

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO., LTD.; AND
SAMSUNG ELECTRONICS AMERICA, INC.,
Petitioner

v.

OURARING, INC.,
Patent Owner.

Case No. PGR2024-00030
U.S. Patent No. 11,868,178

PETITIONER'S SUPPLEMENTAL BRIEF

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¹ Four-digit pin citations that begin with 0 are to the branded numbers added by Samsung in the bottom right corner of the exhibits. All other pin citations are to original page, column, paragraph, or line numbers.

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Ex-1018	INTENTIONALLY LEFT BLANK
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Ex-1023	<i>Dynamic Drinkware</i> -type analysis for Mestas
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Ex-1025	U.S. Patent No. 6,745,061 to Hicks (“Hicks”)
Ex-1026	U.S. Patent No. 7,190,986 to Hannula (“Hannula”)
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Ex-1029	Kevin K. Tremper et al., <i>Pulse Oximetry</i> , 70 Journal of American Society of Anesthesiologists, Inc. (Jan. 1989) (“Tremper”)
Ex-1030	Y. Mendelson et al., <i>A Wearable Reflectance Pulse Oximeter for Remote Physiological Monitoring</i> , Proceedings of 28 th IEEE EMBS Annual International Conference (Aug. 30-Sept. 3, 2006) (“Mendelson 2006”)
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Ex-1046	WO 2001/017421A1 to Lindberg (“Lindberg”)
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Ex-1079	Dr. Anthony's Supplemental Declaration
Ex-1080	Mr. Michael Davies Declaration
Ex-1081	Patrick P. Mercier, Ph.D. Deposition Transcript Volume 1, dated June 24, 2025
Ex-1082	Patrick P. Mercier, Ph.D. Deposition Transcript Volume 2, dated June 25, 2025
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Ex-1088	U.S. Patent Publication No. 20070059595 ("Endo")
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Ex-1331	U.S. Patent No. 7,968,226
Ex-1332	U.S. Patent No. 6,881,516
Ex-1333	Screenshot from the Internet Archive of Ouraring.com, "The Smart Ring That Helps You Get More Restorative Sleep," available at https://web.archive.org/web/20171205082910/https://ouraring.com/
Ex-1334	Screenshot from the Internet Archive of Ouraring.com, "What has Changed? The New Oura Ring," available at, available at https://web.archive.org/web/20191206191935/https://ouraring.com/difference-between-first-and-new-oura-ring/

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Ex-1335	iFixit, Oura Ring 2 Teardown, iFixit (July 9, 2020), https://www.ifixit.com/Teardown/Oura+Ring+2+Teardown/135207
Ex-1336	Screenshots of “What's inside the Oura Ring? (Gen 3 and 2),” available at https://www.youtube.com/watch?v=z7zuWbFNTL8&t=529s
Ex-1337	Declaration of Khanh Leon in Support of Petitioner's Motion for Pro Hac Vice Admission Pursuant to 37 C.F.R. §42.10(c)
Ex-1338	Declaration of Argirenia Zervos in Support of Petitioner's Motion for Pro Hac Vice Admission Pursuant to 37 C.F.R. §42.10(c)
Ex-1339	Petitioner's Demonstratives

I. INTRODUCTION

The ITC's findings and conclusions of law do not resolve the issues before the Board here. PO's Supplemental Brief ("POSB") attempts to link the ITC's decision on five claims of US 11,868,178 ("the '178 Patent") to this PGR, which challenges claims 1-10 and 12-18. But the Board must evaluate different grounds, claims, arguments, evidence, and objective indicia across *four* of PO's patents.

II. THE BOARD HAS DIFFERENT GROUNDS AND CLAIMS TO CONSIDER

PO argues that the ITC "adjudicated the same claims based on the same or substantially the same evidence and arguments." POSB, 1-2. This is false. The ITC only considered five out of the sixteen claims at issue here (claims 1, 2, and 12-14), and did not address features in claims 3-10 and 13-18. Ex-1020. Thus, the ITC did not "adjudicate the same claims."

Moreover, the ITC did not adjudicate substantially the same evidence and arguments. The Petition includes two sets of grounds based on either Schröder or Niwa as a primary reference. The ITC only considered grounds having Niwa as a primary reference. Ex-2122, 86. While PO argues that "respondents at the ITC also attempted various combinations" (POSB, 2), the ITC simply never considered Petitioner's Schröder grounds 1-4 challenging claims 1-10 and 12-18. Paper 9 (DI), 6-7. And the grounds that the ITC did consider were specifically limited by PO with

a motion in limine. While PO argues that the ITC considered “parallel” testimony (POSB, 2), that testimony was offered by different witnesses, Rosing, Sarrafzadeh, and Mulhern, and weighed using different evidentiary procedures and standards. Here, Drs. Anthony and Mercier agree that including an appropriately sized battery into a ring was within a POSITA's skill level, which conflicts with PO's ITC expert's opinion (Dr. Rosing). *Compare* Ex-1079 ¶¶50-58 and Ex-1081, 147:20-148:16 *with* Ex-2122, 96, 98, 101.

III. THE ITC'S DECISION RELIED ON AN IMPLIED CLAIM CONSTRUCTION, DIFFERENT FACTS, AND IMPROPERLY RELIED ON BODILY INCORPORATION

PO argues that the ITC's fact findings and conclusions of law are “directly relevant here.” POSB, 3-5. They are not.

A. The ITC's Decision Relied on an Implied Claim Construction

The ITC determined that Niwa did not teach internal and external housing components (POSB, 4-5) based on an implied claim construction that precluded a unitary housing. Ex-2122, 89-92; Paper 53, 77:17-78:17. But the claims require that the housing components are “coupled together,” not that they need to be separable or separately constructed. Paper 53, 12:21-14:17, 77:17-79:4. The ITC's Niwa determination improperly required separability of the housing components.

B. The ITC's Decision Relied on Different Facts and Improperly Relied on Bodily Incorporation

PO wrongly argues that Petitioner does not offer any different evidence

regarding Schröder's internal battery. POSB, 3-4. For example, the ITC relied on Schröder's Figure 3 embodiment (Ex-2122, 106) but Petitioner relies on Schröder's other configurations in Figures 4-10. Reply, 5-6. And the substantial evidence advanced in this proceeding relates to these admittedly different embodiments. Ex-1079 ¶32; Ex-1081, 77:15-18; Paper 53, 22:10-16, 43:10-24, 48:18-49:7, 51:9-53:1.

Moreover, Drs. Anthony and Mercier testified that Schröder's inlay has depressions for its electrical components, such as its battery, "to be arranged into a carrier" and thus inside of the ring's cavity, along with the inlay. Ex-1079 ¶¶11, 13-24, 31-33; Ex-1081, 105:9-108:9, 120:4-8, 124:3-7. And while a single Kapton layer may be "on the order of 100 microns" thick, as the ITC found, Schröder expressly states that its inlay may be made up of multiple Kapton layers with a wiring pattern. Ex-1007, 13:23-51; Ex-1081, 106:17-108:9; Paper 53, 76:6-16. None of this evidence was before the ITC, which was looking at admittedly different embodiments, in materially different combinations, than those addressed here.

PO argues that the ITC did not find a motivation to combine Niwa-Schröder.² POSB, 5. The ITC concluded that a POSITA would not modify Niwa's housing to

² PO also states "or vice versa" but as explained above, the ITC did not consider Schröder-Niwa, nor the exact Niwa-Schröder combination as presented by Petitioner. See Ex-2122, 86. Petitioner's Niwa-Schröder ground differs than that considered by the ITC because Petitioner relies only on Schröder's housing component teachings, not its inlay or battery. Pet., 74-88.

have Schröder's separate housing components based on bodily incorporating Schröder's housing components, which have a "uniform" thickness, to Niwa. Ex-2122, 108. But Petitioner relies on Schröder's two-housing *teachings*—not bodily incorporating Schröder's housing components into Niwa's ring construction. Pet., 74-75; Reply, 14-15; Paper 53, 77:17-79:4.

PO also argues that the ITC rejected the view that a POSITA would consider curved batteries from larger wearable devices for a finger ring. POSB, 5. But the ITC's decision rests improperly on arguments based on bodily incorporating a secondary reference's specific curved battery into Niwa's finger ring. Ex-2122, 92-97. The ITC did not have the benefit of Drs. Anthony and Mercier's testimony that curved batteries were commercially available at the time of the alleged invention. Ex-1079 ¶¶50-58; Ex-1081, 15:11-18:22 ('178 Patent did not invent curved batteries), 149:6-11 (curved batteries were known before the '178 Patent). Nor did it have the benefit of expert testimony agreeing that electronic components were trending smaller, and that a POSITA would have been motivated to make small curved batteries. Ex-1079 ¶¶50-58; Ex-1081, 147:20-148:16. A POSITA would not have attempted to bodily incorporate a larger device's curved battery into a finger ring; the evidence here makes clear that implementing an appropriately sized curved battery was within a POSITA's skill level.

IV. THE ITC'S OBJECTIVE INDICIA DETERMINATION IS WRONG

PO argues that “based on the same evidence presented here,” the ITC concluded that PO was entitled to a presumption of nexus and evidence weighed in favor of non-obviousness. POSB, 3. But the ITC misapplied *Fox Factory, Inc. v. SRAM, LLC*, 944 F.3d 1366 (Fed. Cir. 2019) by not properly considering whether the product and claims are coextensive, only finding that “Gen. 3 and 4 *embody* the asserted claims.” Ex-2116, 33-34. Nexus cannot be presumed because a product embodies the claim; it must also be *coextensive* with the claims. *Fox Factory*, 944 F.3d at 1373. But a “claim is not coextensive with a product that includes a ‘critical’ unclaimed feature that is claimed by a different patent and that materially impacts ... functionality.” *Id.*, 1375. Gens. 3 and 4 include significant unclaimed features that are separately claimed in PO’s other patents. *Id.*, 1378; Reply, 18-20.

The unclaimed features, such as the Oura Ring Membership or PO’s other patents that specifically recite additional features are critical to the Board’s analysis but were not addressed by the ITC. Ex-2122, 113-121. Unlike the ITC, the Board will have to consider PO’s objective indicia evidence across *at least* four of PO’s patents with different claims at issue in different IPRs. Reply, 19 (“claims...do not cover the same invention.”); Paper 52, 23:14-25:17; Paper 53, 79:17-80:6.

V. Conclusion

The ITC’s findings and conclusions do not resolve the issues before the Board. Claims 1-10 and 12-18 should be cancelled as unpatentable over the prior art.

Respectfully submitted,

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CERTIFICATE OF SERVICE (37 C.F.R. § 42.6(e)(1))

I hereby certify that on October 23, 2025, I caused a true and correct copy of the foregoing PETITIONER'S SUPPLEMENTAL BRIEF to be served electronically on counsel for Patent Owner at the following addresses:

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