



US00D712411S

(12) **United States Design Patent**
Hoskinson et al.

(10) **Patent No.:** **US D712,411 S**
(45) **Date of Patent:** **** Sep. 2, 2014**

(54) **TUNNEL SCANNER**

(71) Applicant: **Datalogic ADC, Inc.**, Eugene, OR (US)

(72) Inventors: **Jeffrey J. Hoskinson**, Eugene, OR (US);
Paul R. Huss, Eugene, OR (US); **Stepan Ryabinin**, Portland, OR (US); **Michael P. Svetal**, Eugene, OR (US);
Christopher N. Lenart, San Francisco, CA (US); **Marco A. Torres, II**, Hercules, CA (US)

(73) Assignee: **Datalogic ADC, Inc.**, Eugene, OR (US)

(**) Term: **14 Years**

(21) Appl. No.: **29/458,926**

(22) Filed: **Jun. 24, 2013**

Related U.S. Application Data

(62) Division of application No. 29/431,294, filed on Sep. 5, 2012, now Pat. No. Des. 684,975, which is a division of application No. 29/383,887, filed on Jan. 24, 2011, now Pat. No. Des. 668,656.

(51) **LOC (10) Cl.** **14-02**

(52) **U.S. Cl.**
USPC **D14/420**; D14/421

(58) **Field of Classification Search**
USPC D14/420-424; 235/462.39, 462.14, 235/462.01, 462.15, 462.17, 454, 235/462.4-462.49, 379, 383, 385, 375, 378, 235/472.02; 358/474, 509, 505, 506, 473; 382/312-315, 321, 318, 319; 356/622, 356/152.3; 359/216-221, 516, 517; 250/203.1, 216, 566; 705/16, 20-21, 705/1-3, 7, 27; D99/28, 35, 36, 40, 43; 186/61, 36, 37, 59, 60, 67; 198/368; 340/572.1, 10.1, 10.5; 156/64; 209/559, 583; 700/215, 225, 226, 227

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,588,480 A 6/1971 Unger et al.
4,192,613 A * 3/1980 Hammar 356/639
4,369,361 A 1/1983 Swartz et al.

(Continued)

OTHER PUBLICATIONS

Olmstead et al., U.S. Appl. No. 13/357,356 for "Tunnel Scanner for Automated Checkout System," Jan. 24, 2012.

(Continued)

Primary Examiner — Susan Moon Lee

(74) *Attorney, Agent, or Firm* — Stoel Rives LLP

(57) **CLAIM**

We claim the ornamental design for a tunnel scanner, as shown and described.

DESCRIPTION

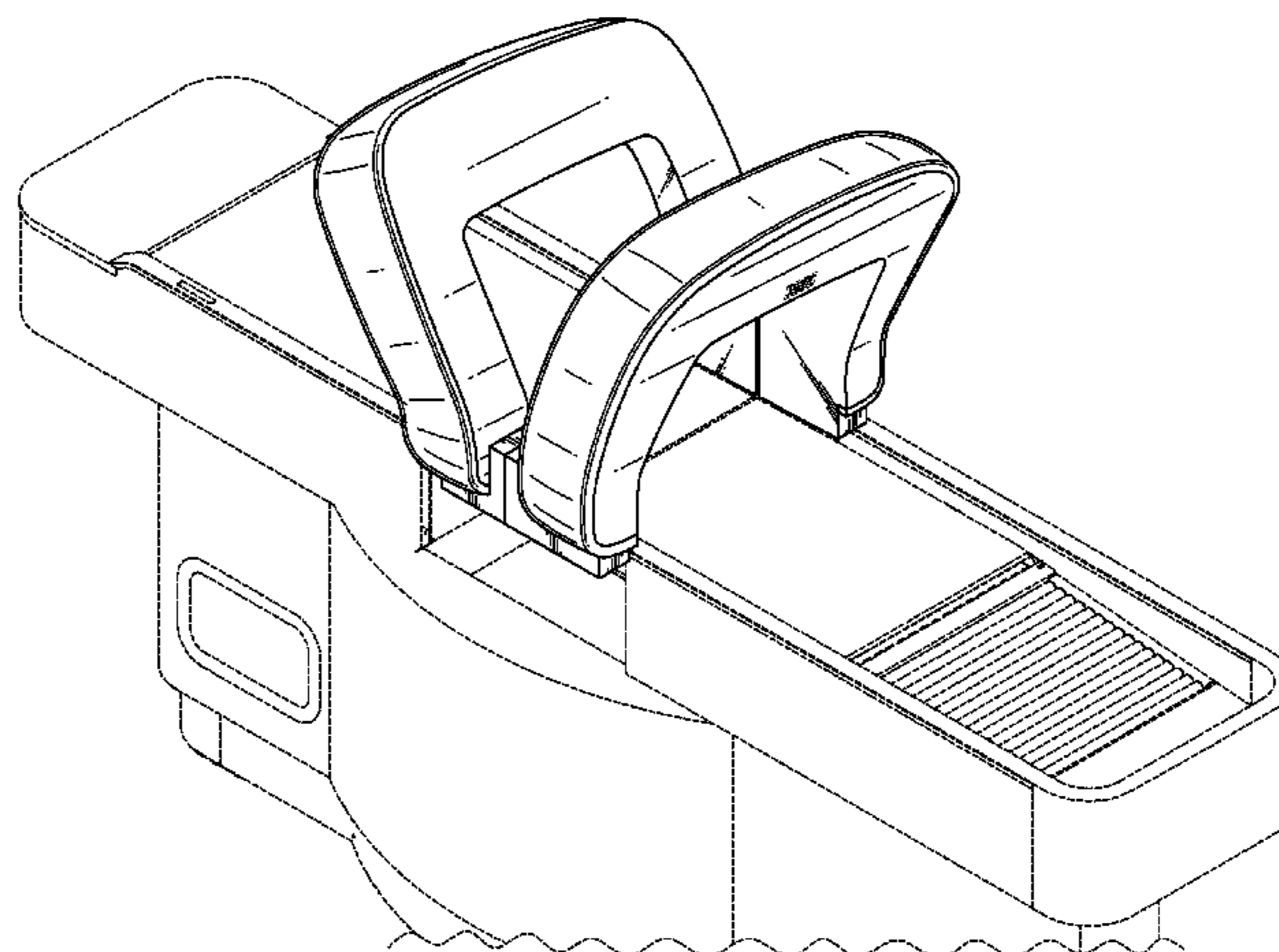
FIG. 1 is a front, top, left isometric view of a tunnel scanner showing the new design, shown, illustratively with a checkstand;

FIG. 2 is a front, top, left isometric view of the tunnel scanner; FIG. 3 is a front side elevation view thereof, the rear side elevation view being a duplicate;

FIG. 4 is a cross-sectional view of FIG. 3 taken along line 4-4; FIG. 5 is a left side elevation view thereof, the right side elevation view being a duplicate; and, FIG. 6 is a top plan view thereof.

The broken line showing of a checkstand in FIG. 1 is to depict environmental context only and is not claimed. The elements in dashed lines showing in FIGS. 1-4 are for illustrative purposes only and form no part of the claimed design. The bottom view is not claimed, and is therefore omitted.

1 Claim, 4 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

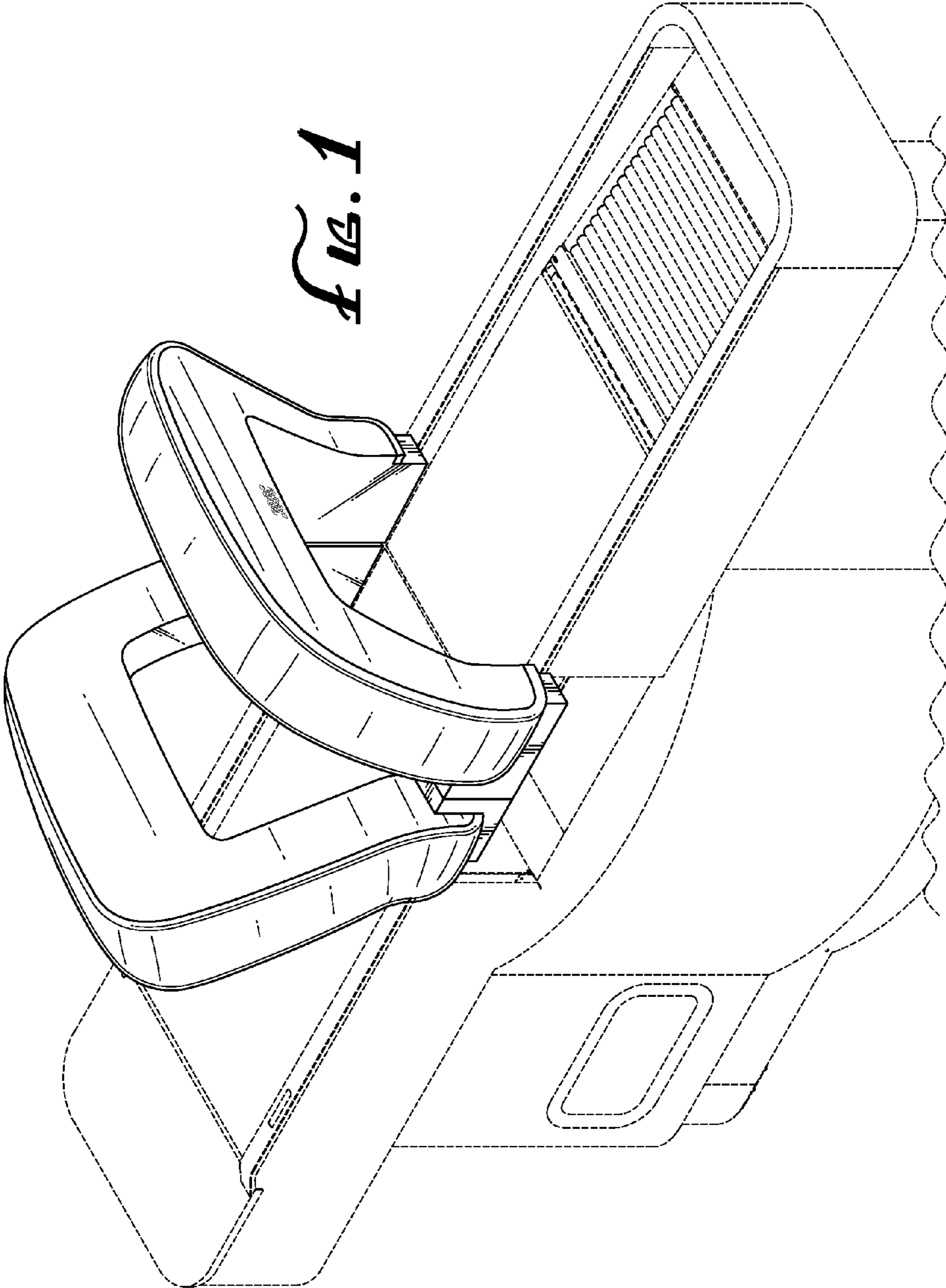
4,618,032 A 10/1986 Woolf
 4,676,343 A 6/1987 Humble et al.
 4,773,029 A 9/1988 Claesson et al.
 D299,939 S 2/1989 Sandoval
 4,838,383 A 6/1989 Saito et al.
 4,891,530 A * 1/1990 Hatji 250/559.4
 4,939,355 A 7/1990 Rando et al.
 4,988,851 A 1/1991 Kohno et al.
 4,989,981 A * 2/1991 Kawamura et al. 356/394
 5,019,694 A 5/1991 Collins, Jr.
 5,042,619 A 8/1991 Kohno
 D325,729 S 4/1992 Forsythe et al.
 5,207,294 A 5/1993 Kurimoto et al.
 5,251,156 A * 10/1993 Heier et al. 702/167
 5,252,814 A 10/1993 Tooley
 5,266,810 A * 11/1993 Murphy 250/559.24
 5,408,325 A * 4/1995 Cruickshank 356/612
 5,426,282 A 6/1995 Humble
 5,469,262 A * 11/1995 Keen et al. 356/639
 5,495,097 A 2/1996 Katz et al.
 5,609,223 A 3/1997 Iizaka et al.
 5,665,955 A 9/1997 Collins et al.
 D387,337 S 12/1997 Sween et al.
 5,699,161 A 12/1997 Woodworth
 5,719,678 A * 2/1998 Reynolds et al. 356/627
 5,737,438 A * 4/1998 Zlotnick et al. 382/101
 5,777,321 A 7/1998 Kerschner et al.
 D409,168 S 5/1999 Myers et al.
 5,900,611 A * 5/1999 Hecht 235/454
 5,911,161 A * 6/1999 Harris 73/618
 5,923,428 A * 7/1999 Woodworth 356/623
 5,969,823 A * 10/1999 Wurz et al. 356/639
 5,981,943 A 11/1999 Berg et al.
 6,045,046 A * 4/2000 Detwiler 235/114
 6,064,629 A 5/2000 Stringer et al.
 6,065,728 A 5/2000 Spradlin
 6,098,885 A 8/2000 Knowles et al.
 6,137,577 A 10/2000 Woodworth
 6,166,811 A 12/2000 Long et al.
 6,177,999 B1 * 1/2001 Wurz et al. 356/623
 6,189,784 B1 2/2001 Williams et al.
 6,246,052 B1 6/2001 Cleveland et al.
 6,314,812 B1 * 11/2001 Harris 73/618
 6,330,973 B1 12/2001 Bridgelall et al.
 6,446,870 B1 9/2002 Rando
 6,484,066 B1 11/2002 Riess et al.
 6,497,362 B2 12/2002 Persky et al.
 6,554,189 B1 4/2003 Good et al.
 6,681,993 B1 1/2004 Nunnink et al.
 6,765,191 B2 * 7/2004 Hollis et al. 250/221

6,783,068 B2 8/2004 Hecht
 6,837,428 B2 1/2005 Lee et al.
 6,974,084 B2 12/2005 Bobba et al.
 6,991,169 B2 1/2006 Bobba et al.
 7,000,839 B2 2/2006 Good et al.
 7,044,370 B2 5/2006 Bellis, Jr. et al.
 7,104,453 B1 * 9/2006 Zhu et al. 235/462.14
 7,113,272 B2 * 9/2006 Bourely et al. 356/237.1
 7,187,457 B2 * 3/2007 Kobayashi 356/639
 7,196,828 B2 3/2007 Rubner et al.
 7,198,195 B2 4/2007 Bobba et al.
 7,325,729 B2 2/2008 Crockett et al.
 7,375,294 B2 5/2008 Kraft
 7,466,462 B2 12/2008 Chen
 7,527,205 B2 5/2009 Zhu et al.
 D595,720 S 7/2009 Warth
 7,632,367 B2 12/2009 Smith
 7,650,289 B2 * 1/2010 Cooper et al. 705/1.1
 7,677,451 B2 3/2010 Dickover et al.
 7,684,057 B2 * 3/2010 Sakai 356/614
 7,720,194 B2 5/2010 Connelly et al.
 7,778,443 B2 8/2010 Watanabe et al.
 7,841,524 B2 11/2010 Schmidt et al.
 7,954,719 B2 * 6/2011 Zhu et al. 235/462.42
 7,967,112 B2 6/2011 Kaplan et al.
 8,066,189 B2 11/2011 Yamada et al.
 D668,656 S 10/2012 Hoskinson et al.
 8,360,318 B2 * 1/2013 Reynolds et al. 235/462.01
 D684,975 S 6/2013 Hoskinson et al.
 2001/0014137 A1 * 8/2001 Bjorkholm 378/57
 2001/0034608 A1 * 10/2001 Gendreau 705/1
 2002/0014533 A1 2/2002 Zhu et al.
 2003/0001007 A1 1/2003 Lee et al.
 2003/0085281 A1 5/2003 Knowles et al.
 2003/0218070 A1 * 11/2003 Tsikos et al. 235/472.01
 2004/0184042 A1 * 9/2004 Kobayashi 356/638
 2006/0169781 A1 8/2006 Khovaylo
 2007/0181685 A1 * 8/2007 Zhu et al. 235/454
 2007/0257110 A1 11/2007 Schmidt et al.
 2009/0001166 A1 1/2009 Barkan et al.
 2009/0134221 A1 5/2009 Zhu et al.
 2010/0163628 A1 7/2010 Olmstead
 2010/0217678 A1 8/2010 Goncalves
 2011/0011932 A1 1/2011 Tsuyuki et al.
 2012/0205448 A1 8/2012 Hoskinson et al.
 2013/0020392 A1 1/2013 Olmstead et al.

OTHER PUBLICATIONS

Olmstead et al., U.S. Appl. No. 61/435,777 for "Tunnel Scanner for Automated Checkout System," Jan. 24, 2011.

* cited by examiner



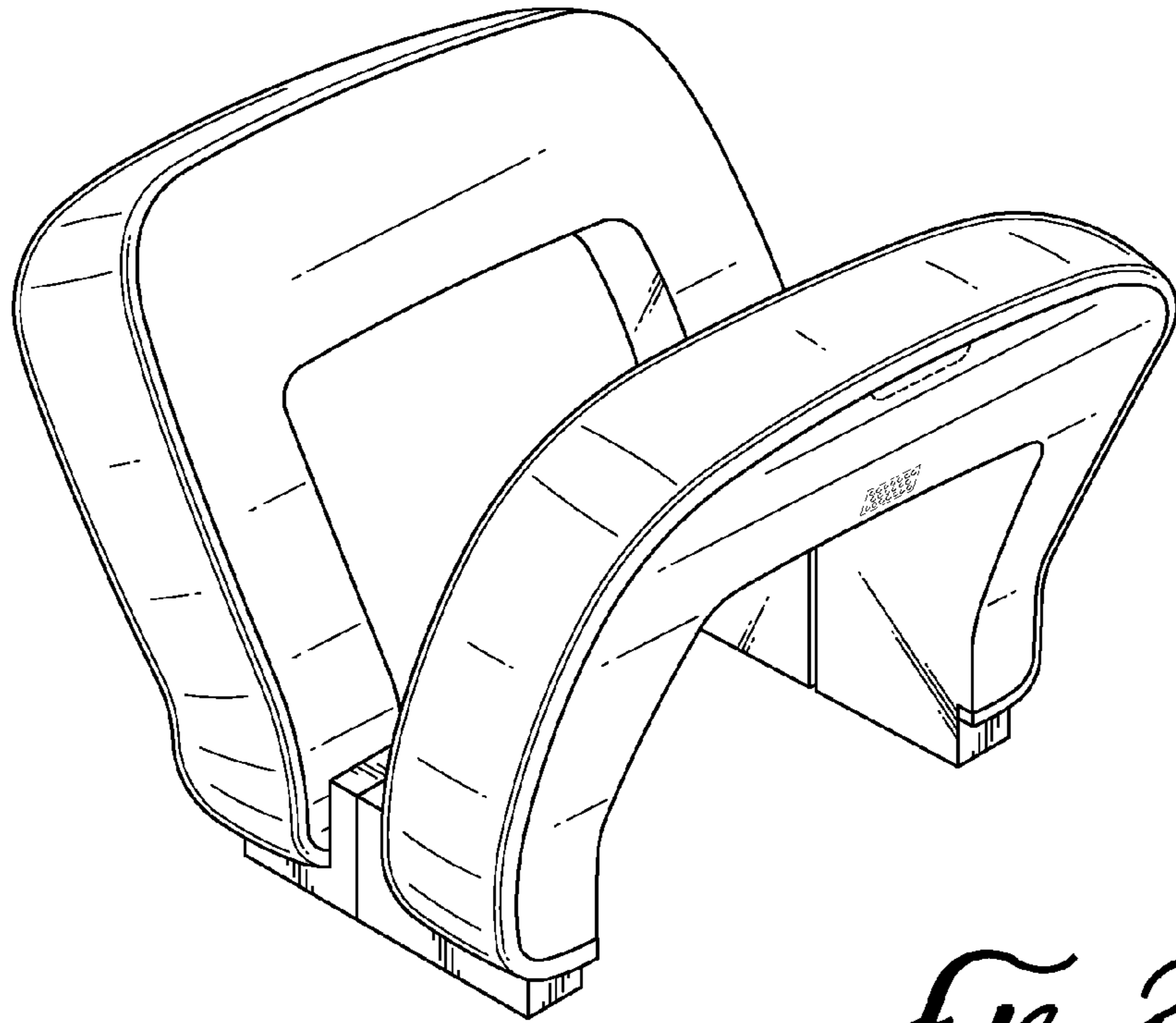


FIG. 2

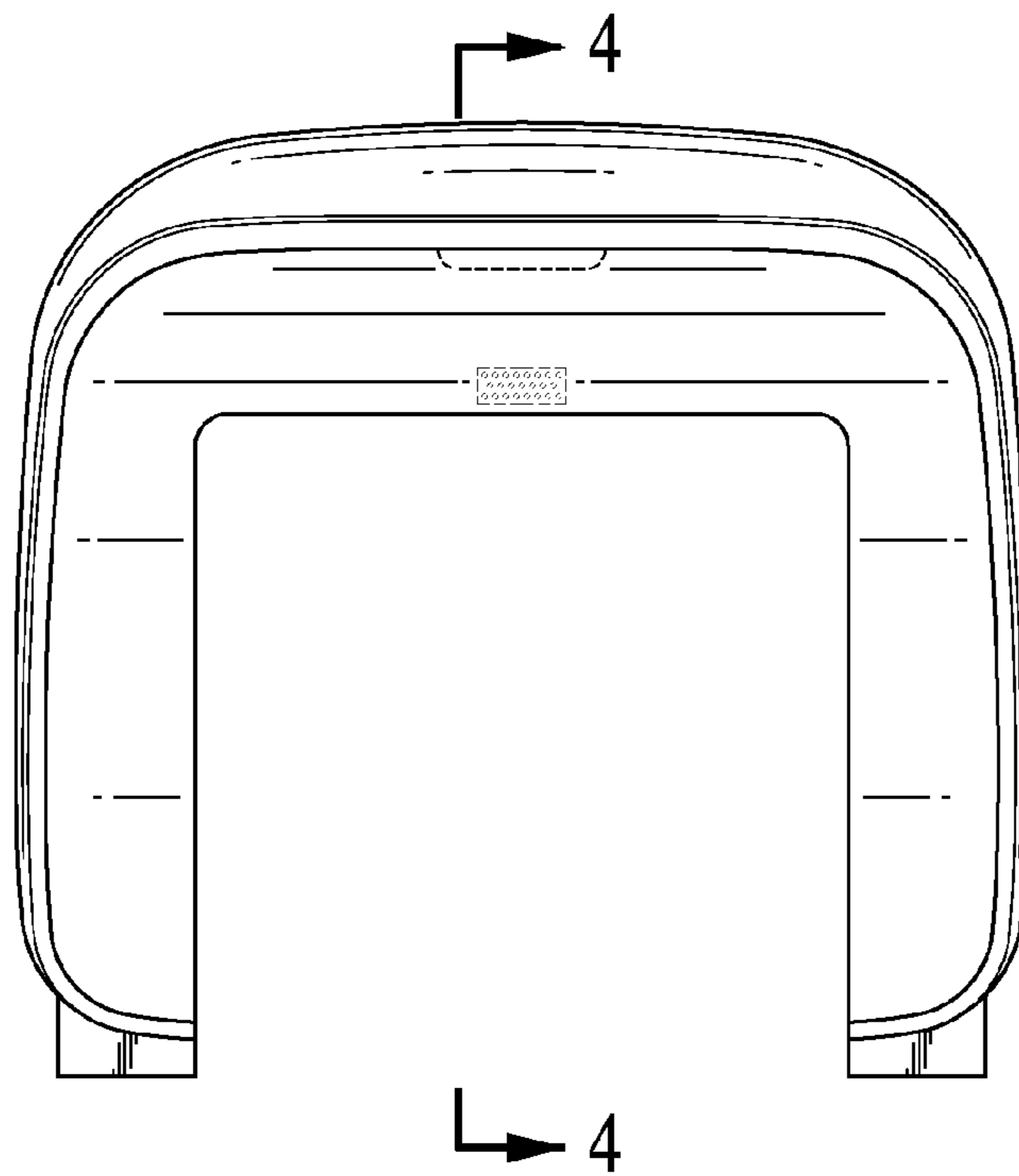


FIG. 3

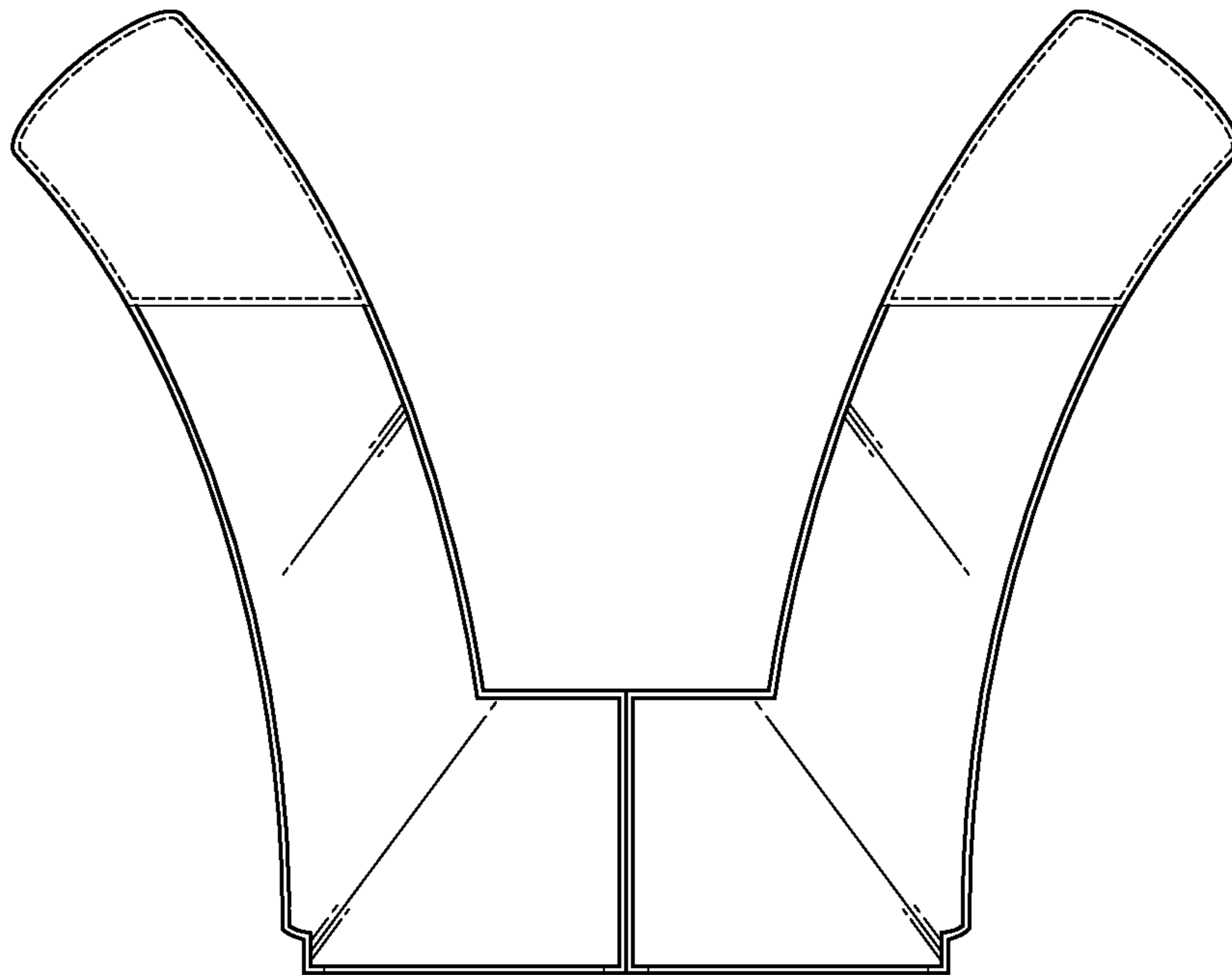


FIG. 4

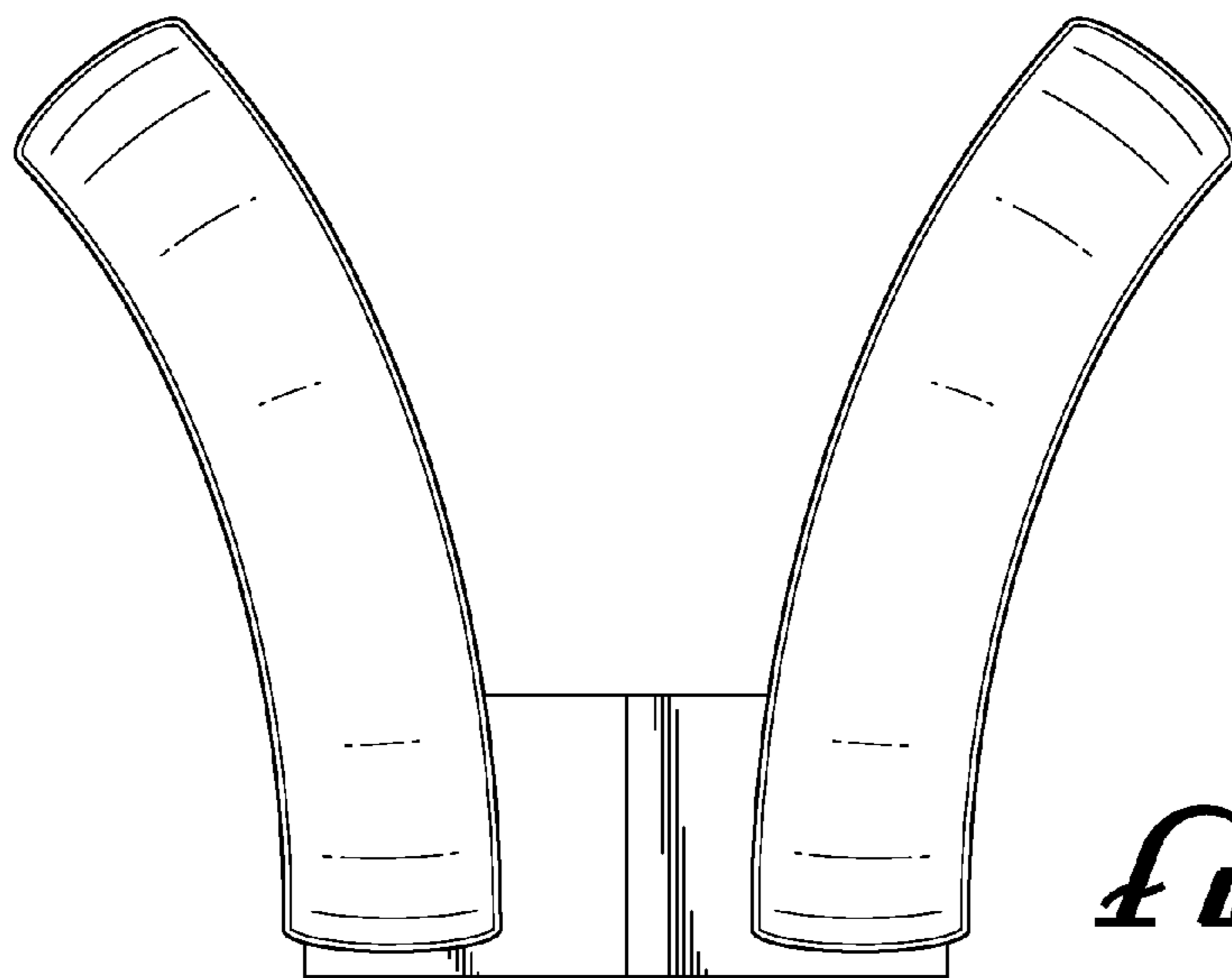


FIG. 5

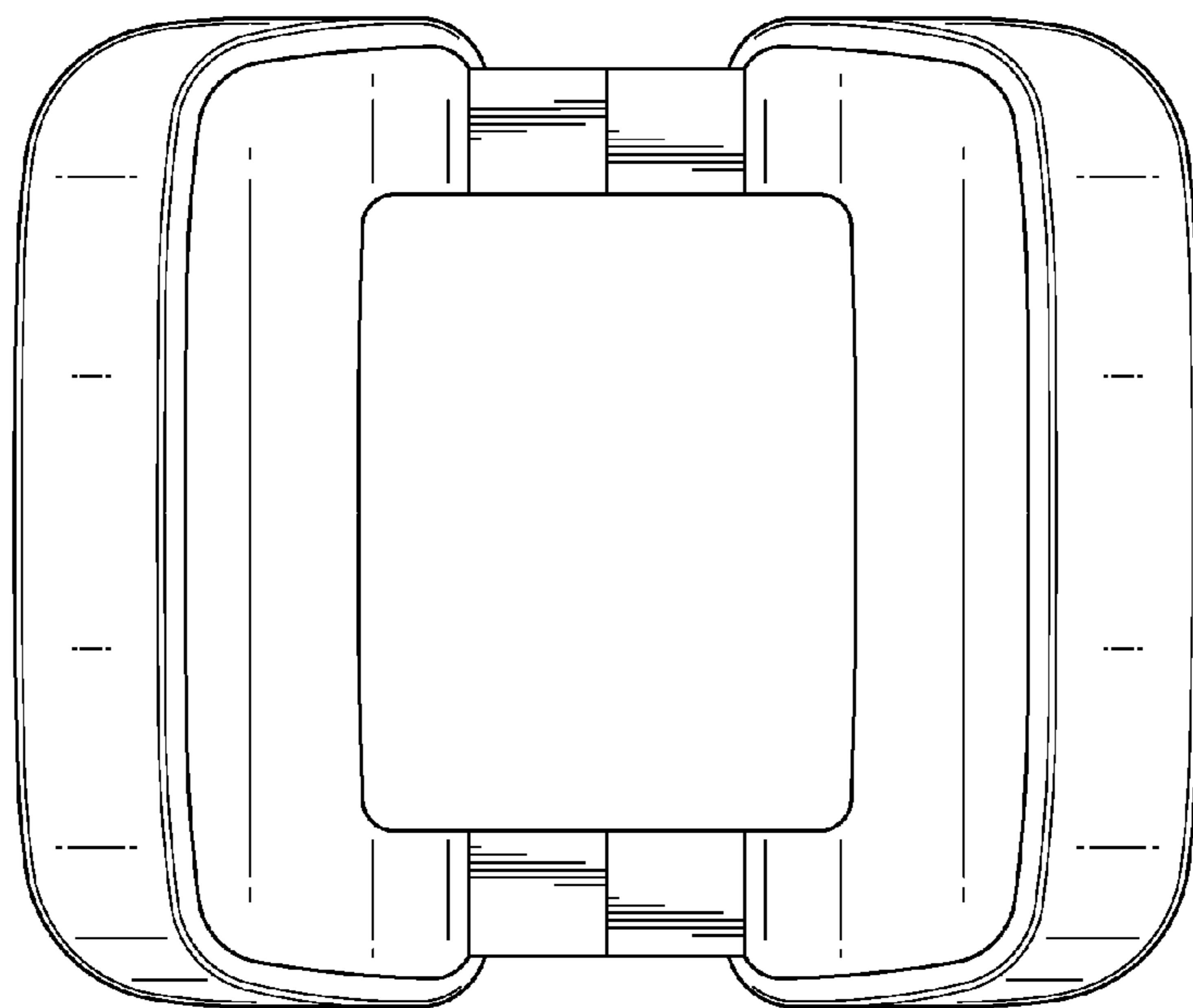


FIG. 6