

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MIANYANG BOE OPTOELECTRONICS TECHNOLOGY CO., LTD.;
WUHAN CHINA STAR OPTOELECTRONICS SEMICONDUCTOR DISPLAY
TECHNOLOGY CO., LTD.; TIANMA MICROELECTRONICS CO., LTD.;
AND VISIONIX TECHNOLOGY, INC.,
Petitioner,

v.

SAMSUNG DISPLAY CO., LTD.
Patent Owner.

Case IPR2023-00941
U.S. Patent No. 7,414,599

**PATENT OWNER'S OPPOSITION TO PETITIONER'S
MOTION TO SUBMIT SUPPLEMENTAL INFORMATION (PAPER 18)**

I. Introduction

“Supplemental information is not intended to provide a petitioner an advantageous ‘wait and see’ opportunity to use a patent owner’s preliminary response and [the] decision on institution in order to refine or bolster petitioner’s position.” *Ooma, Inc. v. Deep Green Wireless LLC*, IPR2017-01541, Paper 14, at 3–4 (Jan. 23, 2018). Yet that is precisely what Petitioner’s motion attempts to do.

Petitioner’s new declaration is effectively a 36-page supplemental petition advancing new theories and evidence of supposed unpatentability—and circumventing the Board’s word count limits—after Patent Owner and the Board identified deficiencies in the Petition’s theories. Having alleged single-reference obviousness, Petitioner now seeks to submit two new prior art references to assert new theories of obviousness, including based on combinations. The Board should deny Petitioner’s motion. “The filing of a petition for *inter partes* review should not be turned into a two-stage process.” *ZTE Corp. v. Contentguard Holdings Inc.*, IPR2013-00139, Paper 27, at 3 (July 30, 2013).

II. Argument

Petitioner’s motion addresses only the timeliness and relevance requirements of 37 C.F.R. § 42.123(a). The motion wholly disregards that “§ 42.123(a) ‘does not connote that the PTAB must accept supplemental information so long as it is timely and relevant.’” *American Well Corp. v. Teledoc Health, Inc.*, IPR2021-00748, Paper

23, at 4–5 (Feb. 28, 2022) (quoting *Redline Detection, LLC v. Star Envirotech, Inc.*, 811 F.3d 435, 445 (Fed. Cir. 2015)). On the contrary, “whether the Board grants a motion to submit supplemental information also ‘depend[s] upon the Board’s determination that, in its discretion, the action sought by the movant is consistent with the Board’s statutory mandate.’” *Redline Detection*, 811 F.3d at 444 (quoting underlying Board decision, IPR2013-00106, Paper 35, at 4); *see also id.* at 446. Petitioner’s motion here is not consistent with the Board’s statutory mandate.

Consistent with *Redline Detection*, the Board has routinely denied motions to submit supplemental information “where,” as here, “the petitioner sought to use the supplemental information to refine or bolster challenges originally presented in the petition, based on information in the preliminary response or institution decision.” *American Well Corp.*, IPR2021-00748, Paper 23, at 6–7 (collecting cases).

Petitioner fails to address the foregoing precedent or explain why the Board should exercise its discretion to permit supplementation here. The Board could deny Petitioner’s motion on this basis alone. *See Redline Detection*, 811 F.3d at 446–47 (“[T]he PTAB has discretion to grant or deny motions as it sees fit.”). Petitioner asserts with a string cite that the Board has allowed supplementation “under similar circumstances,” Mot. at 1–2, but none of the cited cases permitted a petitioner to introduce new theories of obviousness, as Petitioner attempts here. *See, e.g., MED-EL*, IPR2020-00190, Paper 24, at 5 (Aug. 10, 2020) (determining that the petitioner

was “not [attempting] to change its theories of unpatentability”); *Apple Inc.*, IPR2022-00343, Paper 14, at 6 (Nov. 10, 2022) (same). Moreover, just as in *Redline Detection*, where supplementation was denied, Petitioner here “did not allege ‘any of the arguments or evidence in the newly submitted declaration [was] information that reasonably could not have been submitted with the Petition.’” 811 F.3d at 443. Petitioner should not be allowed to now add new theories and evidence of purported obviousness.

A. Petitioner Seeks to Change Its Theories and Evidence Relating to the Shared Light Emitting Signal

In the institution decision, the Board noted several significant issues with Petitioner’s arguments relating to the requirement of claim 13 (and other claims) that the fourth and fifth transistors are controlled by a shared light emitting signal. *See, e.g.*, Paper 12 at 51–52. In response, Petitioner does not articulate how it believes the grounds presented in the Petition address the Board’s concerns. Instead, Petitioner now attempts to add an entirely new prior art reference that was not cited or discussed in the Petition, and to significantly change its obviousness theories.

Petitioner seeks to rely on U.S. Pub. 2004/0056257 (“Sakamoto”), which was never cited or referenced in the Petition. Petitioner’s motion states that “[t]o the extent Fig. 36 has ‘architecture differences’ (ID, 52) of significance, Petitioner submits Sakamoto to show suitability and use of a shared light emitting signal in a variety of pixel configurations.” Mot. at 5. But the Board’s concern was the

Petition's failure to address "the architecture differences *between the embodiments in Kimura's Figures 33 and 36*" when proposing to modify Figure 33 such that the alleged fourth and fifth transistors are controlled by the same shared signal. Paper 12 at 52 (emphasis added).

It is unclear how Sakamoto, an entirely different reference, could possibly be relevant to the Board's concerns. Indeed, Petitioner does not even attempt to compare the pixel circuits of Sakamoto to those of Kimura's embodiments of Figure 33 and 36. In his supplemental declaration, Dr. Foty points to an embodiment of Sakamoto having two transistors that are connected to a common signal line. Ex. 1019, ¶¶ 23–24. However, the issue raised by the Board was not whether a common signal line could be used in any pixel circuit, but rather whether Kimura's Figure 33 embodiment would operate correctly with Petitioner's modifications. Dr. Foty does not explain how Sakamoto is relevant to this question. It is clear that, rather than being an attempt to answer the Board's questions regarding the grounds presented in the Petition, Petitioner raises Sakamoto in an attempt to present new theories because the Petition's actual grounds have deficiencies as flagged by the Board.

Petitioner seeks to materially change its obviousness theories based on Kimura in other ways as well. The Board stated that "[i]t is questionable whether the Figure 33 embodiment, after being modified ... would still meet all of the requirements of the first, second, third, fourth, and fifth transistor, as recited in claim

7.” Paper 12 at 51–52. Recognizing that the Petition’s theory of modifying the Figure 33 embodiment to control the fourth and fifth transistors with a shared light emitting signal would disrupt the operation of the circuit, Petitioner now attempts to introduce a new theory. Specifically, the supplemental declaration relies on an additional transistor from Figure 36, transistor 3612, which was neither referenced nor discussed in the Petition or Dr. Foty’s original declaration with respect to claim 13. *See, e.g.*, Ex. 1019, ¶¶ 9–22.

In his supplemental declaration, Dr. Foty opines about the operation of transistor 3612, which he acknowledges is not present in the Figure 33 embodiment, but which he now states is necessary to “enable[] use of a shared light emitting signal.” Ex. 1019, ¶ 10. Dr. Foty provides a raft of new opinions relating to this transistor, including with respect to a “synchronized operation of the fourth transistor and the fifth transistor” in the Figure 36 embodiment, and asserts for the first time that these would motivate a POSITA to use a shared light emitting signal. Ex. 1019, ¶¶ 11–17. Dr. Foty also states that “all of the ’599 claims are ‘comprising’ claims—and thus do not preclude the use/presence of an additional transistor.” Ex. 1019, ¶ 10. Neither the Petition nor Dr. Foty’s original declaration described any “additional transistor” in the proposed modification of Figure 33 for claim 13.

B. Petitioner Seeks to Change Its Theories and Evidence Relating to Initialization and Erasure in Kimura

In the Institution Decision, the Board noted that while “Petitioner grounds its

reasoning for claim 8 on [the] theory” that “initialization and erasure are the same,” Kimura in fact describes erasure and initialization as different operations. Paper 12 at 48–49. The Board accordingly “question[ed] Petitioner’s accounting for the alleged obviousness of claim 8 over Kimura.” *Id.* at 49.

Petitioner seeks to explain away its critical misinterpretation of Kimura as “confusion” stemming from “incomplete labelling of Fig. 16B” in Patent Owner’s preliminary response. Mot. at 5–6. In so doing, Petitioner ignores the many citations provided in both the Institution Decision and preliminary response showing that Kimura teaches that erasure and initialization are different operations. *See, e.g.*, Paper 12 at 48–49; POPR at 16–20. Petitioner stresses that the timing of the erasure period partially “overlaps” the initialization period, Mot. at 6, but this only reinforces that they are not the same.

Dr. Foty’s supplemental declaration shows that Petitioner recognizes its error, and now seeks to present a new, and different, interpretation of Kimura. Dr. Foty now states that “my opinion is based on the initialization period ... rather than the optional additional erasure period.” Ex. 1019, ¶ 36. This acknowledgement that initialization and erasure are not the same starkly contrasts with the Petition and Dr. Foty’s original declaration, which definitively equated these operations. *See, e.g.*, Pet. at 18, n.4 (“Kimura also calls [initialization] ‘reset’ (*see* Fig. 1B) and ‘erasure’ (*see* [0658]))); Ex. 1003, ¶¶ 224–230 (repeatedly referring to an

“initialization/erasure operation” and “initialization/erasure transistor”). Indeed, Petitioner’s theory as to why an initialization transistor “is readily applicable to the baseline circuit of Fig. 33” and could be placed where Petitioner proposes was based entirely on equating erasure and initialization. Pet. at 52–53 (arguing Kimura teaches “the erasure [transistor] can be placed in any location” and “[t]hus a POSITA would have been motivated to place the initialization transistor” as Petitioner proposes).

C. Petitioner Seeks to Change Its Theories and Evidence Relating to Its “All-PMOS” Theory

Petitioner also seeks to submit U.S. Pub. 2003/0067424 (“Akimoto”), another new prior art reference, to present new theories. Petitioner purports to provide Akimoto in response to questions by the Board, but those questions related to the operability of circuits under Petitioner’s proposed modifications of Kimura. *See, e.g.,* Paper 12 at 31 (“Petitioner has not asserted, much less explained, the interchangeability of a CMOS pair of nMOS and pMOS transistors with either two nMOS transistors or two pMOS transistors.”). Instead of addressing the Board’s questions, Dr. Foty provides a lengthy new discussion of purported “manufacturing benefits” of an all-pMOS approach, citing to Akimoto for support. Ex. 1019, ¶¶ 47–59. Petitioner does not even attempt to explain how these new opinions are relevant to the Board’s questions, which they are not.

III. Conclusion

For these reasons, the Board should deny Petitioner’s motion.

Date: January 30, 2024

Respectfully submitted,

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CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6, I hereby certify that the foregoing Patent Owner's Opposition to Petitioner's Motion to Submit Supplemental Information was served by electronic mail on the following counsel of record for petitioner:

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