

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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SAMSUNG ELECTRONICS CO., LTD.; SAMSUNG ELECTRONICS  
AMERICA, INC., AND HP INC.  
Petitioners

v.

NEODRON LTD.,  
Patent Owner

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Case IPR2020-00282  
Patent 7,821,502

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**PATENT OWNER'S SURREPLY**

**I. PETITIONERS' REPLY DOES LITTLE TO EXPLAIN AWAY THE INCONSISTENT POSITIONS THEY HAVE TAKEN, BUT DOES A LOT TO CONFIRM THE FATAL DEFECTS IN THEIR PETITION**

Petitioners bear the burden of setting forth in their petition the “how the challenged claim is to be construed.” 37 C.F.R. § 42.104(b)(3). Petitioners must set forth the construction they propose—that is, the construction that they believe to be the correct construction under applicable law. *Toyota Motor Corp. v. Blitzsafe Texas, LLC*, IPR2016-00422, Paper 12 at 26 (PTAB July 6, 2016). And because the Board now applies the same standard as district courts, Petitioners may not take inconsistent positions on claim constructions in their petition and in parallel litigation.

Here, Petitioners failed to meet these standards and several others that are necessary to institution of their Petition. In district court, Petitioners disclosed what they believed to be the appropriate constructions, but failed to disclose *or* apply the same ones before this Board. As demonstrated below, Petitioners' Reply under §42.104(b) does nothing to hide these flaws, but only confirms them. It also confirms the related flaws Neodron pointed to in its Response, which, taken together or separately, doom the Petition.

**A. Petitioners Appear to Concede One “Exception” to Their Presenting Expressly Consistent Constructions—But that One Alone Underscores a Fatal Flaw in their Petition: Beyond The Inconsistencies, Their Grounds Do Not Show the Claimed “Wrap-Around Connections Made Outside of the Sensing Area.”**

In its Preliminary Patent Owner's Response, Neodron pointed out how Petitioners express constructions of claim terms appear to meaningfully differ from the parallel district court proceedings to their Petition to this Board, in which they offered *none*. In their Reply, Petitioners now attempt to reconcile these differences by broadly labeling both sets of constructions as reflecting and applying the same “plain and ordinary meaning.” Reply at 2-4. But even if this sort of broad re-casting were enough to brush Petitioners' express inconsistencies and holes under the proverbial rug, Petitioners admit it is not broad enough to capture all inconsistencies. Instead, one “exception” would still remain. *Id.* And it is not a small one.

That admitted “exception” relates to their construction of the claimed “*sensing area*” terms. While Petitioners use their “plain and ordinary meaning” statement to district court as a label to

capture all the other situations in which their district court constructions appear narrower than those applied in any of the Grounds in their petition, they expressly *did not* use that label in reference to “*sensing area*.” And while Petitioners state in their reply that their proffered definition of “sensing area” is the plain and ordinary meaning, they instead offer a lexicographical argument of claim construction, arguing that the patentee expressly defined the claim term in the claims themselves. Reply at 3.

Beyond just any and all facial inconsistencies, Petitioners’ definition in the district court is *not* the plain and ordinary meaning of the term according to the claimed context. *See* Ex. 2004 at 28-32. Contrary to Petitioner’s construction, the contextual claim language makes clear that presence of electrodes defines the array of sensing cells. But it is the sensing cells resulting from the intersection of those electrodes that define the “sensing area,”—because those resulting sensing cells are arranged in columns and rows to ***form the sensing area***:

“wherein the electrodes define an array of sensing cells arranged in columns and rows **to form a capacitive sensing area of the sensor**, each sensing cell including a column sensing electrode and a row sensing electrode, the column sensing electrodes of sensing cells in the same column being electrically coupled together and the row sensing electrodes...being electrically coupled together”

’502 Patent, claim 1 (emphasis added). The patent specification also confirms this point. It, too, describes the relationship between the sensing cells and its role in defining the sensing area. *See, e.g.,* ’502 Patent at 3:48-51 (“The *sensing cells*...can provide a position sensor with sufficient resolution *over a typically sized sensing area* for most applications.”) (emphasis added). In other words, the cells define the “edge” of the sensing area “[i]n *sensing cells in columns at the edge of the sensing area* (i.e. columns x1 and x3, e.g. sensing cell 86) the row [] electrode runs continuously through the sensing cell with the column [] electrode comprising two conductive regions on either side of the [] electrode.” ’502 Patent at 10:67-11:5 (emphasis added).

Petitioners’ construction, on the other hand, appears to conveniently read out the sensing cell and its role from the claim, improperly collapsing that role and incorrectly assigning it to another, already existing claim term: sensing electrodes. Petitioners apparently believe that if the

“sensing area” is nothing more than just the electrodes, then showing connections just outside the electrodes, rather than the sensing cells, becomes easier. But the construction on which this premise is based is legally incorrect. Apart from Petitioners’ arbitrary box-drawing, Petitioners present no evidence that the sensor area of Barkan stops where Petitioners say it does. Petitioners’ contrary argument on the claims and prior art appears to be nothing more than an attempt to make it easier for them to show the claimed “wrap-around connections made outside of the sensing area.”

Regardless, even under their district court construction, Petitioners’ grounds do not show or suggest the claimed “*wrap-around connections made outside of the sensing area.*” As Patent Owner made clear on pages 7 through 21 of its Response, the trace shown in Barkan that Petitioners rely on is not a “row wrap-around connection[.]” because it is not wrapping around anything. Petitioners mischaracterize the top trace as a row *wrap-around* connection when in fact, it is merely another trace in the Barkan sensor design that connects the separate electrode elements together, side-by-side, just like the other row electrode traces 160 and column electrode traces 162.

In other words, as Patent Owner has already demonstrated, Petitioners appear to treat *any* connection as a “*wrap-around connection made outside the sensing area.*” They do not give any meaning to the term “wrap-around.” This invites error, because “interpretations that render some portion of the claim language superfluous are disfavored.” *Power Mosfet Techs.*, 378 F.3d at 1410; *see also Merck & Co. v. Teva Pharm. USA, Inc.*, 395 F.3d 1364, 1372 (Fed. Cir. 2005) (“A claim construction that gives meaning to all the terms of the claim is preferred over one that does not do so”). To be sure, Petitioners position is also inconsistent with the patent specification itself. For example, Fig. 3 of the ’502 Patent shows an embodiment that has row wrap-around connections (e.g., element 38), which lie “outside of the sensing area...to ensure the respective row sensing electrodes of the other rows are connected together.” *See id.* at 6:53-7:10. This is *the* place in which the wrap-around connection is described. And it makes precisely clear that the species of “connections” recited are “connections” configured to “run[] around the outside of the sensing area to connect the electrode 34 providing the row sensing electrodes in columns x1 and x2 of row y2 with the electrode 36 providing the row sensing electrodes in columns x3 and x4 of row y2.”

*Id.* at 6:62-66.

**B. At Any Rate, the Record Contradicts Petitioners’ Suggestion that there Was One “Exception”—There Appears to be At Least Two More, Which Exposes Additional Flaws in the Petition**

Petitioners contend that the “sensing area” terms are the “only exception” to presenting expressly identical and consistent constructions across both venues. Reply at 2-3. Not so. To defend their positions, Petitioners only argue that they have consistently advocated applying the “plain and ordinary meaning” of the disputed claim terms, both in their petition and in the parallel district court proceeding. But this position does not square with the facts.

Beyond the supposed “only exception” with regard to the “sensing area” claim terms, Petitioners fail to offer a satisfactory explanation for the fact that even some of their proposed plain and ordinary meaning constructions differ from the language of the claims as written. For instance, Petitioners’ “plain and ordinary meaning” of “electrically coupled” is defined as “connected with an electrical conductor.” *Id.* Yet Petitioners do not explain why the terms should be construed according to the different wording that Petitioners advanced in the litigation. And more importantly, the Petition *never states* that any “connection” in their Grounds is made with an “electrical conductor.” As another example, Petitioners’ proposed district court construction defines “a substrate having a *surface* with an arrangement of electrodes mounted thereon” as “a substrate having a *side* with an arrangement of electrodes mounted thereon” (emphasis added). *See* Ex. 2004 at 24-28. But in their Petition, they do not *even use this verbiage* to explain how their prior art satisfies it.

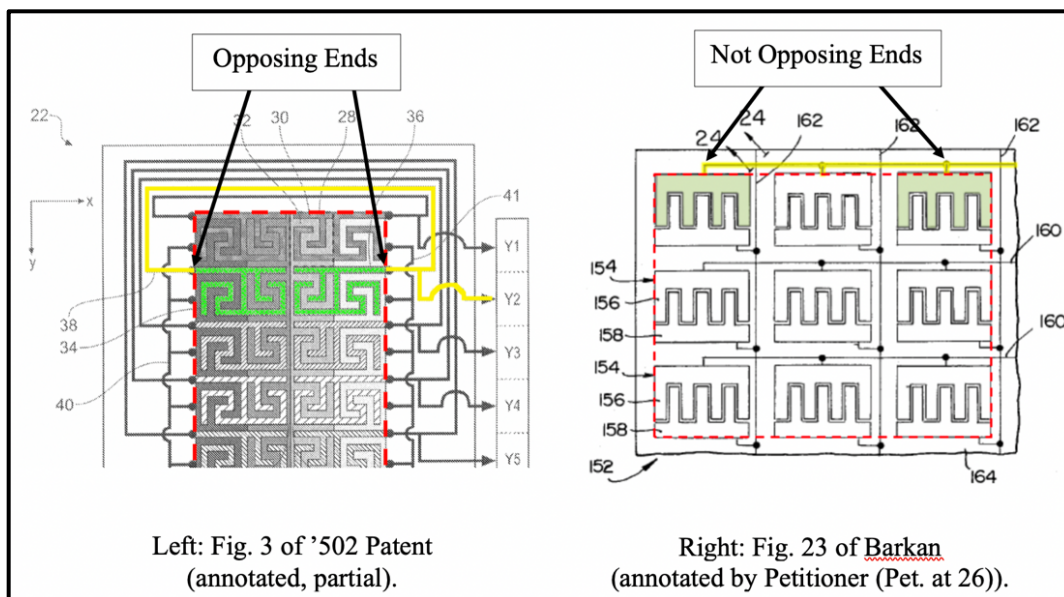
By failing to show how their asserted prior art satisfies the claim terms according to their proposed constructions, Petitioners fail to satisfy their burden “to identify, not only how the challenged claim is to be construed, but also how the construed claim is unpatentable” under “a claim construction that it consider[s] to be correct.” *Hologic v. Enzo*, IPR2018-00019, Paper 17 at 8-9 (PTAB Apr. 18, 2018). Indeed, under recent PTAB decisions, a similar series of events and contradictions gave rise to additional reasons to not institute. The PTAB denied a petitioner’s request stating that the petitioner failed to provide a claim construction necessary to meet its burden

to show a reasonable likelihood that at least one claim is unpatentable. *OrthoPediatrics Corp. v. K2M, Inc.*, IPR2018-01548, Paper 9 (PTAB March 1, 2019). And the Board emphasized that petitioner’s failure to provide a claim construction was further compounded by the fact that the petitioner took an inconsistent position before the district court, as Samsung also does here. *Id.*

**C. Petitioners Misuse Their Reply to Insert New Argument, But That Argument Only Confirms an Additional Flaw: Barkan Simply Does Not Show “Opposing Ends of at Least One Row Electrically Coupled to One Another”**

Though subtle, Petitioners also attempt to use their Reply under §42.104(b) as a vehicle to present a new argument on the merits. On pages 4-5 of their Reply, they contend the “lead 160” in Figure 23 of Barkan is an electrical conductor that connects “opposite ends” of the uppermost row of electrodes and lies outside the sensing area defined by the electrodes.” Petitioners then contend this “connection in Barkan is virtually identical to the ‘column wrap-around connections made outside of the sensing area’ depicted in Figures 3, 7, and 8 of the ’502 Patent.” Reply at 4-5.

Aside from not being in their Petition, in violation of the rules, Petitioners’ argument also fails on the facts. Indeed, one look at a side-by-side comparison of those figures disproves this argument—and only shows beyond any debate why this does not show connecting “opposing ends” with “wrap-around connections made outside of the sensing area,” as required by claims:



Petitioners’ Reply arguments—and the Petition itself—should be rejected.

Dated: April 20, 2020

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

The undersigned hereby certifies that the above document was served on April 20, 2020, by filing this document through the Patent Trial and Appeal Board End to End System as well as delivering a copy via electronic mail upon the following attorneys of record for the Petitioners:

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IPR2020-00282  
U.S. Patent No. 7,821,502

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