

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC,

Petitioner,

v.

HEADWATER RESEARCH LLC,

Patent Owner

IPR2026-00271

Patent No. 9,491,564

**PATENT OWNER'S REQUEST FOR DISCRETIONARY DENIAL OF
INSTITUTION**

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PATENT OWNER'S EXHIBIT LIST

No.	Description
2001	Confidential License Agreement
2002	March 20, 2026 text order regarding motion to dismiss Google's declaratory judgment complaint in <i>Google LLC v. Headwater Research LLC</i> , No. 3:26-CV-01460 (N.D. Cal)
2003	Headwater Research LLC's Opposition to Google's Motion for Leave to File Amended Answer and Counterclaims, <i>Google LLC v. Headwater Research LLC</i> , No. 3:26-CV-01460 (N.D. Cal. Apr. 9, 2026)
2004	U.S. Patent No. 10,140,827, issued to Google LLC
2005	U.S. Patent App. Pub. No. 2010/0192212

I. Introduction

Google seeks to institute an IPR on U.S. Patent No. 9,491,546 (the “’564 patent”) despite having instigated parallel proceedings on that patent in district court and despite offering no stipulation to prevent overlap between this case and any parallel proceedings. The congressional scheme normally prevents a petitioner from “fil[ing] a civil action challenging the validity of a claim of the [challenged] patent” before filing an IPR. 35 U.S.C. §315(a)(1). However, here Google has alleged ***non-infringement***, and then in response to (compulsory) counterclaims of infringement Google reserves the right to raise counterclaims of invalidity (entirely duplicative with the invalidity grounds asserted in the Petition) in Google-initiated district court proceedings. Although such procedural machinations are technically within the letter of the statutory scheme, they constitute a “loophole” that frustrates the purpose of the statute to prevent IPR petitioners from instigating litigation that ultimately seeks a declaratory judgment of invalidity. *Epic Games, Inc. v. Acceleration Bay LLC*, No. 4:19-CV-04133-YGR, 2020 WL 1557436, at *3 (N.D. Cal. Apr. 1, 2020). Exploitation of this loophole weighs heavily in favor of discretionary denial because IPRs are intended to provide an ***alternative*** to litigation, and allowing a declaratory judgment plaintiff to initiate litigation in two forums which will both ultimately seek invalidity based on the same or similar prior art frustrates that intent.

Google exacerbates this issue by failing to offer *any* stipulation regarding the invalidity defenses it may raise in any parallel district court action. Thus, Google is free to pursue any prior art in any parallel proceeding, *including* the exact grounds raised in this IPR, ensuring that any district court litigation that proceeds involving the '564 patent will allow for substantial duplication of effort.

Settled expectations also support denial of institution. The '564 patent has been in force for nearly a decade, and no reason exists to upend Patent Owner Headwater's settled expectations. Additionally, the '564 patent is subject to significant licensing activity, confirming Headwater's settled expectations in enforcement of that patent. Moreover, Google has been aware of the family of applications leading to the '564 patent since at least November 2018, thus undermining any argument that Headwater's settled expectations should be disregarded in favor of Google.

Finally, the merits of the Petition are particularly weak. No prior art reference is even alleged to satisfy numerous claim requirements, and the Petition relies extensively on conclusory expert testimony in an attempt to cure the significant deficiencies of the prior art. Moreover, *even if* this improper reliance on expert testimony *were* credited to demonstrate how the prior art would have obviously operated when combined, the Petition would *still* fail to show that the proposed combination would actually satisfy the claim requirements including "an inter-

process software communication bus providing secure communication between” the device link agent and software components (limitation [1B1]), and “allowing access to the bus only for software components identified by the access authorization information” (limitation [1B2]).

Accordingly, Headwater respectfully requests that the Director exercise discretion to deny institution.

II. Discretionary denial is appropriate.

35 U.S.C. § 314(a) gives the Director discretion to deny institution of an *inter partes* review. The March 26, 2025 Memorandum regarding Interim Processes for PTAB Workload Management sets forth various relevant considerations that may weigh in favor of discretionary denial, including the settled expectations of the parties, the strength of the unpatentability challenge, and extent of the petition’s reliance on expert testimony, and any other considerations bearing on the Director’s discretion.

As explained below, these factors weigh heavily against institution.

A. Google reserves for itself the right to duplicate the exact same issues in parallel district court proceedings, ensuring this case will not serve as an alternative to district court litigation.

On September 3, 2025, Google filed an action for declaratory judgment of non-infringement of the ’564 patent in the Northern District of California. *See Google LLC v. Headwater Research LLC*, No. 5:25-cv-7453 (N.D. Cal.). Headwater

moved to dismiss that litigation for lack of personal jurisdiction, and the court indicated it was likely to grant that relief. *See* Ex. 2002 (stating the “Court is inclined to grant [Headwater’s] motion to dismiss”).

After the court indicated it was likely to dismiss Google’s declaratory judgment claims, Google unilaterally dismissed those claims and attempted to refile those same claims in *Headwater Research LLC v. Google LLC*, No. 3:26-CV-01460 (N.D. Cal.). A history of the timeline of the relevant events is detailed in Exhibit 2003 at 1–2 (background section), but the abbreviated version is that Google filed a declaratory judgment action in a forum that lacked personal jurisdiction over Headwater, and then when it became clear Google’s claims were about to be dismissed, Google sought to raise those claims in another case that Google itself had transferred to the Northern District of California to manufacture jurisdiction.

Headwater believes that Google’s attempts to manufacture jurisdiction in the Northern District of California so that Google can pursue parallel proceedings on the ’564 patent before the Board *and* the Northern District of California reflect gamesmanship, as explained in more detail in Headwater’s district court briefing. *See* Ex. 2003, 1–2 (background section, noting that only after the court was on the verge of dismissing Google’s declaratory judgment complaint did Google dismiss that complaint and attempt to refile the same claims in another proceeding); *id.* at 3–

12 (addressing why Google’s procedural maneuvering only after an adverse judgment was apparent demonstrate undue delay and bad faith).

But even setting aside any dispute regarding the propriety of Google’s actions before the district court, it is clear is that Google is attempting to bring a declaratory judgment action involving the ’564 patent in district court, while simultaneously providing *no* assurance that Google will not raise any art that Google could have raised in this proceeding (including the exact grounds that *are* raised in this proceeding). This prevents this IPR from being a “true alternative” to the district court proceedings that Google is attempting to initiate. *See Motorola Sols., Inc. v. Stellar, LLC*, IPR2024-01205, Paper 19 (PTAB Mar. 28, 2025) (explaining that an IPR may not be a “true alternative” to the district court proceeding *even in the presence of a Sotera* stipulation, which Google has declined to file in this case).

Google may argue that it has not raised a claim for declaratory judgment of invalidity of the ’564 patent in any district court proceeding. This is true, but merely evidences a desire to exploit the well-known “loophole” in the statutory scheme, wherein “a declaratory judgment counterclaimant faces no apparent restrictions on seeking an IPR” which “cannot be reconciled with the clear congressional intent that the IPR serve as a ‘substitute’ for district court litigation that relieves the burdens on the courts.” *See Epic Games, Inc. v. Acceleration Bay LLC*, No. 4:19-CV-04133-YGR, 2020 WL 1557436, at *3 (N.D. Cal. Apr. 1, 2020). It is certainly not evidence

that Google will not pursue claims of invalidity of the '564 patent before the district court, and if Google *were* committing to refrain from such claims, Google should have filed an appropriate stipulation.

Google may also argue that because it voluntarily dismissed its original declaratory judgment claims, there is currently no pending Google district court proceeding in which any claims involving the '564 patent are asserted. But this does not cure the problem that Google is actively attempting to assert the dropped declaratory judgment claims in a different proceeding, with no stipulation to reduce overlap between the instant proceeding and the Google's attempts at district court litigation.

Furthermore, if the Board were to institute this IPR and a final written decision were to issue upholding the challenged claims, the resulting estoppel would *still* not meaningfully simplify any district court proceedings. That is because Google would be estopped only as to grounds it "raised or reasonably could have raised" in this proceeding, which do not include non-publication system art. But in this IPR, Google asserts a combination of a multimedia messaging service (MMS) standard, TS-23.140 in combination with the "Rakic" publication. In the district court, Google may simply point to prior art *device* that used the TS-23.140 MMS standard, and combine that with Rakic or any other reference, and claim that this combination

involving a device (which is not a publication) is a ground that Google could not have raised in an IPR.

Thus, far from ensuring that IPR proceedings would be a “true alternative” to district court litigation (*see Motorola Sols., Inc. v. Stellar, LLC*, IPR2024-01205, Paper 19 at 3–4 (March 28, 2025)), Google has reserved for itself the right to make these IPR proceedings *entirely duplicative* with district court litigation. The potential for duplicative proceedings between this case and district court proceedings weighs heavily in favor of discretionary denial.

Of course, Google’s reservation of rights to relitigate issues *identical to* claims already resolved in an IPR is not what Congress had in mind when it created the IPR process, and exercise of discretionary denial under such circumstances would disincentivize petitioners from reserving the right to pursue such immensely duplicative and inefficient proceedings before both the Board and the district court.

B. Settled expectations additionally support discretionary denial.

The ’564 patent issued on November 8, 2016 (*see* Ex. 1001), and as such will have been in effect for over a decade. Headwater’s settled expectations are further supported by the fact that Headwater has invested significant amounts of money in

litigating its patent portfolio and has achieved significant licensing success. *See* Ex. 2001 at 4 (confidential license fee), 31 (identification of patent).¹

Headwater's settled expectations are further strengthened because Google knew (or should have known) of the '564 patent since 2018 at the latest. *See* Ex. 2004 at 3 (USPN 10,140,827 a patent issued to Google on November 27, 2018, listing U.S. Patent App. Pub. No. 2010/0192212 to Raleigh as a "Reference[] Cited"); Ex. 2005 at 1 (field 21, showing U.S Patent App Pub. No. 2010/0192212 corresponds to application 12/380,780, the same application that the '564 application ultimately continues from—*see* Ex. 1001 at 1–2 (field 63)). Nevertheless, Google waited nearly eight years, until 2026, to file a petition for IPR. By having knowledge of the '564 patent's teachings but waiting many years to take any action against the '564 patent, Google has no settled expectations in availing itself of an IPR that will be redundant with the same grounds that Google has reserved the rights to assert in district court. *See Murata Mfg. Co., Ltd. v. Georgia Tech. Rsch. Corp.*, IPR2025-

¹ Ex. 2001 is just one of several licenses to the Headwater portfolio. Although Headwater has received special authorization to file Exhibit 2001 with the Board, other agreements cannot be produced due to confidentiality restrictions which require another party's waiver of rights or a pending discovery request or court order prior to disclosure. *Cf.* Ex. 2001 at 11.

00383, Paper 14 at 2–3 (PTAB July 29, 2025) (“A failure to seek early review of the patent favors denial....”).

Additionally, Google has made no allegation of examiner error. *See generally* Petition. Even if Google alleges that the examiner should have found the art Google relies upon, Google cannot plausibly show that the elements disclosed in the art are not cumulative of the significant number of other references. And any alleged error would not be material, because as explained further below, Google’s invalidity theory is deficient for numerous reasons.

In sum, the settled expectations of the parties (including the duration of time the ’564 patent has been in effect, Google’s prior knowledge of the ’564 patent family, and Headwater’s substantial licensing activity relating to the ’564 patent) weigh heavily in favor of discretionary denial.

C. The Petition’s weakness and extensive reliance on expert testimony weigh heavily against institution.

As explained below, the Petition is exceptionally weak. If not for conclusory expert testimony, the Petition could not even *arguably* show invalidity of any challenged claims, and even if the Petition’s expert testimony were fully credited regarding the operation of the proposed combination, that would *still* not show the obviousness of the actual claim requirements.

Challenged claims 1 and 14 are the only two independent claims of the '564 patent; claim 14 is similar to claim 1 in scope except that it is a method claim instead of a system claim, and the Petition treats claim 1 as representative of claim 14 for purposes of its analysis. *See* Pet. 63–64 (the Petition's claim 14 analysis merely incorporating by reference its analysis of claim 1).

Claim 1, with the Petition's numbering scheme, is reproduced below.

1. A mobile end-user device comprising:

[1A] a wireless modem configurable to exchange data via a connection to a wireless network;

[1B1] *an inter-process software communication bus providing secure communication between an executing device link agent and respective executing processes for a plurality of software components*, [1B2] ***wherein providing secure communication comprises*** receiving access authorization information from a secure server, and ***allowing access to the bus only for software components identified by the access authorization information***; and

[1C] the device link agent, configured to

[1D1] maintain a secure message link through the wireless network and an Internet network to a message link server, [1D2] the message link server operating a message service that receives messages over a network from a plurality of network functions,

[1E] receive secure messages from the message link server over the secure message link, the received messages identified for delivery to multiple ones of the software components, and including message content received by the message link server from multiple ones of the network functions, and

[1F] for software components identified by the access authorization information, route messages identified for delivery to a given one of those software components via the inter-process software communication bus to a software process corresponding to the given software component.

Ex. 1001, claim 1 (emphases added)

As shown above, Claim 1 requires a bus that provides for “secure communication” between a “device link agent” and other “software components” on the same device (limitation [1B1], wherein “access to the bus” is allowed “only for software components identified by the access authorization information” (limitation [1B2])). Under Google’s theory, the “access authorization information” is information within a specific message that identifies a destination application. *See* Pet. 31. Google alleges that these limitations are satisfied, in the context of Google’s combination, so long as a message transmission is conditioned upon a signature being valid. *See* Pet. 29, 32.

Google's theory is deficient for several reasons. First, no prior art is even alleged to disclose this requirement of limitation [1B]; instead, the Petition simply asserts that it would be obvious to modify the prior art to arrive at this limitation. *See generally* Pet. 27–32 (failing to allege that either TS-23.140 *or* Rakic disclose either (1) “an interprocess software communication bus providing **secure** communication between an executing device link agent and respective executing processes for a plurality of software components” or (2) “allowing access to the bus only for software components identified by the access authorization information”).

Second, the Petition attempts to cure the deficiencies of TS-23.140 through extensive reliance on conclusory expert testimony. Specifically, the Petition alleges that the “secure communication” requirement of limitation [1B1] is satisfied by the separately recited requirement of “allowing access to the bus only for software components identified by the access authorization information” recited in limitation [1B2], which is satisfied because allegedly, the prior art renders obvious sending a message “only if [a] signature... is valid.” *See* Pet. 29 (alleging limitation [1B1] is met “because access to MMS-Rakic’s bus is only allowed for software components identified by access authorization information” as recited in limitation [1B2]). But the Petition’s allegations in this are supported *only* by expert testimony. *See* Pet. 31 (citing *only* Ex. 1003, ¶120 for the allegation that “acesss to the bus” is “allowed only for software components identified by the access authorization information,”

as claimed); *id.* at 32 (citing **only** Ex. 1003, ¶121 for the allegations that the combined user agent “routes the message to the destination application... only if the signature... is valid,” and that this functionality satisfies limitation [1B2]). And the cited expert testimony is merely a series of conclusory allegations regarding how the combination of TS-23.140 and Rakic would operate, even though neither reference actually discloses the limitations at issue. *See generally* Ex. 1003, ¶120–121. Google’s expert also provides no motivation to modify the art to arrive specifically at the missing claim requirements. He does allege reasons to implement certain teachings of Rakic with TS-23.140—*see* Ex. 1003 ¶¶80–86—but these motivations say nothing about a bus providing “secure” communications or preventing certain software processes from accessing the bus).

Finally, even if the Petition’s improper reliance on expert testimony to fill admitted gaps in the prior art could be overlooked, the Petition would **still** be deficient. This is because the Petition’s theory that the combined system would “allow[] access to the bus only for software components identified by the access authorization information” is that a message is transmitted across the bus “**only if the signature** (which... is generated using the identifier that identifies the destination application) **is valid.**” Pet. 32 (emphases in original). But even *assuming* counterfactually that the Petition *had* showed that such functionality would have been obvious in the context of TS-23.140 and Rakic, the Petition provides nothing

more than a conclusory allegation that this functionality satisfies the claim language. *See* Pet. 32 (alleging, without any explanation, “[t]his meets [1B2]...”).

Despite offering no terms for construction (*see* Pet. 4), the Petition’s theory nonsensically rewrites limitation [1B2]’s recitation of “allowing access to the bus only for software components identified by the access authorization information,” to instead require only “~~allowing access to~~ transmitting information across the bus only ~~for~~ when software components are identified by the access authorization information.” Nowhere does the Petition even *attempt* to provide a coherent explanation as to why Google apparently believes these are equivalent to one another. Nor does Google explain how the combined system would even allegedly prevent software components that are *not* identified by the access authorization from accessing the bus *even if* messages are transmitted only in the event that a valid signature exists, such that access to the bus would be allowed “only... for software components identified by the access authorization information.”

In short, the merits of the Petition are weak for three compounding reasons. First, no reference is alleged to disclose the requirements of limitation [1B] including “an inter-process software communication bus providing secure communication between” the device link agent and software components and “allowing access to the bus only for software components identified by the access authorization information.” Second, the Petition’s theory is based solely on conclusory expert

testimony regarding how the combination would operate. Third, even if that testimony regarding how the prior art would operate were credited in full, the Petition *still* fails to show how the actual claim requirements would be satisfied.

Thus, the weak merits of the Petition and extensive reliance on expert testimony weigh heavily in favor of denying institution.

III. Conclusion

Headwater respectfully requests that the Director exercise discretion under Section 314(a) to deny institution.

Date: June 1, 2026

Respectfully submitted,

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

The undersigned hereby certifies that the above document was served on June 1, 2026, by filing this document through the Patent Trial and Appeal Case Tracking System (P-TACTS) as well as delivering a copy via electronic mail upon the following attorneys of record for Petitioner:

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