UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO, LTD.,
SAMSUNG ELECTRONICS AMERICA, INC.,
Petitioner,

v.

MASSIVELY BROADBAND LLC,
Patent Owner.

IPR2026-00086
Patent 8,725,700

PATENT OWNER'S PRELIMINARY RESPONSE

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I. INTRODUCTION

MASSIVELY BROADBAND LLC ("Patent Owner") submits this Patent Owner Preliminary Response ("Preliminary Response") pursuant to 37 C.F.R. § 42.107(a) to the *Inter Partes* Review petition ("Petition" or "Pet.") filed by Samsung Electronics Co., Ltd. and Samsung Electronics America, LLC (together, "Petitioner") for all sixteen (16) claims (the "Challenged Claims") of U.S. Patent No. 8,725,700 ("'700 Patent"). The Board should deny institution because Petitioner fails to demonstrate a reasonable likelihood that Petition will prevail as to any challenged claim.

The Petition fails—at a threshold level— to identify where the asserted prior art teaches the limitation of each Challenged Claim. In particular, none of Grounds 1–4 sufficiently establishes where the relied-upon references disclose: (1) the "updating" requirement of limitation 1[c] ("updating . . . mobile device location information stored in said memory or database when a mobile device . . . travels from one location to another"); or (2) the structural "interface" requirement of limitation 10[c] ("an interface through which" enumerated users may access stored information). Because the Petition fails to show the above-mentioned limitations are taught by the asserted art, the Petition does not establish a reasonable likelihood of success as to any Challenged Claim, and the Board should deny the institution.

First, as to limitation 1[c], Grounds 1 and 2 never demonstrate the required

"updating" of previously stored location information in response to a mobile device traveling from one location to another. Ground 1 relies on the premise that Aaron "collect[s] information when a quality-of-service threshold is impacted," and then asserts—without a supporting disclosure-based showing—that transmitting newly collected information amounts to the claimed travel-triggered updating of stored location information. Pet., 31. Ground 2 similarly devotes only a cursory discussion to limitation 1[c] and cites Scherzer for location-related measurements and reporting, without explaining how those disclosures satisfy the claim's express "updating . . . when . . . travels" requirement.

Grounds 3 and 4 fare no better because they challenge only dependent claim 7, which depends from claim 1. The Petition does not identify any teaching in Chmaytelli or Sharma that supplies evidence of the "updating" step missing from Petitioner's analysis of limitation 1[c]. The Petition fails to establish a reasonable likelihood of success as to the foundational "updating" limitation as required by claim 1 and, therefore, as required by claim 7.

Second, as to limitation 10[c], Grounds 1 and 2 likewise fail to identify and fail to map any structure in the asserted prior art corresponding to the claimed "interface through which" specified classes of users may access the stored quality-of-service and/or location information. Rather than making an elemental showing for the system-level structural requirement of limitation 10[c], the Petition relies on

analyses directed to different, functional "providing access" limitations, without specifically identifying an element of the prior art that can reasonably constitute the claimed "interface." In the absence of any mapping of limitation 10[c] to the asserted art, the Petition fails as to claim 10 as well. The rest of the Challenged Claims depend either directly or indirectly from claims 1 and 10.

Accordingly, the Petition fails to establish a reasonable likelihood of success and the Board should deny institution.

II. STATEMENT OF THE PRECISE RELIEF REQUESTED

Patent Owner requests that the Board deny institution of the Petition with respect to all of the Challenged Claims (claims 1–16) and all asserted grounds. A full statement of the reasons for the relief requested is set forth in Sections III–IV of this Preliminary Response.

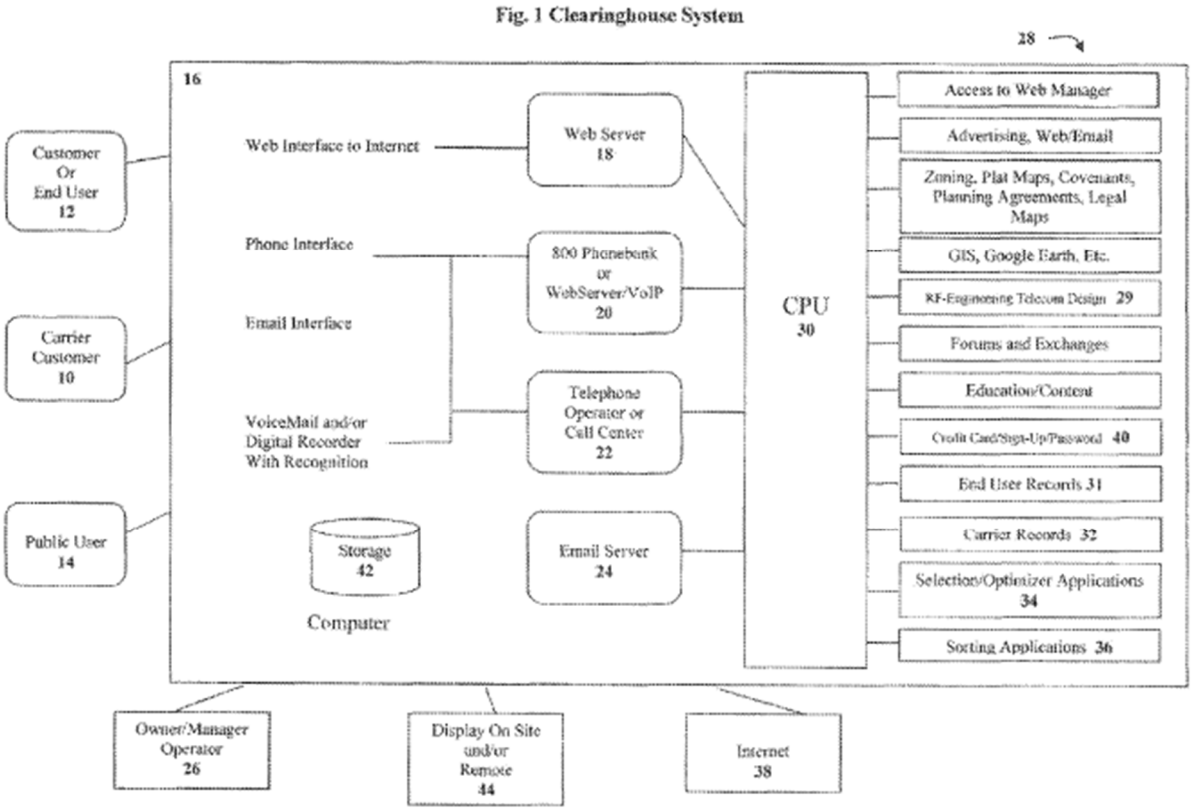
III. BACKGROUND

A. Summary of the '700 Patent

The '700 Patent is directed to computer-implemented systems and methods that ingest location-specific measurement data from mobile devices (Ex. 1001, 26:11-18), store and update structured records of wireless network quality-of-service information in a database as devices move (*id*., 27:31-36), and provide controlled, interface-based access to that stored data for network operators, service providers, and end users (*id*., 16:14-20) for enhanced wireless device operation based on location specific information. *See id.*, 6:15-16. Specifically, the '700 Patent

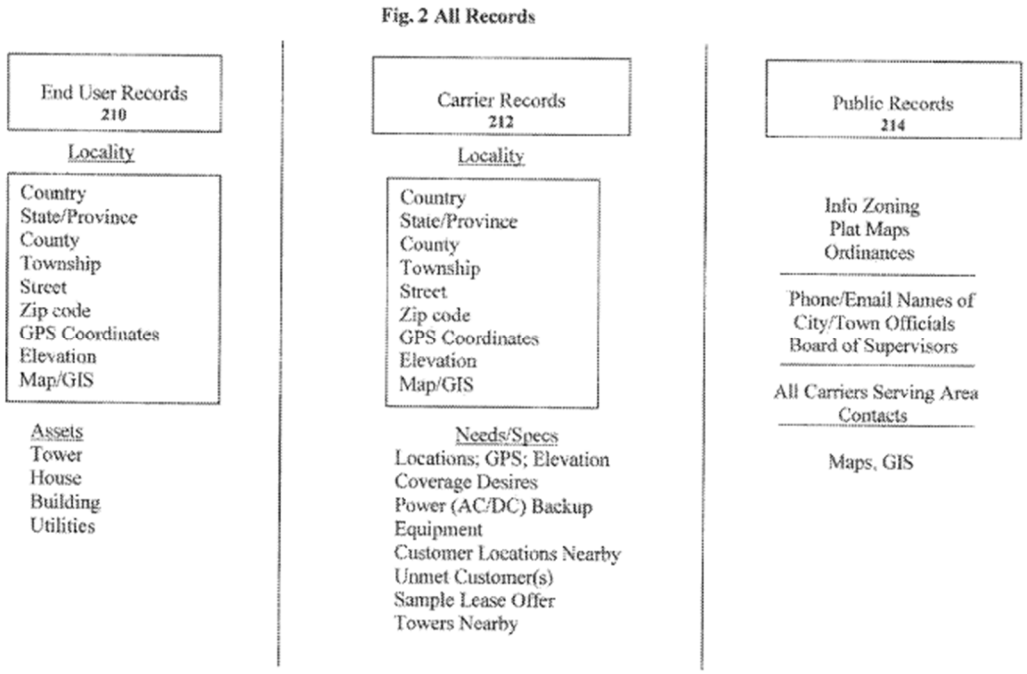
discloses and claims a clearinghouse that provides "the ability to monitor . . . the performance or quality experienced by various end users and to provide rank ordering of various carrier services for end users in various locations throughout the earth." *Id*., 6:32-49. According to the '700 Patent, such monitoring can be performed in real time and through automatic processes. *Id*., 6:33-34.

The '700 Patent depicts a representative clearinghouse system in Figure 1, reproduced below. The '700 Patent explains how CPU 30 is coupled to storage 42 that maintains one or more databases forming a clearinghouse repository, including carrier records 32, end-user records 31, and RF-engineering and location data 29, enabling the system to associate network performance and infrastructure information with geographic locations. *Id*., 16:32-35; 24:55-25:6. The selection/optimizer applications 34 and sorting applications 36 use the stored records and the clearinghouse system analyzes, ranks, and outputs information supporting network deployment, optimization, and service-selection decisions, reflecting a technological system that aggregates, updates, and processes multi-source data to enhance network performance. *Id*., 19:4-23; 24:3-39.



Ex. 1001, Figure 1

According to the ’700 Patent, the clearinghouse system aggregates and processes multi-source data to determine optimal frequencies, carriers, modulation types, data rates, and bandwidths for mobile devices connected to a network. *Id*., 27:11-64. Figure 2, reproduced below, illustrates the sources and nature of the data used by the clearinghouse system. However, the ’700 Patent further describes the use of location-specific performance (*id*., 6:3-19), performance/quality of service metrics (*id*., 6:20-46), and telecommunication carrier records. *Id*., 17:49-62.



Ex. 1001, Figure 2

Based on multi-source data, the clearinghouse system can achieve user-programmed, device-specific objectives (*e.g.*, "highest download speed," "cheapest cost," "always pick Verizon if it can give me better than 10Mbps," etc.). *Id.*, 27:36-50. The '700 Patent describes updating and refreshing this integrated dataset through electronic interfaces—either automatically or manually—by incorporating newly obtained performance or quality-of-service information from devices located in particular geographic areas, while preserving and weighting historical data. *Id.*, 16:12-25; 6:33-34; 25:7-26; 20:25-31:3; Figures 5 and 8-11. The clearinghouse system processes this dataset via the selection/optimizer applications and sorting applications (*id.*, 19:4:20-24; 24:3-39) and generates outputs that assess network

integrity, compare service offerings, and identify infrastructure- or location-specific performance issues. *Id*., 19:42-48; 10:18-32; Figure 5. In other words, the records enable continual collection, evaluation, and processing of network integrity and service quality at a carrier- and infrastructure-level, rather than merely capturing transient device diagnostics.

The Challenged Claims recite computer-implemented systems and methods for collecting, maintaining, and providing access to location-associated wireless network quality information as disclosed by the ’700 Patent. For example, independent claims 1 and 10 recite receiving, by a computer, mobile device location information and corresponding quality-of-service or performance information for wireless communications networks or mobile devices; storing that information in a memory or database; updating stored mobile device location information as devices travel from one geographic location to another; and providing access to the stored information through computer interfaces to end users, end-user devices, carriers, third-party service providers, or wireless communications networks. The claims further specify that the stored information comprises identified, perceived, or measured wireless access characteristics—including radio reception quality, network performance, coverage, capacity, bandwidth, service availability, and application performance—thereby enabling systematic evaluation of wireless service quality across devices, locations, and networks.

Thus, while the '700 Patent discusses obtaining performance information from "one or more mobile or fixed devices," the focus of the '700 Patent is on network-level integrity assessment and enhancement using carrier, infrastructure, and location-based records, rather than on single-device diagnostics or peer-driven reporting of individual Wi-Fi access points. The claimed techniques operate at a broader and more substantial analytical level, integrating multiple structured record types to support informed evaluation and improvement of communications networks.

B. Priority Date

U.S. Patent Application No. 12/815,165 ("'165 Application") was filed on June 14, 2010 and issued as the '700 Patent on May 13, 2014. Ex. 1001, field codes (22), (45). The '165 Application claims priority as a continuation of U.S. Patent Application No. 12/208,007 ("'007 Application"), which was filed on September 10, 2008. *Id.*, field code (63). The '007 Application claims priority to three provisional applications: (1) U.S. Provisional Application No. 60/971,175, filed on September 10, 2007; (2) U.S. Provisional Application No. 60/977,582, filed on October 4, 2007; and (3) and U.S. Provisional Application No. 61/028,261, filed on February 13, 2008. *Id.*, field code (60). Accordingly, for purposes of this proceeding, the earliest filing date to which the Challenged Claims are entitled is September 10, 2007. The pre-AIA provisions of 35 U.S.C. §§ 102, 103 apply. Pub. L. No. 112-29, § 3(n)(1),

125 Stat. 284, 293 (2011).

C. Parallel Proceedings

The '700 Patent, along with other patents owned by Patent Owner, is involved in parallel district court proceedings between Petitioner and Patent Owner. *See* Paper 9 (Patent Owner updated mandatory notice); Paper 8 (Patent Owner request for discretionary denial).

In related *inter partes* review proceedings involving various patents (the "Asserted Patents") asserted in the parallel district court litigation, Petitioner claims that Petitioner has "full access" to the inventor's "research . . . in return" for the parties' "multi-decade collaboration." *See Samsung Elecs. Co. v. MASSIVELY BROADBAND LLC*, IPR2025-01595, Paper 10, 5 (PTAB Jan. 6, 2026); *Samsung Elecs. Co. v. MASSIVELY BROADBAND LLC*, IPR2025-01564, Paper 12, 5 (PTAB Jan. 6, 2026); *Samsung Elecs. Co. v. MASSIVELY BROADBAND LLC*, IPR2025-01565, Paper 11, 4 (PTAB Jan. 7, 2026); *Samsung Elecs. Co. v. MASSIVELY BROADBAND LLC*, IPR2025-01594, Paper 10, 5 (PTAB Jan. 8, 2026); *Samsung Elecs. Co. v. MASSIVELY BROADBAND LLC*, IPR2026-00035, Paper 10, 4-5 (PTAB Jan. 16, 2026); *Samsung Elecs. Co. v. MASSIVELY BROADBAND LLC*, IPR2026-00032, Paper 11, 3 (PTAB Jan. 16, 2026); *Samsung Elecs. Co. v. MASSIVELY BROADBAND LLC*, IPR2025-01563, Paper 10, 6-7 (PTAB Jan. 16, 2026); *Samsung Elecs. Co. v. MASSIVELY BROADBAND LLC*, IPR2025-01605,

Paper 11, 5 (PTAB Jan. 22, 2026).[1] Without substantiation, Petitioner attempts to imply that it has rights to the Asserted Patents, and further attempts to imply that Petitioner, through NYU Wireless, invested in the work that led to Prof. Rappaport's Asserted Patents. *Id.* Petitioner, however, ***does not, and cannot, provide any support for those erroneous suggestions.*** Specifically, Petitioner claims that it made "investments in the accused technology," *i.e.* its own products, citing to an interview with Prof. Rappaport regarding industry involvement in NYU Wireless. Fatal to Petitioner's argument, however, is the fact that the '700 Patent does not arise from any work at NYU Wireless, and further, the specification of the '700 Patent predates the creation of that research center entirely. Petitioner did not become involved at NYU Wireless until 2012 and therefore Petitioner's involvement could not form the basis for any implied rights to Prof. Rappaport's prior work. To the best of Patent Owner's knowledge, Petitioner has produced ***no such evidence*** to

[1] The Director denied institution of *inter partes* review in four of these IPRs—IPR2025-01564, IPR2025-01565, IPR2025-01594 and IPR2025-01595—based on discretionary considerations. *See, e.g., Samsung Elecs. Co. v. MASSIVELY BROADBAND LLC,* IPR2025-01594, Paper 12 (Director Jan. 27, 2026). Patent Owner's discretionary denial requests for the other listed, but later-filed, IPRs not to be instituted are still pending.

support its position in its Petition and in the parallel district court proceedings, and has no intellectual property rights to the '700 Patent or any other Asserted Patent involved in these IPRs or the parallel litigation.

Relatedly, Petitioner contends that the inventor's published research constituted "prior art available for use," such that the Petitioner "did not infringe" the inventor's patents and Patent Owner would not enforce the patents. *See, e.g., Samsung Elecs.*, IPR2026-00032, Paper 11, 4; *Samsung Elecs*, IPR2026-00035, Paper 10, 5; *Samsung Elecs.*, IPR2025-01563, Paper 10, 7; *Samsung Elecs.*, IPR2025-01605, Paper 11, 6. Petitioner, however, has not shown that it practices any such prior art. Nor does Petitioner rely upon any of the inventor's publications to support any asserted ground of unpatentability in Petitioner's IPR Petitions. Absent any showing that Petitioner actually implemented the alleged prior art, Petitioner's assertions regarding non-infringement or non-enforcement are unsupported. Also fatal to Petitioner's assertions, Petitioner has not identified any course of dealing, agreement, or customer-supplier relationship between the parties that could plausibly support any understanding or perception that Patent Owner would refrain from enforcing Patent Owner's patents.

Petitioner also references its own involvement in "relevant" standard-setting efforts, without explaining which efforts are "relevant" or why that participation matters here. By citation to that same interview with Prof. Rappaport, Petitioner

erroneously attempts to imply Prof. Rappaport was a member of the same standard-setting organizations as Petitioner. This claim is not supported by Petitioner's citation, which says only that Prof. Rappaport's work writ large "influenced" standards bodies—not that Prof. Rappaport was a member, contributed any intellectual property, or had any obligation to do so. Indeed, Petitioner ***offered no evidence*** (i) describing a relationship between any of the patents and any applicable technical standard; (ii) that Prof. Rappaport or Patent Owner participated in any development of any applicable technical standard for the Asserted Patents (they did not); or (iii) that Prof. Rappaport or Patent Owner had any obligation to disclose the Asserted Patents to any standard-setting body or to Petitioner. *Id.* Nothing in the Petition for the '700 Patent relies on any technical standard as a basis for invalidity of any Challenged Claim, and nothing that transpires in this proceeding will determine if the '700 Patent or the other eleven Asserted Patents are subject to some technical standard. Thus, denial of institution is warranted, as instituting this proceeding would add substantial, unnecessary work for the Board (*e.g.*, analyzing the validity of claims not asserted in the litigation) while failing to resolve any of Petitioner's unsubstantiated issues that are unrelated to validity and most appropriately adjudicated in the district court proceeding.

D. Level of Ordinary Skill

For purposes of this Preliminary Response, Patent Owner accepts the skill

level proposed by Petitioner for a person of ordinary skill in the art ("POSITA"). Petitioner's proposed POSITA is a person having a "at least a Bachelor's degree in computer science, electrical engineering, or a related field, and at least two years (cumulative) of work or research experience in the fields of database design or administration, online marketplaces or e-commerce, and wireless network or mobile device management, or equivalents," where "[a]dditional work or research experience could substitute for education, and further education could substitute for work or research experience." Pet., 7. However, Patent Owner reserves the right to address or to refine the level of ordinary skill at a later stage of this proceeding or in any parallel litigation, should the POSITA's skill level become relevant.

E. Claim Construction

For purposes of this Preliminary Response, Patent Owner agrees with Petitioner that all claim terms should be given their plain and ordinary meaning as understood by a POSITA in the context of the '700 Patent and its prosecution history. *See* Pet., 7-8.

To the extent any dispute exists regarding the meaning of a claim term, such dispute does not provide a basis for institution. *See, e.g.*, *Catalyst OrthoScience Inc. v. Shoulder Innovations, Inc.*, PGR2024-00042, Paper 17, 43 n. 13 (PTAB Dec. 19, 2024) (Board "need not resolve the express construction of [disputed claim terms] because doing so would not change the outcome of our compelling-merits analysis").

The Petition fails under the plain and ordinary meanings of the claim terms. However, Patent Owner reserves the right to address claim construction post-institution if necessary.

F. The Petitioner's Asserted Grounds

1. Grounds Asserted in the Petition

Petitioner asserts that the Challenged Claims are unpatentable under the following asserted grounds:

Ground	Basis	Reference(s)	Claims
1	§ 103	Daley, Aaron, and Scherzer	1-16
2	§ 103	Scherzer	1-6, 8-16
3	§ 103	Scherzer and Chmaytelli	7
4	§ 103	Scherzer and Sharma	7

There are two grounds for claims 1-6 and 8-16 (Grounds 1 and 2) and three grounds for claim 7 (Grounds 1, 3, and 4).

2. Summary of the Prior Art of the Asserted Grounds

a. Daley (Ex. 1009) – Pub. 2007/0207800 A1

Daley teaches a system for providing customer care for users of electronic devices. Ex. 1009, ¶[0033]. Daley's system provides diagnostic data collected from an electronic device 107 for diagnostic use and troubleshooting via a customer service representative, such that it may become "unnecessary for a customer to

provide such information him/herself." *Id*. Accordingly, Daley is about device-specific troubleshooting, not network-level assessments and enhancements.

For example, Daley explains how an electronic device may store a diagnostic agent, which provides device-specific information to a log file (*id*., ¶[0039]) such that "a customer service representative (CSR) may provide a service to the customer using the electronic device 107, after determining the device capability information retrieved from the electronic device 107." *Id*., ¶[0038]. To the extent that the log file collects network performance data, Daley exclusively teaches the use of such data to troubleshoot issues experienced by a specific electronic device. *Id*., ¶[0039].

Accordingly, Daley does not disclose or rely on multi-source data aggregation, records pertaining to telecommunications carriers, or public records, because the system of Daley is directed to device-specific diagnostics and troubleshooting, not network-level analysis or planning. The system of Daley operates by retrieving and analyzing diagnostic data from a specific electronic device in response to a support interaction. *Id*., ¶[0033]. There is no need for Daley to aggregate data from multiple sources, to maintain records pertaining to carriers or infrastructure, or to consult public records such as zoning, mapping, or geographic information. Daley, therefore, omits such data not by oversight, but because the disclosed system of Daley is designed for one-off, device-level support, rather than network-level analysis based on multi-source records. In fact, the architecture of

Daley eliminates any need for travel-triggered updating of stored location records. *Id*., ¶[0067] (listing triggers based on trace level, firmware, software and/or hardware component, dump requests, periodicity, and/or buffer fullness, but ***not a location of the electronic device***).

b. Aaron (Ex. 1010) – Pub. 2008/0305747 A1

Aaron is directed to measuring and reporting wireless service quality as experienced by mobile handsets, in order to construct and update quality-of-service maps for a wireless communications system. Ex. 1010, Title, Abstract. Aaron discloses the use of "wireless terminals," a term Aaron uses to describe cell phones (*id*., ¶[0027]), to provide service quality and geographic information location, and to store the measured service quality information (*e.g.*, Signal-to-Noise ratio) and location information (*e.g.*, GPS data) to a central processor. *Id*., ¶¶[0041]-[0042]. Based on the information provided via the cell phones, the central processor "updates one or more coverage maps and/or one or more quality-of-service maps" to identify problems prior to user complaints. *Id*., ¶¶[0052], [0054].

The data used by the central processor of Aaron is expressly limited to information "received from wireless terminals," including measured service quality parameters, location data, and optional user feedback. *Id*., ¶¶[0031]-[0036]. Additionally, although Aaron intends to "improve accuracy of problem identification," Aaron teaches no means by which identified problems can be

resolved. *Id*., ¶[0035]. Accordingly, while Aaron contemplates that quality-of-service maps may inform network operators about where service problems exist, Aaron does not disclose network-level enhancements or improvements carried out by the system, nor does Aaron disclose aggregating public records or carrier infrastructure data from multiple sources to perform such enhancements. It is clear that Aaron stores newly detected data; it does not modify previously stored records. *Id*., ¶¶[0034] and [0043] (describing storage of newly detected information for subsequent transmission).

c. Scherzer (Ex. 1011) – Pub. 2008/0186882 A1

Scherzer is directed to facilitating peer-to-peer sharing of Wi-Fi access points, in which members of the "social network" of Scherzer share access credentials to various WiFi hot spots. Ex. 1011, ¶[0147]. Specifically, Scherzer explains how "owners of radio access points are averse to sharing the AP resource with people they don't know" but proceeds to explain that "if there has been certain a priory contact, owners are much more likely to share the resource." *Id*. Scherzer proceeds to explain how "[s]uch an a priory contact may be made in the form of a social network." *Id*.

Scherzer describes the use of connectivity data to "analyze radio resources in reach" available to a user. *Id*., ¶[0028]. The connectivity data includes network name, MAC address, received signal strength and variance over time, encryption

status, access protocol response times, location, password, etc. *Id*. Connectivity data is crowdsourced from client devices themselves, based on their connection attempts to nearby access points, reinforcing that the system operates at the peer-to-peer, access-point level—not through carrier or public-record data sources. *Id*., ¶¶[0027], [0057]. Scherzer specifically explains that client devices "check connectivity to other access points in the vicinity, and report the findings to the server." *Id*., ¶¶[0027], [0057], [0072].

The system of Scherzer is premised expressly on the reluctance of access-point owners to share connectivity broadly. *Id*., ¶[0147] ("[O]wners of radio access points are averse to sharing the AP resource with people they don't know."). Consistent with this premise, Scherzer discloses a trusted peer-to-peer framework in which access to radio access points is controlled by the access-point owner and limited to users within the trusted network. *Id*., ¶¶[0147]-[0148]. Because the system of Scherzer is designed around privately controlled access points and user-level permission, there is no need for Scherzer to consult or maintain public records, such as zoning, mapping, or governmental data, nor any need to store or to analyze records pertaining to telecommunications carriers or carrier infrastructure. Scherzer, therefore, is fundamentally incompatible with a clearinghouse system designed to share multi-sourced information (*e.g.*, from property owners, public records, carriers, etc.). *Id*., ¶ [0147] (explaining that owners of radio access points are averse

to sharing information associated with their access points, like credentials).

Unlike Scherzer, the '700 Patent claims a clearinghouse system that makes network information "easily retrievable and accessible." Ex. 1001, 21:18-19. Fatal to Grounds 2-4, the Petition fails to explain why a POSITA would have been motivated to make access point information easily retrievable and accessible in view of Scherzer, which expressly teaches a system for users that are inherently averse to sharing their resource information. Ex. 1011, ¶ [0147].

d. Chmaytelli (Ex. 1012) – Pub. 2006/0253453 A1

Chmaytelli is directed to time- and location-based delivery of non-intrusive advertisements and informational messages to wireless client devices. Ex. 1012, Title, Abstract. Specifically, Chmaytelli discloses a Carrier Announcement Manager ("CAM") installed on a mobile device, which receives advertisements pushed from a server (*e.g.*, via directed SMS or network callbacks) and manages how, when, and whether those messages are presented to the user. *Id*., ¶[0041].

The advertisements of Chmaytelli can include location data defining a geographic area. *Id*., ¶[0081]. Chmaytelli also teaches the use of a client device location to determine if the client device is within a geographic area defined by the location data in the advertisement. *Id*. However, Chmaytelli does not teach the use of multi-source data including carrier records and public records to generate and to select localized content based on network performance, infrastructure availability,

geographic constraints, and other contextual factors. Otherwise put, Chmaytelli teaches localization as a simple delivery condition and not as the output of network-level processing of multi-source data. It is clear that Chmaytelli teaches a conditional delivery mechanism, not a data-maintenance system. *Id*., ¶¶[0082]–[0089] (describing the delivery of an advertisement to a client device, not the storage and maintenance of performance-based records for network enhancement).

e. Sharma (Ex. 1050) – Pub. 2007/0213925 A1

Sharma is directed to providing responses to user-initiated queries regarding the availability of wireless communication services along predefined travel routes, based on existing coverage information. Ex. 1010, ¶¶[0023], [0029]. Sharma explains a system in which a "wireless availability server" responds to a user's request by querying one or more communication coverage databases using latitude and longitude coordinates supplied by the user. *Id.*, ¶[0029]. The system thus operates in a query–response paradigm where users request information about prospective locations, rather than in a continuous monitoring or updating paradigm tied to mobile device movement.

Sharma relies on preexisting coverage data maintained by third-party servers and databases, such as databases associated with wireless carriers or service providers, which may be cached or temporarily stored for faster access. *Id*., ¶[0022]. The disclosed database usage is therefore directed to retrieving and aggregating

previously generated coverage information, not to collecting real-time measurement data from mobile devices or updating stored location information as devices travel from one location to another.

Importantly, Sharma does not disclose receiving quality-of-service or performance measurements directly from mobile devices, nor does it describe updating stored mobile device location information in response to device movement. Instead, the system of Sharma uses user-specified locations or routes as query parameters to identify existing coverage data corresponding to those locations. *Id.*, ¶¶[0023], [0029]. The geographic information in Sharma is thus input-driven and static and tied to user queries, rather than dynamically maintained or updated based on device mobility.

Sharma further lacks any disclosure of providing interface-based access to a database of continuously updated, device-associated location and performance records for review by carriers, end users, or third-party service providers. Rather, the outputs of Sharma are limited to responses to individual availability inquiries generated at the time of the user's request. *Id.*, ¶[0023]. As a result, Sharma does not describe systems or methods for maintaining, updating, or exposing structured records of mobile device location and quality-of-service information over time.

Accordingly, Sharma is fundamentally directed to coverage look-up and availability reporting based on existing data sources, and not to the collection,

updating, and interface-based dissemination of location-associated wireless performance data as claimed in the '700 Patent. Like Chymaytelli, Sharma teaches a conditional delivery mechanism, not a data-maintenance system. *Id*., ¶¶[0007], [0023], [0029], [0030] (describing a user-initiated, query-and-response system that retrieves existing information and delivers results to the initiating user device, rather than maintaining or updating previously stored performance-indexed records).

IV. THE PETITION FAILS TO ESTABLISH A REASONABLE LIKELIHOOD OF SUCCESS ON A SINGLE CLAIM

The Petition fails to demonstrate a reasonable likelihood of prevailing with respect to any Challenged Claim because it does not show, within the Petition itself, that the cited prior art teaches all limitations of the Challenged Claims, as required by 37 C.F.R. § 42.104(b)(4) ("The petition must specify where each element of the claim is found in the prior art patents or printed publications relied upon[.]"). For each asserted ground, Petitioner has not shown that the cited prior art teaches all limitations of the Challenged Claims, including various limitations of independent claims 1 and 10. In particular, the Petition does not establish (i) the claimed "updating" of previously stored mobile-device location information when a device travels from one location to another, as required by claim 1; or (ii) the claimed "interface" through which enumerated classes of users access stored information, as required by claim 10. These deficiencies with respect to the independent Challenged Claims necessarily apply to the dependent Challenged Claims. Because Petitioner

has not shown that all elements of any Challenged Claim are disclosed or rendered obvious by the prior art, the Board should deny institution.

A. Legal Standard

A patent claim is unpatentable under 35 U.S.C. § 103 if the differences between the claimed subject matter 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). The question of obviousness is resolved based on 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 ordinary skill in the art; and (4) when presented, objective evidence of obviousness or non-obviousness. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

To institute *inter partes* review, a petition must identify with particularity the evidence and reasoning supporting each asserted ground of unpatentability. 35 U.S.C. § 312(a)(3); 37 C.F.R. § 42.104(b)(4). "In an [*inter partes* review], the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable." *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3) (requiring *inter partes* review petitions to identify "with particularity . . . the evidence that supports the grounds for the

challenge to each claim")); *see also* 37 C.F.R. § 42.104(b) (requiring a petition for *inter partes* review to identify where each element of the claim is found in the prior art patents or printed publications relied upon).

The Board has repeatedly denied institution where a petition fails to demonstrate where each claim element is found in the prior art relied upon. *See MediaTek, Inc. v. MOSAID Techs. Inc.*, IPR2024-00718, Paper 10, 2–5 (PTAB Oct. 9, 2024) (denying institution where a petition "has not adequately shown, for purposes of institution, that [the reference] teaches [a] limitation"); *Apple Inc. v. Allani*, IPR2025-00856, Paper 15, 14 (PTAB Nov. 4, 2025) (denying institution where a petition "has not sufficiently shown that [the reference] discloses [the challenged limitations], even for institution purposes"); *Samsung Elecs. Am., Inc. v. Cobblestone Wireless, LLC*, IPR2024-00319, Paper 16, 25 (PTAB June 24, 2024) (denying institution where a petition "has not sufficiently shown that [the limitation], as required by the challenged claims, is disclosed by or would have been obvious over [the reference]").

"[E]xpert testimony . . . is not a substitute for disclosure in a prior art reference itself." Patent Trial and Appeal Board Trial Practice Guide ¶ IV.K (2019) (explaining the appropriate scope of expert testimony and its limitations); *see also Google LLC v. Videoshare, LLC*, IPR2020-01631, Paper 14, 16 (PTAB Apr. 7, 2021) (denying institution and cautioning that expert testimony is not a substitute

for disclosure in a prior art reference itself); *Arris Solutions, Inc. v. Realtime Adaptive Streaming LLC*, IPR2019-01586, Paper 7, 24 (PTAB Apr. 7, 2021) (denying institution and condemning expert testimony used in place of disclosure from patents or printed publications as *ipse dixit* evidence and denying institution). A petition must "identify with particularity the evidence that supports the grounds for the challenge" and may not rely on external clarification or supplementation. *Intelligent Bio-Systems, Inc. v. Illumina Cambridge Ltd.*, 821 F.3d 1359, 1369–70 (Fed. Cir. 2016).

B. The Petition Fails to Specify Where Each Claim Element Is Found in the Prior Art

The Board should deny institution because, as evidenced below, the Petition fails to provide an elemental showing that specifies where each claim element is found in the prior art relied upon. Specifically, the Petition fails to establish, at least, how Grounds 1 and 2 render the "updating" step of limitation 1[c] and the "interface" of limitation 10[c] obvious. Grounds 3 and 4 merely attack claim 7, which depends from claim 1. The Petition does not even argue that either Chmaytelli or Sharma renders limitation 1[c] obvious. None of Grounds 1-4 possess a reasonable likelihood of success and, therefore, the Board should deny institution.

1. The Petition Fails to Establish that Each and Every Feature of Claim 1 Would Have Been Obvious Over the Cited References

Limitation 1[c] requires "updating . . . mobile device location information

stored in [a] memory or database." Limitation 1[c] further specifies that the "updating" step is performed "when a mobile device of said plurality of mobile devices travels from one location to another." In other words, limitation 1[c] recites more than the mere collection of data. Limitation 1[c] requires conditional updates, where previously stored mobile device location information is modified upon the completion of a specific event (*e.g.*, a mobile device traveling from one location to another.). Grounds 1 and 2 fail to establish that any prior art reference teaches an update to previously stored information when a mobile device of said plurality of mobile devices travels from one location to another.

a. *Ground 1 Fails to Render the "Updating" Step of Limitation 1[c] Obvious over Daley, Aaron, and Scherzer*

Ground 1 fails to render the "updating" step of limitation 1[c] obvious over Daley, Aaron, and Scherzer. Under Ground 1, the Petition asserts that "Aaron explicitly discloses collecting information when a quality-of-service threshold is impacted." Pet., 31. From that premise, the Petition concludes—without any supporting disclosure—that "[a] POSITA would have found it obvious for the combination of Daley and Aaron to transmit information at or around the time that information is collected, such that the server is updating . . . location information . . . when a mobile device . . . travels from one location to another." *Id*. Beyond this baseless conclusion, the Petition fails to establish with particularity that either Aaron or Daley teaches: 1) updates to previously stored information; or 2) updates that

specifically occur when a mobile device of said plurality of mobile devices travels from one location to another.

First, the Petition fails to establish that Aaron teaches the claimed "updates" to previously stored mobile device location information. According to the Petition, "Aaron explicitly discloses collecting information." Pet., 30. Merely collecting new information, however, is different from updating previously stored information, and the Petition offers no explanation to the contrary. The Petition, for example, fails to identify previously stored information in Aaron, and fails to explain how the mere collection and storage of new information constitutes an "update" to previously stored information.

The Petitioner's theory would require additional explanation to make sense. The cited paragraphs of Aaron neither teach nor suggest "updates," as recited by limitation 1[c]. Pet., 31 (citing Ex. 1010, ¶¶[0005]-[0007], [0033]-[0034], and [0041]). For example, each of ¶¶[0005]-[0007], [0033]-[0034], and [0041] discloses or refers to "***detecting*** a change in quality of a wireless communication service" and subsequently "storing the ***detected*** . . . ***information*** for subsequent transmission to a central processor." In other words, the express disclosure of Aaron indicates that new information is detected and stored. The Petition fails even to acknowledge this, let alone to explain how the detection and storage of new information corresponds to "updates" to previously stored information, as recited by limitation 1[c].

Second, even assuming, for the sake of argument, that merely collecting information is the same as "updating" previously stored information (which is not the case), the Petition fails to establish that the collection of information of Aaron occurs in response to a mobile device traveling from one location to another, as recited by limitation 1[c]. In this regard, the Petition confusingly argues that the "quality-of-service thresholds" of Aaron "are dependent, in whole or in part, on the location of Aaron's wireless terminals." Pet., 31. The Petition cites ¶[0006] of Aaron to support this argument, which describes "performance parameters that fall below threshold values such as, for example, signal strength of a radio link with a base station, signal quality of a radio link with a base station, and/or numbers of dropped calls, etc." The Petition further references ¶111 of Petitioner's expert Dr. Almeroth's declaration to argue that "changes in location often causes changes in these values." Pet., 31. Expert testimony, however, is not a substitute for disclosure in a prior art reference itself. *See Google*, IPR2020-01631 at Paper 14, 16. As evidenced below, the Petition impermissibly relies on Dr. Almeroth as a substitute for the express teachings of Aaron. Worse, the portions of Dr. Almeroth's declaration upon which Petitioner relies actually contradict the express teachings of Aaron.

Aaron explicitly teaches "detecting a change in quality of a wireless communication service," then "determining a geographical location of the wireless terminal ***in response to detecting a change in service quality***," and subsequently

"storing the detected service quality change information and location information for subsequent transmission to a central processor." Ex. 1010, ¶[0005] (emphasis added); *see also id*., ¶[0033] ("[M]easurement may occur when a change in a performance parameter is detected . . . and then determine, if not already known, a geographical location…in response to detecting a change in quality of a wireless communication service[.]"); ¶¶[0041]-[0042] ("The wireless terminal 100 measures service quality . . . which may include detecting changes in service quality" and "[i]n response to measuring service quality, the wireless terminal determines its geographical location.").

In other words, according to Aaron, one should ***first*** measure service quality and ***second***—only upon detecting a change in the service quality—determine a geographical location of the wireless terminal prior to storing new information. In fact, Aaron expressly indicates that determining the geographical location may not be necessary, explaining that such determinations should only occur "if not already known." *Id*., ¶[0042]. An honest read of Aaron establishes that the location of the wireless terminal is secondary to the storage of newly detected service quality information. Aaron offers neither an express nor an implicit teaching that the geographical location of the wireless terminal needs to change prior to the storage of new information. Aaron is clear that new information is only stored when a performance parameter falls below a threshold. *See id*., ¶¶[0005] and [0006].

Contrary to the data collection of Aaron, a change in location is the crux of limitation 1[c], as it is a necessary condition for the "updating" step to commence. The Petition, however, ignores the express language of the claim and attempts to contort the "performance parameter" thresholds of Aaron into a change in location. As an initial matter, the Petitioner impermissibly relies on Dr. Almeroth's testimony as a substitute for the actual teachings of Aaron. *See Google*, IPR2020-01631, Paper 14, 16. The Petition also fails to reconcile the fact that Aaron discloses the separate use of both performance parameters and terminal locations. The performance parameters of Aaron, therefore, cannot be reasonably interpreted as the location changes required by limitation 1[c]. They are different determinations and, as expressly taught by Aaron, the location of the wireless terminal is secondary and not a triggering condition for the storage of new information.

For at least the foregoing reasons, Ground 1 fails to establish that the asserted combination of Daley, Aaron, and Scherzer teaches the claimed "updating" step of limitation 1[c]. In fact, Petitioner's attempt to shoehorn the actual teachings of Aaron into something that resembles the express language of the claim is indicative of impermissible hindsight bias, which independently warrants denial of institution. *See Solus Advanced Materials Co., Ltd. v. SK Nexilis Co., Ltd.*, IPR2025-00005, Paper 14, 47 (PTAB May 19, 2025) (denying institution because "[p]etitioner's argument appears to be based upon impermissible hindsight reconstruction").

b. *Ground 2 Fails to Render the "Updating" Step of Limitation 1[c] Obvious over Scherzer*

Ground 2 fails to render the "updating" step of limitation 1 [c] obvious over Scherzer. Under Ground 2, the Petition asserts—without adequate explanation—that Scherzer allegedly renders obvious limitation 1[c], which recites "updating, by action of said computer, said mobile device location information stored in said memory or database when a mobile device of said plurality of mobile devices travels from one location to another." Pet., 52-53. This theory fails for three reasons: (1) the Petition ignores the fact that limitation 1[c] requires "updating"; (2) the Petition cites excerpts from Scherzer without a detailed explanation of the relevance of those excerpts to the "updating" of limitation 1[c]; and (3) even if considered, the declaration of Dr. Almeroth cannot supply a theory that is not articulated in the Petition itself.

First, the Petition glosses over the fact that limitation 1[c] requires "updating." The Petition dedicates a meager two sentences to limitation 1[c], neither of which uses the word "update," or any synonym thereof. Pet., 52-53. For example, the Petition argues that "Scherzer discloses that access point connection quality measurements are associated with access points at particular geographic locations and the measurements are gathered by mobile devices within range of that geographic location" (Pet., 52) and that "Scherzer's mobile devices determine their own geographic location[] which is included in the data sent to the database." Pet.,

53. These two assertions constitute the entirety of the Petitioner's analysis of limitation 1[c].

The Petition neither mentions "updating" nor attempts to tie the alleged teachings of Scherzer to the express language of the claim. If institution is granted, the Board will have to impermissibly construct a theory for limitation 1[c] on Petitioner's behalf. *See Nearmap US, Inc. v. Eagle View Tech., Inc.*, IPR2024-00716, Paper 9, 13 (PTAB Oct. 9, 2024) (denying institution because, if institution were granted, the deficiencies of the petition would require the Board to weave together the petitioner's evidence into a cohesive case). For this reason alone, the Board should deny institution.

Second, the Petition cites Scherzer without explaining how the cited excerpts of Scherzer relate to limitation 1[c]. Citing portions of applied references without "a detailed explanation of the significance of the quotations and citations from the applied references" is insufficient to meet Petitioner's burden for institution. *Cisco Sys., Inc. v. C-Cation Techs., LLC*, IPR2014-00454, Paper 12, 11 (PTAB Aug. 29, 2014) (denying institution where the petition lacked a detailed explanation and, instead, provided a list of bare, unexplained quotations). Nonetheless, the Petition presents bare citations to Scherzer to support the meager two-sentence analysis of limitation 1[c], without providing a detailed explanation as to how the citations to Scherzer relate to the express language of limitation 1[c].

For example, the Petition cites ¶¶[0082]-[0087] of Scherzer to support the assertion that "Scherzer's mobile devices determine their own ***geographic location[]*** which is included in the data sent to the database." Pet., 53. However, the Petition fails to explain how the list of parameters, as provided in ¶¶[0082]-[0087] of Scherzer, apply to the "updating" step of limitation 1[c].

The Petition also cites ¶[0131] of Scherzer in support of its assertion that "Scherzer's mobile devices determine their own ***geographic location[]*** which is included in the data sent to the database." *Id*. The Petition, however, fails to explain how the teachings of ¶[0131] of Scherzer specifically relate to "updating . . . mobile device location information . . . when a mobile device of said plurality of mobile devices travels from one location to another," as recited by limitation 1[c].

Petitioner bears the burden of clearly explaining how the asserted prior art references are combined to render the Challenged Claims unpatentable. *See Harmonic*, 815 F.3d at 1363. Petitioner's burden "cannot be met simply by throwing mountains of evidence at the Board" without ***clearly articulating*** how that evidence supports the asserted grounds. *Parus Holdings, Inc. v. Google LLC*, 70 F.4th 1365, 1371 (Fed. Cir. 2023) (emphasis added). Nonetheless, the actual teachings of ¶¶[0082]-[0087] and [0131] of Scherzer are immaterial because the Petition fails to "specify sufficiently where each element of the claims is found in the applied references" and lacks "a detailed explanation of the significance of the quotations

and citations from the applied references." *Cisco Sys.,* IPR2014-00454, Paper 12, 11. Accordingly, Petitioner plainly fails to satisfy its burden.

Third, even if considered, the Petition cannot rely on arguments appearing only in Dr. Almeroth's declaration to cure its failure to establish that limitation 1[c] is disclosed in Scherzer. The Petition cites ¶¶196-197 of Dr. Almeroth's declaration to support its assertion that "Scherzer's mobile devices determine their own ***geographic location[]*** which is included in the data sent to the database." Pet., 53. However, the Petition may not incorporate substantive argument by reference from an expert declaration to supply a theory that is not articulated in the Petition itself. *See* 37 C.F.R. § 42.6(a)(3).

Although Dr. Almeroth actually uses the word "updating" in paragraph 197 of his declaration (Ex. 1002, ¶197), the Petition never articulates Dr. Almeroth's purported "updating" theory in the Petition itself. In particular, the Petition is silent as to Dr. Almeroth's assertions that the system of Scherzer "inherently supports location updates as mobile devices travel" or that a person of ordinary skill would have understood movement between locations to "trigger[] new measurements and corresponding database updates." *Id*. The discussion in the Petition of limitation 1[c] spans only two sentences (Pet., 52-53) and ***does not*** present any: a) inherency theory, b) POSITA-based explanation, or c) articulated mapping explaining how Scherzer satisfies the claimed "updating" of previously stored location information

when a device travels from one location to another.

The Board has consistently found similar "incorporations by reference" to be improper. *See Fidelity Nat'l Info. Servs., Inc. v. DataTreasury Corp.*, IPR2014-00491, Paper 9, 9 (PTAB Aug. 13, 2014) (denying institution and declining to consider information excluded from the petition and found only in the declaration); *see also Cisco Sys.,* IPR2014-00454, Paper 12, 9 (denying institution and denouncing the practice of citing a declaration to support conclusory statements that are not otherwise supported in a petition). This practice "amounts to a self-help increase in the length of the [] brief" and "is a pointless imposition on the court's time[.]" *Fidelity*, IPR2014-00491, Paper 9, 10 (citing *DeSilva v. DiLeonardi*, 181 F.3d 865, 866-67 (7th Cir. 1999)). "A brief must make all arguments accessible to the judges, rather than ask them to play archeologist with the record." *Id*. As the Board has recognized, "expert testimony may explain 'patents and printed publications,' but is not a substitute for disclosure in a prior art reference itself." Patent Trial and Appeal Board Trial Practice Guide ¶ IV.K (2019) (explaining the appropriate scope of expert testimony and its limitations); *see also Google*, IPR2020-01631, Paper 14, 16 (cautioning that expert testimony is not a substitute for disclosure in a prior art reference itself and denying institution); *see also Arris Solutions*, IPR2019-01586, Paper 7, 24 (condemning expert testimony used in place of disclosure from patents or printed publications as *ipse dixit* evidence and denying

institution).

Dr. Almeroth's declaration cannot cure Petitioner's failure to establish limitation 1[c]. When the Petition is evaluated on its own terms, it does not demonstrate that Scherzer teaches or suggests the claimed "updating" of previously stored mobile-device location information when a device travels from one location to another.

c. *Grounds 3 and 4 Fail to Render the "Updating" Step of Limitation 1[c] Obvious over Scherzer*

Grounds 3 and 4 also fail to remedy the defects of Ground 2. For example, Ground 3 challenges claim 7 under 35 U.S.C. § 103 as allegedly invalid over Scherzer in view of Chmaytelli (Pet., 59-62) and Ground 4 challenges claim 7 under 35 U.S.C. § 103 as allegedly invalid over Scherzer in view of Sharma. Pet., 63-67. Claim 7 depends directly from claim 1 and, therefore, requires all the limitations recited by claim 1, including limitation 1[c]. As evidenced above with respect to Ground 2, the Petition fails to establish that Scherzer teaches, at least, the "updating" of limitation 1[c]. The Petition does not argue that either Chmaytelli or Sharma remedies the aforementioned defects of Scherzer. Accordingly, Grounds 3 and 4 fail to render limitation 1[c] invalid under 35 U.S.C. § 103 for the same reasons stated in reference to Ground 2.

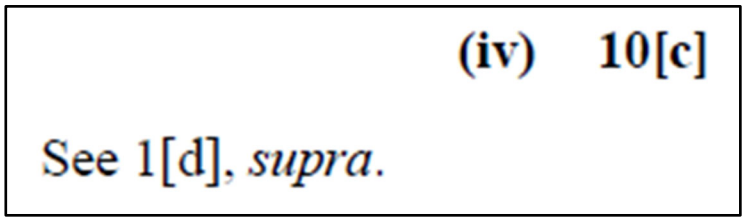
2. The Petition Fails to Establish that Each and Every Feature of Claim 10 Would Have Been Obvious over the Cited References

Limitation 10[c] is a system requirement, not a functional result. For limitation 10[c], Grounds 1 and 2 both exclusively reference Petitioner's analysis of limitation 1[d] without additional analysis, references to the prior art, or references to Dr. Almeroth's declaration. Limitation 10[c], however, is not coextensive with limitation 1[d] because limitation 1[d] only recites the functional act of "providing access to [] quality or service information stored in [a] memory or database." Ex. 1001, 36:13-14. Contrarily, limitation 10[c] recites a structural "interface through which one or more end users . . . may access [] quality or service information or mobile device location information stored in [a] memory or database," imposing a structural requirement on the claimed system. *Id*., 37:44-54. The system must include an interface, and that interface must be the mechanism through which access to the stored information occurs.

a. *Ground 1 Fails to Render the Structural "Interface" of Limitation 10[c] Obvious over Daley, Aaron, and Scherzer*

Ground 1 fails to render the structural "interface" of limitation 10[c] obvious over Daley, Aaron, and Scherzer. Under Ground 1, the Petition also fails to satisfy its burden under 35 U.S.C. § 312(a)(3) with respect to limitation 10[c] because the Petition never explains—or even addresses—how the asserted combination of

Daley, Aaron, and Scherzer teaches or suggests the claimed "interface." Instead, the Petition exclusively refers to "limitation 1[d]" of Ground 1 to establish that Daley, Aaron, and Scherzer teach limitation 10[c]:



Excerpt from Petition, p. 47

As explained above, limitation 10[c] is not coextensive with limitation 1[d]. Whereas limitation 1[d] recites a method step of "providing access" (Ex. 1001, 36:13), limitation 10[c] requires a system comprising "an interface through which" specified classes of users may access stored information. *Id*., 37:44. The Petition never identifies any interface in the prior art, never explains how such an interface is part of the claimed system, and never addresses how the interface permits access by the enumerated recipients. Accordingly, the incorporation by reference of an analysis directed to a different limitation with materially different requirements does not satisfy the particularity requirement of § 312(a)(3).

In Petitioner's analysis of limitation 1[d], Petitioner argues that "Daley discloses ***providing access*** to customer service representatives and engineers (***one or more carriers or third parties that provide services to one or more end users***) to diagnose problems with a mobile device encountered by a customer." Pet., 32.

However, the Petition never identifies with particularity any "interface" in Daley, Aaron, or Scherzer, as required by limitation 10[c]. The Petition fails to do the work required to establish that Ground 1 renders the "interface" of limitation 10[c] obvious.

For example, in the analysis of limitation 1[d], the Petition mentions "web page interfaces" of Daley (Pet., 33) but never articulates with particularity how the alleged "web page interfaces" satisfy all of the requirements of limitation 10[c]. Likewise, the Petition also mentions "quality-of-service maps" of Aaron, but omits an explanation as to how these "quality-of-service maps" constitute the "interfaces" of limitation 10[c]. *Id*. At a minimum, the Petition should explain how Daley's interfaces provide access to the enumerated classes of users specified in limitation 10[c] (*e.g.*, end users that provide services to end users of communication devices, carriers, wireless communications networks, etc.).

The Petition never explains how the web pages of Daley are part of the same system that stores the mobile device location and quality-of-service information relied upon elsewhere for claim 10, nor how those web pages expose that stored information. Even if Daley discloses web interfaces in its own system, the Petition never explains how those interfaces are integrated into the alleged combination or how they provide access to the claimed database. The Board may not supply that missing analysis.

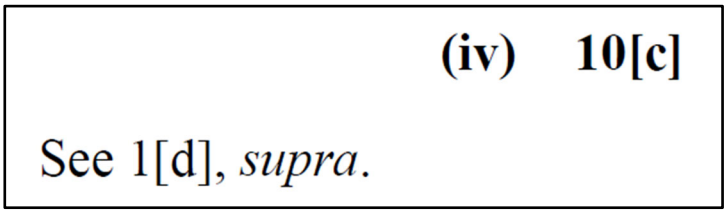
Petitioner also fails to establish limitation 10[c] because neither the Petition nor Dr. Almeroth explains how the cited prior art discloses the claimed "interface" through which enumerated classes of users access stored information. Rather than analyzing the express language of limitation 10[c], the Petition relies on its discussion of limitation 1[d] and cites paragraphs 115–117 of Dr. Almeroth's declaration in support. Pet. 32-33. But limitation 10[c] is a distinct structural limitation, and neither the Petition nor Dr. Almeroth identifies any interface structure or explains how users access information through such an interface.

Dr. Almeroth's testimony does not cure this deficiency. The discussion by Dr. Almeroth focuses on "providing access" under limitation 1[d] and does not address the specific requirements of limitation 10[c]. Ex. 1002, ¶¶115-17. To the extent Dr. Almeroth advances additional theories regarding interfaces, those theories are not articulated in Petitioner's analysis of limitation 10[c] and 37 C.F.R. § 42.6(a)(3) precludes Petitioner from importing those theories into the Petition by merely referencing Dr. Almeroth's declaration. Accordingly, the Petition fails to demonstrate that the prior art teaches or suggests the "interface" required by limitation 10[c]. Accordingly, Petitioner's theory for limitation 10[c] fails to specify how Daley, Aaron, or Scherzer teaches the claimed "interface."

b. *Ground 2 Fails to Render the Structural "Interface" of Limitation 10[c] Obvious over Scherzer*

Ground 2 fails to render the structural "interface" of limitation 10[c] obvious

over Scherzer. Petitioner never explains—or even addresses—how Scherzer teaches or suggests the claimed "interface." Similar to the analysis in the Petition of limitation 10[c] under Ground 1, the Petition exclusively refers to "limitation 1[d]" of Ground 2:



Excerpt from Petition, p. 58

Petitioner's theory for limitation 10[c] fails for two reasons: (1) Petitioner's analysis of functional limitation 1[d] fails to identify an "interface," as required by structural limitation 10[c]; and (2) the theory for limitation 10[c] cannot benefit from arguments made by Dr. Almeroth that were not articulated in the Petition.

First, Petitioner's functional analysis of limitation 1[d] fails to identify an "interface," as required by structural limitation 10[c]. Limitation 10[c] specifically requires "an interface through which one or more end users or one or more end user communication devices, or one or more carriers, or one or more third parties . . . may access said quality or service information or mobile device location information stored in said memory or database." Ex. 1001, 37:44-54. This limitation imposes a structural requirement on the claimed system. The system must include an interface, and that interface must be the mechanism through which access to the stored

information occurs.

Contrarily, limitation 1[d] is functional, reciting a method step of "providing access." *Id*., 36:13. Petitioner's analysis of limitation 1[d] consists of two sentences, each of which focuses on functionality—not structure—allegedly taught by Scherzer. Pet., 53. The Petition, for example, first argues that "Scherzer discloses providing mobile devices (end user communications devices) and their users (end users) with access to access point maps." *Id*. The Petition concludes its analysis of limitation 1[d] by stating that "[t]he server communicates such information to the mobile device via the Internet (providing access)." *Id*. The Petition, however, fails to identify with ***particularity*** any "interface" in Scherzer through which end users can access quality or service information or mobile device location information stored in a memory or database. To the extent that the Petition relies on ¶¶[0068] and [0078] of Scherzer in support of the two-sentence analysis in the Petition of limitation 1[d], the Petition fails to provide a detailed explanation as to how ¶¶[0068] and [0078] of Scherzer teach an "interface," as recited by limitation 10[c].

Second, the theory for limitation 10[c] also cannot benefit from arguments that were made by Dr. Almeroth but not made by Petitioner in the Petition itself. The Petition relies on ¶¶198-200 of Dr. Almeroth's declaration in support of Petitioner's two-sentence analysis of limitation 1[d]. Once again, Dr. Almeroth's cited testimony should be disregarded because the Petition cannot incorporate arguments by

reference from one document into another document. 37 C.F.R. § 42.6(a)(3).

As explained above, Petitioner's two-sentence analysis of limitation 1[d] exclusively focuses on the alleged functionality taught by Scherzer and fails to identify an alleged "interface" in Scherzer, as required by limitation 10[c]. Pet., 53. Although Dr. Almeroth asserts that the "system [of Scherzer] provides interfaces tailored to end users seeking optimal connectivity" (Ex. 1002, ¶198) and references a "map-based interface" of the system of Scherzer (*id*., ¶200), the Petition makes no mention of these arguments in its analysis of limitation 1[d] in the Petition. The Petition, therefore, cannot benefit from Dr. Almeroth's "interface" arguments because Petitioner omitted these arguments from the Petition itself. *See Fidelity*, IPR2014-00491, Paper 9, 9 (denying institution and declining to consider information excluded from the petition and found only in the declaration); *see also Cisco Sys.,* IPR2014-00454, Paper 12, 9 (denying institution and denouncing the practice of citing a declaration to support conclusory statement that are not otherwise supported in a petition).

Additionally, Dr. Almeroth's "interface" testimony does not identify any disclosure in Scherzer teaching such an interface and instead reads features into Scherzer that are not taught by Scherzer itself. "[E]xpert testimony . . . is not a substitute for disclosure in a prior art reference itself." Patent Trial and Appeal Board Trial Practice Guide ¶ IV.K (2019); *see also Google*, IPR2020-01631, Paper

14, 16 (cautioning that expert testimony is not a substitute for disclosure in a prior art reference itself and denying institution); *Arris Solutions*, IPR2019-01586, Paper 7, 24 (condemning expert testimony used in place of disclosure from patents or printed publications as *ipse dixit* evidence and denying institution).

Accordingly, under Ground 2, Petitioner's theory for limitation 10[c] fails to specify how Scherzer teaches the claimed "interface."

V. CONCLUSION

For the reasons set forth above, the Petition fails to demonstrate a reasonable likelihood that Petitioner will prevail on any challenged claim. Petitioner has not established that any of the independent claims of the '700 Patent are anticipated or would have been obvious under any asserted ground.

Because Petitioner has not shown that any independent claim is unpatentable, Petitioner likewise has not shown that any dependent claim is unpatentable. *See, e.g.*, *Hartness Int'l Inc. v. Simplimatic Eng'g Co.*, 819 F.2d 1100, 1108 (Fed. Cir. 1987) (if an independent claim is nonobvious, a dependent claim is necessarily nonobvious and novel). Each dependent claim incorporates the limitations of its corresponding independent claim, and the Petition advances no separate unpatentability theory directed specifically to any dependent claim.

Accordingly, the Board should deny institution.

Dated: January 29, 2026

Respectfully submitted,

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CERTIFICATE OF COMPLIANCE WITH TYPE-VOLUME LIMITATION, TYPEFACE REQUIREMENTS, AND TYPE STYLE REQUIREMENTS

1. This Patent Owner Preliminary Response complies with the type-volume limitation of 14,000 words, comprising **9,503** words, as counted using the Microsoft Word software that was used to prepare this paper, excluding the parts exempted by 37 C.F.R. § 42.24(a), (b).

2. This Patent Owner Preliminary Response complies with the general format requirements of 37 C.F.R. § 42.6(a) and has been prepared using Microsoft Word 2016 in 14-point Times New Roman.

Date: January 29, 2026

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CERTIFICATION OF SERVICE

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