

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

EMBODY, INC. AND ZIMMER BIOMET HOLDINGS, INC.,  
Petitioners

v.

LIFENET HEALTH,  
Patent Owner.

---

IPR2025-00248 (Patent 10,137,223 B2)  
IPR2025-00249 (Patent 11,318,227 B2)

---

**OPPOSITION TO PATENT OWNER'S  
REQUEST FOR ADDITIONAL DISCOVERY**

Filed on behalf of Petitioners:

## **TABLE OF CONTENTS**

|                                                                        | <b>Page</b> |
|------------------------------------------------------------------------|-------------|
| TABLE OF AUTHORITIES .....                                             | ii          |
| PETITIONER’S EXHIBIT LIST .....                                        | iii         |
| I. INTRODUCTION .....                                                  | 1           |
| II. ARGUMENT .....                                                     | 1           |
| A. The Discovery Requests Rest on Mere Allegation and Possibility .... | 2           |
| B. <i>Garmin</i> Factors 2-5 Weigh Against Discovery .....             | 6           |
| III. CONCLUSION .....                                                  | 7           |

## **TABLE OF AUTHORITIES**

### **Page(s)**

#### **Cases**

|                                                                                                                   |               |
|-------------------------------------------------------------------------------------------------------------------|---------------|
| <i>B/E Aerospace, Inc. v. MAG Aerospace Indus., LLC</i> , IPR2014-01511, Paper 104 (PTAB. Mar. 18, 2016) .....    | 4             |
| <i>Brunswick Corp. v. Volvo Penta</i> , IPR2020-01512, Paper 25 (PTAB May 12, 2021) .....                         | 3             |
| <i>Douglas Dynamics LLC v. Meyer LLC</i> , IPR2015-01839, Paper 29 (PTAB July 26, 2016) .....                     | 5             |
| <i>Garmin Int’l, Inc. v. Cuozzo Speed Techs. LLC</i> , IPR2012-00001, Paper 26 (Mar. 5, 2013).....                | <i>passim</i> |
| <i>Merck Sharp &amp; Dohme LLC v. The Johns Hopkins Univ.</i> , IPR2024-00240, Paper 29 (PTAB Aug. 29, 2024)..... | 3             |
| <i>Palo Alto Networks, Inc. v. Juniper Networks, Inc.</i> , IPR2013-00369, Paper 36 (PTAB Feb. 5, 2014).....      | 7             |
| <i>Schott v. SSW</i> , IPR2013-00358, Paper 43 (PTAB Feb. 14, 2014) (“ <i>Schott 2013</i> ”) .....                | 2, 7          |
| <i>Schott v. SSW</i> , IPR2014-00367, Paper 20 (PTAB Aug. 13, 2014) (“ <i>Schott 2014</i> ”) .....                | 2, 3, 5       |

#### **Statutes**

|                          |   |
|--------------------------|---|
| 35 U.S.C. § 311(b) ..... | 4 |
|--------------------------|---|

## PETITIONERS' EXHIBIT LIST

| <b>Exhibit No.</b> | <b>Description</b>                                                                                                                                                                                                                                                                        | <b>Previously Presented</b> |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| <b>1001</b>        | U.S. Patent No. 10,137,223 to Francis et al. (“the ’223 patent”)                                                                                                                                                                                                                          | ✓                           |
| <b>1002</b>        | ’223 Patent Prosecution History                                                                                                                                                                                                                                                           | ✓                           |
| <b>1003</b>        | Declaration of David G. Simpson, Ph.D.                                                                                                                                                                                                                                                    | ✓                           |
| <b>1004</b>        | CV of David G. Simpson, Ph.D.                                                                                                                                                                                                                                                             | ✓                           |
| <b>1005</b>        | Huang et al., <i>The involvement of integrin <math>\beta 1</math> signaling in the migration and myofibroblastic differentiation of skin fibroblasts on anisotropic collagen-containing nanofibers</i> , 33 Biomaterials 1791-1800 (Feb. 2012) (“Huang2”) (available online Dec. 2, 2011) | ✓                           |
| <b>1006</b>        | Kumbar et al., <i>Electrospun nanofiber scaffolds: engineering soft tissues</i> , Biomed. Mater. 3 (2008) (“Kumbar”)                                                                                                                                                                      | ✓                           |
| <b>1007</b>        | Reserved                                                                                                                                                                                                                                                                                  |                             |
| <b>1008</b>        | Huang et al., <i>Electrospun collagen-chitosan-TPU nanofibrous scaffolds for tissue engineered tubular grafts</i> , 82 Colloids and Surfaces B: Biointerfaces 307-315 (2011) (“Huang1”)                                                                                                   | ✓                           |
| <b>1009</b>        | U.S. Patent App. Pub. No. 2004/0037813 to Simpson et al. (“Simpson”)                                                                                                                                                                                                                      | ✓                           |
| <b>1010</b>        | Ayres et al., <i>Measuring fiber alignment in electrospun scaffolds: a user’s guide to the 2D fast Fourier transform approach</i> , 19 J. Biomater. Sci. Polymer. 603-621 (2008) (“Ayres 2008”)                                                                                           | ✓                           |
| <b>1011</b>        | Lee et al., U.S. Patent Application No. US 2010/0331980 A1, Pub. Date December 1, 2011 (“Lee”)                                                                                                                                                                                            | ✓                           |
| <b>1012</b>        | Reserved                                                                                                                                                                                                                                                                                  |                             |

|             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |   |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| <b>1013</b> | Ayres et al., <i>Modulation of Anisotropy in Electrospun Tissue-Engineering Scaffolds: Analysis of Fiber Alignment by the Fast Fourier Transform</i> , 27(32) Biomaterials 5524-5534 (2006) (“Ayres 2006”)                                                                                                                                                                                                                                                                                                 | ✓ |
| <b>1014</b> | U.S. Pat. No. 5,514,378 to Mikos (“Mikos”)                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | ✓ |
| <b>1015</b> | Jose et al, <i>Fabrication and Characterization of Aligned Nanofibrous PLGA/Collagen Blends as Bone Tissue Scaffolds</i> , 50 Polymer 3778-85 (2009) (“Jose”)                                                                                                                                                                                                                                                                                                                                              | ✓ |
| <b>1016</b> | Fu et al, <i>Spatial Arrangement of Polycaprolactone/Collagen Nanofiber Scaffolds Regulates the Wound Healing Related Behaviors of Human Adipose Stromal Cells</i> , 18(5) Tissue Engineering, 631-42 (2012) (“Fu”)                                                                                                                                                                                                                                                                                        | ✓ |
| <b>1017</b> | Shoulders & Raines, <i>Collagen Structure and Stability</i> , 78 Annu. Rev. Biochem. 929 (2009)                                                                                                                                                                                                                                                                                                                                                                                                            | ✓ |
| <b>1018</b> | Kuo et al., U.S. Patent Application No. US 2011/0293685 A1, Pub. Date Dec. 1, 2011 (“Kuo”)                                                                                                                                                                                                                                                                                                                                                                                                                 | ✓ |
| <b>1019</b> | Beachley et al, <i>Highly Aligned Polymer Nanofiber Structures: Fabrication and Applications in Tissue Engineering</i> (2011) in Vol. 246 Biomedical Applications of Polymeric Nanofibers (Jayakumar & Nair eds. 2011)                                                                                                                                                                                                                                                                                     | ✓ |
| <b>1020</b> | Declaration of Emma Xu                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | ✓ |
| <b>1021</b> | U.S. Provisional Patent App. No. 61/0255,35 (“Lee Provisional”)                                                                                                                                                                                                                                                                                                                                                                                                                                            | ✓ |
| <b>1022</b> | Reserved                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |   |
| <b>1023</b> | Reserved                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |   |
| <b>1024</b> | June 21, 2022 Memo From Katherine Vidal on Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation (June 21, 2022), available at <a href="https://www.uspto.gov/sites/default/files/documents/interim_proc_discretionary_denials_aia_parallel_district_court_litigation_memo_20220621_.pdf">https://www.uspto.gov/sites/default/files/documents/interim_proc_discretionary_denials_aia_parallel_district_court_litigation_memo_20220621_.pdf</a> | ✓ |

|             |                                                                                                                                                                                                                                                                                                                                                                                                   |  |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>1100</b> | <i>LifeNet Health v. Zimmer Biomet Holdings, Inc.</i> , 23-cv-00479, D.I. 41 (10/09/24)                                                                                                                                                                                                                                                                                                           |  |
| <b>1101</b> | ZIMMER BIOMET, <i>Patent Marking List for Website Q1-2025</i> , Last updated Mar. 19, 2025, available at <a href="https://www.zimmerbiomet.com/content/dam/zb-corporate/en/corporate/patents/Patent-Marking-List-for-Website-Q1-2025.pdf">https://www.zimmerbiomet.com/content/dam/zb-corporate/en/corporate/patents/Patent-Marking-List-for-Website-Q1-2025.pdf</a> (last visited Sept. 9, 2025) |  |

## **I. INTRODUCTION**

Patent Owner's motion for additional discovery of alleged commercial success rests on speculation, not evidence, and falls far short of the threshold required under the *Garmin* framework to grant such discovery. Patent Owner offers no proof of actual sales, let alone significant sales in a defined market as required by precedent, and fails to establish any nexus between the claimed inventions and Petitioner's products. Its document requests (Nos. 1–4) are vague, overly broad, and untethered to the issues in this proceeding. This is precisely the type of fishing expedition the Board has rejected in similar cases. For these reasons, Petitioner respectfully requests Patent Owner's motion for additional discovery regarding commercial success be denied.

## **II. ARGUMENT**

Under *Garmin*, the Board considers several factors when evaluating additional discovery requests, including whether the request is based on more than speculation, whether the information sought is tied to litigation positions, whether the information is obtainable through other means, whether the request is specific, and whether it is unduly burdensome. *Garmin Int'l, Inc. v. Cuozzo Speed Techs. LLC*, IPR2012-00001, Paper 26 at 6–7 (PTAB Mar. 5, 2013). The Board applies these *Garmin* factors to determine whether additional discovery is in the “interest of justice,” which is a higher standard than what is required “under the more liberal

‘good cause’ standard” and far less than what is available in district court litigation. *Garmin*, Paper 26 at 5–6; Trial Practice Guide at 24 (Nov. 2019). Patent Owner has made no such showing here.

**A. The Discovery Requests Rest on Mere Allegation and Possibility**

In cases involving requests for discovery of commercial success, to satisfy the first *Garmin* factor, the patent owner *must* first provide (1) a threshold showing of significant sales in a relevant market, and (2) a nexus between those sales and the claimed invention. *Schott v. SSW*, IPR2013-00358, Paper 43 at 4–5 (PTAB Feb. 14, 2014); *Schott v. SSW*, IPR2014-00367, Paper 20 at 4–5 (PTAB Aug. 13, 2014) (“*Schott 2014*”); *see also Garmin*, Paper 26 at 8–9.

In *Schott 2013*, the Board denied additional discovery where patent owner submitted a declaration alleging commercial success but included no sales figures. The Board explained that the declaration lacked any data showing actual sales or any indication that such sales were significant within the relevant market. *Schott 2013*, Paper 43 at 5–7. In *Schott 2014*, the patent owner submitted a new declaration describing \$11.9 million in sales data. *Schott 2014*, Paper 20 at 5–6. And contrary to Patent Owner’s assertions that *Schott* is irrelevant because it addresses patent owner sales (IPR2025-00248, Paper 17 (“Motion”) at 5, n.5), the \$11.9 million were *petitioner’s* sales. The Board still found the sales insufficient, stating that it was patent owner’s burden to show that the sales were significant in

the relevant market. *Schott 2014*, Paper 20 at 5–6, 9.

In this case, Patent Owner fails to present evidence of either actual sales or the relevant market, both of which are essential to support its discovery request. Instead, it relies on unsworn statements from Embody’s former CEO regarding potential or future sales prior to Zimmer’s acquisition, as well as the \$155 million purchase price. However, none of this constitutes proof of actual sales, their significance, or the relevant market.

Patent Owner’s reliance on *Merck* and *Brunswick* is unpersuasive. (Motion at 4–5.) In *Merck*, the patent owner submitted evidence that Merck’s Keytruda® product generated billions of dollars in revenue. *Merck Sharp & Dohme LLC v. The Johns Hopkins Univ.*, IPR2024-00240, Paper 29 at 2, 6–7 (PTAB Aug. 29, 2024). In *Brunswick*, the record included a 10-K filing showing over a billion dollars in sales. *Brunswick Corp. v. Volvo Penta*, IPR2020-01512, Paper 25 at 5 (PTAB May 12, 2021). Here, Patent Owner offers no sales data at all. Neither *Merck* nor *Brunswick* supports the notion that the threshold showing for commercial success can rest on speculation without any evidence of even a single sale in a defined market.

Patent Owner references Zimmer’s acquisition of Embody; however, this does not constitute evidence of product sales. Moreover, the milestone payments are contingent on future regulatory and commercial achievements, not solely on

sales, as Patent Owner suggests, nor does Patent Owner assert that any milestone payments were made. Pure speculation concerning future milestones cannot be relied upon to demonstrate current commercial success. *See B/E Aerospace, Inc. v. MAG Aerospace Indus., LLC*, IPR2014-01511, Paper 104 at 48 (PTAB Mar. 18, 2016) (explaining that “[p]rojections of sales are only estimates of future activity and do little or nothing to show the actual commercial success”).

In addition, Patent Owner fails to demonstrate a nexus between the claimed inventions and Petitioner’s product sales. Its only support is a claim chart from the district court complaint stating that the accused products contain “aligned fibers.” Patent Owner argues this is sufficient, but it is not. Initially, only claim 1 of the ’223 patent is alleged to be infringed by Tapestry, and only claim 1 of the ’227 patent is alleged to be infringed by ActivBraid. (Exs. 2006, 2007; *see also* Ex. 1100 at 25, 27, 38–41.) Although Tapestry RC is mentioned in the complaint, it is not linked to any infringement allegations and therefore its sales are not relevant. These are the only claims asserted in the district court litigation. There is no evidence connecting any other challenged claims to an accused product, and Patent Owner has not provided sufficient evidence to establish a nexus for those additional claims. Further, Petitioner has denied infringement of both asserted claims at the district court. (*Id.*) An assessment of infringement is outside the scope of this IPR proceeding under 35 U.S.C. § 311(b).

Even for claim 1, Patent Owner provides no FFT data showing the required 180-degree peak separation. It relies only on the presence of “aligned fibers,” which contradicts its own prior argument that alignment alone does not meet the FFT requirement. (*E.g.*, IPR2025-00248, Paper 9, 2, 16, 36.) Although Petitioner disputes this, Patent Owner’s inconsistency further undermines its nexus argument.

The Board has also found no nexus when the claimed feature is only one among many unrelated product features and such features are covered by other patents. *Garmin*, Paper 26 at 8–9; *Schott 2013*, Paper 43 at 5–6; *Schott 2014*, Paper 20 at 7; *Douglas Dynamics LLC v. Meyer LLC*, IPR2015-01839, Paper 29 at 5, 7 (PTAB July 26, 2016). Petitioner’s products include many features not claimed in the ’223 or ’227 patents. Tapestry, for example, is covered by *Petitioner’s* patents, including U.S. Patent Nos. 11,116,870; 10,617,787; and 11,213,610. (Ex. 1101.) As noted above, Tapestry RC is not included in Patent Owner’s claim charts. Further, Patent Owner’s own evidence emphasizes features like fluid infiltration, pore structure, instrumentation, and material properties that are not claimed in the asserted patents. (Exs. 2009, 2010, 2011.) Ex. 2011 in particular comments on ActivBraid’s braided structure. Patent Owner has not shown any evidence linking commercial success solely to claim 1 of either the ’223 or ’227 patents.

Discovery into Tapestry and Tapestry RC is also unwarranted for another reason. These products are only alleged to relate to claim 1 of the ’223 patent,

which is challenged on three grounds. Two are based on anticipation, where commercial success is not relevant. The Board has already found that the feature of aligned fibers with peaks 180 degrees apart is likely disclosed in the prior art. (*E.g.*, IPR2025-00248, Paper 14 at 24.) And for the obviousness ground, success is irrelevant if the feature was already known. *Schott 2013*, Paper 43 at 5–6.

Because Patent Owner has not shown any actual sales, has failed to define the relevant market, and has not established a nexus between the claimed inventions and sales of any product, its discovery falls short of the standard.

**B. *Garmin* Factors 2-5 Weigh Against Discovery**

Patent Owner’s discovery is based on speculation and should be denied under the first *Garmin* factor. The remaining *Garmin* factors also support denial. First, commercial success requires a nexus between the claimed invention and the alleged success. Establishing such a nexus would require an infringement analysis, and Petitioner has denied infringement of both asserted claims at the district court. *See* Ex. 1101 at 38–41. Because the nexus argument depends on disputed litigation positions, this weighs against granting discovery under Factor 2.

Next, Patent Owner asserts that the requested information is unavailable because it has not been produced in litigation. Yet, at the same time, it also contends that “the requested information does not relate to Petitioner’s litigation positions.” (Motion at 6.) Thus, such documents would not be relevant, regardless

of whether discovery has commenced. In any event, without a threshold showing of sales or nexus, the mere fact that the information is non-public does not justify additional discovery. This alone is insufficient to support the request.

Finally, the requests are vague, overly broad, and unduly burdensome under *Garmin* factors 4 and 5, as explained in *Palo Alto Networks, Inc. v. Juniper Networks, Inc.*, IPR2013-00369, Paper 36 at 3, 5–6. Each of Patent Owner’s requests uses the phrase “documents sufficient to show” without specifying what would qualify as “sufficient,” a formulation the Board has previously rejected. *See Schott* 2013, Paper 43 at 7. Document Requests 3 and 4 are especially problematic. They seek documents showing “reasons why healthcare providers in the United States purchase” Petitioner’s products. (Ex. 2008 at 2.) Petitioner is not a healthcare provider and cannot speak to third-party purchasing decisions. During the meet-and-confer, Patent Owner suggested this could include surveys but provided no indication that any such documents exist. These speculative requests exemplify the type of fishing expedition the Board cautioned against in *Garmin*. This weighs against discovery under Factors 4 and 5.

### **III. CONCLUSION**

Accordingly, Petitioner respectfully requests that the Board deny Patent Owner’s request for additional discovery of commercial success.

Respectfully submitted,

Dated: 9/9/2025

By: Howard Levine/  
Howard W. Levine (Reg. No. 41,453)

## **CERTIFICATE OF SERVICE**

I hereby certify that on September 9, 2025, I caused a true and correct copy of the foregoing Petitioner's Opposition to Patent Owner's Motion for Additional Discovery to be served via electronic upon to the Patent Owner's counsel of record at the following addresses:

Brian C. Riopelle – briopelle@mcguirewoods.com

George V. Davis – gdavis@mcguirewoods.com

Robert W. McFarland – rmcfarland@mcguirewoods.com

Respectfully submitted,

By: /Howard Levine/  
Howard Levine (Reg. No. 41,453)

Counsel for Petitioners