

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO., LTD.,
Petitioner,

v.

WILUS INSTITUTE OF STANDARDS AND TECHNOLOGY INC.,
Patent Owner.

IPR2025–00988
Patent 10,687,281 B2

Before KRISTEN L. DROESCH, TERRENCE W. McMILLIN, and
JON M. JURGOVAN, *Administrative Patent Judges*.

McMILLIN, *Administrative Patent Judge*.

DECISION
Denying Institution of *Inter Partes* Review
35 U.S.C. § 314

INTRODUCTION

Background and Summary

Samsung Electronics Co., Ltd., (“Petitioner”)¹ filed a Petition for *inter partes* review of claims 1–14 of U.S. Patent No. 10,687,281 B2 (Ex. 1001, “the ’281 patent”). Paper 2 (“Pet.”), 1. Wilus Institute of Standards and Technology Inc. (“Patent Owner”)² filed a Preliminary Response. Paper 10 (“Prelim. Resp.”).

For the reason stated herein, we do not institute an *inter partes* review as to claims 1–14 of the ’281 patent.³

Related Proceedings

The parties identify the following district court matters related to the ’281 patent: *Wilus Institute of Standards and Technology Inc. v. HP Inc.*, No. 2-24-cv-00752 (E.D. Tex.); and *Wilus Institute of Standards and Technology Inc. v. Samsung Electronics Co., Ltd.*, No. 2-24-cv-00746 (E.D. Tex.). Pet. 91; Paper 7, 1–2.

The ’281 Patent (Ex. 1001)

The ’281 patent is titled “Wireless Communication Method and Wireless Communication Terminal, Which Use Discontinuous Channel.”

¹ Petitioner identifies itself, Samsung Electronics Co., Ltd., as well as Samsung Electronics America, Inc., as the real parties-in-interest to this proceeding. Pet. 91.

² Patent Owner identifies itself, Wilus Institute of Standards and Technology Inc., as the real party-in-interest to this proceeding. Paper 7, 1.

³ Patent Owner filed a request for discretionary denial of institution. Paper 8. Petitioner filed an opposition. Paper 9. Patent Owner’s request for discretionary denial was denied and the Petition was referred to the Board to issue a decision on institution addressing the merits or other non-discretionary considerations, as appropriate. Paper 11, 5.

Ex. 1001, code (54). The '281 patent seeks to “provide high-efficiency/high-performance wireless LAN communication in a high-density environment” through the efficient signaling of non-contiguous channel allocation. *Id.* at 2:65–67, 5:7–9. In particular, “non-contiguous channel allocation refers to channel allocation in which a band occupied by the transmitted packet (i.e., PPDU [PLCP Protocol Data Unit]) includes at least one non-contiguous channel (or non-contiguous resource unit).” *Id.* at 33:41–46.

In operation, a transmitter may “transmit[] a packet through at least one channel which is idle based on the result of performing the CCA [clear channel assessment] of multiple channels.” Ex. 1001, 33:66–34:1. “[T]he transmitter signals non-contiguous channel allocation information via a non-legacy preamble of the packet,” such that a “receiver decodes the received packet based on the obtained non-contiguous channel allocation information.” *Id.* at 34:1–11. The “packet may be an HE MU [high-efficiency multi-user] PPDU,” in which a non-legacy preamble of the PPDU includes “a high efficiency signal A field (HE-SIG-A)” and “a high efficiency signal B field [HE-SIG-B].” *Id.* 34:11–13, 13:44–46, 13:53–59, Fig. 10(b). “[T]he non-contiguous channel allocation information may be signaled via a combination of subfield(s) of the HE-SIG-A and subfield(s) of the HE-SIG-B,” where “[t]he subfield(s) of the HE-SIG-A may signal at least a portion of the non-contiguous channel allocation information, and the subfield(s) of the HE-SIG-B may signal the remaining information.” *Id.* at 39:26–32.

Challenged Claims

Petitioner challenges claims 1–14 (all) of the '281 patent. Pet. 1. Independent claim 8 recites:⁴

8. A wireless communication method of a wireless communication terminal, the method comprising:

receiving a wireless packet;

obtaining bandwidth information indicated via a bandwidth field of HE-SIG-A of the received packet;

obtaining information of an unassigned resource unit via at least one of the bandwidth field of the HE-SIG-A and a subfield of HE-SIG-B of the received packet; and

decoding the received packet based on the bandwidth information and the information of the unassigned resource unit,

wherein the information of the unassigned resource unit is indicated via a combination of the bandwidth field of the HE-SIG-A and a resource unit allocation field of the HE-SIG-B, and

wherein the bandwidth field of the HE-SIG-A indicates channel information to be punctured within the bandwidth, and the resource unit allocation field indicates additional puncturing information for the unassigned resource unit within the bandwidth.

Ex. 1001, 53:40–54:12.

The Asserted Grounds

Petitioner challenges claims 1–14 of the '281 patent based on the grounds set forth in the table below.

⁴ Petitioner treats independent claim 8 as exemplary. *See* Pet. 10–25 (Ground 1A), 60–71 (Ground 2A), 79–82 (Ground 2B). Patent Owner focuses its discussion of the claims in the Preliminary Response on claim 8. *See* Prelim Resp. 6–7. We also treat claim 8 as exemplary.

Claims Challenged	35 U.S.C. §	Reference(s)/Basis ⁵
1–5, 7–12, 14	103 ⁶	Josiam ⁷
1–7, 13	103	Josiam, Kim ⁸
1–3, 7–10, 14	103	Bharadwaj ⁹ , Li ¹⁰
1–5, 7–12, 14	103	Bharadwaj, Li, Chen ¹¹
6, 13	103	Bharadwaj, Li, Kim
6, 13	103	Bharadwaj, Li, Chen, Kim

Pet. 2.

⁵ Petitioner contends that the cited art qualifies as prior art under applicable law. *See* Pet. 2–3. In particular, Petitioner argues that “the Challenged Claims are entitled to a priority claim no earlier than 5/14/2016 (‘Critical Date’),” but “presents grounds based on the Critical Date and based on the ’281 patent’s earliest provisional filing date of 12/24/2015 (‘Earliest Filing Date’).” *Id.*; *see also id.* at 7–8. Patent Owner disputes the prior art status of Josiam, Kim, and Bharadwaj. *See* Prelim. Resp. 12–15, 19–20.

⁶ The Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (“AIA”), amended 35 U.S.C. § 103, and was effective on March 16, 2013. The application for the ’281 patent is U.S. Application No. 16/016,520, filed on June 22, 2018, which claims priority, through a PCT application, to a number of Korean applications, the earliest of which was filed on December 24, 2015. Ex. 1001, codes (21), (22), (30), (63), 1:9–28. Because the application for the ’281 patent claims an earliest priority date after the effective date of the applicable AIA amendment, the post-AIA version of § 103 applies.

⁷ US 2017/0006608 A1, published Jan. 5, 2017, filed Jun. 24, 2016 (Ex. 1014).

⁸ US 2018/0375632 A1, published Dec. 27, 2018, PCT filed Dec. 9, 2016 (Ex. 1018).

⁹ US 2017/0181129 A1, published Jun. 22, 2017, filed Dec. 21, 2016 (Ex. 1021).

¹⁰ US 2017/0041171 A1, published Feb. 9, 2017, filed Dec. 26, 2015 (Ex. 1023).

¹¹ US 2016/0330058 A1, published Nov. 10, 2016, filed Sep. 25, 2015 (Ex. 1025).

REASON FOR DENYING INSTITUTION

On November 3, 2025, the Director of the Office issued a precedential decision in *Revvo Technologies, Inc. v. Cerebrum Sensor Technologies, Inc.*, IPR2025-00632, Paper 20 (Nov. 3, 2025 (“*Revvo*”)).¹² *Revvo* provides that “when a petitioner takes alternative positions [on claim construction] before the Board and a district court, that petitioner should, at a minimum, explain why alternative positions are warranted.” *Revvo* at 3–4.

On November 5, 2025, the Director of the Office issued an informative decision in *Tesla, Inc. v. Intellectual Ventures II LLC*, IPR2025-00340, Paper 18 (Nov. 5, 2025) (“*Tesla*”). *Tesla* provides that: “Allowing a petitioner to advance a claim construction before the Board when that petitioner has made inconsistent indefiniteness arguments in district court fails to further, but instead detracts from, the Office’s goal of ‘providing greater predictability and certainty in the patent system.’” *Id.* at 4 (citing *Revvo* at 4–5). *Tesla* further provides that when a petitioner raises inconsistent invalidity challenges in two forums, “that petitioner is *required* to explain why those different positions are warranted.” *Id.* at 3 (citing *Revvo* at 3–5).

In this proceeding, Petitioner takes alternative positions on claim construction before the Board and a district court, but fails to explain why alternative positions are warranted. Therefore, in accordance with *Revvo* and *Tesla*, we deny institution.

¹² The *Revvo* and *Tesla* decisions are available on the PTAB’s Precedential and informative decisions page on the USPTO’s website. A link to this page is available here:

https://www.uspto.gov/patents/ptab/precedential-informative-decisions?utm_campaign=subscriptioncenter&utm_content=&utm_medium=email&utm_name=&utm_source=govdelivery&utm_term=

In the Petition, “Petitioner submits that no formal claim constructions are necessary.” Pet. 3. Petitioner does not discuss its position on claim construction in district court nor why alternative positions before the Board and the district court are warranted. *See id.*

In its Preliminary Response, Patent Owner argues that institution should be denied because of “Petitioner’s adoption of inconsistent claim construction arguments between its district court position and its Petition.” Prelim. Resp. 11. The Preliminary Response provides:

“Petitioner submits that no formal claim constructions are necessary....” Petition at 3. Despite this, Petitioner identified terms for construction in the District Court. Recently, in district court, however, Petitioner has identified several terms in the ’281 Patent for construction, including the terms “obtain[ing] information of an unassigned resource unit via at least one of the bandwidth field of the HE-SIG-A and a subfield of HE-SIG-B of the received packet,” which appear in both independent Claims 1 and 8. Petitioner contends that these terms are indefinite under 35 U.S.C. § 112. *See* Ex. 2015 at 1 (correspondence from Petitioner’s trial counsel identifying indefiniteness position for the ’281 Patent).

Id. at 10. Patent Owner further states that “Petitioner has offered no explanation, in this *inter partes* review or in the district court litigation, why it has adopted inconsistent claim construction positions between the two proceedings.” *Id.* at 11.

CONCLUSION

For the foregoing reason, we determine that trial should not be instituted on claims 1–14 of the ’281 patent.

ORDER

Upon consideration of the record before us, it is ORDERED that an *inter partes* review is not instituted.

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