

Filed: August 6, 2025

On behalf of **Imperative Care, Inc.**

By: Joshua J. Stowell (Reg. No. 64,096)  
Joseph R. Re (Reg. No. 31,291)  
Brian C. Barnes (Reg. No. 75,805)  
KNOBBE, MARTENS, OLSON & BEAR, LLP  
2040 Main Street, 14th Floor  
Irvine, CA 92614  
Tel.: (949) 760-0404  
Fax: (949) 760-9502  
Email: BoxImperative921@knobbe.com

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

IMPERATIVE CARE, INC.,  
Petitioner,

v.

INARI MEDICAL INC.,  
Patent Owner.

---

Case No. IPR2025-00728  
Patent No. 11,844,921

---

**PETITIONER'S REPLY TO PATENT OWNER'S PRELIMINARY  
RESPONSE**

## TABLE OF CONTENTS

	<b>Page No.</b>
A. Mr. Thornton Testified Consistently Regarding Figures 30-34 .....	1
B. Mr. Thornton Explains Why Schaffer’s Valve Would Form Gaps.....	2
C. Mr. Thornton Did Not “Reverse[] Course” Regarding Schaffer’s Seal.....	2
D. Adding A String/Wire To Schaffer’s Valve Is Not Unpredictable .....	3
E. A Finite Number Ways Existed To Constrict A Hemostasis Valve.....	4
F. Petitioner’s Description of a POSITA is Correct.....	5

## TABLE OF AUTHORITIES

**Page No(s).**

<i>Intel Corp. v. Qualcomm Inc.</i> , 21 F.4th 784 (Fed. Cir. 2021) .....	3
<i>Janssen Pharms., Inc. v. Teva Pharms. USA, Inc.</i> , 97 F.4th 915 (Fed. Cir. 2024) .....	2

## TABLE OF EXHIBITS

Exhibit No.	Description
1001	U.S. Patent No. 11,844,921 (“the ’921 patent”)
1002	’921 Patent Prosecution History Excerpt
1003	Expert Declaration of Troy Thornton
1004	Resume of Troy Thornton
1005	U.S. Patent Publication US 2003/0225379 A1 to Schaffer et al. (“Schaffer”)
1006	U.S. Patent Publication US 2003/0116731 A1 to Hartley (“Hartley”)
1007	U.S. Patent No. 9,980,813 B1 to Eller (“Eller”)
1008	Certified File History of U.S. Patent Application 10/371,190 (Schaffer File History)
1009	U.S. Patent No. 5,429,616 to Schaffer (“Schaffer ’616”)
1010	U.S. Patent No. 3,438,607 to Williams et al.
1011	U.S. Patent Publication US 2015/0173782 A1 to Garrison et al. (“Garrison”)
1012	U.S. Patent No. 11,697,011 (“the ’011 patent”)
1013	Inari’s Supplemental Infringement Contentions (without claim charts) from <i>Inari Medical, Inc. v. Imperative Care, Inc.</i> , No. 24-cv-3117 (N.D. Cal.) (served February 7, 2025).
1014	Google Dictionary Definition of “String”
1015	Cambridge Dictionary Definition of “String”
1016	U.S. Patent No. 12,109,384 B2 to Merritt et al.

**TABLE OF EXHIBITS**  
(*cont'd*)

Exhibit No.	Description
1017	Decision Granting Institution of <i>Inter Partes</i> Review for U.S. Patent No. 11,697,011 (Paper 7) in <i>Imperative Care, Inc. v. Inari Medical, Inc.</i> , IPR2024-01157 (P.T.A.B. Jan. 23, 2025)
1018	PCT Patent Publication WO 2018/019829 A1 to Brady et al.
1019	Inari's Notice of Motion and Motion for Leave to File Third Amended Complaint (Dkt. #88) in <i>Inari Medical, Inc. v. Imperative Care, Inc.</i> , 24-cv-03117-EKL (N.D. Cal.) (filed March 5, 2025)
1020	U.S. Patent No. 6,776,770 B2 to Treretola
1021	Case Management & Scheduling Order (Dkt. #54) in <i>Inari Medical, Inc. v. Imperative Care, Inc.</i> , 24-cv-03117-EKL (N.D. Cal.) (issued December 19, 2024)
1022	Decision Denying Patent Owner's Request for Discretionary Denial (Paper 9) in <i>Imperative Care, Inc. v. Inari Medical, Inc.</i> , IPR2025-00289 (P.T.A.B. June 12, 2025)
1023	Order Regarding Case Schedule and Motion to Stay (Dkt. #123) in <i>Inari Medical, Inc. v. Imperative Care, Inc.</i> , 24-cv-03117-EKL (N.D. Cal.) (issued July 3, 2025)
1024	Decision Granting Institution of <i>Inter Partes</i> Review for U.S. Patent No. 11,554,005 (Paper 10) in <i>Imperative Care, Inc. v. Inari Medical, Inc.</i> , IPR2025-00289 (P.T.A.B. June 18, 2025)
1025	Decision Granting Institution of <i>Inter Partes</i> Review for U.S. Patent No. 11,697,012 (Paper 6) in <i>Imperative Care, Inc. v. Inari Medical, Inc.</i> , IPR2025-00156 (P.T.A.B. Apr. 22, 2025)
1026	Imperative Care's Opposition to Inari's Motion for Leave to File Third Amended Complaint (Dkt. #98) in <i>Inari Medical, Inc. v. Imperative Care, Inc.</i> , 24-cv-03117-EKL (N.D. Cal.) (filed March 26, 2025)

**TABLE OF EXHIBITS**  
(*cont'd*)

Exhibit No.	Description
1027	Decision Denying Institution of <i>Inter Partes</i> Review for U.S. Patent No. 11,744,691 (Paper 10) in <i>Imperative Care, Inc. v. Inari Medical, Inc.</i> , IPR2024-01257 (P.T.A.B. Feb. 7, 2025)
1028	Standing Order for Patent Cases Before Judge Eumi K. Lee (Aug. 16, 2024)
1029	United States District Courts – National Judicial Caseload Profile (Dec. 2024)
1030	<i>Yangtze Memory Techs. Co., Ltd. v. Micron Tech., Inc.</i> , No. 23-cv-05792-RFL, Dkt. 243 (N.D. Cal. Mar. 14, 2025)
1031	<i>Jawbone Innovations, LLC v. Google, LLC</i> , No. 23-cv-00466-TLT, Dkt. 137 (N.D. Cal. Apr. 27, 2023)
1032	U.S. Patent No. 11,697,012 B2 to Merritt et al. (“’012 patent”)
1033	U.S. Patent No. 11,554,005 B2 to Merritt et al. (“’005 patent”)
1034	Joint Claim Construction and Prehearing Statement Pursuant to Patent Local Rule 4-3 (Dkt. #107) in <i>Inari Medical, Inc. v. Imperative Care, Inc.</i> , 24-cv-03117-EKL (N.D. Cal.) (filed Apr. 28, 2025)
1035	Transcript of Proceedings Before the Honorable Eumi K. Lee on March 28, 2025 (Dkt. #119) in <i>Inari Medical, Inc. v. Imperative Care, Inc.</i> , 24-cv-03117-EKL (N.D. Cal.) (filed June 8, 2025)
1036	Notice of Allowance for U.S. Patent App. No. 17/865,280
1037	Deposition Transcript of PO’s Expert Paul Zalesky, Ph.D. dated June 23, 2025 from IPR2024-01157

Petitioner presents this reply to correct characterizations made by PO regarding the deposition testimony of Petitioner's expert, Mr. Thornton. Petitioner also responds to PO's arguments regarding the qualifications of a POSITA.

**A. Mr. Thornton Testified Consistently Regarding Figures 30-34**

PO argues that Mr. Thornton testified "contrary to his declaration" about Schaffer's Figures 30-34. (POPR, 38.) In his Declaration, Mr. Thornton rebutted PO's argument that Schaffer's valve in Figures 30-34 is limited to "gelatinous" and "sticky" valves. (Ex. 1003, ¶86.) Mr. Thornton explained that Schaffer describes many non-sticky valve materials, that "sticky" materials would not work in Figures 30-34, and that Schaffer describes the "sticky" embodiments in a section dedicated to three-part valves which are unlike Figures 30-34. (*Id.* (citing Ex. 1005, [0075]).)

PO argues that Mr. Thornton contradicted this testimony in deposition by admitting that Figures 30-34 require a sticky third seal member 165. (POPR, 38.) PO is incorrect. Mr. Thornton testified that Figures 30-34 require seal module 100, which may be formed from "one or more seal members." (Ex. 2031, 73:13-75:11.) Mr. Thornton was then asked about a specific portion of Schaffer that describes "one option" for Figures 30-34. (*Id.*, 75:12-77:3; Ex. 1005, [0076].) Mr. Thornton correctly testified that the text describing the "one option" mentions "third seal member 165" and that he would "would interpret that portion of the document" to include the seal member. (Ex. 2031, 76:15-77:3.) Mr. Thornton did not testify that

Schaffer's Figures 30-34 *require* a "third seal member" or a "sticky" seal.

**B. Mr. Thornton Explains Why Schaffer's Valve Would Form Gaps**

PO argues that Schaffer's valve "does not form gaps" under any conditions and, therefore, a POSITA would not have had a reason to combine Schaffer with Hartley or Eller. (POPR 42.) PO suggests that Mr. Thornton's testimony supports this argument. (*Id.*) It does not. Mr. Thornton testified: "***If*** [Schaffer] ***worked perfectly for all the range of tools***, then there probably wouldn't be a need to make adjustments and move to a string-type member." (Ex. 2030, 116:18-117:2 (emphasis added).) However, Mr. Thornton repeatedly explained that Schaffer would ***not*** work perfectly for all the range of tools. (Ex. 1003, ¶¶86, 100.) Thus, Mr. Thornton's deposition testimony does not support PO's conclusion.

**C. Mr. Thornton Did Not "Reverse[] Course" Regarding Schaffer's Seal**

PO argues that a POSITA would not have been motivated to combine Schaffer with Hartley or Eller because a POSITA would have known of other ways to modify Schaffer's seal to work better. (POPR, 56-57.) PO incorrectly argues that Mr. Thornton's testimony supports this argument. (*Id.*, 57.) That a POSITA would have found it obvious to modify Schaffer's valve in several ways, including with Hartley's string or Eller's wire, does not make any one way less obvious. *Janssen Pharms., Inc. v. Teva Pharms. USA, Inc.*, 97 F.4th 915, 930 (Fed. Cir. 2024) ("A POSA can be motivated to do more than one thing . . . and Teva did not need to show

that a POSA would be singularly motivated to use the deltoid injection site.”); *Intel Corp. v. Qualcomm Inc.*, 21 F.4th 784, 800 (Fed. Cir. 2021) (“[It is] not necessary to show that a combination is the *best* option, only that it be a *suitable* option.”).

Mr. Thornton also did not “reverse[] course” in his testimony. (POPR, 57-58.) In response to PO’s argument that seal member 165 always seals perfectly, Mr. Thornton explained that Schaffer does not contain enough information about the valve (e.g., “wall thickness, hardness”) to support that conclusion, but that it would have been “fairly simple to specify and order different hardnesses, different wall thicknesses of flexible tubing to be able to optimize the design.” (Ex. 2031, 127:25-130:10.) Mr. Thornton also consistently testified that a POSITA would have been motivated, and found it obvious, to combine Hartley’s string or Eller’s wire with Schaffer to form a better seal. (Ex. 1003, ¶¶82-106.) Mr. Thornton further testified that if adding the string/wire to the valve required some adjustments to the seal (e.g., adjusting wall thickness), a POSITA would have possessed those basic skills. (*Id.*, ¶¶94, 106.) Mr. Thornton’s testimony is wholly consistent.

**D. Adding A String/Wire To Schaffer’s Valve Is Not Unpredictable**

PO argues that Schaffer’s valve with Hartley’s string or Eller’s wire would be unpredictable and that Mr. Thornton’s testimony supports this argument. (POPR, 59-60 (citing Ex. 2031, 107:2-13).) PO is incorrect.

During his deposition, Mr. Thornton observed that a POSITA could not

determine whether the filaments in Figures 8-9 of the '921 patent were flexible based on the patent figures alone. (Ex. 2031, 43:19-22, 45:1-6 (explaining filaments “are drawn as you could say rigid members” and “perfectly straight lines”).) Mr. Thornton explained that flexible filaments would probably not be perfectly straight in the physical device and that he would need more information to determine their exact orientation. (*Id.*, 45:1-11.) Mr. Thornton did not testify that a POSITA “would be unable to know how the filament would act” as PO suggests.

Rather, Mr. Thornton repeatedly testified that a POSITA would have had a reasonable expectation of success in combining the string/wire member with Schaffer’s valve due to the predictability of the components. (Ex. 1003, ¶¶90-94, 106.) For example, Mr. Thornton specifically explained that a POSITA could determine the appropriate level of flexibility for the filaments given other parameters like “spring tension, the tubular member, size and stiffness.” (Ex. 2031, 44:4-20.)

**E. A Finite Number Ways Existed To Constrict A Hemostasis Valve**

PO argues that “Petitioner has failed to demonstrate that the options and solutions for ‘constricting a tubular member in a hemostasis valve’ were identified and known.” (POPR, 61 (citing Pet., 37, 43).) PO is incorrect. In his deposition, PO questioned Mr. Thornton about various “pinch” valves that press on one or both sides of the tube in a hemostasis valve to flatten the tube. (*See* Ex. 2031, 115:22-116:2 (“In the pinch valves we've been discussing, it's a rigid member that flattens a tube”);

*see also id.*, 105:10-118:18).) Mr. Thornton correctly explained that pinch valves use a different mechanism of action than Schaffer's actuating members, Hartley's string, and Eller's wire, which encircle the tube. (*Id.*, 108:2-23, 114:25-115:18, 117:8-21.) Further, Mr. Thornton testified that even if pinch valves were added to the list of available options, a POSITA still would have had a finite number of options to select for sealing a hemostasis valve by closing a tube. (*Id.*, 118:4-15.)

**F. Petitioner's Description of a POSITA is Correct**

PO argues that Mr. Thornton's declaration should be "afforded little or no weight" because Petitioner's proposed POSITA does not require experience designing hemostasis valves. (POPR, 11-12.) However, in related IPR proceedings, PO's own expert agreed that a POSITA would not need prior experience designing a hemostasis valve or any medical devices. (Ex. 1037, 72:11-75:1.) He further testified: "I don't believe a POSITA has to have specific experience with different methodologies of hemostasis." (*Id.*, 82:3-6.) He also testified that a POSITA "wouldn't have needed to have direct experience with [large-bore catheters] or, in particular, aspiration." (*Id.*, 86:10-18.) In fact, according to PO's expert, a POSITA's experience "could be as simple as bench testing and looking at clinical data" or "an engineer involved in just one aspect of said catheter or device." (*Id.*, 74:5-17.)

The deposition testimony of PO's expert is consistent with Petitioner's proposed definition of a POSITA.

IPR2025-00728

*Imperative Care, Inc. v. Inari Medical, Inc.*

Dated: August 6, 2025

By: /Joshua J. Stowell/

Joshua J. Stowell (Reg. No. 64,096)

Joseph R. Re (Reg. No. 31,291)

Brian C. Barnes (Reg. No. 75,805)

**KNOBBE MARTENS OLSON & BEAR, LLP**

*Attorneys for Petitioner,*

*Imperative Care, Inc.*

IPR2025-00728

*Imperative Care, Inc. v. Inari Medical, Inc.*

**CERTIFICATE OF COMPLIANCE**

Pursuant to 37 C.F.R. § 42.24(d), the undersigned certifies that this **PETITIONER'S REPLY TO PATENT OWNER'S PRELIMINARY RESPONSE** contains 1,215 words according to the word-processing program used to prepare this paper.

Dated: August 6, 2025

By: /Joshua J. Stowell/

Joshua J. Stowell (Reg. No. 64,096)

Joseph R. Re (Reg. No. 31,291)

Brian C. Barnes (Reg. No. 75,805)

**KNOBBE MARTENS OLSON & BEAR, LLP**

*Attorneys for Petitioner,*

*Imperative Care, Inc.*

IPR2025-00728

*Imperative Care, Inc. v. Inari Medical, Inc.*

**CERTIFICATE OF SERVICE**

I hereby certify that, pursuant to 37 C.F.R. § 42.6(e), a true and correct copy of  
**PETITIONER'S REPLY TO PATENT OWNER'S PRELIMINARY RESPONSE**  
is being served electronically on August 6, 2025, to the e-mail addresses shown below:

Joseph Hamilton  
Reg. No. 51,770  
hamilton-ptab@perkinscoie.com  
PERKINS COIE LLP  
1888 Century Park East, Suite 1700  
Los Angeles, CA 90067-1721  
Tel: (310) 788-3271

Paul Parker  
Reg. No. 38,264  
parker-ptab@perkinscoie.com  
PERKINS COIE LLP  
1201 Third Avenue, Suite 4900  
Seattle, WA 98101-3099  
Tel: (206) 359-8000

Inari-Imperative@perkinscoie.com

Dated: August 6, 2025

By: /Joshua J. Stowell/  
Joshua J. Stowell (Reg. No. 64,096)  
**KNOBBE MARTENS OLSON & BEAR, LLP**

61845341