



US00D915569S

(12) **United States Design Patent** (10) **Patent No.:** **US D915,569 S**
Meda et al. (45) **Date of Patent:** **** Apr. 6, 2021**

(54) **SHROUD ASSEMBLY**
(71) Applicant: **Dometic Sweden AB**, Solna (SE)
(72) Inventors: **Samuele Meda**, Solna (SE); **Jaokim Ahlström**, Täby (SE)
(73) Assignee: **Dometic Sweden AB**, Solna (SE)

D284,025 S 5/1986 Armstrong
4,608,834 A 9/1986 Rummer
4,637,299 A 1/1987 Harding
4,641,502 A 2/1987 Aldrich et al.
4,665,804 A 5/1987 Muyasaka
4,672,818 A 6/1987 Roth
4,690,040 A 9/1987 Barnett
(Continued)

(**) Term: **15 Years**

FOREIGN PATENT DOCUMENTS

(21) Appl. No.: **29/594,476**

AU 3067405 3/2016
AU 201612249 5/2016

(22) Filed: **Feb. 17, 2017**

(Continued)

(51) **LOC (13) Cl.** **12-16**

OTHER PUBLICATIONS

(52) **U.S. Cl.**
USPC **D23/325**

10-Minute Tech, Trailer Life, Jul. 1996, pp. 69-70 dated Jul. 1, 1996.

(58) **Field of Classification Search**
USPC D23/325, 342, 314, 318, 324
CPC B60H 1/3232; B60H 1/262; B60H 1/246;
B60H 1/26; B60H 1/00364; B60H
1/00535; B60P 3/20; F25D 23/00
See application file for complete search history.

(Continued)

Primary Examiner — Ania Aman
(74) *Attorney, Agent, or Firm* — Middleton Reutlinger

(56) **References Cited**

(57) **CLAIM**

The ornamental design for a shroud assembly, as shown and described.

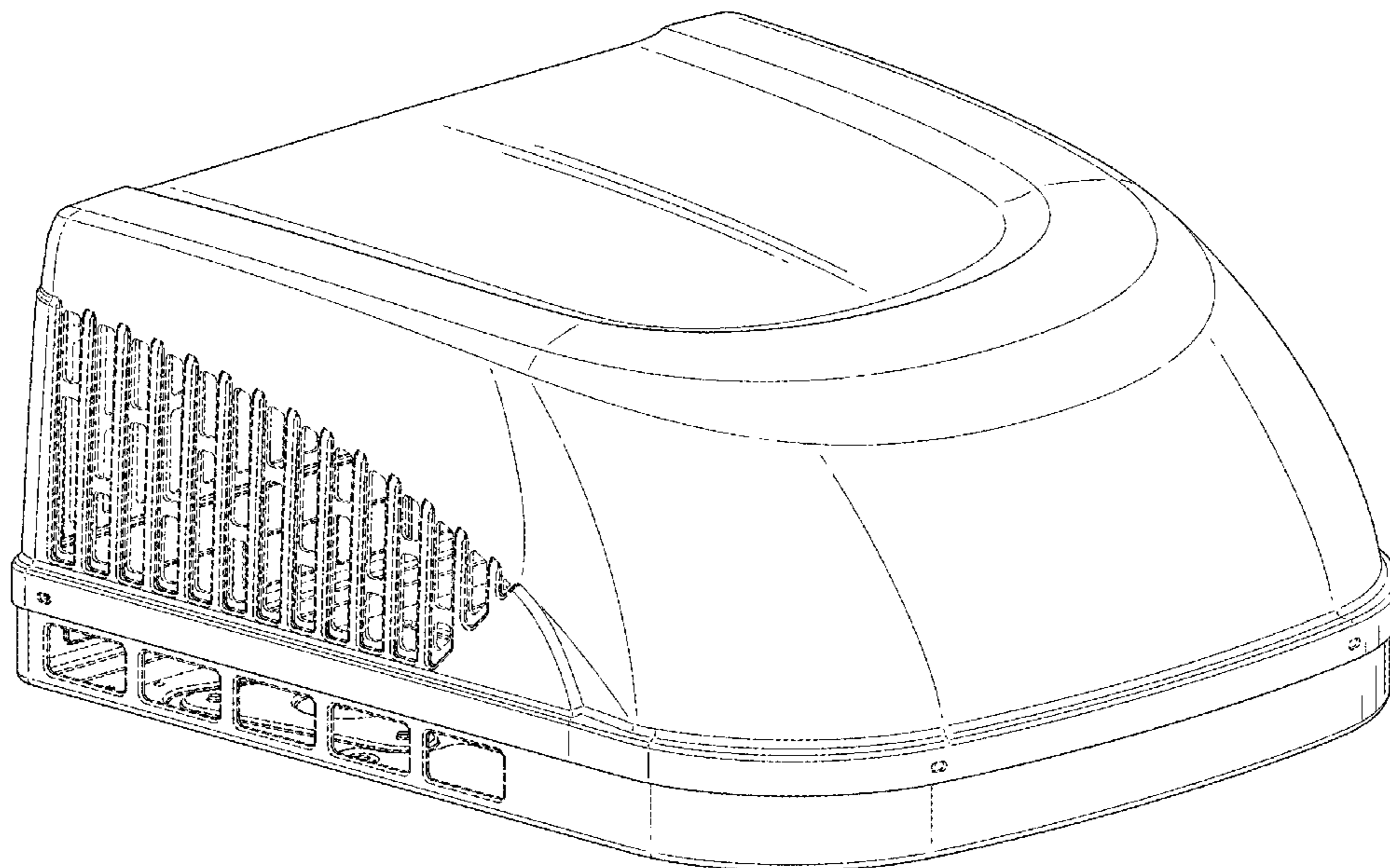
U.S. PATENT DOCUMENTS

DESCRIPTION

964,146 A 7/1910 Clark
RE24,637 E 4/1959 Wulle
3,092,009 A 6/1963 Goettl
3,115,082 A 12/1963 Sanoff
3,528,359 A 9/1970 Sand
3,680,468 A 8/1972 Schueler
D226,381 S 2/1973 Harty
3,727,537 A 4/1973 Harty
3,867,486 A 2/1975 Nagele
3,974,755 A 8/1976 Honmann
4,189,987 A 2/1980 Amberg et al.
D257,637 S 12/1980 Armbruster
4,502,368 A 3/1985 Hempel
4,502,467 A 3/1985 Smith
4,550,648 A 11/1985 Eagle

FIG. 1 is a front perspective view of the shroud assembly showing our new design;
FIG. 2 is right side elevation view of the design of FIG. 1;
FIG. 3 is a left side elevation view of the design of FIG. 1;
FIG. 4 is a front elevation view of the design of FIG. 1;
FIG. 5 is a rear elevation view of the design of FIG. 1;
FIG. 6 is a top plan view of the design of FIG. 1; and,
FIG. 7 is a bottom plan view of the design of FIG. 1.
The broken lines illustrating portions of the shroud assembly form no part of the claimed design.

1 Claim, 7 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

4,693,174 A	9/1987	Anderson	7,441,414 B2	10/2008	Ziehr et al.
4,709,623 A	12/1987	Roth et al.	7,448,227 B2	11/2008	Zeigler et al.
D296,583 S	7/1988	Barradas	7,454,922 B2	11/2008	Zeigler et al.
4,760,773 A	8/1988	Pezzulli	7,591,143 B2	9/2009	Zeigler et al.
D300,777 S	4/1989	Bales et al.	7,591,303 B2	9/2009	Zeigler et al.
D306,341 S	2/1990	Bales et al.	D619,151 S	7/2010	Tsuji
5,056,262 A	10/1991	Schweiss et al.	7,797,958 B2	9/2010	Alston et al.
5,176,570 A	1/1993	Leidl	7,832,221 B2	11/2010	Wijaya et al.
D343,894 S	2/1994	Anderson	D629,094 S	12/2010	Thomas
5,307,645 A	5/1994	Pannell	7,845,187 B2	12/2010	Patel et al.
5,366,149 A	11/1994	Kline	7,934,387 B2	5/2011	Lee et al.
5,403,183 A	4/1995	Andersson et al.	7,963,117 B2	6/2011	Allen et al.
D360,681 S	7/1995	Chopko	8,015,833 B2	9/2011	Cikanek et al.
5,435,781 A	7/1995	Kitchens	8,096,482 B2	1/2012	Dage
D367,524 S	2/1996	Waldschmidt et al.	8,171,866 B2	5/2012	Dunstan
5,494,244 A	2/1996	Walton	D661,386 S	6/2012	Bergin
5,501,634 A	3/1996	Wilder	8,249,749 B2	8/2012	Dage et al.
5,531,641 A	7/1996	Aldrich et al.	D672,450 S	12/2012	Milks et al.
5,556,335 A	9/1996	Holyoake	8,453,722 B2	6/2013	Zeigler et al.
5,588,910 A	12/1996	Hutter et al.	8,535,127 B2	9/2013	Malott
5,632,156 A	5/1997	Takeo et al.	8,568,209 B2	10/2013	Boxum
5,643,081 A	7/1997	Klein	D712,531 S	9/2014	Bergin
D391,632 S	3/1998	Thomas	D715,907 S	10/2014	Bergin
5,727,998 A	3/1998	Kreuger et al.	D716,925 S	11/2014	Bergin
5,752,877 A	5/1998	Sun	D782,939 S	4/2017	Allard
5,765,383 A	6/1998	Inoue	9,631,832 B2	4/2017	Malott
5,860,856 A	1/1999	Teich et al.	D785,771 S	5/2017	Bergin et al.
5,863,310 A	1/1999	Brown et al.	D785,772 S	5/2017	Bergin et al.
5,964,910 A	10/1999	Keele	D811,566 S	2/2018	Liu et al.
D424,184 S	5/2000	Chang-Kwon	D824,499 S *	7/2018	Williamson D23/325
6,066,041 A	5/2000	Hernandez et al.	D841,138 S *	2/2019	Williamson D23/325
6,073,456 A	6/2000	Kawai et al.	D841,139 S *	2/2019	Bergin D23/325
6,076,370 A	6/2000	Da Silva	D856,499 S *	8/2019	Labrani-Motlagh D23/325
D428,480 S	7/2000	Flanagan	D862,668 S *	10/2019	Moseley D23/325
6,101,829 A	8/2000	Robinson	D865,926 S *	11/2019	Moseley D23/325
6,149,513 A	11/2000	Lyu	10,536,527 B2 *	1/2020	Ocejo F25B 49/00
D435,639 S	12/2000	Slavonia et al.	2001/0053668 A1	12/2001	Berger
6,171,062 B1	1/2001	Bucher et al.	2003/0162492 A1	8/2003	Caferro et al.
D437,396 S	2/2001	Flanagan	2003/0220070 A1	11/2003	Orendorff et al.
6,196,914 B1	3/2001	Lyu	2004/0005854 A1	1/2004	Shin
6,234,893 B1	5/2001	Meredith	2004/0038643 A1	2/2004	Katagiri et al.
6,241,794 B1	6/2001	Jadran et al.	2004/0072532 A1	4/2004	Cho
6,250,373 B1	6/2001	Vecchi et al.	2004/0127152 A1	7/2004	Malott
6,257,976 B1	7/2001	Richardson, III	2005/0087332 A1	4/2005	Umeo et al.
6,302,780 B1	10/2001	Ahn et al.	2005/0227609 A1	10/2005	Koessler
6,339,934 B1	1/2002	Yoon	2006/0026936 A1	2/2006	Paumier et al.
D454,625 S	3/2002	Flanagan	2006/0052050 A1	3/2006	Malott et al.
6,351,957 B2	3/2002	Hara	2006/0083889 A1	4/2006	Schuckers
6,367,270 B2	4/2002	Niimi et al.	2007/0000265 A1	1/2007	McEnaney et al.
6,370,899 B1	4/2002	Hobbs et al.	2007/0066215 A1	3/2007	Song et al.
6,370,906 B1	4/2002	Kuo	2007/0131408 A1	6/2007	Zeigler et al.
6,415,622 B2	7/2002	Kim et al.	2007/0157522 A1	7/2007	Hebert et al.
6,536,222 B1	3/2003	Ahn et al.	2007/0227693 A1	10/2007	Allen et al.
6,554,880 B1	4/2003	Northcutt	2007/0287374 A1	12/2007	Day et al.
6,571,572 B2	6/2003	Hobbs et al.	2007/0298702 A1	12/2007	Boxum
6,601,356 B2	8/2003	Snyder	2007/0299560 A1	12/2007	LaHue et al.
6,616,523 B1	9/2003	Tani et al.	2008/0014852 A1	1/2008	Mielke et al.
6,626,003 B1	9/2003	Kortum et al.	2008/0034767 A1	2/2008	Ziehr et al.
6,745,586 B1	6/2004	Reimann et al.	2008/0146136 A1	6/2008	Degutis et al.
D495,041 S	8/2004	Thomas	2009/0098820 A1	4/2009	Yabu
6,814,660 B1	11/2004	Cavett	2010/0089563 A1	4/2010	Sundhar
6,857,953 B2	2/2005	Malott	2010/0224754 A1	9/2010	Khan
6,889,762 B2	5/2005	Zeigler et al.	2011/0016894 A1	1/2011	Lemon et al.
7,086,740 B2	8/2006	Sample	2011/0067420 A1	3/2011	Alston et al.
7,140,192 B2	11/2006	Allen et al.	2011/0302942 A1	12/2011	Birchard
7,171,822 B2	2/2007	Allen et al.	2012/0210733 A1	8/2012	Kolavennu et al.
D538,413 S	3/2007	Lyu et al.	2012/0247131 A1	10/2012	Esch
7,201,010 B2	4/2007	Homan et al.	2012/0324927 A1	12/2012	Suzuki
D541,917 S	5/2007	Pfeiffer	2013/0047648 A1	2/2013	Zeigler et al.
7,234,315 B2	6/2007	Allen et al.	2013/0109294 A1	5/2013	Tolinski et al.
7,237,397 B2	7/2007	Allen	2013/0157557 A1	6/2013	Malott
D554,544 S	11/2007	Englert	2013/0205811 A1	8/2013	Esch
D560,785 S	1/2008	Galeazzi	2014/0033742 A1	2/2014	Esch
7,316,119 B2	1/2008	Allen	2014/0188313 A1	7/2014	Huang
7,334,834 B2	2/2008	Hill et al.	2014/0223928 A1	8/2014	Esch
			2014/0260393 A1	9/2014	Siddiqui
			2015/0087216 A1	3/2015	Stover et al.
			2015/0107814 A1	4/2015	Jeong
			2015/0251521 A1	9/2015	Brauer et al.

(56)

References Cited

U.S. PATENT DOCUMENTS

2015/0352924	A1	12/2015	Allard
2016/0076271	A1	3/2016	Reinking
2016/0207372	A1	7/2016	Parry
2017/0203632	A1	7/2017	Westendarp et al.
2019/0047354	A1*	2/2019	Williamson B60H 1/00535
2020/0086717	A1*	3/2020	Bei F24F 13/24

FOREIGN PATENT DOCUMENTS

AU	201613590	7/2016
AU	201613591	7/2016
AU	201613592	7/2016
AU	201613593	7/2016
AU	201712794	5/2017
AU	201712798	5/2017
CA	1011592	6/1977
CA	167431	3/2016
CA	172872	3/2016
CA	172873	3/2016
CA	172874	3/2016
CA	165232	5/2016
CA	165233	5/2016
CN	201630322524.2	4/2017
CN	106976376	7/2017
EM	003323740	7/2016
EM	003421643	10/2016
EM	003479179	11/2016
EP	0180053	10/1985
EP	0064769	8/1986
EP	1681517	7/2006
EP	1832452	9/2007
FR	2087220	12/1971
GB	2297157	7/1996
JP	52137854	11/1977
JP	2004125338	4/2004
KR	2005119747	A 12/2005
WO	2004099681	11/2004
WO	2014143181	9/2014
WO	15134185	9/2015

OTHER PUBLICATIONS

American RV Company, Dometic 459530 Duo Therm 13,500 BTU Brisk Air Conditioner High Efficiency Upper Unit Trailer Camper RV, Mar. 23, 2014 <https://web.archive.org/web/20140323013456/http://www.americanrvcompany.com/Dometic-459530-Duo-Therm-13500-BTU-Brisk-Air-Conditioner-High-Efficiency-Upper-Unit-Trailer-Camper-RV> Mar. 23, 2014.

American RV Company, Dometic 541815 High Performance 13,500 BTU Air Conditioner Upper Unit CCC2 Required Electronics Pre-Installed Camper Trailer RV, <http://www.americanrvcompany.com/Dometic-541815-High-Performance-13500-BTU-Air-Conditioner-Upper-Unit-CCC2-Required-Electronics-Pre-Installed-Camper-Trailer-RV> Mar. 23, 2014.

American RV Company, Dometic 541816 High Performance 15,000 BTU Air Conditioner Upper Unit CCC2 Required Electronics Pre-Installed Camper Trailer RV, <http://www.americanrvcompany.com/Dometic-541816-High-Performance-15000-BTU-Air-Conditioner-Upper-Unit-CCC2-Required-Electronics-Pre-Installed-Camper-Trailer-RV> Mar. 23, 2014.

American RV Company, Dometic 541916 High Performance 15,000 BTU Air Conditioner Upper Unit Single Zone LCD Thermostat Required Electronics Pre-Installed Camper Trailer RV, <http://www.americanrvcompany.com/Dometic-541916-High-Performance-15000-BTU-Air-Conditioner-Upper-Unit-Single-Zone-LCD-Thermostat-Required-Electronics-Pre-Installed-Camper-Trailer-RV> Mar. 23, 2014.

[americanrvcompany.com/Dometic-541916-High-Performance-15000-BTU-Air-Conditioner-Upper-Unit-Single-Zone-LCD-Thermostat-Required-Electronics-Pre-Installed-Camper-Trailer-RV](http://www.americanrvcompany.com/Dometic-541916-High-Performance-15000-BTU-Air-Conditioner-Upper-Unit-Single-Zone-LCD-Thermostat-Required-Electronics-Pre-Installed-Camper-Trailer-RV) Mar. 23, 2014.

American RV Company, Dometic 551816 High Performance 15,000 BTU Heat Pump for Comfort Control Center II Camper Trailer RV, <http://www.americanrvcompany.com/Dometic-551816-High-Performance-15000-BTU-Heat-Pump-for-Comfort-Control-Center-II-Camper-Trailer-RV> Mar. 23, 2014.

Australian Patent Application 2017220186 entitled "Parking Cooler" filed Jan. 11, 2017.

Chinese Patent Application 201710040123.1 entitled "Parking Cooler" filed Jan. 18, 2017.

European Patent Application 17152275.8 entitled "Parking Cooler" filed Jan. 19, 2017.

Canadian Patent Application 2,906,348 entitled "Modular Air Grill Assembly" as filed Sep. 14, 2016 (national stage entry date).

Dirna Bergstrom: Parking Coolers—No-Idle Electrical A/C—MiniCool Compact 1.4; <http://www.dirna.com/parking-coolers-no-idle-electrical-ac-compact/> Mar. 17, 2015.

Dirna Bergstrom: Slim Cool; <http://www.dirna.com/files/dirna-manuals/220RE00183.pdf> May 21, 2014.

Dometic Corporation, Dometic High Performance Air Conditioners, 2 pages, Jan. 1, 2011.

Dometic Duo-Therm, p. 140. Feb. 22, 2013.

Dometic Group: "Climate Control", <http://www.dometic.com/enus/Americas/USA/RV-Products/climate>, 2 pages, Dec. 14, 2011.

Dometic Waeco Coolair RT 880; <http://www.dometic.co.uk/product/waeco-coolair-rt-880-2/> May 14, 2015.

Eberspacher Cooltronic Parking Coolers with High Efficiency with the Engine Off; <http://www.eberspacher.com/products/air-conditioning/cooltronic-truck-parking-coolers.html> Jun. 23, 2015.

European Design Patent Application No. 003300219 entitled "Air Shroud Assembly" filed Jul. 8, 2016.

Indelb; WO Oblot'; Sleeping Well Oblo; http://www.indelb.com/products/parking_air_cooler/sleeping_well/sw_oblo Apr. 1, 2016.

International Search Report and Written Opinion for PCT/US2013/065458 dated Jan. 29, 2014.

Webasto: Rooftop air conditioning systems: Rooftop 3.5-9.9 kw; <http://www.eberspacher.com/products/air-conditioning/cooltronic-truck-parking-coolers.html> May 14, 2014.

Webasto; Truck parking cooler: Cool Top Vario 10 E; <http://www.webasto.com/gb/markets-products/truck/air-conditioning/products/cool-top-vario/> Apr. 25, 2016.

Youtube; Viesa Kompressor; <https://www.youtube.com/watch?v=SPK17XEvVL0> May 22, 2012 (https://www.google.com/?gws_rd=ssl#q=https://www.youtube.com/watch?v%3DSPK17XEvVL0&spf=1495819902591), May 22, 2012.

Design U.S. Appl. No. 29/542,555 entitled "Modular Air Grill Design" filed Oct. 15, 2015.

Design U.S. Appl. No. 29/552,019 entitled "Air Shroud Assembly" dated Jan. 19, 2016.

Design U.S. Appl. No. 29/581,176 entitled "Air-Conditioning Unit" dated Oct. 17, 2016.

Design U.S. Appl. No. 29/573,473 entitled "Recreational Vehicle Air-Conditioning Unit" filed Aug. 5, 2016.

Design U.S. Appl. No. 29/604,433 entitled "Air Conditioning Apparatus" filed May 17, 2017.

Utility U.S. Appl. No. 15/407,709 entitled "Parking Cooler" filed Jan. 17, 2017.

Design Divisional U.S. Appl. No. 29/620,394 entitled "Air Shroud Assembly" filed Oct. 4, 2017.

Design Divisional U.S. Appl. No. 29/620,395 entitled "Air Shroud Assembly" filed Oct. 4, 2017.

* cited by examiner

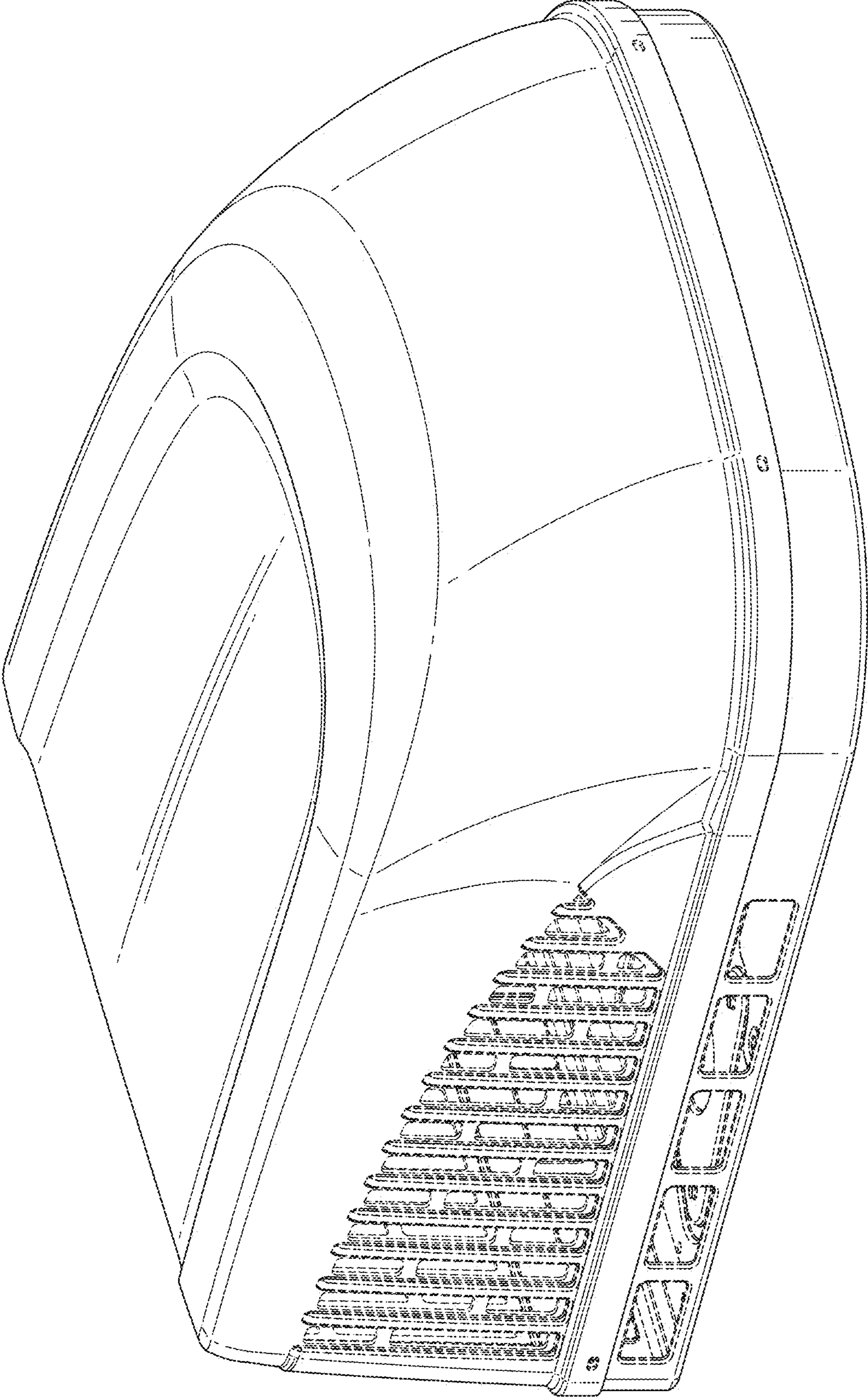


FIG. 1

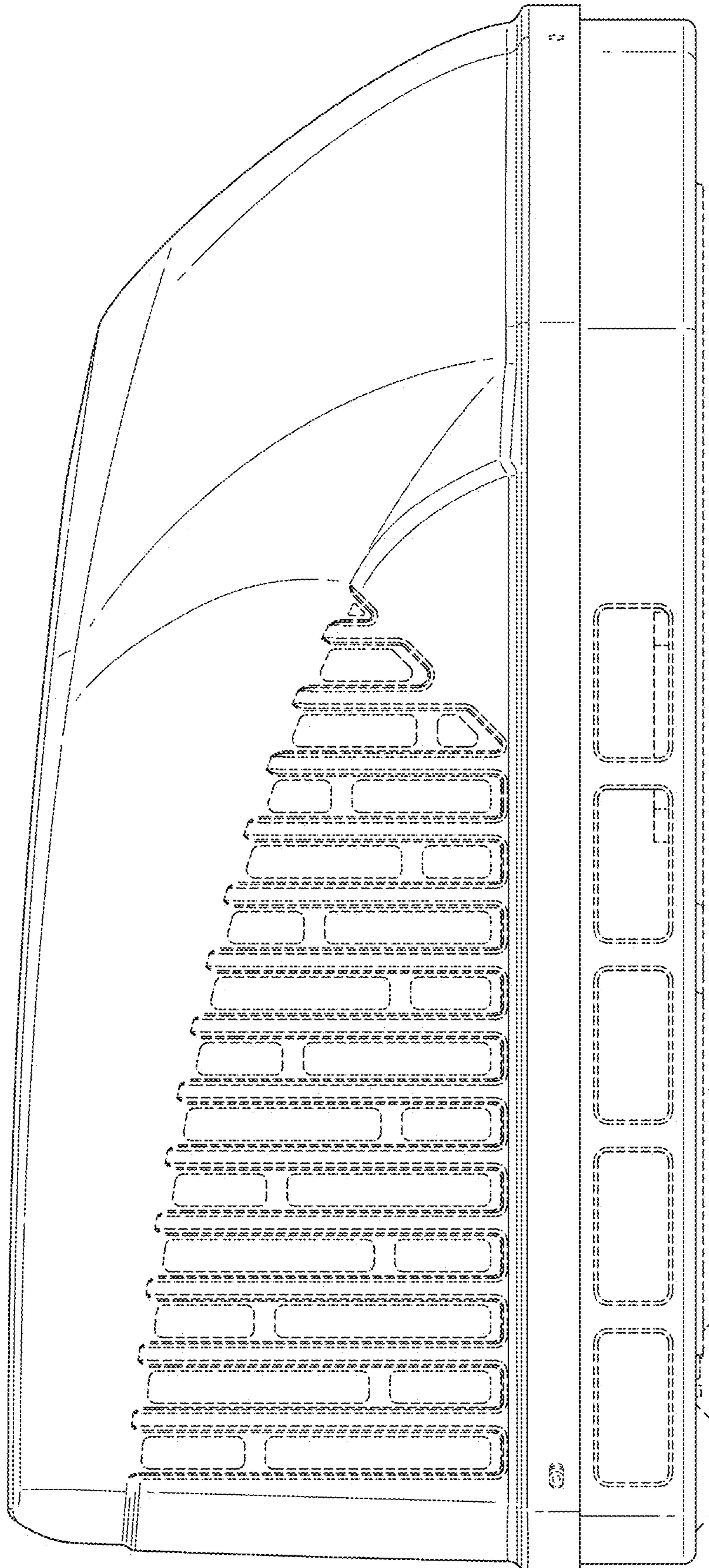


FIG. 2

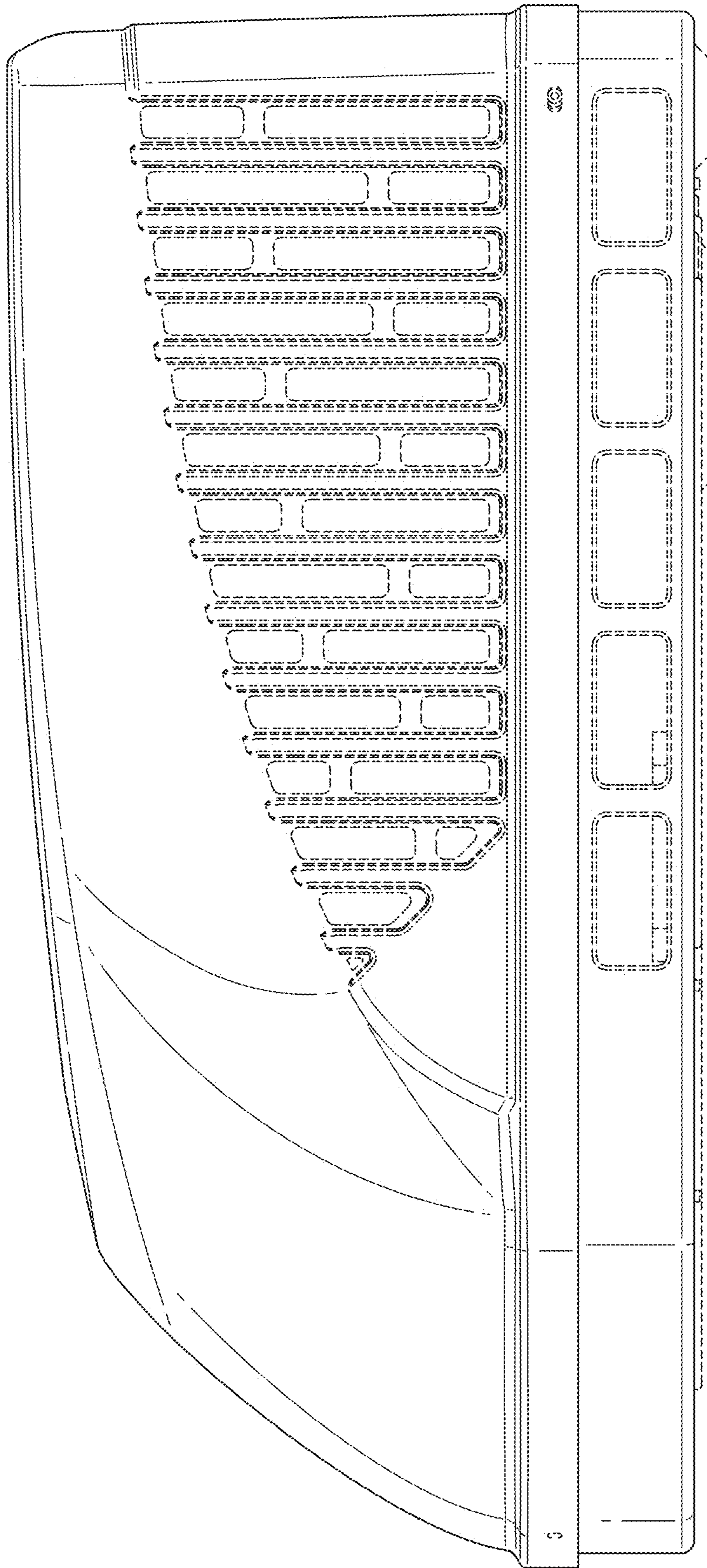


FIG. 3

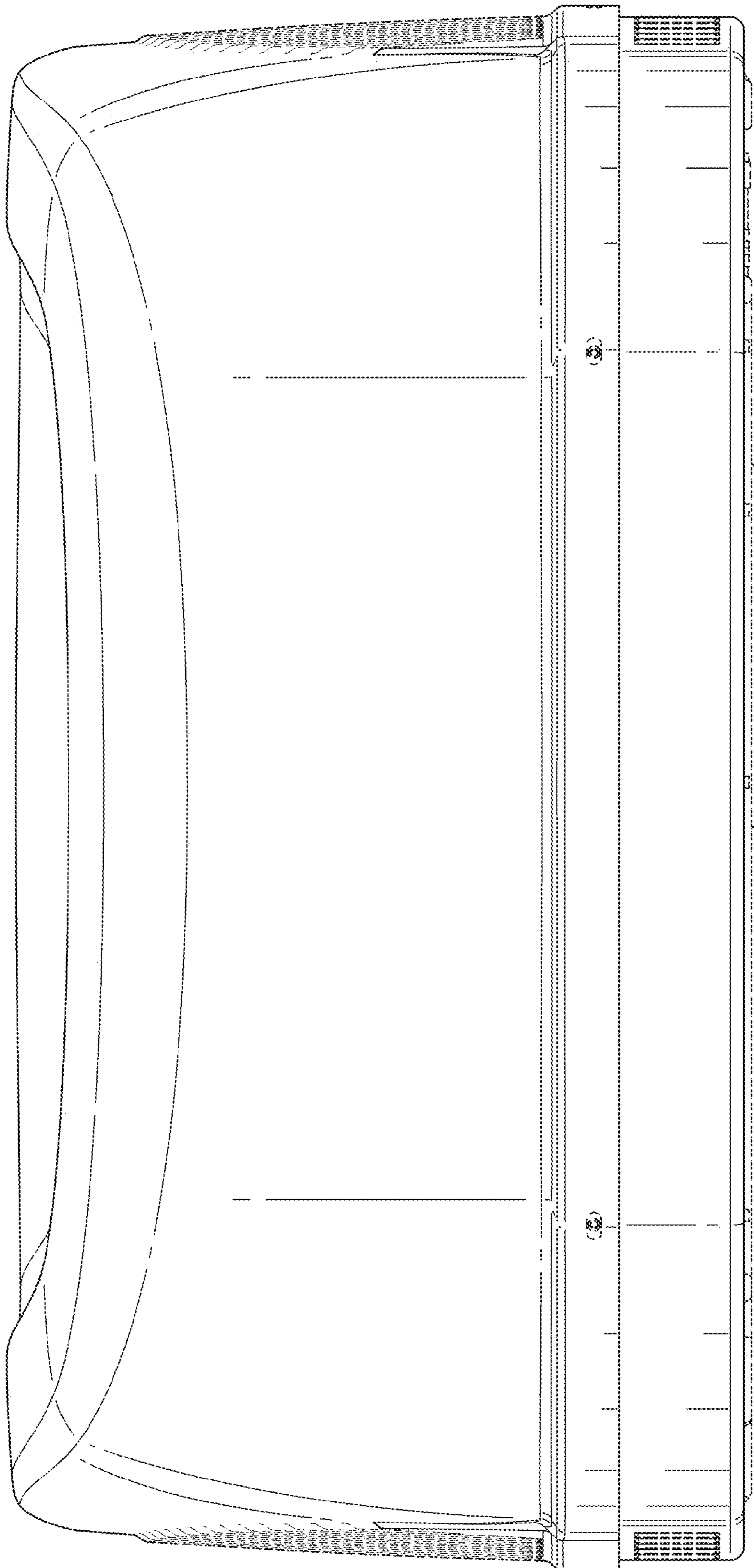


FIG. 4

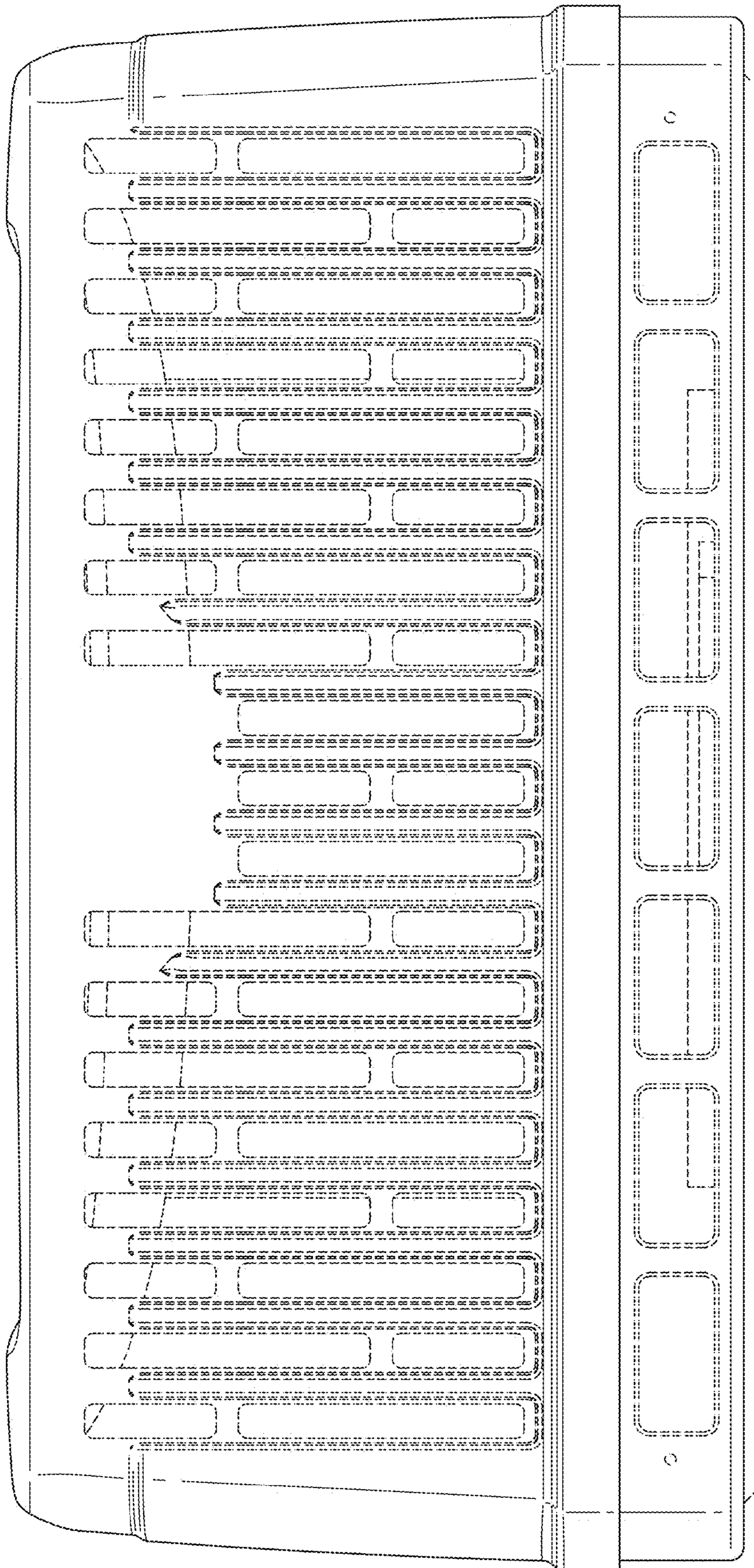


FIG. 5

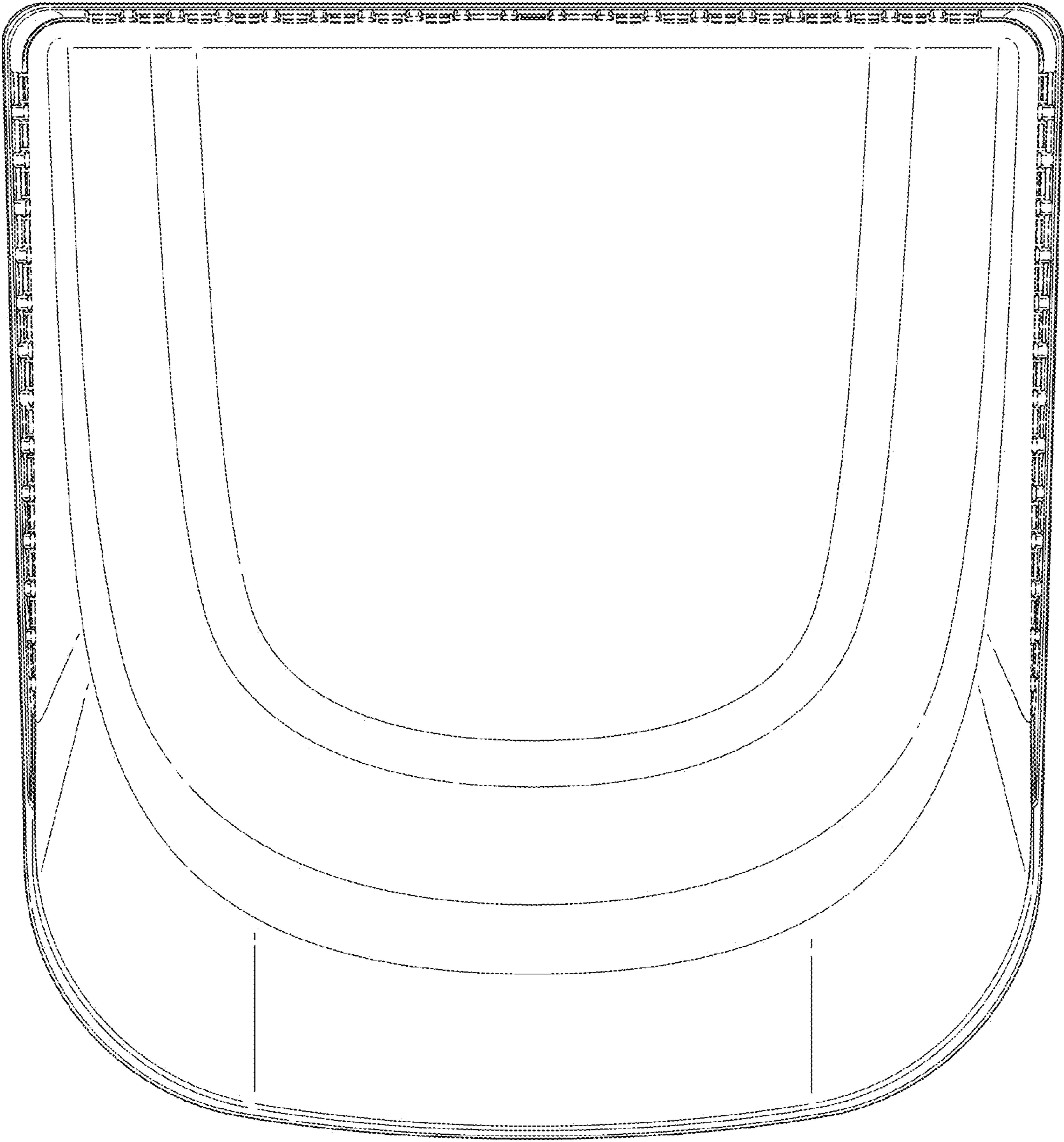


FIG. 6

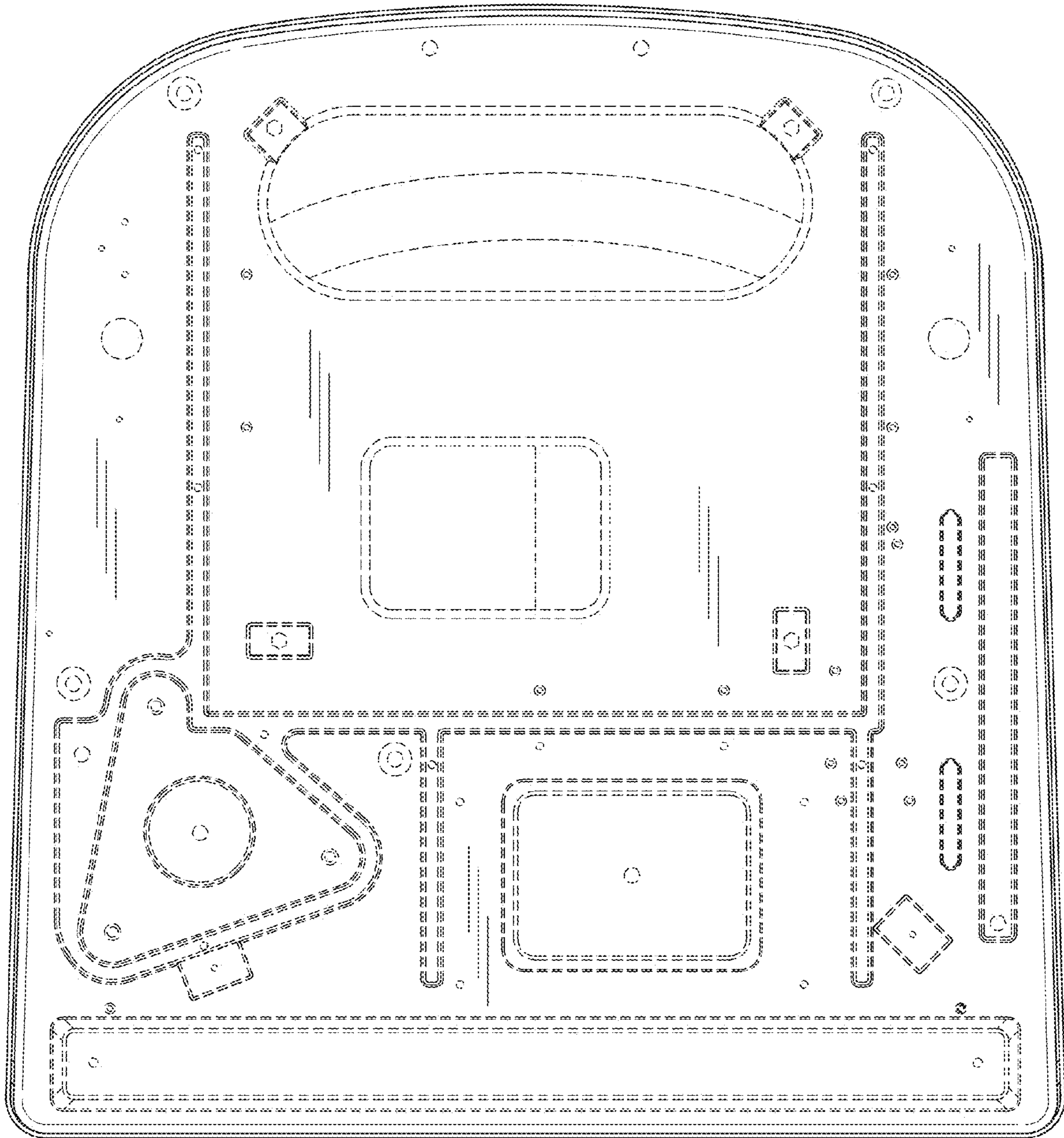


FIG. 7