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(12) **United States Design Patent**
Reinhardt et al.

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(54) **NON-PNEUMATIC TIRE**

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

(21) Appl. No.: **29/576,297**

(22) Filed: **Sep. 1, 2016**

Related U.S. Application Data

(63) Continuation-in-part of application No. 29/512,376, filed on Dec. 18, 2014, now abandoned.

(51) **LOC (11) Cl.** **12-15**

(52) **U.S. Cl.**
USPC **D12/605**

(58) **Field of Classification Search**
USPC D6/309; D7/396.4, 396.5, 588; D10/17, D10/22; D11/3, 4; D12/500, 501, 503, D12/506, 544, 570, 579, 580, 587, 588, D12/599, 600, 605
CPC .. B60C 13/00; B60C 1/00; B60C 7/00; B60C 7/10; B60C 2007/107
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,945,962 A 8/1990 Pajtas
5,042,544 A 8/1991 Dehasse
5,460,213 A 10/1995 Pajtas

(Continued)

OTHER PUBLICATIONS

Solid Smack. Airless and Bulletproof Tires Being Introduced in New Polaris ATV Design. Nov. 19, 2013 [earliest online date], [site visited Sep. 7, 2017]. Available from Internet, <URL:https://www.solidsmack.com/design/airless-and-bulletproof-tires-being-introduced-in-new-polaris-atv-design/>. (Year: 2013).*

(Continued)

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(57) **CLAIM**

The ornamental design for a non-pneumatic tire, as shown and described.

DESCRIPTION

FIG. 1 is a side elevational view of a first embodiment of our new tire design;

FIG. 2 is a cross-sectional view along cross-section line 2-2 of FIG. 1;

FIG. 3 is cross-sectional view along cross-section line 3-3 of FIG. 1;

FIG. 4 is a side elevational view of a second embodiment of our new tire design;

FIG. 5 is a cross-sectional view along cross-section line 5-5 of FIG. 4;

FIG. 6 is a cross-sectional view along cross-section line 6-6 of FIG. 4;

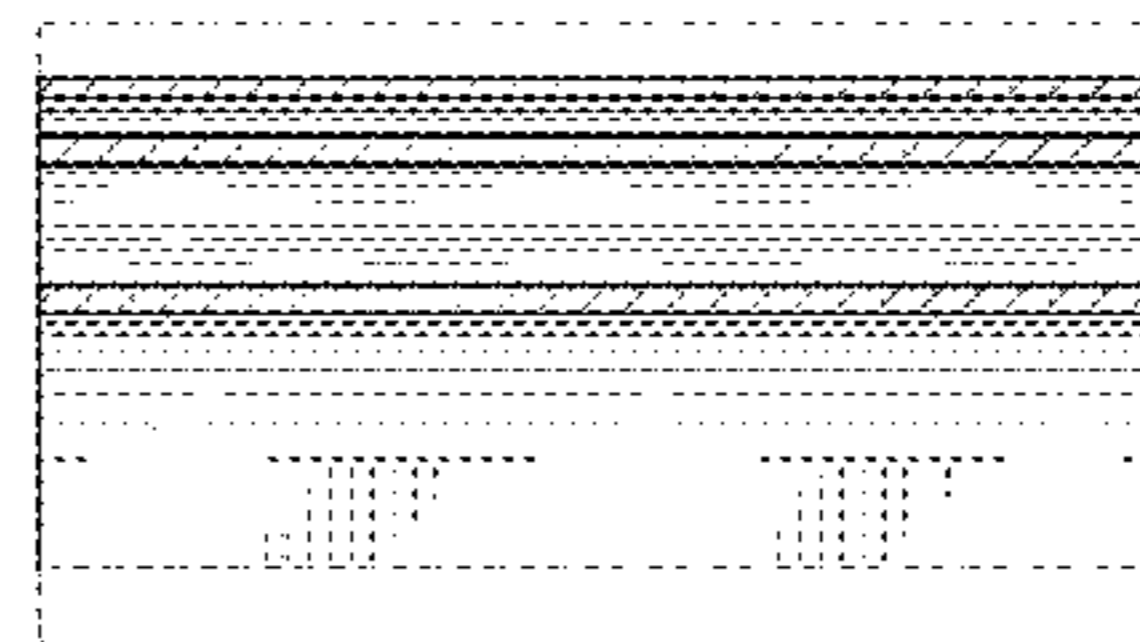
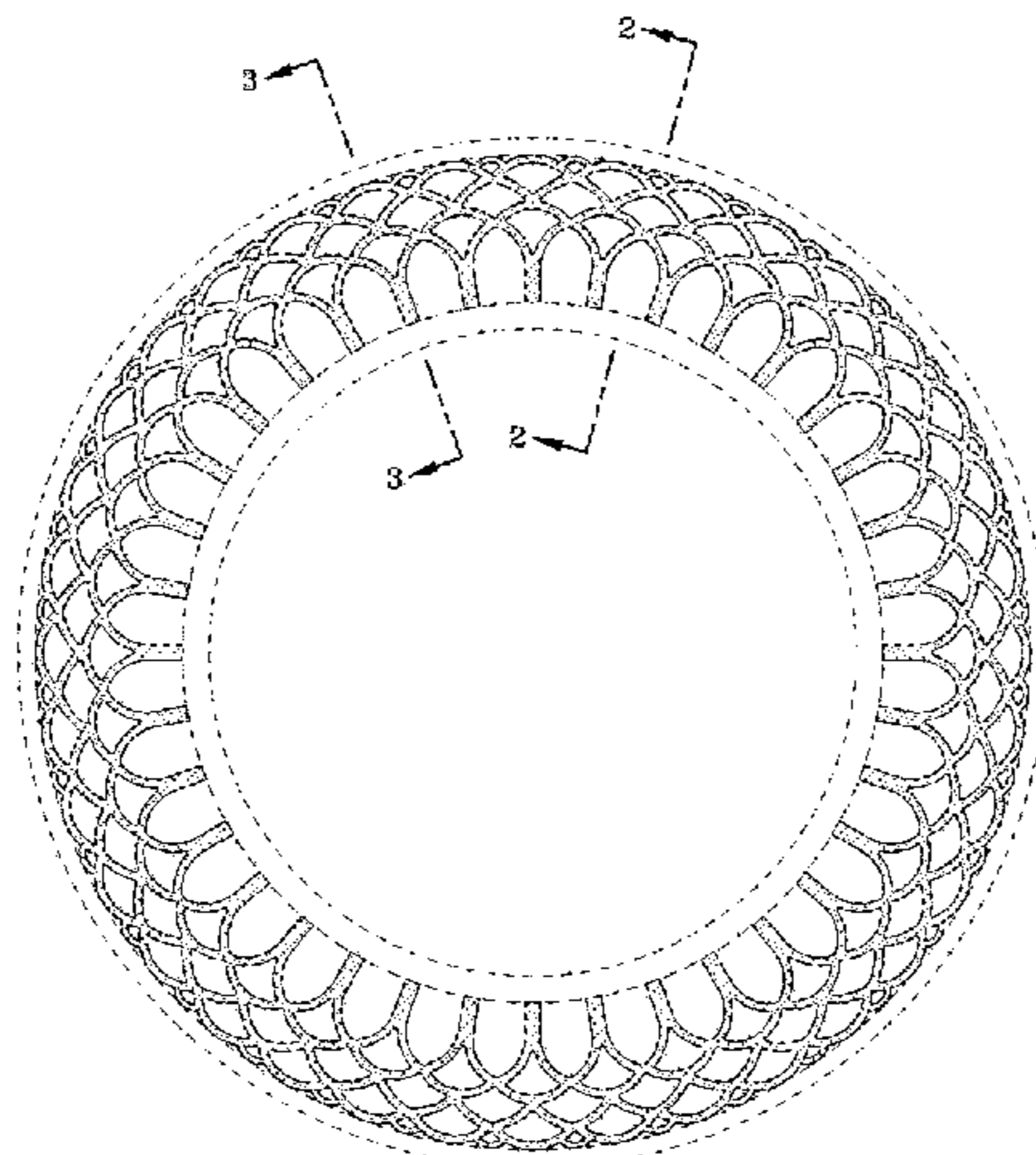
FIG. 7 is a side elevational view of a third embodiment of our new tire design;

FIG. 8 is a cross-sectional view along cross-section line 8-8 of FIG. 7; and,

FIG. 9 is a cross-sectional view along cross-section line 9-9 of FIG. 7.

The broken lines defining the tire tread and inner bead of the tire represent unclaimed environmental subject matter; the broken lines immediately adjacent the solid line showing of the tire sidewall represent the boundaries of the claimed design but form no part thereof.

1 Claim, 6 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D365,689 S * 1/1996 Ramirez D6/300
 D379,168 S * 5/1997 Ratliff, Jr. D12/605
 6,374,887 B1 4/2002 Subotics
 D458,035 S * 6/2002 O'Hare D6/300
 6,681,822 B2 1/2004 Adams et al.
 D504,238 S * 4/2005 Mohundro D6/309
 7,174,936 B2 2/2007 Becker et al.
 D559,172 S * 1/2008 Umstot D12/605
 D627,716 S * 11/2010 Harvey D12/605
 D652,339 S * 1/2012 Zander D11/4
 8,104,524 B2 1/2012 Manesh et al.
 8,109,308 B2 2/2012 Manesh et al.
 8,113,253 B2 2/2012 Arakawa et al.
 8,176,957 B2 5/2012 Manesh et al.
 D770,373 S * 11/2016 Krier D12/605
 2003/0201043 A1 10/2003 Adams
 2006/0174989 A1 8/2006 Jones
 2008/0314486 A1 12/2008 Manesh et al.
 2009/0283185 A1 11/2009 Manesh et al.
 2010/0078111 A1 4/2010 Anderson et al.
 2011/0011506 A1 1/2011 Manesh et al.
 2011/0024008 A1 2/2011 Manesh et al.
 2011/0079335 A1 4/2011 Manesh et al.
 2011/0146872 A1 6/2011 Tercha et al.
 2011/0180194 A1 7/2011 Anderson et al.
 2012/0038206 A1 2/2012 Chadwick et al.

2012/0038207 A1 2/2012 Williams et al.
 2012/0060991 A1 3/2012 Mun et al.
 2012/0234444 A1 9/2012 Palinkas et al.
 2012/0234445 A1 9/2012 Manesh et al.
 2012/0241062 A1 9/2012 Manesh et al.
 2012/0247635 A1 10/2012 Manesh et al.

OTHER PUBLICATIONS

Reddit. Air-less Tire in Use at SEA-TAC Airport. Sep. 8, 2015 [earliest online date], [site visited Sep. 7, 2017]. Available from Internet, <URL:https://www.reddit.com/r/mildlyinteresting/comments/3k4di6/airless_tire_in_use_at_seatac_airport/>. (Year: 2015).*

Wikipedia. Airless tire. Oct. 12, 2017 [earliest online date], [site visited Oct. 31, 2017]. Available from Internet <URL:https://en.wikipedia.org/wiki/Airless_tire>. (Year: 2017).*

ECVV.16x2.125 Inch Air Free Solid Colorful Electric Bike Tire. May 27, 2017 [earliest online date], [site visited Oct. 31, 2017]. Available from Internet, <URL:https://www.ecvv.com/product/4780394.html>. (Year: 2017).*

Google Patents. Annular ring and non-pneumatic tire—US 20140367007 A1. Dec. 18, 2014 [publication date], [site visited Oct. 31, 2017]. Available from Internet, <URL:http://www.google.com/patents/US20140367007>. (Year: 2014).*

* cited by examiner

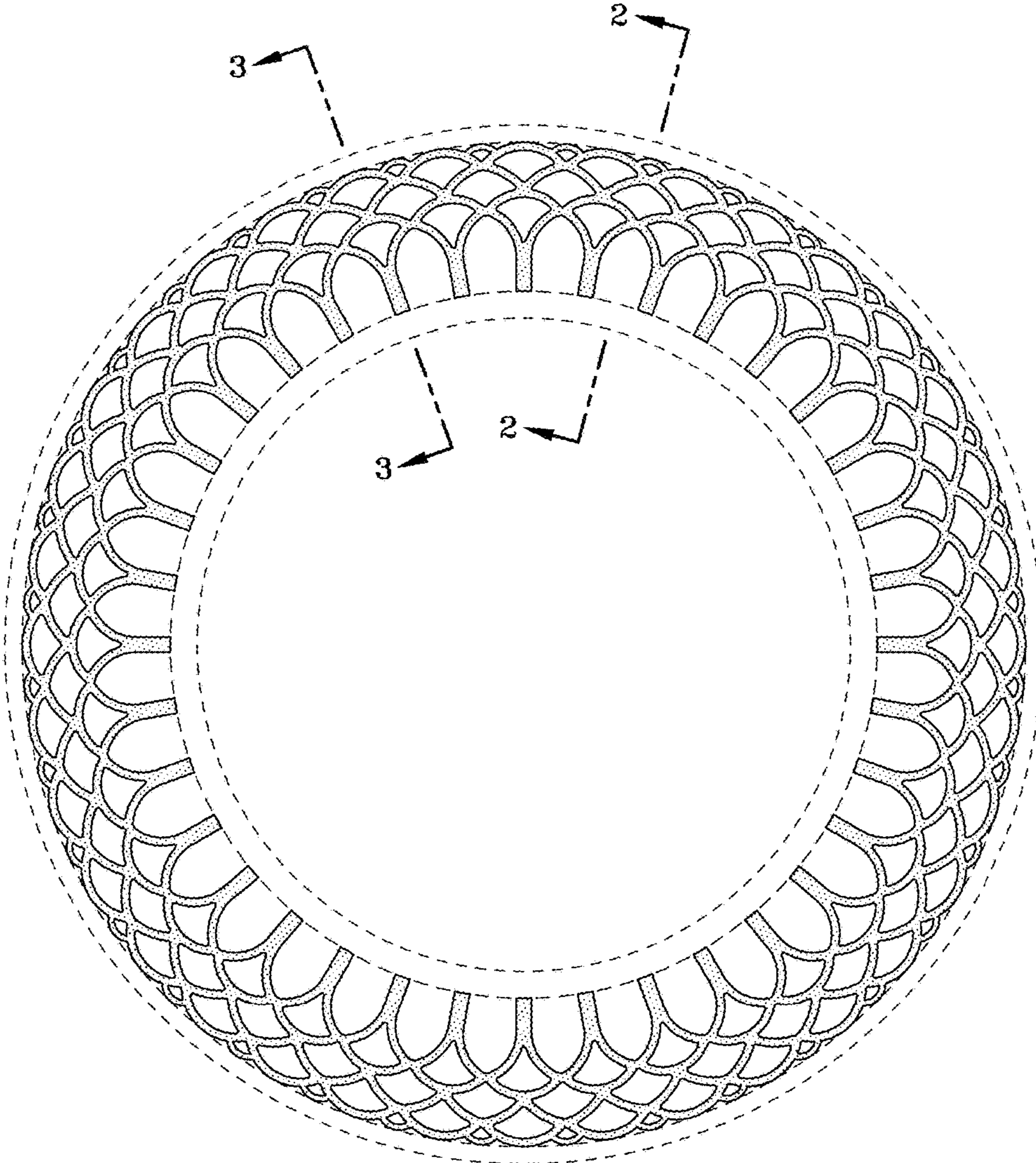


FIG. 1

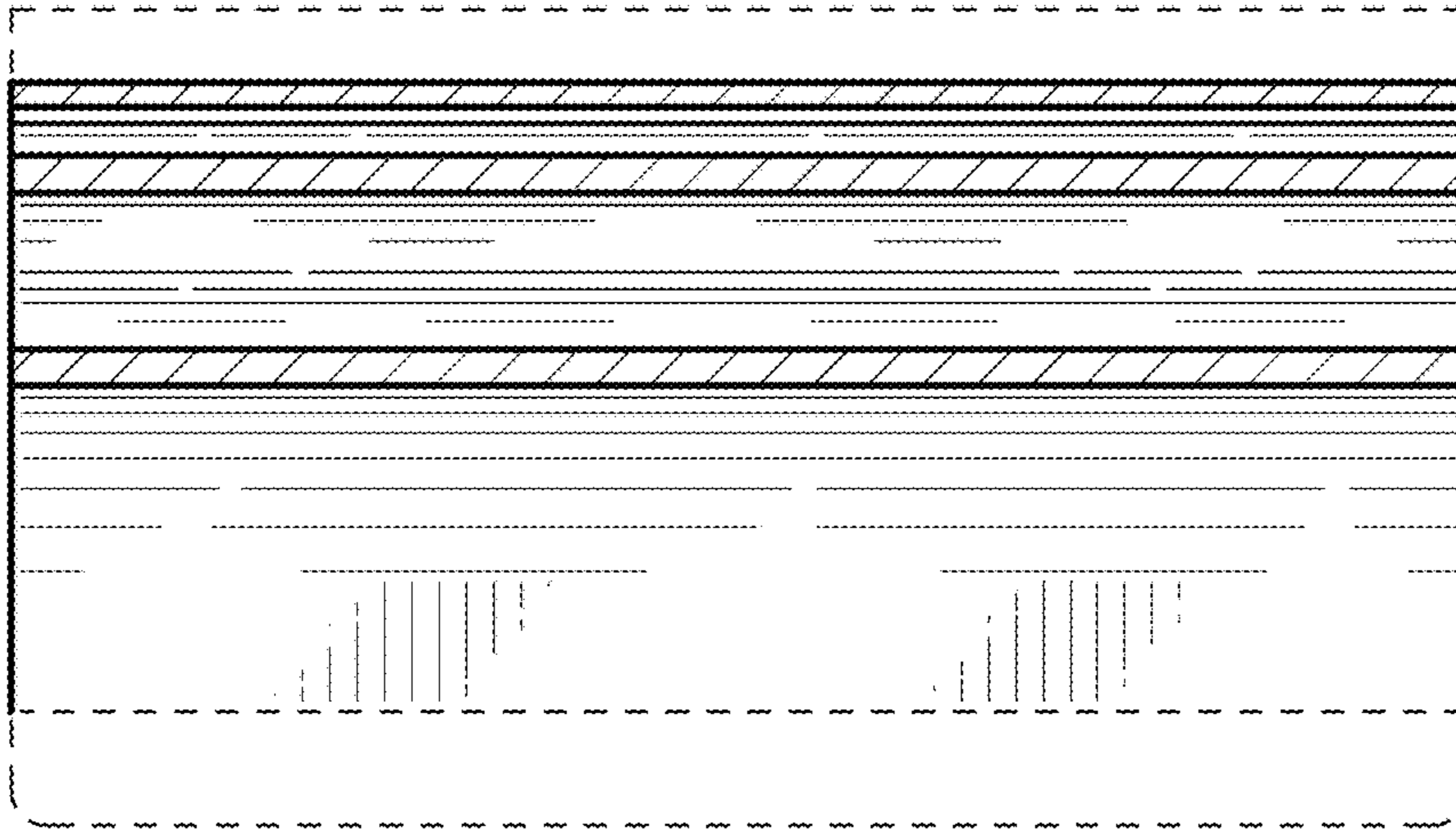


FIG. 2

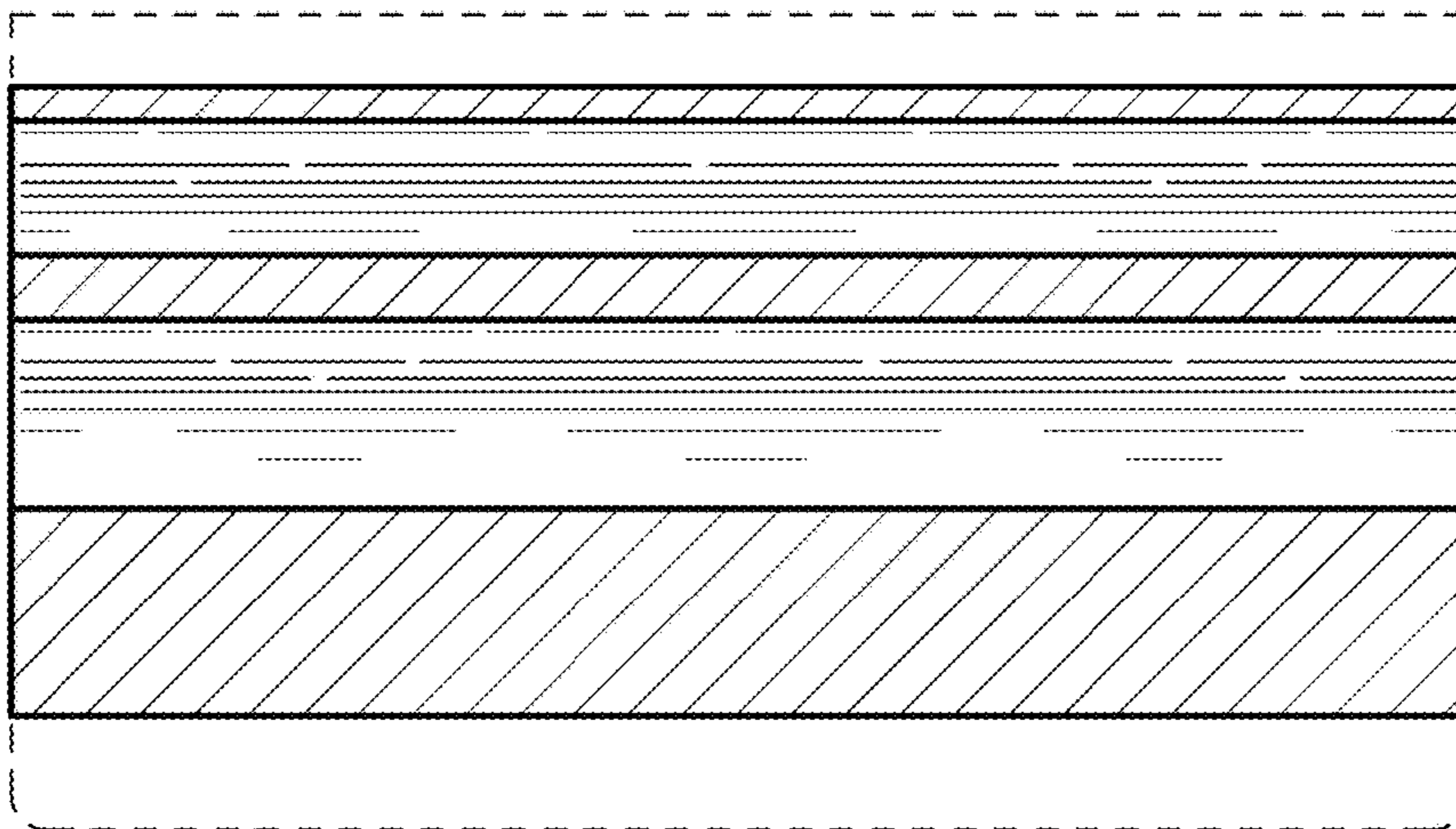


FIG. 3

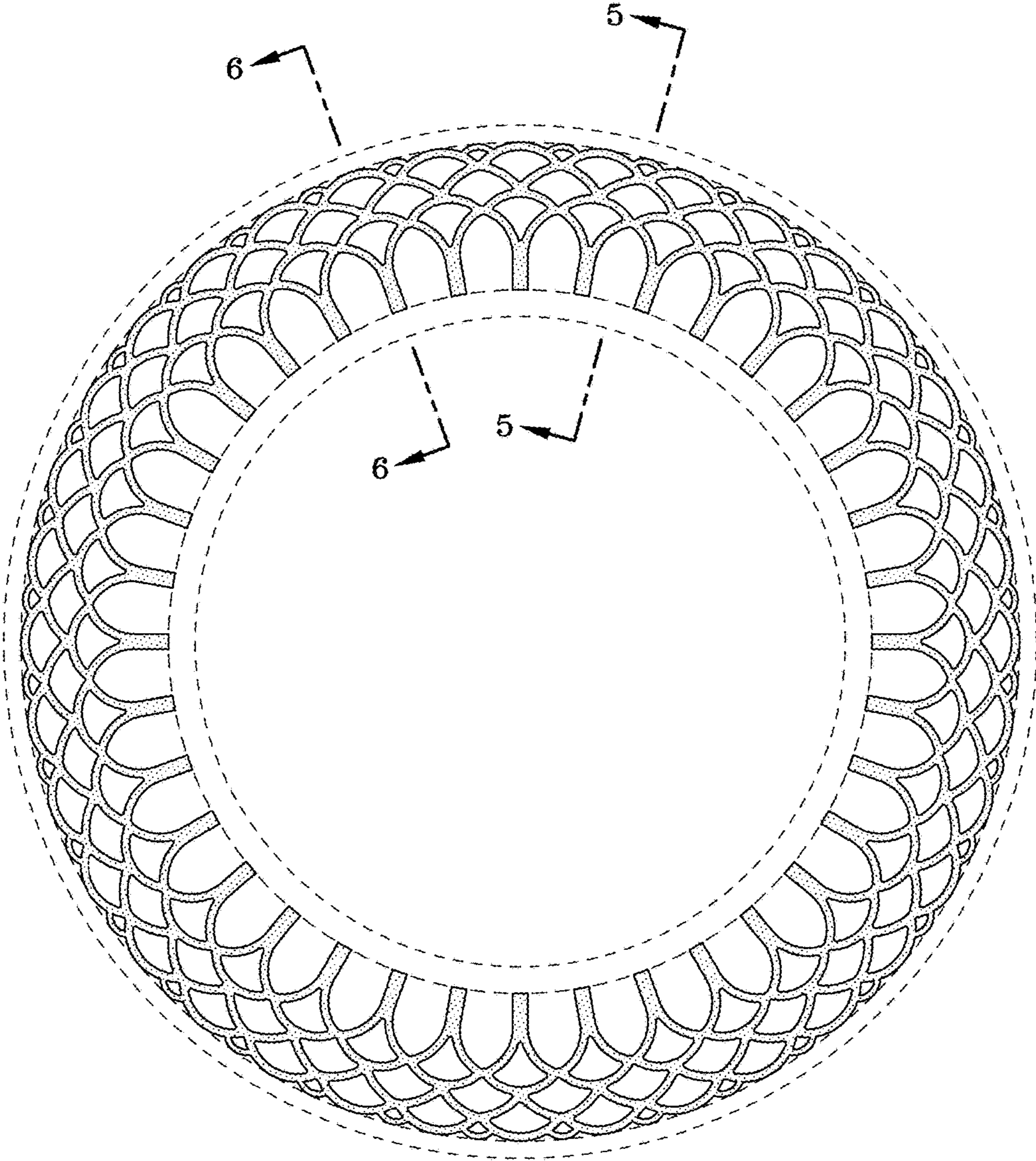


FIG.4

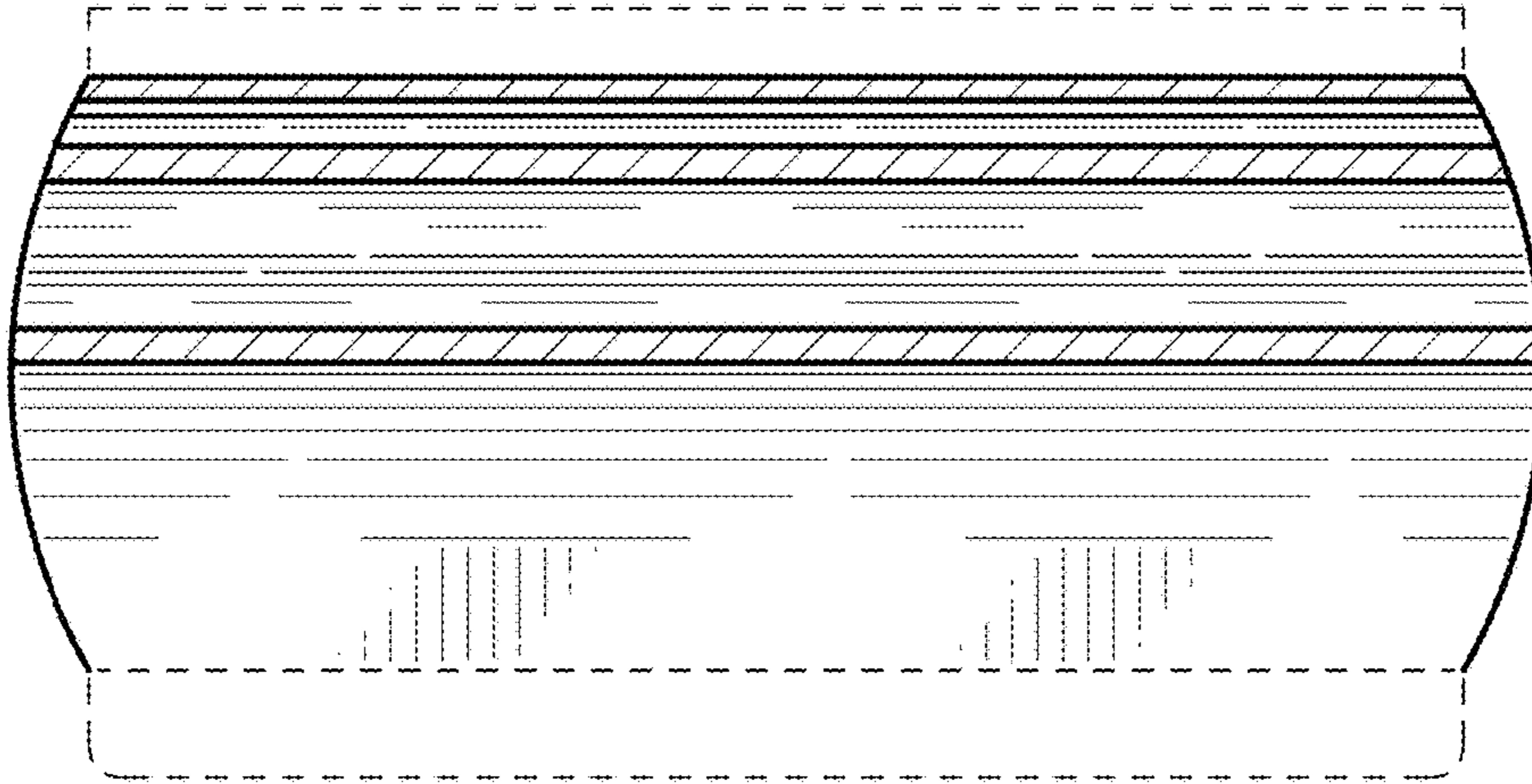


FIG. 5

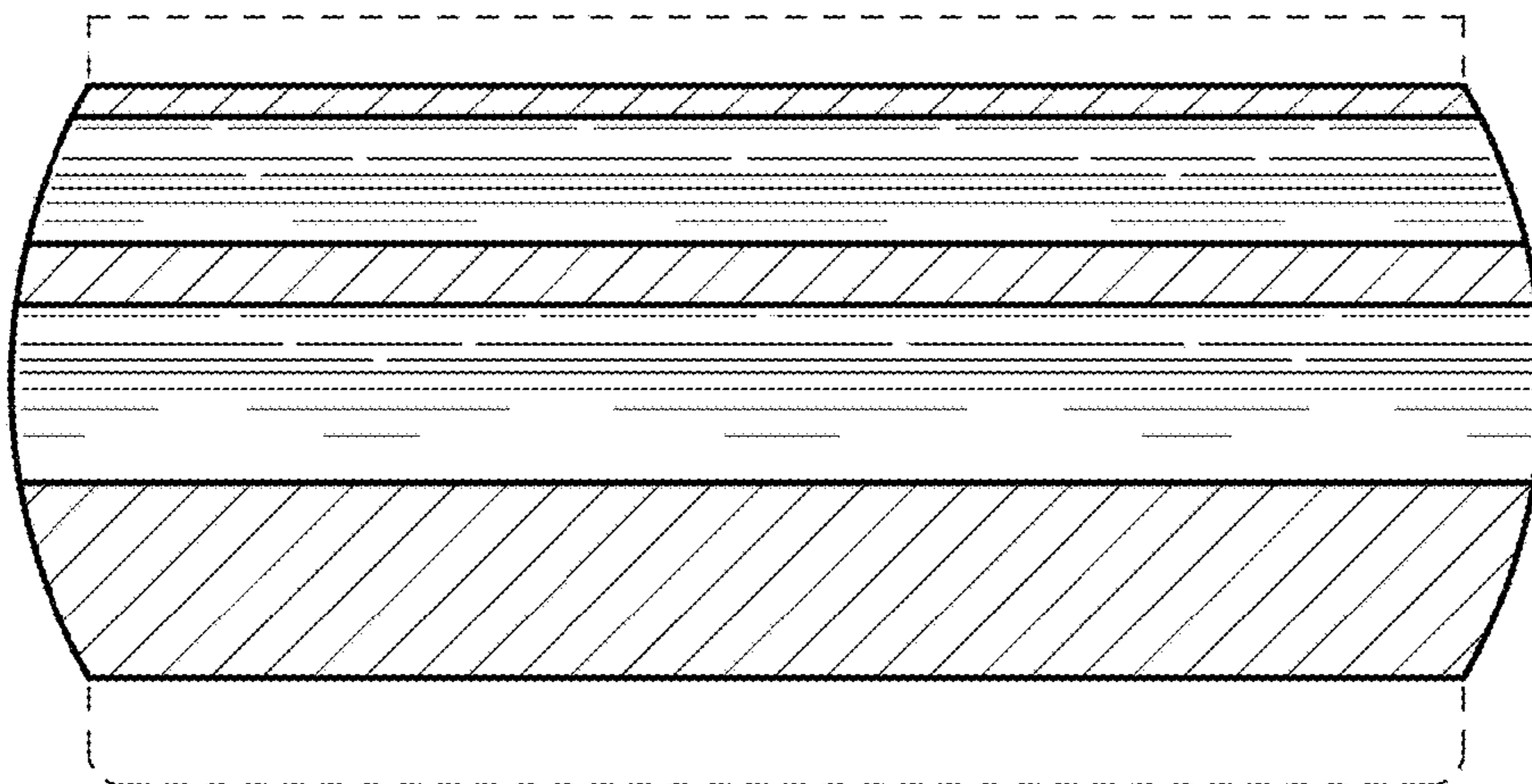


FIG. 6

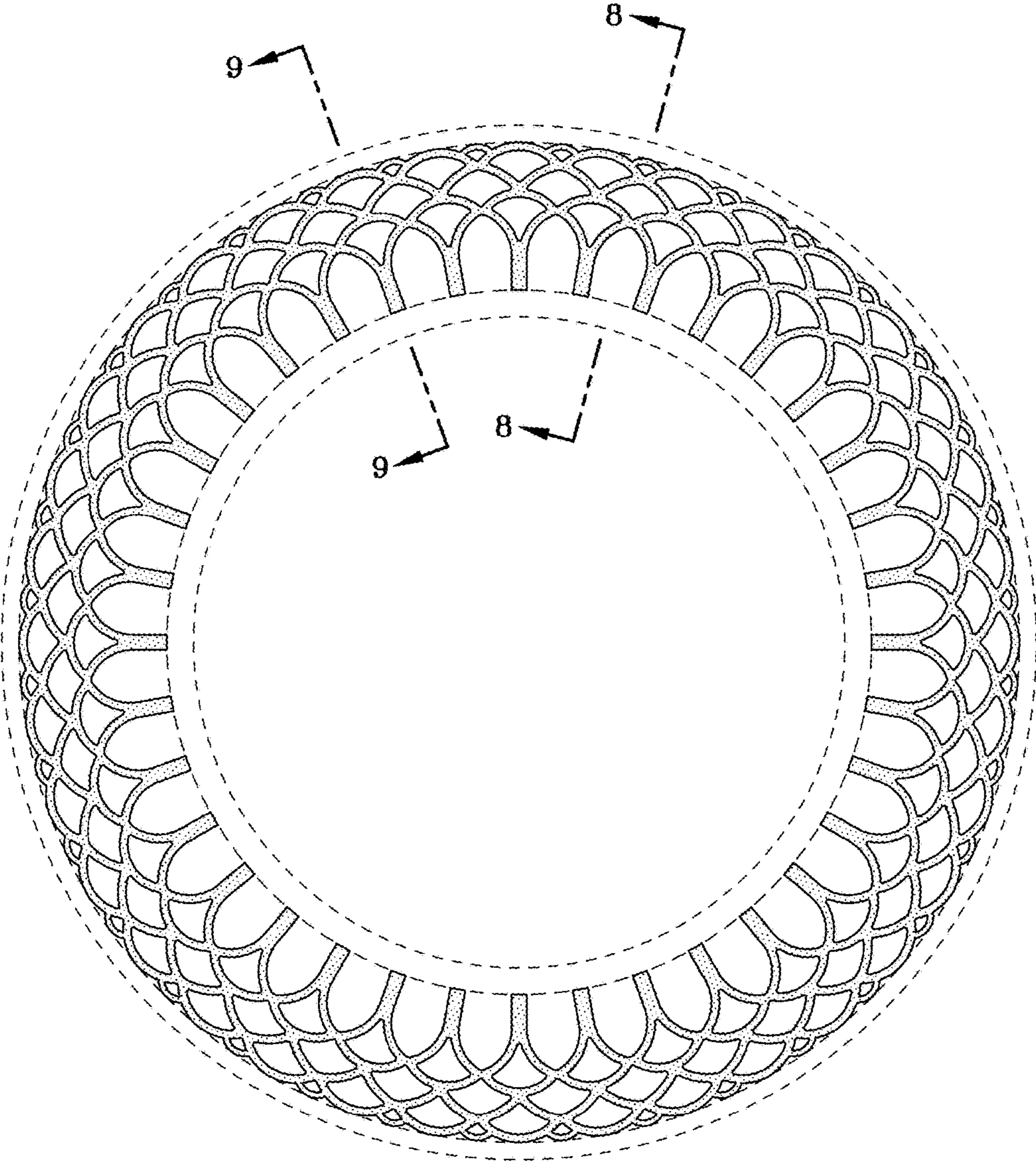


FIG. 7

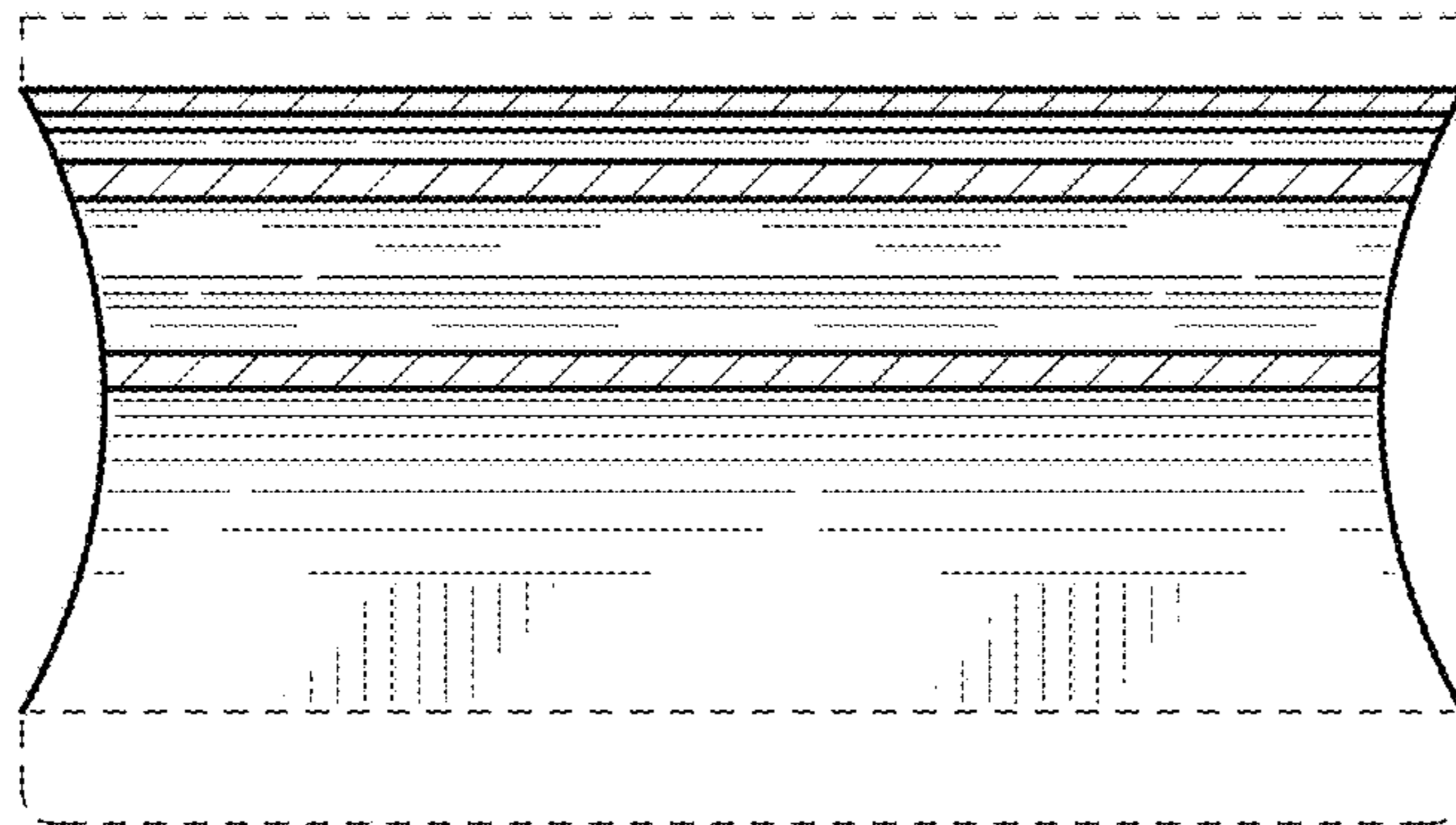


FIG. 8

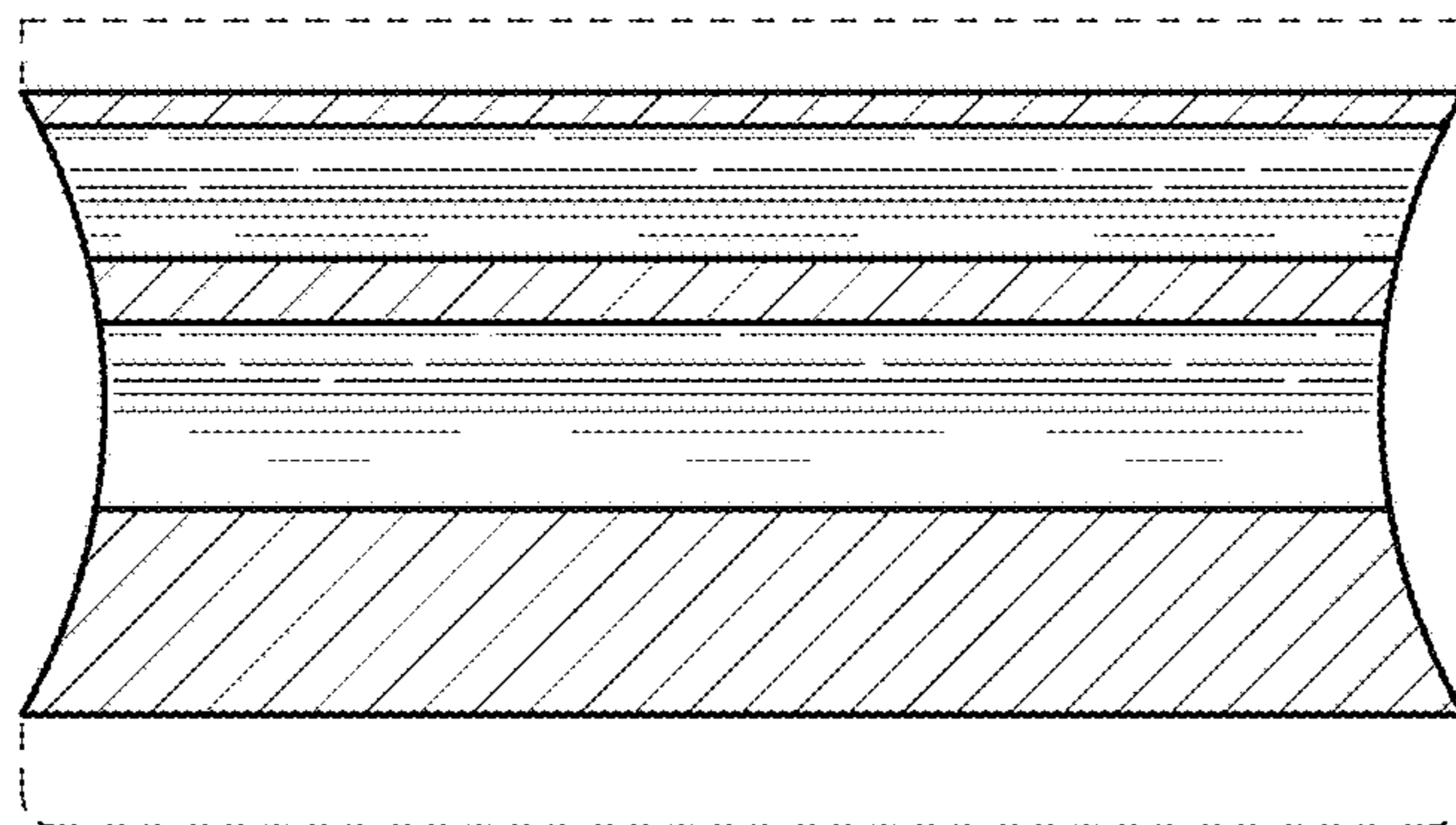


FIG. 9