



US00D947699S

(12) **United States Design Patent** (10) **Patent No.:** **US D947,699 S**
Schuh et al. (45) **Date of Patent:** **** Apr. 5, 2022**

(54) **CONTROLLER**

(71) Applicant: **Dometic Sweden AB**, Solna (SE)

(72) Inventors: **Eric Schuh**, Stevensville, MI (US);
Clayton Hendry Meyers, Middlebury,
IN (US); **Samuele Meda**, Solna (SE);
Jens Nybacka, Nacka (SE)

(73) Assignee: **Dometic Sweden AB**, Solna (SE)

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

(21) Appl. No.: **29/683,099**

(22) Filed: **Mar. 11, 2019**

(51) **LOC (13) Cl.** **10-05**

(52) **U.S. Cl.**
USPC **D10/103; D10/50**

(58) **Field of Classification Search**

USPC D10/104.1, 106.1, 106.95, 105, 111, 112,
D10/119.2, 49-56, 59, 65, 81, 103, 96,
D10/97, 98; D14/138 G, 217, 434, 218;
D23/351, 364; D13/168

CPC B60H 1/00364; B60H 1/00771; B60H
1/00964; C12N 1/14; C12M 1/36; G05D
7/0676; G05D 7/06; G05D 23/19; H02G
3/14; H02G 3/10; F24F 11/523; F24F
11/49; F24F 2110/10; F24F 11/88; F24F
11/30; G08B 5/36; G08B 21/182; H05K
1/181; H05K 5/0017; H05K 2201/10106;
H05K 2201/10128

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,931,151 A 8/1999 Van Dore et al.
6,434,459 B2 8/2002 Wong et al.
6,539,027 B1 3/2003 Cambron

6,696,963 B2 2/2004 Chapman et al.
D495,259 S * 8/2004 Starck D10/53
6,965,818 B2 11/2005 Haupt et al.
7,061,391 B2 6/2006 Jepsen et al.
7,075,769 B2 7/2006 Rupert et al.
(Continued)

FOREIGN PATENT DOCUMENTS

AU 201710975 S 3/2017
AU 201710976 S 3/2017
(Continued)

OTHER PUBLICATIONS

US D887,373 S, 06/2020, Becker (withdrawn)
(Continued)

Primary Examiner — Keli L Hill
Assistant Examiner — Sara S Sahneh
(74) *Attorney, Agent, or Firm* — Middleton Reutlinger

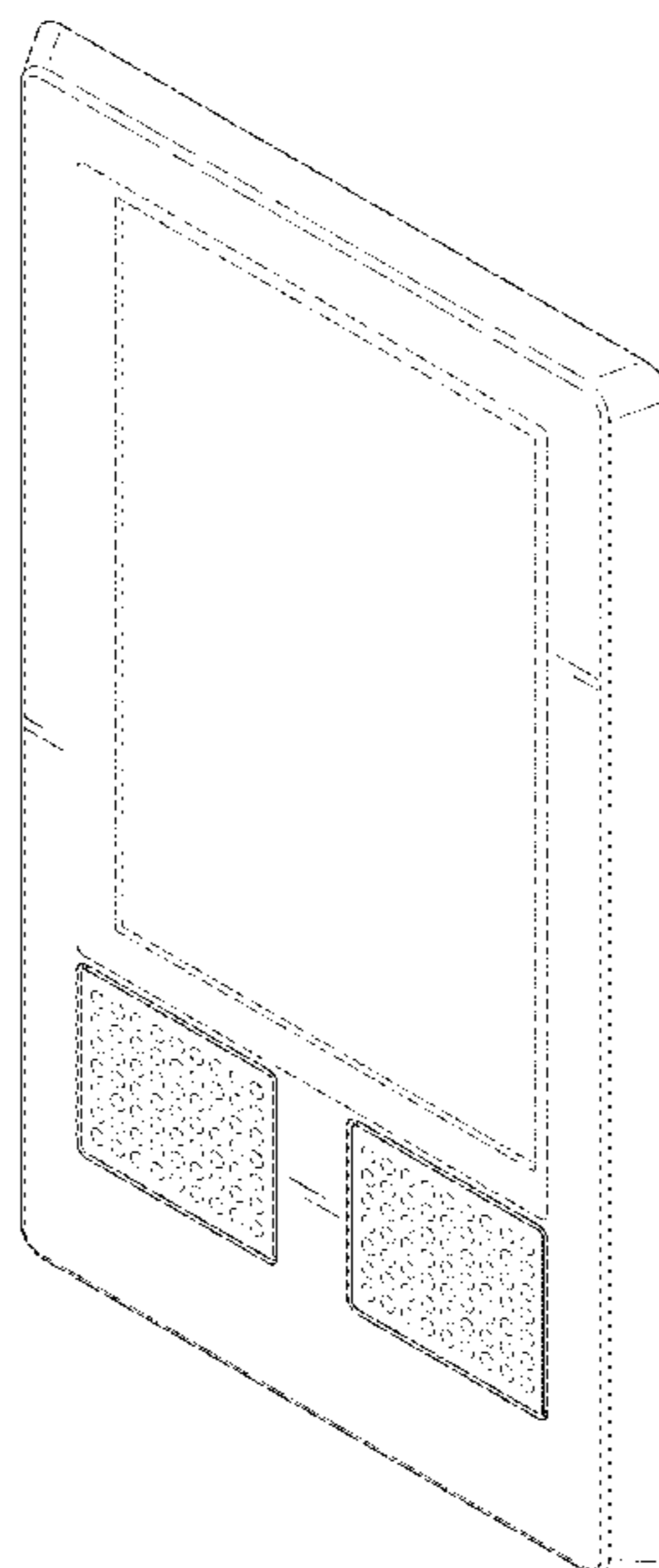
(57) **CLAIM**

The ornamental design for a controller, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a controller showing our new design;
FIG. 2 is a front view of the controller design of FIG. 1;
FIG. 3 is a rear view of the controller design of FIG. 1;
FIG. 4 is a first side view of the controller design of FIG. 1;
FIG. 5 is a second side view of the controller design of FIG. 1;
FIG. 6 is a top view of the controller design of FIG. 1; and,
FIG. 7 is a bottom view of the controller design of FIG. 1.
The broken lines shown in the drawings are included for the purpose of illustrating the unclaimed boundary or unclaimed portions of the controller. The broken lines form no part of the claimed design.

1 Claim, 5 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

7,107,160 B2 9/2006 Bean
 7,259,953 B2 8/2007 Salerno
 7,899,631 B2 3/2011 Iwane
 7,908,990 B2 3/2011 Strahm et al.
 7,937,216 B2 5/2011 Humphrey
 7,940,508 B2 5/2011 Helfrick et al.
 D640,992 S * 7/2011 Margolin D13/162
 8,085,168 B2 12/2011 Bethel
 8,249,829 B2 8/2012 Sai et al.
 8,291,851 B2 10/2012 Strahm et al.
 8,364,546 B2 1/2013 Yenni et al.
 8,490,005 B2 7/2013 Tarte
 8,577,487 B2 11/2013 Tarte et al.
 8,666,576 B2 3/2014 Kim
 8,682,503 B2 3/2014 Bosch et al.
 8,706,318 B2 4/2014 Jauch et al.
 8,755,994 B2 6/2014 Bodnar et al.
 8,767,379 B2 7/2014 Whitaker
 8,773,250 B2 7/2014 Sitarski et al.
 8,798,913 B2 8/2014 Humphrey
 8,803,676 B2 8/2014 Sitarski et al.
 8,928,465 B2 1/2015 Frye et al.
 8,979,353 B2 3/2015 Wilson et al.
 9,000,730 B2 4/2015 Murawaka
 D738,355 S 9/2015 Smith et al.
 9,135,770 B2 9/2015 Alberth
 9,171,270 B2 10/2015 Wada et al.
 D743,349 S * 11/2015 Leeland D13/162
 9,243,755 B2 1/2016 Zultowski et al.
 9,254,750 B2 2/2016 Tarte et al.
 D756,333 S 5/2016 Smith et al.
 D757,691 S 5/2016 Smith et al.
 9,349,306 B2 5/2016 Hall
 9,352,687 B1 5/2016 Zakhem et al.
 D761,232 S 7/2016 Smith et al.
 D766,217 S 9/2016 Smith et al.
 9,435,675 B2 9/2016 Wise
 9,454,897 B2 9/2016 Cattermole et al.
 9,488,697 B2 11/2016 Harman
 D773,328 S * 12/2016 DeLeon D10/104.1
 D780,131 S * 2/2017 Kashimoto D13/168
 9,586,579 B1 3/2017 Miller et al.
 9,604,541 B1 3/2017 Anter
 9,612,130 B2 4/2017 Loftus et al.
 9,643,515 B2 5/2017 Wagner et al.
 9,644,969 B2 5/2017 Oakden et al.
 9,701,200 B2 7/2017 Dhillon et al.
 9,744,852 B2 8/2017 Buttolo et al.
 9,791,514 B2 10/2017 Nishizawa
 9,797,744 B2 10/2017 Bethel
 D801,833 S * 11/2017 Jiang D10/50
 9,863,854 B2 1/2018 Axness et al.
 9,911,095 B2 3/2018 Kemper et al.
 9,953,471 B2 4/2018 Tieman
 D821,984 S * 7/2018 Mori D13/168
 D823,265 S 7/2018 Meda et al.
 10,045,147 B2 8/2018 Dickow et al.
 10,046,637 B2 8/2018 Buttolo et al.
 10,053,112 B2 8/2018 Goldman-Shenhar et al.
 10,059,219 B2 8/2018 Qiu et al.
 10,093,286 B2 10/2018 Lehman et al.
 10,144,290 B2 12/2018 Jang et al.
 D839,318 S 1/2019 Meda et al.
 10,168,180 B2 1/2019 Bethel
 10,173,689 B1 1/2019 Bullock et al.
 D842,149 S * 3/2019 Haag D10/98
 10,220,706 B2 3/2019 Anter
 10,227,006 B2 3/2019 Choi et al.
 10,229,654 B2 3/2019 Kim et al.
 D862,400 S * 10/2019 Chretien D13/162
 D865,914 S 11/2019 Snyder
 D886,749 S * 6/2020 Emigh D13/170
 D888,589 S * 6/2020 Menden D10/49
 10,696,129 B2 6/2020 Bergin
 D901,314 S * 11/2020 Atwood D10/50

2002/0072988 A1 6/2002 Aram
 2005/0141154 A1 6/2005 Consadori et al.
 2006/0218244 A1 9/2006 Rasmussen et al.
 2008/0299961 A1 12/2008 Muller et al.
 2009/0005930 A1 1/2009 Koebrick
 2010/0115925 A1 5/2010 Charbonneau
 2011/0209079 A1 8/2011 Tarte et al.
 2011/0234003 A1 9/2011 Helfrick et al.
 2012/0091214 A1 4/2012 Rixen
 2012/0221188 A1 8/2012 Kelly, III
 2013/0124247 A1 5/2013 Yenni et al.
 2013/0161489 A1 * 6/2013 Gardner, Jr. G09G 3/3406
 250/208.1
 2014/0046468 A1 2/2014 Tarte et al.
 2014/0052484 A1 2/2014 Bellamy
 2014/0121956 A1 5/2014 Jastrzebski
 2014/0180761 A1 6/2014 Flanzer et al.
 2014/0253050 A1 9/2014 Whitaker
 2014/0265941 A1 9/2014 Robinson et al.
 2014/0324299 A1 10/2014 Sørensen
 2015/0088570 A1 3/2015 Yenni et al.
 2015/0253778 A1 9/2015 Rothoff et al.
 2015/0269150 A1 9/2015 Sou et al.
 2015/0379533 A1 12/2015 Cipolla et al.
 2016/0061610 A1 3/2016 Sangameswaran et al.
 2016/0291806 A1 10/2016 Civiero et al.
 2016/0377471 A1 12/2016 Wise
 2017/0028850 A1 2/2017 Miller et al.
 2017/0028866 A1 2/2017 Miller et al.
 2017/0036561 A1 2/2017 Harman
 2017/0046578 A1 2/2017 Phillips
 2017/0124035 A1 5/2017 Buttolo et al.
 2017/0285712 A1 10/2017 Veloso et al.
 2017/0351422 A1 12/2017 Wild et al.
 2017/0359519 A1 12/2017 Hardy
 2018/0075399 A1 3/2018 Perdue et al.
 2018/0147913 A1 5/2018 Bergin
 2018/0225624 A1 8/2018 Mashburn et al.
 2018/0253990 A1 9/2018 Skaff et al.
 2018/0293819 A1 10/2018 Ross
 2018/0343303 A1 11/2018 Dudar et al.
 2018/0354777 A1 12/2018 Slater et al.
 2019/0019093 A1 1/2019 Murakami
 2019/0031158 A1 1/2019 Lehman et al.
 2019/0043270 A1 2/2019 Hemes et al.
 2019/0070959 A1 3/2019 Hamasaki et al.
 2019/0077279 A1 3/2019 Malcolm et al.
 2019/0079717 A1 3/2019 Lee et al.
 2019/0128551 A1 5/2019 Heral

FOREIGN PATENT DOCUMENTS

AU 201712767 S 5/2017
 AU 201811509 S 4/2018
 AU 201811512 S 4/2018
 CN 304191093 * 12/2016
 CN 207190899 U 4/2018
 CN 305159643 * 12/2018
 CN 305471153 * 5/2019
 CN 305826916 * 12/2019
 CN 306678208 * 3/2021
 CN 306678231 * 3/2021
 CN 306784992 * 4/2021
 DE 10161576 A1 6/2003
 JP D1543972 * 6/2015
 JP D1605366 * 12/2017
 JP D1672172 * 10/2020
 WO 2017190595 A1 11/2017
 WO 2019082168 A1 5/2019
 WO 2020183367 A1 9/2020
 WO 2020183368 A1 9/2020

OTHER PUBLICATIONS

Dometic Store, Thermostat Control Kit, Date first available May 14, 2012, [online]retrieved Aug. 24, 2021 ,available from https://www.amazon.com/Dometic-3316230-014-Thermostat-Control-Kit/dp/B072QFK2XH/ref=psdc_15725471_t5_B00CXB7BVU (Year: 2012).*

(56)

References Cited

OTHER PUBLICATIONS

Briidea Store, RV Thermostat, Date first available May 31, 2021, [online]retrieved Aug. 24, 2021, available from https://www.amazon.com/dp/B093LHWQSH/ref=sspa_dk_detail_4?psc=1&pd_rd_i=B093LHWQSH&pd_rd_w=iXINc&pf_rd_p=6977686b-f796-42ac-b080-763d5d917329&pd_rd_wg=w1bjL&pf_rd_r=CTRSMEZA2MMCZFD5E3RE&pd_rd_r=e (Year: 2021).*

Dometic Store, 3314082000 Thermostat, Date first available May 22, 2013, [online]retrieved Aug. 24, 2021, available from https://www.amazon.com/Dometic-3314082000-Thermostat/dp/B00CXB7BVU/ref=psdc_15725471_t4_B093LHWQSH (Year: 2013).*

Micro-Air; Easy Touch RV Comfort, Date first available from wayback date Aug. 7, 2020, [online]retrieved Oct. 25, 2021, available from wayback https://web.archive.org/web/20200807040244/https://micro-air.com/products_easytouch_rv_thermostat_touchscreen.cfm (Year: 2020).*

Honeywell Home Store, WIFI Thermostat, Date first available May 6, 2019, [online]retrieved Oct. 25, 2021, available from https://www.amazon.com/dp/B07RLXQYX3/ref=sspa_dk_detail_0?pd_rd_i=B07RLXQYX3&pd_rd_w=NmxYH&pf_rd_p=54ed5474-54a8-4c7f-a88a-45f748d18166&pd_rd_wg=unRQH&pf_rd_r=WD0HFJQT06J8CDF6J9Z2&pd_rd_r=c (Year: 2019).*

Honeywell Home Store, Programmable Thermostat, Date first available Aug. 30, 2017, [online]retrieved Oct. 25, 2021, available from https://www.amazon.com/dp/B07589KPQ3/ref=sspa_dk_detail_7?pd_rd_i=B07589KPQ3&pd_rd_w=lCbmw&pf_rd_p=9fd3ea7c-b77c-42ac-b43b-c872d3f37c38&pd_rd_wg=zfCto&pf_rd_r=RZTS7FFB2F87GYE7 (Year: 2017).*

Australian Patent/Design Application No. 201915241, of Schuh, E., et al., filed Sep. 11, 2019.

European Union Patent/Design Application No. 006852919-001, of Schuh, E., et al., filed Sep. 11, 2019.

International Application No. PCT/IB2020/052065, of Schuh, E., et al., filed Mar. 10, 2020.

Examination Report dated Sep. 18, 2019 received for European Union Patent/Design Application No. 006852919-001, of Schuh, E et al., filed Sep. 11, 2019.

Certification of Registration dated Dec. 13, 2019 received for Australian Patent/Design Application No. 201915241, of Schuh, E., et al., filed Sep. 11, 2019.

International Search Report and Written Opinion for International Application No. PCT/IB2020/052066 dated May 19, 2020, 12 pages.

International Search Report and Written Opinion for International Application No. PCT/IB2020/052065 dated Jun. 22, 2020, 8 pages.

U.S. Appl. No. 16/641,581 entitled "Recreational Vehicle, Cooling Device, Controlling System and Method for Controlling the Cooling Device" filed Feb. 24, 2020.

Design U.S. Appl. No. 29/641,674, filed Mar. 23, 2018 titled "Control Panel".

Design U.S. Appl. No. 29/767,088, filed Jan. 20, 2021 titled "Control Panel".

European Design Application No. 008053383-0001-0003 filed on Jul. 24, 2020.

U.S. Appl. No. 62/816,534 entitled "Multiplex Controller Assembly" filed Mar. 11, 2019.

U.S. Appl. No. 62/816,561 entitled "Predictive Analysis System for Recreational Vehicle" filed Mar. 11, 2019.

Schuh, E., "Hardware Specification for Tesla/Dometic Interact," p. 15 (Feb. 12, 2019).

DE Patent Application No. 112020000798.7 titled "Multiplex Controller Assembly" filed on Sep. 10, 2021 (national stage entry application from PCT/IB2020/052065-WO/2020/183367A1).

International Preliminary Report on Patentability issued in PCT Application No. PCT/IB2020/052065 dated Aug. 25, 2021.

International Preliminary Report on Patentability issued in PCT Application No. PCT/IB2020/052066 dated Aug. 25, 2021.

Notification of Registration Issued in European Union Application No. 008053383-0001-0003 dated Jul. 31, 2020.

U.S. Appl. No. 17/438,034 titled "Predictive Analysis System for Recreational Vehicle" filed Sep. 10, 2021.

U.S. Appl. No. 17/438,032 titled "Multiplex Controller Assembly" filed Sep. 10, 2021.

* cited by examiner

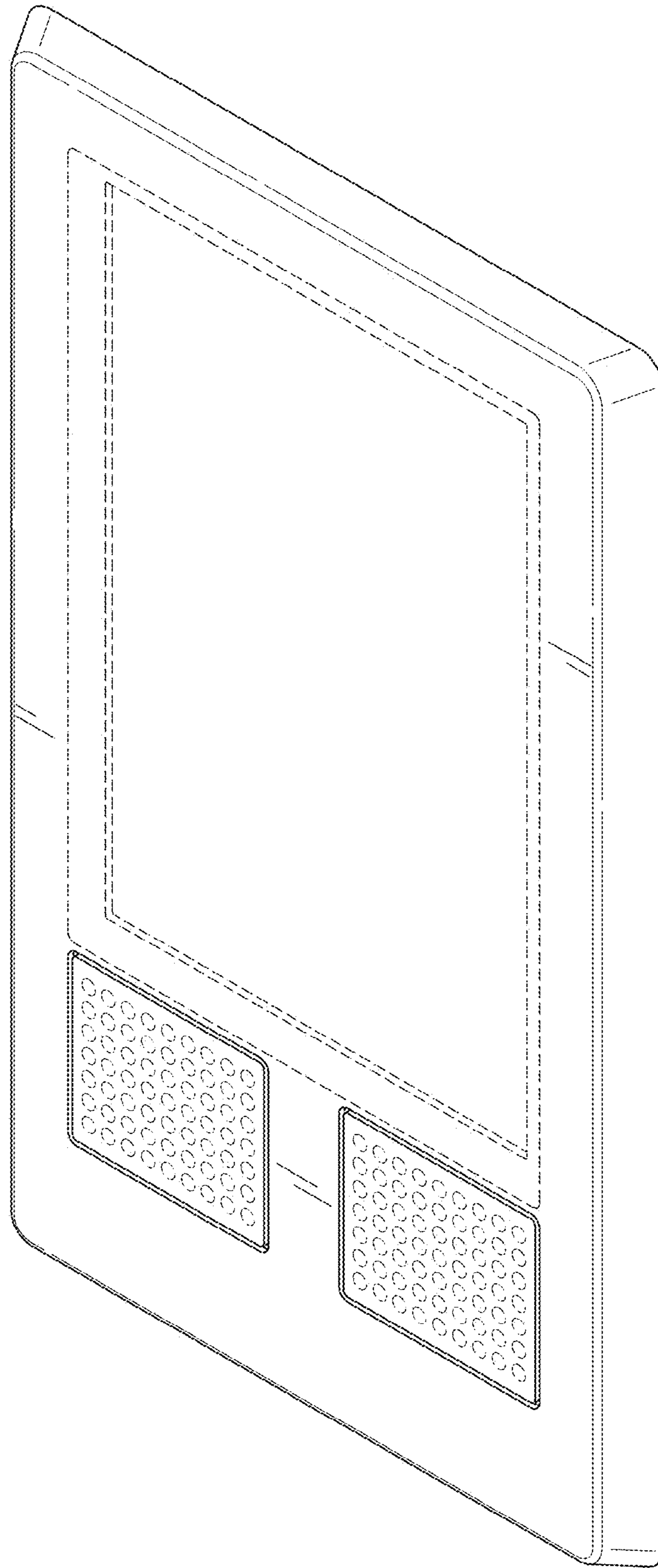


FIG. 1

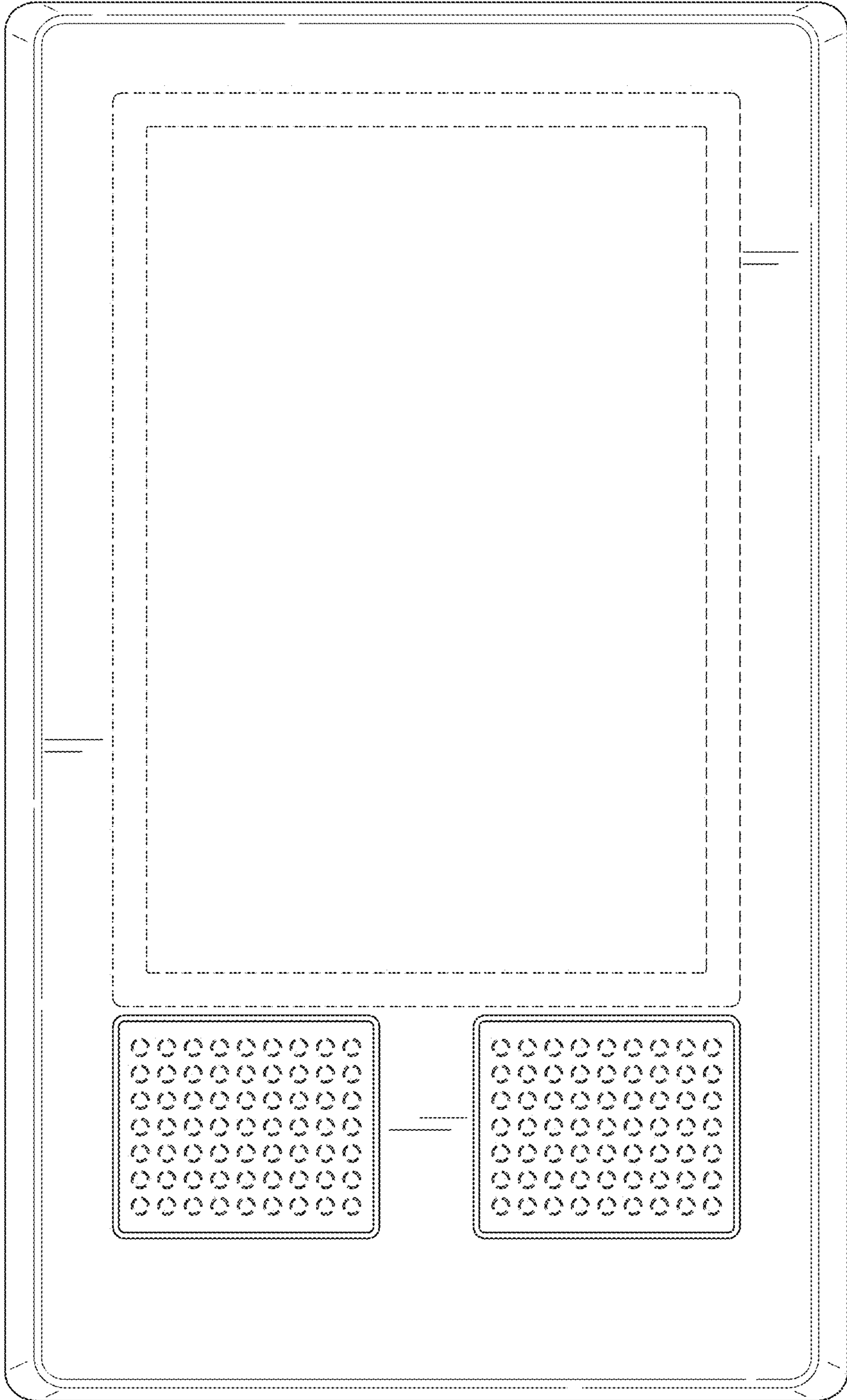


FIG. 2

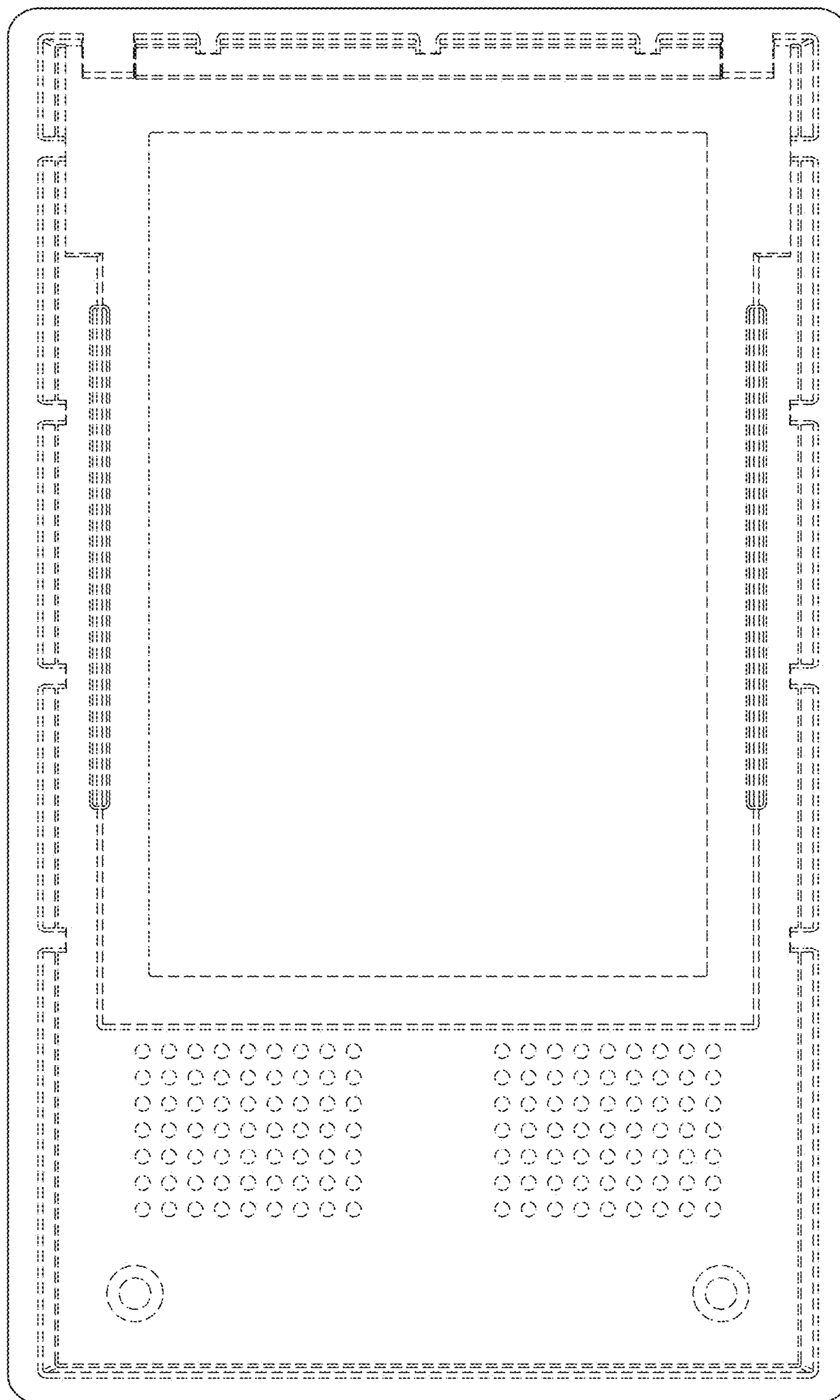


FIG. 3

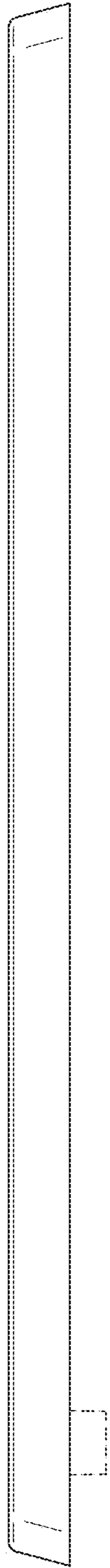


FIG. 4

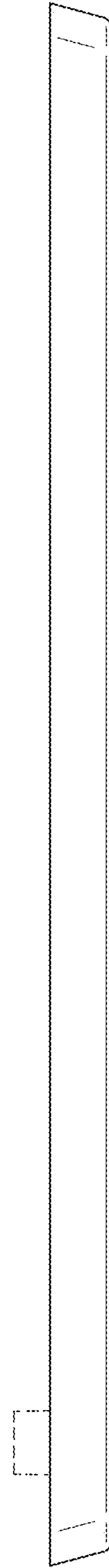


FIG. 5

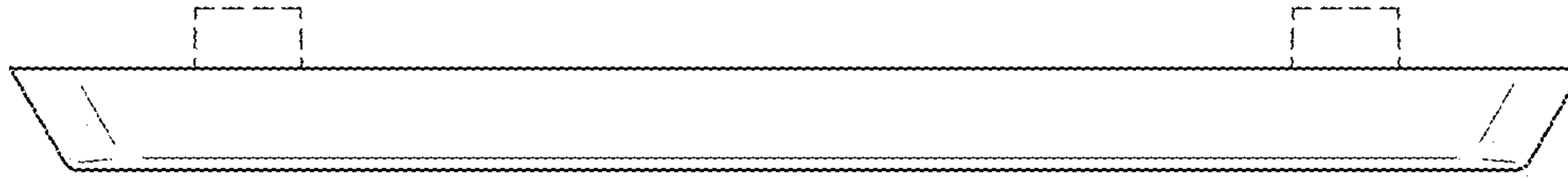


FIG. 6

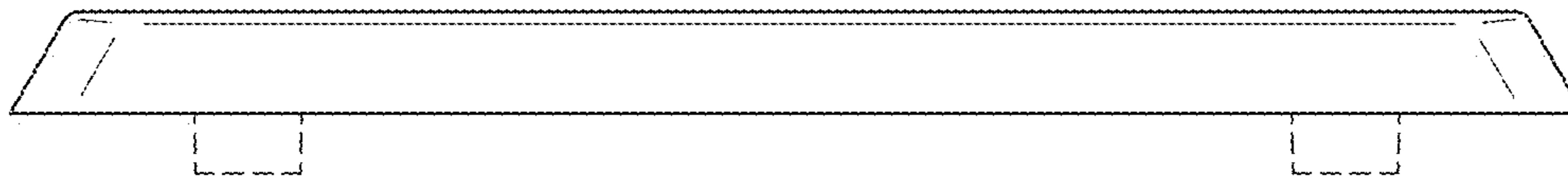


FIG. 7