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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

AMAZON.COM, SERVICES LLC,
Petitioner,

v.

VB ASSETS, LLC,
Patent Owner.

Case No. IPR2025-01167
Patent No. 11,087,385

PATENT OWNER'S PRELIMINARY RESPONSE

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I. INTRODUCTION

The Board should deny institution of *inter partes* review of U.S. Patent No. 11,087,385 (“the ’385 patent”) because Petitioner Amazon.com Services LLC fails to demonstrate a reasonable likelihood that at least one of the claims challenged in the petition is unpatentable. 35 U.S.C. §324(a).

The petition challenges the claims of the ’385 patent based on two sets of grounds. The first set, represented by Grounds 1-4, asserts that the claims are obvious based on the primary reference Li. In particular, all four grounds rely on Li alone as allegedly rendering the ’385 patent’s independent claims obvious. However, the petition’s case rests entirely on the improper picking-and-choosing of disparate portions of Li to manufacture alleged disclosures that are not actually found in the reference. The petition also leaves it to the Board and Patent Owner to dissect each of the petition’s citations to Li to assess whether and how each of the citations—which often refer to different systems, methods, and components—can be combined in the way the petition proposes. This is improper and thus renders the petition deficient for failing to make out its case with particularity. The petition’s lack of a reasoned basis for combining Li’s disclosure as proposed renders the analysis insufficient in establishing that Li teaches the recited elements.

In addition, the petition also fails to sufficiently explain how certain disclosures in Li map to particular claim elements. For example, the petition maps

Li's selection of a retailer to claim 1's requirement of *selecting ... a product or service*¹ but the petition fails to explain why selection of a retailer equates to the selection of a product or service. Moreover, for claim 31, the petition provides insufficient evidence establishing that Li teaches a computer system that satisfies the requirements of *causing ... a set of search results to be presented to a user based on the search and completing ... without further user input after identifying the payment information and the shipping information, a purchase transaction of the identified one or more products or services.*

For the petition's second set of grounds, Ground 4 of the petition alleges that the independent claims are obvious based on a combination of Chen and Barnes. The petition, however, fails to show that either reference teaches *searching, by the computer system, one or more databases of products or services based on the one or more words or phrases and selecting, by the computer system, without further user input other than the single first user input, a product or service from the database to be purchased based on the search*, recited in claim 1. In addition, while the petition admits that neither reference teaches claim 31's requirement of *completing ... without further user input after identifying the payment information*

¹ Claim language is italicized throughout this preliminary response.

and the shipping information, a purchase transaction of the identified one or more products or services, the petition nevertheless contends the requirement obvious. However, the petition's assertions are undermined by the applied references themselves, making petition's conclusory reasoning insufficient to establish obviousness.

Accordingly, for the reasons detailed below, the Board should deny institution of the petition.

II. CLAIM CONSTRUCTION

In an IPR, claims are given their ordinary and customary meaning in light of the specification. 37 C.F.R. §42.100(b). No constructions are necessary to deny institution because denial is warranted for numerous reasons that do not depend on claim construction, as further detailed below.

III. GROUND 1: THE PETITION FAILS TO ESTABLISH THAT CLAIMS 1, 3-8, 10-16, 18-23, AND 25-38 ARE OBVIOUS OVER LI

Ground 1 of the petition challenges claims 1, 3-8, 10-16, 18-23, and 25-38 as obvious based on Li. Pet., 3. As detailed below, the petition fails to establish that the challenged claims are rendered obvious over Li. As a whole, the petition's obviousness analysis is deficient because it stitches together different disclosures of Li without providing a reasoned basis for doing so. In addition, the petition fails to show that Li teaches each and every limitation of independent claim 1, including

limitations [1.a]-[1.d]², and the corresponding limitations found in independent claim 16. The petition also fails to show that Li teaches each and every limitation of independent claim 31, including limitations [31.a]-[31.d] and [31.h], and the corresponding limitations found in independent claim 35.

A. The Petition’s Obviousness Analysis Is Deficient

An overarching deficiency to the petition’s Ground 1 is its selective re-working of its applied reference, Li. Throughout its analysis of the challenged claims, the petition stitches together cherry-picked quotes from various and disparate paragraphs of Li to create manufactured sentences that the petition presents as “disclosure” that is then used to map Li to the recited limitations. However, when the citations underlying Petitioner’s cultivated sentences are compared to Li, the result often reveals the petition’s reliance on paragraphs that do not actually state what the petition alleges they do, instead referring to numerous and distinct apparatuses and methods described in Li. The petition makes no attempt to explain the relationship between the various embodiments of Li that would support its assertions regarding Li’s disclosure nor does the petition

² For convenience, Patent Owner adopts the petition’s labeling for the claim limitations.

present any theories premised on the combination of the different apparatuses and methods. For this reason, the petition is irredeemably deficient.

Li contains over 45 figures and spans 75 pages of written description. Among this disclosure, Li describes numerous apparatuses and methods that each detail varying components and processes with no clear guiding thread as to how they all relate. For example, Li describes its figures as containing no less than 21 different “exemplary apparatus[es]” and 28 different “exemplary method[s].” EX1004, [0007]-[0074]. The figures themselves include differently-labeled components and method steps (which often include multiple, distinct paths) and, even with respect to a particular figure, Li describes several different ways in which a figure may be implemented. *See, e.g., id.*, [0544]-[0551] (describing different embodiments for performing a step of a method), [0566]-[058] (same), [0600]-[0603] (same).

Despite this elaborate and varied disclosure, the petition often stitches together various parts of Li to create its own description not appearing in Li. As one example, the petition asserts, in connection with limitation [1.a]: “The ‘request’ is a ‘speech utterance’ containing ‘any word string spoken by the user’ ‘related to an Object of Interest.’” Pet., 13. The petition creates this sentence by pulling small snippets of text from several paragraphs. *Id.* (citing EX1004, [0006], [0160], [0254], [0264]). As shown below, these selected snippets span over 200

paragraphs of Li, with each cited paragraph discussing different apparatuses and methods. *See also infra*, §III.B.1.

Quoted Excerpt	Paragraph where quoted excerpt appears
“request”	[0006] (describing summary of invention)
“speech utterance”	[0160] (describing FIG. 2B exemplary apparatus embodiment)
“any word string spoken by the user” “related to an Object of Interest”	[0264] (describing FIG. 11 exemplary apparatus embodiment)
No associated quote	[0254] (describing FIG. 6A exemplary method embodiment)

Numerous other instances exist where the petition will weave together a sentence based on disparate quotes discussing different aspects of different figures. For example, in arguing that “Li’s Inter Server (***computer system***) selects from the ‘candidate word strings’ output by the ‘Speech Recognition Module’ (***speech recognition engine***) a ‘highest ranking word or word string as the Object of Interest,’” the petition relies on paragraphs spanning nearly 500 paragraphs. Pet., 15 (citing EX1004, [0161], [0329]-[0337], [0553]); EX1004, [0161] (FIG. 2B apparatus), [0329]-[0337] (FIG. 18B method), [0553] (FIGS. 36A1 and 36A2 method). Immediately following that, the petition again draws from distinct parts of Li in asserting: “Based on the selected word string, an ‘Offer ID Engine’

identifies ‘qualifying offers related to [the] object of interest’ by ‘query[ing] one or more data structures for any data...related to the Object of Interest.’” Pet., 15 (citing EX1004, [0161], [0206], [0240], [0618]); EX1004, [0161] (FIG. 2B apparatus), [0206] (FIG. 5 method), [0240] (FIG. 6A method), [0618] (FIG. 37 article of manufacture). As another example, the petition supports an assertion relating to limitation [1.e] with citations that separately reference four different figures. See Pet., 17 (arguing “Li’s Inter Server ‘quer[ies] one or more data structures’ to select ‘a Retailer offering [the] Object of Interest, in combination with one or more qualifying Offers,’ which corresponds to a ***‘product or service from the database to be purchased,’*** because it indicates a product or service (‘Object of Interest’) to be purchased from a selected ‘Retailer offering the Object’ based on ‘an Offer related to the Object’”) (citing EX1004, [0003], [0160]-[0161], [0168]-[0169], [0197], [0206]); EX1004, [0003] (discussing background), [0160]-[0161] (FIG. 2B apparatus), [0168]-[0168] (FIG. 4 method), [0197] (FIG. 3H method), [0206] (FIG. 5 method); *see also infra*, §§III.B.2-5.

However, the presentation of its cherry-picked assertions is where the petition stops. The petition proffers no explanation providing the basis for why or how the petition can make the connections between the numerous apparatuses and methods that its assertions suggest. The petition’s expert declaration fares no better by taking the same approach in many instances. *See, e.g.*, EX1002, ¶¶76,

80-83, 89-90. Moreover, further highlighting the deficiencies of the petition are the numerous discrepancies between the petition's analysis and that provided by the expert. For example, in many instances, the expert declaration relies on to other aspects of Li to support his opinions that are not relied on in the petition. *See, e.g.*, Pet., 11-13 (citing EX1002, ¶¶72-75 (additionally citing EX1004, [0006], [0082], [0089]-[0109])), 13-14 (citing EX1002, ¶¶77-79 (additionally citing EX1004, [0315], [0382], [0527])), 15-16 (citing EX1002, ¶¶82-88 (additionally citing EX1004, [0088], [0101], [0157]-[0158], [0223]-[0226], [0331], [0553])), 17-18 (citing EX1002, ¶¶89-92 (additionally citing EX1004, [0114], [0158], [0167], [0214], [0223]-[0226], [0240], [0553])), 34 (citing EX1002, ¶148 (additionally citing [0158], [0179], [0478], [0622])), 34-35 (citing EX1002, ¶150 (additionally citing [0156], [0165], [0197], [0206], [0240], [0242], [0553])).

In other instances, the petition cites to portions of Li that are not cited by the expert and thus their relevance to the particular claim limitation goes unexplained. *See, e.g.*, Pet., 11 (citing EX1004, [0091] for the preamble), 13-14 (citing EX1004, [0126] for limitation [1.b]), 15 (citing EX1004, [0160] for limitation [1.c]), 17-18 (citing EX1004, [0003], [0168], [0626] for limitation [1.e]), 34 (citing EX1004, [0165], [0252] for limitation [31.c]), 34 (citing EX1004, [0126]-[0145] for limitation [31.d]). The expert declaration also presents theories that are not relied upon or advanced in the petition. *See, e.g.*, EX1002, ¶¶87 (relying on obviousness

which the petition does not assert (Pet., 16)), 92 (advancing obviousness theory where corresponding part of petition (Pet., 18) asserts only disclosure), 103 (proposing modification to Li not presented in petition (Pet., 24-25)), 149 (advancing obviousness where petition (Pet., 34) asserts disclosure).

The petition’s lack of reasoned explanation for its analysis and its treatment of Li makes the petition deficient in terms of its burden in establishing obviousness and explaining its case with particularity. Instead, the petition improperly leaves it to the Board to navigate through the maze of citations to assess the petition’s arguments. *See Parus Holdings, Inc. v. Google LLC*, 70 F.4th 1365, 1371-72 (Fed. Cir. 2023) (explaining “the Board should not be forced to play archaeologist with the record” (internal quotations and alteration omitted)); *Lenovo (United States) Inc. v. LiTL LLC*, IPR2021-00800, Paper 7, 18 (Nov. 2, 2021) (denying institution where the petition provided “a web of internal cross-references that require the reader to engage in extensive analysis just to decipher what is being argued, much less evaluate the merits of that argument”). This improperly shifts the burden to both the Board and Patent Owner to determine the basis for Petitioner’s case. *Niantic, Inc. v. Barbaro Techs., LLC*, IPR2019-00668, Paper 8, 16 (denying institution where “Petitioner improperly placed the burden on us to sift through the information presented by Petitioner ... rather than providing a sufficiently clear explanation”); *see also Intelligent Bio-Systems, Inc. v. Illumina Cambridge Ltd.*,

821 F.3d 1359, 1367 (Fed. Cir. 2016) (“It is of the utmost importance that petitioners in the IPR proceedings adhere to the requirement that the initial petition identify ‘with particularity’ the ‘evidence that supports the grounds for the challenge to each claim.’”).

B. The Petition Fails to Establish Li Teaches Each and Every Limitation of Independent Claim 1

1. The petition fails to show that Li teaches limitation [1.a]

Limitation [1.a] recites *receiving, by the computer system, a single first user input comprising a natural language utterance*. The petition maps Li’s “Inter Server” as the computer system that implements the method as recited in claim 1. Pet., 12-13; *see also* EX1002, ¶74 (annotating “Inter Server 02300” illustrated in FIG. 2B). The petition alleges that Li’s Inter Server receives *a single first user input comprising a natural language utterance* by receiving from a client device a “‘request’ [that] is a ‘speech utterance’ containing ‘any word string spoken by the user’ ‘related to an Object of Interest.’” Pet., 13.

In asserting that Li discloses that its Inter Server receives the identified request, the petition partially quotes from four separate paragraphs of Li. *Id.* (citing EX1004, [0006], [0160], [0254], [0264]). However, the relied-upon citations do not discuss the Inter Server as receiving the request and also refer to different components and figures that go unexplained by the petition.

For example, while paragraph 6 (provided as part of Li's general summary) describes a method that, "[i]n one embodiment," includes "receiving from a client device a request related to an object of interest," the paragraph does not identify Li's Inter Server as the component that receives the request. EX1004, [0006]. Similarly, paragraph 160 mentions an analysis module 02330 that can "utiliz[e] an acoustic and/or language module to recognize a speech utterance," but the paragraph does not describe the Inter Server as receiving a speech utterance request from a client device as the petition asserts. *Id.*, [0160]. Paragraph 254 discusses a "Method 06000," which Li describes as "enabling the association of data related to an object of interest across two or more devices, according to one embodiment," which Li describes as having multiple steps with distinct paths and different possible implementations. *See, e.g., id.*, [0021], [0209], [0243], [0255], FIGS. 6A-6C. Paragraph 264 mentions a "[s]peech 11512 [that] can be any word string spoken by the user of a device, e.g., WD 02202," but Li does not identify the Inter Server as receiving speech 11512. *Id.*, [0264]. Instead, Li describes this in relation to yet another figure, FIG. 11, which Li explains is "an exemplary apparatus enabling the identification of an object of interest." *Id.*, [0026]. The paragraph also refers to other "apparatuses and methods described in FIG. 17, FIG. 18A, and FIG. 18B." *Id.*, [0264]. Notably, FIG. 17 shows a **different** component receiving speech 11512. *Id.*, FIG. 17 (illustrating speech 11512 input into speech

recognition 17200). The petition’s citations to “examples of natural language ‘speech utterances’” similarly do not identify the Inter Server as receiving a request that is a speech utterance. Pet., 13 (citing EX1004, [0005], [0213], [0413]).

Other than selecting partial phrases from these different paragraphs to assert that Li discloses the claim limitation, the petition makes no attempt to explain how the different apparatuses and methods described in each of the paragraphs relate to one another such that the Inter Server is the component that receives a speech utterance request as the petition contends. Petitioner’s expert also fails to provide sufficient explanation tying these disparate disclosures together. See EX1002, ¶76.

Accordingly, for these reasons, the petition fails to establish that Li teaches limitation [1.a].

2. The petition fails to show that Li teaches limitation [1.b]

Limitation [1.b] recites *providing, by the computer system, the natural language utterance as an input to a speech recognition engine*. The petition argues that Li’s Inter Server “includes a ‘Speech Recognition Module,’” which the petition maps to the claimed *speech recognition engine*. Pet., 13. The petition argues that “[t]he Inter Server receives the natural language utterance from the client device, and provides it to the ‘Speech Recognition Module’ for recognizing the text of the utterance.” *Id.*, 14. As explained below, the petition fails to

sufficiently show that Li's Inter Server provides a natural language utterance to the identified Speech Recognition Module.

First, in arguing that Li discloses the claimed *speech recognition engine*, the petition relies on FIG. 17 of Li as "show[ing] the 'Speech Recognition Module 17200' receiving 'Speech 11512' to generate a 'Hypothesized Word String 17300.'" *Id.* However, while FIG. 17 illustrates Inter Server 02300, it does not illustrate the Inter Server as providing Speech 11512 to the Speech Recognition Module 17200, as petition contends. EX1004, FIG. 17; *see also* Pet., 14 (annotating FIG. 17).

Second, in arguing that the Inter Server "provides" a natural language utterance to the Speech Recognition Module, the petition cites to paragraphs 156 and 380 of Li. Pet., 14. Neither of these paragraphs support the petition's assertion. For example, paragraph 156 broadly describes Inter Server 02300 and does not detail its relation to any speech recognition module. EX1004, [0156]. Moreover, paragraph 380 does not discuss the Inter Server. *Id.*, [0380]. It is also not apparent how the two paragraphs relate to one another. For instance, paragraph 380 references a "Method 18160C_{PUT}," which is illustrated as a method with multiple steps among multiple paths and described as "enabling the identification and/or determining of a candidate object of interest and/or any attributes of the object of interest by analyzing prior user transactions and/or prior user sample

transactions.” *Id.*, [0035], FIGS. 18D-18F; *see also id.*, [0380] (describing numerous “objective[s]” from which the method can select). Li also explains that the method “refer[s] to the apparatus and structures depicted in FIG. 18C,” a ***different*** figure than the apparatus shown in FIG. 17. *Id.*, [0372].

Third, the petition’s assertion that Li teaches the Inter Server “includes” the Speech Recognition Module is also unsupported and unexplained. Pet., 13 (citing EX1004, [0160], [0317], [0320]). For example, neither paragraph 160 or paragraph 317 identify the Speech Recognition Module as a component of the Inter Server. *See* EX1004, [0160] (discussing a different component, “Analysis Module 02330”), [0317] (discussing only Speech Recognition Module 17200). Moreover, the petition misleadingly cites to paragraph 320 for the proposition that “Speech Recognition Module [is] part of Apparatus ‘located in...Inter Server’” (Pet., 13), but the paragraph does not support the petition’s contention. Instead, the paragraph explains that, “[i]n another embodiment, Apparatus 17000 can comprise one or more of the above components located in another Data Processing System, e.g., Inter Server 02300.” EX1004, [0320]. The paragraph does not identify the Speech Recognition Module as being part of the Inter Server nor does it specify what the “one or more of the above components” refer to (*e.g.*, whether it is referring to components described as located in the Inter Server can be part of Apparatus 17000). And, even if the paragraph could be fairly read as suggesting

another embodiment in which one or more of the components described in relation to FIG. 17 can be located in the Inter Server, the petition (nor its expert) provides no analysis as to why a POSITA would have been motivated to include the Speech Recognition Module as part of the Inter Server. Pet., 13; EX1002, ¶77.

Accordingly, the petition fails to establish that Li teaches limitation [1.b].

3. The petition fails to show that Li teaches limitation [1.c]

Limitation [1.c] recites *obtaining, by the computer system, one or more words or phrases recognized from the natural language utterance as an output of the speech recognition engine*. The petition asserts that “Li’s Inter Server obtains ‘a set of candidate word strings’ or ‘Hypothesized Word String,’” which correspond to the claimed *one or more words or phrases recognized from the natural language utterance*, “generated and output by” the Speech Recognition Module. Pet., 15. The petition again cites to FIG. 17, which the petition contends “shows the ‘Speech Recognition Module 17200’ generating ‘a Hypothesized Word String 17300’ for use by an ‘Object ID Engine’ to determine an Object ID (e.g., ‘Product ID’ 17400).” *Id.* As explained below, the petition fails to show that Li teaches that the Inter Server obtains the output generated by the Speech Recognition Module.

First, the petition again relies on disparate paragraphs that discuss different components and methods illustrated in different figures in support of its assertion

that the Inter Server obtains the output generated by the Speech Recognition Module. *See* Pet., 15 (citing EX1004, [0091], [0160], [0310], [0317]). For example, paragraph 91 discusses classifying a user request as a contingent or not contingent request in connection with Method 02000—it neither mentions the Inter Server or the Speech Recognition Module (or even refers to “candidate word strings” or a “Hypothesized Word String”). EX1004, [0091]. Paragraph 160 also does not refer to the Speech Recognition Module, instead describing a different component, “Analysis Module 02330,” in connection with FIG. 2B. *Id.*, [0160]. Similarly, paragraph 310 does not describe the Inter Server or the Speech Recognition Module and its output. *Id.*, [0310]. Instead, the paragraph refers to yet another method, Method 16000, in connection with FIG. 16, which “refers to the apparatus and structures depicted in FIG. 14 and FIG. 15.” *Id.*, [0307], [0310]. And, while paragraph 317 refers to the Speech Recognition Module of FIG. 17, it fails to describe its output and its relation to the Inter Server. *Id.*, [0317].

In addition, the petition’s reliance on FIG. 17 does not support its contention that the output of the Speech Recognition Module is obtained by the Inter Server. As an initial matter, the figure does not illustrate the alleged output identified by the petition (*i.e.*, Hypothesized Word String 17300) as being sent to the Inter Server. *See, e.g.*, Pet., 14 (annotating FIG. 17). The figure also does not show that the Hypothesized Word String 17300 is used by an “Object ID Engine” (as the

petition alleges³) nor does the petition provide any detail as to how Li teaches that the Hypothesized Word String 17300 is used by the Object ID Engine and how that means that the word string is output to the Inter Server. *Id.*

Instead, the petition's citations suggest that the Hypothesized Word String 17300 shown in FIG. 17 is unrelated to an Object ID Engine. For example, of the paragraphs cited by the petition in support of its argument, only paragraph 527 discusses an "Object ID Engine 33310" in relation to another figure. *See* EX1004, [0512] (discussing FIG. 35), [0527]. The paragraph does not refer to FIG. 17, nor does it mention the Inter Server or the Speech Recognition Module illustrated in that figure. *Id.*, [0527]. In fact, the paragraph references a different "Hypothesized Word String 35500C" than that shown in FIG. 17. *Id.* Moreover, Li illustrates Object ID Engine 33310 as a separate component from Inter Server 02300 (*see id.*,

³ The petition also takes inconsistent positions interpreting Li's FIG. 17. For example, for this limitation, the petition argues "FIG. 17 above shows the 'Speech Recognition Module 17200' generating 'a Hypothesized Word String 17300' for use by an 'Object ID Engine' to determine an Object ID (e.g., 'Product ID' 17400)." Pet., 15. However, for limitation [1.d], the petition identifies "Offer ID Engine" as "determin[ing] 'an identifier associated with the Object of Interest' (shown in FIG. 17 as 'Product ID and/or Merchant ID 17400')." *Id.*

FIG. 33), making it even more unclear how, even if any alleged output from Speech Recognition Module 17200 is “for use by an ‘Object ID Engine,’” the output is obtained by the Inter Server. These discrepancies go unexplained in the petition.

Accordingly, the petition fails to establish that Li teaches limitation [1.c].

4. The petition fails to show that Li teaches limitation [1.d]

Limitation [1.d] recites *searching, by the computer system, one or more databases of products or services based on the one or more phrases*. The petition asserts that Li teaches this limitation because Li’s Inter Server “selects from the ‘candidate word strings’ output by the ‘Speech Recognition Module’ ... a ‘highest ranking word or word string as the Object of Interest,’” which is then used to query one or more databases. Pet., 15. The petition argues that Li discloses that the Inter Server searches the databases *based on the one or more phrases* because it uses these “candidate word strings” output by the Speech Recognition Module. Pet., 16. The petition fails to show that Li teaches limitation [1.d] because the petition fails to establish that Li’s Inter Server searches databases based on “candidate word strings” output by the Speech Recognition Module.

As an initial matter, FIG. 17, which the petition relies on as illustrating the Speech Recognition Module (*see* Pet., 14), does not describe the Speech Recognition Module as outputting “candidate word strings,” instead illustrating the

output of a “Hypothesized Word String 17300.”⁴ See EX1004, [0317], FIG. 17. The petition’s citations also do not support the assertion that the Speech Recognition Module outputs “candidate word strings” from which the Inter Server selects. Pet., 15 (citing EX1004, [0161], [0329]-[0337], [0553]). For example, paragraph 161 does not describe the Speech Recognition Module or its output and paragraphs 329-337, which discuss a Method 18000 shown in FIGS. 18A-18B, identify “candidate word strings” in relation to aspects that are not related to speech (nor does it identify the Inter Server as the component that selects from these word strings). See EX1004, [0161], [0322], [0329]-[0337], FIGS. 18A-18B (illustrating “candidate word strings” in connection with ambident audio signal (step 18200B1) and user data (step 18160C)). Paragraph 553 discusses yet another Method 36000A and similarly does not identify the Inter Server as selecting from “candidate word strings” output from the Speech Recognition Module. See *id.*, [0533], FIG. 35.

Thus, the petition’s argument that Li teaches the Inter Server searches databases *based on the one or more phrases* because it selects from “candidate word strings” output by the Speech Recognition Module by which to query

⁴ The petition does not allege that the Inter Server searches the identified databases based on the Hypothesized Word String 17300. See Pet., 15-16.

databases is unsupported and insufficiently explained. Accordingly, the petition fails to establish that Li teaches limitation [1.d].

5. The petition fails to show that Li teaches limitation [1.e]

Limitation [1.e] recites *selecting, by the computer system, without further user input other than the single first user input, a product or service from the database to be purchased based on the search*. The petition asserts that Li teaches this limitation because “Li’s Inter Server ‘queries one or more data structures’ to select ‘a Retailer offering the Object of Interest, in combination with one or more qualifying Offers.’” Pet., 17. The petition argues that the selection of a **retailer** “corresponds to” the selection of *a product or service*. *Id.*; *see also id.* (citing FIG. 3A as “show[ing] an example interface displaying the selected ‘product or service from the database to be purchased’ from a selected retailer”). As explained below, the petition provides insufficient evidence why selection of a **retailer** equates to selection of *a product or service* because it is inconsistent with the ’385 patent and Li.

First, the petition’s assertion that selection of a retailer constitutes selection of *a product or service* as claimed is inconsistent with the ’385 patent. The ’385 patent distinguishes the selection of a product or service from the selection of a retailer that offers the selected product or service. For example, as illustrated in FIG. 3, the ’385 patent describes “operation 304,” in which “a product or service to

be purchased on behalf of the user may be determined based on the natural language utterance.” EX1001, 18:40-42. “[U]pon recognition of one or more words associated with the natural language utterance that are related to at least one product or service, the product/service-related words may be utilized to search one or more databases associated with one or more products or services.” *Id.*, 18:42-48. The ’385 patent explains that these results are then processed “to select the most relevant product or service as the product or service that is to be purchased on behalf of the user.” *Id.*, 18:49-52.

The ’385 patent also describes that, after this operation, “a seller from which the product or service is to be purchased may be selected” in an “operation 402,” as illustrated in FIG. 4. *Id.*, 19:50-52. For example, “a database of sellers may be queried to determine which seller has the product or service available for purchase” and the seller meeting certain criteria, such as the seller that “has the lower price (or overall lower total purchase costs),” may be selected “from which the product or service is to be purchased.” *Id.*, 19:61-20:2. Thus, the ’385 patent specification suggests a difference between selection of *a product or service* and selection of a seller from which to purchase the product or service. The ’385 claims further support the specification’s distinction between these two actions. *Compare id.*, claim 1 (reciting *selecting, by the computer system, ... a product or service from the database to be purchased based on the search*) with *id.*, claim 7

(reciting *selecting, by the computer system, a seller from which to purchase the selected product or service*). Indeed, that the petition collapses these actions without explanation is evident in the petition’s analysis of dependent claim 7, which recites *selecting, by the computer system, a seller from which to purchase the selected product or service*. Specifically, the petition asserts that Li’s identification of “a Retailer offering the Object of Interest” also meets the requirements of claim 7. Pet., 27-28; cf. *id.*, 17 (arguing Li’s Inter Server selects “a Retailer offering the Object of Interest” for limitation [1.e]).

Accordingly, the petition fails to establish that Li teaches limitation [1.e].

C. The Petition Fails to Show that Li Renders Obvious Independent Claim 16

Independent claim 16 recites “[a] system for providing voice commerce.” EX1001, 23:59-60. The petition incorporates its claim 1 analysis for independent claim 16, including the limitations discussed above. See Pet., 33 (addressing the limitation of *one or more physical processors programmed with computer program instructions* and arguing “[t]he remaining limitations of claim 16 are substantively identical to those of claim 1”). Accordingly, for the same reasons discussed above with respect to independent claim 1, the petition also fails to establish that Li renders obvious independent claim 16.

D. The Petition Fails to Show that Li Renders Obvious Independent Claim 31

As detailed below, the petition also fails to show that independent claim 31 is rendered obvious over Li.

1. The petition fails to show that Li teaches limitation [31.a]

The petition argues that limitation [31.a] is “identical” to limitation [1.a] and “obvious for the same reasons.” Pet., 33. Thus, the petition fails to establish that Li teaches limitation [31.a] for the same reasons identified above with respect to limitation [1.a]. *Supra*, §III.B.1.

2. The petition fails to show that Li teaches limitation [31.b]

Limitation [31.b] recites *recognizing, by the computer system, one or more words or phrases from the natural language utterance*. The petition argues that Li teaches this limitation because, “[a]s discussed for limitation [1.c], Li’s Inter Server ... includes a speech recognition engine that recognizes ‘candidate word strings’ from the natural language utterance.” Pet., 33-34. However, for the reasons discussed above with respect to limitation [1.c], the petition fails to establish that Li teaches limitation [31.b] because it fails to show that Li teaches that the Inter Server includes the Speech Recognition Module (which the petition alleges is a speech recognition engine). *Supra*, §III.B.3.

3. The petition fails to show that Li teaches limitation [31.c]

Limitation [31.c] recites *searching, by the computer system, one or more databases of products or services based on the one or more recognized words or phrases from the single first user input, and without further user input other than the single first user input*. The petition relies on its analysis for limitation [1.d] to assert that Li's Inter Server searches *one or more databases of products or services based on the one or more words or phrases*. Pet., 34. For the reasons discussed above with respect to limitation [1.d], the petition fails to establish that Li teaches limitation [31.c] because it fails to show that Li teaches that the Inter Server searches the identified databases based on "candidate word strings" output from the Speech Recognition Module. *Supra*, §III.B.4.

4. The petition fails to show that Li teaches limitation [31.d]

Limitation [31.d] recites *causing, by the computer system, a set of search results to be presented to a user based on the search, the search results indicating one or more products or services from the database available for purchase*. The petition asserts that Li's Inter Server causes *a set of search results to be presented to a user based on the search* in two ways. First, the petition asserts that the information displayed in FIG. 3A (i.e., "'Object XYZ' available for purchase from 'Retailer XYZ'") satisfies the claimed *set of search results*. Pet., 34-35. Second, the petition also asserts that Li teaches that "the presented set of search results may

include multiple search results.” *Id.*, 35. As explained below, under either theory, the petition fails to show that Li teaches that the Inter Server causes *a set of search results to be presented to a user based on the search*.

First, the petition fails to sufficiently explain how the information displayed in FIG. 3A constitutes ***a set of search results***. As shown in the figure, only a single “Object XYZ” from a single “Retailer XYZ” is presented to the user. *See* EX1004, FIG. 3A (“Retailer XYZ sells Object XYZ for the lowest price we can find”); *see also id.*, [0169] (stating FIG. 3A showing “the image of the Object of Interest” and a text and/or image of “the Retailer offering the Object of Interest”). The petition fails to sufficiently explain how the presentation of a single object from a single retailer offering that object constitutes *a set of search results*.⁵ *Pet.*, 35 (citing only EX1002, ¶150, which makes the same assertion without further explanation); *cf.* EX1001, 8:17-30 (selecting “the product/service to be purchased from the set of results”), 12:16-20.

⁵ The petition’s deficient explanation is further made apparent in view of limitation [31.e], which requires *a second user input comprising a selection from the set of search results*. Petitioner does not explain how a *selection from the set of search results* can occur when the user is provided with only a single option.

Second, the petition fails to establish that Li teaches presenting “multiple search results” that is *based on the search*. As recited in limitation [31.c], the search of limitation [31.d] is *based on the one or more recognized words or phrases from the single first user input*, which is performed *without further user input other than the single first user input*. See *supra*, §III.D.3. Other than identifying examples that allegedly present “multiple search results,” the petition does not explain how the cited examples are the result of a search based on a single first user input and the petition’s citations do not make it apparent that this is the case.

For example, the petition cites to paragraph 185, which discusses FIG. 3H, which Li explains shows “Format 03000H” that “display[s] the net price of each Object of Interest among a plurality of Object of Interest[s].” EX1004, [0185], FIG. 3H. In describing the figure, Li states that “[a] user can be interested in seeing the net price of each Object of Interest among a plurality of Objects of Interest, e.g., the net price of a plurality of objects on a shopping list” and “will generate a list of Objects of Interest before visiting a Physical Retailer.” *Id.*; see also *id.*, FIG. 3H (“Shopping List Output”). It is not clear (nor does the petition explain) how the generation of a list of objects by the user would be the result of a *single first user input*, especially when Li expressly contemplates the transmission of “a plurality of User Requests.” EX1004, [0214]. The additional examples cited

by the petition similarly do not state that the illustrated presentation formats are the result of a single user input and the petition provides no explanation as to why it would be taught by Li. *See Pet.*, 35.

Accordingly, the petition fails to establish that Li teaches limitation [31.d].

5. The petition fails to show that Li teaches limitation [31.h]

Limitation [31.h] recites *completing, by the computer system, without further user input after identifying the payment information and the shipping information, a purchase transaction of the identified one or more products or services*. The petition advances two theories as to why Li teaches or renders obvious the elements of limitation [31.h]. As detailed below, each of these theories fail because the petition fails to show that Li teaches or renders obvious completing a purchase transaction *without further user input after identifying the payment information and the shipping information*.

First, the petition alleges that Li teaches the Inter Server completes a purchase transaction “by transmitting the ‘set of attributes and values’ associated with the selected product,” which “includes the identified payment information and shipping information.” *Pet.*, 38-39. According to the petition, “[b]ecause the user does not ‘select at the retailer any object attributes, enter any offer and/or reward codes, and/or enter any payment account data,’ a POSITA would have understood

that the purchase is completed ‘*without further user input after identifying the payment information and the shipping information.*’” *Id.*, 39.

However, Li teaches identifying any payment information and shipping information **before** the user requests the system to complete a purchase. For example, in connection with limitation [31.g], the petition cites to paragraph 138 of Li as mapping to the claimed *identifying ... payment information and shipping information*. Paragraph 138 describes “Object M 02254,” which “describ[es] the expense of transporting Product A.” EX1004, [0138]. Li explains that this can include costs of transporting a product “from a Retailer to an address of the user” (*e.g.*, “a shipping expense when purchasing Product A from Web Server 11910”) or “from the location of the PC/WD 02200 to the location of one or more Retailers” (*e.g.*, “the actual or estimated expense of gasoline and other travel expenses when purchasing Product A at PHY POS 11920”). *Id.* In other words, Li describes presenting to the user transportation costs associated with a product if purchased through a particular retailer—*i.e.*, **before** a user requests completion of a purchase. *Cf.* Pet., 25 (stating Li describes “obtaining ‘a shipping address provided by the user’ ‘stored in a data structure,’ to determine a ‘shipping expense’ associated with the purchase”) (citing, in part, EX1004, [0138]). This understanding is consistent with other parts of Li, which show the presentation of transportation costs and discounts associated with a particular payment method

before the user selects “Buy.” *See, e.g.*, EX1004, FIG. 3A (showing associated savings “[i]f you use your Bank XYZ Visa®/MasterCard® card”), FIG. 3E (“Payment Method Discount” and “Transportation Costs”). Thus, the petition relies on *payment information and shipping information* that is identified before a user buys the product.

The petition identifies a user’s selection of “Buy” to purchase an object as a form of “user input.” *See* Pet., 35 (“As discussed for limitation [1.f], Li’s Inter Server receives ‘**a second user input**’ when the user selects the ‘Buy/Call’ object, e.g., ‘Buy’ button.”). Because this “user input” would occur after the system has identified payment and shipping information, the petition fails to show that a POSITA would have understood from Li’s teachings that the purchase is completed *without further user input after identifying the payment information and the shipping information*.

Second, the petition alleges that “a POSITA would have found it obvious for Li’s Inter Server to identify the payment and shipping information after receiving the second user input.” Pet., 39-40. As an initial matter, in support of its argument, the petition relies on figures of Li that illustrate identification of payment accounts and shipping costs before the user selects “Buy.” *See* Pet., 39 (citing FIGS. 3E-3H); EX1004, FIGS. 3E (“Payment Method Discount” and “transportation Costs”), 3F (“Payment Method Discount”), 3H (“Payment

Method”). Moreover, the petition does not provide any reasoned showing why a POSITA would have been motivated to implement Li’s Inter Server to identify the payment and shipping information after receiving the second user input. Instead, the petition points to FIG. 2A2 and argues “shows at 02000F, for example, ‘select[ing] set {Retailer(s), Offer(s), Payment Account, attribute_N},’ which includes identifying the payment information and shipping information, after receiving the user’s ‘request to purchase Object of Interest.’” *Id.*, 40. The petition also alleges that, “when there are multiple search results corresponding to different sets of attributes,” a POSITA would have understood that “the Inter Server would, after receiving the ‘second user input,’ identify and transmit the payment and shipping information as part of the attributes for the specific selected result to the selected retailer to complete the purchase.” *Id.*, 39-40.

This ignores Li’s consistent description that payment and shipping information are identified and displayed to the user **before** a user requests completion of a purchase, including when “multiple search results” are presented, to allow the user to view the “net price” for an object. *See, e.g.*, EX1004, Abstract (stating “[u]pon receiving a request for an object of interest, a client device can automatically: (a) display ... the selection of a payment account ... which can yield the lowest net price; and/or (b) execute a purchase of the object of interest using the selected payment account”), [0006] (“identifying any qualifying reward

associated with the registered payment account” before “receiving from client device an event selecting the function of buying the object of interest”), FIGS. 3A-C (showing display of savings if certain payment used), 3E (showing “Payment Method Discount” and “Transportation Costs” to compare net prices), claim 19. The petition fails to explain why a POSITA would forgo identifying this information before the user requests a purchase when Li specifically teaches that the information is used to display to the user ways in which the net price can be lowered (as a result of, *e.g.*, qualifying rewards from payment accounts or lower shipping costs) before the user selects “Buy.”

Accordingly, the petition fails to establish that Li teaches limitation [31.e].

E. The Petition Fails to Show that Li Renders Obvious Independent Claim 35

Independent claim 35 recites “[a] system for providing voice commerce.” EX1001, 26:46-47. The petition argues that “Li renders claim 35 obvious for similar reasons as claims 16 and 31.” Pet., 41. Accordingly, for the same reasons discussed above with respect to independent claims 16 and 31, the petition also fails to establish that Li renders obvious independent claim 35.

F. The Petition Fails to Show that Li Renders Obvious Dependent Claims 3-8, 10-16, 18-23, 25-30, 32-34, and 36-38

Dependent claims 3-8, 10-15, 18-23, 25-30, 32-34, and 36-38 depend from either independent claims 1, 16, 31, or 35. The petition thus fails to establish that

Li renders these claims obvious for the same reasons discussed above with respect to the independent claims.

IV. GROUND 2: THE PETITION FAILS TO ESTABLISH THAT CLAIMS 2 AND 17 ARE OBVIOUS OVER LI AND KENNEWICK

Ground 2 of the petition applies Kennewick as allegedly teaching certain limitations recited in dependent claims 2 and 17. *See* Pet., 41-45. Because these claims depend from either independent claims 1 and 16, the petition fails to establish that the combination of Li and Kennewick renders obvious the challenged claims for the same reasons discussed above with respect to Ground 1.

V. GROUND 3: THE PETITION FAILS TO ESTABLISH THAT CLAIMS 9 AND 24 ARE OBVIOUS BASED ON LI AND CHEN

Ground 3 of the petition applies Chen as allegedly teaching certain limitations recited in dependent claims 9 and 24. *See* Pet., 46-47. Because these claims depend from either independent claims 1 and 16, the petition fails to establish that the combination of Li and Chen renders obvious the challenged claims for the same reasons discussed above with respect to Ground 1.

VI. GROUND 4: THE PETITION FAILS TO ESTABLISH THAT CLAIMS 39 AND 40 ARE OBVIOUS BASED ON LI AND LEE

Ground 4 of the petition applies Lee as allegedly teaching certain limitations recited in dependent claims 39-40. *See* Pet., 48-50. Because these claims depend from either independent claims 1 and 16, the petition fails to establish that the

combination of Li and Lee renders obvious the challenged claims for the same reasons discussed above with respect to Ground 1.

VII. GROUND 5: THE PETITION FAILS TO ESTABLISH THAT CLAIMS 1, 3-11, 14-16, 18-26, AND 29-38 ARE OBVIOUS BASED ON CHEN AND BARNES

Ground 5 of the petition challenges claims 1, 3-11, 14-16, 18-26, and 29-38 based on a combination of Chen and Barnes. Pet., 3. The petition fails to meet its burden in showing that the combination of Chen and Barnes renders these claims obvious because the petition fails to show that the proposed combination teaches each and every limitation of independent claims 1, 16, 31, and 35.

A. The Petition's Obvious Analysis Is Deficient

The petition's grounds based on the proposed combination of Chen and Barnes present deficiencies similar to those of Petitioner's Li-based grounds. Specifically, like the grounds based on Li, numerous discrepancies exist between the petition's analysis and that provided by the expert.

For example, the expert declaration similarly relies on to other aspects of Chen and Barnes to support his opinions that are not relied on in the petition, while the petition, in other cases, cites to portions of Chen and Barnes that are not cited by the expert. *See, e.g.*, Pet., 51 (citing EX1002, ¶¶200-01 (additionally citing EX1005, 1:52-2:3, 2:24-65, 3:62-65, 19:2-4, 21:42-56, 22:16-24, 23:43-24:12)), 54 (citing EX1002, ¶208 (additionally citing EX1005, Abstract, 4:66-67, 1:58-60, 18:37-40)), 55-56 (citing EX1002, ¶220 (additionally citing EX1006, [0380]-

[0381])), 60 (citing EX1002, ¶220 (additionally citing EX1005, 9:19-35)); Pet., 52 (citing EX1005, 23:36-41 for limitation [1.b]).

Also like the Li-based grounds, the expert declaration presents theories that are not relied upon or advanced in the petition. For instance, with respect to limitation [31.h], the petition argues that “a POSITA would have understood” that when “multiple results are presented,” “the HRS would identify the purchase and shipping information to be sent with the purchase order to the vendor.” Pet., 79. In contrast, however, Petitioner’s expert does not support the petition’s assertion, instead contending that “a POSITA would have found it obvious to try” by “recogniz[ing] two possibilities” in which the payment and shipping information could be identified before or after “receipt of the second user input.” EX1002, ¶289; *see also* Pet., 79 (citing same). Other instances exist where the petition and the expert declaration assert differing positions. *See, e.g.*, Pet., 54 (for limitation [1.d], arguing “[a] POSITA would have understood that the ‘series of queries’ is a search ‘**based on the one or more words or phrases**’” (citing EX1002, ¶208 (arguing “[a] POSITA thus would have understood that the target product or service is searched for ‘**based on the one or more words or phrases**’”))).

B. The Petition Fails to Establish the Combination of Chen and Barnes Teaches Each and Every Limitation of Independent Claim 1

As detailed below, the petition fails to establish that the combination of Chen and Barnes teaches the preamble and limitations [1.b], [1.d], and [1.e].

1. The petition fails to show that the combination of Chen and Barnes teaches the preamble

Claim 1's preamble recites *[a] method for providing voice commerce, the method being implemented on a computer system having one or more physical processors programmed with computer program instructions which, when executed, perform the method*. In the parallel district court litigation, Petitioner has taken the position that the preamble is limiting. See EX2008, 2. The petition argues that “Chen’s ‘hybrid response system’ (“HRS”)” maps to the claimed *computer system* and further asserts that the HRS includes *one or more physical processors* that execute *program instructions*. Pet., 51 (citing EX1005, 6:1-11, 17:34-57, 20:28-39, FIG. 4).

However, none of the cited portions of Chen support Petitioner’s assertion. The only citations that mention the inclusion of a processor is with respect to the **head-mountable device** (or “HMD”), which Chen describes as **a client device**, not the HRS. EX1005, 17:34-57 (stating “device 410” shown in FIG. 4, which “may include a processor 414” and “take the form of or include a head-mountable display, such as the head-mounted devices 302, 352, or 372 that are described with

reference to FIGS. 3A-3G”), 20:28-39 (stating “method 600 may be carried out by an HMD, or a system therein (e.g., a processor and non-transitory computer readable medium with instructions that are executable to carry out the functionality described herein” or can “be carried out by other types of client devices”); *see also* Pet., 51 (arguing Chen’s HRS receives a “‘voice input’ from ‘a client device’”) (citing, in part, EX1005, 5:26-41); EX1005, 5:26-59 (stating the HMD is a client device), FIG. 1 (showing HMD 102A communicating with HRS 101). Because the citations do not support the petition’s assertion that “[t]he HRS is a ‘**computer system**’ ... having ‘**one or more physical processors**’ ... that execute ‘**program instructions**,’” the petition fails to establish that the combination of Chen and Barnes teaches the preamble. Pet., 51; *see also* EX1002, ¶202 (asserting “Chen discloses” the claimed elements based on the same citations).

2. The petition fails to show that the combination of Chen and Barnes teaches limitation [1.b]

Limitation [1.b] recites *providing, by the computer system, the natural language utterance as an input to a speech recognition engine*. The petition argues that “Chen’s HRS includes a ‘transcription module,’” which the petition maps to the claimed *speech recognition engine*. Pet., 52. The petition asserts that “[t]he HRS provides the natural language utterance as input to the transcription module, as shown in FIG. 2.” *Id.*, 52-53. However, the petition does not explain how the HRS *provides the natural language utterance* to the transcription module.

For example, FIG. 2 illustrates the voice input 102 as being directly received by the transcription module 204. Pet., 53 (annotating transcription module 204); see *also* EX1005, 8:30-39 (stating “voice input 202 may be received by a transcription module 204”). The petition’s theory as to how Chen teaches the limitation is further made unclear by its reliance on Chen’s FIG. 7 for limitation [1.a].

Petitioner relies on this figure as illustrating a *single first user input* that comprises a *natural language utterance* that is received by Chen’s HRS. Pet., 51. However, with respect to FIG. 7, Chen explains that the **HMD** (*i.e.*, the client device) “appl[ies] a speech-to-text process to the voice request,” which is then sent to the HRS. EX1005, 53-67. Thus, it is not clear how Chen’s HRS first receives a *natural language utterance*, which is then *provid[ed]* to the transcription module.⁶

Accordingly, the petition fails to establish that the combination of Chen and Barnes teaches limitation [1.b].

⁶ To the extent Petitioner’s expert offers his own theory as to how Chen may teach this limitation (EX1002, ¶206), such a theory is not advanced in the petition. Moreover, Petitioner’s expert relies on a different portion of Chen that is not cited or relied upon in the petition. *Id.* (citing EX1005, 17:36-18:18); *cf.* Pet., 52-53 (citing EX1005, 8:30-39, 23:36-41).

3. The petition fails to show that the combination of Chen and Barnes teaches limitation [1.d]

Limitation [1.d] recites *searching, by the computer system, one or more databases of products or services based on the one or more phrases*. The petition advances two arguments as to why the proposed combination teaches the elements recited in limitation [1.d]. As detailed below, both of these arguments fail to show that the references teach limitation [1.d] because the petition fails to establish that the references teach *searching, by the computer system, one or more databases of products or services*.

First, the petition does not allege that Chen discloses searching *one or more databases of products or services* using its HRS. Instead, the petition asserts that “Chen’s HRS” (“hybrid response system,” which the petition maps to the claimed *computer system*) “identifies ‘a target product or service in response to the user’s voice request’ ‘through a series of queries.’” Pet., 54. According to the petition, “[a] POSITA would have found it obvious that the queries would search ‘**one or more databases of products and services**’ ..., because ‘queries’ are typically used to search for and extract data from databases.” *Id.*

As an initial matter, none of the petition’s citations to Chen support the petition’s assertion that Chen’s HRS identifies a product or service “through a series of queries.” In fact, despite providing the phrase in quotes, none of the

citations actually use the phrase (or even the word “query”). See Pet., 54 (citing EX1005, 1:38-39, 9:5-22, 18:40-43, 21:53-58, 22:16-24).

To the extent that the petition intended to cite to column 4 of Chen (the only place where the phrase “a series of queries” appears), that portion of Chen does not support the petition’s assertion. In particular, Chen states:

In some examples, the process of identifying a target product or service and purchasing the target product and service may be separated. For instance, the user may first be able to determine an appropriate target or service for a particular request. Finding a target product or service may be accomplished through a series of queries, possibly with the help of a human guide. The user may then have the option to issue a separate purchase request after a product or service has been found or continue searching for an alternative product or service.

EX1005, 4:62-5:5.

This portion of Chen does not specify who or what performs the “series of queries” and who or what the “series of queries” are directed to. For instance, Chen does not identify the HRS as the component that performs the “series of queries.” Chen also does not identify what receives the “series of queries”—for instance, whether it is a series of queries to the user to “determine an appropriate target or service” or some other entity that performs a search. Nevertheless, on the basis of the phrase “a series of queries” alone, the petition concludes, without explanation, that Chen’s HRS is the component that performs the queries and it would have been obvious that the queries would search *one or more databases of*

products and services. Pet., 54; *see also* EX1002, ¶209 (providing similar analysis). This conclusory assertion is insufficient to meet Petitioner’s burden in establishing obviousness.

Recognizing that Chen does not teach *searching, by the computer system, one or more databases of products or services*, the petition turns to Barnes. In particular, the petition alleges that Barnes “discloses ‘***searching one or more databases of products or services based on the one or more words or phrases,***’ e.g., by searching a local memory or remote computer system for vendors ‘who offer ... the product’ and searching vendor databases for the product identified based on the words or phrases.” Pet., 55-56. The petition fails to show that Barnes teaches the claimed limitation.

First, the petition fails to explain how “searching a local memory or remote computer system for vendors ‘who offer ... the product’” satisfies the claimed *searching ... one or more databases of products or services*. The petition alleges that “Barnes discloses a device that determines ‘product identifying information’ from the recognized words or phrases of the user’s voice input, to search ‘data of vendors from local memory, a remote computer system, and/or’ a ‘service registry’ for ‘available vendors that can provide the product.’” Pet., 55. However, Barnes does not describe a database and, even if it did, what kind of data is contained in “data of vendors,” Instead, Barnes only describes retrieving “data of vendors from

local memory, a remote computer system, and/or transmitting a request for such vendors to a public, private, or local (e.g., shopping complex) service registry (e.g., a UDDI implementation).” EX1006, [0169]. The petition does not explain how searching for “data of vendors” using these means establishes that a database of *products or services* is searched.⁷

The petition also fails to explain how “searching vendor databases for the product identified based on the words or phrases” satisfies the claimed *searching, by the computer system, one or more databases of products or services*. In particular, Barnes describes, after identifying vendors, the device “generates a vendor request for the desired action that is based on the product identifying information, the processing instructions, and the vender’s communication

⁷ Moreover, the petition relies on this same disclosure as mapping to other limitations of the challenged claims. For example, the petition asserts that Barnes’ description of retrieving “data of vendors’ also maps to the limitations of *obtaining, by the computer system, seller information ... via one or more remote information sources* and *storing, by the computer system, the seller information in one or more databases*, as recited in dependent claim 5. See Pet., 64-66. The petition does not explain how this same process can map to distinct method steps recited in the challenged claims.

parameters.” EX1006, [0172]; *see also id.*, [0167] (stating “the user provides the product identifying information and instructions through a voice input,” such as “‘find lower price’ followed by product identifying information such as manufacturer Calloway®, Big Bertha® driver”), [0172] (“In this example, the instruction is to generate a request for a price and the product identifying information is the manufacturer and product model information and, in particular, data presenting ‘manufacturer Calloway®, Big Bertha® driver.’”). Barnes goes on to state that “[e]ach formatted vendor request is transmitted to the respective **vendor computer system**,” which “receive[s] and process[es] the[] respective requests,” including “interpreting the request and **searching a database for the price of the identified product.**” *Id.*, [0173]-[0174]. Thus, Barnes identifies another computer system (*i.e.*, a vendor computer system) as the system that searches a database for pricing information of a requested product, rather than the device that receives the user’s voice input. *See* Pet., 55.

The petition proposes combining Barnes’s process with Chen’s HRS without modification. *See* Pet., 56 (“A POSITA would have found it obvious to modify Chen’s HRS to search databases as taught by Barnes....”), 56 (“sending requests to search respective vendor databases for the requested product”), 57-58 (relying on “Barnes’ ‘Multi-Vender Search’”). As such, the petition fails to establish that the

combination of Chen and Barnes teaches *searching, by the computer system, one or more databases of products or services*.

Accordingly, the petition fails to establish that the combination of Chen and Barnes teaches limitation [1.d].

4. The petition fails to show that the combination of Chen and Barnes teaches limitation [1.e]

Limitation [1.e] recites *selecting, by the computer system, without further user input other than the single first user input, a product or service from the database to be purchased based on the search*. The petition alleges that Chen's HRS teaches this limitation "by automatically identifying 'a target product or service' through 'a series of queries,' which, in the combination with Barnes, search 'one or more databases.'" Pet., 58. However, as described above, the petition fails to establish that Chen's HRS identifies a product or service through "a series of queries" that is based on a search of one or more databases of products or services. Thus, for similar reasons, the petition fails to show that Chen's HRS *select[s] ... a product or service from the database to be purchased based on the search*. Moreover, to the extent the petition relies on Barnes's process (see Pet., 59-60), the petition fails to establish that the combination teaches *selecting, by the computer system, a product or service from the database to be purchased based on the search*. As noted above, Barnes teaches that another computer system (which receives requests from device that receives the voice input) performs the searching.

The petition does not explain how this would result in Chen's HRS (the *computer system*, as alleged in the petition) *selecting* a product or service based on the search.

Accordingly, the petition fails to establish that the combination of Chen and Barnes teaches limitation [1.e.]

C. The Petition Fails to Show that the Combination of Chen and Barnes Renders Obvious Independent Claim 16

The petition incorporates its claim 1 analysis for independent claim 16, including the limitations discussed above. *See* Pet., 73-74. Accordingly, for the same reasons discussed above with respect to independent claim 1, the petition also fails to establish that the combination of Chen and Barnes renders obvious independent claim 16.

D. The Petition Fails to Show that the Combination of Chen and Barnes Renders Obvious Independent Claim 31

As detailed below, the petition also fails to show that independent claim 31 is rendered obvious over the combination of Chen and Barnes.

1. The petition fails to show that the combination of Chen and Barnes teaches the preamble

The petition contends that limitation [31.pre] is "identical to" limitation [1.pre] and relies on the same analysis. Therefore, for the reasons explained above with respect to claim 1's preamble, the petition fails to show that the combination of Chen and Barnes teach claim 31's preamble. *Supra*, §VII.B.1.

2. The petition fails to show that the combination of Chen and Barnes teaches limitation [31.c]

Limitation [31.c] recites *searching, by the computer system, one or more databases of products or services based on the one or more recognized words or phrases from the single first user input, and without further user input other than the single first user input*. The petition relies on its analysis for limitation [1.d] to assert that “Chen in combination with Barnes discloses” *searching, by the computer system, one or more databases of products or services based on the one or more words or phrases*. Pet., 75. For the reasons discussed above with respect to limitation [1.d], the petition fails to establish that the combination of Chen and Barnes teaches limitation [31.c] because it fails to show that the combination teaches that Chen’s HRS searches *one or more databases of products or services*. *Supra*, §VII.A.1.

3. The petition fails to show that the combination of Chen and Barnes teaches limitation [31.h]

Limitation [31.h] recites *completing, by the computer system, without further user input after identifying the payment information and the shipping information, a purchase transaction of the identified one or more products or services*. The petition does not allege that either Chen or Barnes discloses completing a purchase transaction *without further user input after identifying the payment information and the shipping information*. See Pet., 78-79. Instead, the petition alleges “a

POSITA would have found it obvious” to do so based on two arguments, both of which fail.

First, the petition alleges that “a POSITA would have found it obvious” that Chen’s HRS completes the purchase *without further user input after identifying the payment information and the shipping information* “because the HRS identifies the payment and shipping information from the ‘user-account’ and sends it ‘with the order’ after the user says ‘buy’ to complete the purchase using ‘the user’s provided credit card information and shipped to the user’s default shipping address,’ without further user input.” Pet., 78-79.

However, Chen discusses identifying payment and shipping information **before** the user is prompted to confirm the purchase. For example, with respect to the method illustrated in FIG. 5, Chen describes the creation of a purchase order that “comprises user data from the associated user-account,” such as “credit card information, a loyalty reward number, a user account number or login details associated with the online store or service provider, shipping preferences (e.g., rush delivery at a cost or free standard delivery and/or a preferred carrier).” EX1005, 19:55-62. Chen goes on to explain that the method “may further involve the hybrid response system sending a purchase-approval request.” *Id.*, 20:9-11. “The purchase-approval request may include an identification of the target product or service, the price of the product or service, the vendor, the price of shipping, the

shipping carrier, and/or the estimated arrival date, among other possibilities.” *Id.*, 20:11-15. “If the user is satisfied with the details,” the user may then “speak a command, such as ‘buy.’” *Id.*, 20:15-18. Thus, at the very least, Chen teaches identifying shipping information provided in the associated user-account in order to, for example, identify the price of shipping and the shipping carrier as part of the purchase-approval request, which occurs **before** the user says “buy” (*i.e., further user input*). The petition’s conclusory assertion that “a POSITA would have found it obvious” that Chen’s HRS completes the purchase *without further user input after identifying the payment information and the shipping information* is undermined by Chen itself and therefore insufficient to establish the obviousness of the claim limitation.

Second, the petition contends, “[t]o the extent the Chen-Barnes combination does not explicitly disclose the timing at which the payment and shipping information is identified, a POSITA would have found it obvious to identify it after the receipt of the second user input.” Pet., 79. In particular, the petition argues that “a POSITA would have understood that the HRS may generate the purchase-approval request without the payment and shipping information.” *Id.* This conclusory assertion is insufficient to satisfy Petitioner’s burden in establishing obviousness because, in addition to being undermined by Chen itself (as discussed above), the argument essentially amounts to an assertion that a POSITA “could

have” identified the payment and shipping information after receipt of the second user input without providing a rational underpinning as to why a POSITA would have been motivated to do so. *See Belden Inc. v. Berk-Tek LLC*, 805 F.3d 1064, 1073 (Fed. Cir. 2015) (“obviousness concerns whether a skilled artisan not only *could have made* but *would have been motivated to make* the combinations or modifications of prior art to arrive at the claimed invention”).

In addition, the petition argues that, “in cases where multiple results are presented, a POSITA would have understood that when the user provides the second user input ‘to purchase the product from a particular vender,’ the HRS would identify the purchase and shipping information to be sent with the purchase order to the vendor.” Pet., 79. The petition’s assertion is again undermined by the applied references. For example, in addition to teaching identifying purchase and shipping information before providing a purchase-approval request, Chen teaches prompting for “one or more additional inputs, such as a response to a product-or-service-detail request” to confirm a purchase, such as when the system is “uncertain as to the particular store where the user would like to make the purchase.” EX1005, 22:25-38. Moreover, like Chen, Barnes also discusses displaying “[a]dditional information,” such as “delivery charges for the product” prior to the user’s “transmit[ing] a request to purchase the product from a particular vender.” EX1006, [0177]-[0178]. Thus, the petition’s contention that “a

POSITA would have understood” that “the HRS would identify the purchase and shipping information to be sent with the purchase order to the vendor” *without further user input* is unsupported by the references. *See* 37 C.F.R. §42.104(b)(4) (IPR petitions “must specify where each element of the claim is found in the prior art patents or printed publications relied upon”).

Accordingly, the petition fails to establish that the combination of Chen and Barnes teaches limitation [31.h].

E. The Petition Fails to Show that the Combination of Chen and Barnes Renders Obvious Independent Claim 35

The petition argues that the combination of Chen and Barnes “renders claim 35 obvious for similar reasons as claims 16 and 31.” Pet., 80. Accordingly, for the same reasons discussed above with respect to independent claims 16 and 31, the petition also fails to establish that the combination of Chen and Barnes renders obvious independent claim 35.

F. The Petition Fails to Show that the Combination of Chen and Barnes Renders Obvious Dependent Claims 3-11, 14-16, 18-26, 29-30, 32-34, and 36-38

Dependent claims 3-11, 14-15, 18-26, 29-30, 32-34, and 36-38 depend from either independent claims 1, 16, 31, or 35. The petition thus fails to establish that the combination of Chen and Barnes renders these claims obvious for the same reasons discussed above with respect to the independent claims.

VIII. GROUND 6: THE PETITION FAILS TO ESTABLISH THAT CLAIMS 2 AND 17 ARE OBVIOUS BASED ON CHEN, BARNES, AND KENNEWICK

Ground 6 of the petition applies Kennewick as allegedly teaching certain limitations recited in dependent claims 2 and 17. *See* Pet., 80-84. Because these claims depend from either independent claims 1 and 16, the petition fails to establish that the combination of Chen, Barnes, and Kennewick renders obvious the challenged claims for the same reasons discussed above with respect to Ground 5.

IX. GROUND 7: THE PETITION FAILS TO ESTABLISH THAT CLAIMS 12-13 AND 27-28 ARE OBVIOUS BASED ON CHEN, BARNES, AND LI

Ground 7 of the petition applies Chen as allegedly teaching certain limitations recited in dependent claims 12-13 and 27-28. *See* Pet., 84-86. Because these claims depend from either independent claims 1 and 16, the petition fails to establish that the combination of Chen, Barnes, and Li renders obvious the challenged claims for the same reasons discussed above with respect to Ground 5.

X. GROUND 8: THE PETITION FAILS TO ESTABLISH THAT CLAIMS 39 AND 40 ARE OBVIOUS BASED ON CHEN, BARNES, AND LEE

Ground 8 of the petition applies Lee as allegedly teaching certain limitations recited in dependent claims 39-40. *See* Pet., 87-89. Because these claims depend from either independent claims 1 and 16, the petition fails to establish that the combination of Chen, Barnes, and Lee renders obvious the challenged claims for the same reasons discussed above with respect to Ground 5.

XI. CONCLUSION

For at least the reasons discussed above, the petition fails to demonstrate a reasonable likelihood that at least one of the claims challenged in the petition is unpatentable. Accordingly, Patent Owner respectfully requests the Board deny the petition.

Respectfully submitted,

Date: October 7, 2025

/ Matthew A. Argenti /
Matthew A. Argenti, Lead Counsel
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CERTIFICATE OF COMPLIANCE

Pursuant to §42.24(d), the undersigned certifies that this paper contains no more than 14,000 words, not including the portions of the paper exempted by §42.24(b). According to the word-processing system used to prepare this paper, the paper contains 11,589 words.

Respectfully submitted,

Date: October 7, 2025

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CERTIFICATE OF SERVICE

The undersigned certifies that the foregoing Patent Owner's Preliminary Response was served on October 7, 2025, on the Petitioner at the electronic correspondence address of the Petitioner as follows:

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