



US00D971872S

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

(10) **Patent No.:** **US D971,872 S**  
(45) **Date of Patent:** **\*\* Dec. 6, 2022**

(54) **VOICE INPUT/OUTPUT DEVICE**

(71) Applicant: **SHENZHEN GRANDSUN ELECTRONIC CO., LTD.**, Guangdong (CN)  
(72) Inventors: **Haiquan Wu**, Shenzhen (CN); **Xiaobao Lei**, Guangdong (CN); **Weili Chen**, Shenzhen (CN)  
(73) Assignee: **Shenzhen Grandsun Electronic Co., Ltd.**, Shenzhen (CN)  
(\*\*) Term: **15 Years**

(21) Appl. No.: **29/732,938**

(22) Filed: **Apr. 28, 2020**

(30) **Foreign Application Priority Data**

Nov. 28, 2019 (CN) ..... 201930661297.X

(51) **LOC (13) Cl.** ..... **14-01**

(52) **U.S. Cl.**  
USPC ..... **D14/204**

(58) **Field of Classification Search**  
USPC ... D14/159, 208, 209.1, 215, 216, 217, 219, D14/221, 222, 223, 224, 224.1, 225, 226,  
(Continued)

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

D406,845 S \* 3/1999 Goto ..... D14/215  
D514,553 S \* 2/2006 Yang ..... D14/229  
(Continued)

**FOREIGN PATENT DOCUMENTS**

CN 304295153 \* 9/2017  
CN 305485196 \* 12/2019  
(Continued)

**OTHER PUBLICATIONS**

Formation Wedge, announced © 2022 [online], retrieved Feb. 18, 2022, retrieved from internet, <https://www.bowerswilkins.com/wireless-speakers/formation-wedge>.  
(Continued)

*Primary Examiner* — Messina L Smith  
(74) *Attorney, Agent, or Firm* — Robert L. Stearns; Dickinson Wright, PLLC

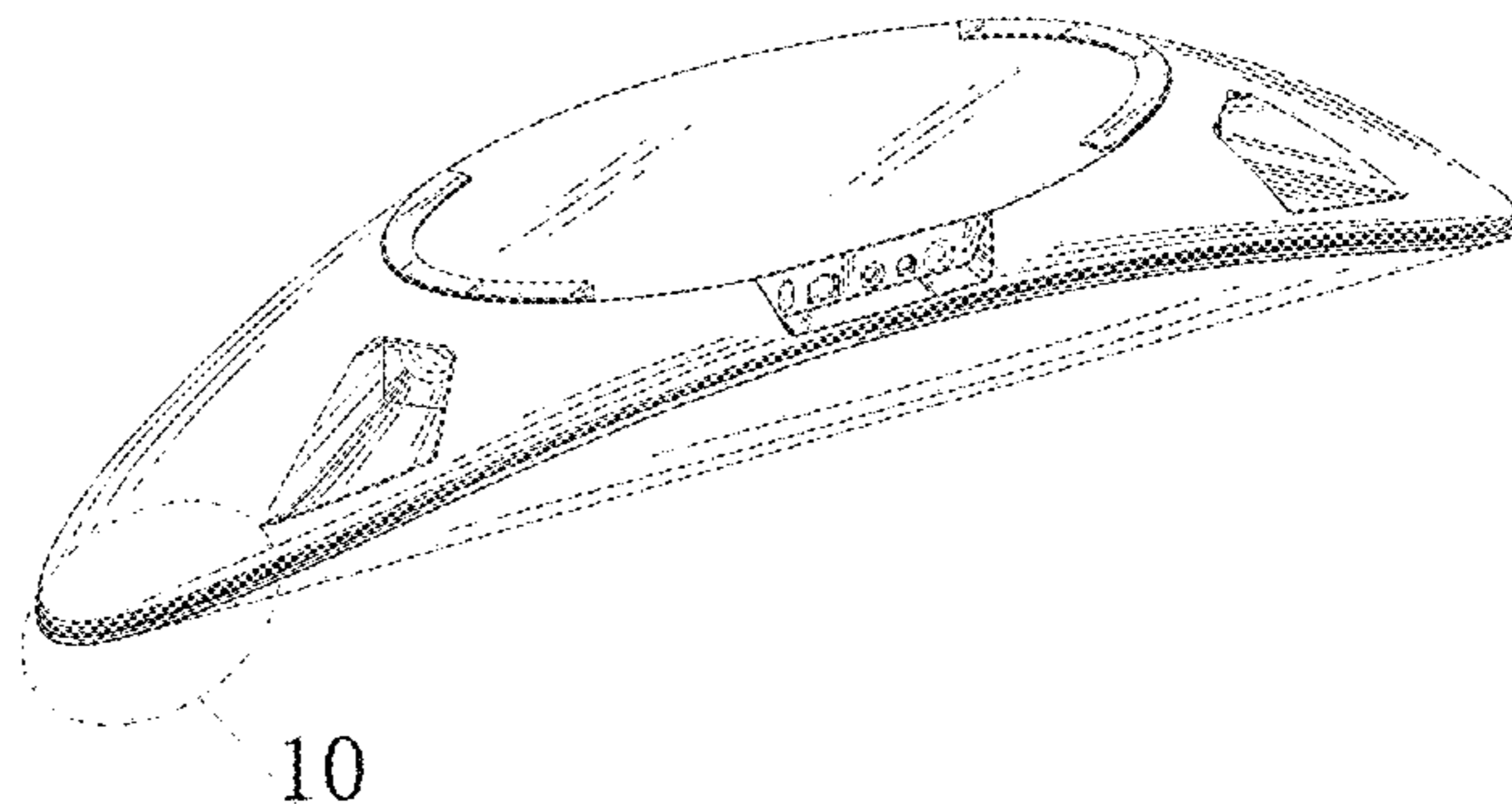
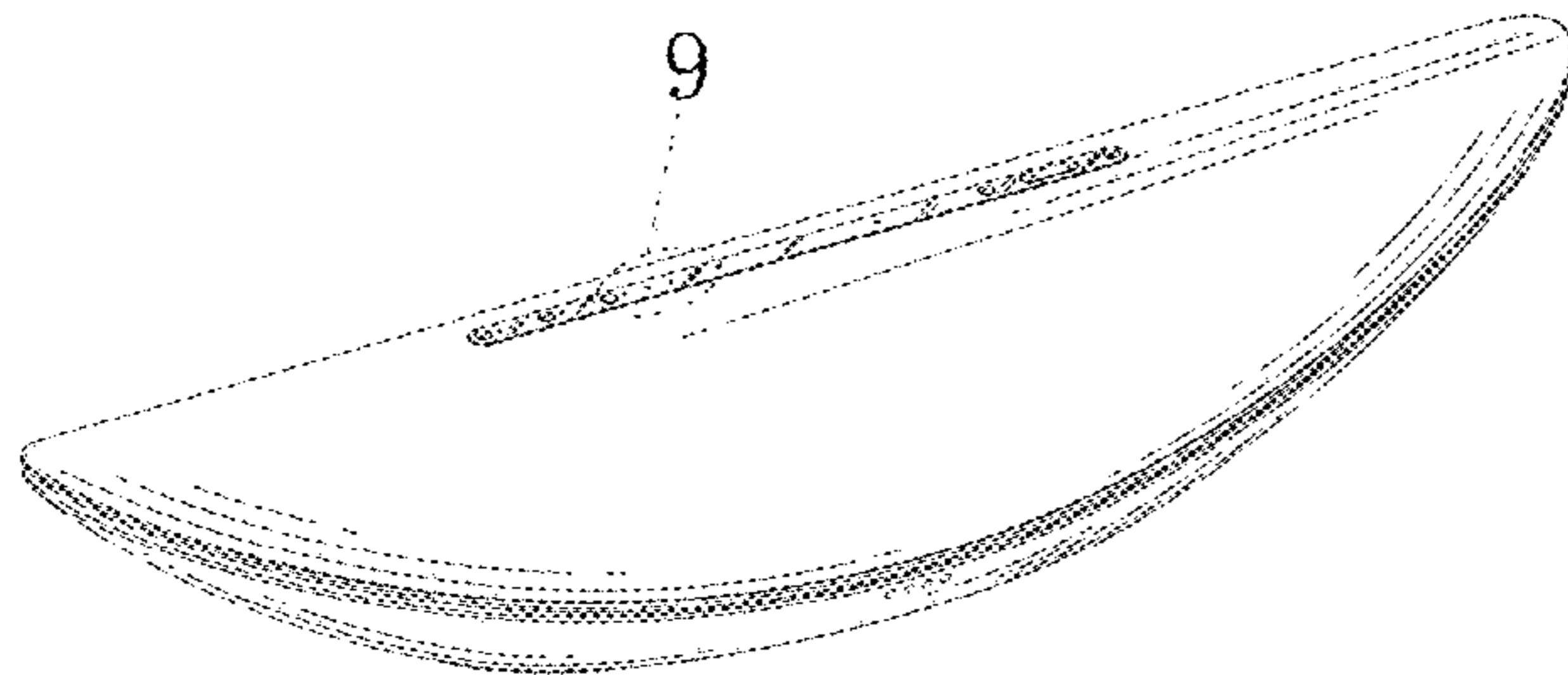
(57) **CLAIM**

The ornamental design for a voice input/output device, as shown and described.

**DESCRIPTION**

FIG. 1 is a top perspective view of a voice input/output device of the present design;  
FIG. 2 is a bottom perspective view of the voice input/output device of the present design;  
FIG. 3 is a front view of the voice input/output device;  
FIG. 4 is a rear view of the voice input/output device;  
FIG. 5 is a left side view of the voice input/output device;  
FIG. 6 is a right side view of the voice input/output device;  
FIG. 7 is a bottom view of the voice input/output device; and  
FIG. 8 is top view of the voice input/output device.  
FIG. 9 is enlarged view of a portion of the voice input/output device shown within the area designated as 9 in FIG. 1.  
FIG. 10 is enlarged view of a portion of the voice input/output device shown within the area designated as 10 in FIG. 2; and,  
FIG. 11 is enlarged view of a portion of the voice input/output device shown within the area designated as 11 in FIG. 3.  
The broken lines in the figures depict portions of the voice input/output device that form on part of the claimed design. The dashed broken lines encircling portions of the voice input/output device in FIG. 1-3 and illustrated in enlarged views in FIG. 9-11 form no part of the claimed design.

**1 Claim, 11 Drawing Sheets**



(58) **Field of Classification Search**

USPC ..... D14/228, 229, 344, 345, 299; D3/201,  
 D3/273, 274, 294, 295; D13/108  
 CPC .. A45F 3/00; A45F 3/001; A45F 3/002; A45F  
 3/14; A45F 3/142; A45F 3/144; A45F  
 3/146; A45F 3/148; H04R 2420/07; H04R  
 5/02; H04R 1/403; H04R 2201/028;  
 G06F 1/1628; G06F 1/1626; A47B  
 23/044

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D554,583 S \* 11/2007 Solland ..... D13/108  
 D636,372 S \* 4/2011 Leung ..... D14/168  
 D640,238 S \* 6/2011 Warren ..... D14/216  
 D642,156 S \* 7/2011 Joseph ..... D14/209.1  
 D676,830 S \* 2/2013 Garrett ..... D14/210  
 D699,709 S \* 2/2014 Files ..... D12/114  
 D714,765 S \* 10/2014 Goransson ..... D14/223  
 D728,523 S \* 5/2015 Cho ..... D14/216  
 D730,869 S \* 6/2015 Lee ..... D14/216  
 D733,098 S \* 6/2015 Takamoto ..... D14/215  
 D753,185 S \* 4/2016 Ryu ..... D14/496  
 D785,597 S \* 5/2017 Fung ..... D14/204  
 D819,602 S \* 6/2018 Won ..... D14/216  
 D822,716 S \* 7/2018 Mangum ..... D14/496  
 D825,528 S \* 8/2018 Huang ..... D14/216  
 D835,072 S \* 12/2018 Won ..... D14/216  
 D842,854 S \* 3/2019 Lee ..... D14/344  
 D868,018 S \* 11/2019 Chen ..... D14/149  
 D886,782 S \* 6/2020 Yasuda ..... D14/204

D929,879 S \* 9/2021 Paschke ..... D10/70  
 2006/0126883 A1\* 6/2006 Thalheimer ..... H04R 5/02  
 381/124  
 2009/0114550 A1\* 5/2009 Ying ..... A45C 15/00  
 206/5

FOREIGN PATENT DOCUMENTS

GB 6094986 \* 7/2020  
 JP D1516230 \* 12/2014  
 JP D1660468 \* 5/2020  
 WO WO-2006031702 A2 \* 3/2006 ..... H04R 1/00

OTHER PUBLICATIONS

The Best Alarm Clocks, announced Jul. 29, 2021 [online], retrieved Feb. 18, 2022, retrieved from internet, <https://www.nytimes.com/wirecutter/reviews/best-alarm-clock/>.\*

Best smart speakers, announced Feb. 11, 2022 [online], retrieved Feb. 18, 2022, retrieved from internet, <https://www.techhive.com/article/583168/best-smart-speakers.html>.\*

Jabra SP700 Bluetooth Speakerphone Review, announced Feb. 2, 2009 [online], retrieved Feb. 18, 2022, retrieved from internet, <https://www.trustedreviews.com/reviews/jabra-sp700-bluetooth-speakerphone>.\*

OontZ Angle 3 Bluetooth Portable Speaker, announced Jul. 1, 2015 [online], retrieved Feb. 18, 2022, retrieved from internet, <https://www.amazon.com/Enhanced-Splashproof-Portable-Bluetooth-Radiator/dp/B010OYASRG?th=1>.\*

Prosonic BT3 Portable Wireless Bluetooth Speaker, announced © 2022 [online], retrieved Feb. 18, 2022, retrieved from internet, <https://www.amazon.com/dp/B09DZNTFPG>.\*

\* cited by examiner

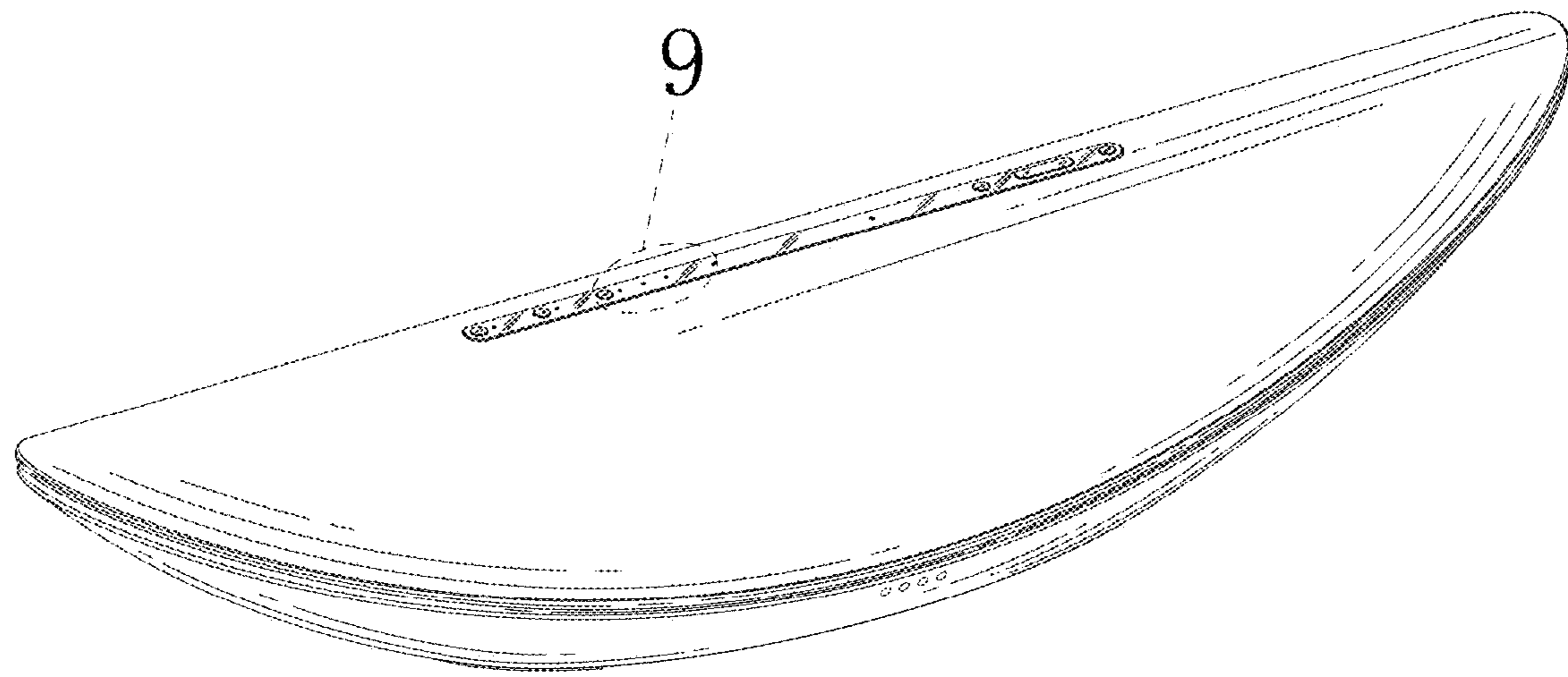


FIG. 1

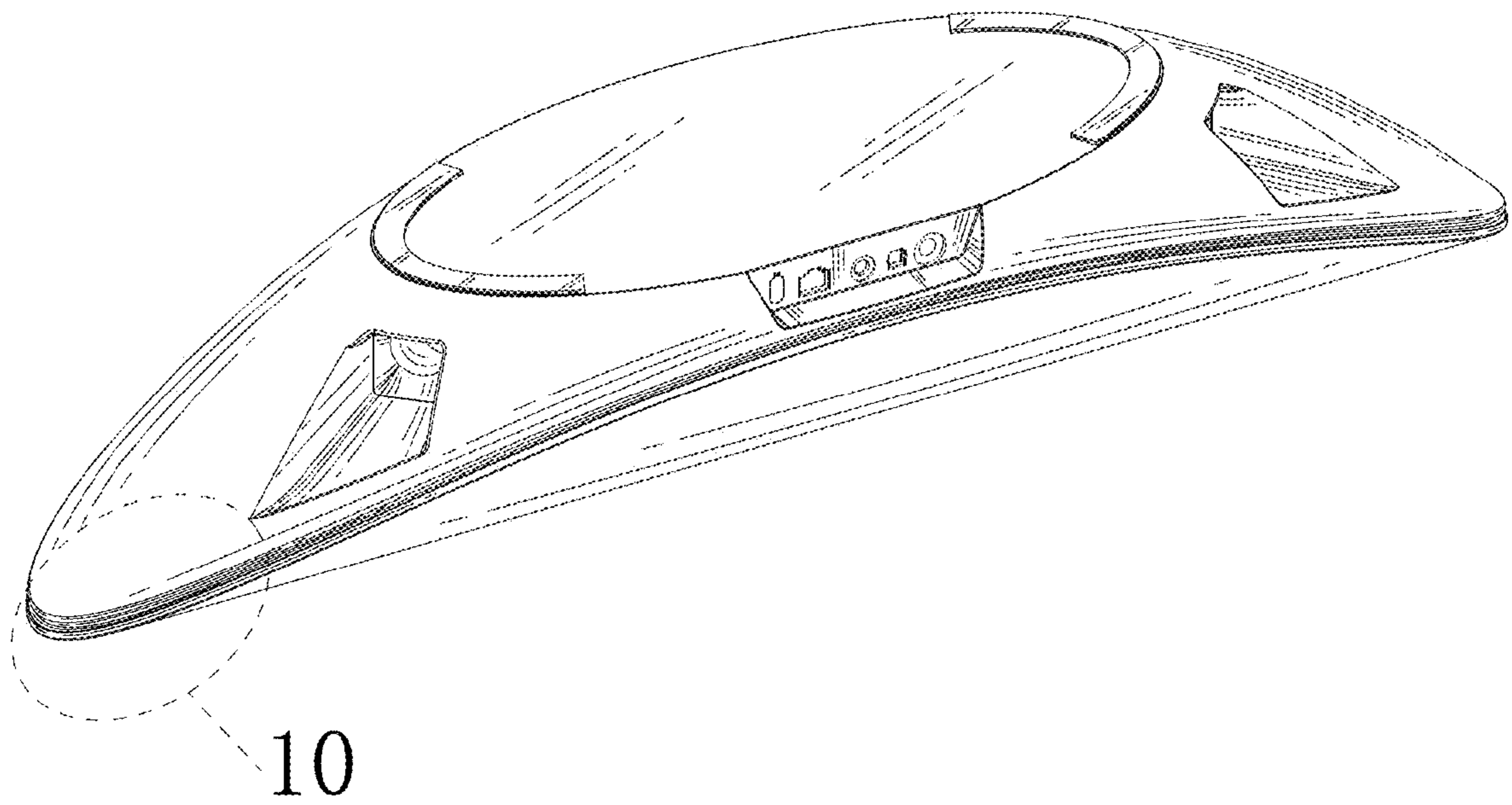


FIG. 2

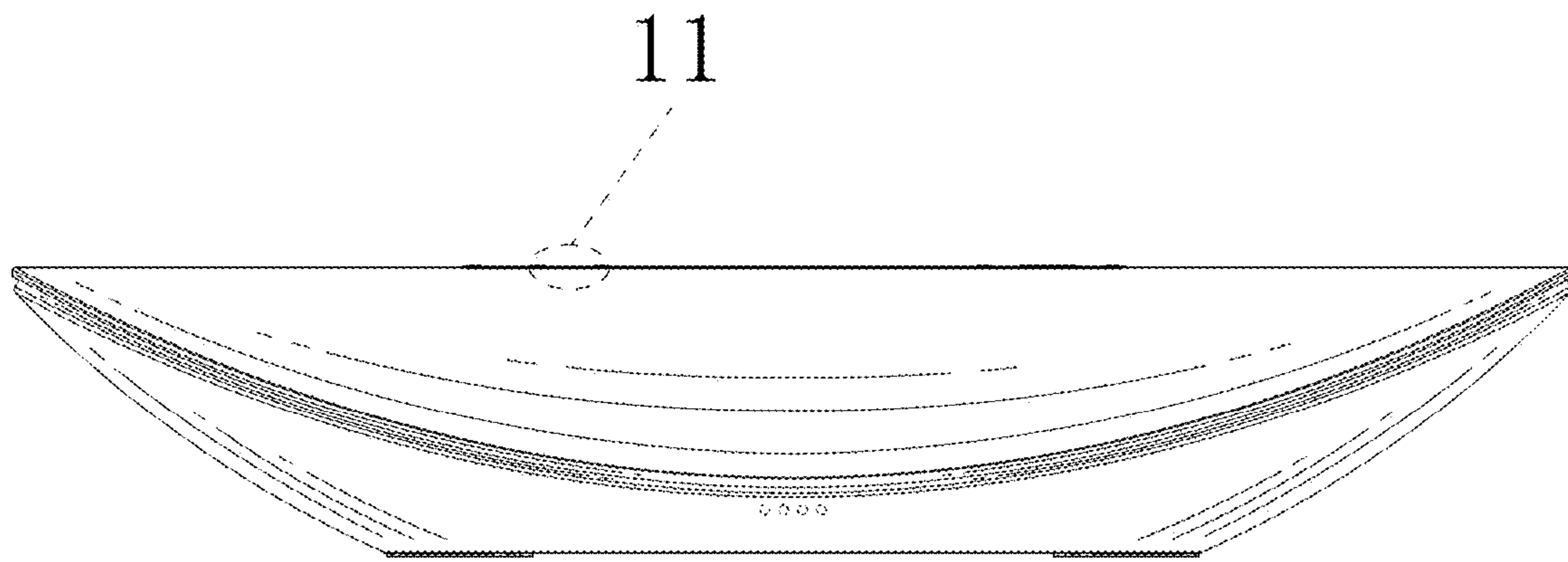


FIG. 3

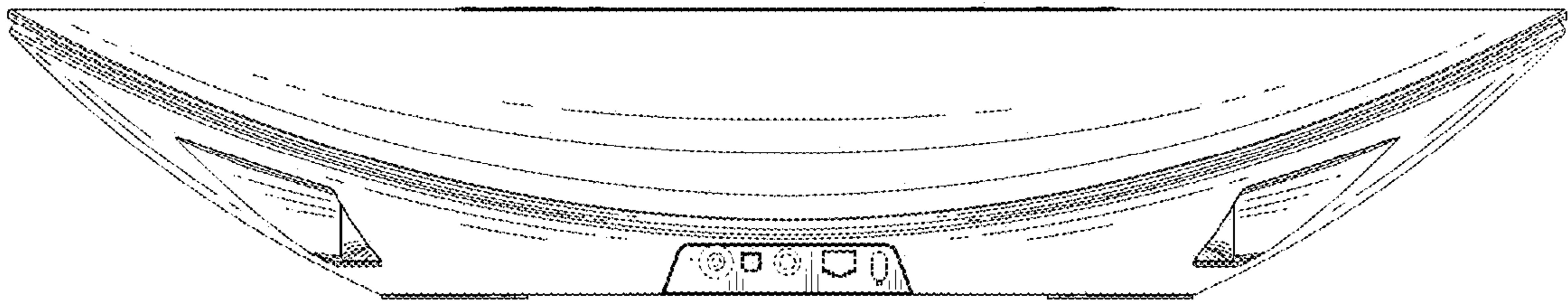


FIG. 4

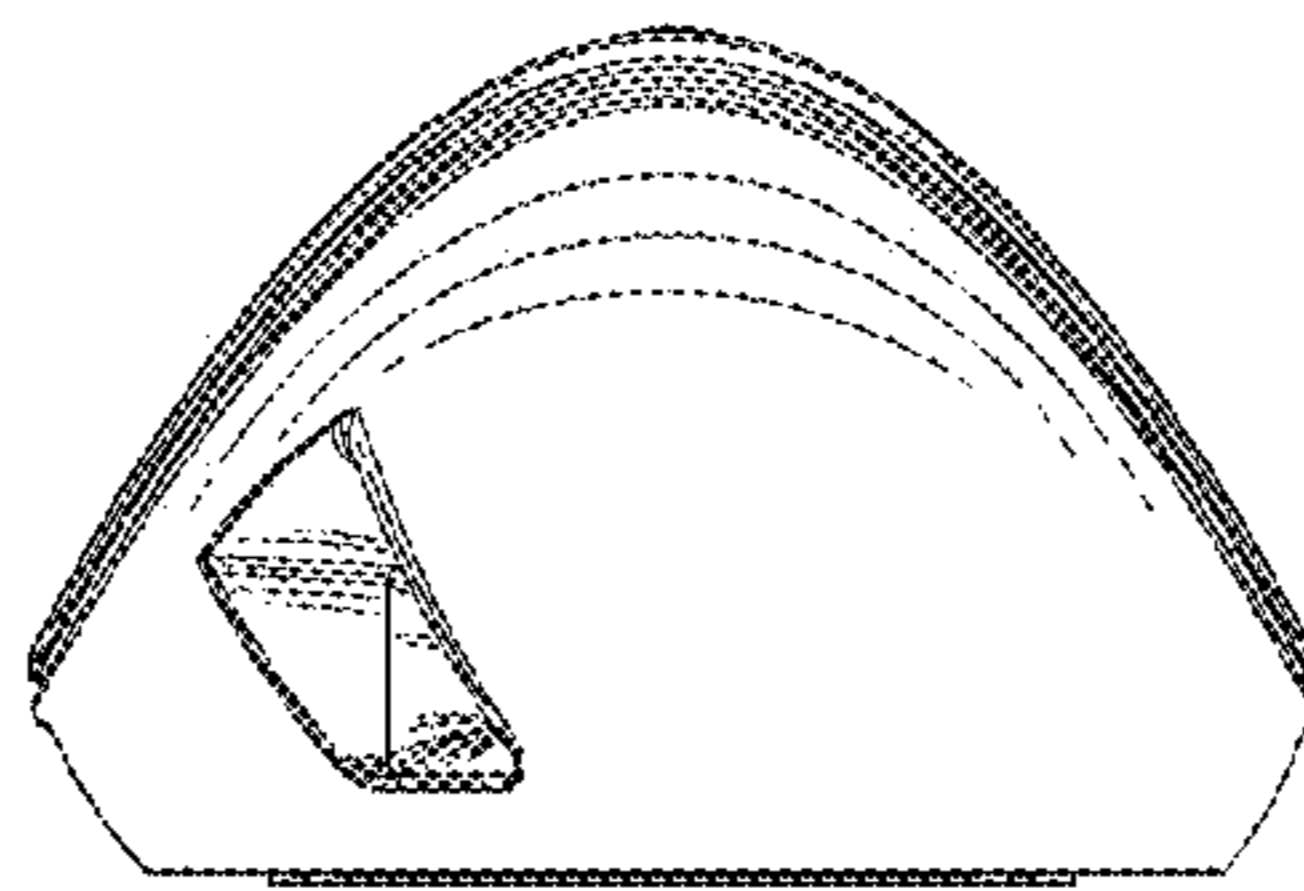


FIG. 5

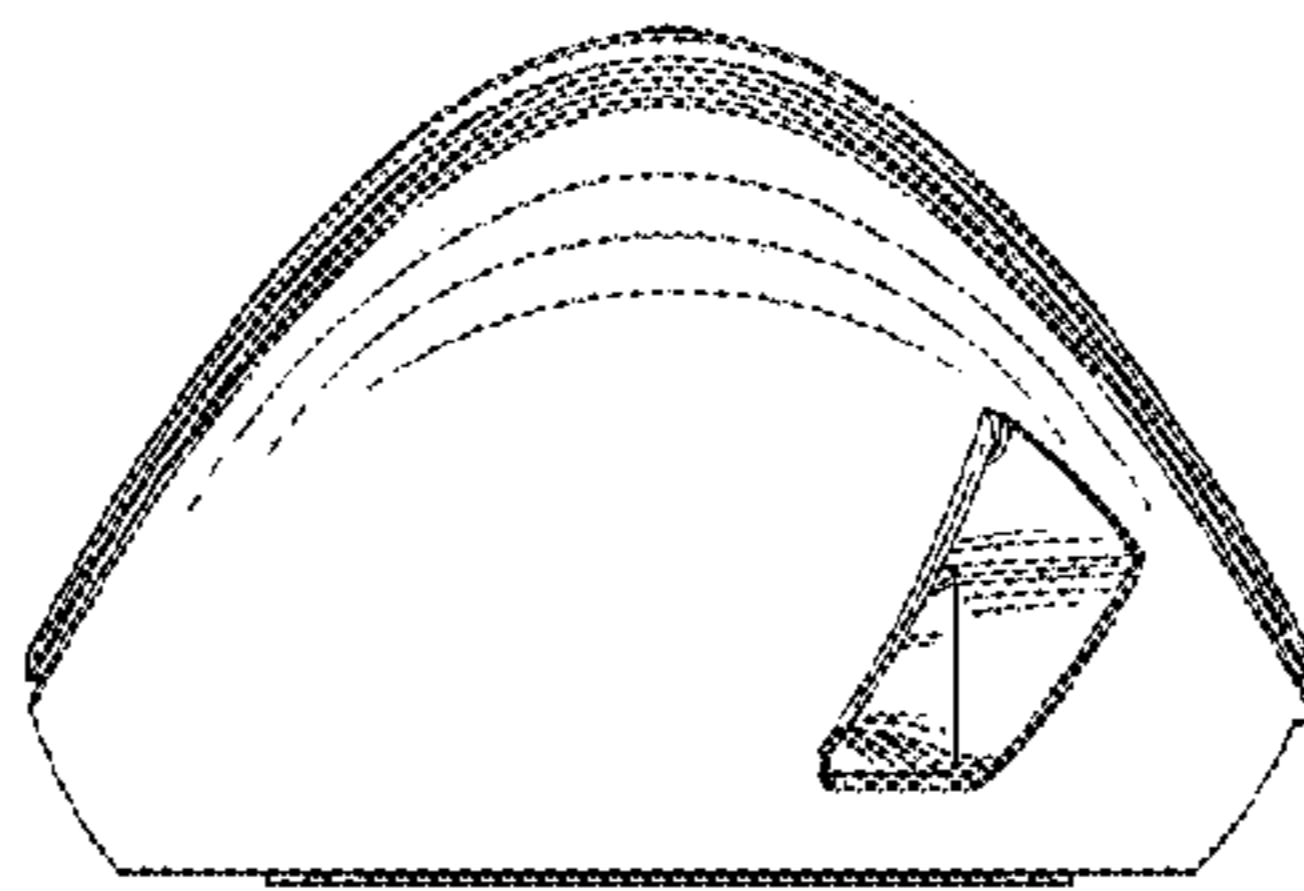


FIG. 6



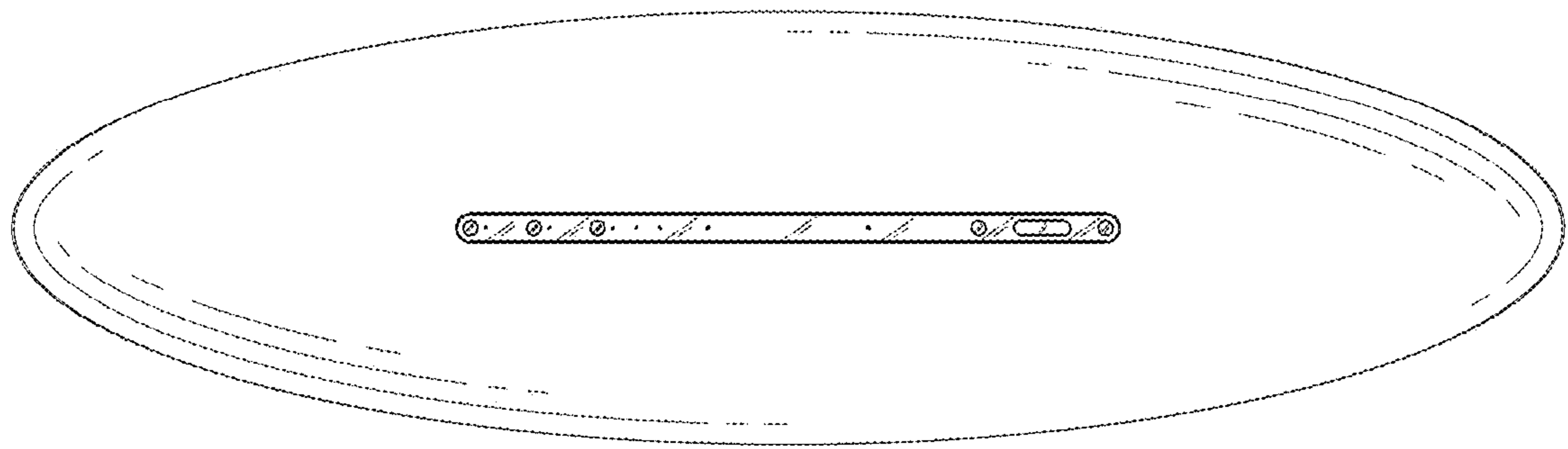


FIG. 7

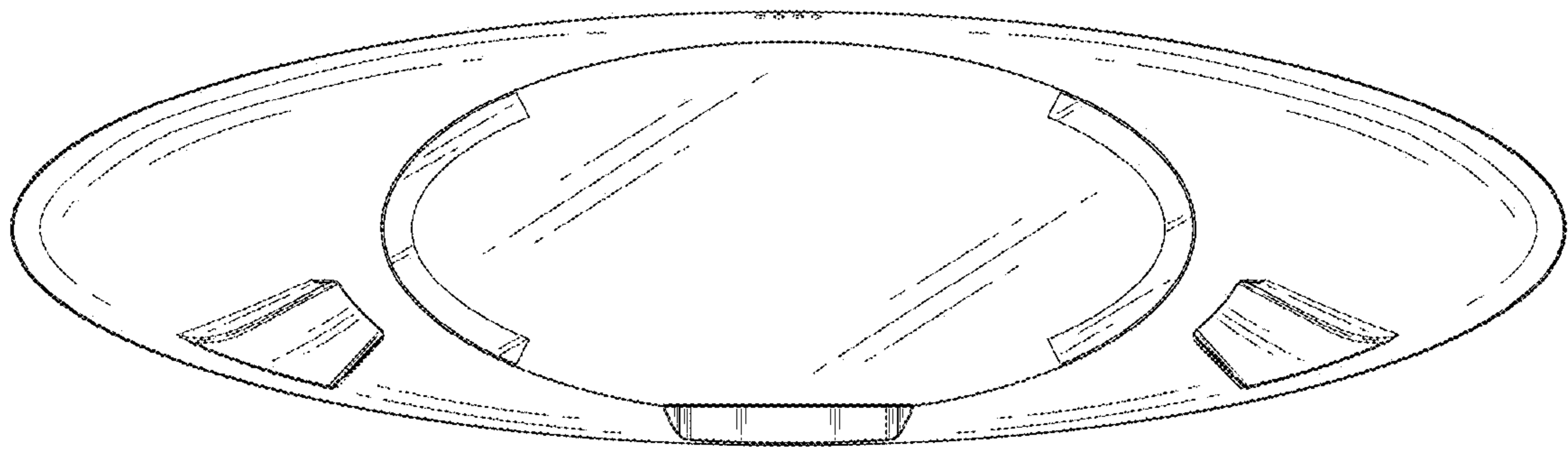


FIG. 8

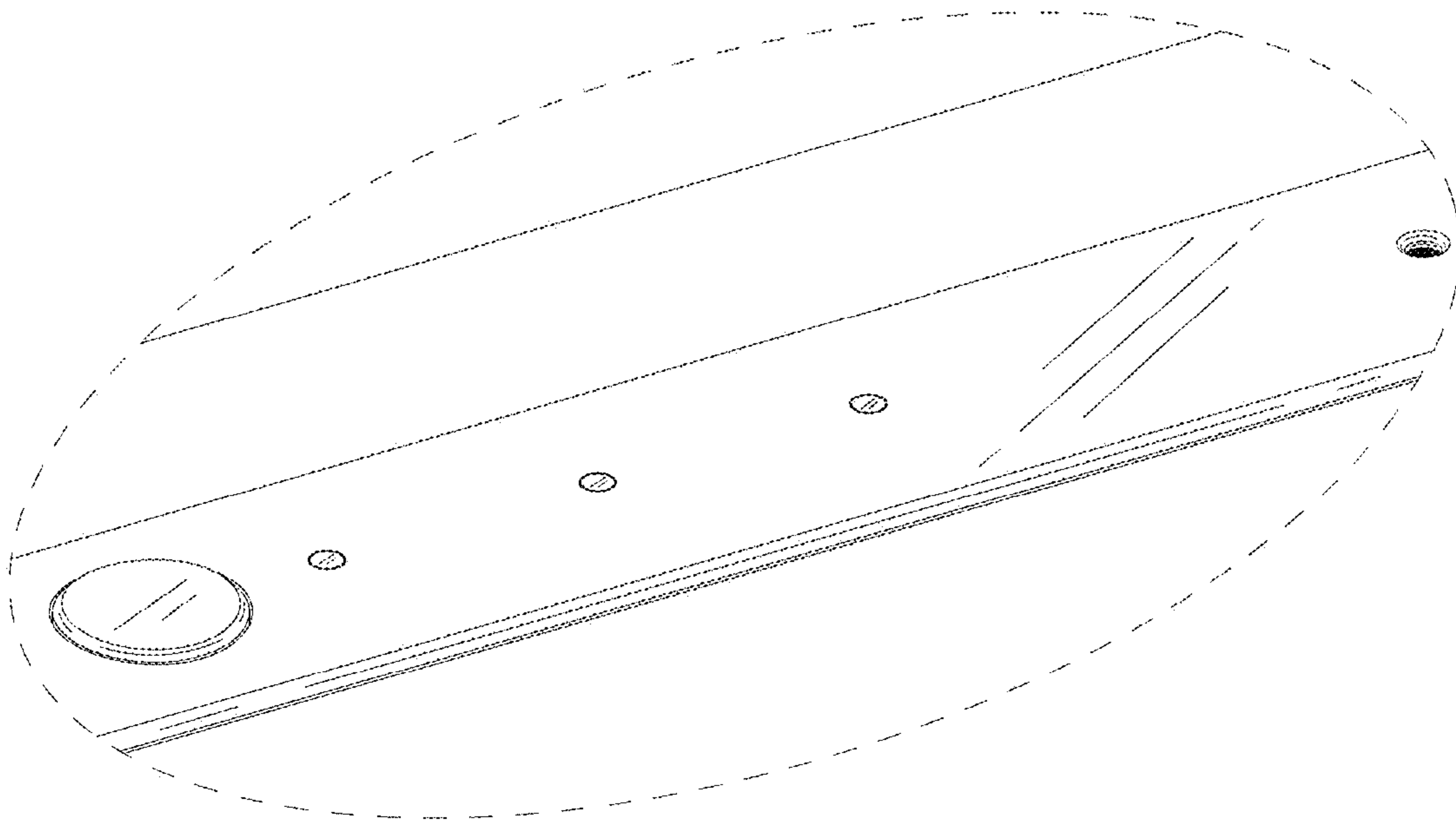


FIG. 9

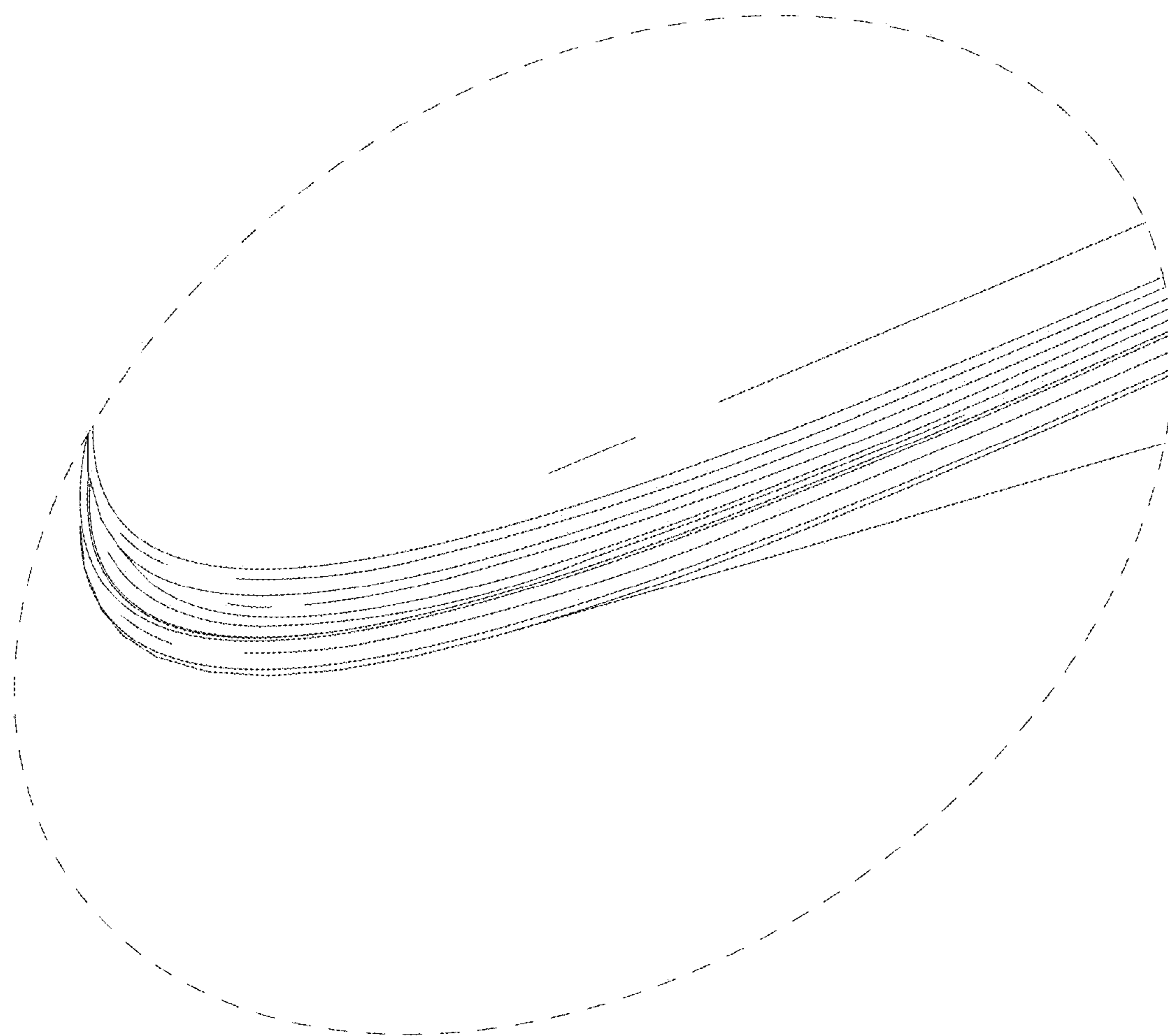


FIG. 10

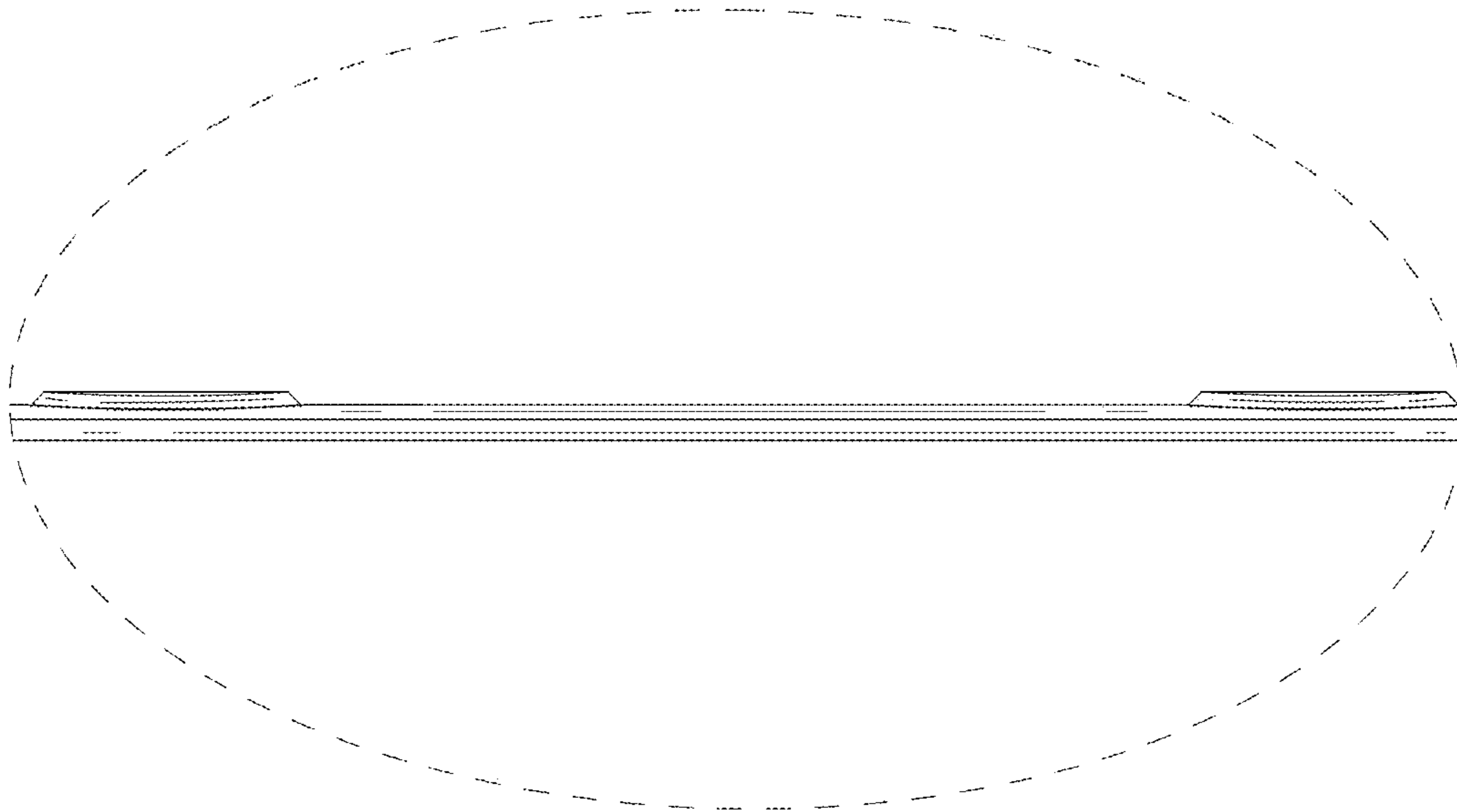


FIG. 11