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

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- (54) **MULTI-FUNCTIONAL CHARGER**
- (71) Applicants: **Mingchang Huang**, Shaoyang (CN);  
**Panwen Huang**, Shenzhen (CN)
- (72) Inventors: **Mingchang Huang**, Shaoyang (CN);  
**Panwen Huang**, Shenzhen (CN)
- (\*\*) Term: **15 Years**
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- (51) **LOC (10) Cl.** ..... **13-02**
- (52) **U.S. Cl.**  
USPC ..... **D13/108**
- (58) **Field of Classification Search**  
USPC ..... D13/107-110, 118, 119, 184; D14/251,  
D14/253, 432, 434  
CPC ..... Y02E 60/12; Y02T 90/14; Y02T 90/122;  
Y02T 90/128; Y02T 90/163; H02J 7/025;  
H02J 7/0042; H02J 7/0044; H02J 7/0045;  
H02J 7/0003; H01F 38/14; H01R  
13/6675; H01M 2/1022; H01M 2/1055;  
H01M 10/44; H01M 10/46; H01M  
10/425; B60L 11/182  
See application file for complete search history.

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*Primary Examiner* — Rosemary K Tarcza  
*Assistant Examiner* — Alison Ofstun  
(74) *Attorney, Agent, or Firm* — Novoclaims Patent  
Services LLC; Mei Lin Wong

(57) **CLAIM**

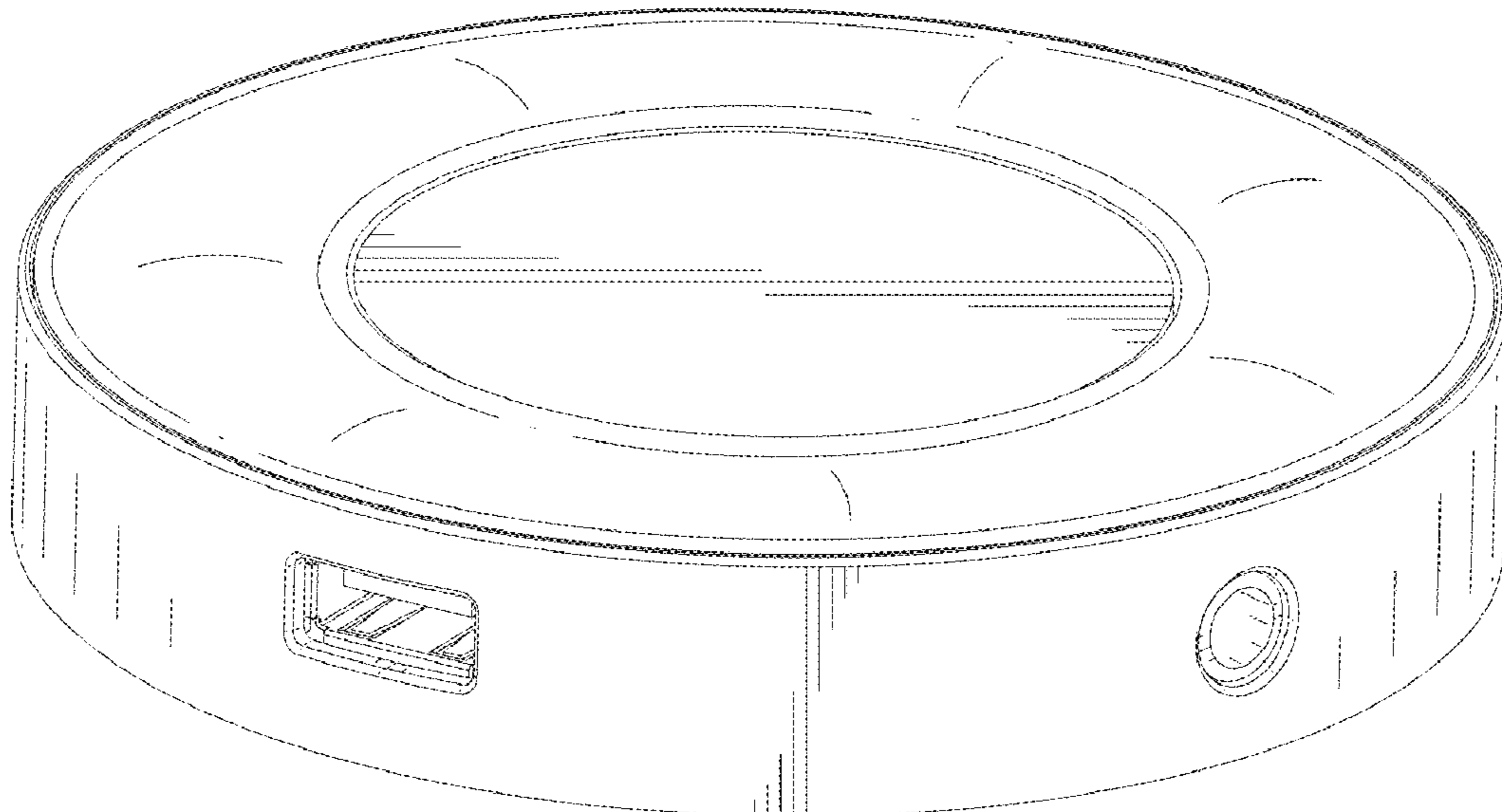
The ornamental design for a multi-functional charger, as shown and described.

**DESCRIPTION**

FIG. 1 is a perspective view of a multi-functional charger showing our new design.  
FIG. 2 is a front view thereof.  
FIG. 3 is a rear view thereof.  
FIG. 4 is a left end view thereof.  
FIG. 5 is a right end view thereof.  
FIG. 6 is a top view thereof; and,  
FIG. 7 is a bottom view thereof.

**1 Claim, 7 Drawing Sheets**

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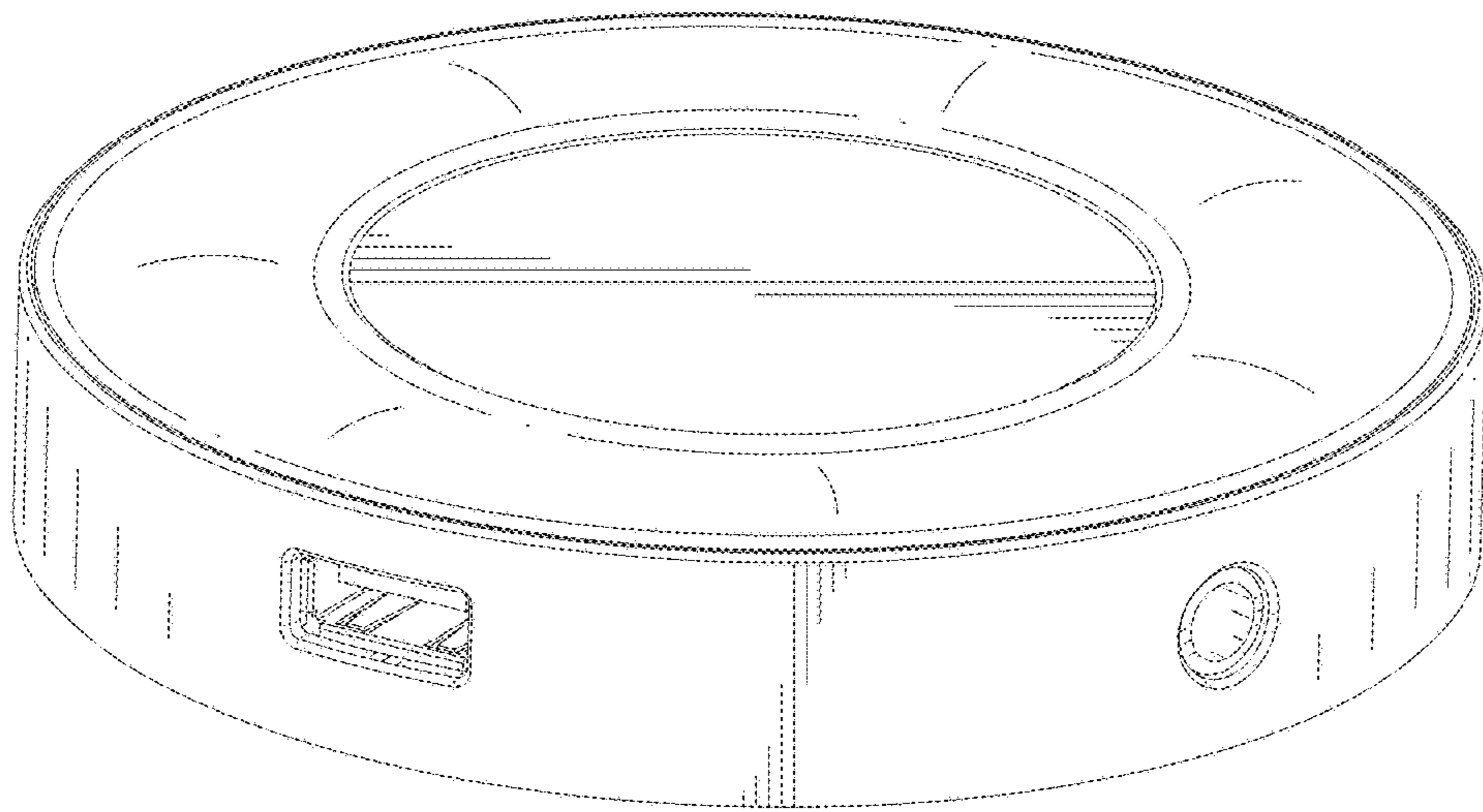


FIG.1

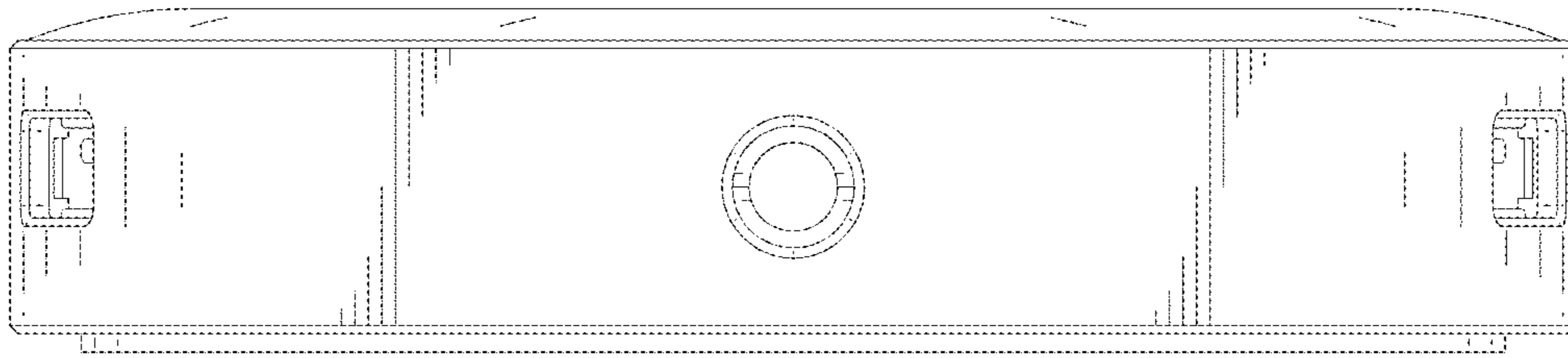


FIG.2

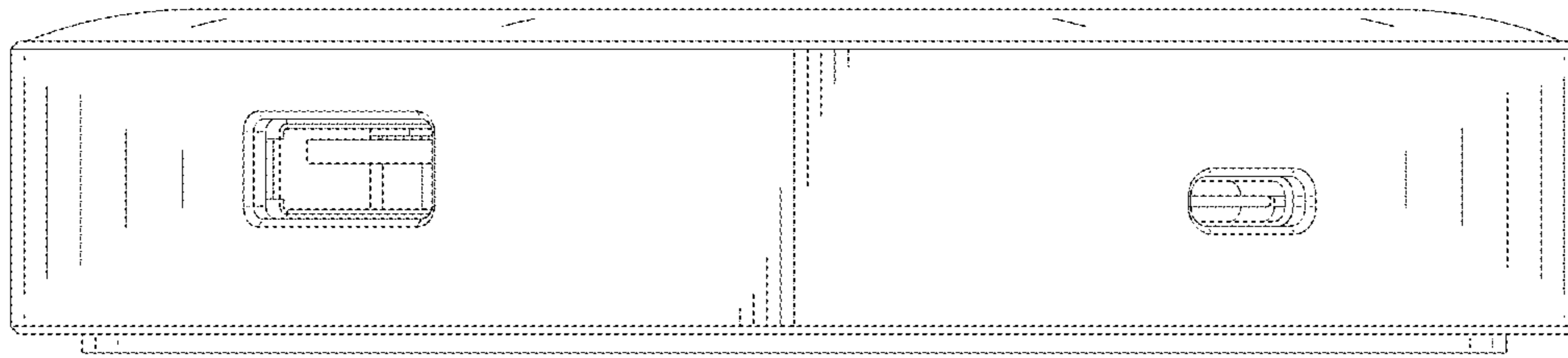


FIG.3

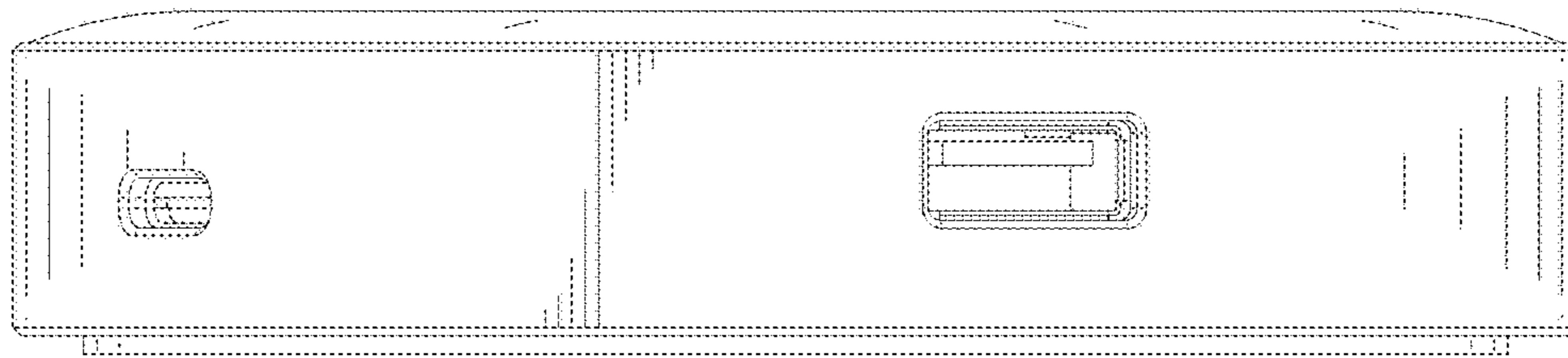


FIG.4

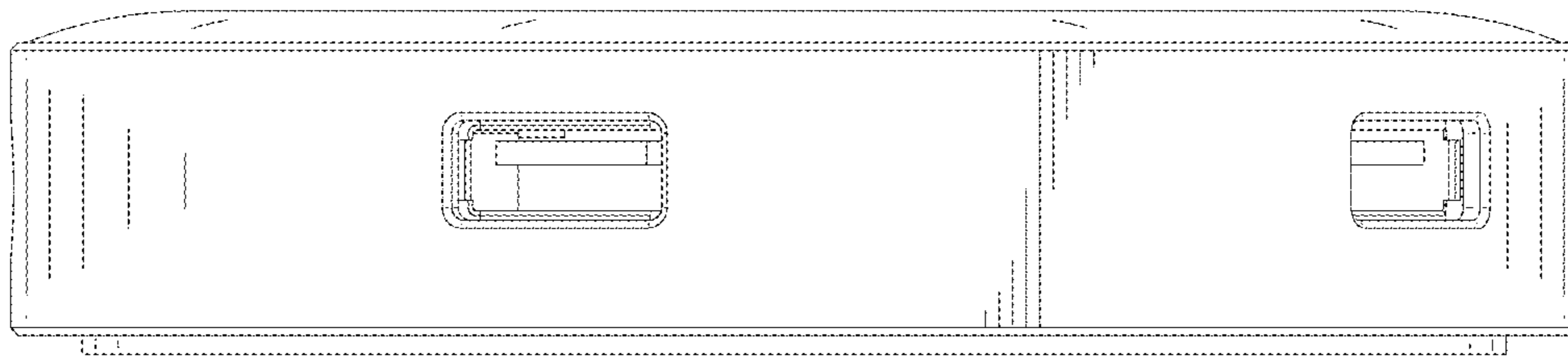


FIG.5

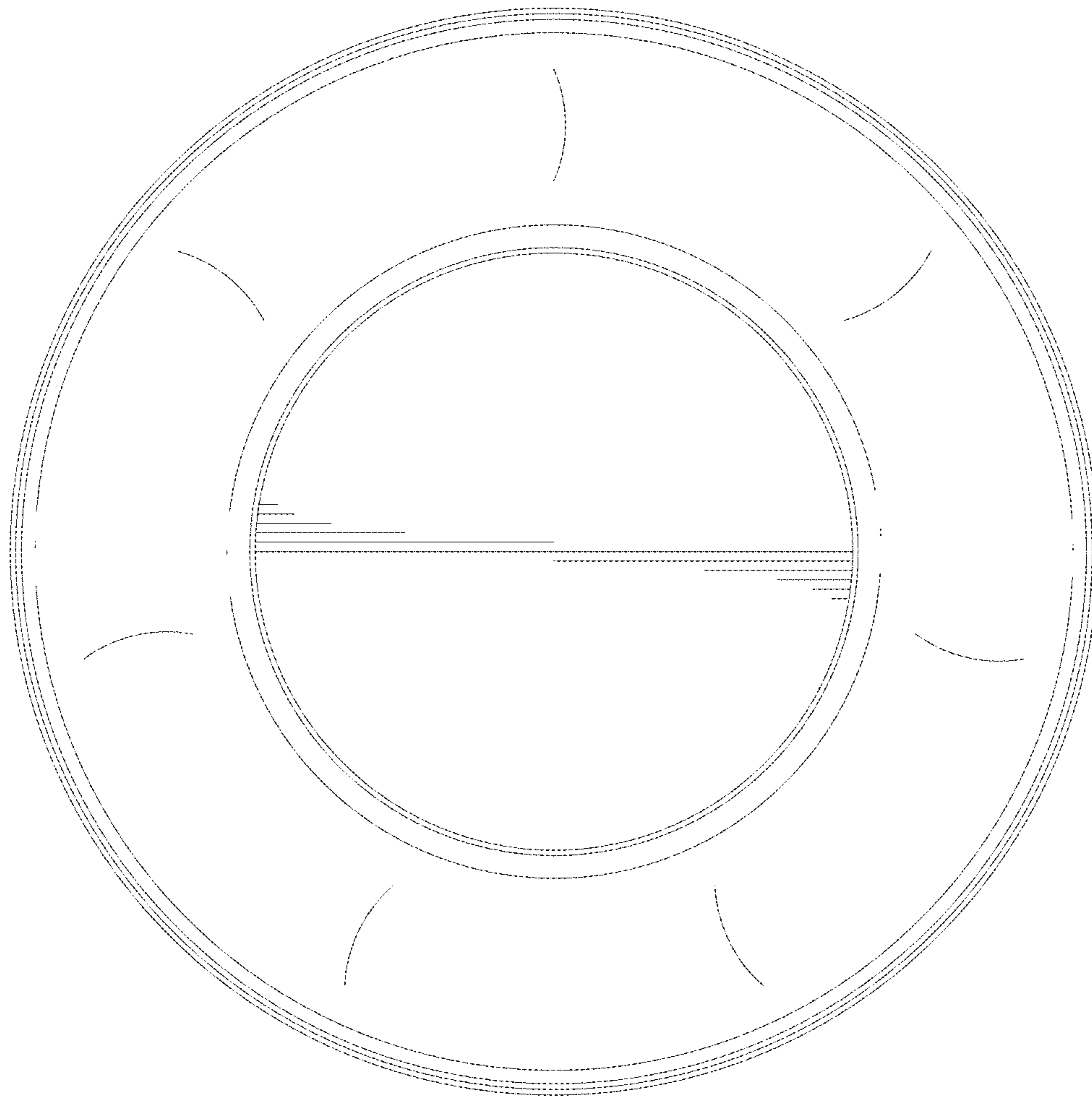


FIG.6

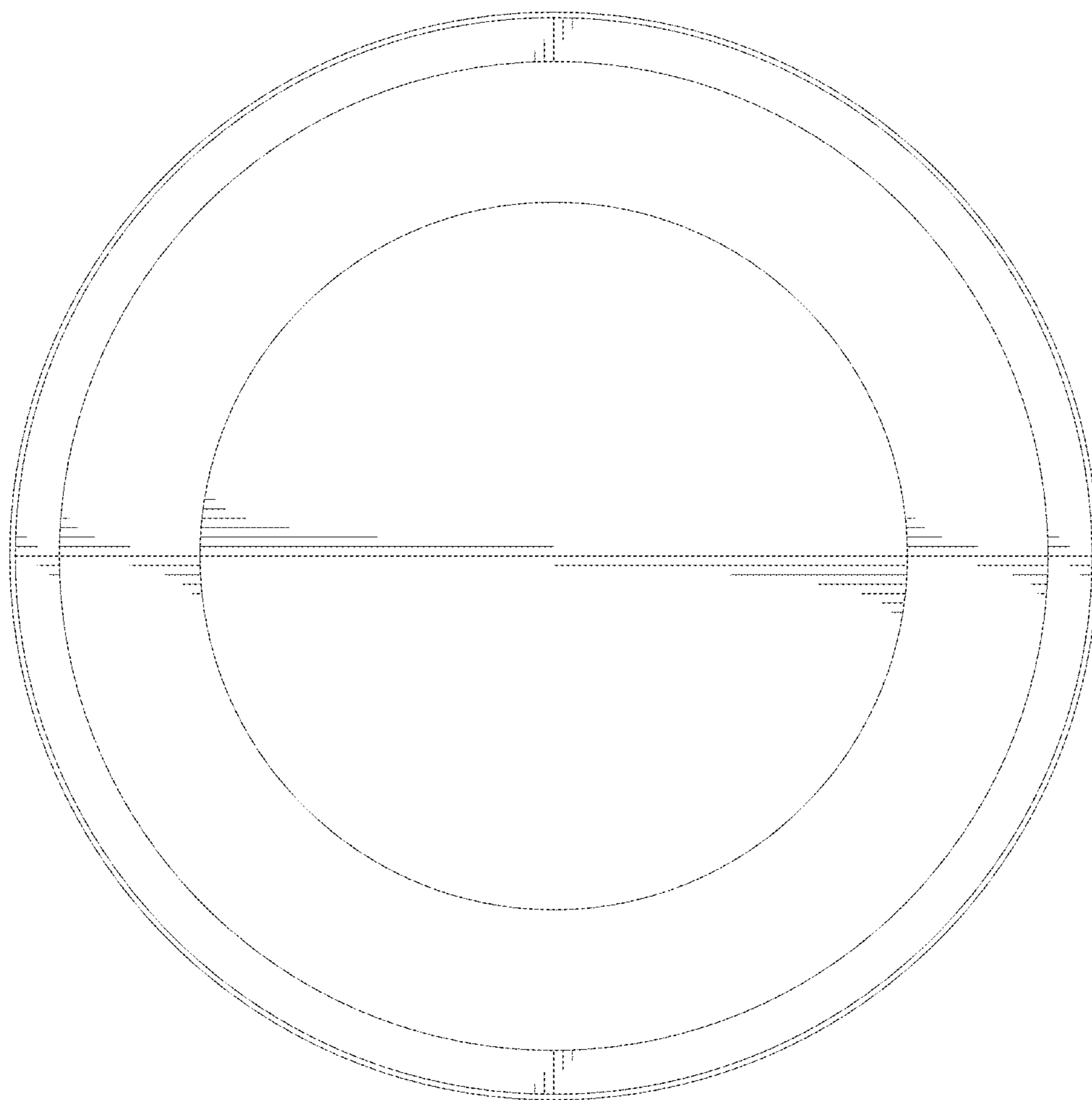


FIG.7