

Filed: January 6, 2025

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS,

PETITIONER,

V.

GENERAL ACCESS SOLUTIONS, LTD.,

PATENT OWNER.

Case No. IPR2023-00978¹

U.S. Patent No. 7,230,931

**PATENT OWNER'S REQUEST FOR DIRECTOR REVIEW OF FINAL
WRITTEN DECISION**

¹ The Board joined Ericsson Inc. and Nokia of America Corporation as petitioners in this proceeding in IPR2024-00392 and IPR2024-00461, respectively.

TABLE OF CONTENTS

I.	INTRODUCTION.....	1
II.	BACKGROUND.....	2
A.	In the Prior Sprint IPR, the Board Confirmed the Patentability of Claims 28 and 29 of the '931 Patent.....	2
B.	In an Appeal of the Sprint IPR, the Federal Circuit Affirmed the Board's Confirmation of the Patentability of the Challenged Claims	3
III.	VERIZON'S CURRENT IPR CHALLENGE.....	4
A.	The Board Decided Verizon's Current IPR Challenge Based on a Disclosure in Atsuta Known to Exist in the Prior Art When the Board and Federal Circuit Previously Confirmed the Patentability of the Challenged Claims	4
B.	Verizon's Serial IPR Challenge is Contrary to Congress's AIA Directive ...	7
IV.	CONCLUSION	9

TABLE OF AUTHORITIES

Cases

<i>Sprint Spectrum L.P. v. General Access Sols., Ltd.</i> , 812 F. App'x 999 (Fed. Cir. 2020)	4
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Other Authorities

H.R. Rep. No. 112-98 (2011).....	8
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Rules

Discretionary Institution Practices, Petition Word-Count Limits, and Settlement Practices for America Invents Act Trial Proceedings Before the Patent Trial and Appeal Board, 88 Fed. Reg. 24503 (Apr. 21, 2023)	8
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I. INTRODUCTION

Patent Owner General Access Solutions, Ltd. (“GAS”) requests the Director review the Board’s Final Written Decision (Paper 43 (“FWD”)) finding claims 28 and 29 (the “Challenged Claims”) of U.S. Patent No. 7,230,931 (the “’931 Patent”) unpatentable. Patent Owner respectfully requests Director review of the current FWD, as it is fundamentally incorrect cannot be squared with the prior decisions of both the Board and the Federal Circuit with respect to the Challenged Claims. Specifically, the current FWD now inexplicably finds the Challenged Claims unpatentable over the same primary reference at issue in a prior IPR—Vornefeld—in combination with an additional reference—Atsuta—that discloses no more than what was admittedly known within the prior art in the prior IPR when both the Board and Federal Circuit affirmed the patentability of the Challenged Claims.

Moreover, permitting this serial petition against the same Challenged Claims and based on the same primary reference and secondary disclosures at issue in the previous IPR flies in the face of the Congressional directive for the USPTO to address potential abuses and current inefficiencies, while recognizing the importance of quiet title to patent owners. For these reasons, Patent Owner respectfully requests that the Director review and vacate the current FWD.

II. BACKGROUND

A. In the Prior Sprint IPR, the Board Confirmed the Patentability of Claims 28 and 29 of the '931 Patent

The '931 Patent is directed to the coordination of beamformed downlink transmissions from a base station to wireless devices in a cellular wireless network using Time Division Duplexing ("TDD"). The Challenged Claims require that a base station of a cellular wireless network transmit multiple beamformed signals, each of which carries different downlink data to wireless devices in separate geographic sectors of the cell, and that those separate beamformed signals be transmitted in the same downlink portion of the same TDD frame.

The Challenged Claims were already the subject of a prior IPR that asserted Vornefeld as the same primary prior art reference, *Sprint Spectrum L.P. v. General Access Solutions, Ltd.*, IPR2017-01889. In the prior IPR, Sprint relied on the same primary reference (Vornefeld) that Verizon asserts in this Petition. In the prior IPR, the Board correctly rejected Sprint's obviousness challenge as to claims 28 and 29. In this proceeding, Verizon did not allege that the Board committed any error in rejecting Sprint's prior, duplicative obviousness challenge.

In the prior Sprint IPR, the Board found that the critical limitation of the Challenged Claims was not disclosed in, or obvious in view of, the same Vornefeld reference at issue here. Specifically, the Board concluded that rather than using one common TDD frame to schedule all network communications, Vornefeld instead

disclosed the use of *separate TDD frames for each beamformed transmission*. As the Board explained:

Petitioner has not met its burden to establish claim 28 is anticipated by, or would have been obvious over, Vornefeld. Claim 28 requires the transmit circuitry to transmit second downlink data traffic in the same (said) downlink portion of the same (said) TDD frame recited in claim 1. *The block [from Figure 3 of Vornefeld] that Petitioner relies on for the second downlink data traffic is depicted as a different (spatially separated) TDD frame that is simultaneously transmitted with the other frames. We agree with Patent Owner that Petitioner does not establish Vornefeld discloses using different beams in the same TDD frame* (i.e., second downlink data traffic, transmitted in “said downlink portion of said TDD frame”) to transmit to devices within a different sector.

Ex. 1009, Sprint IPR Final Written Decision at 23 (emphasis added) (citations omitted).

B. In an Appeal of the Sprint IPR, the Federal Circuit Affirmed the Board’s Confirmation of the Patentability of the Challenged Claims

On appeal of the Sprint IPR, the Federal Circuit affirmed the Board’s determination of the validity of the Challenged Claims. The Federal Circuit specifically affirmed the Board’s conclusion that “Vornefeld discloses *multiple*

spatially separated frames that are simultaneously transmitted in parallel—not a single frame with ‘second downlink data traffic,’ as required by claims 28 and 29.” *Sprint Spectrum L.P. v. General Access Sols., Ltd.*, 812 F. App’x 999, 1006 (Fed. Cir. 2020) (emphasis in original).

III. VERIZON’S CURRENT IPR CHALLENGE

A. The Board Decided Verizon’s Current IPR Challenge Based on a Disclosure in Atsuta Known to Exist in the Prior Art When the Board and Federal Circuit Previously Confirmed the Patentability of the Challenged Claims

In the current IPR, Verizon relies on Atsuta to supply the elements of the Challenged Claims the Board and the Federal Circuit previously found to be missing from Vornefeld. *See* Paper 15 at 18-20. Specifically, Verizon argues that the combination of Vornefeld and Atsuta obviates the Challenged Claims on the theory that the only element the Board and the Federal Circuit previously found to be missing from Vornefeld was the concept of “transmitting to subscribers in different sectors within a single frame.” Pet. at 30; *see also id.* at 2-3, 38, 44-46. The Board, in its FWD, credited this argument from Verizon. FWD at 35-38. Specifically, the Board held that “certain cited disclosures in Atsuta is all the information a POSA would need to determine that it would be obvious that a single frame in Vornefeld could include downlink transmissions to different sectors.” FWD at 38 (quotation omitted). The Board further held that these disclosures in Atsuta teach “transmit[ing] to different subscribers and sectors in a single frame,”

such that “a POSA would have found the use of Atsuta’s single-frame structure ... with Vornefeld’s system to be an obvious design choice.” FWD at 35 (quotation omitted).

But Verizon’s revisionist history—accepted by the Board—ignores the fact that Sprint presented un rebutted evidence in the prior IPR that this concept was disclosed in the prior art. Verizon—and the Board’s FWD—also ignores the prior art incorporated into the specification of the ’931 Patent that discloses the very thing Verizon and the Board say is newly presented by Atsuta: time slots assigned to multiple users in the same frame. FWD at 35-38. Specifically, in the prior IPR, Sprint asserted secondary references in addition to Vornefeld in an attempt to show that the Challenged Claims were obvious.² And some of those references contained disclosures comparable to the Atsuta reference relied upon by Verizon and the Board in its FWD. For example, one of the secondary references Sprint asserted against the Challenged Claims was U.S. Patent No. 7,366,133 (“Ahy”). Sprint argued that Ahy disclosed the use of a TDD frame structure and that it would have

² In the prior IPR, Sprint asserted Vornefeld in combination with Anderson against Claims 28 and 29, as well as Newman in combination with Ahy. IPR Petition, IPR2017-01889, at 44, 51 (July 28, 2017) (Paper 1); Ex. 2020, Proctor Decl.

¶¶ 110, 112.

been obvious to incorporate a TDD frame structure with the other elements of the claimed invention, similar to what Verizon and the Board’s FWD argues here with respect to Atsuta. Ex. 2020, Proctor Decl. ¶¶ 122-24, 153-54; FWD at 35-38. Sprint’s expert also offered unrebutted testimony that U.S. Patent No. 6,005,854 disclosed a TDD frame with transmissions to users in multiple sectors in the same frame. *See id.* ¶¶ 83-85 (“The ’854 patent further discloses the TDD protocol utilizing a frame structure” that includes “up to thirty one concurrent orthogonally modulated traffic channels . . . within a DTS frame”). Thus, the very same thing that Verizon and the Board’s FWD now says invalidates the Challenged Claims in view of Vornefeld and Atsuta—transmissions to users in multiple sectors in the “same frame”—was already before the Board and the Federal Circuit in the prior Sprint IPR. *See* FWD at 35-38.

Verizon’s combination therefore adds nothing new to the Board and Federal Circuit’s previous analysis of the Challenged Claims in view of Vornefeld. Thus, the Board’s FWD now finding the Challenged Claims unpatentable over Vornefeld in view of the addition of the Atsuta reference cannot be squared with the Board’s prior decision and Federal Circuit affirmance of the patentability of the Challenged Claims in view of Vornefeld.

Curiously, the Board’s FWD was issued the very day before a highly publicized retrial of Patent Owner’s infringement case against Verizon, which had

previously resulted in an \$847 million verdict against Verizon (and which then settled prior to verdict). See <https://www.law360.com/articles/1853049/verizon-hit-with-847m-patent-verdict-in-edtx>; <https://www.law360.com/articles/2270536/ptab-axes-patent-claims-in-scrapped-583m-verizon-verdict>. The uncanny timing of the Board's FWD raises serious questions as to whether the Board's decision may have been influenced by the large, highly publicized jury verdict.

B. Verizon's Serial IPR Challenge is Contrary to Congress's AIA Directive

Verizon's current IPR is exactly the sort of repeated, serial challenge that Congress ordered the Board to protect against when enacting the AIA. Indeed, in consideration of its most recent rules update, the USPTO reiterated that:

The United States Patent and Trademark Office (USPTO or Office) is considering modifications to the rules of practice for inter partes review (IPR) and post-grant review (PGR) proceedings before the Patent Trial and Appeal Board (PTAB or Board) to *better align the practices with the USPTO's mission to promote and protect innovation and investment in the same, and with the congressional intent behind the American Invents Act (AIA) to provide a less-expensive alternative to district court litigation to resolve certain patentability issues while also protecting against patentee harassment.*

Changes Under Consideration to Discretionary Institution Practices, Petition Word-Count Limits, and Settlement Practices for America Invents Act Trial Proceedings Before the Patent Trial and Appeal Board, 88 Fed. Reg. 24503 (Apr. 21, 2023) (amending 37 C.F.R. § 42) (emphasis added). The USPTO has additionally recently noted that “[t]he patent system works best when any disputes as to the validity or infringement of patents are addressed efficiently and effectively, and when appropriate steps are taken to curb abusive actions that contravene the Office’s mission to promote innovation.” *Id.*

Importantly, in passing the AIA, Congress explicitly “recognize[d] the *importance of quiet title to patent owners* to ensure continued investment resources.” H.R. Rep. No. 112-98, at 48 (2011) (emphasis added). In so stating, the Office made clear that the tools provided by the AIA “are not to be used as tools for harassment or a means to prevent market entry through repeated litigation and administrative attacks on the validity of a patent. Doing so would frustrate the purpose of the section as providing quick and cost effective alternatives to litigation. Further, such activity would divert resources from the research and development of inventions. As such, the Committee intends for the *USPTO to address potential abuses and current inefficiencies* under its expanded procedural authority.” *Id.* (emphasis added).

Here, by permitting Verizon (joined by the equipment manufacturers who also supplied Sprint) to file this serial IPR against the Challenged Claims of the '931 patent—relying on the same primary art reference against which both the Board and Federal Circuit have already confirmed the patentability of the Challenged Claims, the Board is acting directly contrary to the intent of the AIA as articulated by Congress. *See* Paper 15 at 51-54. At a minimum, the Board's decision in this case will improperly invite successive petitions challenging the same patent based on substantially the same prior art. Indeed, nothing could be more adverse to Patent Owner's quiet title in the Challenged Claims than permitting the current FWD to stand, despite its reliance on a combination of Vornefeld—already considered by both the Board and the Federal Circuit—and Atsuta—for a proposition admittedly also within the prior art considered in the prior Sprint IPR. As Congress has explicitly directed the USPTO to address potential abuses and current inefficiencies, Patent Owner respectfully requests that the Director follow this Congressional directive here.

IV. CONCLUSION

For the reasons above, Patent Owner respectfully requests that the Director review the FWD, and that the Director find that Petitioner failed to establish by a preponderance of the evidence that claims 28 and 29 are unpatentable.

Dated: January 6, 2025

Respectfully Submitted,

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CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), I certify that I caused to be served on the counsel for Petitioner a true and correct copy of the foregoing Patent Owner's Request for Director Review of Final Written Decision by electronic means on January 6, 2025, at the following addresses or record:

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