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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

AMERICAN AIRLINES, INC., and HILTON DOMESTIC OPERATING
COMPANY, INC.,

Petitioners

v.

R2 SOLUTIONS LLC,

Patent Owner.

Case IPR2023-00690

U.S. Patent No. 7,698,329

PATENT OWNER'S PRELIMINARY RESPONSE

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PATENT OWNER'S EXHIBIT LIST

Exhibit	Description
2001	Order of Dismissal, <i>R2 Solutions LLC v. American Airlines, Inc.</i> , in Case No. 4:22-cv-00353-ALM (E.D. Tex. June 26, 2023), ECF 72
2002	US20030120654A1
2003	Handling noindex meta tags
2004	Claim Construction Memorandum Opinion and Order, <i>R2 Solutions, LLC v. American Airlines, Inc.</i> , Case No. 4:22-cv-00353-ALM (E.D. Tex. April 3, 2023), ECF 58

I. INTRODUCTION

Pursuant to 35 U.S.C. § 313 and 37 C.F.R. § 42.107, R2 Solutions LLC (“Patent Owner”) submits this Preliminary Response to American Airlines, Inc.’s (“AA”) and Hilton Domestic Operating Company, Inc.’s (“Hilton”) (collectively, “Petitioner”) Petition for *Inter Partes* Review (“Petition,” Paper 1), challenging claims 1-14 of U.S. Patent No. 7,698,329 (the “’329 Patent”) (Ex. 1001).¹ The Board should not institute *inter partes* review because Petitioner has not met its burden of demonstrating a reasonable likelihood of prevailing on any of the challenged grounds.

The Petition suffers from a number of fundamental flaws, each of which warrants denial of institution. To begin with, the Petition fails to show that the asserted references disclose or suggest each element of each of the challenged

¹ The parallel district court action against AA was resolved and ultimately dismissed on June 26, 2023. *See* Ex. 2001. Counsel for AA contacted the Board on July 5, 2023 to request permission for R2 and AA to submit a Joint Motion to Terminate this proceeding as to AA, and a Joint Request to Maintain Confidentiality and Keep Separate the settlement agreement that is to be filed with the Board as part of the Motion to Terminate. The Motion to Terminate has not yet been submitted. The anticipated Motion to Terminate will not seek to terminate Hilton as a petitioner.

independent claims and, thus, Petitioner cannot show that any of the challenged claims are reasonably likely to be found unpatentable. Specifically, the prior art cited by Petitioner suffers from the same lack of disclosure as the art cited during prosecution of the '329 Patent. In the Notice of Allowability for the '329 Patent, the Examiner found that the prior art disclosed only “meta tags” that “tell a search engine crawler to ignore a certain section of a web page” completely, but did not disclose tags that command a search engine to ignore a section for recalling documents yet to use the section when ranking results. Ex. 1002, 127 (“But, the Claims do not index the section containing the command to ignore the specified section. It only uses that section for ranking purposes. ... The reason for allowance lies specifically in the concept of using an ignored section only for purposes of ranking and not indexing.”). The same is true for the prior art that Petitioner relies upon—nothing discloses ignoring sections of documents for recalling documents yet still using those sections for ranking. Because each of the independent claims requires this element, none of the challenged claims are rendered obvious by the asserted prior art.

The Board should also exercise its discretion under 35 U.S.C. § 325(d) and deny institution on all grounds because the Petition merely advances “the same or substantially the same prior art or arguments previously [] presented to the [Patent] Office.” 35 U.S.C. § 325(d). Each asserted ground is based heavily on references and arguments that are cumulative of other references and arguments that were

previously before the Patent Office. Namely, the Page reference cited by Petitioner is cumulative of the Edlund reference that was examined during prosecution. Likewise, the FusionBot reference cited by Petitioner is cumulative of the Cutts and Kamholz references that the Examiner also analyzed during prosecution. Indeed, even the arguments put forth by Petitioner mirror the arguments made during prosecution. Despite this significant overlap, Petitioner makes no attempt to carry its burden of articulating any error in the Patent Office’s examination. *Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH*, IPR2019-01469, Paper 6 at 8 (PTAB Feb. 13, 2020) (precedential).

II. BACKGROUND

A. Overview of the ’329 Patent

The ’329 Patent was filed by Yahoo! on January 10, 2007 and issued on April 13, 2010, and is entitled “Method for Improving Quality of Search Results by Avoiding Indexing Sections of Pages.” It issued from U.S. Patent Application No. 11/652,356 (the “’356 application”). The ’329 patent concerns methods and systems for improving search results provided by a search engine that address failings in the art. Specifically, the ’329 Patent provides mechanisms “that allow search engines to affect the recall and ranking of documents to more accurately reflect relevance of the documents to search engine queries.” Ex. 1001 (’329 Patent) at 3:1-3.

The '329 Patent specification explains that traditional search engines generally “rank the documents according to relevance to the search query. Relevance is a measure of how closely the subject matter of a document matches a search query’s terms.” *Id.* at 1:67-2:3. This traditional search process was problematic because ranking dictated by relevance meant that search engines could be tricked “into recalling documents and inflating their ranking” using techniques known as “search engine spamming.” *Id.* at 2:6-8. Search engine spamming occurs by filling documents full of particular terms as a way to artificially inflate relevance and ultimately “trick search engine ranking algorithms into recalling and highly ranking documents that contain, for example, sponsored links to a web merchant.” *Id.* at 2:8-11. Spamming greatly hindered search engine performance, causing search results to include irrelevant content that the user did not intend and potentially subjected users to malicious behavior. *Id.* at 2:14-17.

The '329 Patent solved this problem by introducing an enhanced search engine application that “prevent[s] hiding of search engine spam” while allowing for the “designat[ion] of page content that should not be indexed.” *Id.* at 2:34-37. Specifically, the '329 Patent designates sections of documents to not be indexed or recalled, but are included for ranking purposes:

In examining the various sections, the crawler identifies sections to ignore, that is, to not index in search engine indexes and or otherwise use for recalling the document. Such sections are referred to herein as

“no-recall sections.” Those portions that are indexed for recalling are referred to as recall sections. In an embodiment, a crawler ignores no-recall sections demarcated by, for example, a tag. In another embodiment a no-recall section may be identified by analyzing section content rather than examining only delimiters. The terms inside no-recall sections do not contribute to the document term frequency counts and are not used for recalling the documents in response to search engine queries. However the no-recall sections are included as input to forms of analysis of the document that affect, for example, the document’s ranking.

Id. at 3:9-23. The claims of the ’329 Patent reflect these advancements. For example, claim 1 requires:

A method comprising:

ranking a plurality of documents recalled by a search engine for a query;

wherein the plurality of documents contain certain documents, *each document of said certain documents containing at least one section that is not used by said search engine for recall and one or more sections that are used by said search engine for recall;*

wherein *ranking a plurality of documents includes ranking said plurality of documents based, at least in part, on the at least one section of said certain documents not used by said search engine to recall documents;* and

wherein the method is performed by one or more computing devices.

Ex. 1001, Claim 1 (emphases added). Independent Claim 8 includes similar limitations, and all other claims depend from either Claim 1 or Claim 8.

B. Prosecution History of the '329 Patent

A review of the prosecution history of the '329 Patent is important in this case because it reveals a thorough examination of the patent and its issuance in view of prior art that is essentially identical to that asserted here. The examiner initially rejected the pending claims as obvious in view of U.S. Patent Application Publication No. 2003/0120654 to Edlund (Ex. 2002, "Edlund") and an internet publication entitled "Handling noindex meta tags" by Cutts (Ex. 2003, "Cutts"). *See* Ex. 1002, 38-39. Edlund contemplated the use of systems and methods of metadata search ranking. Edlund, Abstract. It used a combination of popularity and/or relevancy to determine a search ranking for a given search result. *Id.* The Examiner contended that Edlund disclosed "ranking a plurality of documents recalled by a search engine for a query" because it states:

The search engine (0156) may be any kind of standard search engine. A search engine calculates the content relevance as described herein, and return a list of search results ranked based on this content relevance. The present invention does not require a specific search engine. One skilled in the art will recognize that search engine component may be replaced with a different search engine component, as long as the task of calculating content relevance is performed.

Edlund, [0045]; Ex. 1002 at 38. The Examiner conceded, however, that “Edlund does not explicitly disclose wherein the plurality of documents contain certain documents, each document of said certain documents containing at least one section that is not used by said search engine for recall and one or more sections that are used by said search engine for recall,” and that “Edlund does not explicitly disclose wherein ranking a plurality of documents includes ranking said plurality of documents based, at least in part, on the one or more sections of said certain documents not used by said search engine to recall documents.” Ex. 1002, 38-39.

The Examiner, however, alleged that Cutts discloses the elements missing from Edlund because it discloses a “noindex” metatag. According to the Examiner:

Cutts (page 1) describes using a “noindex” metatag. According to the specification of the instant application [0018], [t]he “noindex” tag is supposed to prevent the indexing of specific content. ... Cutts discloses searching for “congoo” in a search engine. Congoo.com contains a “noindex” metatag. However, a search in the Yahoo search engine brings up the page even though the “noindex” metatag is used. Also, the results o[n] page 2 show that ranking was involved in indexing a page which contained a “noindex” tag. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Edlund with Cutts. One would have been motivated to do so in order to index and rank documents.

Id. The Examiner asserted that Edlund and Cutts also rendered obvious all other pending claims except for Claim 2. The Examiner contended that Claim 2 was obvious in view of Edlund, Cutts, and in further view of U.S. Patent Application Publication No. 2005/0091580 to Kamholz (Ex. 1010, “Kamholz”). Like Cutts, the Examiner alleged that Kamholz “discloses using noindex tags on specific content so it wouldn’t be indexed.” Ex. 1002 at 41.

In response to this rejection, the applicant amended the independent claims to add the limitation “ranking said plurality of documents based, at least in part, on the one or more section of said certain documents not used by said search engine to recall documents.” Ex. 1002 at 78. The applicant explained the significance of this limitation as follows:

A document usually contains various sections. One or more of the sections may have content not relevant to the main document content. According to the method of Claim 1, such sections are identified as no-recall sections and are not indexed by the crawler. Thus, a search engine does not recall a document based on terms inside no-recall sections. However, Claim 1 further requires that the content of a no-recall section is still used for analysis of the document, for example, the document’s ranking. Thus, the ranking of a document is based on the entirety of the document content, including both no-recall sections and recall sections.

Ex. 1002 at 78. The applicant then argued that Edmund and Cutts do not disclose such a method because they do not disclose “ranking a plurality of documents

includes ranking said plurality of documents based, at least in part, on the one or more sections of said certain documents not used by said searching engine to recall documents.” *Id.* The applicant noted that the Examiner admitted that Edlund does not disclose this limitation, and further argued that such a limitation would not have been obvious in view of Cutts. *Id.* at 78-79. The applicant pointed out that Cutts discloses that “the action of the crawler, not the ‘noindex’ metatag, controls whether a document is used for document recall and ranking” and thus “the search results reflect ranking based on documents whose entire content has been used for document recall. Such performance is completely contrary to the method of Claim 1 which discloses that ranking documents is based, at least in part, on sections not being used for document recall.” *Id.* at 79.

The Examiner disagreed. In a Final Office Action, the Examiner again rejected the claims as obvious in light of Edlund and Cutts stating that “Cutts provides examples of search engines which ignore the ‘noindex’ tag when indexing documents. Even though Cutts’ example deals [*sic*] when the noindex tag is used for the whole page, [i]t was common knowledge at the time of the invention that the noindex tag may be used either for a whole page or for section of a page. An example of that is provided by Kamholz [] in [0047]. Kamholz is also used to reject Claim 2 of the instant application below.” Ex. 1002 at 87. The Examiner thus again rejected

all of the claims based on Edlund and Cutts (and Kamholz for Claim 2). *Id.* at 87-92.

In an interview after the Final Office Action, the applicant explained the claimed invention. *Id.* at 107. The Examiner responded by indicating that the use of data within noindex metatags for recall or ranking is contrary to industry standards and is generally frowned upon, thus acknowledging that the prior art essentially taught away from the methods described by the claimed inventions. *Id.* Thus, in a response to the final Office Action, the applicant asserted that:

[T]he search engines discussed in Cutts makes no distinction between the use of noindex metadata for recall and ranking. By contrast, Claim 1 recites ‘ranking a plurality of documents includes ranking said plurality of documents based, at least in part, on the one or more sections of said certain documents **not used by said search engine** to recall documents.’ Thus, Claim 1 teaches ignoring the data contained within a noindex metatag for the purposes of recall but using the data contained within a noindex metatag for the purposes of ranking. Examiner expressly indicated in the interview of December 9, 2009, that the approach described in Claim 1 is **contrary** to industry standards and generally **frowned** upon by the industry. Thus, Claim 1 recites a counterintuitive method for ranking documents recalled by a search engine.

Id. at 108 (emphasis in original). The applicant further argued that “Cutts fails to describe treating data in the noindex section **differently** for recall purposes than

ranking purposes as recited in Claim 1. Cutts describes treating data in the noindex section the **same** for both recall and ranking purposes.” *Id.* at 109 (emphasis in original).

After recognizing these distinctions, the Examiner issued a notice of allowance. The Examiner stated that the application was allowed because:

The Examiner’s cited prior art as well as the prior art available prior to the filing date deals with meta tags, such as a “noindex” tag, which tell a search engine crawler to ignore a certain section of a web page. Once the crawler ignores a section, it does not take the ignored section into consideration for ranking purposes. However, the Claims of the instant application claim reading the ignored (or the “noindex”) section and using that section for purposes of ranking the web page. But, the Claims do not index the section containing the command to ignore the specified section. It only uses that section for ranking purposes. ... The reason for allowance lies specifically in the concept of using an ignored section only for purposes of ranking and not indexing.

Id. at 127.

Despite the explanation of patentability by the USPTO, the Petition relies on two references, Page and FusionBot, that are substantially similar to Edlund and Cutts. As discussed below, neither Page nor FusionBot teach or suggest “the concept of using an ignored section only for purposes of ranking and not indexing.”

Id.

III. LEVEL OF ORDINARY SKILL IN THE ART

For the limited purpose of this Preliminary Response, Patent Owner does not contest Petitioner’s definition of a person of ordinary skill in the art, but it reserves the right to do so if trial is instituted.

IV. CLAIM CONSTRUCTION

In R2 and AA’s related infringement action in the Eastern District of Texas, the court construed certain claim terms as set forth below. *See* Ex. 2004.

Term/Phrase	Court’s Construction
“said data includes an abstract describing each document of said plurality of documents”	Plain meaning
“each document of said certain documents containing at least one section that is not used by said search engine for recall and one or more sections that are used by said search engine for recall” and “wherein ranking a plurality of documents includes ranking said plurality of documents based, at least in part, on the at least one section of said certain documents not used by said search engine to recall documents”	Plain meaning
“recall”	“generating results for a search engine query”
“section”	“defined portion within the structure of a document”

“for each respective abstract of each document of said certain documents, said abstract excludes terms from the respective at least one section not used by said search engine to recall said each document”	Plain meaning except for “section” and “recall” as construed above
“document(s)”	“any unit of information that may be indexed by search engine indexes”

Patent Owner submits that the Board need not construe the majority of claim terms in a particular manner to arrive at the conclusion that the Petition is procedurally and substantively deficient. *See Wellman, Inc. v. Eastman Chem. Co.*, 642 F.3d 1355, 3291 (Fed. Cir. 2011) (Claim terms “need only be construed ‘to the extent necessary to resolve the controversy’”). However, the Board may need to determine the meaning of “each document of said certain documents containing at least one section that is not used by said search engine for recall and one or more sections that are used by said search engine for recall.” Patent Owner contends that a section “is not used by said search engine for recall” only when the section is incapable of being used for recall. This is discussed further below in Section VII.A.1.

V. APPLICABLE LEGAL STANDARDS

The Board may only grant a petition for *inter partes* review where “the information presented in the petition . . . shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged

in the petition.” 35 U.S.C. § 314(a); 37 C.F.R. § 42.108(c). Petitioner bears the burden of showing that this statutory threshold has been met. *See* Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756 (Aug. 14, 2012) (“The Board . . . may institute a trial where the petitioner establishes that the standards for instituting the requested trial are met . . .”).

A. Obviousness

Section 103 provides that “[a] patent may not be obtained . . . if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” 35 U.S.C. § 103(a). The obviousness analysis requires several threshold inquiries: the level of ordinary skill in the art must be established; the scope and content of the prior art must be determined; and any differences between the prior art and the claims at issue must be ascertained. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

1. Claims cannot be found obvious if an element is absent.

If a single element of the claim is absent from the prior art, the claim cannot be considered obvious. *See CFMT, Inc. v. Yieldup Int’l Corp.*, 349 F.3d 1333, 1342 (Fed. Cir. 2003) (“[O]bviousness requires a suggestion of all limitations in a claim.”); *In re Rijckaert*, 9 F.3d 1531, 1534 (Fed. Cir. 1993) (reversing obviousness

rejection where prior art did not teach or suggest all claim limitations); *Garmin Int'l, Inc. v. Patent of Cuozzo Speed Techs. LLC*, Case No. IPR2012-00001, Paper 15 at 15 (P.T.A.B. Jan. 9, 2013) (refusing to institute an IPR under 35 U.S.C. § 103 where prior art did not disclose all claim limitations). The Board has recognized that, “in an obviousness analysis, conclusory assertions from a third party about general knowledge in the art cannot, without supporting evidence of record, supply a limitation that is not evidently and indisputably within the common knowledge of those skilled in the art.” See November 2019 Consolidated Trial Practice Guide at 36. “Furthermore, because an *inter partes* review may only be requested ‘on the basis of prior art consisting of patents or printed publications,’ 35 U.S.C. § 311(b), expert testimony cannot take the place of disclosure from patents or printed publications. In other words, expert testimony may explain ‘patents and printed publications,’ but is not a substitute for disclosure in a prior art reference itself.” *Id.*; see also *K/S Himpp v. Hear-Wear Techs., LLC*, 751 F.3d 1362, 1365 (Fed. Cir. 2014); *Arendi S.A.R.L. v. Apple Inc.*, 832 F.3d 1355, 1366-67 (Fed. Cir. 2016) (reversing obviousness decision because the Patent and Trial Appeal Board presumed a missing claim limitation was present in the prior art based on conclusory statements made by Petitioner’s expert).

Additionally, it is improper to use the challenged claim as a roadmap to piece together disparate disclosure using hindsight bias. See *InTouch Techs., Inc. v. VGo*

Comm'ns, Inc., 751 F.3d 1327, 1351 (Fed. Cir. 2014) (reversing obviousness where “[i]t appears that [the expert] relied on the [] patent itself as her roadmap for putting what she referred to as pieces of a ‘jigsaw puzzle’ together.”); *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 421 (2007) (“A factfinder should be aware, of course, of the distortion caused by hindsight bias and must be cautious of arguments reliant upon ex post reasoning.”). And while “‘common sense and common knowledge have their proper place in the obviousness inquiry,” “common sense is typically invoked to provide a known motivation to combine, not to supply a missing claim limitation.” *DSS Tech. Mgmt. v. Apple Inc.*, 885 F.3d 1367, 1374 (Fed. Cir. 2018) (internal citations omitted) (quoting *Arendi S.A.R.L. v. Apple Inc.*, 832 F.3d 1355, 1361 (Fed. Cir. 2016)). The Federal Circuit has cautioned that “references to ‘common sense’—whether to supply a motivation to combine or a missing limitation—cannot be used as a wholesale substitute for reasoned analysis and evidentiary support, especially when dealing with a limitation missing from the prior art references specified.” *Id.*

2. *A petition must provide articulated reasoning with rational underpinning to combine and/or modify references.*

The conclusion of obviousness based on a combination of references must also be supported with explicit analysis of a reason to combine those references. *KSR Int’l Co.*, 550 U.S. at 418. The Federal Circuit has stated that such reasons must be more than “mere conclusory statements; instead, there must be some articulated

reasoning with some rational underpinning to support the legal conclusion of obviousness.” *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006); *see also Innogenetics, N.V. v. Abbott Labs.*, 512 F.3d 1363, 1374 (Fed. Cir. 2008) (agreeing with the district court’s reasoning that “some kind of motivation must be shown from some source, so that the jury can understand why a person of ordinary skill would have thought of either combining two or more references or modifying one to achieve the patented method”); *see also LG Elecs., Inc. v. Cellular Commc’ns Equip. LLC*, IPR2016-00197, Paper 7 at 7-11 (PTAB April 29, 2016) (faulting a petition’s obviousness analysis for lack of sufficient articulated reasons with rational underpinnings for modifying references to achieve particular elements required in the claims).

VI. SUMMARY OF THE PRIOR ART REFERENCES

A. Overview of Primary Reference: Page

Petitioner’s first primary reference, Page (Ex. 1004), is entitled “Method for Node Ranking in a Linked Database” and generally discloses a method that “assigns importance ranks to nodes in a linked database, such as any database of documents containing citations, the world wide web or any other hypermedia database.” Page, Abstract. As explained by Page, the ranking functionality takes “advantage of the linked structure of a database to assign a rank to each document in the database, where the document rank is a measure of the importance of a document.” *Id.*, 2:52-54. Searching and ranking documents is based on popularity (“One aspect provides

an objective ranking based on the relationship between documents”) and relevance (“Another aspect of the invention is directed to a technique for ranking documents within a database whose content has a large variation in quality and importance.”). *Id.* at 2:41-45. Additionally, “[t]he search engine is used to locate documents that match the specified search criteria, either by searching full text, or by searching titles only.” *Id.* at 8:21-23. Although Page can be used to search only titles, Page does not disclose excluding any sections of documents from ranking. Indeed, Page does not disclose separating or delineating documents into sections or separate pieces at all and focuses on the number of links present in a document. Page instead discloses that the whole document is indexed and ranked:

A search engine employing a ranking method of the present invention provides automation while producing results comparable to a human maintained categorization system. In this approach, a web crawler explores the web and creates an index of the web content.... Once a set of documents is identified that match the search terms, the list of documents is then sorted with high ranking documents first and low ranking documents last. The ranking in this case is a function which combines all of the above factors such as the objective ranking and textual matching.

Id. at 8:11-15, 42-46. Thus, the indexing and ranking performed in Page does not exclude any specific sections of documents.

B. Overview of Secondary Reference: FusionBot

Petitioner's secondary reference, FusionBot (Ex. 1005), is a collection of five archived web pages consisting of brief descriptions of frequently asked questions ("FAQ") and answers regarding the FusionBot product. The first FAQ asks whether the elements that are displayed as part of search results can be controlled in the FusionBot system. FusionBot at 1. The default search results displays Title, Description, Body, Rank, URL, Size, and Date. *Id.* The answer states that the user can "choose which elements you would like displayed." *Id.* Thus the user can adjust how the search results are displayed, but cannot alter the ranking of search results.

The second FAQ asks whether a user can "prevent a particular portion/section of [a] page from being indexed?" *Id.* at 2. The response states that "[y]ou can prevent a particular section of your page from being indexed by surrounding the content you wish to exclude with the <noindex>...</noindex> tags...Please note, however, that this will only prevent the indexing of actual words on a page, but will not prevent our spider from following a specific link or links that may be included between the <NOINDEX> tags." *Id.* There is no description, however, of using the non-indexed content for ranking purposes in the search results.

The third FAQ asks whether a user can "prevent a specific link on [a] page from being followed/indexed?" *Id.* at 4. The response states that "[t]here may also be times, however, when FusionBot should follow most of the links on your page,

but you wish to omit a specific link or set of links from being indexed/followed within your document. Under this scenario, you should use the <NOFOLLOW>...</NOFOLLOW> tags wrapped around the specific <A HREF...> tag in which you wish for FusionBot to ignore in your document.” *Id.* Here, too, there is no description of using the non-indexed content for ranking purposes in the search results.

The last portion of FusionBot is a “What’s New?” page that lists of 82 updates to FusionBot over a six-year period. *Id.* at 5-9. The list simply provides the titles and sometimes a brief description for all of the updates, but does not provide any further detail about each update. *Id.* None of the update entries describe using non-indexed content for ranking purposes in search results.

VII. THE PETITION DOES DEMONSTRATE THAT THE CHALLENGED CLAIMS ARE UNPATENTABLE.

To justify the institution of an *inter partes* review, a petitioner must establish that there is a “reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a). Petitioner has not met its burden of establishing a reasonable likelihood of success at least because the Petition fails to show that each limitation of challenged independent

Claims 1 and 8 is disclosed or taught by the asserted prior art references.² Consequently, the Board should deny the Petition and decline to institute *inter partes* review.

A. Ground 1: Page Does Not Teach or Suggest At Least One Limitation of Each Independent Claim, and Combining FusionBot with Page Does Not Resolve This Flaw.

Petitioner has not demonstrated a reasonable likelihood of success in showing that the challenged claims are unpatentable under Ground 1. Specifically, Petitioner cannot show that the prior art discloses “wherein the plurality of documents contain certain documents, each document of said certain documents containing at least one section that is not used by said search engine for recall” (referred to as element [1b] herein, Ex. 1001 at 7:5-8) and “wherein ranking a plurality of documents includes ranking said plurality of documents based, at least in part, on the at least one section of said certain documents not used by said search engine to recall documents” (referred to as element [1d] herein). Ex. 1001 at 7:10-14; *see also* Petition at 35-45.

² Because Petitioner has failed to carry its burden of demonstrating a reasonable likelihood of success with each of the challenged independent claims, Petitioner likewise has failed to carry its burden of demonstrating a reasonable likelihood of success with each of the challenged dependent claims.

1. *Page does not teach or suggest “wherein the plurality of documents contain certain documents, each document of said certain documents containing at least one section that is not used by said search engine for recall.”*³

Contrary to the Petition, Page does not disclose “at least one section of said certain documents not used by said search engine to recall documents.” Petitioner points to Page’s disclosure that it can “locate documents that match specific search criteria, either by searching full text, or by searching titles only.” Petition at 35 (citing Page at 8:21-23; Ex. 1027 at ¶95). This is the only excerpt from Page that Petitioner cites as allegedly teaching one section of each document *not used* by said search engine to recall documents. According to Petitioner, because Page discloses searching by title, “Page therefore simultaneously discloses to a POSITA the inverse: a search engine that uses no content found in other, non-title sections of documents for recall.” Petition at 36 (citing Ex. 1027 at ¶¶95-96). But Petitioner’s conclusion here is inconsistent with Page’s disclosure—indeed, the excerpt from Page that Petitioner points to demonstrates that Page actually teaches away from the claimed feature. Page is explicit that while documents can be searched by title, documents can also be located “by searching *full text*,” clarifying that *the entirety* of the documents in Page are used for recall. Page at 8:21-23. In other words, while Page’s search engine may only search part of a document in response to certain

³ The limitations relevant to this argument are [1b] and [8b].

searches, that does not make a section not searched a “section that is not used by said search engine for recall,” because that part of the document *could* be searched by the search engine.

This teaching in Page is contrary to the '329 patent, which, under a proper understanding of the subject limitation, makes clear that sections not used by a search engine for recall are sections that are incapable of being used for recall. The '329 patent specifies that:

In examining the various sections, the crawler identifies sections to ignore, that is, to not index in search engine indexes and or otherwise use for recalling the document. Such sections are referred to herein as “no-recall sections.” Those portions that are indexed for recalling are referred to as recall sections. In an embodiment, a crawler ignores no-recall sections demarcated by, for example, a tag. In another embodiment a no-recall section may be identified by analyzing section content rather than examining only delimiters. The terms inside no-recall sections do not contribute to the document term frequency counts and are not used for recalling the documents in response to search engine queries.

Ex. 1001 at 3:9-21. Indeed, this was a key point made by the applicant during prosecution as well in overcoming the prior art—the applicant explained that no-recall sections “are not indexed by the crawler” (Ex. 1002 at 78) and that this limitation “teaches ignoring data contained” in such sections “for the purposes of

recall” (*id.* at 108). The specification and prosecution history, then, require that sections not used by a search engine for recall are sections that are incapable of being used for recall. *See Medrad, Inc. v. MRI Devices Corp.*, 401 F.3d 1313, 1319 (Fed. Cir. 2005) (“We cannot look at the ordinary meaning of the term ... in a vacuum. Rather, we must look at the ordinary meaning in the context of the written description and the prosecution history.”). But Page discloses that the “full text” of documents, not just title, can be used for recall, and Page thus does not disclose the claimed feature. Page at 8:21-23.

Further, Petitioner’s argument also ignores the specific claim language, which requires a “section” that is not used for recall. Page does not disclose dividing documents into specific “sections” whatsoever, let alone that “titles” or “non-titles” are “sections.” In fact, throughout the specification, Page does not disclose treating “titles” any differently than any other part of the document other than mentioning briefly that a user can search only for titles.

Petitioner attempts to remedy Page’s shortcomings by relying on its expert’s statement that “POSITAs understood that webpages typically comprise sections (e.g., title, navigation, copyright and privacy announcement, advertisement, and main content sections), which may be partitioned using tags.” *Id.* at 35-36 (citing Ex. 1027 at ¶ 95). But Page has absolutely no disclosure about sections of documents or separating documents into sections, as the claim requires. Indeed, the terms

“section” and “portion”⁴ do not even appear in Page, let alone in relation to delineating sections of documents. And contrary to Dr. Bederson’s assertions, Page also does not contain any mention of the various “typical” sections of webpages, nor the use of tags to partition the sections. Petitioner cannot rely on purported “knowledge of a person of ordinary skill” to supply elements that are not found in the references identified in the asserted grounds. *See Lone Star Silicon Innovations LLC v. Iancu*, 809 F. App’x 773, 777 (Fed. Cir. 2020).

Petitioner next contends that a combination of Page and FusionBot teaches this limitation. But a POSITA would not have combined Page and FusionBot to achieve elements [1b] and [8b]. Petitioner alleges that “FusionBot demonstrates how to implement <noindex> tags to exclude a section of a document from an index [] and therefore preclude it from being used for recall,” and that “[g]iven Page’s disclosure of a search engine embodiment that uses only document title sections for recall, a POSITA would have been motivated and found it obvious to implement systems and methods that accounted for FusionBot’s <noindex> tags when they were placed around non-title sections in documents to be ignored during indexing, and thus recall.” *Id.* at 37-38 (citing FusionBot at 2).

⁴ The term “part” only appears once in Page relating to how the National Science Foundation supported the invention “in part.” Page at 1:13.

Petitioner argues that a POSITA would have been motivated to combine them based on time and cost savings. *Id.* at 38. But Petitioner fails to specify how or why FusionBot’s use of <noindex> tags would “reduce a search engine’s index time, lessen storage requirements and computational burdens imposed by indexing as compared to search engines designed to index each document in its entirety.” *Id.* Nothing in Page or FusionBot describes these time or cost savings. Indeed, Petitioner argues that Page already discloses that each document contains at least one section that is not used by the search engine for recall. Petitioner fails to explain why, if this is so, a POSITA would see a need to modify Page in light of FusionBot.

Petitioner further argues that “FusionBot also provides express motivation for combining it with Page” because indexing “common footer bar[s]” or “navigation bars . . . may skew the search results.” *Id.* (citing FusionBot at 2). This is wrong. Again, Petitioner already argues that Page teaches excluding everything except for the title. Petitioner has not explained why, if this is true, there would be a need to use <noindex> tags for footer or navigation bars in Page. Moreover, regardless of whether Page discloses excluding sections of documents from indexing, Page does not describe separate sections of documents at all, let alone common footer bars or navigation bars or any problem relating to indexing such information. Thus, a POSITA utilizing Page’s system would have no reason or motivation to combine the Page with FusionBot.

Notably, Dr. Bederson’s declaration merely parrots the discussion in the Petition with respect to the motivation to combine Page and FusionBot and does not provide any additional explanation, evidence, or citation to support Petitioner’s contentions. *Compare* Ex. 1027 at ¶¶ 101–102, *with* Petition at 38–39. Such conclusory expert testimony is not a substitute for Page and FusionBot’s lack of disclosure on this point. *Roxane Labs., Inc. v. Novartis AG*, IPR2016-01461, Paper 9 at 10 (PTAB Feb. 13, 2017); *see also* PTAB Consolidated Trial Practice Guide (USPTO Nov. 2019) (“[E]xpert testimony cannot take the place of disclosure from patents or printed publications.”). At bottom, if Page discloses sections of documents that can never be used for recall, there would be no reason to use FusionBot’s <noindex> tags. And if Page does not disclose sections of documents that can never be used for recall, Petitioner has failed to provide any motivation to combine the teachings of Page with FusionBot for element [1b].

2. Page nor FusionBot teach “wherein ranking a plurality of documents includes ranking said plurality of documents based, at least in part, on the at least one section of said certain documents not used by said search engine to recall documents.”⁵

Neither Page nor FusionBot disclose “wherein ranking a plurality of documents includes ranking said plurality of documents based, at least in part, on the at least one section of said certain documents not used by said search engine to

⁵ The limitations relevant to this argument are [1d] and [8d].

recall documents.” Petitioner argues (incorrectly) that Page discloses limitations [1d] and [8d] merely because it discloses searching “titles only” and describes ranking based on “the number of backlinked webpages it connects to” and “the ranks of the backlinked webpages, which may be determined from the number of forward links from still other webpages to each of the backlinked webpages.” Petition at 40. But, as discussed above, Page does not disclose that certain sections are incapable of being used for recall but are then used for ranking, as the claim requires. To the contrary, Page explicitly contemplates that all portions of documents can be used for recall by disclosing that documents can be located “by searching full text.” Page at 8:21-23.

Petitioner also cites FusionBot for this claim element, but FusionBot has even less disclosure relevant to claim elements [1d] and [8d] than Page. According to Petitioner, “[a] POSITA would have found it obvious and would have been motivated to enclose within FusionBot’s <noindex> tags certain sections of webpages . . . FusionBot expressly discloses that <noindex> tags ‘will only prevent the indexing of actual words on a page, but will not prevent [a] spider from following a specific link or links that may be included between the <NOINDEX> tags.’ Thus, in Page-FusionBot, a crawler would still follow any hyperlinks within document sections surrounded by <noindex> tags and account for them” for ranking. Petition at 44. Petitioner, however, mischaracterizes the disclosure of FusionBot. FusionBot

does not describe using the excluded sections of documents (namely those included within <noindex> tags) being used for ranking purposes as Petitioner alleges. While a crawler may follow links within <noindex> tags, FusionBot does not disclose that any documents are ranked based on links followed. In fact, in the only discussion of ranking in FusionBot, it specifically links ranking with what is recalled, defining the “Rank” element as “[t]he Rank value (percent likelihood of a good match) for each result returned.” FusionBot at 1 (emphasis added). Thus, in order for data to be ranked, it must be indexed. This is the opposite of what is claimed in the ’329 Patent, namely, that ranking is accomplished using a section that is unavailable for recall.

The combination asserted by Petitioner is nearly identical to the combination asserted by the Examiner during prosecution before issuance. As explained above, one reference raised during prosecution (Edlund) disclosed a method of ranking documents without reference to excluding sections of documents. The Examiner argued that Edlund would be combined with another reference (Cutts and/or Kamholz) that disclosed excluding sections for indexing, but did not disclose ranking. *See e.g.*, Ex. 1002 at 38-39, 88-89. Like FusionBot, Cutts and Kamholz both disclosed that links within the pages or sections identified with <noindex> tags could still be followed despite the fact that those pages or sections were not indexed. *See, e.g.*, Cutts at 1-2 (noting the use of <noindex> and <nofollow> tags and specifying Yahoo! search engine following/displaying links in search results); Kamholz at

[0037-0041, 0048]. Despite these disclosures, the Examiner concluded that “the approach described in Claim 1 is contrary to industry standards and generally frowned upon by the industry.” Ex. 1002 at 108. In light of these nearly identical arguments, the Examiner allowed the claims noting “[t]he reason for allowance lies specifically in the concept of using an ignored section only for purposes of ranking and not indexing.” *Id.* at 127. For the same reason, Petitioner has failed to demonstrate a reasonable likelihood of proving that Page in view of FusionBot discloses or otherwise renders obvious the claims of the ’329 Patent.

VIII. THE PETITION SHOULD BE DENIED UNDER 35 U.S.C. § 325(d).

The Director has discretion to deny institution of an *inter partes* review proceeding under 35 U.S.C. § 325(d) when “the same or substantially the same prior art or arguments previously were presented to the Office.” *Advanced Bionics*, Paper 6 at 7. The Board applies a two-part framework under § 325(d): “(1) whether the same or substantially the same art previously was presented to the Office or whether the same or substantially the same arguments previously were presented to the Office; and (2) if either condition of the first part of the framework is satisfied, *whether the petitioner has demonstrated* that the Office erred in a manner material

to the patentability of challenged claims.”⁶ *Advanced Bionics*, Paper 6 at 8 (emphasis added). Both factors are met here, so the Board should deny institution.

A. Substantially the Same Art and Arguments were Previously Presented to the Office.

1. *Page and FusionBot are substantially the same as the art previously presented to the Patent Office.*

Page and FusionBot serve as the foundation for all of Petitioner’s purported obviousness contentions.⁷ *See, e.g.*, Petition at 33-50 (Ground 1 challenging claims 1-3, 5, 8-10, and 12), 50-52 (Ground 2 challenging claims 4 and 11), 53-55 (Ground 3 challenging claims 6 and 13), 55-58 (Ground 4 challenging claims 7 and 14). Even though Page and FusionBot were not presented to the Patent Office, these

⁶ Art that is previously presented includes “art made of record by the Examiner, and art provided to the Office by an applicant, such as on an Information Disclosure Statement (IDS), in the prosecution history of the challenged patent.” *Advanced Bionics*, Paper 6 at 8. If the first prong of factor (1) is met (i.e. substantially the same art was previously presented), then no analysis is needed regarding whether the same arguments were previously presented to the Office. *Id.* at 20.

⁷ Petitioner relies on only Page and FusionBot for all independent claims. Petitioner relies on Emens (Ex. 1006), Li (Ex. 1007), and Cucerzan (Ex. 1008) for dependent claims 4 and 11; 6 and 13; and 7 and 14, respectively.

publications are nonetheless cumulative of the references considered and analyzed by the Patent Office during prosecution of the '329 Patent (e.g., Edlund, Cutts, and Kamholz). Specifically, the relevant portions of Page's disclosure are essentially the same as Edlund's disclosure and the relevant portions of FusionBot's disclosure is essentially the same as Cutts's and Kamholz's disclosure. Moreover, Petitioner has not identified any disclosure (or new teaching) in Page, FusionBot, or any other reference that are any different from the teachings of Edlund, Cutts, Kamholz or any other art already considered by the Examiner during prosecution of the '329 Patent. Petitioner thus fails to "address differences between the teachings in [Page and FusionBot] and the teachings in prior art before the Examiner during prosecution as a basis for unpatentability." *Microsoft Corp., v. Koninklijke Philips N.V.*, IPR2018-00277, Paper 10 at 12 (PTAB June, 8, 2018). Accordingly, Page and FusionBot are cumulative of the art of record and meet the first prong of the *Advanced Bionics* framework.

a) Page is cumulative of Edlund.

Petitioner's primary reference, Page, is cumulative of the Edlund reference that was considered during prosecution of the '329 Patent. As described by Petitioner, Page is cited in the Petition for its alleged disclosure of certain elements of independent claim 1 including: "ranking a plurality of documents recalled by a search engine for a query" [1a]; "one or more sections that are used by said search

engine for recall” [1c]; and “wherein the method is performed by one or more computing devices” [1e].⁸ But the teachings Petitioner relies on are merely cumulative of those taught by Edlund, as illustrated below (where like colors designate like teachings):

<i>Page</i> (Ex. 1004)	<i>Edlund</i> (Ex. 2002)
“Various aspects of the present invention provide systems and methods for ranking documents in a linked database. One aspect provides an objective ranking based on the relationship between documents. Another aspect of the invention is directed to a technique for ranking documents within a database whose content has a large variation in quality and importance.” (2:39-45) “More particularly, it relates to methods for assigning ranks to nodes	“The search engine (0156) may be any kind of standard search engine. A search engine calculates the content relevance as described herein, and return a list of search results ranked based on this content relevance. The present invention does not require a specific search engine. One skilled in the art will recognize that search engine component may be replaced with a different search engine component, as long as the task of

⁸ These same arguments equally apply to independent Claim 8. Indeed, Petitioner failed to provide any additional or separate analysis of Claim 8 beyond what was cited for Claim 1. Petition at 49.

in a linked database, such as any database of documents containing citations, the world wide web or any other hypermedia database.” (1:19-22)	calculating content relevance is performed.” ([0045])
“One aspect of the present invention is directed to taking advantage of the linked structure of a database to assign a rank to each document in the database, where the document rank is a measure of the importance of a document. Rather than determining relevance only from the intrinsic content of a document, or from the anchor text of backlinks to the document, a method consistent with the invention determines importance from the extrinsic relationships between documents.” (2:51-59) “Because citations, or links, are ways of directing attention, the important documents correspond to those documents to which the most attention is directed. Thus, a high rank indicates that a document is considered valuable	“With this information the present invention provides a ranking system that performs a ranking based on a combination of relevancy and popularity.” ([0022])

by many people or by important people.” (3:4-8)	
“A search engine employing a ranking method of the present invention provides automation while producing results comparable to a human maintained categorized system. In this approach, a web crawler explores the web and creates an index of the web content, as well as a directed graph of nodes corresponding to the structure of hyperlinks. The nodes of the graph (i.e. pages of the web) are then ranked according to importance as described above in connection with various exemplary embodiments of the present invention. The search engine is used to locate documents that match the specified search criteria, either by searching full text, or by searching titles only. In addition, the search can include the anchor text associated with backlinks to the page.” (8:11-24)	“Indexing is done mostly automatically. The present invention uses the human’s ability to evaluate resources and store this information for further reuse.” ([0018]) “The search engine returns search results based on the original query. These search results are typically sorted ascending or descending based on content relevance. The search result list contains unique identifiers for search result items (e.g., URL), along with some abstract and additional information for each search result item. To identify all the data properly, the Result Analyzer (0202) will generate a list data structure, containing the search result items, along with their content relevance. This generated list will then be passed to the Relevancy Calculator.” ([0069]).

As shown above, Page describes substantially the same search methodology used by Edlund. Specifically, both Page and Edlund describe search methodologies

that rank information on both relevance and popularity via use of a search engine and indexing the results.

b) FusionBot is cumulative of Cutts.

The FusionBot reference relied on by Petitioner is also cumulative of other references that were considered during prosecution of the '329 Patent (e.g., Cutts and Kamholz). As an initial matter, Petitioner only relies upon two pages (FBFAQ #29 and #47) of the combined FusionBot reference in Ground 1—the only Ground challenging the independent claims. Petitioner alleges that FusionBot discloses claim elements 1[b]/[8b] and 1[d]/[8d] through the use of <noindex> tags. Petition at 37-38, 44-45. FusionBot’s disclosure of the use of <noindex> tags, however, is substantially the same as Cutts as shown below:

<i>FusionBot</i> (Ex. 1005)	<i>Cutts</i> (Ex. 2003)
“Can I prevent a particular portion / section of my page(s) from being indexed? You can prevent a particular section of your page from being indexed by surrounding the content you wish to exclude with the <noindex>...</noindex> tags. The <noindex> tags will only work within the <body> of your HTML.” (p. 2).	“I did the search [congoo] recently and didn't get the home page of Congoo-why not? If you view the source of http://www.congoo.com/ , it turns out that they have a noindex meta tag: <meta name="robots" content="noindex, nofollow" />

	Okay, so Congoo apparently doesn't want their root page to show up in search results pages. (p. 1).
“Please note, however, that this will only prevent the indexing of actual words on a page, but will not prevent our spider from following a specific link or links that may be included between the <NOINDEX> tags.” (p. 2) “Can I prevent a specific link on my page from being followed/indexed? ...There may also be times, however, when FusionBot should follow most of the links on your page, but you wish to omit a specific link or set of links from being indexed/followed within your document. Under this scenario, you should use the <NOFOLLOW>...</NOFOLLOW> tags wrapped around the specific <A HREF...> tag in which you wish for FusionBot to ignore in your document.” (p. 4).	If you view the source of http://www.congoo.com/, it turns out that they have a noindex meta tag: <pre><meta name="robots" content="noindex, nofollow" /></pre> ... So based on a sample size of one page, it looks like search engines handle the ‘noindex’ meta tag: -Google doesn’t show the page in any way -Ask doesn’t show the page in any way -MSN shows a url reference and Cached link, but no snippet. Clicking the cached link doesn’t return anything. -Yahoo! shows a url reference and Cached link, but no snippet. Clicking on the cached link returns the cached page.” (p. 1-2).

As detailed above, both Cutts and FusionBot describe the use of <noindex> metatags as well as <nofollow> metatags. FusionBot describes the use of <noindex> metatags to prevent content from being indexed by the search engine, but the links within may still be followed. FusionBot at 2. Cutts reveals that the use of <noindex> metatags with Yahoo! prevents the content from being indexed by the search engine, but the cached link is still present. Cutts at 1-2 (“Yahoo! shows a url reference and Cached link, but no snippet. Clicking on the cached link returns the cached page.”). FusionBot describes the use of <nofollow> metatags to prevent links from being indexed or followed. FusionBot at 4. Cutts discloses the use of <noindex>/<nofollow> metatags as well and describes its use with Google as preventing links from being indexed or followed. Cutts at 2 (“Google doesn’t show the page in any way.”). Thus, FusionBot is cumulative of Cutts.

c) FusionBot is also cumulative of Kamholz.

FusionBot is also cumulative of Kamholz, which was examined during prosecution of the ’329 Patent. Indeed, both references discuss the use of <noindex> and <nofollow> meta tags to exclude content from indexing or following as demonstrated below:

<i>FusionBot</i> (Ex. 1005)	<i>Kamholz</i> (Ex. 1010)
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“Can I prevent a particular portion / section of my page(s) from being indexed? You can prevent a particular section of your page from being indexed by surrounding the content you wish to exclude with the <noindex>...</noindex> tags. The <noindex> tags will only work within the <body> of your HTML.” (p. 2).	“Accordingly, what is needed is a method and system that is capable of preventing specific portions of web pages from being indexed by bots and/or other web crawling mechanisms...The present invention addresses these needs...Through the use of the present invention, specific content on a web page can be prevented from being indexed by a web crawling mechanism.” ([0009-0011]).
Below is an example of the no index implementation... <noindex> This is the content you wish to be excluded from your index within a particular page. </noindex>...Please note, however, that this will only prevent the indexing of actual words on a page, but will not prevent our spider from following a specific link or links that may be included between the <NOINDEX> tags.” (p. 2).	“The following are examples of HTML tags that could be utilized to designate specific content that is prevented from being indexed or followed by a bot: <robot=“noindex, nofollow”>content</robot> <robot=“noindex”>content</robot> <robot= “nofollow”>content</robot> By enclosing these tags around specific web page content, bots are

“Can I prevent a specific link on my page from being followed/indexed? ...There may also be times, however, when FusionBot should follow most of the links on your page, but you wish to omit a specific link or set of links from being indexed/followed within your document. Under this scenario, you should use the <NOFOLLOW>...</NOFOLLOW> tags wrapped around the specific <A HREF...> tag in which you wish for FusionBot to ignore in your document.” (p. 4).	prevented from indexing or following this content.” ([0037-0041]). “Similarly, FIG. 3D demonstrates how to utilize HTML tags to prevent specific content from being followed by a bot in accordance with an embodiment of the present invention.” ([0048]); <i>see also</i> FIG 3D.
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Thus, both FusionBot and Kamholz describe the use of <noindex> metatags to prevent content from being indexed by the search engine. FusionBot at 2; Kamholz at [0037-0041, 0044]; *see also* Claims 1 and 17 (“designat[ing] a specific portion of the content to prevent a web crawling mechanism from indexing the specific portion.”). And both FusionBot and Kamholz describe the use of <nofollow> metatags to prevent links from being followed. FusionBot at 4; Kamholz at [0037-0041], [0048] (“Similarly, Fig. 3D demonstrates how to utilize HTML tags to prevent specific content from being followed by a bot in accordance with the

present invention.”); *see also* Fig. 3D, Claim 18 (“wherein indexing further comprises following”). Thus, FusionBot is also cumulative of Kamholz.

2. Petitioner’s Arguments Regarding Page and FusionBot are Substantially the Same Arguments Made by the Examiner During Prosecution

Not only are the Page and FusionBot references cumulative of the references asserted by the Examiner during prosecution of the ’329 Patent, the arguments regarding those references are the same as well. Indeed, the arguments made by the Examiner with respect to Edlund and Cutts match the arguments made by Petitioner with respect to Page and FusionBot, respectively.

As explained above, during prosecution, the Examiner rejected pending claim 1 and 15 because “Edlund discloses a method and a computer-readable storage medium comprising [] ranking a plurality of documents recalled by a search engine for a query,” citing Edlund’s disclosure of a search engine returning a list of ranked search results. Ex. 1002 at 88 (citing Edlund at [0045]). Petitioner argues that “Page discloses this element,” citing Page’s disclosure of “[a] search engine employing [Page’s] ranking method.” Petition at 34 (citing Page at 8:6-8, 13-20, 21-22, 42-44). Thus, the Examiner’s and Petitioner’s arguments for the first elements of Claims 1 and 8 are the same.

The Examiner then noted that “Edlund does not explicitly disclose wherein the plurality of documents contain certain documents, each document of said certain

documents containing at least one section that is not used by said search engine for recall and one or more sections that are used by said search engine for recall. However, Cutts does.” Ex. 1002 at 88-89. Here, Petitioner argues that because Page discloses searching by title only, “Page therefore simultaneously discloses to a POSITA the inverse: a search engine that uses no content found in other, non-title sections of documents for recall” citing only Petitioner’s expert declaration. Petition at 36. Thus, Page too does not “explicitly disclose...each document of said certain documents containing at least one section that is not used by said search engine for recall and one or more sections that are used by said search engine for recall.”

For an alleged explicit disclosure of using a section of a document not used by the search engine for recall, the Examiner relied on Cutts. According to the Examiner, “Cutts [] describes using a ‘noindex’ metatag...The ‘no index’ tag is supposed to prevent the indexing of specific content. Therefore it would have been obvious for one of ordinary skill in the art at the time of the invention was made to modify Edlund with Cutts. One would have been motivated to do so in order to not index certain parts of pages.” Ex. 1002 at 89. The Examiner also argued that “[e]ven though Cutts’ example deals [*sic*] when the noindex tag is used for a whole page, [i]t was common knowledge at the time of the invention that the noindex tag may be used either for a whole page or for section of a page. An example of that is provided by Kamholz.” *Id.* at 87 (citing Kamholz at [0047]).

Petitioner relies on FusionBot to make the same argument that the Examiner made with respect to Cutts. According to Petitioner, “a POSITA would have found it obvious to implement Page’s disclosure of selectively excluding document sections from recall by enclosing those section within <noindex> tags, as was known in the art.” Petition at 36. Petitioner further argues that “FusionBot describes the <noindex> tags known in the art. [] Specifically, FusionBot explains that ‘[y]ou can prevent a particular section of your page from being indexed by surrounding the content you wish to exclude with the <noindex>...</noindex> tags.’... A POSITA would have been motivated to combine Page’s and FusionBot’s teachings with a reasonable expectation of success.” Petition at 37 (citing FusionBot at 2). Petitioner even additionally cites the same Kamholz reference used by the Examiner to support what it contends FusionBot discloses: “The <noindex> tag was known to POSITAs and its functions were taught by FusionBot and other references.” *Id.* (citing Kamholz at [0037-0041]).

With respect to the claim limitation, “wherein ranking a plurality of documents includes ranking said plurality of documents based, at least in part, on the at least one section of said certain documents not used by said search engine to recall documents,” the Examiner relied on Cutts as disclosing:

[S]earching for ‘congoo’ in a search engine. Congoo.com contains a ‘noindex’ metatag. However, a search in the Yahoo search engine brings up the page even though the ‘noindex’ metatag is used. Also, the

results of page 2 show that ranking was involved in indexing a page which contained a ‘noindex’ tag. Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention was made to modify Edlund with Cutts. One would have been motivated to do so in order to index and rank documents.

Ex. 1002, 89. This, too, directly mirrors the argument made by Petitioner in view of Page⁹ and FusionBot. Petitioner argues “Page-FusionBot teaches this element, and a POSITA would have found it obvious to implement Page’s link-based ranking method to rank documents based at least in part on the content of document sections enclosed within <noindex> tags.” Petition at 43. Just like the Examiner’s argument on this claim element, Petitioner further argues that “FusionBot expressly discloses that <noindex> tags ‘will only prevent the indexing of actual words on a page, but will not prevent [a] spider from following a specific link or links that may be included between the <NOINDEX> tags.’ Thus, in Page-FusionBot, a crawler would

⁹ Petitioner again separately argues that Page alone discloses ranking based on sections of documents not used for indexing, but for the same reasons noted above, there is no explicit disclosure of that in Page. *See* Section VII.A.2. Indeed, although Petitioner references Page in each element of independent Claims 1 and 8, Petitioner does not allege in any of the asserted Grounds that these claims are obvious or anticipated in light of Page alone.

still follow any hyperlinks within document sections surrounded by <noindex> tags and account for them in the directed graph of nodes on which its ranking method is based.” Petition at 44 (citing FusionBot at 2). This is no different than the examiner’s argument regarding Cutts’ description of using <noindex> tags with the Yahoo search engine. In sum, not only are the references asserted by Petitioner substantially the same as the references used during prosecution, the arguments advanced by Petitioner and Examiner are substantially the same as well.

B. Petitioner Has Failed to Demonstrate that the Office Committed Material Error.

Because substantially the same art was already presented to the Office, the Board should determine “whether the petitioner has demonstrated that the Office erred in a manner material to the patentability of challenged claims.” *Advanced Bionics*, Paper 6 at 8 (emphasis added). In *Advanced Bionics*, the petitioner presented arguments that the examiner erred during prosecution in evaluating prior art, referring to specific technical aspects and claim limitations that the petitioner asserted the examiner failed to properly analyze and research. *See id.* at 20. Even though the petitioner there specifically pointed out how it thought the examiner erred and cited additional references that potentially disclosed relevant technical aspects, the Board nonetheless concluded that the petitioner was not persuasive in showing that “the Examiner materially erred in determining the patentability of the challenged claims.” *Id.* at 22.

Here, Petitioner fails to demonstrate that “the Office erred in a manner material to patentability of the challenged claims.” *Id.* at 8. In fact, ***Petitioner does not assert that the Office erred at all.*** Unlike in *Advanced Bionics*, where the Board found that petitioner failed to persuasively demonstrate error when the petitioner actually presented arguments, ***Petitioner here has not even attempted to demonstrate error.*** See *id.* Because substantially the same information was previously before the Office, and because Petitioner has failed to demonstrate that the Office committed material error, the Board should deny institution under § 325(d).

IX. PATENT OWNER’S FINAL COMMENTS

Patent Owner does not concede the legitimacy of any arguments in the Petition that are not specifically addressed herein, and expressly reserves the right to rebut any such arguments in its Patent Owner Response if *inter partes* review is instituted. Similarly, Patent Owner also does not concede any underlying contentions in the Petition and reserves the right to rebut them later. Additionally, Patent Owner is not limited to the arguments presented here in this Preliminary Response, but expressly reserves the right to raise further arguments, including claim construction arguments, whether the prior art is enabled, or any other arguments not presented in this Preliminary Response.

X. CONCLUSION

For the foregoing reasons, Patent Owner respectfully requests that the Board decline to institute *inter partes* review of the '329 Patent.

Dated: July 11, 2023

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CERTIFICATE OF COMPLIANCE WITH WORD COUNT

Pursuant to 37 C.F.R. § 42.24(d), I certify that this Preliminary Response complies with the type-volume limits of 37 C.F.R. § 42.24(b)(1) because it contains 10,863 words, excluding the parts of this Patent Owner's Preliminary Response that are exempted by 37 C.F.R. § 42.24(a), according to the word processing system used to prepare this Patent Owner's Preliminary Response.

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CERTIFICATE OF SERVICE

The undersigned certifies that the foregoing Patent Owner's Preliminary Response was served on July 11, 2023, to Lead and Back-up Counsel for Petitioner at the service address provided in Petitioner's Mandatory Notices:

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