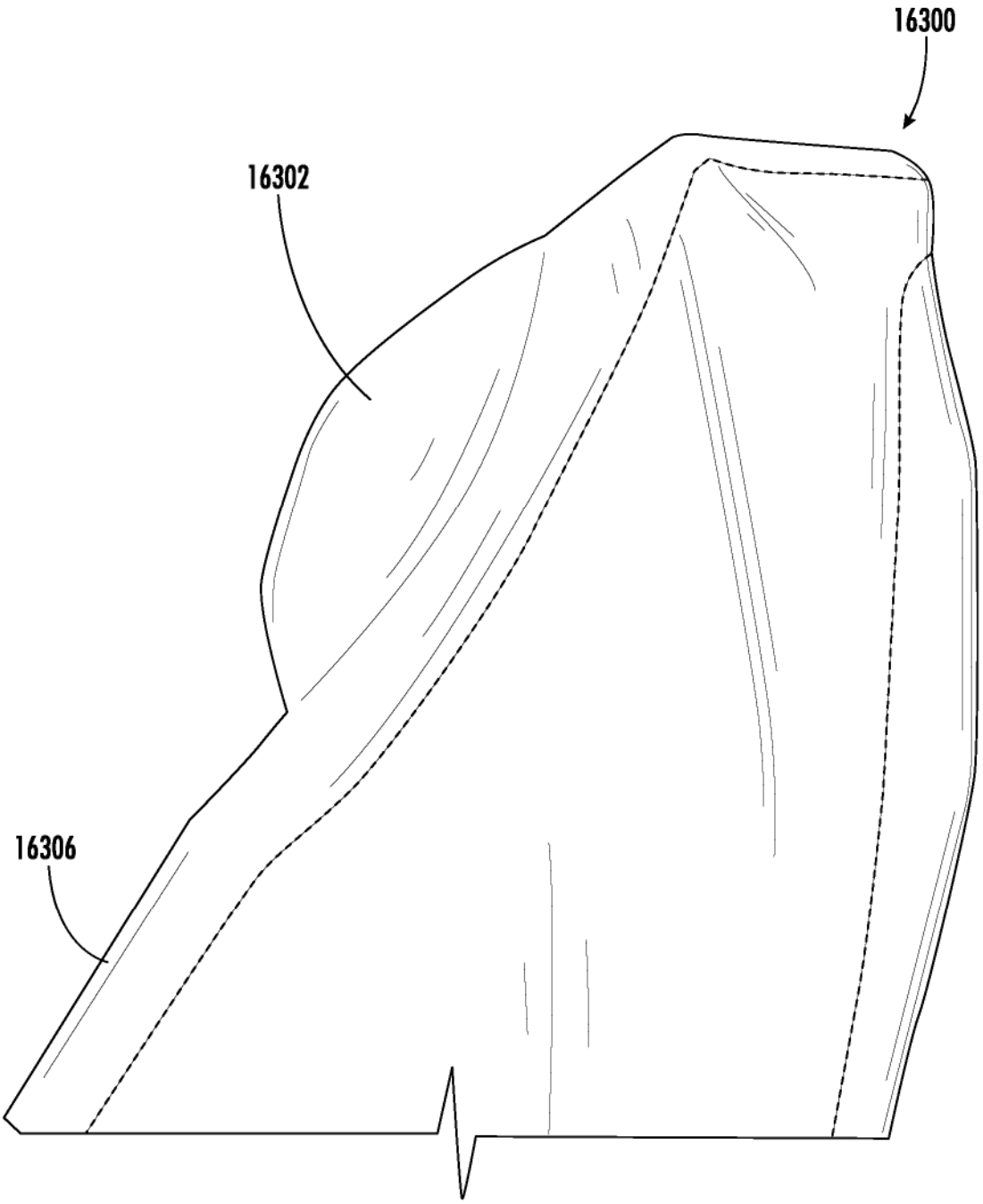

FIG. 225C

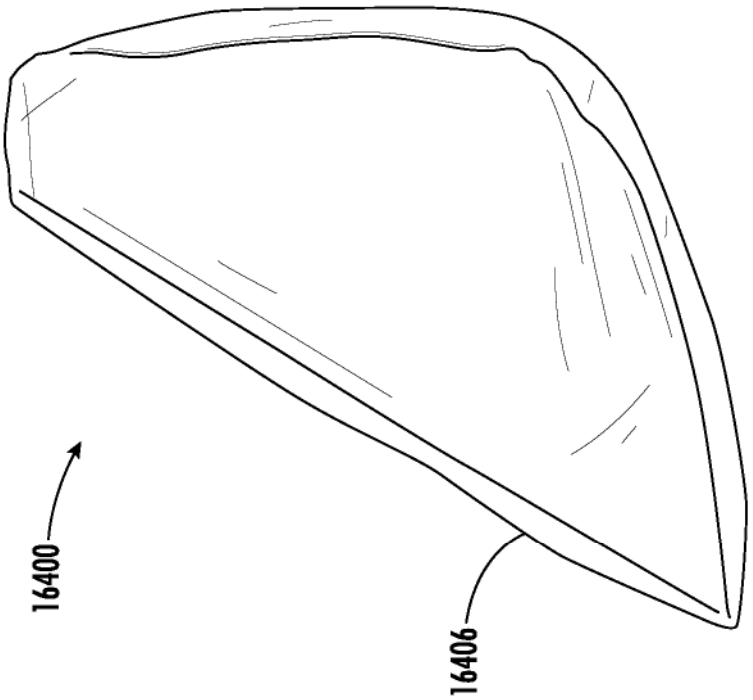

FIG. 225B

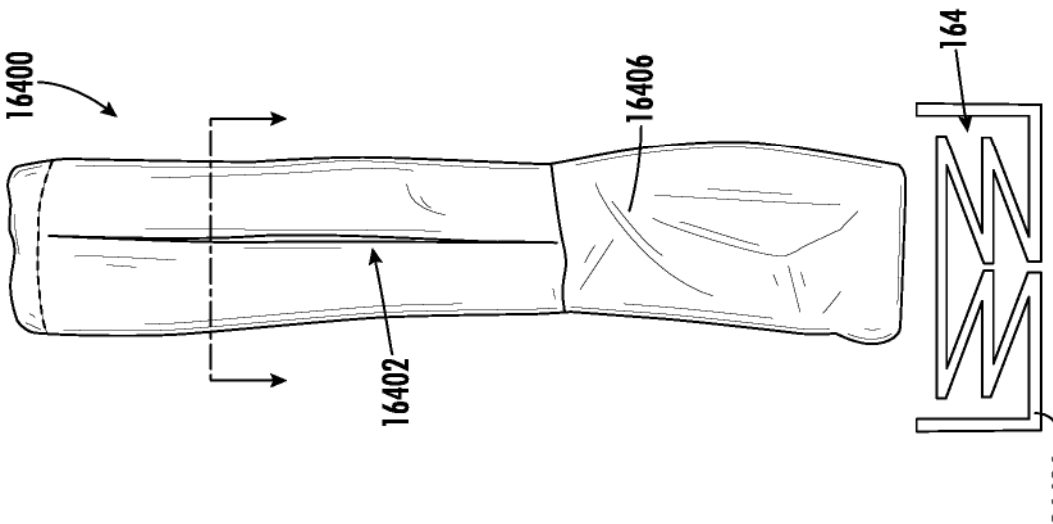

FIG. 225A

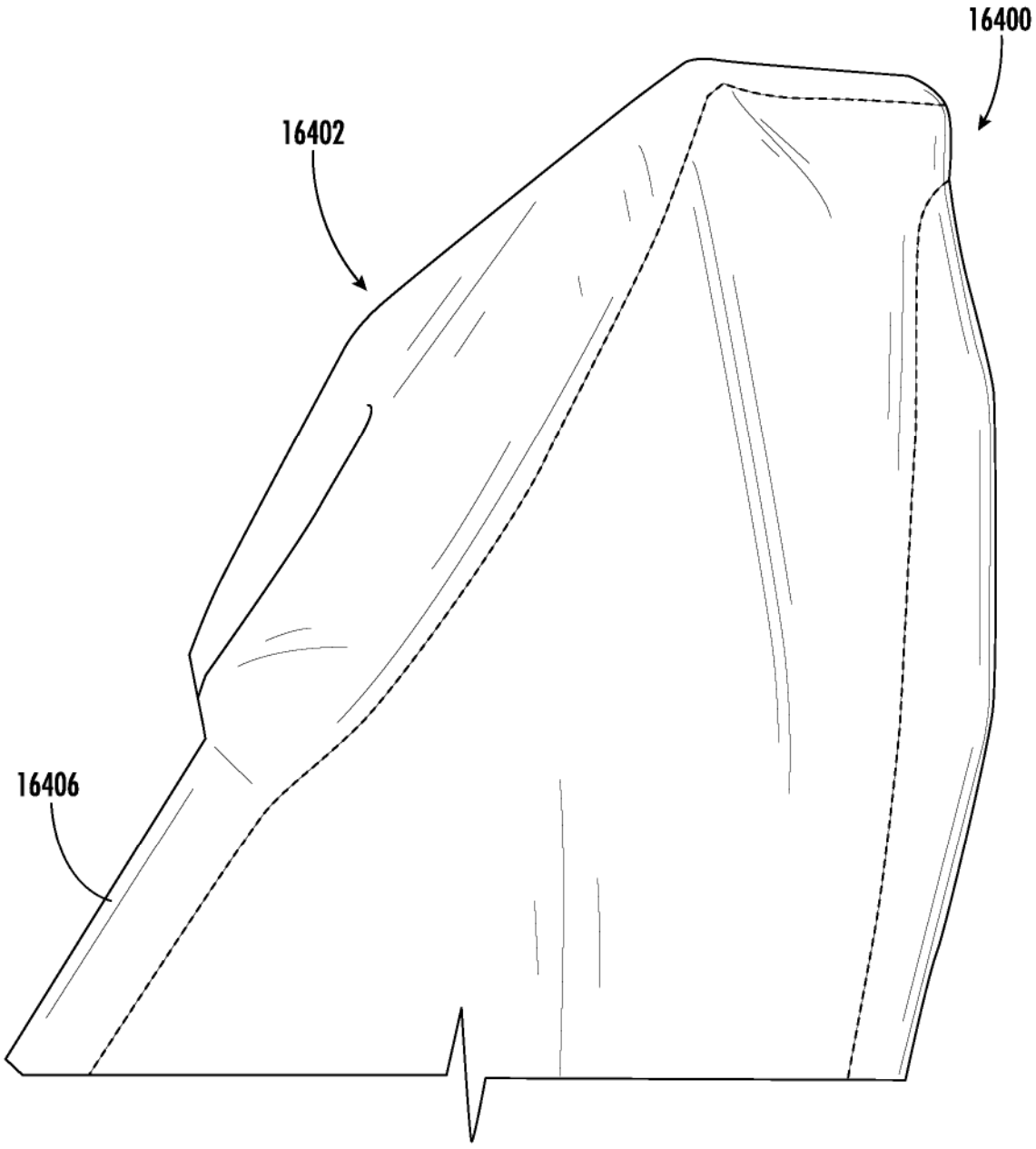

FIG. 225C

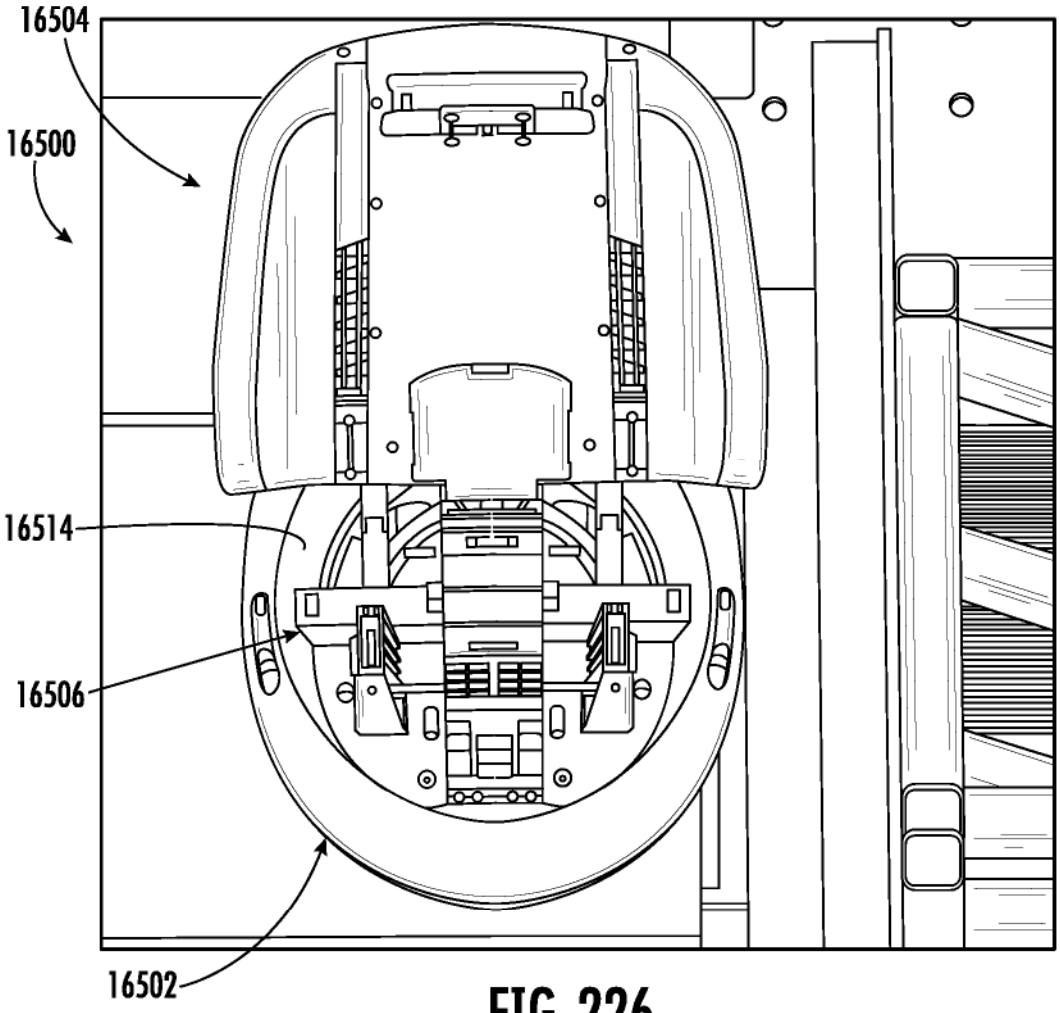

FIG. 226

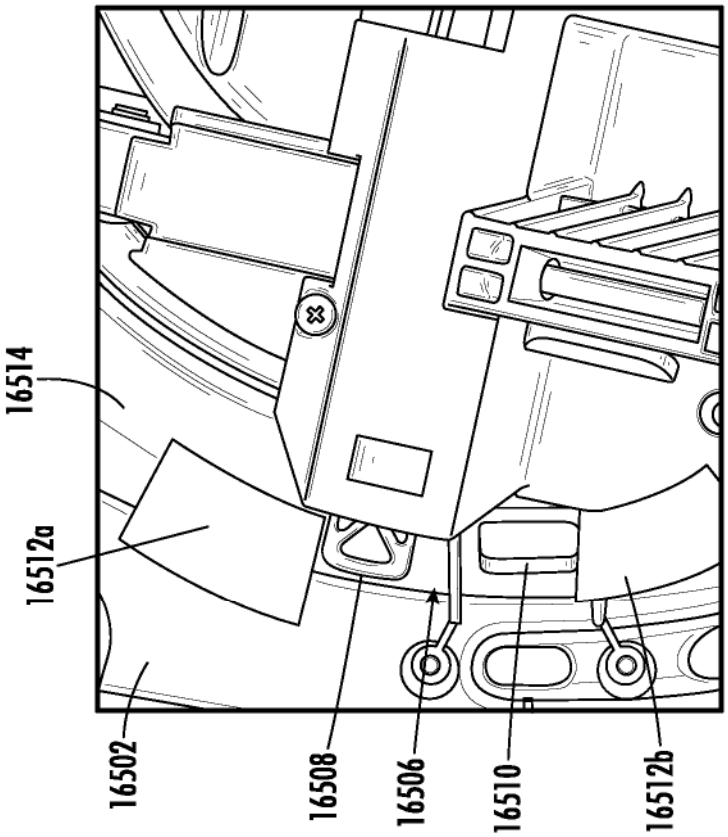

FIG. 227B

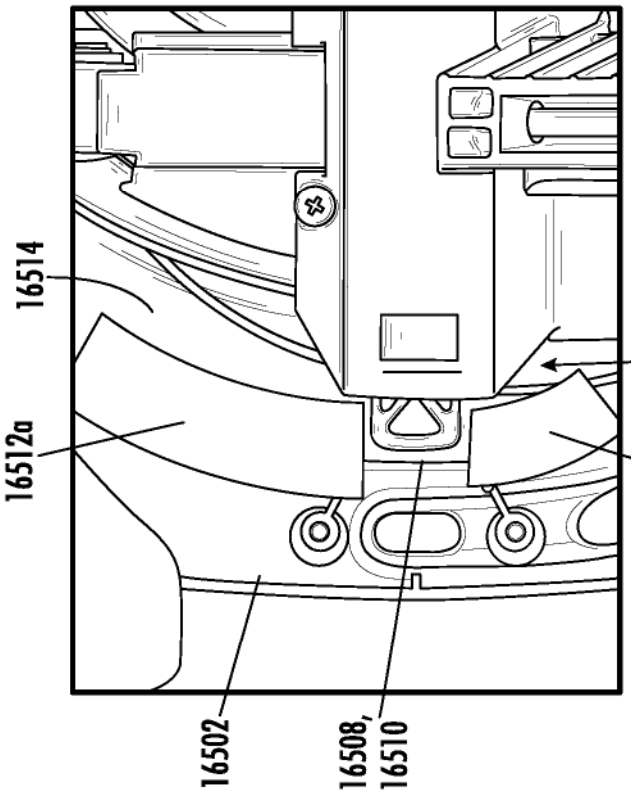

FIG. 227A

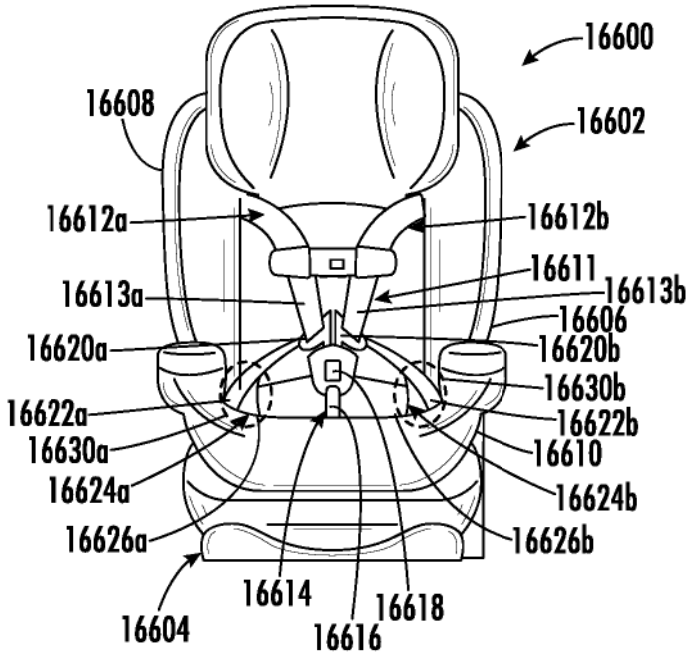

FIG. 228A

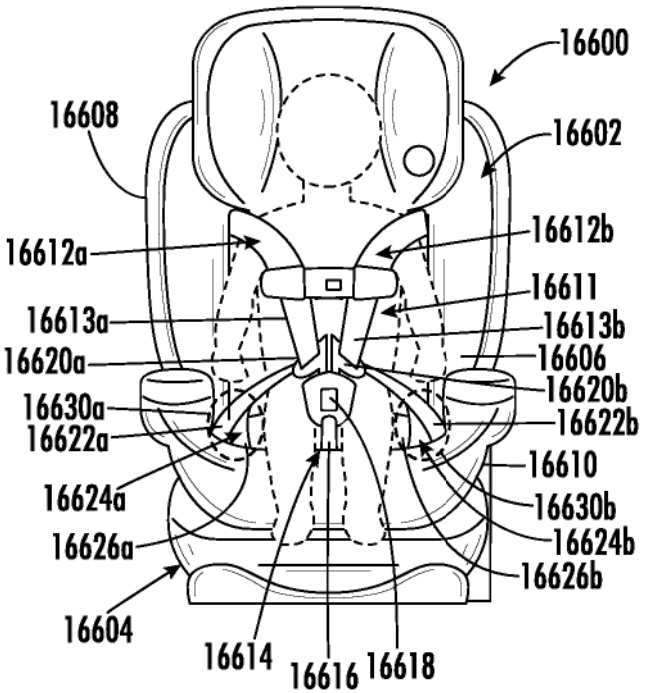

FIG. 228B

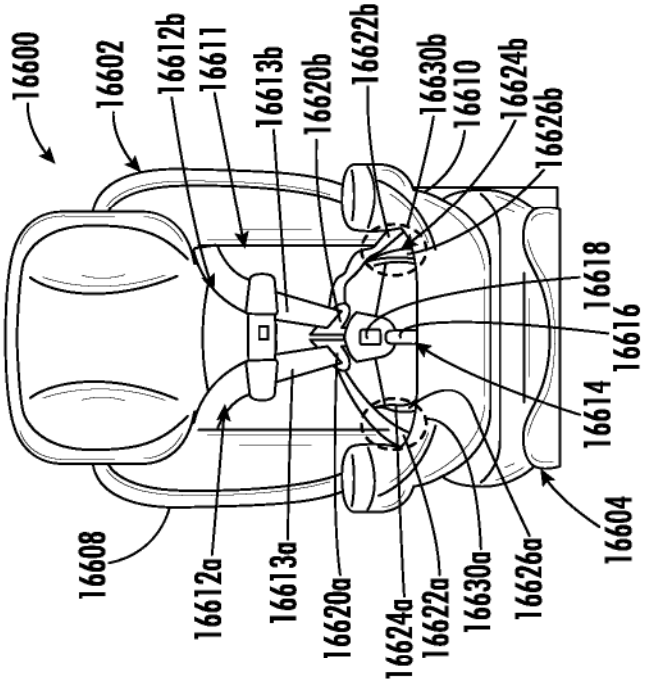

FIG. 229A

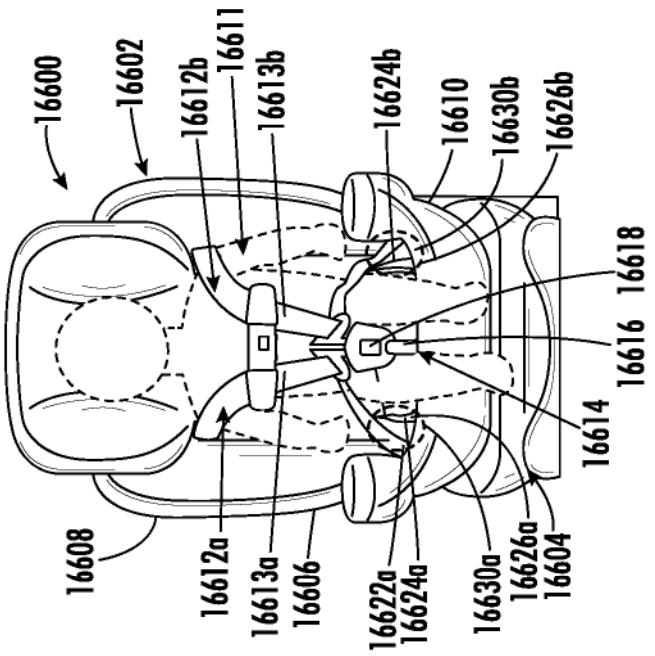

FIG. 229B

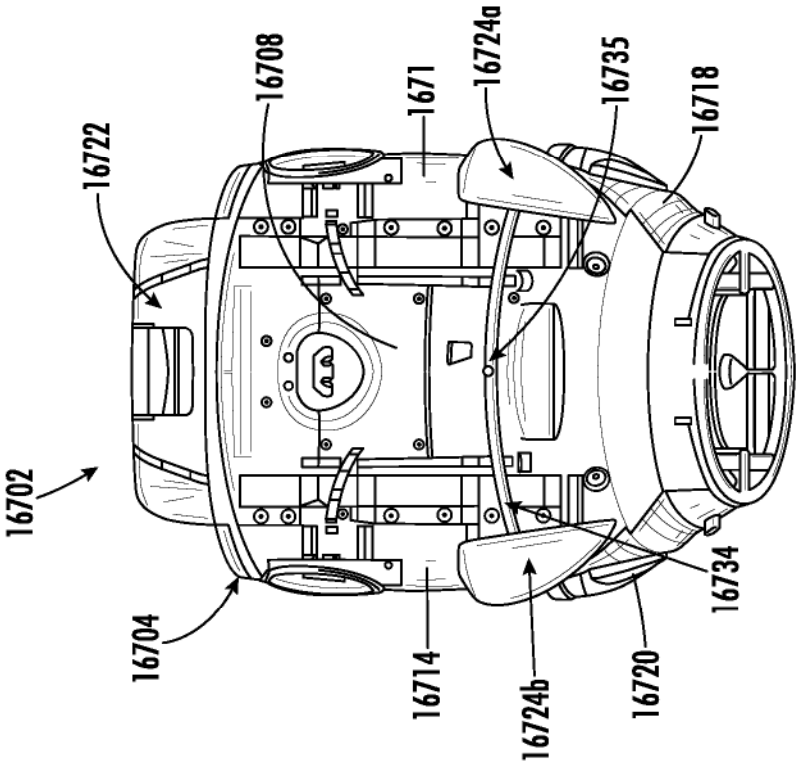

FIG. 230B

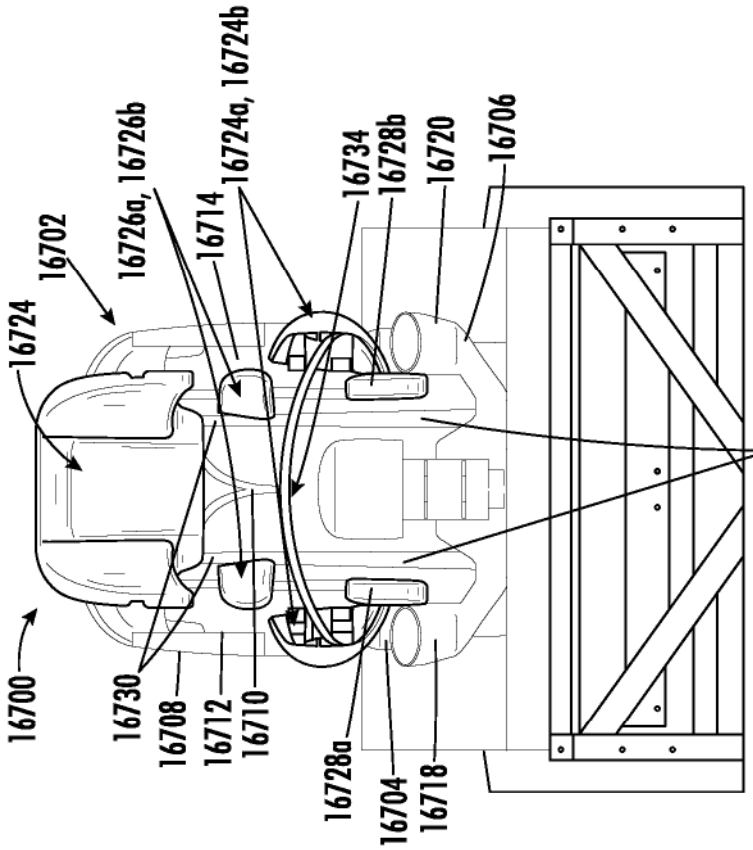

FIG. 230A

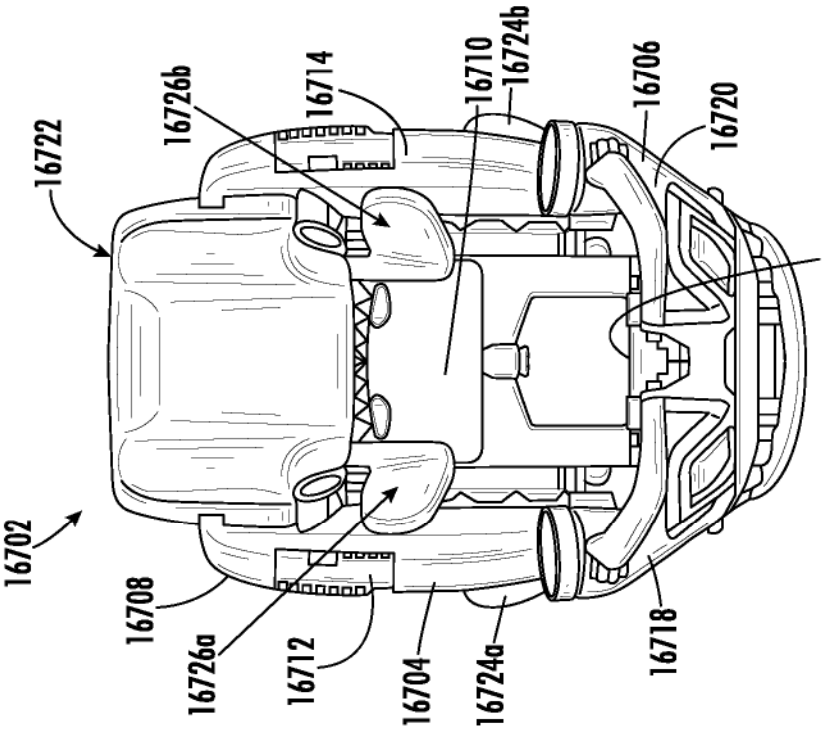

FIG. 230D

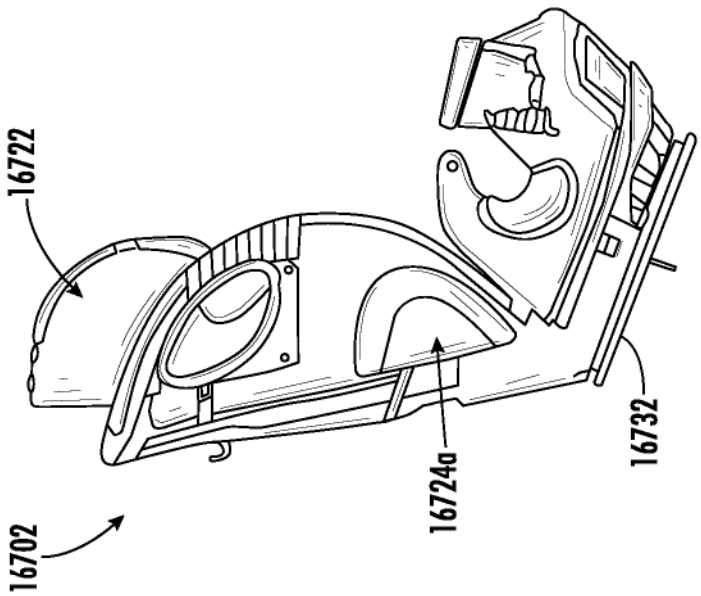

FIG. 230C

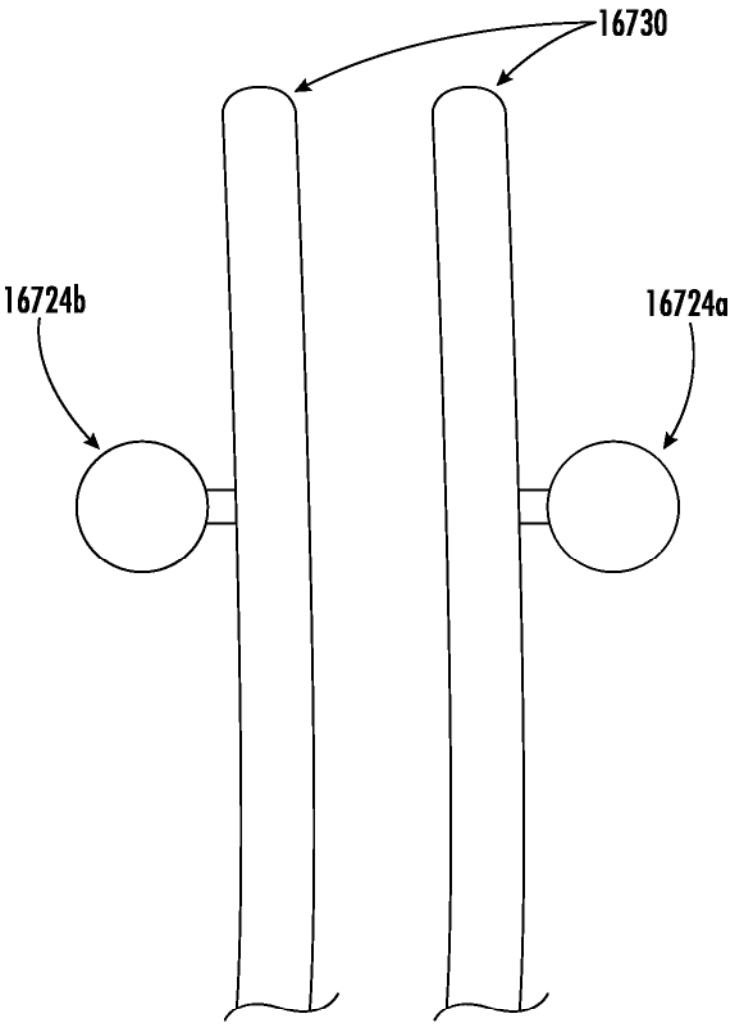

FIG. 231

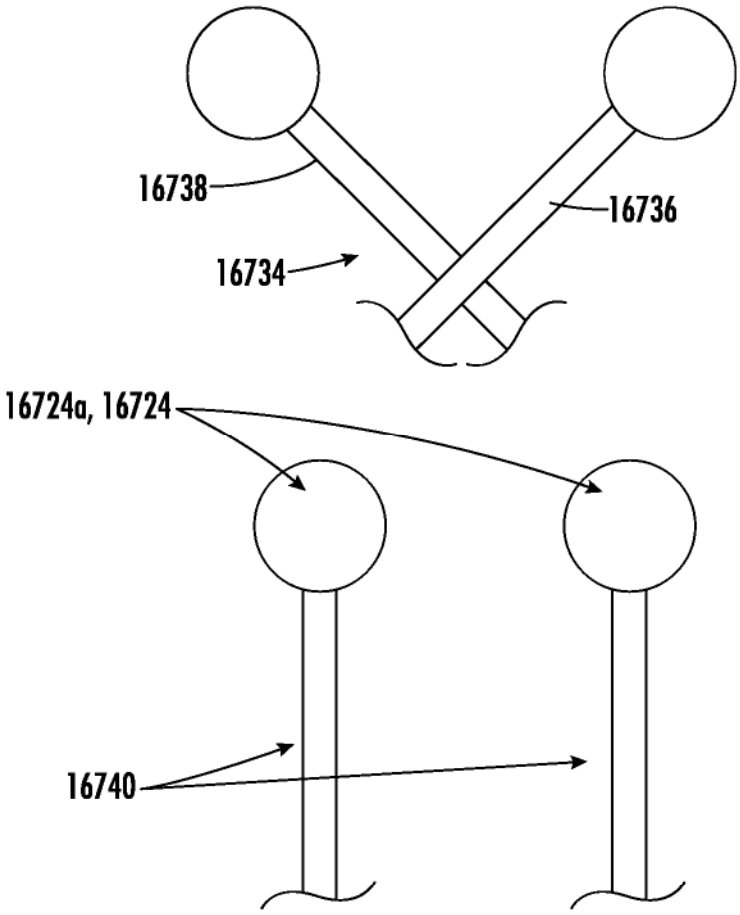

FIG. 232

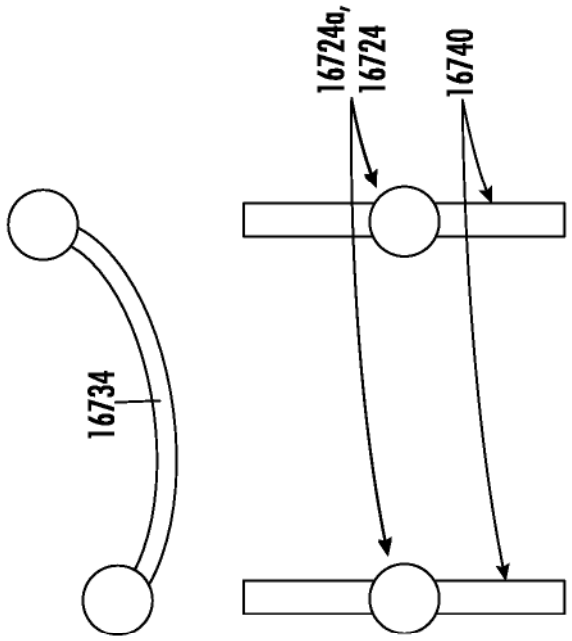

FIG. 233B

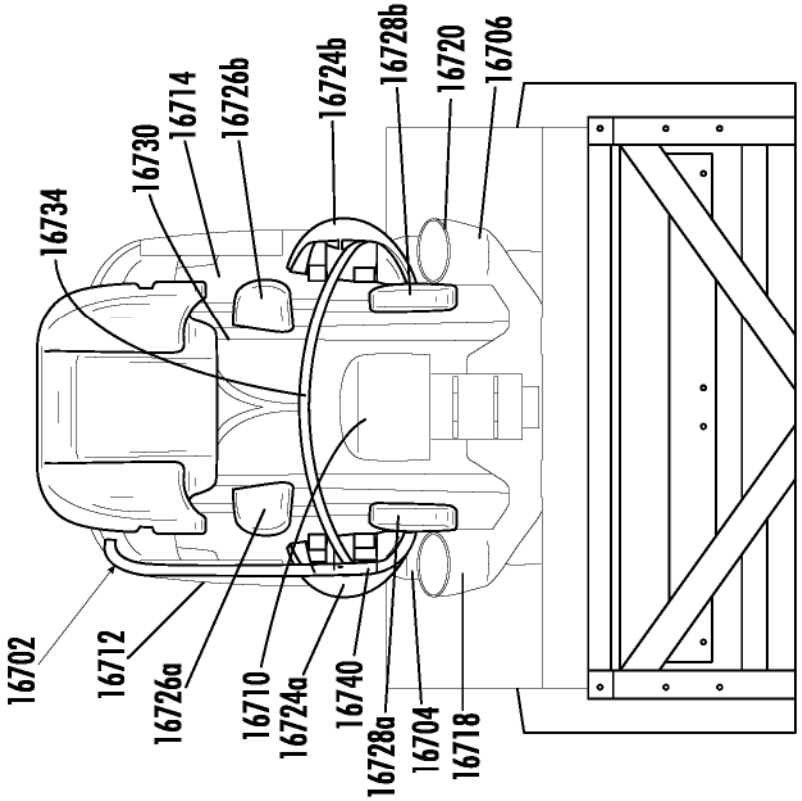

FIG. 233A

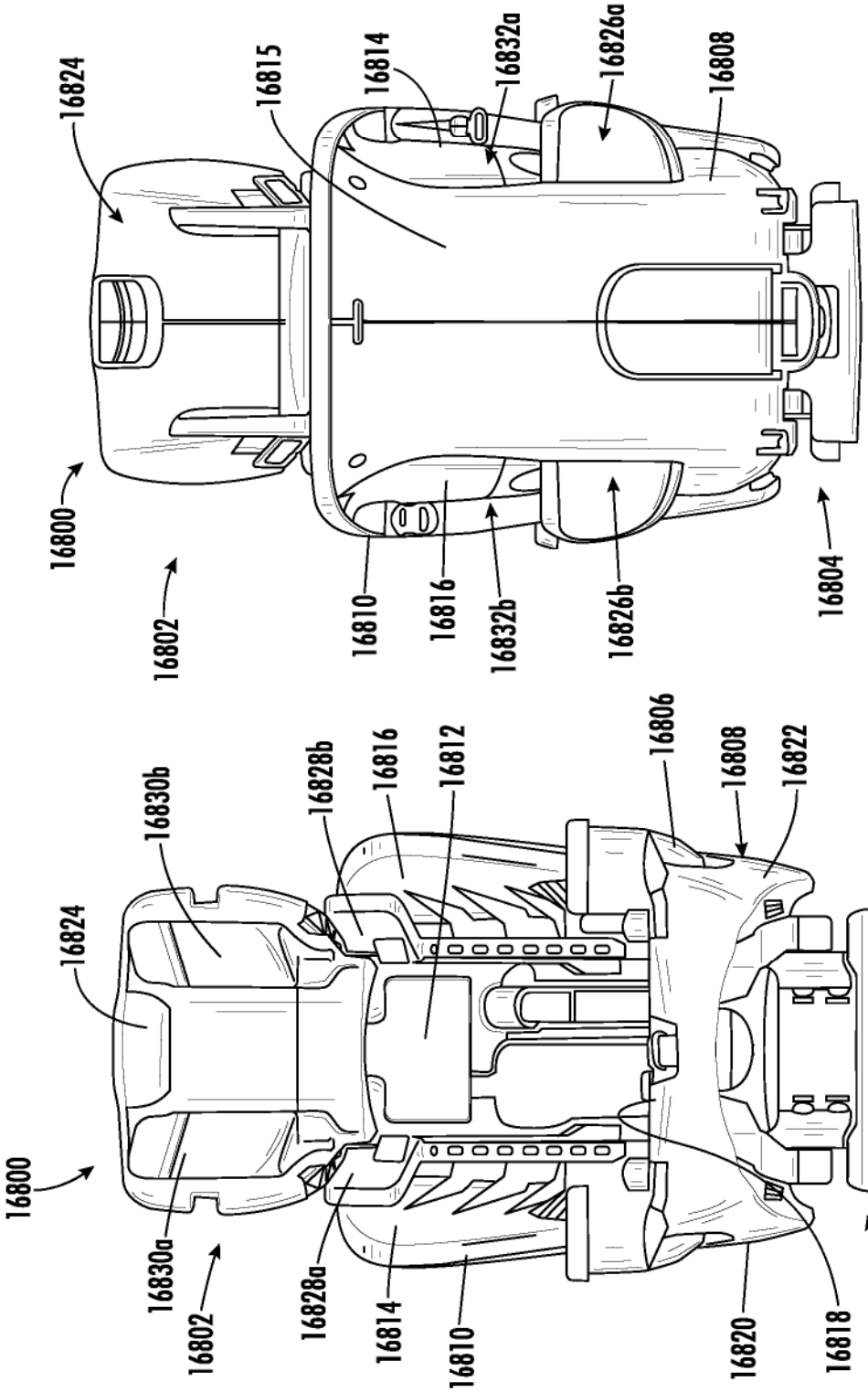

FIG. 234B

FIG. 234A

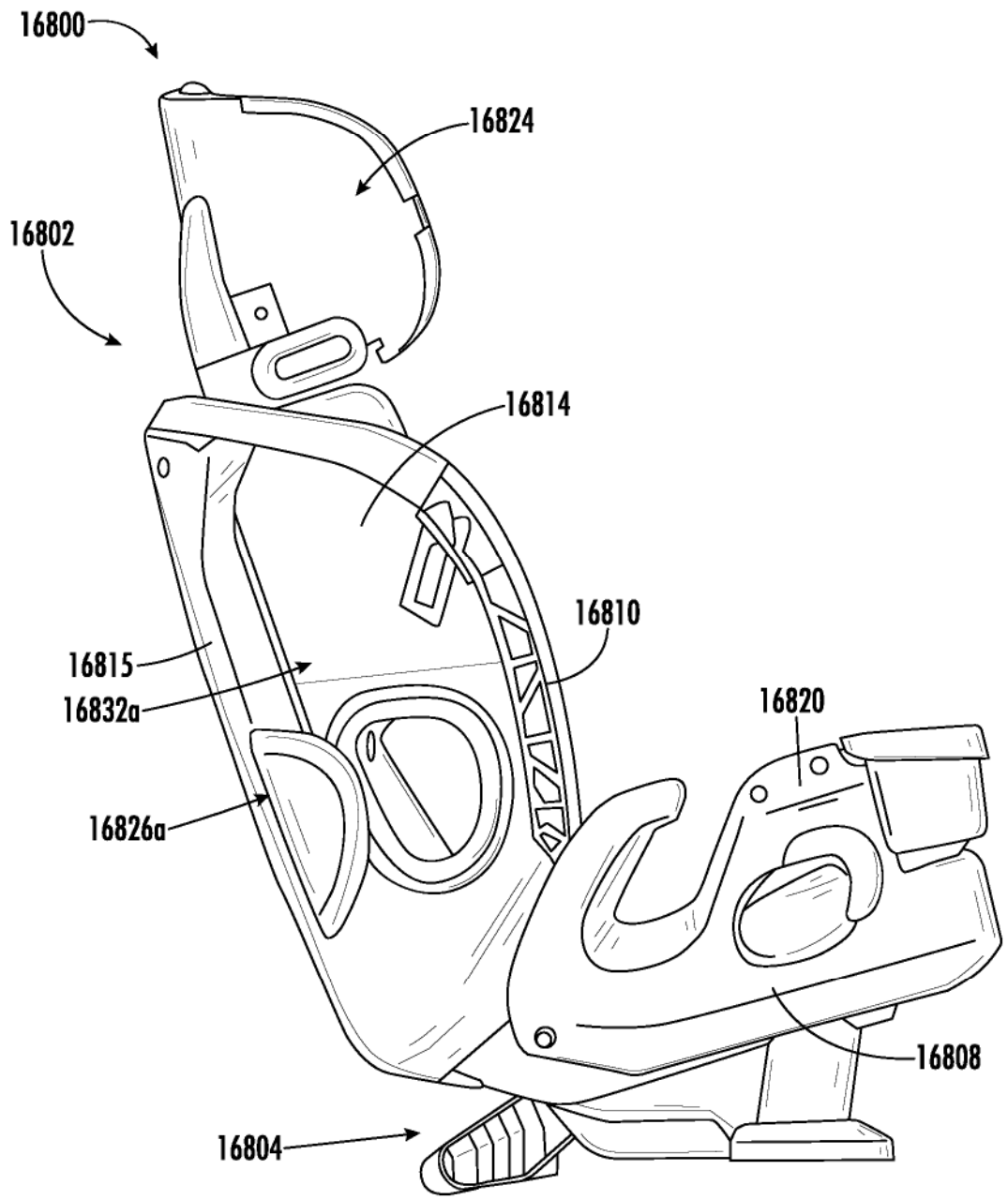
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FIG. 234C

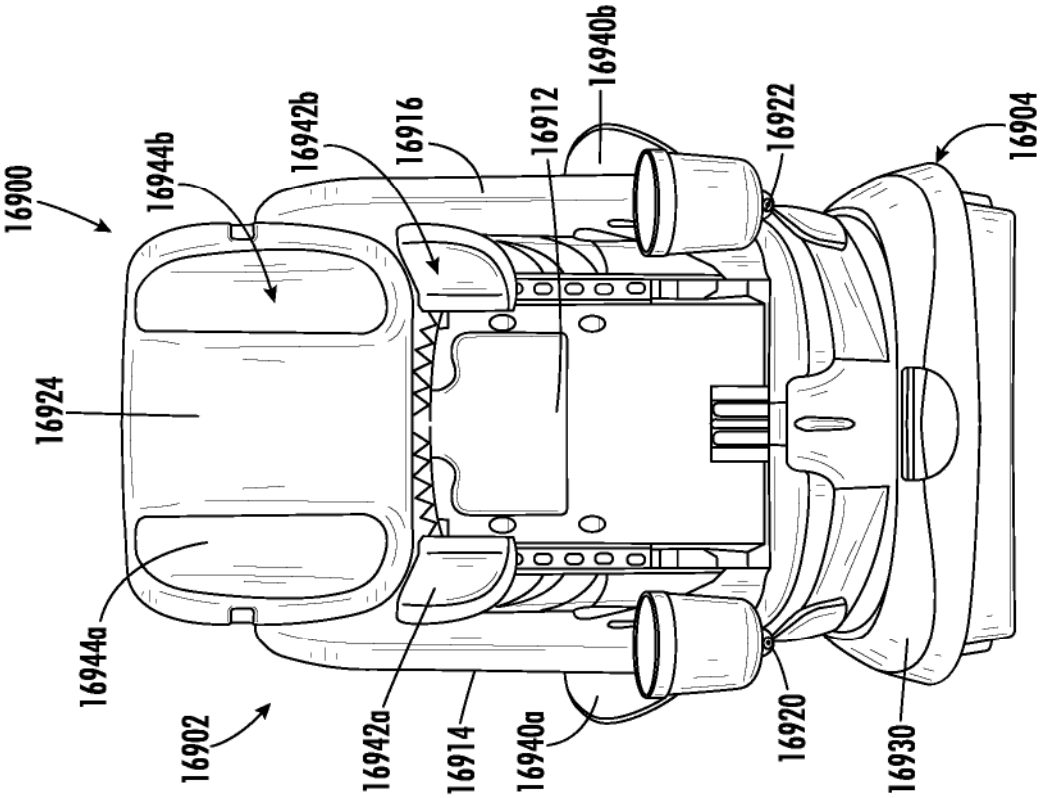


FIG. 235B

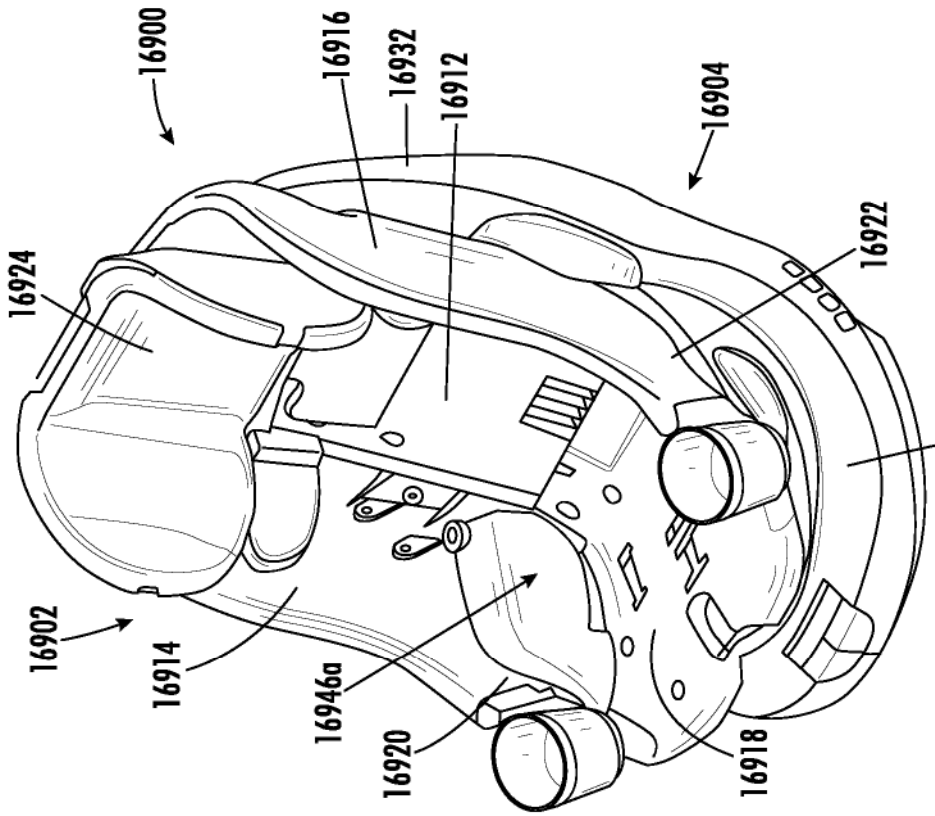
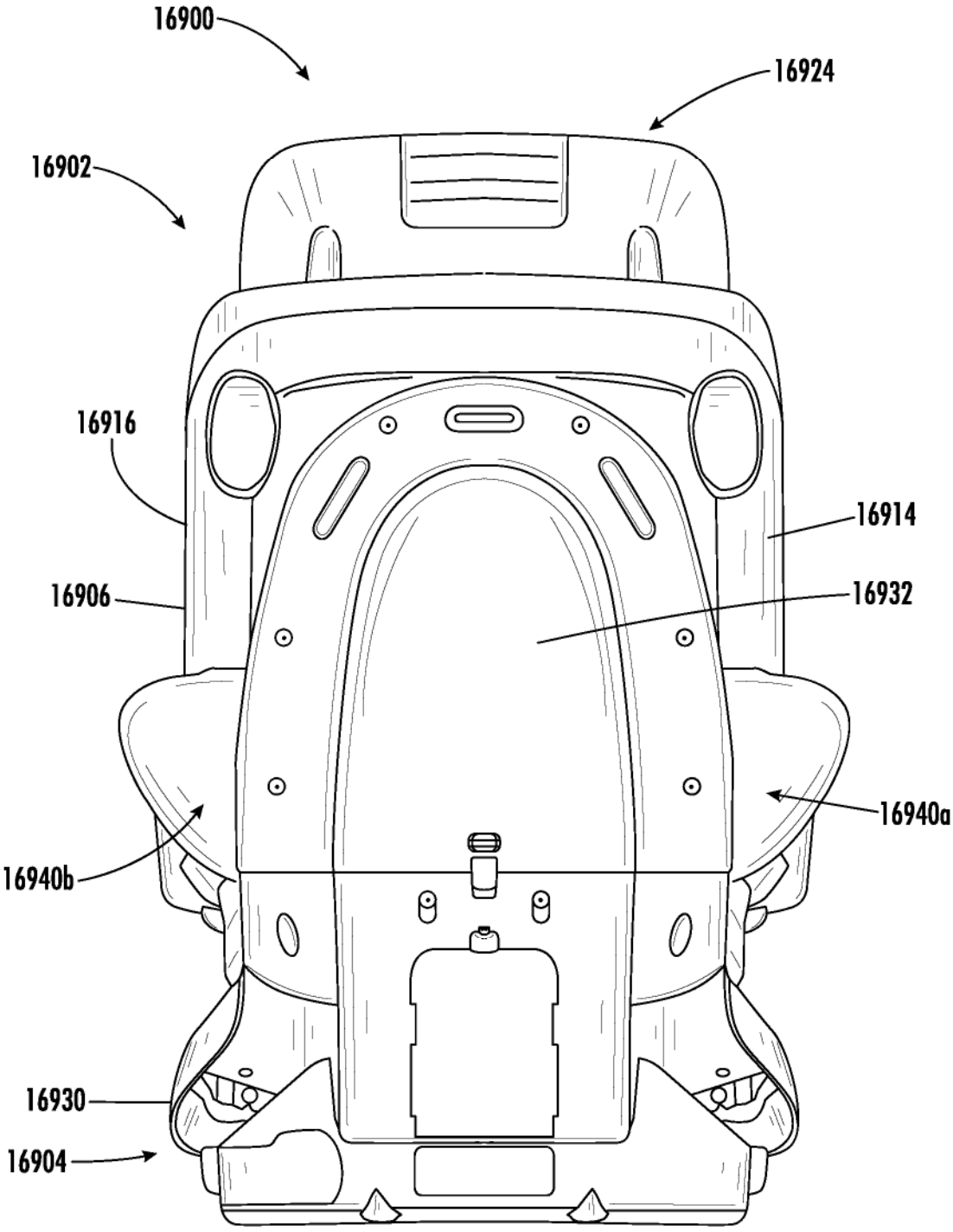


FIG. 235A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16940b
16930
16904

FIG. 235C

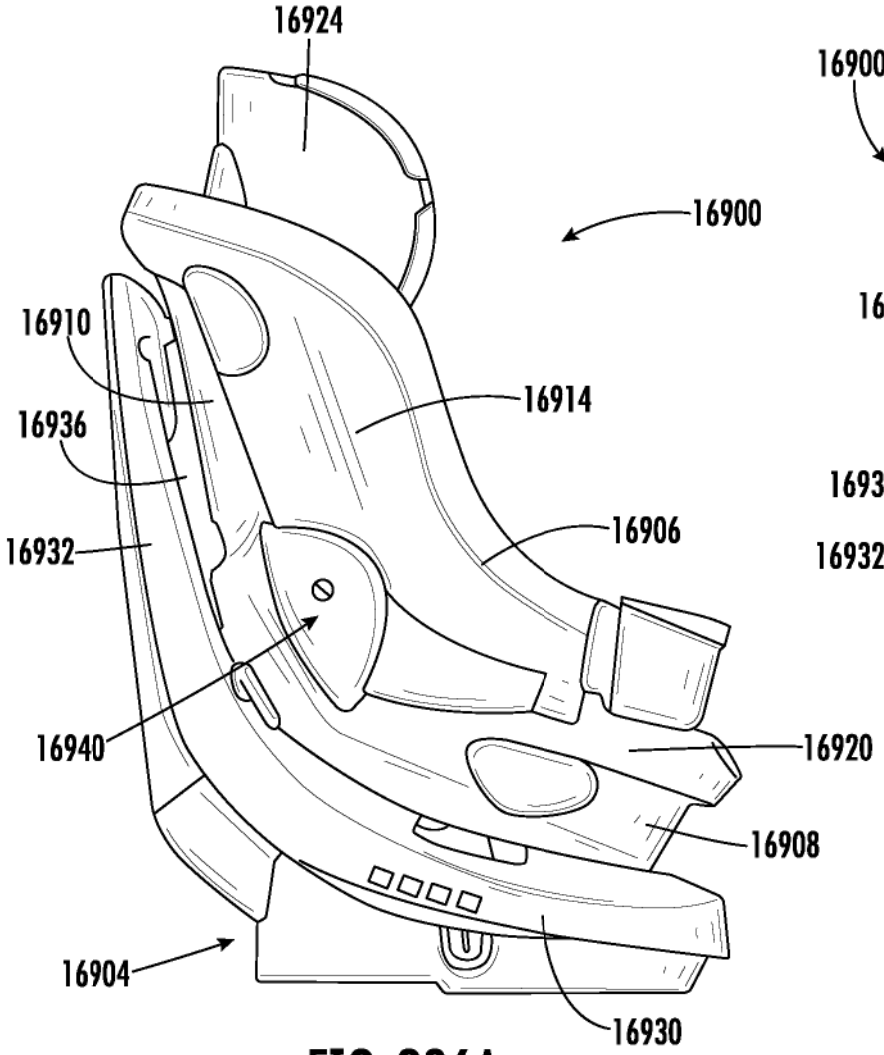

FIG. 236A

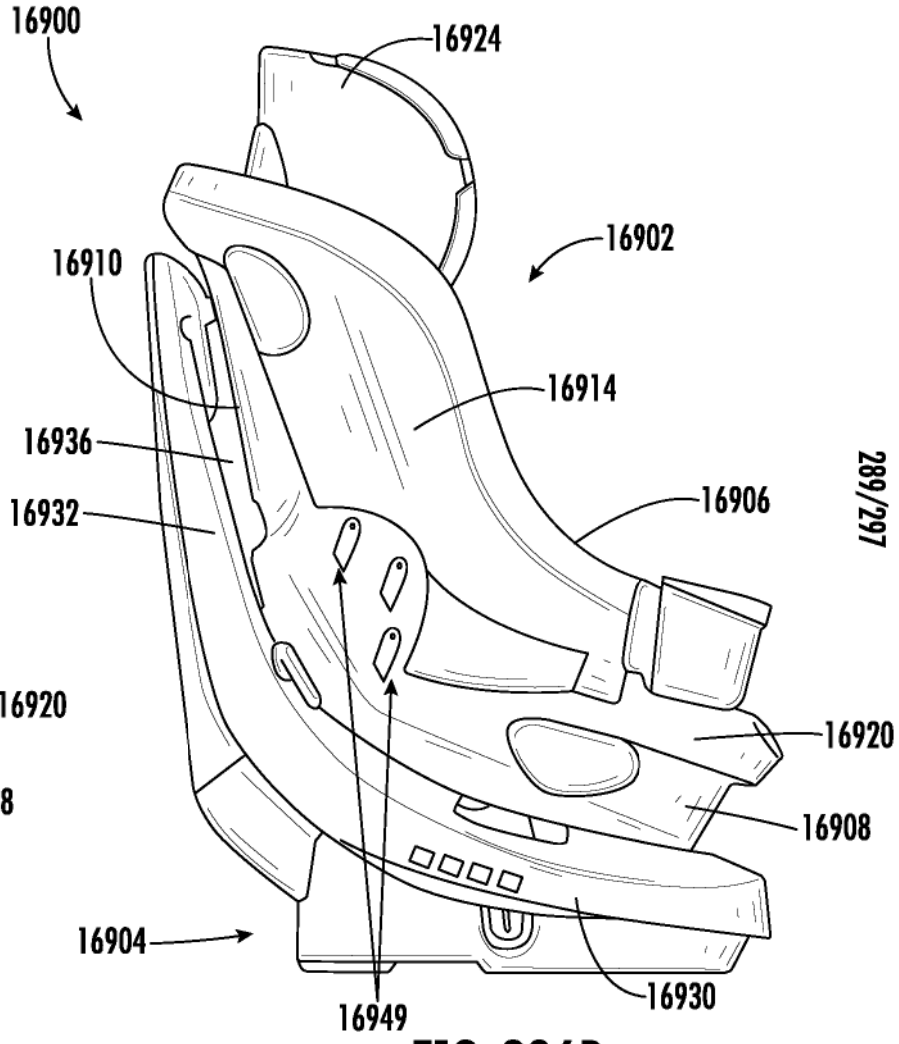

FIG. 236B

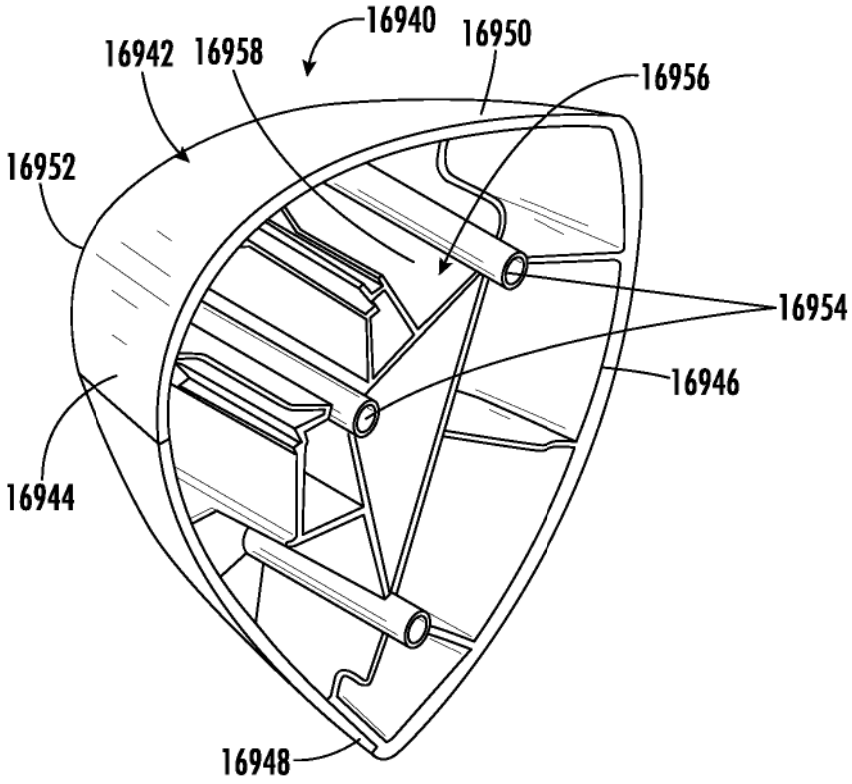

FIG. 237A

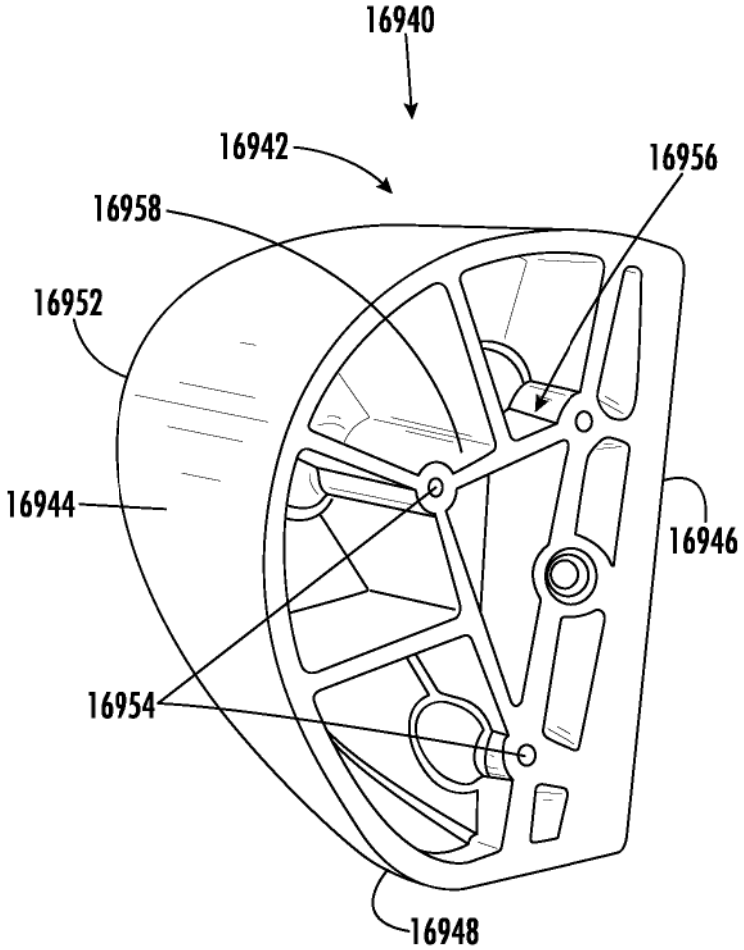

FIG. 237B

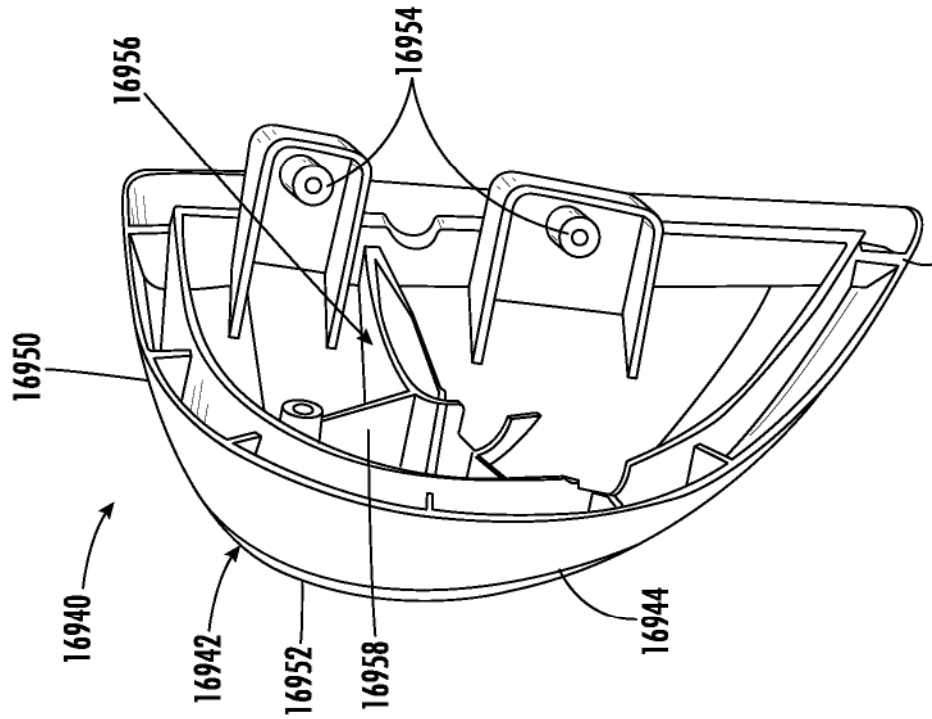

FIG. 237D

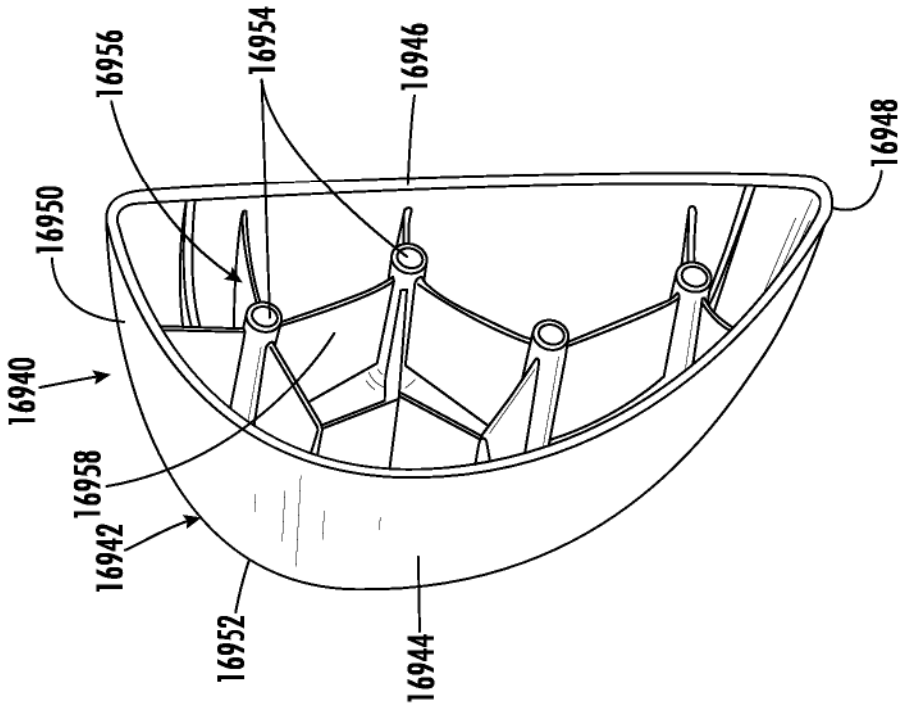

FIG. 237C

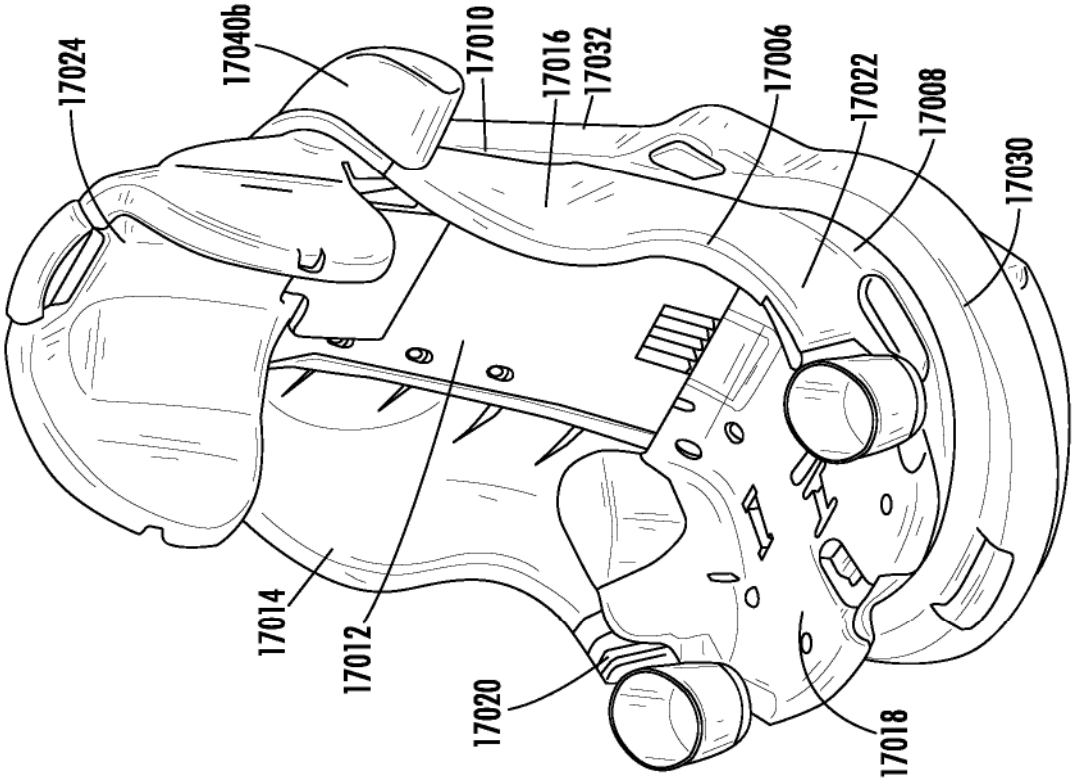

FIG. 238B

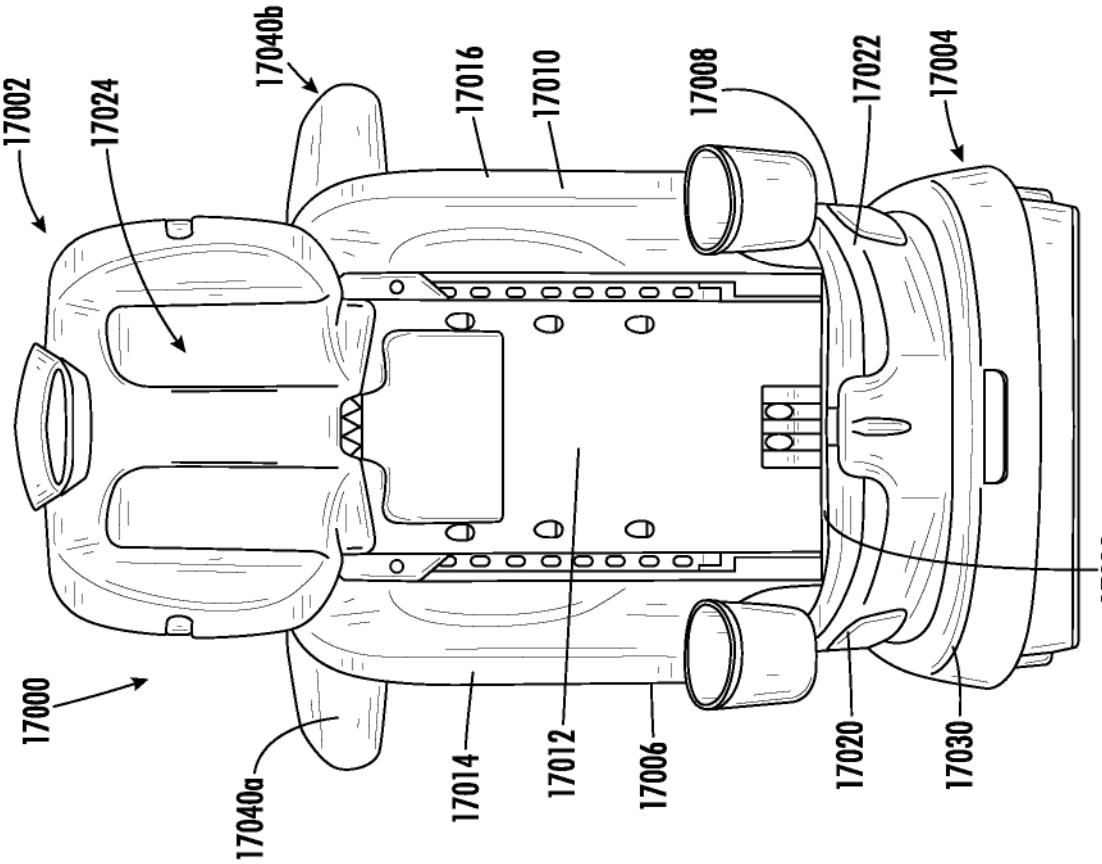

FIG. 238A

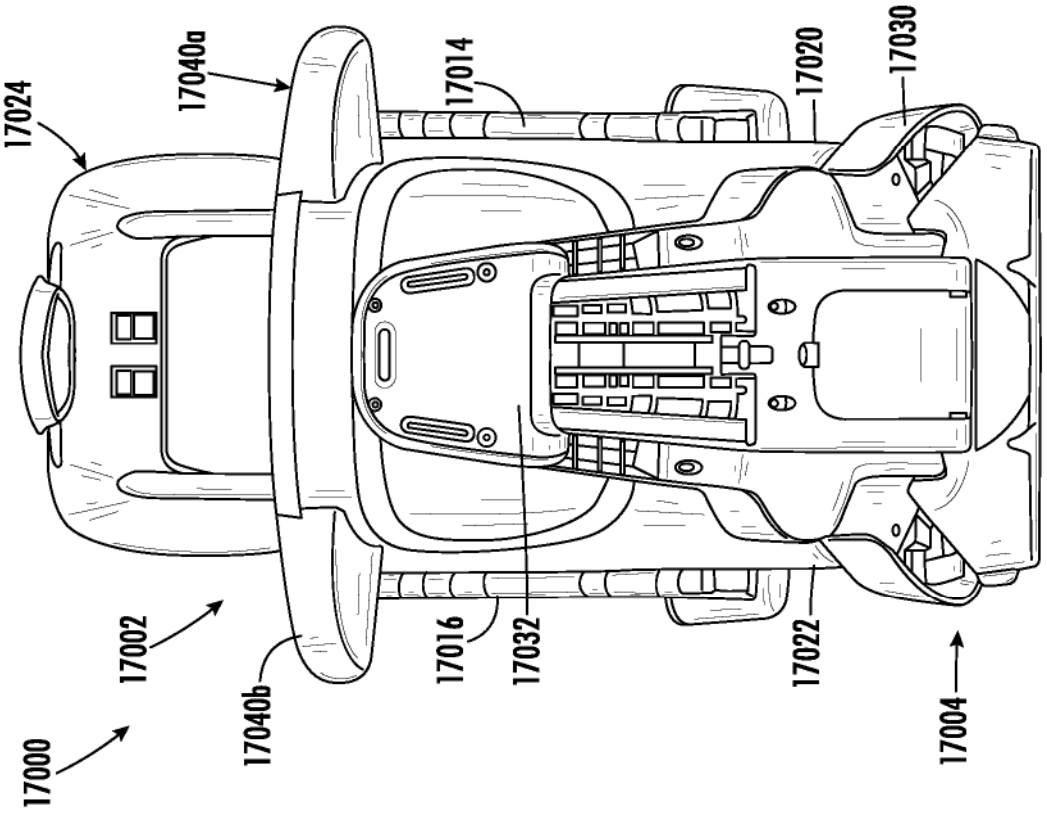

FIG. 238D

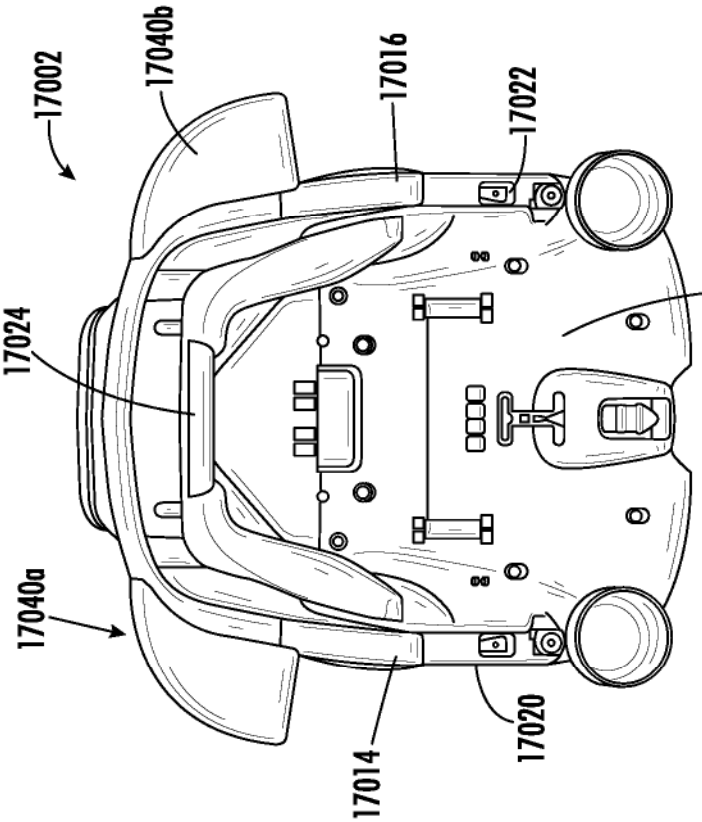

FIG. 238C

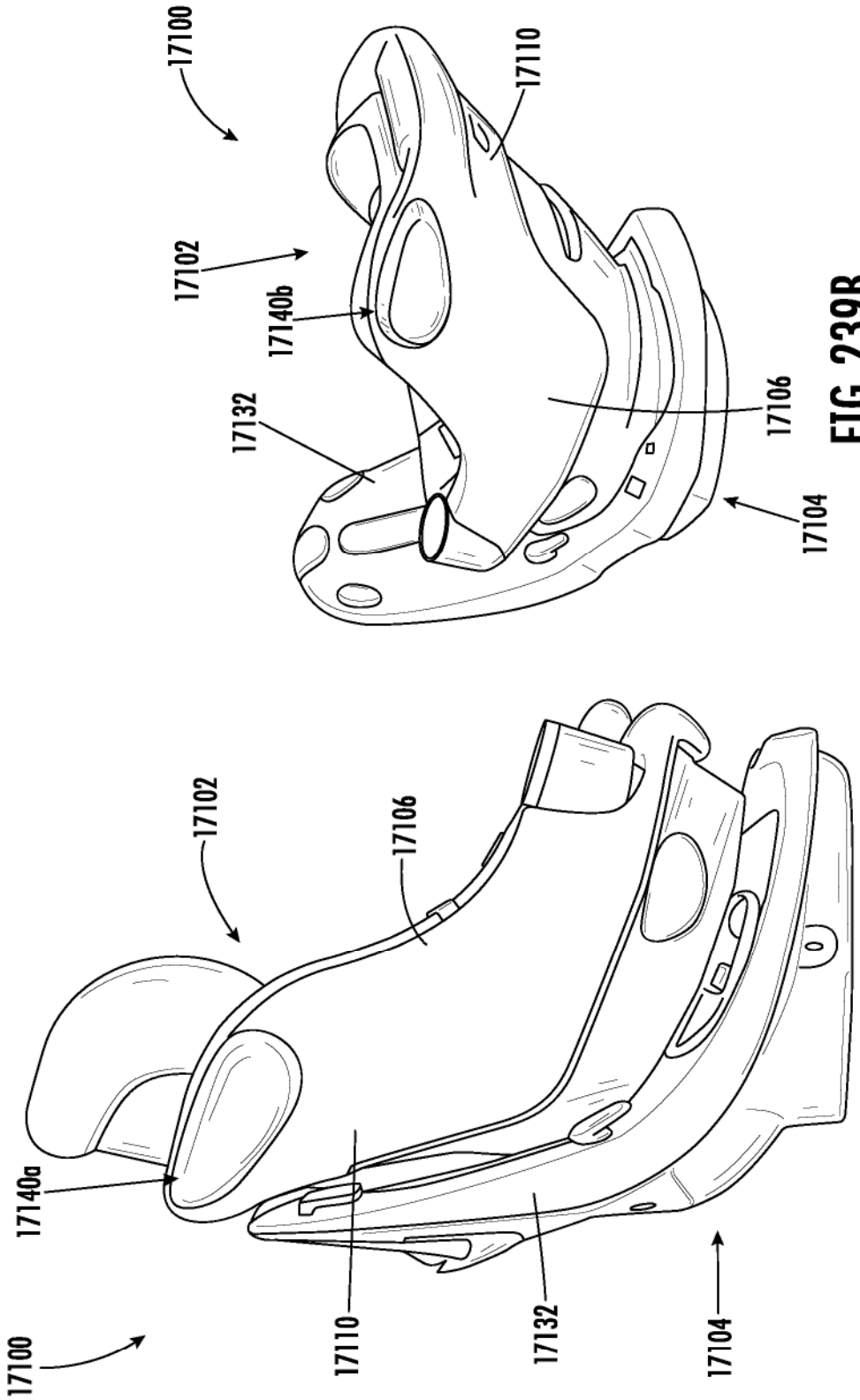

FIG. 239A

FIG. 239B

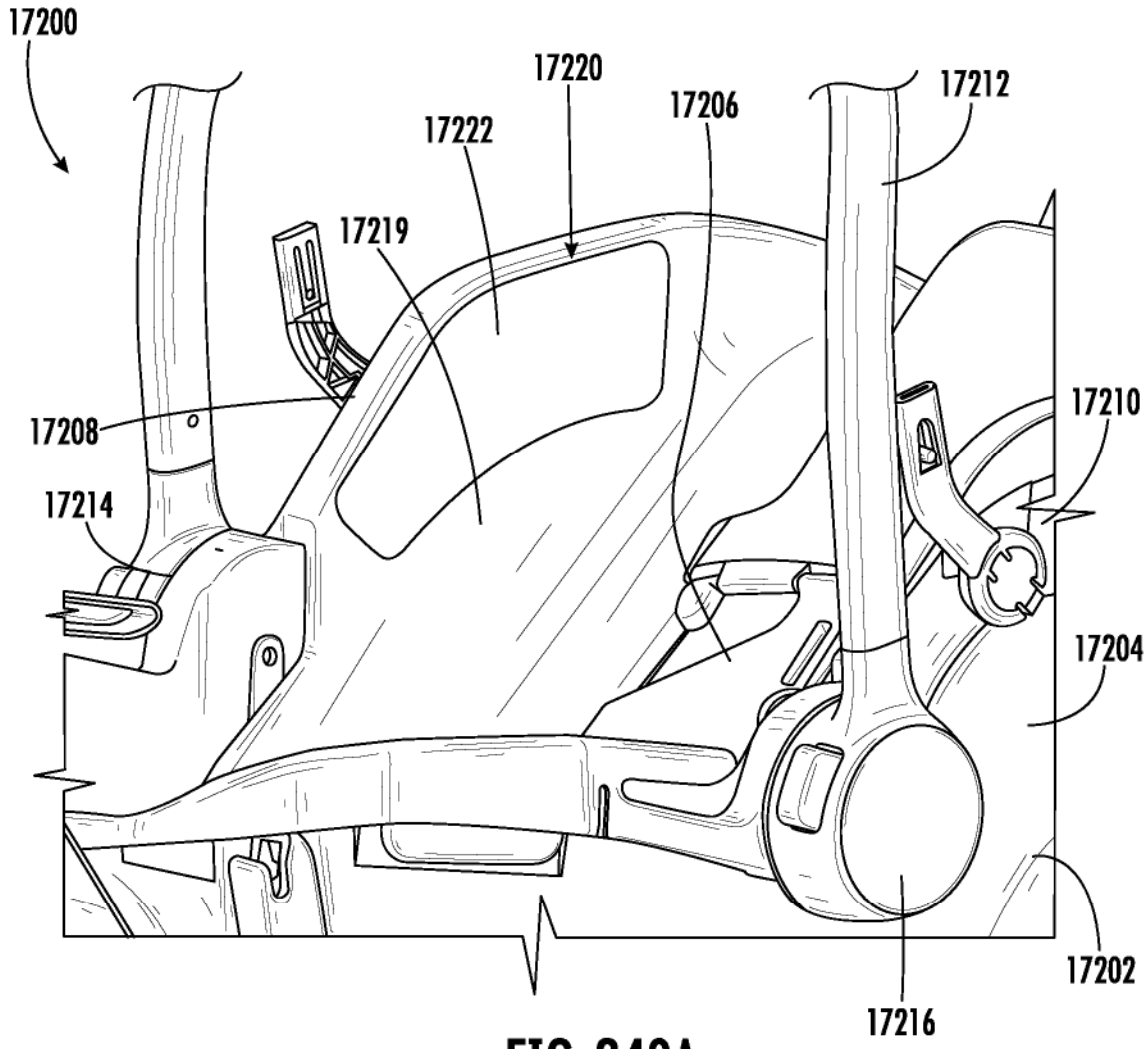
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FIG. 240A

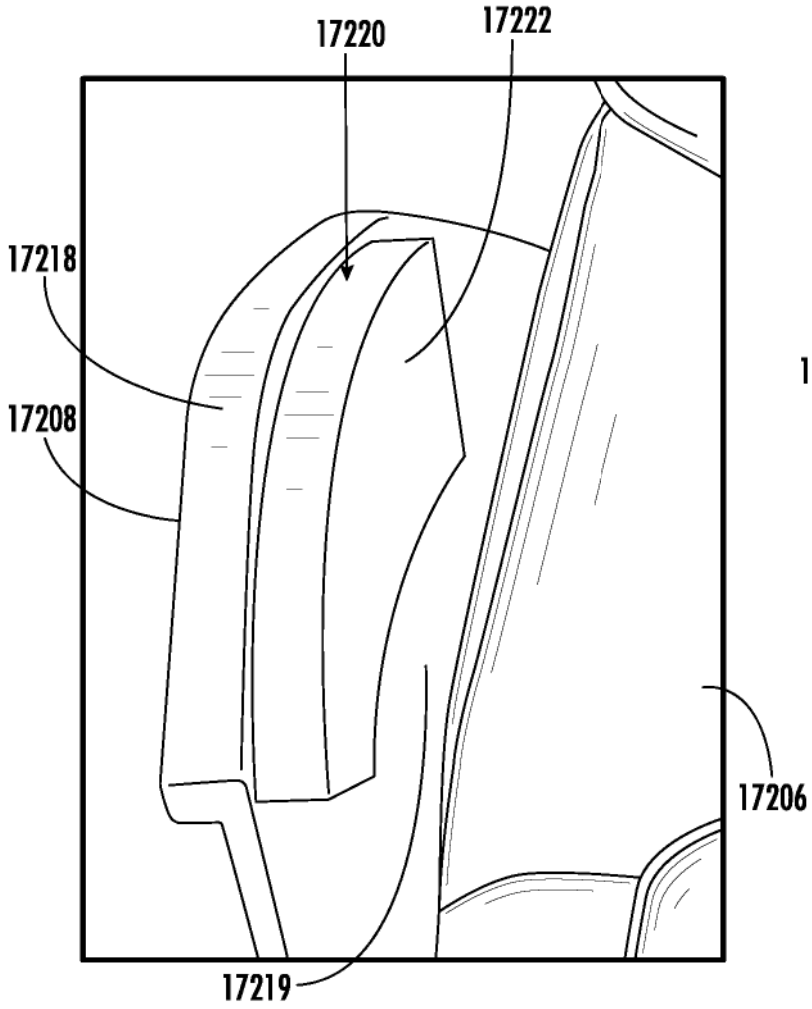

FIG. 240B

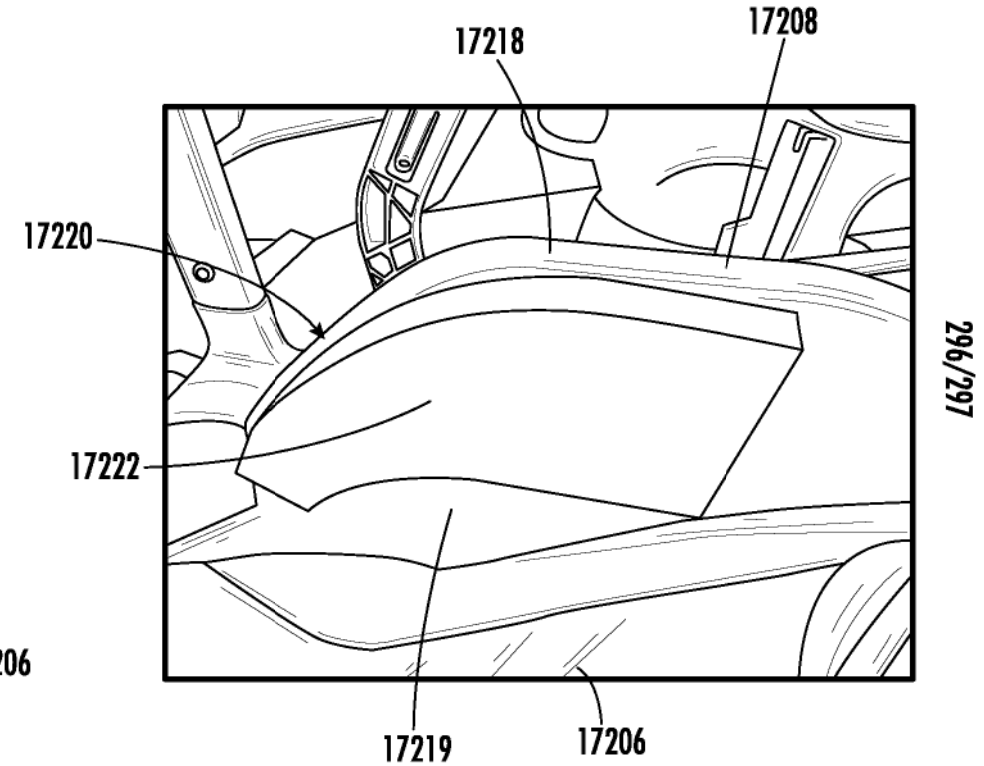

FIG. 240C

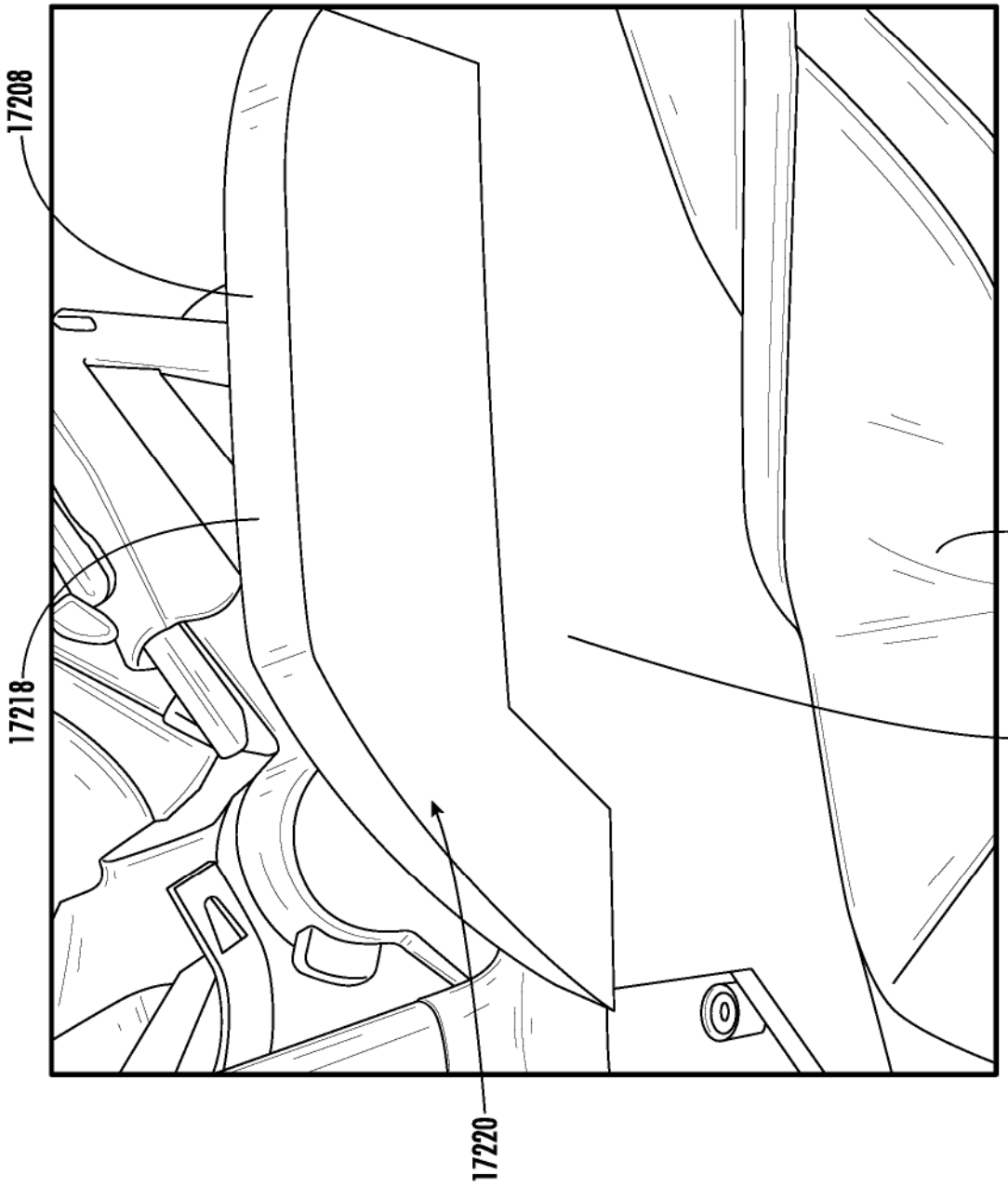

FIG. 241