

Watson Guide IP, LLC
Patent No. 11,806,209 – PGR2024-00040

Filed on behalf of Watson Guide IP, LLC

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

3D DIAGNOSTIX, INC.,

Petitioner,

v.

WATSON GUIDE IP, LLC

Patent Owner

Case PGR2024-00040
U.S. Patent No. 11,806,209

PATENT OWNER'S SUR-REPLY TO PETITIONER'S REPLY

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PATENT OWNER’S EXHIBIT LIST

Exhibit	Description
2001	Disclaimer of Claims 11 and 13 of U.S. Pat. No. 11,806,209
2002	Definition of “Surround” from New Webster’s Dictionary
2003	Definition of “Surround” from Oxford English Dictionary
2004	Definition of “Surround” from Merriam-Webster Dictionary
2005	Definition of “Surround” from Dictionary.com
2006	Declaration of Alan Banks
2007	Declaration of Jeffrey Elo, DDS, MS, FACS
2008	Curriculum Vitae of Jeffrey Elo, DDS, MS, FACS
2009	Definition of “Mouthpiece” from American Heritage Dictionary
2010	Transcript, Deposition of Dr. Douglas Erickson, August 12, 2025

I. Introduction

Fundamentally, Petitioner relies on a definition of mouthpiece – “any dental device placed in the mouth” (Petitioner’s Reply, p. 5) – that is nonsensical in its overbreadth. Under that definition, Petitioner’s expert, Dr. Erickson, admits that a toothbrush and toothpick can be considered mouthpieces. EX 2010 (Erickson Depo Tr.) 37:25-39:13, 40:21-41:12) even though he admits, that as a person of ordinary skill in the art, he has never heard them referred to as such. EX 2010 (Erickson Depo Tr.) 38:21-22).

Indeed, the very prosecution history that Petitioner relies on – the disclosure of “mouthpieces” that do not surround the teeth in the provisional application, that are not carried forward in the application for the ‘209 patent – establishes, under binding Federal Circuit law, that the term “mouthpiece” was narrowed for the ‘209 patent. *FMC Corp. v. Sharda USA, LLC*, No. 2024-2335, 2025 U.S. App. LEXIS 19313, at *10 (Fed. Cir. Aug. 1, 2025); *DDR Holdings, LLC v. Priceline.com LLC*, 122 F.4th 911 (Fed. Cir. 2024) (when a Patent Owner, alters the specification from a provisional, that indicates an evolution of the applicant’s intended meaning of the claim term). In fact, the only disclosure of “mouthpiece” in the ‘209 Patent is of “a device that is inserted into the mouth and worn over the teeth.”

Petitioner also misunderstands or misrepresents Patent Owner’s proposed construction of “surround at least a portion of the teeth” as “enclose at least some

teeth of the patient.” The issue is not the substitution of the word “enclose” for the term “surround”, but that at least some teeth are enclosed/surrounded, rather than at least some part of the teeth. As explained in Patent Owner’s Preliminary Response, that is the construction supported by the file history. Fitting like a hand in a glove is not the same as a foot fitting in shallow footprints. None of the cited prior art completely encloses any teeth of a patient.

As the Examiner found, Llop fails to teach or suggest a “mouthpiece . . . configured and dimensioned to surround at least a portion of the teeth” because Llop’s struts and tooth molds surround only minimal portions of the teeth rather than at least some of the teeth. Sichuan and Yau suffer from the same defect. None of Llop, Sichuan or Yau teach a “mouthpiece . . . configured and dimensioned to enclose at least some teeth of the patient.”

Petitioner raises some concerns regarding certain of Patent Owner’s evidence of secondary indicia of non-obviousness. However, Patent Owner has shown a nexus between the CHROME GuidedSmile product produced by GuidedSMILE, LLC (Patent Owner’s exclusive licensee) and Petitioner has failed to rebut that nexus. The evidence taken as a whole show that there are substantial secondary indicia of non-obviousness.

Accordingly, the patentability of the claims should be confirmed over all the cited references.

II. Claim Construction

A. “Mouthpiece”

Petitioner wrongly claims that the ‘209 Patent discloses a “mouthpiece” that is not limited to “a device that is inserted into the mouth and worn over the teeth.” Petitioner’s basis for this claim is that the ‘209 Patent claims priority from U.S. Provisional Patent App. No. 62/508,377 which discloses two embodiments to locate the fixation base, including a fully edentulous embodiment. EX1005, 22; (“This invention uses the patients existing teeth (partially edentulous) or denture teeth for a (fully edentulous) to set the fixation base”); EX 2010 (Erickson Depo Tr.) 30:10-21. However, as admitted by Petitioner’s expert, the ‘209 Patent does not teach or suggest any “mouthpiece” that is used on toothless (edentulous) patients. EX 2010 (Erickson Depo Tr.) 31:1-19.

The deliberate exclusion of any discussion of edentulous patients or dentures in the ‘209 patent shows the inventor’s intent that the “mouthpiece” is “a device that is inserted into the mouth and worn over the teeth.” In fact, the ‘209 patent did not carry over and maintain the specification from the earlier filed U.S. Provisional Application No. 62/508,377. Rather, as acknowledged by Petitioner’s expert Douglas Erickson, the inventor deleted each of the several instances of disclosure of guides relating to edentulous patients. EX 2010 (Erickson Depo Tr.) 31:1-19.

The Federal Circuit has held that when a Patent Owner, like Watson Guide here, materially alters the specification from a provisional, that one skilled in the art would understand that material alteration to indicate an evolution of the applicant's intended meaning of the claim term. *FMC Corp. v. Sharda USA, LLC*, No. 2024-2335, 2025 U.S. App. LEXIS 19313, at *6-7 (Fed. Cir. Aug. 1, 2025); *DDR Holdings, LLC v. Priceline.com LLC*, 122 F.4th 911 (Fed. Cir. 2024).

Petitioner and its expert rely on the '209 Patent incorporation by reference of U.S. Provisional Application No. 62/508,377 to argue that this means that all of the teachings of U.S. Provisional Application No. 62/508,377 are in the '209 specification. However, the Federal Circuit has held that "[t]he use of a restrictive term in an earlier application does not reinstate that term in a later patent that purposely deletes the term, even if the earlier patent is incorporated by reference." *Finjan LLC v. ESET, LLC*, 51 F.4th 1377, 1383 (Fed. Cir. 2022). Accordingly, as a matter of binding Federal Circuit law, the "mouthpiece" of the '209 Patent is only directed to a device that is inserted into the mouth and worn over the teeth. This construction is complementary to the rest of the specification and claim language

that the “mouthpiece” is “configured and dimensioned to surround at least a portion of the teeth of the patient.”¹

Petitioner’s proposed construction of “mouthpiece” as “any dental device placed in the mouth” is so broad as to be nonsensical. Indeed, Petitioner’s expert said that a toothpick and toothbrush falls within Petitioner’s definition of “mouthpiece”. EX 2010 (Erickson Depo Tr.) 37:25-39:13, 40:22-41:12. At the same time, Petitioner’s expert, a person skilled in the art, admitted that he had never heard the term mouthpiece used that way. EX 2010 (Erickson Depo Tr.) 38:21-22 (“when I hear mouthpiece, I don't think of toothpick and toothbrush”). Indeed, Petitioner’s expert testified that he did not even know if the facts he used to develop his overly broad definition of mouthpiece were true. Specifically, in his Supplemental Declaration, Petitioner’s expert noted that dental supplier Henry Schein Dental has 29 items for sale on its website matching the search term “mouthpiece” and that “none of these items appear to be worn over the teeth of the patient.” EX1050, Par. 10; EX1038. However, when pressed, Petitioner’s expert

¹ Petitioner’s arguments that the claims should be limited to metal based on statements made in U.S. Provisional Application No. 62/508,377 suffer from this same error. The ‘209 Patent has a broader disclosure and does not contain the statements cited by Petitioner as limiting. EX1005, 13, 20, 26-28. The remaining claims in the ‘209 Patent are not limited to any particular material.

admitted he that he did not know whether this fact was true. EX 2010 (Erickson Depo Tr.) 27:15-20. In contrast to the declaration, at least some of the items are plainly worn over the teeth of a patient.

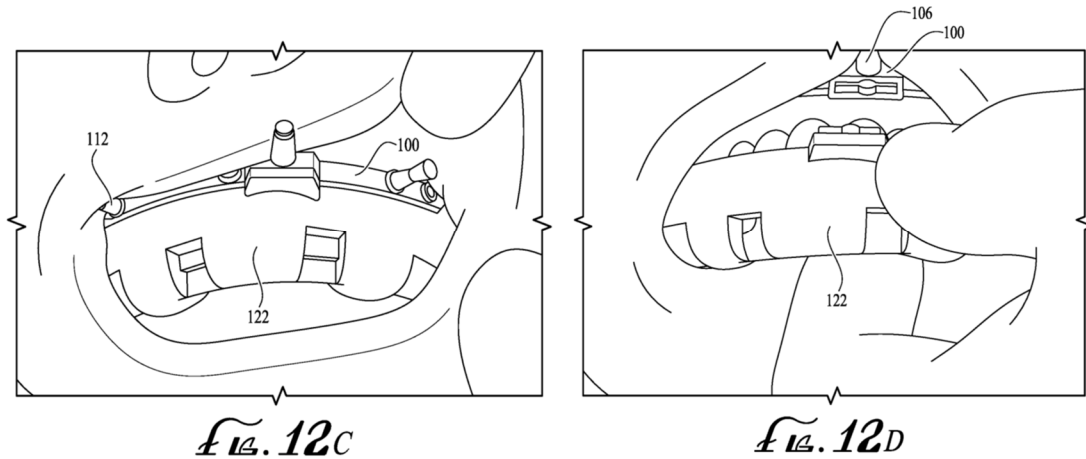
https://www.youtube.com/watch?v=mqb4uF-G_Xc (at 3:07). Petitioner’s construction of “mouthpiece” is not supported by the specification, prosecution history, or the understanding of those skilled in the art. It should be rejected.

B. “Surround At Least A Portion Of the Teeth”

“Surround at least a portion of the teeth” should be construed as “enclose at least some teeth of the patient.” The issue is not, as Petitioner argues, the substitution of the word “enclose” for the term “surround”, but rather that at least some teeth are enclosed/surrounded, rather than at least some portion of the teeth are surrounded.

As explained in Patent Owner’s Preliminary Response, this construction is evident from the specification which states that the mouthpiece is “configured and dimensioned to surround teeth (not shown) of the patient.” EX1001, 4:61-67. Moreover, as explained in Patent Owner’s Response to Petition for Post-Grant Review, Figures 12A through 12D and the accompanying portion of the specification, col. 8:6-18, shows and describes the mouthpiece 122 in additional detail. Fig. 12C shows that the mouthpiece guide 122 completely encloses the teeth

on the patient's maxillary bone to properly seat the fixation base. EX1001, 8:16-19.

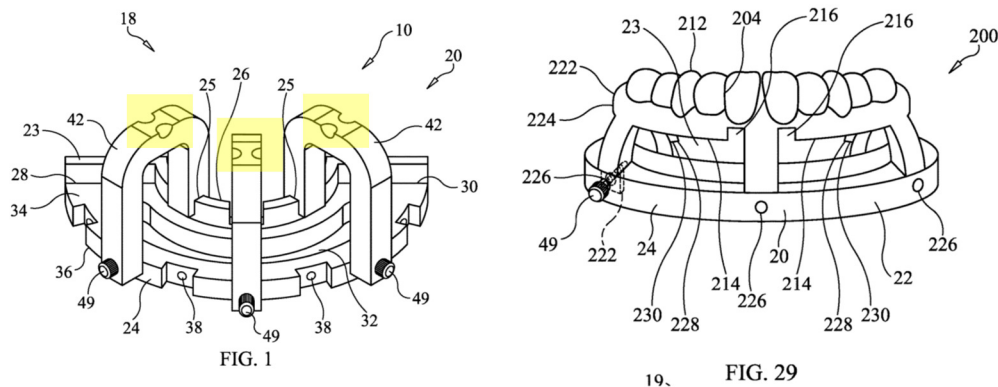


Patent Owner's construction is also evident from arguments made during prosecution that played a critical role in allowance of the claims over Llop." Patent Owner specifically distinguished U.S. Patent Application Publication No. 2017/0252126 to Llop (the primary reference cited by Petitioner), because in the '209 Patent the patient's existing teeth provide a "hand and glove" relationship with the mouthpiece. EX1002, pp. 166, 167. Llop has indentations that go around some portions of a patient's teeth. However, the indentations on the struts of Llop, the biteplate of Sichuan or the biteplate of Yau are not a "mouthpiece . . . dimensioned and configured to enclose at least some teeth of the patient."

III. Llop + Sichuan Do Not Disclose All Claim Elements

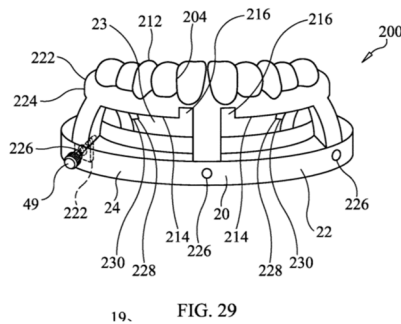
Petitioner oversimplifies Patent Owner’s argument as being limited to a claim that neither Llop nor Sichuan teach a “mouthpiece”. Patent Owner does submit that neither Llop nor Sichuan teach a “mouthpiece” as that term is properly construed as a “device that is inserted into the mouth and worn over the teeth” in view of the patent and file history. However, Patent Owner further submits that regardless of how “mouthpiece” is construed, neither Llop nor Sichuan teach a “mouthpiece . . . dimensioned and configured to surround at least a portion of the teeth.” Patent Owner’s Response to Petition at 34.

Again, the struts and tooth molds taught by Llop (below) were correctly found by the Examiner not to constitute a “mouthpiece . . . dimensioned and configured to surround at least a portion of the teeth.”

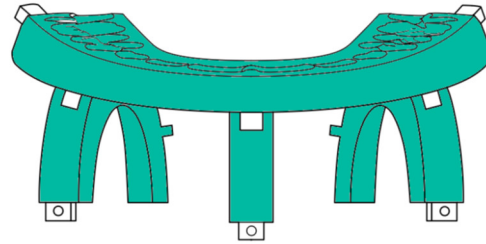


The 1 to 2 mm impressions in the bite plate of Sichuan (below) are no more of a “mouthpiece . . . dimensioned and configured to surround at least a portion of

the teeth” than the struts and tooth molds of Llop.



Llop



Llop + Sichuan As Proposed
by Petitioner

IV. A POSA Would Not Have Been Motivated to Combine Llop + Sichuan

Petitioner disregards most of Patent Owner’s argument that a POSA would not have been motivated to combine Llop with Sichuan. While Petitioner focuses on the language about a subapical osteotomy being a “very rare procedure . . . that is very different from implant installation”, Petitioner ignores Dr. Elo’s testimony that a subapical osteotomy is not performed by a person of ordinary skill in the art as defined in this proceeding. EX2007 (Elo Declaration), ¶¶87.

As Prof. Elo explains, a person of ordinary skill in the art of implant dentistry is not trained how to perform a subapical osteotomy, is not qualified to perform a subapical osteotomy, and would never perform a subapical osteotomy. Moreover, a person of ordinary skill in the art would not look to a device for performing subapical osteotomies, which are used in the field of maxillofacial surgery or plastic surgery, and not general dentistry. EX2007 (Elo Declaration),

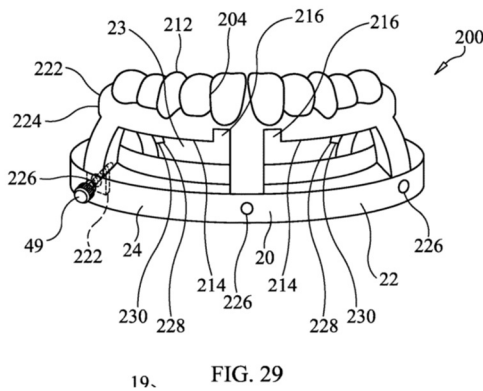
¶87. Notably, Petitioner fails to provide any additional evidence or rebuttal from its expert that a POSA would be familiar with a subapical osteotomy as taught by Sichuan. Indeed, without any evidence, Petitioner argues that information about the topic may be available in “a dental school library.” That speculation is not evidence.

Accordingly, the Petition fails to show that claims 1-3, 7, 10, 13-14 and 16-17 are obvious in view of Llop and Sichuan.

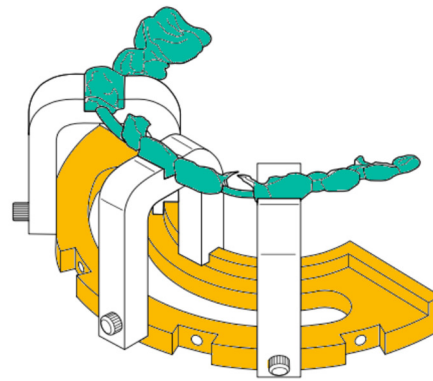
V. Llop + Yau Do Not Disclose All Claim Elements

Again, Patent Owner submits that neither Llop nor Yau teach a “mouthpiece” as that term is properly construed as a “device that is inserted into the mouth and worn over the teeth” in view of the patent and file history. Patent Owner further submits that regardless of how “mouthpiece” is construed, neither Llop nor Yau teach a “mouthpiece . . . dimensioned and configured to surround at least a portion of the teeth.”

Again, the struts and tooth molds taught by Llop (below) were correctly found by the Examiner not to constitute a “mouthpiece . . . dimensioned and configured to surround at least a portion of the teeth.”



Llop



Llop + Yau As Proposed by
Petitioner

Llop combined with Yau as proposed by Petitioner is no better and does not constitute a “mouthpiece . . . dimensioned and configured to surround at least a portion of the teeth.”

Accordingly, the Petition fails to show that claims 1-3, 7, 10, 13-14 and 16-17 are obvious in view of Llop and Yau.

VI. A POSA Would Not Have Been Motivated to Combine Llop + Yau

A POSA would not have been motivated to combine Llop with Yau because, as seen in the drawings above, modifying the anchoring struts of Llop to include the tooth mold of Yau only arrives at a structure that is the same as the tooth mold that Llop itself teaches (but with the added complexity of Yau’s three part structure). As explained by Dr. Elo, modifying Llop to include the anchoring struts of Llop would not improve the positioning of the bone foundation guide for

attachment to a patient's jawbone beyond the tooth molds already taught by Llop. EX2007, ¶¶96-101.

Accordingly, the Petition fails to show that claims 1-3, 7, 10, 13-14 and 16-17 are obvious in view of Llop and Yau.

VII. Patent Owner's Evidence Of Secondary Indicia Shows That The '209 Patent Is Not Obvious

Contrary to Petitioner's arguments, Patent Owner showed a nexus between its evidence and the claimed invention. Patent Owner provided ample evidence that its commercial CHROME GuidedSmile product embodies the full scope of the claimed invention and that the claimed invention is not merely a subcomponent of those products. Patent Owner's response contained a detailed mapping of the claimed invention onto the standard CHROME GuidedSmile commercial products by a knowledgeable fact witness, GuidedSmile's President, Mr. Alan Banks. EX2006, ¶¶9-14.

Petitioner says that "PO's expert here has not 'provided a detailed analysis' mapping the '209 patent claims to the description in PO's product literature." Reply, p. 16-17. Expert testimony is, however, not required. *See Centricut, LLC v. ESAB Group, Inc.*, 390 F.3d 1361, 1369 (Fed. Cir. 2004)(quoting *Union Carbide Corp. v. Am. Can Co.*, 724 F.2d 1567,1573 (Fed. Cir. 1984) ("In many patent cases

expert testimony will not be necessary because the technology will be ‘easily understandable without the need for an expert.’”)). As in the case cited by Petitioner, it is Petitioner who has failed to rebut Patent Owner’s presumption of nexus. *Quanergy Sys. v. Velodyne Lidar USA, Inc.*, 24 F.4th 1406, 1418 (Fed. Cir. 2022).

Petitioner says “PO refers to “CHROME GuidedSMILE” as if it were a single product. Not true.” Petitioner’s Reply, p. 17. The evidence that Petitioner cites demonstrates that assertion is false. EXs. 1024 and 1046 identify CHROME GuidedSMILE as one of the GuidedSMILE family of products. Likewise, Mr. Banks testified that CHROME GuidedSMILE was one part of the “GuidedSMILE family of products.” Ex. 1046 at 15:10-16:3. The existence of a family of GuidedSMILE products is irrelevant when the Bank’s declaration is only about the “CHROME GuidedSmile” product. Ex2006, Banks Decl., ¶¶9-14. No other GuidedSMILE Family members are mentioned in the Banks Declaration.

Petitioner says that “PO fails to acknowledge the presence of ‘critical unclaimed feature[s] that [are] claimed by a different patent and that materially affects the product’s functionality.’” Petitioner’s Reply, p. 19-20. Yet the only evidence that Petitioner cites for the supposed critical features are arguments to the USPTO that those features present a patentably distinct invention, and Mr. Banks’ testimony that the CHROME name was chosen because of the material used. Ex.

46, 13:12-15. There is no evidence that these “unclaimed features” have any importance to the commercial success or praise the invention has received.

Petitioner disparages Mr. Banks’ evidence of long-felt need by citing *Iron Grip Barbell Co., Inc. v. USAA Sports, Inc.*, 392 F.3d 1317, 1324 (Fed. Cir. 2004), implying that the Federal Circuit requires some kind of documentary evidence to establish long felt need. That argument is a misstatement of *Iron Grip*, which addressed a complete lack of evidence. Mr. Banks testimony in his declaration is evidence of long felt need.

At least when it comes to the fact that the sales chart provided in the Banks’ declaration apparently includes sales of other GuidedSMILE family products (Petitioner’s Reply, p. 22), Petitioner has not misstated the evidence. But Petitioner’s own evidence regarding the GuidedSMILE family of products shows that CHROME GuidedSMILE is the primary product in that family, so the chart has some relevance. Beyond that, PO presented the testimony of Mr. Banks about commercial success, which is evidence of commercial success independent of the sales chart.

Petitioner denigrates the praise that CHROME GuidedSMILE has received by, for example, stating that some awards to CHROME GuidedSMILE were “based on the number of readers who circled a magazine feedback card to request additional information.” Petitioner’s Reply, p. 23. Recognition of strong interest

in a new product is, however, evidence that the product has provided something new and non-obvious. EX2006, ¶17; EXs 1036, 1037.

Finally, Petitioner cites *Medtronic, Inc. v. Teleflex Innovations S.a.r.l.*, 70 F.4th 1331, 1340 (Fed. Cir. 2023) for the proposition that differences between CHROME GuidedSmile and the 3DDX product negate copying and that “actual evidence of copying are required.” Petitioner’s Reply, p. 24-25. In this regard, Petitioner apparently stopped reading the *Medtronic* case once it found a quotation it liked. In the very next paragraph of the *Medtronic* case, the Federal Circuit says “[w]e have never held, however, that copying cannot be established through evidence of access to and substantial similarity between the accused and patented product.” *Id.* at 1340. Indeed, in *Medtronic* the Federal Circuit affirmed a finding of copying where there were differences between the patented and accused product and there was no direct evidence of copying. *Id.* at 1341. While pointing out some differences between the products, Petitioner does not dispute that it had access to Patent Owner’s products or that the products have substantial similarity. As in the *Medtronic* case, the differences are not so significant as to preclude substantial similarity and the corresponding inference that Petitioner copied. *Id.* at 1341.

While Petitioner may criticize the quality or quantity of Patent Owner’s evidence of secondary indicia of nonobviousness, Patent Owner contends that the evidence is substantial and must be considered. *Quanergy Sys. v. Velodyne Lidar*

USA, Inc., 24 F.4th 1406, 1417 (Fed. Cir. 2022)(“Evidence of objective indicia of nonobviousness, if present, must always be considered before reaching a determination on the issue of obviousness.”)

VIII. Conclusion

All the references in the Petition, considered alone and in combination fail to teach or disclose a “mouthpiece . . . configured and dimensioned to surround at least a portion of the teeth of the patient” as recited in all challenged claims. Additionally, substantial evidence of non-obviousness supports the patentability of the claims. For each of the foregoing reasons, Watson Guide IP, LLC respectfully requests the Board confirm patentability of the challenged claims.

ORBIT IP, LLP

Dated: August 27, 2025

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CERTIFICATE OF WORD COUNT

I, Marc Karish, appointed counsel of Watson Guide IP, LLC, pursuant to 37 C.F.R. 42.24, I hereby certify that the foregoing Patent Owner Sur-Reply contains 3,280 words, excluding the parts of this Sur-Reply that are exempted by 37 C.F.R. 42.24(c), as counted by the word-processing system used to prepare the paper.

For Patent Owner Watson Guide IP, LLC

ORBIT IP, LLP

Dated: August 27, 2025

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CERTIFICATE OF SERVICE

The undersigned certifies that pursuant to 37 C.F.R. § 42.6(e), a true copy of the foregoing document was filed electronically and served via email to all parties in this proceeding at the addresses indicated:

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