

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

BMW OF NORTH AMERICA, LLC,

Petitioner,

v.

NORTHSTAR SYSTEMS LLC,

Patent Owner.

Patent No. 6,898,432

Filing Date: November 21, 2000

Issue Date: May 24, 2005

Inventor: Xi Jiang

Title: ROUTE-BASED COMMUNICATION PLANNING ARCHITECTURE
AND METHOD FOR WIRELESS COMMUNICATION

PATENT OWNER'S PRELIMINARY RESPONSE

Case No. IPR2023-01190

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EXHIBIT LIST

Exhibit No.	Description of Document
2001	Docket Control Order, Dkt. 57, in <i>NorthStar Sys. LLC v. Volkswagen AG</i> , Case No. 2:22-cv-00486-JRG (E.D. Tex. Aug. 9, 2023)

I. INTRODUCTION

On July 19, 2023, BMW of North America, LLC (“BMW” or “Petitioner”) submitted a Petition for *Inter Partes* Review (Paper No. 1, “Petition”) of U.S. Patent No. 6,898,432 (Ex. 1001, the “’432 Patent”), challenging Claims 1-8 pursuant to §§ 311-319 and § 42.100, *et seq.* (the “Challenged Claims”).

The Petition should be denied because the Petitioner has failed to demonstrate a reasonable likelihood that the Challenged Claims are invalid as obvious under 35 U.S.C. § 103(a) based on the prior art references and obviousness grounds set forth in the Petition. The ’432 Patent is novel technology developed by a true innovator in the mobile communications space—Daimler Chrysler.

The art cited by Petitioner is nearly identical to that cited during prosecution. Petitioner relies primarily on the “Oh” reference to teach “different communication options.” However, Oh, like the Liu reference cited during prosecution, only teaches a single communication option. Petitioner does not rely on any other reference to teach or disclose this limitation. Accordingly, the Petition fails and should be denied.

Moreover, because the Petition is merely a weak rehash of the arguments raised during prosecution, the Petition should be denied in the Board’s discretion. Additionally, the cited art is very close in time to the filing date of the ’432 Patent

and Patent Owner may be able to obtain evidence in the companion District Court case to antedate the cited references and remove them as prior art.

Additionally, Petitioner has filed a declaratory judgment action against NorthStar alleging noninfringement of the challenged patent. Petitioner has therefore indicated it prefers to litigate in district court. Because the Petition is weak on the merits, because the art is cumulative of the art advanced during prosecution, and because the Petitioner has chosen its own litigation path in the district courts, the Board should decline to unnecessarily increase the burden, time, and cost on the parties and the Board and should exercise its discretion to deny this Petition.

II. THE '432 PATENT

The '432 Patent, entitled "Route-Based Communication Planning Architecture and Method for Wireless Communication," was filed on November 21, 2000, and issued on May 24, 2005. The '432 Patent relates to novel methods for improving mobile connectivity by using location/route information to efficiently use multiple mobile communications options. More specifically, the '432 Patent relates to improving vehicular communication systems, commonly known as "telematics." During prosecution, the Patentee described the invention as related to providing the ability to select "from a variety of available wireless communications options along [a] travel route to ensure optimal, seamless vertical handoff between the communication options." Ex. 1002 at 294. Moreover, the Patentee described

improving mobile communications in ways that were not described in “2G” and “3G” telecommunication. ’432 Patent at 1:52-2:25. The Patentee further distinguished his invention from the conventional 2G and 3G telecommunications when discussing the “Liu” reference, which described handover between base-stations based on location. As described by the Patentee, the prior art, like Liu, only describes how “*on one network*, a company could distribute its mobile services based on where it predicts its customers will ultimately be located.” Ex. 1002 at 295. Because conventional 2G and 3G disclosures like Liu teach only distribution of facilities on “*one network*,” they do not teach or disclose the claimed *alternative* wireless communication options. *Id.* Petitioner has ignored these disclosures and seeks to invalidate the Challenged Claims over the very concept that was at issue during prosecution.

III. THE ALLEGED PRIOR ART

The Petition primarily relies on the “Oh” reference, U.S. No. 6,714,789 (Ex. 1005 “Oh”). Oh, like the Liu reference that was overcome during prosecution, describes conventional “handoff” processes. Indeed, Oh, describes, within a *singular communication option*, to which “carrier frequency the communication should be switched.” Ex. 1005 at 1:24-25. Indeed, switching carrier frequencies is merely using *the same* communication option, just as switching base-stations in Liu, is using *the same* communication option.

IV. LEVEL OF ORDINARY SKILL IN THE ART

For the purposes of this Preliminary Response only, Patent Owner utilizes Petitioner's proposed level of ordinary skill in the art: would have had at least a bachelor's degree in Computer or Electrical Engineering or equivalent engineering discipline, and approximately three years' experience in navigation or geolocation systems along with a background in telecommunication. Additional education could substitute for professional experience, and significant work experience could substitute for formal education. Pet. at 10.

V. CLAIM CONSTRUCTION

Petitioner identifies no terms in its Claim Construction section. Instead, Petitioner generally states that several terms are indefinite; in other words, that the Petitioner cannot identify the boundaries of those claim terms. While Patent Owner contends that these terms are sufficiently definite in scope, it is the Petitioner's burden to set forth an explanation of how the prior art can be mapped to each claim limitation. By punting on these issues, Petitioner simply cannot meet its burden and the Petition should be denied.

VI. LEGAL STANDARD

The question of obviousness is resolved on the basis of underlying factual determinations, including: (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, (3) the level of skill

in the art, and (4) where in evidence, so called secondary considerations. *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17–18 (1966). A claim is only unpatentable under 35 U.S.C. § 103 if “the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007) (quoting 35 U.S.C. § 103).

“An invention is not obvious simply because all of the claimed limitations were known in the prior art at the time of the invention. Instead, we ask ‘whether there is a reason, suggestion, or motivation in the prior art that would lead one of ordinary skill in the art to combine the references, and that would also suggest a reasonable likelihood of success.’” *Forest Lab’ys, LLC v. Sigmapharm Lab’ys, LLC*, 918 F.3d 928, 934 (Fed. Cir. 2019). “Of course, concluding that the references are within the scope and content of the prior art to be considered for obviousness does not end the inquiry. *Graham* makes clear that the obviousness inquiry requires a determination whether the claimed invention would have been obvious to a skilled artisan.” *Apple Inc. v. Samsung Elecs. Co.*, 839 F.3d 1034, 1051 n.14 (Fed. Cir. 2016).

VII. THE BOARD SHOULD DENY INSTITUTION BECAUSE PETITIONER HAS FAILED TO SHOW A REASONABLE LIKELIHOOD OF SUCCESS FOR ANY OF GROUNDS 1-3

Petitioner does not explain how the combination of Oh, Clark, and McGregor can arrive at the claimed “plurality of wireless communications options,” as specified in all of the Challenged Claims. As set forth above, the Oh reference merely discloses handoff between frequencies, which is only a single wireless communications option. Petitioner incorrectly attributes frequency hopping to a plurality of wireless communications options. Frequency hopping, like base station hopping in the prior art, does not meet the claims. One of skill in the art would have understood that the plain meaning of the term “wireless communications option” would not include merely frequency hopping or changing base stations as in Liu or Oh. Petitioner’s argument regarding wireless communications options is cumulative of the arguments made by the Office and overcome during prosecution. None of the other references advanced by Petitioner overcome this limitation as Petitioner relies on Oh.

Accordingly, because Oh cannot support a plurality of wireless communications options, the combination fails and the Petition should be denied in its entirety.

**VIII. THE PETITION SHOULD BE DENIED IN THE DISCRETION
OF THE DIRECTOR UNDER 35 U.S.C. § 314(A)**

The circumstances of the parallel District Court Litigation in Texas (*NorthStar Sys. LLC v. Bayerische Motoren Werke AG, Inc.*, No. 2:22-cv-00496-JRG (E.D. Tex.) (the “East Texas Case”) and *BMW of N. Am., LLC v. NorthStar Sys. LLC*, No. 6:23-cv-00456-ADA (W.D. Tex.) (the “West Texas Case,” together the “Texas Actions”) necessitate denial of the Petition under the Board’s precedent, as every factor considered in relation to efficiency, fairness, and the merits supports denial. *See Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11, at 6 (P.T.A.B. Mar. 20, 2020) (precedential) (considering (a) “whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted;” (b) “proximity of the court’s trial date to the Board’s projected statutory deadline for a final written decision;” (c) “investment in the parallel proceeding by the court and the parties;” (d) “overlap between issues raised in the petition and in the parallel proceeding;” (e) “whether the petitioner and the defendant in the parallel proceeding are the same party;” and (f) “other circumstances that impact the Board’s exercise of discretion, including the merits.”). Furthermore, there is no “compelling merit” to BMW’s Petition that would negate the strong *Fintiv* factors under *Commscope Techs. LLC*

v. Dali Wireless, Inc., IPR2022-01242, Paper 23 (P.T.A.B. Feb. 27, 2023) (precedential).

As set forth below, every *Fintiv* factor demonstrates that efficiency and integrity of the AIA are best served by denying review. First, the Court has not granted a stay and the Court cannot grant a stay for IPR according to longstanding precedent. Second, trial (set for November 2024) will be complete long before the projected statutory deadline for a Final Written Decision in January 2025. Additionally, BMW North America filed a Declaratory Judgment action against NorthStar on June 16, 2023, indicating that it intends to pursue relief in the District Court rather than in the PTAB. Third, the parties have already invested resources developing legal and factual issues of validity, and discovery will be ongoing before the institution decision on this Petition. Fourth, there is complete overlap between the Challenged Claims and prior art and those at issue in the parallel proceedings. Fifth, Petitioner and Patent Owner may complete trial, and receive a judgment on the merits, before or contemporaneous with the projected statutory deadline for a final written decision. Finally, as shown above, BMW's obviousness combination fails to disclose the central claim limitation and BMW's art is cumulative of the art advanced during prosecution. Additionally, the Oh reference is very close-in-time to the filing date of the '432 Patent, and Petitioner will likely be able to remove Oh as prior art by ante-dating it in the companion District Court litigation.

Accordingly, the Board should exercise its discretion under § 314(a) and deny the Petition because institution of this proceeding would not be consistent with the objective of the AIA to “provide an effective and efficient alternative to district court litigation.” *NHK Spring Co. v. Intri-Plex Techs., Inc.*, IPR2018-00752, Paper 8, at 20 (P.T.A.B. Sept. 12, 2018) (quoting *Gen. Plastic Indus. Co. v. Canon Kabushiki Kaisha*, IPR2016-01357, Paper 19, at 16–17 (P.T.A.B. Sept. 6, 2017) (precedential)).

A. No Stay of the Parallel District Court Litigation

While Petitioner has moved to stay the Eastern District of Texas Court action, the District Court must deny that motion in view of its longstanding precedent. Additionally, BMW has not moved to stay its own Declaratory Judgment action in the Western District of Texas. Since BMW cannot guarantee institution on all patents in the underlying East Texas Case, the Court will likely abide by its “universal practice” to deny motions to stay. *See, e.g., Apex Beam Techs. LLC v. ZTE Corp.* Case No. 2:22-CV-00031-JRG-RSP, Dkt. No. 55 at *1, (E.D. Tex. June 14, 2023) (Denying Motion to Stay where IPRs have not been instituted against all patents in the litigation and stating, “[i]n this district, that is not just the majority rule; it is the universal practice.”)

Additionally, BMW has filed the West Texas Case, a declaratory judgment action in the Western District of Texas, after filing this IPR. Unsurprisingly, BMW

has only sought to stay the Eastern District of Texas case and *not* the Western District Case. Thus, this case will march on toward a trial, regardless of the outcome here. Indeed, rather than pursue the efficiencies of the PTAB, BMW has doubled down on District Court litigation and chosen to multiply those proceedings. Based on BMW's choice of District Court litigation, the Petition should be denied. Accordingly, this factor weighs in favor of discretionary denial in order to avoid the significant inefficiency of proceeding with IPR and multiple District Court proceedings.

B. The Board's Written Decision Deadline Coincides with the Trial Date

On July 20, 2023, the Court provided a Jury Selection/Trial Date of November 18, 2024. Ex. 2001. Pursuant to 35 U.S.C. § 316(a)(11), the projected statutory deadline for a final written decision is on January 24, 2025, long after the jury trial date in this case. Even assuming the median 24.5 months to trial in the Eastern District of Texas, which would be December 2024, the final written decision is still scheduled to be released after the trial date.

Accordingly, this factor weighs in favor of denying institution. *See Samsung Elecs. Am., Inc. v. Uniloc 2017 LLC*, IPR2019-01218, Paper 7, at 7-10 (P.T.A.B. Jan. 7, 2020)

C. Significant Investment by the Time of Institution Favors Discretionary Denial

The parties' investment in the parallel proceeding weighs in favor of discretionary denial. Significant work in the District Court Litigation has already taken place and the parties will be months into discovery, and months from trial by the time the Board decides whether to institute. Furthermore, the parties are also likely to invest resources in the subsequent Declaratory Judgment action filed by BMW in the Western District of Texas, multiplying the investment.

Pursuant to 35 U.S.C. § 314(b), the Board will issue an institution decision in January 2024. The parties will have already served both infringement and invalidity contentions. These substantial investments, including a significant investment in validity, infringement contentions, and discovery, show that this factor weighs heavily against institution.

Thus, the parties' and the Eastern District of Texas's substantial investments strongly weigh in favor of discretionary denial.

Accordingly, this factor weighs in favor of denial.

D. The District Court Litigation Involves the Same Claims and the Same Arguments

The Asserted Claims in the District Court Litigation and the Challenged Claims in this Petition are substantially the same and at least independent Claim 1 is at issue in both proceedings.

To date, Petitioner has not alleged any prior art other than that at issue in this proceeding. The Board has noted, when both the District Court and the Board will consider the same prior art and arguments, “concerns of inefficiency and the possibility of conflicting decisions [are] particularly strong.” *Fintiv, Inc.*, IPR2020-00019, Paper 11, at 12 (P.T.A.B. Mar. 20, 2020) (precedential). The likelihood of inefficiency and conflicting decisions is particularly significant in this case where the Texas Actions will proceed to trial in November 2024. Furthermore, to date, BMW has not served any stipulation to remove the challenged prior art from the District Court actions. Even if BMW were to serve such a stipulation, the other factors set forth herein, including the cumulative nature of BMW’s prior art, should favor denial.

This factor accordingly favors discretionary denial.

E. The Parallel District Court Litigation and the Petition Involve the Same Parties

As noted above, the Texas Action is between the same parties. BMW makes no argument as to this factor. Accordingly, this factor weighs in favor of discretionary denial.

F. Other Circumstances Favor Denial of Institution

As shown above, Petitioner fails to show that key limitations are disclosed or rendered obvious by its combinations. As such, it lacks strength on the merits.

Furthermore, the material set forth in the references cited by Petitioner was squarely within the prior art that was already of record and considered by the Office and is therefore cumulative. For example, the Oh reference and the Liu reference both describe handoff between base stations and/or frequencies. This type of handoff does not satisfy the “wireless communications” of the claims. Petitioner does not meaningfully address this glaring deficiency, despite having analyzed the prosecution history.

Petitioner’s failure to substantively address the similarity or cumulative nature of the alleged prior art in the context of 325(d) should be fatal to its Petition. At the very least, the similarities in subject should preclude any finding that the Petition provides “compelling merit.”

Considering all factors together, the Petition should be denied in the Director’s discretion under 35 U.S.C. § 314(a).

IX. CONCLUSION

For the foregoing reasons, Patent Owner respectfully requests that the Board deny institution of the Petition in its entirety.

Respectfully submitted,

Dated: October 24, 2023

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CERTIFICATE OF WORD COUNT

The undersigned hereby certifies that the portions of the above-captioned PATENT OWNER'S PRELIMINARY RESPONSE TO PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 6,898,432 specified in 37 C.F.R. § 42.24 has 2,764 words in compliance with the 14,000-word limit set forth in 37 C.F.R. § 42.24. This word count was prepared using Microsoft Word for Office 365.

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CERTIFICATE OF SERVICE

A copy of PATENT OWNER'S PRELIMINARY RESPONSE TO PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 6,898,432 and EXHIBIT 2001 have been served on Petitioner's counsel of record as follows:

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