



US00D921577S

(12) **United States Design Patent** (10) **Patent No.:** **US D921,577 S**  
**Nishimura et al.** (45) **Date of Patent:** **\*\* Jun. 8, 2021**

(54) **POWER SUPPLY UNIT FOR WIRELESS POWER TRANSFER**

(71) Applicant: **IHI Corporation**, Tokyo (JP)

(72) Inventors: **Kenji Nishimura**, Tokyo (JP); **Seishiro Nakajima**, Tokyo (JP); **Tatsuya Matsui**, Tokyo (JP)

(73) Assignee: **IHI CORPORATION**, Tokyo (JP)

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

(21) Appl. No.: **29/692,056**

(22) Filed: **May 22, 2019**

(30) **Foreign Application Priority Data**

Mar. 29, 2019 (JP) ..... 2019-006866

(51) **LOC (13) Cl.** ..... **13-02**

(52) **U.S. Cl.**  
USPC ..... **D13/103**

(58) **Field of Classification Search**  
USPC ..... D13/103-108, 118-119, 184, 199;  
D14/356, 432  
CPC ..... Y02E 60/12; Y02E 60/122; Y02E 60/50;  
H01M 2/02; H01M 2/022; H01M 2/0202;  
H01M 2/0207; H01M 2/0212; H01M  
2/1061; H01M 2/1022; H01M 2/1055;  
H01M 2/1066; H01M 2/105; H01M  
2/204; H01M 10/4257; H01M 10/0436;  
H01M 10/48; H02J 50/12  
See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

D449,271 S \* 10/2001 Tong ..... D13/110  
D546,277 S \* 7/2007 Andre ..... D13/103  
D624,011 S \* 9/2010 Bertagnole ..... D13/103  
D690,262 S \* 9/2013 Huang ..... D13/103

D719,505 S 12/2014 Kim et al.  
D729,163 S 5/2015 Meyer  
D743,887 S \* 11/2015 Dasbach ..... D13/110  
D782,973 S 4/2017 Zhou  
D786,791 S 5/2017 Jeong et al.  
D800,651 S \* 10/2017 Voller ..... D13/103  
D812,556 S 3/2018 Xu  
D835,574 S \* 12/2018 Trongone ..... D13/103

(Continued)

**OTHER PUBLICATIONS**

Applicant's Website Featuring Applicant's Wireless Power Transfer Device, Available at: <https://www.ihico.jp/mobility/ev/> (Nov. 27, 2018).

*Primary Examiner* — Catherine S Posthauer

*Assistant Examiner* — Alison M Ofstun

(74) *Attorney, Agent, or Firm* — Volpe Koenig

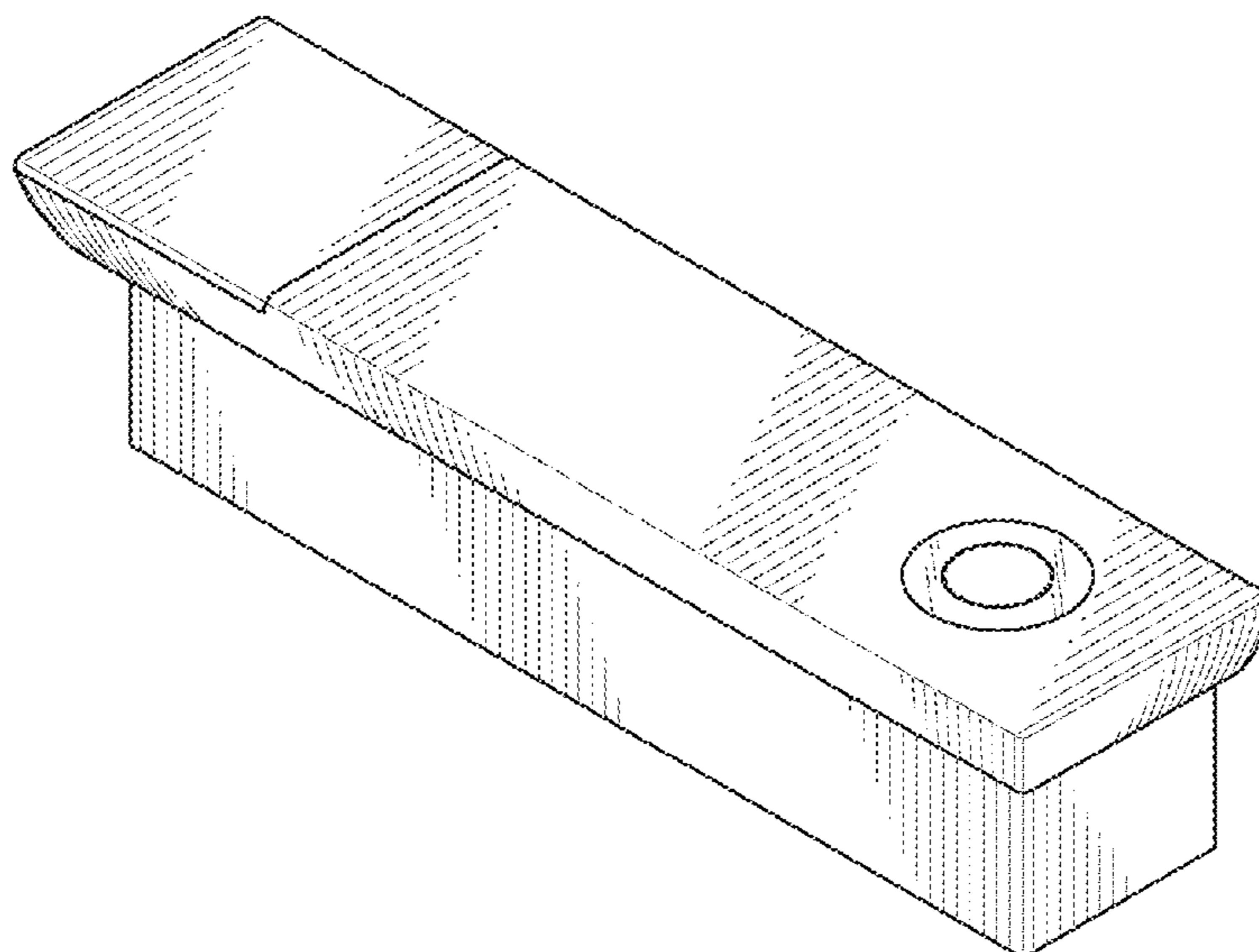
(57) **CLAIM**

The ornamental design for a power supply unit for wireless power transfer, as shown and described.

**DESCRIPTION**

FIG. 1 is a front perspective view of a power supply unit for wireless power transfer showing our new design;  
FIG. 2 is a rear perspective view thereof;  
FIG. 3 is a front view thereof;  
FIG. 4 is a rear view thereof;  
FIG. 5 is a top plan view thereof;  
FIG. 6 is a bottom view thereof;  
FIG. 7 is a right side view thereof;  
FIG. 8 is a left side view thereof;  
FIG. 9 is a perspective view thereof, shown in an environment of use; and,  
FIG. 10 is a perspective view thereof, shown in a second environment of use.  
The features shown in broken lines depict environmental subject matter only and form no part of the claimed design.

**1 Claim, 10 Drawing Sheets**



(56)

**References Cited**

U.S. PATENT DOCUMENTS

D845,897 S 4/2019 Kim  
D849,679 S \* 5/2019 Tian ..... D13/103  
D866,458 S 11/2019 Chen et al.  
D871,321 S \* 12/2019 Chung ..... D13/103  
D875,041 S 2/2020 Chen et al.  
D875,042 S 2/2020 Ye  
D875,678 S 2/2020 Kim et al.  
D876,356 S \* 2/2020 Tanaka ..... D13/123  
D887,970 S \* 6/2020 Himeno ..... D13/103  
D893,423 S \* 8/2020 Nishimura ..... D13/110  
2014/0357094 A1 \* 12/2014 Kim ..... H01R 39/00  
439/13  
2015/0042268 A1 \* 2/2015 Chen ..... H02J 7/0042  
320/108  
2016/0352390 A1 \* 12/2016 Park ..... H04B 5/0037  
2017/0250574 A1 \* 8/2017 Min ..... H02J 50/12  
2019/0165610 A1 \* 5/2019 Hong ..... H02J 50/12

\* cited by examiner

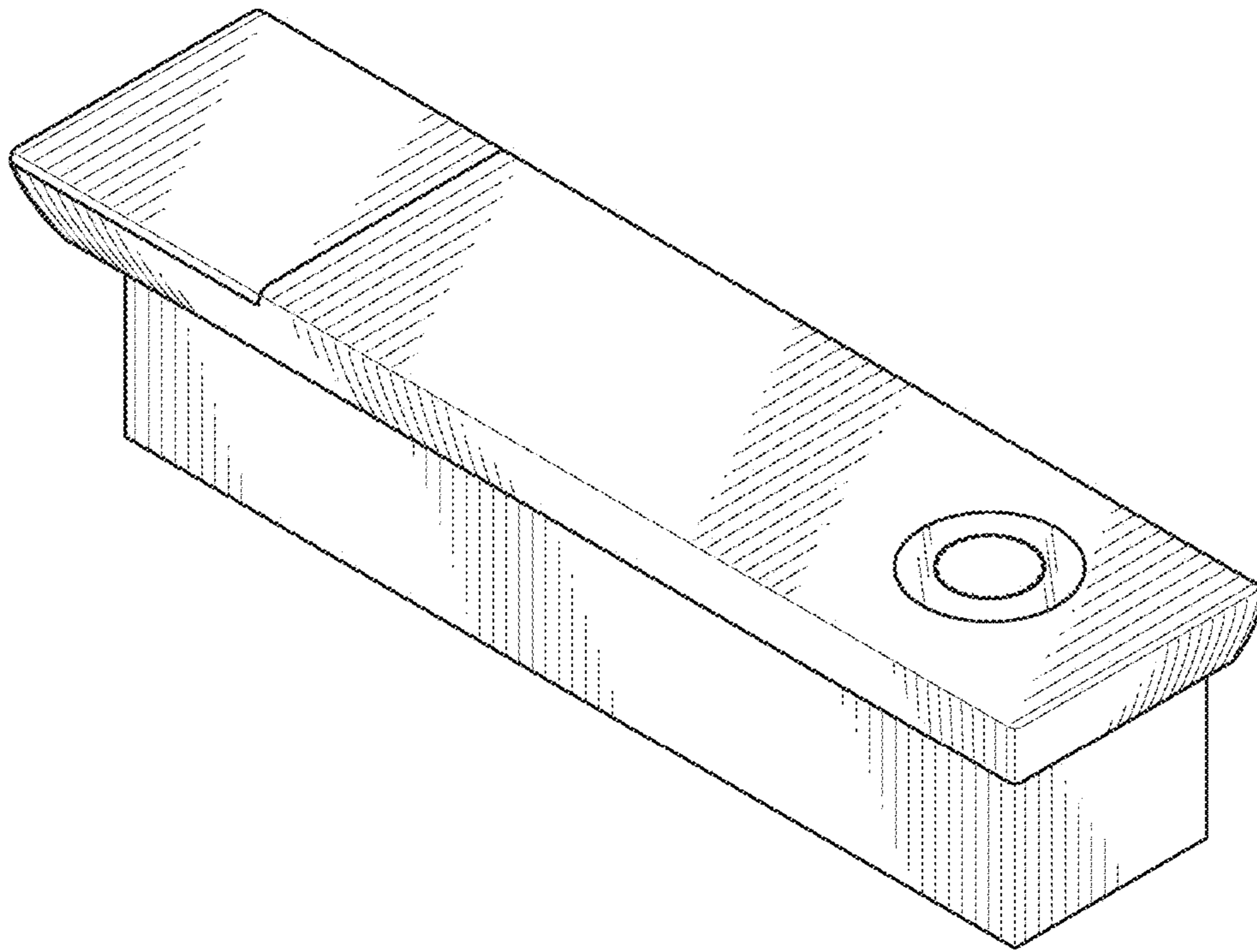


FIG. 1

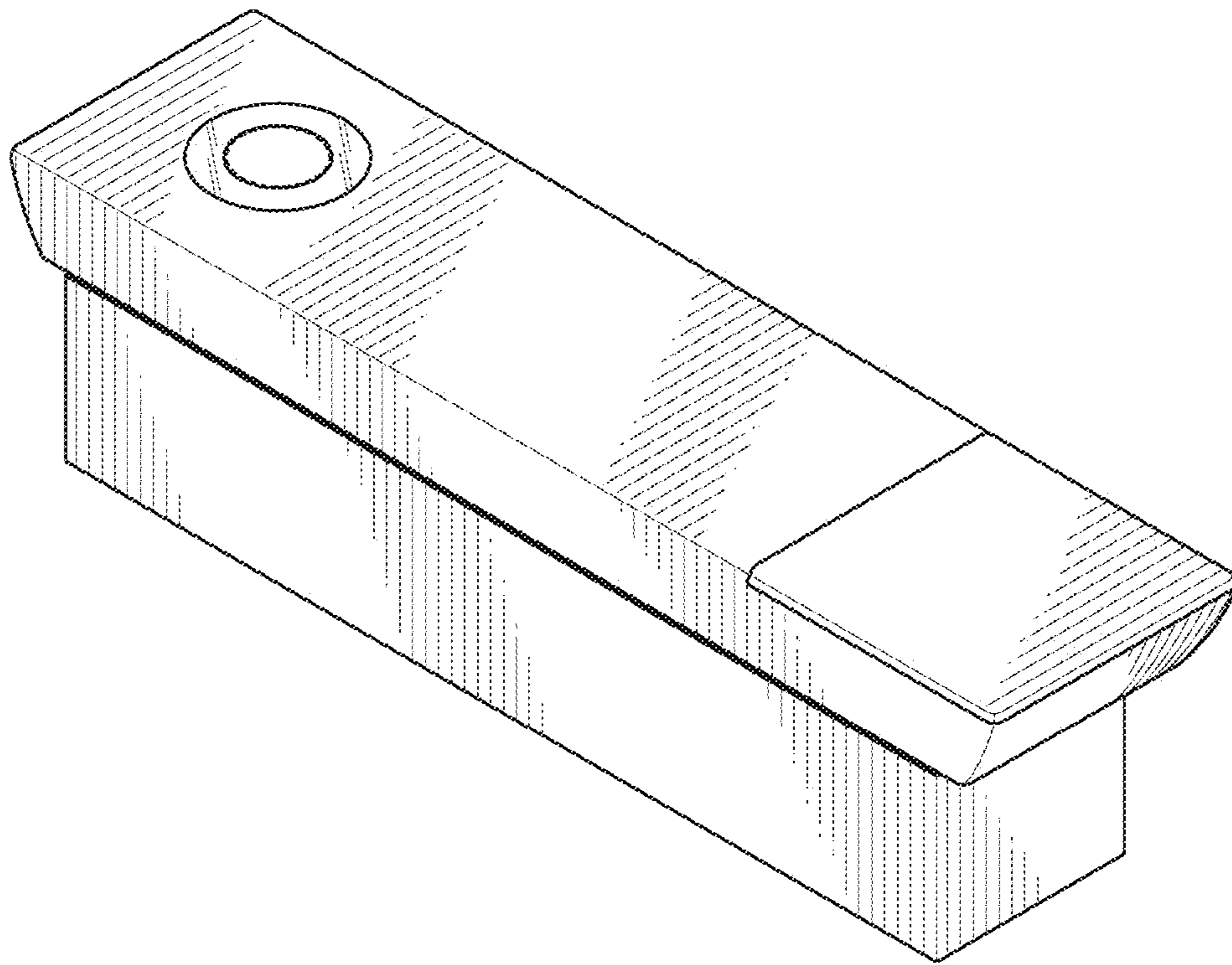


FIG. 2

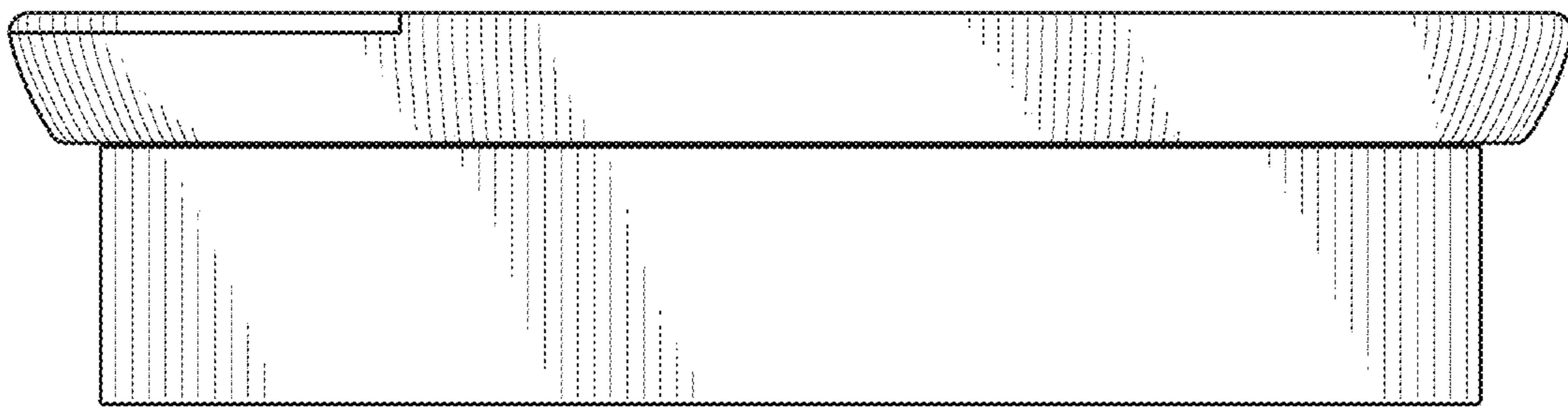


FIG. 3

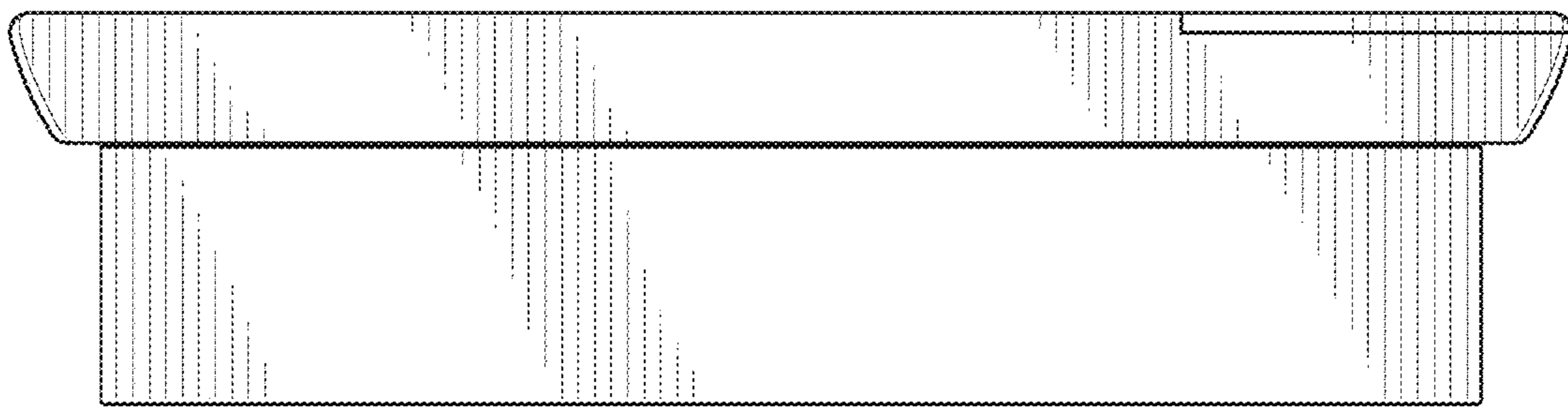


FIG. 4

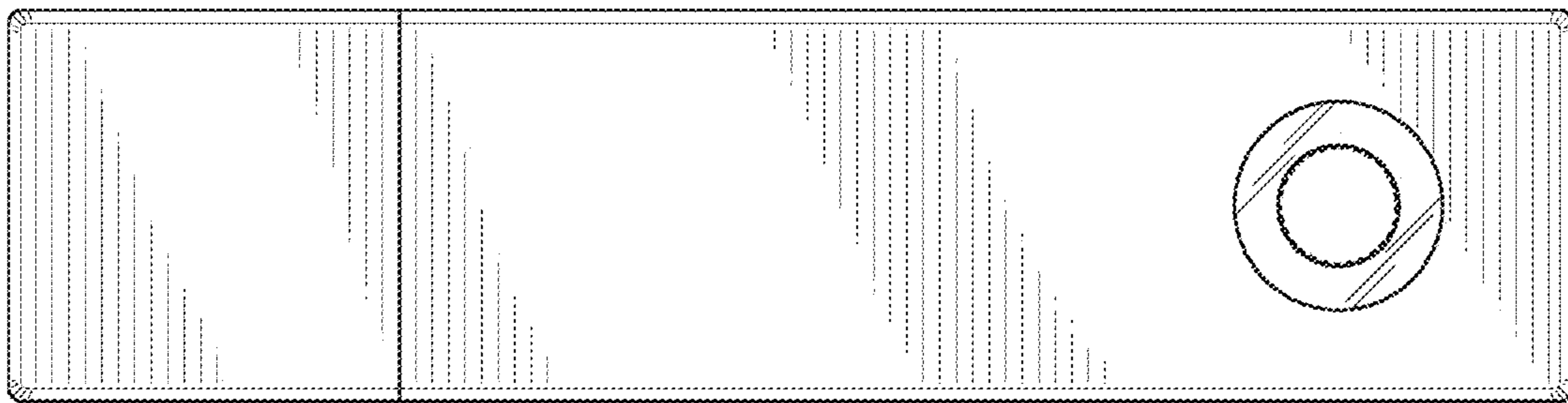


FIG. 5

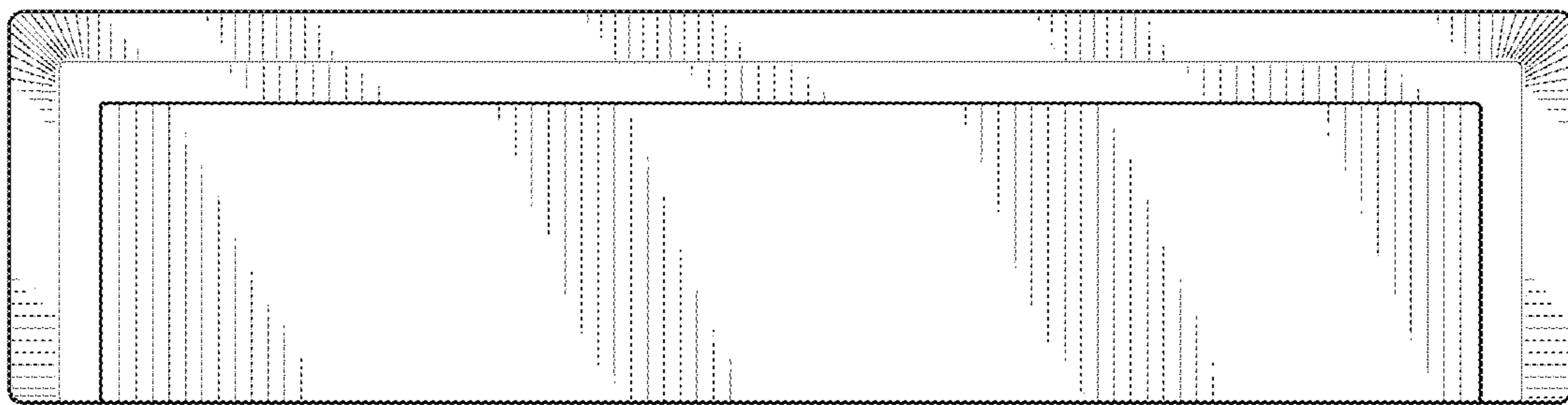


FIG. 6



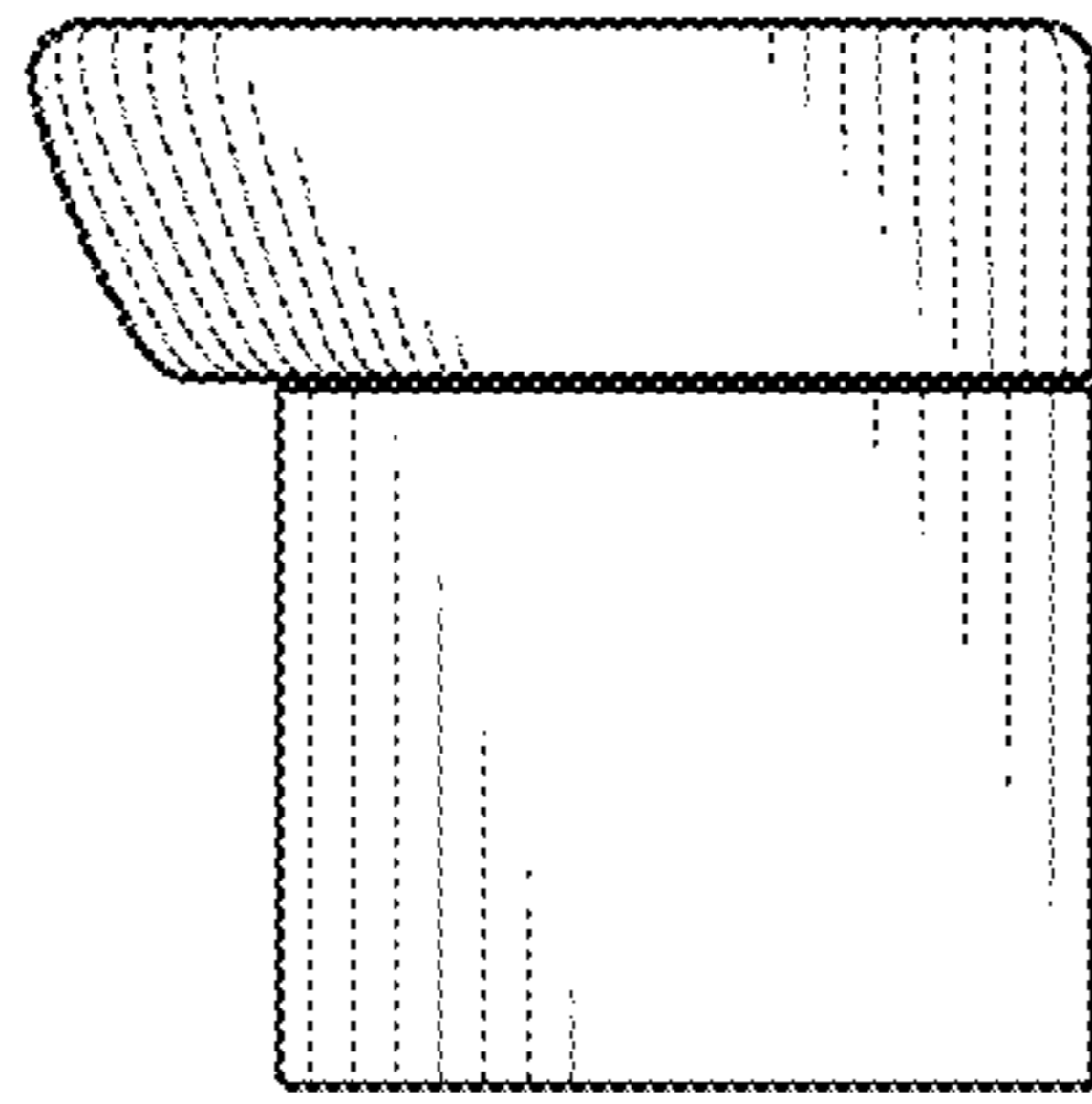


FIG. 7

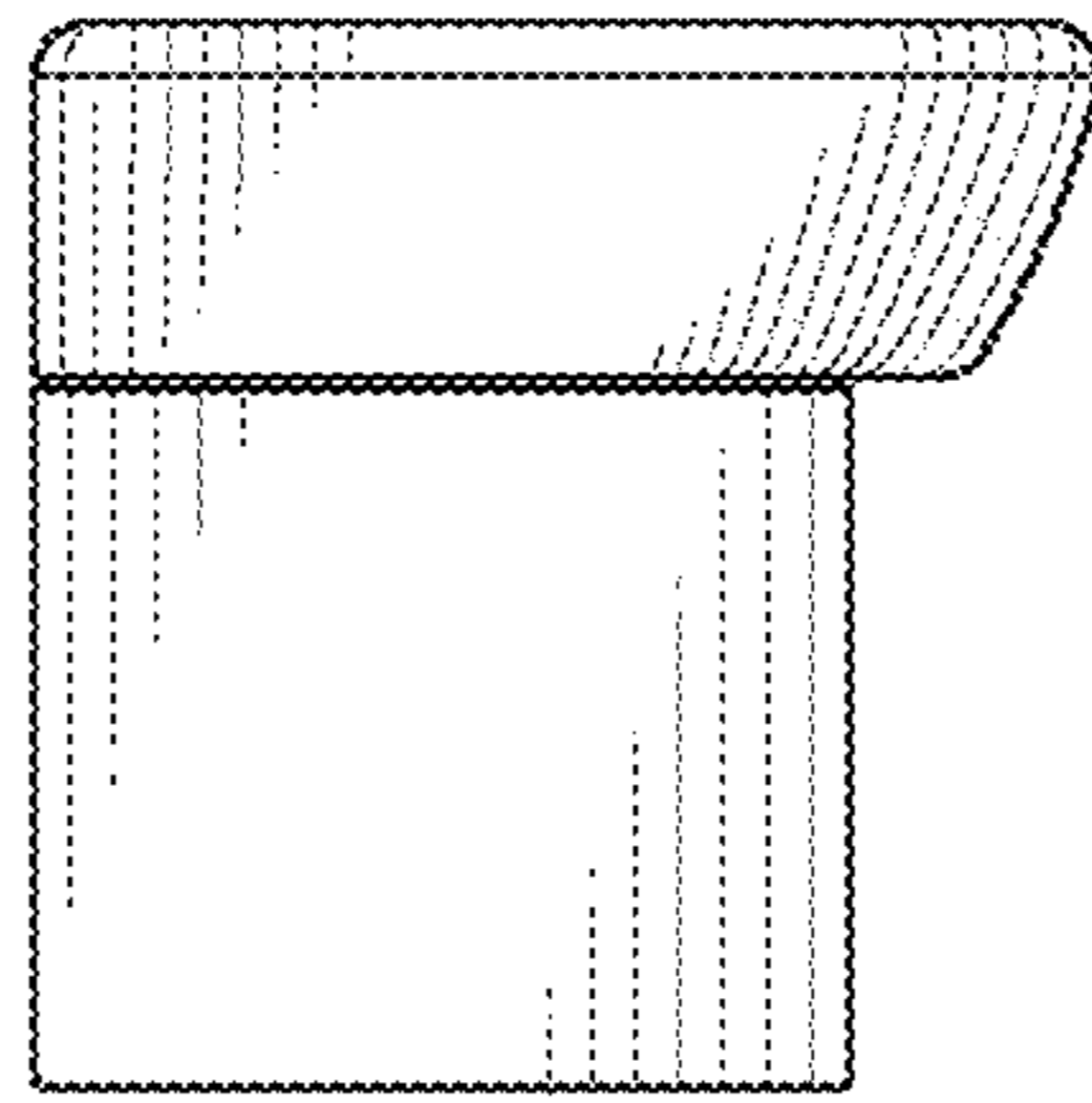


FIG. 8

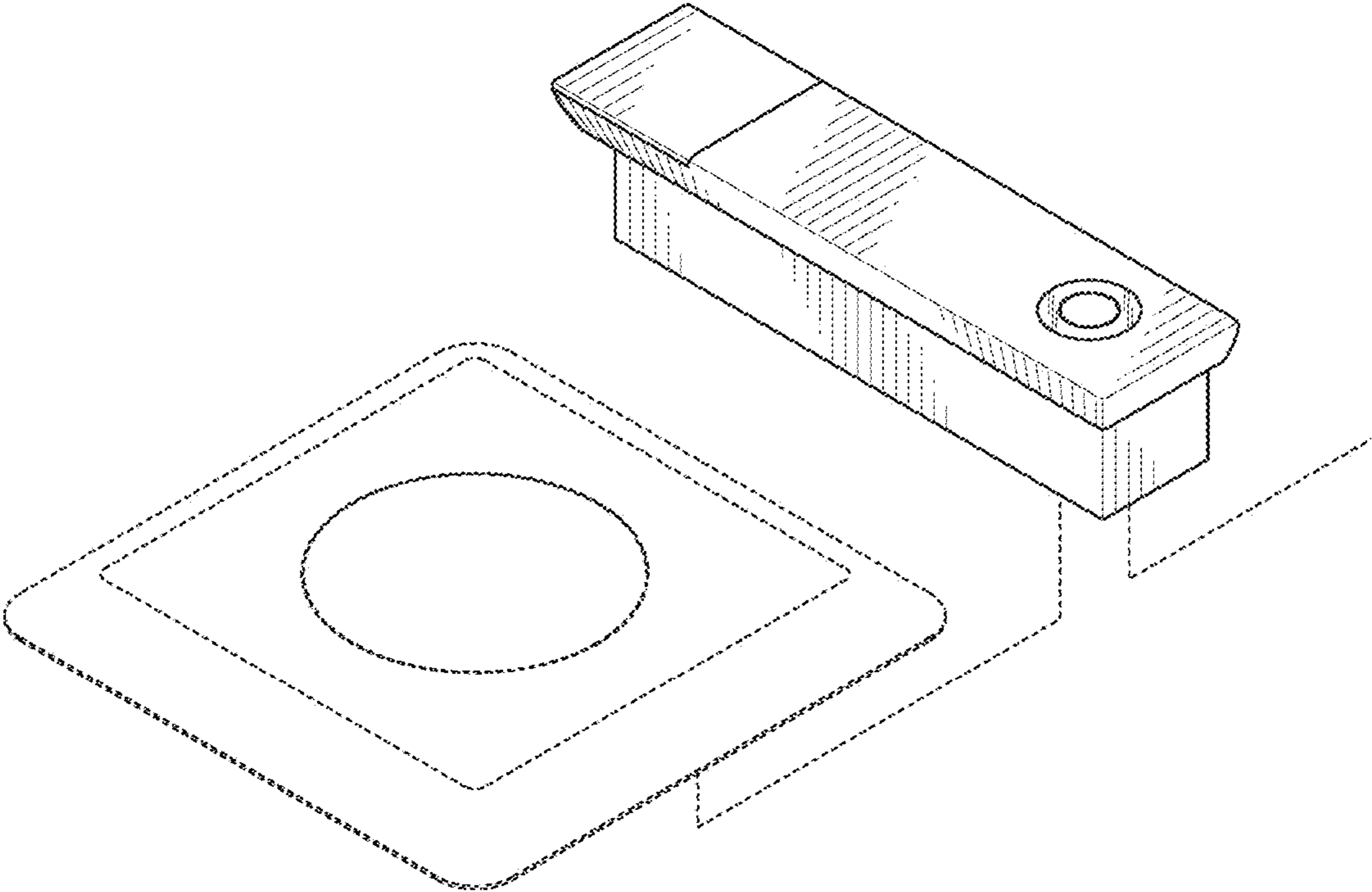


FIG. 9

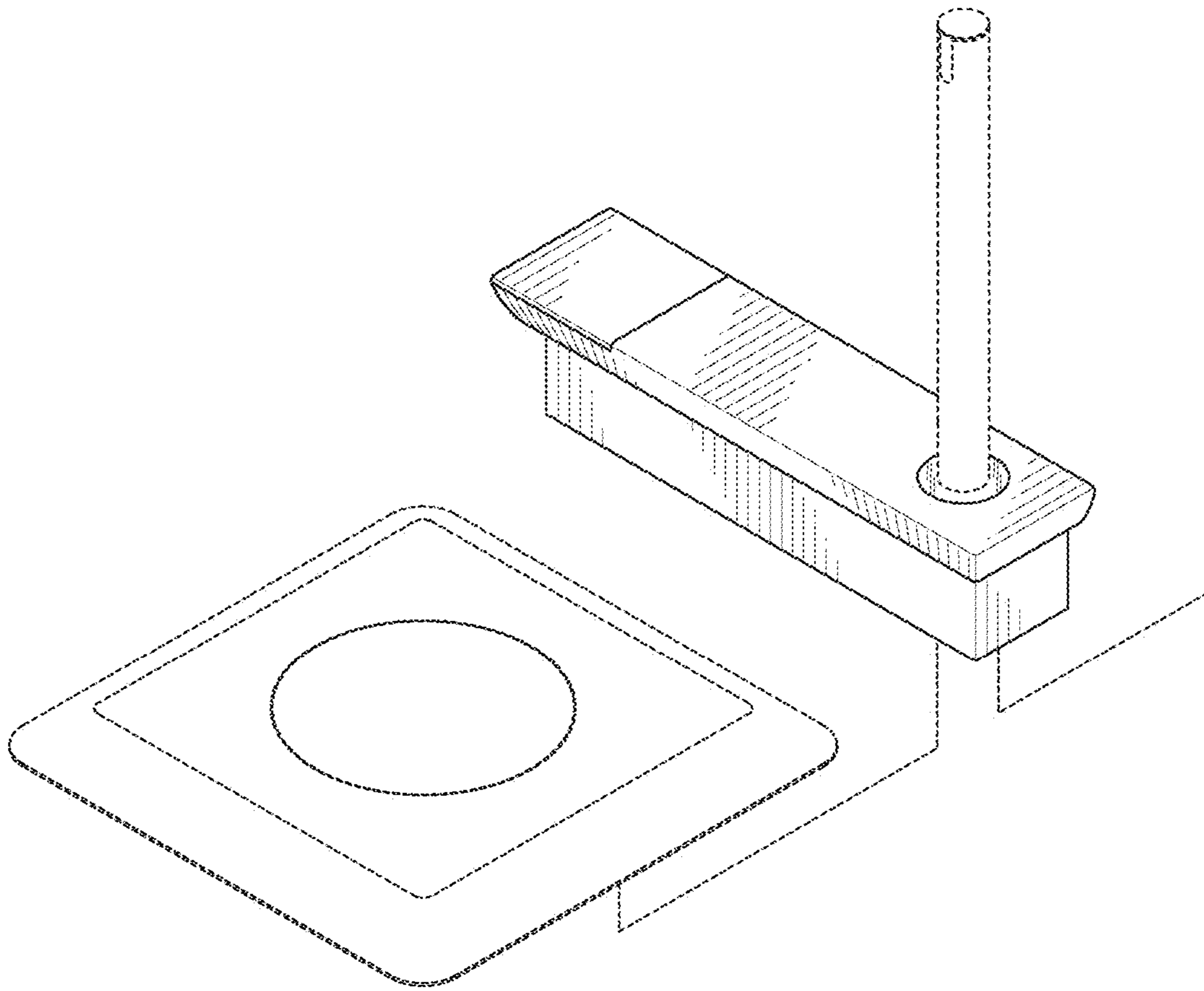


FIG. 10