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

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(54) **SPONGE FOR SUBSTRATE CLEANING**

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

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

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(30) **Foreign Application Priority Data**

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(51) **LOC (10) Cl.** **04-01**

(52) **U.S. Cl.**
USPC **D32/40**

(58) **Field of Classification Search**
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D9/499, 780, 772, 767, 775, 435, 453;
D8/70, 62

CPC A47L 13/16; B24B 1/00; B24B 41/06
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

- 782,278 A * 2/1905 Russ B24B 41/06
451/226
- 1,223,219 A * 4/1917 Tichborne B24B 41/06
279/2.22
- D52,793 S * 12/1918 Hoffman D9/772
- 1,374,612 A * 4/1921 Standish B67B 7/18
81/3.56
- 1,432,670 A * 10/1922 Cole B67B 7/20
81/3.55
- 1,835,392 A * 12/1931 Hardies E21B 31/107
175/296
- 1,858,342 A * 5/1932 Rollman B65D 41/0485
215/302
- 1,861,552 A * 6/1932 Savery B65D 41/02
215/233

(Continued)

FOREIGN PATENT DOCUMENTS

JP 2000-173966 A 6/2000
KR 300743303.0000 * 5/2014

OTHER PUBLICATIONS

Amazon.com: Quickie Soap Dispensing Dishwasher Refills, review Jan. 9, 2013, https://www.amazon.com/Quickie-Dispensing-Dishwasher-Refills-136MB/dp/B0012YL5SO/ref=sr_1_288?ie=UTF8&qid=1488499893&sr=8-288&keywords=soap+sponge, [site visited Mar. 2, 2017 7:15:58 PM].*

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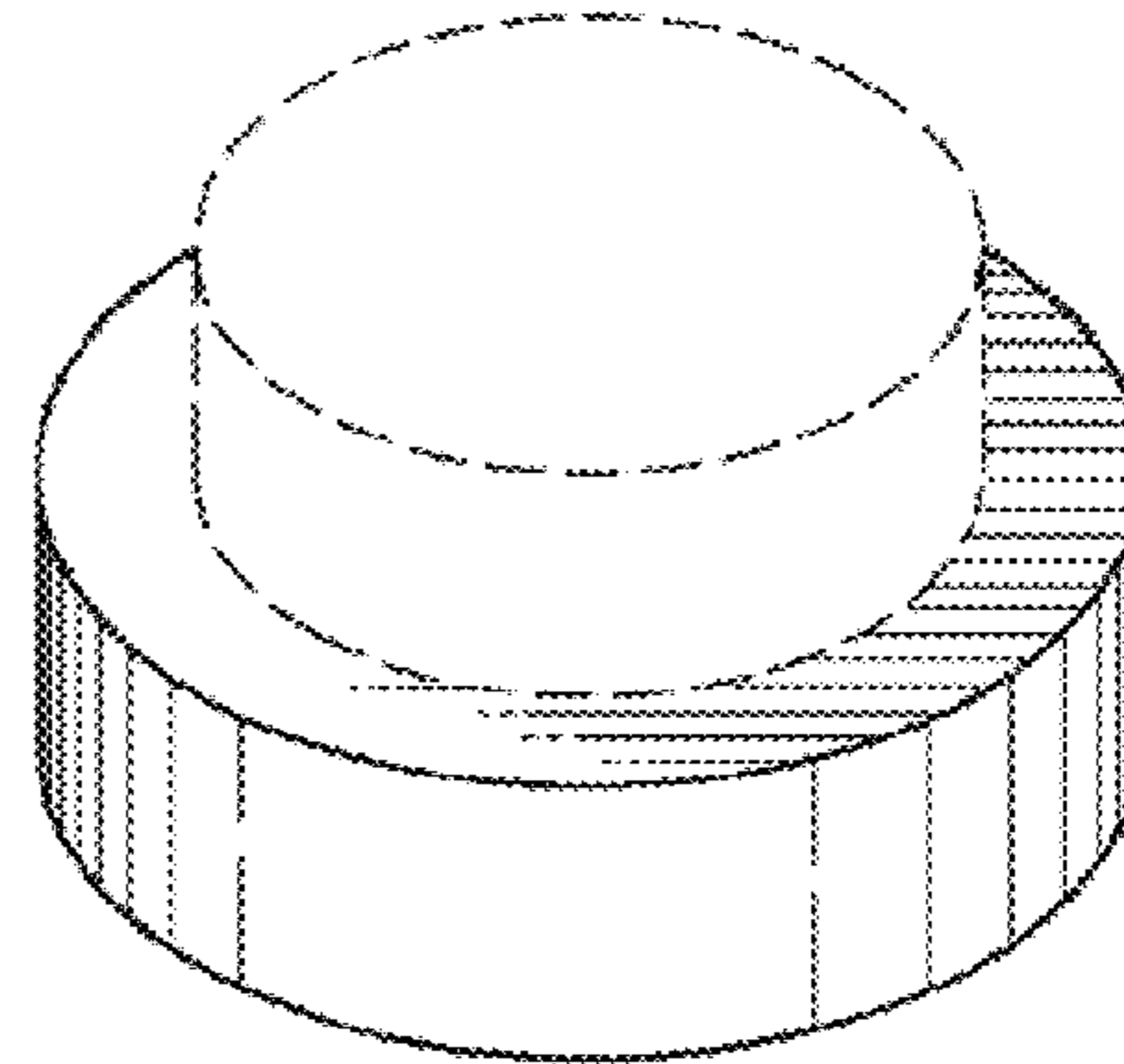
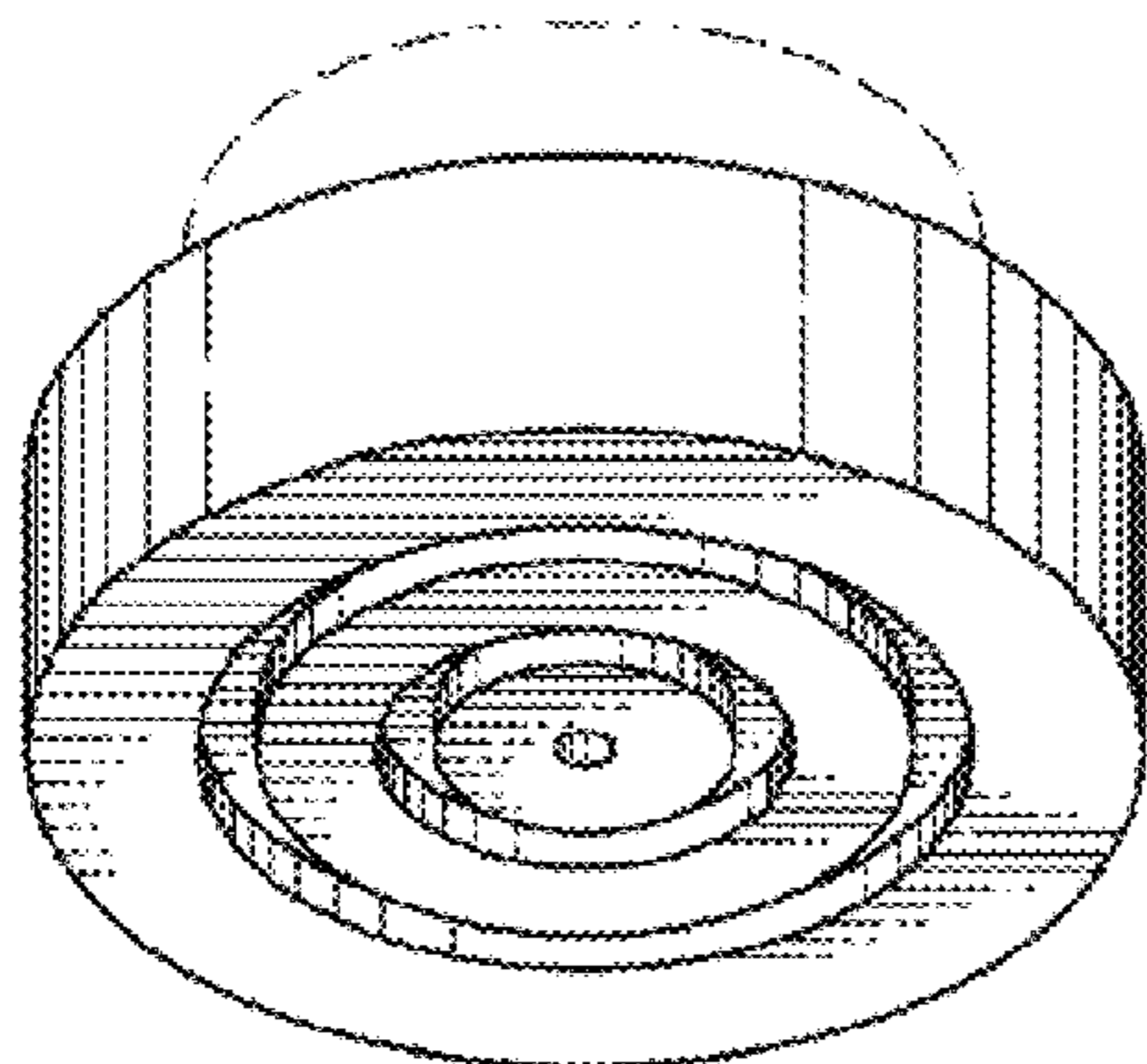
(57) **CLAIM**

The ornamental design for a sponge for substrate cleaning, as shown and described.

DESCRIPTION

FIG. 1 is a bottom perspective view of a sponge for substrate cleaning showing my new design;
FIG. 2 is a top-right perspective view observed from a bottom thereof;
FIG. 3 is a front view thereof, rear, left-side and right-side views being identical thereto;
FIG. 4 is a top view thereof;
FIG. 5 is a bottom view thereof; and,
FIG. 6 is an enlarged, rotated cross-sectional view thereof taken along section line 6-6 in FIG. 4.
The cross-hatching pattern shown in FIG. 6 does not represent a particular material.
The broken lines depict environmental subject matter only and form no part of the claimed design.

1 Claim, 1 Drawing Sheet



(56)

References Cited

U.S. PATENT DOCUMENTS

2,077,260 A * 4/1937 Polisso B67B 3/18
72/126
2,425,966 A * 8/1947 Tjomsland A63B 67/14
473/588
3,075,222 A * 1/1963 Miller A47L 11/164
15/209.1
3,135,003 A * 6/1964 Wise A47L 15/0068
15/211
D223,945 S * 6/1972 Bousquet 15/28
D260,408 S * 8/1981 Ruffing D21/731
D267,783 S * 2/1983 Lang D7/624.1
D289,143 S * 4/1987 Guillaume D9/445
D315,236 S * 3/1991 Kraselsky D32/40
D422,792 S * 4/2000 Liu D32/42
D456,257 S * 4/2002 Bakic D9/435
D498,116 S * 11/2004 Papanastasiou D7/362
D653,127 S * 1/2012 Cronin D27/172
D694,081 S * 11/2013 Wright D8/70
D765,328 S * 8/2016 Brown D32/40
2003/0109203 A1 * 6/2003 Bootle B24B 1/00
451/41
2015/0336234 A1 * 11/2015 Kimura B24B 37/26
438/692

OTHER PUBLICATIONS

Metal honeycomb substrate—Persistence Heating Applied Co.,Ltd, website 2016, [site visited Mar. 2, 2017 9:59:46 PM], <http://www.alloypersistence.com/products/show/?78-5-Metal-honeycomb-substrate.html>.*

Variety of PVA Sponge Roller—Specilize in Industry Cleaning Process, website 2014, <http://www.dstec.com.my/variety-of-pva-sponge-roller/>, [site visited Mar. 2, 2017 9:56:18 PM].*

* cited by examiner

FIG. 2

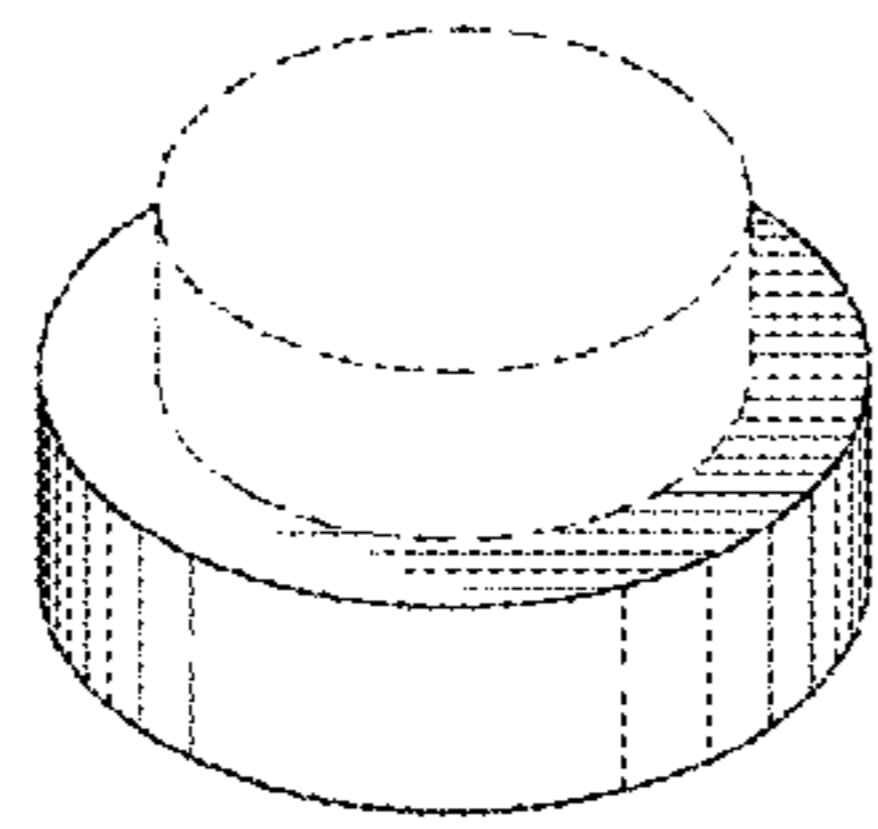


FIG. 1

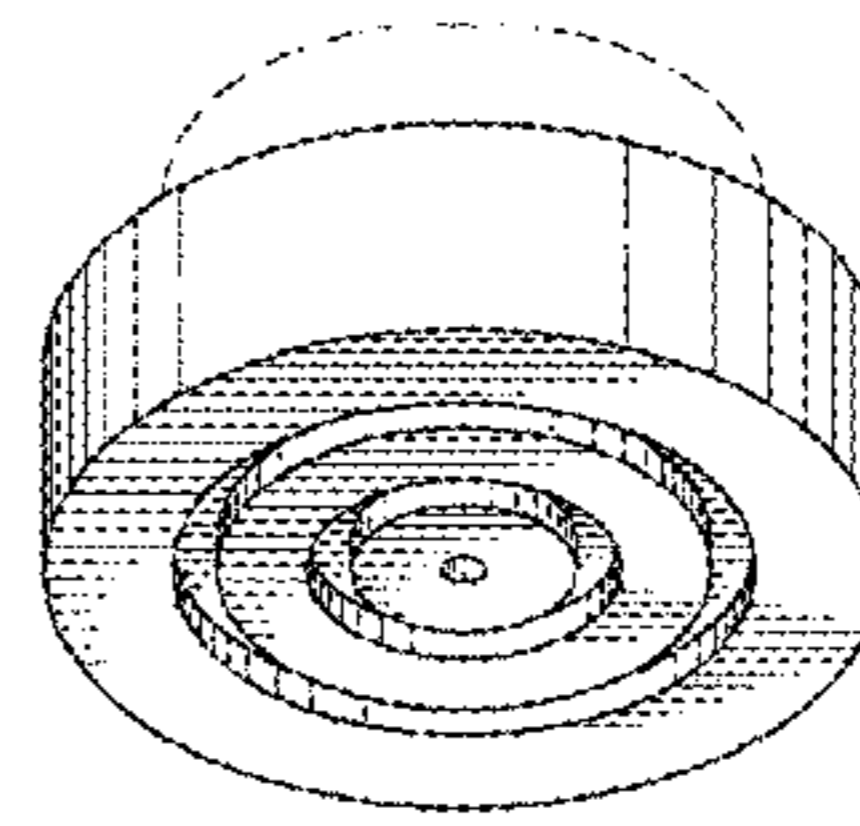


FIG. 3

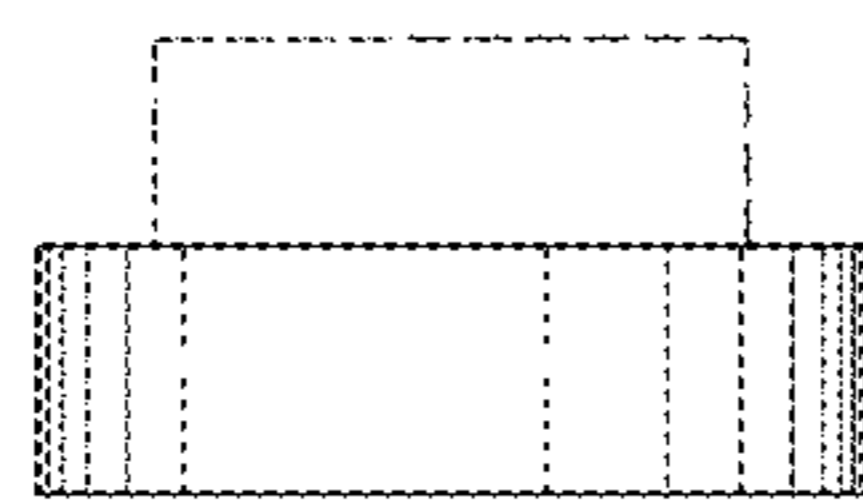


FIG. 4

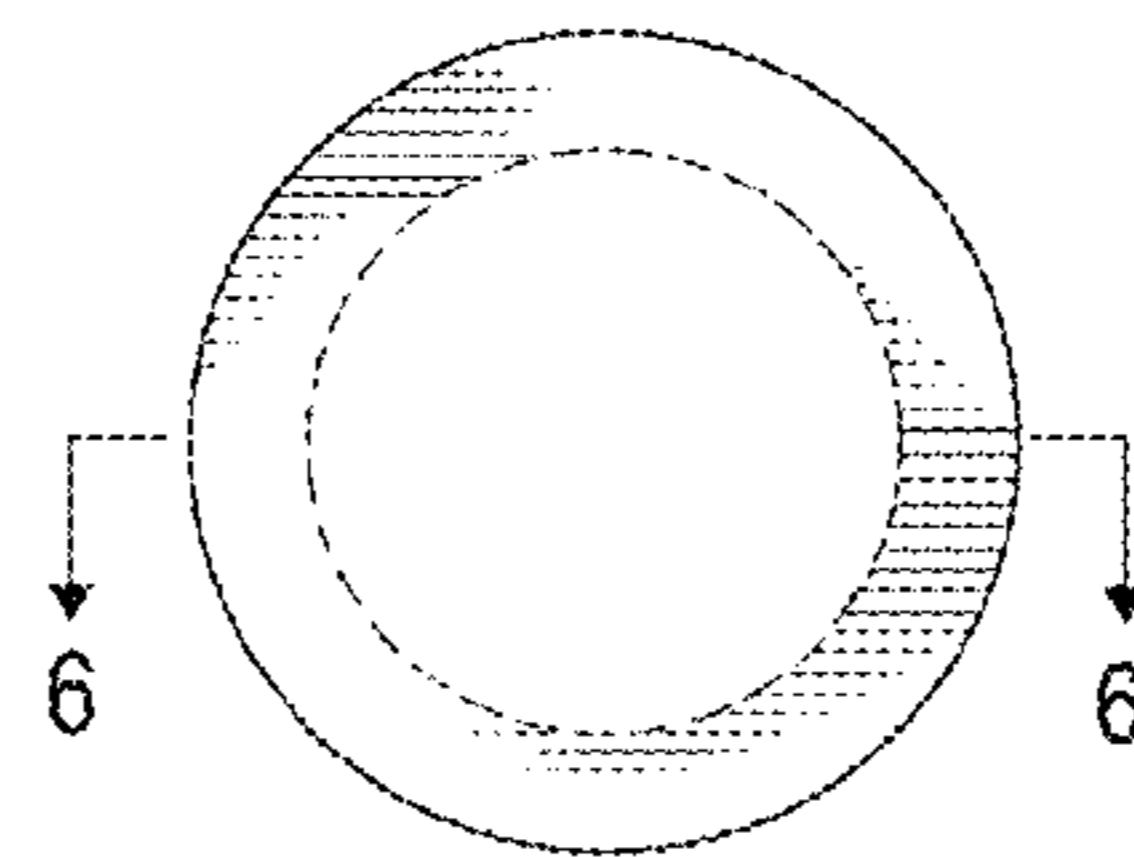


FIG. 6

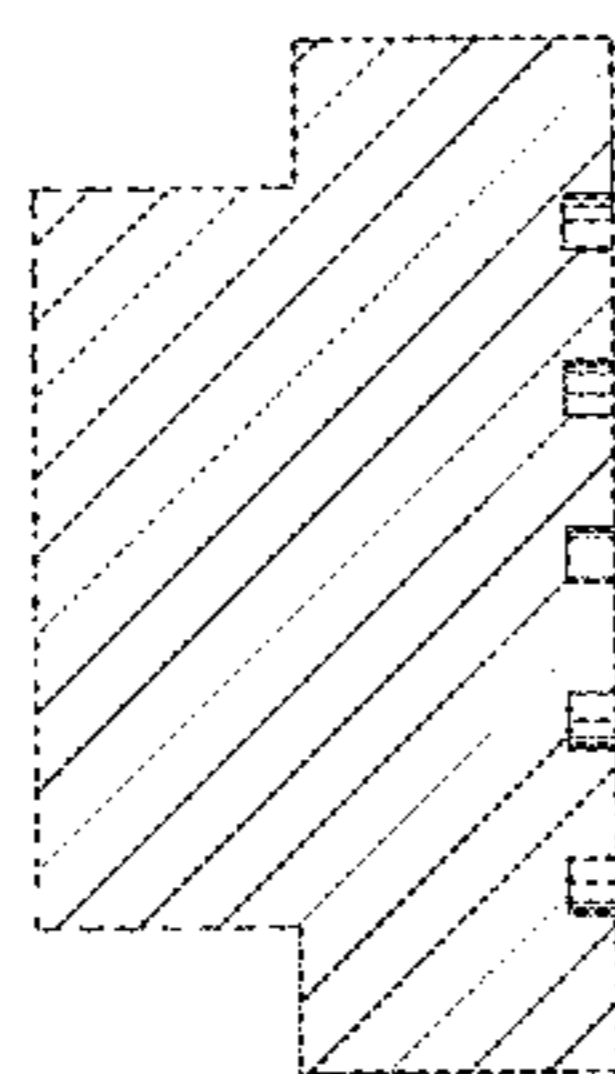


FIG. 5

