



US00D919130S

(12) **United States Design Patent** (10) **Patent No.:** **US D919,130 S**  
**Schrama et al.** (45) **Date of Patent:** **\*\* \*May 11, 2021**

- (54) **OPTICAL MODULE WITH LED EMITTING WHITE-COLORED LIGHT**
- (71) Applicant: **Lumileds LLC**, San Jose, CA (US)
- (72) Inventors: **Charles André Schrama**, San Jose, CA (US); **Mehdi Aas**, Eindhoven (NL)
- (73) Assignee: **LUMILEDS LLC**, San Jose, CA (US)
- (\*) Notice: This patent is subject to a terminal disclaimer.
- (\*\*) Term: **15 Years**
- (21) Appl. No.: **29/695,001**
- (22) Filed: **Jun. 14, 2019**
- (51) **LOC (13) Cl.** ..... **26-03**
- (52) **U.S. Cl.**  
USPC ..... **D26/24**
- (58) **Field of Classification Search**  
USPC ..... D26/1, 24, 25, 28, 35, 80, 86, 120;  
D13/133, 180; 362/249.02, 249.04, 224,  
362/225, 227, 240  
CPC ..... F21L 4/00; F21L 4/02; F21L 4/025; F21L  
4/027; F21V 5/007; H01J 3/38; H01S  
3/034; H01S 5/022; H01S 5/02208; F21Y  
2115/10; F21S 2/005  
See application file for complete search history.

9,939,144	B2 *	4/2018	Kwak	.....	F21S 2/005
D843,613	S *	3/2019	Hodohara	.....	D26/1
10,228,119	B2 *	3/2019	Hong	.....	F21V 29/74
10,292,782	B2 *	5/2019	Haverich	.....	F21L 4/00
D860,502	S *	9/2019	Gregory	.....	D26/80
D861,922	S *	10/2019	Kang	.....	D26/1
D886,751	S *	6/2020	Lee	.....	D13/180
D899,672	S *	10/2020	Schrama	.....	D26/120
D900,355	S *	10/2020	Schrama	.....	D26/24

(Continued)

*Primary Examiner* — Wan Laymon  
*Assistant Examiner* — Clint A Samuel  
(74) *Attorney, Agent, or Firm* — Seyfarth Shaw LLP

(57) **CLAIM**

The ornamental design for an optical module with LED emitting white-colored light, as shown and described.

**DESCRIPTION**

FIG. 1 is a top perspective view of an optical module with LED emitting white-colored light, showing our new invention;

FIG. 2 is a bottom perspective view of the optical module with at least one LED that emits white-colored light of FIG. 1;

FIG. 3 is a first side view of the optical module with at least one LED that emits white-colored light of FIG. 1;

FIG. 4 is a second side view of the optical module with at least one LED that emits white-colored light of FIG. 1;

FIG. 5 is a third side view of the optical module with at least one LED that emits white-colored light of FIG. 1;

FIG. 6 is a fourth side view of the optical module with at least one LED that emits white-colored light of FIG. 1;

FIG. 7 is a top view of the optical module with at least one LED that emits white-colored light of FIG. 1; and,

FIG. 8 is a bottom view of the optical module with at least one LED that emits white-colored light of FIG. 1.

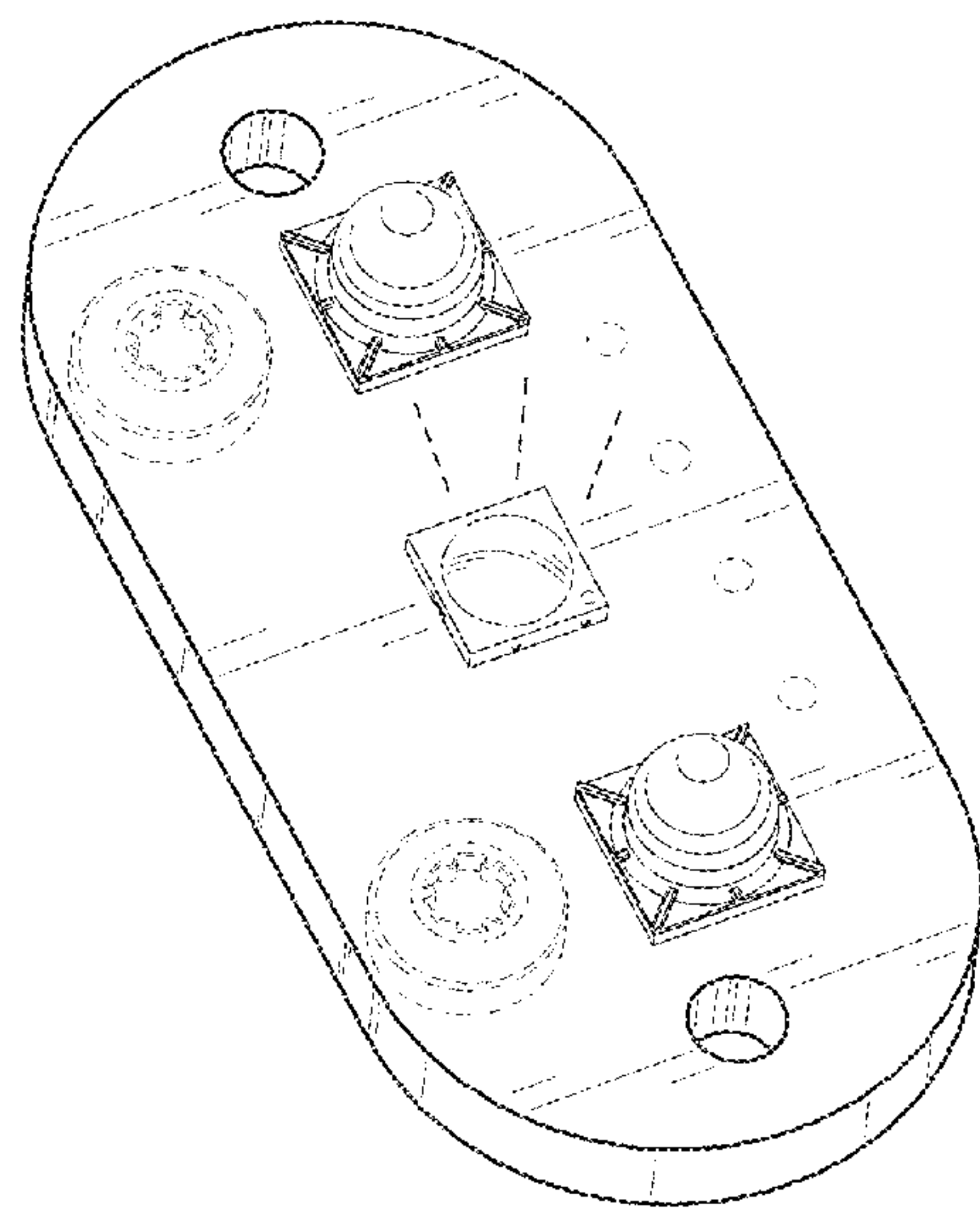
The broken lines in the drawings form no part of the claimed design.

**1 Claim, 8 Drawing Sheets**

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,893,633	A *	4/1999	Uchio	.....	F21K 9/00 257/E25.02
D592,162	S *	5/2009	Sugimoto	.....	D13/180
D726,347	S *	4/2015	Soong	.....	D26/1
D727,859	S *	4/2015	Freeman	.....	D13/180
D797,362	S *	9/2017	Deyaf	.....	D26/120
D802,176	S *	11/2017	Tan	.....	D26/1
9,899,582	B2 *	2/2018	Min	.....	H01L 33/486
D812,256	S *	3/2018	Huntley	.....	D26/28



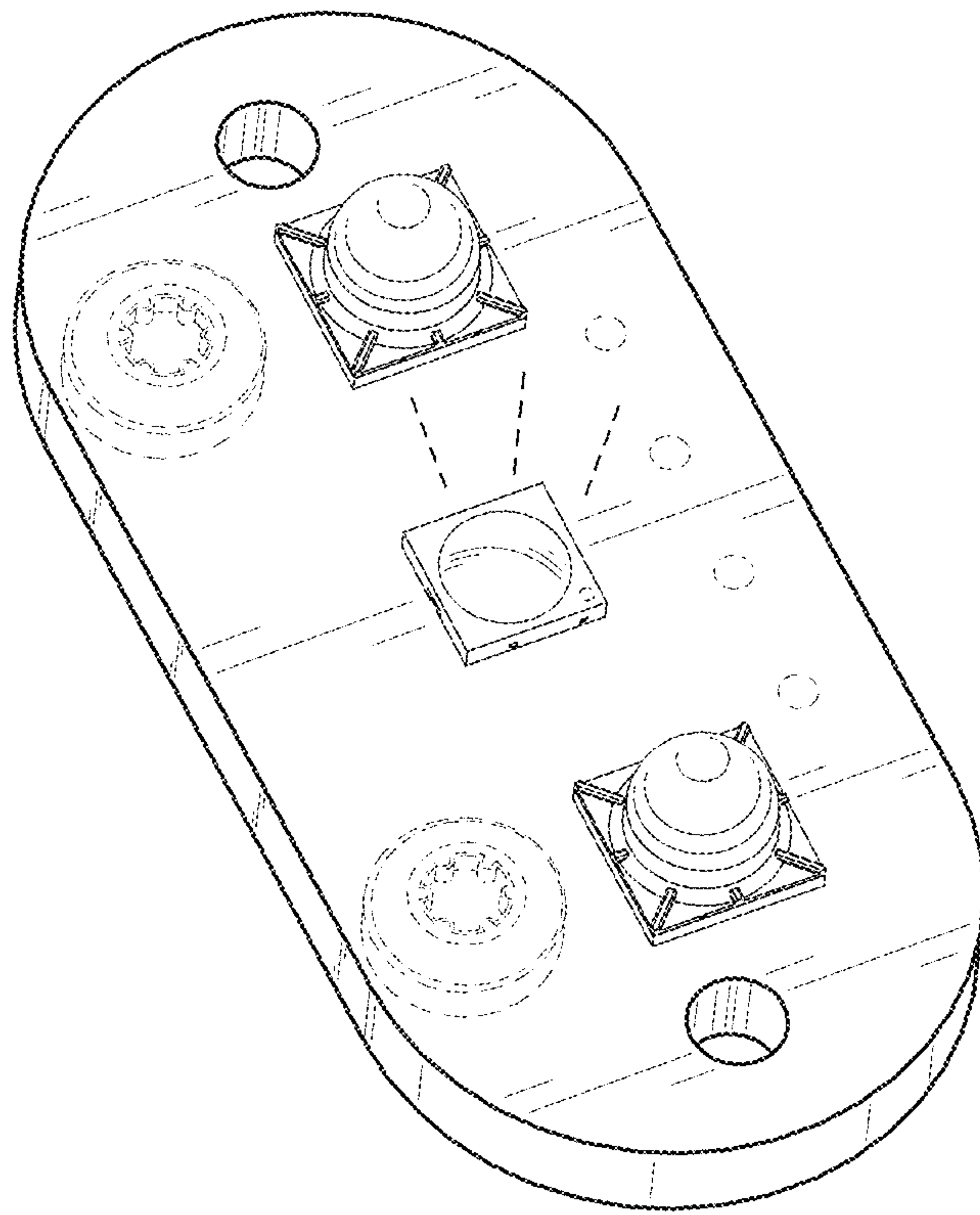
(56)

**References Cited**

U.S. PATENT DOCUMENTS

D905,874 S \* 12/2020 Gorman ..... D26/1  
2006/0262533 A1\* 11/2006 Lin ..... F21S 4/10  
362/249.01  
2010/0002450 A1\* 1/2010 Pachler ..... H01L 33/58  
362/311.02  
2012/0020086 A1\* 1/2012 Kataoka ..... F21V 19/0055  
362/249.02  
2015/0369459 A1\* 12/2015 Huang ..... F21S 4/10  
362/311.02  
2019/0154952 A1\* 5/2019 Zheng ..... G02B 7/04  
2019/0227338 A1\* 7/2019 Bachar ..... G02B 27/646  
2020/0124248 A1\* 4/2020 Kim ..... G02B 3/04

\* cited by examiner



*Fig.1*

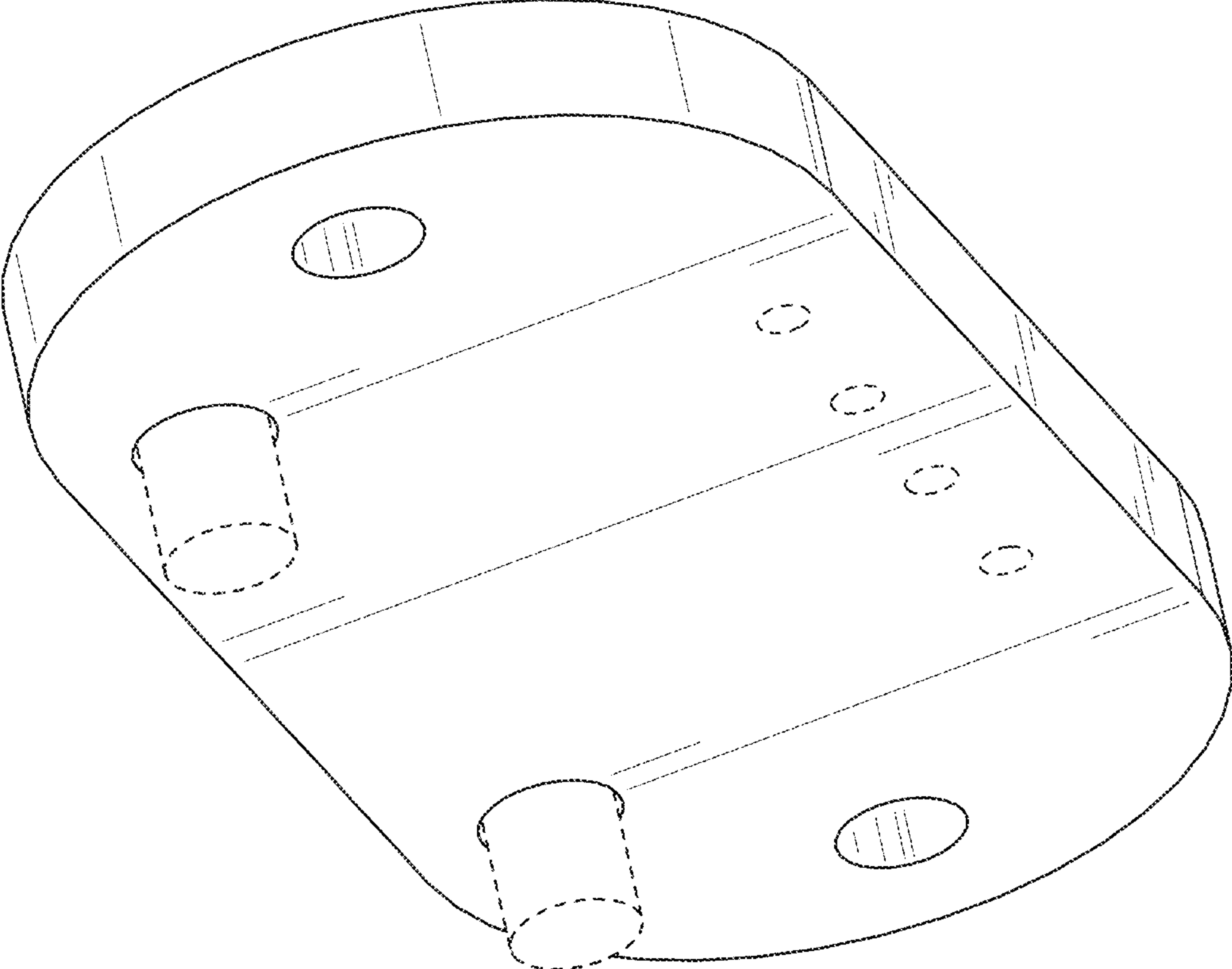
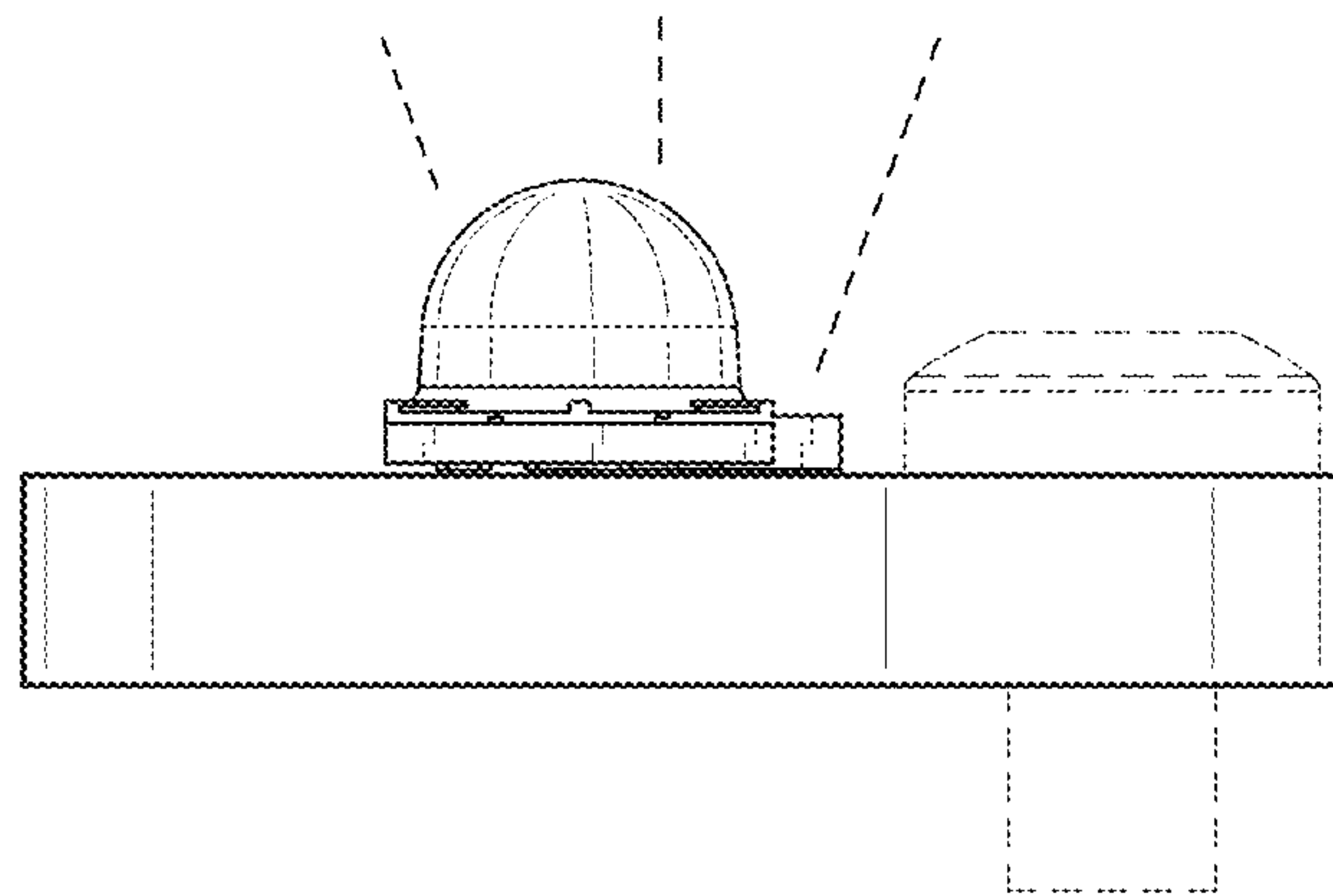
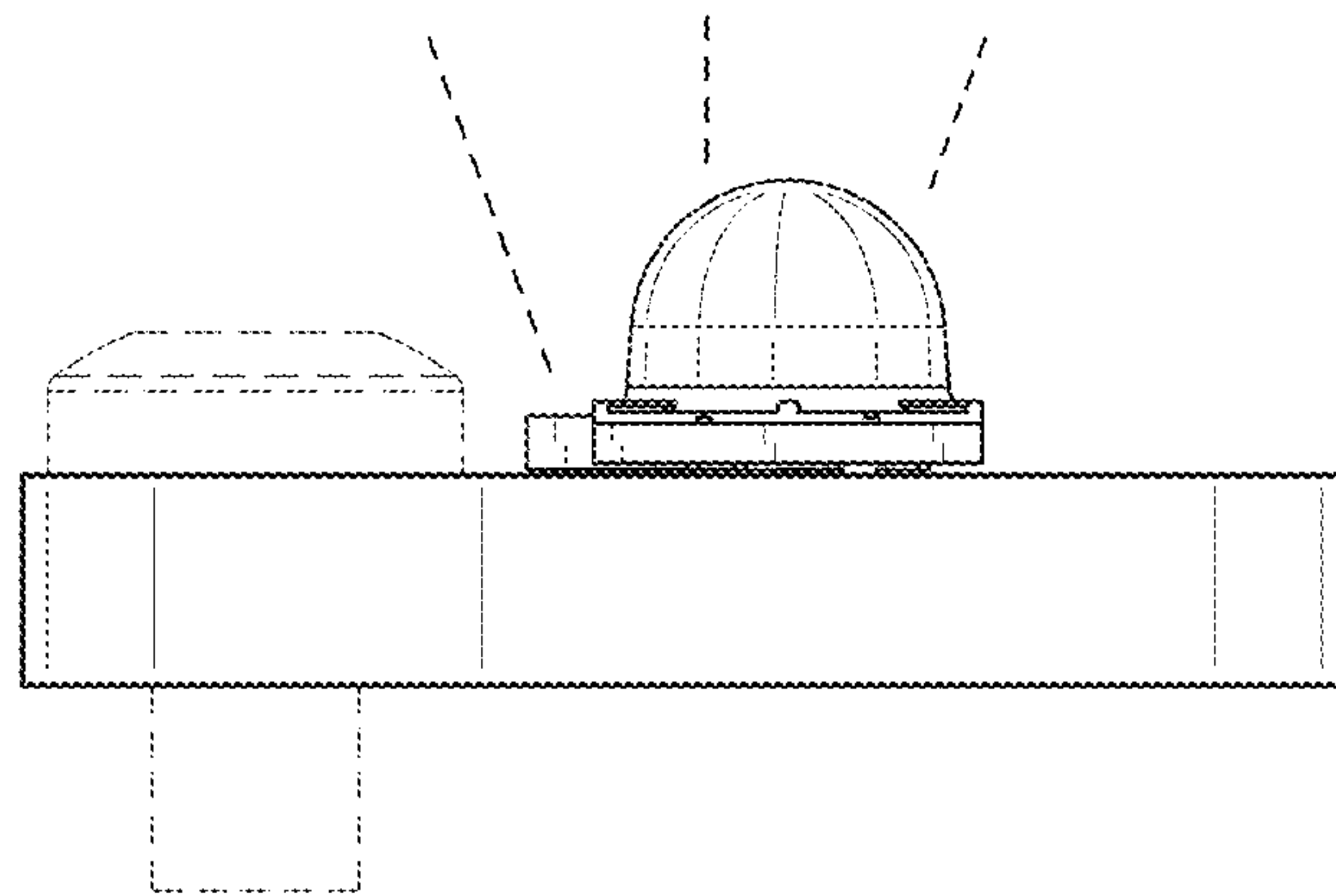


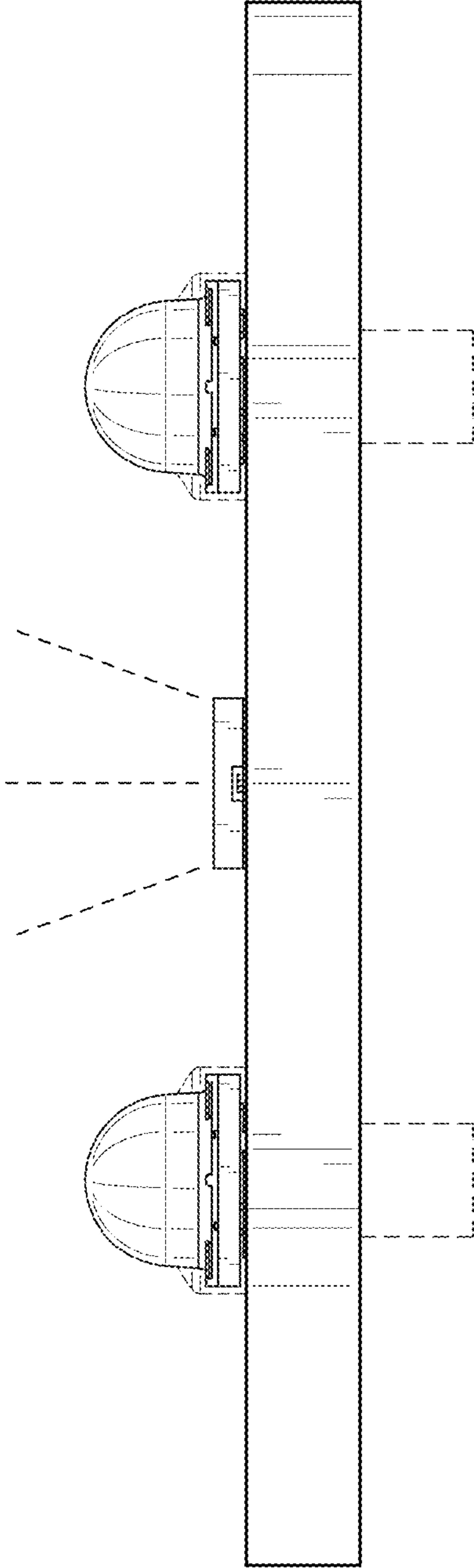
FIG. 2



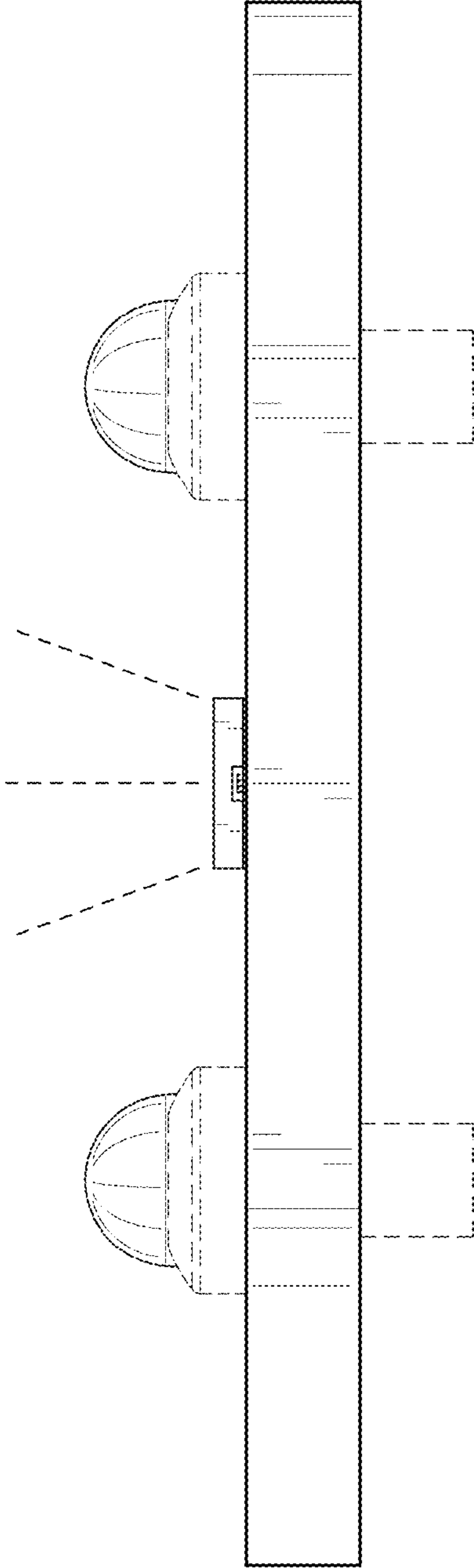
*Fig.3*



*Fig.4*

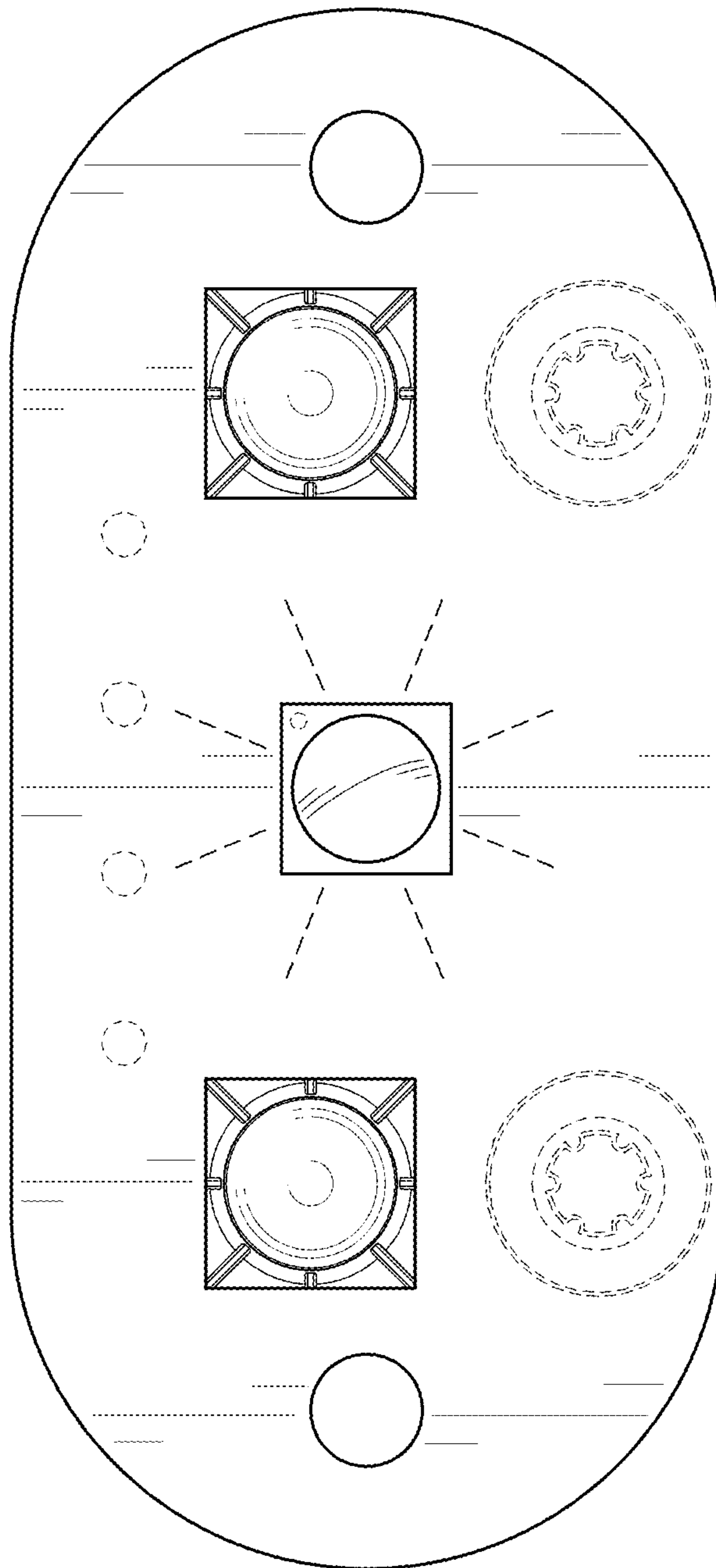


*Fig.5*



*Fig.6*





*Fig.7*

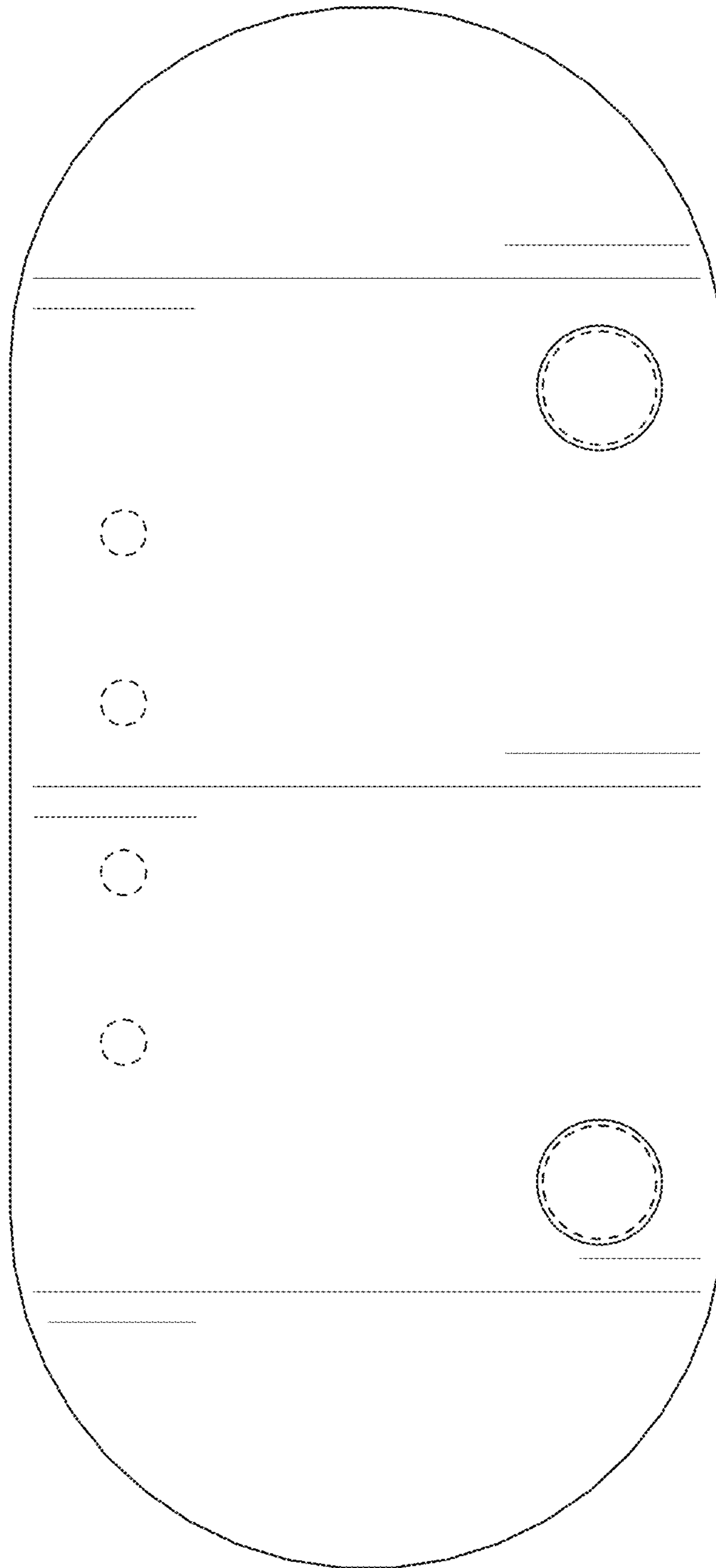


FIG. 8