



US00D851057S

(12) **United States Design Patent**  
**Nam**

(10) **Patent No.:** **US D851,057 S**  
(45) **Date of Patent:** **\*\* Jun. 11, 2019**

(54) **SPEAKER GRILL WITH GRADUATED HOLE SIZING OVER A TRANSITION AREA FOR A MEDIA DEVICE**

(71) Applicant: **Sonos, Inc.**, Santa Barbara, CA (US)

(72) Inventor: **Youjin Nam**, Santa Barbara, CA (US)

(73) Assignee: **Sonos, Inc.**, Santa Barbara, CA (US)

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

(21) Appl. No.: **29/579,643**

(22) Filed: **Sep. 30, 2016**

(51) **LOC (11) Cl.** ..... **14-01**

(52) **U.S. Cl.**  
USPC ..... **D14/203.7; D14/219**

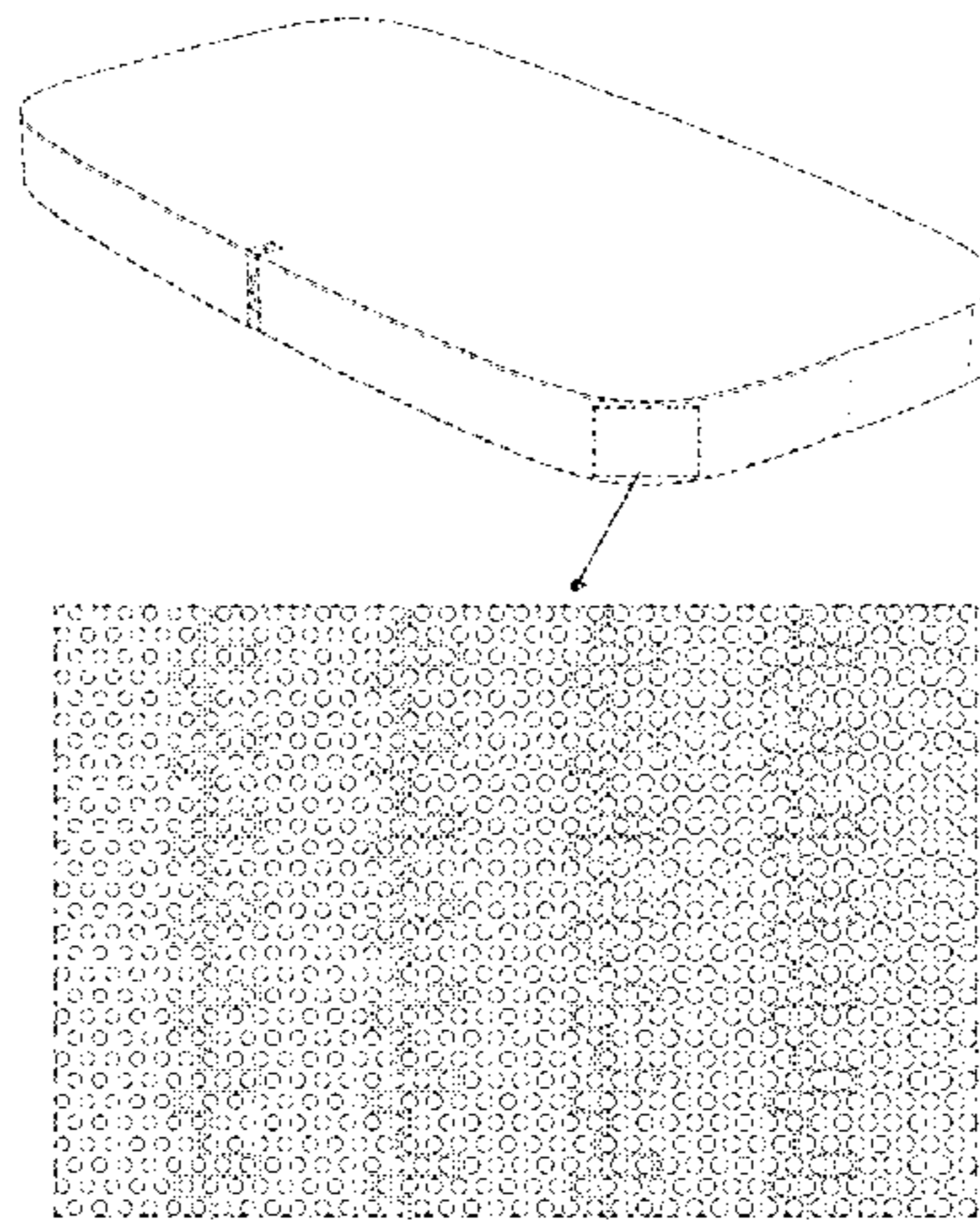
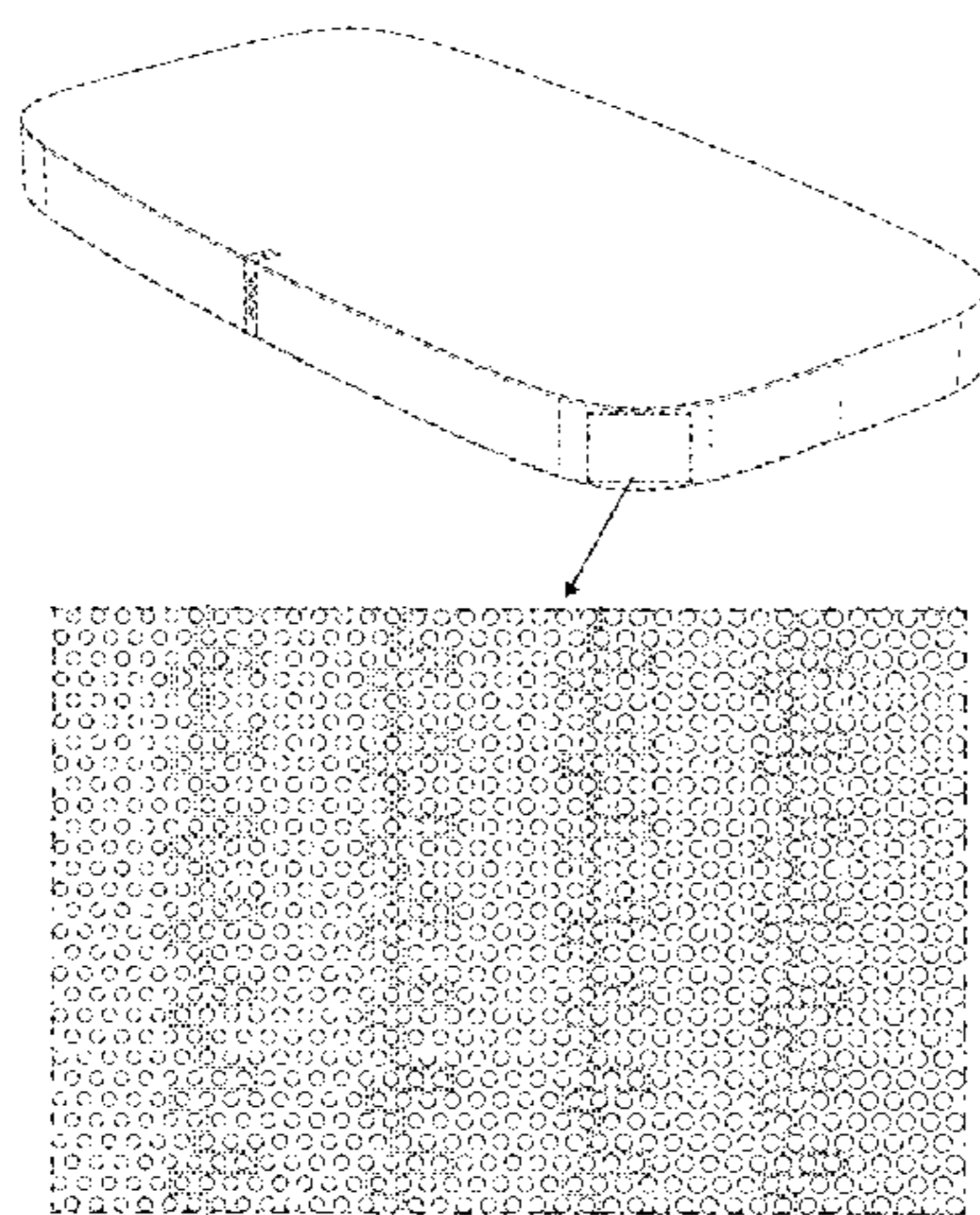
(58) **Field of Classification Search**  
USPC ..... D14/496, 203.3, 203.7, 217, 219, 356,  
D14/358, 314, 240, 242, 363, 365, 434,  
D14/167, 168, 156, 125, 204, 206, 216,  
D14/210, 213, 214, 215; D13/184;  
361/679.31, 679.32, 679.33; 455/90.3,  
455/575.1, 569.1  
CPC ..... G06F 1/16  
See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

2,981,039 A \* 4/1961 Pohl ..... B65B 43/08  
206/486  
3,443,162 A \* 5/1969 Nudelmont ..... H01R 25/003  
174/59  
3,811,532 A 5/1974 Everitt  
4,030,563 A 6/1977 Zinna  
4,064,365 A 12/1977 Zeller  
D262,464 S \* 12/1981 Vernon, Jr. .... D21/324  
4,418,248 A 11/1983 Mathis  
D297,642 S \* 9/1988 Van der Tuuk ..... D14/385  
D304,823 S \* 11/1989 Pfeifer ..... D14/353  
4,995,778 A 2/1991 Brussel et al.  
D323,818 S \* 2/1992 Willis ..... D14/353  
D338,193 S \* 8/1993 Sasaki ..... D13/147  
D352,634 S \* 11/1994 Canning ..... 5/736

D355,962 S 2/1995 Chiu et al.  
D367,650 S \* 3/1996 Solomita ..... D14/141.1  
5,519,572 A 5/1996 Luo  
D370,667 S \* 6/1996 Chen ..... D14/239  
D378,912 S \* 4/1997 Oikawa ..... D13/147  
D381,647 S \* 7/1997 Terng ..... D14/217  
D382,118 S \* 8/1997 Ferrero ..... D5/53  
D384,667 S \* 10/1997 Kokkinis ..... D14/194  
D396,471 S \* 7/1998 Kolinen ..... D14/240  
D411,185 S \* 6/1999 Isshiki ..... D14/358  
5,910,991 A 6/1999 Farrar et al.  
D417,223 S \* 11/1999 Groves ..... D14/125  
6,035,962 A 3/2000 Lin  
6,147,859 A 11/2000 Abboud  
D441,375 S \* 5/2001 Hisatsune ..... D14/125  
6,278,789 B1 8/2001 Potter  
6,349,792 B1 2/2002 Smith et al.  
D460,443 S \* 7/2002 Brunner ..... D14/240  
D461,791 S 8/2002 Ma  
D462,065 S 8/2002 Silverstein et al.  
D471,541 S \* 3/2003 Tomino ..... D14/240  
6,634,615 B1 10/2003 Bick et al.  
6,639,577 B2 \* 10/2003 Eberhard ..... G06F 1/1601  
345/102  
D484,484 S 12/2003 Green  
D498,742 S 11/2004 Green  
D508,041 S 8/2005 Carbone et al.  
6,955,606 B2 10/2005 Tahoe et al.  
D512,988 S 12/2005 Green  
D515,824 S \* 2/2006 Leisch ..... D5/53  
7,072,477 B1 7/2006 Kincaid et al.  
D529,295 S \* 10/2006 Kressner ..... D5/57  
D530,325 S \* 10/2006 Kerila ..... D14/240  
D538,260 S 3/2007 Wada  
D542,271 S \* 5/2007 Jenkins ..... D14/214  
D557,257 S 12/2007 Azumi  
D559,197 S 1/2008 Lim et al.  
D560,655 S 1/2008 Carbone  
D560,656 S 1/2008 Andre et al.  
D563,994 S \* 3/2008 Liu ..... D14/356  
D574,849 S 8/2008 Chen  
D575,801 S \* 8/2008 Kusano ..... D14/496  
D582,429 S 12/2008 Kusano et al.  
7,490,044 B2 2/2009 Kulkarni et al.  
7,519,188 B2 4/2009 Berardi et al.  
D594,002 S \* 6/2009 Kettula ..... D14/240  
D594,875 S 6/2009 Sheba et al.  
D598,020 S 8/2009 Lu et al.  
D599,814 S 9/2009 Ogura et al.  
D601,133 S 9/2009 Ogori  
D605,626 S \* 12/2009 Park ..... D14/203.1  
7,630,500 B1 12/2009 Beckman et al.  
D609,718 S 2/2010 Chang et al.



# US D851,057 S

D616,466 S *	5/2010	Sheppard .....	D14/501	9,020,153 B2	4/2015	Britt, Jr. et al.
D619,119 S *	7/2010	Graber .....	D14/216	D731,491 S *	6/2015	Larson ..... D14/435
D620,953 S *	8/2010	Andre .....	D14/203.3	D739,380 S	9/2015	Bolton
D622,710 S	8/2010	Goransson		9,195,432 B2	11/2015	Reilly
D624,526 S *	9/2010	Jones .....	D14/203.1	D744,541 S	12/2015	Langhammer et al.
D629,370 S *	12/2010	Sheppard .....	D14/125	D746,253 S	12/2015	Fishman
D631,061 S *	1/2011	Pardi .....	D14/203.1	D746,795 S	1/2016	Burlingame et al.
D633,503 S	3/2011	Bo et al.		D750,044 S *	2/2016	Nam ..... D14/214
D638,317 S *	5/2011	Nguyen .....	D10/65	D754,751 S *	4/2016	Kusano ..... D14/203.3
D638,819 S *	5/2011	Shum .....	D14/203.1	D759,629 S	6/2016	Kusano et al.
D641,628 S	7/2011	Baughman		9,376,051 B1	6/2016	McKenna
D648,743 S	11/2011	Chang		D768,602 S	10/2016	Reichert et al.
8,063,698 B2	11/2011	Howard et al.		D770,534 S	11/2016	Thissen
D654,476 S	2/2012	Weitgasser		D771,142 S	11/2016	Langhammer
D655,305 S	3/2012	Koo et al.		D778,889 S *	2/2017	Nagao ..... D14/240
8,139,774 B2	3/2012	Berardi et al.		D778,956 S	2/2017	Langhammer
8,160,281 B2	4/2012	Kim et al.		D780,728 S	3/2017	Shin et al.
D659,670 S	5/2012	Goetzen		D781,918 S	3/2017	Langhammer et al.
D660,284 S	5/2012	Carbone		D789,991 S	6/2017	Bird et al.
8,175,292 B2	5/2012	Aylward et al.		D791,747 S *	7/2017	Bellows ..... D14/230
8,229,125 B2	7/2012	Short et al.		D792,397 S	7/2017	Ma et al.
8,233,632 B1	7/2012	MacDonald et al.		D794,019 S	8/2017	Kusano et al.
D665,161 S	8/2012	Leifeld et al.		D797,808 S	9/2017	Peng et al.
8,238,578 B2	8/2012	Aylward et al.		D803,265 S	11/2017	Spindler
8,243,961 B1	8/2012	Morrill		D806,678 S	1/2018	Reichert et al.
8,265,310 B2	9/2012	Berardi et al.		D809,481 S	2/2018	McManigal
8,267,246 B2 *	9/2012	Bettenhausen .....	A61B 50/34 206/363	D827,671 S	9/2018	Nam et al.
8,290,185 B2	10/2012	Kim et al.		2003/0193654 A1	10/2003	Ushinski
8,291,670 B2 *	10/2012	Gard .....	E04F 15/02 52/181	2005/0233782 A1 *	10/2005	Bree ..... B44C 3/02 455/575.1
8,306,235 B2	11/2012	Mahowald et al.		2006/0014431 A1	1/2006	Shuey et al.
D671,909 S	12/2012	Choi		2007/0243911 A1 *	10/2007	Saito ..... H04M 1/22 455/575.1
D672,748 S	12/2012	Kallai et al.		2008/0044053 A1	2/2008	Belanger et al.
8,325,935 B2	12/2012	Rutschman et al.		2010/0142735 A1	6/2010	Yoon et al.
8,331,585 B2	12/2012	Enbom et al.		2011/0170710 A1	7/2011	Son et al.
D674,778 S	1/2013	Skurdal		2011/0311083 A1	12/2011	Bennett
D674,779 S	1/2013	Joseph		2012/0051558 A1	3/2012	Kim et al.
D675,190 S	1/2013	Nylen		2012/0127831 A1	5/2012	Gicklhorn et al.
D677,245 S	3/2013	Joseph		2012/0212903 A1	8/2012	Hopkinson et al.
D678,329 S *	3/2013	Lee .....	D14/203.3	2012/0263325 A1	10/2012	Freeman et al.
8,391,501 B2	3/2013	Khawand et al.		2013/0010970 A1	1/2013	Hegarty et al.
D681,009 S	4/2013	Meng et al.		2013/0028443 A1	1/2013	Pance et al.
D682,266 S *	5/2013	Wu .....	D14/240	2013/0259254 A1	10/2013	Xiang et al.
8,452,020 B2	5/2013	Gregg et al.		2014/0016784 A1	1/2014	Sen et al.
D684,948 S	6/2013	Burlingame et al.		2014/0016786 A1	1/2014	Sen et al.
D685,348 S	7/2013	Szymanski et al.		2014/0016802 A1	1/2014	Sen et al.
D688,231 S	8/2013	Nishii		2014/0023196 A1	1/2014	Xiang et al.
D689,446 S *	9/2013	Soyano .....	D13/180	2014/0112481 A1	4/2014	Li et al.
D692,859 S	11/2013	Ohashi		2014/0219456 A1	8/2014	Morrell et al.
D692,860 S	11/2013	Paterson		2014/0226823 A1	8/2014	Sen et al.
8,577,045 B2	11/2013	Gibbs et al.		2014/0294200 A1	10/2014	Baumgarte et al.
D695,711 S	12/2013	Szymanski et al.		2014/0355768 A1	12/2014	Morrell et al.
8,600,075 B2	12/2013	Lim et al.		2014/0355794 A1	12/2014	Sen et al.
8,620,006 B2	12/2013	Berardi et al.		2014/0355806 A1	12/2014	Graff
D700,692 S	3/2014	Engelhardt		2015/0036858 A1	2/2015	Aboabdo
D706,249 S *	6/2014	Holzer .....	D14/240	2015/0063610 A1	3/2015	Mossner
D707,667 S	6/2014	Kono et al.		2015/0146886 A1	5/2015	Baumgarte et al.
D710,328 S	8/2014	Kim		2015/0181007 A1 *	6/2015	Chang ..... H04M 1/0264 455/575.1
D713,405 S	9/2014	Akana et al.		2015/0195635 A1	7/2015	Garfio et al.
D715,257 S	10/2014	Son et al.		2015/0201274 A1	7/2015	Shabestary et al.
D715,258 S	10/2014	Cheney et al.		2015/0281866 A1	10/2015	Burge et al.
D715,259 S	10/2014	Han et al.		2016/0057529 A1 *	2/2016	Kappus ..... H04R 1/1075 381/74
D715,768 S	10/2014	Ryu et al.		2016/0126624 A1 *	5/2016	Lee ..... H01Q 1/526 343/841
8,855,319 B2	10/2014	Han et al.		2017/0085972 A1	3/2017	Reichert et al.
D716,756 S	11/2014	Kim et al.				
8,879,761 B2	11/2014	Goel et al.				
D718,737 S	12/2014	Shadovitz				
D719,931 S	12/2014	Wang				
8,914,559 B2	12/2014	Terlizzi et al.				
D721,061 S	1/2015	Burlingame et al.				
D721,352 S	1/2015	Kusano et al.				
8,934,647 B2	1/2015	Freeman et al.				
8,934,655 B2	1/2015	Carbone et al.				
8,965,546 B2	2/2015	Visser et al.				
D723,480 S	3/2015	Lee et al.				
8,977,974 B2	3/2015	Kraut				
8,984,442 B2	3/2015	Cortes et al.				
D727,360 S	4/2015	Peng et al.				

## FOREIGN PATENT DOCUMENTS

EP	1133896 B1	8/2002
EP	1825713 B1	10/2012
EP	2860992 A1	4/2015
JP	1595215 S	12/2017
WO	2015024881 A1	2/2015

OTHER PUBLICATIONS

United States Patent and Trademark Office “Notice of Allowance”, issued in connection with U.S. Appl. No. 29/446,524, dated Sep. 9, 2014, 48 pages.

United States Patent and Trademark Office, “Notice of Allowance”, issued in connection with U.S. Appl. No. 29/425,045, dated Sep. 12, 2014, 45 pages.

“ValueBasket.com”, Pioneer Wireless Speaker, Jun. 26, 2012, Retrieved from: <http://www.valuebasket.com/blog/wp-content/uploads/2013/07/Pioneer-Wireless.jpg> on Sep. 22, 2015, 1 pg.

“XW-SMA1 Large”, Pioneer Electronics, Jun. 26, 2012, Retrieved from: [http://www.pioneerelectronics.com/StaticFiles/PUSA/Images/Product%20Images/Home/XW-SMA1\\_large.jpg](http://www.pioneerelectronics.com/StaticFiles/PUSA/Images/Product%20Images/Home/XW-SMA1_large.jpg) on Sep. 22, 2015, 1 pg.

Ali Express, “Kadaer Cylinder Mini”, 2013, retrieved from [http://www.aliexpress.com/store/group/audio/113449\\_211742368.html](http://www.aliexpress.com/store/group/audio/113449_211742368.html) on Feb. 25, 2013, 2 pages.

CNET Reviews, “Definitive Technology Sound Cylinder: Definitive rolls out slick Sound Cylinder Bluetooth speaker”, CNET Editors’ Take, Jan. 6, 2013, retrieved from [http://reviews.cnet.com/portable-speakers/definitive-technology-sound-cylinder/4505-11313\\_7-35566924.html](http://reviews.cnet.com/portable-speakers/definitive-technology-sound-cylinder/4505-11313_7-35566924.html) on Feb. 25, 2013, 5 pages.

Google Search, “B&W MM—1 Speakers—PC multimedia—wired”, Jun. 2010, retrieved from [https://www.google.com/shopping/product/11800561382655422863?q=Bowers%20&%20Wilkins=&oq=Bowers+%26+Wilkins&gs\\_l=products-3\\_cc.3..0110.71820.76179.0.76394.16.5.0.11.11.0.129.354.4j1.5.0...0.0...1ac.1.4.products-cc.D\\_kgnKwdwrwOO&sa=X&ei=VMsnU](https://www.google.com/shopping/product/11800561382655422863?q=Bowers%20&%20Wilkins=&oq=Bowers+%26+Wilkins&gs_l=products-3_cc.3..0110.71820.76179.0.76394.16.5.0.11.11.0.129.354.4j1.5.0...0.0...1ac.1.4.products-cc.D_kgnKwdwrwOO&sa=X&ei=VMsnU) on Feb. 25, 2013, 3 pages.

Murrell, Eric, “Review: Sonos Play:5 Wireless Speaker”, At Home in the Future, Dec. 22, 2014 retrieved from <http://athomeinthefuture.com/2014/12/review-sonos-play5-wireless-speaker/> on Mar. 16, 2017, 4 pages.

Ricker, Thomas, “Sonos Play:3 review Wireless Hi-Fi takes on AirPlay”, The Verge, Oct. 12, 2011, retrieved from <http://www.theverge.com/2011/10/12/2481479/sonos-play-3-review> on Mar. 16, 2017, 2 pages.

Souppouris, Aaron, “Sonos Play:5 review (2015): A generational leap forward”, Engadget, Oct. 29, 2015, retrieved from <https://www.engadget.com/2015/10/29/sonos-play-5-review-2015/#/> on Mar. 16, 2017, 8 pages.

Trei, Michael, “RAAL Speakers fill your room with cylinders of sound”, DVICE, Oct. 4, 2009, retrieved from <http://www.dvice.com/archives/2009/10/raal-speakers-f.php> on Feb. 25, 2013, 3 pages.

Walton, Mark, “Sonos Play:5 review: The best-sounding wireless speaker system we’ve ever used”, ARS Technica, Nov. 8, 2015, retrieved from <https://arstechnica.com/gadgets/2015/11/sonos-play5-review-the-best-sounding-wireless-speaker-system-weve-ever-used/> on Mar. 16, 2017, 6 pages.

Yamamoto, Mike, “Some speakers are still firing on all cylinders”, CNET Reviews, Dec. 5, 2007, retrieved from [http://fnews.cnet.com/8301-17938\\_105-9829130-1.html](http://fnews.cnet.com/8301-17938_105-9829130-1.html) on Feb. 25, 2013, 6 pages.

Larsen, Rasmus, “LG brings Dolby Atmos to SJ9 soundbar and all 2017 OLED TVs”, FlatpanelHD, Jan. 10, 2017, 8 pages, retrieved from <https://www.flatpanelhd.com/news.php?subaction=showfull&id=1484046315> on Feb. 12, 2018.

“Dotty circle plain stamp 3.5cm”, Stampingallday.co.uk, Oct. 10, 2014, retrieved from [https://web.archive.org/web/20141010142137/http://stampingallday.co.uk/stampingalldayshopfront/prod\\_3161905-Dotty-circle-plain-stamp-35cm.html](https://web.archive.org/web/20141010142137/http://stampingallday.co.uk/stampingalldayshopfront/prod_3161905-Dotty-circle-plain-stamp-35cm.html) on Jun. 6, 2018, 2 pgs.

“Making Your Own Humidor”, devonbuy.com, Feb. 19, 2013, retrieved from <https://www.devonbuy.com/making-your-own-humidor/> on Jun. 6, 2018, 24 pgs.

“XIKAR PuroTemp Round Hygrometer 832XI”, NeptuneCigar.com, Dec. 2013, retrieved from <https://www.neptunecigar.com/hygrometers/xikar-purotemp-digital-hygrometer-round> on Jun. 6, 2018, 2 pgs.

Pierce, “Amazon Echo review: listen up”, The Verge, retrieved from <https://www.theverge.com/2015/1/19/7548059/amazon-echo-review-speaker> on Jun. 6, 2018, Jan. 19, 2015, 12 pgs.

\* cited by examiner

Primary Examiner — Paula Allen Greene  
(74) Attorney, Agent, or Firm — KPPB LLP

(57)

CLAIM

The ornamental design for speaker grill with graduated hole sizing over a transition area for a media device, as shown and described.

DESCRIPTION

FIG. 1A is a perspective view, which includes a view of an enlarged portion for visibility, of a speaker grill with graduated hole sizing over a transition area for a media device, according to a first embodiment of the invention.

FIG. 1B is another perspective view of the first embodiment.

FIG. 1C is a top view, which includes a view of an enlarged portion for visibility, of the first embodiment.

FIG. 1D is a bottom view of the first embodiment.

FIG. 1E is a first side view of the first embodiment.

FIG. 1F is a second side view of the first embodiment.

FIG. 1G is a front view of the first embodiment.

FIG. 1H is a back view of the first embodiment.

FIG. 2A is a perspective view, which includes a view of an enlarged portion for visibility, of a speaker grill with graduated hole sizing over a transition area for a media device, according to a second embodiment of the invention.

FIG. 2B is another perspective view of the second embodiment.

FIG. 2C, which includes a view of an enlarged portion for visibility, is a top view of the second embodiment.

FIG. 2D is a bottom view of the second embodiment.

FIG. 2E is a first side view of the second embodiment.

FIG. 2F is a second side view of the second embodiment.

FIG. 2G is a front view of the second embodiment.

FIG. 2H is a back view of the second embodiment.

FIG. 3A is a perspective view of a speaker grill with graduated hole sizing over a transition area for a media device, according to a third embodiment of the invention.

FIG. 3B is another perspective view of the third embodiment.

FIG. 3C is a top view, which includes a view of an enlarged portion for visibility, of the third embodiment.

FIG. 3D is a bottom view of the third embodiment.

FIG. 3E is a first side view of the third embodiment.

FIG. 3F is a second side view of the third embodiment.

FIG. 3G is a front view, which includes a view of an enlarged portion for visibility, of the third embodiment.

FIG. 3H is a back view of the third embodiment.

FIG. 4A is a perspective view of a speaker grill with graduated hole sizing over a transition area for a media device, according to a fourth embodiment of the invention.

FIG. 4B is another perspective view of the fourth embodiment.

FIG. 4C is a top view, which includes a view of an enlarged portion for visibility, of the fourth embodiment.

FIG. 4D is a bottom view of the fourth embodiment.

FIG. 4E is a first side view of the fourth embodiment.

FIG. 4F is a second side view of the fourth embodiment.

FIG. 4G is a front view, which includes a view of an enlarged portion for visibility, of the fourth embodiment.

FIG. 4H is a back view of the fourth embodiment.

FIG. 5A is a perspective view, which includes a view of an enlarged portion for visibility, of a speaker grill with graduated hole sizing over a transition area for a media device, according to a fifth embodiment of the invention.

FIG. 5B is another perspective view of the fifth embodiment.  
FIG. 5C is a top view, which includes a view of an enlarged portion for visibility, of the fifth embodiment.

FIG. 5D is a bottom view of the fifth embodiment.

FIG. 5E is a first side view of the fifth embodiment.

FIG. 5F is a second side view of the fifth embodiment.

FIG. 5G is a front view of the fifth embodiment.

FIG. 5H is a back view of the fifth embodiment.

FIG. 6A is a perspective view, which includes a view of an enlarged portion for visibility, of a speaker grill with graduated hole sizing over a transition area for a media device, according to a sixth embodiment of the invention.

FIG. 6B is another perspective view of the sixth embodiment.

FIG. 6C is a top view, which includes a view of an enlarged portion for visibility, of the sixth embodiment.

FIG. 6D is a bottom view of the sixth embodiment.

FIG. 6E is a first side view of the sixth embodiment.

FIG. 6F is a second side view of the sixth embodiment.

FIG. 6G is a front view of the sixth embodiment; and,

FIG. 6H is a back view of the sixth embodiment.

The dot-dash broken lines highlight portions of the speaker grill that are shown in an enlarged view and form no part of the claimed design.

The dot-dot broken lines are for illustrative purposes only, to distinguish between sections of the transition area that have holes of the same size, and form no part of the claimed design.

The features shown in dash-dash broken lines are for illustrative purposes only and do not form any part of the claimed design.

**1 Claim, 38 Drawing Sheets**

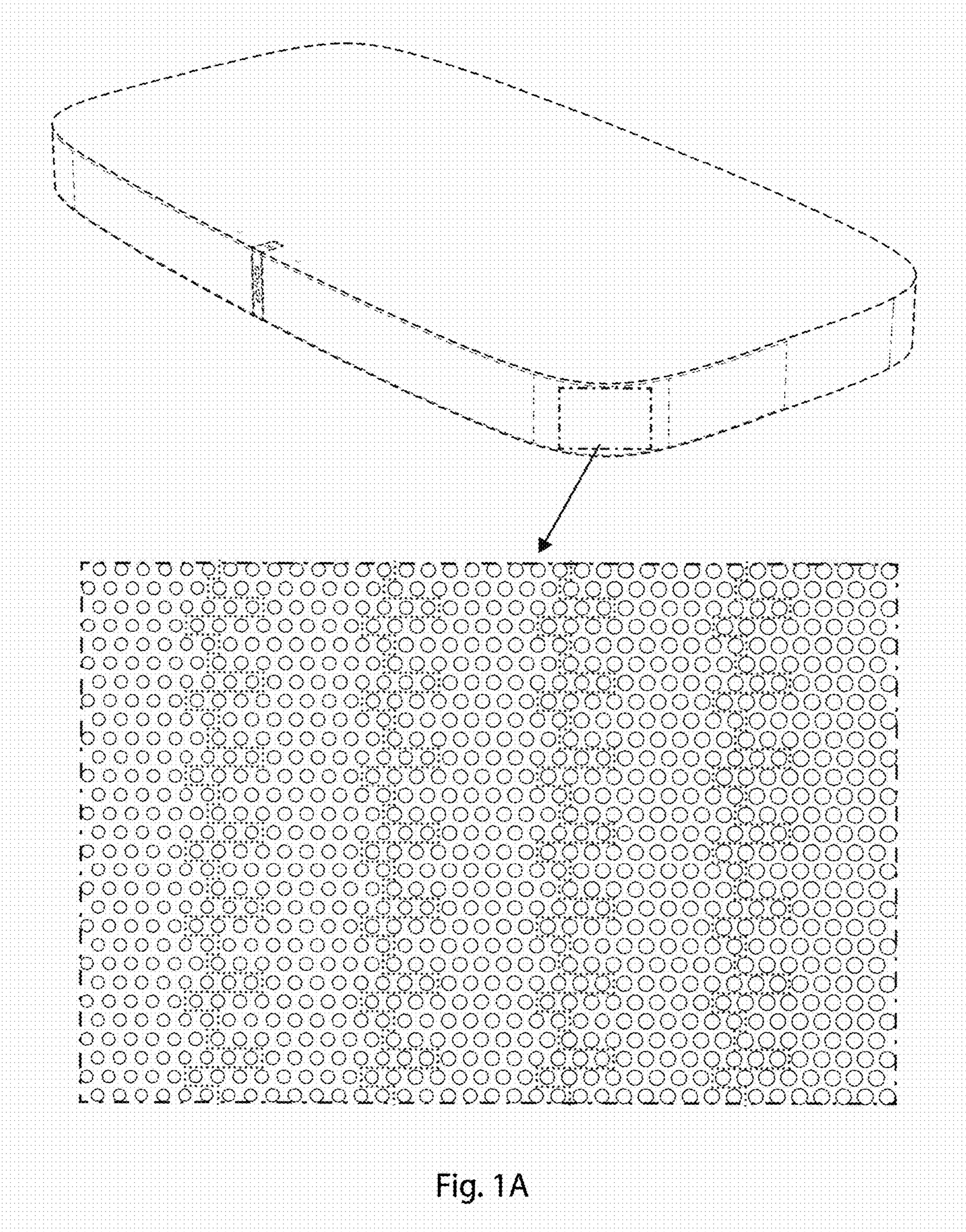


Fig. 1A

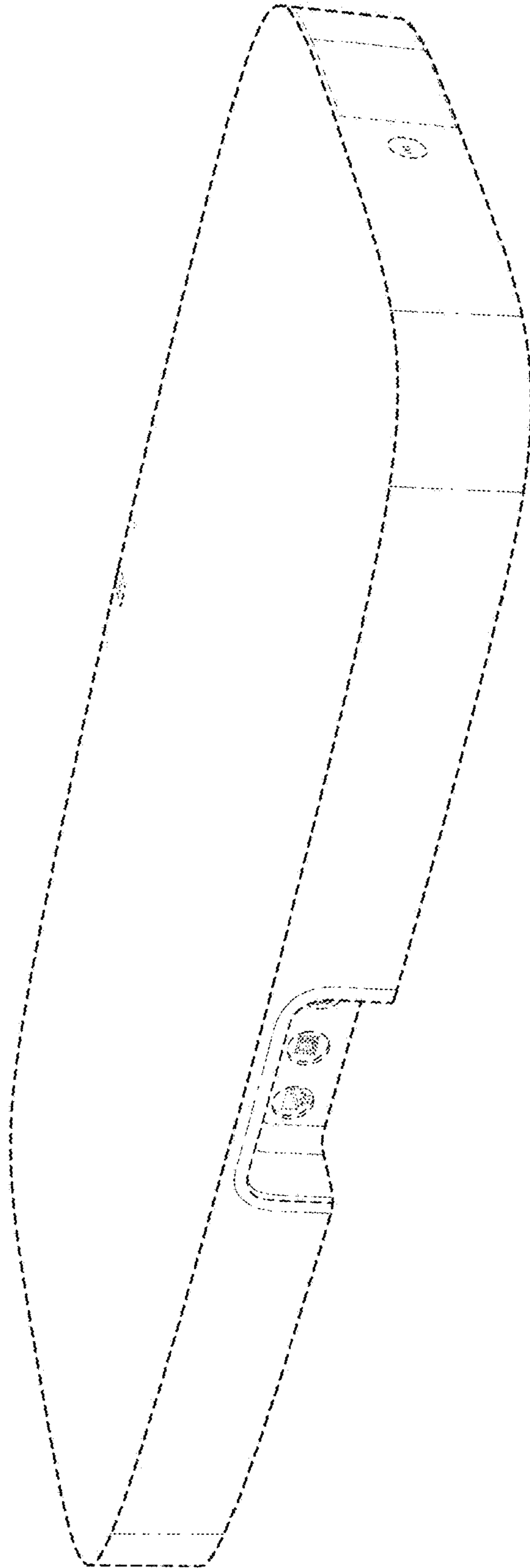


Fig. 1B

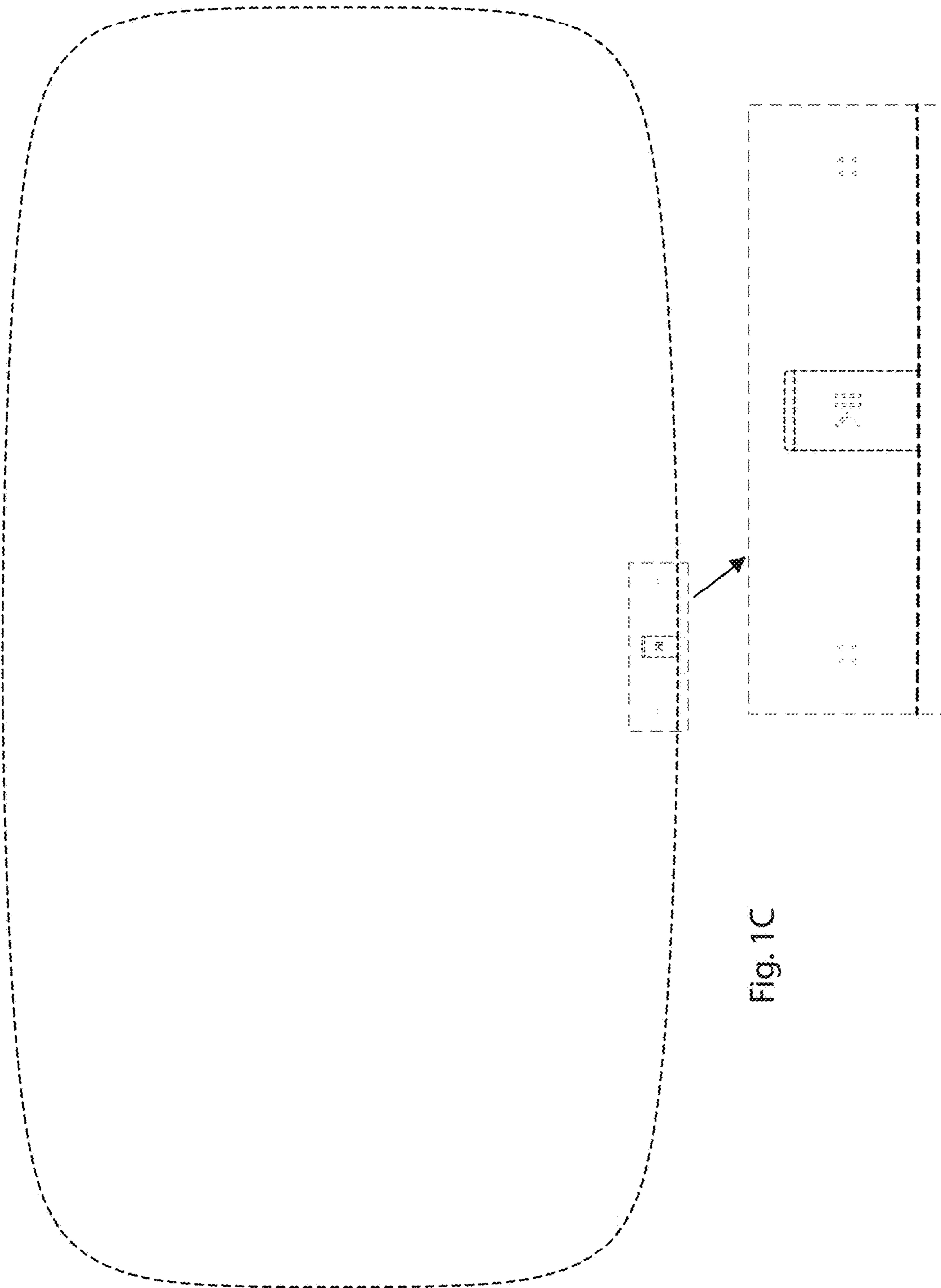


Fig. 1C

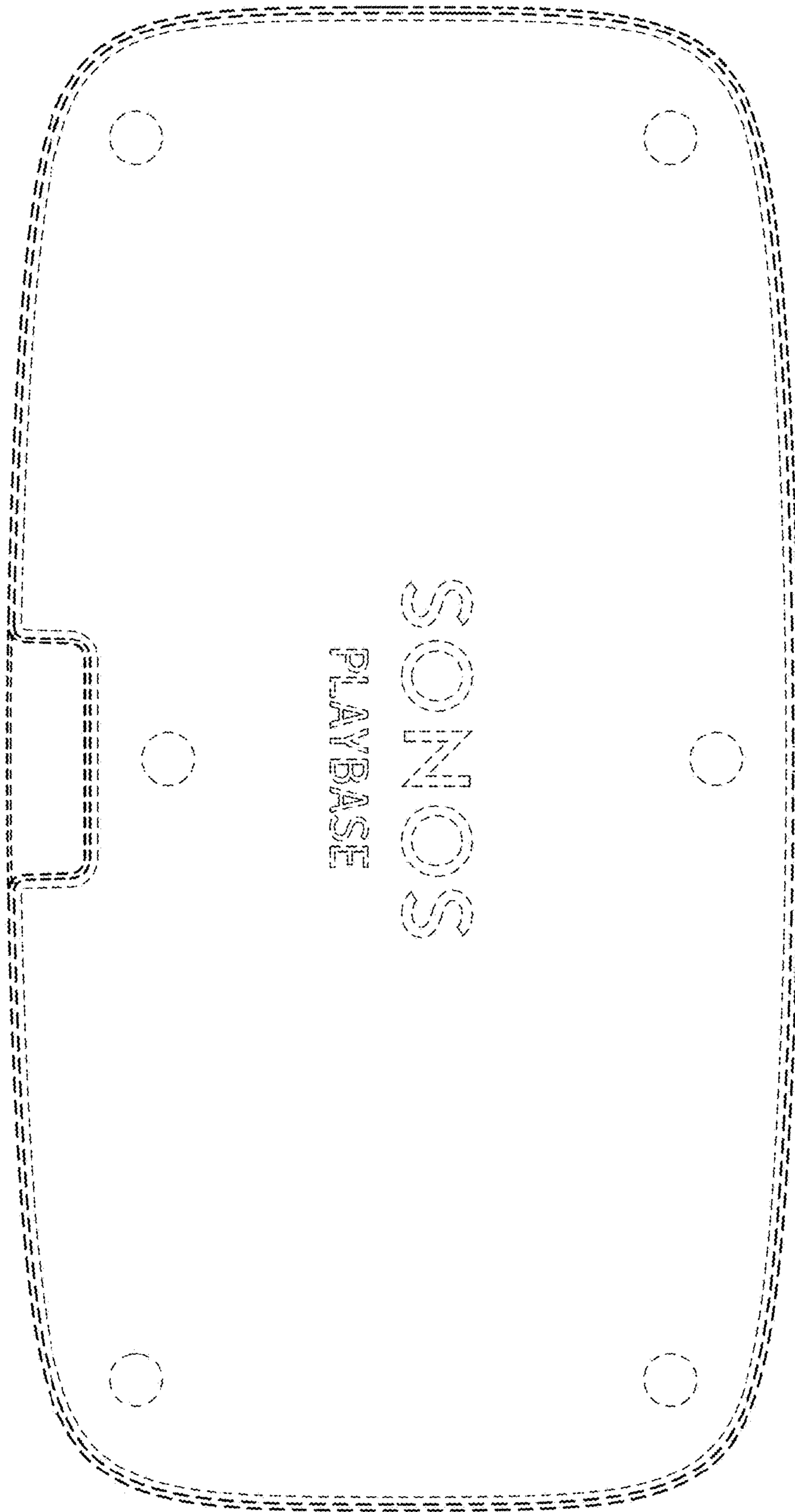


Fig. 1D



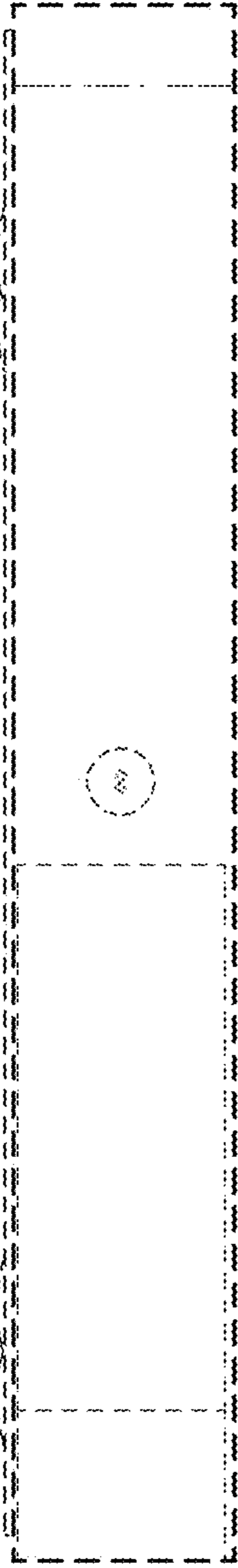


Fig. 1E

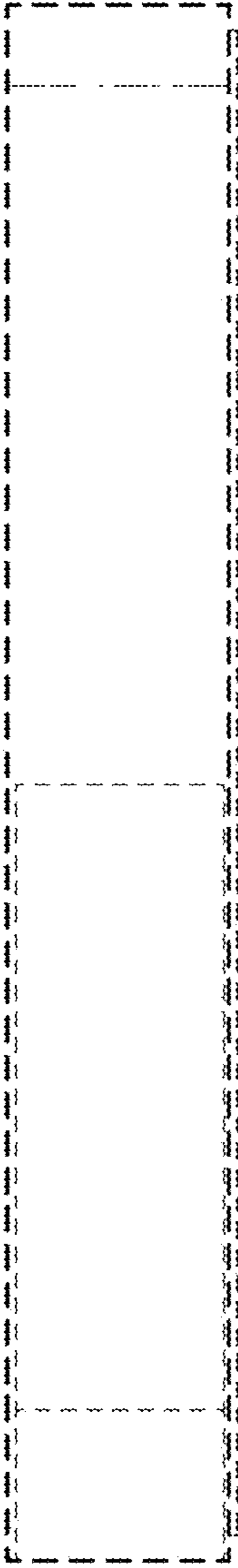


Fig. 1F

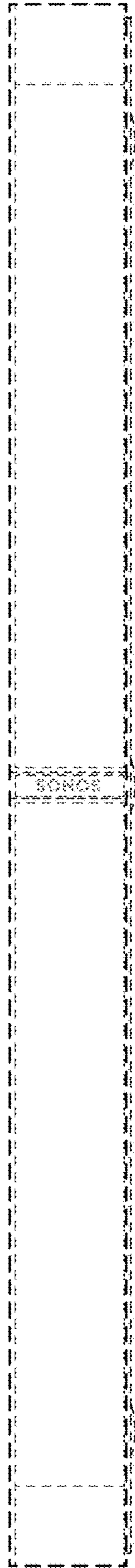


Fig. 1G

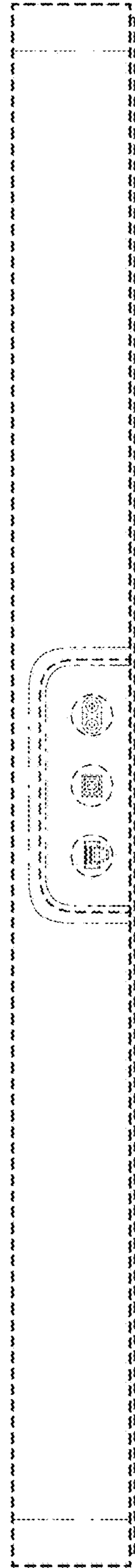


Fig. 1H

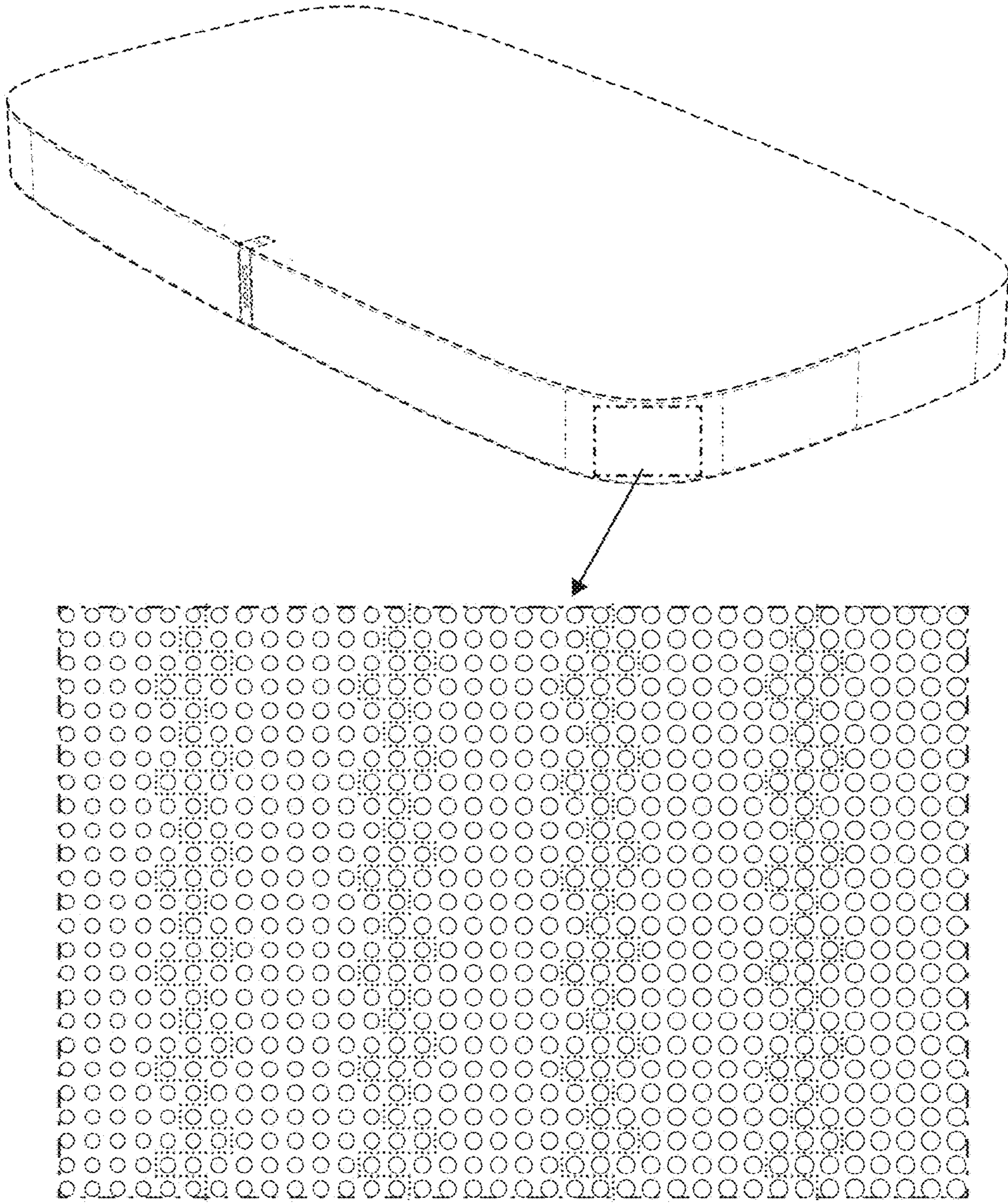


Fig. 2A

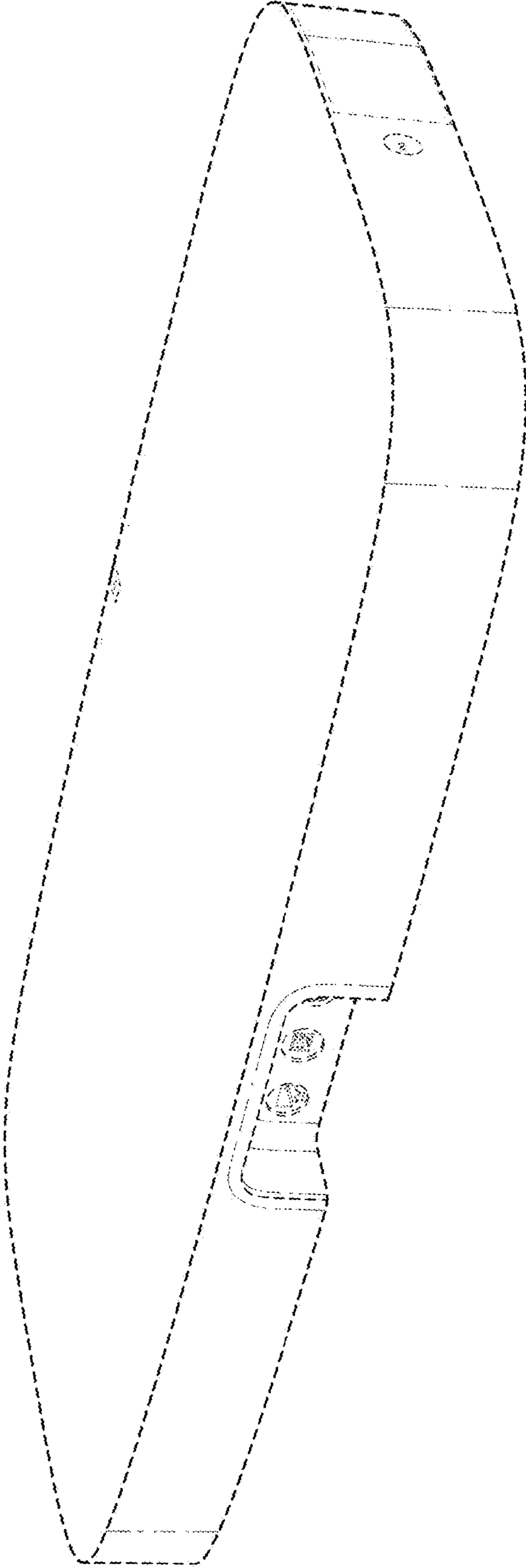


Fig. 2B

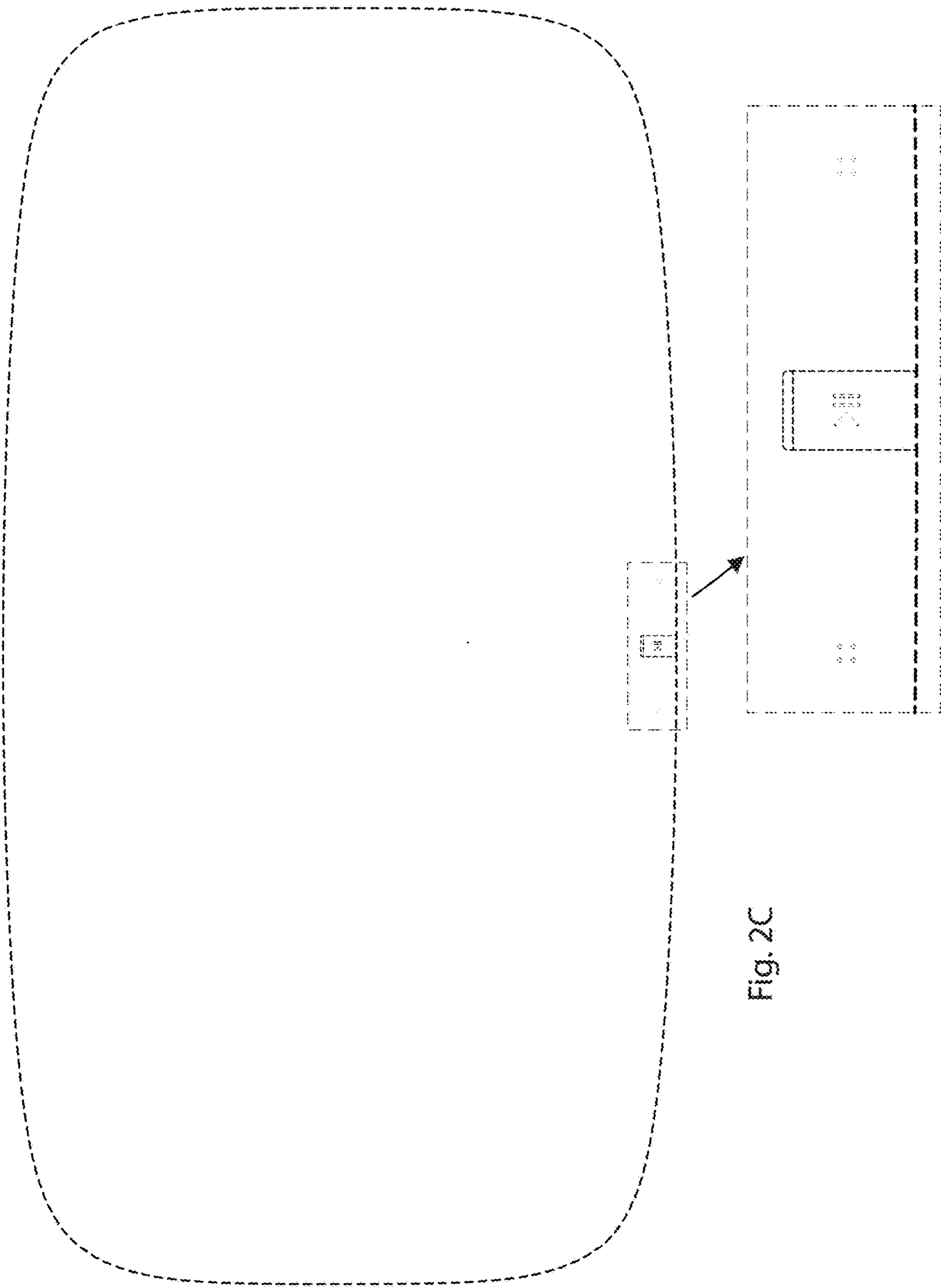


Fig. 2C

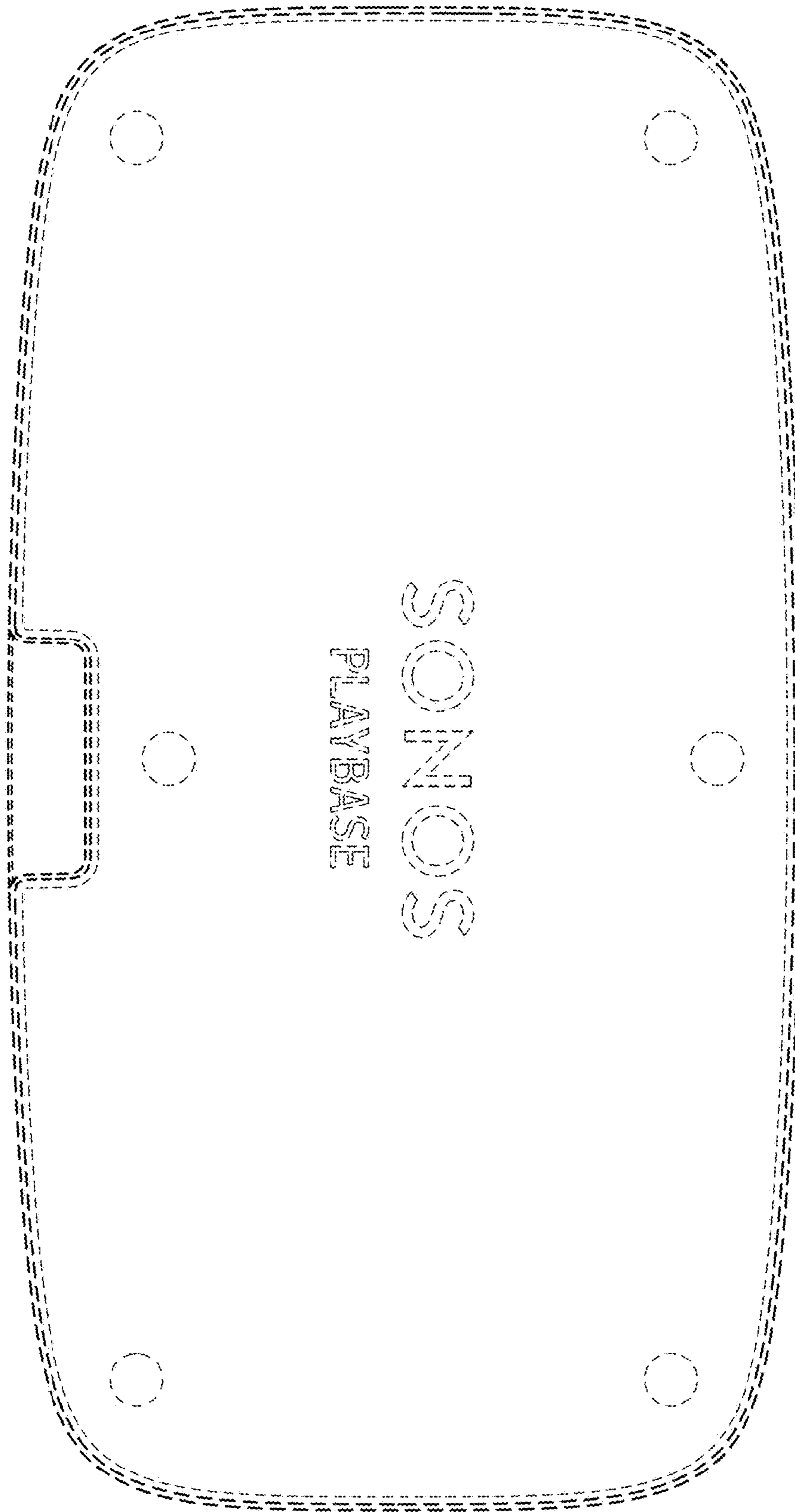


Fig. 2D

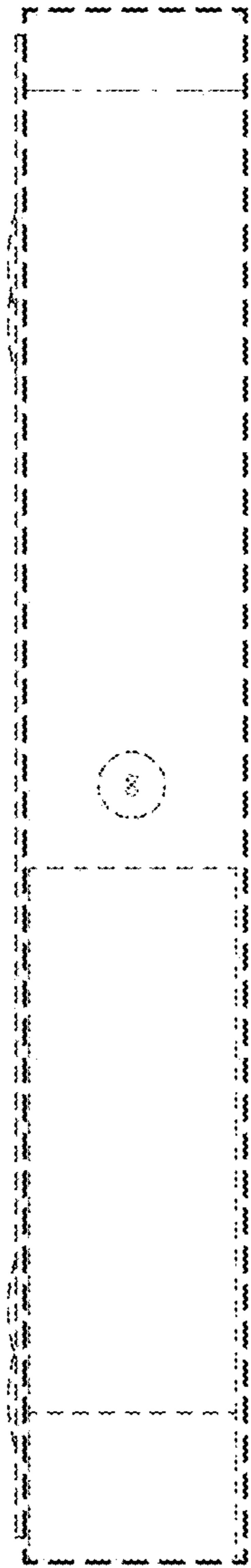


Fig. 2E

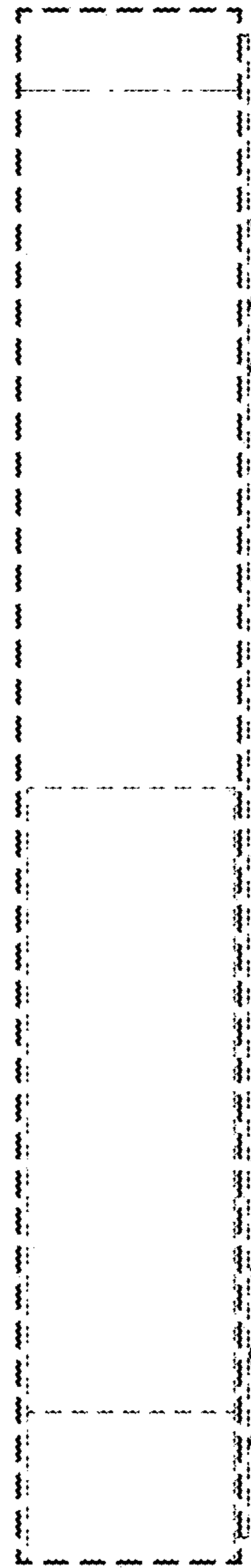


Fig. 2F

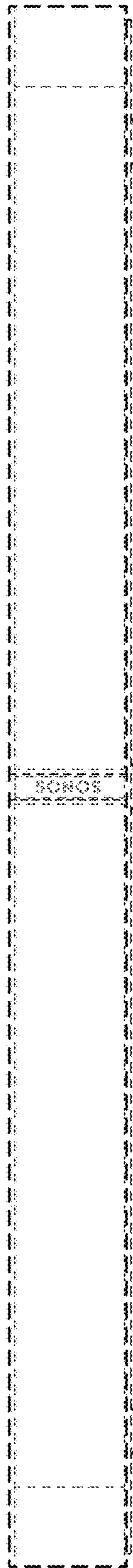


Fig. 2G

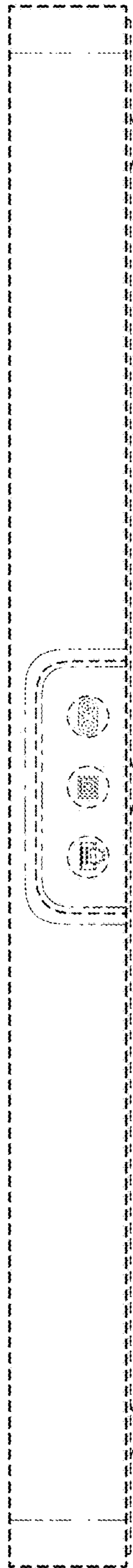


Fig. 2H



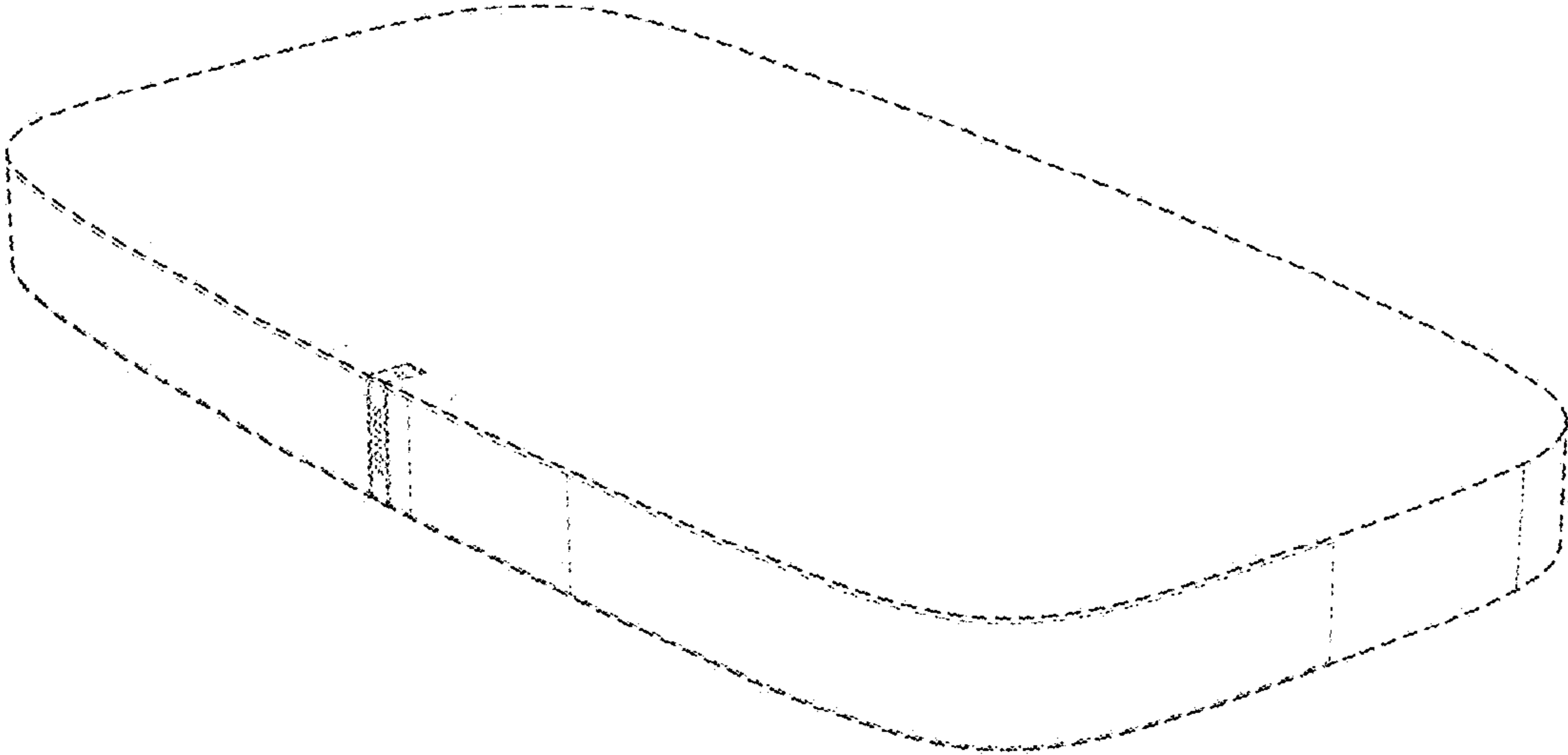


Fig. 3A

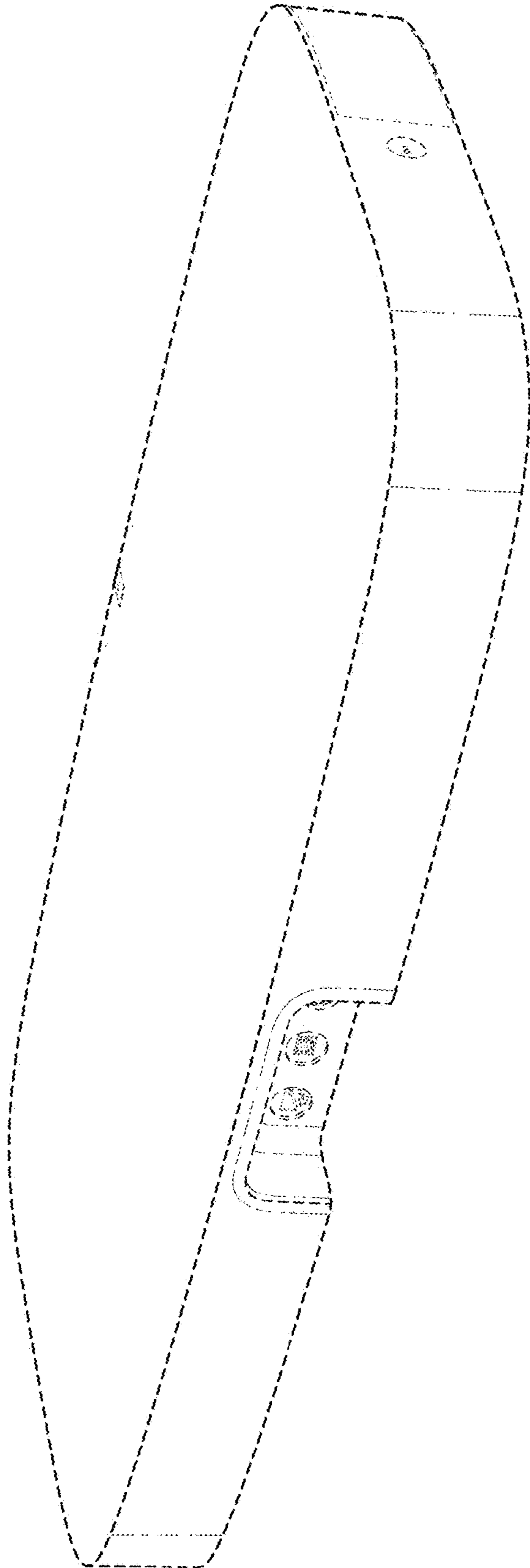


Fig. 3B

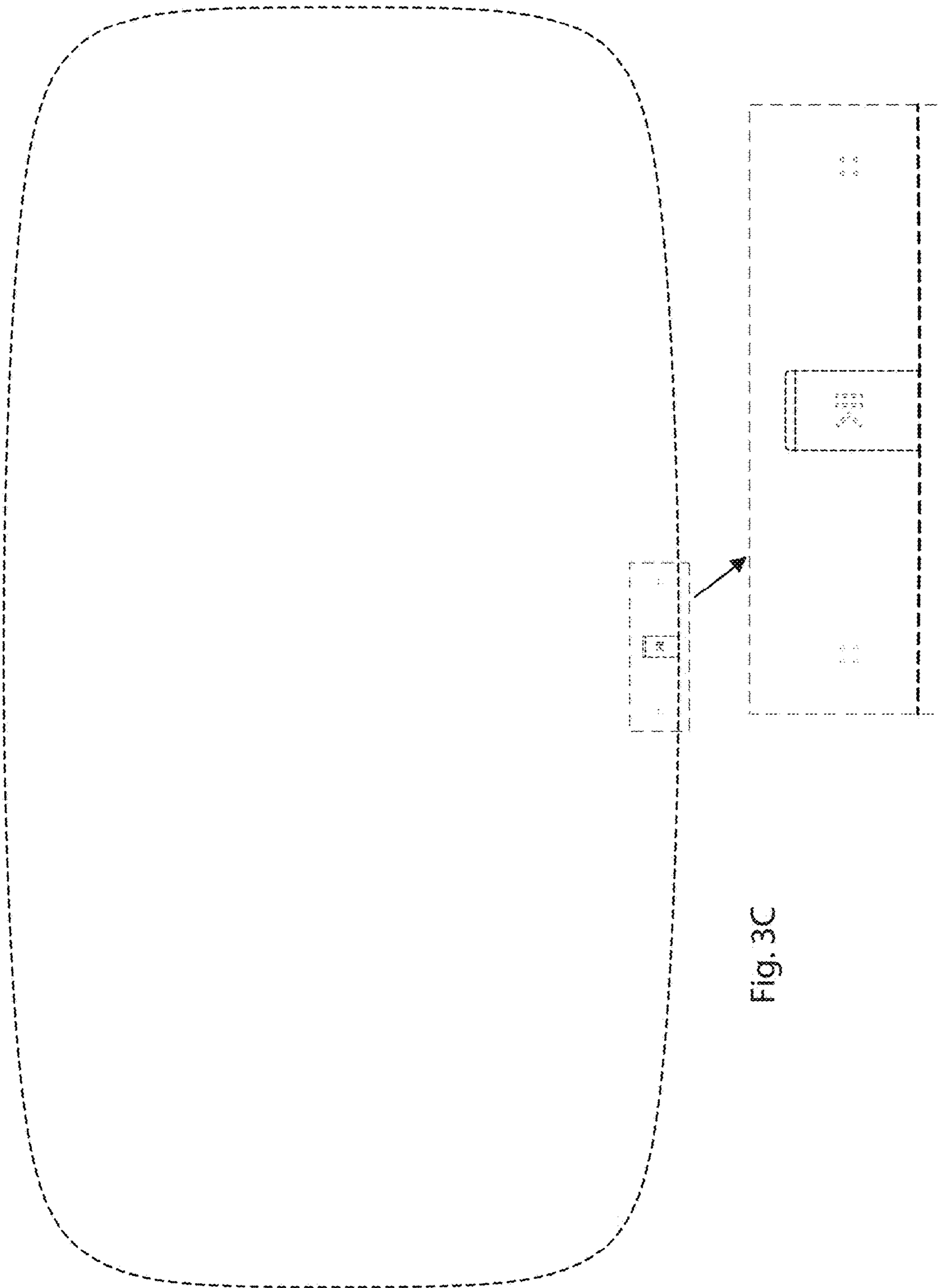


Fig. 3C

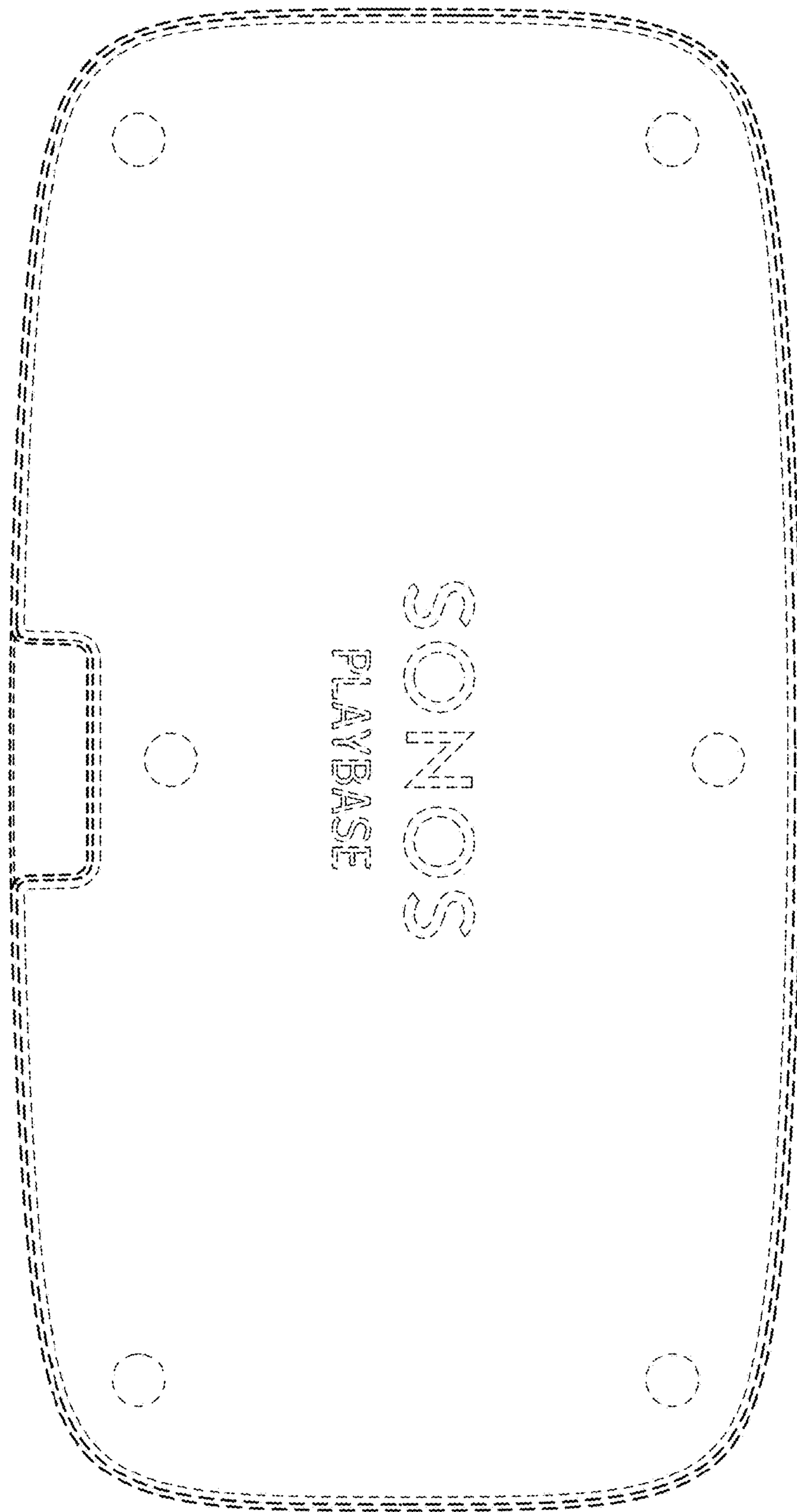


Fig. 3D

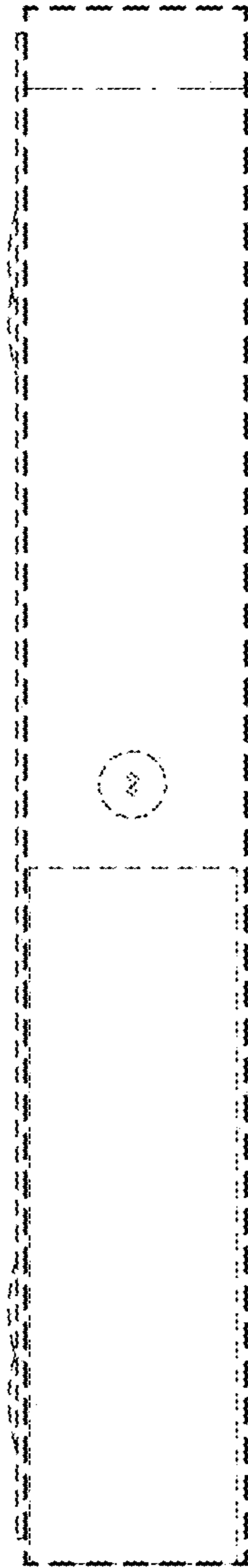


Fig. 3E

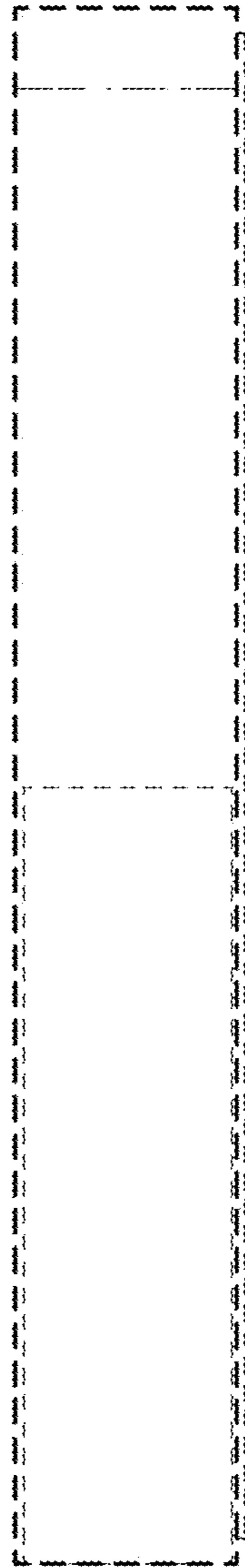


Fig. 3F

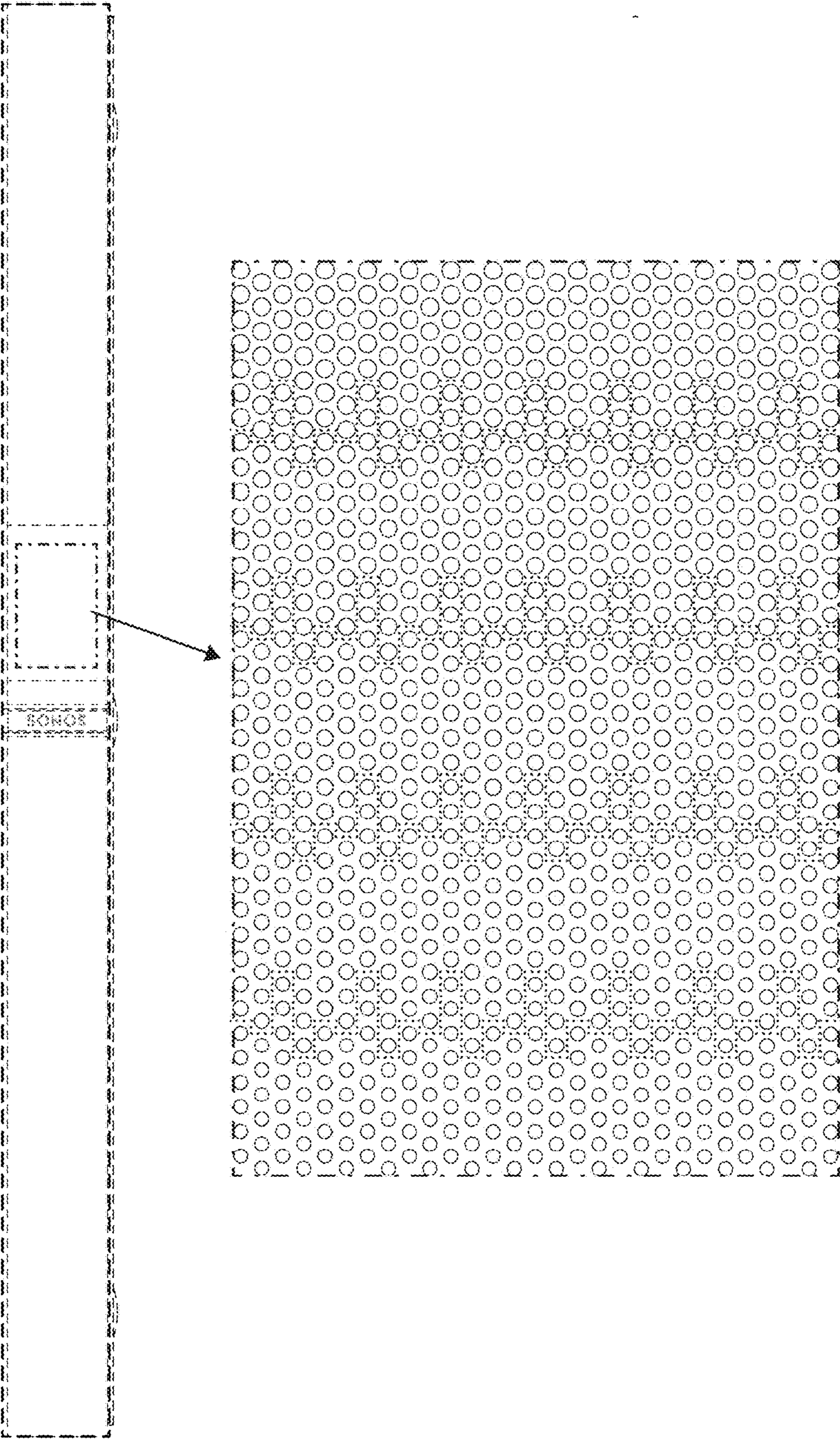


Fig. 3G

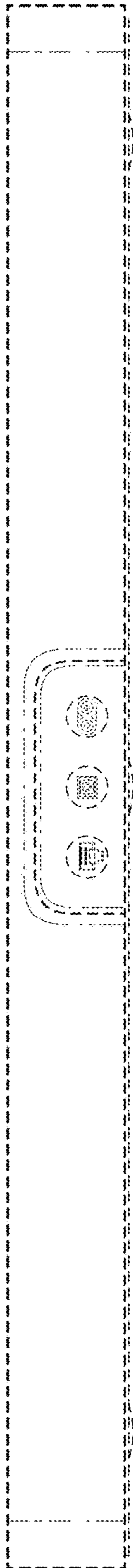


Fig. 3H

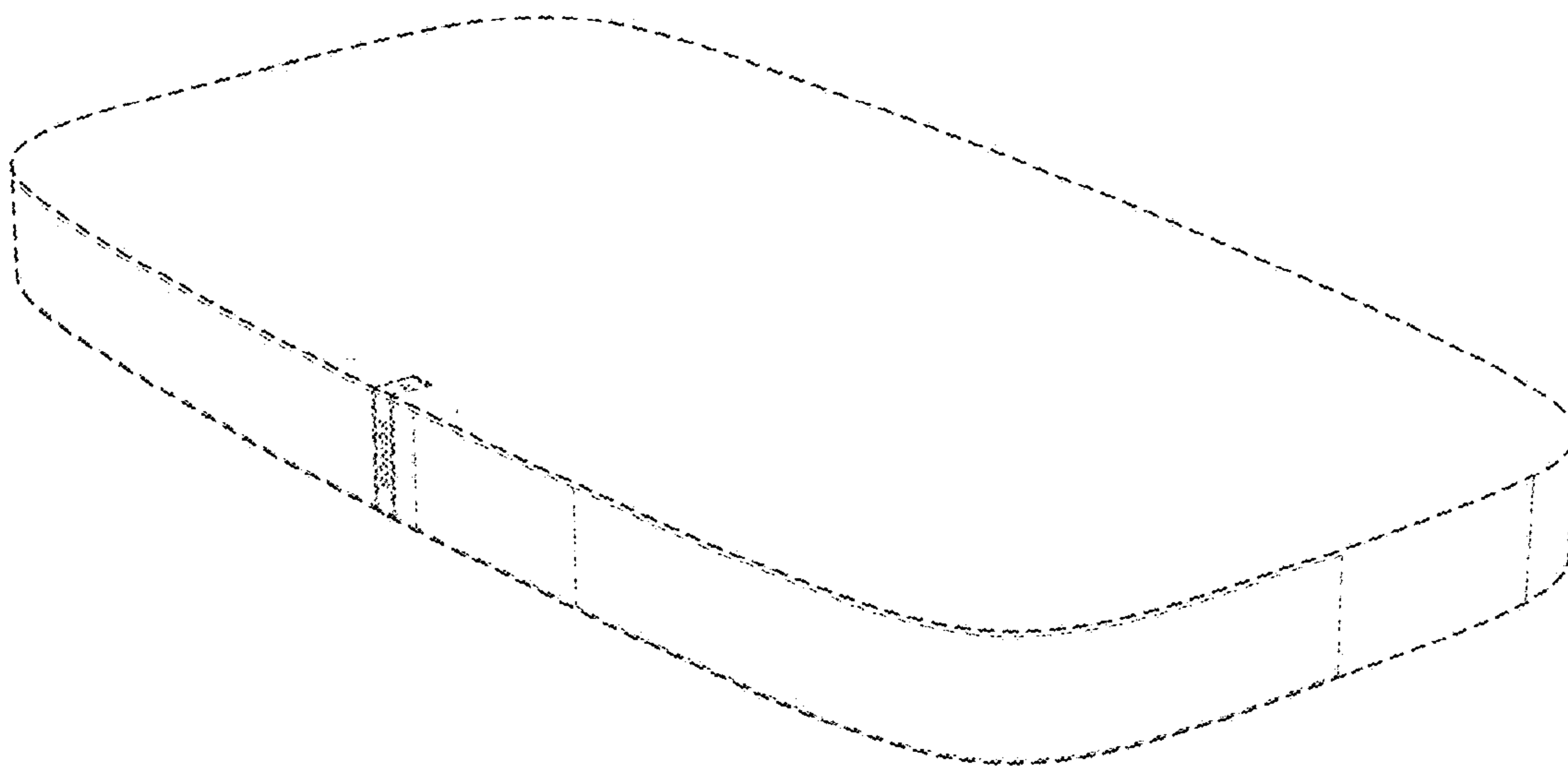


Fig. 4A



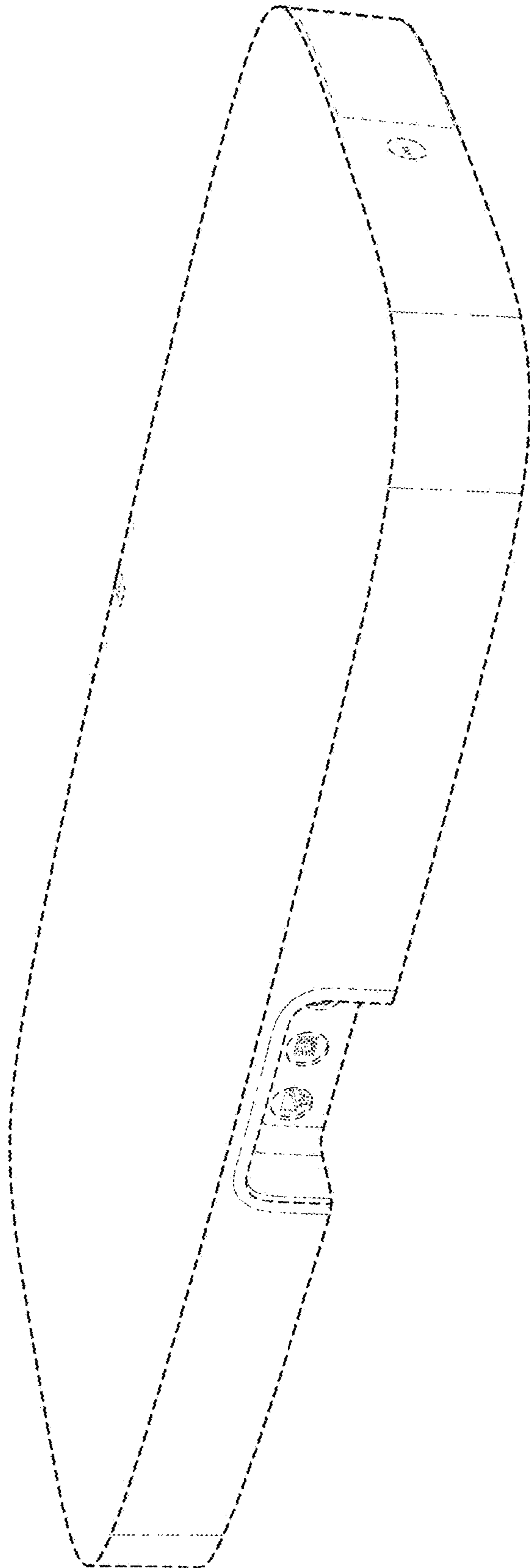


Fig. 4B

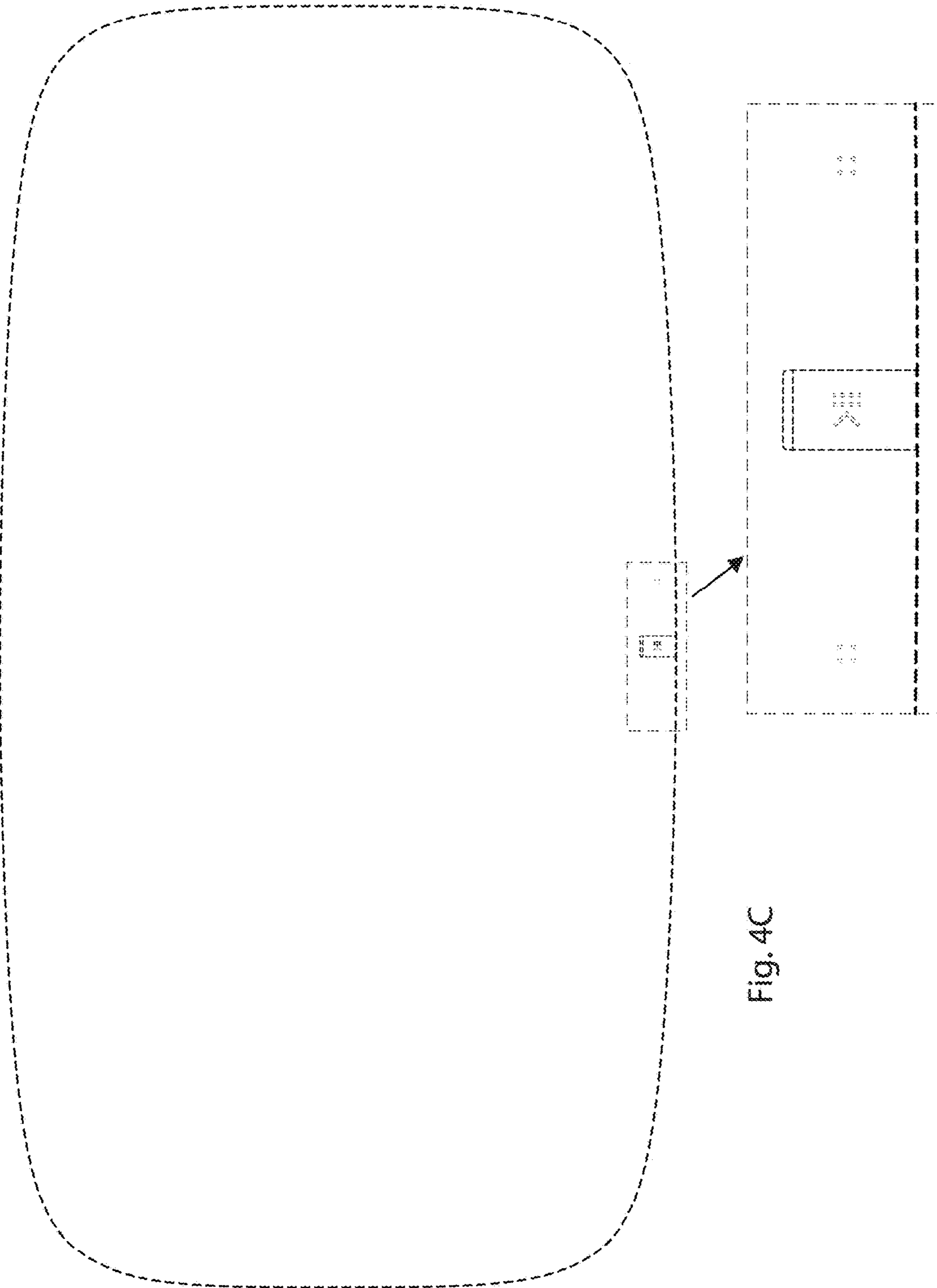


Fig. 4C

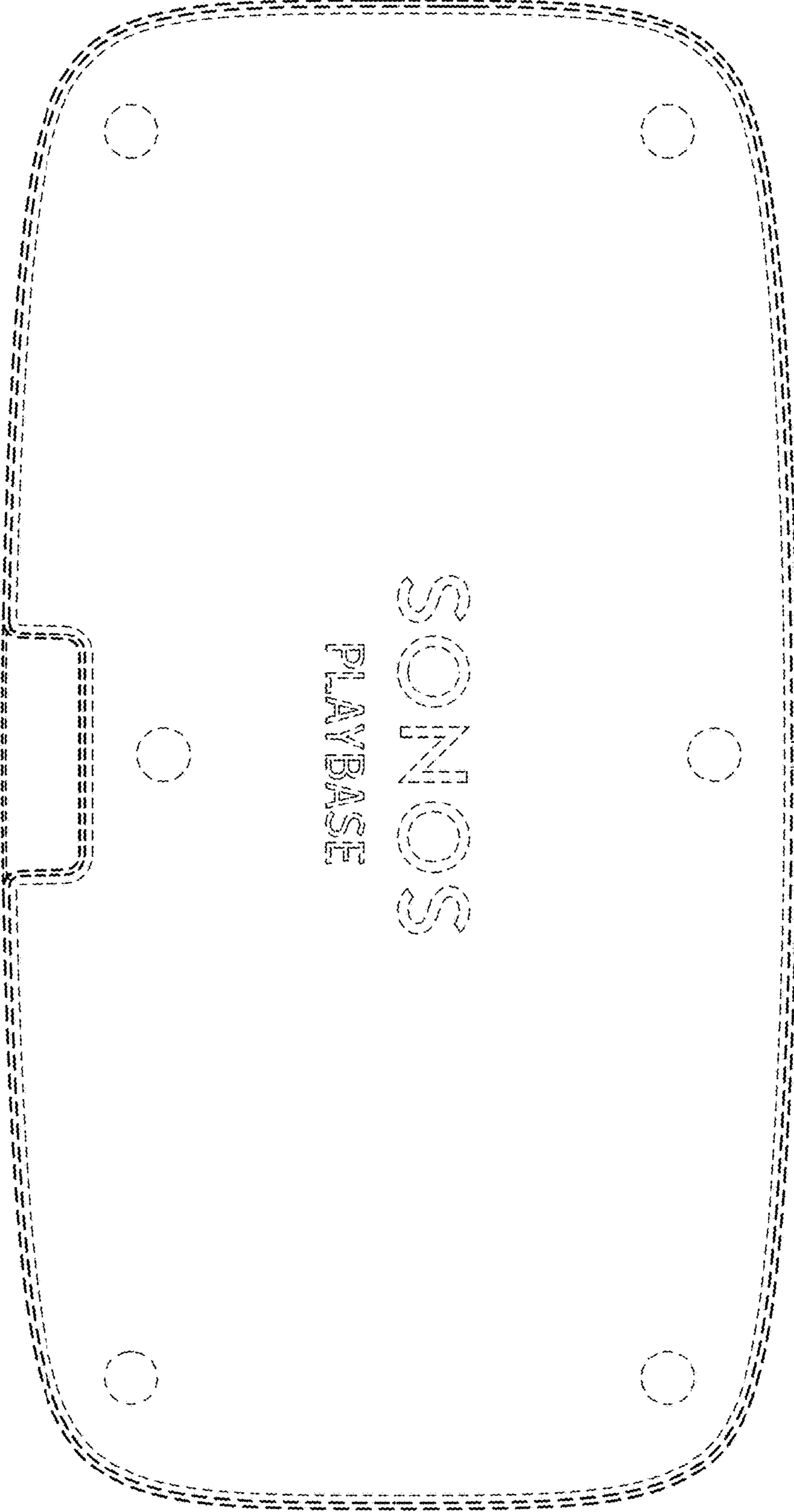


Fig. 4D

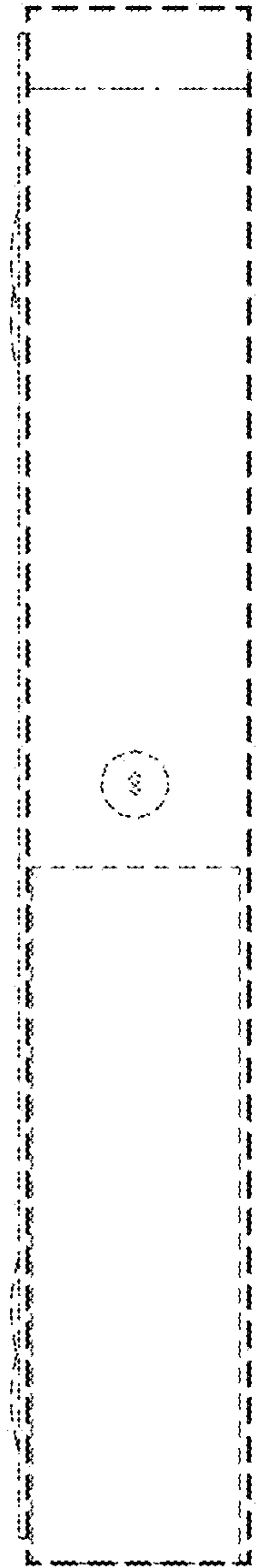


Fig. 4E

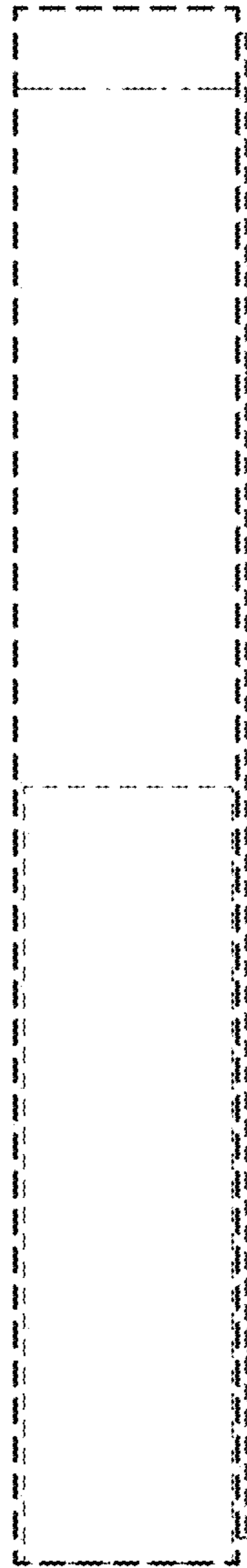


Fig. 4F

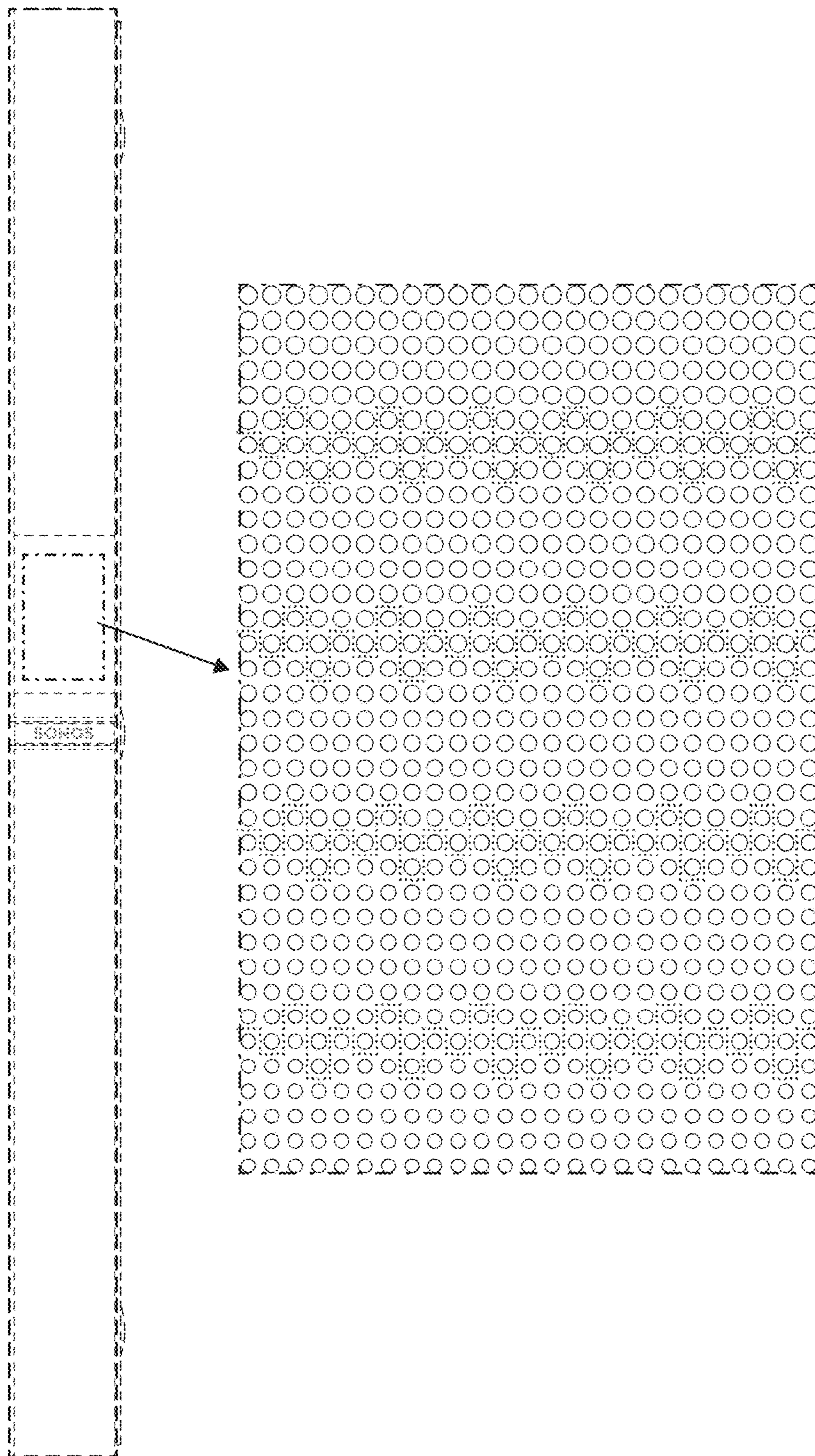


Fig. 4G

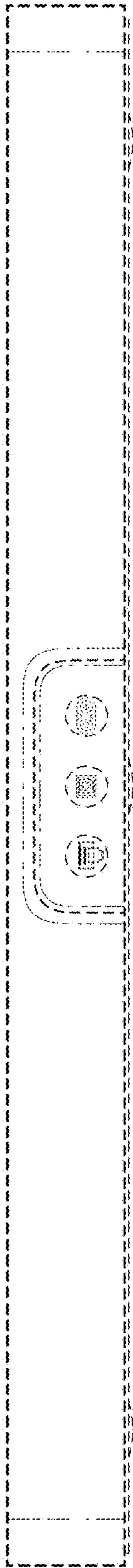


Fig. 4H

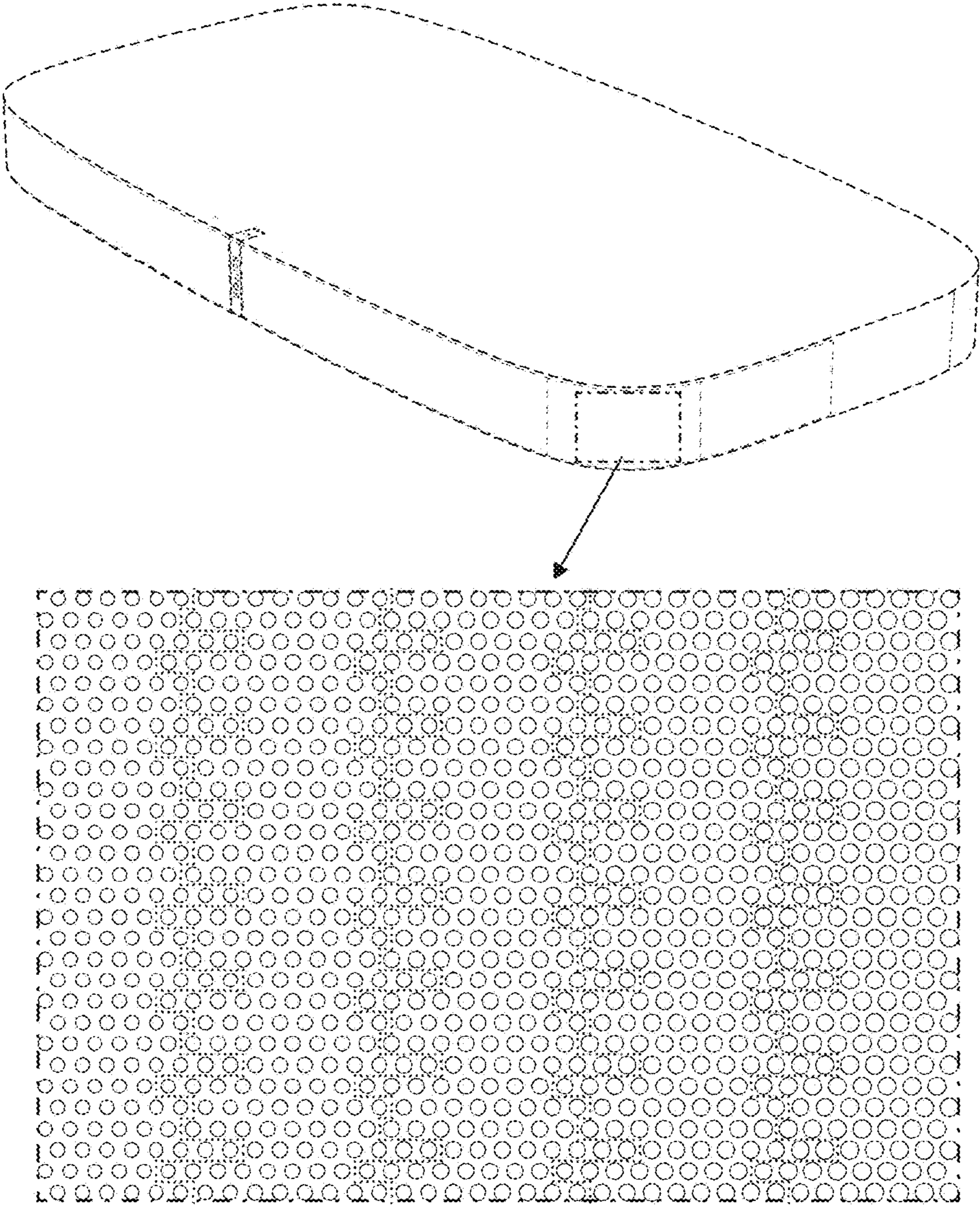


Fig. 5A

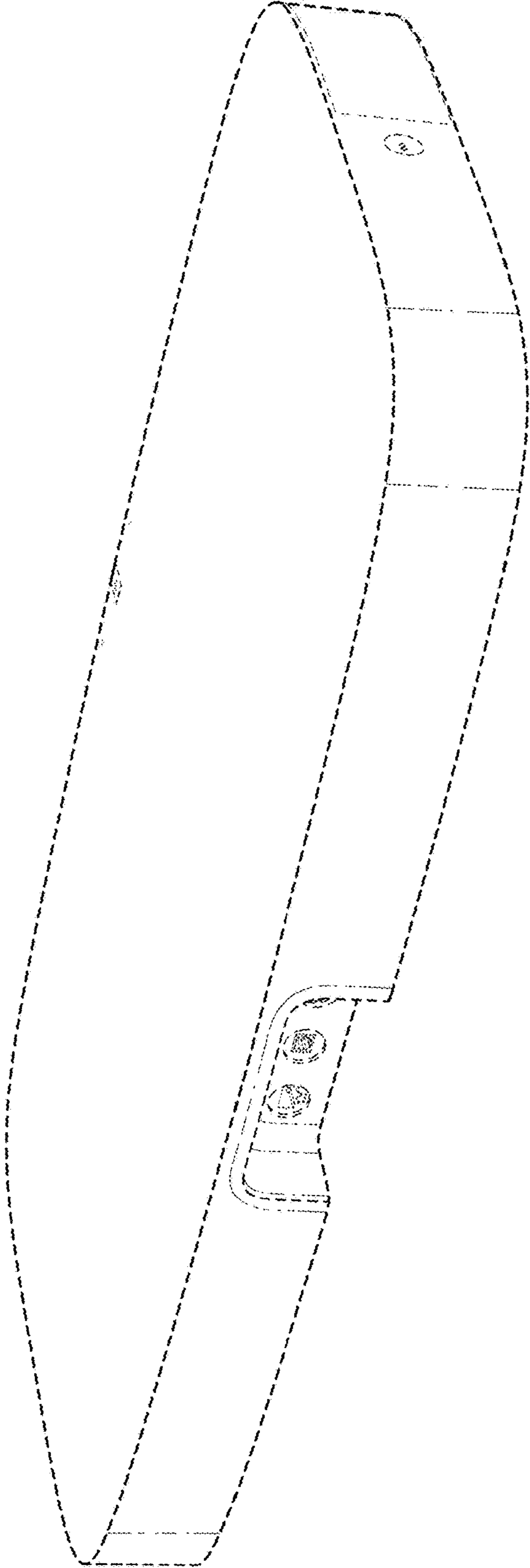


Fig. 5B



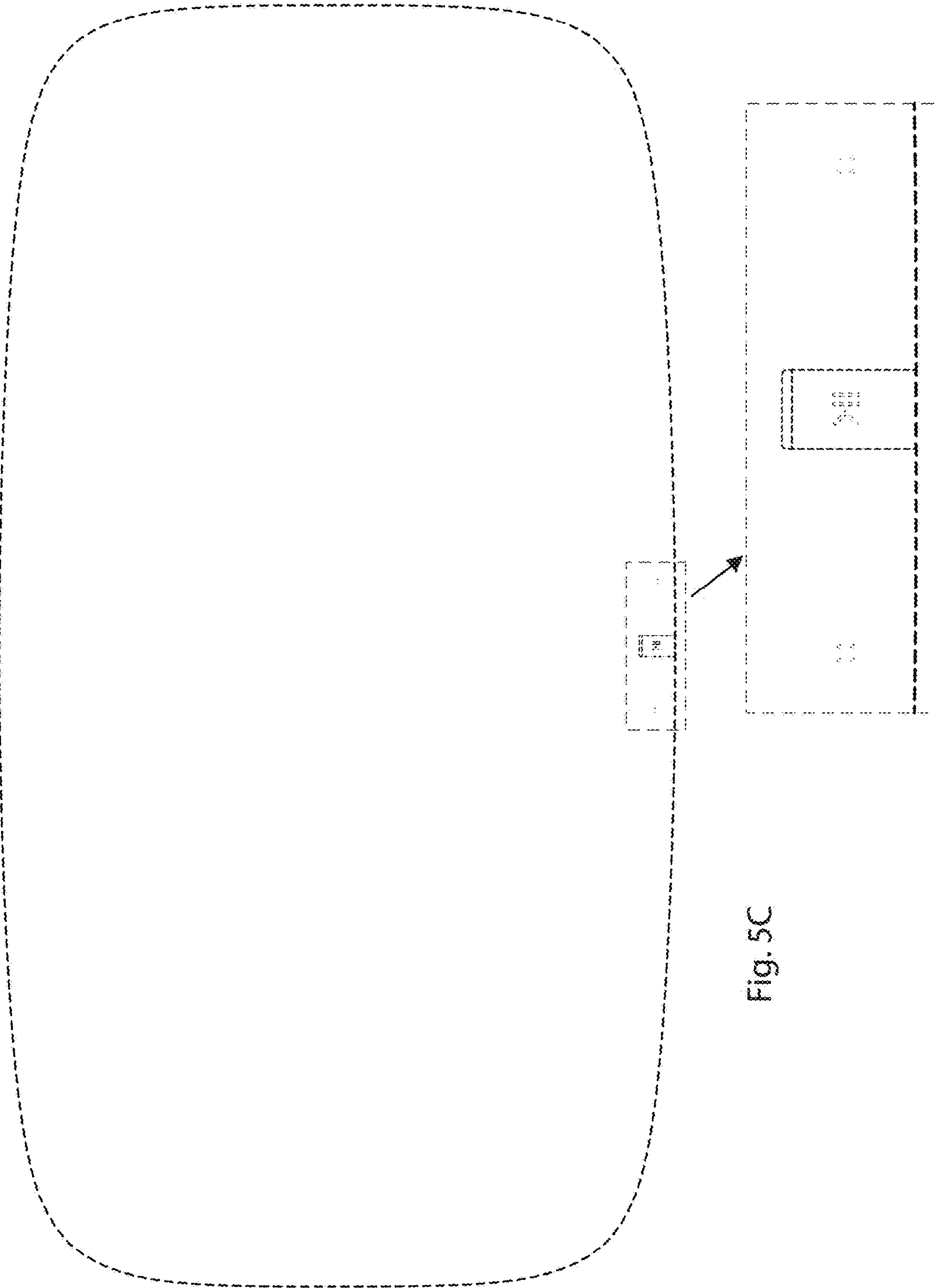


Fig. 5C

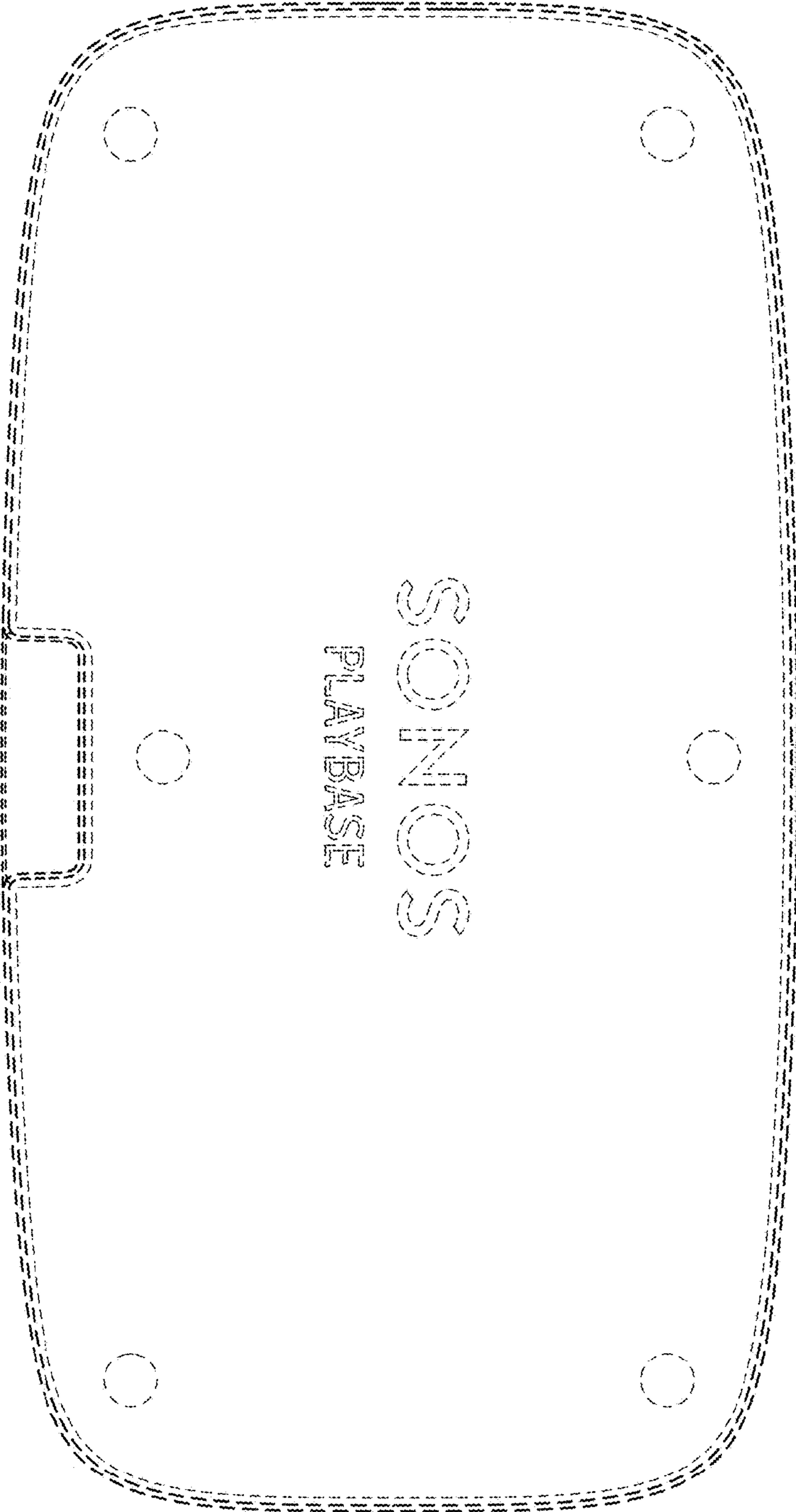


Fig. 5D

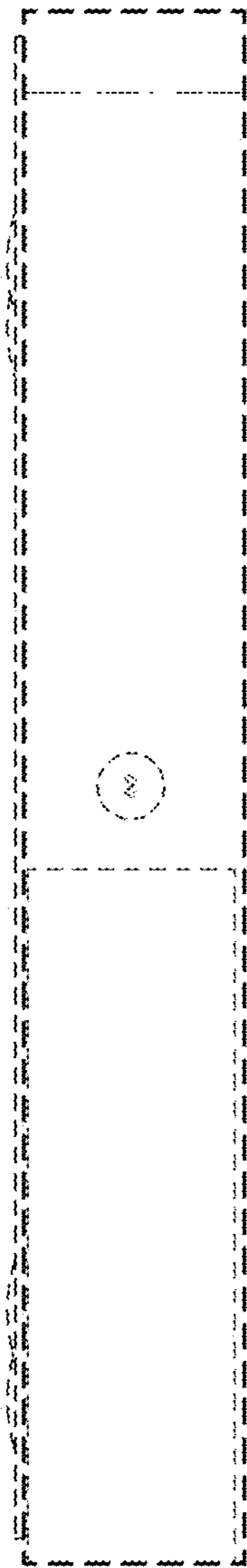


Fig. 5E

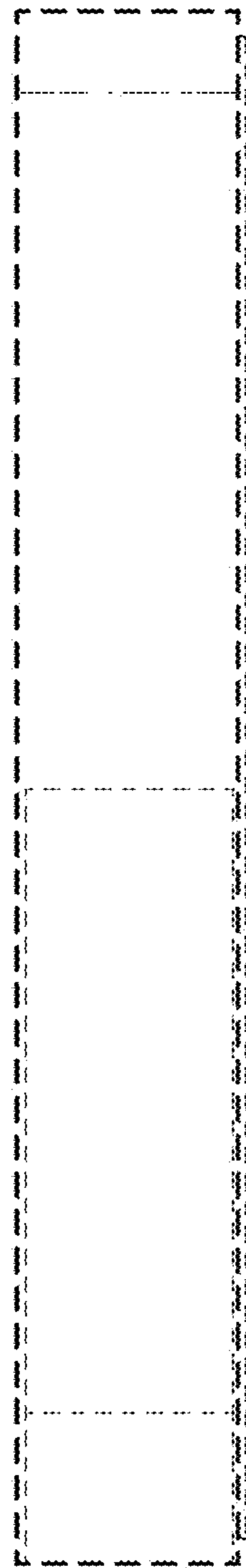


Fig. 5F

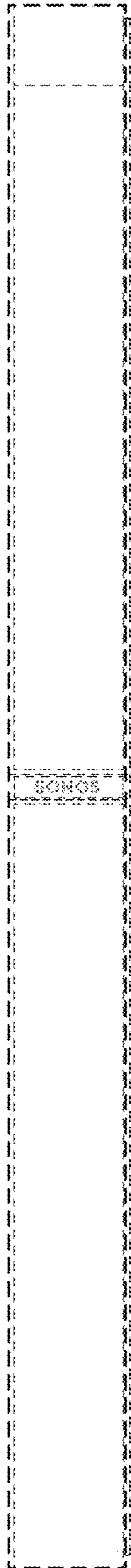


Fig. 5G

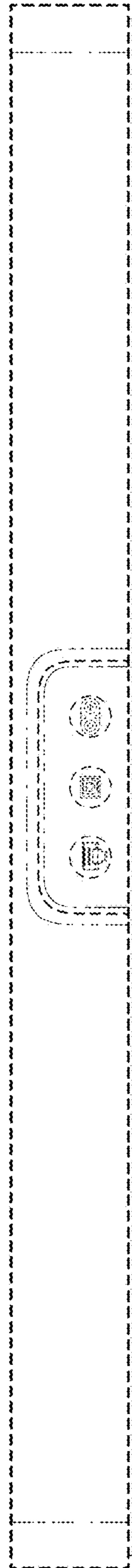


Fig. 5H

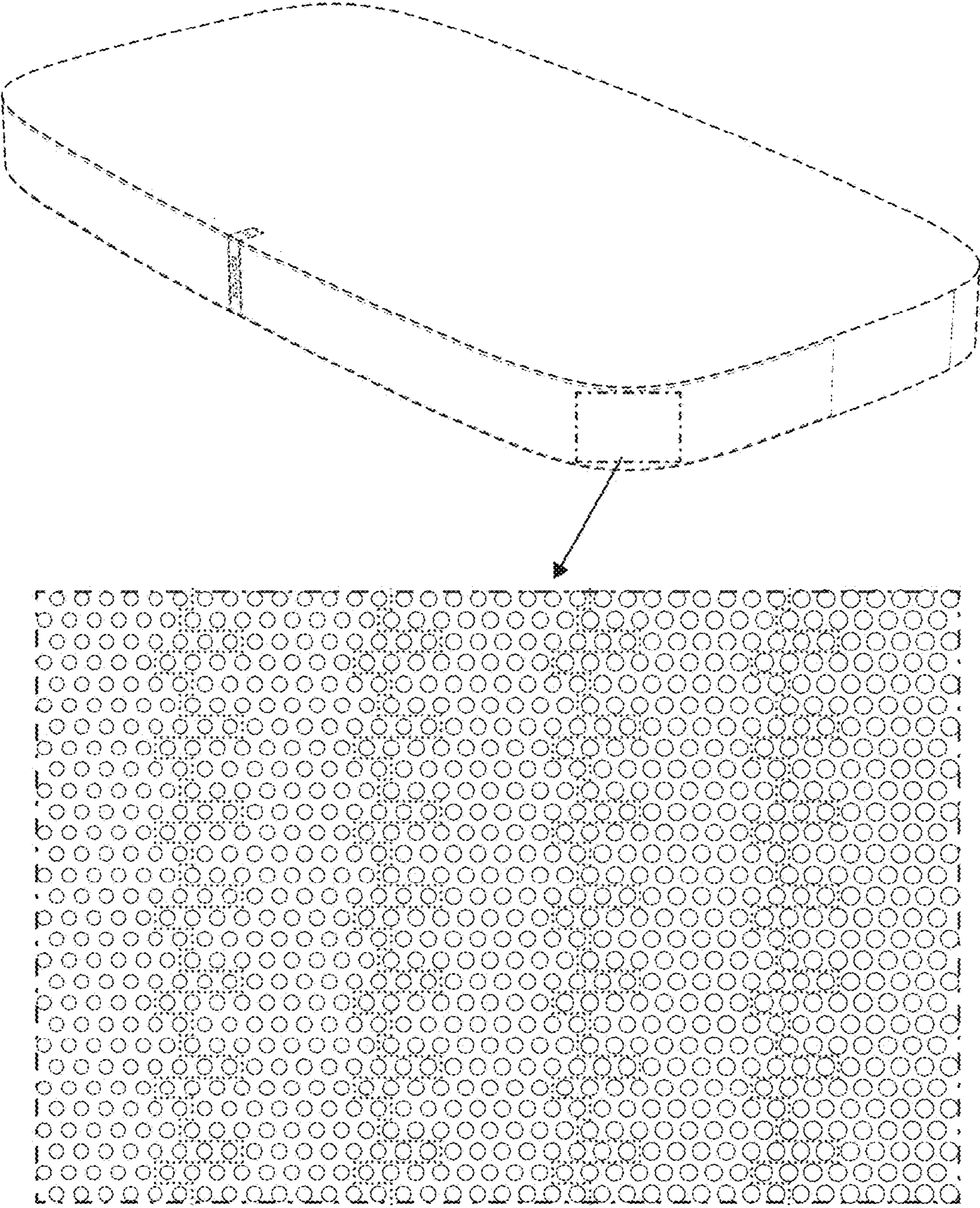


Fig. 6A

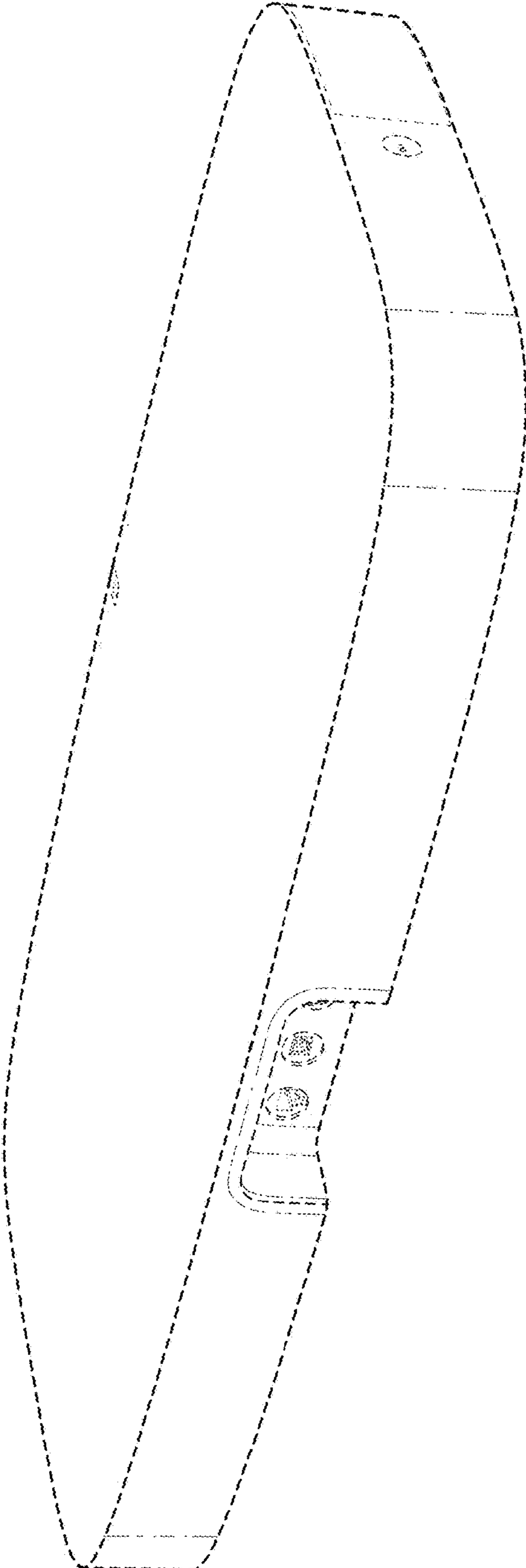


Fig. 6B

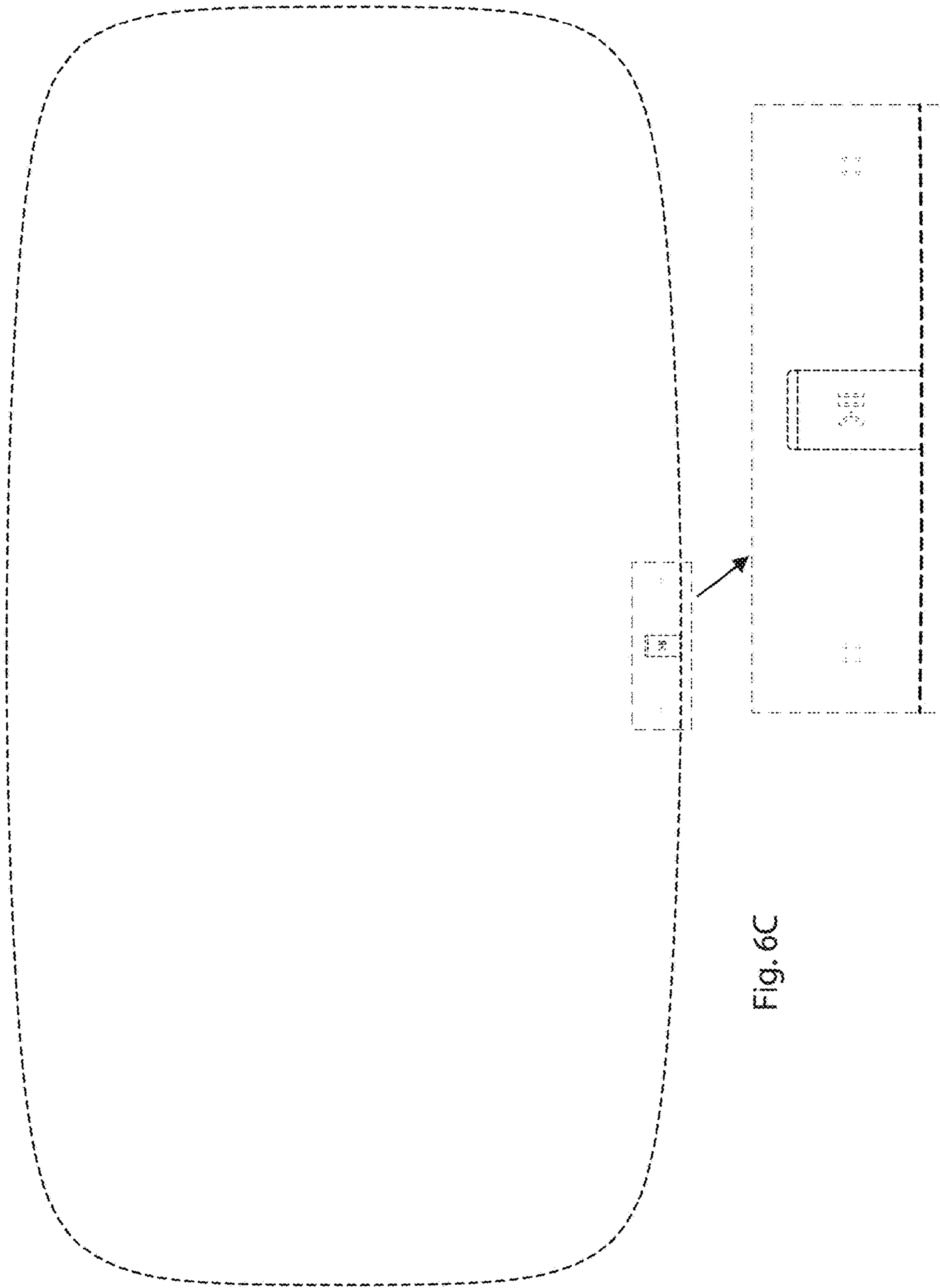


Fig. 6C

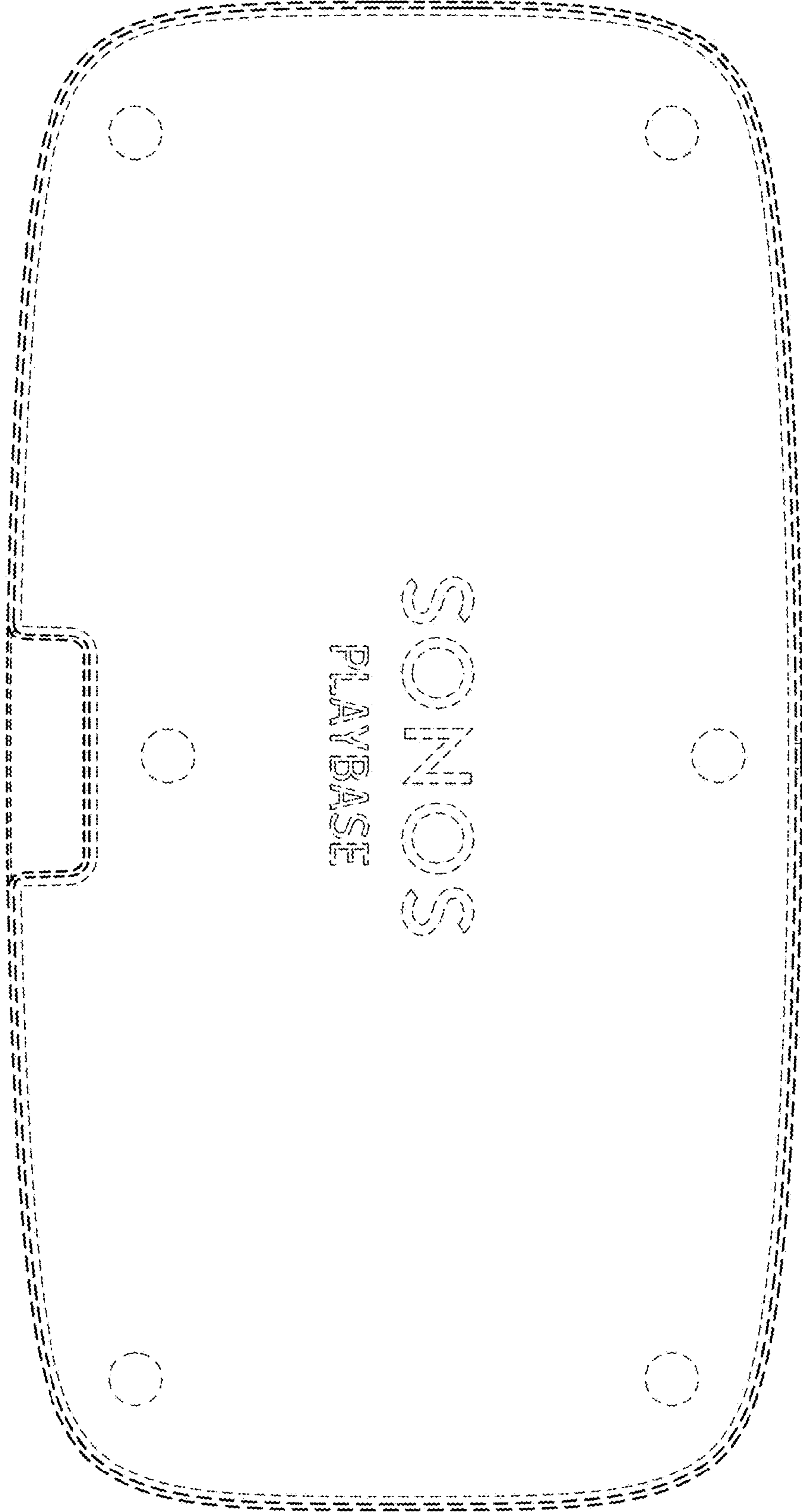


Fig. 6D



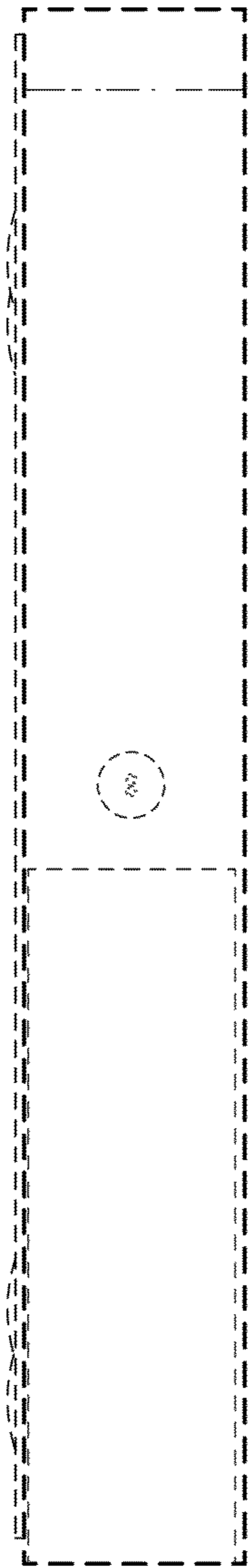


Fig. 6E

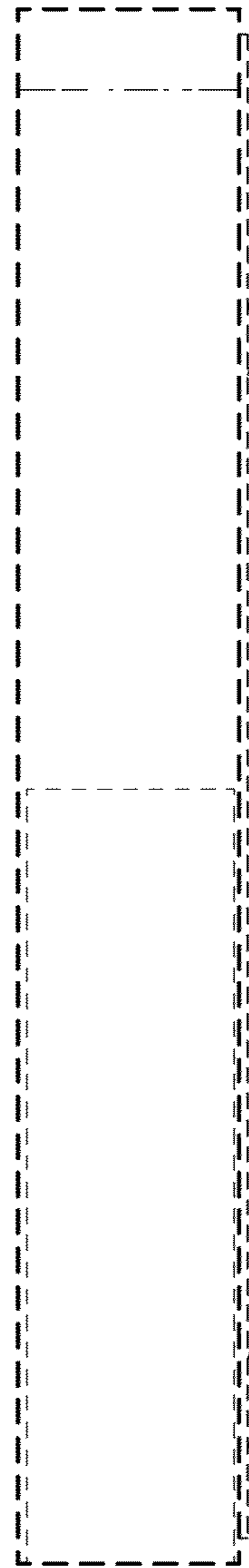


Fig. 6F

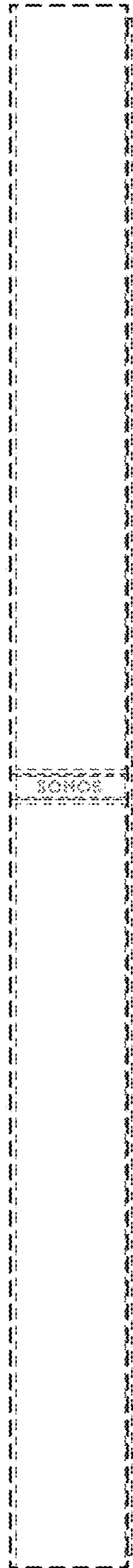


Fig. 6G

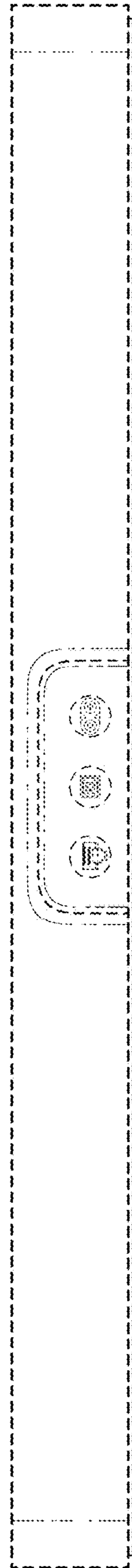


Fig. 6H