

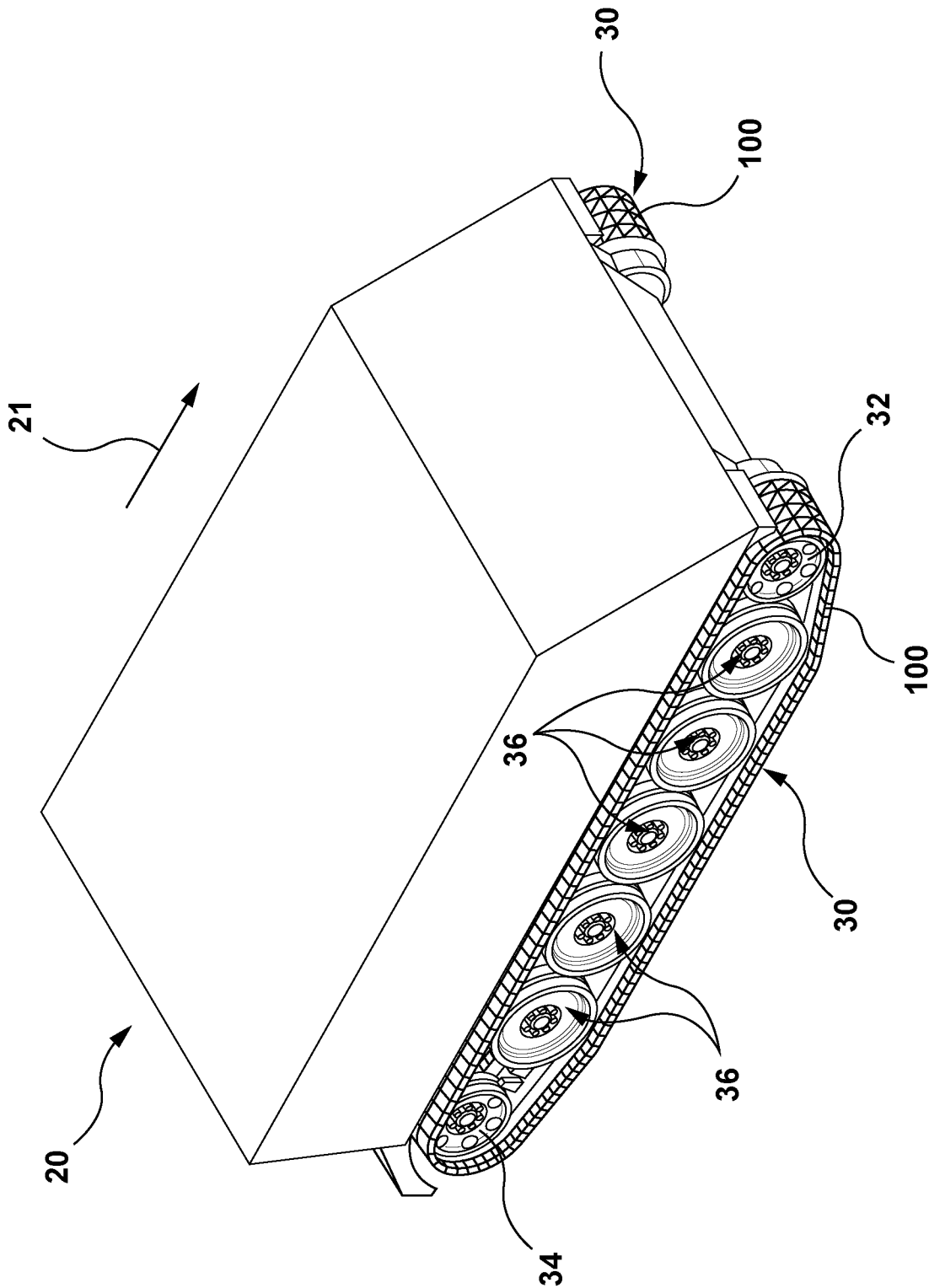


FIG. 1

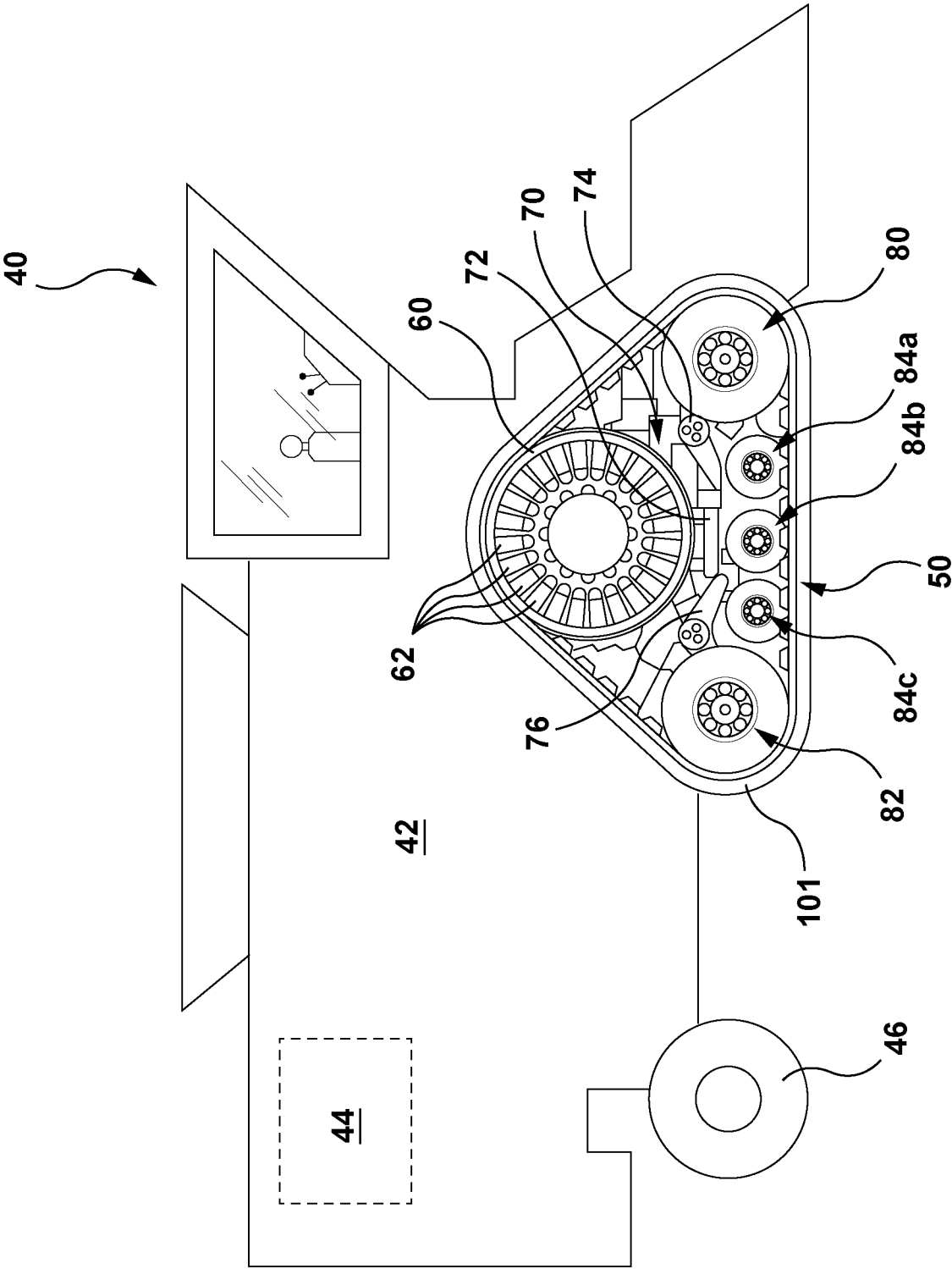


FIG. 2

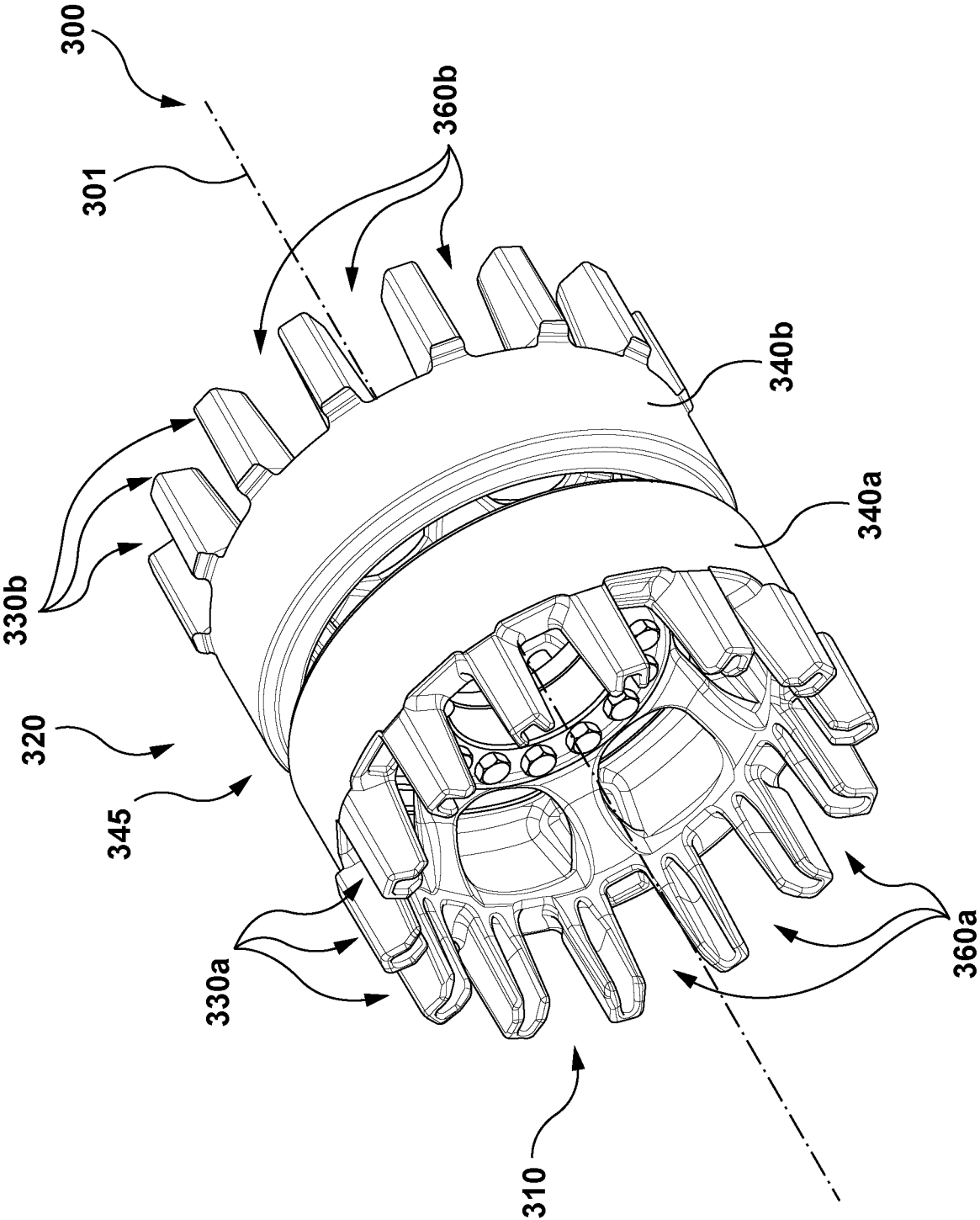


FIG. 3

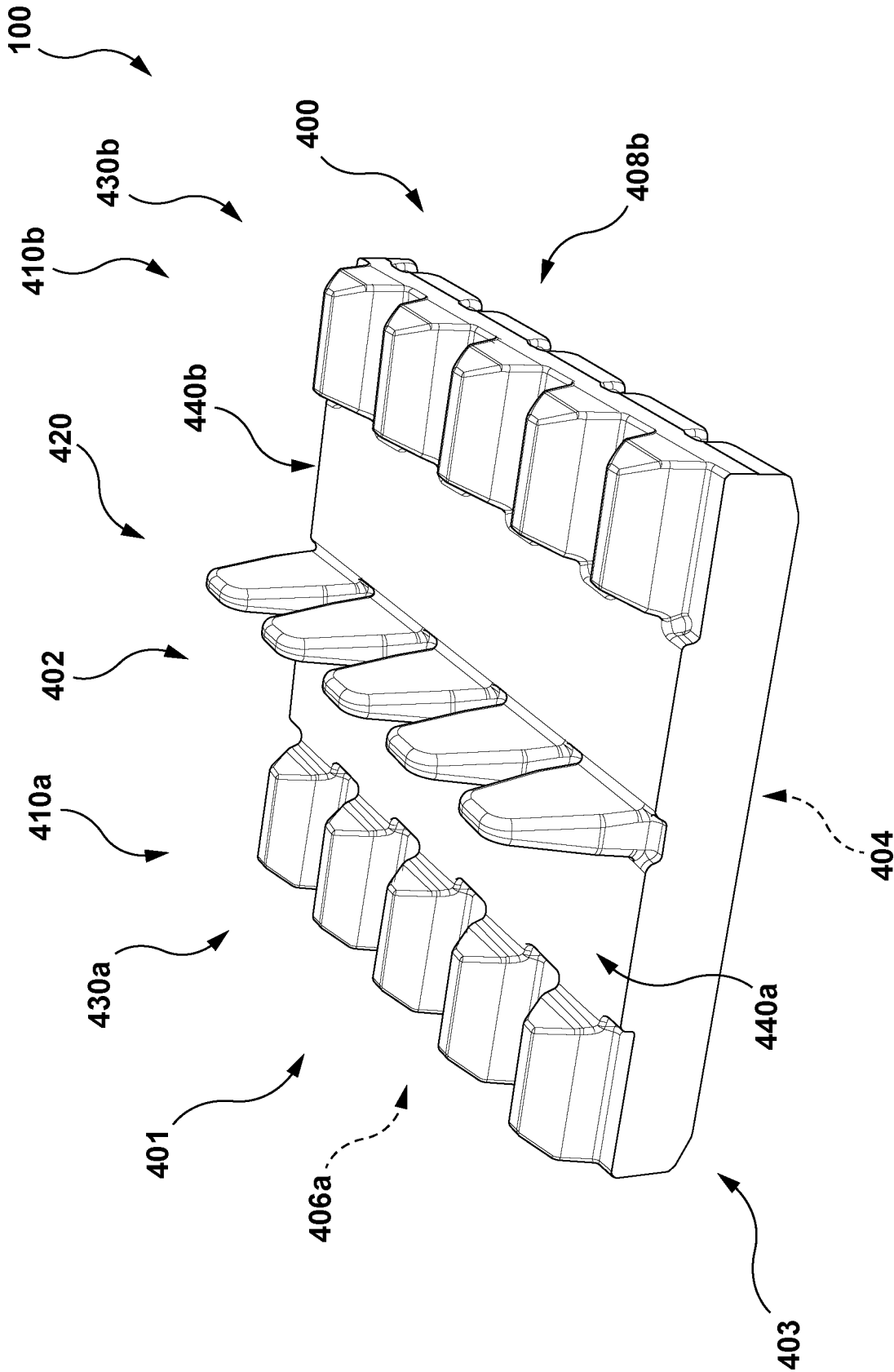


FIG. 4

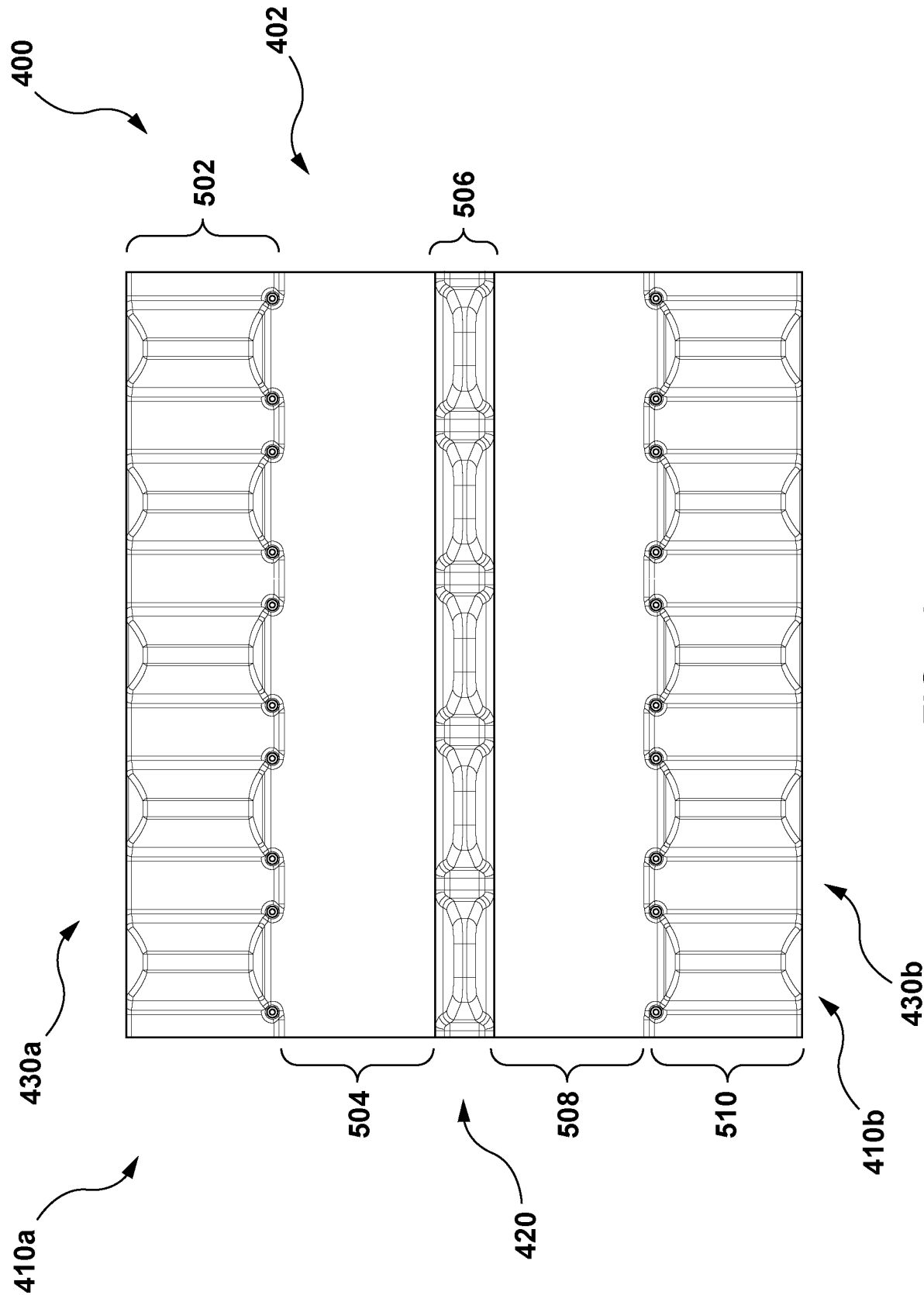


FIG. 5A

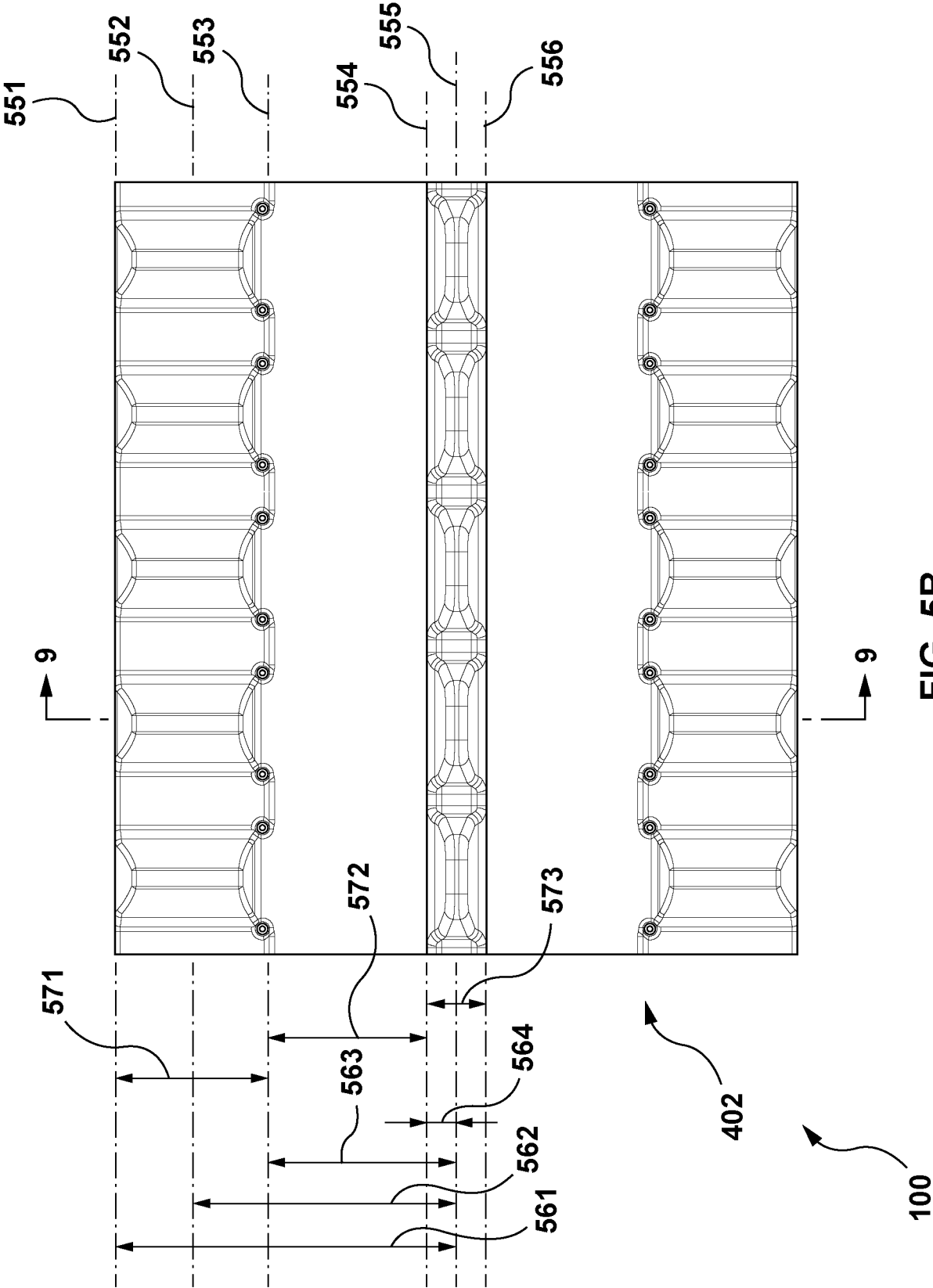


FIG. 5B

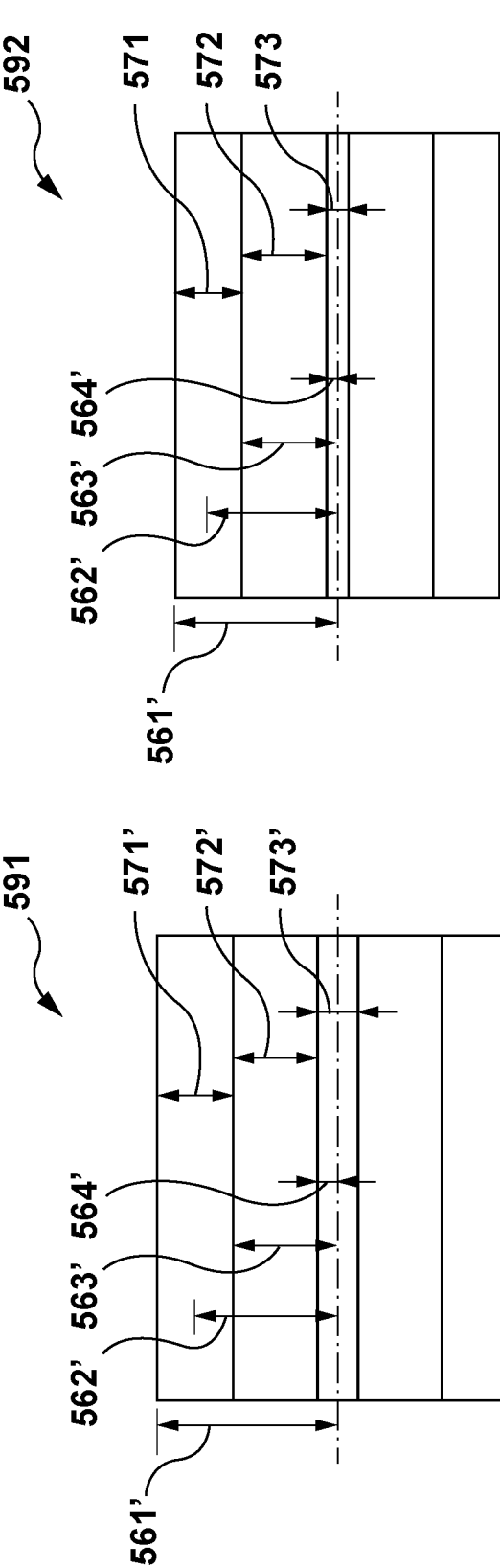


FIG. 5D

FIG. 5C (Prior Art)

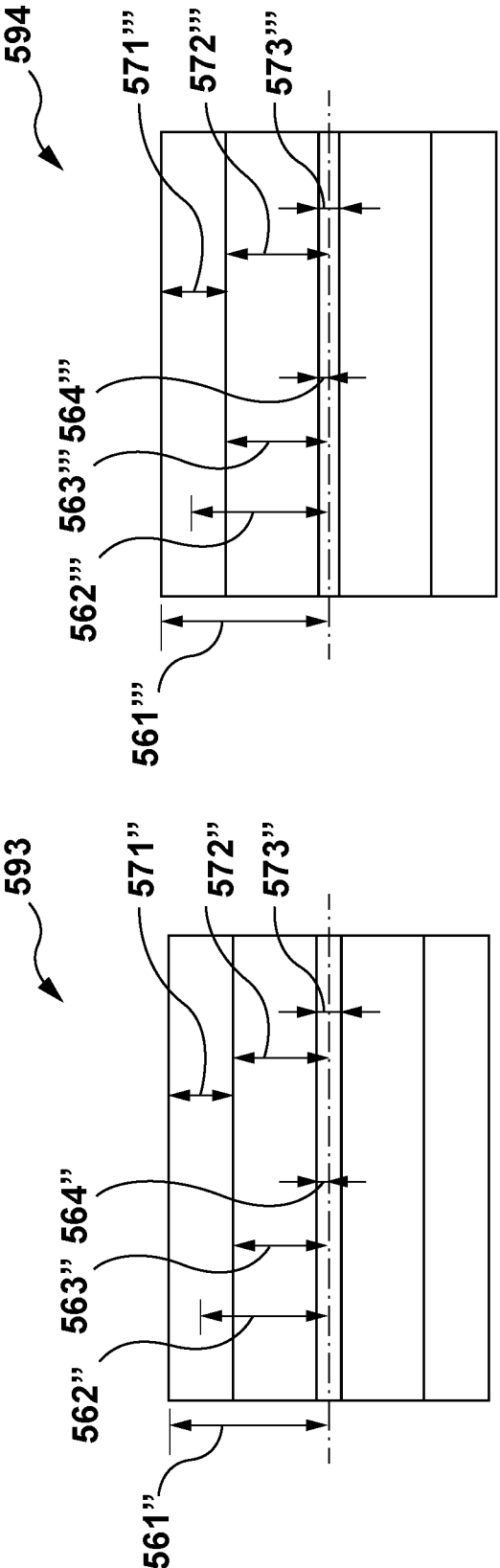


FIG. 5F

FIG. 5E

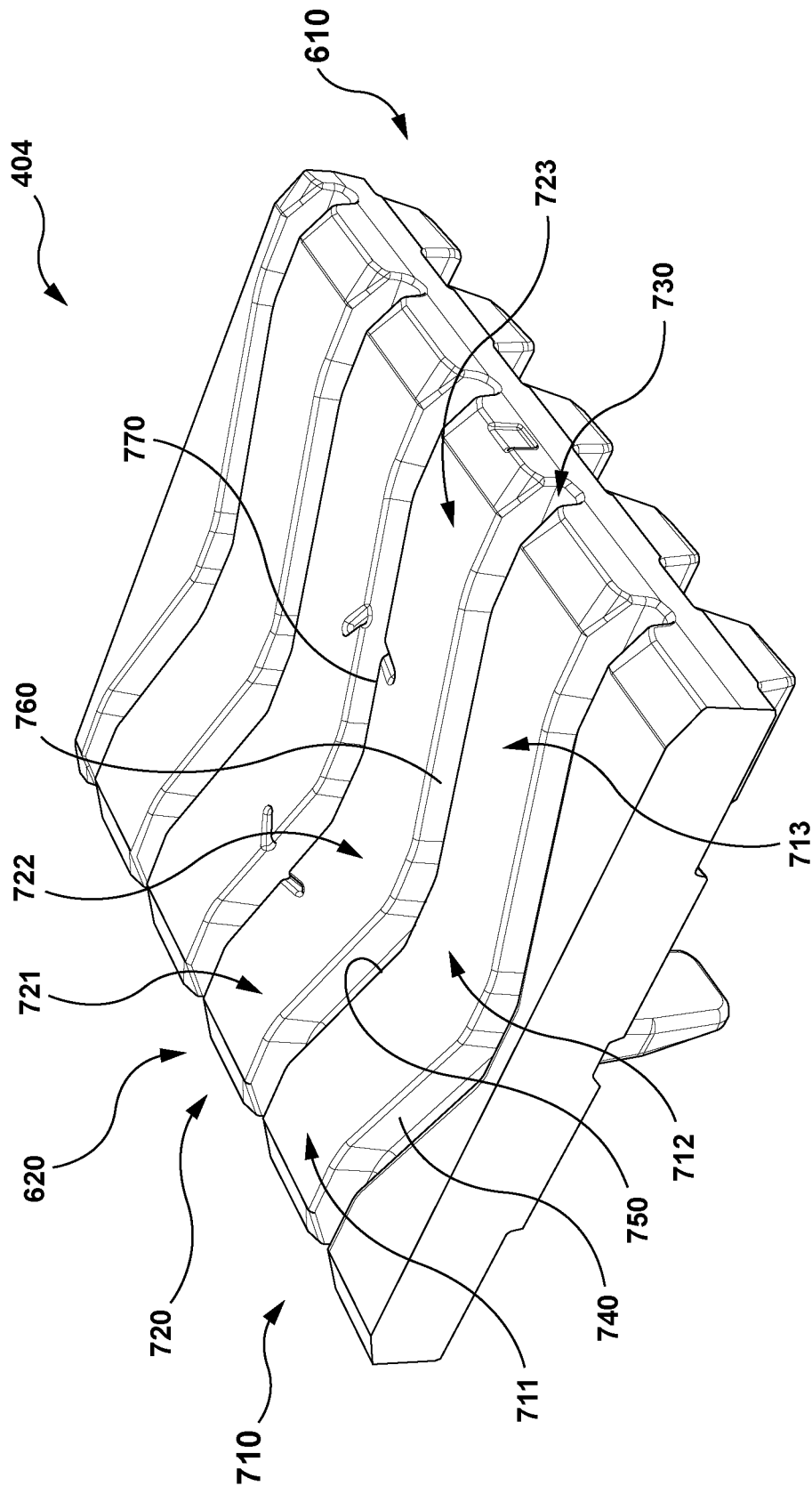


FIG. 6

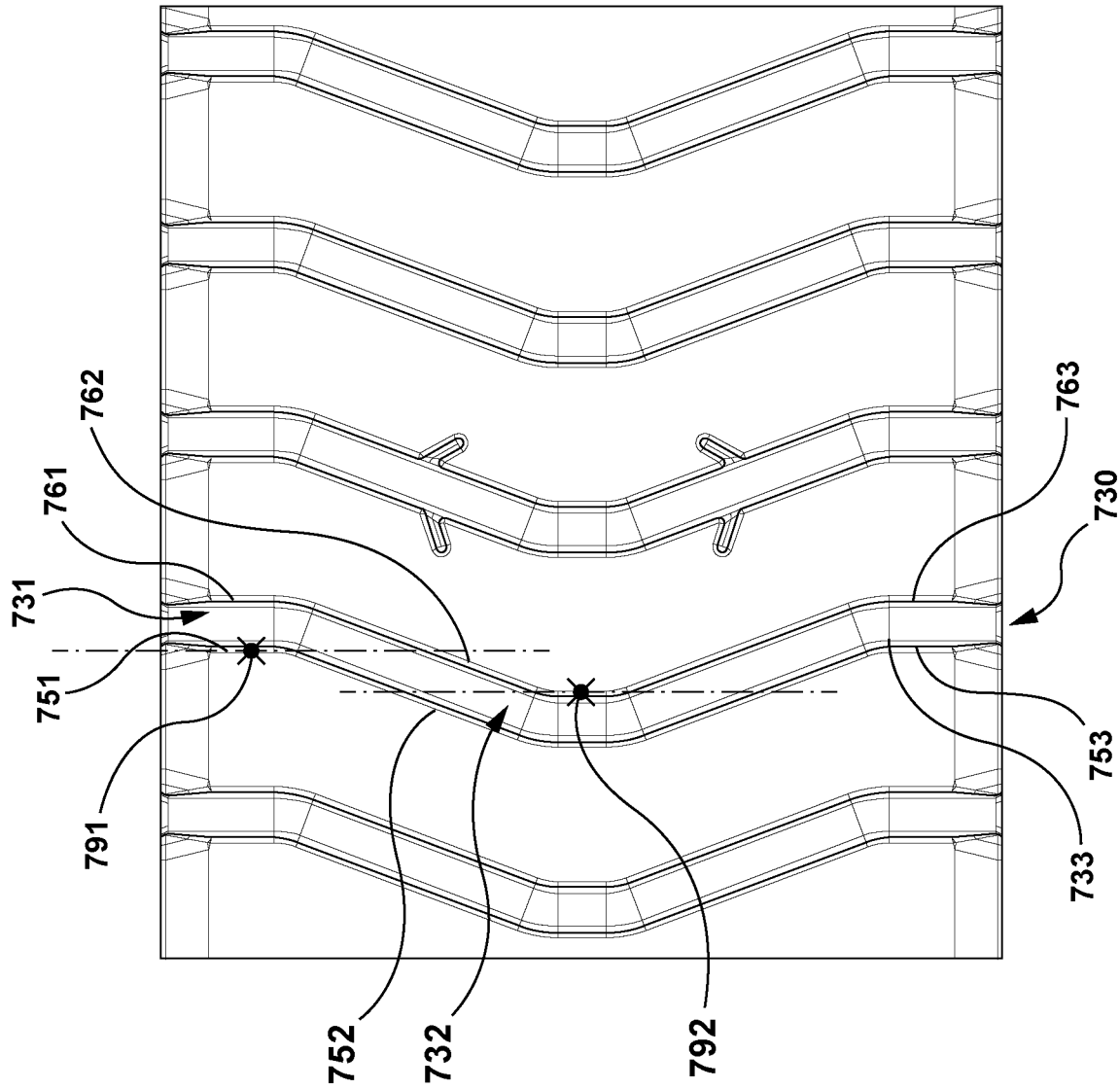


FIG. 7A

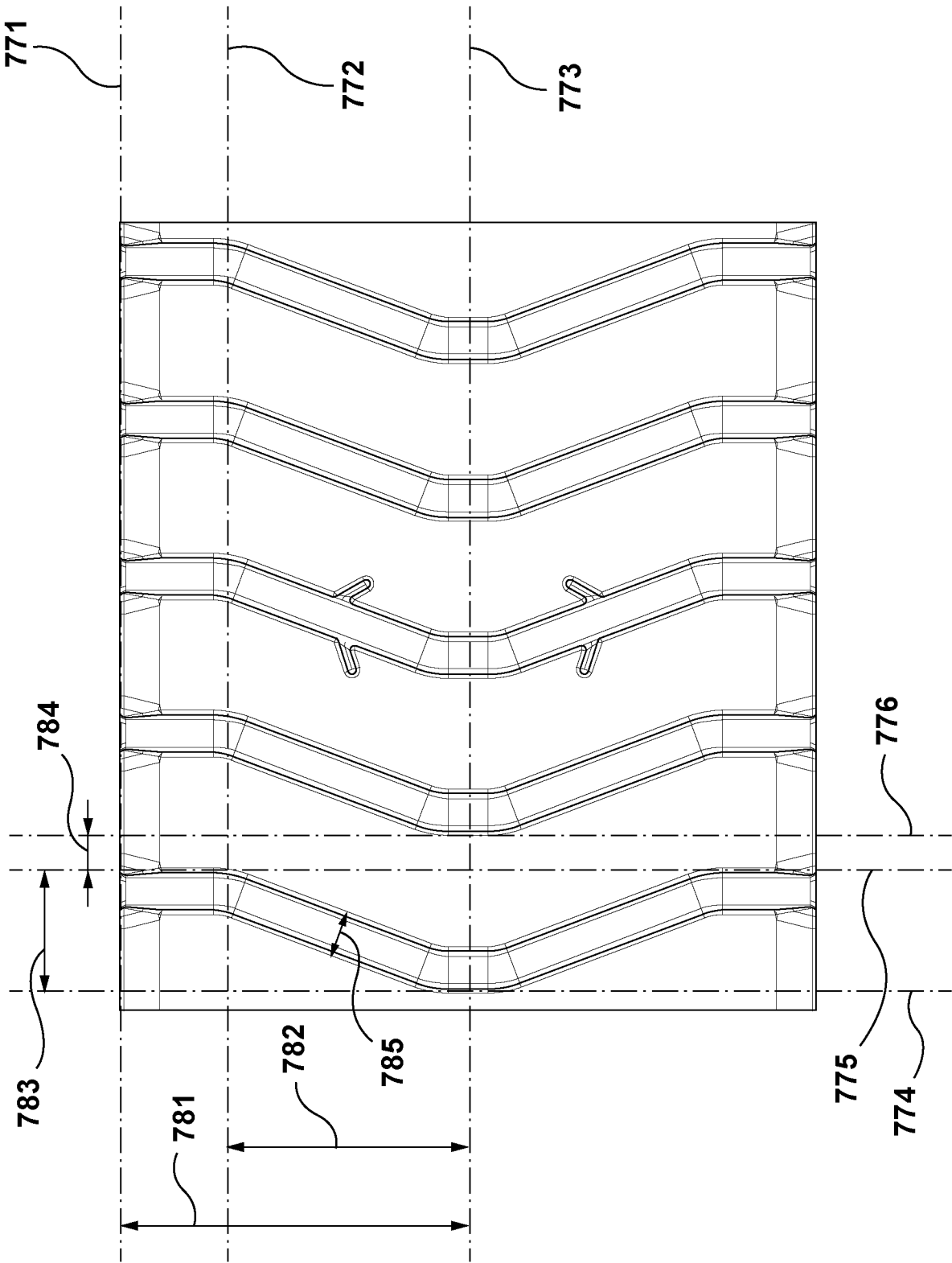


FIG. 7B

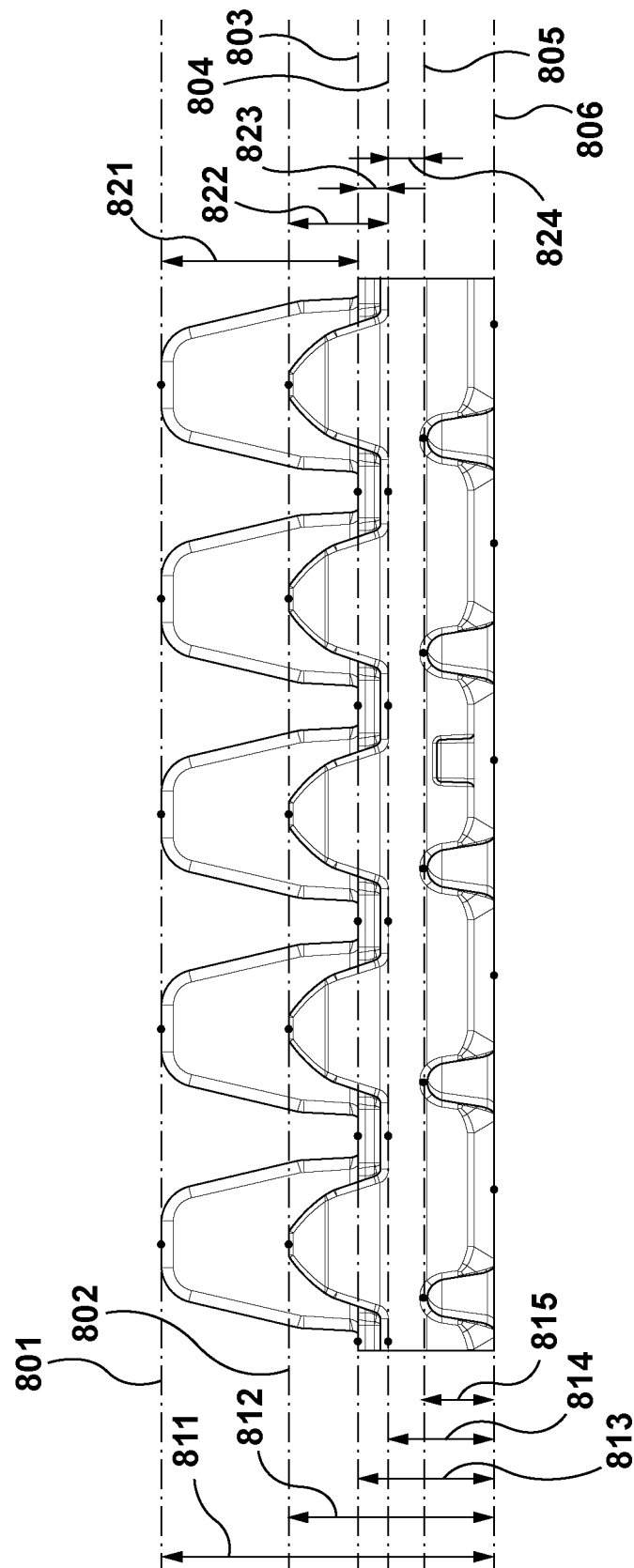


FIG. 8A

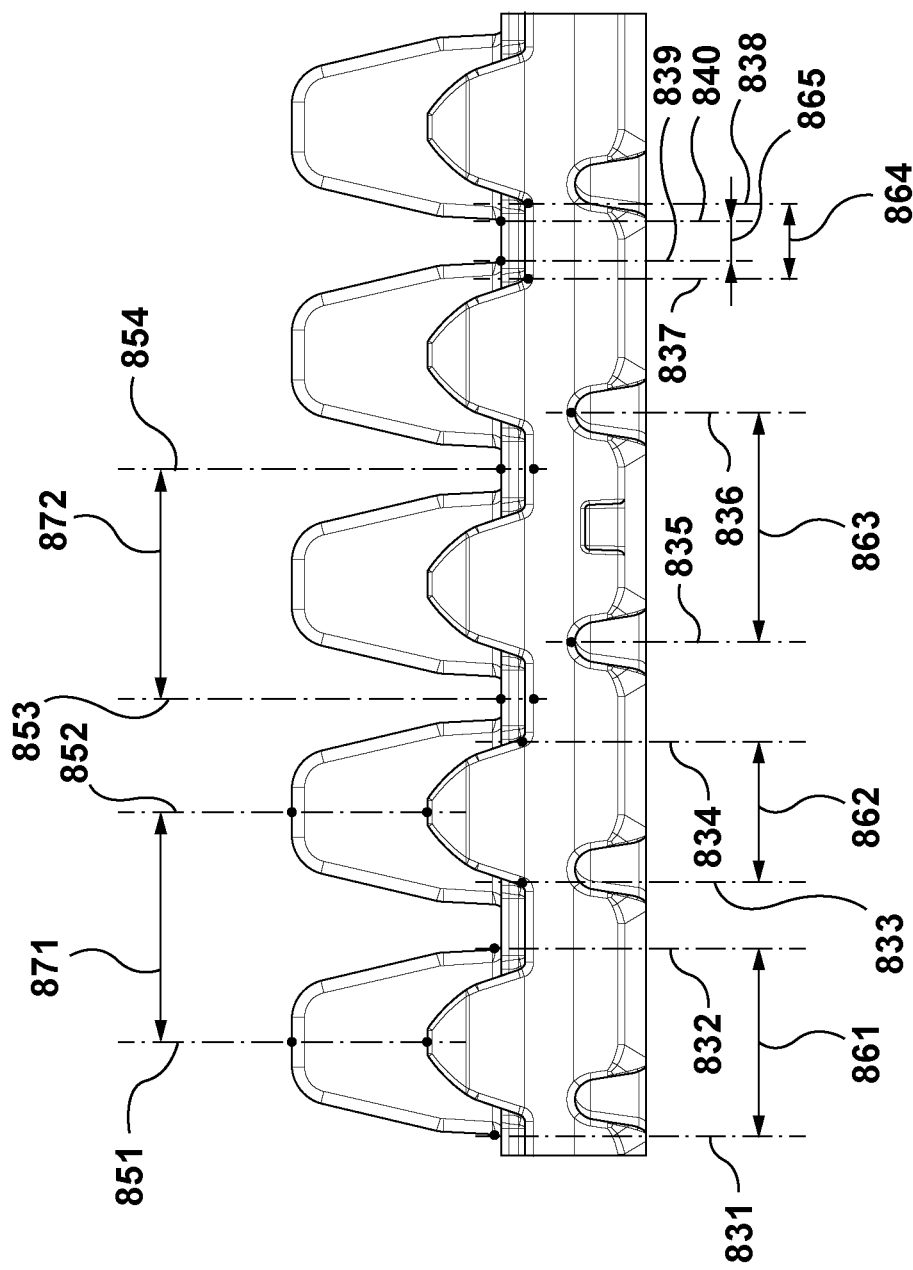


FIG. 8B

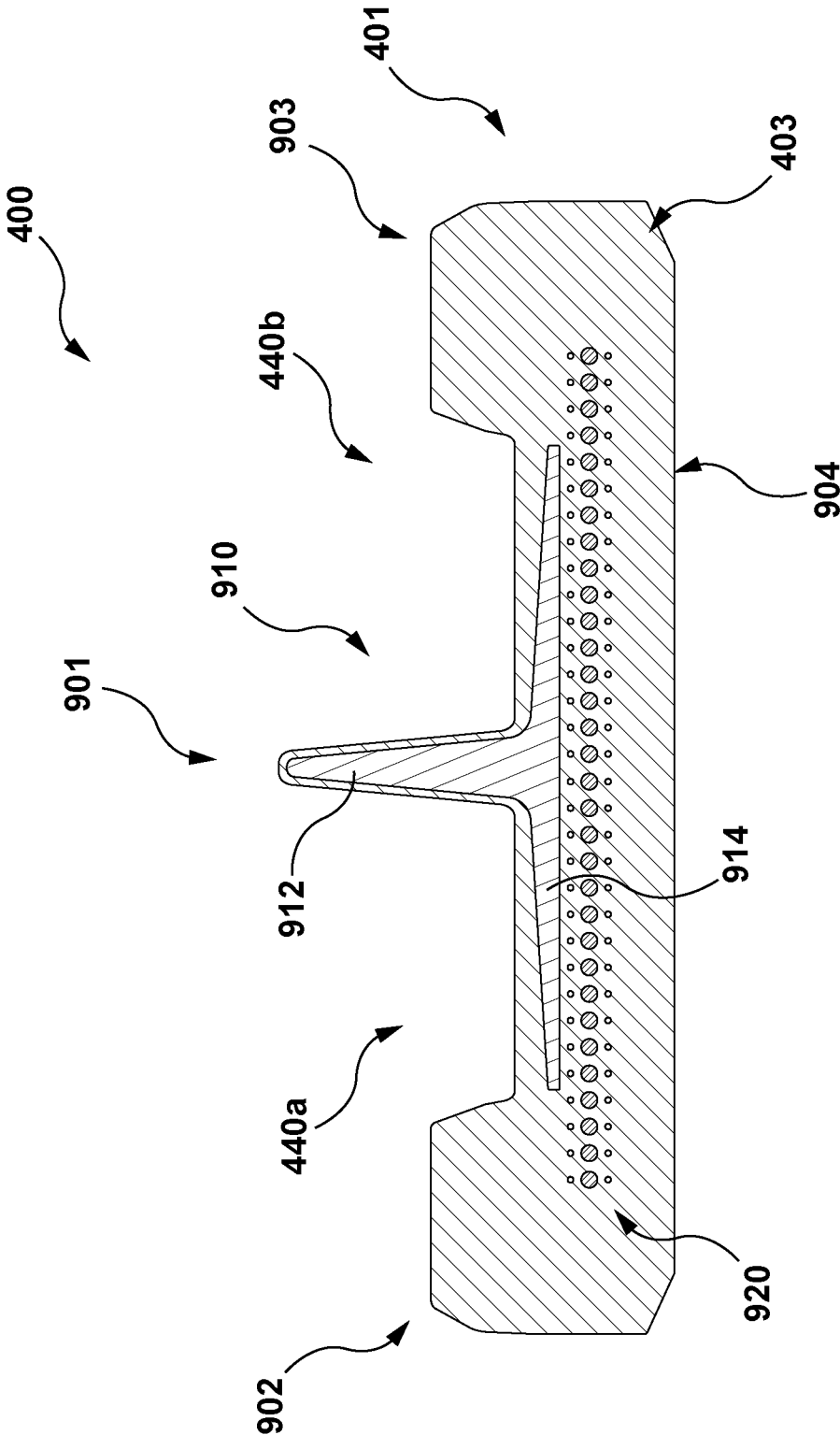


FIG. 9A

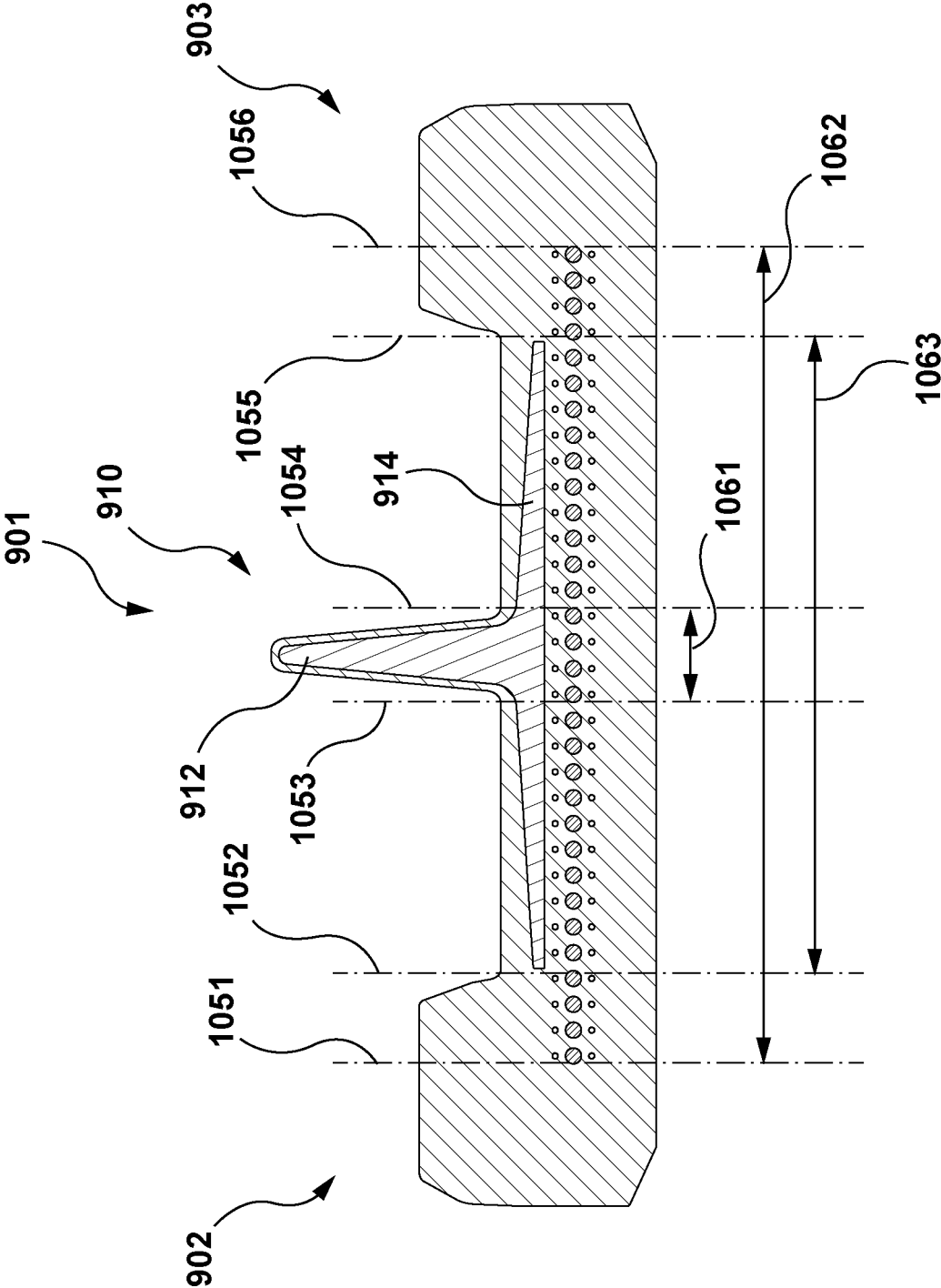


FIG. 9B

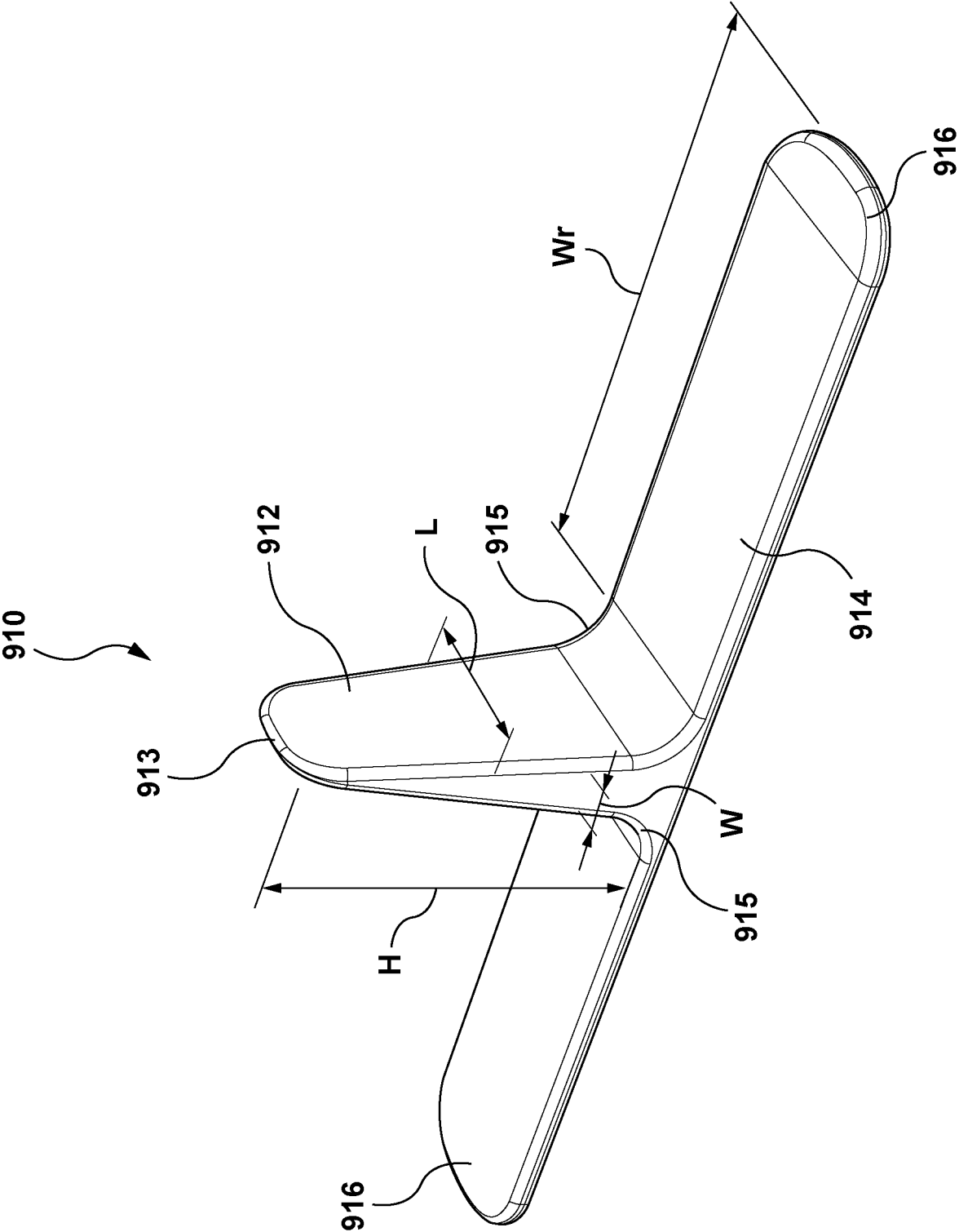


FIG. 9C

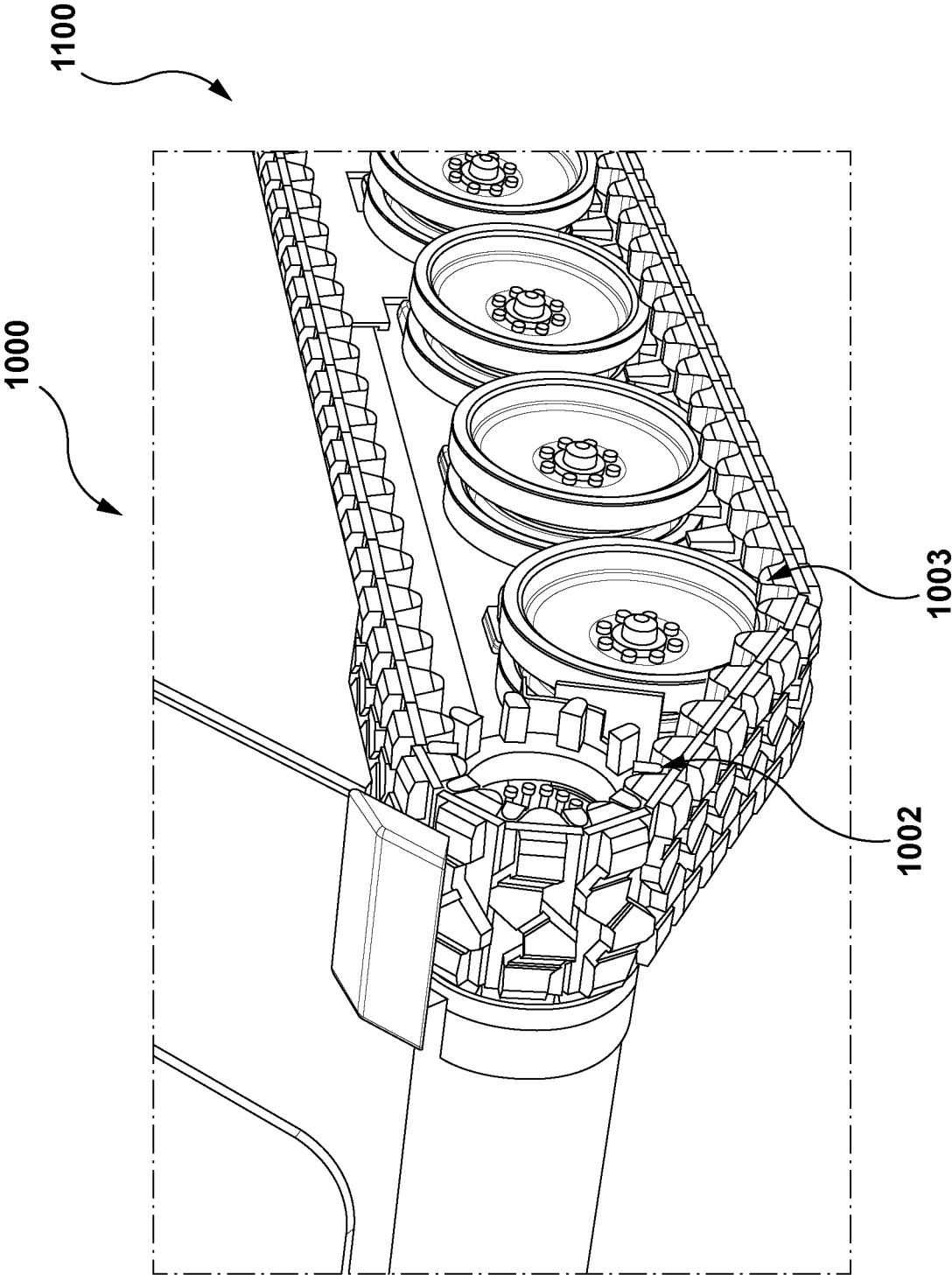


FIG. 10

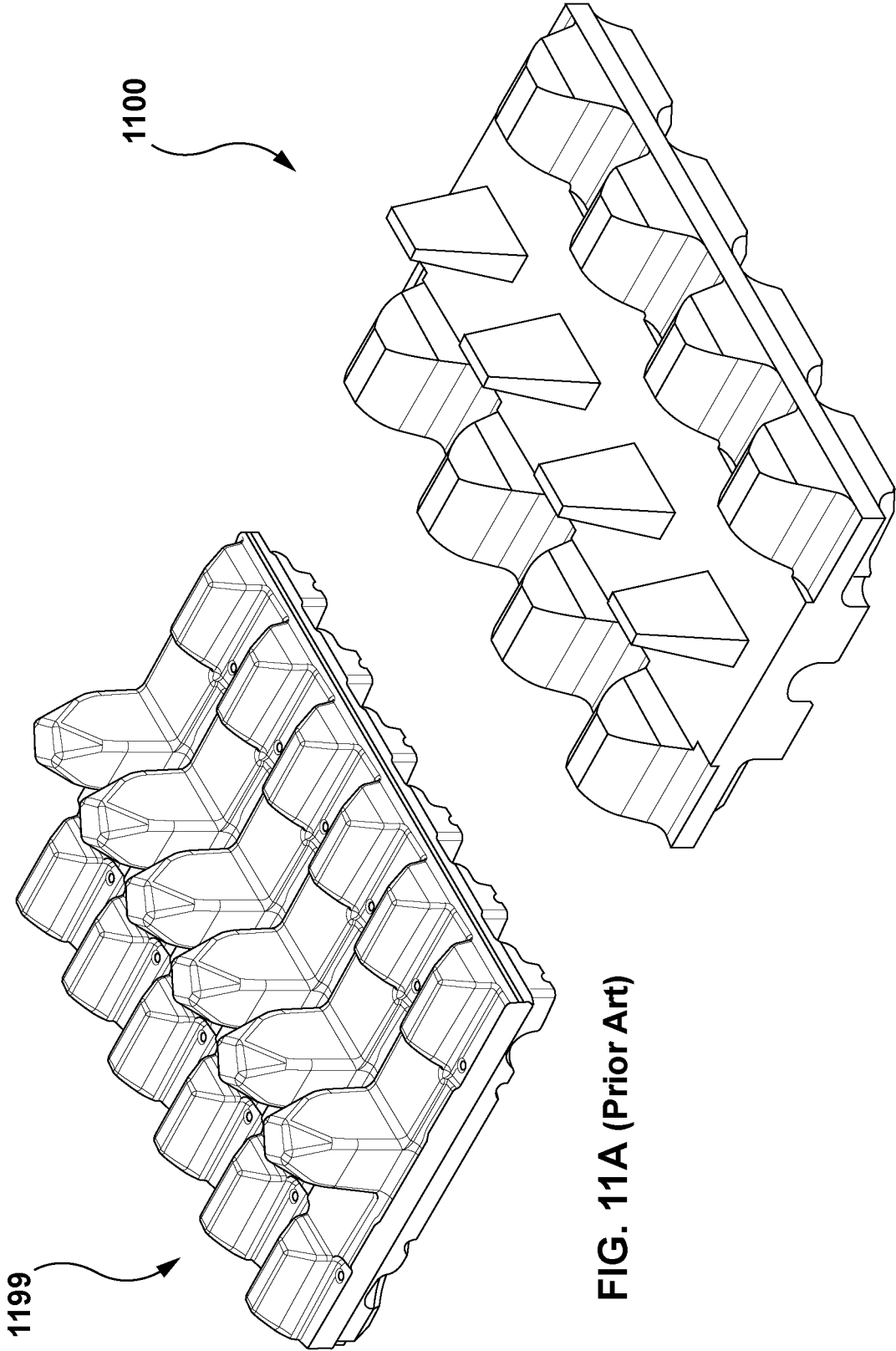


FIG. 11A (Prior Art)

FIG. 11B

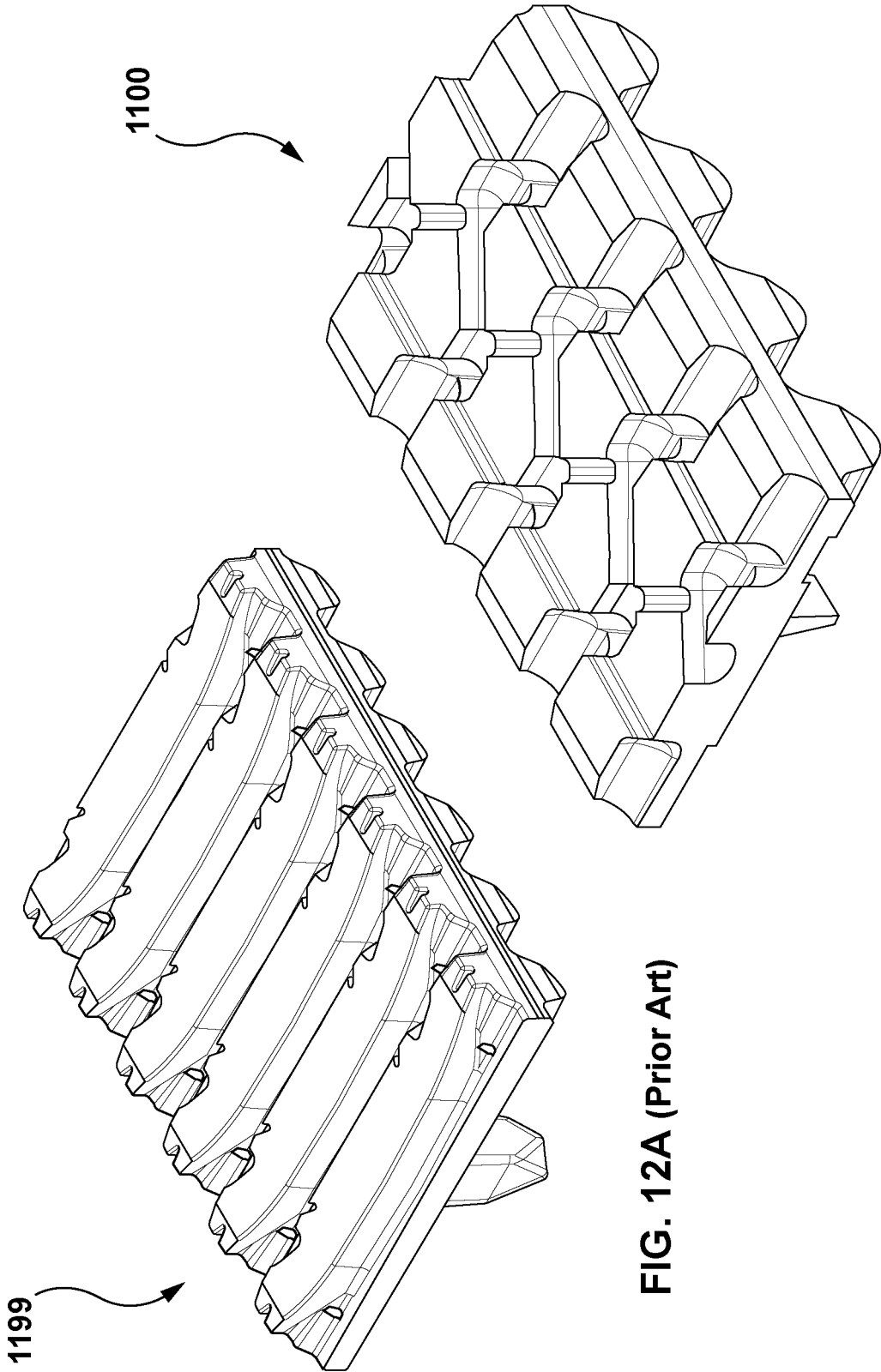


FIG. 12A (Prior Art)

FIG. 12B

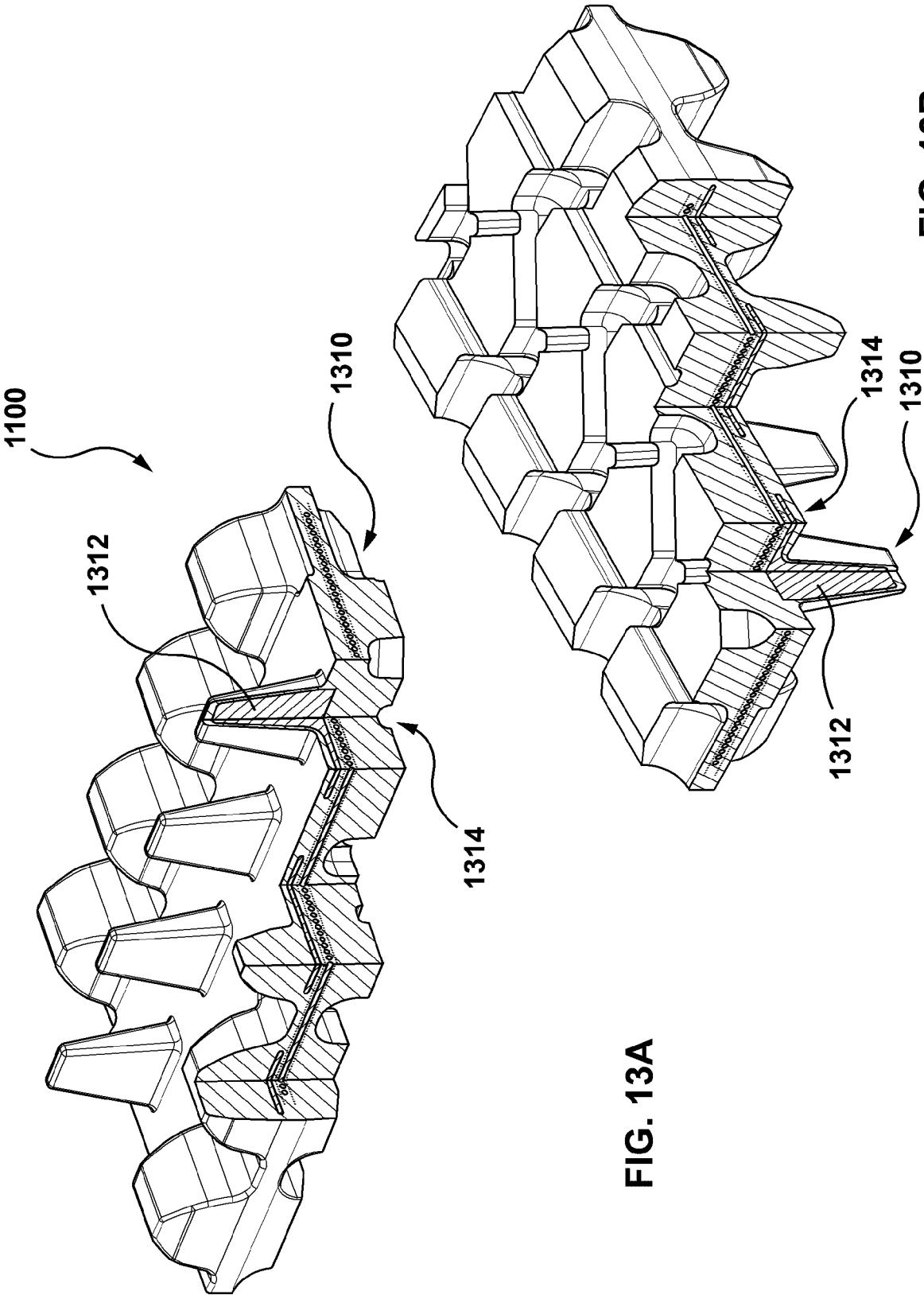


FIG. 13B

FIG. 13A

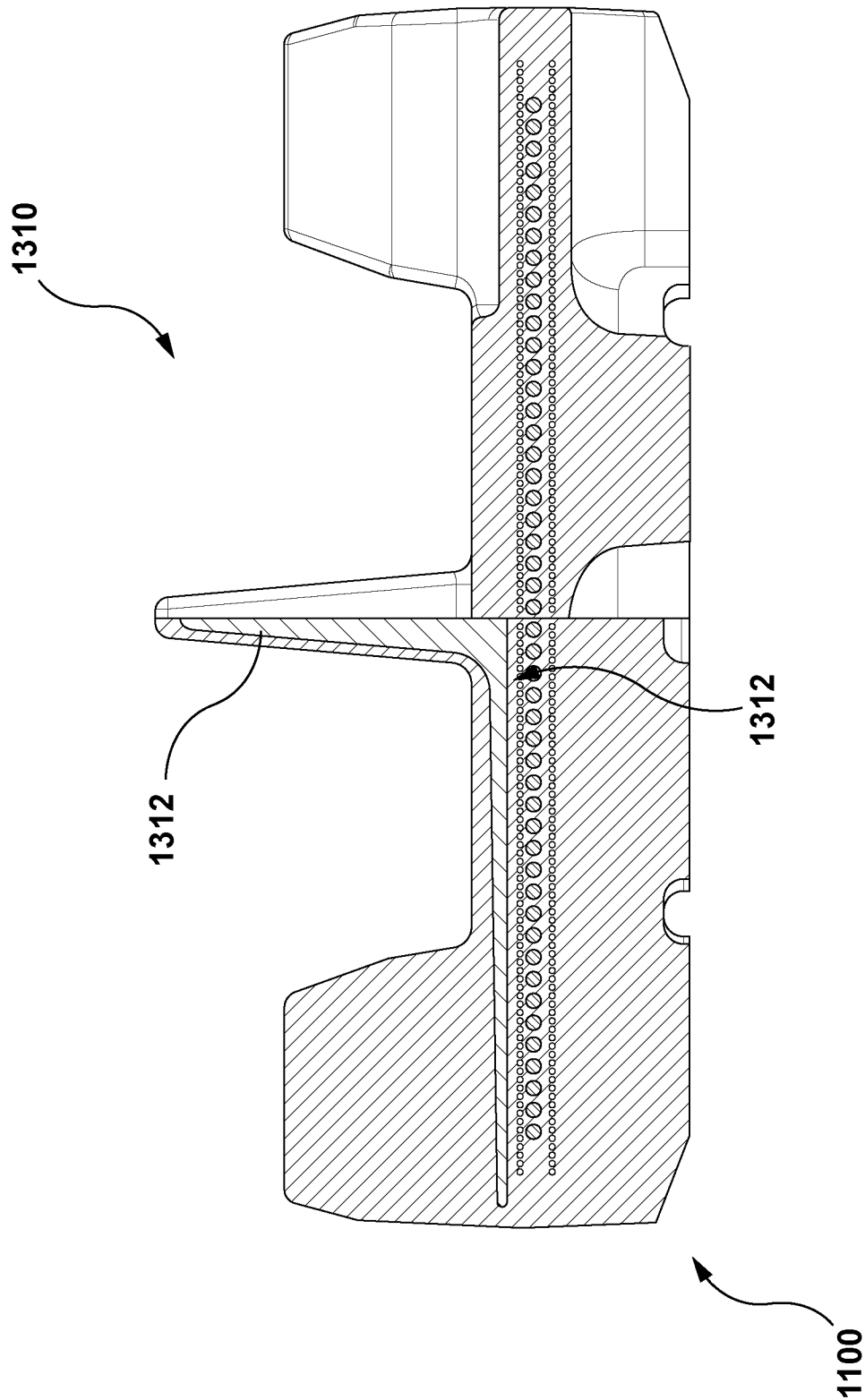


FIG. 13C

INTERNATIONAL SEARCH REPORT

International application No.
PCT/CA2023/051320

A. CLASSIFICATION OF SUBJECT MATTER IPC: B62D 55/24 (2006.01) CPC: , B62D 55/24 (2020.01) , B62D 55/244 (2020.01) According to International Patent Classification (IPC) or to both national classification and IPC			
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC: B62D 55/24 (2006.01) Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic database(s) consulted during the international search (name of database(s) and, where practicable, search terms used) FAMPAT (Questel) Reinforced (and variations)			
C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category*	Citation of document, with indication, where appropriate, of the relevant passages		Relevant to claim No.
X Y	CA2422481 A1 (SOUCY, G., et al.) 18 September 2004 (18-09-2004) Figures 1-11,		1-9, 22-29, 33-42 10-21, 30-32
A	A - WO2004/083024 A1 (SOUCY, G., et al.) 30 September 2004 (30-09-2004) *Whole document		1-42
A	A - US20080100134 A1 (SOUCY, G., et al.) 01 May 2008 (01-05-2008) *Whole document		1-42
A	A - WO2017/117672 A1 (DUMOULIN, O., et al.) 13 July 2017 (13-07-2017) *whole document		1-42
☐ Further documents are listed in the continuation of Box C. ☒ See patent family annex.			
* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "D" document cited by the applicant in the international application "E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family		
Date of the actual completion of the international search 28 November 2023 (28-11-2023)		Date of mailing of the international search report 30 November 2023 (30-11-2023)	
Name and mailing address of the ISA/CA Canadian Intellectual Property Office Place du Portage I, C114 - 1st Floor, Box PCT 50 Victoria Street Gatineau, Quebec K1A 0C9 Facsimile No.: 819-953-2476		Authorized officer Scott Bedard (873) 354-9774	

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/CA2023/051320

Patent Document Cited in Search Report	Publication Date	Patent Family Member(s)	Publication Date
CA2422481A1	18 September 2004 (18-09-2004)	CA2422481C US2008100134A1 US7784884B2 US2010283317A1 US7914090B2 US2004222697A1 WO2004083024A1	26 July 2011 (26-07-2011) 01 May 2008 (01-05-2008) 31 August 2010 (31-08-2010) 11 November 2010 (11-11-2010) 29 March 2011 (29-03-2011) 11 November 2004 (11-11-2004) 30 September 2004 (30-09-2004)
WO2004083024A1	30 September 2004 (30-09-2004)	CA2422481A1 CA2422481C US2008100134A1 US7784884B2 US2010283317A1 US7914090B2 US2004222697A1	18 September 2004 (18-09-2004) 26 July 2011 (26-07-2011) 01 May 2008 (01-05-2008) 31 August 2010 (31-08-2010) 11 November 2010 (11-11-2010) 29 March 2011 (29-03-2011) 11 November 2004 (11-11-2004)
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WO2017117672A1	13 July 2017 (13-07-2017)	AU2017204965A1 AU2017204965B2 CA3010523A1 CN108698652A CN108698652B DK3400163T3 EP3400163A1 EP3400163A4 EP3400163B1 ES2871749T3 PL3400163T3 SG11201805796QA US2019016399A1 US10501131B2	02 August 2018 (02-08-2018) 23 September 2021 (23-09-2021) 13 July 2017 (13-07-2017) 23 October 2018 (23-10-2018) 30 April 2021 (30-04-2021) 10 May 2021 (10-05-2021) 14 November 2018 (14-11-2018) 14 August 2019 (14-08-2019) 21 April 2021 (21-04-2021) 02 November 2021 (02-11-2021) 18 October 2021 (18-10-2021) 30 August 2018 (30-08-2018) 17 January 2019 (17-01-2019) 10 December 2019 (10-12-2019)