



US00D989765S

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

(10) **Patent No.:** **US D989,765 S**  
(45) **Date of Patent:** **\*\* Jun. 20, 2023**

(54) **VISUAL DISPLAY UNIT HAVING ROLLABLE DISPLAY**

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

(21) Appl. No.: **29/824,286**

(22) Filed: **Jan. 24, 2022**

**Related U.S. Application Data**

(63) Continuation of application No. 29/800,424, filed on Jul. 21, 2021, now Pat. No. Des. 944,242, which is a  
(Continued)

(30) **Foreign Application Priority Data**

Oct. 19, 2018 (KR) ..... 30-2018-0048132

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

(52) **U.S. Cl.**  
USPC ..... **D14/345**

(58) **Field of Classification Search**  
USPC ..... D14/138 AA, 138 AB, 138 AC, 138 AD,  
D14/138 C, 138 G, 248, 315-318,  
(Continued)

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

4,374,906 A 2/1983 Breault  
D597,090 S 7/2009 Bemelmans  
(Continued)

**FOREIGN PATENT DOCUMENTS**

JP D1544715 2/2019  
JP D1640845 9/2019  
(Continued)

**OTHER PUBLICATIONS**

A Huawei Mate X Rollable is in the works, Aug. 6, 2021, [retrieved Dec. 14, 2022], Retrieved from Internet, URL: <https://www.phonearena.com/news/huawei-working-on-mate-x-3-new-rollable-phone-patent\_id134156> (Year: 2021).\*

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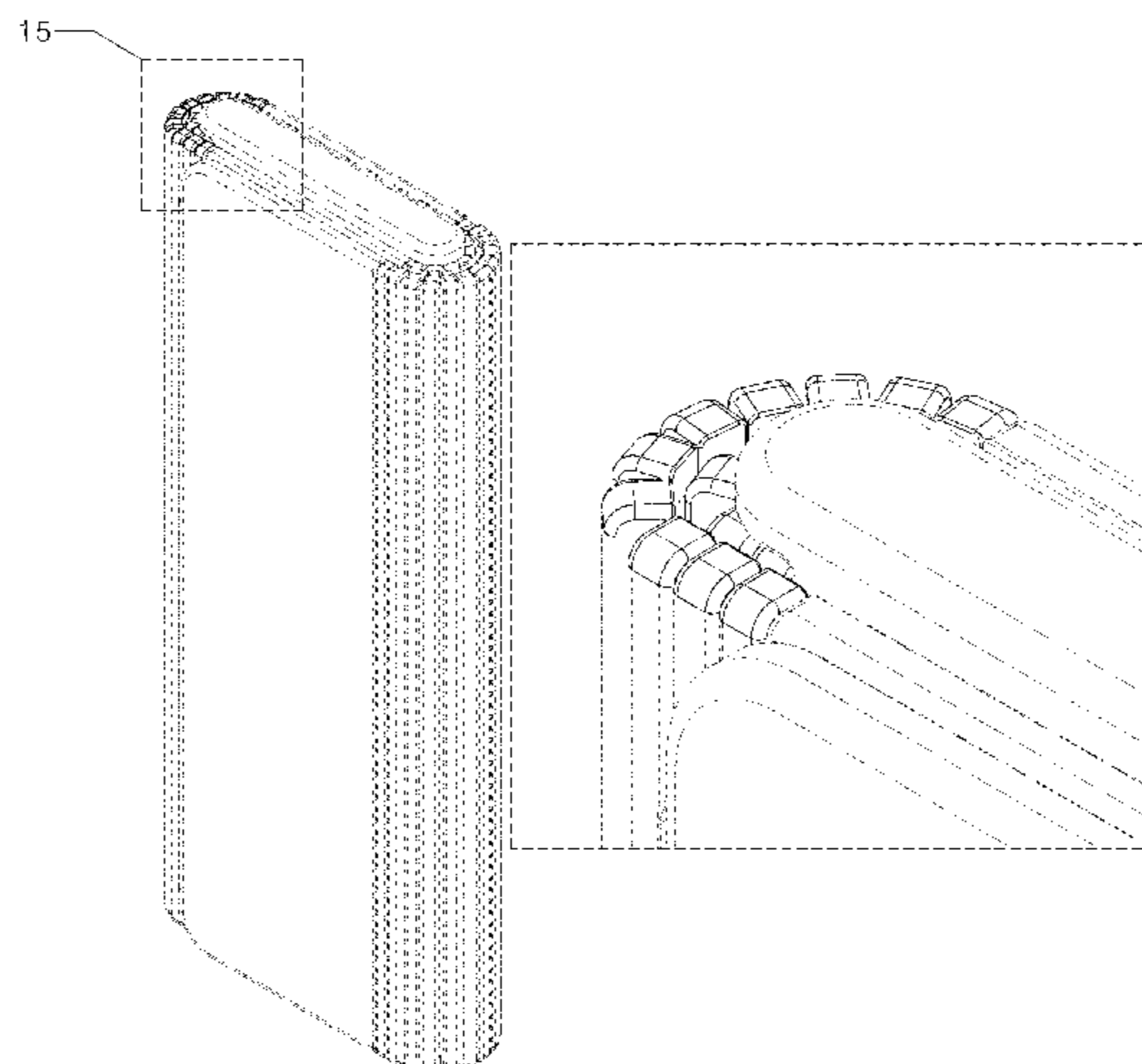
(57) **CLAIM**

The ornamental design for a visual display unit having rollable display, as shown and described.

**DESCRIPTION**

FIG. 1 is a front, right perspective view of a visual display unit having rollable display showing our new design;  
FIG. 2 is a front view thereof;  
FIG. 3 is a rear view thereof;  
FIG. 4 is a right side view thereof;  
FIG. 5 is a left side view thereof;  
FIG. 6 is a top plan view thereof;  
FIG. 7 is a bottom view thereof;  
FIG. 8 is a front, right perspective view of the visual display unit having rollable display in an unrolled position;  
FIG. 9 is a front view thereof;  
FIG. 10 is a rear view thereof;  
FIG. 11 is a left side view thereof;  
FIG. 12 is a right side view thereof;  
FIG. 13 is a top plan view thereof;  
FIG. 14 is a bottom plan view thereof;  
FIG. 15 is an enlarged view of a portion of the visual display unit having rollable display shown within the area labeled 15 in FIG. 1; and,  
FIG. 16 is an enlarged view of a portion of the visual display unit having rollable display shown within the area labeled 16 in FIG. 8.

(Continued)



The broken lines depict portions of the visual display unit having rollable display that form no part of the claimed design.

**1 Claim, 16 Drawing Sheets**

**Related U.S. Application Data**

continuation of application No. 29/688,128, filed on Apr. 18, 2019, now Pat. No. Des. 928,782.

(58) **Field of Classification Search**

USPC ..... D14/341–347, 371, 374, 432, 439;  
D6/308, 310; D10/50, 65, 104.1;  
D18/6–7; D19/26, 59–60; D21/324,  
D21/329–330, 332  
CPC ... H04M 1/0202; H04M 1/0266; H04M 1/725  
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

8,773,411	B2	7/2014	van Lieshout	
8,873,225	B2	10/2014	Huitema	
D723,541	S *	3/2015	Sohn	D14/315
D733,960	S	7/2015	Howe	
D761,251	S	7/2016	Senda	
D761,252	S	7/2016	Senda	
D761,253	S	7/2016	Yamazaki	
D761,788	S	7/2016	Yamazaki	
D770,447	S *	11/2016	Endo	D14/371
D789,925	S *	6/2017	Browning	D14/341
D822,633	S	7/2018	Yeom	
D884,743	S	5/2020	Liu et al.	
D885,381	S *	5/2020	Hwang	D14/371
D901,422	S *	11/2020	Lee	D14/138 AB
D906,994	S *	1/2021	Lee	D14/138 AB
D911,299	S	2/2021	Kim	
D913,282	S *	3/2021	Song	D14/371
D917,412	S	4/2021	Seo et al.	
D920,272	S *	5/2021	Lee	D14/138 AB
D920,973	S	6/2021	Lee	
D922,343	S	6/2021	Bae	
D922,344	S *	6/2021	Lee	D14/138 AB
D928,782	S *	8/2021	Seo	D14/341
D944,242	S *	2/2022	Seo	D14/345
D953,316	S *	5/2022	Lee	D14/248
D967,047	S *	10/2022	Lee	D14/138 AB
2008/0204367	A1	8/2008	Lafarre	
2016/0246558	A1	8/2016	Prushinskiy	
2017/0003756	A1	1/2017	Gao	
2017/0061836	A1	3/2017	Kim	
2019/0036068	A1	1/2019	Kim et al.	
2019/0268456	A1	8/2019	Park et al.	
2019/0280226	A1 *	9/2019	Myeong	H01L 51/0097
2020/0178404	A1 *	6/2020	Um	H01L 51/5237
2020/0233464	A1	7/2020	Lee	
2020/0253068	A1	8/2020	Cha	
2020/0253069	A1 *	8/2020	Cha	G06F 1/1681
2021/0011514	A1	1/2021	Wang et al.	

FOREIGN PATENT DOCUMENTS

JP	D1643436	10/2019
KR	301005155.0000	* 5/2019
KR	301009227.0000	* 6/2019
TW	200859-0001	* 11/2019
TW	200860-0001	* 11/2019

OTHER PUBLICATIONS

LG Reportedly Sets Release Date For Its Sleek Rollable Display Smartphone, Jul. 3, 2020, [retrieved Dec. 14, 2022], Retrieved from Internet, URL: <<https://hothardware.com/news/lg-sets-reportedly-release-date-for-its-sleek-rollable-display-smartphone>> (Year: 2020).\*

LG's rollable display smartphone . . . , Jul. 2, 2020, [retrieved Dec. 14, 2022], Retrieved from Internet, URL: <<https://www.gizmochina.com/2020/07/02/lg-rollable-display-smartphone-project-b-launch-next-year/>> (Year: 2020).\*

Tri-fold display concept, Mar. 5, 2020, [retrieved Dec. 14, 2022], Retrieved from Internet, URL: <[https://www.gsmarena.com/tcl\\_foldable\\_concept\\_phones\\_hands\\_on\\_review-2077p3.php](https://www.gsmarena.com/tcl_foldable_concept_phones_hands_on_review-2077p3.php)> (Year: 2020).\*

TCL Latest Foldable Phone Prototype Has a Rollable Screen, Mar. 5, 2020, [retrieved Dec. 14, 2022], Retrieved from Internet, URL: <<https://www.ign.com/articles/tcl-latest-foldable-phone-prototype-has-a-rollable-screen>> (Year: 2020).\*

First Rollable Smartphone Prototype, Oct. 26, 2020, [retrieved Sep. 23, 2021], Retrieved from Internet, URL: <<https://wccftech.com/first-rollable-smartphone-prototype-tcl/>> (Year: 2020).

LG patents a new smartphone design, Sep. 11, 2019 [online], [retrieved Dec. 2, 2020], Retrieved from Internet, URL: <<https://www.gizmochina.com/2019/09/11/lg-rollable-display-patent/>> (Year: 2019).

LG Patents Smartphone With A Flexible, Wrap-Around Display, Jan. 20, 2020, [retrieved Sep. 23, 2021], Retrieved from Internet, URL: <<https://www.androidheadlines.com/2020/01/lg-smartphone-with-flexible-wrap-around-display.html>> (Year: 2020).

LG Rollable Smartphone is in Works, Jul. 2, 2020, [retrieved Sep. 23, 2021], Retrieved from Internet, URL: <<https://www.gizchina.com/2020/07/02/lg-rollable-smartphone-is-in-works-chinese-boe-helps/>> (Year: 2020).

LG's roll able smartphone pictured in 3D renders, Aug. 28, 2019, [retrieved Sep. 23, 2021], Retrieved from Internet, URL: <[https://www.gsmarena.com/lgs\\_rollable\\_smartphone\\_pictured\\_in\\_3d\\_renders-news-38906.php](https://www.gsmarena.com/lgs_rollable_smartphone_pictured_in_3d_renders-news-38906.php)> (Year: 2019).

LG's rollable display smartphone, Jul. 2, 2020 [online], [retrieved Dec. 2, 2020], Retrieved from Internet, URL: <<https://www.gizmochina.com/2020/07/02/lg-rollable-display-smartphone-project-b-launch-next-year/>> (Year: 2020).

Meet The First Flexible Smartphone From LG. Dec. 4, 2013, [retrieved Sep. 23, 2021], Retrieved from Internet, URL: <<https://www.forbes.com/sites/parmyolson/2013/12/04/meet-the-first-flexible-smartphone-from-lg/?sh=34d2420a7ddf>> (Year: 2013).

Rollable Phones: LG's new roll able phone, Sep. 10, 2019 [online], [retrieved Dec. 2, 2020], Retrieved from Internet, URL: <<https://www.phonefoldable.com/rollable-phones-lgs-new-rollable-phone-will-be-perfect-for-mobile-gaming-and-streaming/>> (Year: 2019).

\* cited by examiner



FIG. 1

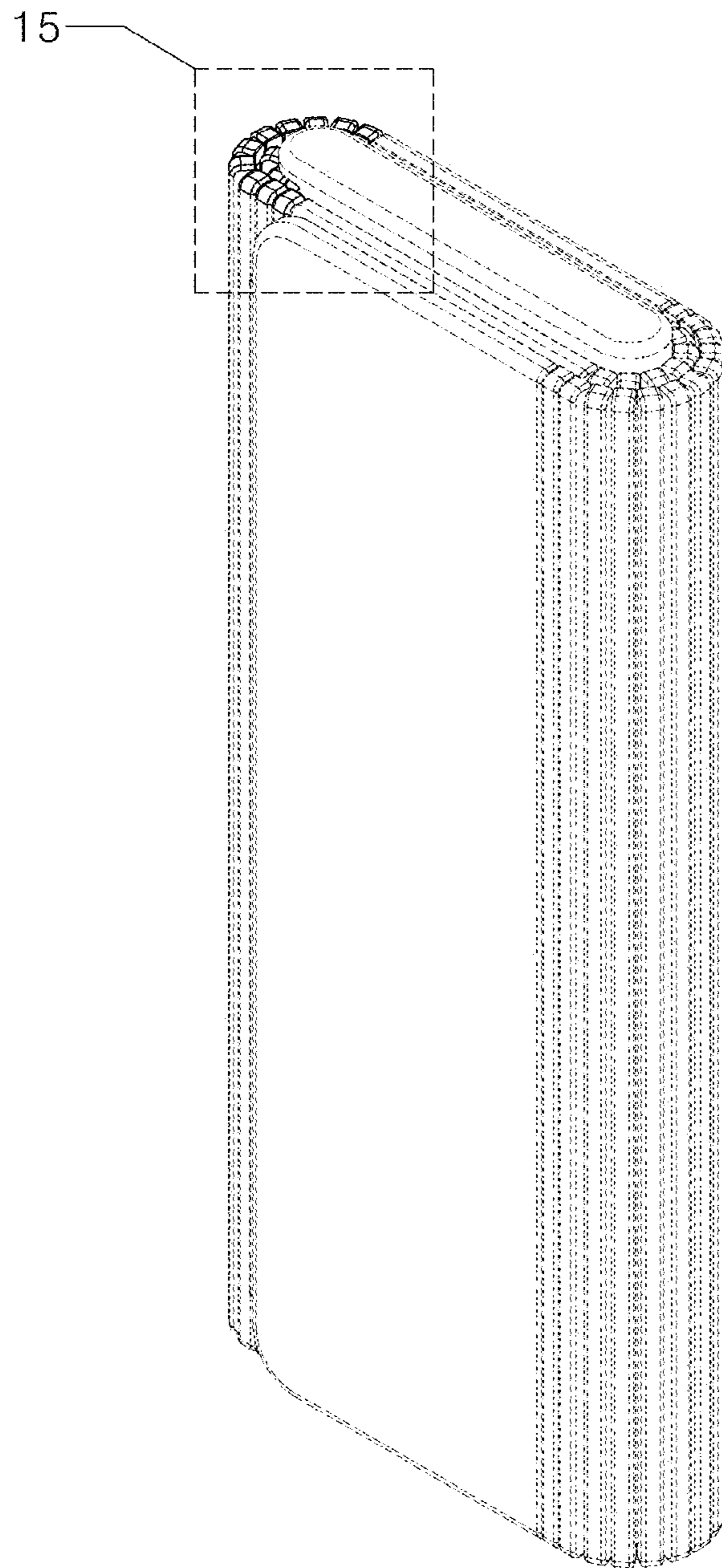


FIG. 2

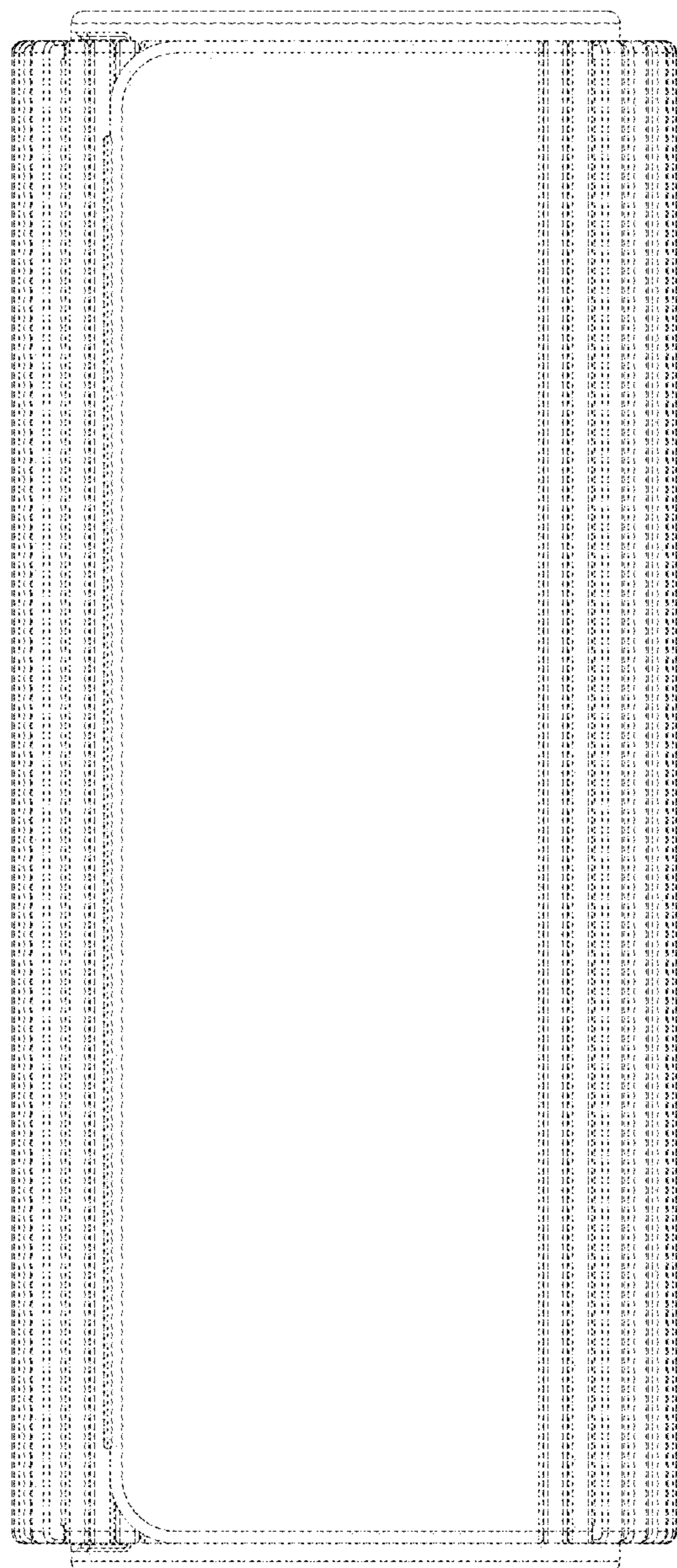


FIG. 3

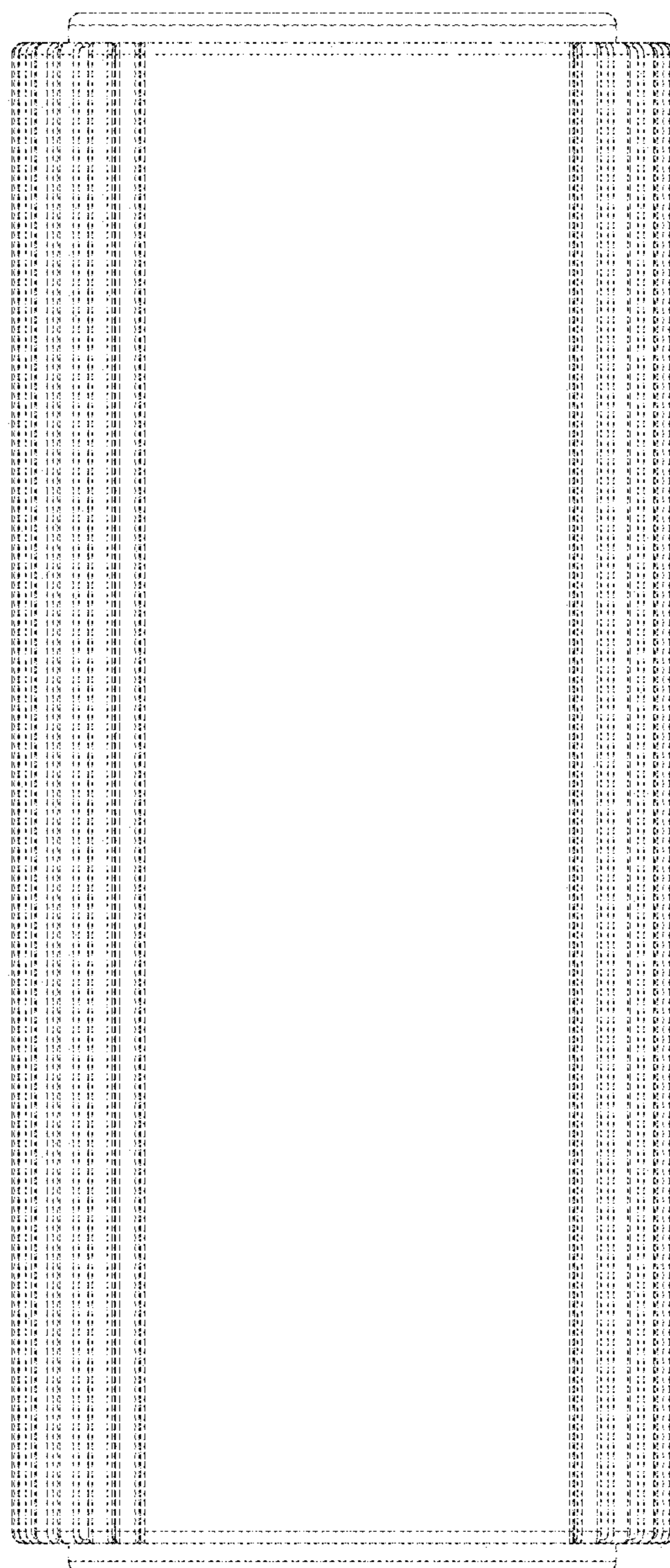


FIG. 4

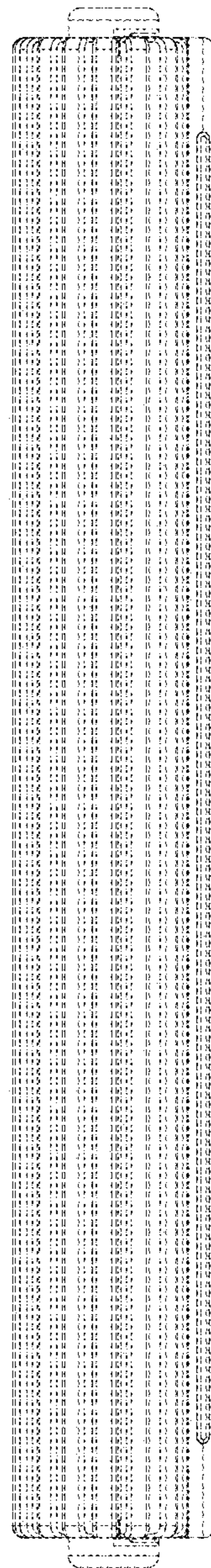


FIG. 5



FIG. 6

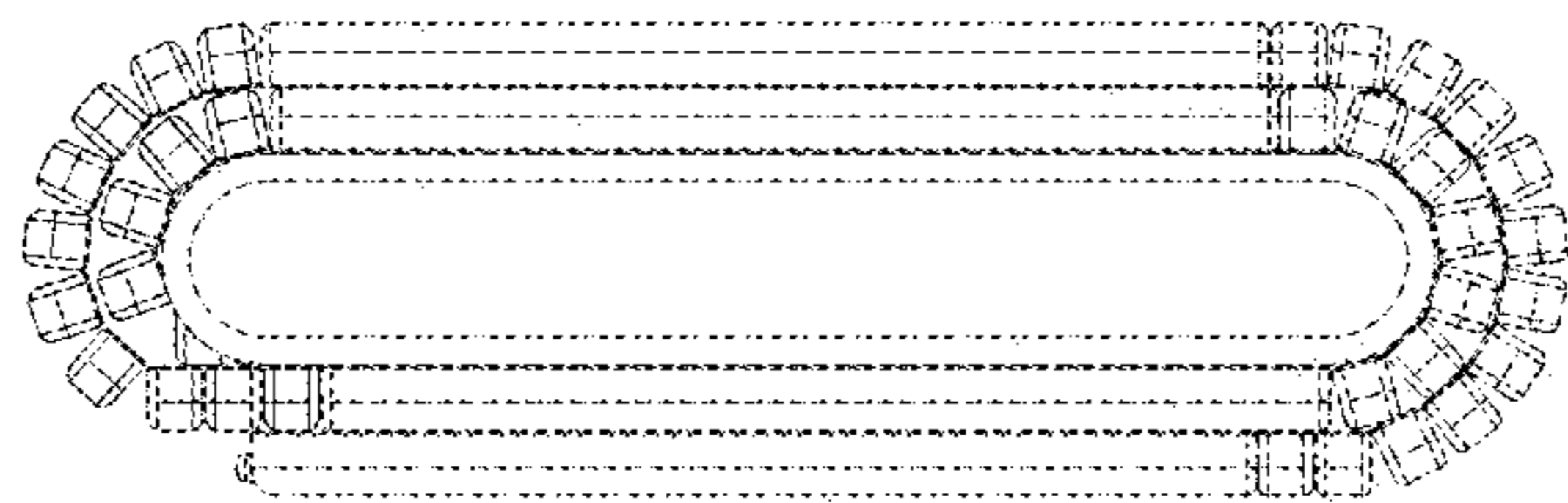




FIG. 7

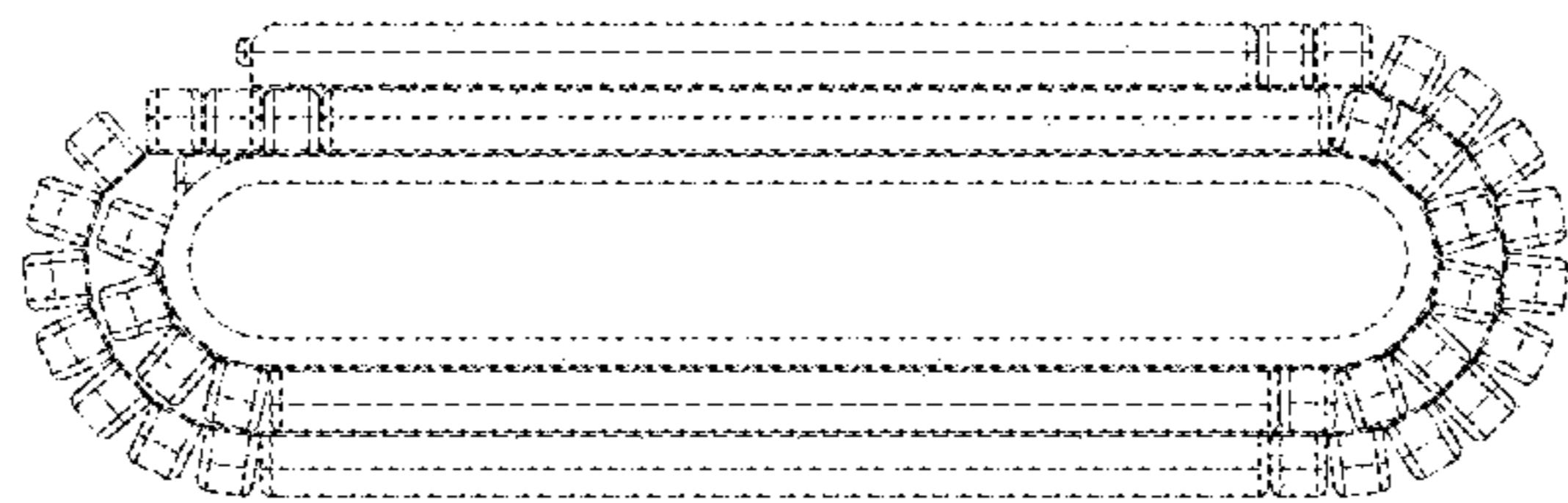


FIG. 8

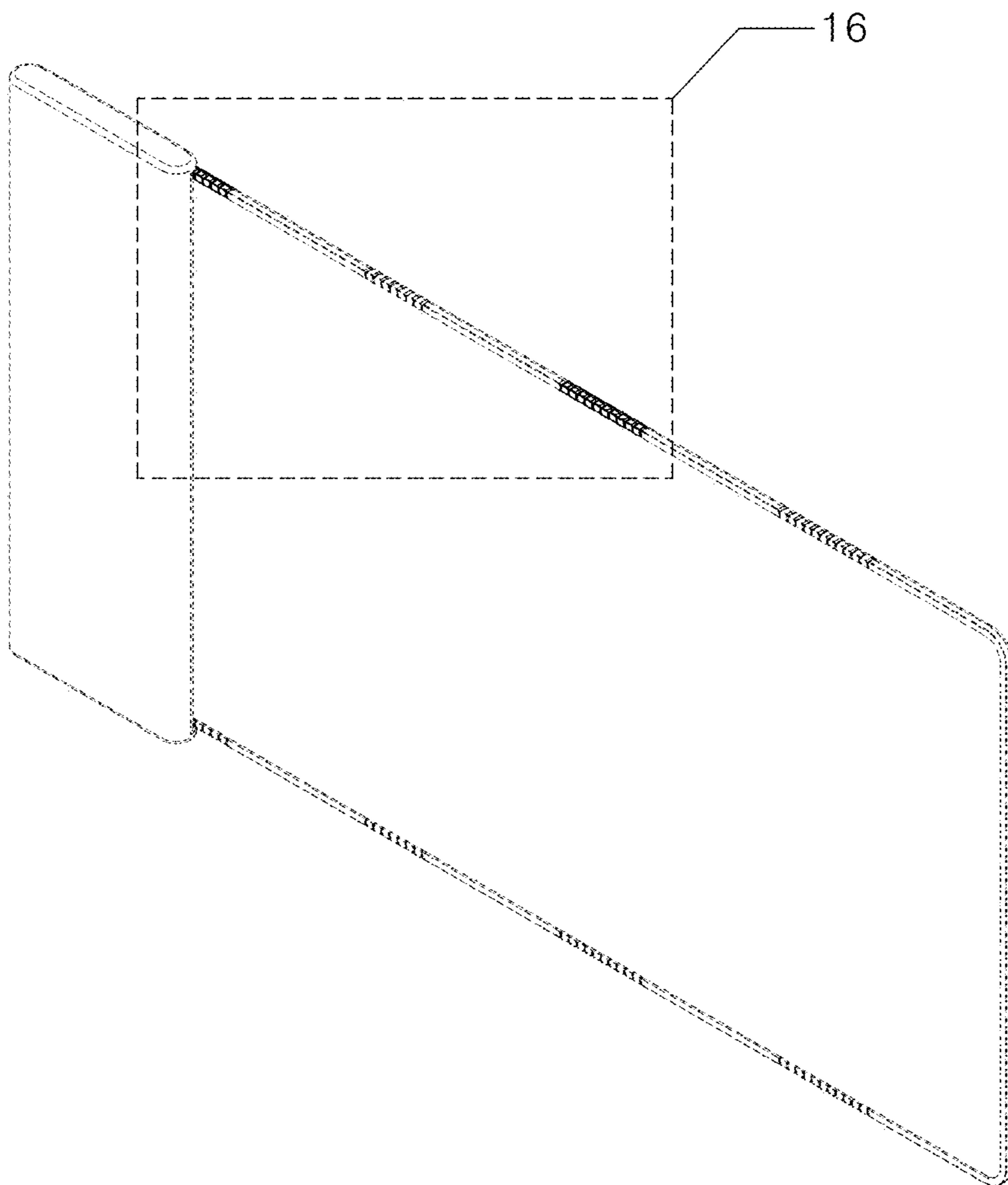


FIG. 9

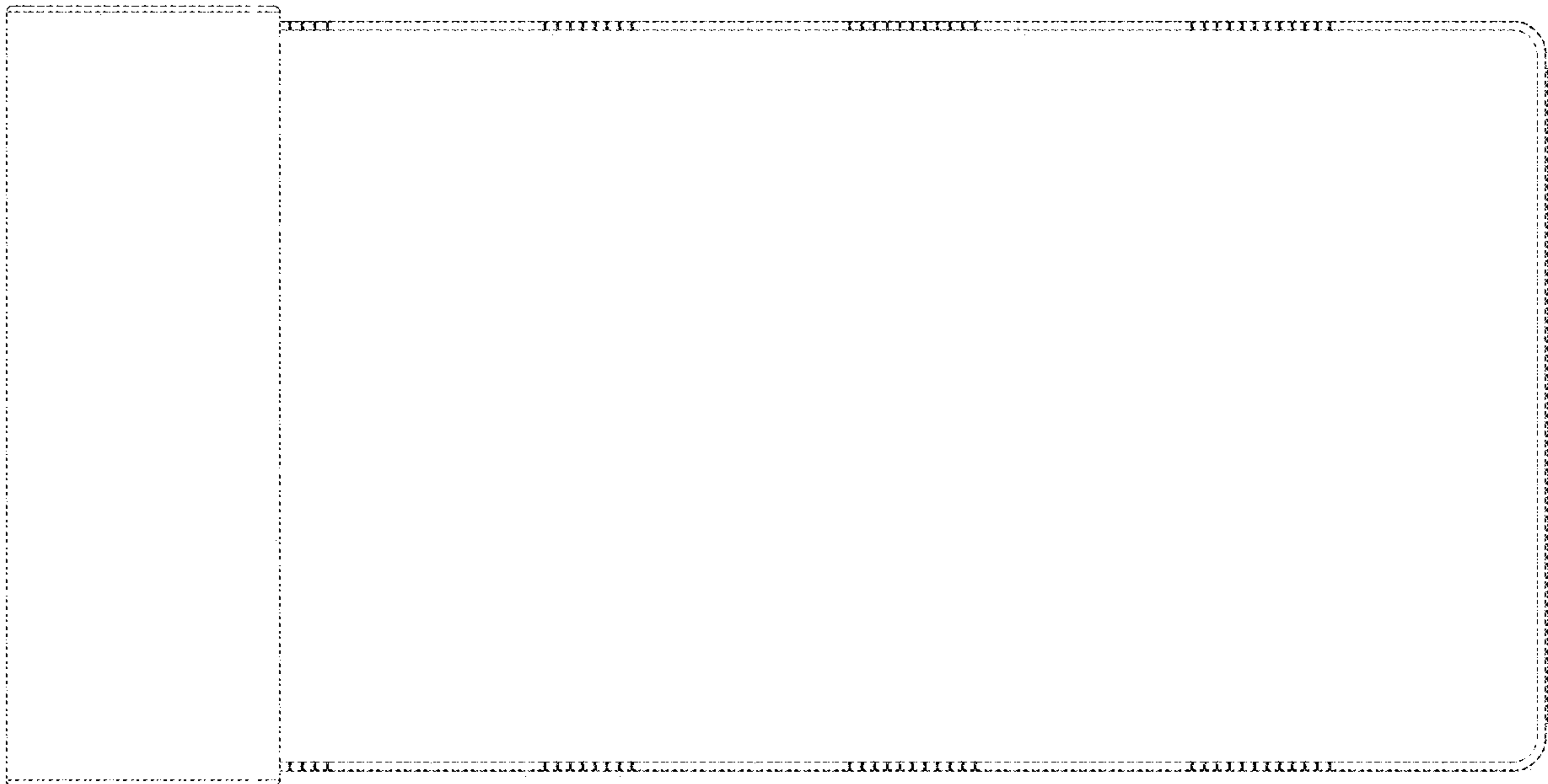


FIG. 10

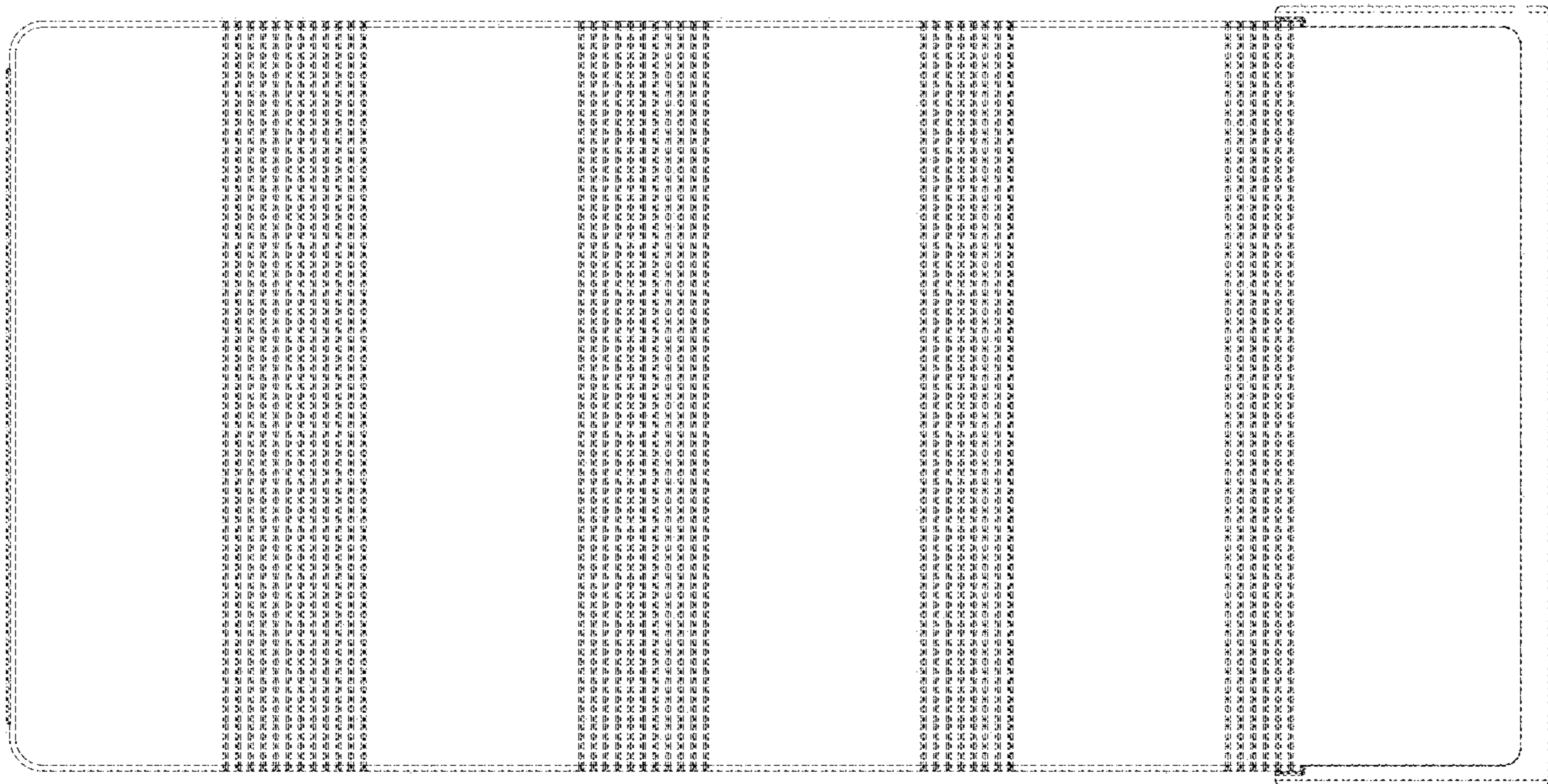




FIG. 11

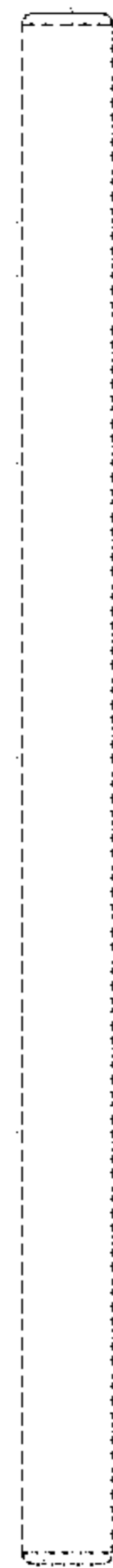


FIG. 12



FIG. 13

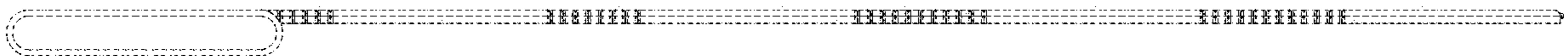


FIG. 14

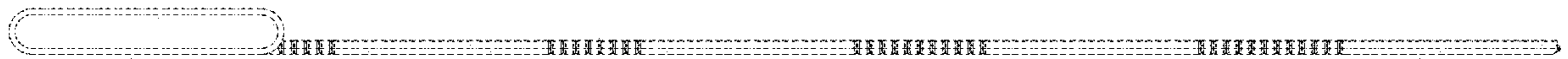




FIG. 15

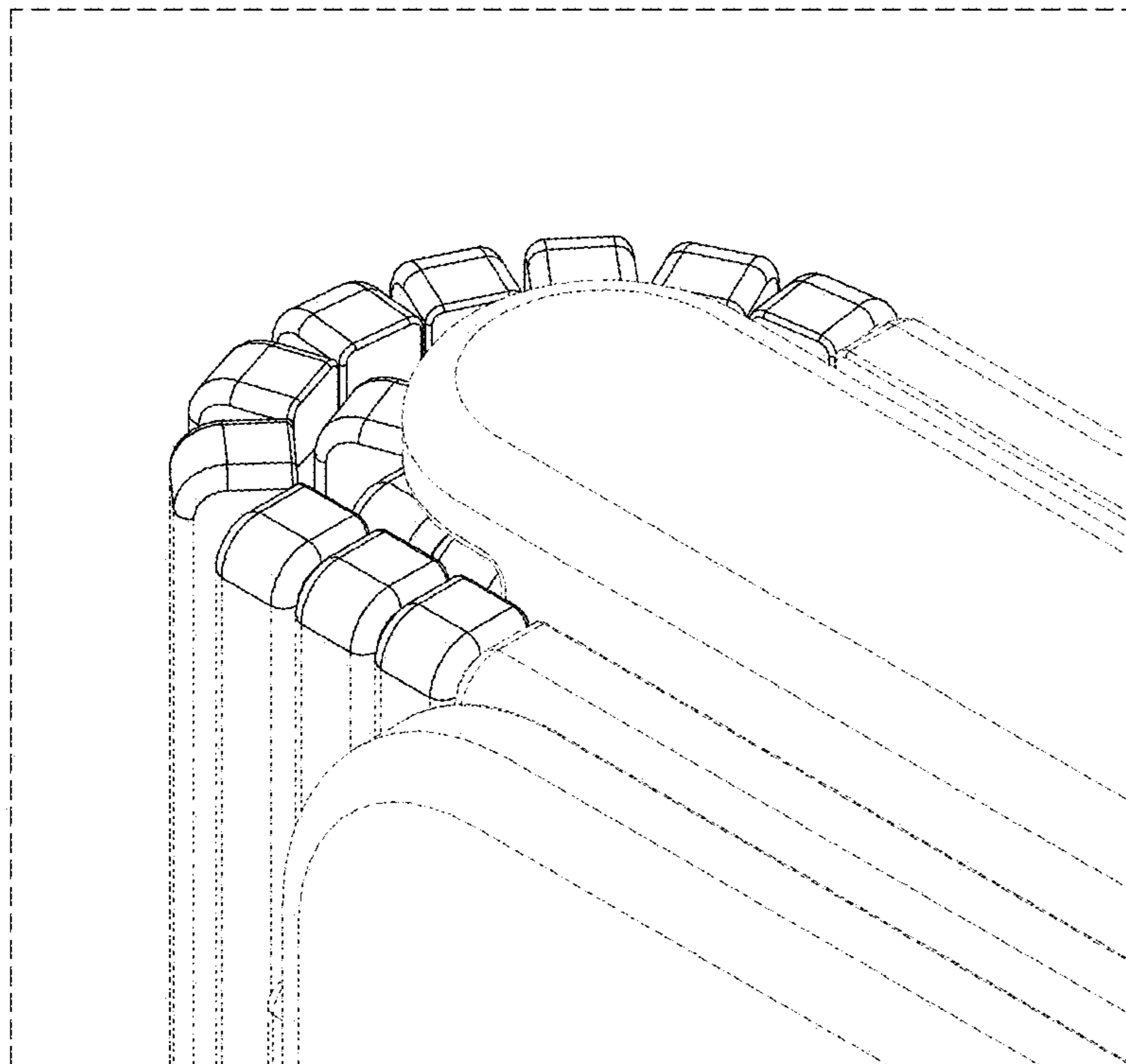


FIG. 16

