

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

X CORP.

Petitioner,

v.

STERLING COMPUTERS CORPORATION

Patent Owner.

Case IPR2025-00299

U.S. Patent No. 7,716,217

PATENT OWNER'S REQUEST FOR DIRECTOR REVIEW

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EXHIBIT LIST

Patent Owner's Exhibit No.	Exhibit Description
2001	Declaration of Latifur Khan (March 12, 2025)
2002	Curriculum vitae of Latifur Khan
2003	Declaration of Justin Marston (March 12, 2025)
2004	"BlueSpace Mail Search" Document, Sept. 2, 2004
2005	"The Development of the Mathematical Algorithms," May 12, 2005
2006	"BlueSpace Mail Relevance," June 7, 2005
2007	"BlueSpace Mail Relevance," Aug. 16, 2005
2008	"BlueSpace Mail Relevance," Aug. 17, 2005
2009	"Importance," Sept. 18, 2005
2010	"BlueSpace Mail Relevance," Oct. 6, 2005
2011	"BlueSpace Mail Relevance," Oct. 7, 2005
2012	"BlueSpace Mail Relevance," Oct. 7, 2005
2013	"There are many cognate relevance values that must be calculated," Nov. 9, 2005
2014	Claim Chart for BlueSpace Mail Documents
2015	Supplemental Declaration of Justin Marston (July 8, 2025)
2016	<i>listing of NATURE article:</i> Marston, Justin, "Chaos in the Classroom," Jan. 25, 1996, NATURE, <i>available at</i> https://www.nature.com/articles/379306b0
2017	<i>excerpt from:</i> 32nd European Union Contest for Young

Patent Owner's Exhibit No.	Exhibit Description
	Scientists (2020-2021) ("Winners 1989-2019")
2018	LinkedIn profile: Justin Marston
2019	Metadata extracted from native of EX2004
2020	Metadata extracted from native of EX2005
2021	Metadata extracted from native of EX2006
2022	Metadata extracted from native of EX2007
2023	Metadata extracted from native of EX2008
2024	Metadata extracted from native of EX2009
2025	Metadata extracted from native of EX2010
2026	Metadata extracted from native of EX2011
2027	Metadata extracted from native of EX2012
2028	Metadata extracted from native of EX2013
2029	Declaration of Latifur Khan (September 10, 2025)
2030	Declaration of Justin Marston (September 9, 2025)
2031	Declaration of Paul Marston (September 9, 2025)
2032	"BlueSpace Mail Relevance," September 21, 2005
2033	"BlueSpace Mail Relevance," October 2, 2005
2034	"BlueSpace Mail Relevance," November 8, 2005
2035	"BlueSpace Mail Relevance," November 12, 2005
2036	"BlueSpace Mail Relevance," November 13, 2005

Patent Owner's Exhibit No.	Exhibit Description
2037	"Frequency analysis stats," August 21, 2005
2038	"Relevance typology 2.bmp," November 13, 2005
2039	"Relevance process flow 2.bmp," November 13, 2005
2040	<i>intentionally omitted (duplicate)</i>
2041	Log of BlueSpace documents showing BlueSpace work from June 28, 2005, until January 13, 2006
2042	Log of J. Marston privileged communications with BlueSpace counsel regarding BlueSpace work from June 28, 2005, until January 13, 2006
2043	Version of EX2010/EX1044 showing tracked changes and comments by Justin Marston
2044	Version of EX2010/EX1044 showing tracked changes and comments by Paul Marston
2045	Version of EX2010/EX1044 showing tracked changes and comments by Jon Fernyhough
2046	Redacted (for privilege) correspondence from J. Marston to B. Hoffman, January 12, 2006
2047	"Transmail Relevance Formulae," September 9, 2004
2048	"Notes on Search Document," September 13, 2004
2049	"Pauls Formula Section Sept 17.doc," September 20, 2004
2050	"General Comments," May 17, 2005
2051	"Some Thoughts on the TransMail Relevance/Importance Algorithm," May 17, 2005
2052	"2004-09-10 notes on search document.doc," September 10,

Patent Owner's Exhibit No.	Exhibit Description
	2004
2053	"Changes to document_.doc," September 15, 2004
2054	"BlueSpaceMailSearchfor JamesB.doc," September 15, 2004
2055	"Importance 1.1.1.doc," September 18, 2004
2056	"formula.doc," August 17, 2005
2057	"SoftwareImplementation.doc," August 18, 2005
2058	"SoftwareImplementationComment.doc," August 19, 2005
2059	"BlueSpaceRelevancePM250805.doc," August 25, 2005
2060	"BlueSpaceMailRelevancePM250905.doc," September 25, 2005
2061	"BlueSpaceMailRelevancePM270905c.doc," September 28, 2005
2062	"BlueSpaceMailRelevancePM280905.doc," September 28, 2005
2063	"Comments to Jon and Justin 07.doc," October 8, 2005
2064	"Alterations to document.doc," October 8, 2005
2065	"BSMR021005_jfpm2.doc," October 13, 2005
2066	"BSMR021005_jfpm3.doc," October 13, 2005
2067	"BSMR021005_jfpm4.doc," October 13, 2005
2068	"BSMR021005_jfpm5.doc," October 13, 2005
2069	"BSMR021005_jfpm6.doc," October 14, 2005

Patent Owner's Exhibit No.	Exhibit Description
2070	"Jon & Justin 14.10.05.doc," October 14, 2005
2071	"Comments to Justin and Jon Oct 15th.doc," October 15, 2005
2072	"BlueSpaceMailRelevanceJM06,11,05.doc," November 10, 2005
2073	"BlueSpace Mail Relevance," August 21, 2005
2074	"BlueSpace Mail Relevance," November 12, 2005
2075	Paul Marston LinkedIn Profile
2076	Paul Marston employment history (1968-2024) (from teachers' pensions employment history)
2077	Article: "Farewell after almost 50 years: Paul Marston, Senior Lecturer in Mathematics."
2078	Letter appointing P. Marston as lecturer at Nazarene Theological College, July 25, 2005
2079	"Twitter's Recommendation Algorithm," X Blog, March 31, 2023
2080	"Twitter Revenue and Usage Statistics (2025)," Business of Apps, Sept. 2, 2025
2081	"Twitter Is Changing Your Timeline: What You Need to Know," ABC News, Feb. 10, 2016
2082	"News Feeds, Old Content: A Brief History of Algorithmically Curated Feeds on Facebook and Twitter," Medium, April 29, 2019
2083	"You Can Finally Switch Your Instagram Feed to a Chronological Timeline. Here's How," Business Insider, Mar. 24, 2022

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Patent Owner's Exhibit No.	Exhibit Description
2084	Complaint, <i>Sterling v. X Corp.</i> , Case No. 1:24-cv-00552 (W.D. Texas)
2085	Complaint, <i>Sterling v. Meta</i> , Case No. 1:24-cv-00551 (W.D. Texas)

For the reasons set forth herein, the Board erred when it invalidated claims based upon both the Dumais reference and the Kircher-Krug combination.

I. The Board's Conclusions Are Based Upon an Erroneous Claim Construction That Renders Superfluous the "*Cognate*" Limitation.

The **first** legal error the Board made was its implicit adoption of an erroneous claim construction that collapsed two separate components in the '217 Patent, rendering superfluous the "*cognate*" limitation present in every challenged claim.

Every claim of the '217 Patent requires "*identify[ing] at least one other of the plurality of users [1] that is a recipient of the piece of electronic content **and** [2] that is cognate to the user.*" The plain and ordinary meaning of the claim language, confirmed by the specification, is that the "*cognate*" limitation (requiring that the second user must share some similarity with the first user) is **in addition to**, or **distinct** from, the "*recipient*" limitation. In other words, the similarity that makes users "*cognate*" cannot be solely that they are "*a recipient*" of the same, singular piece of content being scored. Nevertheless, the Board erroneously collapsed the two distinct limitations, finding that, in Dumais and Krug, simply "using" or "accessing" a piece of content simultaneously makes users **both** "*recipients*" **and** "*cognate*."

A. Standard of Review: Governing Claim Construction Principles.

The Federal Circuit has repeatedly held that claims should not be construed so as to render any claim term "void, meaningless, or superfluous." *Wasica Fin. GmbH v. Cont'l Auto. Sys., Inc.*, 853 F.3d 1272, 1288 n.10 (Fed.Cir.2017); *Bicon*,

Inc. v. Straumann Co., 441 F.3d 945, 950 (Fed.Cir.2006); accord *Samsung Elecs. Co., Ltd. v. Promos Techs., Inc.*, No. IPR2017-01412, 2017 WL 4861943, at *5 (P.T.A.B. Oct. 25, 2017). In addition, when “[w]here a claim lists elements separately, the clear implication of the claim language is that those elements are distinct components.” *Becton, Dickinson & Co. v. Tyco Healthcare Group, LP*, 616 F.3d 1249, 1254 (Fed.Cir.2010); *Kyocera Senco Indus. Tools Inc. v. Intl. Trade Commn.*, 22 F.4th 1369, 1382 (Fed.Cir.2022); accord *Ex Parte Xionghui He, et al.*, No. APPEAL 2023-001189, 2023 WL 6307411, at *3–4 (P.T.A.B. Sept. 27, 2023).

B. “Cognate” Is a **Distinct** Requirement from the “Recipient” Limitation.

Here, the plain and ordinary meaning is that the “*recipient*” limitation is distinct from the “*cognate*” limitation. As in *Becton*, the two limitations are connected by the word “and,” demonstrating that the “*cognate*” limitation is a separate requirement from the “*recipient*” limitation. 616 F.3d at 1254-55. Both parties and the Board have recognized this plain and ordinary meaning. *E.g.*, Resp., 1 (“the ‘*identifying*’ step requires a second ‘*user*’ that is **both**” “*cognate to the [first] user*” **and** “*a recipient*”); Tr. (Paper 53), 16:8-11 (“How is it the case that, if you’ve satisfied the recipient portion...that means you necessarily have satisfied the cognate feature..., how is that not collapsing those two features into one?”) & *id.* at 16:12-17:7 (arguing it is not “collapsing” because “people can be part of multiple groups” – e.g., (1) a group of women **and also** (2) people who “received similar content”).

The specification also shows the distinctness of the two limitations. **First**, it distinguishes between (1) the category of **all** “*recipients*” and (2) the **distinct** category of users in a “*cognate*” group. For example, it states that “global relevance” is the “relevance score for a piece of content respective to **the entire system**” (i.e., what did **all other users** do with a piece of content), whereas “cognate relevance” is a distinct concept: “a relevance score for a piece of content” based only upon users in “the cognate group for that recipient” (i.e., what did **the people most similar to the first user** do with the item). EX1001,25:59-64 & 26:11-15; Resp.,11-14 (citing EX2029,¶¶88-96). **Second**, the specification states that the actions of the first user’s “*cognate*” group are **more helpful** than the actions of every “*recipient*” of that piece of content. Resp.,10 (quoting EX1001, 14:59-15:11). **Third**, the specification states that each user’s “*cognate*” group considers historical interactions (plural) **over time**: “for each user, **over time**, the system may identify a cognate group of the *n* other users **regarded as most similar**”; “[s]uch a group may be defined by similar past user actions and assessments” (plural). *See id.* This is undisputed. *See* Pet.,19 (“‘*identify[ing]*’ cognate users are based on past user actions and assessments”); FWD,12 (noting that parties’ “constructions overlap” in requiring that “cognate” users share “similar past user actions and assessments” (or similar direct input)). Thus, to be “*cognate*” based upon actions, there must be shared “historical” pattern of behavior, not just being “*a recipient*” of the singular piece of content being scored.

C. The Board Implicitly Adopted a Claim Construction That Renders the “Cognate” Limitation Superfluous.

In analyzing Dumais, the Board found that Dumais' use of collaborative filtering to create a “user model” satisfies the “*identify*...” limitation because Dumais analyzes “similarities” between users, which can be based on “usage of items,” and “items” can be “emails” (i.e., sent content). FWD,23-24. The Board found that two users that “interact[ed] with the same data item ... would be grouped,” and therefore “the members of the cognate ‘group’ are also a ‘*recipient*’ of the content.” *Id.* at 26; *id.* (“Petitioner’s explanation meets both the ‘recipient’ and ‘cognate’ aspects”).

Similarly, in analyzing Krug, the Board found that found that Krug can form a “user group” of “all users who access a specific object,” and the Board found that that “user group” satisfies both the “*recipient*” and “*cognate*” requirements simultaneously. FWD,44-45 (that grouping “identif[ies]” “users,” making the “identified other user both ‘a recipient of the piece of electronic content and... cognate to the user.’”). The Board reasoned that, “because the user and the other user are grouped based on commonly accessing the same object, both users have received the same content and are also cognate to each other (based on common access).”

The Board’s findings are legally erroneous because they render superfluous the “*cognate*” requirement present in every claim. Under the Board’s interpretation, when two users in Dumais or Krug “use” or “access” the same piece of content, that automatically makes the two users **both** “*recipients*” and “*cognate*.” But if the Board

is correct – i.e., if shared use/access to the single piece of content being scored alone makes users “*cognate*” – then the “*cognate*” requirement adds nothing beyond the “*recipient*” requirement. Every “*recipient*” of that piece of content would **always**, and **automatically**, be “*cognate*” to every other “*recipient*.” The Board’s interpretation is legally erroneous and not supported by substantial evidence because it (1) renders the “*cognate*” limitation superfluous, *Wasica*, 853 F.3d at 1288 n.10; and (2) fails to treat separately listed elements as distinct. *Becton*, 616 F.3d 1249.

Importantly, if the “*cognate*” and “*recipient*” limitations are properly interpreted as distinct requirements (as they should have been), neither *Dumais* nor *Krug* teach or suggest the limitation. *See Resp.*, 33 & 51-52. Therefore, Patent Owner (“PO”) respectfully requests the Director reverse the Board’s decision.

II. The Board Misconstrued the Claims When It Found That *Dumais*’ “User Model” and *Krug*’s “User Groups” Satisfy the “*Identify...*” Limitation.

The **second** error the Board made was that it ignored that the ‘217 Patent claims require a particular sequence of events. The ‘217 Patent requires “*identify[ing]*” “*a recipient*” **of a particular piece of content** (the content being scored for the first user) and another user that has a “*cognate*” relationship **to a particular user** (the first user for which a score is being determined). As a result, in the claimed invention, one cannot “*identify*” the other user until it knows **both** (1) “**the**...content” being scored and (2) “**the** user” for which the content is being scored. Despite this plain and ordinary meaning, the Board found that *Dumais*’ “user model”

and Krug's "user groups" satisfy the "*identify...*" limitation, even though **neither** has **both** pieces of information when they form their user model/group.

A. To "Identify" a Second "Recipient" That Is "Cognate to" "The [First] User," the '217 Patent Must Know (1) the Specific Piece of Content Being Scored and (2) the Specific User for Which the Content Is Being Scored.

The "*identify...*" limitation present in every claim must be understood in the context of the claim language that precedes it. **First**, "*identify[ing] ... a recipient of the piece of electronic content*" refers to a **specific** piece of content: the piece of content from in the preamble. EX1001, Claims, Preamble ("*system for determining a relevance score of a piece of electronic content sent from a sender to a user*"). **Second**, "*cognate to the user*" refers to being "*cognate*" to a **specific** user: the "user" from the preamble, for whom relevancy is being determined. *Id.* ("*determining a relevance score*" for "*content sent from a sender to a user, the relevance score determined with respect to the user*"; accord FWD,¹³ ("the identified other user [must be] cognate **specifically to the user whose relevance score is being determined**"). Thus, this second user being "*identif[ied]*" (1) must be "*a recipient*" of the **specific** piece of content (i.e., the content being scored); and (2) must be "*cognate to*" a **specific** user (i.e., the first user for which content is being scored).

Because the "*identify*" limitation relates to a **specific** user and a **specific** piece of content, the "*other*" "*user*" cannot be "*identif[ied]*" until it is known: (1) which piece of content is being scored and (2) which user the content is being scored for.

The “John’s email” example in the ‘217 Patent highlights this sequencing. *See* EX1001, 26:62-27:65. In the example, John sends an email to Sue, Harry, and Chris, and the system then determines relevance of John’s email for Sue, Harry, and Chris (i.e., for each “*recipient*”). *Id.* In the example, “John sends an electronic mail object to Sue” and, “[s]ubsequently,” the system “initiates a batch cognate relevance recalculation for Sue, and so calculates the first cognate relevance value for this ... object.” EX1001, 27: 3-8. The example highlights that the “*identify*” step cannot happen until after the system knows both (1) “the piece” of content being scored (i.e., John’s email has appeared in inboxes and needs to be scored); and also (2) “the user” it needs to be scored for (i.e., it needs it to be scored for Sue).

B. Dumais’ “User Models” Are Formed Before “*The Piece of ... Content*” Being Scored Is Known and, Therefore, Dumais’ “User Models” Cannot “*Identify*” a Second “*User*” That Received “*The Piece of ... Content*.”

The Board found that, when Dumais creates a user model, it “*identif[ies]*” another “*recipient*” that is also “*cognate to the [first] user*.” That finding was erroneous because Dumais creates its user model before it is known which item needs to be scored. This is because Dumais’ focus is on how data is retrieved in response to a search, and items in Dumais only need to be scored once search results are returned. EX1006, Abstract; EX2029, ¶100. For example, Dumais states that, after the first user runs a search that returns initial results, its “user model” can be used to “modify” (or re-score) the list of search results. EX1006, [0041]. This

demonstrates that Dumais' "user model" was built **before** the scoring phase – i.e., **before** the search is run and, thus, before system knows "the" item being scored.

Applying the '217 Patent's "John's email" example to Dumais, assume that Dumais creates a "user model" for Sue. When Dumais creates that user model, Sue has not yet run any search and, therefore, Dumais **does not yet know** whether "John's email" will be an "item" that needs to be scored for Sue. Therefore, when Dumais creates its "user model" for Sue, it cannot "*identify*" who else "*is a recipient of the piece of...content*" being scored for Sue. The Board erred when it found that creating a user model in Dumais "*identifies*" other "*recipients*" **of "the piece of electronic content"** being scored because "the piece of ... content" is unknown when Dumais' user models are formed. See Resp., 51-52 (Dumais does not "*identify*" a "*cognate*" "*user*" that is **also** "*a recipient*" of "the piece of...content").

C. Krug's "User Groups" Are Formed Before "The [First] User" Is Known and, Therefore, Krug's "User Groups" Cannot "Identify" a Second "User" That Is "Cognate to" "The [First] User."

The Board found that, when Krug creates a "user group" of users that accessed an object, Krug "*identifies*" another "*recipient*" that is also "*cognate to the [first] user*." That finding was erroneous because Krug's "user groups" are created **before** Krug knows who is doing the searching (i.e., **before** it knows the "first user" that the objects need to be scored for). Krug, like Dumais, is centered on a user's search query. EX1008, Abstract; EX2029, ¶157. In Krug, the first user searching "can select

the profile of a user group” “to rate the relevance of the objects.” EX1008, [0031]. That “user group,” however, is formed **before** the pairing happens (and, therefore, before the “first user” is known). Because the first user is unknown, Krug’s creation of a “user group” cannot “*identify*” another user “*cognate to the [first] user.*”

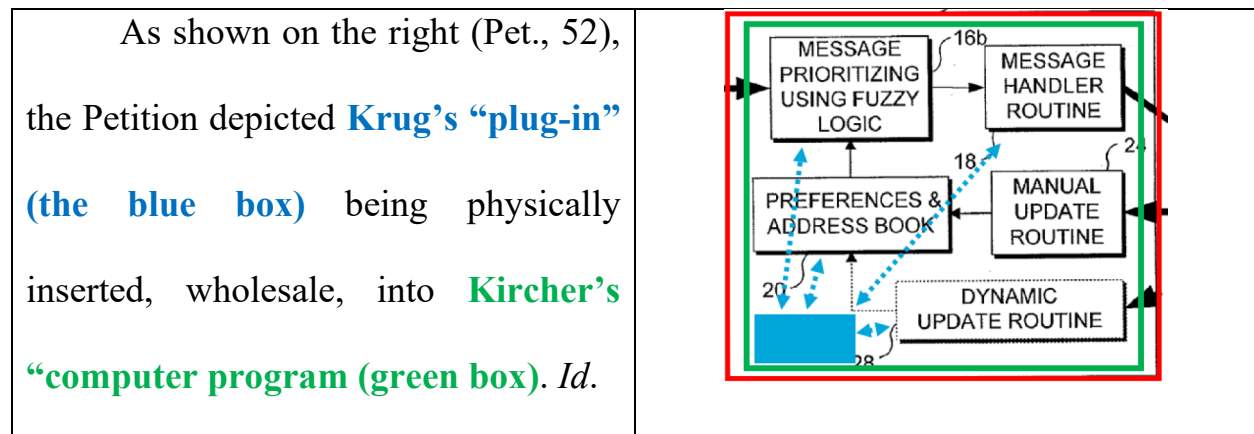
To analogize to the “John’s email” example in the ‘217 Patent, assume that John creates a website¹ that Sue, Harry, and Chris all visit. Assume, *arguendo*, that Krug can create a “user group” of users that accessed that singular object (John’s website). Critically, when Krug creates a “user group” of users that accessed John’s website, Krug **does not yet know** the identity of the first user doing the searching. That is because, in Krug, it is only **after** a user actually selects a “user group” for searching that the identity of the “first user” is known. For example, Sue could select the “user group” of users that accessed John’s website to rate the relevance of the objects in her search results. But it is not until Sue actually chooses to search using that “user group” that the identity of the “first user” (Sue) becomes known. Therefore, when Krug forms a “user group” of all users that accessed John’s website, it does not yet know that Sue would be the “first user” and, therefore, could not “*identify*” users that are “**cognate to**” Sue. See Resp., 33. Because “**the [first] user**” is unknown when Krug’s user groups are formed, the Board erred when it found that Krug’s “user group” “*identif[ies]*” other users that are “*cognate to the [first] user.*”

¹ Krug does not apply to “sent” items (e.g., emails). EX1008.

III. The Board's Finding on Inoperability in Kircher-Krug Is Erroneous Because It Is Based upon a Combination Not Included in the Petition.

The third error the Board made is that the Board invalidated claims based upon a combination of Kircher and Krug that (1) was **not** included in the Petition and, furthermore, (2) has never been articulated. This is another legal error.

The Kircher-Krug combination articulated in the Petition inserted Krug's "software program" as a "plug-in" into Kircher. Pet., 52. The Petition states: "It would have been a matter of simple substitution to include the plug-in that embodies Krug (**Blue**) ... into Kircher's 'computer program' (**Green**).” Pet., 52.



Id. The Petition did **not** propose modifying Krug's "software program"; instead, it stated that its combination would keep **Krug's** "program" (*id.*, 50), as well as Krug's "known elements" and "known functions" (*id.*, 52), Krug's "numerical rankings" (*id.*, 53), and Krug's "relevance measurement and ranking system." *Id.*, 52.

But there was a problem with "plug-in" combination advanced in the Petition: it would not work. Resp., 34-37 (citing EX2029, ¶¶212-223). This is because Krug's "plug-in" is designed for "Internet browser[s]" (see **EX1008**, [0099]), and Kircher's

electronic message system (EX1007) is not an Internet browser. Even more problematically, Krug uses an **algorithm** that uses results from **search engines** on Internet browsers (e.g., how an object was ranked by, e.g., Netscape, etc.). *See* Resp.,34-37 (citing **EX2029**,¶¶118-121&215-223); EX1008, [0043] (“weigh the results of the individual search engines”); *id.* [0098]; *id.* [0115]. But Kircher’s emails would **never** appear in lists of results from “search engines” on Internet browsers. As a result, if Krug’s “software program” were inserted into Kircher’s email system as a “plug-in,” the algorithm would fail, rendering the combination inoperable.

In its Reply, Petitioner changed its tune, advancing an **altogether different** combination, in which (1) Krug’s “functions” and “criteria” would be **modified**; (2) Krug’s “plug-in” would **not** be inserted “physically” into Kircher; and (3) the combination could be moved into a webmail/email-based “browser.” Reply,11-13; Sur-Reply,11-12. But that is not what the Petition argued. Pet.,50-56. Because this new combination was asserted for the first time in Petitioner’s Reply, it was improper. *See* Sur-Reply, 11-12. Nevertheless, the Board embraced the new combination that Petitioner advanced for the first time on Reply. *See* FWD, 38 (PHOSITA “would have considered **which** of Krug’s...criteria” would be incorporated “into Kircher[.]”). That was legal error. *See Koninklijke Philips N.V. v. Google LLC*, 948 F.3d 1330, 1337 (Fed.Cir.2020) (Board erred by relying on combination not raised in the petition); *Intelligent Bio-Sys., Inc. v. Illumina*

Cambridge Ltd., 821 F.3d 1359, 1369–70 (Fed.Cir.2016) (Board did not err in refusing to consider the reply brief where Petitioner “chose not to assert this new” ground of invalidity in its petition); 35 U.S.C. § 312(a)(3) (petition must “identif[y], in writing and **with particularity**,...the grounds on which the challenge to each claim is based”); 37 C.F.R. § 42.104(b)(4) (Petition must include “precise” statement of challenge); 37 C.F.R. §42.23(b) (“A reply may only respond to arguments raised in the corresponding ... patent owner response.”); PTAB CTPG, 42 (Nov. 2019) (“Petitioner may not submit new evidence or argument in reply that it could have presented earlier,” (e.g., a “newly raised rationale to combine”); a reply “that raises a new issue or belatedly presents evidence **may not be considered**”).

In addition, the Board also committed a **second** error when it permitted a combination to invalidate the claims even though the particulars of the combination were **never articulated**. Indeed, Petitioner and the Board seem to acknowledge that parts of Krug’s “plug-in” would be discarded (FWD, 37; Reply), but they do not indicate **which portions** of Krug’s program would be discarded or what they would be replaced with (if anything). The Board found that any modifications would be “simple” because both systems are “software applications.” FWD,37-38. But, certainly, the mere fact that two systems are software-based does not establish that functionality from one system can be transferred to the other without substantial redesign or modification. The Board’s states that a PHOSITA “would have been able

to address the technical details,” FWD,37, but those “details” remain a mystery. It is **never explained** how a POSA could successfully combine Krug’s browser functions into Kircher’s email system while preserving the intended operations of both.

In sum, the Board erred when it invalidated claims based upon a combination that (1) was **not** in the Petition (2) was never described with particularity.

IV. The Board’s Decision Is Not Supported by Substantial Evidence Because It Arbitrarily & Capriciously Ignored the Cited Evidence of Diligence.

The Board’s **fourth** error is its finding that PO had not carried its burden of production on diligence. The finding is not supported by substantial evidence because the Board refused to consider PO’s properly submitted evidence.

PO’s Response cited EX2003-14 and EX2032-78 as containing evidence showing diligence during the critical period. *See* Resp., 6 & 46. The Response also explained “the significance” of the material, explaining that the cited Exhibits “show reasonable diligence” and “corroborate the inventors’ testimony regarding diligence.” *Id.*; 37 C.F.R. § 42.22. Although PO did not include “pinpoint citations” to specific pages from each Exhibit, doing so would not make sense because, for each of the diligence exhibits, it is the **entire** Exhibit (along with its metadata) that shows the inventors worked on the invention on particular dates of the critical period. Moreover, PO provided a metadata slipsheet at the end of each Exhibit, confirming that **34 cited Exhibits** were “last modified” during the critical period (in August, September, October, and November 2005). *See* EX2007-13, EX2032-39, EX2056-

74; *see also* Resp., vi.-x (Table of Contents with dates from metadata). The Board knew that PO had provided this metadata. *See* FWD,18 (citing PO's "metadata" provided for EX2051). Thus, its finding that that PO's exhibits were "undated" (FWD,18) is also erroneous. In any event, the Board did not consider **a single one** of PO's 34 Exhibits that show diligence during the critical period. FWD,17 (declining to "sift through" PO's cited diligence evidence). In addition, the Board refused to consider the declarations of Justin and Paul Marston, even though PO's Response cited and described them. *See* Resp., 6 & 46 (citing EX2003, EX2030, EX2031). These inventor declarations not only provide testimony regarding the inventors' diligence activities, but they also describe in detail the corroborating evidence, including the 34 diligence Exhibits. *See* EX2003, EX2050, EX2051.

The Board erred when it refused to consider PO's voluminous evidence of diligence. *See, e.g., Aqua Prods., Inc. v. Matal*, 872 F.3d 1290, 1325 (Fed.Cir.2017) (FWD "must be based on *the entirety* of the record"; "refusal to consider evidence bearing on the issue before it is, by definition, arbitrary and capricious" (citing 5 U.S.C. § 706)); *Princeton Vanguard LLC v. Frito-Lay N. Am. Inc.*, 786 F.3d 960, 970 (Fed.Cir.2015) ("[S]ubstantial evidence review 'requires an examination of the record as a whole'"); *Netflix, Inc. v. DivX, LLC*, 84 F.4th 1371, 1377 (Fed.Cir.2023); *cf.* PTAB CTPG, I(M). Moreover, the *Parus* decision that the Board relied upon (FWD, 14 & 16) is distinguishable because, there, the party **did "not dispute"** that it

incorporated arguments by reference.” *Parus Holdings, Inc. v. Google LLC*, 70 F.4th 1365, 1370 (Fed.Cir.2023). In contrast, here, PO’s Response cited the specific diligence Exhibits and explained their significance. The Board erred when it refused to consider this evidence showing diligence during the critical period.

The Board also committed a **second** error when it refused to consider proper argument and citation in PO’s Sur-Reply. In response to Petitioner’s argument that PO had not described the evidence “with specificity” (Reply, 18), PO’s Sur-Reply provided additional descriptions of the diligence evidence, explaining the evidence shows the inventors’ time spent on particular documents² (Sur-Reply,23 (citing EX2030,¶¶17,34,47)); the activities during an alleged “gap” (*id.*,24 (citing EX2030,¶¶7-12; EX2041,2-5; EX2042,3-4; EX1066; EX2031,¶10)); and specific inventor communications about the patent application (*id.*,24-25 (citing EX2053-54, EX2051, EX1044,92 & EX2044; EX2030,¶8 & EX2031,¶17)). Sur-Reply, 23. Once again, however, the Board refused to consider the evidence, finding the descriptions “untimely.” FWD, 18. That finding was erroneous. *See* 37 CFR § 42.23(b) (sur-replies may “respond to arguments raised in the corresponding reply”).

² The Board erred in finding that PO had not cited “non-testimonial evidence corroborating” the Marstons’ testimony about the 108 hours spent. FWD,18. To the contrary, the Response cited EX2007-08, EX2010, and EX2013 (Resp.,6), which are the Exhibits the Marstons testified that they spent those hours on. *See* Sur-Reply,23 (citing EX2030,¶¶17,34,47); EX2030, ¶17 (describing time spent on EX2007), *id.* ¶ 34 (describing time spent on EX2008 & EX2010), *id.* ¶47 (time preparing EX2013).

Respectfully submitted,

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CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. 42.6(e), I certify that on this 9th day of July, 2026, a true and correct copy of the foregoing **Patent Owner's Request for Director Review** was served by electronic mail on Petitioner's lead and backup counsel at the following addresses:

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