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(12) **United States Design Patent** (10) **Patent No.:** **US D907,546 S**
Bock et al. (45) **Date of Patent:** **** Jan. 12, 2021**

(54) **BRAKE DUST FILTER**
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(**) Term: **15 Years**
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(30) **Foreign Application Priority Data**

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(51) **LOC (13) Cl.** **12-16**
(52) **U.S. Cl.**
USPC **D12/180**
(58) **Field of Classification Search**
USPC D12/400, 415, 162, 174–177, 179, 180,
D12/181, 190–192, 196, 218
CPC .. B60T 17/00; B60D 1/01; B60D 1/14; B60R
25/02105; B60R 2011/001
See application file for complete search history.

(56) **References Cited**
U.S. PATENT DOCUMENTS
6,478,121 B2 * 11/2002 Reeves F16D 55/2265
188/258
D556,103 S * 11/2007 Morimoto D12/180
D610,059 S * 2/2010 Azimonti D12/180
D610,507 S * 2/2010 Azimonti D12/180
D642,100 S * 7/2011 Crippa D12/180

D739,319 S * 9/2015 Montgomery D12/180
D815,000 S * 4/2018 Igawa D12/180
D837,704 S * 1/2019 Huang D12/180
D890,047 S * 7/2020 Bock D12/180
2013/0020155 A1 * 1/2013 Crippa F16D 55/228
188/73.31
2015/0027821 A1 * 1/2015 Nessi F16D 55/224
188/72.3

OTHER PUBLICATIONS

“The brake dust particle filter from MANN+HUMMEL” [online].
mann-hummel.com. [Published on Sep. 11, 2017]. Retrieved from
the Internet: <<https://www.mann-hummel.com/en/the-company/current-topics/press-releases/the-brake-dust-particle-filter-from-mannhummel/>>.*

* cited by examiner

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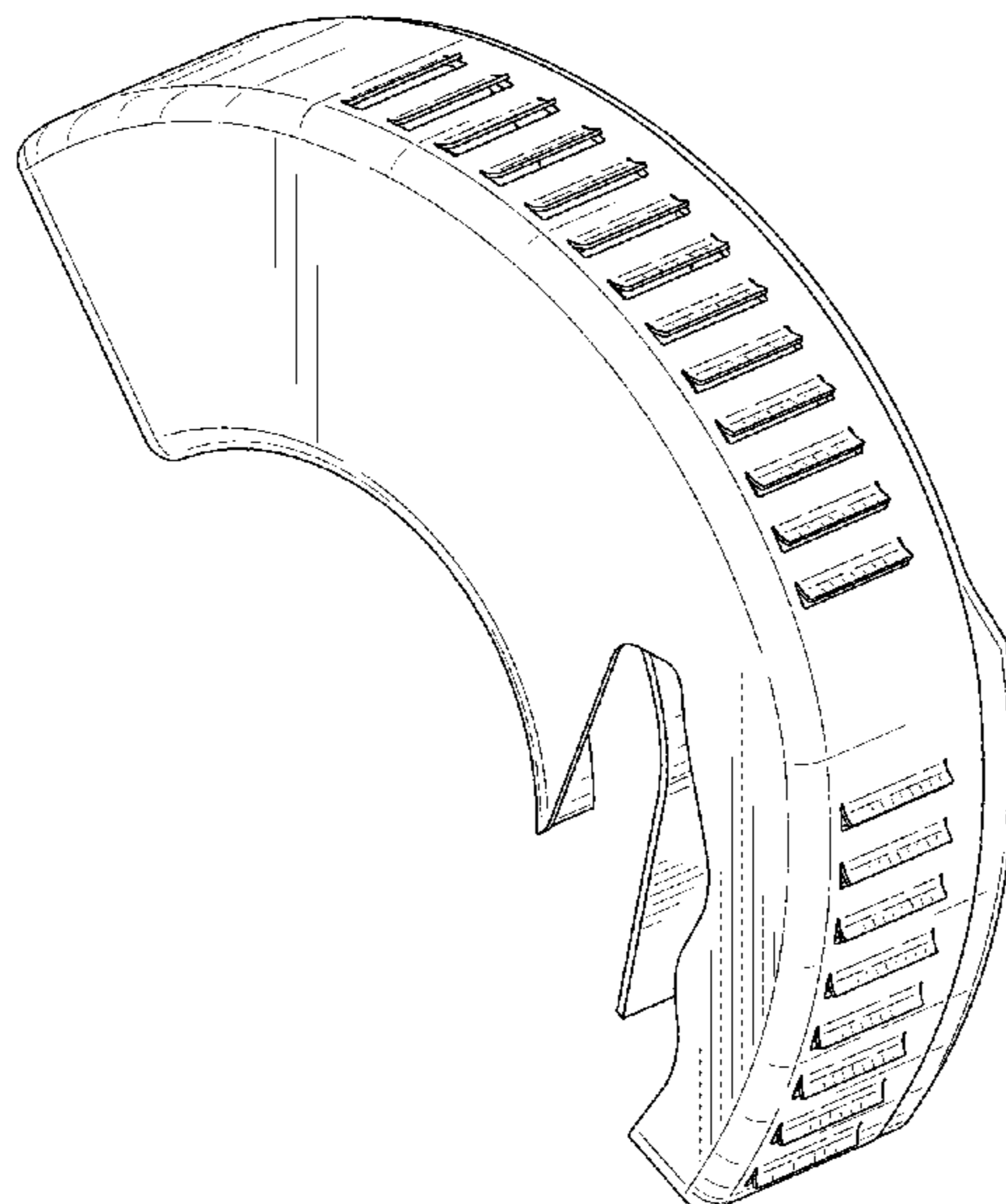
(57) **CLAIM**

We claim the ornamental design for a brake dust filter, as shown and described.

DESCRIPTION

FIG. 1 shows a perspective view of the brake dust filter showing our new design;
FIG. 2 shows a front elevational view thereof;
FIG. 3 shows a rear elevational view thereof;
FIG. 4 shows a right side elevational view thereof;
FIG. 5 shows a left side elevational view thereof;
FIG. 6. shows a top plan view thereof; and,
FIG. 7 shows a bottom plan view thereof.
The evenly broken line in the drawings depicts unclaimed portion of the dust filter, and the dot-dash line depicts the boundary of the claim. The broken lines forms no part of the claimed design.

1 Claim, 5 Drawing Sheets



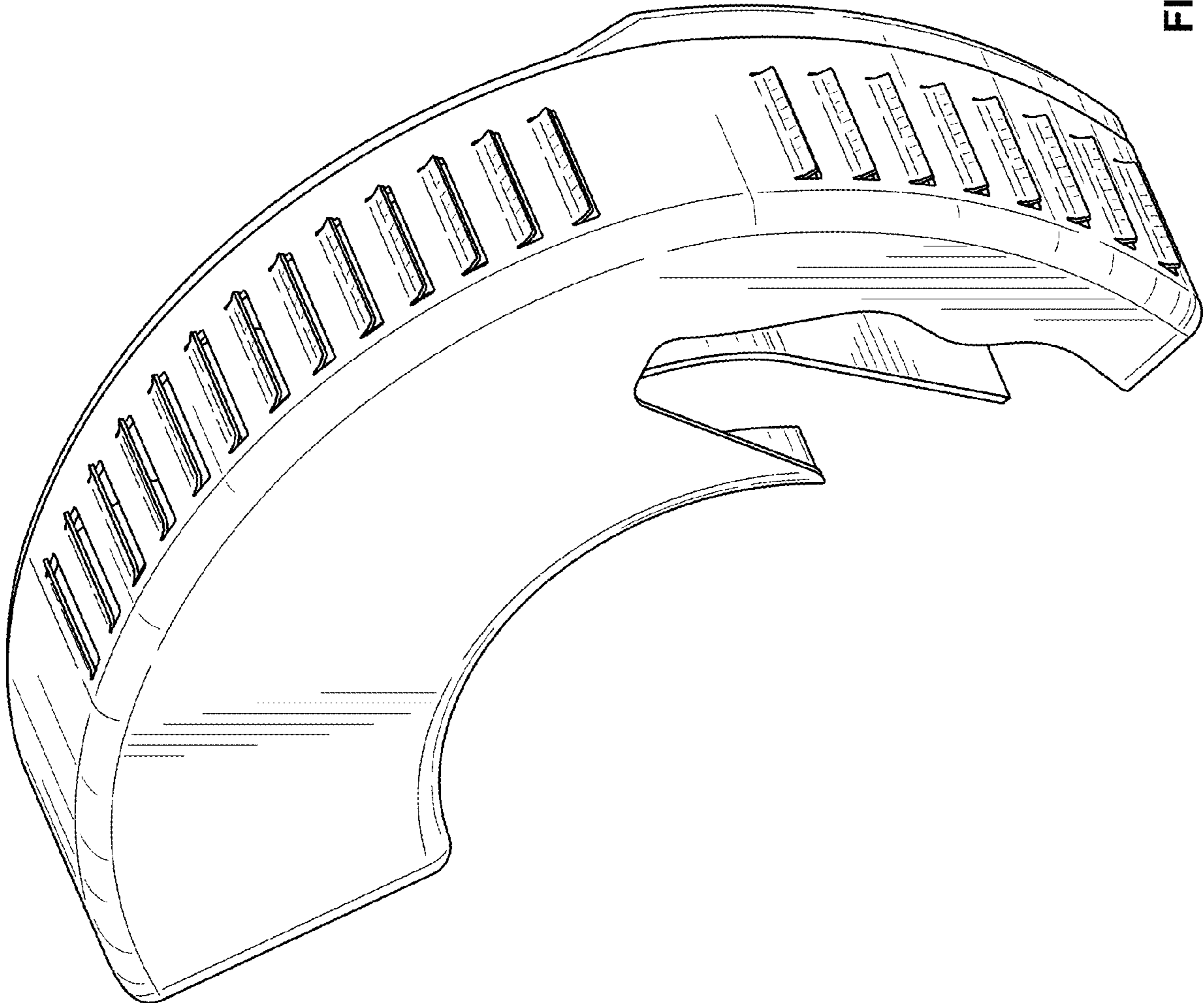


FIG. 1

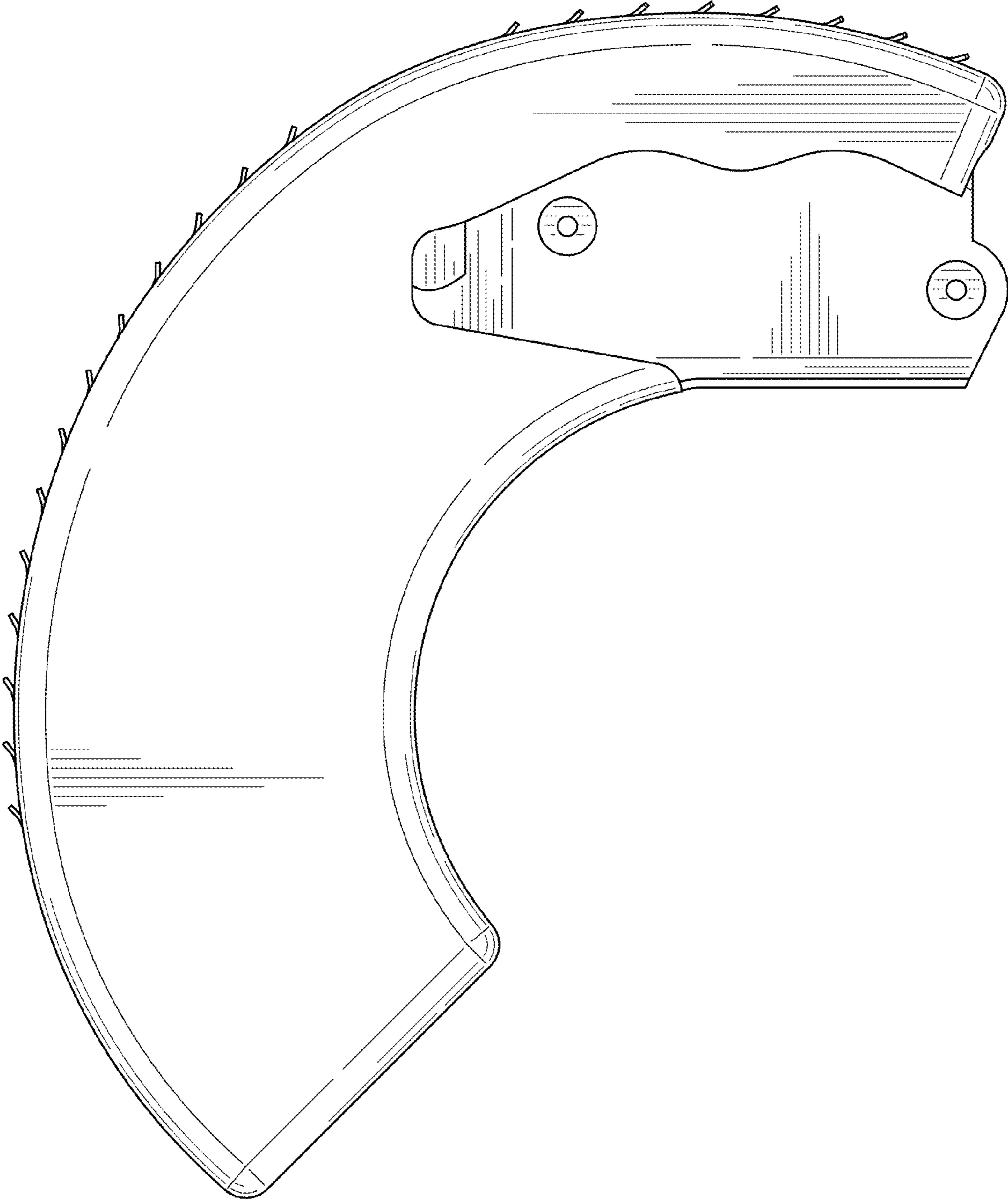


FIG. 2

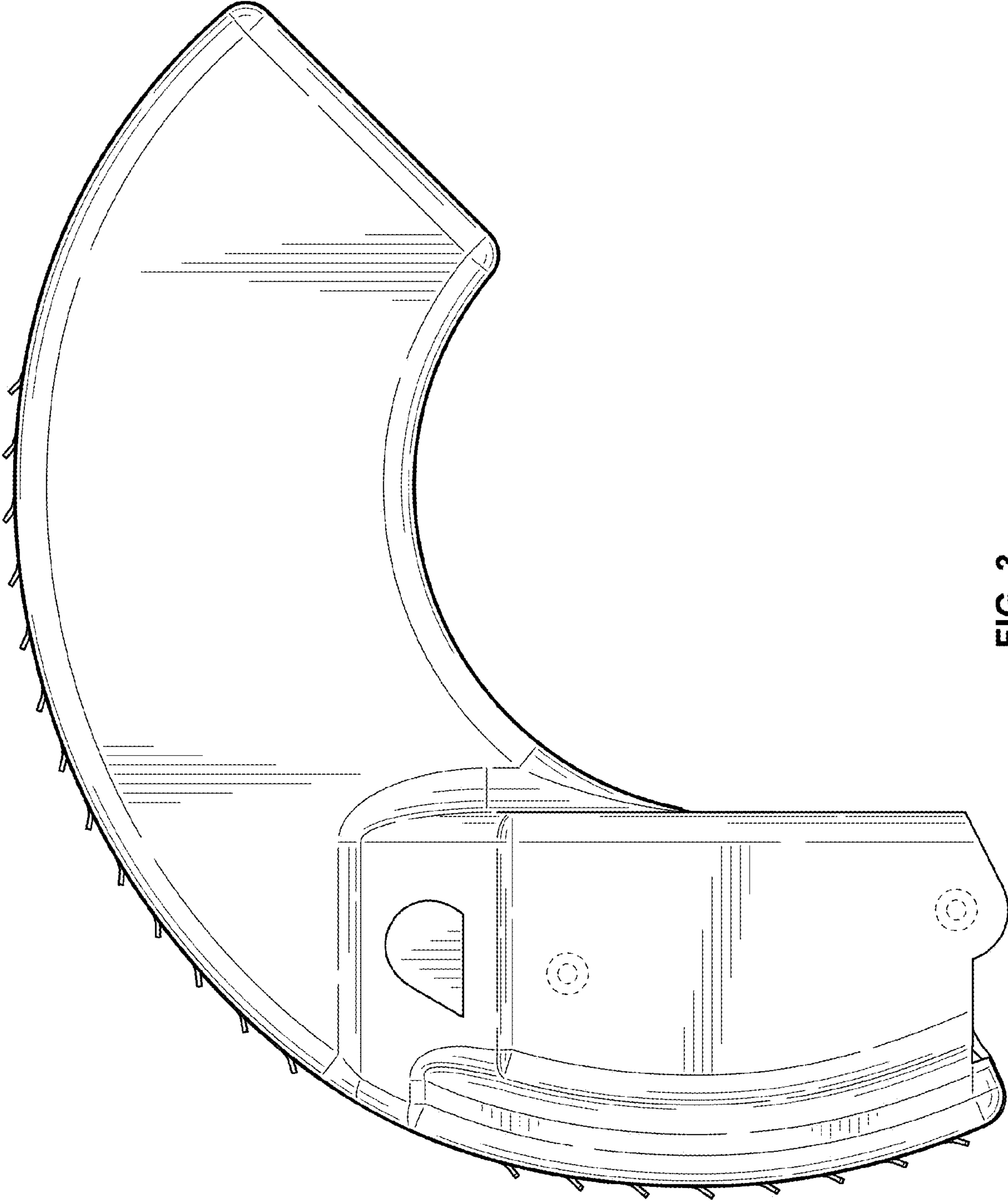


FIG. 3

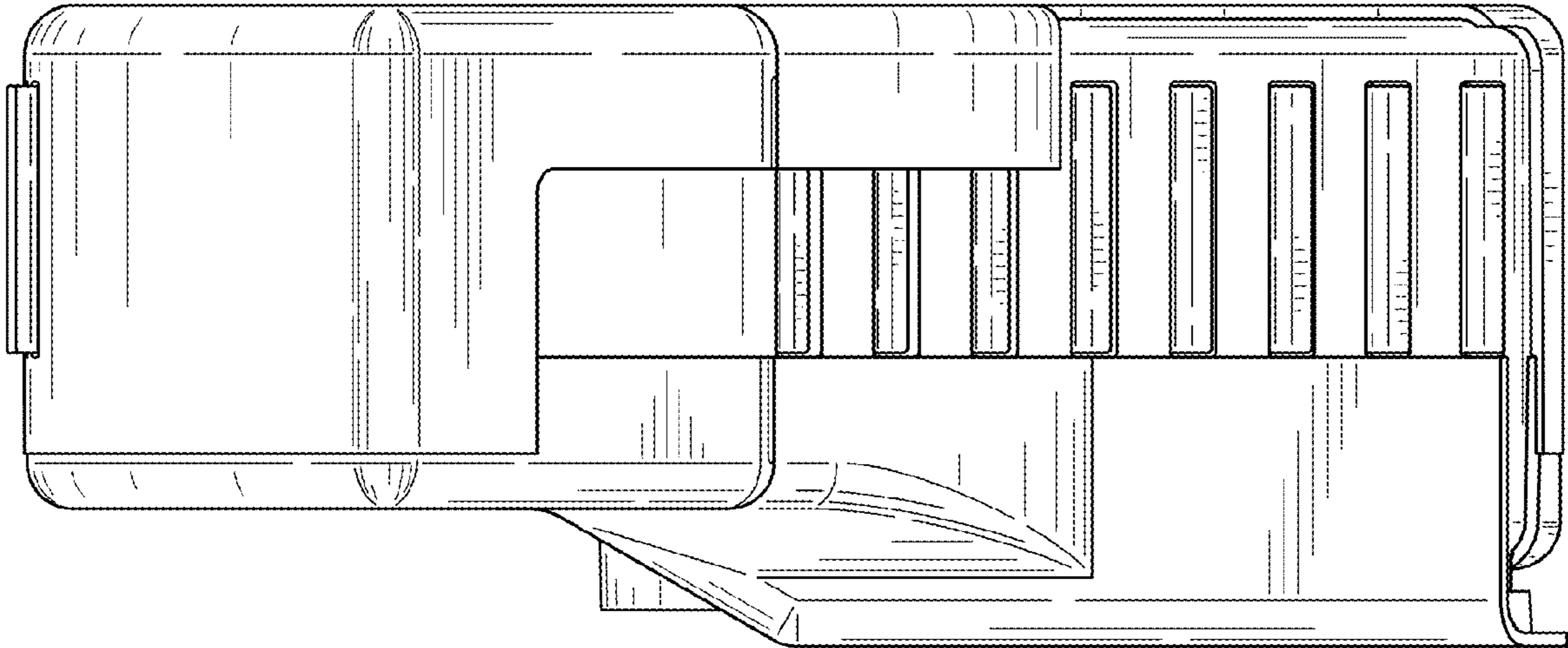


FIG. 5

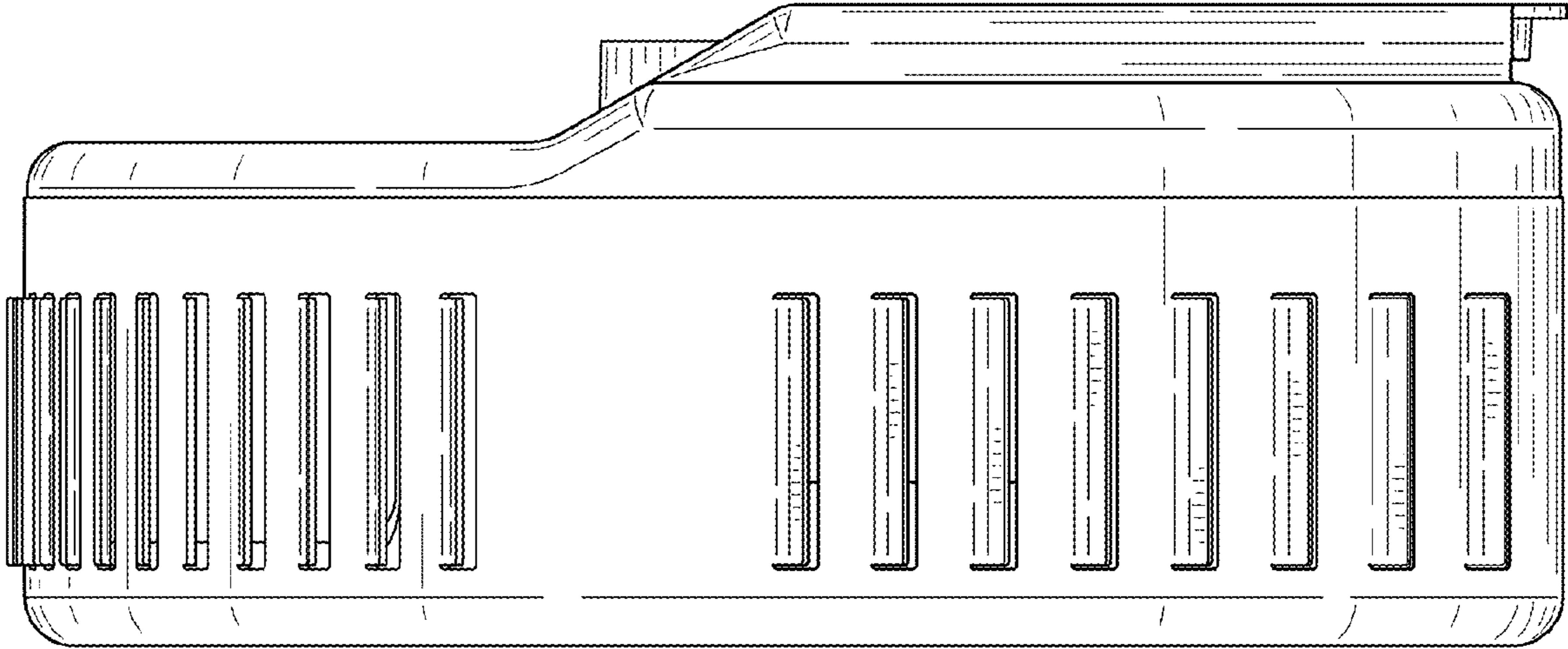


FIG. 4

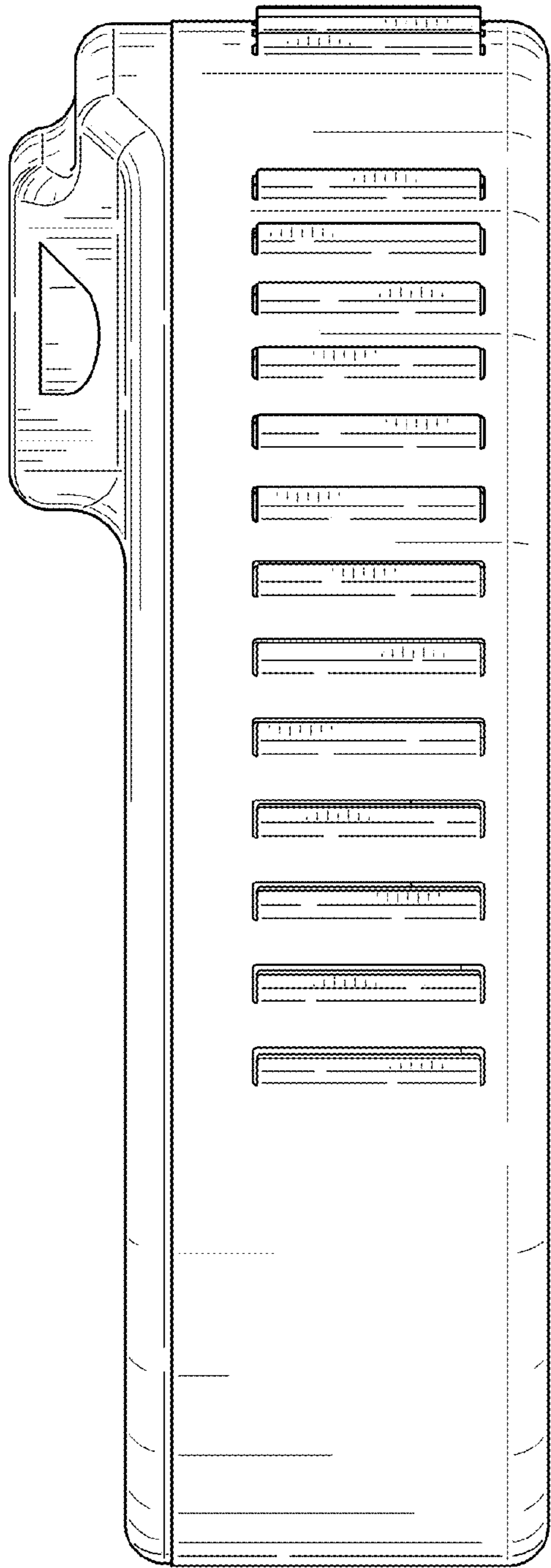


FIG. 6

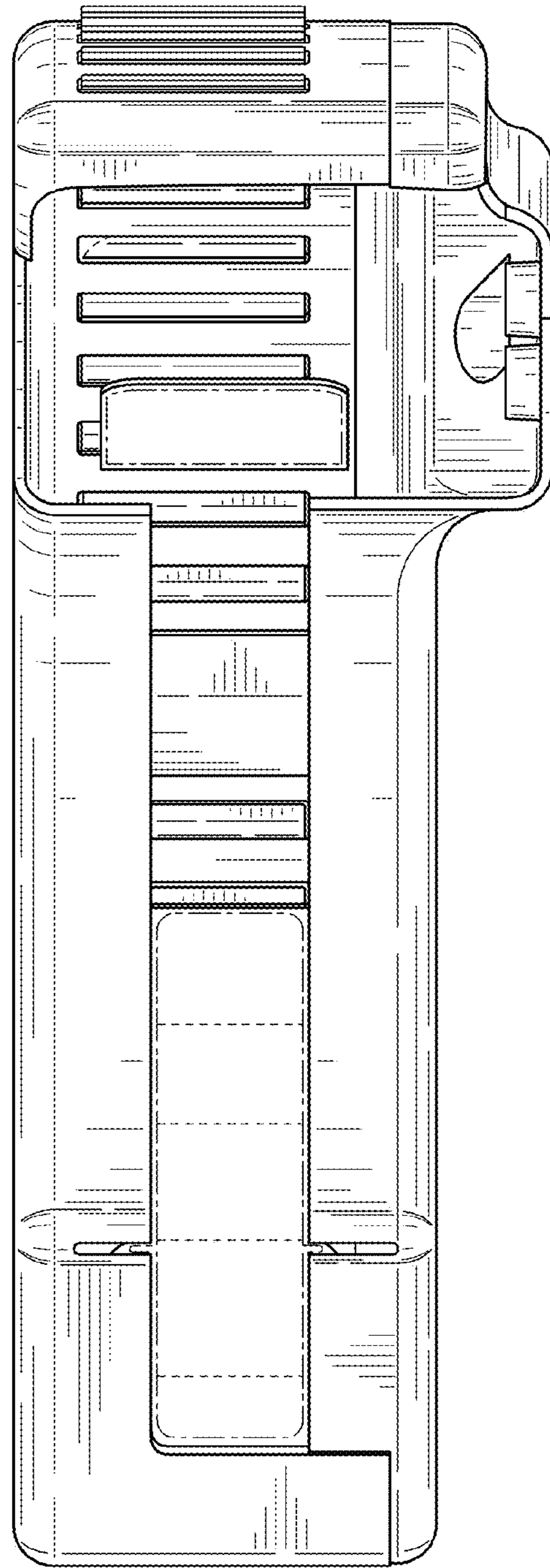


FIG. 7