IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

AERIN MEDICAL INC. and THE FOUNDRY, LLC, Plaintiffs and Counter-claim Defendants, v. NEURENT MEDICAL INC. and NEURENT MEDICAL LTD., Defendants and Counter-claim Plaintiffs.	))))))))))	C.A. No. 23-756 (JLH) (Consolidated)

<u>AERIN'S INITIAL INVALIDITY CONTENTIONS</u>

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I. Introduction

Pursuant to the Court's Interim Scheduling Order (D.I. 107) and Paragraph 4(d) of the Default Standard For Discovery, Including Discovery Of Electronically Stored Information, Aerin Medical Inc. serves its Initial Invalidity Contentions on Neurent Medical Ltd. for U.S. Patent Nos. 11,998,262 ("'262 patent); 12,089,889 ("'889 patent"); 12,096,973 ("'973 patent"); and 12,096,974 ("'974 patent") (collectively, "Neurent's Asserted Patents").

On June 2, 2025, Neurent served Aerin with its Initial Infringement Contentions alleging infringement of Neurent's Asserted Patents. Specifically, Neurent alleges that Aerin infringes the following claims of the following patents:

Asserted Neurent Patent	Asserted Claims
'262 patent	1-17 and 20
'889 patent	1-20
'973 patent	1-30
'974 patent	1-20

These Initial Invalidity Contentions address the asserted claims listed above.

II. Reservation of Rights

These Initial Invalidity Contentions are based on Neurent's complaint and Initial Infringement Contentions as best understood by Aerin. Aerin reserves the right to supplement or otherwise amend these Initial Invalidity Contentions, including if Neurent presents any new infringement assertion or contention. Aerin also reserves the right to supplement or amend its contentions should Neurent's infringement contentions change in scope or interpretation.

Aerin makes these Initial Invalidity Contentions based on the information and discovery currently available to it. Fact discovery has not begun (beyond the limited discovery authorized by the Interim Scheduling Order (D.I. 107)) on Neurent's claims of infringement. Expert discovery has not begun. The claim construction process has not begun, and the Court has not construed any claim terms. Aerin's investigation into the invalidity of Neurent's Asserted Patents is ongoing. Aerin reserves the right to supplement or amend these contentions based on information that becomes available during discovery, based on positions that Neurent takes throughout the case, and based on the Court's claim constructions. Aerin also reserves the right to supplement these Initial Invalidity Contentions with respect to any additional prior art that becomes apparent as discovery proceeds.

These Initial Invalidity Contentions should not be taken as an indication of Aerin's positions with regard to the proper construction of any term. Rather, Aerin has made reasonable assumptions, to the extent necessary and appropriate, as to the meaning of the claim terms. Aerin relies in part on Neurent's apparent interpretation of the claims, and for the purposes of these contentions only, may apply those meanings in these contentions. Accordingly, Aerin's Initial Invalidity Contentions, including the attached invalidity claim charts, may reflect alternative positions as to claim construction and scope. Aerin reserves the right to amend these contentions based on the Court's claim constructions and any subsequent interpretation taken by Neurent.

Aerin contends that certain claim terms are indefinite, and that because of these terms, certain asserted claims are invalid under 35 U.S.C. § 112. For the purposes of these Initial Invalidity Contentions, Aerin has made assumptions regarding possible meanings of indefinite claim terms. By making these assumptions, Aerin does not admit that any claim language satisfies § 112. Similarly, the use of asserted claim terms herein should not be understood to mean that such terms, as used in the asserted patents or claims thereof, are definite or otherwise comply with the conditions of patentability under 35 U.S.C. § 112. Likewise, the use of asserted claim terms herein should not be understood to suggest or imply a common, usual, ordinary, customary, plain, or accepted meaning in the art for any such term.

Aerin contends that certain claim terms are invalid as obvious under 35 U.S.C. § 103. Aerin is not aware of any objective indicia of nonobviousness, such as unexpected results, long-felt unmet needs, commercial success, failure of others, skepticism, industry praise, or copying that would support the nonobviousness of the asserted claims. To the extent that Neurent puts forward evidence allegedly supporting secondary considerations, Aerin reserves the right to respond to any such assertions or evidence.

These contentions are provided without prejudice to Aerin's right to introduce at trial any subsequently discovered evidence, or evidence or expert opinions relating to currently known facts and to produce and introduce at trial all evidence, whenever discovered.

Nothing in these contentions should be construed as an admission that Aerin agrees with Neurent's Infringement Contentions or that any claim of the Asserted Patents is valid, enforceable, or infringed.

III. Identification of Prior Art References

A. Patent References

Reference	Publication Date (Filing Date; Priority Date)	Short Name	BATES Range
US2021/0236199A1	Aug. 5, 2021 (filed on Jan. 28, 2021; claims priority to provisional filed on Jan. 31, 2020)	Frazier '199	AERIN_00010717-0756
US2016/0114163A1	Apr. 28, 2016 (filed on Oct. 22, 2015; claims priority to provisional filed on Oct. 22, 2014)	Franke '163	AERIN_00010653-0716
US2019/0201089A1	July 4, 2019	Waldstreicher '089	AERIN_00012147-2230

Reference	Publication Date (Filing Date; Priority Date)	Short Name	BATES Range
	(filed on Dec. 20, 2018; claims priority to PCT application filed on Jun. 27, 2017)		
US2020/0129128A1	Apr. 30, 2020 (filed on Oct. 25, 2018) Later patented as U.S. Pat. No. 11,452,484	Gliner ’128	AERIN_00010799-0809
WO2018/167451A1	Sept. 20, 2018 (filed on Mar. 10, 2018; claims priority to application filed Mar. 12, 2017)	Rajiah ’451	AERIN_00011887-1904
US2020/0179697A1	Jun. 11, 2020 (filed on Nov. 6, 2019; claims priority to provisional filed on Dec. 7, 2018)	Schepis ’697	AERIN_00011973-2025
US9072597B2	Jul. 7, 2015 (filed on Jun. 30, 2014; claims priority to provisionals filed on Feb. 27, 2012 and Jun. 14, 2011)	Wolf ’597	AERIN_00012603-2692
US9415194B2	Aug. 16, 20216 (filed on Mar. 31, 2015; claims priority to provisionals filed on Feb. 27, 2012, Jun. 14, 2011, and Apr. 3, 2014)	Wolf ’194	AERIN_00012278-2325
US11033318B2	Jun. 15, 2021 (filed on May 15, 2019; claims priority to provisionals filed on Feb. 27, 2012 and Jun. 14, 2011)	Wolf ’318	AERIN_00012511-2602
US11241271B2	Feb. 8, 2022 (filed on Jul. 17, 2019; claims priority	Wolf ’271	AERIN_00012326-2395

Reference	Publication Date (Filing Date; Priority Date)	Short Name	BATES Range
	to provisionals filed on Feb. 27, 2012 and Jun. 14, 2011)		
US11766286B2	Sept. 26, 2023 (filed on May 21, 2021; claims priority to provisionals filed on Feb. 27, 2012 and Jun. 14, 2011)	Wolf ’286	AERIN_00012396-2487
US2015/0202003A1	Jul. 23, 2015 (filed on Mar. 31, 2015; claims priority to provisionals filed on Feb. 27, 2012, Jun. 14, 2011, and Apr. 3, 2014)	Wolf ’003	AERIN_00012231-2277
US2019/0282290A1	Sept. 19, 2019 (filed on Jun. 6, 2019; claims priority to provisionals filed on Feb. 27, 2012 and Jun. 14, 2011)	Wolf ’290	AERIN_00012488-02510
US2020/0129223A1	Apr. 30, 2020 (filed on Oct. 30, 2019; claims priority to provisional filed on Oct. 31, 2018)	Angeles ’223	AERIN_00010455-0469
US2016/0331459A1	Nov. 17, 2016 (filed on May 12, 2016; claims priority to provisional filed on May 12, 2015)	Townley ’459	AERIN_00012057-2109
US2018/0133460A1	May 17, 2018 (filed on Nov. 13, 2017; claims priority to provisional filed on Nov. 11, 2016)	Townley ’460	AERIN_00012110-2146
US10307200B2	Jun. 4, 2019 (filed May 17, 2018; claims priority to provisionals filed on Jun. 22, 2014, Sep. 30, 2013)	Saadat ’200	AERIN_00011905-1972

Reference	Publication Date (Filing Date; Priority Date)	Short Name	BATES Range
US20080021369A1	Jan. 24, 2008 (filed on May 18, 2007; claims priority to provisionals filed on May 19, 2006 and Jul. 22, 2005)	Deem ’369	AERIN_00010524-0561
US6517535B2	Feb. 11, 2003 (filed Nov. 9, 1999; claims priority to non-provisional filed on Jun. 24, 1994)	Edwards ’535	AERIN_00010562-0584
US6273886B1	Aug. 14, 2001 (filed May 4, 1999; claims priority to non-provisional filed on Feb. 19, 1998)	Edwards ’886	AERIN_00010585-0652
US20070219600A1	Sep. 20, 2007 (filed Aug. 24, 2006; claims priority to provisional filed on Mar. 17, 2006)	Gertner ’600	AERIN_00010757-0798
WO2010077980A1	July 8, 2010 (filed on Dec. 16, 2009; claim priority to provisionals filed on Dec. 16, 2008)	Baker ’980	AERIN_00010470-0523
US20050240147A1	Oct. 27, 2005 (filed on Apr. 21, 2004)	Makower ’147	AERIN_00011787-1859
US20070287994A1	Dec. 13, 2007 (filed on Jun. 12, 2006)	Patel ’994	AERIN_00011860-1886
US5562720	Oct. 8, 1996 (filed Oct. 6, 1994; claims priority to non-provisional filed on Oct. 14, 1993)	Stern ’720	AERIN_00012026-2056

B. Non-Patent Publication References

Reference	Date	Short Name	BATES Range
Chen et al., *Radiofrequency Treatment of Nasal Posterior-Under*	March 2005	Chen	NMI_AERIN_000004576-4578

Reference	Date	Short Name	BATES Range
Nerve, Ethmoidal Nerve and Infraturbinal for Perennial Allergic Rhinitis Under Nasal Endoscope, 11 China J. Endoscopy, Abstract (2005) (English translation)			
Fang Chao-xin and Zhen Shao-Shao, *Nasal Endoscopy Combined with Multiple Radiofrequency for Perennial Allergic Rhinitis*, 25(07) J. First Military Medical Univ. 876 (English translation)	July 20, 2005	Fang	NMI_AERIN_0000 04912-4925
Kong et al., *Clinical Observation on Radiofrequency Ablation Treatment in Perennial Allergic Rhinitis*, 19 J. Clin Otorhinolaryngol (China) 214 (2005) (English translation)	March 2005	Kong	NMI_AERIN_0000 05007-5008
Liang et al., *Radiofrequency Treatment of Ethmoidal Nerve with Allergic Rhinitis Under Nasal Endoscopy*, 13 J. Clin Otorhinolaryngol (China) 341 (August 1999) (English Translation)	August 1999	Liang	NMI_AERIN_0000 05038-5039
Instructions for Use – RhinAer™ Stylus Model: FG815	Copyright 2019 Sent to customer with purchase at least by February 11, 2020	RhinAer Stylus FG815 IFU	AERIN_00003526-3528
Instructions for Use – Aerin Console Model FG226	2019 Sent to customer with purchase at least by October 18, 2019	RhinAer Console FG226 IFU	AERIN_00003385-3413

C. Items Offered for Sale, Sold, in Public Use, or Publicly Known

Item	Prior Art Date	Short Name	BATES Range
RhinAer System with RhinAer Stylus Model FG815 (also referred to as RHIN1) and RhinAer Console Model FG226	RhinAer Stylus Model FG815: at least by February 11, 2020 RhinAer Console Model FG226: at least by October 18, 2019	The RhinAer System[1]	AERIN_00003282-3455; AERIN_00003509-3531

D. Other References

In addition to the specific references identified above, Aerin may rely on documents cited on the face of Neurent's Asserted Patents and related patents, patent publications, file histories and applications, and other documents cited herein and otherwise produced pursuant to Paragraph 4(d) of the Default Standard to illustrate the state of the art, the knowledge possessed by a person of ordinary skill, to address alleged secondary considerations, or for other context surrounding invalidity that is commonly introduced in a patent trial.

[1] Evidence of The RhinAer System includes, but is not limited to: RhinAer Console FG226 IFU (AERIN_00003385-3413); Aerin Console IFU (AERIN_00003414-3415); Premarket Notification for the RHIN1 Stylus (AERIN_00003282-3384); Compilation of Invoices (AERIN_00003416-3418); RhinAer – Barranco ENT Clinic Article (AERIN_00003419-3423); RhinAer – Press Article re FDA Clearance (AERIN_00003424-3426); RhinAer – Austin ENT Clinic Article (AERIN_00003427-3429); RhinAer Medtech Article (AERIN_00003430-3432); FDA 510(k) Letter - K192471 (AERIN_00003433-3439); RhinAer – Business Wire Article (AERIN_00003440-3441); FDA 510(k) Letter - K221907 (AERIN_00003442-3447); FDA 510(k) Letter - K212666 (AERIN_00003448-3455); RhinAer – Press Article re FDA Clearance (AERIN_00003509-3513); RhinAer – Sinus & Snoring Article (AERIN_00003514-3525); RhinAer Stylus FG815 IFU (AERIN_00003526-3528); and RhinAer Stylus IFU (AERIN_00003529-3531). Aerin reserves the right to rely on additional documentation showing the design and functionality of The RhinAer System, including the RhinAer Stylus Model FG815 and RhinAer Console Model FG226 itself, and photographs, technical drawings, user guides, manuals, and other technical documents for the RhinAer Stylus Model FG815 and RhinAer Console Model FG226.

E. Table of Exhibits

The following non-limiting, exemplary claim charts are being submitted as exhibits concurrently with Aerin's Initial Invalidity Contentions:

Exhibit No.	Patent	Cited Reference(s)[2]	Grounds
A-1	'262 patent	Frazier '199	§§ 102, 103
A-2	'262 patent	Wolf '597; Wolf '194; Wolf '271; Wolf '318; Wolf '286; Wolf '290	§§ 102, 103
A-3	'262 patent	Townley '459	§§ 102, 103
A-4	'262 patent	Townley '460	§§ 102, 103
A-5	'262 patent	Angeles '223	§ 103
A-6	'262 patent	Saadat '200; Schepis '697; Waldstreicher '089; Deem '369; Gliner '128; Franke '163; Rajiah '451	§ 103
A-7	'262 patent	The RhinAer System; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU	§§ 102, 103
B-1	'889 patent	Frazier '199	§§ 102, 103
B-2	'889 patent	Wolf '597; Wolf '194; Wolf '271; Wolf '318; Wolf '286; Wolf '290	§§ 102, 103
B-3	'889 patent	Townley '459	§§ 102, 103
B-4	'889 patent	Townley '460	§§ 102, 103
B-5	'889 patent	Angeles '223	§ 103
B-6	'889 patent	Saadat '200; Schepis '697; Waldstreicher '089; Deem '369; Gliner '128; Franke '163; Rajiah '451	§ 103
B-7	'889 patent	The RhinAer System; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU	§§ 102, 103
C-1	'973 patent	Frazier '199	§§ 102, 103
C-2	'973 patent	Wolf '597; Wolf '194; Wolf '271; Wolf '318; Wolf '286; Wolf '290	§§ 102, 103
C-3	'973 patent	Townley '459	§§ 102, 103
C-4	'973 patent	Townley '460	§§ 102, 103
C-5	'973 patent	Angeles '223	§ 103
C-6	'973 patent	Saadat '200; Schepis '697; Waldstreicher '089; Deem '369; Gliner '128; Franke '163; Rajiah '451	§ 103
C-7	'973 patent	The RhinAer System; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU	§§ 102, 103
D-1	'974 patent	Frazier '199	§§ 102, 103

[2] Because the disclosure of Wolf '286 is substantively identical to the disclosure of Wolf '318, the exemplary claim charts use representative citations to Wolf '318, and Aerin reserves the right to rely on the same citations in Wolf '286.

Exhibit No.	Patent	Cited Reference(s)[2]	Grounds
D-2	’974 patent	Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290	§§ 102, 103
D-3	’974 patent	Townley ’459	§§ 102, 103
D-4	’974 patent	Townley ’460	§§ 102, 103
D-5	’974 patent	Angeles ’223	§ 103
D-6	’974 patent	Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451	§ 103
D-7	’974 patent	The RhinAer System; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU	§§ 102, 103

IV. Prior-Art Invalidity Grounds

A. The ’262 Patent

The Asserted Claims of the ’262 patent are invalid under 35 U.S.C. §§ 102 and/or 103 as anticipated by or obvious over the prior art disclosed above and in attached Exhibits A1-A7. Exhibits A1-A7 contain exemplary prior art that anticipates or renders obvious the Asserted Claims as applied by Neurent in this litigation. Some references both anticipate and render the claims obvious. Representative citations of disclosures from exemplary prior art references are mapped against the limitations in the ’262 patent and can be found in Exhibits A1-A7.

For instance, Aerin provides the following non-limiting, exemplary grounds of prior art that render the Asserted Claims of the ’262 patent anticipated, according to Neurent’s initial infringement contentions:

1. Frazier ’199 anticipates the Asserted Claims of the ’262 patent under 35 U.S.C. § 102.
2. Each Wolf reference—Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290—anticipates the Asserted Claims of the ’262 patent under 35 U.S.C. § 102.
3. Each Townley reference—Townley ’459 and Townley ’460—anticipates the Asserted Claims of the ’262 patent under 35 U.S.C. § 102.
4. RhinAer Stylus FG815 IFU anticipates the Asserted Claims of the ’262 patent under 35 U.S.C. § 102.

5. The RhinAer System anticipates the Asserted Claims of the ’262 patent under 35 U.S.C. § 102.

To the extent any references are found to not anticipate, these references, alone or in combination with the knowledge of a person having ordinary skill in the art, and/or one or more other references identified above, alternatively render the claim obvious. For the purposes of 35 U.S.C. § 103, the prior art in the attached Exhibits may be applied alone or in combination with any other reference identified above in Sections III.A-D. For instance, Aerin provides the following, non-limiting, exemplary grounds and combinations of prior art that render the Asserted Claims of the ’262 patent obvious:

1. Frazier ’199 renders the Asserted Claims of the ’262 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.

2. Wolf ’597 renders the Asserted Claims of the ’262 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.

3. Wolf ’194 renders the Asserted Claims of the ’262 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.

4. Wolf ’271 renders the Asserted Claims of the ’262 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’194; Wolf ’318; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.

5. Wolf ’318 renders the Asserted Claims of the ’262 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.

6. Wolf ’286 renders the Asserted Claims of the ’262 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’290; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.

7. Wolf ’290 renders the Asserted Claims of the ’262 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.

8. Angeles ’223 renders the Asserted Claims of the ’262 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.

9. Townley ’459 renders the Asserted Claims of the ’262 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.

10. Townley ’460 renders the Asserted Claims of the ’262 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’459; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.

11. RhinAer Stylus FG815 IFU renders the Asserted Claims of the ’262 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Console FG226 IFU; and/or The RhinAer System.

12. RhinAer Console FG226 IFU renders the Asserted Claims of the ’262 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; and/or The RhinAer System

13. The RhinAer System renders the Asserted Claims of the ’262 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; and/or RhinAer Console FG226 IFU.

“The obviousness inquiry entails consideration of whether a person of ordinary skill in the art would have been motivated to combine the teachings of the prior art references to achieve the claimed invention, and … would have had a reasonable expectation of success in doing so.” *PGS Geophysical AS v. Iancu*, 891 F.3d 1354, 1363 (Fed. Cir. 2018). A “motivation and reasonable expectation may be present where the claimed invention is the ‘combination of familiar elements according to known methods’ that ’does no more than yield predictable results.’” *PGS Geophysical*, 891 F.3d at 1363 (quoting *KSR Int’l Co. v. Teleflex, Inc.*, 550 U.S. 398, 415-16 (2007)). As the Supreme Court recognized, a person of ordinary skill in the art may have combined the prior art’s teachings for any of the following reasons: (1) to combine prior art elements according to known methods to yield predictable results; (2) to substitute of one known element for another to obtain predictable results; (3) to use a known technique to improve similar devices, methods, or products in the same way; (4) to apply a known technique to a known device, method, or product ready for improvement to yield predictable results; (5) to choose from a finite number of identified, predictable solutions, with a reasonable expectation of success (“obvious to try”); (6) to adapt known work in one field of endeavor for use in either the same field or a different one based on design incentives or other market forces when the adaptations would have been predictable; and/or (7) to modify the prior art or combine prior art teachings to arrive at the claimed invention according to a teaching, suggestion, or motivation in the prior art. *KSR*, 550 U.S. at 401.

The Asserted Claims of the ’262 patent are invalid under either 35 U.S.C. § 102 or alternatively 35 U.S.C. § 103, either under the doctrine of single-reference obviousness, when combined with information known to one of ordinary skill in the art at the time of the alleged invention, or in combination with one or more other reference(s) disclosed herein. Indeed, each element of each Asserted Claim is disclosed in numerous prior art references, and it would have been obvious to combine the teachings of the prior art in any number of ways to render the Asserted Claims obvious. These combinations and modifications of the prior art, which would have rendered obvious the Asserted Claims of the ’262 patent, arise from ordinary efforts, ordinary skill, common sense, or would have been obvious to try or otherwise predictable. Moreover, design improvements and other market forces would have prompted the combinations and modifications.

Moreover, each of the identified references herein is analogous art to the ’262 patent and to each other. Each reference is in this same field of endeavor as the ’262 patent—i.e., treating tissue in the body—and each is reasonably pertinent to solving the same problem that the ’262 patent purports to solve—i.e., applying energy to tissue via a device with electrodes.

There is also no objective indicia of nonobviousness for the ’262 patent. Neurent bears the burden of coming forward with evidence of objective indicia of nonobviousness and its purported nexus to the Asserted Claims. Neurent has provided no such assertions, much less evidence, of objective indicia of nonobviousness. Aerin is not aware of any unexpected results, satisfaction of a long-felt unmet need, commercial success, failure of others, skepticism, industry praise, or copying that would support the nonobviousness the Asserted Claims of the ’262 patent. Regardless of any purported objective indicia of nonobviousness, any such evidence cannot overcome the strong prima facie showing of obviousness as demonstrated by the teachings of the prior art and combinations of prior art described above. Aerin reserves the right to amend and/or supplement these Initial Invalidity Contentions to the extent Neurent later presents new arguments or evidence of objective indicia of nonobviousness.

Aerin further incorporates by reference herein its Petition for Inter Partes Review of the ’262 patent in Case No. IPR2025-01124, filed on June 19, 2025, as well as any accompanying exhibits and declarations.

Aerin also incorporates by reference herein the petitions for Inter Partes Review, challenging U.S. Patent Nos. 9,072,597; 9,415,914; 11,241,271; 11,033,318; 11,766,286;10,610,675; 10,894,011; and 11,679,077, filed by Neurent in Case Nos. IPR2024-00275; IPR2024-00276; IPR2024-00277; IPR2024-00278; IPR2024-00282; IPR2024-00279; IPR2024-00280; and IPR2024-00669, respectively. For the reasons provided in Neurent's petitions and its exhibits, the Asserted Claims of the '262 patent are anticipated and/or rendered obvious based on Neurent's assessment of the disclosed prior art.

For instance, with respect to Neurent's IPR petitions, Neurent concedes that "[a] method for improving a patient's sleep by treating at least one of rhinitis, congestion, and rhinorrhea within a sino-nasal cavity of a patient" (1[pre]) was known in the art because it alleged at least the following in its IPR petitions:

- Makower and Fang render obvious "[a]n apparatus for treating rhinitis in a nasal cavity." IPR2024-00669 at 67-70.
- Makower and Fang render obvious an "[a]pparatus for treatment of a nasal condition by altering function of a nasopharyngeal passage of a patient." IPR2024-00280 at 64-68.
- Makower, Fang, and Edwards-535 teaches "an energy source operatively coupled to the energy transmission element for supplying energy thereto according to one or more parameters selected so as to alter nasopharyngeal cells in the target tissue such that nasal congestion is reduced." IPR2024-00280 at 72-76.
- Makower and Fang render obvious "[a] method of treating a nasal condition of a patient." IPR2024-00279 at 64-65; *see also id.* at 68-70 (asserting that Makower and Fang teach "administering therapy to the target tissue with the treatment device

so as to disrupt neural activity such that mucus secretion is reduced in the nasopharyngeal passage"); *see also id.* at 82-83.

- Edwards-535 and Stern; Makower in view of Stern and Edwards-535; Edwards-535 in view of Stern and Liang; and Makower in view of Stern, Edwards-535- and Liang render obvious "[a] device for delivering energy to a nasal airway to treat rhinitis." IPR2024-00282 at 25-26, 62-63, 83-87, and 89-91; *see e.g.*, IPR2024-00277 at 26-34 (asserting as obvious "method for treating a nasal airway to reduce mucus production"); *see* IPR2024-00278 (asserting as obvious "[a] device for delivering energy to a nasal airway to improve nasal airflow"); *see* IPR2024-00276 (asserting as obvious "[a] method for reducing mucus secretion in an upper airway of a patient to treat at least one of post nasal drip or chronic cough"); *see* IPR2024-00275 patent (asserting as obvious "[a] method of treating a patient's nasal airway").

Neurent also concedes that "advancing a multi-electrode end effector into the sino-nasal cavity of the patient, the multi-electrode end effector being operably associated with a shaft of a treatment device and configured for delivering energy to one or more target sites within the sino-nasal cavity of the patient, the multi-electrode end effector comprising a first electrode that is spaced apart from a separate and distinct second electrode along a length of the multi-electrode end effector, wherein each of the first and second electrodes comprises an active state and an inactive state and comprises a respective location on the multi-electrode end effector" (1[a]) was known in the art because it alleged at least the following in its IPR petitions:

- Makower and Fang teach an elongated body comprising a proximal portion and a distal portion "configured for positioning in the nasal cavity." IPR2024-00669 at 70-72; *see also id.* (specifically asserting that Makower teaches a shaft).
- Makower teaches "multiple radiofrequency electrodes coupled with the distal portion of the elongate body" IPR2024-00669 at 72-74; *see also id.* at 85-86; *see also id.* at 92- (asserting as obvious at least two bipolar radiofrequency electrodes comprising multiple pairs of bipolar radiofrequency electrodes).
- The combination of Makower, Fang, and Edwards-535 teaches a radiofrequency generator "for supplying radiofrequency energy" to the multiple electrodes "to treat a target tissue in the nasal cavity" and thus treat rhinitis. IPR2024-00669 at 74-77.
- The combination of Makower, Fang, and Edwards-535 teaches delivering energy to target tissue comprising nerve tissue. IPR2024-00669 at 87.
- The combination of Makower and Fang teaches "a hand-held elongate body having proximal and distal portions, the distal portion being configured for positioning in a nasopharyngeal passage of a patient." IPR2024-00280 at 69-71.
- The combination of Makower and Fang teaches "an energy transmission element in the distal portion configured to deliver energy to target tissue in the nasopharyngeal passage." IPR2024-00280 at 71-72; *see also id.* at 85-86 (asserting as obvious "wherein the energy transmission element comprises at least one electrode").
- The combination of Makower and Fang teaches "positioning a distal portion of a treatment device proximate to target tissue in a nasopharyngeal passage of a patient." IPR2024-00279 at 65-68; *see also id.* at 82 (claim 17).

- The combination of XX teaches "administering therapy to the target tissue with the treatment device so as to disrupt neural activity such that mucus secretion is reduced in the nasopharyngeal passage." IPR2024-00279 at 68-77; *see also id.* at 82-83 (claim 17).
- The combination of Makower and Fang teaches that "the energy delivery element comprises a plurality of electrodes." IPR2024-00279 at 84-85 (claims 20-21).
- Several combinations teach a "shaft" and "a treatment element" with "multiple pairs of bipolar radiofrequency electrodes" to be "inserted into a nostril" and "change from a first configuration to a second configuration" where each electrode "is connected with a respective one of the multiple radiofrequency output channels." IPR2024-00282 at 25-46, 62-76, 83-88, and 89-92 (claim 1); *see also* IPR2024-00278 at 24-49 and 77-90 (claim 1) (same).
- Several combinations teach "contacting a treatment element of a nasal airway treatment device directly with nasal mucosa of the nasal airway" and "applying radiofrequency energy with the bipolar electrode pairs through the nasal mucosa to a target tissue." IPR2024-00277 at 26-56 and 74-84.
- Several combinations teach "controlling at least one characteristic of the applied radiofrequency energy with a control system coupled with the nasal airway treatment device." IPR2024-00277 at 57-58, and 85 (claim 3).
- Several combinations teach "delivering a treatment from the treatment delivery portion to at least one tissue selected from the group of the mucosal tissue and another tissue underlying the mucosal tissue." IPR2024-00276 at 36-41, 74-78; *see also id.* at 42-43, and 79 (claim 3); *see also* IPR2024-00275 at 25-33 and 64-75.

Neurent also concedes that "the first electrode is exposed from a surface of the multi-electrode end effector and is positioned at a separate and discrete portion thereon, the first electrode extending in a first outward direction relative to a longitudinal axis of the shaft to interact with anatomy at a first location within the nasal cavity" (1[b]) was known in the art because it alleged at least the following in its IPR petitions:

- Makower teaches "multiple radiofrequency electrodes coupled with the distal portion of the elongate body" IPR2024-00669 at 72-74; *see also* IPR2024-00669 at 85-86 (asserting that a combination of Makower, Fang, and Edwards-535 teaches multiple radiofrequency electrodes comprising at least two bipolar radiofrequency electrodes).
- The combination of Makower, Fang, and Edwards-535 teaches at least one electrode is movable relative to the distal portion of the elongate body and is configured to deliver energy laterally relative to the distal portion of the elongate body. IPR2024-00669 at 87-90.
- The combination of Makower, Fang, and Edwards-535 teaches "an energy transmission element in the distal portion configured to deliver energy to target tissue in the nasopharyngeal passage." IPR2024-00280 at 71-72; *see also id.* at 85-86 ("wherein the energy transmission element comprises at least one electrode"); *id.* at 88-91 ("wherein the energy transmission element is configured to extend laterally from the distal portion of the body" and "extend laterally from the distal portion of the body").
- The combination of Makower and Fang teaches "wherein administering therapy comprises delivering energy from at least one energy delivery element on the

treatment device” (IPR2024-00279 at 77-78) and “the energy delivery element comprises a monopolar or bipolar electrode.” IPR2024-00279 at 84-85.

- Several combinations teach “multiple pairs of bipolar radiofrequency electrodes disposed on the treatment element.” IPR2024-00282 at 33-40, 67-71, 88, and 91; *see also* IPR2024-00277 at 26-49,74-80 (same); IPR2024-00278 at 32-41 and 82-87 (same).

Neurent also concedes that “the second electrode is exposed from a surface of the multi-electrode end effector and is positioned at a separate and discrete portion thereon, the second electrode extending in a second outward direction relative to a longitudinal axis of the shaft to interact with anatomy at a second location within the nasal cavity” (1[c]) was known in the art because it alleged at least the following in its IPR petitions:

- Makower teaches “multiple radiofrequency electrodes coupled with the distal portion of the elongate body” IPR2024-00669 at 72-74; *see also* IPR2024-00669 at 85-86 (asserting that a combination of Makower, Fang, and Edwards-535 teaches multiple radiofrequency electrodes comprising at least two bipolar radiofrequency electrodes).
- The combination of Makower, Fang, and Edwards-535 teaches at least one electrode is movable relative to the distal portion of the elongate body and is configured to deliver energy laterally relative to the distal portion of the elongate body. IPR2024-00669 at 87-90.
- The combination of Makower, Fang, and Edwards-535 teaches “an energy transmission element in the distal portion configured to deliver energy to target tissue in the nasopharyngeal passage.” IPR2024-00280 at 71-72; *see also id.* at 85-

86 (“wherein the energy transmission element comprises at least one electrode”); *id.* at 88-91 (“wherein the energy transmission element is configured to extend laterally from the distal portion of the body” and “extend laterally from the distal portion of the body”).

- The combination of Makower and Fang teaches “wherein administering therapy comprises delivering energy from at least one energy delivery element on the treatment device” (IPR2024-00279 at 77-78) and “the energy delivery element comprises a monopolar or bipolar electrode.” IPR2024-00279 at 84-85.
- Several combinations teach “multiple pairs of bipolar radiofrequency electrodes disposed on the treatment element.” IPR2024-00282 at 33-40, 67-71, 88, and 91; *see also* IPR2024-00277 at 26-49,74-80 (same); IPR2024-00278 at 32-41 and 82-87 (same).

Neurent also concedes that “delivering energy, via the first and second electrodes, to one or more target sites within a sino-nasal cavity of the patient to disrupt multiple neural signals to, and/or result in local hypoxia of, mucus producing and/or mucosal engorgement elements, thereby reducing production of mucus and/or mucosal engorgement within a nose of the patient and reducing or eliminating one or more symptoms associated with at least one of rhinitis, congestion, and rhinorrhea to improve nasal breathability of the patient” (1[d]) was known in the art because it alleged at least the following in its IPR petitions:

- The combination of Makower and Fang teaches an apparatus for treating rhinitis in a nasal cavity. IPR2024-00669 at 67-70.
- The combination of Makower, Fang, and Edwards-535 teaches “supplying radiofrequency energy to the multiple radiofrequency electrodes to treat a target

tissue in the nasal cavity and thus treat rhinitis” IPR2024-00669 at 74-77; *see also id.* at 78-85.

- The combination of Makower, Fang, and Edwards-535 teaches “an energy transmission element in the distal portion configured to deliver energy to target tissue in the nasopharyngeal passage” where the energy source parameters are selected “so as to alter nasopharyngeal cells in the target tissue such that nasal congestion is reduced.” IPR2024-00280 at 71-85.

- The combination of Makower and Fang teaches positioning a treatment device “proximate to target tissue in a nasopharyngeal passage” and “administering therapy to the target tissue with the treatment device so as to disrupt neural activity such that mucus secretion is reduced in the nasopharyngeal passage.” IPR2024–00279 at 65-70; *see also id.* at 82-83 (claim 17).

- Several combinations render obvious “[a] device for delivering energy to a nasal airway to treat rhinitis.” IPR2024-00282 at 25-26, 62-63, 83-87, and 89-91; *see* IPR2024-00277 at 26-34, 74-78 (asserting as obvious “method for treating a nasal airway to reduce mucus production”); *see* IPR2024-00278 at 24-25, 77-78 (asserting as obvious “[a] device for delivering energy to a nasal airway to improve nasal airflow”); *see* IPR2024-00276 at 22-27, 54-68 (asserting as obvious “[a] method for reducing mucus secretion in an upper airway of a patient to treat at least one of post nasal drip or chronic cough”); *see* IPR2024-00275 at 26, 42 (asserting as obvious “[a] method of treating a patient’s nasal airway”).

Neurent also concedes that “wherein the one or more target sites comprises an inferior turbinate within the nasal cavity and the tissue comprises submucosal tissue associated with the inferior turbinate" (2[a]) was known in the art because it alleged at least the following in its IPR petitions:

- The combination of Makower and Fang teaches an apparatus for treating rhinitis in a nasal cavity. IPR2024-00669 at 67-70 (asserting Fang discloses that the inferior nasal turbinate is the target site); *see also* IPR2024-00280 at 66-67 (same); IPR2024-00279 at 66-67 (same).
- Several combinations teach "applying radiofrequency energy with the bipolar electrode pairs through the nasal mucosa to a target tissue underlying the nasal mucosa." IPR2024-00277 at 49-51, 80-81 (claim 1b); *see also id.* at 56-57, 84-85 (claim 2); *see* IPR2024-00276 at 36-41, 49-51, 74-78 (claim 1c) (asserting as obvious "delivering a treatment from the treatment delivery portion to at least one tissue selected from the group of the mucosal tissue and another tissue underlying the mucosal tissue"); *see also id.* at 80-81 (claim 6); *see* IPR2024-00275 at 25, 43, 64 at 29-33, 46-52, 69-75 (claim 9) (same).
- Several combinations teach "wherein the at least one turbinate comprises an inferior turbinate, and contacting the mucosal tissue comprises contacting a posterior aspect of the inferior turbinate." IPR2024-00276 at 52-65, 70-87.

Neurent also concedes that "wherein the multi-electrode end effector comprises at least four electrodes" (3[a]) was known in the art because it alleged at least the following in its IPR petitions:

- Makower teaches "multiple radiofrequency electrodes coupled with the distal portion of the elongate body" IPR2024-00669 at 72-74; *see also id.* at 85-86; *see also id.* at 92 (asserting that Makower, Fang, Edwards-353, and Stern teaches at least two bipolar radiofrequency electrodes comprising multiple pairs of bipolar radiofrequency electrodes); *see also* IPR2024-00279 at 84-87 (asserting as obvious a "plurality of electrodes").

- Several combinations teach "multiple pairs of bipolar radiofrequency electrodes." IPR2024-00282 at 33-40, 67-71, 88, and 91; IPR2024-00277 at 34-49, 78-80 (same); IPR2024-00278 at 32-41, 82-87 (same).

Neurent also concedes that "wherein the multi-electrode end effector comprises at least eight electrodes" (4[a]) was known in the art because it alleged at least the following in its IPR petitions:

- Makower teaches "multiple radiofrequency electrodes coupled with the distal portion of the elongate body" IPR2024-00669 at 72-74; *see also id.* at 85-86; *see also id.* at 92 (asserting that Makower, Fang, Edwards-353, and Stern teaches at least two bipolar radiofrequency electrodes comprising multiple pairs of bipolar radiofrequency electrodes); *see also* IPR2024-00279 at 84-87 (asserting as obvious a "plurality of electrodes").
- Several combinations teach "multiple pairs of bipolar radiofrequency electrodes." IPR2024-00282 at 33-40, 67-71, 88, and 91; IPR2024-00277 at 34-49, 78-80 (same); IPR2024-00278 at 32-41, 82-87 (same).

Neurent also concedes that "wherein radiofrequency (RF) energy is delivered from the first and second electrodes to tissue at the one or more target sites and is controlled via a console unit operably associated with the treatment device and multi-electrode end effector" (5[a]) was known in the art because it alleged at least the following in its IPR petitions:

- The combination of Makower, Fang, and Edwards-535 teaches a radiofrequency generator "for supplying radiofrequency energy" to the multiple electrodes "to treat a target tissue in the nasal cavity" and thus treat rhinitis. IPR2024-00669 at 74-77.
- The combination of Makower, Fang, and Edwards-535 teaches delivering energy to target tissue comprising nerve tissue. IPR2024-00669 at 87.
- The combination of Makower, Fang, and Edwards-535 teaches a monitoring system coupled with the distal portion of the elongate body for monitoring a degree of treatment of the target tissue. IPR2024-00669 at 91-92.
- The combination of Makower, Fang, and Edwards-535 teaches "an energy transmission element in the distal portion configured to deliver energy to target tissue in the nasopharyngeal passage." IPR2024-00280 at 65-76; *see also id.* at 72-76, 86-87 (asserting that an RF generator is taught); *see also id.* at 91-92 (asserting that "a monitoring system" is taught).
- The combination of Makower and Fang teaches "administering therapy to the target tissue with the treatment device" and monitoring the system through a "monitoring electrode." IPR2024-00279 at 68-77, 82-83, 88-90; *see also id.* at 84-85.
- Several combinations teach "multiple pairs of bipolar radiofrequency electrodes disposed on the treatment element." IPR2024-00282 at 33-43, 67-72, 87-88, 91; *see also* IPR-2024-00278 at 32-41, 82-87.
- Several combinations teach "controlling at least one characteristic of the applied radiofrequency energy with a control system coupled with the nasal airway treatment device." IPR2024-00277 at 57-58, 85-86.

Neurent also concedes that "wherein the console unit is operably coupled to an energy generator configured to generate RF energy to be delivered by the first and second electrodes" (6[a]) was known in the art because it alleged at least the following in its IPR petitions:

- The combination of Makower, Fang, and Edwards-535 teaches a radiofrequency generator "for supplying radiofrequency energy" to the multiple electrodes "to treat a target tissue in the nasal cavity" and thus treat rhinitis. IPR2024-00669 at 74-77; *see also* IPR2024-00280 at 86-87 (asserting as obvious "an RF generator").
- Several combinations teach "multiple radiofrequency output channels connected with the multiple pairs of bipolar radiofrequency electrodes." IPR2024-00282 at 40-43, 71-72, 88, 91 (claim 1); *see also id.* at 51-53, 58-60, 79-80, 88, 92 (claims 7 and 9) (asserting as obvious "a radiofrequency generator"); *see also* IPR2024-00278 at 53-59, 74-76, 95-97 (claim 9).
- Several combinations teach "further comprising displaying one or more parameters of treatment on a console attached to the nasal airway treatment device while the radiofrequency energy is applied." IPR2024-00277 at 58-60, 85-86 (claim 6).

Neurent also concedes that "wherein the RF energy comprises at least bipolar RF energy" (7[a]) was known in the art because it alleged at least the following in its IPR petitions:

- Makower teaches "multiple radiofrequency electrodes coupled with the distal portion of the elongate body" IPR2024-00669 at 72-74; *see also id.* at 85-86; *see also id.* at 92 (asserting that Makower, Fang, Edwards-353, and Stern teaches at least two bipolar radiofrequency electrodes comprising multiple pairs of bipolar radiofrequency electrodes).

- The combination of Makower and Fang teaches that “the energy delivery element comprises a monopolar or bipolar electrode.” IPR2024-00279 at 84-85 (claim 20).
- Several combinations teach “multiple pairs of bipolar radiofrequency electrodes disposed on the treatment element.” IPR2024-00282 at 33-40, 67-71, 88, and 91; *see also* IPR2024-00277 at 26-49,74-80 (same); IPR2024-00278 at 32-41 and 82-87 (same).

Neurent also concedes that “wherein the console unit is configured to receive feedback from at least one temperature sensor arranged relative to the first and second electrodes and configured to sense temperature at an interface between tissue and the first and second electrodes, wherein the console unit is configured to control energy output from the first and second electrodes based, at least in part, on the feedback in order to maintain a predetermined temperature of tissue at the one or more target sites” (8[a]) was known in the art because it alleged at least the following in its IPR petitions:

- The combination of Makower, Fang, and Edwards-535 “teaches at least one sensing electrode (e.g., sensing elements/thermal sensor).” IPR2024-00669 at 86.
- The combination of Makower, Fang, and Edwards-535 “teaches a monitoring system (e.g., sensing elements/thermal sensor) coupled with the distal portion of the elongate body for monitoring a degree of treatment of the target tissue.” IPR2024-0069 at 91-92.
- The combination of Makower, Fang, and Edwards-535 teaches a sensing element, such as a temperature sensor, for “monitoring” the system. IPR2024-00280 at 91-92 (claims 12 and 14); *see also* IPR2024-00279 at 88-90 (claims 24 and 25) (asserting as obvious a monitoring electrode which comprises a sensing electrode).

- Several combinations teach monitoring temperature and "modifying an amount of radiofrequency energy applied to the target tissue based on the sensed temperature." IPR2024-00277 at 44-45, 49-51, 57-59, 85-86; *see also* IPR2024-00278 at 53-59, 74-76, 95-97 (asserting as obvious "a radiofrequency generator configured to receive sensed signals from the multiple sensors and deliver radiofrequency energy separately to each of the multiple radiofrequency output channels").

Neurent also concedes that "wherein the console unit is configured to receive one or more temperature readings from the at least one temperature sensor and process the readings to determine a level of RF energy to be delivered by the first and second electrodes that is sufficient to maintain a temperature of tissue at the one or more target sites below a predetermined threshold" (9[a]) was known in the art because it alleged at least the following in its IPR petitions:

- The combination of Makower, Fang, and Edwards-535 "teaches at least one sensing electrode (e.g., sensing elements/thermal sensor)." IPR2024-00669 at 86.
- The combination of Makower, Fang, and Edwards-535 "teaches a monitoring system (e.g., sensing elements/thermal sensor) coupled with the distal portion of the elongate body for monitoring a degree of treatment of the target tissue." IPR2024-0069 at 91-92.
- The combination of Makower, Fang, and Edwards-535 teaches a sensing element, such as a temperature sensor, for "monitoring" the system. IPR2024-00280 at 91-92 (claims 12 and 14); *see also* IPR2024-00279 at 88-90 (claims 24 and 25) (asserting as obvious a monitoring electrode which comprises a sensing electrode).
- Several combinations teach monitoring temperature and "modifying an amount of radiofrequency energy applied to the target tissue based on the sensed temperature."

IPR2024-00277 at 44-45, 49-51, 57-59, 85-86; *see also* IPR2024-00278 at 53-59, 74-76, 95-97 (asserting as obvious "a radiofrequency generator configured to receive sensed signals from the multiple sensors and deliver radiofrequency energy separately to each of the multiple radiofrequency output channels").

Neurent also concedes that "wherein the console unit is configured to monitor temperature of tissue at the one or more target sites during delivery of RF energy thereto based on temperature readings from the at least one temperature sensor and further monitor an elapsed time during delivery of RF energy to tissue at the one or more target sites" (10[a]) was known in the art because it alleged at least the following in its IPR petitions:

- The combination of Makower, Fang, and Edwards-535 "teaches a monitoring system (e.g., sensing elements/thermal sensor) coupled with the distal portion of the elongate body for monitoring a degree of treatment of the target tissue." IPR2024-0069 at 91-92 (asserting that Makower "monitor[s] various parameters of the catheter and/or surrounding tissue (e.g., temperature, etc.)").
- The combination of Makower, Fang, and Edwards-535 teaches a sensing element, such as a temperature sensor, for "monitoring" the system. IPR2024-00280 at 91-92 (claims 12 and 14); *see also* IPR2024-00279 at 88-90 (claims 24 and 25) (asserting as obvious a monitoring electrode which comprises a sensing electrode).
- Several combinations teach monitoring temperature, "modifying an amount of radiofrequency energy applied to the target tissue based on the sensed temperature," and monitoring and displaying parameters such as "treatment time, power level, temperature sensed by treatment element, [etc.]" IPR2024-00277 at 44-45, 49-51, 57-59, 85-86.

Neurent also concedes that "wherein the console unit is configured to provide, via a display, feedback information to an operator during each treatment application, wherein said feedback information comprises at least an elapsed time during delivery of RF energy to tissue at the one or more target sites" (11[a]) was known in the art because it alleged at least the following in its IPR petitions:

- The combination of Makower, Fang, and Edwards-535 teaches "a monitoring system operatively coupled to the sensing element for indicating a degree of treatment of the target tissue." IPR2024-00280 at 91-92 (claims 12 and 14).
- Several combinations teach monitoring temperature, "modifying an amount of radiofrequency energy applied to the target tissue based on the sensed temperature," and monitoring and displaying parameters such as "treatment time, power level, temperature sensed by treatment element, [etc.]" IPR2024-00277 at 44-45, 49-51, 57-59, 85-86.

Neurent also concedes that "wherein the console unit is configured to control RF energy output from the first and second electrodes in separate and discrete treatment applications of RF energy to be delivered to tissue at the one or more target sites, wherein each separate and discrete treatment application comprises a predetermined elapsed time period for each treatment application and a predetermined threshold maximum temperature of tissue during delivery of RF energy to ensure that application of said RF energy results in the desired effect of reduced engorgement of the tissue at the target site for a given treatment application" (13[a]) was known in the art because it alleged at least the following in its IPR petitions:

- The combination of Makower, Fang, and Edwards-535 "teaches a monitoring system (e.g., sensing elements/thermal sensor) coupled with the distal portion of the elongate body for monitoring a degree of treatment of the target tissue." IPR2024-0069 at 91-92 (asserting that Makower "monitor[s] various parameters of the catheter and/or surrounding tissue (e.g., temperature, etc.)").

- The combination of Makower, Fang, and Edwards-535 teaches "a monitoring system operatively coupled to the sensing element for indicating a degree of treatment of the target tissue." I IPR2024-00280 at 91-92 (claims 12 and 14).
- Several combinations teach monitoring temperature, "modifying an amount of radiofrequency energy applied to the target tissue based on the sensed temperature," and monitoring and displaying parameters such as "treatment time, power level, temperature sensed by treatment element, [etc.]" IPR2024-00277 at 44-45, 49-51, 57-59, 85-86.

Neurent also concedes that "wherein the predetermined threshold maximum temperature is less than 90°C" (15[a]) was known in the art because it alleged at least the following in its IPR petitions:

- Several combinations teach "applying the radiofrequency energy comprises heating the target tissue to a temperature between 50 degrees Celsius to 70 degrees Celsius." IPR2024-00277 at 61-63, 86 (claim 9).

Neurent also concedes that "wherein the predetermined threshold maximum temperature is greater than 37° C and less than 90°C" (16[a]) was known in the art because it alleged at least the following in its IPR petitions:

- Several combinations teach "applying the radiofrequency energy comprises heating the target tissue to a temperature between 50 degrees Celsius to 70 degrees Celsius." IPR2024-00277 at 61-63, 86 (claim 9).

Neurent also concedes that "the predetermined elapsed time period for each separate and discrete treatment application is between 1 second to 20 seconds" (17[a]) was known in the art because it alleged at least the following in its IPR petitions:

- Several combinations teach "wherein the amount of time the radiofrequency energy is applied to the target tissue is between fifteen seconds and one minute." IPR2024-00277 at 63-64, 86-87 (claim 10).

Each of the above allegations in Neurent's IPR petitions (Case Nos. IPR2024-00275; IPR2024-00276; IPR2024-00277; IPR2024-00278; IPR2024-00282; IPR2024-00279; IPR2024-00280; and IPR2024-00669) are provided as exemplary assertions. Each would apply equally to substantially similar elements from the remaining asserted patents (U.S. Patent Nos. 12,096,973; 12,069,974; and 12,089,889). Indeed, while representative citations are mapped against the limitations of the '262 patent, these assertions operate as concessions for similar limitations of the '973, '974, and '889 patents, and Aerin reserves the right to rely on any and all citations from Neurent's IPR petitions for each claim of an Asserted Patent. Thus, Aerin maintains that each of Neurent's assertions in its Petitions render the Asserted Claims of the '973, '974, and '889 patents invalid for the same reasons they render the Asserted Claims of the '262 patent invalid. Aerin also reserves the right to present additional evidence, revise, amend, and/or supplement these exemplary IPR citations.

B. The '889 Patent

The Asserted Claims of the '889 patent are invalid under 35 U.S.C. §§ 102 and/or 103 as anticipated by or obvious over the prior art disclosed above and in attached Exhibits B1-B7. Exhibits B1-B7 contain exemplary prior art that anticipates or renders obvious the Asserted Claims as applied by Neurent in this litigation. Some references both anticipate and render the claims obvious. Representative citations of disclosures from exemplary prior art references are mapped against the limitations in the ’889 patent and can be found in Exhibits B1-B7.

For instance, Aerin provides the following non-limiting, exemplary grounds of prior art that render the Asserted Claims of the ’889 patent anticipated, according to Neurent’s initial infringement contentions:

1. Frazier ’199 anticipates the Asserted Claims of the ’889 patent under 35 U.S.C. § 102.
2. Each Wolf reference—Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290—anticipates the Asserted Claims of the ’889 patent under 35 U.S.C. § 102.
3. Each Townley reference—Townley ’459 and Townley ’460—anticipates the Asserted Claims of the ’889 patent under 35 U.S.C. § 102.
4. RhinAer Stylus FG815 IFU anticipates the Asserted Claims of the ’889 patent under 35 U.S.C. § 102.
5. The RhinAer System anticipates the Asserted Claims of the ’889 patent under 35 U.S.C. § 102.

To the extent any references are found to not anticipate, these references, alone or in combination with the knowledge of a person having ordinary skill in the art, and/or one or more other references identified above, alternatively render the claim obvious. For the purposes of 35 U.S.C. § 103, the prior art in the attached Exhibits may be applied alone or in combination with any other reference identified above in Sections III.A-D. For instance, Aerin provides the following, non-limiting, exemplary grounds and combinations of prior art that render the Asserted Claims of the ’889 patent obvious:

1. Frazier ’199 renders the Asserted Claims of the ’889 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128;

Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.

2. Wolf ’597 renders the Asserted Claims of the ’889 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.

3. Wolf ’194 renders the Asserted Claims of the ’889 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.

4. Wolf ’271 renders the Asserted Claims of the ’889 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’194; Wolf ’318; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.

5. Wolf ’318 renders the Asserted Claims of the ’889 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.

6. Wolf ’286 renders the Asserted Claims of the ’889 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’290; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163;

Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.

7. Wolf ’290 renders the Asserted Claims of the ’889 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.

8. Angeles ’223 renders the Asserted Claims of the ’889 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.

9. Townley ’459 renders the Asserted Claims of the ’889 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.

10. Townley ’460 renders the Asserted Claims of the ’889 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’459; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.

11. RhinAer Stylus FG815 IFU renders the Asserted Claims of the ’889 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369;

Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Console FG226 IFU; and/or The RhinAer System.

12. RhinAer Console FG226 IFU renders the Asserted Claims of the ’889 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; and/or The RhinAer System

13. The RhinAer System renders the Asserted Claims of the ’889 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; and/or RhinAer Console FG226 IFU.

“The obviousness inquiry entails consideration of whether a person of ordinary skill in the art would have been motivated to combine the teachings of the prior art references to achieve the claimed invention, and … would have had a reasonable expectation of success in doing so.” *PGS Geophysical AS v. Iancu*, 891 F.3d 1354, 1363 (Fed. Cir. 2018). A “motivation and reasonable expectation may be present where the claimed invention is the ‘combination of familiar elements according to known methods’ that ’does no more than yield predictable results.’” *PGS Geophysical*, 891 F.3d at 1363 (quoting *KSR Int’l Co. v. Teleflex, Inc.*, 550 U.S. 398, 415-16 (2007)). As the Supreme Court recognized, a person of ordinary skill in the art may have combined the prior art’s teachings for any of the following reasons: (1) to combine prior art elements according to known methods to yield predictable results; (2) to substitute of one known element for another to obtain predictable results; (3) to use a known technique to improve similar devices, methods, or products in the same way; (4) to apply a known technique to a known device, method, or product ready for improvement to yield predictable results; (5) to choose from a finite number of identified, predictable solutions, with a reasonable expectation of success ("obvious to try"); (6) to adapt known work in one field of endeavor for use in either the same field or a different one based on design incentives or other market forces when the adaptations would have been predictable; and/or (7) to modify the prior art or combine prior art teachings to arrive at the claimed invention according to a teaching, suggestion, or motivation in the prior art. *KSR*, 550 U.S. at 401.

The Asserted Claims of the '889 patent are invalid under either 35 U.S.C. § 102 or alternatively 35 U.S.C. § 103, either under the doctrine of single-reference obviousness, when combined with information known to one of ordinary skill in the art at the time of the alleged invention, or in combination with one or more other reference(s) disclosed herein. Indeed, each element of each Asserted Claim is disclosed in numerous prior art references, and it would have been obvious to combine the teachings of the prior art in any number of ways to render the Asserted Claims obvious. These combinations and modifications of the prior art, which would have rendered obvious the Asserted Claims of the '889 patent, arise from ordinary efforts, ordinary skill, common sense, or would have been obvious to try or otherwise predictable. Moreover, design improvements and other market forces would have prompted the combinations and modifications.

Moreover, each of the identified references herein is analogous art to the '889 patent and to each other. Each reference is in this same field of endeavor as the '889 patent—i.e., treating tissue in the body—and each is reasonably pertinent to solving the same problem that the '889 patent purports to solve—i.e., applying energy to tissue via a device with electrodes.

There is also no objective indicia of nonobviousness for the '889 patent. Neurent bears the burden of coming forward with evidence of objective indicia of nonobviousness and its purported nexus to the Asserted Claims. Neurent has provided no such assertions, much less evidence, of objective indicia of nonobviousness. Aerin is not aware of any unexpected results, satisfaction of a long-felt unmet need, commercial success, failure of others, skepticism, industry praise, or copying that would support the nonobviousness the Asserted Claims of the ’889 patent. Regardless of any purported objective indicia of nonobviousness, any such evidence cannot overcome the strong prima facie showing of obviousness as demonstrated by the teachings of the prior art and combinations of prior art described above. Aerin reserves the right to amend and/or supplement these Initial Invalidity Contentions to the extent Neurent later presents new arguments or evidence of objective indicia of nonobviousness.

Aerin further incorporates by reference herein its Petition for Inter Partes Review of the ’889 patent in Case No. IPR2025-01125, filed on June 24, 2025, as well as any accompanying exhibits and declarations.

Aerin also incorporates by reference herein the petitions for Inter Partes Review, challenging U.S. Patent Nos. 9,072,597; 9,415,914; 11,241,271; 11,033,318; 11,766,286;10,610,675; 10,894,011; and 11,679,077, filed by Neurent in Case Nos. IPR2024-00275; IPR2024-00276; IPR2024-00277; IPR2024-00278; IPR2024-00282; IPR2024-00279; IPR2024-00280; and IPR2024-00669, respectively. Each of the allegations in Neurent’s IPR petitions (Case Nos. IPR2024-00275; IPR2024-00276; IPR2024-00277; IPR2024-00278; IPR2024-00282; IPR2024-00279; IPR2024-00280; and IPR2024-00669), provided above in Section IV.A, are provided as exemplary assertions and would apply equally to substantially similar elements from the ’889 patent. Indeed, while representative citations are mapped against the limitations of the ’262 patent, these assertions operate as concessions for similar limitations of the ’889 patent, and Aerin reserves the right to rely on any and all citations from Neurent’s IPR petitions for each claim of an Asserted Patent. Thus, Aerin maintains that each of Neurent’s assertions in its Petitions render the Asserted Claims of the ’889 patent invalid for the same reasons they render the Asserted Claims of the ’262 patent invalid. Aerin also reserves the right to present additional evidence, revise, amend, and/or supplement these exemplary IPR citations.

C. The ’973 Patent

The Asserted Claims of the ’973 patent are invalid under 35 U.S.C. §§ 102 and/or 103 as anticipated by or obvious over the prior art disclosed above and in attached Exhibits C1-C7. Exhibits C1-C7 contain exemplary prior art that anticipates or renders obvious the Asserted Claims as applied by Neurent in this litigation. Some references both anticipate and render the claims obvious. Representative citations of disclosures from exemplary prior art references are mapped against the limitations in the ’973 patent and can be found in Exhibits C1-C7.

For instance, Aerin provides the following non-limiting, exemplary grounds of prior art that render the Asserted Claims of the ’973 patent anticipated, according to Neurent’s initial infringement contentions:

1. Frazier ’199 anticipates the Asserted Claims of the ’973 patent under 35 U.S.C. § 102.
2. Each Wolf reference—Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290—anticipates the Asserted Claims of the ’973 patent under 35 U.S.C. § 102.
3. Each Townley reference—Townley ’459 and Townley ’460—anticipates the Asserted Claims of the ’973 patent under 35 U.S.C. § 102.
4. RhinAer Stylus FG815 IFU anticipates the Asserted Claims of the ’973 patent under 35 U.S.C. § 102.
5. The RhinAer System anticipates the Asserted Claims of the ’973 patent under 35 U.S.C. § 102.

To the extent any references are found to not anticipate, these references, alone or in combination with the knowledge of a person having ordinary skill in the art, and/or one or more other references identified above, alternatively render the claim obvious. For the purposes of 35

U.S.C. § 103, the prior art in the attached Exhibits may be applied alone or in combination with any other reference identified above in Sections III.A-D. For instance, Aerin provides the following, non-limiting, exemplary grounds and combinations of prior art that render the Asserted Claims of the ’973 patent obvious:

1. Frazier ’199 renders the Asserted Claims of the ’973 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.
2. Wolf ’597 renders the Asserted Claims of the ’973 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.
3. Wolf ’194 renders the Asserted Claims of the ’973 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.
4. Wolf ’271 renders the Asserted Claims of the ’973 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’194; Wolf ’318; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.

5. Wolf ’318 renders the Asserted Claims of the ’973 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.

6. Wolf ’286 renders the Asserted Claims of the ’973 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’290; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.

7. Wolf ’290 renders the Asserted Claims of the ’973 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.

8. Angeles ’223 renders the Asserted Claims of the ’973 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.

9. Townley ’459 renders the Asserted Claims of the ’973 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.

10. Townley ’460 renders the Asserted Claims of the ’973 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’459; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.
11. RhinAer Stylus FG815 IFU renders the Asserted Claims of the ’973 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Console FG226 IFU; and/or The RhinAer System.
12. RhinAer Console FG226 IFU renders the Asserted Claims of the ’973 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; and/or The RhinAer System
13. The RhinAer System renders the Asserted Claims of the ’973 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; and/or RhinAer Console FG226 IFU.

“The obviousness inquiry entails consideration of whether a person of ordinary skill in the art would have been motivated to combine the teachings of the prior art references to achieve the claimed invention, and … would have had a reasonable expectation of success in doing so.” *PGS Geophysical AS v. Iancu*, 891 F.3d 1354, 1363 (Fed. Cir. 2018). A “motivation and reasonable expectation may be present where the claimed invention is the ‘combination of familiar elements according to known methods' that 'does no more than yield predictable results.'" *PGS Geophysical*, 891 F.3d at 1363 (quoting *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398, 415-16 (2007)). As the Supreme Court recognized, a person of ordinary skill in the art may have combined the prior art's teachings for any of the following reasons: (1) to combine prior art elements according to known methods to yield predictable results; (2) to substitute of one known element for another to obtain predictable results; (3) to use a known technique to improve similar devices, methods, or products in the same way; (4) to apply a known technique to a known device, method, or product ready for improvement to yield predictable results; (5) to choose from a finite number of identified, predictable solutions, with a reasonable expectation of success ("obvious to try"); (6) to adapt known work in one field of endeavor for use in either the same field or a different one based on design incentives or other market forces when the adaptations would have been predictable; and/or (7) to modify the prior art or combine prior art teachings to arrive at the claimed invention according to a teaching, suggestion, or motivation in the prior art. *KSR*, 550 U.S. at 401.

The Asserted Claims of the '973 patent are invalid under either 35 U.S.C. § 102 or alternatively 35 U.S.C. § 103, either under the doctrine of single-reference obviousness, when combined with information known to one of ordinary skill in the art at the time of the alleged invention, or in combination with one or more other reference(s) disclosed herein. Indeed, each element of each Asserted Claim is disclosed in numerous prior art references, and it would have been obvious to combine the teachings of the prior art in any number of ways to render the Asserted Claims obvious. These combinations and modifications of the prior art, which would have rendered obvious the Asserted Claims of the '973 patent, arise from ordinary efforts, ordinary skill, common sense, or would have been obvious to try or otherwise predictable. Moreover, design improvements and other market forces would have prompted the combinations and modifications.

Moreover, each of the identified references herein is analogous art to the ’973 patent and to each other. Each reference is in this same field of endeavor as the ’973 patent—i.e., treating tissue in the body—and each is reasonably pertinent to solving the same problem that the ’973 patent purports to solve—i.e., applying energy to tissue via a device with electrodes.

There is also no objective indicia of nonobviousness for the ’973 patent. Neurent bears the burden of coming forward with evidence of objective indicia of nonobviousness and its purported nexus to the Asserted Claims. Neurent has provided no such assertions, much less evidence, of objective indicia of nonobviousness. Aerin is not aware of any unexpected results, satisfaction of a long-felt unmet need, commercial success, failure of others, skepticism, industry praise, or copying that would support the nonobviousness the Asserted Claims of the ’973 patent. Regardless of any purported objective indicia of nonobviousness, any such evidence cannot overcome the strong prima facie showing of obviousness as demonstrated by the teachings of the prior art and combinations of prior art described above. Aerin reserves the right to amend and/or supplement these Initial Invalidity Contentions to the extent Neurent later presents new arguments or evidence of objective indicia of nonobviousness.

Aerin further incorporates by reference herein its Petition for Inter Partes Review of the ’973 patent in Case No. IPR2025-01126, filed on June 25, 2025, as well as any accompanying exhibits and declarations.

Aerin also incorporates by reference herein the petitions for Inter Partes Review, challenging U.S. Patent Nos. 9,072,597; 9,415,914; 11,241,271; 11,033,318; 11,766,286;10,610,675; 10,894,011; and 11,679,077, filed by Neurent in Case Nos. IPR2024-00275; IPR2024-00276; IPR2024-00277; IPR2024-00278; IPR2024-00282; IPR2024-00279; IPR2024-00280; and IPR2024-00669, respectively. Each of the allegations in Neurent’s IPR petitions (Case Nos. IPR2024-00275; IPR2024-00276; IPR2024-00277; IPR2024-00278; IPR2024-00282; IPR2024-00279; IPR2024-00280; and IPR2024-00669), provided above in Section IV.A are provided as exemplary assertions and would apply equally to substantially similar elements from the ’973 patent. Indeed, while representative citations are mapped against the limitations of the ’262 patent, these assertions operate as concessions for similar limitations of the ’973 patent, and Aerin reserves the right to rely on any and all citations from Neurent’s IPR petitions for each claim of an Asserted Patent. Thus, Aerin maintains that each of Neurent’s assertions in its Petitions render the Asserted Claims of the ’973 patent invalid for the same reasons they render the Asserted Claims of the ’262 patent invalid. Aerin also reserves the right to present additional evidence, revise, amend, and/or supplement these exemplary IPR citations.

D. The ’974 Patent

The Asserted Claims of the ’974 patent are invalid under 35 U.S.C. §§ 102 and/or 103 as anticipated by or obvious over the prior art disclosed above and in attached Exhibits D1-D7. Exhibits D1-D7 contain exemplary prior art that anticipates or renders obvious the Asserted Claims as applied by Neurent in this litigation. Some references both anticipate and render the claims obvious. Representative citations of disclosures from exemplary prior art references are mapped against the limitations in the ’974 patent and can be found in Exhibits D1-D7.

For instance, Aerin provides the following non-limiting, exemplary grounds of prior art that render the Asserted Claims of the ’974 patent anticipated, according to Neurent’s initial infringement contentions:

1. Frazier ’199 anticipates the Asserted Claims of the ’974 patent under 35 U.S.C. § 102.
2. Each Wolf reference—Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290—anticipates the Asserted Claims of the ’974 patent under 35 U.S.C. § 102.

3. Each Townley reference—Townley ’459 and Townley ’460—anticipates the Asserted Claims of the ’974 patent under 35 U.S.C. § 102.
4. RhinAer Stylus FG815 IFU anticipates the Asserted Claims of the ’974 patent under 35 U.S.C. § 102.
5. The RhinAer System anticipates the Asserted Claims of the ’974 patent under 35 U.S.C. § 102.

To the extent any references are found to not anticipate, these references, alone or in combination with the knowledge of a person having ordinary skill in the art, and/or one or more other references identified above, alternatively render the claim obvious. For the purposes of 35 U.S.C. § 103, the prior art in the attached Exhibits may be applied alone or in combination with any other reference identified above in Sections III.A-D. For instance, Aerin provides the following, non-limiting, exemplary grounds and combinations of prior art that render the Asserted Claims of the ’974 patent obvious:

1. Frazier ’199 renders the Asserted Claims of the ’974 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.
2. Wolf ’597 renders the Asserted Claims of the ’974 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.
3. Wolf ’194 renders the Asserted Claims of the ’974 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf

’271; Wolf ’318; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.

4. Wolf ’271 renders the Asserted Claims of the ’974 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’194; Wolf ’318; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.

5. Wolf ’318 renders the Asserted Claims of the ’974 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.

6. Wolf ’286 renders the Asserted Claims of the ’974 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’290; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.

7. Wolf ’290 renders the Asserted Claims of the ’974 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.

8. Angeles ’223 renders the Asserted Claims of the ’974 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf

’194; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.

9. Townley ’459 renders the Asserted Claims of the ’974 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.

10. Townley ’460 renders the Asserted Claims of the ’974 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’459; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; RhinAer Console FG226 IFU; and/or The RhinAer System.

11. RhinAer Stylus FG815 IFU renders the Asserted Claims of the ’974 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Console FG226 IFU; and/or The RhinAer System.

12. RhinAer Console FG226 IFU renders the Asserted Claims of the ’974 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf ’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; and/or The RhinAer System

13. The RhinAer System renders the Asserted Claims of the ’974 patent invalid as obvious under 35 U.S.C. § 103 either alone or in view of any combination of Frazier ’199; Wolf

’597; Wolf ’194; Wolf ’271; Wolf ’318; Wolf ’286; Wolf ’290; Angeles ’223; Townley ’459; Townley ’460; Saadat ’200; Schepis ’697; Waldstreicher ’089; Deem ’369; Gliner ’128; Franke ’163; Rajiah ’451; RhinAer Stylus FG815 IFU; and/or RhinAer Console FG226 IFU.

“The obviousness inquiry entails consideration of whether a person of ordinary skill in the art would have been motivated to combine the teachings of the prior art references to achieve the claimed invention, and … would have had a reasonable expectation of success in doing so.” *PGS Geophysical AS v. Iancu*, 891 F.3d 1354, 1363 (Fed. Cir. 2018). A “motivation and reasonable expectation may be present where the claimed invention is the ‘combination of familiar elements according to known methods’ that ’does no more than yield predictable results.’” *PGS Geophysical*, 891 F.3d at 1363 (quoting *KSR Int’l Co. v. Teleflex, Inc.*, 550 U.S. 398, 415-16 (2007)). As the Supreme Court recognized, a person of ordinary skill in the art may have combined the prior art’s teachings for any of the following reasons: (1) to combine prior art elements according to known methods to yield predictable results; (2) to substitute of one known element for another to obtain predictable results; (3) to use a known technique to improve similar devices, methods, or products in the same way; (4) to apply a known technique to a known device, method, or product ready for improvement to yield predictable results; (5) to choose from a finite number of identified, predictable solutions, with a reasonable expectation of success (“obvious to try”); (6) to adapt known work in one field of endeavor for use in either the same field or a different one based on design incentives or other market forces when the adaptations would have been predictable; and/or (7) to modify the prior art or combine prior art teachings to arrive at the claimed invention according to a teaching, suggestion, or motivation in the prior art. *KSR*, 550 U.S. at 401.

The Asserted Claims of the ’974 patent are invalid under either 35 U.S.C. § 102 or alternatively 35 U.S.C. § 103, either under the doctrine of single-reference obviousness, when combined with information known to one of ordinary skill in the art at the time of the alleged invention, or in combination with one or more other reference(s) disclosed herein. Indeed, each element of each Asserted Claim is disclosed in numerous prior art references, and it would have been obvious to combine the teachings of the prior art in any number of ways to render the Asserted Claims obvious. These combinations and modifications of the prior art, which would have rendered obvious the Asserted Claims of the ’974 patent, arise from ordinary efforts, ordinary skill, common sense, or would have been obvious to try or otherwise predictable. Moreover, design improvements and other market forces would have prompted the combinations and modifications.

Moreover, each of the identified references herein is analogous art to the ’974 patent and to each other. Each reference is in this same field of endeavor as the ’974 patent—i.e., treating tissue in the body—and each is reasonably pertinent to solving the same problem that the ’974 patent purports to solve—i.e., applying energy to tissue via a device with electrodes.

There is also no objective indicia of nonobviousness for the ’974 patent. Neurent bears the burden of coming forward with evidence of objective indicia of nonobviousness and its purported nexus to the Asserted Claims. Neurent has provided no such assertions, much less evidence, of objective indicia of nonobviousness. Aerin is not aware of any unexpected results, satisfaction of a long-felt unmet need, commercial success, failure of others, skepticism, industry praise, or copying that would support the nonobviousness the Asserted Claims of the ’974 patent. Regardless of any purported objective indicia of nonobviousness, any such evidence cannot overcome the strong prima facie showing of obviousness as demonstrated by the teachings of the prior art and combinations of prior art described above. Aerin reserves the right to amend and/or supplement these Initial Invalidity Contentions to the extent Neurent later presents new arguments or evidence of objective indicia of nonobviousness.

Aerin further incorporates by reference herein its Petition for Inter Partes Review of the ’974 patent in Case No. IPR2025-01127, filed on June 27, 2025, as well as any accompanying exhibits and declarations.

Aerin also incorporates by reference herein the petitions for Inter Partes Review, challenging U.S. Patent Nos. 9,072,597; 9,415,914; 11,241,271; 11,033,318; 11,766,286;10,610,675; 10,894,011; and 11,679,077, filed by Neurent in Case Nos. IPR2024-00275; IPR2024-00276; IPR2024-00277; IPR2024-00278; IPR2024-00282; IPR2024-00279; IPR2024-00280; and IPR2024-00669, respectively. Each of the allegations in Neurent’s IPR petitions (Case Nos. IPR2024-00275; IPR2024-00276; IPR2024-00277; IPR2024-00278; IPR2024-00282; IPR2024-00279; IPR2024-00280; and IPR2024-00669), provided above in Section IV.A are provided as exemplary assertions and would apply equally to substantially similar elements from the ’974 patent. Indeed, while representative citations are mapped against the limitations of the ’262 patent, these assertions operate as concessions for similar limitations of the ’974 patent, and Aerin reserves the right to rely on any and all citations from Neurent’s IPR petitions for each claim of an Asserted Patent. Thus, Aerin maintains that each of Neurent’s assertions in its Petitions render the Asserted Claims of the ’974 patent invalid for the same reasons they render the Asserted Claims of the ’262 patent invalid. Aerin also reserves the right to present additional evidence, revise, amend, and/or supplement these exemplary IPR citations.

V. Invalidity Grounds Under 35 U.S.C. § 112

A. The ’262 Patent

1. Lack of Written Description and Enablement

At least the following claims, and their dependent claims, of the ’262 patent are invalid because they lack written description or enabling disclosure under 35 U.S.C. § 112, in particular with regard to the limitations identified below:

- Claims 1, 3-5: “multi-electrode end effector”
- Claim 1: “the first electrode is exposed from a surface of the multi-electrode end effector and is positioned at a separate and discrete portion thereon, the first electrode extending in a first outward direction relative to a longitudinal axis of the shaft to interact with anatomy at a first location within the nasal cavity”
- Claim 1: “the second electrode is exposed from a surface of the multi-electrode end effector and is positioned at a separate and discrete portion thereon, the second electrode extending in a second outward direction relative to a longitudinal axis of the shaft to interact with anatomy at a second location within the nasal cavity”
- Claim 1: “delivering energy, via the first and second electrodes, to one or more target sites within a sino-nasal cavity of the patient”
- Claim 8: “wherein the console unit is configured to receive feedback from at least one temperature sensor arranged relative to the first and second electrodes and configured to sense temperature at an interface between tissue and the first and second electrodes, wherein the console unit is configured to control energy output from the first and second electrodes based, at least in part, on the feedback in order to maintain a predetermined temperature of tissue at the one or more target sites”
- Claim 9: “wherein the console unit is configured to receive one or more temperature readings from the at least one temperature sensor and process the readings to determine a level of RF energy to be delivered by the first and second

electrodes that is sufficient to maintain a temperature of tissue at the one or more target sites below a predetermined threshold"

- Claim 10: "wherein the console unit is configured to monitor temperature of tissue at the one or more target sites during delivery of RF energy thereto based on temperature readings from the at least one temperature sensor and further monitor an elapsed time during delivery of RF energy to tissue at the one or more target sites"
- Claim 11: "wherein the console unit is configured to provide, via a display, feedback information to an operator during each treatment application, wherein said feedback information comprises at least an elapsed time during delivery of RF energy to tissue at the one or more target sites"
- Claim 13: "the console unit is configured to control RF energy output from the first and second electrodes in separate and discrete treatment applications of RF energy to be delivered to tissue at the one or more target sites"
- Claim 15: "wherein the predetermined threshold maximum temperature is less than 90ºC"
- Claim 16: "wherein the predetermined threshold maximum temperature is greater than 37° C. and less than 90° C"
- Claims 17-20: "each separate and discrete treatment application"

2. Indefiniteness

At least the following claims of the '262 patent, and their dependent claims, are invalid as indefinite under 35 U.S.C. § 112 for failing to particularly point out and distinctly claim the subject matter which the applications regard as their invention, in particular with regard to the limitations identified below:

- Claim 1: "the multi-electrode end effector being operably associated with a shaft of a treatment device"
- Claim 1: "a longitudinal axis of the shaft"
- Claim 1: "the first electrode is exposed from a surface of the multi-electrode end effector and is positioned at a separate and discrete portion thereon, the first electrode extending in a first outward direction relative to a longitudinal axis of the shaft to interact with anatomy at a first location within the nasal cavity"
- Claim 1: "the second electrode is exposed from a surface of the multi-electrode end effector and is positioned at a separate and discrete portion thereon, the second electrode extending in a second outward direction relative to a longitudinal axis of the shaft to interact with anatomy at a second location within the nasal cavity"
- Claim 1: "one or more target sites"
- Claim 1: "a sino-nasal cavity"
- Claims 1 and 5: "operably associated with"
- Claim 2: "the tissue"
- Claim 6: "operably coupled to"
- Claims 8-11, 13: "tissue"
- Claim 8: "wherein the console unit is configured to receive feedback from at least one temperature sensor arranged relative to the first and second electrodes and configured to sense temperature at an interface between tissue and the first and

second electrodes, wherein the console unit is configured to control energy output from the first and second electrodes based, at least in part, on the feedback in order to maintain a predetermined temperature of tissue at the one or more target sites"

- Claim 9: "the readings"
- Claim 10: "temperature readings"
- Claim 13: "the console unit is configured to control RF energy output from the first and second electrodes in separate and discrete treatment applications of RF energy to be delivered to tissue at the one or more target sites"
- Claim 13: "the target site"
- Claim 13: "the desired effect"
- Claim 14: "automatically control and adjust RF energy output from the first and second electrodes for each treatment application based, at least in part, on the predetermined elapsed time period and the predetermined threshold maximum temperature"
- Claims 17-20: "each separate and discrete treatment application"

B. The '889 Patent

1. Lack of Written Description and Enablement

At least the following claims, and their dependent claims, of the '889 patent are invalid because they lack written description or enabling disclosure under 35 U.S.C. § 112, in particular with regard to the limitations identified below:

- Claims 1-2 and 15-17: "multi-electrode end effector"

- Claim 1: "the first electrode is exposed from a surface of the multi-electrode end effector and is positioned at a discrete portion thereon, the first electrode extending in a first outward direction relative to a longitudinal axis of the shaft to interact with anatomy at a first location within the nasal cavity"
- Claim 1: "the second electrode is exposed from the surface of the multi-electrode end effector and is positioned at a discrete portion thereon, the second electrode extending in a second outward direction relative to a longitudinal axis of the shaft to interact with anatomy at a second location within the nasal cavity"
- Claims 1 and 18: "delivering energy, via the first and second electrodes, to one or more target sites within a sino-nasal cavity of the patient"
- Claims 2 and 15; "wherein [radiofrequency (RF) / RF] energy is delivered from the first and second electrodes to tissue at the one or more target sites"
- Claim 5: "wherein the console unit is configured to receive feedback from at least one temperature sensor arranged relative to the first and second electrodes and configured to sense temperature at an interface between tissue and the first and second electrodes, wherein the console unit is configured to control energy output from the first and second electrodes based, at least in part, on the feedback in order to maintain a predetermined temperature of tissue at the one or more target sites"
- Claim 6: "wherein the console unit is configured to receive one or more temperature readings from the at least one temperature sensor and process the readings to determine a level of RF energy to be delivered by the first and second

electrodes that is sufficient to maintain a temperature of tissue at the one or more target sites below a predetermined threshold"

- Claim 7: "wherein the console unit is configured to monitor temperature of tissue at the one or more target sites during delivery of RF energy thereto based on temperature readings from the at least one temperature sensor and further monitor an elapsed time during delivery of RF energy to tissue at the one or more target sites"
- Claim 8: "wherein the console unit is configured to provide, via a display, feedback information to an operator during a given treatment application, wherein said feedback information comprises at least an elapsed time during delivery of RF energy to tissue at the one or more target sites"
- Claim 11: "wherein the predetermined threshold maximum temperature is less than 90° C"
- Claim 12: "wherein the predetermined threshold maximum temperature is greater than 37° C. and less than 90° C"
- Claim 15: "wherein the shaft is a substantially rigid shaft with a hollow cavity, wherein the shaft comprises an outer sheath and hypotube"
- Claims 15-17: "wherein the at least [four/six/eight] electrodes are oriented at an angle less than 90 degrees relative to the shaft"

2. Indefiniteness

At least the following claims of the '889 patent, and their dependent claims, are invalid as indefinite under 35 U.S.C. § 112 for failing to particularly point out and distinctly claim the subject matter which the applications regard as their invention, in particular with regard to the limitations identified below:

- Claim 1: "the multi-electrode end effector being operably associated with a shaft of a treatment device"
- Claim 1: "a longitudinal axis of the shaft"
- Claim 1: "the first electrode is exposed from a surface of the multi-electrode end effector and is positioned at a discrete portion thereon, the first electrode extending in a first outward direction relative to a longitudinal axis of the shaft to interact with anatomy at a first location within the nasal cavity"
- Claim 1: "the second electrode is exposed from the surface of the multi-electrode end effector and is positioned at a discrete portion thereon, the second electrode extending in a second outward direction relative to a longitudinal axis of the shaft to interact with anatomy at a second location within the nasal cavity"
- Claim 1: "one or more target sites"
- Claim 1: "a sino-nasal cavity"
- Claims 1, 2, 15: "operably associated with"
- Claims 3 and 15: "operably coupled to"
- Claim 5: "wherein the console unit is configured to receive feedback from at least one temperature sensor arranged relative to the first and second electrodes and configured to sense temperature at an interface between tissue and the first and second electrodes, wherein the console unit is configured to control energy output from the first and second electrodes based, at least in part, on the feedback in

order to maintain a predetermined temperature of tissue at the one or more target sites"

- Claims 5-8, 10: "tissue"
- Claim 6: "the readings"
- Claim 7: "temperature readings"
- Claim 10: "the target site"
- Claim 10: "the desired effect"
- Claim 10: "automatically control and adjust RF energy output from the first and second electrodes based, at least in part, on a predetermined elapsed time period and a predetermined threshold maximum temperature during delivery of RF energy"
- Claim 15: "the delivery of radiofrequency (RF) energy"
- Claims 15-17: "the at least [four/six/eight] electrodes are oriented at an angle less than 90 degrees relative to the shaft"
- Claim 18: "one or more target sites"

C. The '973 Patent

1. Lack of Written Description and Enablement

At least the following claims, and their dependent claims, of the '973 patent are invalid because they lack written description or enabling disclosure under 35 U.S.C. § 112, in particular with regard to the limitations identified below:

- Claims 1, 3 16, 18: "multi-electrode end effector"
- Claims 1 and 16: "the first electrode is exposed from a surface of the multi-electrode end effector and is positioned at a discrete portion thereon, the first

electrode extending in a first outward direction relative to a longitudinal axis of the shaft to interact with anatomy at a first location within the nasal cavity”

- Claims 1 and 16: “the second electrode is exposed from the surface of the multi-electrode end effector and is positioned at a discrete portion thereon, the second electrode extending in a second outward direction relative to a longitudinal axis of the shaft to interact with anatomy at a second location within the nasal cavity”
- Claims 1 and 16: “wherein the plurality of electrodes comprises at least [six/eight] electrodes extend beyond surface of the shaft and are oriented at an angle less than 90 degrees relative to the shaft”
- Claims 1 and 16: “delivering energy, via the first and second electrodes, to one or more target sites within a sino-nasal cavity of the patient”
- Claims 3 and 18: “wherein the shaft is a substantially rigid shaft with a hollow cavity, wherein the shaft comprises an outer sheath and hypotube”
- Claims 6 and 21: “wherein the console unit is configured to receive feedback from at least one temperature sensor arranged relative to the first and second electrodes and configured to sense temperature at an interface between tissue and the first and second electrodes, wherein the console unit is configured to control energy output from the first and second electrodes based, at least in part, on the feedback in order to maintain a predetermined temperature of tissue at the one or more target sites”
- Claims 7 and 22: “wherein the console unit is configured to receive one or more temperature readings from the at least one temperature sensor and process the readings to determine a level of RF energy to be delivered by the first and second

electrodes that is sufficient to maintain a temperature of tissue at the one or more target sites below a predetermined threshold"

- Claims 8 and 23: "wherein the console unit is configured to monitor temperature of tissue at the one or more target sites during delivery of RF energy thereto based on temperature readings from the at least one temperature sensor and further monitor an elapsed time during delivery of RF energy to tissue at the one or more target sites"
- Claims 9 and 24: "wherein the console unit is configured to provide, via a display, feedback information to an operator during a given treatment application, wherein said feedback information comprises at least an elapsed time during delivery of RF energy to tissue at the one or more target sites"
- Claims 12 and 27: "wherein the predetermined threshold maximum temperature is less than 90° C"
- Claims 13 and 28: "wherein the predetermined threshold maximum temperature is greater than 37° C. and less than 90° C"

2. Indefiniteness

At least the following claims of the '973 patent, and their dependent claims, are invalid as indefinite under 35 U.S.C. § 112 for failing to particularly point out and distinctly claim the subject matter which the applications regard as their invention, in particular with regard to the limitations identified below:

- Claim 1: "the multi-electrode end effector being operably associated with a shaft of a treatment device"
- Claims 1, 3, 16, and 18: "operably associated with"

- Claims 3, 4, 18, and 19: "operably coupled to"
- Claims 1 and 16: "a longitudinal axis of the shaft"
- Claims 1 and 16: "the first electrode is exposed from a surface of the multi-electrode end effector and is positioned at a discrete portion thereon, the first electrode extending in a first outward direction relative to a longitudinal axis of the shaft to interact with anatomy at a first location within the nasal cavity"
- Claims 1 and 16: "the second electrode is exposed from the surface of the multi-electrode end effector and is positioned at a discrete portion thereon, the second electrode extending in a second outward direction relative to a longitudinal axis of the shaft to interact with anatomy at a second location within the nasal cavity"
- Claims 1 and 16: "one or more target sites"
- Claims 1 and 16: "a sino-nasal cavity"
- Claims 1 and 16: "the delivery of RF energy"
- Claims 1 and 16: "at least [six/eight] electrodes extend beyond surface of the shaft and are oriented at an angle less than 90 degrees relative to the shaft"
- Claims 1 and 16: "wherein the at least [six/eight] electrodes comprise a first electrode spaced apart from a second electrode along a length of the multi-electrode end effector"
- Claims 2 and 17: "the tissue"
- Claims 6 and 21: "wherein the console unit is configured to receive feedback from at least one temperature sensor arranged relative to the first and second electrodes and configured to sense temperature at an interface between tissue and the first and second electrodes, wherein the console unit is configured to control

energy output from the first and second electrodes based, at least in part, on the feedback in order to maintain a predetermined temperature of tissue at the one or more target sites"

- Claims 6-9 and 21-24: "tissue"
- Claims 7 and 22: "the readings"
- Claims 8 and 23: "temperature readings"
- Claims 11 and 26: "automatically control and adjust RF energy output from the first and second electrodes based, at least in part, on a predetermined elapsed time period and a predetermined threshold maximum temperature"
- Claims 11 and 26: "the tissue"
- Claims 11 and 26: "the target site"
- Claims 11 and 26: "the desired effect"
- Claim 21: "at least one temperature sensor arranged relative to the first and second electrodes"

D. The '974 Patent

1. Lack of Written Description and Enablement

At least the following claims, and their dependent claims, of the '974 patent are invalid because they lack written description or enabling disclosure under 35 U.S.C. § 112, in particular with regard to the limitations identified below:

- Claims 1, 3, 5-8: "multi-electrode end effector"
- Claim 1: "the first electrode is exposed from a surface of the multi-electrode end effector and is positioned at a discrete portion thereon, the first electrode

extending in a first outward direction relative to a longitudinal axis of the shaft to interact with anatomy at a first location within the nasal cavity"

- Claim 1: "the second electrode is exposed from the surface of the multi-electrode end effector and is positioned at a discrete portion thereon, the second electrode extending in a second outward direction relative to a longitudinal axis of the shaft to interact with anatomy at a second location within the nasal cavity"
- Claim 1: "wherein at least one portion of the multi-electrode end effector comprises a diameter that is larger than a diameter of the shaft"
- Claim 1: "delivering energy, via the first and second electrodes, to one or more target sites within a sino-nasal cavity of the patient"
- Claim 5: "wherein the shaft is a substantially rigid shaft with a hollow cavity, wherein the shaft comprises an outer sheath and hypotube"
- Claims 5 and 8: "wherein [RF / radiofrequency (RF)] energy is delivered from the first and second electrodes to tissue at the one or more target sites"
- Claims 5-7: "wherein the at least [four/six/eight] electrodes are oriented at an angle less than 90 degrees relative to the shaft"
- Claim 11: "wherein the console unit is configured to receive feedback from at least one temperature sensor arranged relative to the first and second electrodes and configured to sense temperature at an interface between tissue and the first and second electrodes, wherein the console unit is configured to control energy output from the first and second electrodes based, at least in part, on the feedback in order to maintain a predetermined temperature of tissue at the one or more target sites"

- Claim 12: “wherein the console unit is configured to receive one or more temperature readings from the at least one temperature sensor and process the readings to determine a level of RF energy to be delivered by the first and second electrodes that is sufficient to maintain a temperature of tissue at the one or more target sites below a predetermined threshold”
- Claim 13: “wherein the console unit is configured to monitor temperature of tissue at the one or more target sites during thereto based on temperature readings from the at least one temperature sensor and further monitor an elapsed time during delivery of RF energy to tissue at the one or more target sites”
- Claim 14: “wherein the console unit is configured to provide, via a display, feedback information to an operator during a given treatment application, wherein said feedback information comprises at least an elapsed time during delivery of RF energy to tissue at the one or more target sites”
- Claim 17: “wherein the predetermined threshold maximum temperature is less than 90° C”
- Claim 18: “wherein the predetermined threshold maximum temperature is greater than 37° C. and less than 90° C”

2. Indefiniteness

At least the following claims of the ’974 patent, and their dependent claims, are invalid as indefinite under 35 U.S.C. § 112 for failing to particularly point out and distinctly claim the subject matter which the applications regard as their invention, in particular with regard to the limitations identified below:

- Claim 1: “the multi-electrode end effector being operably associated with a shaft of a treatment device”
- Claims 1, 5, and 8: “operably associated with”
- Claim 1: “a diameter”
- Claim 1: “a sino-nasal cavity”
- Claim 1: “a longitudinal axis of the shaft”
- Claim 1: “the first electrode is exposed from a surface of the multi-electrode end effector and is positioned at a discrete portion thereon, the first electrode extending in a first outward direction relative to a longitudinal axis of the shaft to interact with anatomy at a first location within the nasal cavity”
- Claim 1: “the second electrode is exposed from the surface of the multi-electrode end effector and is positioned at a discrete portion thereon, the second electrode extending in a second outward direction relative to a longitudinal axis of the shaft to interact with anatomy at a second location within the nasal cavity”
- Claim 1: “one or more target sites”
- Claim 2: “the tissue”
- Claim 3: “at least one temperature sensor arranged relative to first and second electrode”
- Claim 3: “first and second electrode”
- Claim 5: “the delivery of radiofrequency (RF) energy”
- Claims 5-7: “the at least [four/six/eight] electrodes are oriented at an angle less than 90 degrees relative to the shaft”
- Claims 5 and 9: “operably coupled to”

- Claim 11: "tissue"
- Claims 11-14: "tissue at the one or more target sites"
- Claim 11: "at least one temperature sensor arranged relative to the first and second electrodes"
- Claim 11: "wherein the console unit is configured to receive feedback from at least one temperature sensor arranged relative to the first and second electrodes and configured to sense temperature at an interface between tissue and the first and second electrodes, wherein the console unit is configured to control energy output from the first and second electrodes based, at least in part, on the feedback in order to maintain a predetermined temperature of tissue at the one or more target sites"
- Claim 12: "the readings"
- Claim 13: "temperature readings"
- Claims 13-14 and 16: "delivery of RF energy"
- Claim 16: "the target site"
- Claim 16: "the desired effect"
- Claim 16: "automatically control and adjust RF energy output from the first and second electrodes based, at least in part, on a predetermined elapsed time period and a predetermined threshold maximum temperature"

VI. Inter-Partes Review Proceedings Involving Neurent's Asserted Patents

Aerin incorporates by reference its invalidity theories set forth in its petitions for inter partes review that were filed in the following *inter partes* review proceedings.

Challenged Neurent Patent	Case Number
’262 patent	IPR2025-01124
’889 patent	IPR2025-01125
’973 patent	IPR2025-01126
’974 patent	IPR2025-01127

VII. Document Production

Aerin is producing documents bearing BATES numbers AERIN_00010455-2692 concurrently with the service of these Initial Invalidity Contentions.

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