



US00D929949S

(12) **United States Design Patent** (10) **Patent No.:** **US D929,949 S**
Li et al. (45) **Date of Patent:** **** Sep. 7, 2021**

(54) **ROBOT CONTROLLER**

(71) Applicants: **Shanghai Flexiv Robotics Technology Co., Ltd.**, Shanghai (CN); **FLEXIV LTD.**, Grand Cayman (GB)

(72) Inventors: **Xuesen Li**, Shanghai (CN); **Yan Tan**, Shanghai (CN); **Mengshen Wu**, Shanghai (CN); **Shuyun Chung**, Shanghai (CN); **Shiquan Wang**, Shanghai (CN)

(73) Assignees: **Shanghai Flexiv Robotics Technology Co., Ltd.**, Shanghai (CN); **FLEXIV LTD.**, Cayman Islands (GB)

(**) Term: **15 Years**

(21) Appl. No.: **29/735,605**

(22) Filed: **May 22, 2020**

(30) **Foreign Application Priority Data**

Apr. 10, 2020 (CN) 202030140143.9

(51) **LOC (13) Cl.** **14-03**

(52) **U.S. Cl.**
USPC **D13/168**; D14/388; D14/412

(58) **Field of Classification Search**
USPC D14/388, 389, 390, 396, 397, 398, 399, D14/400, 401, 454, 455, 356, 357, 496, D14/217, 218, 239, 168, 415, 402, 408, D14/412; D21/324-333, 566; D13/162, D13/162.1, 163, 168; D12/174; D15/199, 28, 78, 122, 138
CPC G05G 9/047; G06N 3/008; G06F 2203/0381; G06F 17/5095; G06F 3/04845; G06F 1/169; B62D 57/032; B25J 9/1661; B25J 9/664; B25J 3/08; G05B 19/425; G05B 2219/45083

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D306,998 S *	4/1990	Mintz	.....	D13/164
D307,415 S *	4/1990	Holmer	.....	D13/164
D368,901 S *	4/1996	Currid	.....	D14/417
D380,473 S *	7/1997	Otani	.....	D14/218
D383,134 S *	9/1997	Patton	.....	D14/218
D493,150 S *	7/2004	Murtaugh	.....	D13/168
D502,929 S *	3/2005	Copeland	.....	D13/168
D506,982 S *	7/2005	Murtaugh	.....	D13/168
D540,882 S *	4/2007	Crook	.....	D14/412
D541,226 S *	4/2007	Wakisaka	.....	D13/168
D552,562 S *	10/2007	Yamamoto	.....	D13/168
D556,201 S *	11/2007	Ashida	.....	D14/412
D556,760 S *	12/2007	Ashida	.....	D14/412
D567,243 S *	4/2008	Ashida	.....	D14/412
D570,792 S *	6/2008	Leung	.....	D13/168

(Continued)

Primary Examiner — Marie D. Fast Horse

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

(57) **CLAIM**

The ornamental design for a robot controller, as shown and described.

DESCRIPTION

FIG. 1 is a front, top, right perspective view of a robot controller showing our new design according to an embodiment;

FIG. 2 is a rear, top, right perspective view thereof;

FIG. 3 is a front elevation view thereof;

FIG. 4 is a rear elevation view thereof;

FIG. 5 is a left side view thereof;

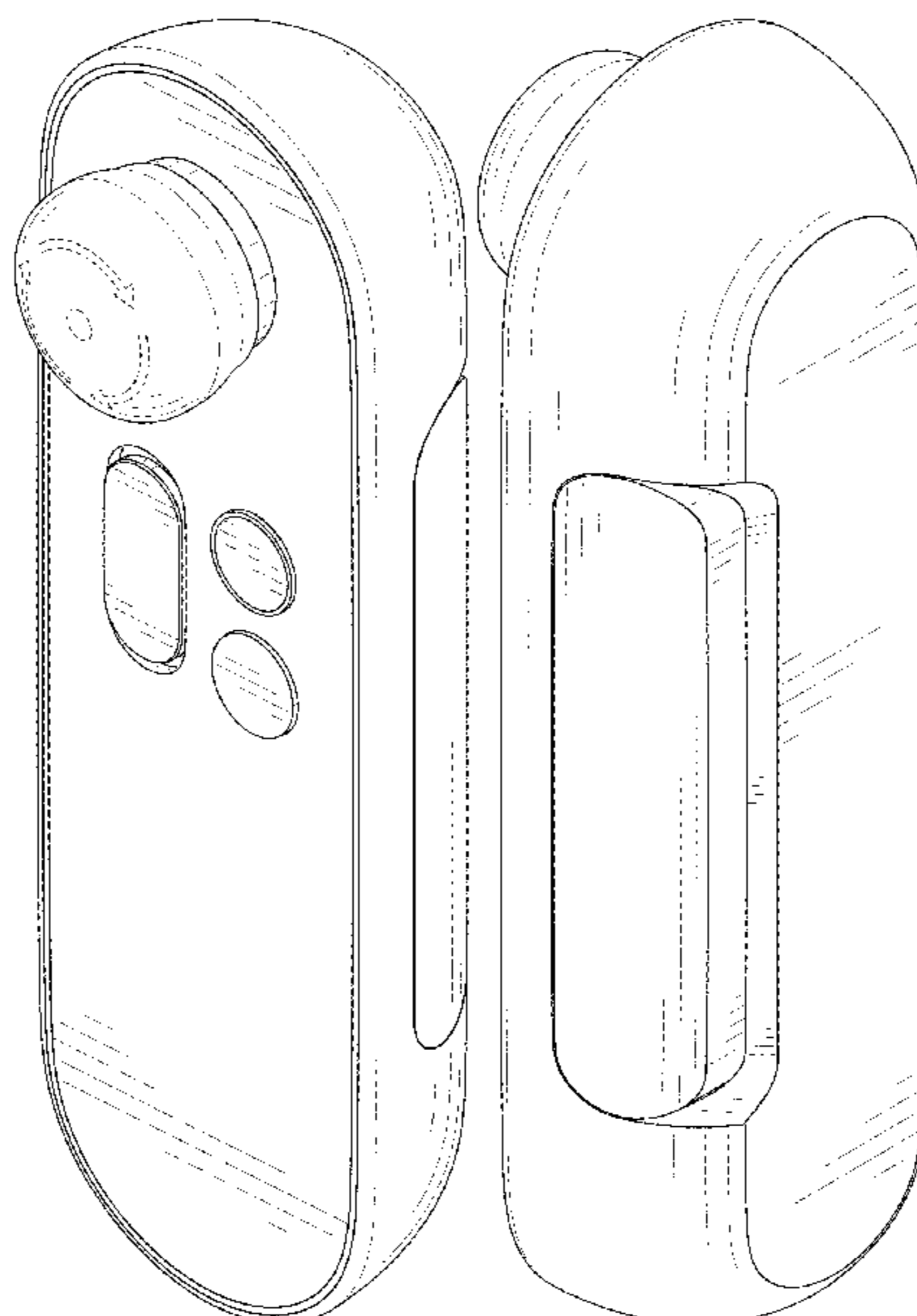
FIG. 6 is a right side view thereof;

FIG. 7 is a top view thereof; and,

FIG. 8 is a bottom view thereof.

The broken lines in the drawings are for the purpose of illustrating unclaimed portions of the robot controller and form no part of the claimed design.

1 Claim, 8 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D576,113 S *	9/2008	Kindle	.....	D13/168	D796,454 S *	9/2017	Zheng	.....	D13/168
D586,301 S *	2/2009	Corsini	.....	D13/168	D797,686 S *	9/2017	McRoberts	.....	D13/168
D587,713 S *	3/2009	Sutton	.....	D14/412	D797,743 S *	9/2017	Awad	.....	D14/412
D589,515 S *	3/2009	Brunner	.....	D14/412	D799,450 S *	10/2017	Lee	.....	D14/218
D603,841 S *	11/2009	Foley	.....	D14/218	D805,482 S *	12/2017	McRoberts	.....	D13/168
D611,477 S *	3/2010	Brunner	.....	D14/412	D805,501 S *	12/2017	Akana	.....	D14/218
D617,745 S *	6/2010	Kindle	.....	D13/168	D813,203 S *	3/2018	Hardi	.....	D14/218
D626,517 S *	11/2010	Yano	.....	D13/168	D814,370 S *	4/2018	Kim	.....	D12/174
D638,841 S *	5/2011	Musick, Jr.	.....	D14/412	D820,263 S *	6/2018	Rebello	.....	D14/426
D662,478 S *	6/2012	Rantala	.....	D13/168	D827,613 S *	9/2018	Seo	.....	D14/218
D667,380 S *	9/2012	Ishikawa	.....	D13/168	D827,615 S *	9/2018	Akana	.....	D14/218
D714,739 S *	10/2014	Rantala	.....	D13/168	D828,337 S *	9/2018	Li	.....	D14/218
D715,230 S *	10/2014	Rantala	.....	D13/168	D840,360 S *	2/2019	Scott	.....	D13/168
D771,597 S *	11/2016	Akana	.....	D14/218	D844,608 S *	4/2019	Chen	.....	D14/388
D776,091 S *	1/2017	Spio	.....	D14/218	D848,298 S *	5/2019	Taheri	.....	D10/118.2
D776,640 S *	1/2017	Simonian	.....	D14/218	D863,446 S *	10/2019	Bristol	.....	D21/333
D779,487 S *	2/2017	Rothfuß	.....	D14/388	D873,245 S *	1/2020	Russo	.....	D14/218
D784,990 S *	4/2017	Huang	.....	D14/401	D875,690 S *	2/2020	Krebs	.....	D13/168
D790,483 S *	6/2017	Yoon	.....	D13/168	D880,602 S *	4/2020	Ehara	.....	D21/333
					D882,529 S *	4/2020	Scott	.....	D13/168
					D900,042 S *	10/2020	Scott	.....	D13/168

* cited by examiner

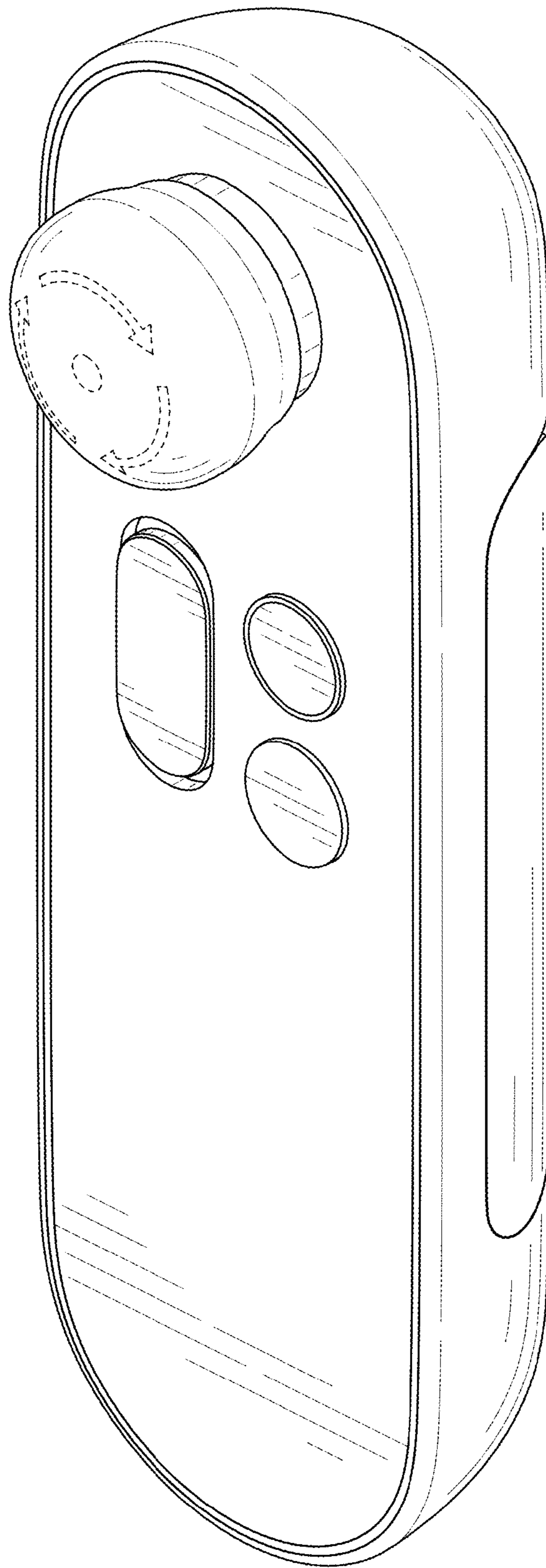


FIG. 1

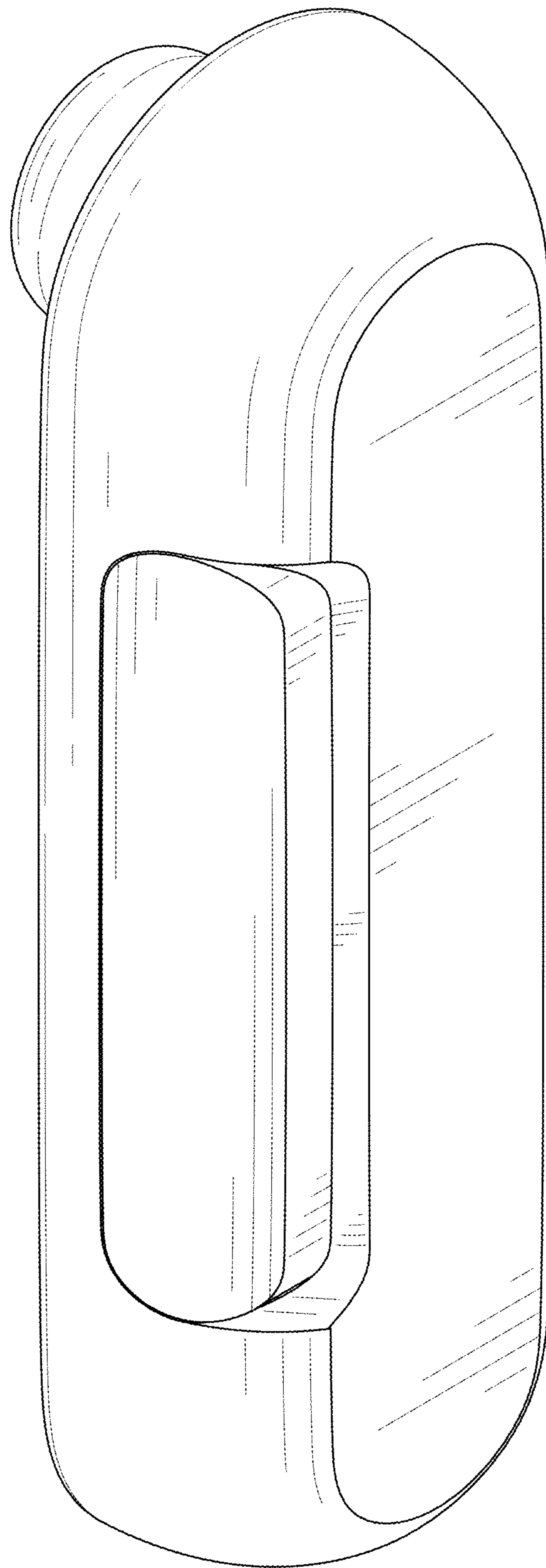


FIG. 2

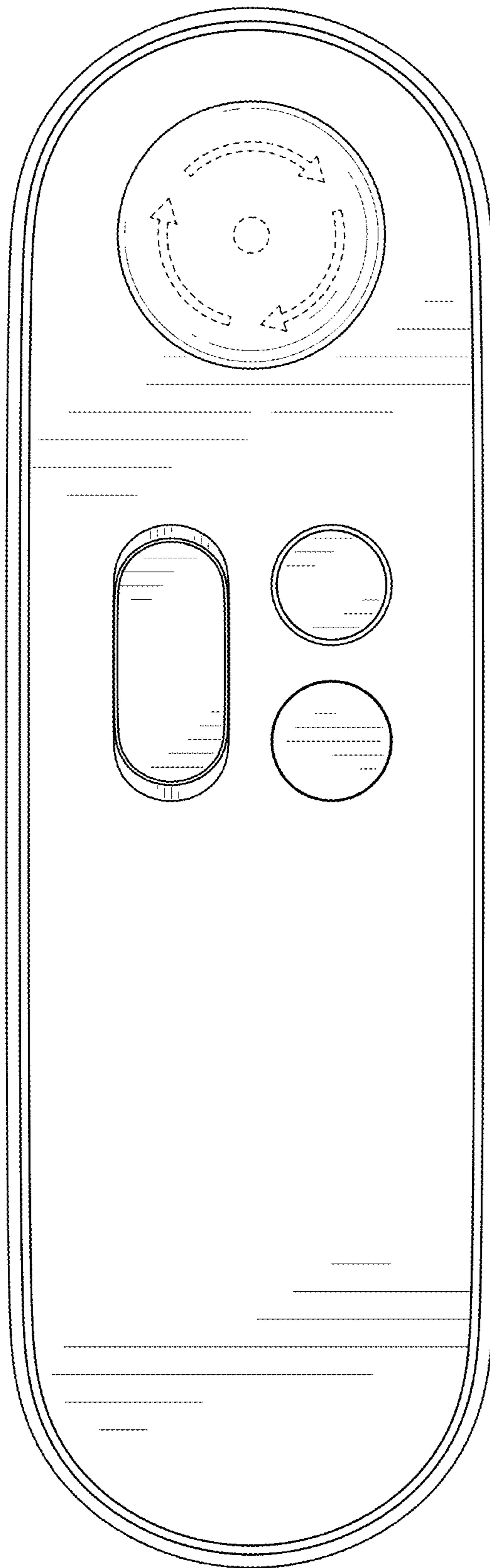


FIG. 3

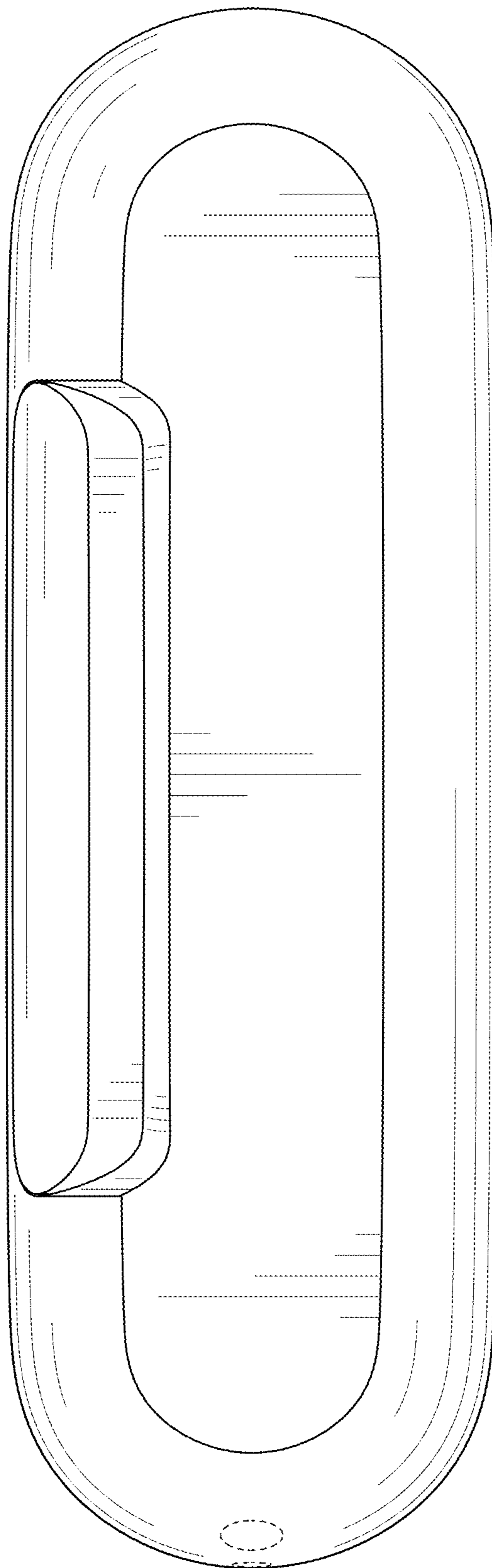


FIG. 4

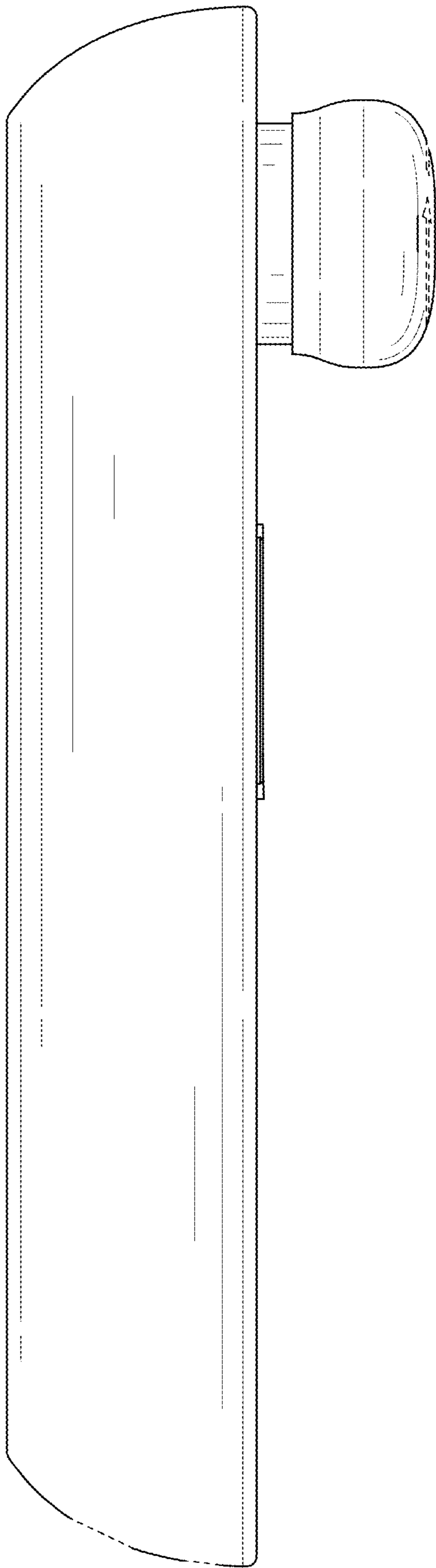


FIG. 5

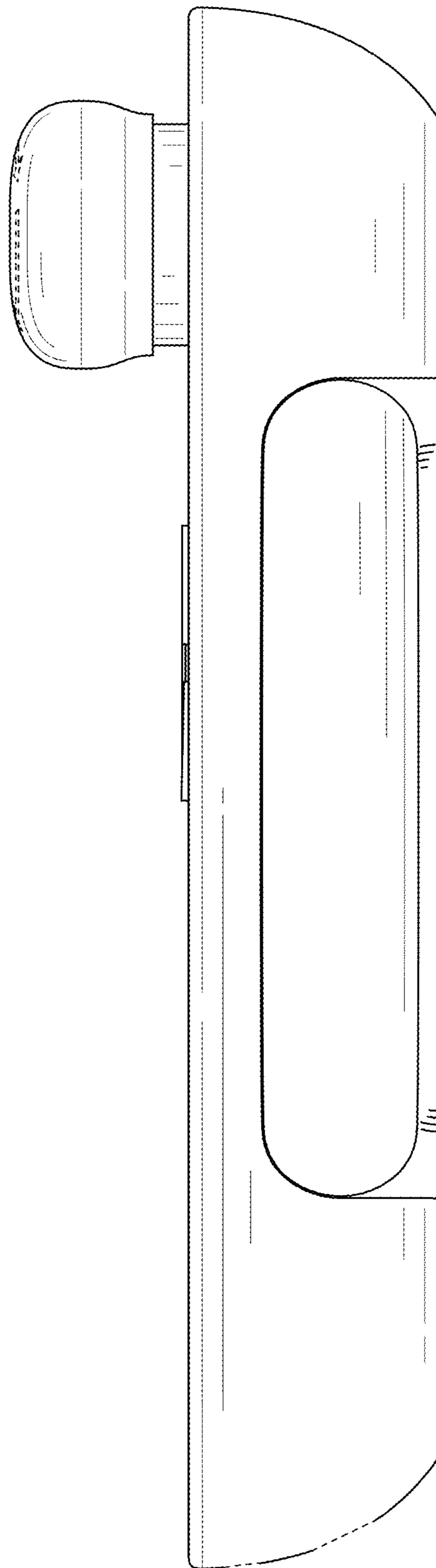


FIG. 6

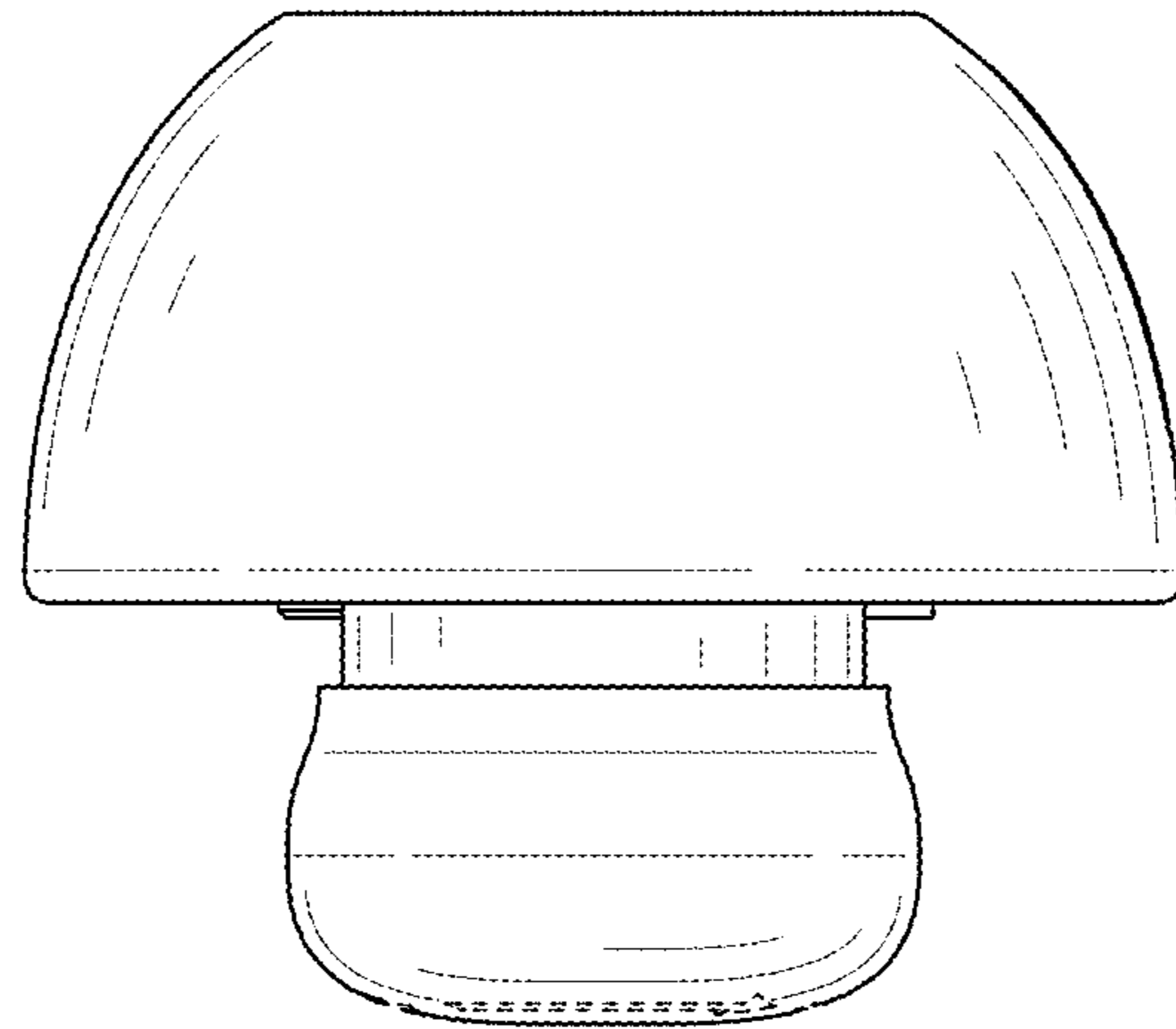


FIG. 7

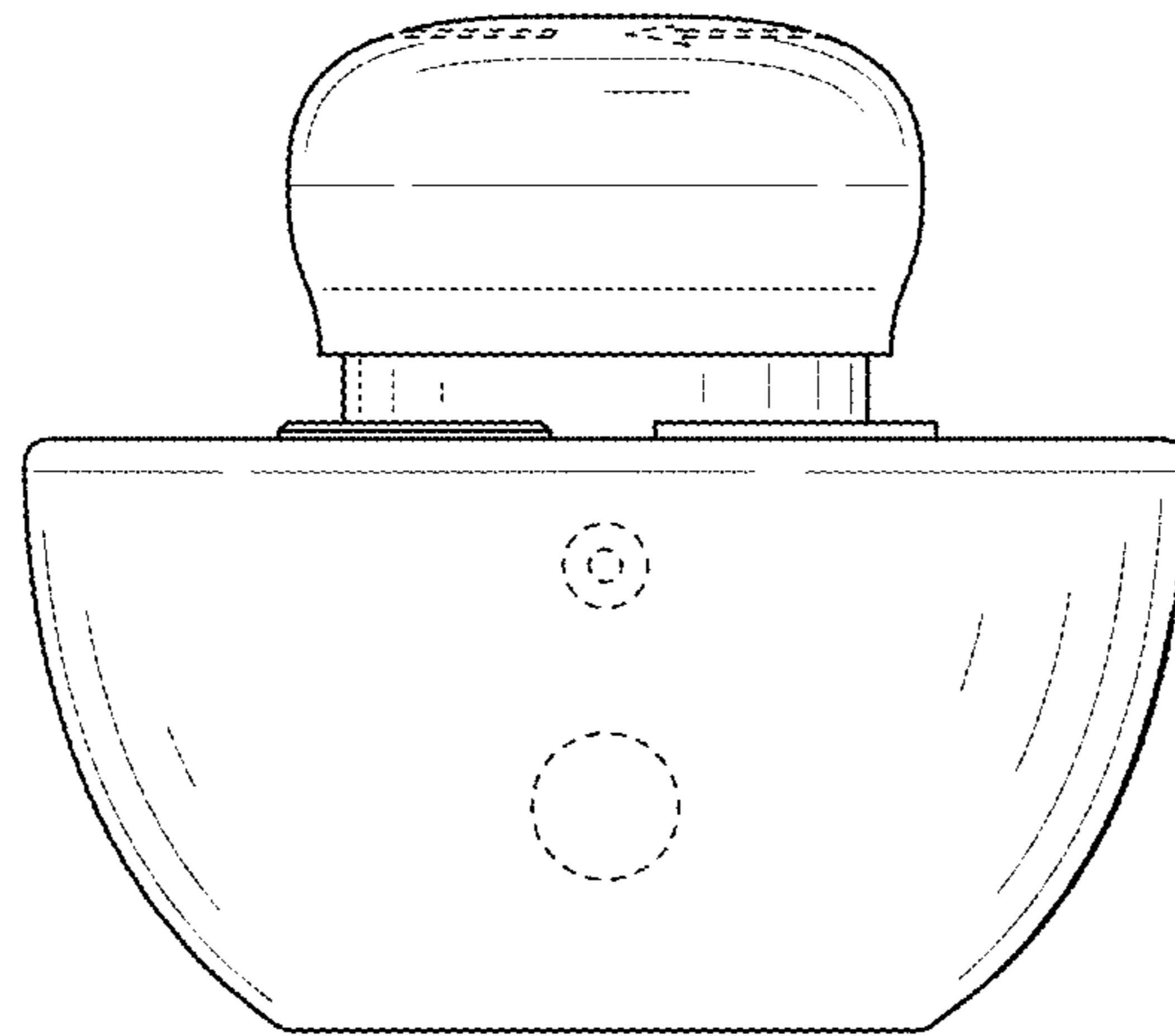


FIG. 8