



US00D833380S

(12) **United States Design Patent** (10) **Patent No.:** **US D833,380 S**
Martin (45) **Date of Patent:** **** Nov. 13, 2018**

- (54) **URETHANE TIRE**
- (71) Applicant: **Caterpillar Inc.**, Peoria, IL (US)
- (72) Inventor: **Kevin Martin**, Washburn, IL (US)
- (73) Assignee: **Caterpillar Inc.**, Deerfield, IL (US)
- (**) Term: **15 Years**
- (21) Appl. No.: **29/585,006**
- (22) Filed: **Nov. 18, 2016**

2,620,844 A 12/1952 Lord
 2,742,941 A 4/1956 Johnson
 3,219,090 A 11/1965 Cisko
 (Continued)

FOREIGN PATENT DOCUMENTS

JP D1416103 5/2011
 JP D1416237 5/2011
 (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)

Primary Examiner — Eric L Goodman
Assistant Examiner — Darcey E Heflin
 (74) *Attorney, Agent, or Firm* — Saidman Design Law Group

Related U.S. Application Data

- (63) Continuation of application No. 29/510,679, filed on Dec. 2, 2014, now Pat. No. Des. 777,655.
- (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.

(57) **CLAIM**

The ornamental design for a urethane tire, as shown and described.

DESCRIPTION

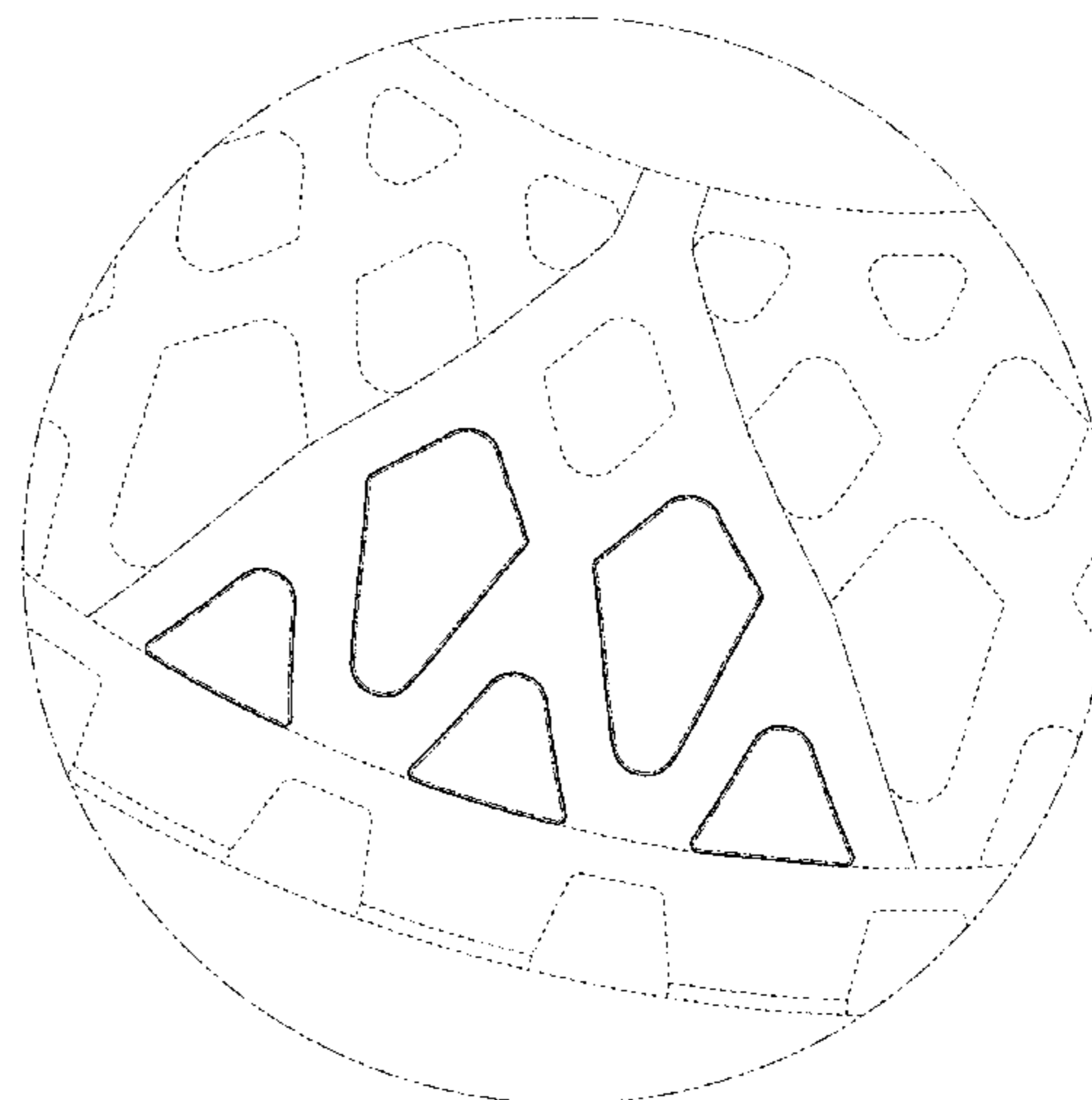
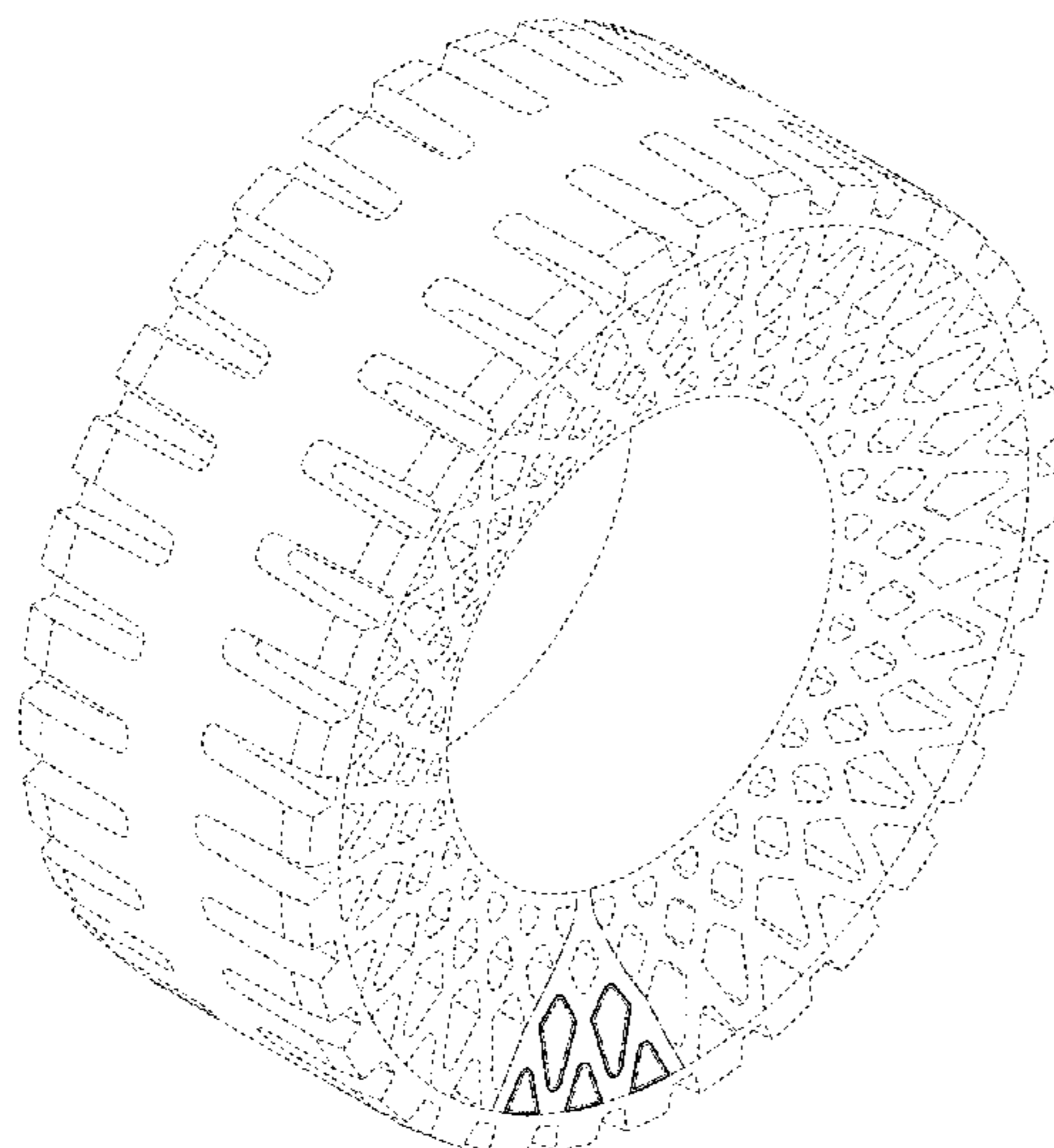
FIG. 1 is a perspective view of a urethane tire showing my new design;
 FIG. 2 is a front view thereof; and,
 FIG. 3 is an enlargement of FIG. 2.
 The dashed broken lines illustrate a tire and form no part of the claimed design.
 The dot-dash broken lines illustrate boundaries and form no part of the claimed design.
 The dot-dot-dash broken lines illustrate areas of enlargement and form no part of the claimed design.

1 Claim, 3 Drawing Sheets

(56) **References Cited**

U.S. PATENT DOCUMENTS

- 854,699 A 5/1907 Nash
- 1,125,191 A 1/1915 Scotucci et al.
- 1,164,887 A 12/1915 Strauch et al.
- D50,873 S 6/1917 Jones
- D59,024 S 9/1921 McCollough
- D62,985 S * 9/1923 Fritch D12/570
- D65,946 S 11/1924 Beegle
- D67,515 S 2/1925 Gillam
- D68,536 S 2/1925 Lenhoff
- D81,752 S 8/1930 Kratz et al.



(56)

References Cited

U.S. PATENT DOCUMENTS

4,226,273 A 10/1980 Long et al.
 D262,013 S * 11/1981 Davis D12/580
 D272,526 S * 2/1984 Manestar D12/587
 4,553,577 A 11/1985 Gregg
 4,934,425 A 6/1990 Gajewski et al.
 4,945,962 A 8/1990 Pajtas
 5,042,544 A 8/1991 Dehasse
 5,223,599 A 6/1993 Gajewski
 5,343,916 A 9/1994 Duddey et al.
 D365,689 S * 1/1996 Ramirez D6/300
 D379,168 S * 5/1997 Ratliff, Jr. D12/605
 D401,896 S 12/1998 Chandler et al.
 D458,035 S * 6/2002 O'Hare D6/300
 6,615,885 B1 9/2003 Ohm
 6,681,822 B2 1/2004 Adams et al.
 D498,203 S 11/2004 Shapiro et al.
 D499,065 S 11/2004 Shapiro et al.
 6,845,796 B2 1/2005 Katoh et al.
 D504,238 S * 4/2005 Mohundro D6/309
 D507,522 S 7/2005 Becker et al.
 D536,298 S 2/2007 Becker et al.
 7,174,936 B2 2/2007 Becker et al.
 D548,681 S 8/2007 Becker et al.
 D559,172 S * 1/2008 Umstot D12/605
 D602,422 S 10/2009 Laskowitz et al.
 D602,852 S 10/2009 Laskowitz et al.
 D613,241 S 4/2010 Song
 D615,920 S 5/2010 Kline et al.
 D627,716 S * 11/2010 Harvey D12/605
 D631,821 S * 2/2011 Kline D12/570
 7,950,428 B2 5/2011 Hanada et al.
 8,056,593 B2 11/2011 Palinkas et al.
 8,061,398 B2 11/2011 Palinkas et al.
 D652,339 S * 1/2012 Zander D11/4
 8,091,596 B2 1/2012 Louden
 8,104,524 B2 1/2012 Manesh et al.
 8,109,308 B2 2/2012 Manesh et al.
 8,176,957 B2 5/2012 Manesh et al.
 8,555,941 B2 10/2013 Perron et al.
 D711,815 S 8/2014 Abe et al.
 D718,171 S * 11/2014 Fakesch D11/3
 D727,247 S 4/2015 Martin et al.
 D731,962 S 6/2015 Martin et al.
 D767,483 S 9/2016 Martin et al.
 D770,373 S * 11/2016 Krier D12/605
 D773,387 S * 12/2016 Martin D12/605
 D774,447 S * 12/2016 Mathis D12/605
 D776,557 S * 1/2017 Gusky D11/4
 D777,655 S * 1/2017 Martin D12/605
 D782,391 S * 3/2017 Schaedler B60C 7/10
 D791,692 S * 7/2017 Kline D12/501
 D12/605
 2007/0029020 A1 2/2007 Wietharn et al.
 2007/0119531 A1 5/2007 Steinke et al.
 2009/0107596 A1 4/2009 Palinkas et al.
 2009/0120548 A1 5/2009 Norbits
 2009/0211674 A1 8/2009 Hanada et al.
 2009/0211678 A1 8/2009 Palinkas et al.
 2009/0211681 A1 8/2009 Palinkas et al.
 2010/0132858 A1 6/2010 Arakawa et al.
 2011/0024008 A1 2/2011 Manesh et al.
 2011/0079335 A1 4/2011 Manesh et al.
 2012/0060991 A1 3/2012 Mun et al.
 2012/0234444 A1 * 9/2012 Palinkas B60C 7/18
 D12/501
 D152/246
 2012/0241062 A1 9/2012 Manesh et al.
 2012/0247635 A1 10/2012 Manesh et al.
 2013/0240272 A1 9/2013 Gass et al.
 2013/0287882 A1 10/2013 Wilson
 2014/0000777 A1 1/2014 Choi et al.
 2014/0034219 A1 2/2014 Chadwick et al.
 2014/0062168 A1 3/2014 Martin et al.
 2014/0062169 A1 * 3/2014 Martin B60C 7/10
 D152/246

2014/0062170 A1 * 3/2014 Martin B60C 7/10
 D152/246
 2014/0062171 A1 3/2014 Martin et al.
 2014/0062172 A1 3/2014 Martin et al.
 2014/0083581 A1 3/2014 Schaedler et al.
 2014/0110024 A1 4/2014 Anderfaas et al.
 2014/0159280 A1 * 6/2014 Martin B29C 33/0033
 D264/299
 2014/0238561 A1 8/2014 Choi et al.
 2014/0246135 A1 9/2014 Andrews
 2014/0251518 A1 9/2014 Abe et al.
 2014/0311643 A1 * 10/2014 Amstutz B60C 7/105
 D152/310
 2014/0367007 A1 * 12/2014 Thompson B60C 7/102
 D152/17
 2015/0034222 A1 * 2/2015 Martin B60C 11/243
 D152/154.2
 2015/0034225 A1 * 2/2015 Martin B29C 70/84
 D152/326
 2015/0210025 A1 7/2015 Martin
 2015/0355056 A1 12/2015 Martin et al.
 2016/0016433 A1 1/2016 Amstutz et al.
 2016/0046091 A1 2/2016 Kinney et al.
 2016/0046092 A1 2/2016 Kinney et al.
 2017/0057287 A1 * 3/2017 Martin B60B 9/26

FOREIGN PATENT DOCUMENTS

JP D1446806 6/2012
 JP D1446802 6/2012
 JP D1446808 6/2012
 JP D1447054 6/2012
 JP D1447056 6/2012
 JP D1447059 6/2012

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.16*2.125 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).*

Bridgestone, “Bridgestone Announces Development of Non-Pneumatic (Airless) Concept Tire,” <http://www.bridgestone.com/corporate/news/2011112901.html>, Nov. 29, 2011.

Toxel, “Innovative Airless Tires by Michelin,” <http://www.toxel.com/tech/2009/07/05/innovative-airless-tires-by-michelin/>, Jul. 5, 2009.

CORE77, “Innovation Gets Tired, Part 1: The Non-Pneumatic Tire,” <http://www.core77.com/blog/transportation/innovation_gets_tired_part_1_the_non-pneumatic_tire_21410.asp>, Dec. 27, 2011.

Resilienttech, “Non-Pneumatic Tire (NPT),” <http://www.resilienttech.com/products/non-pneumatic-tire>, copyright 2011.

Soldiersystems, “Solic—Polaris Defense Non-Pneumatic Tire,” <http://soldiersystems.net/2012/05/22/solic-polaris-defense-non-pneumatic-tire/>, May 22, 2012.

Caterpillar®, “Introducing the Cat® generation II Flexport™ tires available in 3 different tread options for SSL, wheel loader applications,” Sep. 2011.

Caterpillar®, “Cat® Flexport™ Tires for Skid Steer Loaders,” copyright 2005.

Caterpillar®, “Caterpillar Introduces Next Generation of Flexport™ Tires for Wheel Loaders,” available Mar. 2010.

(56)

References Cited

OTHER PUBLICATIONS

Just a Car Guy—Blog. The cool Tweels are on this Jeep Wrangler. Nov. 2, 2015 [earliest online date], [site visited Jun. 14, 2016]. Available from Internet, <URL:<http://justacarguy.blogspot.com/2015/11/the-cool-tweels-are-on-this-jeep.html>>.

(Trelleborg) Brawler Solid Flex Tire (Catalog PDF) found online [Jul. 7, 2016] https://www.deere.com/en_US/docs/parts/agriculture/brawler_tires.pdf.

U.S. Appl. No. 29/532,829, filed Jul. 10, 2015 (unpublished).

U.S. Appl. No. 29/532,828, filed Jul. 10, 2015 (unpublished).

* cited by examiner

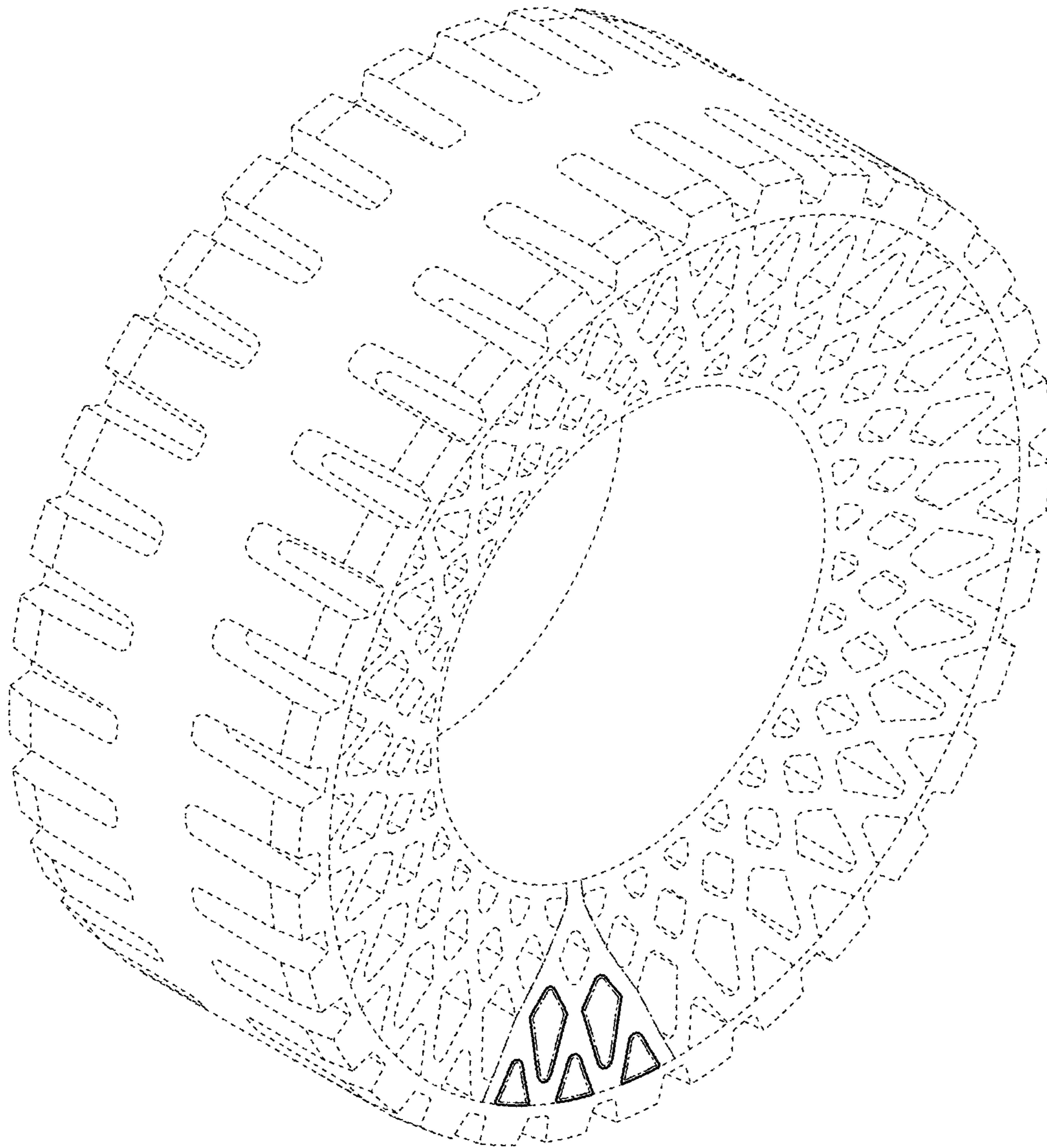


Fig. 1

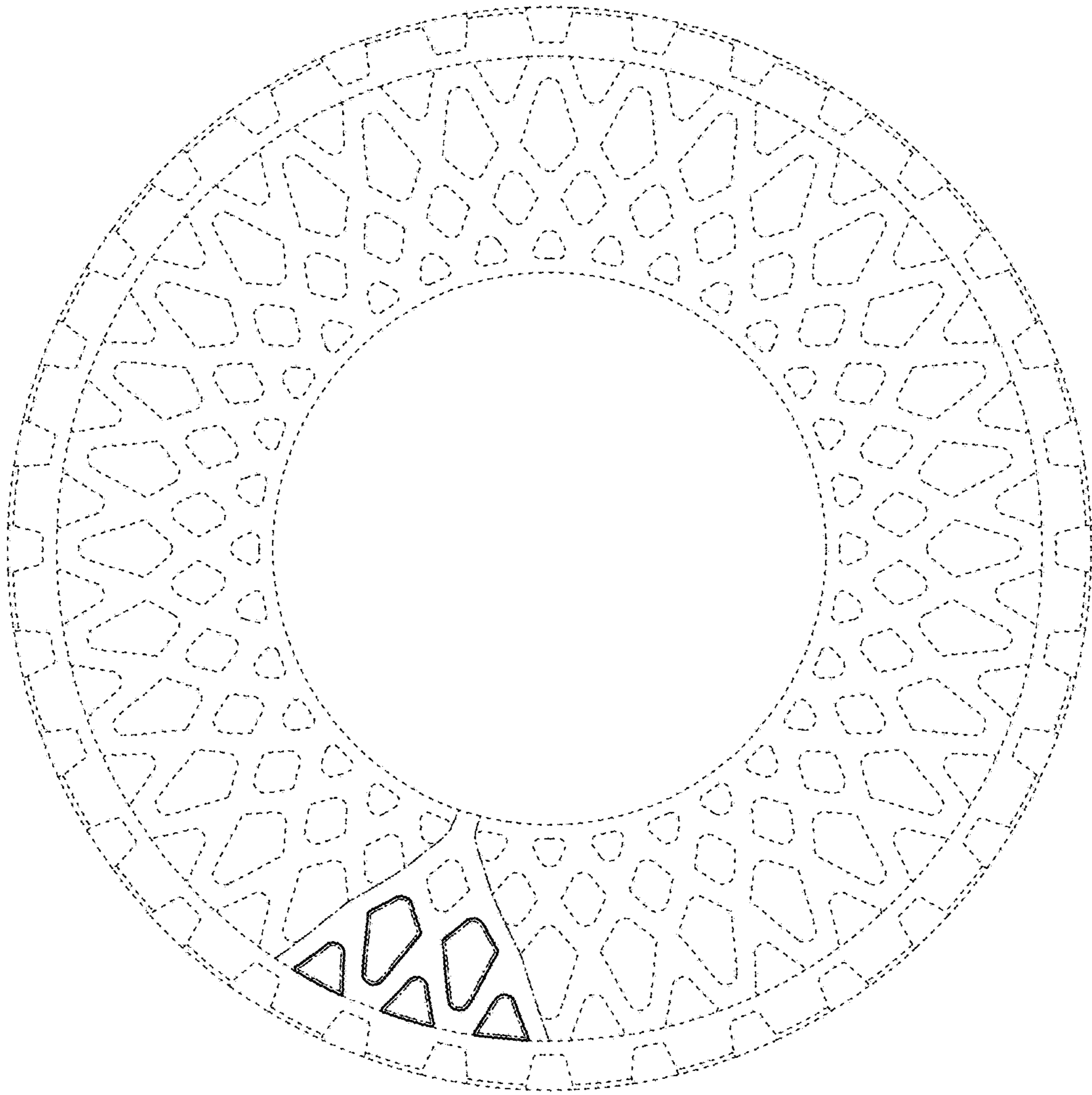


Fig. 2

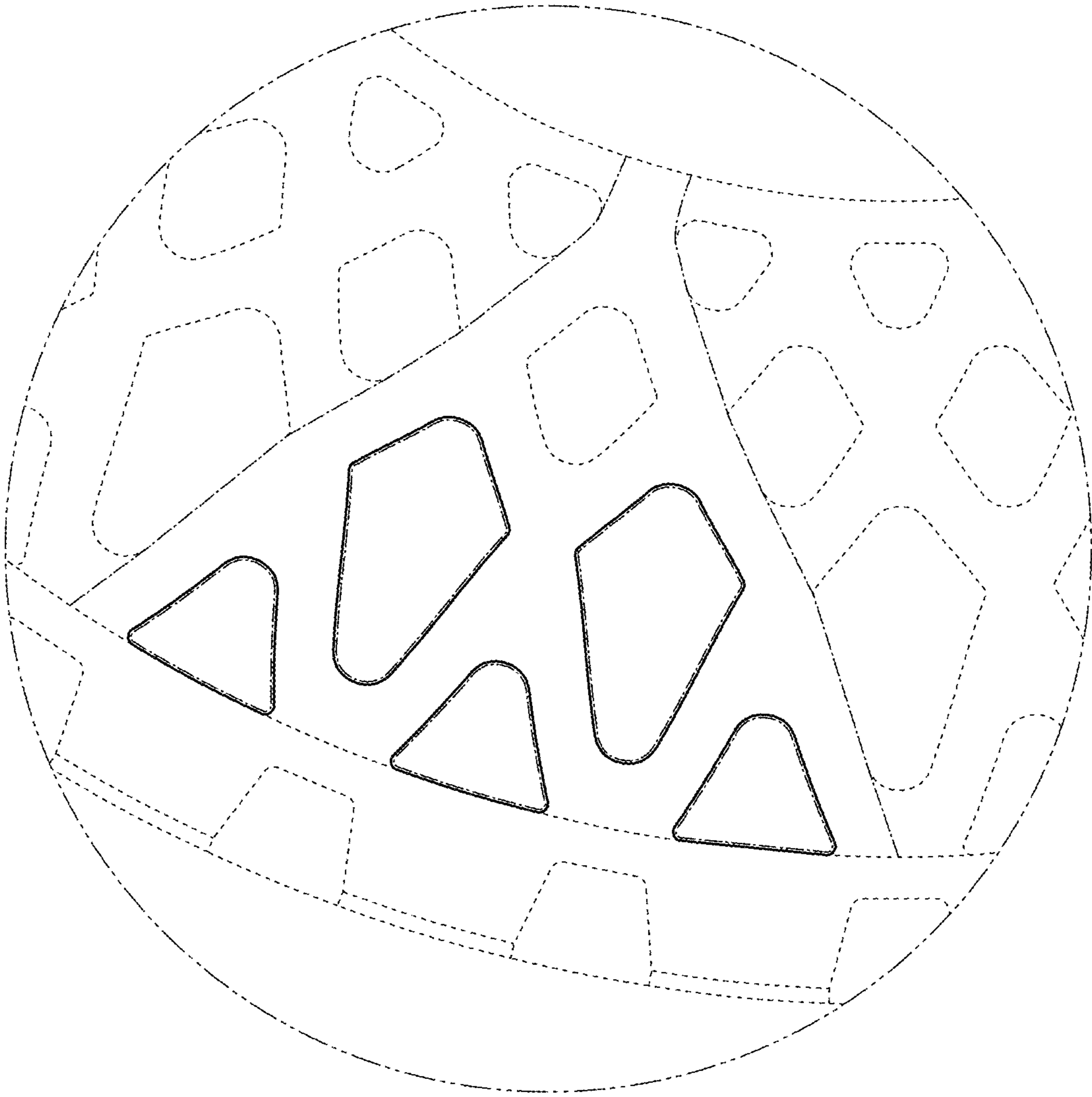


Fig. 3