**IN THE UNITED STATES DISTRICT COURT**
**FOR THE DISTRICT OF DELAWARE**

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| **AORTIC INNOVATIONS LLC,** | ) | |
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| **Plaintiff,** | ) | |
| | ) | |
| **v.** | ) | **C.A. NO. 23-00158 (JPM)** |
| | ) | |
| **EDWARDS LIFESCIENCES CORPORATION, EDWARDS LIFESCIENCES LLC, AND EDWARDS LIFESCIENCES (U.S.) INC.,** | ) | **JURY TRIAL DEMANDED** |
| | ) | |
| | ) | |
| **Defendants.** | ) | |
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**AORTIC INNOVATIONS LLC'S LPR 4-2(C) DISCLOSURE**

Pursuant to the Western District of Tennessee Local Patent Rules ("LPR"), Paragraph 4-2(c) and the Court's Scheduling Order (D.I. 21), Plaintiff Aortic Innovations LLC ("Aortic") respectfully submits its claim constructions and supporting evidence for the claim terms, phrases, or clauses contained in the asserted patents that the parties identified pursuant to LPR 4-2(a) and (b).

Aortic bases these constructions upon its current knowledge, understanding, and belief as to the facts and information available as of this date. Aortic reserves the right to further amend these claim constructions as the parties proceed with discovery and work toward the preparation of a final Joint Claim Construction Statement. In particular, Aortic reserves the right to modify or supplement these LPR 4-2 disclosures to facilitate agreement with Edwards, to avoid duplication of terms or phrases, to reflect newly-received information, or in response to any changes in Edwards's invalidity contentions. To the extent necessary to clarify the issues for the Court or otherwise avoid ambiguity or confusion, Aortic reserves the right to address a word or phrase



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**Edwards Ex. 1150**

separately from the terms listed below, including but not limited to if addressing that word or phrase separately will assist in the resolution of the parties' disputes.

Aortic also reserves the right to revise its proposals regarding claim terms in view of Edwards's proposals and as discovery proceeds. Aortic specifically reserves the right to modify or supplement its constructions once it has had an opportunity to review Edwards's constructions. Aortic further reserves the right to rely on intrinsic and extrinsic evidence identified by Edwards and to add additional intrinsic and extrinsic evidence, particularly for constructions on which the parties disagree. Furthermore, Aortic reserves the right to update its citations to additional relevant intrinsic and extrinsic evidence, such as IPR submissions and/or orders; patent and file history citations, inventor testimony and testimony from attorneys responsible for prosecuting the asserted patents, as well as to identify additional dictionary definitions and prior art.

Aortic also reserves the right to amend these disclosures to the extent Edwards supplements or amends its invalidity contentions or claim construction disclosures. Edwards has not served invalidity contentions that comply with the Court's rules and has otherwise not provided sufficient notice as to its invalidity theories in this case as set forth by Aortic in separate correspondence. Aortic continues to be prejudiced by Edwards's discovery deficiencies, and reserves the right to amend or modify its constructions and evidence for at least this reason.

To confirm the proper construction, in addition to the intrinsic and extrinsic evidence cited below, Aortic may rely on the patents and other references cited during the prosecution of the asserted patents and/or in the IPRs filed by Edwards. Aortic also may rely on one or more of the systems and/or publications identified in the Invalidity Contentions to explain the state of the art and/or to show the ordinary meaning of certain claim terms. Furthermore, Aortic may rely on any

public statement of Edwards and/or its representatives, or any current or former employee of Edwards; and/or any information from other sources, including discovery produced in this case. Aortic may also rely on documents produced pursuant to Local Patent Rule 3-2 to the extent those documents evidence the ordinary meaning of claim terms and/or any different meaning assigned to claim terms by the inventors.

As noted below, Aortic may also rely on testimony from one or more expert witnesses, including any identified by Edwards. Such expert evidence may address the relevant field of art, the level of ordinary skill in the art, that the meaning of certain terms is ascertainable with reasonable certainty, the patents' specifications' disclosure regarding the claims and claim terms, the definiteness of certain terms, and the meaning that certain claim terms would have to a person of ordinary skill in the art based on the asserted patents' disclosure and associated prosecution history, including any extrinsic evidence offered by Edwards or Aortic. Aortic may also rely on references cited on the cover of the asserted patents and/or patents, publications, and/or applications incorporated therein. Aortic also may rely on evidence from and statements made by the parties, their experts, and/or the PTAB in IPR2021-01527, IPR2021-01584, IPR2022-00034, IPR2022-00193, IPR2022-00556, IPR2022-00549, IPR2023-01151, IPR2023-01232, and IPR2023-01325. Aortic also reserves the right to rely on Edwards' SAPIEN 3 Ultra demonstrative and related materials, as well as orders, briefing, evidence and the parties' claim construction presentations from the *Aortic I* matter.

In each instance in which "plain and ordinary meaning" is offered, for clarity and to the extent Edwards argues indefiniteness, Aortic contends that the term is not indefinite.

Dated: December 11, 2023

**YOUNG CONAWAY STARGATT & TAYLOR, LLP**

*/s/ Robert M. Vrana*
Adam W. Poff (No. 3990)
Robert M. Vrana (No. 5666)
Rodney Square
1000 North King Street
Wilmington, DE 19801
(302) 571-6600
apoff@ycst.com
rvrana@ycst.com

**MCKOOL SMITH, P.C.**
John Campbell
jcampbell@McKoolSmith.com
John F. Garvish
jgarvish@McKoolSmith.com
Joel L. Thollander
jthollander@mckoolsmith.com
Geoffrey L. Smith
glsmith@mckoolsmith.com
Caroline E. Burks
cburks@mckoolsmith.com
MCKOOL SMITH, P.C.
303 Colorado, Suite 2100
Austin, Texas 78701
Telephone: (512) 692-8700
Facsimile: (512) 692-8744

Casey L. Shomaker
cshomaker@mckoolsmith.com
MCKOOL SMITH, P.C.
300 Crescent Court, Suite 1500
Dallas, Texas 75201
Telephone: (214) 978-4000
Facsimile: (214) 978-4044

**ATTORNEYS FOR PLAINTIFF AORTIC INNOVATIONS LLC**

| Identified Claim Terms[1] | | | | |
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| **Term #** | **Claim Term** | **Claim(s)** | **Preliminary Construction** | **Supporting Materials** |
| 1. | frame | '834 Patent – Claims 2, 9, 17, 18; '310 Patent – Claims 11, 13; '033 Patent – Claims 1, 5; '634 Patent – Claims 1-7, 9; '918 Patent – Claims 1, 4-10, 16-17, 20-22, 26 | plain and ordinary meaning | '834 Patent, Figures 3, 8-14, 17-22, cols. 1:4-53; 7:44-67; 9:22-25; 11:25-15:15; 15:26-17:49; 17:50-20:10; claims 1-18.<br><br>'310 Patent, Figures 3, 8-14, 17-22, cols. 1:4-53; 7:32-53; 9:8-11; 11:11-15:2; 15:14-17:35; 17:36-19:63; claims 1-15.<br><br>'033 Patent, Figures 3, 8-14, 17-22, cols. 1:4-53; 7:46-67; 9:22-25; 11:25-15:17; 15:28-17:49; 17:50-20:10; claims 1-6.<br><br>'634 Patent, Figures 3, 8-14, 17-22, cols. 1:4-53; 7:46-67; 9:22-25; 11:25-15:15; 15:26-17:49; 17:50-20:10; claims 1-10.<br><br>'918 Patent, Figures 3, 8-14, 17-22, cols. 1:4-51; 7:39-60; 9:16-18; 11:17-15:9; 15:20-17:41; 17:42-20:7; claims 1-27.<br><br>U.S. Provisional App. No. 61/723,446, Figures 2-10; claim 1; [0012] – [0034]; U.S. Pat. No. 5,102,417; and U.S. Pat. No. 6,582,462.<br><br>U.S. Patent App. No. 17/327,673, Amendment and Response dated Aug. 14, 2021 at 7-18; Amendment and Response dated Sept. 28, 2021 at 7- |

[1] For the "gridded" term proposed for construction by Edwards appearing in claim 8 of the '834 patent, Aortic is no longer asserting '834 patent, claim 8 in the case. Likewise, for the "radially extending" term in claims 1, 3, 5, and 8 of the '310 Patent, Aortic is no longer asserting those claims pending its appeal in the *Aortic I* matter. To the extent that Edwards continues to seek construction of these terms, Aortic reserves the right to provide its disclosures at a later date.

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| | | | | 10; Amendment and Response dated Nov. 8, 2021 at 7-10; Notice of Allowance dated May 2, 2022.<br><br>U.S. Patent App. No. 16/941,117, Amendment and Response dated Nov. 4, 2021 at 16-17; Amendment and Response dated Dec. 14, 2021 at 19-21; Amendment and Response dated Oct. 12, 2021 at 5-12; Notice of Allowance dated (June 6, 2022).<br><br>U.S. Patent App. No. 17/719,160, Amendment and Response dated July 31, 2022 at 5-10.<br><br>U.S. Patent App. No. 17/469,391, Amendment and Response dated Jan. 4, 2022 at 17-20; Amendment and Response dated March 28, 2022 at 6-13.<br><br>U.S. Patent App. No. 17/213,251, Amendment and Response dated June 22, 2022 at 6-14 (referencing support in 446 Provisional); Amendment and Response dated May 17, 2022 at 6-8, 11-12; Amendment and Response dated Oct. 9, 2021 at 16; Amendment and Response dated July 27, 2021 at 12-19; Amendment and Response dated May 28, 2021 at 13-17; 22-23.<br><br>U.S. Patent App. No. 17/024,060, Preliminary Amendment (dated 10-30-2020) at 2-11, Office Action (dated 11-10-2020) at 2-5 (and art cited therein); Amendment and Response (dated 11-16-2020) at 2-13; Notice of Allowance.<br><br>U.S. Patent App. No. 17/096,253, Preliminary Amendment (dated 11-30-2020) at 2-25 (and art cited therein), Notice of Allowance (dated 02-08-2021) at 2-3 (and art cited therein). |

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| | | | | U.S. Patent App. No. 17/131,869, Preliminary Amendment (dated 01-26-2021) at 2-9; Preliminary Amendment (dated 02-16-2021) at 2-17 (and art cited therein); Office Action (dated 02-26-2021) at 3-8 (and art cited therein); Office Action Response (dated 02-28-2021) at 2-12; Notice of Allowance (dated 03-24-2021) at 2.<br><br>U.S. Patent App. No. 17/170,957, Preliminary Amendment (dated 03-27-2021) at 2-4; Office Action (dated 04-30-2021) at 2, 6-9 (and art cited therein); Office Action Response (dated 05-21-2021) at 2-13; Notice of Allowance (dated 06-11-2021) at 2-3; Notice of Allowance (dated 07-26-2021) at 2-3; Applicant Submission (dated (07-27-2021) at 2-4 (and art cited therein); Notice of Allowance (dated 08-23-2021).<br><br>U.S. Patent App. No. 17/748,073, Claims (dated Nov. 13, 2023), Notice of Allowance (dated Oct. 25, 2013) at 1-4, Notice of Allowance and Interview Summary Record (dated Oct. 17, 2023) at 1-4, Supplemental Amendment dated Oct. 3, 2023 at 2-13; Amendment dated Sept. 25, 2023 at 2-26; Office Action dated Sept 7, 2023 at 2-12; Notice of Allowance dated 6-22-2023 at 2-4; Notice of Allowance dated 6-5-2023 at 2-5, Preliminary Amendment dated 4-26-2023 at 2-14; Preliminary Amendment dated 4-3-2023 at 2-14; Amendment dated 12-29-2022 at 2-9; Office Action dated 12-28-2002 at 2-4; Amendment dated 12-25-2002 at 2-6; Amendment dated 11-04-2022 at 2-8; Response dated 10-22-2022 at 2-8; Office Action dated 10-13-2022 at 2-4; Amendment and Response dated 9-19-2022 at 2-13.<br><br>U.S. Patent App. No. 17/975,986, Amendment dated 3-8-2022 at 2-18; Office Action dated 3-21-2023 at 3-13; Amendment dated 6-21-2023 at 2-44; Response dated 7-16-2023 at 2-16; Response dated 8-3-2023 at 2-16; Office Action dated 9-1-2023 at 1-13; Amendment and Response |

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| | | | | dated 9-25-2023 at 2-19; Office Action dated 10-11-2023 at 2-7; Amendment and Claims (dated Oct. 16, 2023); Notice of Allowance (dated Nov. 1, 2023) at 1-8; Issue Notification (dated Nov. 22, 2023); U.S. Patent No. 11,839,559, cl. 1-22.<br><br>IPR2023-01151, Petition, Paper 1 at 8-16, 21-22, 24-26, 59, 70-71, 79; Buller Declaration, Ex. 1003 at 10-11, 16-44, 54-56, 104-105, 120-123, 128, 134, 159, 164; POPR at 3; Ex. 2002, 19.<br><br>IPR2023-01232, Petition, Paper 1 at 6-13, 18-19, 20-23, 25-26 65-66; Buller Declaration, Ex. 1003 at 10-11, 17-46, 62-66,148.<br><br>IPR2023-01325, Petition, Paper 2 at 9-15, 20, 23-25, 66; Buller Declaration, Ex. 1003 at 10, 16-47, 65-67, 118.<br><br>*Aortic I*, Case No. 1:21-cv-01377-JPM (D.Del), D.I 83-85; D.I. 93-95; D.I. 112; D.I. 125 at 7-11; D.I. 135; D.I. 138; D.I 140.<br><br>U.S. Patent Pub. No. US2006/0259136 (Nguyen).<br><br>*See, e.g., Frame,* American Heritage College Dictionary (4th ed. 2007) at 550 ("A structure that gives shape or support"; "An open structure or rim for encasing, holding, or bordering.").<br><br>*See, e.g., Frame,* Merriam Webster's Collegiate Dictionary (11th ed. 2004) at 496-497 ("An enclosing border.").<br><br>*See, e.g., Frame,* Webster's Dictionary of the English Language (2012) at 82 ("a supporting or enclosing structure"). |

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| | | | | *See, e.g., Stent*, Merriam Webster's Medical Dictionary (11th ed. 2004) at 717 ("a short narrow metal or plastic tube often in the form of a mesh that is inserted into the lumen of an anatomical vessel (such as an artery or a bile duct) especially to keep a previously blocked passageway open").<br><br>"Statics and Mechanics of Materials," McGraw Hill (2011), 249, 273.<br><br>Edwards' Invalidity Contentions and identified art for "frame".<br><br>One or more experts, including Dr. Stephen Brecker and/or Dr. Bruce Anneaux, may testify regarding the technology of the '834, '310, '033, '634, and '918 Patents, including the relevant state of the art, how a person of ordinary skill in the art as of the priority dates of the '834, '310, '033, '634, and '918 Patents would have understood this claim term (including whether or not the term is or is not definite), including in light of the specification (including any provisional applications) and file history, and/or in rebuttal to arguments made by or on behalf of Edwards regarding claim construction. The expert(s) may also analyze the meaning of this term in light of evidence of how this term was used in textbooks, patents and/or articles around the time of invention.<br><br>*Aortic I*, Case No. 1:21-cv-01377-JPM (D.Del), D.I. 84, Ex. F at APP233.<br><br>*Aortic I*, Case No. 1:21-cv-01377-JPM (D.Del), D.I. 95, Ex. Y, at<br><br>EDWARDS_AI011910-911.<br><br>https://www.dicardiology.com/article/direct-flowmedical- |

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| | | | | tavr-system-virtually-eliminates-aortic-regurgitation "Direct Flow Medical TAVR System Virtually Eliminates Aortic Regurgitation" (Nov. 5, 2012).<br><br>*Aortic I*, Case No. 1:21-cv-01377-JPM (D.Del), D.I. 95, Ex. W; D.I. 1-2 at 315.<br><br>*Aortic I*, Case No. 1:21-cv-01377-JPM (D.Del), D.I. 95, Ex. BB (Bushnaq, et al.).<br><br>*Aortic I*, Case No. 1:21-cv-01377-JPM (D.Del), D.I. 95, Ex. DD (Schofer, et al.).<br><br>*Aortic I*, Case No. 1:21-cv-01377-JPM (D.Del), D.I. 82-1.<br><br>Aortic also reserves the right to rely on evidence identified by Edwards.<br><br>Aortic's U.S. Patent No. 11,833,068 (issued Dec. 5, 2023), claims 1-47.<br><br>Brecker Decl. (dated Oct. 27, 2023) at ¶¶1-57 (and cited materials). |
| 2. | fibers | '834 Patent – Claims 2, 9, 17, 18; '310 Patent – Claims 11, 13; '033 Patent – Claims 1, 5; '634 Patent – Claims 1-7, 9; | plain and ordinary meaning | '834 Patent, Figures 3, 8-14, 17-22, cols. 1:4-53; 3:32-36; 4:23-32; 12:53-63; 14:16-43; 14:61-15:15, 18:34-44; 19:48-60; claims 1-18.<br><br>'310 Patent, Figures 3, 8-14, 17-22, cols. 1:4-53; 3:20-24; 4:10-19; 12:39-49; 14:3-29; 14:48-15:2, 18:20-30; 19:34-46; claims 1-15. |

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| | | ’918 Patent – Claims 1, 4-10, 16-17, 20-22, 26 | | ’033 Patent, Figures 3, 8-14, 17-22, cols. 1:4-53; 3:32-36; 4:23-32; 12:53-64; 14:18-44; 14:63-15:17, 18:34-44; 19:48-60; claims 1-6.<br><br>’634 Patent, Figures 3, 8-14, 17-22, cols. 1:4-53; 3:32-36; 4:23-32; 12:53-64; 14:16-42; 14:61-15:15, 18:34-44; 19:48-60; claims 1-10.<br><br>’918 Patent, Figures 3, 8-14, 17-22, cols. 1:4-51; 3:29-33; 4:19-28; 12:45-51; 14:9-35; 14:54-15:9, 18:27-37; 19:45-57; claims 1-27.<br><br>U.S. Provisional App. No. 61/723,446, Figures 2-3, and 5-10; paragraphs [0024]; [0031]-[0032]; [0034] and claim 1.<br><br>U.S. Patent App. No. 17/327,673, Amendment and Response dated Aug. 14, 2021 at 7-18; Amendment and Response dated Sept. 28, 2021 at 7-10; Amendment and Response dated Nov. 8, 2021 at 7-10; Notice of Allowance dated May 2, 2022.<br><br>U.S. Patent App. No. 16/941,117, Amendment and Response dated Nov. 4, 2021 at 16-17; Amendment and Response dated Dec. 14, 2021 at 19-21; Amendment and Response dated Oct. 12, 2021 at 5-12; Notice of Allowance dated (June 6, 2022).<br><br>U.S. Patent App. No. 17/719,160, Amendment and Response dated July 31, 2022 at 5-10.<br><br>U.S. Patent App. No. 17/469,391, Amendment and Response dated Jan. 4, 2022 at 17-20; Amendment and Response dated March 28, 2022 at 6-13.<br><br>U.S. Patent App. No. 17/213,251, Amendment and Response dated June 22, 2022 at 6-14 (referencing support in 446 Provisional); Amendment |

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| | | | | and Response dated May 17, 2022 at 6-8, 11-12; Amendment and Response dated Oct. 9, 2021 at 16; Amendment and Response dated July 27, 2021 at 12-19; Amendment and Response dated May 28, 2021 at 13-17; 22-23.<br><br>U.S. Patent App. No. 17/024,060, Preliminary Amendment (dated 10-30-2020) at 5-11, Office Action (dated 11-10-2020) at 2-5 (and art cited therein); Amendment and Response (dated 11-16-2020) at 5-11; Notice of Allowance (dated Nov. 27, 2020).<br><br>U.S. Patent App. No. 17/096,253, Preliminary Amendment (dated 11-30-2020) at 5-25 (and art cited therein), Notice of Allowance (dated 02-08-2021) at 2-3 (and art cited therein).<br><br>U.S. Patent App. No. 17/131,869, Preliminary Amendment (dated 01-26-2021) at 5-8; Preliminary Amendment (dated 02-16-2021) at 2-17 (and art cited therein); Office Action (dated 02-26-2021) at 3-8 (and art cited therein); Office Action Response (dated 02-28-2021) at 4-12; Notice of Allowance (dated 03-24-2021) at 2.<br><br>U.S. Patent App. No. 17/170,957, Preliminary Amendment (dated 03-27-2021) at 2-4; Office Action (dated 04-30-2021) at 2, 6-9 (and art cited therein); Office Action Response (dated 05-21-2021) at 6-13; Notice of Allowance (dated 06-11-2021) at 2-3; Notice of Allowance (dated 07-26-2021) at 2-3; Applicant Submission (dated (07-27-2021) at 2-4 (and art cited therein); Notice of Allowance (dated 08-23-2021).<br><br>U.S. Patent App. No. 17/748,073, Claims (dated Nov. 13, 2023), Notice of Allowance (dated Oct. 25, 2013) at 1-4, Notice of Allowance and Interview Summary Record (dated Oct. 17, 2023) at 1-4, Supplemental Amendment dated Oct. 3, 2023 at 2-13; Amendment dated Sept. 25, 2023 |

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| | | | | Deposition at 93-95; 153-160; 167-175; 311-312, Final Written Decision, Paper 52.<br><br>IPR2021-01584, Petition at 2-5; 18-21; 24; 38-50; 77-79; 88-96; 108-111; Buller Declaration at 8-9; 30-31; 41-45; 60-86; 108-109; 146-148; 159-166; 190-193; Buller Deposition at 93-95; 153-160; 167-175; 311-312; Final Written Decision, Paper 50; Final Written Decision, Paper 50.<br><br>*Aortic I*, Case No. 1:21-cv-01377-JPM (D.Del), D.I 83-85; D.I. 93-95; D.I. 112; D.I. 125 at 22-24; D.I. 135; D.I. 138; D.I 140.<br><br>Edwards' Invalidity Contentions and identified art for "fibers".<br><br>*See, e.g., Fiber,* American Heritage College Dictionary (4th ed. 2007) at 514 ("a thread like object or structure.").<br><br>*See, e.g., Fiber,* American Heritage College Dictionary (5th ed. 2012) at 314 ("a slender threadlike structure").<br><br>*See, e.g., Fiber,* Merriam Webster's Collegiate Dictionary (11th ed. 2004) at 464 ("a thread or structure resembling a thread").<br><br>*See, e.g., Fiber,* Dorland's Pocket Medical Dictionary (2013) at 607 ("an elongated threadlike structure").<br><br>One or more experts, including Dr. Stephen Brecker and/or Dr. Bruce Anneaux, may testify regarding the technology of the '834, '310, '033, '634, and '918 Patents, including the relevant state of the art, how a person of ordinary skill in the art as of the priority dates of the '834, '310, '033, '634, and '918 Patents would have understood this claim term |

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| | | | | (including whether or not the term is or is not definite), including in light of the specification (including any provisional applications) and file history, and/or in rebuttal to arguments made by or on behalf of Edwards regarding claim construction. The expert(s) may also analyze the meaning of this term in light of evidence of how this term was used in textbooks, patents and/or articles around the time of invention.<br><br>European Patent App. EP0897942A1; U.S. Patent Pub. No. 2023/0270544A1; U.S. Patent No. 11,654,023; EP 4239115A2.<br><br>*Aortic I*, Case No. 1:21-cv-01377-JPM (D.Del), D.I. 95, Ex. W.<br><br>*Aortic I*, Case No. 1:21-cv-01377-JPM (D.Del), D.I. 95, Ex. EE, FF, GG, HH.<br><br>*Aortic I*, Case No. 1:21-cv-01377-JPM (D.Del), D.I. 82-1 at 100-1001.<br><br>Aortic also reserves the right to rely on evidence identified by Edwards.<br><br>Aortic's U.S. Patent No. 11,833,068 (issued Dec. 5, 2023), claims 1-47.<br><br>Brecker Decl. (dated Oct. 27, 2023) at ¶¶1-50, 58-66 (and cited materials).<br><br>Brecker Decl. (dated Nov. 13, 2023) at ¶¶6-10 (and cited materials). |

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| 3. | plurality of fibers | '834 Patent – Claims 2, 9, 17, 18; '634 Patent – Claims 1-7, 9; '918 Patent – Claims 10, 17, 21-22, 26 | plain and ordinary meaning | '834 Patent, Figures 3, 8-14, 17-22, cols. 1:4-53; 3:32-36; 4:23-32; 12:53-63; 14:16-43; 14:61-15:15, 18:34-44; 19:48-60; claims 1-18.<br><br>'310 Patent, Figures 3, 8-14, 17-22, cols. 1:4-53; 3:20-24; 4:10-19; 12:39-49; 14:3-29; 14:48-15:2, 18:20-30; 19:34-46; claims 1-15.<br><br>'033 Patent, Figures 3, 8-14, 17-22, cols. 1:4-53; 3:32-36; 4:23-32; 12:53-64; 14:18-44; 14:63-15:17, 18:34-44; 19:48-60; claims 1-6.<br><br>'634 Patent, Figures 3, 8-14, 17-22, cols. 1:4-53; 3:32-36; 4:23-32; 12:53-64; 14:16-42; 14:61-15:15, 18:34-44; 19:48-60; claims 1-10.<br><br>'918 Patent, Figures 3, 8-14, 17-22, cols. 1:4-51; 3:29-33; 4:19-28; 12:45-51; 14:9-35; 14:54-15:9, 18:27-37; 19:45-57; claims 1-27.<br><br>U.S. Provisional App. No. 61/723,446, Figures 2-3, and 5-10; paragraphs [0024]; [0031]-[0032]; [0034] and claim 1.<br><br>U.S. Patent App. No. 17/327,673, Amendment and Response dated Aug. 14, 2021 at 7-18; Amendment and Response dated Sept. 28, 2021 at 7-10; Amendment and Response dated Nov. 8, 2021 at 7-10; Notice of Allowance dated May 2, 2022.<br><br>U.S. Patent App. No. 16/941,117, Amendment and Response dated Nov. 4, 2021 at 16-17; Amendment and Response dated Dec. 14, 2021 at 19-21; Amendment and Response dated Oct. 12, 2021 at 5-12; Notice of Allowance dated (June 6, 2022).<br><br>U.S. Patent App. No. 17/719,160, Amendment and Response dated July 31, 2022 at 5-10. |

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| | | | | U.S. Patent App. No. 17/469,391, Amendment and Response dated Jan. 4, 2022 at 17-20; Amendment and Response dated March 28, 2022 at 6-13.<br><br>U.S. Patent App. No. 17/213,251, Amendment and Response dated June 22, 2022 at 6-14 (referencing support in 446 Provisional); Amendment and Response dated May 17, 2022 at 6-8, 11-12; Amendment and Response dated Oct. 9, 2021 at 16; Amendment and Response dated July 27, 2021 at 12-19; Amendment and Response dated May 28, 2021 at 13-17; 22-23.<br><br>U.S. Patent App. No. 17/024,060, Preliminary Amendment (dated 10-30-2020) at 5-11, Office Action (dated 11-10-2020) at 2-5 (and art cited therein); Amendment and Response (dated 11-16-2020) at 5-11; Notice of Allowance (dated Nov. 27, 2020).<br><br>U.S. Patent App. No. 17/096,253, Preliminary Amendment (dated 11-30-2020) at 5-25 (and art cited therein), Notice of Allowance (dated 02-08-2021) at 2-3 (and art cited therein).<br><br>U.S. Patent App. No. 17/131,869, Preliminary Amendment (dated 01-26-2021) at 5-8; Preliminary Amendment (dated 02-16-2021) at 2-17 (and art cited therein); Office Action (dated 02-26-2021) at 3-8 (and art cited therein); Office Action Response (dated 02-28-2021) at 4-12; Notice of Allowance (dated 03-24-2021) at 2.<br><br>U.S. Patent App. No. 17/170,957, Preliminary Amendment (dated 03-27-2021) at 2-4; Office Action (dated 04-30-2021) at 2, 6-9 (and art cited therein); Office Action Response (dated 05-21-2021) at 6-13; Notice of Allowance (dated 06-11-2021) at 2-3; Notice of Allowance |

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| | | | | (dated 07-26-2021) at 2-3; Applicant Submission (dated (07-27-2021) at 2-4 (and art cited therein); Notice of Allowance (dated 08-23-2021).<br><br>U.S. Patent App. No. 17/748,073, Claims (dated Nov. 13, 2023), Notice of Allowance (dated Oct. 25, 2013) at 1-4, Notice of Allowance and Interview Summary Record (dated Oct. 17, 2023) at 1-4, Supplemental Amendment dated Oct. 3, 2023 at 2-13; Amendment dated Sept. 25, 2023 at 2-26; Office Action dated Sept 7, 2023 at 2-12; Notice of Allowance dated 6-22-2023 at 2-4; Notice of Allowance dated 6-5-2023 at 2-5, Preliminary Amendment dated 4-26-2023 at 2-14; Preliminary Amendment dated 4-3-2023 at 2-14; Amendment dated 12-29-2022 at 2-9; Office Action dated 12-28-2002 at 2-4; Amendment dated 12-25-2002 at 2-6; Amendment dated 11-04-2022 at 2-8; Response dated 10-22-2022 at 2-8; Office Action dated 10-13-2022 at 2-4; Amendment and Response dated 9-19-2022 at 2-13.<br><br>U.S. Patent App. No. 17/975,986, Amendment dated 3-8-2022 at 2-18; Office Action dated 3-21-2023 at 3-13; Amendment dated 6-21-2023 at 2-44; Response dated 7-16-2023 at 2-16; Response dated 8-3-2023 at 2-16; Office Action dated 9-1-2023 at 1-13; Amendment and Response dated 9-25-2023 at 2-19; Office Action dated 10-11-2023 at 2-7; Amendment and Claims (dated Oct. 16, 2023); Notice of Allowance (dated Nov. 1, 2023) at 1-8; Issue Notification (dated Nov. 22, 2023); U.S. Patent No. 11,839,559, cl. 1-22.<br><br>U.S. Patent App. No. 18/210,674, Claims and Preliminary Amendment (dated August 15, 2023); Notice of Allowance and Interview Summary Record (dated Sept. 1, 2023); Amendment (dated Sept. 7, 2023). |

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| | | | | IPR2023-01151, Petition, Paper 1 at 8-16, 21-22, 30-35, 41-48, 80-82, 84; Buller Declaration, Ex. 1003 at 10-11, 16-44, 61-66, 74-84, 124-125, 129-131, 135-147160, 165-166; POPR at 4-78; Ex. 2002, 21-90.<br><br>IPR2023-01232, Petition, Paper 1 at 6-13, 18-19, 26-33, 41-51, 65, 71-76, 77-80; Buller Declaration, Ex. 1003 at 10-11, 17-46, 70-79, 89, 92-102, 110, 117-120, 123, 129-136, 139-142, 143-144, 146, 148-149.<br><br>IPR2023-01325, Petition, Paper 2 at 9-15, 20, 29-39, 46-58, 67-77; Buller Declaration, Ex. 1003 at 10, 16-47, 72-84, 92-107, 118-129, 133-134.<br><br>IPR2022-00034, Petition, Paper 2 at 2-18; 23; 28-34; 37-38; 44-45; 53-62; 75-76; 84-89; 102; Buller Declaration, Ex. 1003 at 8-9; 40-69; 72-91; 97-108; 143-156; 173-178; Ex. 2052, Buller Deposition at 93-95; 311-312; Brecker Declaration, Ex. 2002 at 17-51; Brecker Declaration, Ex. 2051 at 24-82; Final Written Decision, Paper 50.<br><br>IPR2022-00193, Corrected Petition at 3-6; 13-17; 21; 31-44; 48-51; 63-67; 69-70; 76-85; 91-95; 97-98; 102-109; Buller Declaration, Ex. 1003 at 8-9; 15; 44-45; 68-78; 82-84; 90-91; 120-126; 129-131; 152-155; 174-181; 185-189; 207-208; 100-101; 115-120; 135; 139; 152-157; 168-173; 192-194; Ex. 2052, Buller Deposition at 93-95; 153-160; 167-175; 311-312; Brecker Declaration, Ex. 2002 at 48-57; Brecker Declaration Ex. 2051 at 17-22; 74; 79-82; 100-110; 129-148; Final Written Decision, Paper 50.<br><br>IPR2022-00556, Petition at 2-7, 29; 41-49; 81-84; 63-73; 77-78; 88-96; 100-101; Buller Declaration, Ex. 1003 at 8-9; 19-21; 48-53; 64-85; 92-94; 111-125; 128-131; 132-134; 147-161; 166-167; Brecker Declaration, Ex. 2002 at 20-31; Brecker Decl., Ex. 2203 at 83-84; Response, Paper |

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| | | | | 18; Reply, Paper 22; Surreply, Paper 27; Final Written Decision, Paper 35.<br><br>IPR2022-00549, Petition at 2-5; 7; 12; 24; 36-41; 74-84; 105-109; Buller Declaration, Ex. 1003 at 8-9; 19-21; 41-56; 78-90; 124-136; 172-179; Institution Decision, Paper 12.<br><br>*Aortic I*, Case No. 1:21-cv-01377-JPM (D.Del), D.I 83-85; D.I. 93-95; D.I. 112; D.I. 125 at 22-24; D.I. 135; D.I. 138; D.I 140.<br><br>Edwards' Invalidity Contentions and identified art for "plurality of fibers".<br><br>IPR2021-01527, Petition at 2-5; 12; 16-18; 23-24, 28-33; 76; 102-103; Buller Declaration at 8-9; 26-27; 49-59; 79-80; 118-119; 159-160; Buller Deposition at 93-95; 153-160; 167-175; 311-312, Final Written Decision, Paper 52.<br><br>IPR2021-01584, Petition at 2-5; 18-21; 24; 38-50; 77-79; 88-96; 108-111; Buller Declaration at 8-9; 30-31; 41-45; 60-86; 108-109; 146-148; 159-166; 190-193; Buller Deposition at 93-95; 153-160; 167-175; 311-312; Final Written Decision, Paper 50; Final Written Decision, Paper 50.<br><br>*See, e.g., Plural/Plurality,* American Heritage College Dictionary (4th ed. 2007) at 1072 ("composed of more than one member, set, or kind; the state or fact of being plural.").<br><br>*See, e.g., Fiber,* American Heritage College Dictionary (4th ed. 2007) at 514 ("a thread like object or structure.").<br><br>*See, e.g., Fiber,* American Heritage College Dictionary (5th ed. 2012) at |

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| | | | | 314 ("a slender threadlike structure").<br><br>*See, e.g., Fiber,* Merriam Webster's Collegiate Dictionary (11th ed. 2004) at 464 ("a thread or structure resembling a thread").<br><br>*See, e.g., Fiber,* Dorland's Pocket Medical Dictionary (2013) at 607 ("an elongated threadlike structure").<br><br>One or more experts, including Dr. Stephen Brecker and/or Dr. Bruce Anneaux, may testify regarding the technology of the '834, '634, and '918 Patents, including the relevant state of the art, how a person of ordinary skill in the art as of the priority dates of the '834, '634, and '918 Patents would have understood this claim term (including whether or not the term is or is not definite), including in light of the specification (including any provisional applications) and file history, and/or in rebuttal to arguments made by or on behalf of Edwards regarding claim construction. The expert(s) may also analyze the meaning of this term in light of evidence of how this term was used in textbooks, patents and/or articles around the time of invention.<br><br>European Patent App. EP0897942A1; U.S. Patent Pub. No. 2023/0270544A1; U.S. Patent No. 11,654,023; EP 4239115A2.<br><br>*Aortic I*, Case No. 1:21-cv-01377-JPM (D.Del), D.I. 95, Ex. W.<br><br>*Aortic I*, Case No. 1:21-cv-01377-JPM (D.Del), D.I. 95, Ex. EE, FF, GG, HH.<br><br>*Aortic I*, Case No. 1:21-cv-01377-JPM (D.Del), D.I. 82-1 at 100-1001. |

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| 4. | sealing material | '310 Patent – Claims 11, 13; '918 Patent – Claims 1, 4-9, 16, 20 | plain and ordinary meaning | '834 Patent, Figures 3, 8-14, 17-22, cols. 1:4-53; 3:32-36; 4:23-32; 12:53-63; 14:16-43; 14:61-15:15, 18:34-44; 19:48-60; claims 1-18.<br><br>'310 Patent, Figures 3, 8-14, 17-22, cols. 1:4-53; 3:20-24; 4:10-19; 12:39-49; 14:3-29; 14:48-15:2, 18:20-30; 19:34-46; claims 1-15.<br><br>'033 Patent, Figures 3, 8-14, 17-22, cols. 1:4-53; 3:32-36; 4:23-32; 12:53-64; 14:18-44; 14:63-15:17, 18:34-44; 19:48-60; claims 1-6.<br><br>'634 Patent, Figures 3, 8-14, 17-22, cols. 1:4-53; 3:32-36; 4:23-32; 12:53-64; 14:16-42; 14:61-15:15, 18:34-44; 19:48-60; claims 1-10.<br><br>'918 Patent, Figures 3, 8-14, 17-22, cols. 1:4-51; 3:29-33; 4:19-28; 12:45-51; 14:9-35; 14:54-15:9, 18:27-37; 19:45-57; claims 1-27.<br><br>U.S. Provisional App. No. 61/723,446, Figures 2-3, and 5-10; paragraphs [0024]; [0031]-[0032]; [0034] and claim 1.<br><br>U.S. Patent App. No. 17/327,673, Amendment and Response dated Aug. 14, 2021 at 7-18; Amendment and Response dated Sept. 28, 2021 at 7- |

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| | | | | 10; Amendment and Response dated Nov. 8, 2021 at 7-10; Notice of Allowance dated May 2, 2022.<br><br>U.S. Patent App. No. 16/941,117, Amendment and Response dated Nov. 4, 2021 at 16-17; Amendment and Response dated Dec. 14, 2021 at 19-21; Amendment and Response dated Oct. 12, 2021 at 5-12; Notice of Allowance dated (June 6, 2022).<br><br>U.S. Patent App. No. 17/719,160, Amendment and Response dated July 31, 2022 at 5-10.<br><br>U.S. Patent App. No. 17/469,391, Amendment and Response dated Jan. 4, 2022 at 17-20; Amendment and Response dated March 28, 2022 at 6-13.<br><br>U.S. Patent App. No. 17/213,251, Amendment and Response dated June 22, 2022 at 6-14 (referencing support in 446 Provisional); Amendment and Response dated May 17, 2022 at 6-8, 11-12; Amendment and Response dated Oct. 9, 2021 at 16; Amendment and Response dated July 27, 2021 at 12-19; Amendment and Response dated May 28, 2021 at 13-17; 22-23.<br><br>U.S. Patent App. No. 17/096,253, Preliminary Amendment (dated 11-30-2020) at 5-25 (and art cited therein), Notice of Allowance (dated 02-08-2021) at 2-3 (and art cited therein).<br><br>U.S. Patent App. No. 17/170,957, Preliminary Amendment (dated 03-27-2021) at 2-4; Office Action (dated 04-30-2021) at 2, 6-9 (and art cited therein); Office Action Response (dated 05-21-2021) at 6-13; Notice of Allowance (dated 06-11-2021) at 2-3; Notice of Allowance |

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| 5. | sealing assembly | '033 Patent – Claims 1, 5 | plain and ordinary meaning | '834 Patent, Figures 3, 8-14, 17-22, cols. 1:4-53; 3:32-36; 4:23-32; 12:53-63; 14:16-43; 14:61-15:15, 18:34-44; 19:48-60; claims 1-18.<br><br>'310 Patent, Figures 3, 8-14, 17-22, cols. 1:4-53; 3:20-24; 4:10-19; 12:39-49; 14:3-29; 14:48-15:2, 18:20-30; 19:34-46; claims 1-15.<br><br>'033 Patent, Figures 3, 8-14, 17-22, cols. 1:4-53; 3:32-36; 4:23-32; 12:53-64; 14:18-44; 14:63-15:17, 18:34-44; 19:48-60; claims 1-6.<br><br>'634 Patent, Figures 3, 8-14, 17-22, cols. 1:4-53; 3:32-36; 4:23-32; 12:53-64; 14:16-42; 14:61-15:15, 18:34-44; 19:48-60; claims 1-10. |

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| | | | | ’918 Patent, Figures 3, 8-14, 17-22, cols. 1:4-51; 3:29-33; 4:19-28; 12:45-51; 14:9-35; 14:54-15:9, 18:27-37; 19:45-57; claims 1-27.<br><br>U.S. Provisional App. No. 61/723,446, Figures 2-3, and 5-10; paragraphs [0024]; [0031]-[0032]; [0034] and claim 1.<br><br>U.S. Patent App. No. 17/327,673, Amendment and Response dated Aug. 14, 2021 at 7-18; Amendment and Response dated Sept. 28, 2021 at 7-10; Amendment and Response dated Nov. 8, 2021 at 7-10; Notice of Allowance dated May 2, 2022.<br><br>U.S. Patent App. No. 16/941,117, Amendment and Response dated Nov. 4, 2021 at 16-17; Amendment and Response dated Dec. 14, 2021 at 19-21; Amendment and Response dated Oct. 12, 2021 at 5-12; Notice of Allowance dated (June 6, 2022).<br><br>U.S. Patent App. No. 17/719,160, Amendment and Response dated July 31, 2022 at 5-10.<br><br>U.S. Patent App. No. 17/469,391, Amendment and Response dated Jan. 4, 2022 at 17-20; Amendment and Response dated March 28, 2022 at 6-13.<br><br>U.S. Patent App. No. 17/213,251, Amendment and Response dated June 22, 2022 at 6-14 (referencing support in 446 Provisional); Amendment and Response dated May 17, 2022 at 6-8, 11-12; Amendment and Response dated Oct. 9, 2021 at 16; Amendment and Response dated July 27, 2021 at 12-19; Amendment and Response dated May 28, 2021 at 13-17; 22-23. |

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| | | | | U.S. Patent App. No. 17/096,253, Preliminary Amendment (dated 11-30-2020) at 5-25 (and art cited therein), Notice of Allowance (dated 02-08-2021) at 2-3 (and art cited therein).<br><br>U.S. Patent App. No. 17/170,957, Preliminary Amendment (dated 03-27-2021) at 2-4; Office Action (dated 04-30-2021) at 2, 6-9 (and art cited therein); Office Action Response (dated 05-21-2021) at 6-13; Notice of Allowance (dated 06-11-2021) at 2-3; Notice of Allowance (dated 07-26-2021) at 2-3; Applicant Submission (dated (07-27-2021) at 2-4 (and art cited therein); Notice of Allowance (dated 08-23-2021).<br><br>U.S. Patent App. No. 17/748,073, Claims (dated Nov. 13, 2023), Notice of Allowance (dated Oct. 25, 2013) at 1-4, Notice of Allowance and Interview Summary Record (dated Oct. 17, 2023) at 1-4, Supplemental Amendment dated Oct. 3, 2023 at 2-13; Amendment dated Sept. 25, 2023 at 2-26; Office Action dated Sept 7, 2023 at 2-12; Notice of Allowance dated 6-22-2023 at 2-4; Notice of Allowance dated 6-5-2023 at 2-5, Preliminary Amendment dated 4-26-2023 at 2-14; Preliminary Amendment dated 4-3-2023 at 2-14; Amendment dated 12-29-2022 at 2-9; Office Action dated 12-28-2002 at 2-4; Amendment dated 12-25-2002 at 2-6; Amendment dated 11-04-2022 at 2-8; Response dated 10-22-2022 at 2-8; Office Action dated 10-13-2022 at 2-4; Amendment and Response dated 9-19-2022 at 2-13.<br><br>U.S. Patent App. No. 17/975,986, Amendment dated 3-8-2022 at 2-18; Office Action dated 3-21-2023 at 3-13; Amendment dated 6-21-2023 at 2-44; Response dated 7-16-2023 at 2-16; Response dated 8-3-2023 at 2-16; Office Action dated 9-1-2023 at 1-13; Amendment and Response dated 9-25-2023 at 2-19; Office Action dated 10-11-2023 at 2-7; Amendment and Claims (dated Oct. 16, 2023); Notice of Allowance |

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| | | | | 159-166; 190-193; Buller Deposition at 93-95; 153-160; 167-175; 311-312; Final Written Decision, Paper 50.<br><br>*Aortic I*, Case No. 1:21-cv-01377-JPM (D.Del), D.I 83-85; D.I. 93-95; D.I. 112; D.I. 125 at 22-27; D.I. 135; D.I. 138; D.I 140.<br><br>Edwards' Invalidity Contentions and identified art for "sealing material".<br><br>*See, e.g., Seal,* American Heritage College Dictionary (4th ed. 2007) at 1250 ("a device that joins two systems or elements so as to prevent leakage").<br><br>*See, e.g., Assembly,* American Heritage College Dictionary (4th ed. 2007) at 85 ("The state of being assembled.").<br><br>*See, e.g., Assembly,* American Heritage College Dictionary (5th ed. 2012) at 85 ("The state of being assembled.").<br><br>One or more experts, including Dr. Stephen Brecker and/or Dr. Bruce Anneaux, may testify regarding the technology of the '033 Patent, including the relevant state of the art, how a person of ordinary skill in the art as of the priority dates of the '033 Patent would have understood this claim term (including whether or not the term is or is not definite), including in light of the specification (including any provisional applications) and file history, and/or in rebuttal to arguments made by or on behalf of Edwards regarding claim construction. The expert(s) may also analyze the meaning of this term in light of evidence of how this term was used in textbooks, patents and/or articles around the time of invention. |

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| 6. | outwardly extending fibers | '310 Patent – Claims 11, 13; '634 Patent – Claims 1-7, 9; '918 Patent – Claims 1, 4-9, 16, 20 | plain and ordinary meaning | '834 Patent, Figures 3, 8-14, 17-22, cols. 1:4-53; 3:32-36; 4:23-32; 12:53-63; 14:16-43; 14:61-15:15, 18:34-44; 19:48-60; claims 1-18.<br><br>'310 Patent, Figures 3, 8-14, 17-22, cols. 1:4-53; 3:20-24; 4:10-19; 12:39-49; 14:3-29; 14:48-15:2, 18:20-30; 19:34-46; claims 1-15.<br><br>'033 Patent, Figures 3, 8-14, 17-22, cols. 1:4-53; 3:32-36; 4:23-32; 12:53-64; 14:18-44; 14:63-15:17, 18:34-44; 19:48-60; claims 1-6. |

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| | | | | ’634 Patent, Figures 3, 8-14, 17-22, cols. 1:4-53; 3:32-36; 4:23-32; 12:53-64; 14:16-42; 14:61-15:15, 18:34-44; 19:48-60; claims 1-10.<br><br>’918 Patent, Figures 3, 8-14, 17-22, cols. 1:4-51; 3:29-33; 4:19-28; 12:45-51; 14:9-35; 14:54-15:9, 18:27-37; 19:45-57; claims 1-27.<br><br>U.S. Provisional App. No. 61/723,446, Figures 2-3, and 5-10; paragraphs [0024]; [0031]-[0032]; [0034] and claim 1.<br><br>U.S. Patent App. No. 17/327,673, Amendment and Response dated Aug. 14, 2021 at 7-18; Amendment and Response dated Sept. 28, 2021 at 7-10; Amendment and Response dated Nov. 8, 2021 at 7-10; Notice of Allowance dated May 2, 2022.<br><br>U.S. Patent App. No. 16/941,117, Amendment and Response dated Nov. 4, 2021 at 16-17; Amendment and Response dated Dec. 14, 2021 at 19-21; Amendment and Response dated Oct. 12, 2021 at 5-12; Notice of Allowance dated (June 6, 2022).<br><br>U.S. Patent App. No. 17/719,160, Amendment and Response dated July 31, 2022 at 5-10.<br><br>U.S. Patent App. No. 17/469,391, Amendment and Response dated Jan. 4, 2022 at 17-20; Amendment and Response dated March 28, 2022 at 6-13.<br><br>U.S. Patent App. No. 17/213,251, Amendment and Response dated June 22, 2022 at 6-14 (referencing support in 446 Provisional); Amendment and Response dated May 17, 2022 at 6-8, 11-12; Amendment and Response dated Oct. 9, 2021 at 16; Amendment and Response dated July |

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| | | | | 27, 2021 at 12-19; Amendment and Response dated May 28, 2021 at 13-17; 22-23.<br><br>U.S. Patent App. No. 17/096,253, Preliminary Amendment (dated 11-30-2020) at 5-25 (and art cited therein), Notice of Allowance (dated 02-08-2021) at 2-3 (and art cited therein).<br><br>U.S. Patent App. No. 17/170,957, Preliminary Amendment (dated 03-27-2021) at 2-4; Office Action (dated 04-30-2021) at 2, 6-9 (and art cited therein); Office Action Response (dated 05-21-2021) at 6-13; Notice of Allowance (dated 06-11-2021) at 2-3; Notice of Allowance (dated 07-26-2021) at 2-3; Applicant Submission (dated (07-27-2021) at 2-4 (and art cited therein); Notice of Allowance (dated 08-23-2021).<br><br>U.S. Patent App. No. 17/748,073, Claims (dated Nov. 13, 2023), Notice of Allowance (dated Oct. 25, 2013) at 1-4, Notice of Allowance and Interview Summary Record (dated Oct. 17, 2023) at 1-4, Supplemental Amendment dated Oct. 3, 2023 at 2-13; Amendment dated Sept. 25, 2023 at 2-26; Office Action dated Sept 7, 2023 at 2-12; Notice of Allowance dated 6-22-2023 at 2-4; Notice of Allowance dated 6-5-2023 at 2-5, Preliminary Amendment dated 4-26-2023 at 2-14; Preliminary Amendment dated 4-3-2023 at 2-14; Amendment dated 12-29-2022 at 2-9; Office Action dated 12-28-2002 at 2-4; Amendment dated 12-25-2002 at 2-6; Amendment dated 11-04-2022 at 2-8; Response dated 10-22-2022 at 2-8; Office Action dated 10-13-2022 at 2-4; Amendment and Response dated 9-19-2022 at 2-13.<br><br>U.S. Patent App. No. 18/210,674, Claims and Preliminary Amendment (dated August 15, 2023); Notice of Allowance and Interview Summary Record (dated Sept. 1, 2023); Amendment (dated Sept. 7, 2023). |

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| | | | | 514 ("a thread like object or structure.").<br><br>*See, e.g., Fiber,* American Heritage College Dictionary (5th ed. 2012) at 314 ("a slender threadlike structure").<br><br>*See, e.g., Fiber,* Merriam Webster's Collegiate Dictionary (11th ed. 2004) at 464 ("a thread or structure resembling a thread").<br><br>One or more experts, including Dr. Stephen Brecker and/or Dr. Bruce Anneaux, may testify regarding the technology of the '310, '634, and '918 Patents, including the relevant state of the art, how a person of ordinary skill in the art as of the priority dates of the '310, '634, and '918 Patents would have understood this claim term (including whether or not the term is or is not definite), including in light of the specification (including any provisional applications) and file history, and/or in rebuttal to arguments made by or on behalf of Edwards regarding claim construction. The expert(s) may also analyze the meaning of this term in light of evidence of how this term was used in textbooks, patents and/or articles around the time of invention.<br><br>U.S. Patent Pub. No. 2023/0270544A1; U.S. Patent No. 11,654,023; EP 4239115A2.<br><br>*Aortic I*, Case No. 1:21-cv-01377-JPM (D.Del), D.I. 85, Exs. F and U.<br><br>*Aortic I*, Case No. 1:21-cv-01377-JPM (D.Del), D.I. 85, Ex. U.<br><br>*Aortic I*, Case No. 1:21-cv-01377-JPM (D.Del), D.I. 95, Ex. W. |

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| 7. | outwardly extending | '310 Patent – Claims 11, 13; '634 Patent – Claims 1-7, 9; '918 Patent – Claims 1, 4-9, 16, 20 | plain and ordinary meaning | '834 Patent, Figures 3, 8-14, 17-22, cols. 1:4-53; 3:32-36; 4:23-32; 12:53-63; 14:16-43; 14:61-15:15, 18:34-44; 19:48-60; claims 1-18.<br><br>'310 Patent, Figures 3, 8-14, 17-22, cols. 1:4-53; 3:20-24; 4:10-19; 12:39-49; 14:3-29; 14:48-15:2, 18:20-30; 19:34-46; claims 1-15.<br><br>'033 Patent, Figures 3, 8-14, 17-22, cols. 1:4-53; 3:32-36; 4:23-32; 12:53-64; 14:18-44; 14:63-15:17, 18:34-44; 19:48-60; claims 1-6.<br><br>'634 Patent, Figures 3, 8-14, 17-22, cols. 1:4-53; 3:32-36; 4:23-32; 12:53-64; 14:16-42; 14:61-15:15, 18:34-44; 19:48-60; claims 1-10.<br><br>'918 Patent, Figures 3, 8-14, 17-22, cols. 1:4-51; 3:29-33; 4:19-28; 12:45-51; 14:9-35; 14:54-15:9, 18:27-37; 19:45-57; claims 1-27.<br><br>U.S. Provisional App. No. 61/723,446, Figures 2-3, and 5-10; paragraphs [0024]; [0031]-[0032]; [0034] and claim 1. |

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| | | | | construction. The expert(s) may also analyze the meaning of this term in light of evidence of how this term was used in textbooks, patents and/or articles around the time of invention.<br><br>Aortic also reserves the right to rely on evidence identified by Edwards.<br><br>Aortic's U.S. Patent No. 11,833,068 (issued Dec. 5, 2023), claims 1-47.<br><br>Brecker Decl. (dated Oct. 27, 2023) at ¶¶1-50, 95-98 (and cited materials).<br><br>Brecker Decl. (dated Nov. 13, 2023) at ¶¶6-10 (and cited materials). |
| 8. | second plurality of fibers | '834 Patent – Claims 2, 9, 17; '918 Patent – Claims 5, 10, 17 | plain and ordinary meaning | '834 Patent, Figures 8-9, 10-14, 17-22; cols. 12:53-63; 18:34-44, claims 1-18.<br><br>'918 Patent, Figures 8-9, 10-14, 17-22; col. 12:45-56; 18:27-37, claims 1-27.<br><br>U.S. Provisional App. No. 61/723,446, Figures 2-3, and 5-10; paragraphs [0024]; [0031]-[0032]; [0034] and claim 1.<br><br>U.S. Patent App. No. 17/327,673, Amendment and Response dated Aug. 14, 2021 at 8, 13-15.<br><br>U.S. Patent App. No. 17/213,251, Response dated Sept. 11, 2022 at 2-4; Amendment and Response dated June 22, 2022 at 9-12 (referencing support in 446 Provisional); Amendment and Response dated May 17, |

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| | | | | 2022 at 5-16, 23-26; Amendment and Response dated July 27, 2021 at 12-17.<br><br>U.S. Patent App. No. 17/748,073, Claims (dated Nov. 13, 2023), Notice of Allowance (dated Oct. 25, 2013) at 1-4, Notice of Allowance and Interview Summary Record (dated Oct. 17, 2023) at 1-4, Supplemental Amendment dated Oct. 3, 2023 at 2-13; Amendment dated Sept. 25, 2023 at 2-26; Office Action dated Sept 7, 2023 at 2-12; Notice of Allowance dated 6-22-2023 at 2-4; Notice of Allowance dated 6-5-2023 at 2-5, Preliminary Amendment dated 4-26-2023 at 2-14; Preliminary Amendment dated 4-3-2023 at 2-14; Amendment dated 12-29-2022 at 2-9; Office Action dated 12-28-2002 at 2-4; Amendment dated 12-25-2002 at 2-6; Amendment dated 11-04-2022 at 2-8; Response dated 10-22-2022 at 2-8; Office Action dated 10-13-2022 at 2-4; Amendment and Response dated 9-19-2022 at 2-13.<br><br>U.S. Patent App. No. 17/975,986, Amendment dated 3-8-2022 at 2-18; Office Action dated 3-21-2023 at 3-13; Amendment dated 6-21-2023 at 2-44; Response dated 7-16-2023 at 2-16; Response dated 8-3-2023 at 2-16; Office Action dated 9-1-2023 at 1-13; Amendment and Response dated 9-25-2023 at 2-19; Office Action dated 10-11-2023 at 2-7; Amendment and Claims (dated Oct. 16, 2023); Notice of Allowance (dated Nov. 1, 2023) at 1-8; Issue Notification (dated Nov. 22, 2023); U.S. Patent No. 11,839,559, cl. 1-22.<br><br>U.S. Patent App. No. 18/210,674, Claims and Preliminary Amendment (dated August 15, 2023); Notice of Allowance and Interview Summary Record (dated Sept. 1, 2023); Amendment (dated Sept. 7, 2023).<br><br>IPR2023-01151, Petition at 8-16, 21-22, 44-48, 84-87; Buller Declaration |

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| | | | | at 10-11, 16-44, 78-84, 124-125, 143-147, 160-161; POPR at 4-78; Ex. 2002, 21-90.<br><br>IPR2022-00556, Petition at 2-7, 29; 41-49; 81-84; 63-73; 77-78; 88-96; 100-101; Buller Declaration, Ex. 1003 at 8-9; 19-21; 48-53; 64-85; 92-94; 111-125; 128-131; 132-134; 147-161; 166-167; Brecker Declaration, Ex. 2002 at 20-31; Buller Decl., Ex. 1104 at 52-61; Brecker Decl., Ex. 2203 at 57-83; Response, Paper 18; Reply, Paper 22; Surreply, Paper 27; Final Written Decision, Paper 35.<br><br>*Aortic I*, Case No. 1:21-cv-01377-JPM (D.Del), D.I 83-85; D.I. 93-95; D.I. 112; D.I. 125 at 22-24; D.I. 135; D.I. 138; D.I 140.<br><br>Edwards' Invalidity Contentions and identified art for "second plurality of fibers".<br><br>*See, e.g., Plural/Plurality,* American Heritage College Dictionary (4th ed. 2007) at 1072 ("composed of more than one member, set, or kind; the state or fact of being plural.").<br><br>*See, e.g., Fiber,* American Heritage College Dictionary (4th ed. 2007) at 514 ("a thread like object or structure.").<br><br>*See, e.g., Fiber,* American Heritage College Dictionary (5th ed. 2012) at 314 ("a slender threadlike structure").<br><br>*See, e.g., Fiber,* Merriam Webster's Collegiate Dictionary (11th ed. 2004) at 464 ("a thread or structure resembling a thread").<br><br>*See, e.g., Fiber,* Dorland's Pocket Medical Dictionary (2013) at 607 ("an |

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| | | | | elongated threadlike structure”).<br><br>U.S. Patent Pub. No. 2023/0270544A1; U.S. Patent No. 11,654,023; EP 4239115A2.<br><br>One or more experts, including Dr. Stephen Brecker and/or Dr. Bruce Anneaux, may testify regarding the technology of the ‘834, ‘310, ‘033, ‘634, ‘918 Patents, including the relevant state of the art, how a person of ordinary skill in the art as of the priority dates of the ‘834, ‘310, ‘033, ‘634, ‘918 Patents would have understood this claim term (including whether or not the term is or is not definite), including in light of the specification (including any provisional applications) and file history, and/or in rebuttal to arguments made by or on behalf of Edwards regarding claim construction. The expert(s) may also analyze the meaning of this term in light of evidence of how this term was used in textbooks, patents and/or articles around the time of invention.<br><br>*See also*, “plurality of fibers” and “fibers” terms herein.<br><br>Aortic also reserves the right to rely on evidence identified by Edwards.<br><br>Aortic’s U.S. Patent No. 11,833,068 (issued Dec. 5, 2023), claims 1-47.<br><br>Brecker Decl. (dated Oct. 27, 2023) at ¶¶1-50, 77-82 (and cited materials).<br><br>Brecker Decl. (dated Nov. 13, 2023) at ¶¶6-10 (and cited materials). |

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| 9. | spacing(s) | ’834 Patent – Claims 2, 17, 18; ’033 Patent – Claims 1, 5; ’634 Patent – Claims 1-7, 9; ’918 Patent – Claims 1, 4-10, 16-17, 20-22, 26 | plain and ordinary meaning | ’834 Patent, Figures 8-9, 10-14, 17-22; cols. 12:53-63; 18:34-44, claims 1-18.<br><br>’033 Patent, Figures 8-9, 10-14, 17-22; cols. 12:53-64; 18:34-44, claims 1-6.<br><br>’634 Patent, Figures 8-9, 10-14, 17-22; cols. 12:53-63; 18:34-44, claims 1-10.<br><br>’918 Patent, Figures 8-9, 10-14, 17-22; col. 12:45-56; 18:27-37, claims 1-27.<br><br>U.S. Provisional App. No. 61/723,446, Figures 2-3, and 5-10; paragraphs [0024]; [0031]-[0032]; [0034].<br><br>U.S. Patent App. No. 17/327,673, Amendment and Response dated Aug. 14, 2021 at 8-15; Notice of Allowance dated May 2, 2022.<br><br>U.S. Patent App. No. 17/719,160, Response dated Sept. 11, 2022 at 2-4; Notices of Allowance dated (Sept. 26, 2022 and Oct. 14, 2022).<br><br>U.S. Patent App. No. 17/469,391, Amendment and Response dated May 18, 2022 at 5-13; Notice of Allowance dated (Sept. 19, 2022).<br><br>U.S. Patent App. No. 17/213,251, Amendment and Response dated June 27, 2021 at 12-17; Amendment and Response dated June 22, 2022 at 9-12; Amendment and Response dated May 17, 2022 at 5-16, 23-26; Remarks dated Sept. 11, 2022 at 2-4; Notice of Allowance in dated (Oct. 5, 2022). |

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| | | | | 125-128, 130-131, 147-150, 157-158, 161-163, 166; POPR at 4-78; Ex. 2002, 21-90.<br><br>IPR2023-01325, Petition, Paper 2 at 26, 9-15, 20, 46-55, 76-78; Buller Declaration, Ex. 1003 at 10, 16-47, 72-84, 92-107, 118-129, 133-134.<br><br>IPR2022-00556, Petition at 2-7, 29; 41-49; 81-84; 63-73; 77-78; 88-96; 100-101; Buller Declaration, Ex. 1003 at 8-9; 19-21; 48-53; 64-85; 92-94; 111-125; 128-131; 132-134; 147-161; 166-167; Brecker Declaration, Ex. 2002 at 20-31; Buller Decl., Ex. 1104 at 61-65; Brecker Decl., Ex. 2203 at 84-92; Response, Paper 18; Reply, Paper 22; Surreply, Paper 27; Final Written Decision, Paper 35.<br><br>IPR2022-00556, Petition at 2-7, 29; 41-49; 81-84; 63-73; 77-78; 88-96; 100-101; Buller Declaration, Ex. 1003 at 8-9; 19-21; 48-53; 64-85; 92-94; 111-125; 128-131; 132-134; 147-161; 166-167; Brecker Declaration, Ex. 2002 at 20-31; Buller Decl., Ex. 1104 at 52-61; Response, Paper 18; Reply, Paper 22; Surreply, Paper 27; Final Written Decision, Paper 35<br><br>Edwards' Invalidity Contentions and identified art for "spacing(s)".<br><br>*See, e.g., Spacing,* American Heritage College Dictionary (4th ed. 2007) at 1326 ("to organize or arrange with spaces between; the result of (arranging with intervening spaces); spaces or a space.").<br><br>U.S. Patent Pub. No. 2023/0270544A1; U.S. Patent No. 11,654,023; EP 4239115A2.<br><br>One or more experts, including Dr. Stephen Brecker and/or Dr. Bruce Anneaux, may testify regarding the technology of the '834, '033, '634, |

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| | | | | and '918 Patents, including the relevant state of the art, how a person of ordinary skill in the art as of the priority dates of the '834, '033, '634, and '918 Patents would have understood this claim term (including whether or not the term is or is not definite), including in light of the specification (including any provisional applications) and file history, and/or in rebuttal to arguments made by or on behalf of Edwards regarding claim construction. The expert(s) may also analyze the meaning of this term in light of evidence of how this term was used in textbooks, patents and/or articles around the time of invention.<br><br>Aortic also reserves the right to rely on evidence identified by Edwards.<br><br>Aortic's U.S. Patent No. 11,833,068 (issued Dec. 5, 2023), claims 1-47.<br><br>Brecker Decl. (dated Oct. 27, 2023) at ¶¶1-50, 83-92 (and cited materials).<br><br>Brecker Decl. (dated Nov. 13, 2023) at ¶¶11-23 (and cited materials). |
| 10. | second layer | '918 Patent – Claims 21-22, 26 | plain and ordinary meaning | '918 Patent, Figures 8-9, 10-14, 17-22; col. 12:45-56; 18:27-37, claims 1-27.<br><br>U.S. Provisional App. No. 61/723,446, Figures 2-3, and 5-10; paragraphs [0024]; [0031]-[0032]; [0034].<br><br>U.S. Patent App. No. 17/213,251, Amendment and Response dated June 27, 2021 at 12-17; Amendment and Response dated July 5, 2022, Amendment and Response dated June 22, 2022 at 9-12; Amendment and Response dated May 17, 2022 at 5-16, 23-26; Remarks dated Sept. 11, 2022 at 2-4; Notice of Allowance in dated (Oct. 5, 2022). |

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| | | | | U.S. Patent App. No. 17/748,073, Claims (dated Nov. 13, 2023), Notice of Allowance (dated Oct. 25, 2013) at 1-4, Notice of Allowance and Interview Summary Record (dated Oct. 17, 2023) at 1-4, Supplemental Amendment dated Oct. 3, 2023 at 2-13; Amendment dated Sept. 25, 2023 at 2-26; Office Action dated Sept 7, 2023 at 2-12; Notice of Allowance dated 6-22-2023 at 2-4; Notice of Allowance dated 6-5-2023 at 2-5, Preliminary Amendment dated 4-26-2023 at 2-14; Preliminary Amendment dated 4-3-2023 at 2-14; Amendment dated 12-29-2022 at 2-9; Office Action dated 12-28-2002 at 2-4; Amendment dated 12-25-2002 at 2-6; Amendment dated 11-04-2022 at 2-8; Response dated 10-22-2022 at 2-8; Office Action dated 10-13-2022 at 2-4; Amendment and Response dated 9-19-2022 at 2-13.<br><br>U.S. Patent App. No. 17/975,986, Amendment dated 3-8-2022 at 2-18; Office Action dated 3-21-2023 at 3-13; Amendment dated 6-21-2023 at 2-44; Response dated 7-16-2023 at 2-16; Response dated 8-3-2023 at 2-16; Office Action dated 9-1-2023 at 1-13; Amendment and Response dated 9-25-2023 at 2-19; Office Action dated 10-11-2023 at 2-7; Amendment and Claims (dated Oct. 16, 2023); Notice of Allowance (dated Nov. 1, 2023) at 1-8; Issue Notification (dated Nov. 22, 2023); U.S. Patent No. 11,839,559, cl. 1-22.<br><br>Edwards' Invalidity Contentions and identified art for "second layer".<br><br>*See, e.g., Layer,* American Heritage College Dictionary (4th ed. 2007) at 786 ("a single thickness or level of material").<br><br>*See, e.g., Layer,* American Heritage College Dictionary (5th ed. 2012) at 478 ("a single thickness or level of material"). |

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| | | | | U.S. Patent Pub. No. 2023/0270544A1; U.S. Patent No. 11,654,023; EP 4239115A2.<br><br>One or more experts, including Dr. Stephen Brecker and/or Dr. Bruce Anneaux, may testify regarding the technology of the '918 Patent, including the relevant state of the art, how a person of ordinary skill in the art as of the priority dates of the '918 Patent would have understood this claim term (including whether or not the term is or is not definite), including in light of the specification (including any provisional applications) and file history, and/or in rebuttal to arguments made by or on behalf of Edwards regarding claim construction. The expert(s) may also analyze the meaning of this term in light of evidence of how this term was used in textbooks, patents and/or articles around the time of invention.<br><br>Aortic also reserves the right to rely on evidence identified by Edwards.<br><br>Aortic's U.S. Patent No. 11,833,068 (issued Dec. 5, 2023), claims 1-47.<br><br>Brecker Decl. (dated Oct. 27, 2023) at ¶¶1-50, 77-82 (and cited materials).<br><br>Brecker Decl. (dated Nov. 13, 2023) at ¶¶6-10 (and cited materials). |
| 11. | distinct layers | '918 Patent – Claim 22 | plain and ordinary meaning | '918 Patent, Figures 8-9, 10-14, 17-22; col. 12:45-56; 18:27-37, claims 1-27. |

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| | | | | U.S. Provisional App. No. 61/723,446, Figures 2-3, and 5-10; paragraphs [0024]; [0031]-[0032]; [0034].<br><br>U.S. Patent App. No. 17/213,251, Amendment and Response dated July 5, 2022 at 7-8, Amendment and Response dated Aug. 29, 2022 at 9-13, Remarks dated Sept. 11, 2022 at 2-4; Notice of Allowance in dated (Oct. 5, 2022).<br><br>U.S. Patent App. No. 17/748,073, Claims (dated Nov. 13, 2023), Notice of Allowance (dated Oct. 25, 2013) at 1-4, Notice of Allowance and Interview Summary Record (dated Oct. 17, 2023) at 1-4, Supplemental Amendment dated Oct. 3, 2023 at 2-13; Amendment dated Sept. 25, 2023 at 2-26; Office Action dated Sept 7, 2023 at 2-12; Notice of Allowance dated 6-22-2023 at 2-4; Notice of Allowance dated 6-5-2023 at 2-5, Preliminary Amendment dated 4-26-2023 at 2-14; Preliminary Amendment dated 4-3-2023 at 2-14; Amendment dated 12-29-2022 at 2-9; Office Action dated 12-28-2002 at 2-4; Amendment dated 12-25-2002 at 2-6; Amendment dated 11-04-2022 at 2-8; Response dated 10-22-2022 at 2-8; Office Action dated 10-13-2022 at 2-4; Amendment and Response dated 9-19-2022 at 2-13.<br><br>U.S. Patent App. No. 17/975,986, Amendment dated 3-8-2022 at 2-18; Office Action dated 3-21-2023 at 3-13; Amendment dated 6-21-2023 at 2-44; Response dated 7-16-2023 at 2-16; Response dated 8-3-2023 at 2-16; Office Action dated 9-1-2023 at 1-13; Amendment and Response dated 9-25-2023 at 2-19; Office Action dated 10-11-2023 at 2-7; Amendment and Claims (dated Oct. 16, 2023); Notice of Allowance (dated Nov. 1, 2023) at 1-8; Issue Notification (dated Nov. 22, 2023); U.S. Patent No. 11,839,559, cl. 1-22. |

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| | | | | Edwards' Invalidity Contentions and identified art for "distinct layers".<br><br>*See, e.g., Distinct,* American Heritage College Dictionary (4th ed. 2007) at 411 ("easily perceived by the senses or intellect; clear; very likely; probable").<br><br>*See, e.g., Distinct,* American Heritage College Dictionary (5th ed. 2012) at 248 ("easily perceived by the senses").<br><br>*See, e.g., Layer,* American Heritage College Dictionary (4th ed. 2007) at 786 ("a single thickness or level of material").<br><br>*See, e.g., Layer,* American Heritage College Dictionary (5th ed. 2012) at 478 ("a single thickness or level of material").<br><br>U.S. Patent Pub. No. 2023/0270544A1; U.S. Patent No. 11,654,023; EP 4239115A2.<br><br>One or more experts, including Dr. Stephen Brecker and/or Dr. Bruce Anneaux, may testify regarding the technology of the '918 Patent, including the relevant state of the art, how a person of ordinary skill in the art as of the priority dates of the '918 Patent would have understood this claim term (including whether or not the term is or is not definite), including in light of the specification (including any provisional applications) and file history, and/or in rebuttal to arguments made by or on behalf of Edwards regarding claim construction. The expert(s) may also analyze the meaning of this term in light of evidence of how this term was used in textbooks, patents and/or articles around the time of invention. |

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| | | | | Aortic also reserves the right to rely on evidence identified by Edwards.<br><br>Brecker Decl. (dated Oct. 27, 2023) at ¶¶1-50, 93-94 (and cited materials).<br><br>Brecker Decl. (dated Nov. 13, 2023) at ¶¶6-10 (and cited materials). |
| 12. | end of the apices of the frame that are most proximal are uncovered by the fibers and the graft covering such that an end of the most proximal apices of the frame extends more proximally than a most proximal one of the | ’634 Patent – Claims 1-7, 9 | plain and ordinary meaning | ’634 Patent, Figures 11-12, col. 3:65-4:9; claims 1-10.<br><br>’918 Patent, Figures 11-12, col. 3:52-4:5; claims 1-27.<br><br>U.S. Provisional App. No. 61/723,446, Figures 5-6.<br><br>U.S. Patent App. No. 17/469,391, Amendment and Response dated May 18, 2022 at 2-28; Notice of Allowance dated (Sept. 19, 2022).<br><br>U.S. Patent App. No. 17/213,251, Amendment and Response dated July 16, 2021 at 4, 17-19; Amendment and Response dated August 19, 2021 at 2-6; Amendment and Response dated Oct. 9, 2021 at 4-17; Amendment and Response dated May 17, 2022 at 3-28; Amendment and Response dated June 22, 2022 at 4-19; Amendment and Response dated Aug. 29, 2022 at 6; Remarks dated Sept. 11, 2022 at 2-4; Notice of Allowance in dated (Oct. 5, 2022).<br><br>U.S. Patent App. No. 17/170,957, Amendment and Response dated May 21, 2021 at 2-13; Notice of Allowance dated (June. 11, 2021) at 2-4.<br><br>U.S. Patent App. No. 17/748,073, Claims (dated Nov. 13, 2023), Notice of Allowance (dated Oct. 25, 2013) at 1-4, Notice of Allowance and |

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| | plurality of fibers | | | Interview Summary Record (dated Oct. 17, 2023) at 1-4, Supplemental Amendment dated Oct. 3, 2023 at 2-13; Amendment dated Sept. 25, 2023 at 2-26; Office Action dated Sept 7, 2023 at 2-12; Notice of Allowance dated 6-22-2023 at 2-4; Notice of Allowance dated 6-5-2023 at 2-5, Preliminary Amendment dated 4-26-2023 at 2-14; Preliminary Amendment dated 4-3-2023 at 2-14; Amendment dated 12-29-2022 at 2-9; Office Action dated 12-28-2002 at 2-4; Amendment dated 12-25-2002 at 2-6; Amendment dated 11-04-2022 at 2-8; Response dated 10-22-2022 at 2-8; Office Action dated 10-13-2022 at 2-4; Amendment and Response dated 9-19-2022 at 2-13.<br><br>U.S. Patent App. No. 17/975,986, Amendment dated 3-8-2022 at 2-18; Office Action dated 3-21-2023 at 3-13; Amendment dated 6-21-2023 at 2-44; Response dated 7-16-2023 at 2-16; Response dated 8-3-2023 at 2-16; Office Action dated 9-1-2023 at 1-13; Amendment and Response dated 9-25-2023 at 2-19; Office Action dated 10-11-2023 at 2-7; Amendment and Claims (dated Oct. 16, 2023); Notice of Allowance (dated Nov. 1, 2023) at 1-8; Issue Notification (dated Nov. 22, 2023); U.S. Patent No. 11,839,559, cl. 1-22.<br><br>U.S. Patent App. No. 18/210,674, Claims and Preliminary Amendment (dated August 15, 2023); Notice of Allowance and Interview Summary Record (dated Sept. 1, 2023); Amendment (dated Sept. 7, 2023).<br><br>IPR2022-00549, Petition at 2-5, 30, 49-54, 84-87, 109-111; Buller Declaration, Ex. 1003 at 8-9; 43-49; 90-98; 136-139, 179-181; POPR at 1-81; Brecker Decl., Ex. 2002, at 18-47; Institution Decision, Paper 12 at 2-31.<br><br>Edwards' Invalidity Contentions and identified art for "end of the apices |

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| | | | | of the frame that are most proximal are uncovered by the fibers and the graft covering such that an end of the most proximal apices of the frame extends more proximally than a most proximal one of the plurality of fibers".<br><br>*See, e.g., End,* American Heritage College Dictionary (4th ed. 2007) at 462 ("Either extremity of something that has length.")<br><br>*See, e.g., End,* American Heritage College Dictionary (5th ed. 2012) at 282 ("Either extremity of something that has length").<br><br>*See, e.g., Apex,* American Heritage College Dictionary (4th ed. 2007) at 65 ("The usu. pointed end of an object; the tip.")<br><br>*See, e.g., Apex,* Dorland's Pocket Medical Dictionary (2013) at 56 ("tip").<br><br>*See, e.g., Frame,* American Heritage College Dictionary (4th ed. 2007) at 550 ("A structure that gives shape or support"; "An open structure or rim for encasing, holding, or bordering.").<br><br>*See, e.g., Frame,* Merriam Webster's Collegiate Dictionary (11th ed. 2004) at 496-497 ("An enclosing border.").<br><br>*See, e.g., Frame,* Webster's Dictionary of the English Language (2012) at 82 ("a supporting or enclosing structure").<br><br>*See, e.g., Proximal,* American Heritage College Dictionary (4th ed. 2007) at 1123 ("Nearest; proximate; nearer to a point of reference ...")<br><br>*See, e.g., Proximal,* Dorland's Pocket Medical Dictionary (2013) at 625 |

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| | | | | ("nearest; closer to a point of reference").<br><br>*See, e.g., Fiber,* American Heritage College Dictionary (4th ed. 2007) at 514 ("a thread like object or structure.").<br><br>*See, e.g., Fiber,* American Heritage College Dictionary (5th ed. 2012) at 314 ("a slender threadlike structure").<br><br>*See, e.g., Fiber,* Merriam Webster's Collegiate Dictionary (11th ed. 2004) at 464 ("a thread or structure resembling a thread").<br><br>*See, e.g., Fiber,* Dorland's Pocket Medical Dictionary (2013) at 607 ("an elongated threadlike structure").<br><br>*See, e.g., Covering,* American Heritage College Dictionary (4th ed. 2007) at 329 ("Something that covers so as to protect or conceal").<br><br>*See, e.g., Covering,* American Heritage College Dictionary (5th ed. 2012) at 200 ("Something that covers so as to protect or conceal").<br><br>*See, e.g., Covering,* Merriam Webster's Collegiate Dictionary (11th ed. 2004) at 288 ("something that covers or conceals").<br><br>*See, e.g., Cover,* Webster's Dictionary of the English Language (2012) at 48 ("something that covers").<br><br>One or more experts, including Dr. Stephen Brecker and/or Dr. Bruce Anneaux, may testify regarding the technology of the '634 Patent, including the relevant state of the art, how a person of ordinary skill in the art as of the priority dates of the '634 Patent would have understood |

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| | | | | this claim term (including whether or not the term is or is not definite), including in light of the specification (including any provisional applications) and file history, and/or in rebuttal to arguments made by or on behalf of Edwards regarding claim construction. The expert(s) may also analyze the meaning of this term in light of evidence of how this term was used in textbooks, patents and/or articles around the time of invention.<br><br>*See also*, evidence for component terms herein.<br><br>Aortic also reserves the right to rely on evidence identified by Edwards.<br><br>Aortic's U.S. Patent No. 11,833,068 (issued Dec. 5, 2023), claims 1-47.<br><br>Brecker Decl. (dated Oct. 27, 2023) at ¶¶1-50, 99-100 (and cited materials).<br><br>Brecker Decl. (dated Nov. 13, 2023) at ¶¶6-10 (and cited materials). |
| 13. | end of the most proximal apices of the frame are uncovered by sealing material and the graft covering, wherein the | '918 Patent – Claim 8 | plain and ordinary meaning | '634 Patent, Figures 11-12, col. 3:65-4:9; claims 1-10.<br><br>'918 Patent, Figures 11-12, col. 3:52-4:5; claims 1-27.<br><br>U.S. Provisional App. No. 61/723,446, Figures 5-6.<br><br>U.S. Patent App. No. 17/469,391, Amendment and Response dated May 18, 2022 at 2-28; Notice of Allowance dated (Sept. 19, 2022).<br><br>U.S. Patent App. No. 17/213,251, Amendment and Response dated July 16, 2021 at 4, 17-19; Amendment and Response dated August 19, 2021 |

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| | end of the most proximal apices of the frame extends more proximally than a proximal end of the sealing material | | | at 2-6; Amendment and Response dated Oct. 9, 2021 at 4-17; Amendment and Response dated May 17, 2022 at 3-28; Amendment and Response dated June 22, 2022 at 4-19; Amendment and Response dated Aug. 29, 2022 at 6; Remarks dated Sept. 11, 2022 at 2-4; Notice of Allowance in dated (Oct. 5, 2022).<br><br>U.S. Patent App. No. 17/170,957, Amendment and Response dated May 21, 2021 at 2-13; Notice of Allowance dated (June. 11, 2021) at 2-4.<br><br>U.S. Patent App. No. 17/748,073, Claims (dated Nov. 13, 2023), Notice of Allowance (dated Oct. 25, 2013) at 1-4, Notice of Allowance and Interview Summary Record (dated Oct. 17, 2023) at 1-4, Supplemental Amendment dated Oct. 3, 2023 at 2-13; Amendment dated Sept. 25, 2023 at 2-26; Office Action dated Sept 7, 2023 at 2-12; Notice of Allowance dated 6-22-2023 at 2-4; Notice of Allowance dated 6-5-2023 at 2-5, Preliminary Amendment dated 4-26-2023 at 2-14; Preliminary Amendment dated 4-3-2023 at 2-14; Amendment dated 12-29-2022 at 2-9; Office Action dated 12-28-2002 at 2-4; Amendment dated 12-25-2002 at 2-6; Amendment dated 11-04-2022 at 2-8; Response dated 10-22-2022 at 2-8; Office Action dated 10-13-2022 at 2-4; Amendment and Response dated 9-19-2022 at 2-13.<br><br>U.S. Patent App. No. 17/975,986, Amendment dated 3-8-2022 at 2-18; Office Action dated 3-21-2023 at 3-13; Amendment dated 6-21-2023 at 2-44; Response dated 7-16-2023 at 2-16; Response dated 8-3-2023 at 2-16; Office Action dated 9-1-2023 at 1-13; Amendment and Response dated 9-25-2023 at 2-19; Office Action dated 10-11-2023 at 2-7; Amendment and Claims (dated Oct. 16, 2023); Notice of Allowance (dated Nov. 1, 2023) at 1-8; Issue Notification (dated Nov. 22, 2023); U.S. Patent No. 11,839,559, cl. 1-22. |

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| | | | | U.S. Patent App. No. 18/210,674, Claims and Preliminary Amendment (dated August 15, 2023); Notice of Allowance and Interview Summary Record (dated Sept. 1, 2023); Amendment (dated Sept. 7, 2023).<br><br>IPR2022-00549, Petition at 2-5, 30, 49-54, 84-87, 109-111; Buller Declaration, Ex. 1003 at 8-9; 43-49; 90-98; 136-139, 179-181; POPR at 1-81; Brecker Decl., Ex. 2002, at 18-47; Institution Decision, Paper 12 at 2-31.<br><br>Edwards' Invalidity Contentions and identified art for "end of the most proximal apices of the frame are uncovered by sealing material and the graft covering, wherein the end of the most proximal apices of the frame extends more proximally than a proximal end of the sealing material".<br><br>*See, e.g., End,* American Heritage College Dictionary (4th ed. 2007) at 462 ("Either extremity of something that has length.")<br><br>*See, e.g., End,* American Heritage College Dictionary (5th ed. 2012) at 282 ("Either extremity of something that has length").<br><br>*See, e.g., Apex,* American Heritage College Dictionary (4th ed. 2007) at 65 ("The usu. pointed end of an object; the tip.")<br><br>*See, e.g., Apex,* Dorland's Pocket Medical Dictionary (2013) at 56 ("tip").<br><br>*See, e.g., Frame,* American Heritage College Dictionary (4th ed. 2007) at 550 ("A structure that gives shape or support"; "An open structure or rim for encasing, holding, or bordering.").<br><br>*See, e.g., Frame,* Merriam Webster's Collegiate Dictionary (11th ed. |

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| | | | | 2004) at 496-497 ("An enclosing border.").<br><br>*See, e.g., Frame,* Webster's Dictionary of the English Language (2012) at 82 ("a supporting or enclosing structure").<br><br>*See, e.g., Proximal,* American Heritage College Dictionary (4th ed. 2007) at 1123 ("Nearest; proximate; nearer to a point of reference ...")<br><br>*See, e.g., Proximal,* Dorland's Pocket Medical Dictionary (2013) at 625 ("nearest; closer to a point of reference").<br><br>*See, e.g., Seal,* American Heritage College Dictionary (4th ed. 2007) at 1250 ("a device that joins two systems or elements so as to prevent leakage").<br><br>*See, e.g., Material,* American Heritage College Dictionary (4th ed. 2007) at 853-854 ("the substance or substances out of which a thing is … made.").<br><br>*See, e.g., Material,* Merriam Webster's Collegiate Dictionary (11th ed. 2004) at 517 ("the substance or substances out of which a thing is … made; cloth; fabric").<br><br>*See, e.g., Covering,* American Heritage College Dictionary (4th ed. 2007) at 329 ("Something that covers so as to protect or conceal").<br><br>*See, e.g., Covering,* American Heritage College Dictionary (5th ed. 2012) at 200 ("Something that covers so as to protect or conceal").<br><br>*See, e.g., Covering,* Merriam Webster's Collegiate Dictionary (11th ed. |

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| | | | | 2004) at 288 ("something that covers or conceals").<br><br>*See, e.g., Cover,* Webster's Dictionary of the English Language (2012) at 48 ("something that covers").<br><br>One or more experts, including Dr. Stephen Brecker and/or Dr. Bruce Anneaux, may testify regarding the technology of the '918 Patent, including the relevant state of the art, how a person of ordinary skill in the art as of the priority dates of the '918 Patent would have understood this claim term (including whether or not the term is or is not definite), including in light of the specification (including any provisional applications) and file history, and/or in rebuttal to arguments made by or on behalf of Edwards regarding claim construction. The expert(s) may also analyze the meaning of this term in light of evidence of how this term was used in textbooks, patents and/or articles around the time of invention.<br><br>*See also*, evidence for component terms herein.<br><br>Aortic also reserves the right to rely on evidence identified by Edwards.<br><br>Aortic's U.S. Patent No. 11,833,068 (issued Dec. 5, 2023), claims 1-47.<br><br>Brecker Decl. (dated Oct. 27, 2023) at ¶¶1-50, 99-100 (and cited materials).<br><br>Brecker Decl. (dated Nov. 13, 2023) at ¶¶6-10 (and cited materials). |

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| 14. | inner frame | ’310 Patent – Claims 13; ’634 Patent – Claim 6; ’918 Patent – Claim 20 | plain and ordinary meaning[2] | ’310 Patent, Figures 3, 8-14, 17-22, cols. 1:4-53; 3:65-4:3; 13:35-14:29, 14:48-15:2; 17:54-65, 19:15-46; 20:49-62, claims 1-15.<br><br>’634 Patent, Figures 3, 8-14, 17-22, cols. 1:4-53; 4:10-15; 13:27-14:42, 14:61-15:15; 18:1-12, 19:29-60; 20:63-21:8; claims 1-10.<br><br>’918 Patent, Figures 3, 8-14, 17-22, cols. 1:4-51; 4:7-11; 13:41-14:35, 14:54-15:8; 17:60-18:4, 19:22-57; 20:61-21:6; claims 1-27.<br><br>’834 Patent, claims 1-18; ’033 Patent, claims 1-6; ’735 Patent, claims 1-12; ’538 Patent, claims 1-20; ’846 Patent, claims 1-12; ’236 Patent, claims 1-4.<br><br>U.S. Provisional App. No. 61/723,446, Figures 2-10; [0012] – [0021], [0022] - [0030], [0031] - [0034]; U.S. Pat. No. 5,102,417; and U.S. Pat. No. 6,582,462.<br><br>U.S. Patent App. No. 16/941,117, Amendment and Response dated Oct. 12, 2021 at 5-13; Amendment and Response dated Nov. 4, 2021 at 2-17; Amendment and Response dated Dec. 14, 2021 at 4-5; Office Action dated Feb. 4, 2022 at 8-10 (and cited references); Amendment and Response dated Feb. 19, 2022 at 4-18; Office Action dated April 19, 2022 at 7-9 (and cited references); Amendment and Response dated May 11, 2022 at 4-11; Notice of Allowance dated (June 6, 2022). |

[2] Aortic believes that the plain meaning of the “inner frame” term should apply. But given that the Court has already construed this term as a “balloon-expandable frame” in the *Aortic I* matter and held that the same meaning of terms should apply across related patents, Aortic does not plan to dispute the Court’s prior construction of “inner frame” for the ’310, ’634, and ’918 Patents at this time, but reserves all rights to challenge the Court’s construction of this term on any appeals.

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| | | | | U.S. Patent App. No. 17/469,391, Office Action dated Nov. 30, 2021 at 2-5; Amendment and Response dated Jan. 4, 2022 at 2-20; Office Action dated Jan 24, 2022 at 4-8; Amendment and Response dated March 28, 2022 at 6-13.<br><br>U.S. Patent App. No. 17/213,251, Amendment and Response dated June 22, 2022 at 2-8; Amendment and Response dated July 5, 2022 at 7-8; Amendment and Response dated June 22, 2022 at 7-13 (referencing support in 446 Provisional); Amendment and Response dated May 17, 2022 at 2-4; Office Action dated Nov. 2, 2021 at 3-13; Amendment and Response dated Oct. 9, 2021 at 7-17; Amendment and Response dated July 27, 2021 at 6-19; Amendment and Response dated June 16, 2021 at 10-15; Office Action, dated June 15, 2021 at 4-5 (and cited references); Amendment and Response dated May 28, 2021 at 4-18.<br><br>U.S. Patent App. No. 17/024,060, Preliminary Amendment (dated 10-30-2020) at 2-11, Office Action (dated 11-10-2020) at 2-5 (and art cited therein); Amendment and Response (dated 11-16-2020) at 2-13; Notice of Allowance.<br><br>U.S. Patent App. No. 17/096,253, Preliminary Amendment (dated 11-30-2020) at 2-25 (and art cited therein), Notice of Allowance (dated 02-08-2021) at 2-3 (and art cited therein).<br><br>U.S. Patent App. No. 17/131,869, Preliminary Amendment (dated 01-26-2021) at 2-9; Preliminary Amendment (dated 02-16-2021) at 2-17 (and art cited therein); Office Action (dated 02-26-2021) at 3-8 (and art cited therein); Office Action Response (dated 02-28-2021) at 2-12; Notice of Allowance (dated 03-24-2021) at 2. |

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| | | | | U.S. Patent App. No. 17/170,957, Preliminary Amendment (dated 03-27-2021) at 2-4; Office Action (dated 04-30-2021) at 2, 6-9 (and art cited therein); Office Action Response (dated 05-21-2021) at 2-13; Notice of Allowance (dated 06-11-2021) at 2-3; Notice of Allowance (dated 07-26-2021) at 2-3; Applicant Submission (dated (07-27-2021) at 2-4 (and art cited therein); Notice of Allowance (dated 08-23-2021).<br><br>U.S. Patent App. No. 17/748,073, Claims (dated Nov. 13, 2023), Notice of Allowance (dated Oct. 25, 2013) at 1-4, Notice of Allowance and Interview Summary Record (dated Oct. 17, 2023) at 1-4, Supplemental Amendment dated Oct. 3, 2023 at 2-13; Amendment dated Sept. 25, 2023 at 2-26; Office Action dated Sept 7, 2023 at 2-12; Notice of Allowance dated 6-22-2023 at 2-4; Notice of Allowance dated 6-5-2023 at 2-5, Preliminary Amendment dated 4-26-2023 at 2-14; Preliminary Amendment dated 4-3-2023 at 2-14; Amendment dated 12-29-2022 at 2-9; Office Action dated 12-28-2002 at 2-4; Amendment dated 12-25-2002 at 2-6; Amendment dated 11-04-2022 at 2-8; Response dated 10-22-2022 at 2-8; Office Action dated 10-13-2022 at 2-4; Amendment and Response dated 9-19-2022 at 2-13.<br><br>U.S. Patent App. No. 17/975,986, Amendment dated 3-8-2022 at 2-18; Office Action dated 3-21-2023 at 3-13; Amendment dated 6-21-2023 at 2-44; Response dated 7-16-2023 at 2-16; Response dated 8-3-2023 at 2-16; Office Action dated 9-1-2023 at 1-13; Amendment and Response dated 9-25-2023 at 2-19; Office Action dated 10-11-2023 at 2-7; Amendment and Claims (dated Oct. 16, 2023); Notice of Allowance (dated Nov. 1, 2023) at 1-8; Issue Notification (dated Nov. 22, 2023); U.S. Patent No. 11,839,559, cl. 1-22. |

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| | | | | IPR2023-01232, Petition, Paper 1 at 6-13, 18-19, 54-55, 65-66, 80-82; Buller Declaration, Ex. 1003 at 10-11, 17-46, 106, 120-121, 123, 142, 147, 150.<br><br>U.S. Patent App. No. 18/210,674, Claims and Preliminary Amendment (dated August 15, 2023); Notice of Allowance and Interview Summary Record (dated Sept. 1, 2023); Amendment (dated Sept. 7, 2023).<br><br>IPR2022-00034, Petition, Paper 2 at 2-5; 17-27; 49-51; 79-80; Buller Declaration, Ex. 1003 at 40-46; 51-55; 93-96; 139-142; Ex. 2052, Buller Deposition at 8-9; 34-42; 311-312; Brecker Declaration, Ex. 2051 at 17-20; Final Written Decision, Paper 50.<br><br>IPR2022-00193, Corrected Petition at 2-7; 21; 28-31; 59-62; 89-91; Buller Declaration, Ex. 1003 at 8-9; 39-42; 62-67; 115-119; 168-173; Ex. 2052, Buller Deposition at 34-42; 311-312; Brecker Declaration, Ex. 2051 at 17-20; Final Written Decision, Paper 50.<br><br>IPR2022-00556, Petition at 2-6; 29; 36-41; 69-73; 101-104; Buller Declaration, Ex. 1003 at 8-9; 29-51; 68-77; 118-123; 166-171; Response, Paper 18; Reply, Paper 22; Surreply, Paper 27; Final Written Decision, Paper 35.<br><br>IPR2022-00549, Petition at 2-5, 30, 36-41; 69-73; 101-104; Buller Declaration, Ex. 1003 at 8-9; 43-49; 58-63; 106-110; 120-124; 143-146; Institution Decision, Paper 12.<br><br>IPR2021-01527, Petition at 2-5; 12; 23, 25-28; 38; 42; 46; 52-55; 75-76; 82-84; 95; Buller Declaration at 8-9; 38-41; 45-48; 77-78; 85-89; 116- |

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| | | | | 117; 127-129; 158; Ex. 2052, Buller Deposition at 8-9; 34-42; 311-312, Final Written Decision, Paper 52.<br><br>IPR2021-01584, Petition at 2-5; 18-21; 24; 29-38; 75-77; 108; ; Buller Declaration at 8-9; 41-45; 51-60; 106-108; 116-120; 144-146; 151-156; 188-190; Ex. 2052, Buller Deposition at 8-9; 34-42; 311-312; Final Written Decision, Paper 50.<br><br>*See, e.g., Frame,* American Heritage College Dictionary (4th ed. 2007) at 550 ("An open structure or rim for encasing, holding, or bordering.").<br><br>*See, e.g., Frame,* Merriam Webster's Collegiate Dictionary (11th ed. 2004) at 496-497 ("An enclosing border.").<br><br>*See, e.g., Inner,* American Heritage College Dictionary (4th ed. 2007) at 715 ("1. Located or occurring farther inside.").<br><br>*See, e.g., Inner,* American Heritage College Dictionary (5th ed. 2012) at 436 ("1. Located farther inside.").<br><br>*See, e.g., Inner,* Merriam Webster's Collegiate Dictionary (11th ed. 2004) at 645 ("situated farther in").<br><br>*See, e.g., Inner,* Webster's Dictionary of the English Language (2012) at 105 ("being on the inside").<br><br>Edwards' Invalidity Contentions and identified art for "inner frame".<br><br>One or more experts, including Dr. Stephen Brecker and/or Dr. Bruce Anneaux, may testify regarding the technology of the '310, '634, and |

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| | | | | ‘918 Patents, including the relevant state of the art, how a person of ordinary skill in the art as of the priority dates of the ‘310, ‘634, and ‘918 Patents would have understood this claim term (including whether or not the term is or is not definite), including in light of the specification (including any provisional applications) and file history, and/or in rebuttal to arguments made by or on behalf of Edwards regarding claim construction. The expert(s) may also analyze the meaning of this term in light of evidence of how this term was used in textbooks, patents and/or articles around the time of invention.<br><br>https://www.porex.com/material-science/ptfe/what-is-the-difference-between-eptfe-and-sinteredptfe/<br><br>Rutherford’s Vascular Surgery, 7th ed. (2010), chapter 88.<br><br>U.S. Patent No. 7,921,678 ("Norris"); U.S. Patent Publication No. 2004/0082989 ("Cook"); U.S. 2002/0052649 ("Greenhalgh"); U.S. Patent No. 5,957,949 (“Leonhardt”); U.S. Patent No. 5,122,154 (“Rhodes”); U.S. Patent No. 8,906,081 (“Cully”); European Patent App. EP0897942A1; U.S. Patent Pub. No. 2023/0270544A1; U.S. Patent No. 11,654,023; EP 4239115A2.<br><br>EDWARDS_AI011910-911.<br><br>https://www.dicardiology.com/article/direct-flowmedical-tavr-system-virtually-eliminates-aortic-regurgitation “Direct Flow Medical TAVR System Virtually Eliminates Aortic Regurgitation” (Nov. 5, 2012).<br><br>*Aortic I*, Case No. 1:21-cv-01377-JPM (D.Del), D.I. 95, Ex. W. |

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| | | | | *Aortic I*, Case No. 1:21-cv-01377-JPM (D.Del), D.I. 83-85; 93-95; 112.<br><br>Aortic incorporates its briefing and disclosures from the Aortic I matter for this term. Aortic also reserves the right to rely on evidence identified by Edwards. |

## CERTIFICATE OF SERVICE

The undersigned hereby certifies that on December 11, 2023, a copy of the foregoing document was served on the persons listed below in the manner indicated:

**BY EMAIL**

Brian P. Egan
Anthony D. Raucci
MORRIS, NICHOLS, ARSHT
& TUNNELL LLP
1201 North Market Street
Wilmington, DE 19801
began@morrisnichols.com
araucci@morrisnichols.com

Mark Vorder-Bruegge, Jr.
Matthew M. Lubozynski
WYATT, TARRANT & COMBS, LLP
6070 Poplar Ave., Suite 300
Memphis, TN 38119
mvb@wyattfirm.com
mlubozynski@wyattfirm.com

*Attorneys for Defendants Edwards Lifesciences Corporation, Edwards Lifesciences LLC and Edwards Lifesciences (U.S.) Inc.*

John B. Sganga, Jr.
Craig S. Summers
Christy G. Lea
Joshua J. Stowell
Brian C. Barnes
KNOBBE MARTENS
2040 Main St., 14 Floor
Irvine, CA 92614
john.sganga@knobbe.com
craig.summers@knobbe.com
Christy.Lea@knobbe.com
joshua.stowell@knobbe.com
brian.barnes@knobbe.com

Brian C. Horne
KNOBBE MARTENS
1925 Century Park East, Suite 600
Los Angeles, CA 90067
brian.horne@knobbe.com

LitEWLIFL.028L@knobbe.com

*Attorneys for Defendants Edwards Lifesciences Corporation, Edwards Lifesciences LLC and Edwards Lifesciences (U.S.) Inc.*

YOUNG CONAWAY STARGATT
& TAYLOR, LLP

*/s/ Robert M. Vrana*
Adam W. Poff (No. 3990)
Robert M. Vrana (No. 5666)
Rodney Square
1000 North King Street
Wilmington, DE 19801
(302) 571-6600
apoff@ycst.com
rvrana@ycst.com
*Attorneys for Plaintiff Aortic Innovations, LLC*