



US00D836572S

(12) **United States Design Patent** (10) **Patent No.:** **US D836,572 S**
Riker et al. (45) **Date of Patent:** **** Dec. 25, 2018**

(54) **TARGET PROFILE FOR A PHYSICAL VAPOR DEPOSITION CHAMBER TARGET**

(71) Applicant: **APPLIED MATERIALS, INC.**, Santa Clara, CA (US)

(72) Inventors: **Martin Lee Riker**, Milpitas, CA (US);
Fuhong Zhang, Cupertino, CA (US);
Xiaodong Wang, San Jose, CA (US)

(73) Assignee: **APPLIED MATERIALS, INC.**, Santa Clara, CA (US)

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

(21) Appl. No.: **29/579,470**

(22) Filed: **Sep. 30, 2016**

(51) **LOC (11) Cl.** **13-03**

(52) **U.S. Cl.** **D13/182**
USPC

(58) **Field of Classification Search**
USPC D13/182; D15/144.1, 144.2, 199
CPC H01L 21/67742; H01L 21/0226; H01L 21/02263; H01L 21/02266; H01L 21/02269; H01L 21/02271; H01L 2224/75186; H01L 2224/761185; H01L 2224/76186; H01L 2221/68363
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

6,659,850 B2 * 12/2003 Korovin B24B 37/30
451/286
D557,226 S * 12/2007 Uchino D13/182
D559,993 S 1/2008 Nagakubo et al.
D559,994 S 1/2008 Nagakubo et al.
D614,593 S * 4/2010 Lee D13/182
D616,390 S * 5/2010 Sato D13/182
D633,452 S * 3/2011 Namiki D13/182
D691,974 S * 10/2013 Osada D13/182

D716,742 S * 11/2014 Jang D13/182
D724,553 S * 3/2015 Choi D13/182
D741,823 S * 10/2015 Tateno D13/182
D769,200 S * 10/2016 Fukushima D13/182
D770,992 S * 11/2016 Tauchi D13/182
(Continued)

FOREIGN PATENT DOCUMENTS

JP D1420846 8/2011
JP D1421157 8/2011
(Continued)

OTHER PUBLICATIONS

U.S. Appl. No. 29/524,109, filed Apr. 16, 2015, Riker et al.
(Continued)

Primary Examiner — Elizabeth J Oswecki

(74) *Attorney, Agent, or Firm* — Moser Taboada; Alan Taboada

(57) **CLAIM**

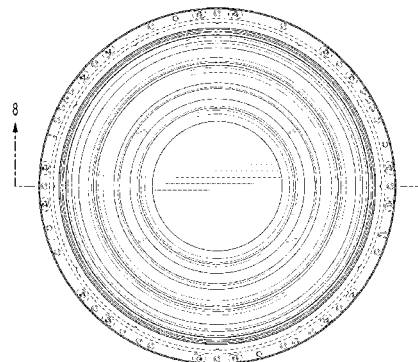
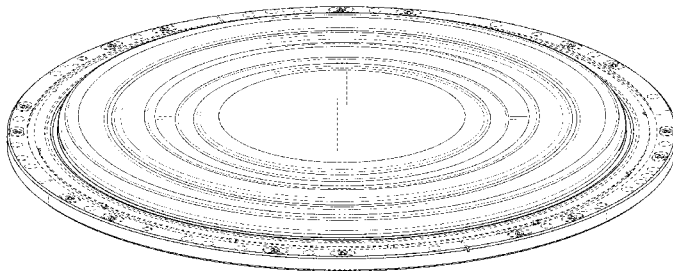
The ornamental design for a target profile for a physical vapor deposition chamber target, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a target profile for a physical vapor deposition chamber target, showing our new design; FIG. 2 is a top plan view thereof; FIG. 3 is a bottom plan view thereof; FIG. 4 is a right side elevation view thereof; FIG. 5 is a left side elevation view thereof; FIG. 6 is a front elevation view thereof; FIG. 7 is a back elevation view thereof; and, FIG. 8 is a cross-sectional view taken along line 8-8 of FIG. 2.

The dashed lines in FIGS. 1-8 represent disclaimed matter that forms no part of the claimed design.

1 Claim, 6 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D795,208	S	8/2017	Sasaki et al.	
D797,067	S *	9/2017	Zhang	D13/182
D797,691	S *	9/2017	Joubert	D13/182
D798,248	S *	9/2017	Hanson	D13/182
D801,942	S	11/2017	Riker et al.	
D810,705	S	2/2018	Krishnan et al.	
2005/0152089	A1 *	7/2005	Matsuda	H02N 13/00 361/234
2005/0193952	A1 *	9/2005	Goodman	H01J 37/32871 118/728

FOREIGN PATENT DOCUMENTS

JP	D1422692	9/2014
TW	D146490	4/2012

OTHER PUBLICATIONS

U.S. Appl. No. 29/524,557, filed Apr. 21, 2015, Zhang et al.
U.S. Appl. No. 29/530,683, filed Jun. 18, 2015, Hanson et al.
Search Report for Taiwan Design Application No. 106301373 dated
Jun. 20, 2017.

* cited by examiner

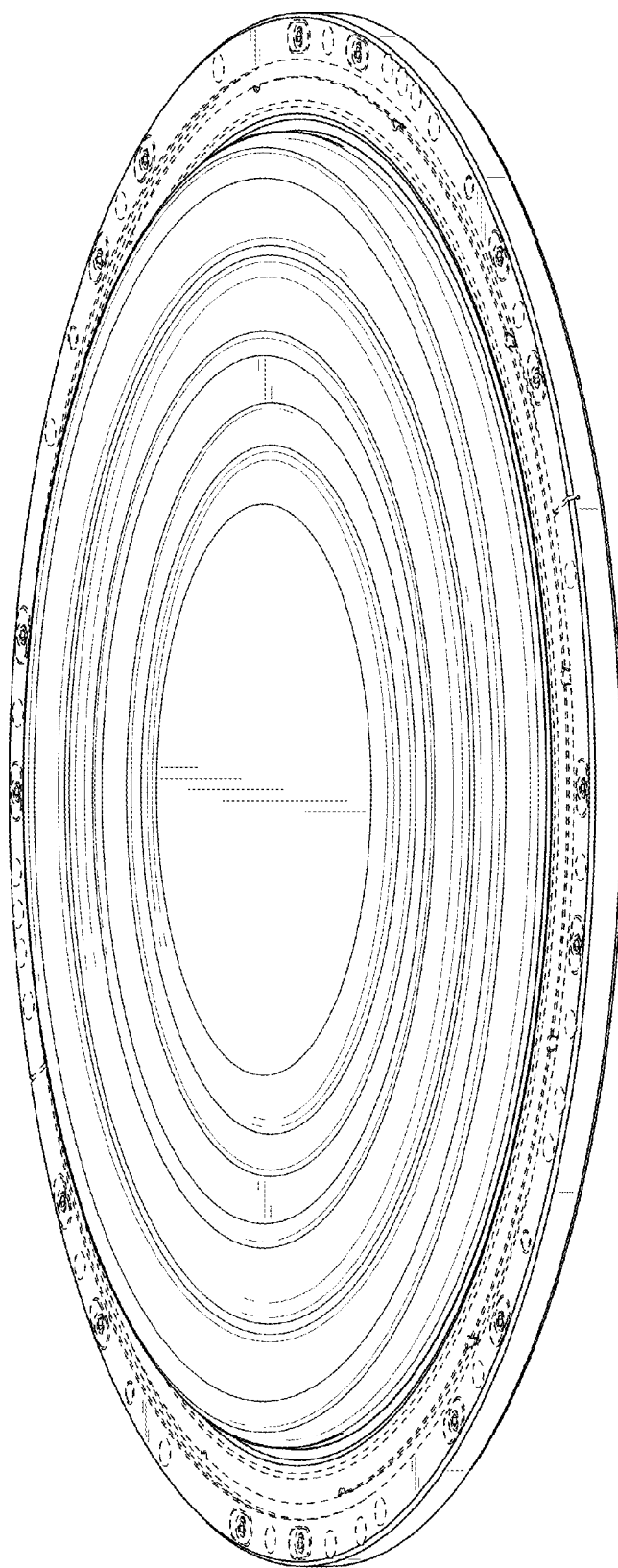


FIG. 1

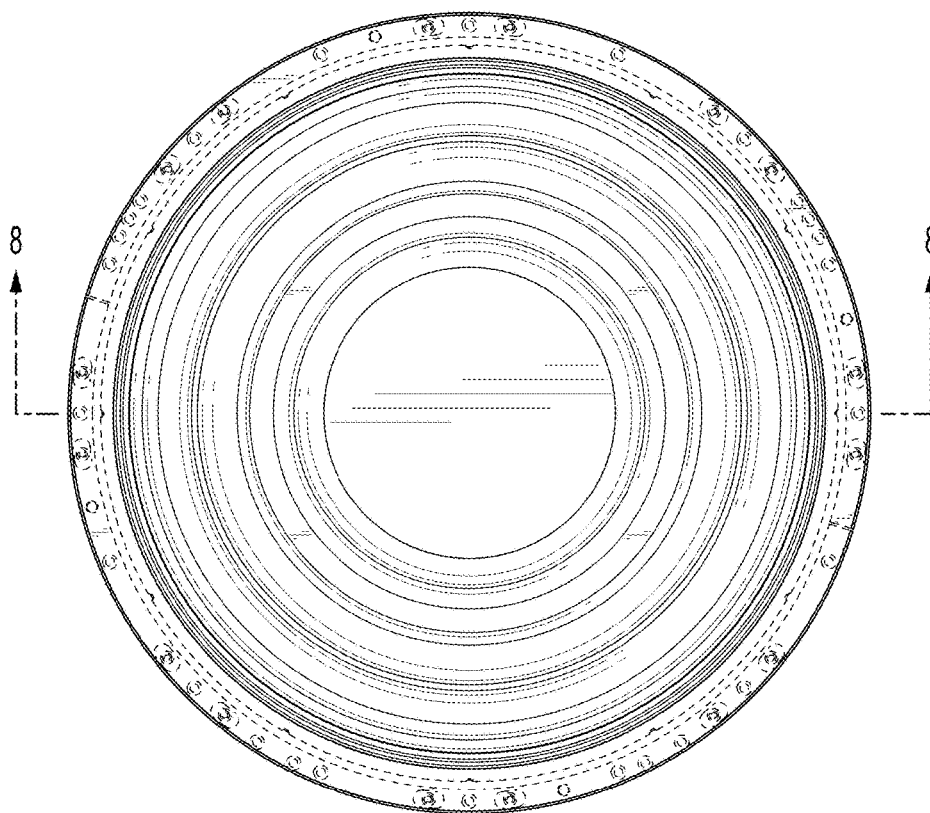


FIG. 2

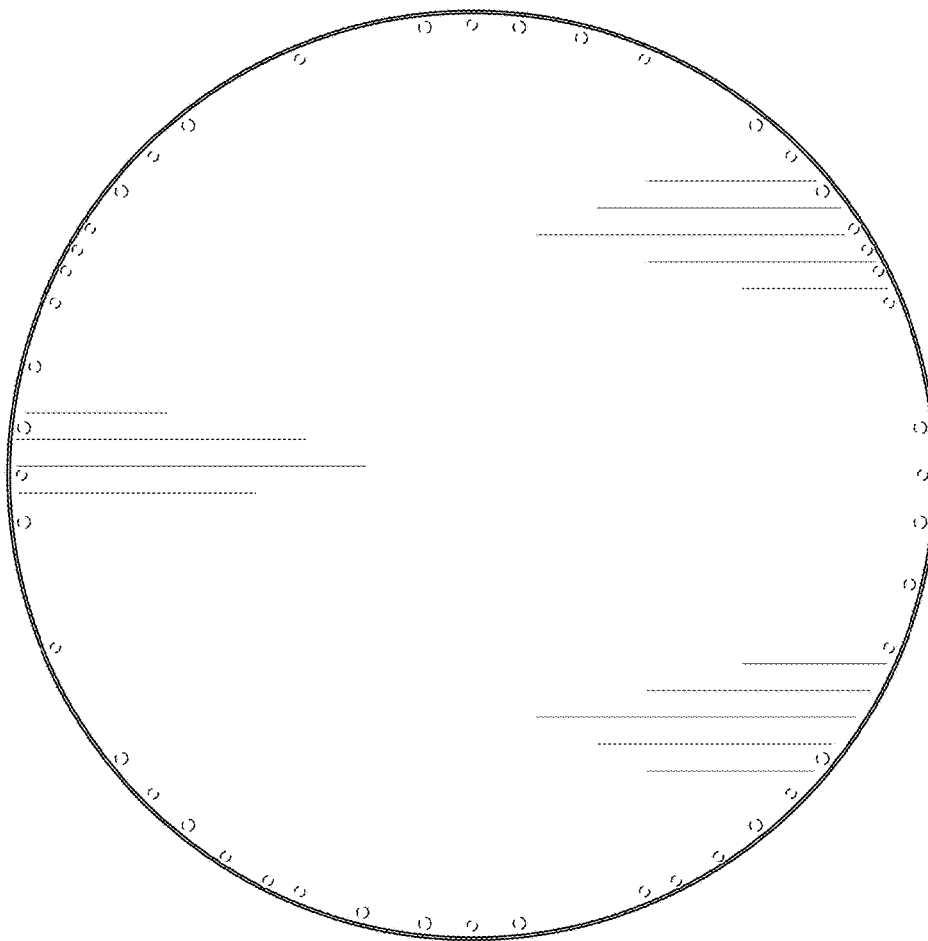


FIG. 3



FIG. 4



FIG. 5

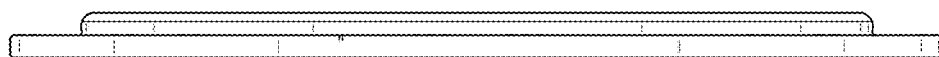


FIG. 6

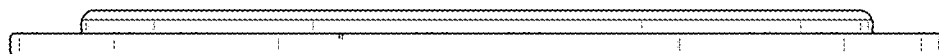


FIG. 7

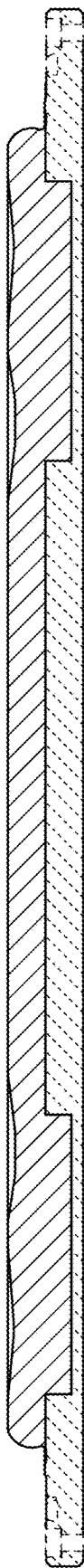


FIG. 8