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

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(54) **MOP REPLACEMENT HEAD**
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D287,539 S 12/1986 Wilson et al.
D315,975 S 4/1991 Huang
D352,432 S * 11/1994 Monroe D32/41
5,365,881 A 11/1994 Sporn
D358,238 S 5/1995 Barnett
D360,507 S 7/1995 Salvato
5,455,980 A * 10/1995 Buchanan A47L 13/24
15/147.2

(Continued)

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FOREIGN PATENT DOCUMENTS

JP D1489801 S 2/2014

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

OTHER PUBLICATIONS

(21) Appl. No.: **29/724,397**

Mop Head <https://www.homedepot.com/p/Shark-VACMOP-5-9-in-x-10-in-Disposable-Hard-Floor-Vacuum-and-Mop-Pad-Refills-Microfiber-Cloth-10-Count-VMP10/312832515> (Year: 2020).*

(22) Filed: **Feb. 14, 2020**

(Continued)

(51) **LOC (13) Cl.** **07-05**

(52) **U.S. Cl.**
USPC **D32/39**

(58) **Field of Classification Search**
USPC D6/582; D30/159; D32/38, 41, 45, 49,
D32/50, 51
CPC A47L 9/1409; A47L 13/256; A47L 13/225;
A47L 9/1445; A47L 13/254; A47L 13/24;
B01D 50/002; B25G 3/38

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See application file for complete search history.

(57) **CLAIM**

We claim the ornamental design for the mop replacement head, as shown and described.

(56) **References Cited**

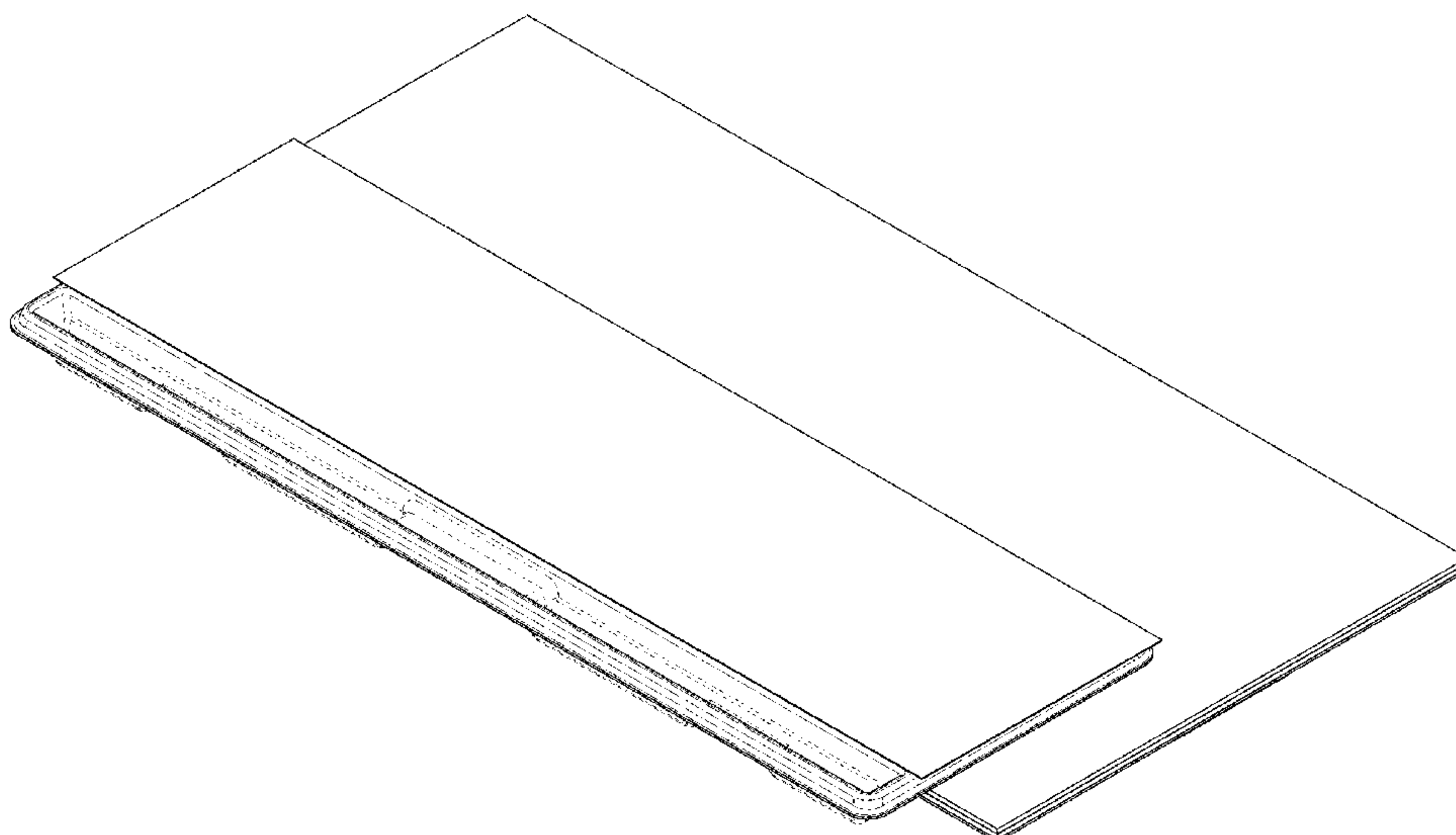
DESCRIPTION

U.S. PATENT DOCUMENTS

490,472 A 1/1893 Clements
D50,310 S * 2/1917 Krantz D32/38
D95,984 S * 6/1935 Pullen D32/38
D104,418 S * 5/1937 Williams D32/38
D117,388 S 10/1939 Woinarovicz
D214,977 S 8/1969 Roth
3,676,888 A 7/1972 Akers
D247,949 S 5/1978 Tillinghast et al.
D249,821 S 10/1978 Cooke et al.
D250,245 S 11/1978 Bebb
D278,099 S 3/1985 Evans
D286,576 S 11/1986 Schneider et al.

FIG. 1 is an isometric view of the replacement head;
FIG. 2 is a front view of the replacement head;
FIG. 3 is a rear view of the replacement head;
FIG. 4 is a top view of the replacement head;
FIG. 5 is a bottom view of the replacement head;
FIG. 6 is a side view of the replacement head; and,
FIG. 7 is another side view of the replacement head.
Broken lines shown in the Figures indicate unclaimed subject matter.

1 Claim, 5 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D388,569 S 12/1997 Israel
D391,715 S * 3/1998 Irwin A47L 13/254
D32/50
D402,776 S 12/1998 Carlson
5,915,437 A 6/1999 Petner
D423,157 S 4/2000 Hodges
D427,401 S * 6/2000 Kunkier D32/50
D444,952 S 7/2001 Mason, Jr.
D455,878 S * 4/2002 Debreczeni D32/50
6,379,408 B1 * 4/2002 Embree A47L 9/1445
15/347
D467,686 S 12/2002 Kohler
D506,050 S 6/2005 Lalanne et al.
D518,935 S 4/2006 Leitch et al.
D548,907 S 8/2007 Killen
D548,910 S * 8/2007 Murray D32/45
D554,815 S 11/2007 Harper et al.
D563,068 S 2/2008 Jiang et al.
D587,538 S 3/2009 Vendl et al.
D591,019 S * 4/2009 Perry Zang Wentz Pho
D32/49
D597,717 S * 8/2009 Rosenzweig A47L 13/225
D32/45
D613,473 S 4/2010 Pierce
D615,260 S 5/2010 Koenig
D617,066 S 6/2010 Koenig et al.
D625,480 S 10/2010 Raven
D644,386 S * 8/2011 Tawara D32/51
D653,826 S 2/2012 Lee
D657,515 S * 4/2012 McGee D32/45
D657,516 S * 4/2012 McGee D32/45
D657,928 S 4/2012 Byrne
D658,836 S 5/2012 Ediger et al.
D661,034 S 5/2012 Ediger et al.
D672,107 S 12/2012 Van Landingham, Jr. et al.
D677,031 S 2/2013 Best et al.
D701,013 S 3/2014 Libman et al.
D703,407 S 4/2014 Xiong
D720,906 S 1/2015 Baldwin
D731,137 S * 6/2015 Colangelo A47L 13/16
D32/40
D740,050 S * 10/2015 Jalbert D6/582
D740,051 S * 10/2015 Jalbert D6/582
D756,581 S 5/2016 Libman et al.
D759,329 S 6/2016 Colangelo
D761,510 S 7/2016 Vicari et al.
D764,127 S 8/2016 Vicari et al.

D765,931 S * 9/2016 Presnell D32/50
D766,528 S 9/2016 Choi et al.
D766,584 S 9/2016 Blouin et al.
D779,144 S 2/2017 Layevsky
D783,215 S * 4/2017 Presnell D32/50
D792,043 S 7/2017 Buckley et al.
D793,639 S 8/2017 Schuller et al.
D804,123 S 11/2017 Orsino
D817,574 S 5/2018 Libman et al.
10,004,372 B2 6/2018 Escobar et al.
D837,464 S * 1/2019 Park D30/159
D850,047 S 5/2019 James et al.
D885,002 S * 5/2020 James D32/50
D912,357 S * 3/2021 Ross D32/50
2005/0193516 A1 9/2005 Hughes
2006/0018706 A1 1/2006 Bensussan et al.
2006/0048327 A1 3/2006 Lacotta et al.
2006/0070196 A1 4/2006 Lacotta et al.
2009/0265872 A1 * 10/2009 Eldessouky B25G 3/38
15/144.1
2016/0167128 A1 * 6/2016 Stalder B01D 50/002
164/76.1
2017/0049292 A1 2/2017 Harrington et al.
2021/0015324 A1 * 1/2021 James A47L 13/256
2021/0045601 A1 * 2/2021 Douglas A47L 9/1409

OTHER PUBLICATIONS

Replacement Head [https://www.amazon.com/Shark-VACMOP-Disposable-Vacuum-Refills/dp/B0921SPS4B/ref=asc_df_B0921SPS4B/\(Year:2020\).](https://www.amazon.com/Shark-VACMOP-Disposable-Vacuum-Refills/dp/B0921SPS4B/ref=asc_df_B0921SPS4B/(Year:2020).)*
(2019) Shark Rocket DuoClean Ultra-Light Corded Stick Vacuum, Walmart.com reviews, <https://www.walmart.com/ip/SharkNinja-Rocket-DuoClean-Corded-Ultra-Light-Bagless-M...> site visited Sep. 5, 2019, 19 pages.
amazon.com “Shark Genius Steam Pocket Mop Hard Floor Cleaner”, oldest reviews 2016, https://www.amazon.com/Cleaner-Blaster-Technology-Intelligent-S50030/dp/B01KU4BSGK/ref=cm_cr_arpd_product_top?ie=UTF8, site visited Oct. 11, 2018, 11 pages.
Design U.S. Appl. No. 29/680,842, filed Feb. 20, 2019, Richard R. Mathias et al., 4 pages.
U.S. Appl. No. 29/680,842, filed Feb. 20, 2019, Mop Pad.
U.S. Appl. No. 29/724,367, filed Feb. 14, 2020, Mop Replacement Head.
U.S. Appl. No. 29/724,387, filed Feb. 14, 2020, Mop Replacement Head.
U.S. Appl. No. 29/692,756, filed May 28, 2019, Mop Head.
U.S. Appl. No. 29/621,018, filed Oct. 3, 2017, Mop Head.

* cited by examiner

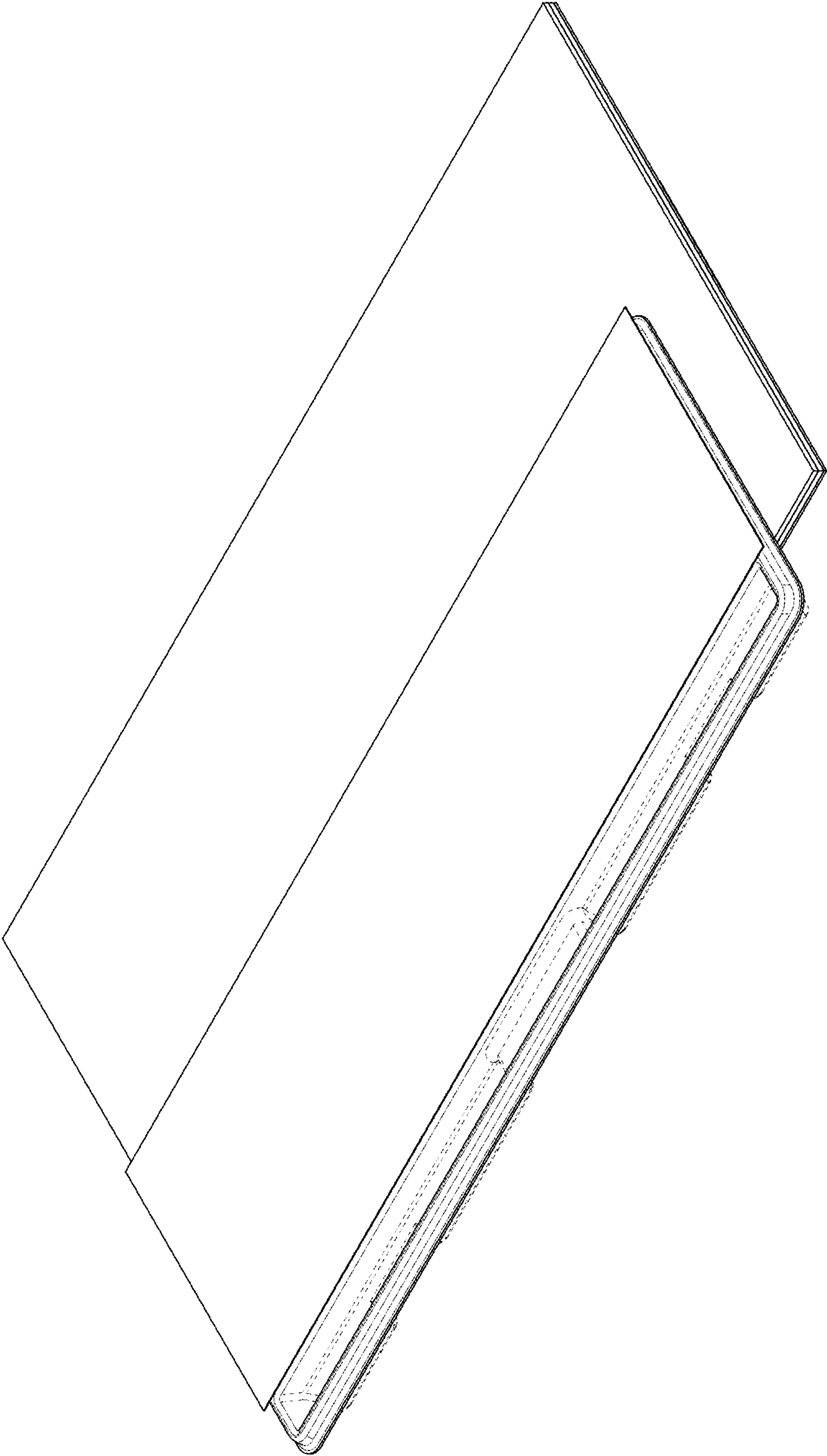


FIG. 1



FIG. 2

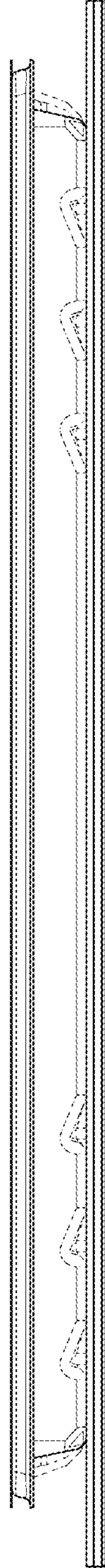


FIG. 3

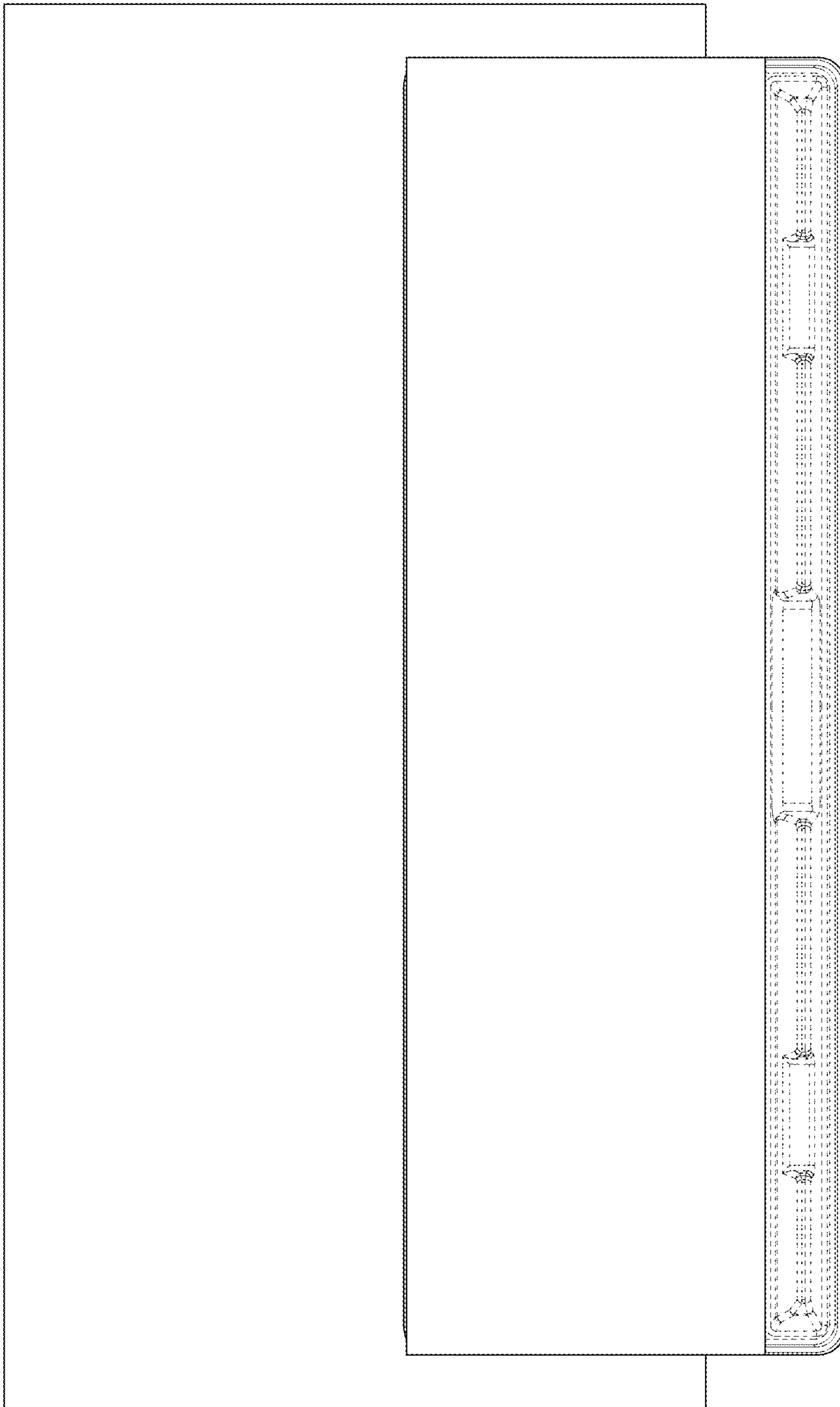


FIG. 4

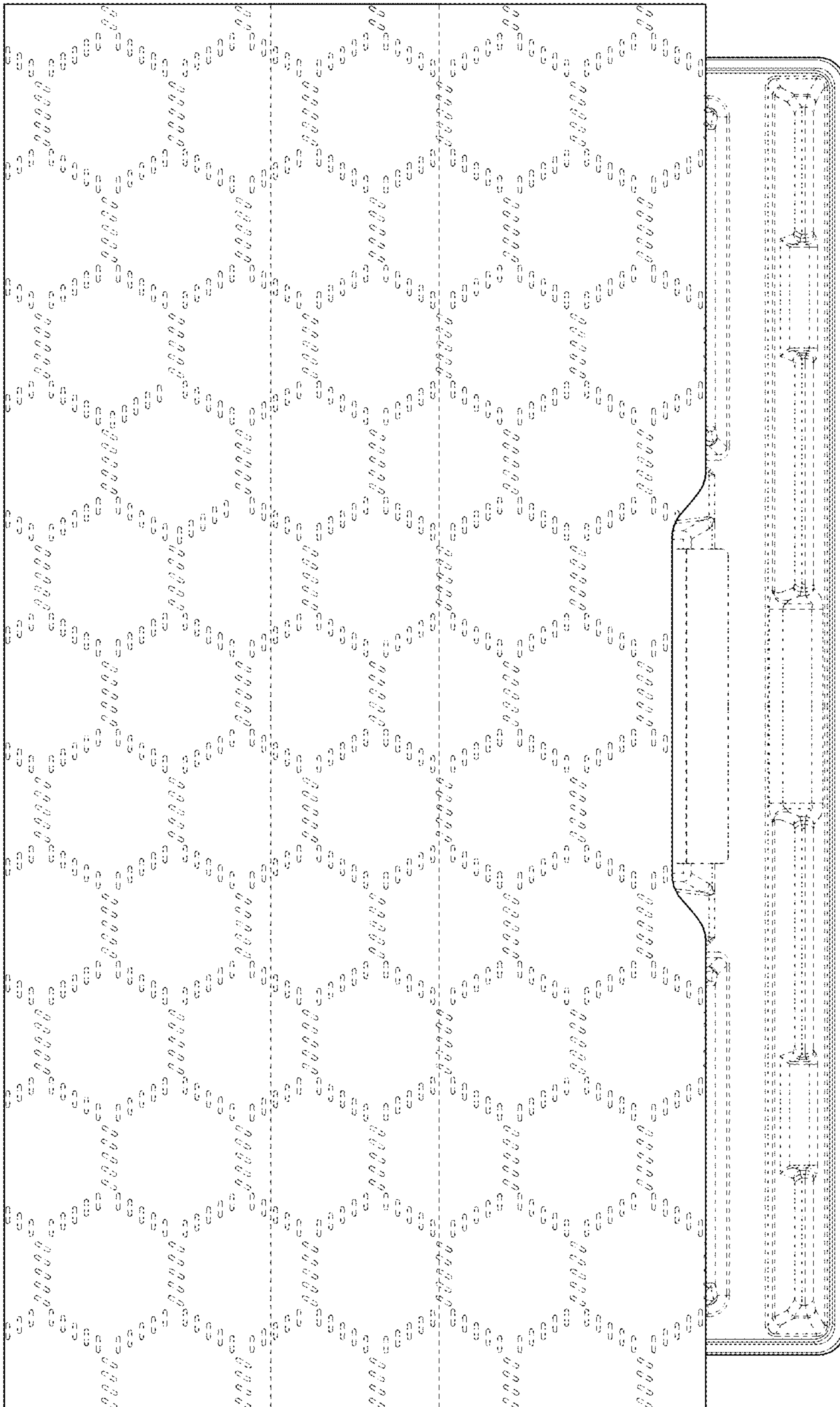


FIG. 5

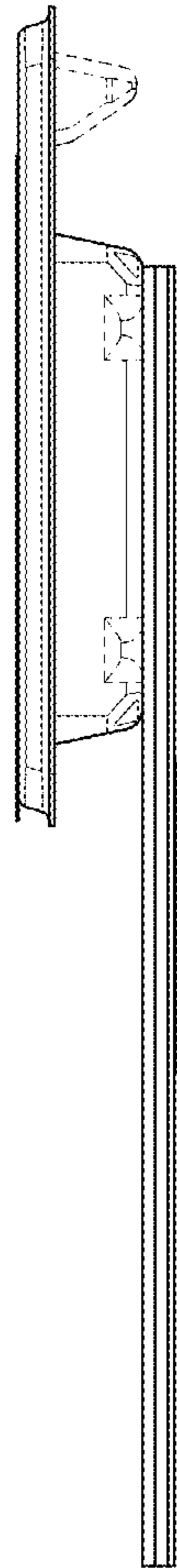


FIG. 6

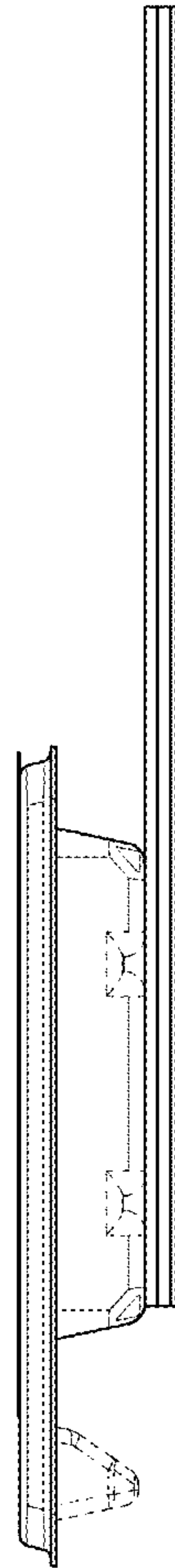


FIG. 7