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(12) **United States Design Patent** (10) **Patent No.:** US D802,545 S
(45) **Date of Patent:** ** Nov. 14, 2017

(54) **LOWER CHAMBER FOR A PLASMA PROCESSING APPARATUS**(71) Applicant: **Hitachi High-Technologies Corporation**, Minato-ku, Tokyo (JP)(72) Inventors: **Susumu Tauchi**, Tokyo (JP); **Takashi Uemura**, Tokyo (JP); **Kohei Sato**, Tokyo (JP)(73) Assignee: **Hitachi High-Technologies Corporation**, Tokyo (JP)(***) Term: **15 Years**(21) Appl. No.: **29/544,071**(22) Filed: **Oct. 30, 2015**(30) **Foreign Application Priority Data**

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(51) LOC (10) Cl. 13-03

(52) U.S. Cl.

USPC **D13/182**(58) **Field of Classification Search**

USPC D13/118, 123, 154, 156, 173, 177, 182, D13/184, 199; D8/70, 90, 396;

D15/126, 138, 139

CPC B24B 5/00; B24B 7/00; B24B 7/22; B24B

37/04; B24B 37/28; B24B 37/32; B24B 1/00; B24B 29/00; C30B 23/02; H01L

21/304; H01L 21/67; H01L 21/68; H01L 21/00; H01L 21/32; Y10S 41/139; C23C

16/00; C23C 16/45; C25D 17/00; H01R

3/00

See application file for complete search history.

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Primary Examiner — Thomas Johannes*Assistant Examiner* — Shawn T Gingrich(74) *Attorney, Agent, or Firm* — Crowell & Moring LLP(57) **CLAIM**

The ornamental design for a lower chamber for a plasma processing apparatus, as shown and described.

DESCRIPTION

FIG. 1 is a front, top and right side perspective view of a lower chamber for a plasma processing apparatus according to the design;

FIG. 2 is a front elevational view thereof;

FIG. 3 is a rear elevational view thereof;

FIG. 4 is a left side elevational view thereof;

FIG. 5 is a right side elevational view thereof;

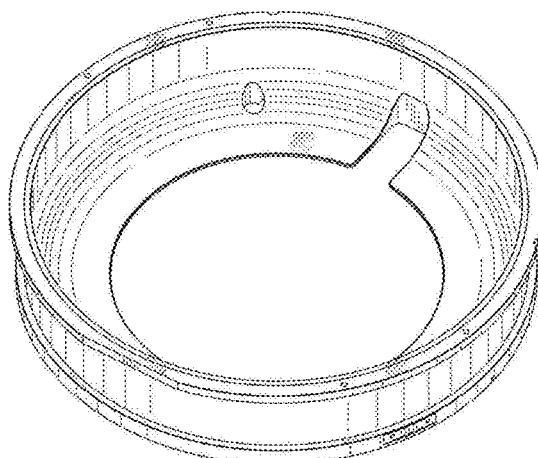
FIG. 6 is a top plan view thereof;

FIG. 7 is a bottom plan view thereof;

FIG. 8 is a cross-sectional view taken along line 8-8 of FIG. 6;

FIG. 9 is a cross-sectional view taken along line 9-9 of FIG. 6; and,

FIG. 10 is a partially enlarged view taken along line 10-10 of FIG. 8.

1 Claim, 6 Drawing Sheets

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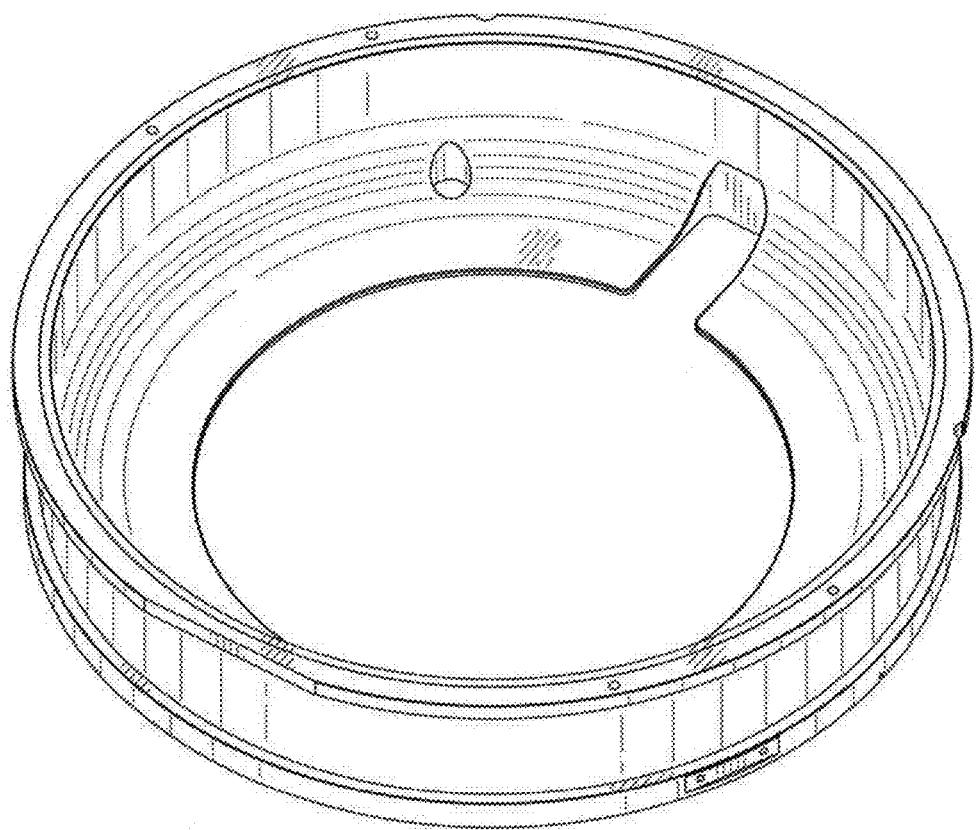


FIG. 1

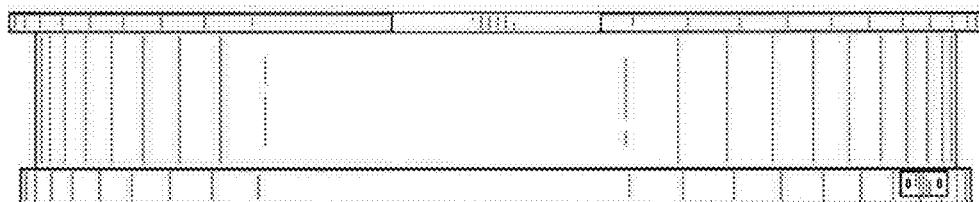


FIG. 2

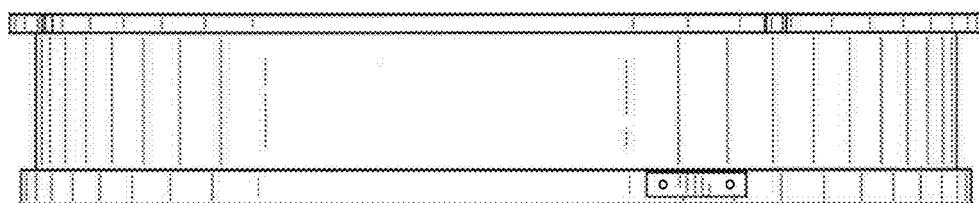


FIG. 3

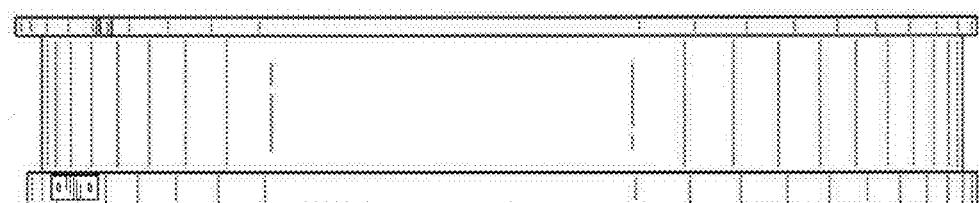


FIG. 4

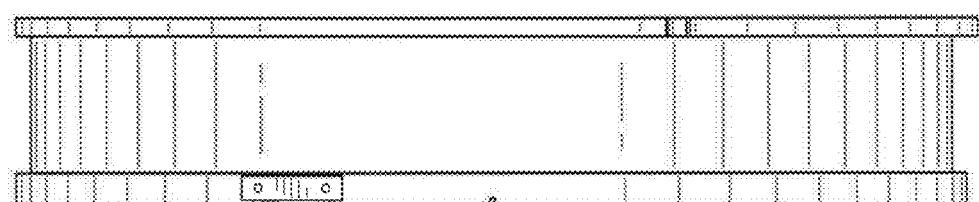


FIG. 5

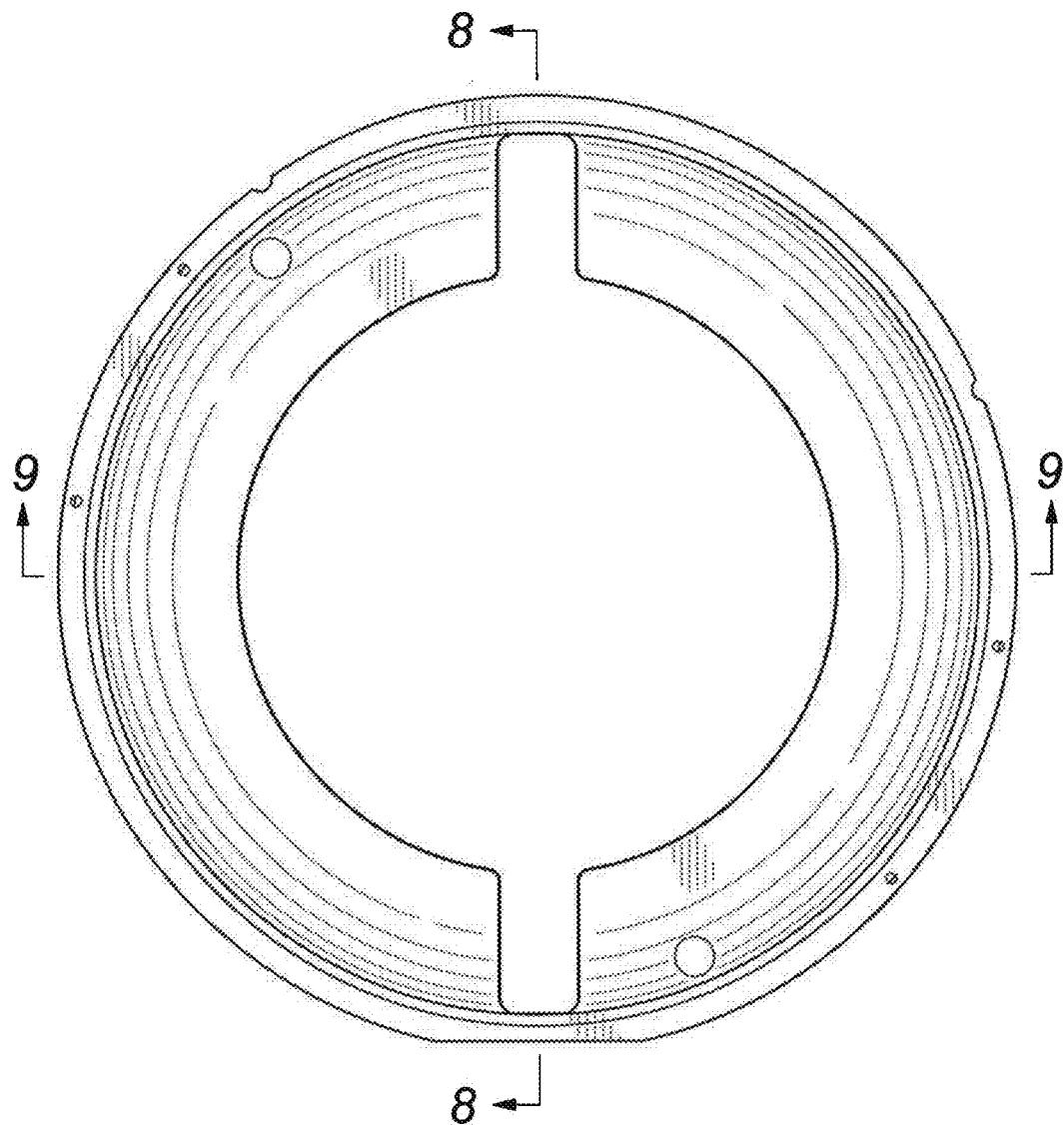


FIG. 6

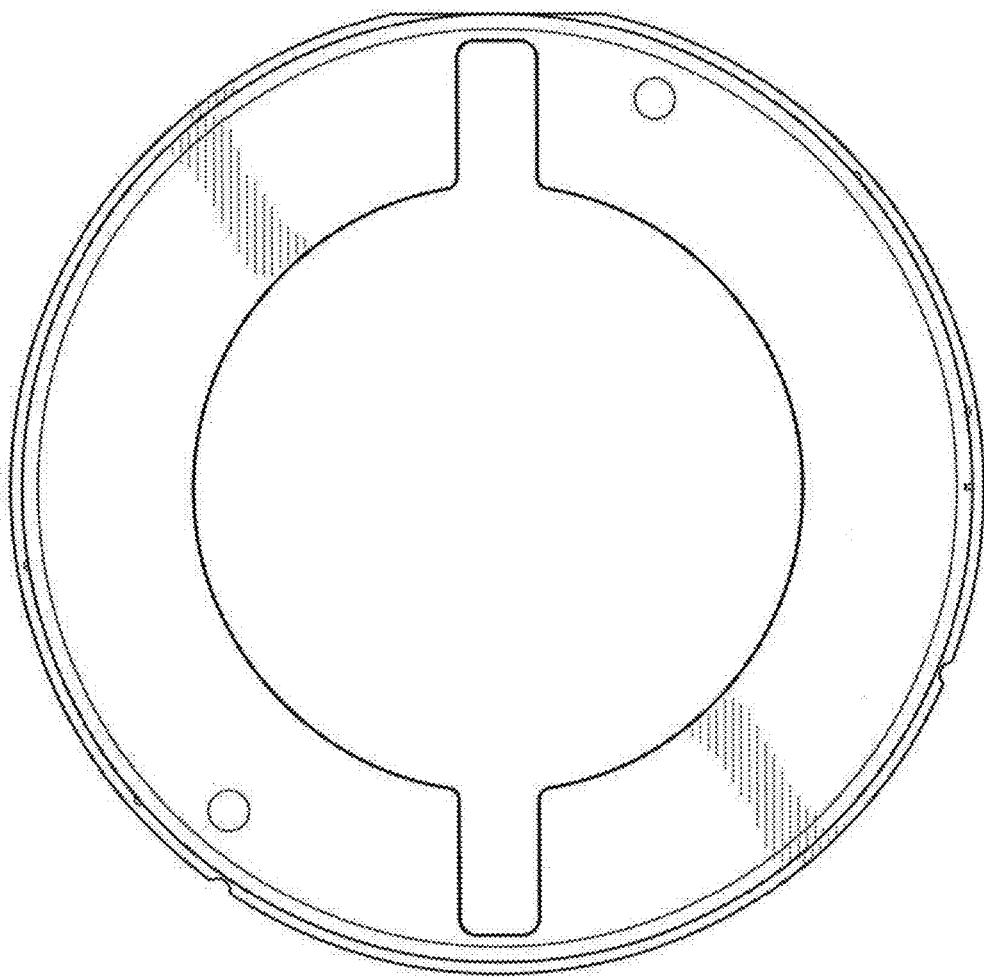


FIG. 7

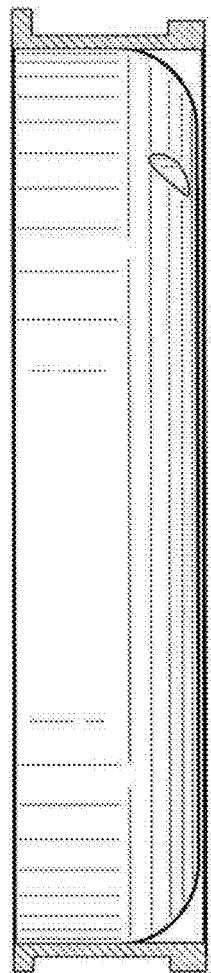


FIG. 8

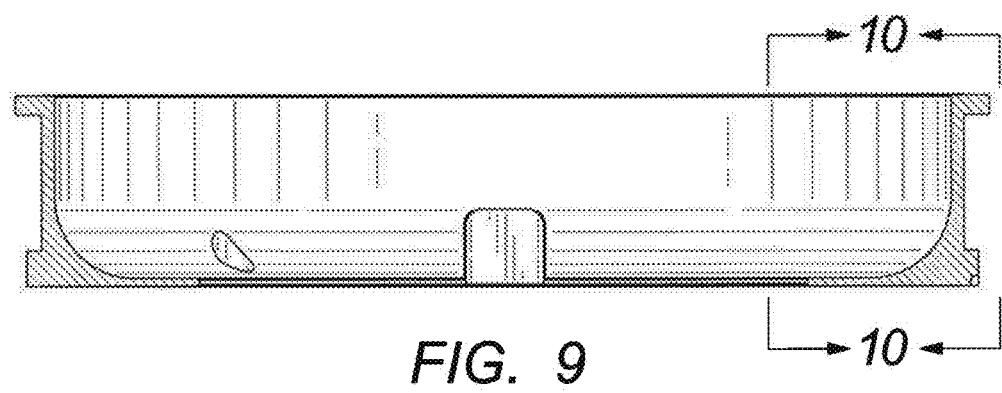


FIG. 9

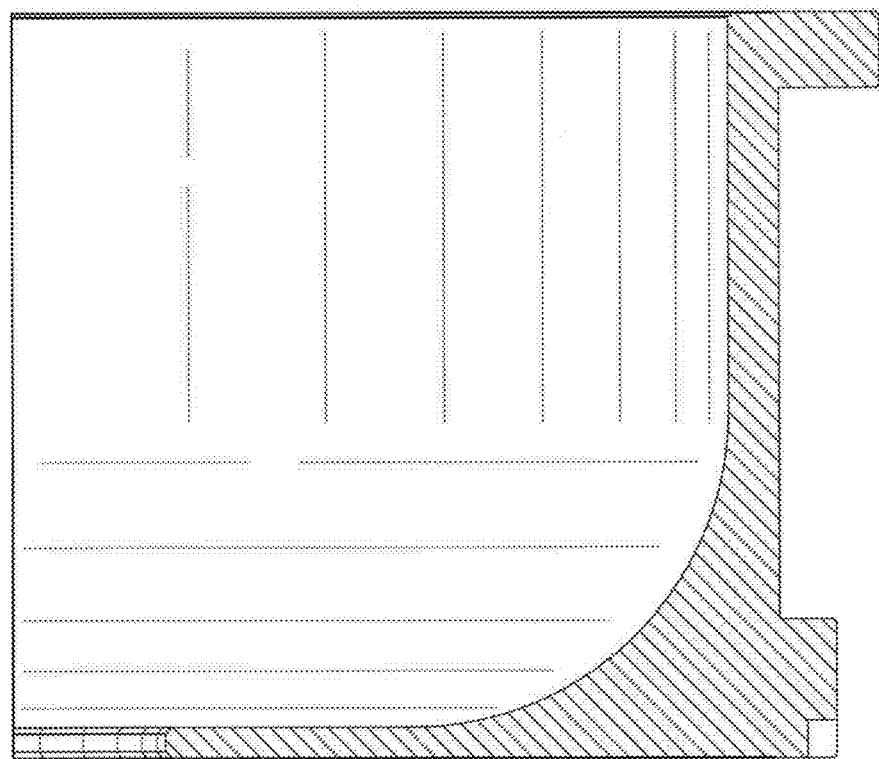


FIG. 10