



US00D900178S

(12) **United States Design Patent** (10) **Patent No.:** **US D900,178 S**
Anantha et al. (45) **Date of Patent:** **** Oct. 27, 2020**

- (54) **SPOOL FOR FILAMENT OF A THREE-DIMENSIONAL PRINTER**
- (71) Applicant: **MakerBot Industries, LLC**, Brooklyn, NY (US)
- (72) Inventors: **Vishnu Anantha**, Brooklyn, NY (US);
Mark Palmer, San Jose, CA (US);
Michael Joseph Kobida, Lake Barrington, IL (US)
- (73) Assignee: **MakerBot Industries, LLC**, Brooklyn, NY (US)
- (**) Term: **15 Years**
- (21) Appl. No.: **29/684,302**
- (22) Filed: **Mar. 20, 2019**
- (51) **LOC (12) Cl.** **15-09**
- (52) **U.S. Cl.**
USPC **D15/138**
- (58) **Field of Classification Search**
USPC D15/122, 135, 138, 141; D18/14, 19, 50,
D18/54, 54.1, 55, 59
CPC B22F 3/105; B22F 3/008; B29C 35/00;
B29C 35/02; B29C 35/04; B29C 35/06;
B29C 35/08; B29C 35/10; B29C 35/12;
B29C 35/14; B29C 35/16; B29C 35/18;
B29C 37/00; B29C 37/02; B29C 37/04;
B29C 67/00; B29C 67/02; B29C 67/04;
B29C 67/06; B29C 67/08; B29C 67/20;
B29C 67/24; B29C 69/00; B29C 69/02;
B29C 70/00; B29C 70/02; B29C 70/04;
B29C 70/06; B29C 70/08; B29C 70/10;
B29C 70/12; B29C 70/14; B29C 70/16;
B29C 70/18; B29C 70/20; B29C 70/22;
B29C 70/24; B29C 70/26; B29C 70/28;

(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

2,144,723 A * 1/1939 Howsam B65H 75/14
242/118.8

2,479,946 A 8/1949 Lofgren

(Continued)

FOREIGN PATENT DOCUMENTS

JP 2014069326 A * 4/2014 B41J 15/02

OTHER PUBLICATIONS

Engineering360. Link: <https://insights.globalspec.com/article/12705/a-weather-resistant-alternative-to-abs>. Sep. 27, 2019. A weather resistant alternative to ABS. (Year: 2019).*

(Continued)

Primary Examiner — Lauren D McVey

(74) *Attorney, Agent, or Firm* — Strategic Patents, P.C.

(57) **CLAIM**

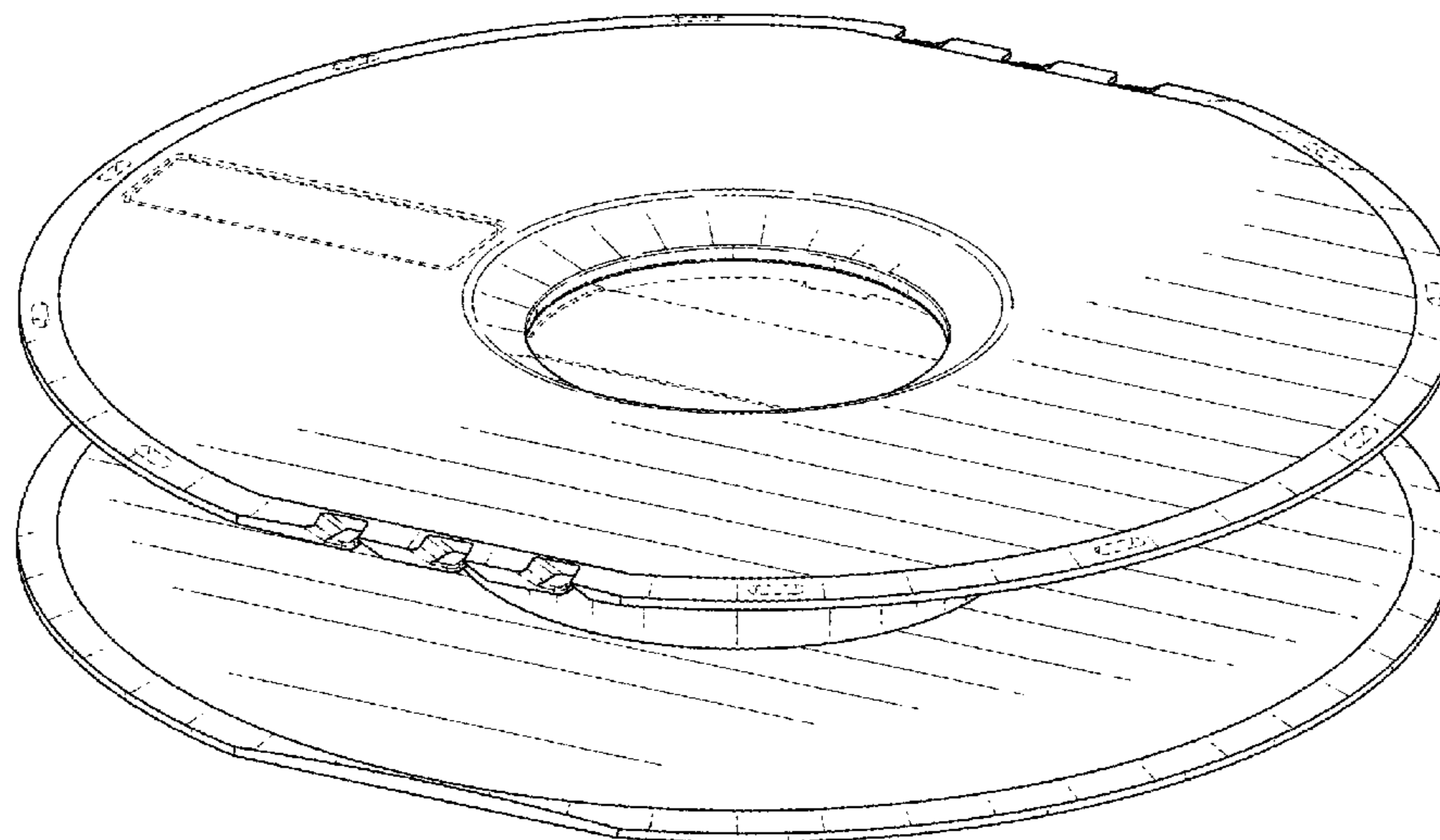
The ornamental design for a spool for filament of a three-dimensional printer, as shown and described.

DESCRIPTION

FIG. 1 is a top, front perspective view of a design for a spool for filament of a three-dimensional printer;
FIG. 2 is a front view thereof;
FIG. 3 is a rear view thereof;
FIG. 4 is a left side view thereof;
FIG. 5 is a right side view thereof;
FIG. 6 is a top view thereof; and,
FIG. 7 is a bottom view thereof.

The broken lines that are immediately adjacent to the shaded areas and define unshaded regions depict the bounds of the claimed design, while all other broken lines are directed to environment. The broken lines form no part of the claimed design. The attached Appendix includes additional images and drawings of the spool for filament of three-dimensional printer.

1 Claim, 3 Drawing Sheets



(58) **Field of Classification Search**
 CPC B29C 41/12; B29C 41/36; B29C 67/0081;
 B41J 2/155; B41J 2/17513; B41J
 2/17556; B41J 2/17596; B41J 2/16552;
 B41J 2/16541; B41J 2002/20; B41J
 2002/14475; B29K 2995/0021
 See application file for complete search history.

D623,927 S	9/2010	Gu et al.	
D628,466 S	12/2010	Taatjes et al.	
D673,090 S	12/2012	Lemke	
D705,643 S	5/2014	Siboni et al.	
D709,536 S	* 7/2014	Yoshimura	D15/138
D709,538 S	* 7/2014	Mizukami	D15/138
D709,539 S	* 7/2014	Kuwabara	D15/138
D730,952 S	* 6/2015	Siboni	D15/72
D740,107 S	* 10/2015	Armani	D8/358
D815,163 S	* 4/2018	Savill, Jr.	D15/138

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,104,077 A	*	9/1963	Struble	B65H 75/22 242/118.8
3,266,749 A		8/1966	Christian et al.	
D227,975 S	*	7/1973	Diamond	D8/358
D240,192 S		6/1976	Balmar, Jr.	
D272,485 S		2/1984	Philips	
D281,482 S		11/1985	Suzuki	
D300,405 S	*	3/1989	Kuntze	D8/358
D337,511 S	*	7/1993	Donaldson	D3/24
D341,769 S	*	11/1993	Donaldson	D3/24
D408,720 S		4/1999	Sheng	
D429,997 S	*	8/2000	Zeman	D8/358
D436,520 S		1/2001	Bulman	
6,715,710 B1		4/2004	Russell et al.	
6,991,197 B2		1/2006	Cox et al.	
D527,041 S		8/2006	Nagaoka et al.	
D545,561 S		7/2007	Vandecasteele	
D557,118 S		12/2007	Linginfelter	
D557,119 S		12/2007	Laga	
D598,733 S		8/2009	Taatjes et al.	
D606,845 S		12/2009	Taatjes et al.	
D618,086 S		6/2010	Taatjes et al.	

OTHER PUBLICATIONS

“U.S. Appl. No. 29/467,097, Notice of Allowance dated Jan. 15, 2014”, 9 pages.
 “U.S. Appl. No. 29/467,099, Notice of Allowance dated Feb. 24, 2015”, 11 pages.
 “U.S. Appl. No. 29/478,433, Final Office Action dated Jun. 30, 2015”, 8 pages.
 “U.S. Appl. No. 29/478,433, Non-Final Office Action dated Apr. 6, 2015”, 12 pages.
 “U.S. Appl. No. 29/478,433, Notice of Allowance dated Oct. 16, 2015”, 5 pages.
 “U.S. Appl. No. 29/478,434, Final Office Action dated Jul. 2, 2015”, 6 pages.
 “U.S. Appl. No. 29/478,434, Non-Final Office Action dated Apr. 3, 2015”, 9 pages.
 “U.S. Appl. No. 29/478,434, Notice of Allowance dated Nov. 5, 2015”, 8 pages.
 “U.S. Appl. No. 29/684,126, Non-Final Office Action dated Mar. 5, 2020”, 12 pages.

* cited by examiner

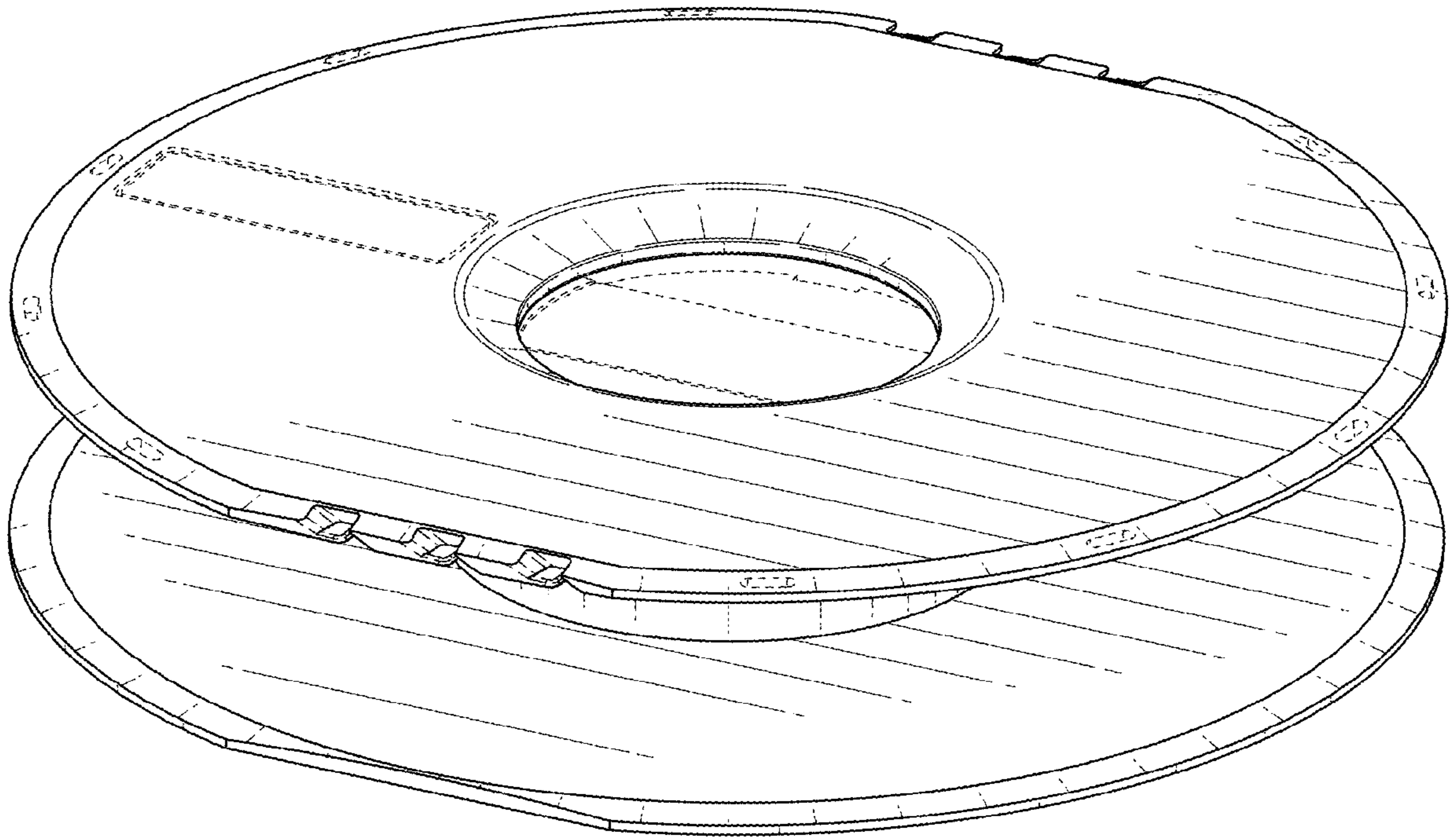


FIG. 1

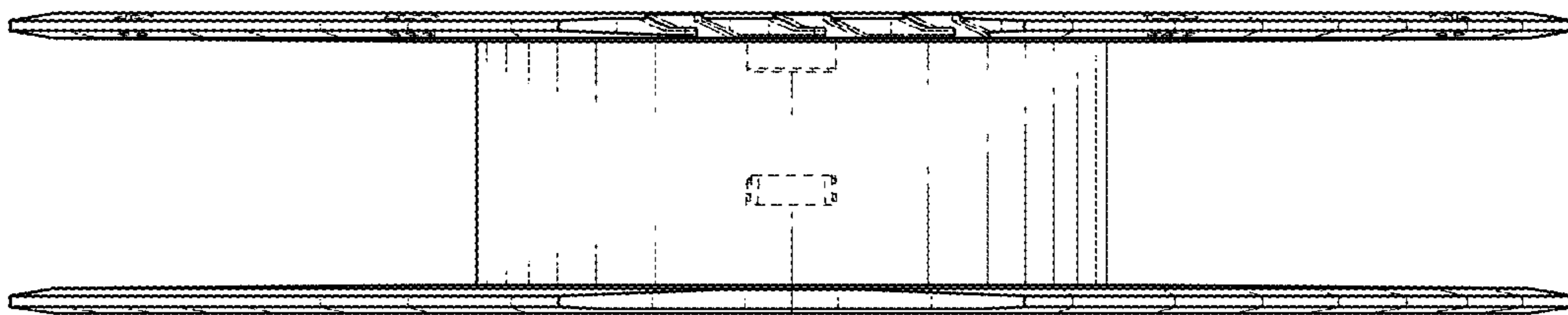


FIG. 2

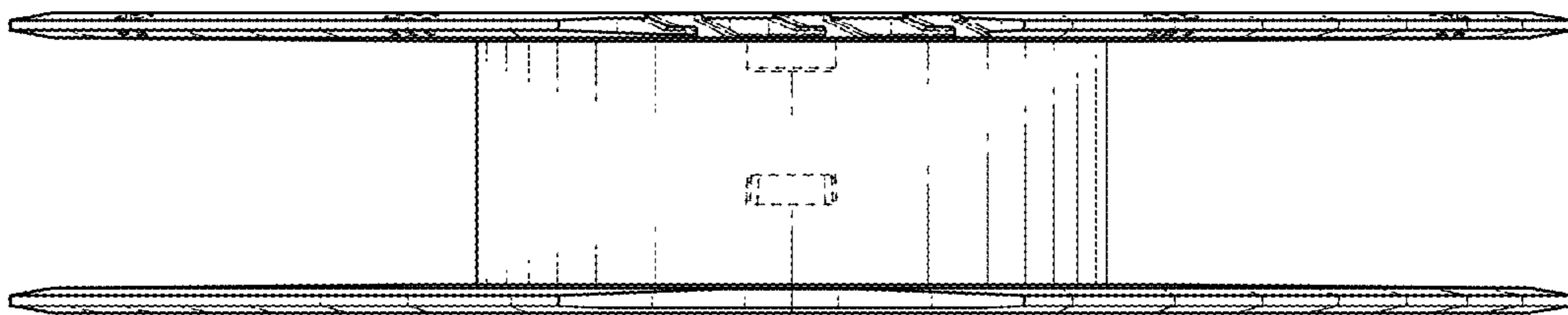


FIG. 3

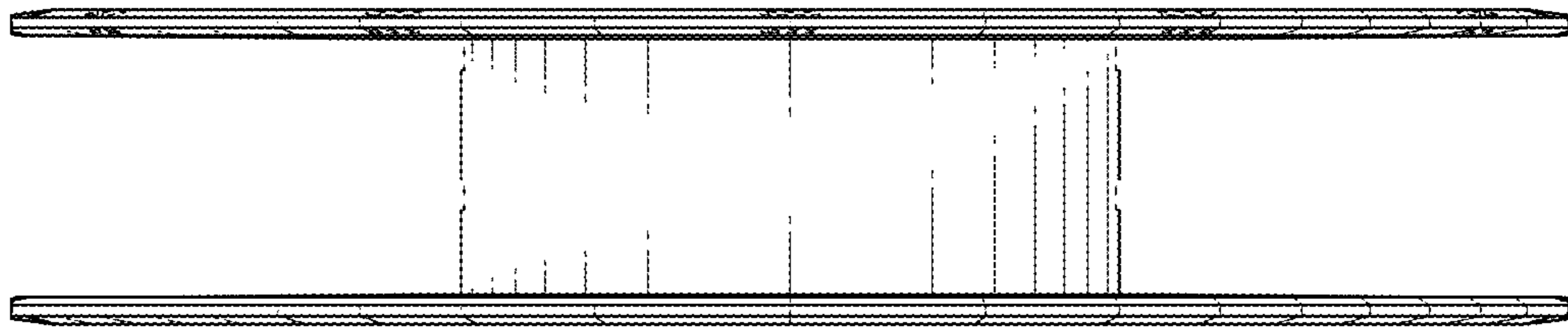


FIG. 4

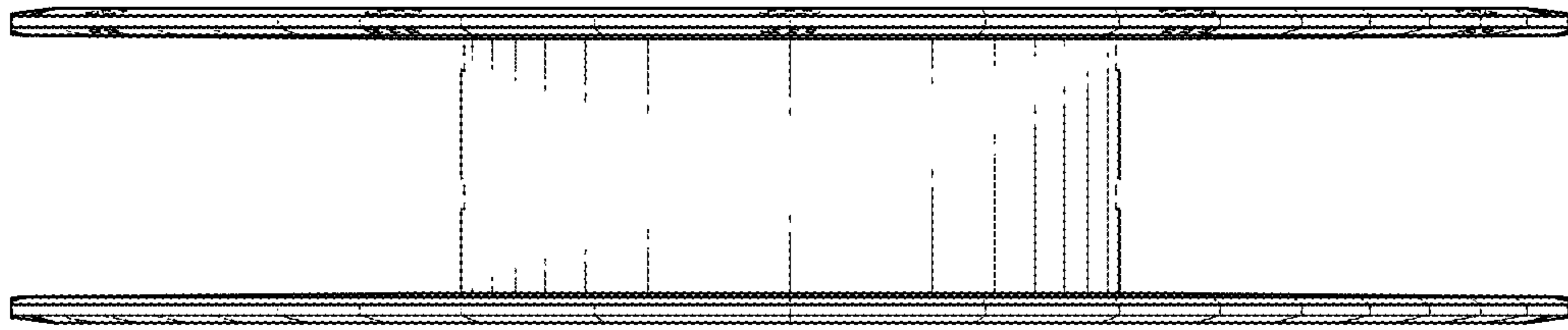


FIG. 5

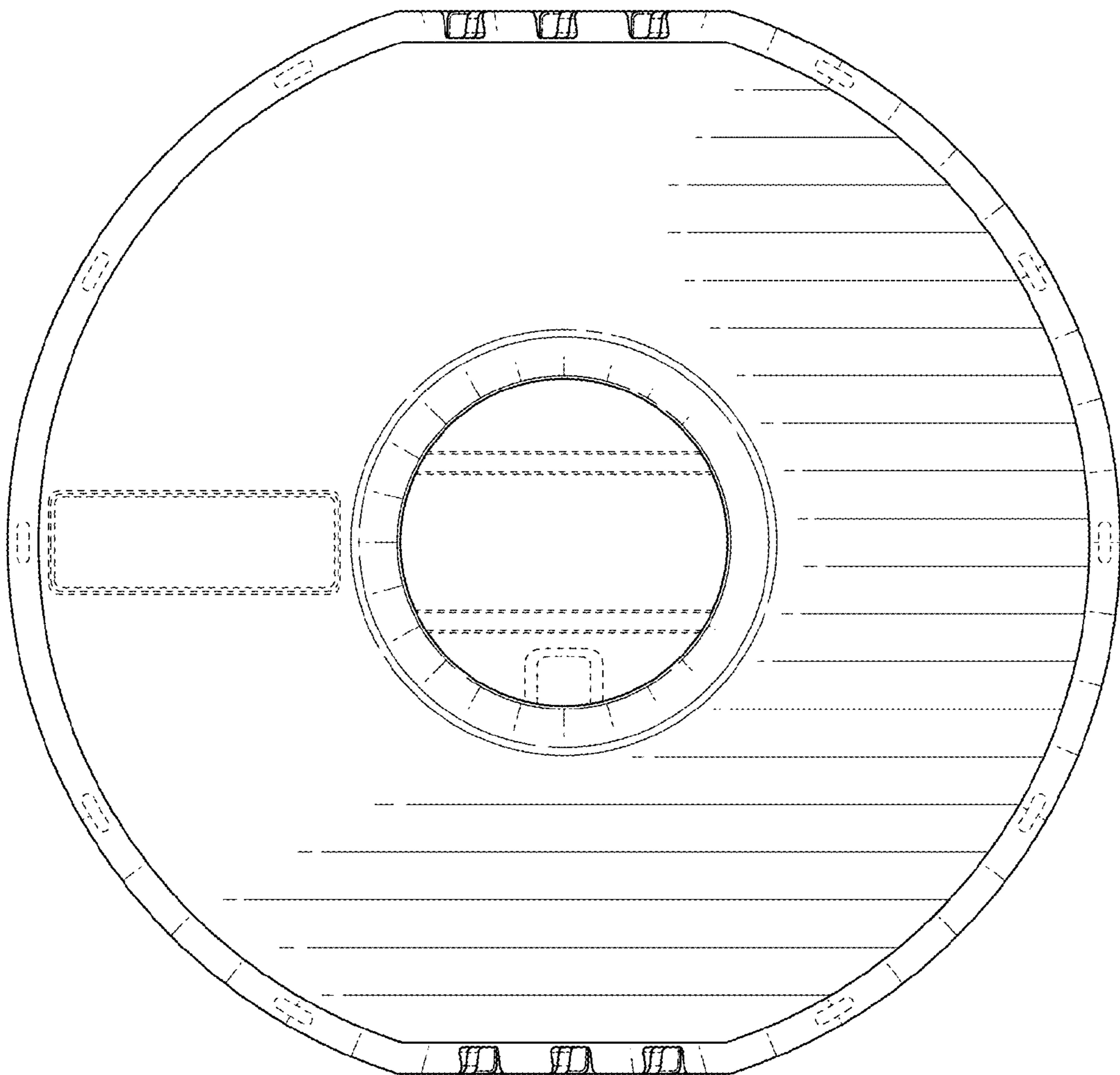


FIG. 6

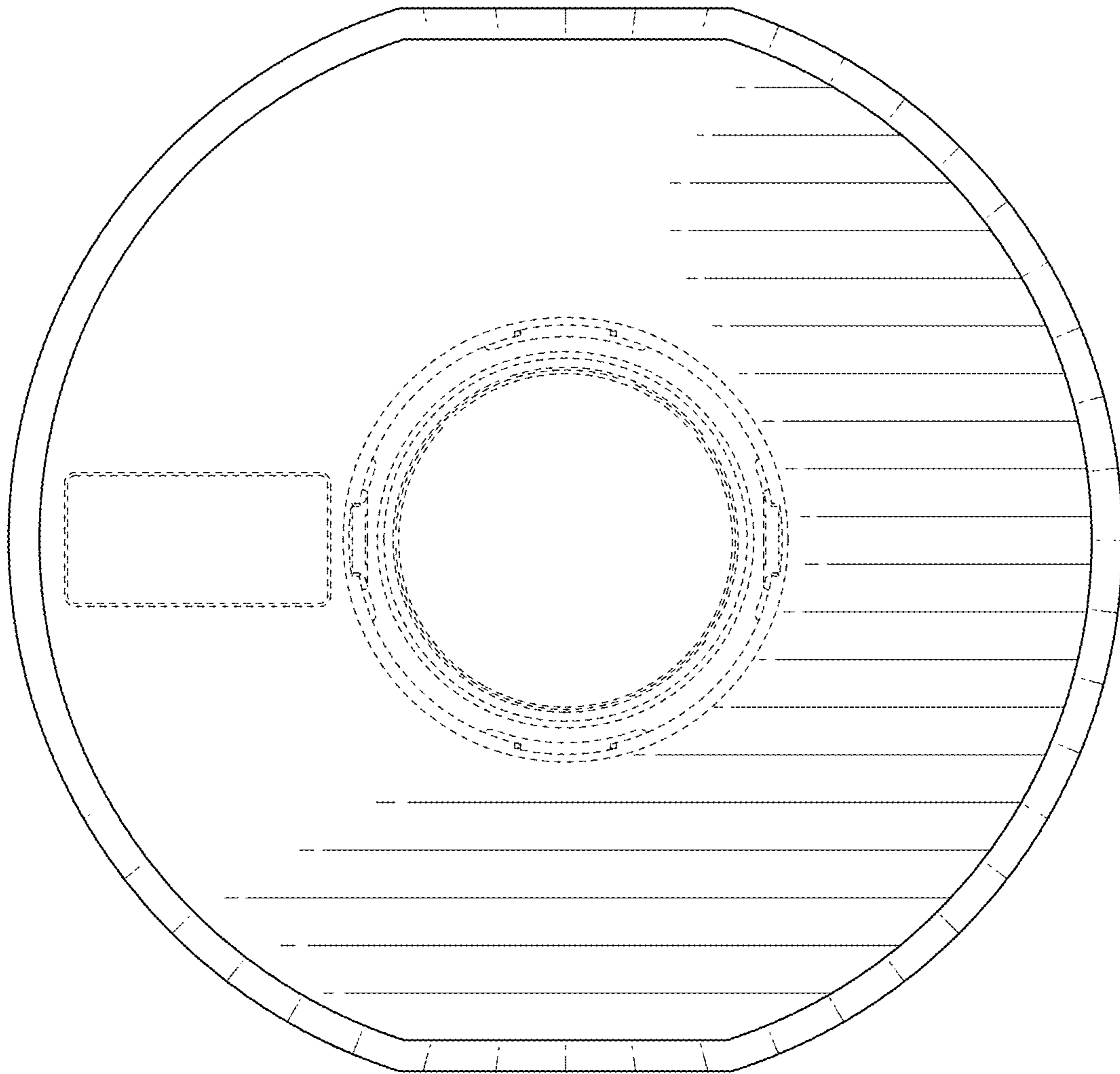


FIG. 7