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(12) **United States Design Patent**
Nishimura

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- (54) **VEHICLE DETECTOR**
- (71) Applicant: **OPTEX CO., LTD.**, Shiga (JP)
- (72) Inventor: **Shinya Nishimura**, Otsu (JP)
- (**) Term: **15 Years**
- (21) Appl. No.: **29/804,165**
- (22) Filed: **Aug. 18, 2021**
- (51) **LOC (14) Cl.** **10-04**
- (52) **U.S. Cl.**
USPC **D10/70**
- (58) **Field of Classification Search**
USPC D10/60, 65, 70, 75, 78, 80, 103, 106.5;
D24/187; D14/230
CPC G01R 19/2513; G01R 21/06; G01R 31/40;
G01R 19/16571; G01R 31/3842; G01R
35/04; G01R 19/0007; G01R 19/16547;
G01R 19/16566; G01R 19/257; G01R
19/16538; G01R 29/24; G01R 31/00;
G01R 19/08
See application file for complete search history.

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|-----------|----|---|---------|-------------|-------|-------------|
| D778,184 | S | * | 2/2017 | Kikstra | | D10/70 |
| D796,364 | S | * | 9/2017 | Konotopskyi | | D10/106.1 |
| D812,595 | S | * | 3/2018 | Kang | | D14/230 |
| 9,927,301 | B2 | * | 3/2018 | Peterson | ..... | G01J 5/0806 |
| D826,073 | S | * | 8/2018 | Alkelai | ..... | D10/70 |
| D860,013 | S | * | 9/2019 | Ahn | ..... | D10/70 |
| D861,526 | S | * | 10/2019 | Wang | ..... | D10/106.6 |
| D862,266 | S | * | 10/2019 | Kondo | ..... | D10/106.6 |
| D874,957 | S | * | 2/2020 | Ahn | ..... | D10/70 |
| D892,652 | S | * | 8/2020 | Bailey | ..... | D10/70 |
| D899,482 | S | * | 10/2020 | Li | ..... | D10/118.2 |
| D902,974 | S | * | 11/2020 | Park | ..... | D16/208 |
| D906,853 | S | * | 1/2021 | Kang | ..... | D10/106.8 |
| D937,698 | S | * | 12/2021 | Noguchi | ..... | D10/106.6 |
| D938,074 | S | * | 12/2021 | He | ..... | D26/26 |
| D941,693 | S | * | 1/2022 | Walliser | ..... | D10/52 |
| D968,982 | S | * | 11/2022 | Zhevelev | | D10/70 |
| D978,120 | S | * | 2/2023 | Castronova | | D14/230 |

(Continued)

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(57) **CLAIM**

The ornamental design for a vehicle detector, as shown and described.

DESCRIPTION

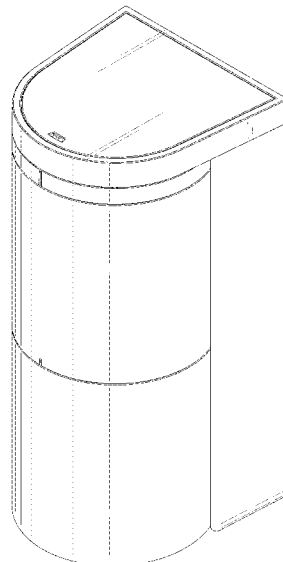
FIG. 1 is a perspective view of front, right and top side of a vehicle detector showing my new design;
FIG. 2 is a front view thereof;
FIG. 3 is a rear view thereof;
FIG. 4 is a left side view thereof;
FIG. 5 is a right side view thereof;
FIG. 6 is a top plan view thereof; and,
FIG. 7 is a bottom plan view thereof.
The broken lines in the figures are included for the purpose of illustrating portions of the vehicle detector that form no part of the claimed design.

1 Claim, 6 Drawing Sheets

(56) **References Cited**

U.S. PATENT DOCUMENTS

| | | | | | | |
|-----------|----|---|---------|------------|-------|--------------------------|
| D307,245 | S | * | 4/1990 | Biersdorff | ..... | D10/106.6 |
| D485,774 | S | * | 1/2004 | Hwang | ..... | D10/106.6 |
| D516,441 | S | * | 3/2006 | Iida | ..... | D10/70 |
| 7,321,120 | B1 | * | 1/2008 | Gorman | ..... | G08B 13/193 250/338.1 |
| D595,275 | S | * | 6/2009 | Skottke | ..... | D14/230 |
| D619,126 | S | * | 7/2010 | Lee | ..... | D14/230 |
| D628,103 | S | * | 11/2010 | Schmalz | ..... | D10/70 |
| D649,673 | S | * | 11/2011 | Liang | ..... | D26/85 |
| D650,506 | S | * | 12/2011 | Kaule | ..... | D26/85 |
| D666,512 | S | * | 9/2012 | Gresko | ..... | D10/70 |
| 8,258,949 | B1 | * | 9/2012 | Jaynes | ..... | G08B 13/19 340/567 |
| D731,906 | S | * | 6/2015 | Troutman | ..... | D10/70 |
| D756,813 | S | * | 5/2016 | Ueland | ..... | D10/70 |



(56)

References Cited

U.S. PATENT DOCUMENTS

| | | | | |
|--------------|-----|--------|----------------|------------------------|
| 2005/0117153 | A1* | 6/2005 | Kishi | G01C 15/002 356/399 |
| 2009/0115684 | A1* | 5/2009 | Wang | H01Q 1/1207 343/882 |
| 2010/0019903 | A1* | 1/2010 | Sawaya | G01J 5/0846 340/552 |
| 2017/0115165 | A1* | 4/2017 | Peterson | G01J 5/0022 |
| 2019/0259258 | A1* | 8/2019 | Morita | G01J 5/0025 |

* cited by examiner

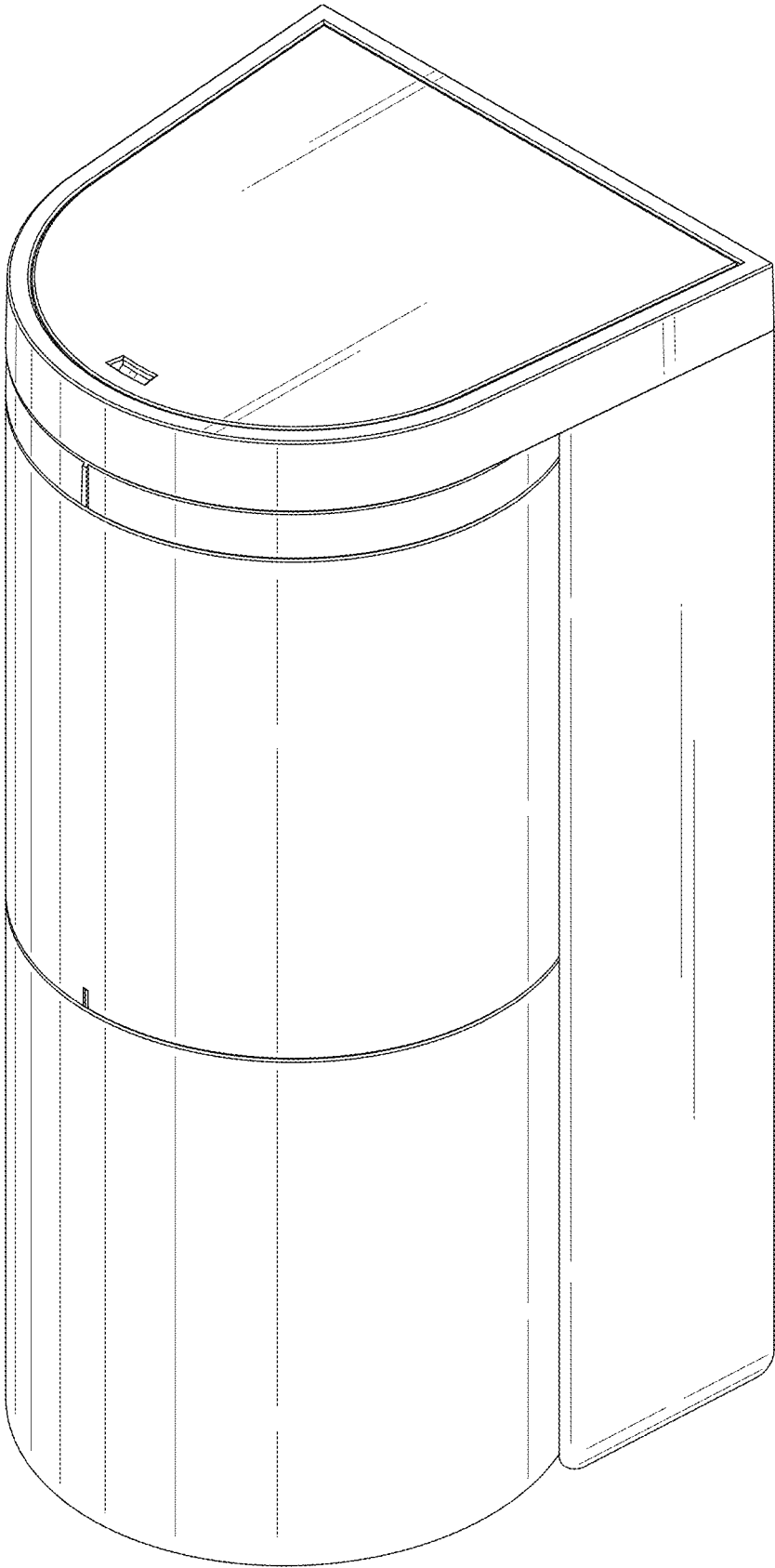


FIG. 1

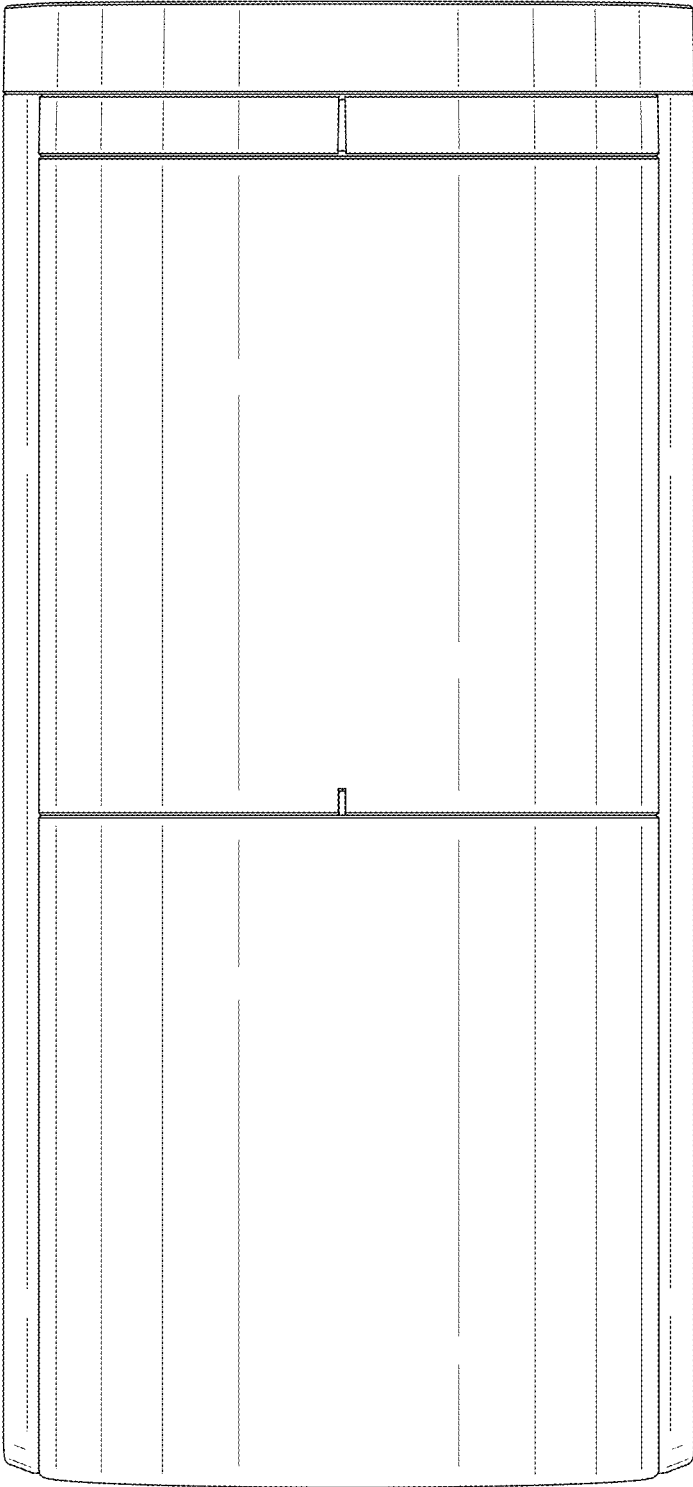


FIG. 2

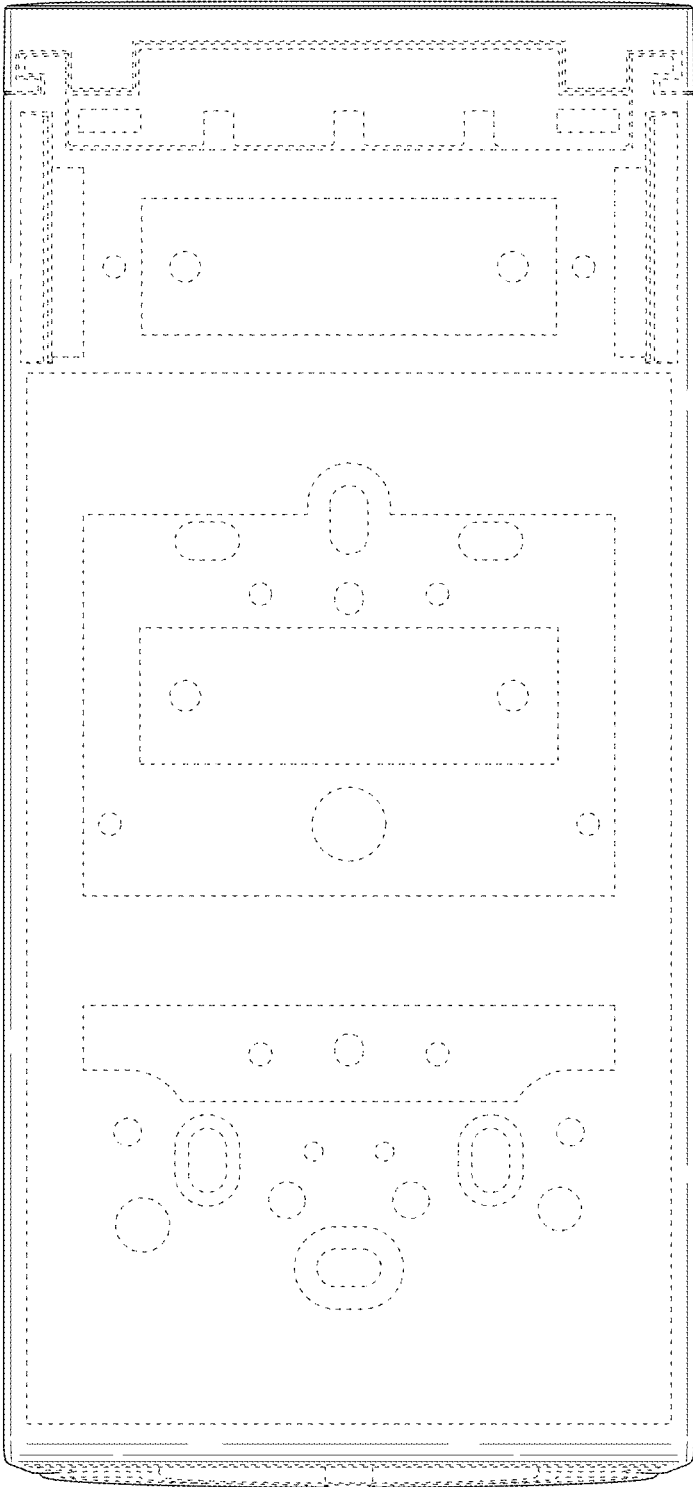


FIG. 3

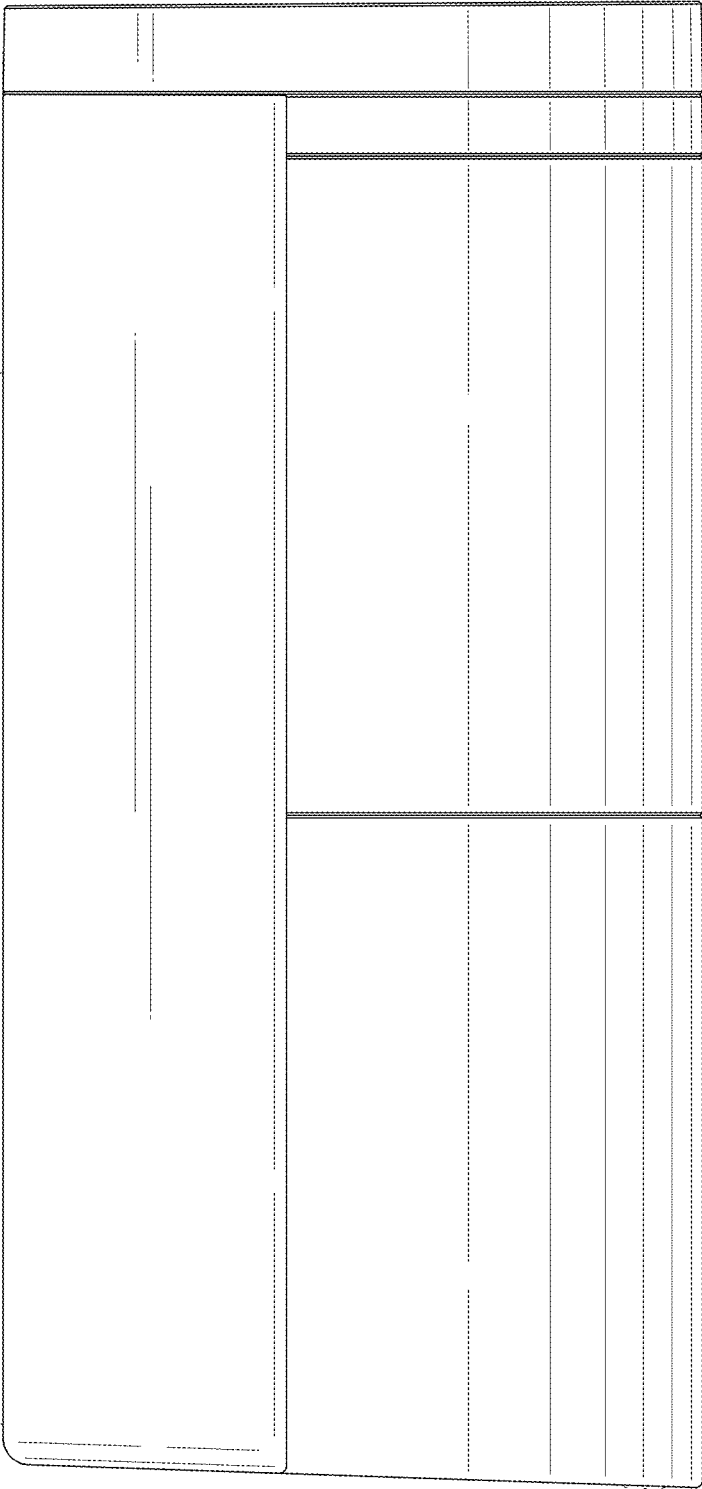


FIG. 4

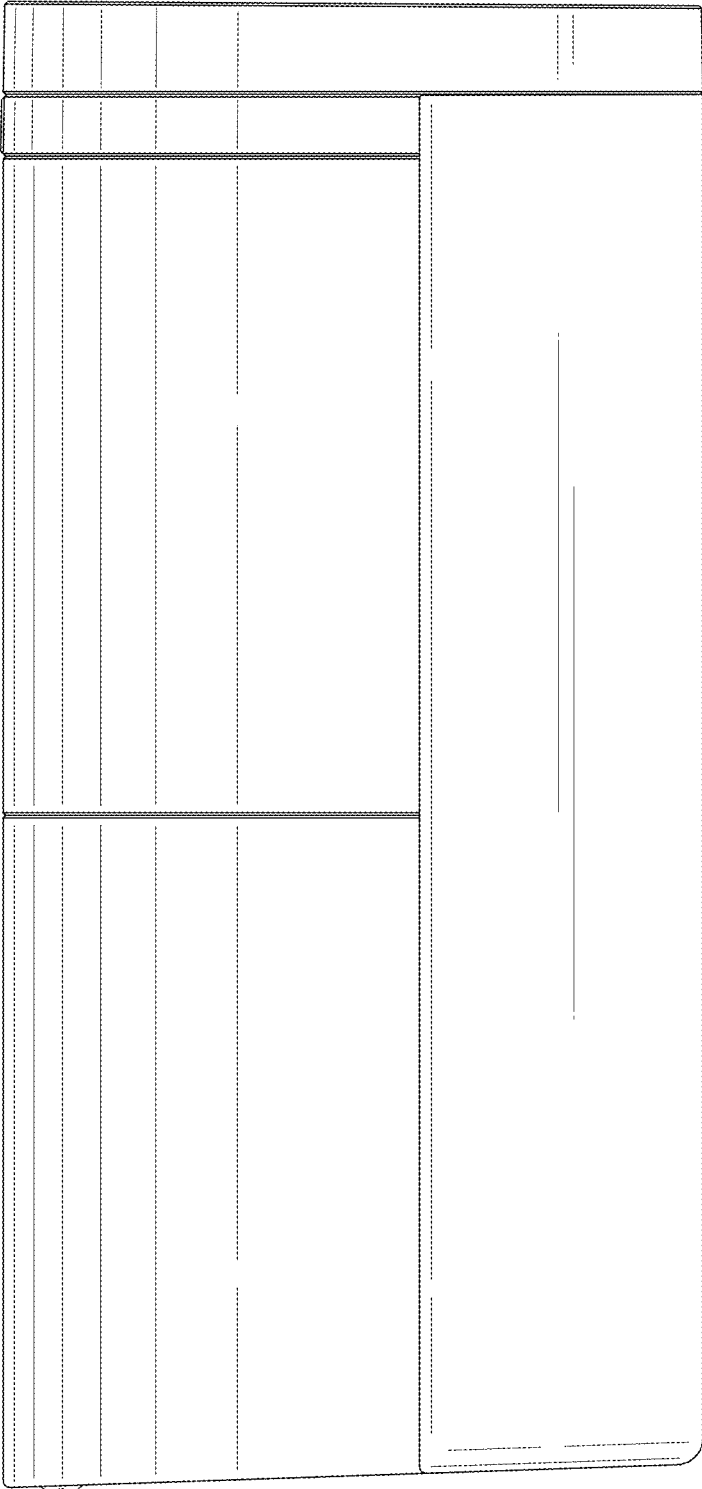


FIG. 5

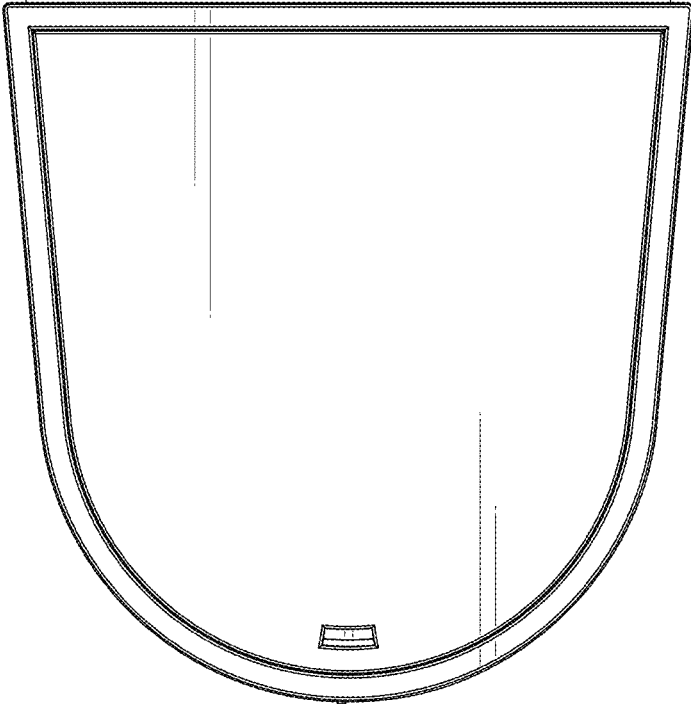


FIG. 6

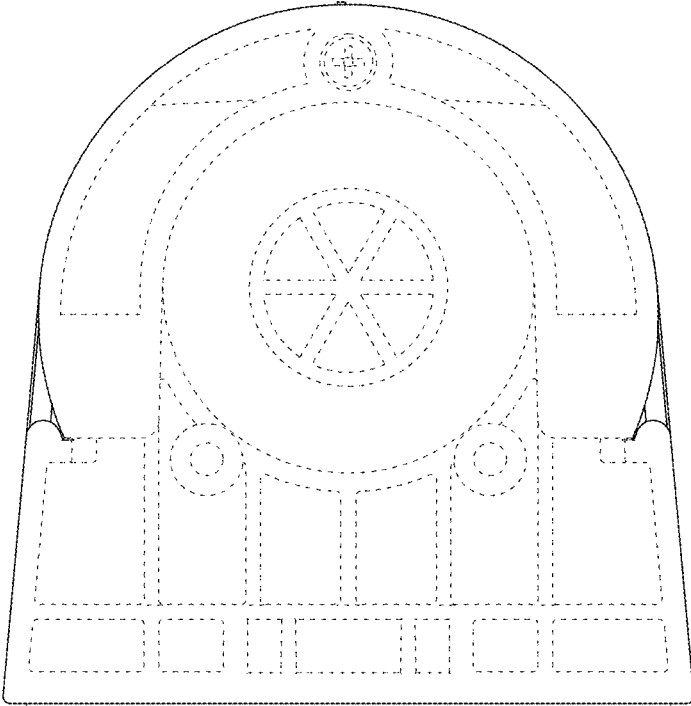


FIG. 7