



US00D968981S

(12)

United States Design Patent

Gross et al.

(10)

Patent No.:

US D968,981 S

(45)

Date of Patent:

** Nov. 8, 2022

(54)

SENSOR ASSEMBLY

(71)

Applicant: WAYMO LLC, Mountain View, CA (US)

(72)

Inventors: Jared Gross, Belmont, CA (US); Joshua Newby, San Francisco, CA (US); Albert Shane, Berkeley, CA (US); Alexandre Girard, Palo Alto, CA (US)

(73)

Assignee: Waymo LLC, Mountain View, CA (US)

(**)

Term: 15 Years

(21)

Appl. No.: 29/754,326

(22)

Filed: Oct. 9, 2020

Related U.S. Application Data

(63)

Continuation of application No. 29/680,845, filed on Feb. 20, 2019, now Pat. No. Des. 902,756.

(51)

LOC (13) Cl. 10-04

(52)

U.S. Cl. D10/70

(58)

Field of Classification Search

USPC D10/46, 70

CPC .. B60Q 1/0017; B60Q 1/0023; B60Q 1/0029; B60Q 1/0035; B60Q 1/0041; B60Q 1/26; B60Q 1/2603; B60Q 1/2607; B60Q 1/2611; B60Q 9/002; B60Q 9/003; B60Q 9/004; B60Q 9/006; B60Q 9/007; B60Q 9/008; B60R 1/10; B60R 1/12; B60R 2001/1284

See application file for complete search history.

References Cited

U.S. PATENT DOCUMENTS

D328,436 S

8/1992

Fuerst et al.

D335,467 S

5/1993

Cheng

D395,408 S

6/1998

Wiesemann

D413,277 S

8/1999

Scheibe

5,945,907 A

8/1999

Yaron et al.

D427,101 S

6/2000

Leen

D434,992 S

12/2000

Hiller et al.

D445,386 S

7/2001

Sacco et al.

D454,574 S

3/2002

Wasko et al.

D478,518 S

8/2003

Porter

D525,888 S

8/2006

Porter

7,109,880 B2

9/2006

Sibalich et al.

D547,222 S

7/2007

Wilson et al.

D563,246 S

3/2008

Ishii et al.

7,459,672 B2

12/2008

Jensen et al.

7,517,099 B2

4/2009

Hannah

D644,663 S

9/2011

Gardner et al.

D651,532 S

1/2012

Li et al.

D689,385 S

9/2013

Haws

D717,720 S

11/2014

Marino

D726,214 S

4/2015

Wantland et al.

D726,560 S

4/2015

Gaw

D727,181 S

4/2015

Papadourakis

D731,905 S

6/2015

Olivieri et al.

D734,211 S

7/2015

Ahn et al.

D739,336 S

9/2015

Berrey

D750,098 S

2/2016

Song

D759,698 S

6/2016

Kirsch et al.

9,373,112 B1

6/2016

Henderson et al.

D761,815 S

7/2016

Velasco et al.

D775,978 S

1/2017

Christianson et al.

D782,349 S

3/2017

Konotopskyi et al.

D784,397 S

4/2017

Kim et al.

D788,607 S

6/2017

Ji et al.

D788,625 S

6/2017

Hsieh et al.

D789,427 S

6/2017

Jackson et al.

D791,994 S

7/2017

Liu

D795,108 S

8/2017

Kondo et al.

9,725,060 B1

8/2017

Daniel et al.

9,802,656 B1

10/2017

Williams et al.

D809,001 S

1/2018

Funnell, II et al.

9,862,311 B2

1/2018

Kiriyama et al.

D810,112 S

2/2018

Hasjim et al.

9,885,526 B2

2/2018

Maranville et al.

D818,915 S

5/2018

Kozub et al.

D819,043 S

5/2018

Yamaura et al.

D821,232 S

6/2018

Ewringmann et al.

D822,580 S

7/2018

Eriksson et al.

D825,357 S

8/2018

Ahn et al.

D826,073 S

8/2018

Alkelai et al.

D828,257 S

9/2018

Akrapovic et al.

D829,239 S

9/2018

Rehman

D831,053 S

10/2018

Guo et al.

D834,971 S

12/2018

Ahn et al.

D835,028 S

12/2018

Ahn et al.

10,302,744 B1

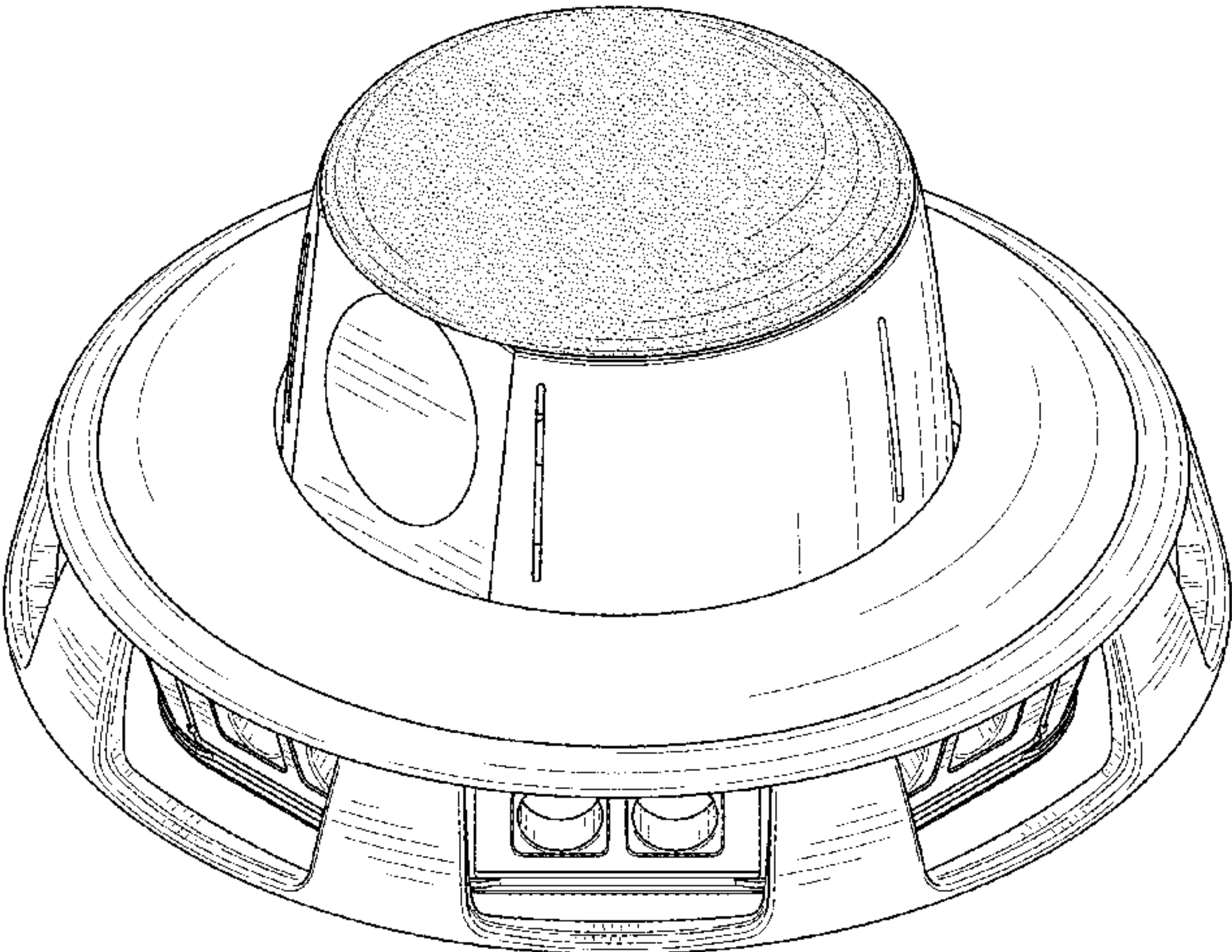
5/2019

Krishnan et al.

D850,303 S

6/2019

Wang et al.



D850,946 S	6/2019	Zhevelev et al.	
10,359,507 B2	7/2019	Berger et al.	
D858,381 S	9/2019	Ahn et al.	
D858,550 S	9/2019	Crandall et al.	
D860,013 S	9/2019	Min et al.	
10,444,752 B2	10/2019	Kim et al.	
D866,368 S	11/2019	Ahn et al.	
D874,956 S	2/2020	Ahn et al.	
D874,957 S	2/2020	Min et al.	
D877,162 S	3/2020	Hanson	
D878,264 S *	3/2020	Ahn	D16/203
D887,436 S	6/2020	Crandall et al.	
D897,353 S	9/2020	Hall et al.	
D900,834 S	11/2020	Yamazaki et al.	
D902,756 S *	11/2020	Gross	D10/70
D915,913 S *	4/2021	Ahn	D10/70
D916,851 S	4/2021	Crandall et al.	
2012/0325360 A1	12/2012	McGrath et al.	
2013/0242586 A1	9/2013	Huizen et al.	
2014/0049912 A1	2/2014	Marshall	
2016/0011594 A1	1/2016	Chung et al.	
2017/0151933 A1	6/2017	Doorley et al.	
2017/0261273 A1	9/2017	Maranville et al.	
2017/0293016 A1	10/2017	McCloskey et al.	
2017/0297488 A1	10/2017	Wang et al.	
2017/0300060 A1	10/2017	Crawley	
2017/0343654 A1	11/2017	Valois et al.	
2018/0011173 A1	1/2018	Newman	
2018/0015886 A1	1/2018	Frank et al.	
2018/0017680 A1	1/2018	Pennecot et al.	
2018/0037268 A1	2/2018	Moore et al.	
2018/0086280 A1	3/2018	Nguyen	
2019/0247748 A1	8/2019	Yusupov et al.	
2020/0025933 A1	1/2020	Ghannam et al.	
2020/0195816 A1	6/2020	Stein et al.	

FOREIGN PATENT DOCUMENTS

CN	306381056	3/2021
CN	306559778 S	5/2021
DE	102017104988 A1	9/2017
KR	101998298 B1	7/2019
WO	2017119385 A1	7/2017
WO	2018138584 A1	8/2018

OTHER PUBLICATIONS

PCT Search Report and Written Opinion in International Application No. PCT/US2020/043068, dated Oct. 15, 2020.

European Union Office Action for Application No. 008041701 dated Oct. 26, 2020.

How to Bevel Cylinder Edge [on-line], Feb. 2016 [retrieved Oct. 22, 2020], Retrieved from internet <blenderartists.org/t/how-to-bevel-cylinder-edge/663039/4>, screen images. (Year: 2016).

Vectto, Travel Places vol. 1, Jan. 12, 2017, iconfinder.com [online], [site visited Nov. 5, 2018]. Available from Internet <https://www.iconfinder.com/iconsets/travel-places-travel-starter><<http://www.iconfinder.com/iconsets/travel-places-travel-starter>>(Year: 2017).

Dreamstime White Oval Button [online], undated [retrieved Jun. 11, 2021], Retrieved from the internet <[URL:https://www.dreamstime.com/white-i](https://www.dreamstime.com/white-i)><<http://www.dreamstime.com/white-i>>nterface-oval-button-blank-d-icon-vector-illustration-image137999456>, image (Year: 2021).

Houzz Chamfer [online], Jan. 11, 1970 [retrieved Jun. 11, 2021], Retrieved from the internet <[URL:https://www.houzz.com/](https://www.houzz.com/)<<http://www.houzz.com/>>magazine/chamfer-stsetivw-vs-13436627>, image (Year: 1970).

* cited by examiner

Primary Examiner — Antoine Duval Davis

(74) Attorney, Agent, or Firm — Banner & Witcoff, Ltd.

(57)

CLAIM

The ornamental design for a sensor assembly, as shown and described.

DESCRIPTION

FIG. 1 is a front side view of a sensor assembly according to a first embodiment of our design;

FIG. 2 is a rear side view thereof;

FIG. 3 is a front elevation view thereof;

FIG. 4 is a rear side elevation view thereof;

FIG. 5 is a left side elevation view thereof;

FIG. 6 is right side elevation view thereof;

FIG. 7 is a top plan view thereof;

FIG. 8 is a top perspective view thereof;

FIG. 9 is a front side view of a sensor assembly according to a second embodiment of our design;

FIG. 10 is a rear side view thereof;

FIG. 11 is a front elevation view thereof;

FIG. 12 is a rear side elevation view thereof;

FIG. 13 is a left side elevation view thereof;

FIG. 14 is right side elevation view thereof;

FIG. 15 is a top plan view thereof;

FIG. 16 is a top perspective view thereof;

FIG. 17 is a left side elevation view of a sensor assembly according to a third embodiment of our design;

FIG. 18 is a front perspective view thereof;

FIG. 19 is a perspective view of a sensor assembly according to a fourth embodiment of our design;

FIG. 20 is a front elevation view thereof;

FIG. 21 is a rear elevation view thereof;

FIG. 22 is a left side elevation view thereof;

FIG. 23 is a right side elevation view thereof;

FIG. 24 is a top plan view thereof;

FIG. 25 is a front side view of a sensor assembly according to a fifth embodiment of our design;

FIG. 26 is a rear side view thereof;

FIG. 27 is a front elevation view thereof;

FIG. 28 is a rear side elevation view thereof;

FIG. 29 is a left side elevation view thereof;

FIG. 30 is right side elevation view thereof;

FIG. 31 is a top plan view thereof;

FIG. 32 is a top perspective view thereof;

FIG. 33 is a front side view of a sensor assembly according to a sixth embodiment of our design;

FIG. 34 is a rear side view thereof;

FIG. 35 is a front elevation view thereof;

FIG. 36 is a rear side elevation view thereof;

FIG. 37 is a left side elevation view thereof;

FIG. 38 is right side elevation view thereof;

FIG. 39 is a top plan view thereof;

FIG. 40 is a top perspective view thereof;

FIG. 41 is a left side elevation view of a sensor assembly according to a seventh embodiment of our design;

FIG. 42 is a front perspective view thereof;

FIG. 43 is a perspective view of a sensor assembly according to an eighth embodiment of our design;

FIG. 44 is a front elevation view thereof;

FIG. 45 is a rear elevation view thereof;

FIG. 46 is a left side elevation view thereof;

FIG. 47 is a right side elevation view thereof;

FIG. 48 is a top plan view thereof;

FIG. 49 is a front side view of a sensor assembly according to a ninth embodiment of our design;

FIG. 50 is a rear side view thereof;

FIG. 51 is a front elevation view thereof;

FIG. 52 is a rear side elevation view thereof;

FIG. 53 is a left side elevation view thereof;

FIG. 54 is right side elevation view thereof;

FIG. 55 is a top plan view thereof;
FIG. 56 is a top perspective view thereof;
FIG. 57 is a front side view of a sensor assembly according to a tenth embodiment of our design;
FIG. 58 is a rear side view thereof;
FIG. 59 is a front elevation view thereof;
FIG. 60 is a rear side elevation view thereof;
FIG. 61 is a left side elevation view thereof;
FIG. 62 is right side elevation view thereof;
FIG. 63 is a top plan view thereof; and,
FIG. 64 is a top perspective view thereof.

The dashed broken lines illustrate environmental features that form no part of the claimed design. The dashed broken lines themselves form no part of the claimed design.

The dash-dot broken lines indicate a perimeter of the sensor assembly that are part of the claimed design. Portions of the sensor assembly falling outside the dash-dot broken lines form no part of the claimed design. The dash-dot broken lines themselves form no part of the claimed design.

The portions of the sensor assembly shown in a pattern or patterns of stipple illustrate areas of contrasting appearance.

1 Claim, 40 Drawing Sheets

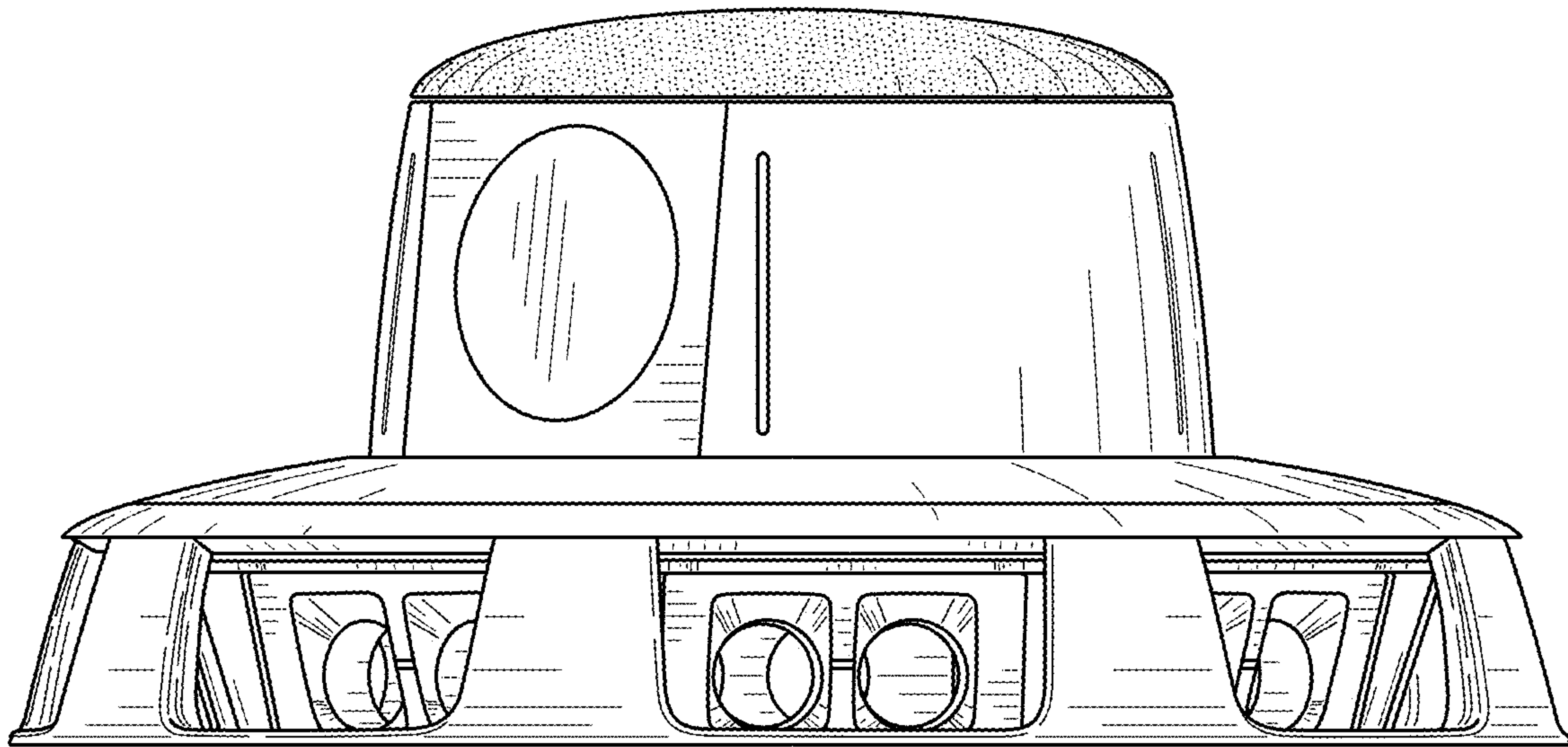


FIG. 1

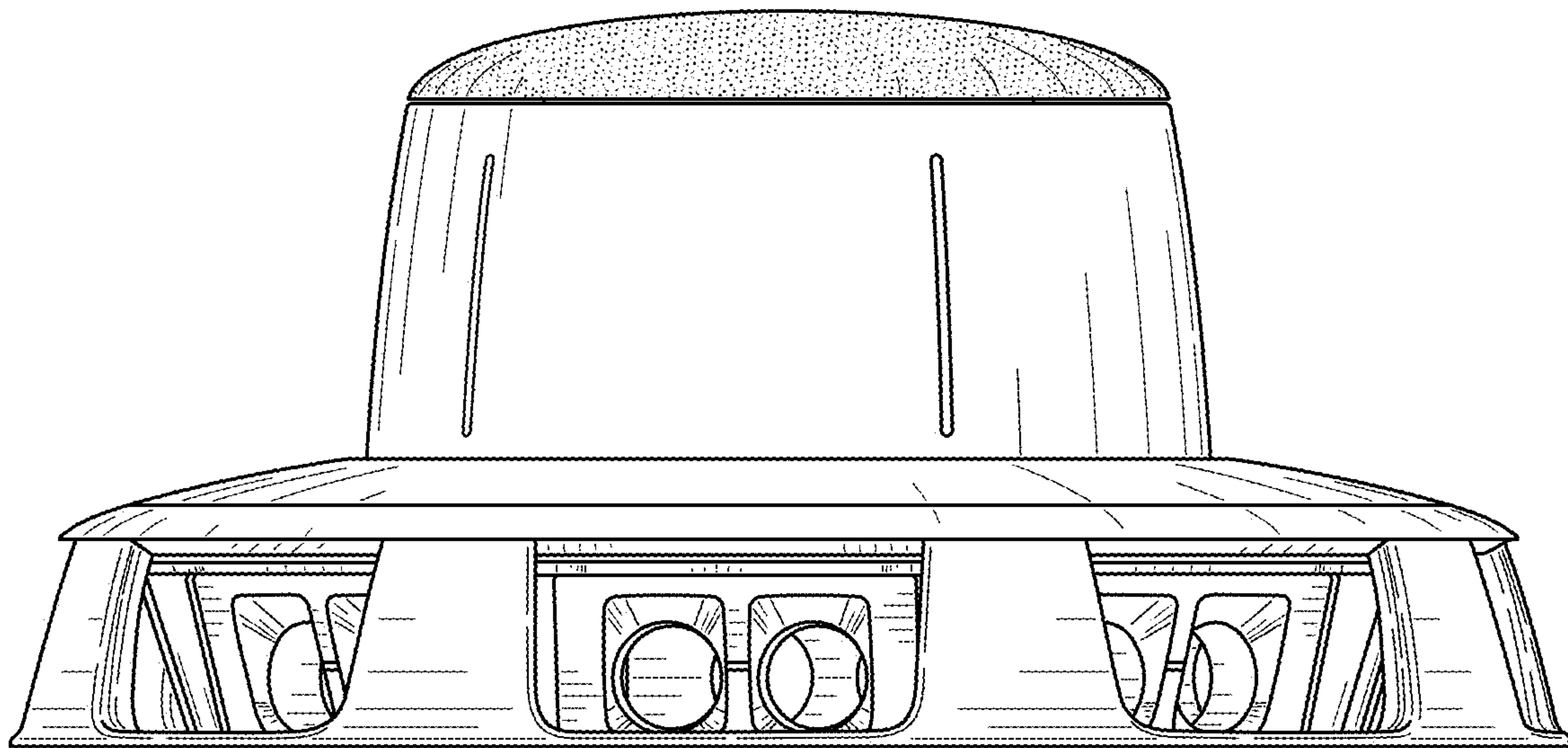


FIG. 2

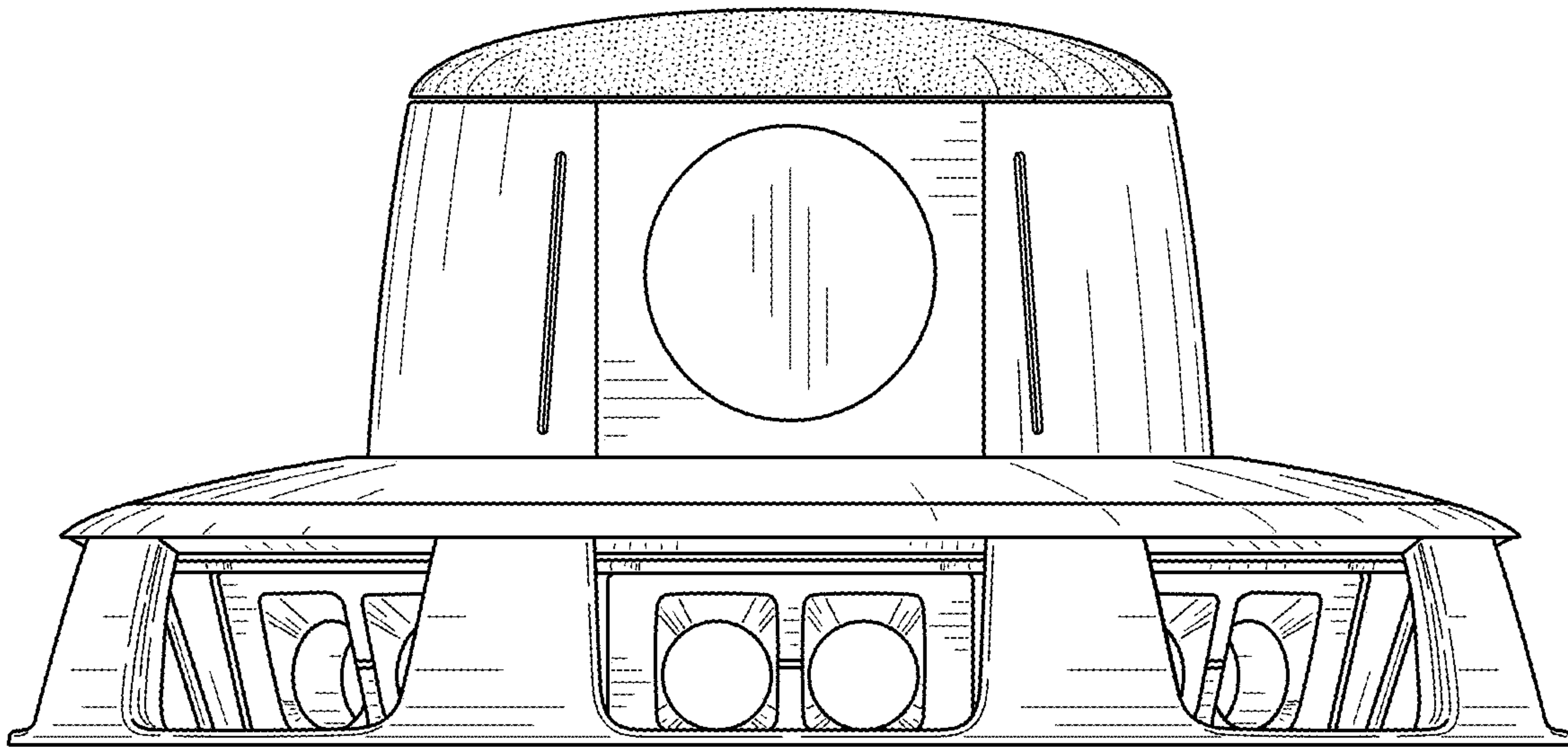


FIG. 3

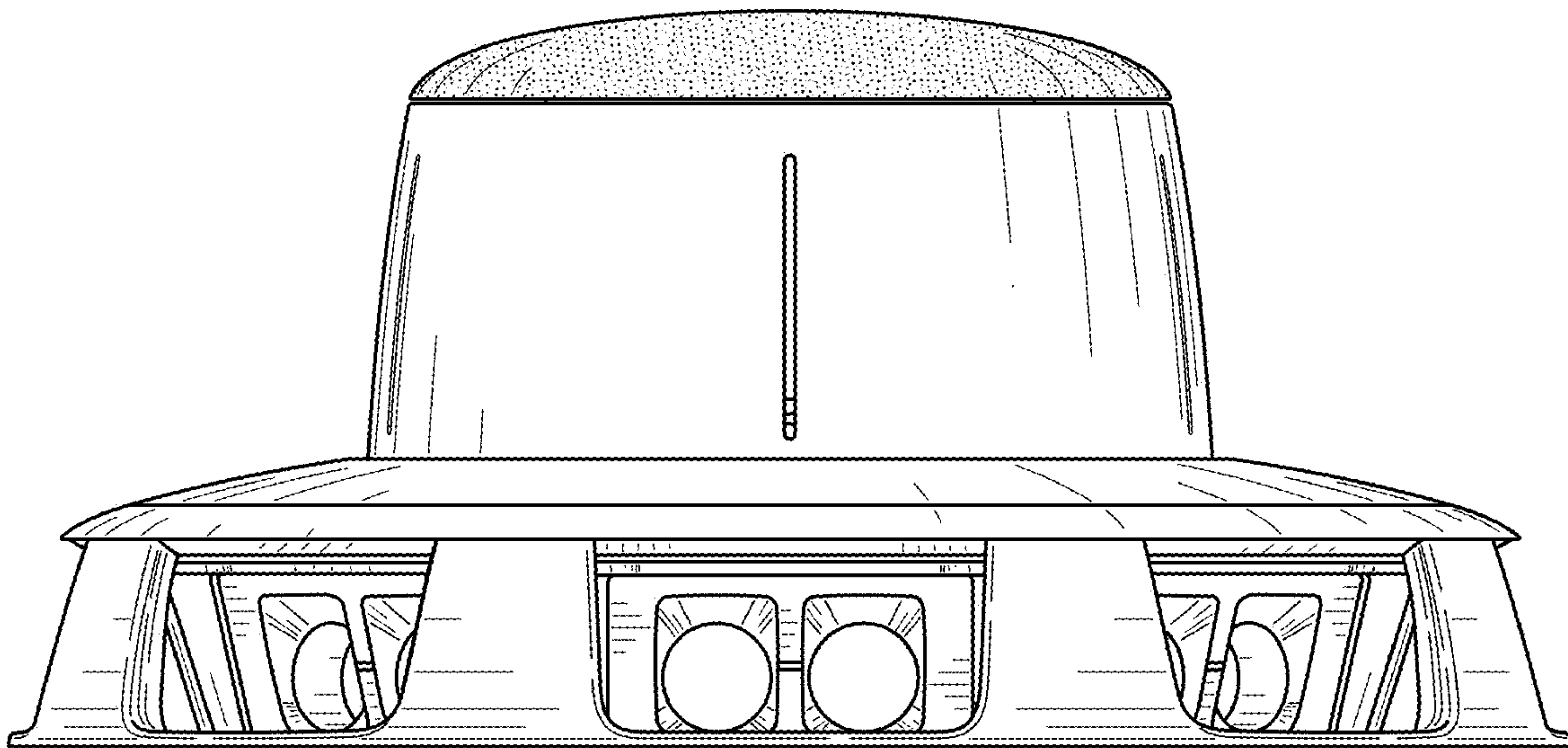


FIG. 4

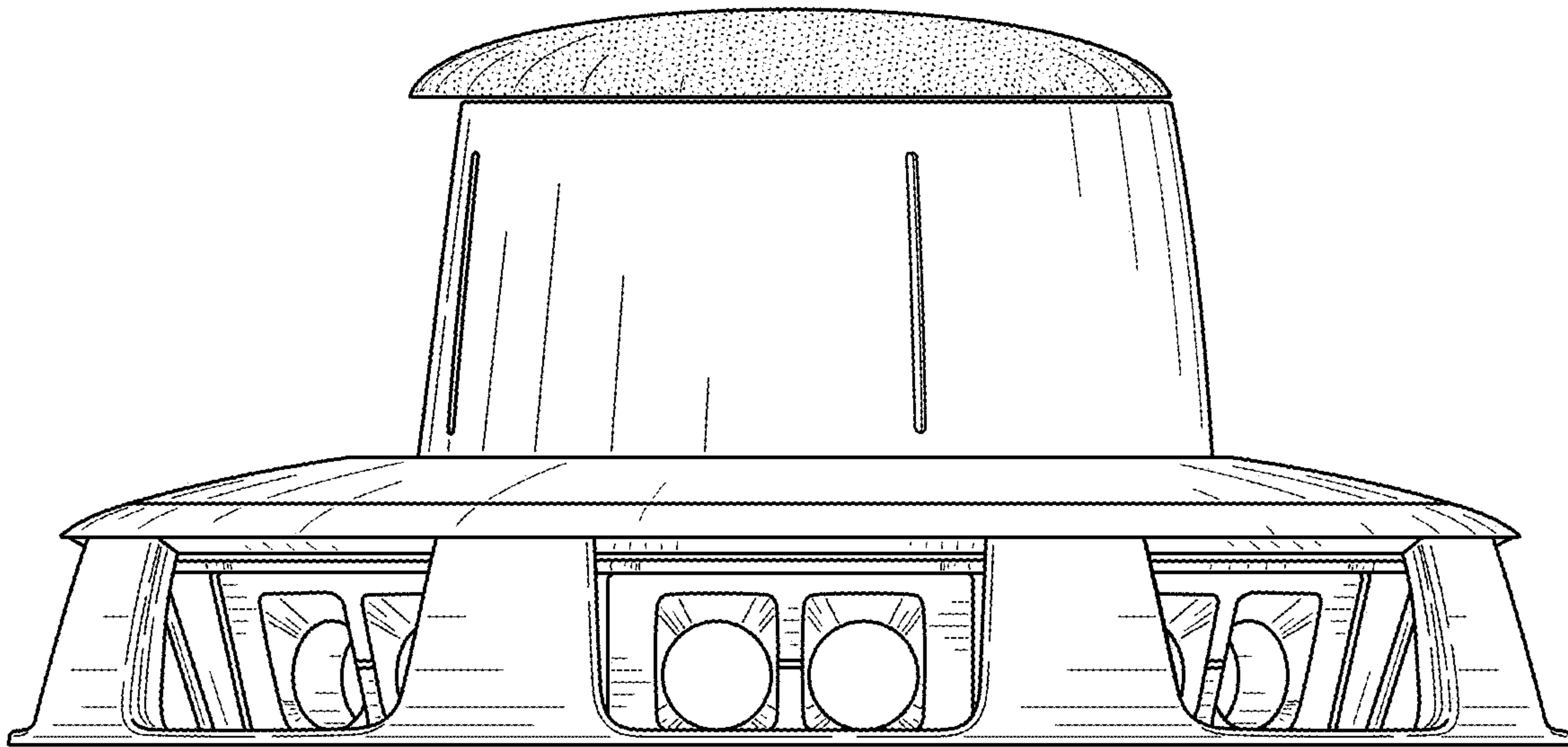


FIG. 5

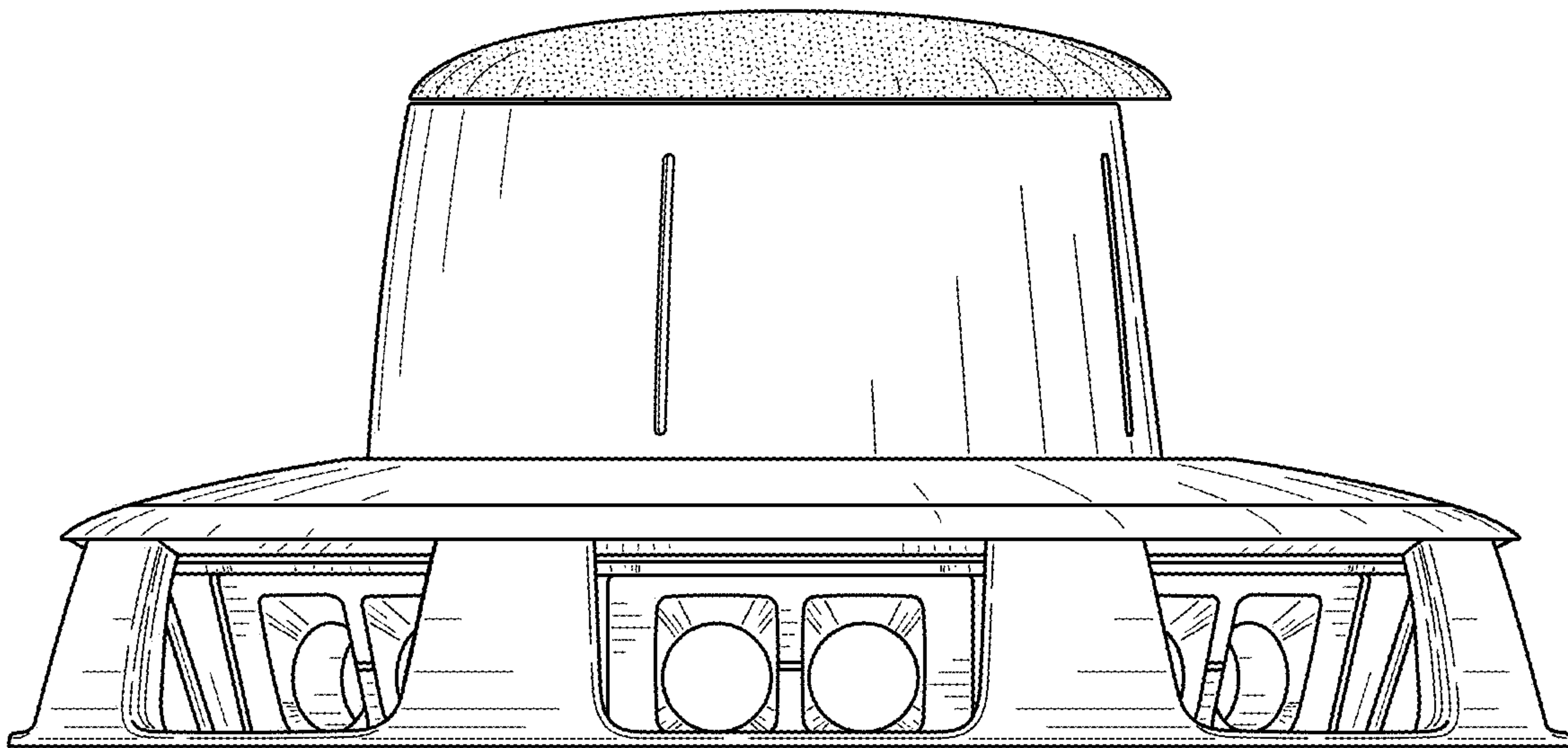


FIG. 6

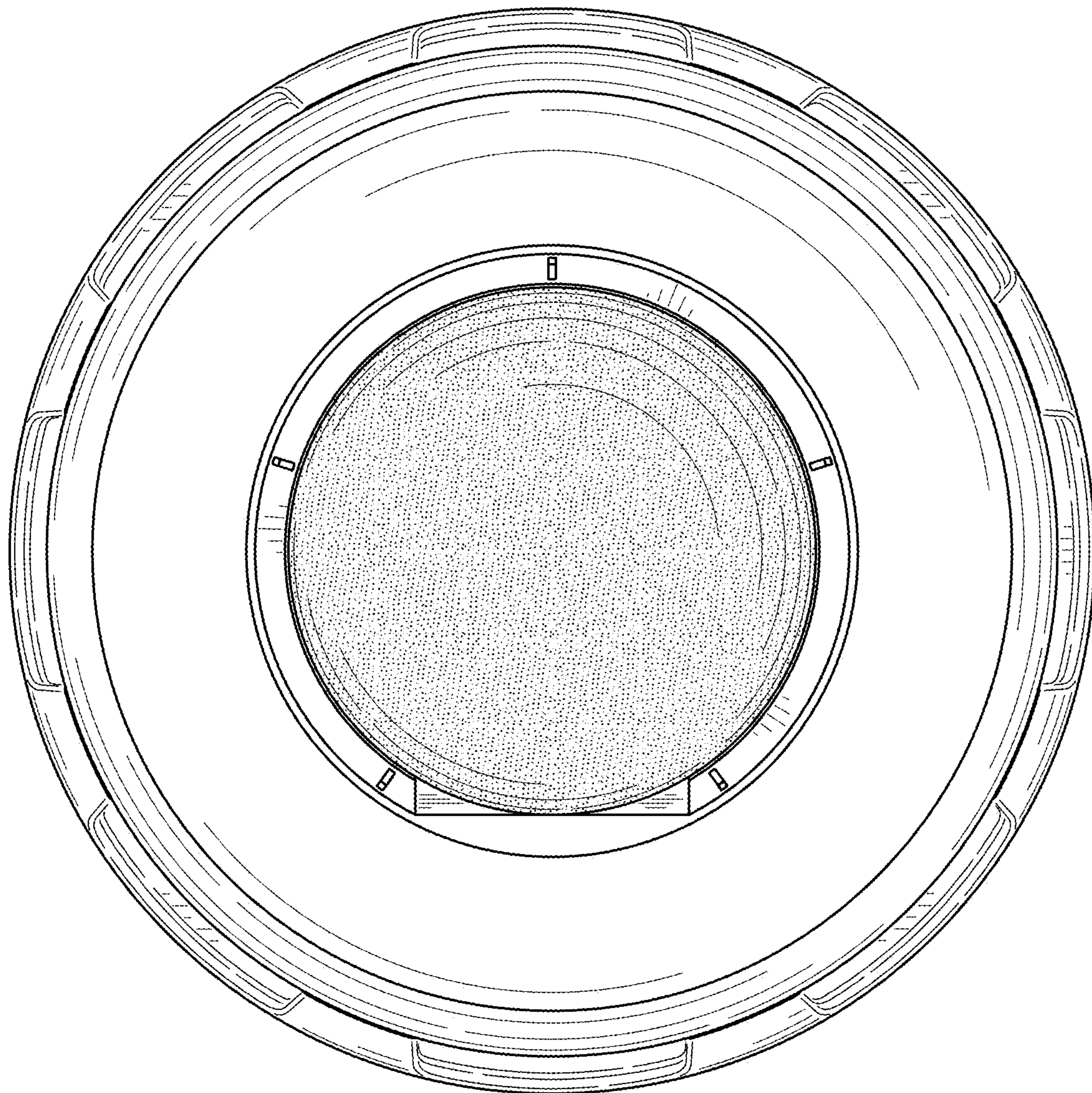


FIG. 7

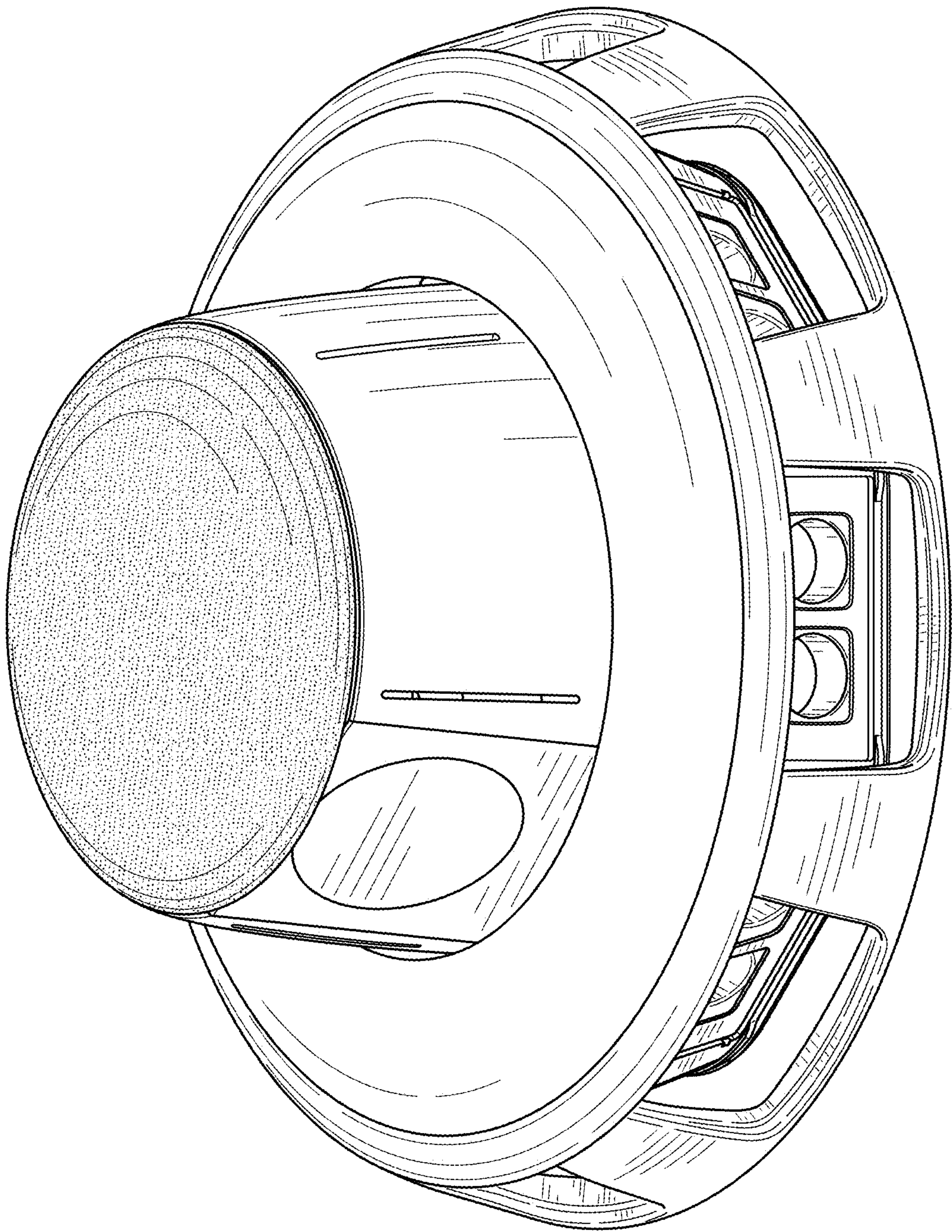


FIG. 8

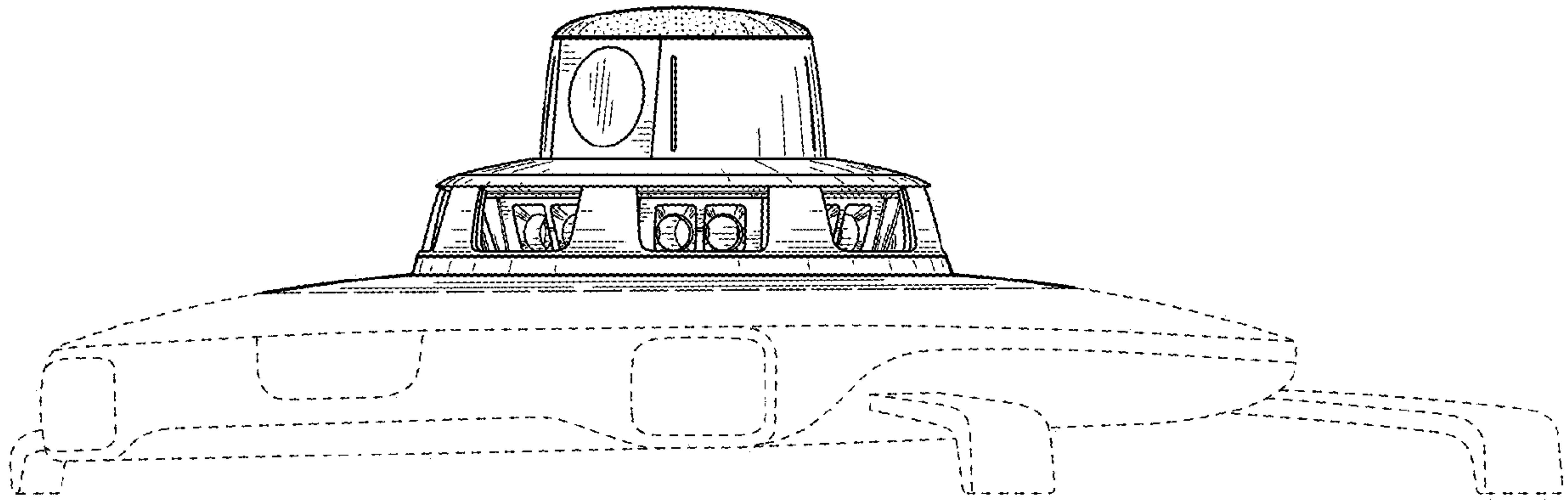


FIG. 9

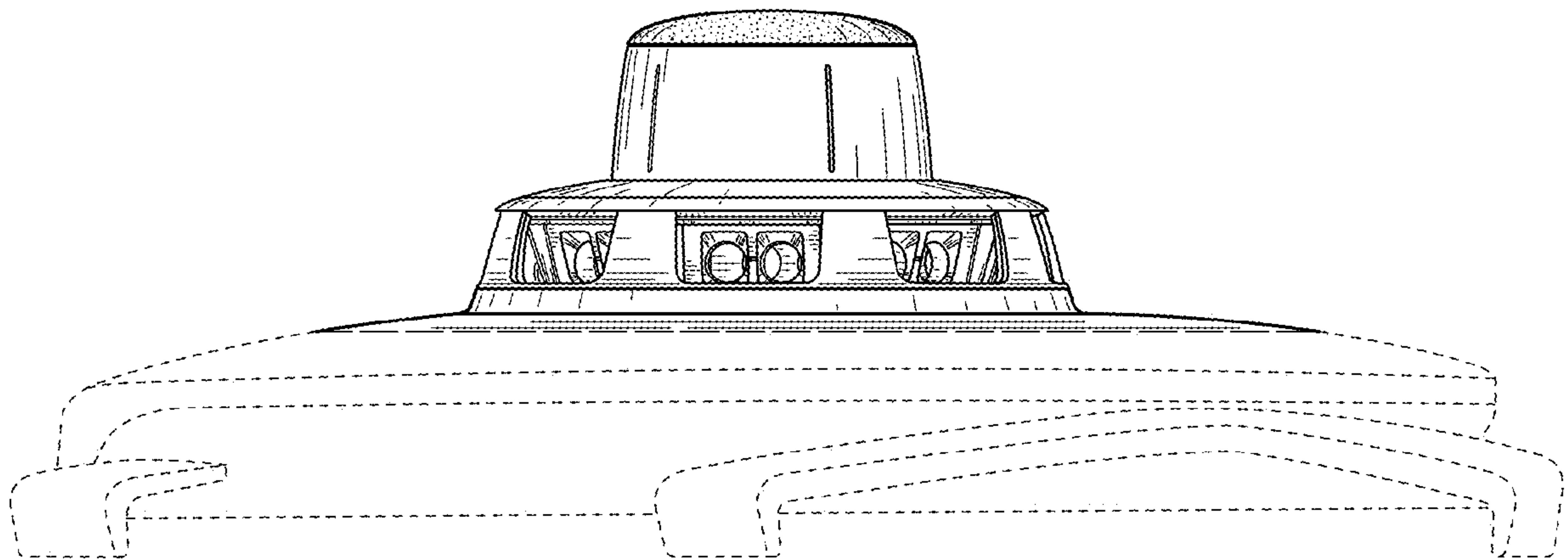


FIG. 10

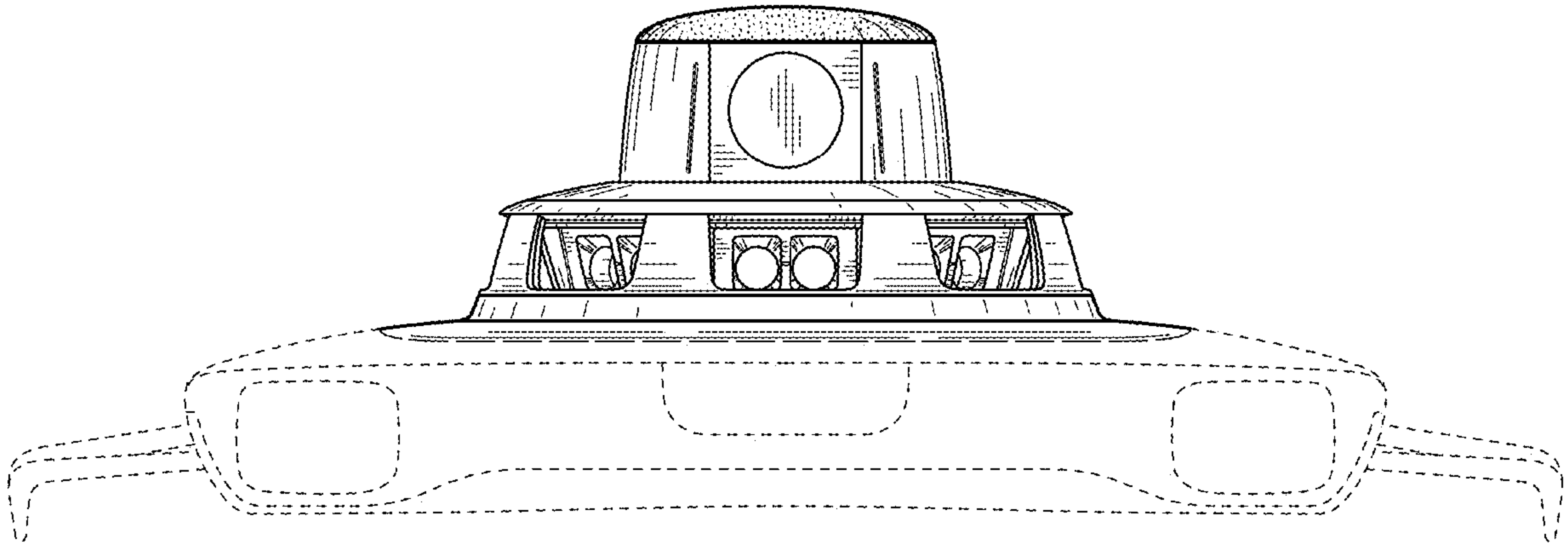


FIG. 11

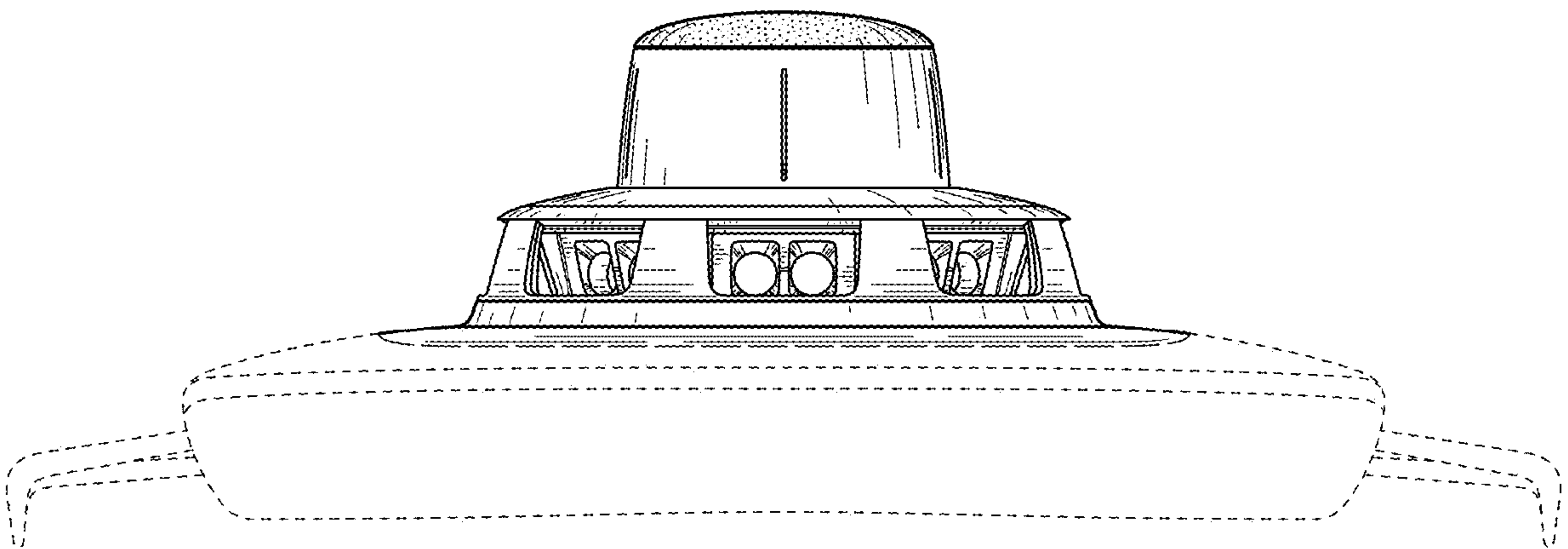


FIG. 12

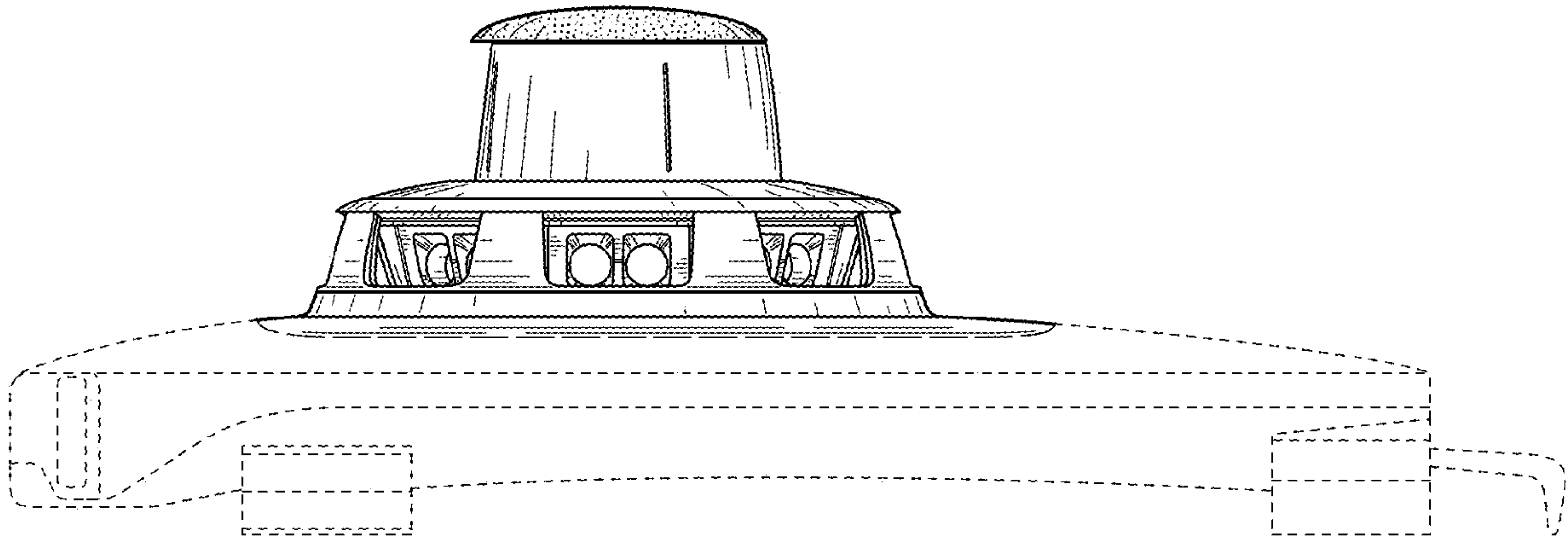


FIG. 13

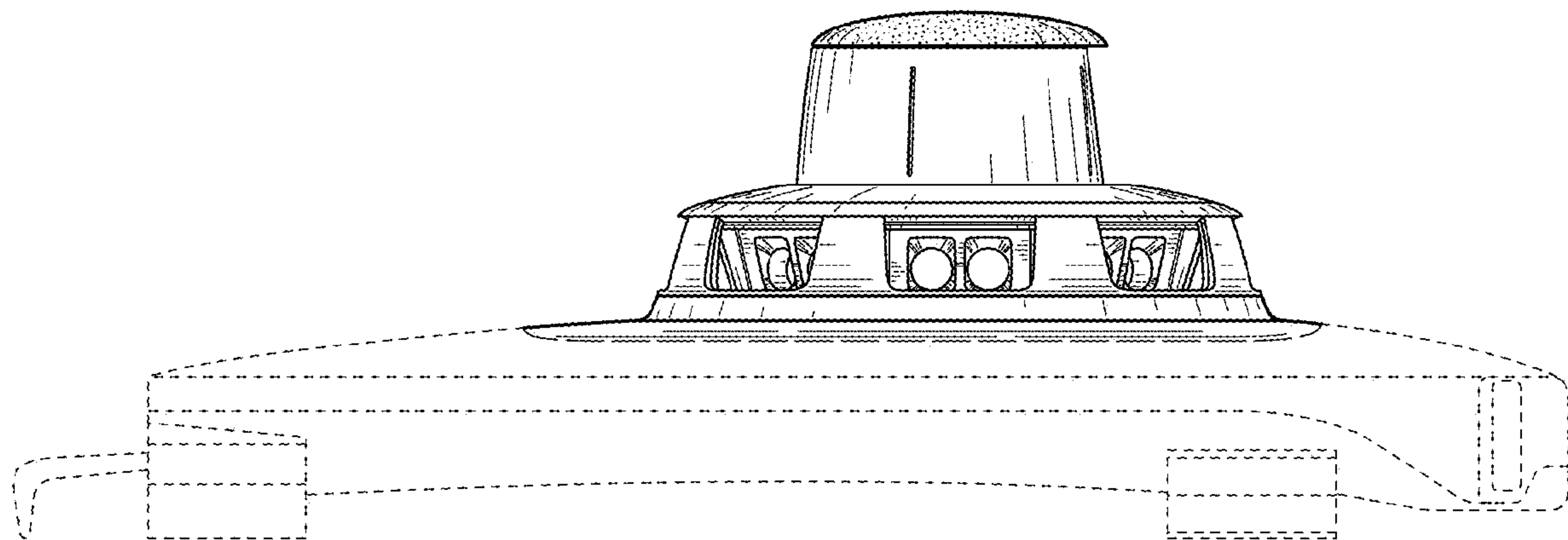


FIG. 14

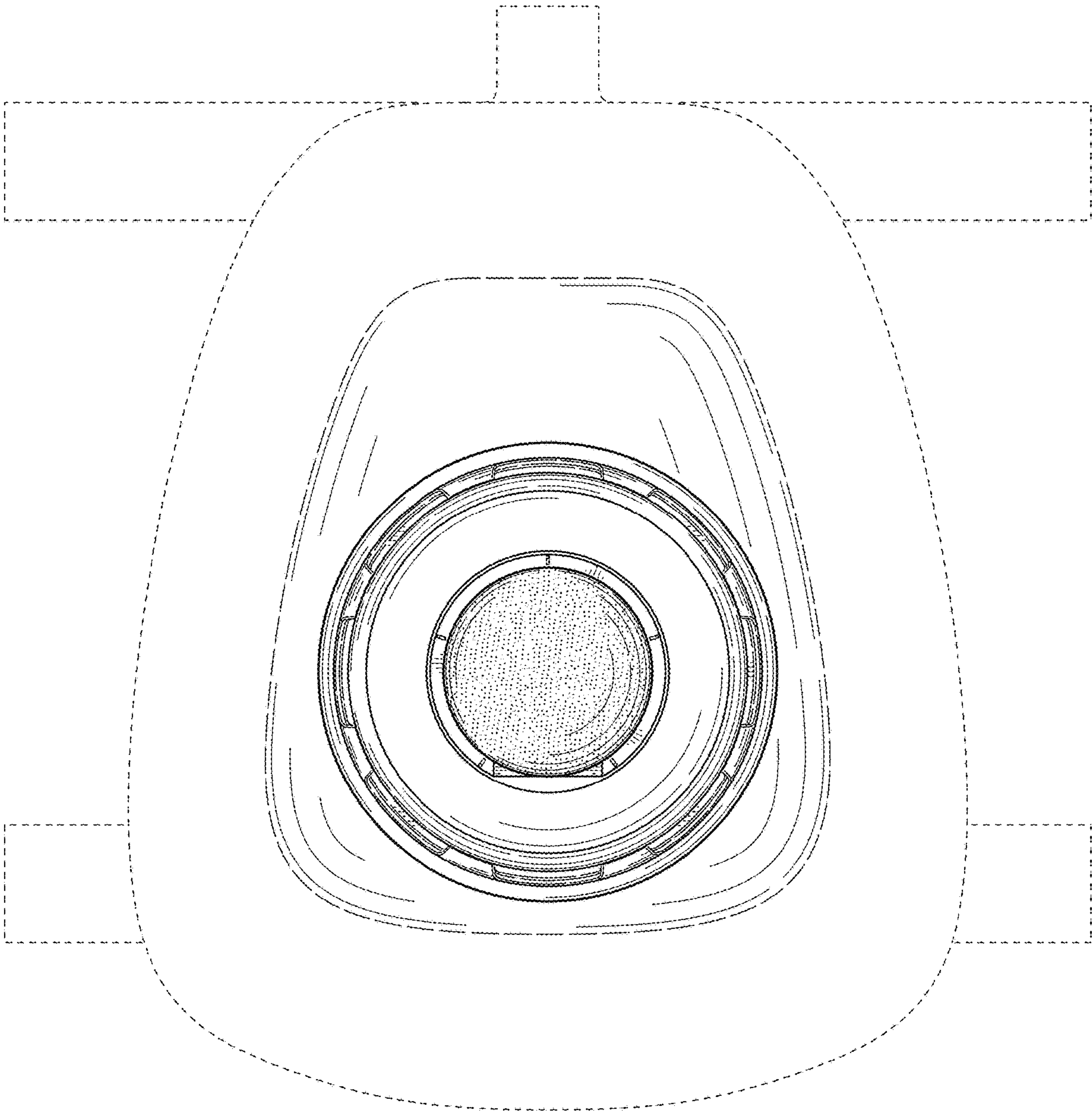


FIG. 15

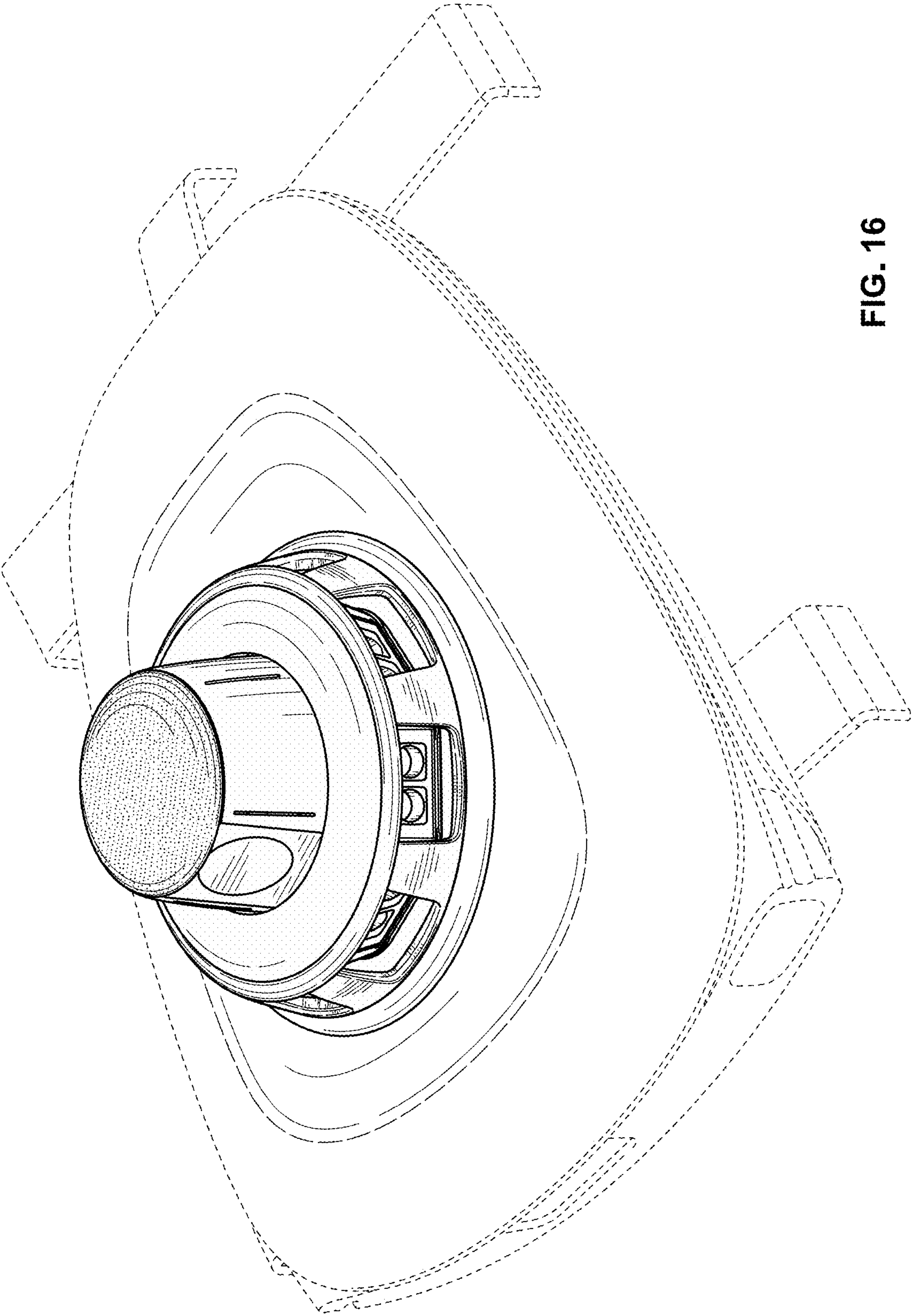


FIG. 16

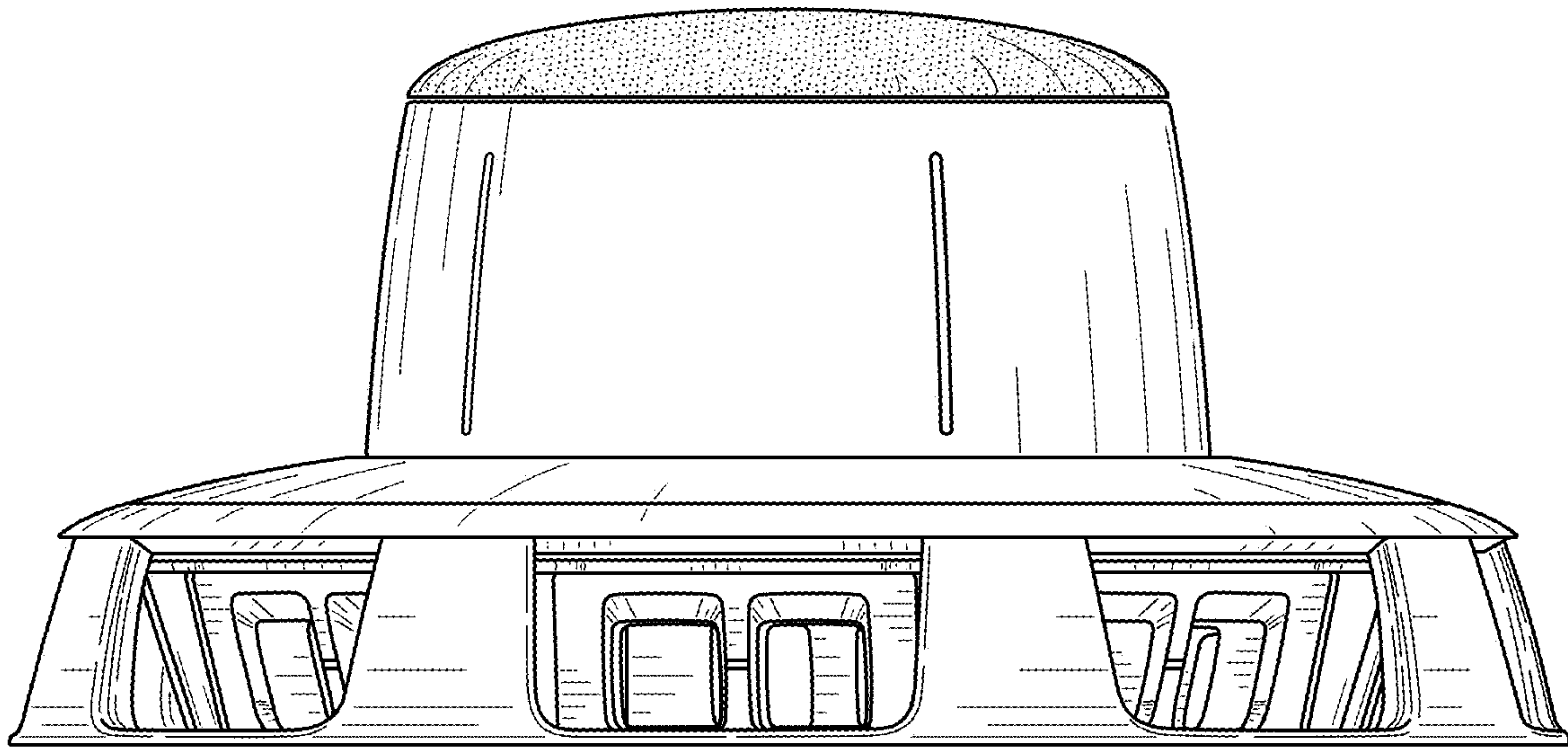


FIG. 17

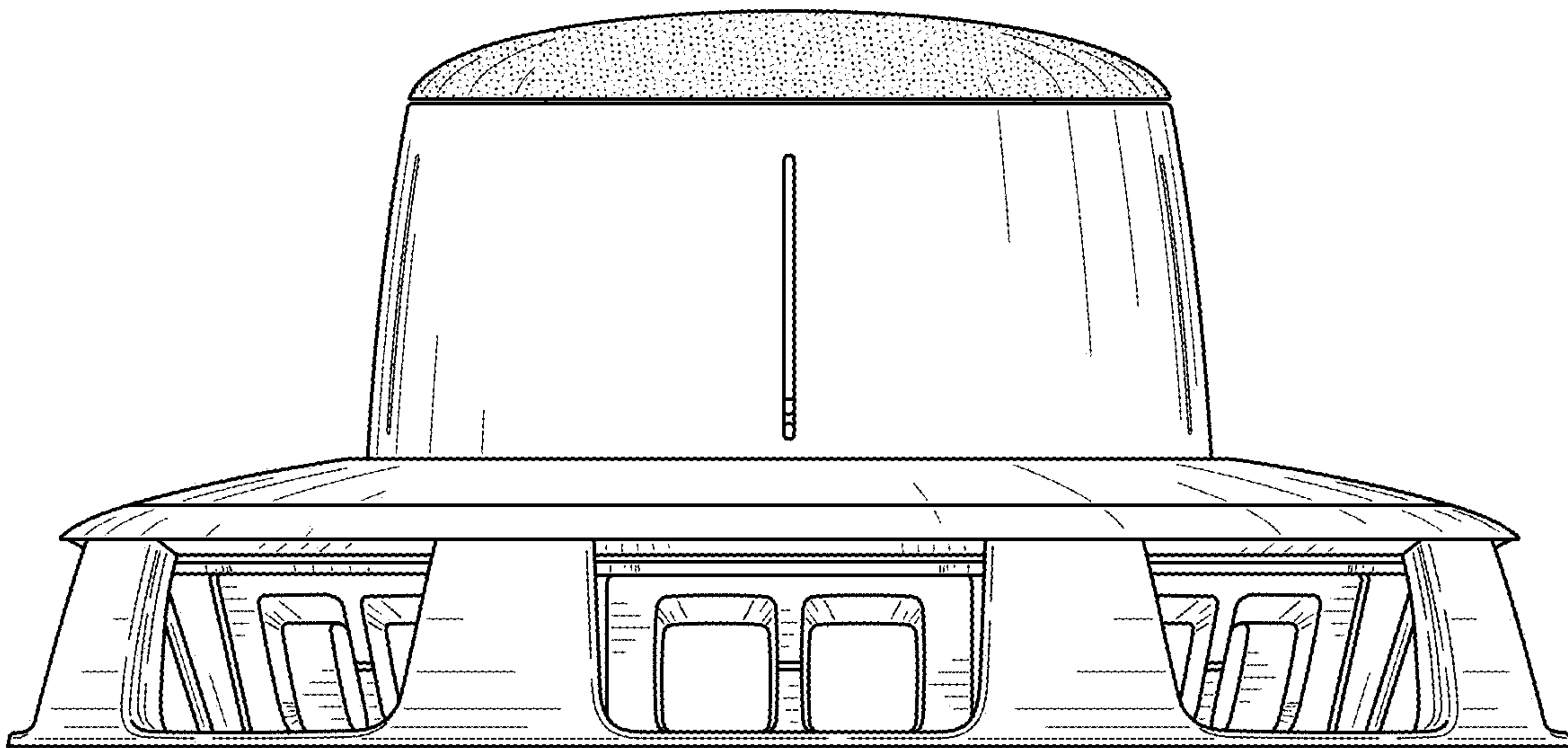


FIG. 18

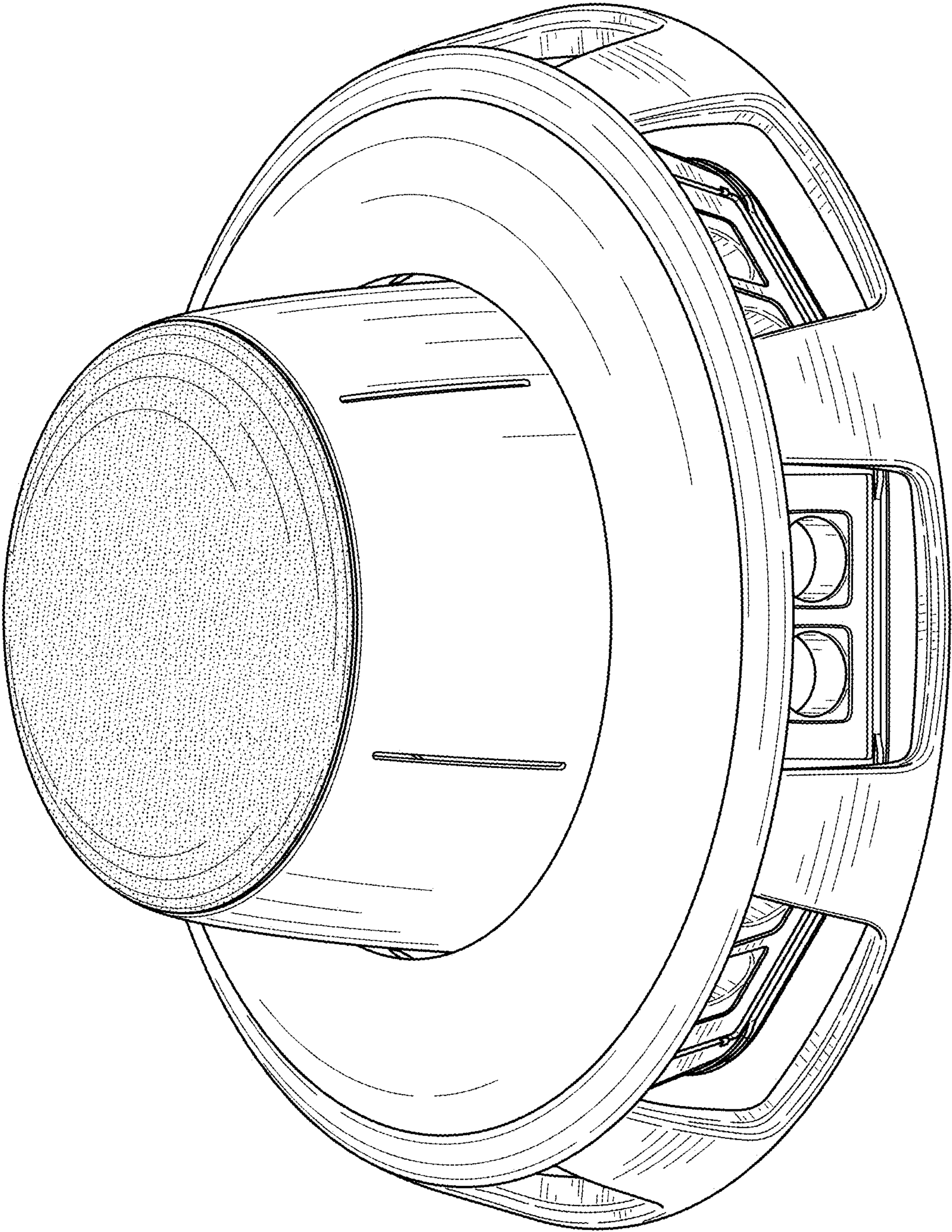


FIG. 19

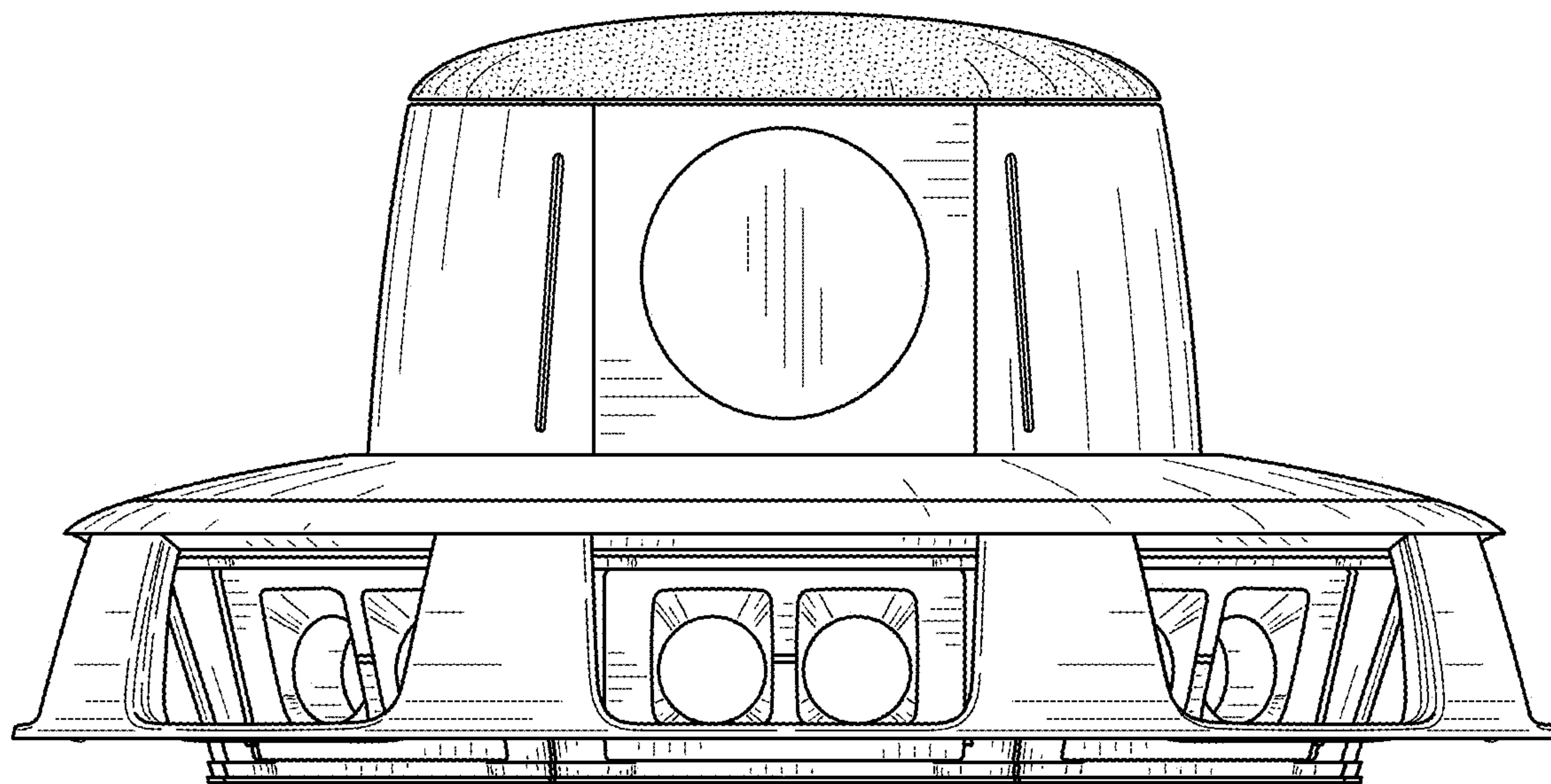


FIG. 20

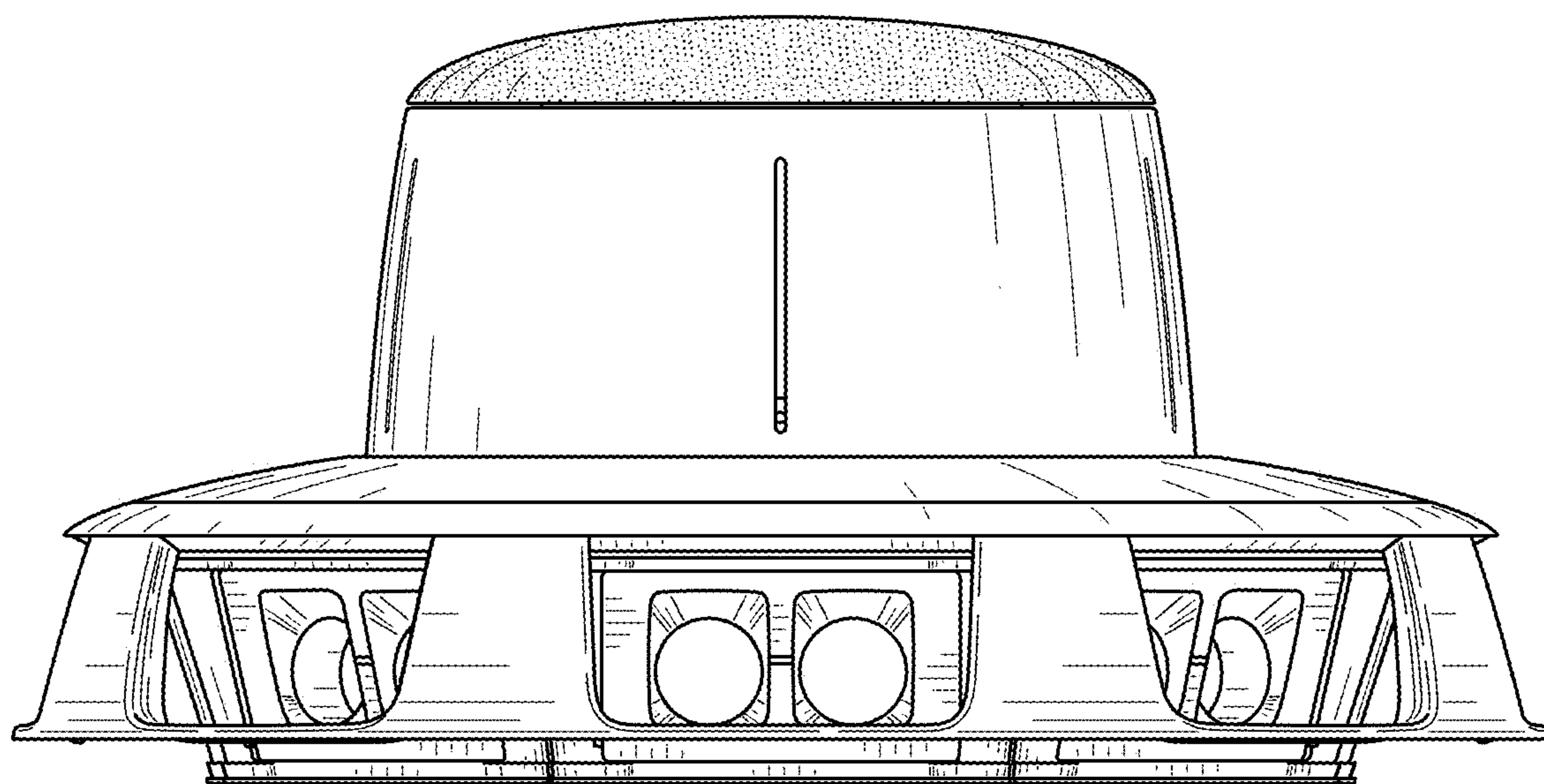


FIG. 21

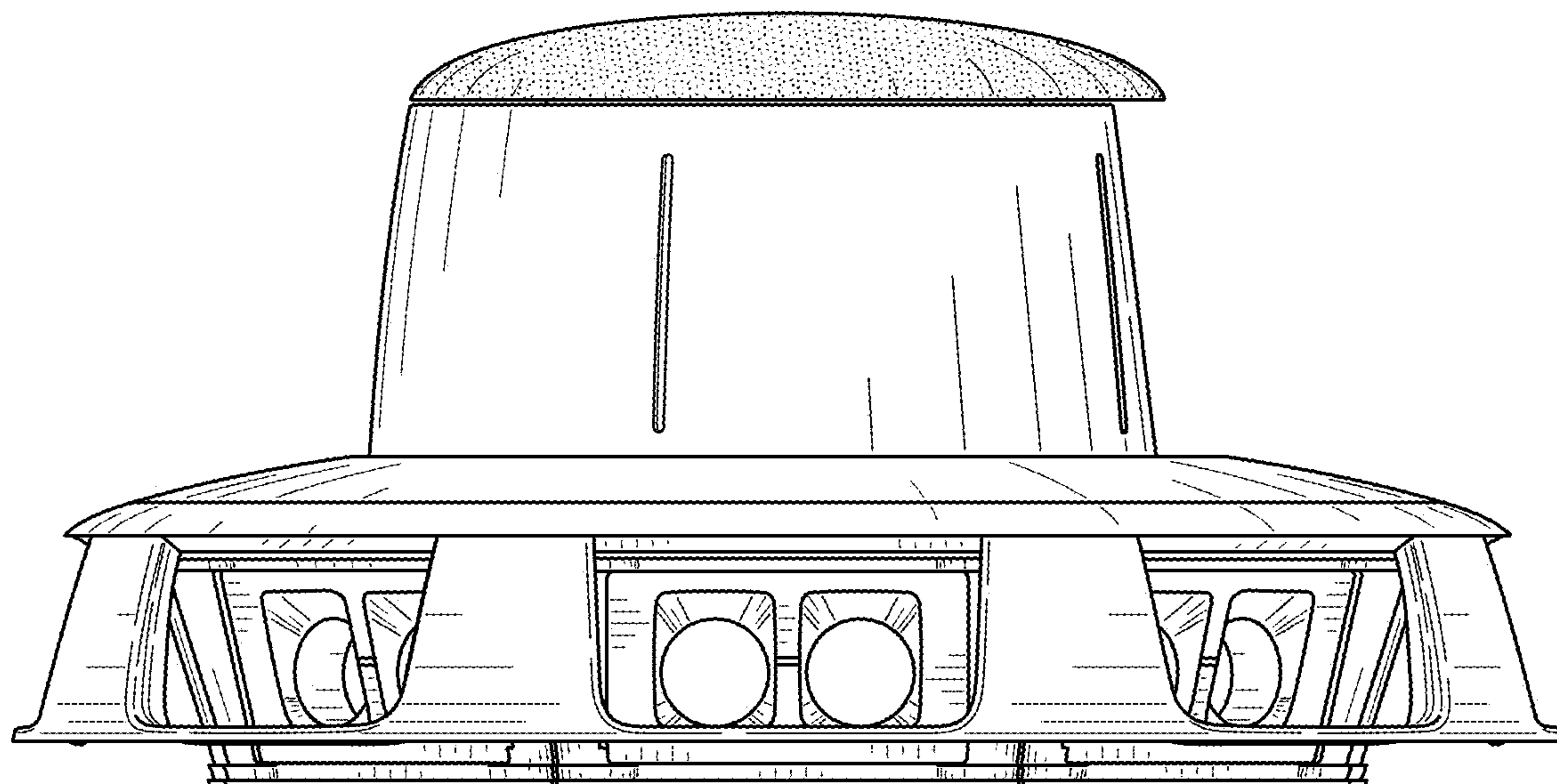


FIG. 22

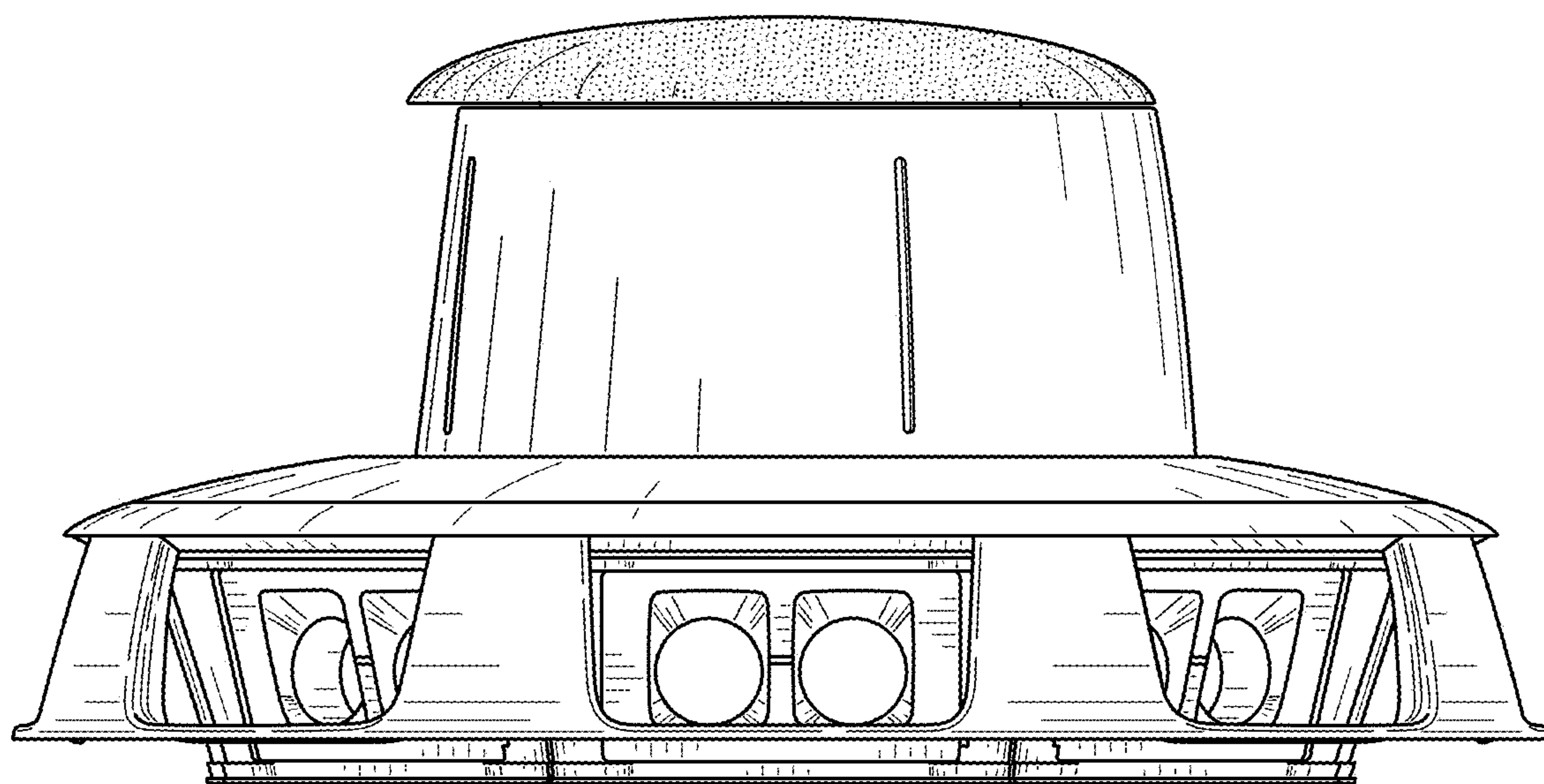


FIG. 23

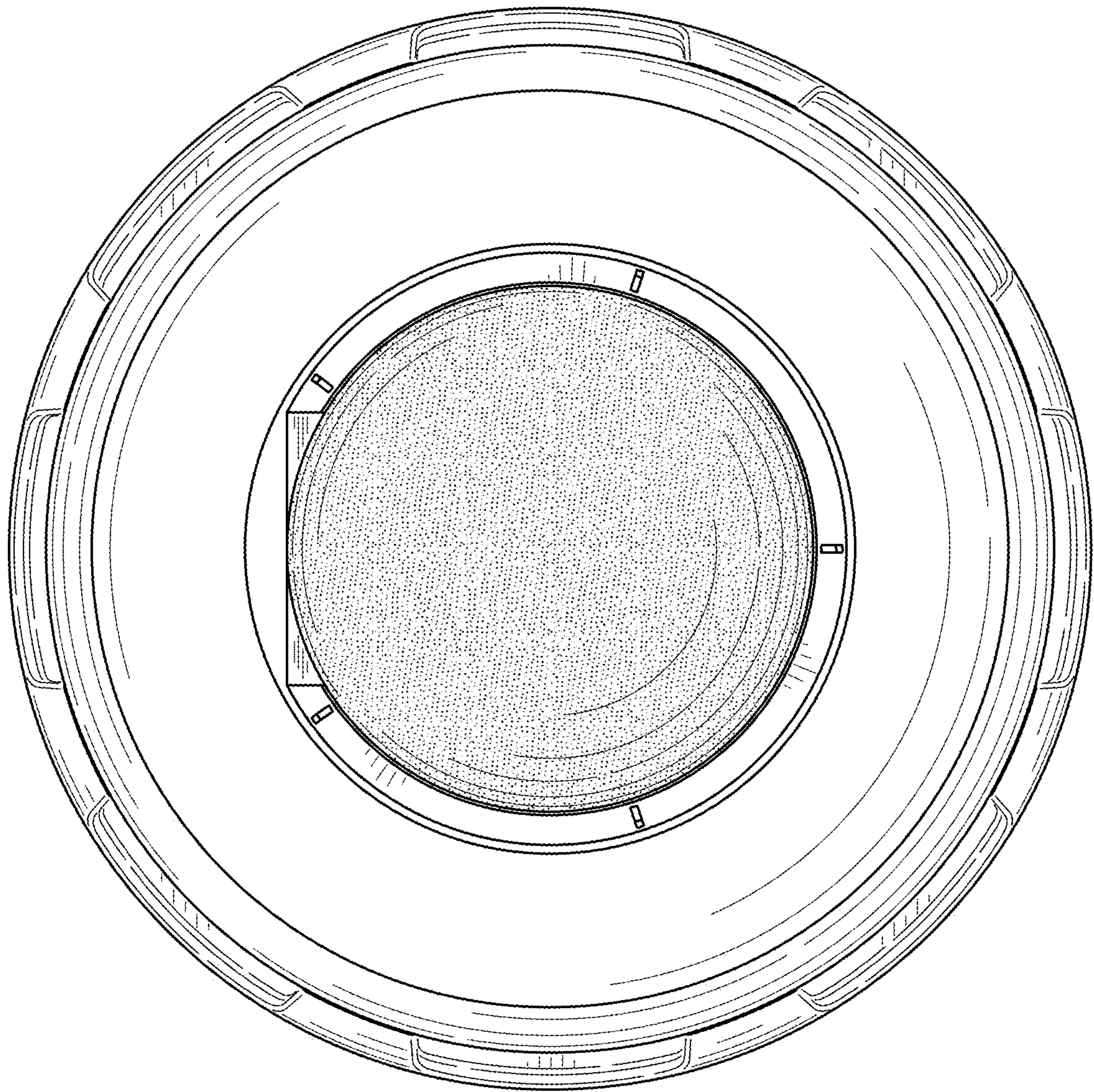


FIG. 24

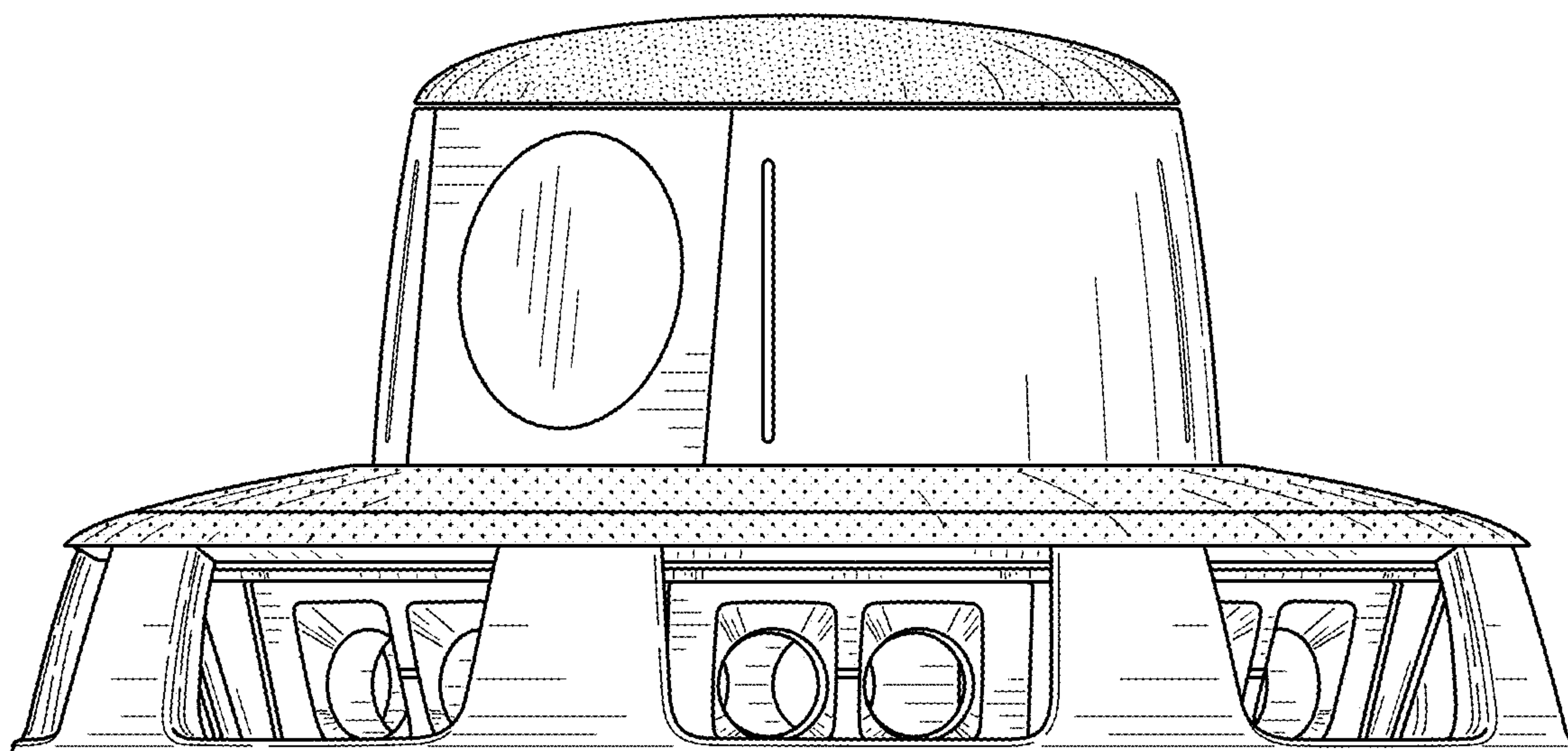


FIG. 25

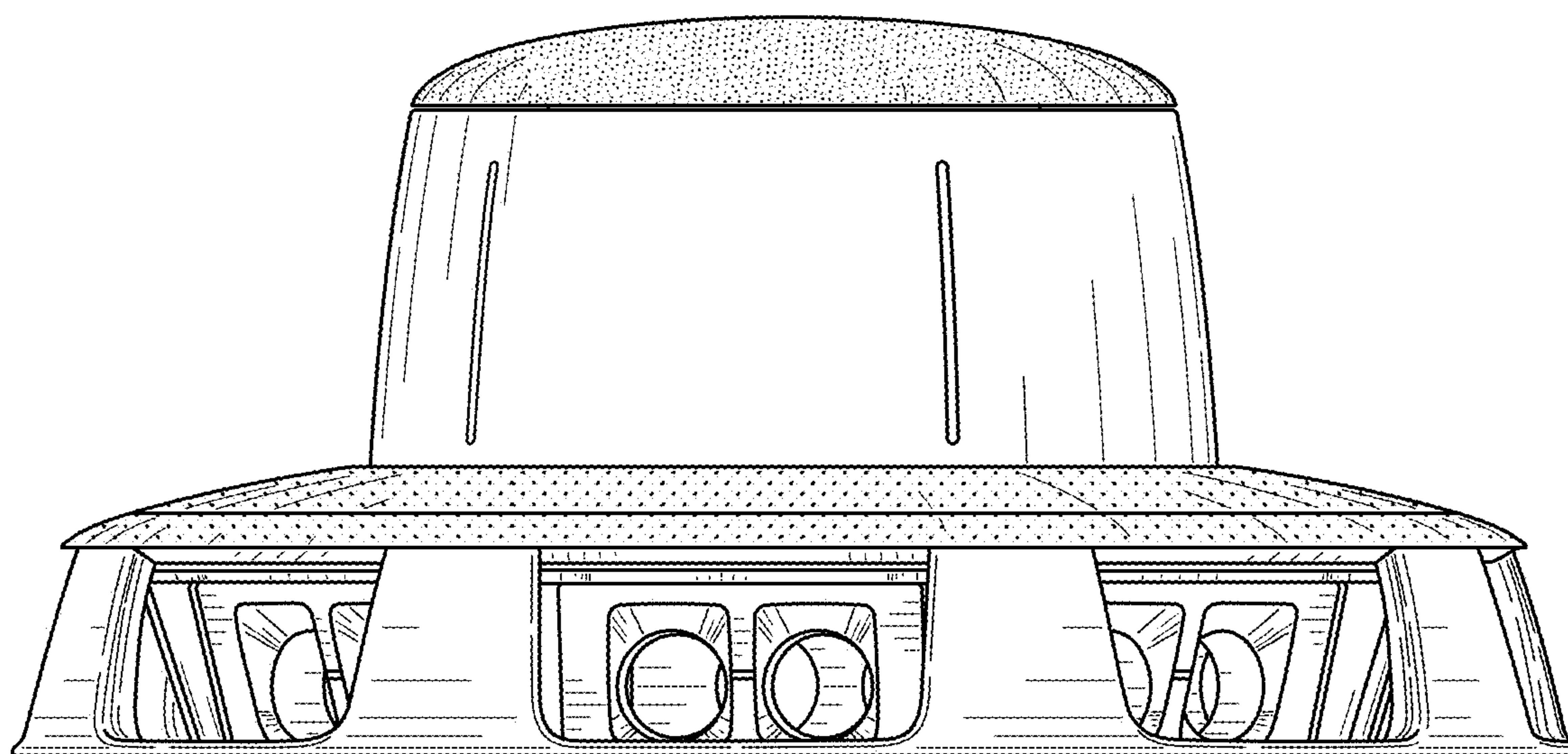


FIG. 26

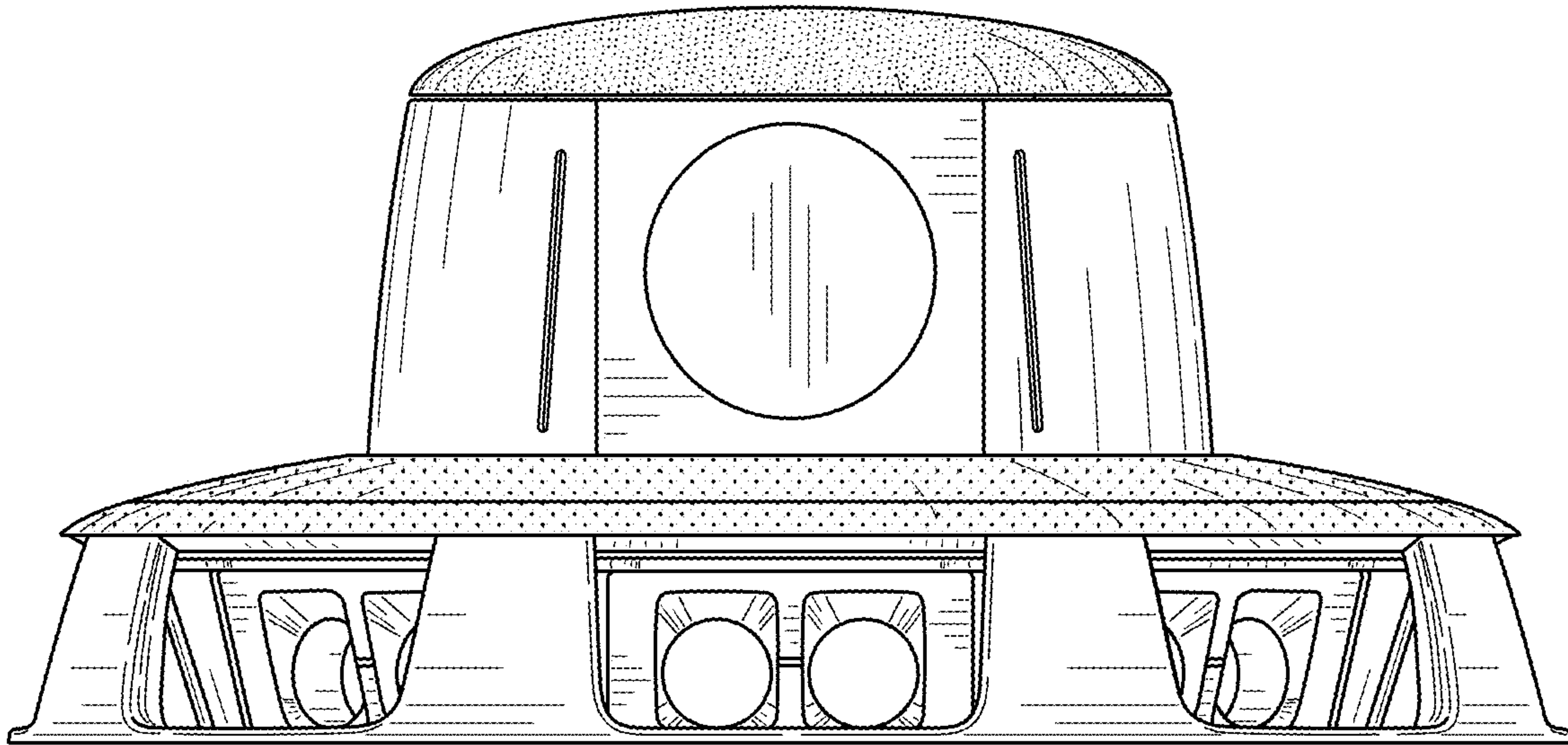


FIG. 27

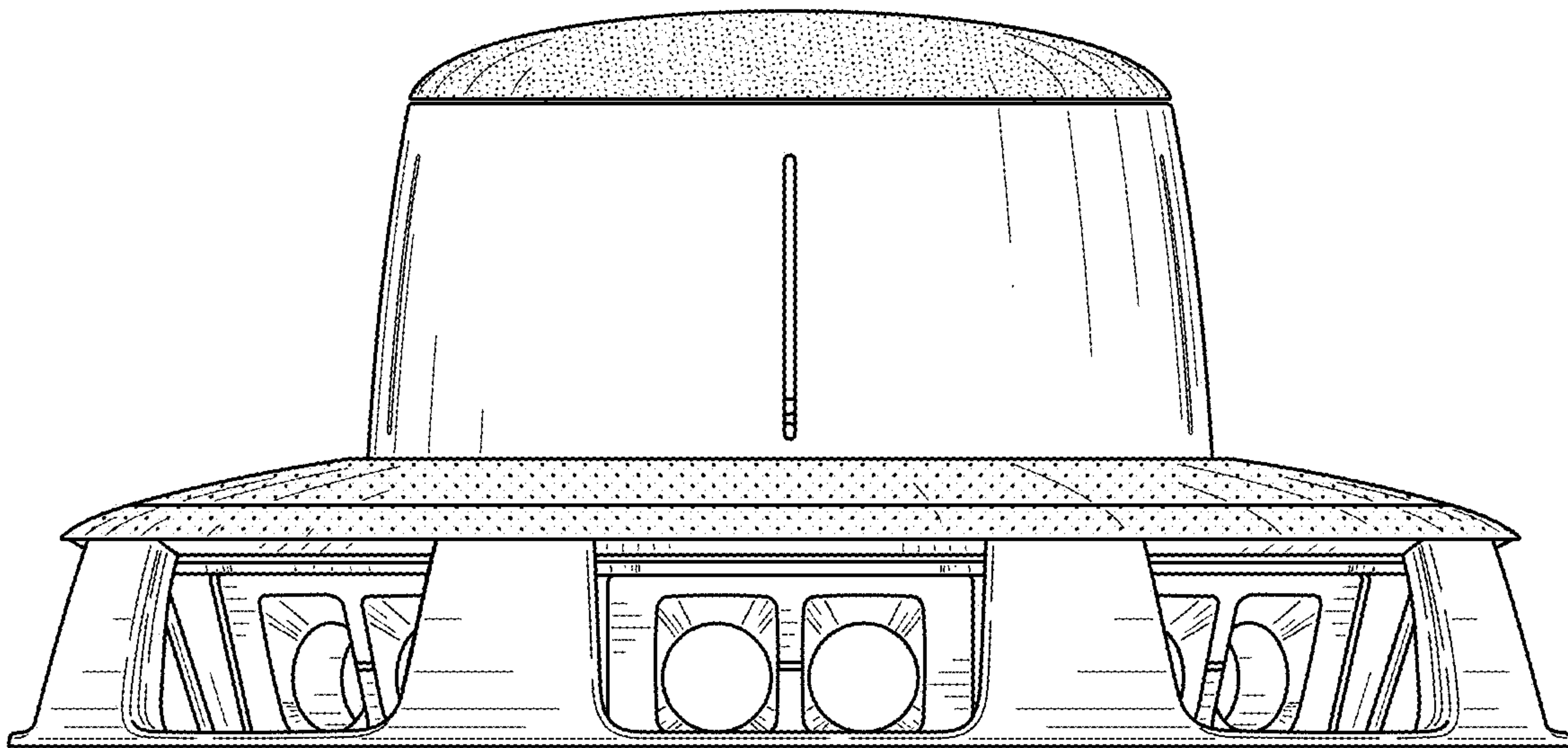


FIG. 28

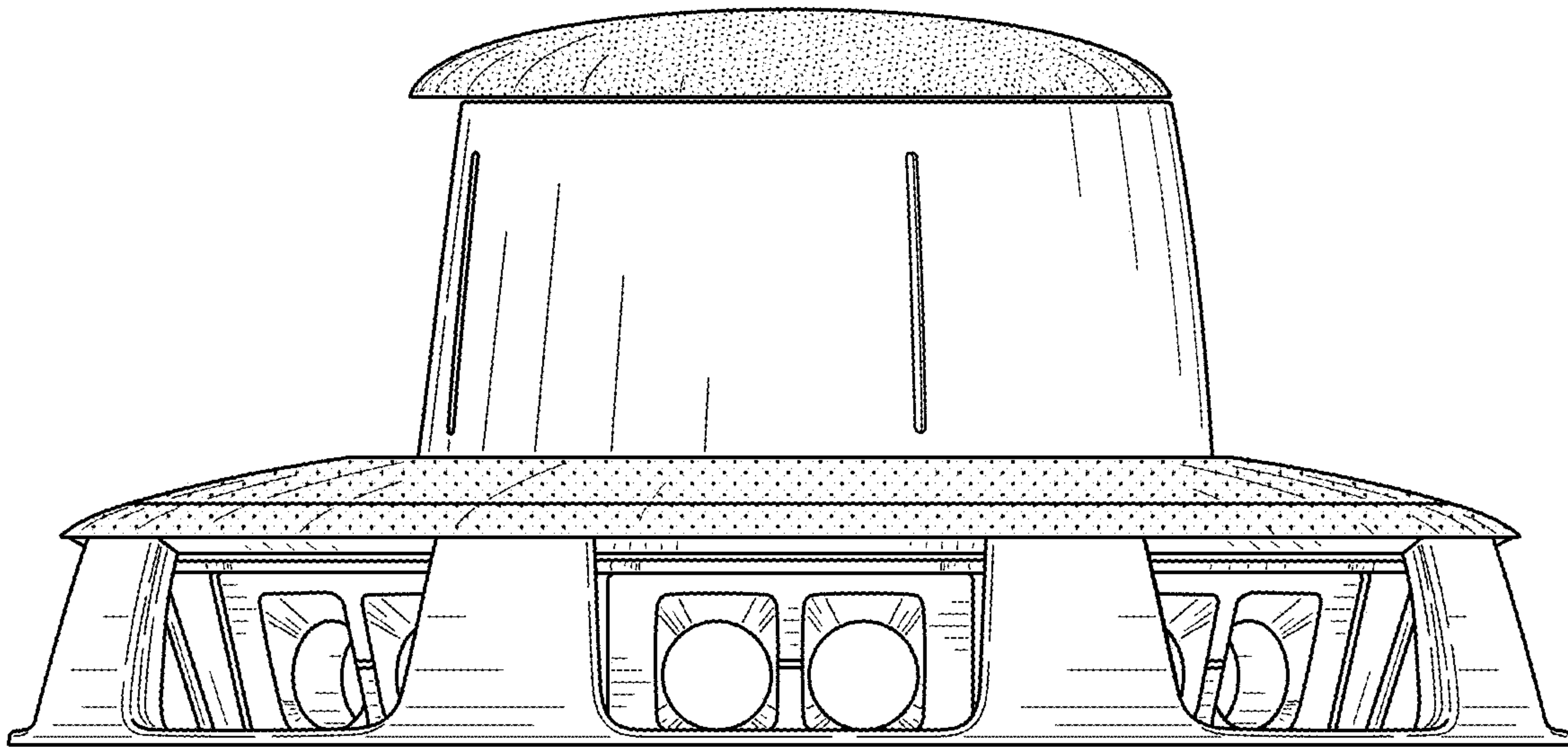


FIG. 29

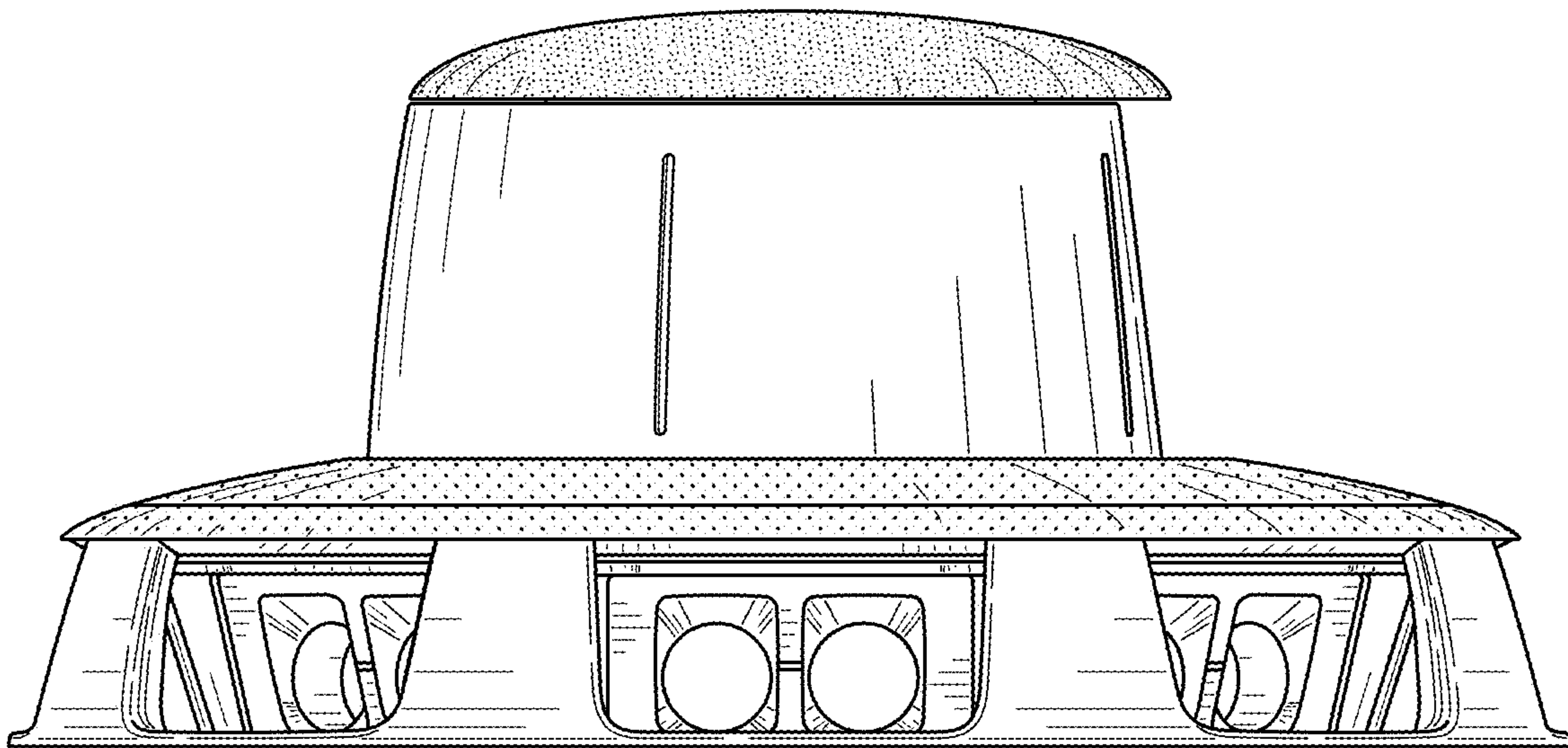


FIG. 30

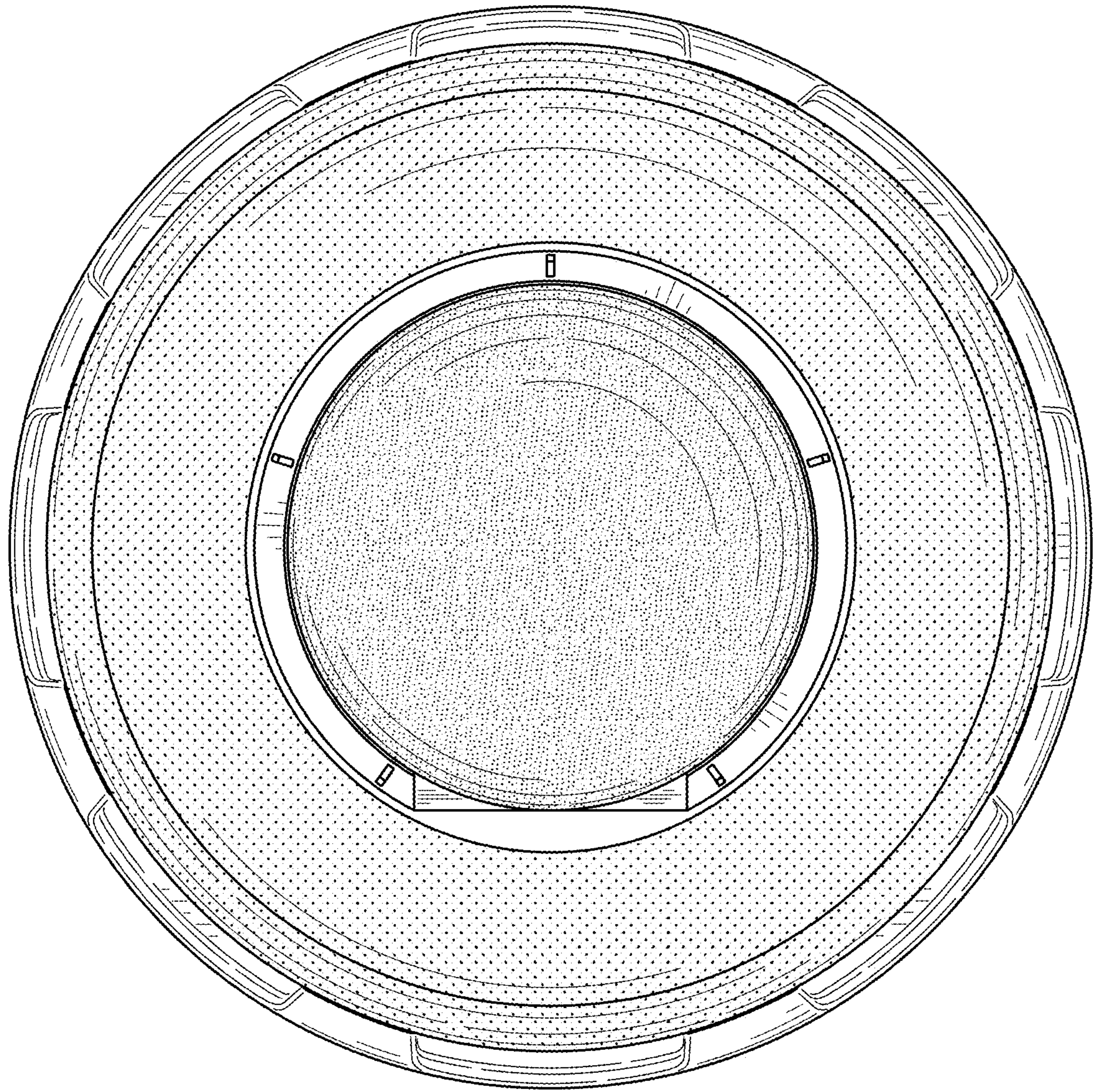


FIG. 31

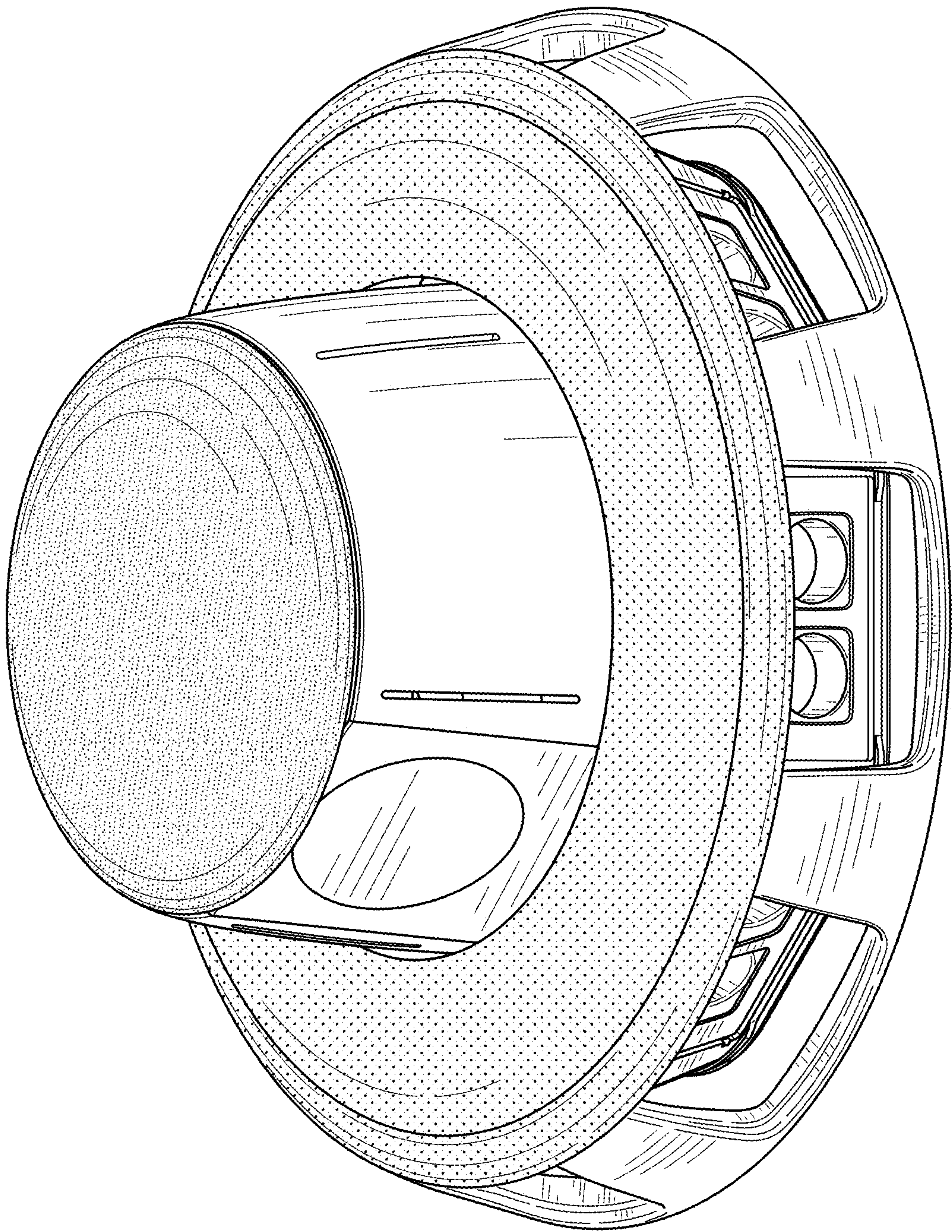


FIG. 32

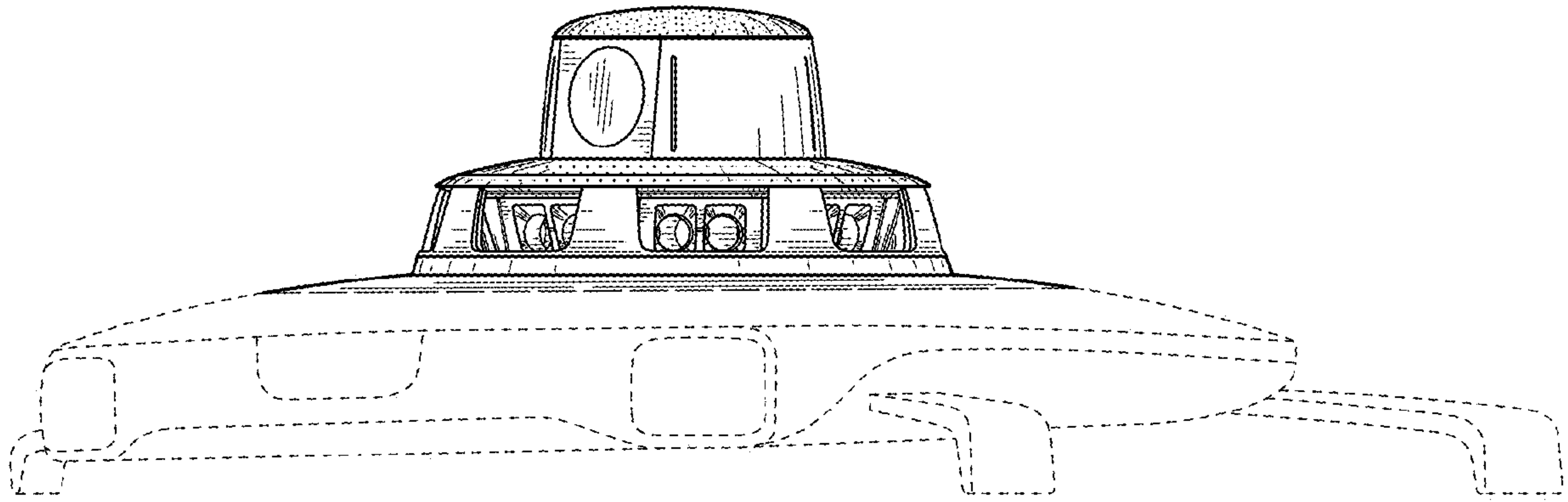


FIG. 33

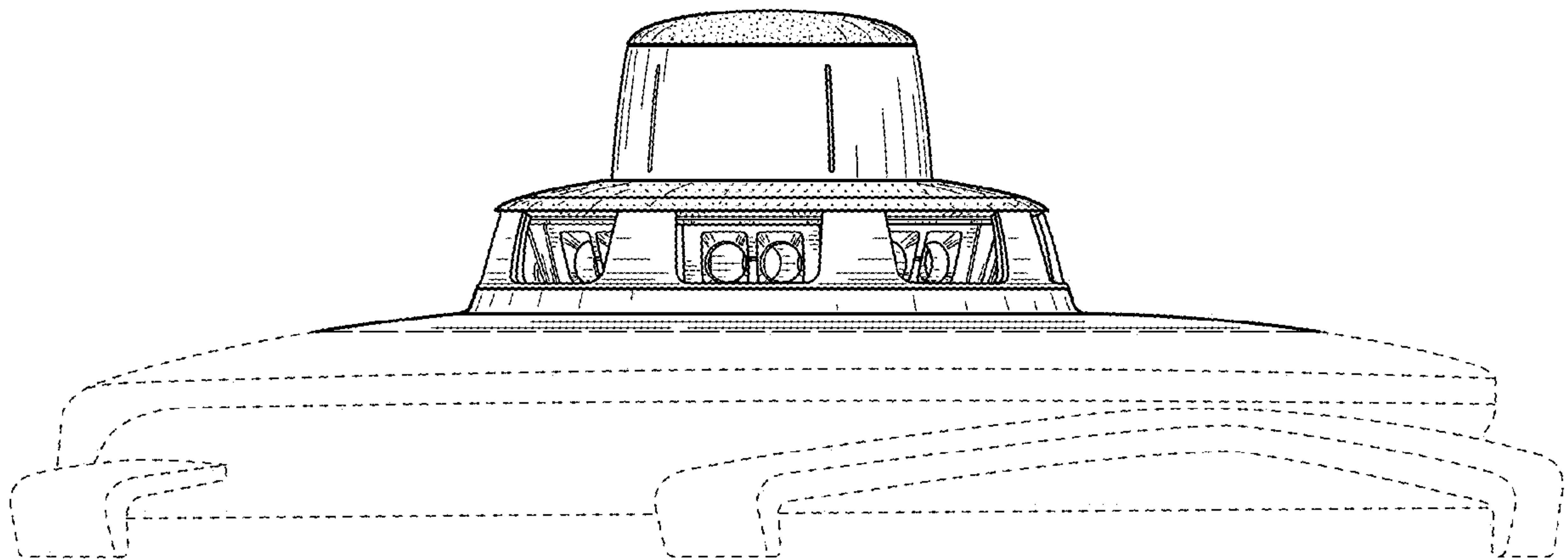


FIG. 34

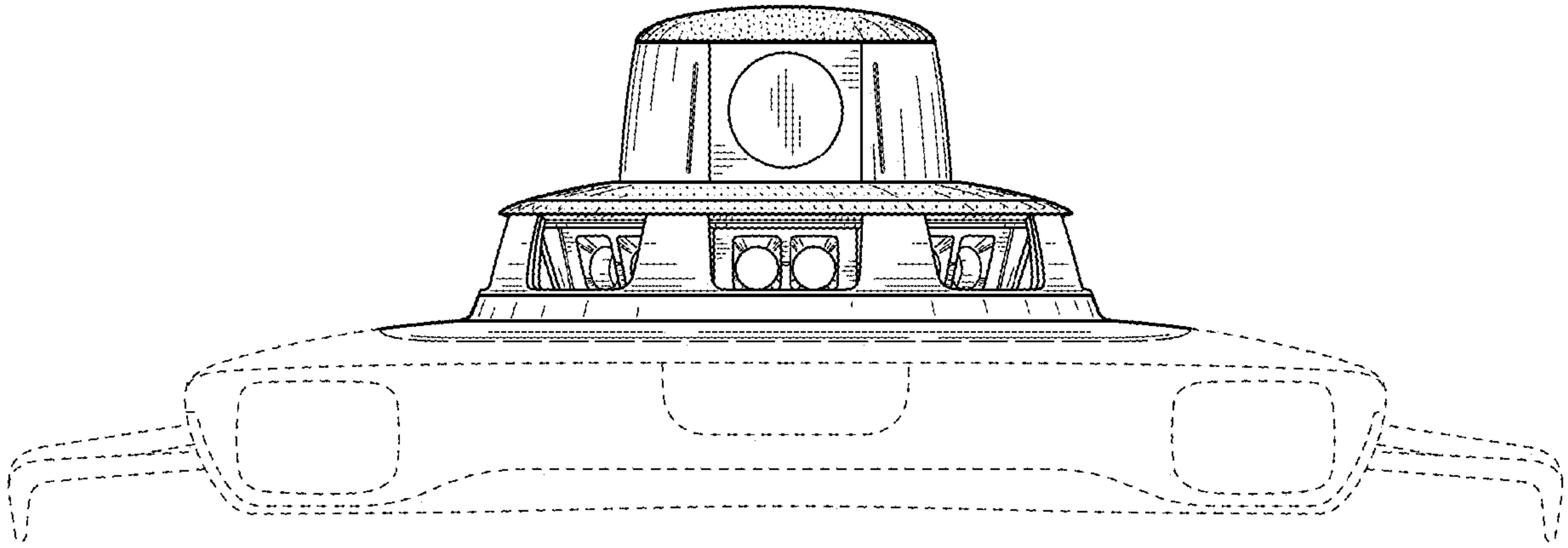


FIG. 35

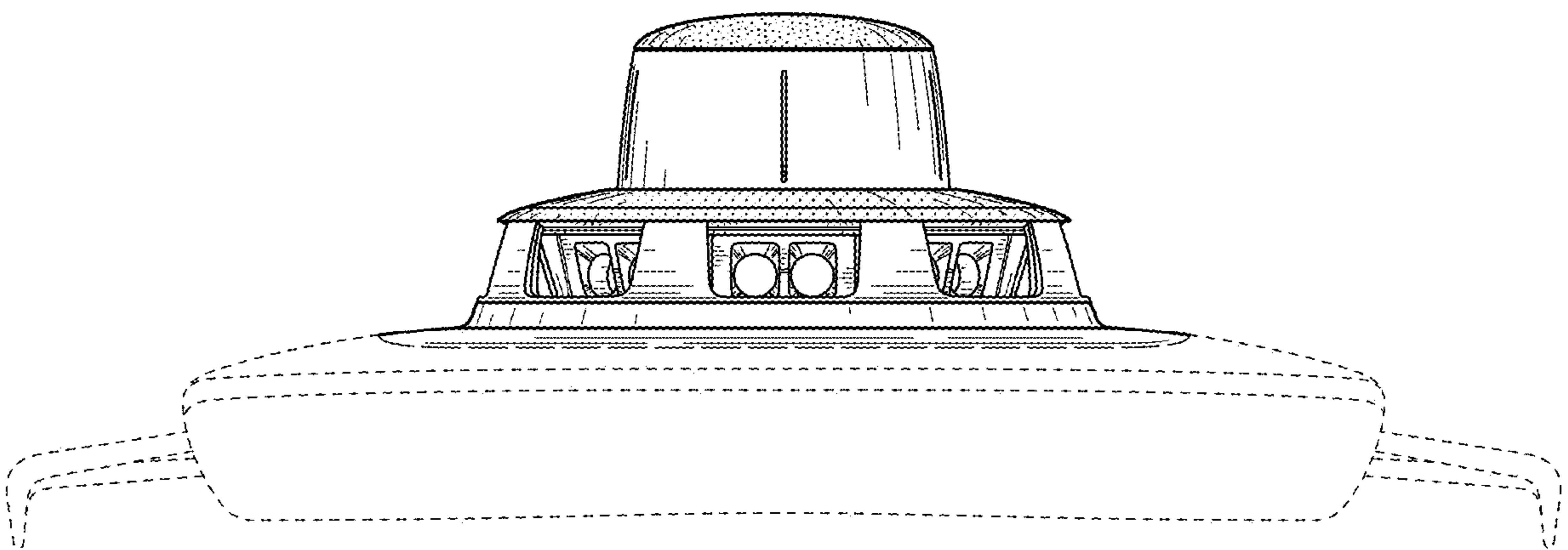


FIG. 36

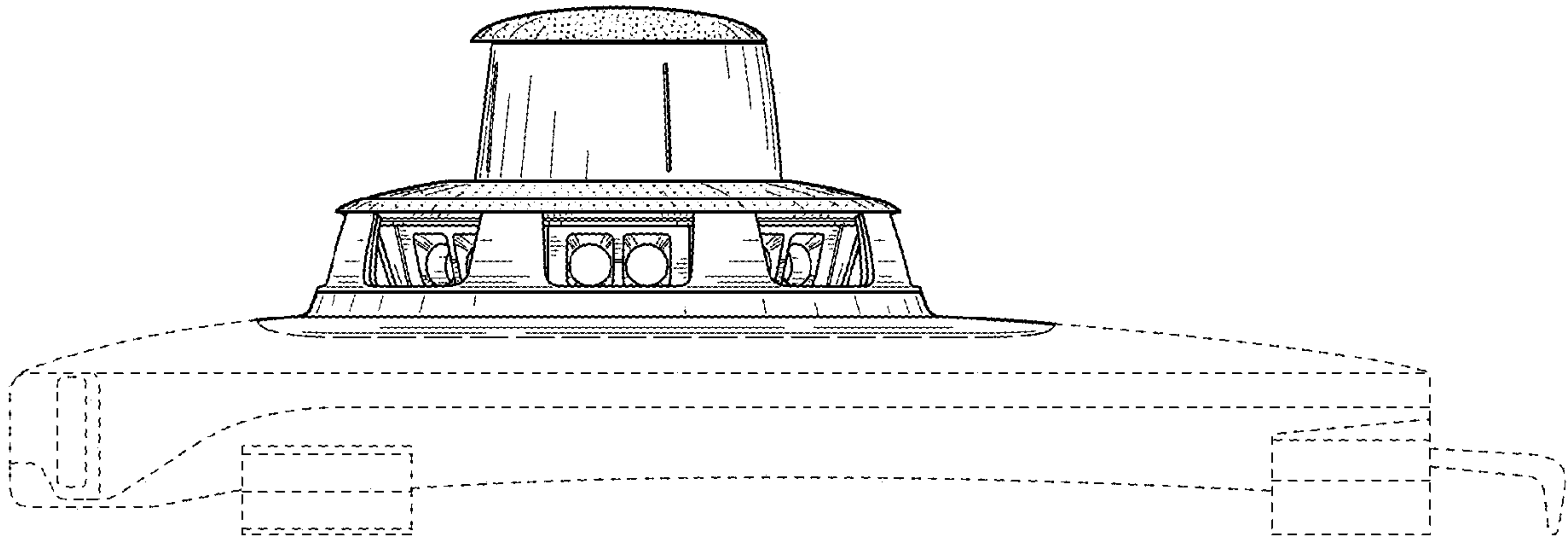


FIG. 37

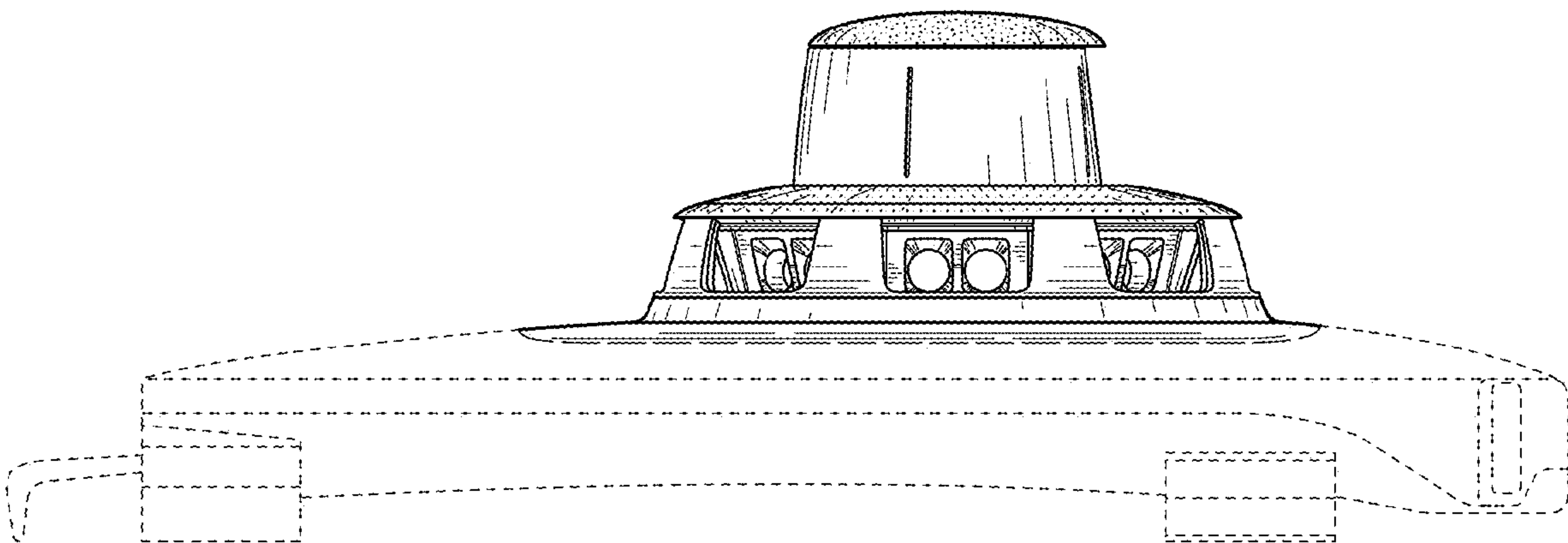


FIG. 38

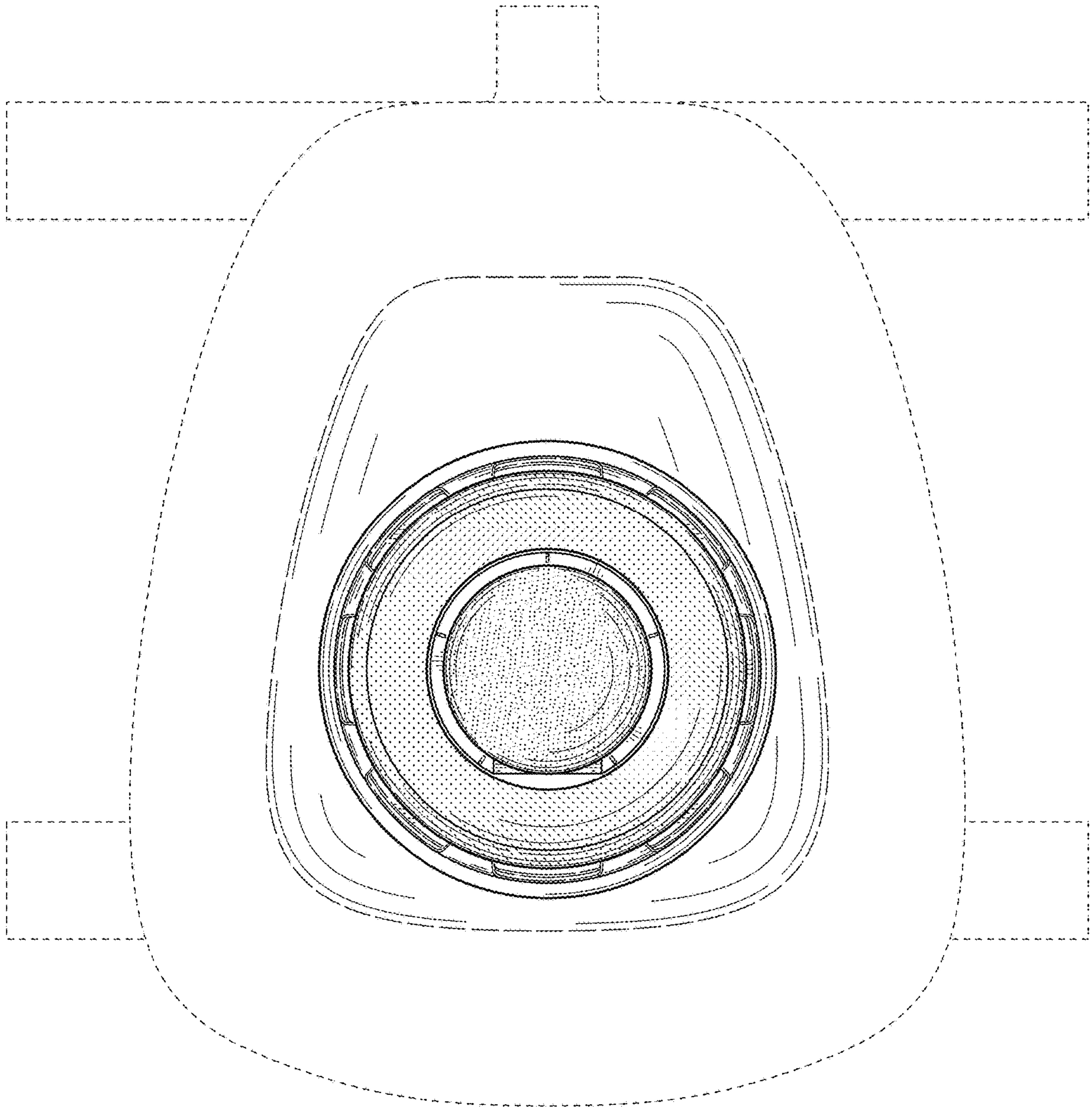


FIG. 39

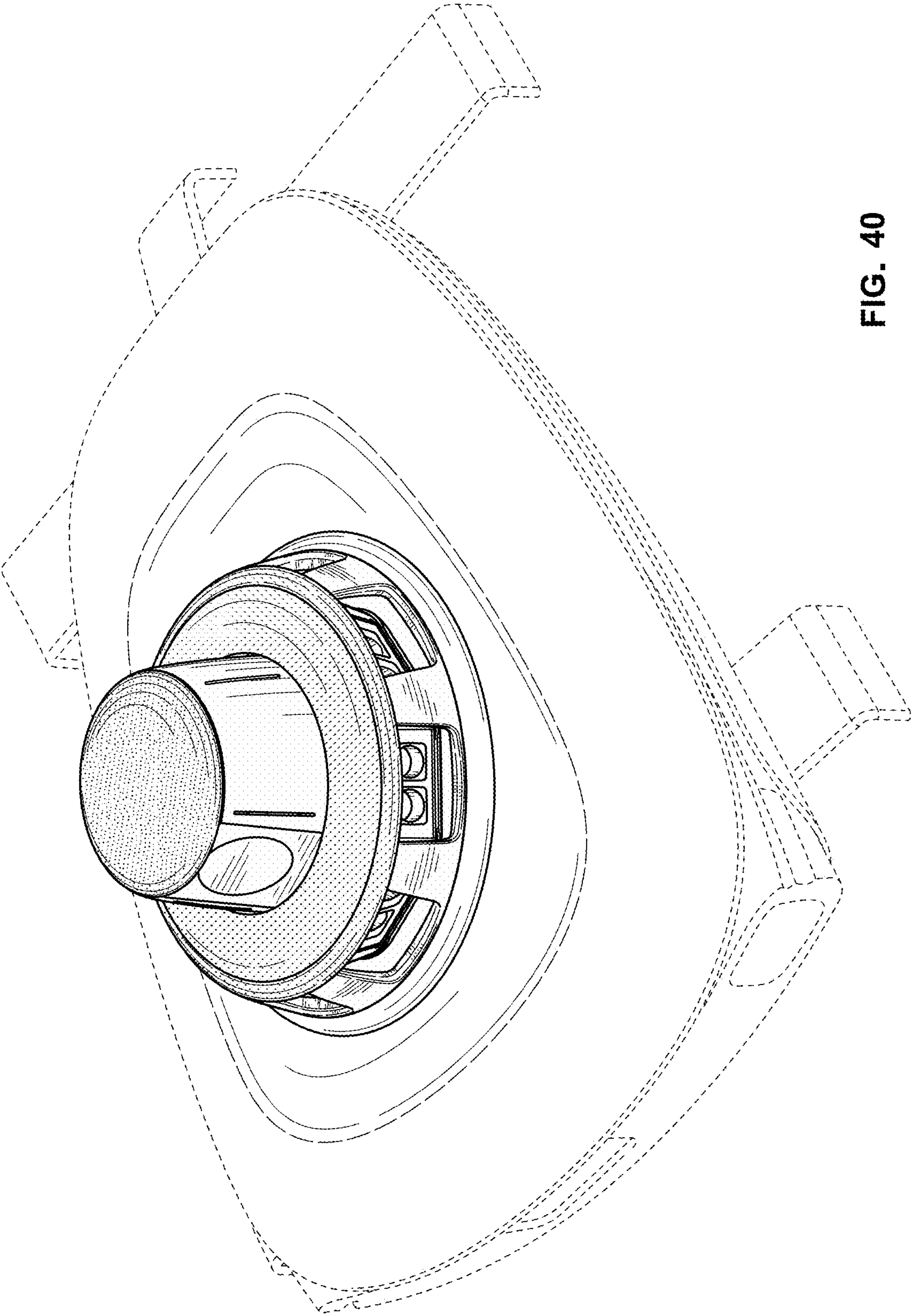


FIG. 40

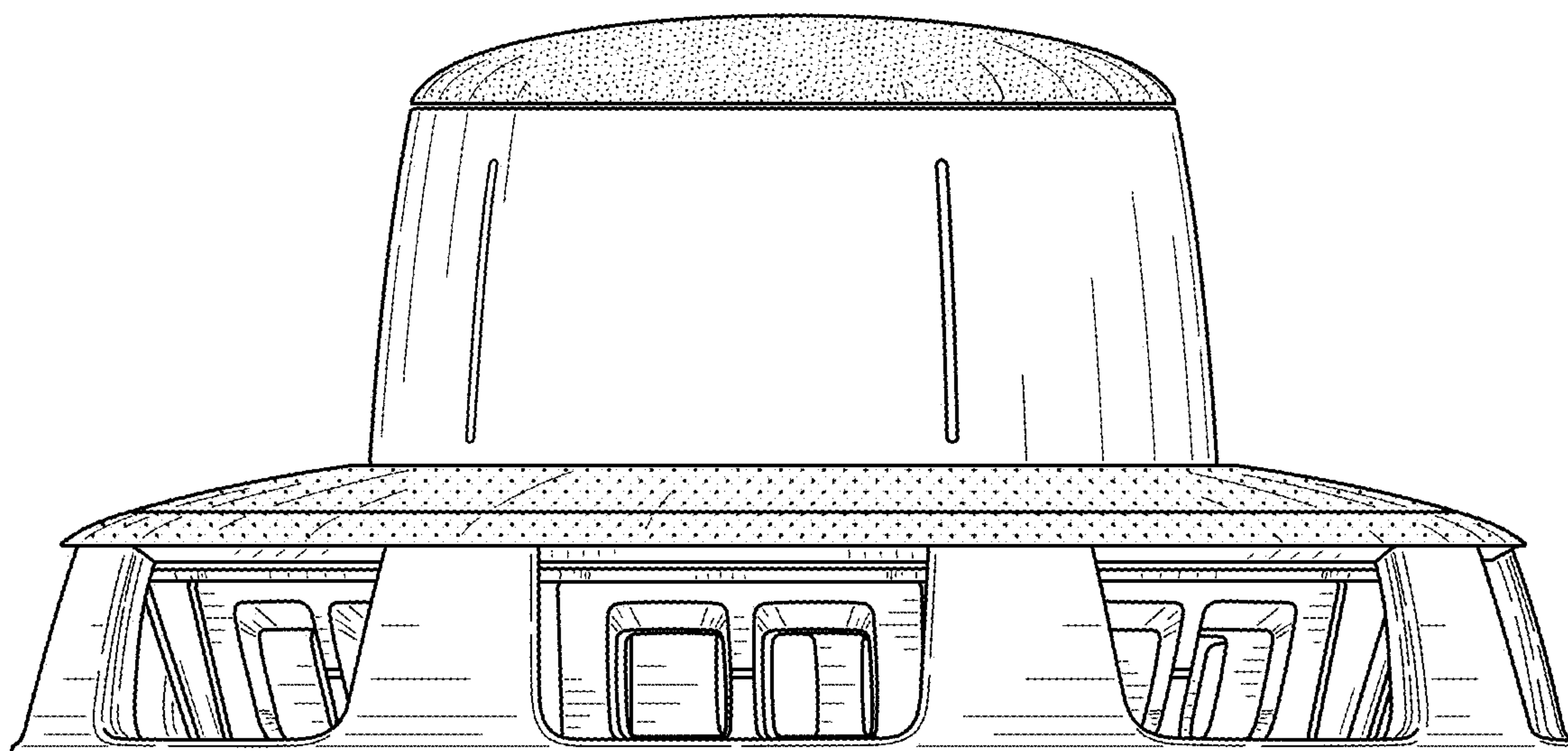


FIG. 41

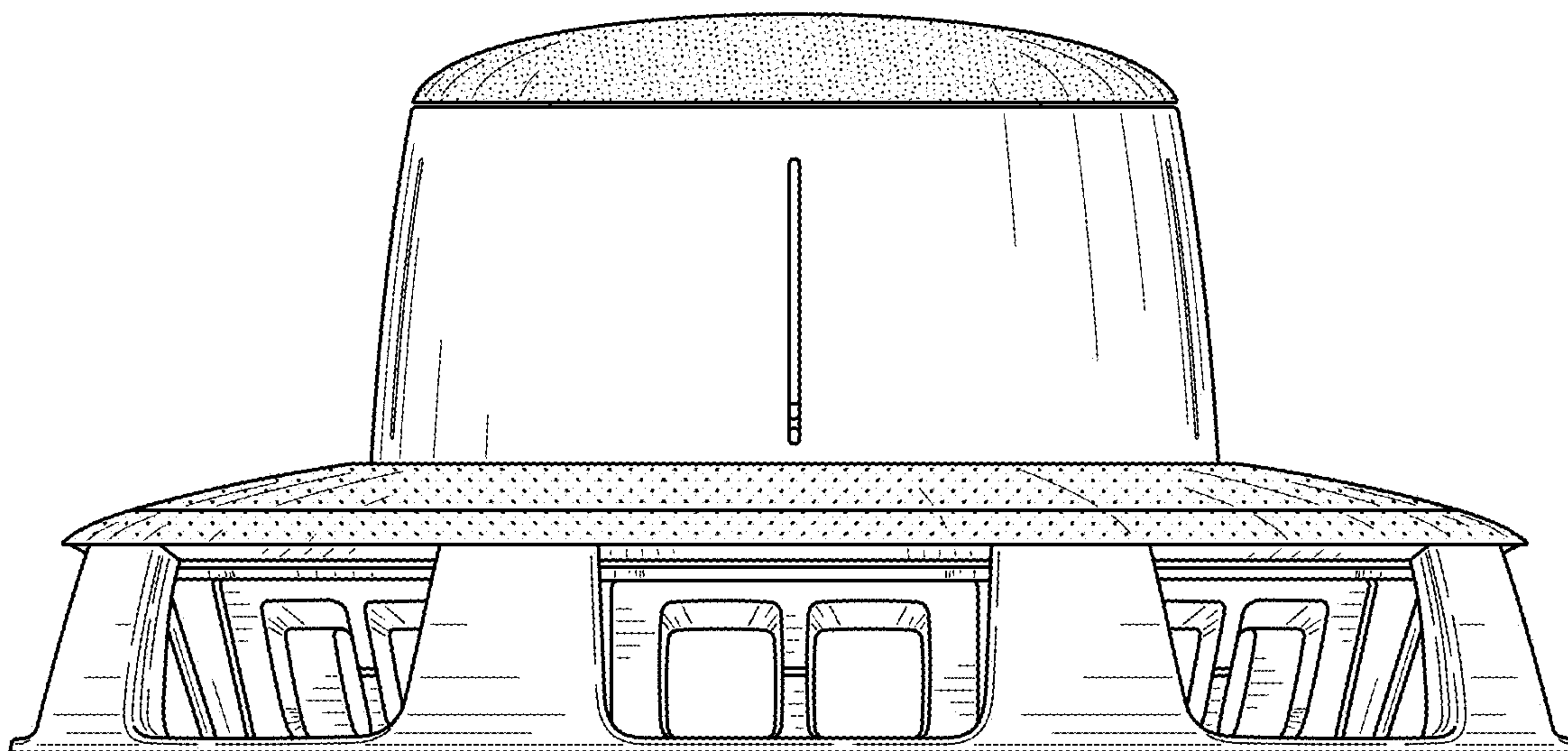


FIG. 42

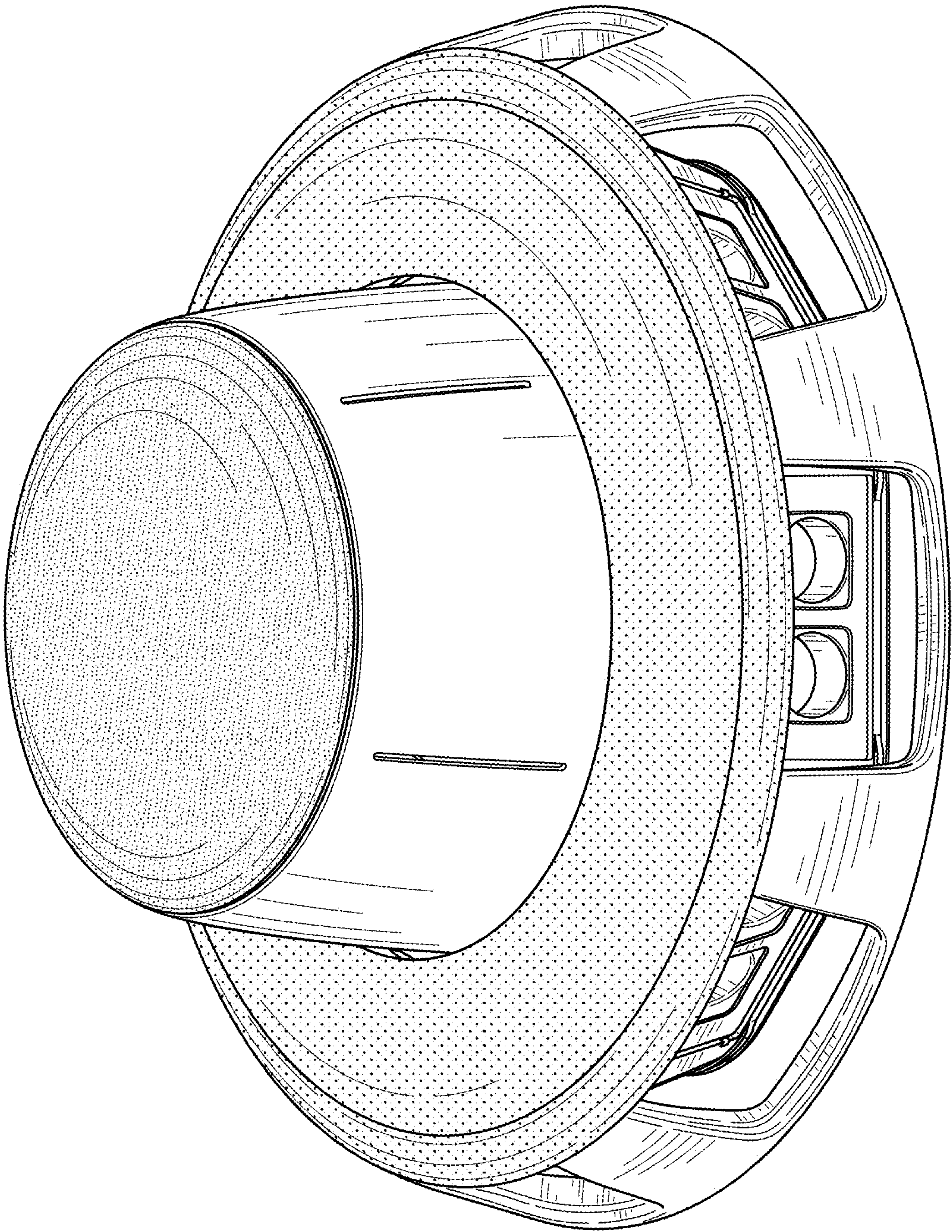


FIG. 43

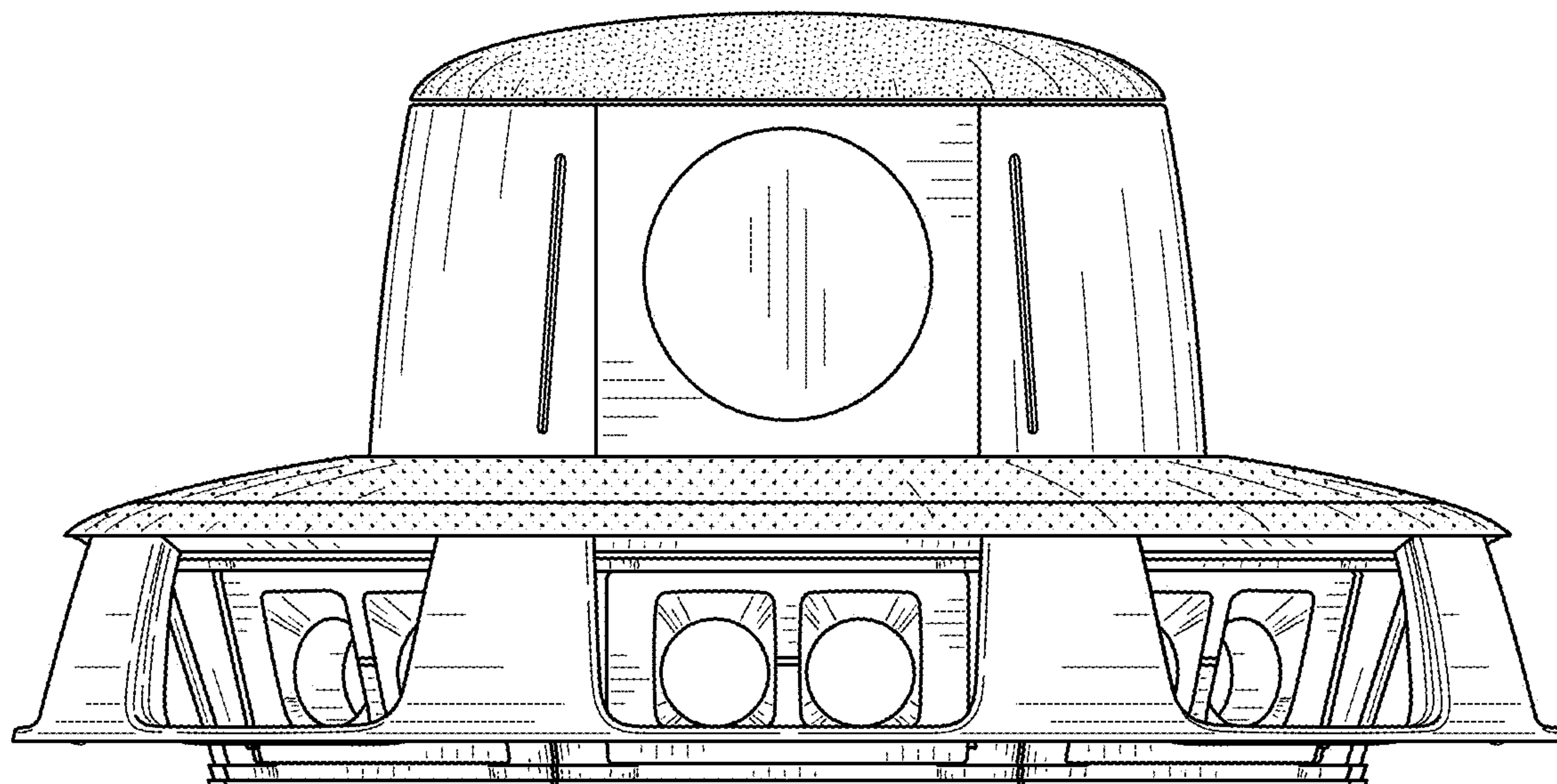


FIG. 44

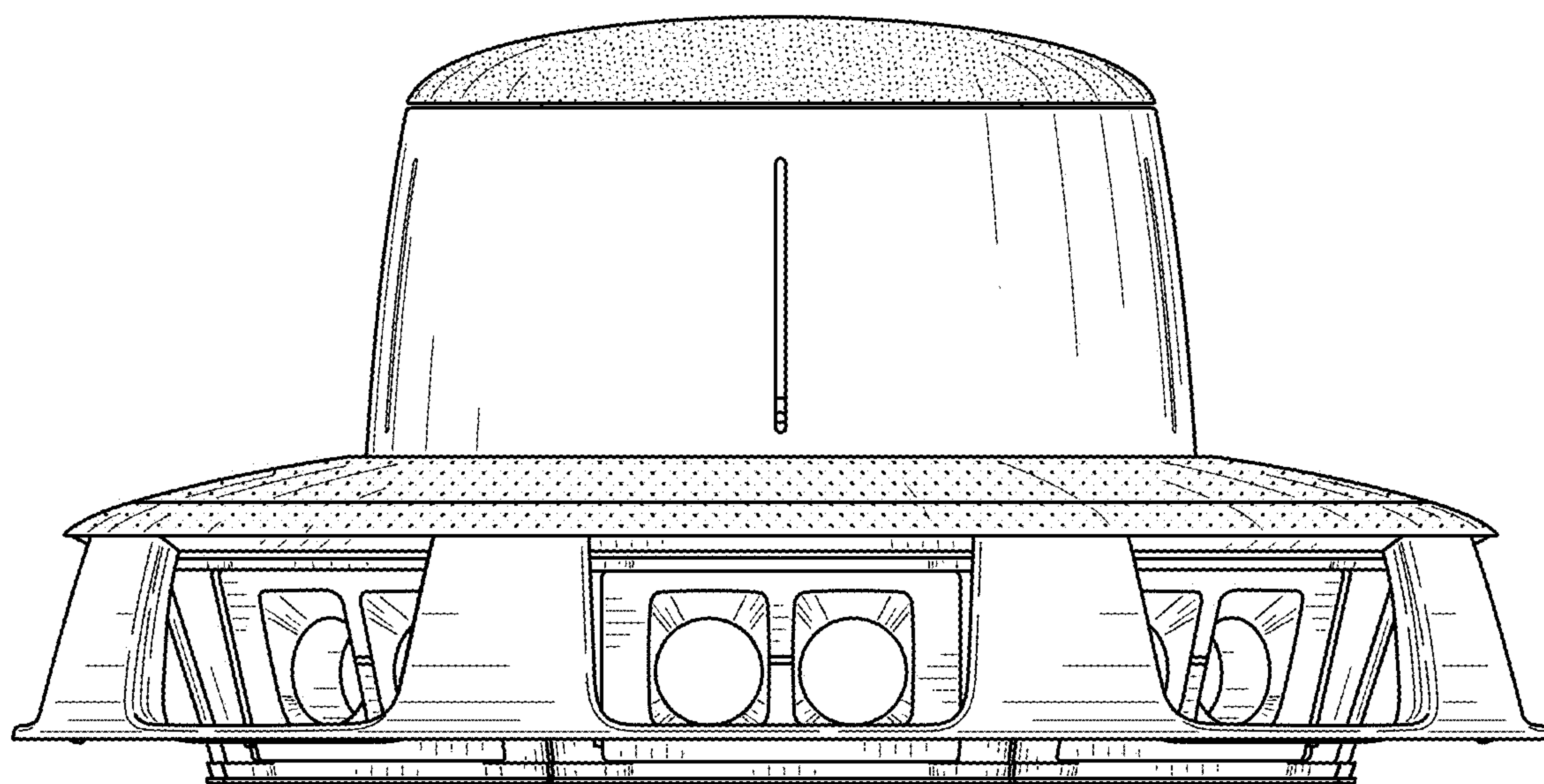


FIG. 45

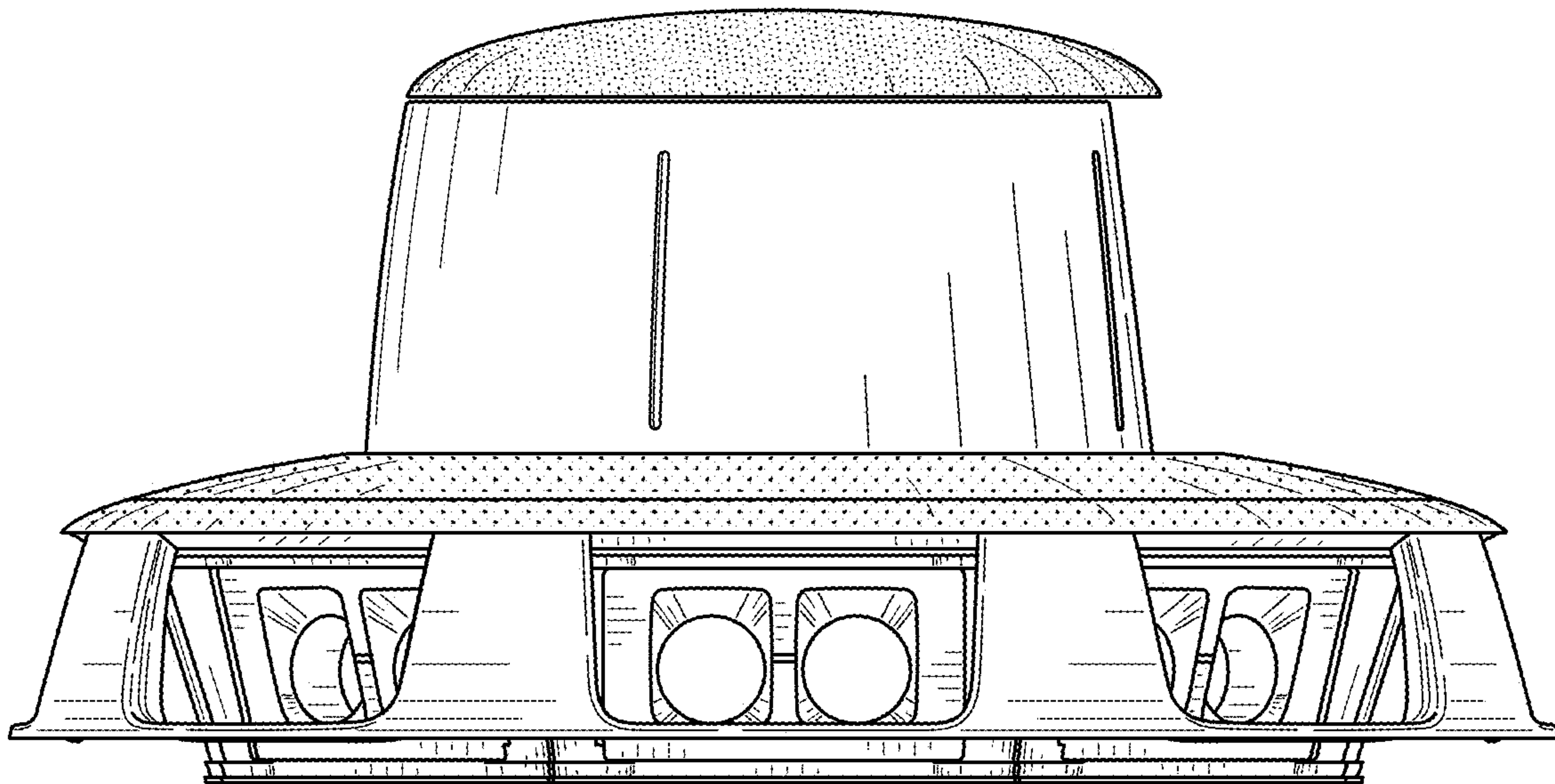


FIG. 46

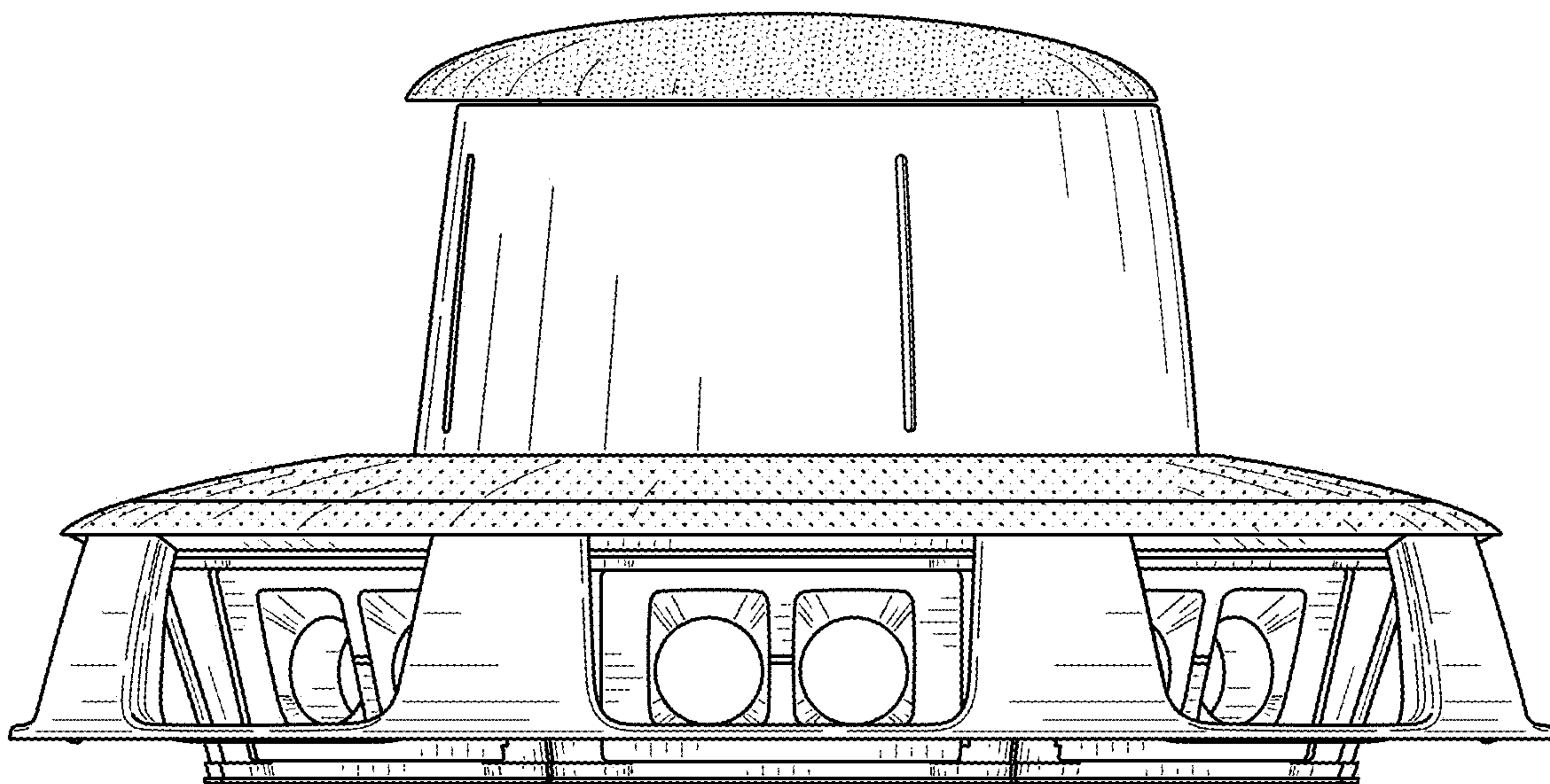


FIG. 47

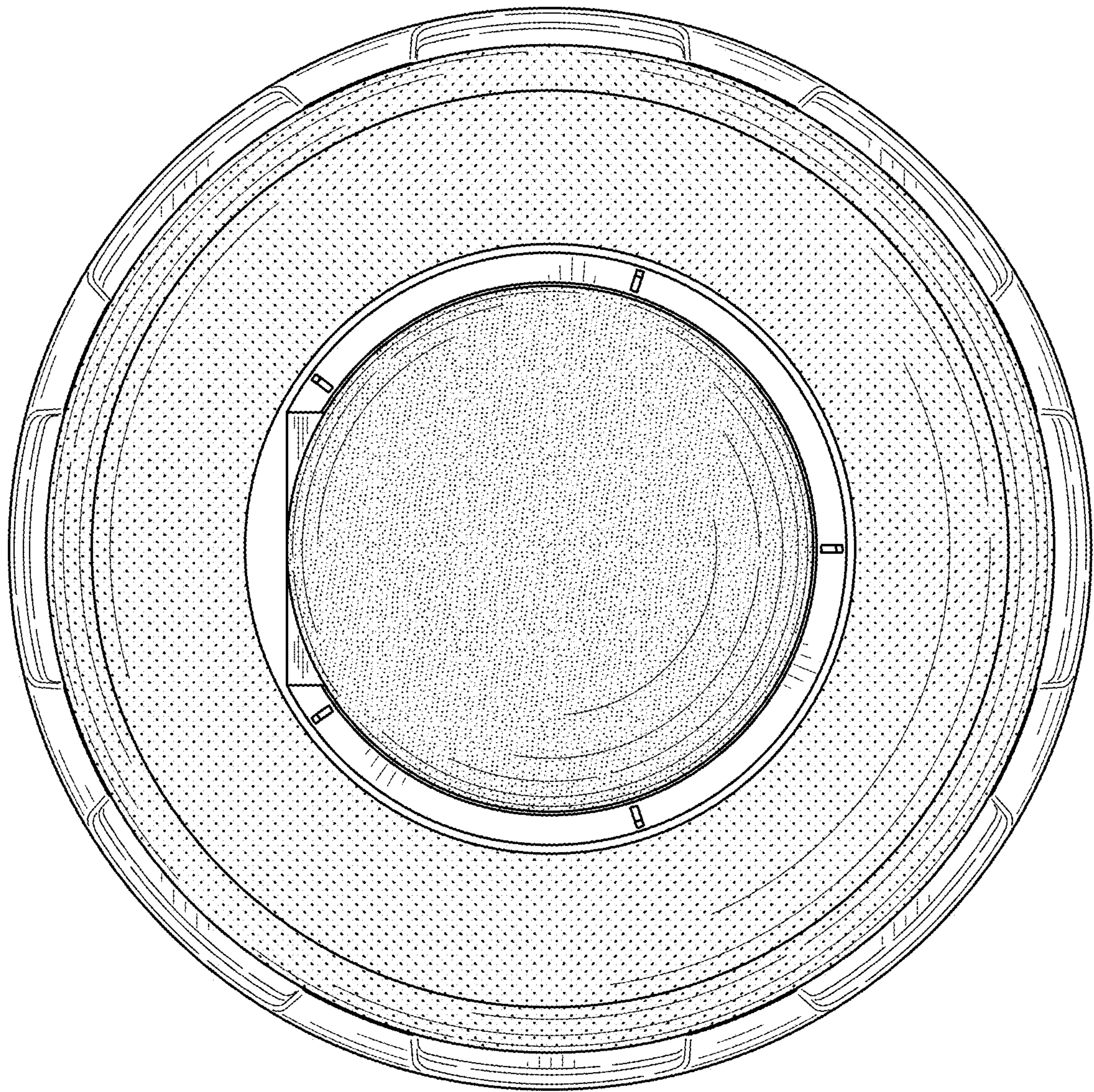


FIG. 48

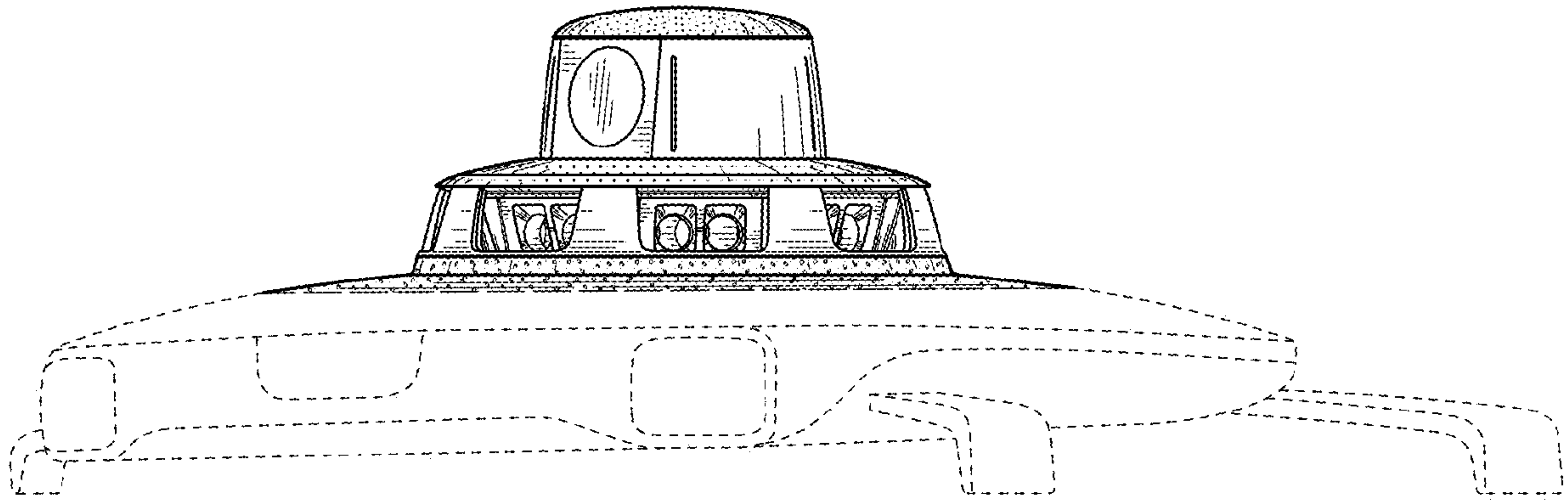


FIG. 49

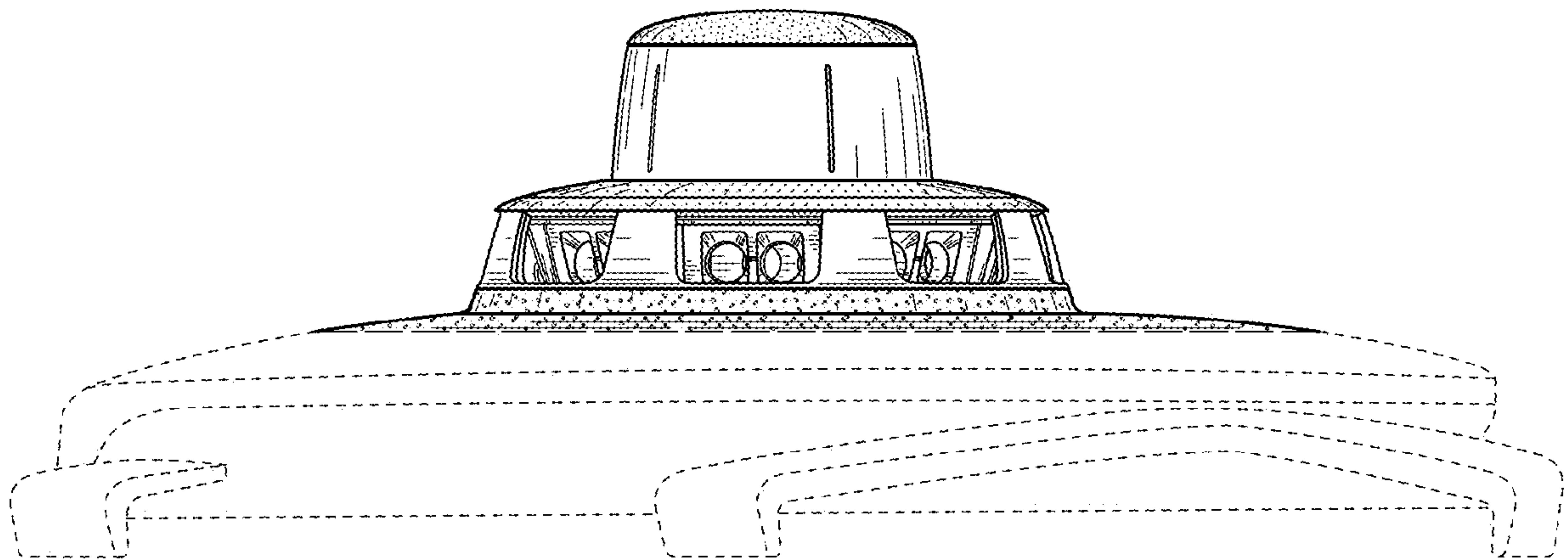


FIG. 50

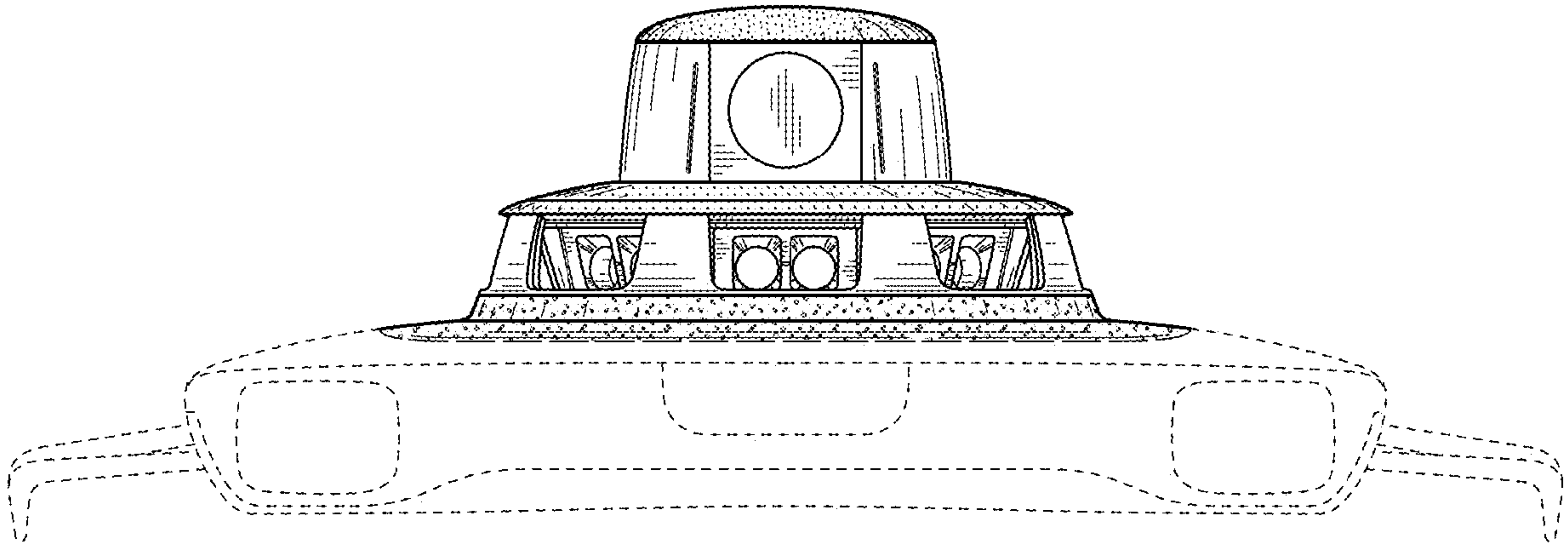


FIG. 51

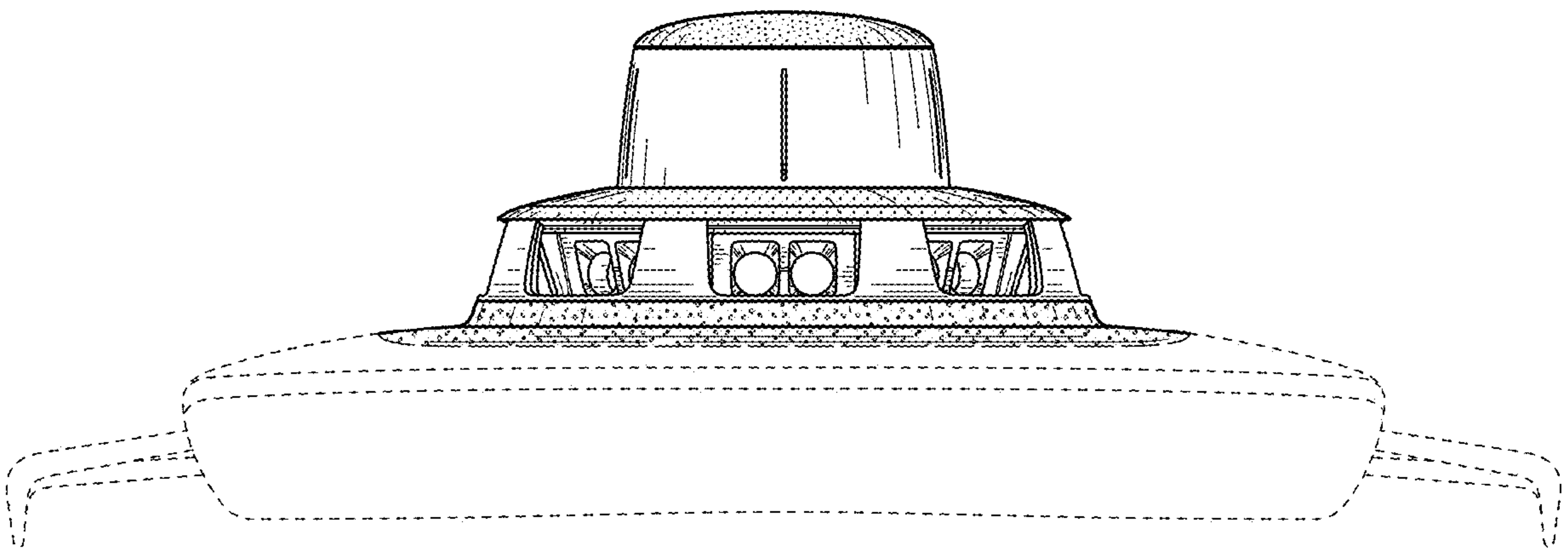


FIG. 52

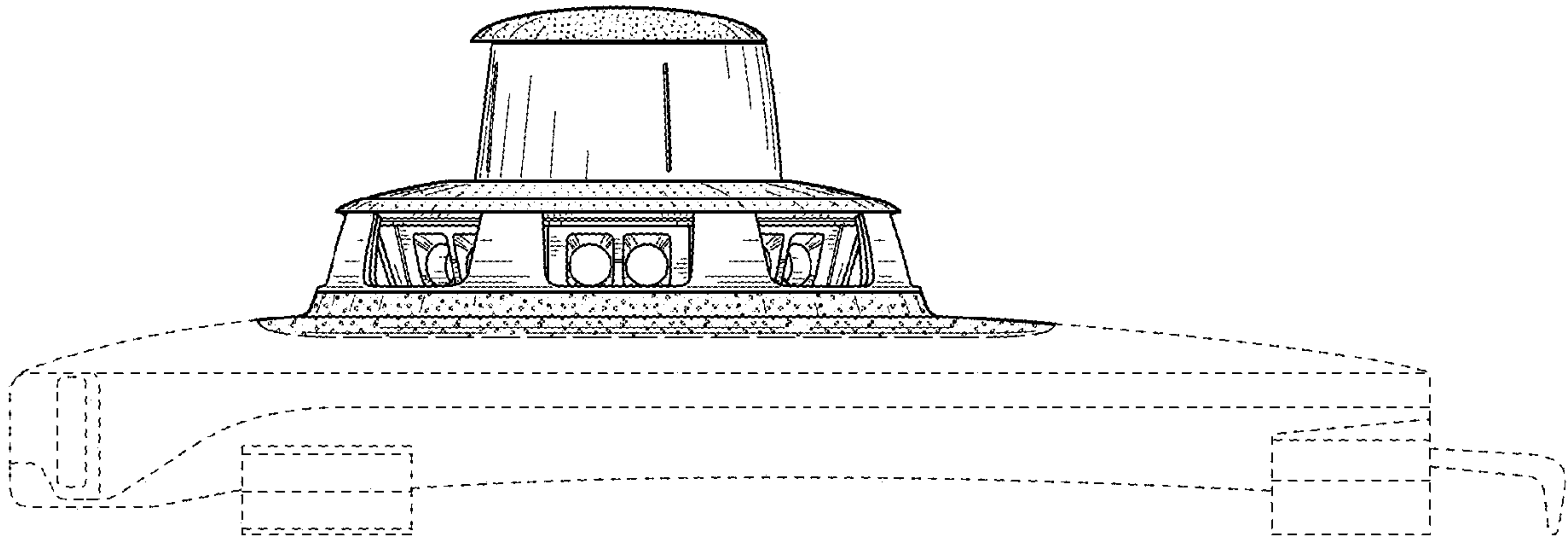


FIG. 53

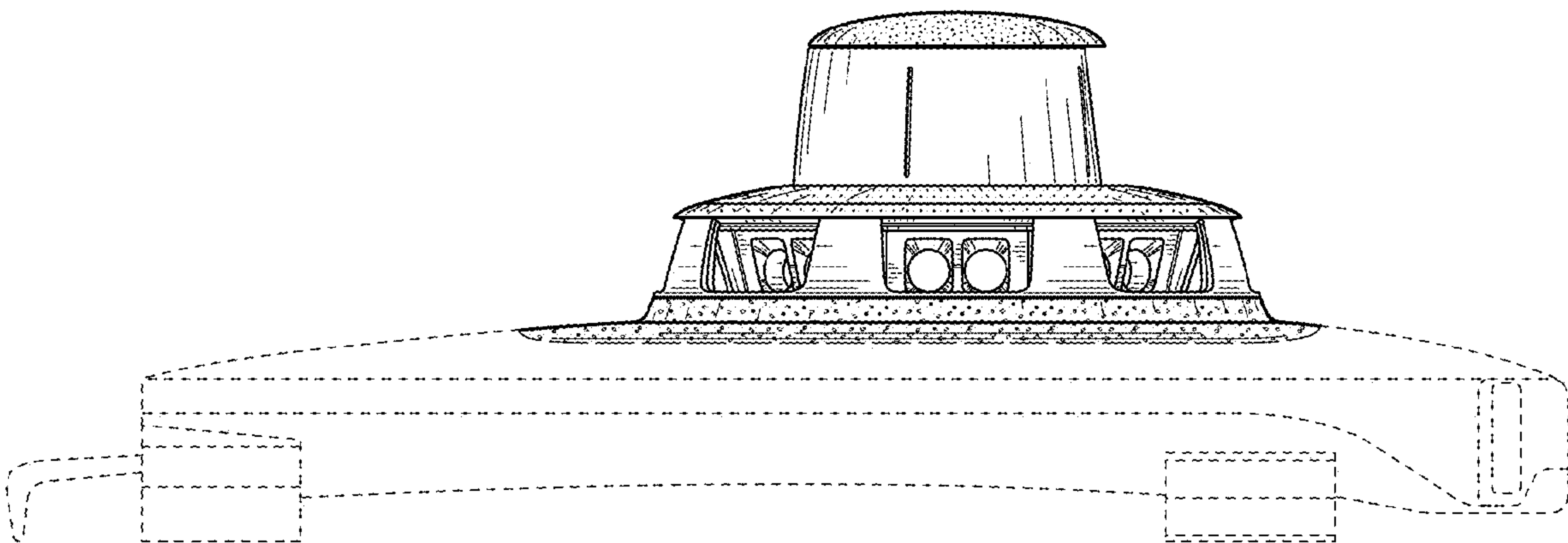


FIG. 54

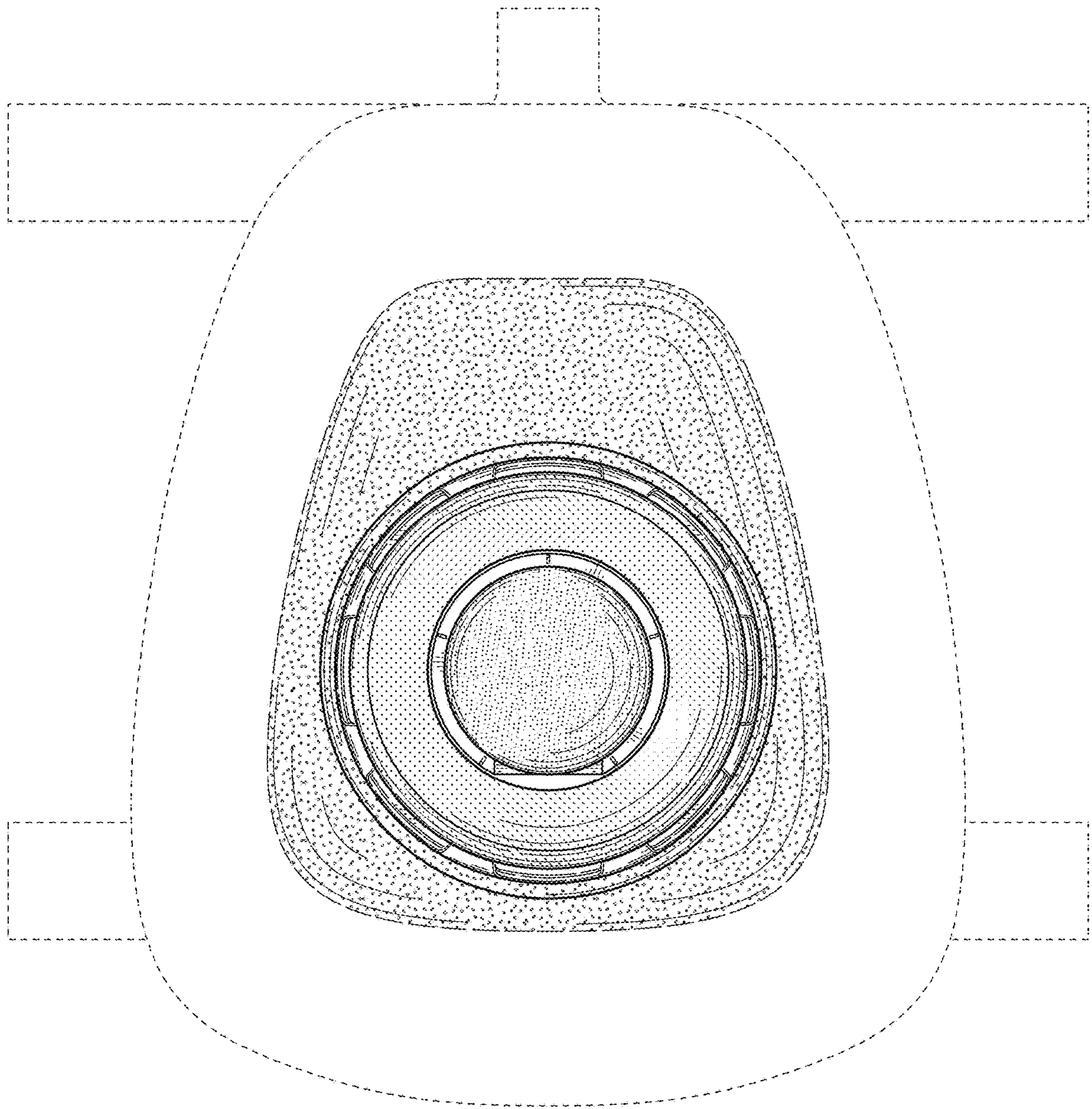


FIG. 55

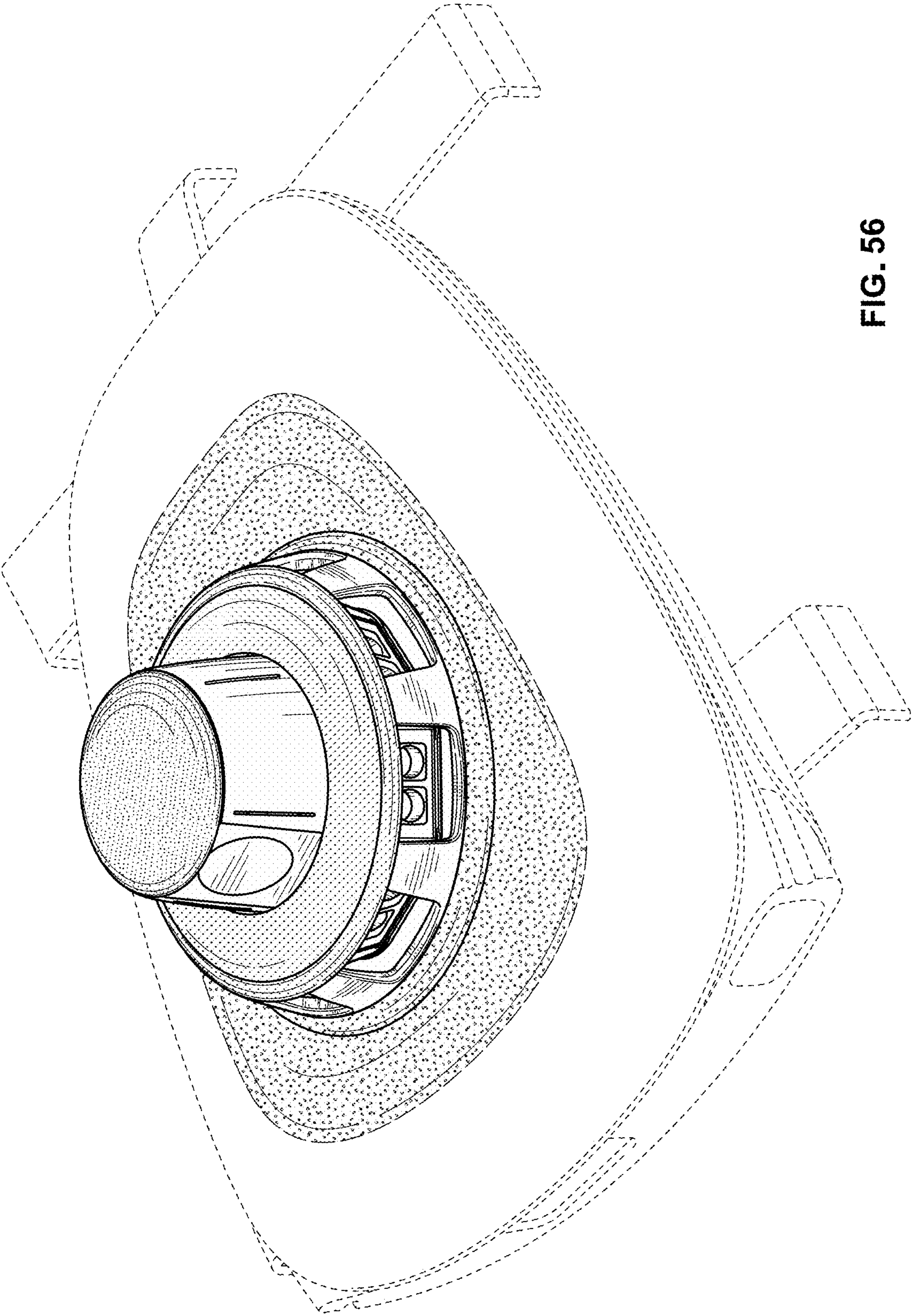


FIG. 56

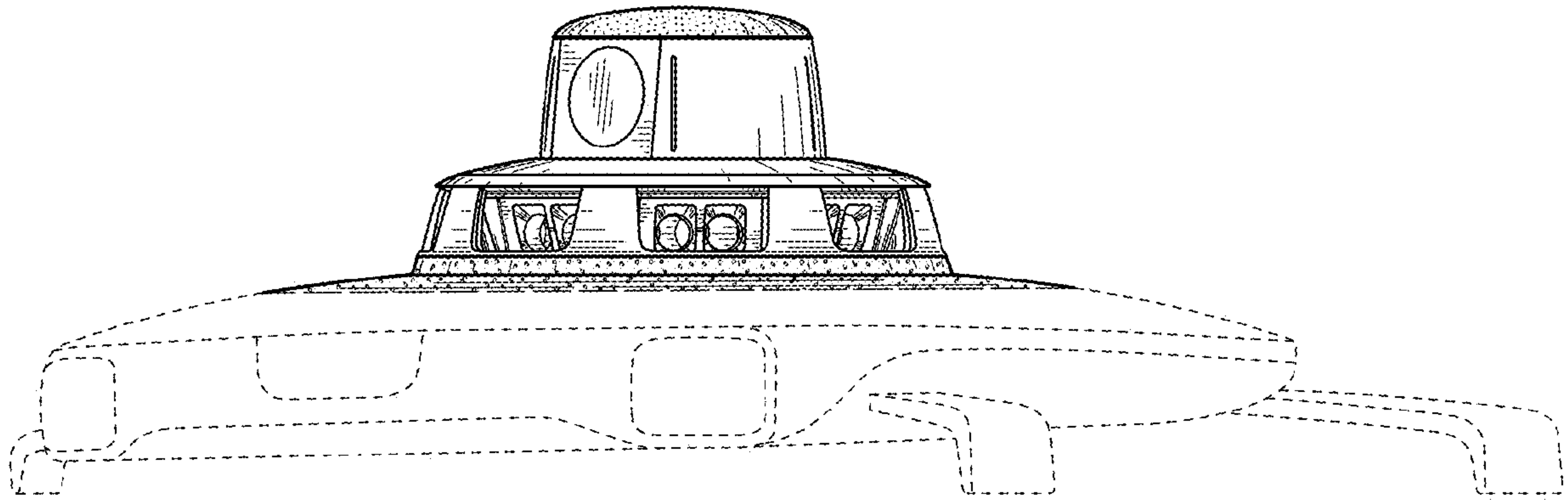


FIG. 57

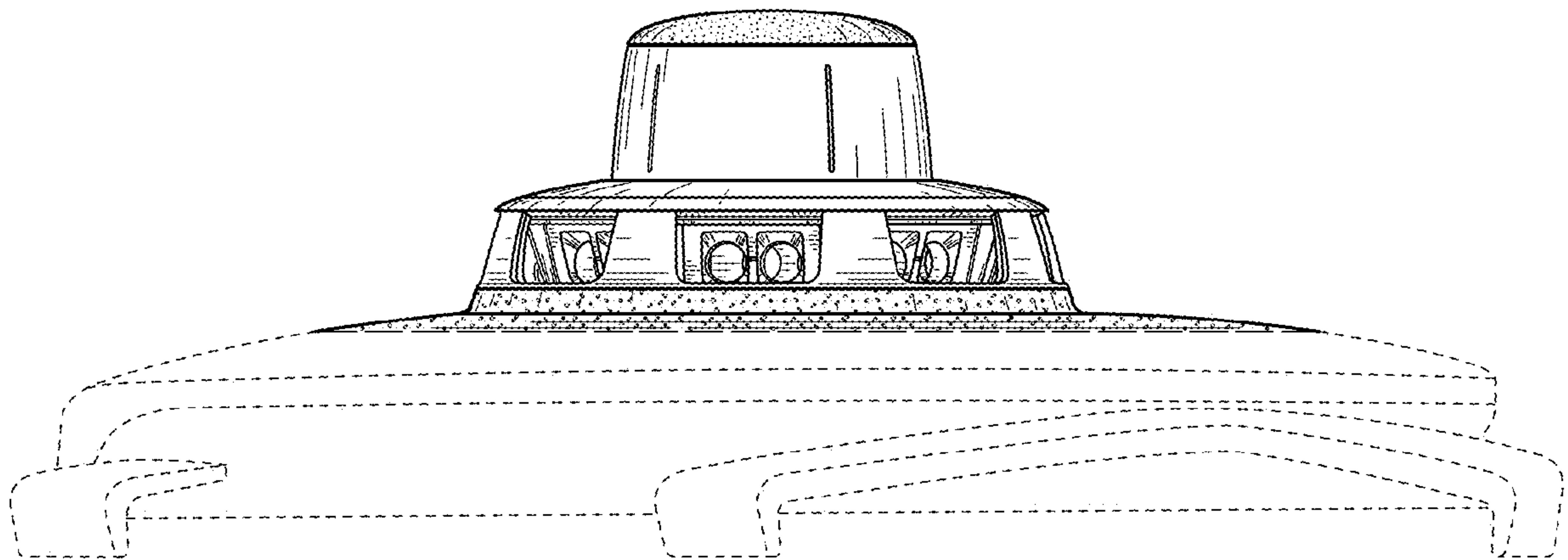


FIG. 58

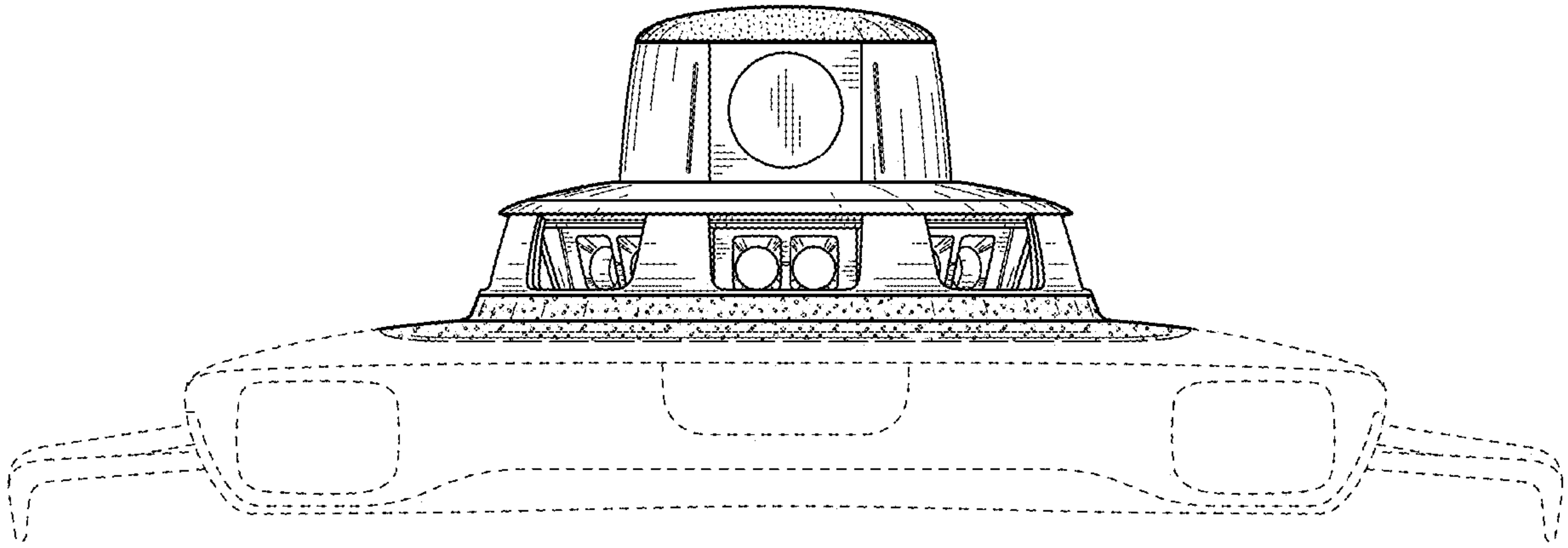


FIG. 59

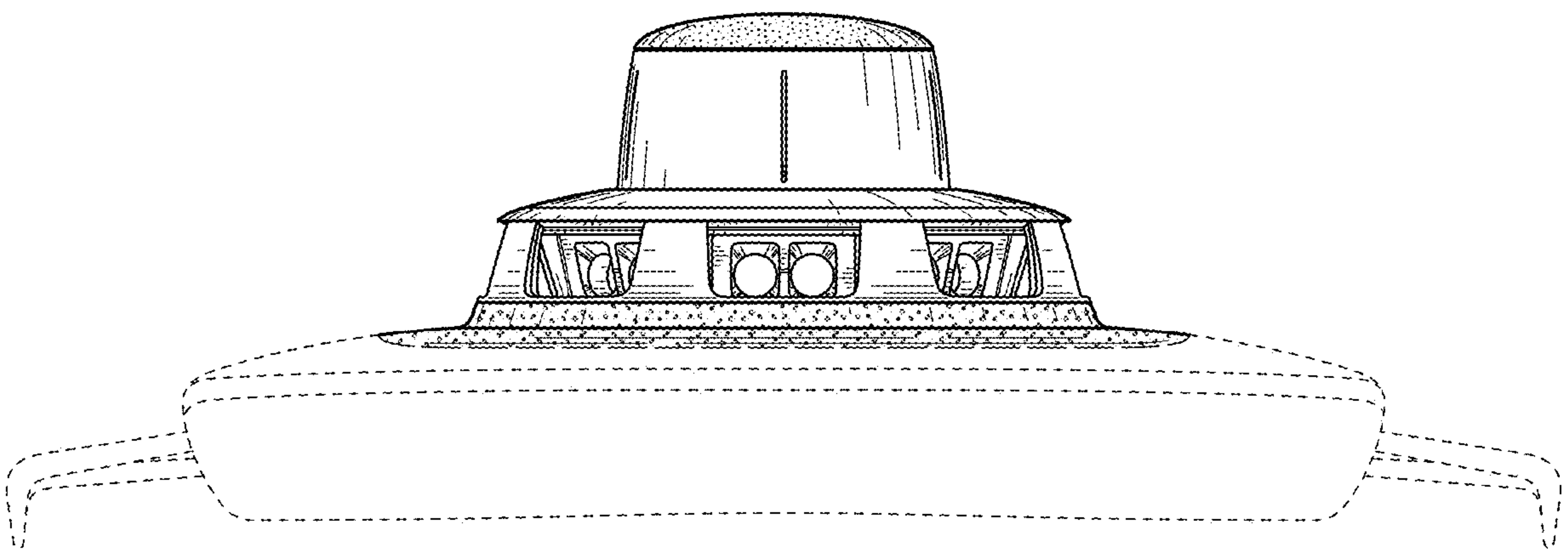


FIG. 60

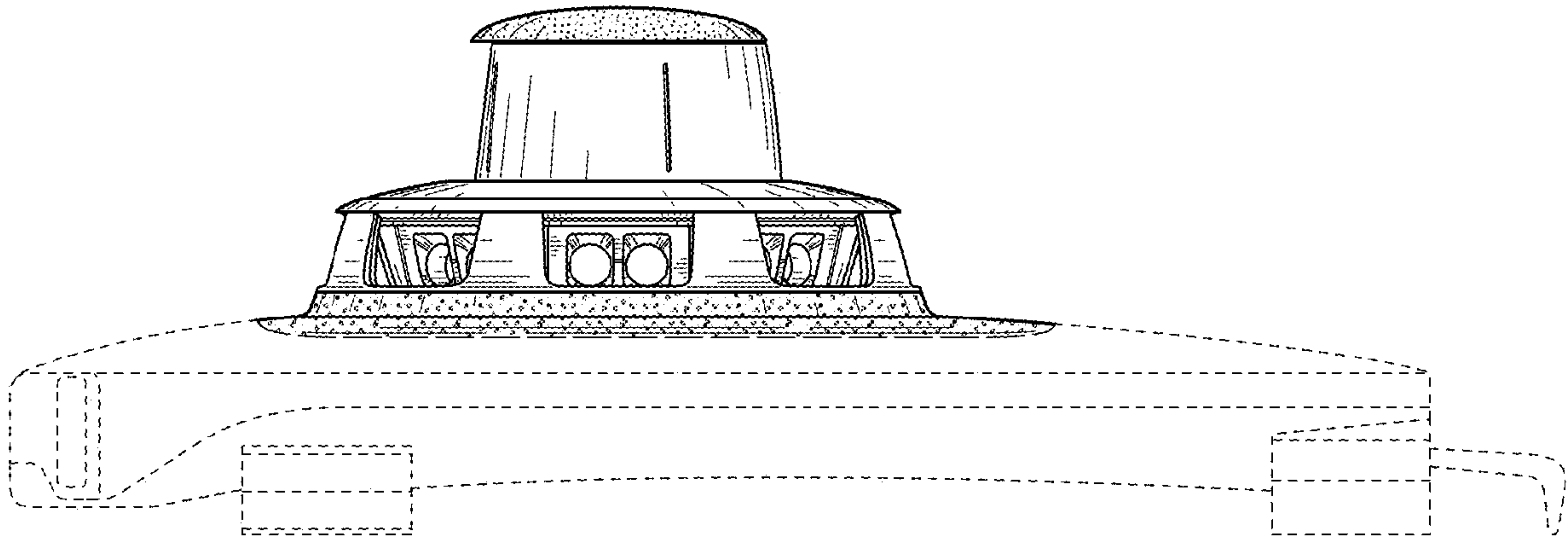


FIG. 61

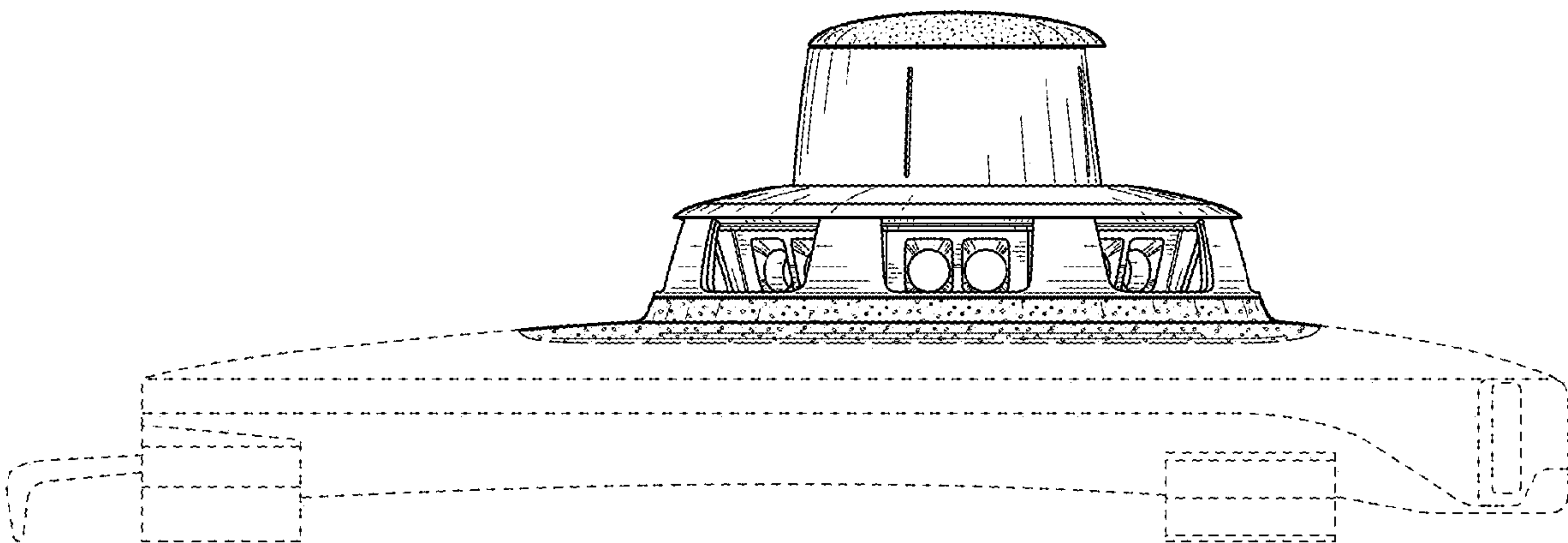


FIG. 62

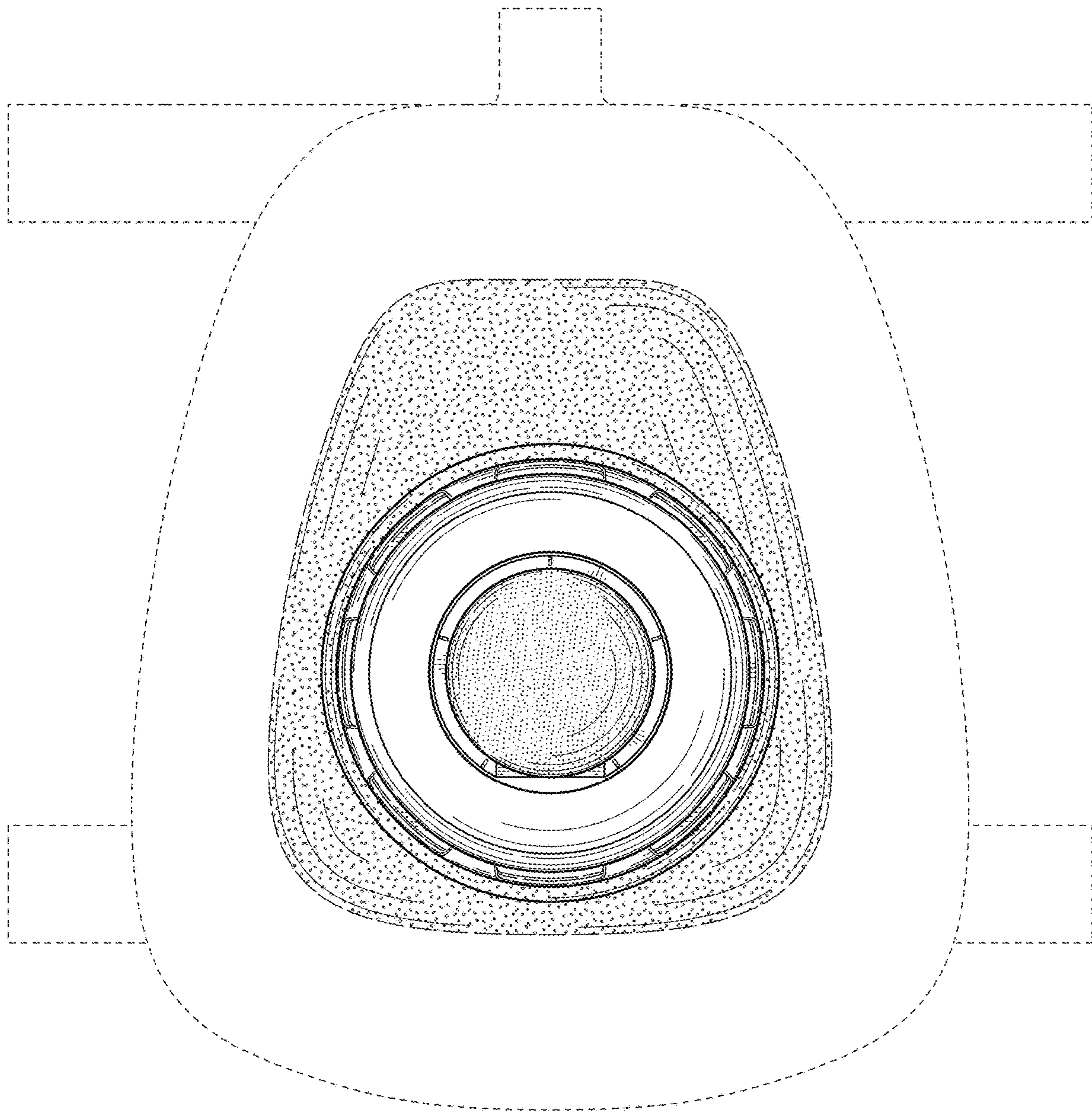


FIG. 63

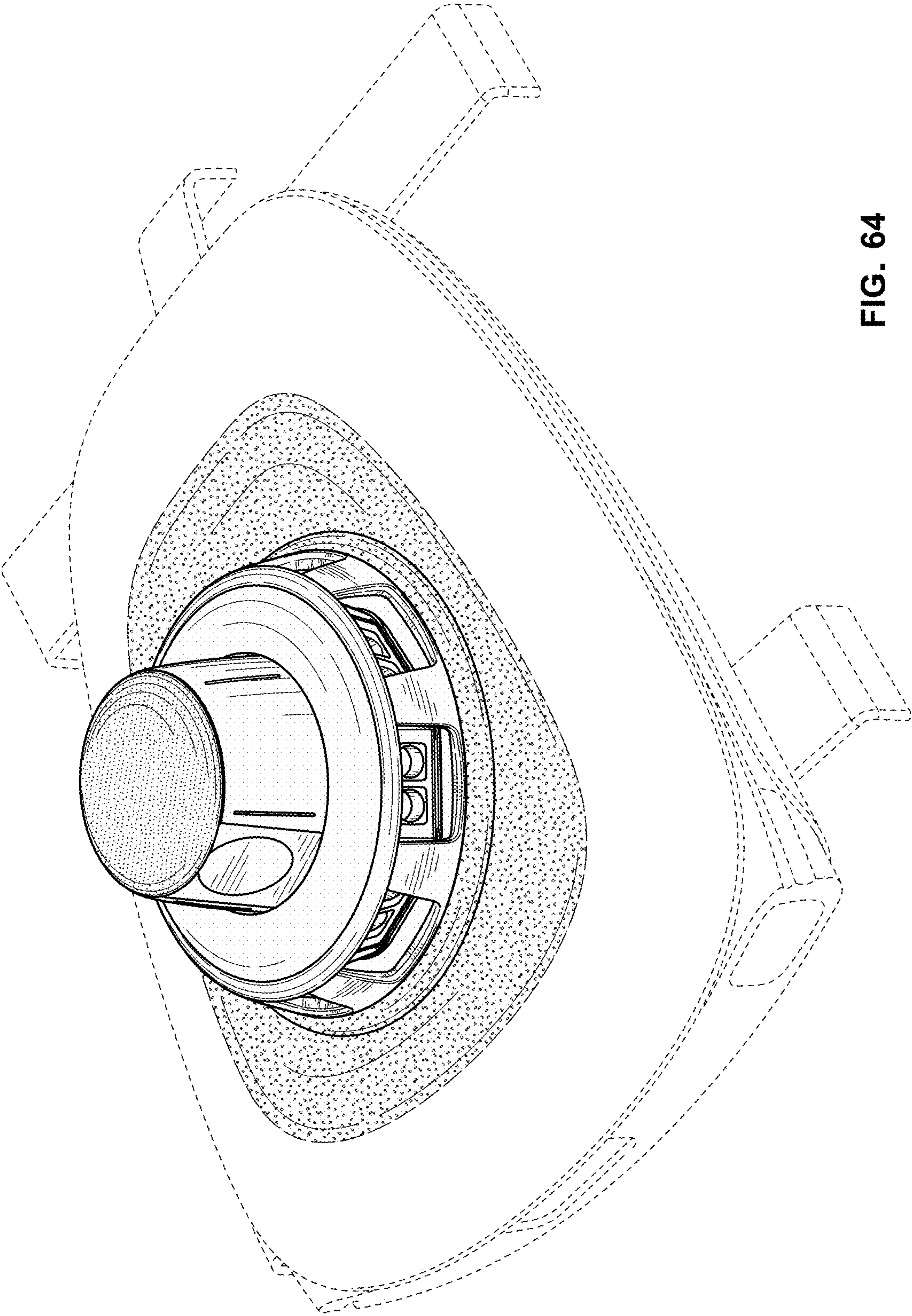


FIG. 64