

Sterling's '217 Patent Is Patentable Over the Art

Devan Padmanabhan

Britta Loftus

Preamble

1. A computer-implemented system for determining a relevance score of a piece of electronic content sent from a sender to a user, the relevance score determined with respect to the user, the computer-implemented system comprising:

- The '217 Patent claims “determine” “a relevance score.”
- It is “determining a relevance score” with regard to “a piece of electronic content.”
- The content for which relevance is being determined is “sent from a sender to a user.”
- The relevance score of the piece of electronic content is determined “with respect to the [first] user” – i.e., the person to whom the piece of electronic content was sent by a sender.

Resp. (Paper 17), at 6-9

1st two elements –
computer requirements
a computer processor;
and
a computer-readable
storage medium
storing computer
program modules
configured to execute
on the computer
processor, the
computer program
modules comprising:

- The claimed computer-implemented system requires a computer processor.
- And a computer-readable storage medium to store the program modules.
- These program modules are configured to execute on the computer processor – making it clear that these modules are computer code. EX2029, ¶¶28-48.

Resp. (Paper 17), at 6-9

1st computer program module

a monitoring module
configured to track
actions by a plurality
of **users** associated
with an application
for managing
electronic content;

- The first computer program module claimed is the monitoring module.
- This module is configured to track the actions of a plurality of users associated with the application.
- So, there is the **first user** – who is sent the piece of electronic content and for who relevance is being determined – and **other users**.

Resp. (Paper 17), at 6-9

2nd Computer Program Module

a first relevance measurement module coupled to the monitoring module and configured to determine a first measure of relevance of **the piece of electronic content** based at least in part on one or more actions of **the user** on **the piece of electronic content**;

- The 2nd computer program module is a first relevance measurement module.
- The piece of electronic content was the one a sender sent.
- The user is a recipient of that content and is the user for whom the relevance for this piece of content is being determined.

Resp. (Paper 17), at 6-9

3rd Computer Program Module
a second relevance measurement module coupled to the monitoring module and configured to:

- The 3rd computer program module is a second relevance measurement module.
- It is configured to do two things under this claim.

Resp. (Paper 17), at 6-9

3rd Computer Program Module

identify at least one other of the plurality of users that is a recipient of the piece of electronic content and that is cognate to the user, and

- The first thing the 3rd computer program module is configured to do is “identify” another user that is BOTH:
 - a recipient of the piece of electronic content; AND
 - is cognate to the first user.
- The electronic piece of content that is received by the recipient is the same piece of electronic content for which relevance is being determined.
- This module identifies a second user that is cognate to the first user – the one who was sent the content and for whom relevance of the content is being determined.

Resp. (Paper 17), at 6-9

Role of “Identify[ing]” Another “Recipient”

Reasons to identify another “recipient” of “the piece of electronic content”:

- The actions of other “recipients” can help determine “the relevance of content in a given user’s folders.” Ex. 1001, 12:27-30.
- When determining “the relevance value seen by the recipient,” the system considers “the actions of all other recipients.” Ex. 1001, 33-41; Ex. 2029, ¶83.
- The ‘217 Patent teaches that “[a]s to communal filtering, this mechanism may **use the behavior of other recipients** of a given piece of content to determine the content’s relevance to the user in question – communal relevance.” Ex. 1001, 43:61-64; Ex. 2029, ¶86.

Resp. (Paper 17), at 9-11

Padmanabhan & Dawson, P.L.L.C.

Role of “identify[ing]” another user that is “cognate” to the first user

“[T]he system may identify a cognate group of the n other users regarded as most similar.

[T]he actions of this particular group on an electronic mail object will give more indication of its relevance to the user than would a global reaction to the electronic mail.”

Ex. 1001, 14:59-15:11; Ex. 2029, ¶80.

- The ‘217 Patent describes the math to implement this insight. Ex. 2029, ¶¶88-96.
- This insight is not in any of the prior art.

Resp. (Paper 17), at 2, 4, 9-11, 52

Padmanabhan & Dawson, P.L.L.C.

Role of “identify[ing]” another user that is “cognate” to the first user

Information about users in the “cognate” group for a recipient is used to calculate values including:

- Cognate relevance value
- Cognate importance value
- Local relevance

Ex. 1001, 25:37-26:52; 29:59-30:15; 36:33-41; 42:64-44:3; 43:4-7. Ex. 2029, ¶¶ 81-85.

Resp. (Paper 17), at 9-11

Padmanabhan & Dawson, P.L.L.C.

3rd Computer Program Module

determine a second measure of relevance of **the piece of electronic content** as based at least in part on one or more measures derived from the group consisting of:

a local importance describing an importance of **the sender** to **the user**,

a global importance describing an importance of **the sender** within an organization with which the plurality of **users** are associated,

a content relevance determined responsive to content of **the piece of electronic content**, and

one or more actions on **the piece of electronic content** of the at least one other of the plurality of **users** that is a **recipient** of **the piece of electronic content** and that is **cognate** to **the user**; and

- The second thing the 3rd computer program module is configured to do is determine a second measure of relevance.
- The various measures all tie to the piece of electronic content sent by a sender to the first user.
- One measure specific to the second user that is recipient of the piece of electronic content AND is cognate to the first user.

Resp. (Paper 17), at 6-9

Padmanabhan & Dawson, P.L.L.C.

11

4th Computer Program Module

a relevance analysis module configured to determine the relevance score of the piece of electronic content sent from the sender to the user, the relevance score being determined based at least in part on the first determined measure of relevance and on the second determined measure of relevance.

- The 4th computer program module is a relevance analysis module that determines the relevance score for the piece of electronic content “sent from the sender to the user.”
- It is calculated based on the 1st and 2nd measures of relevance.

Resp. (Paper 17), at 6-9

Prior Art Does Not Disclose or Suggest the Claimed Algorithm for Relevance

Dumais' Algorithm

- A search and retrieval system that uses:
 - a user model – based on user activity or interaction data – to
 - modify the query
 - used to do an initial search
 - used on results returned from the initial search.

Ex. 1006, Dumais, ¶ 40.

What's not disclosed in Dumais:

- Dumais is not in the context in which relevance is being determined on content that is “sent from a sender to a user.”
- Dumais does **not** identify a second user “cognate” to the first user that also received the electronic content for which relevance is being determined.
- Dumais' use of collaborative filtering to develop a user model: does **not** identify a second user “cognate” to the first user that also received the electronic content for which relevance is being determined.

Resp. (Paper 17), at 48-53

Prior Art Does Not Disclose or Suggest the Claimed Algorithm for Relevance

Kircher's Algorithm

- criteria relating to the sender
- content of the message
- personalization of the message

What's missing from Kircher?

- Numerous elements are missing, but, in terms of its relevance algorithm:
 - Kircher does not use “actions of the user” “on the piece of electronic content” to “determine a first measure of relevance of the piece of electronic content.”; and
 - Kircher does not identify a second user “cognate” to the first user that also received the message for which relevance is being determined.

Resp. (Paper 17), at 28-29 (citing EX2029, ¶¶191-198) & 39 (citing EX2029, ¶¶191-201); EX2029, ¶¶191-201

Padmanabhan & Dawson, P.L.L.C.

Prior Art Does Not Disclose or Suggest the Claimed Algorithm for Relevance

Petitioner proposes to add Krug's Algorithm to Kircher

- In Krug's algorithm:
 - the user doing the search is identified
 - a user profile associated with the user conducting the search is used
 - object profiles are compared to the user profile

What's not disclosed in Krug

- Krug is not in the context in which relevance is being determined on content that is "sent from a sender to a user."
- Krug does not "identify" a second user that is "cognate" to the first user and also received the message for which relevancy is being determined.

Resp. (Paper 17), at 30-34 (citing EX2029, ¶¶168-190)

Padmanabhan & Dawson, P.L.L.C.

“Computer Program Module” Terms

- The following claim terms do not invoke Section 112, ¶6:
 - “a monitoring module”
 - “a first relevance measurement module”
 - “a second relevance measurement module”
 - “a relevance analysis module”
 - “content presentation module”
 - “search module”
- The Board’s preliminary determination that these terms do not invoke Section 112, ¶6 is correct.
- As an initial matter – the “module” terms are presumed to not invoke Section 112, ¶6.
 - The claims do not recite “means for” language.

Resp. (Paper 17), at 15-18 (citing EX2029, ¶¶26-48)

Padmanabhan & Dawson, P.L.L.C.

“Computer Program Module” Terms

- The claims introduce the “module” terms with the following language, which connote structure (software instructions) to a POSA:
 - “a computer-readable storage medium storing computer program modules configured to execute on the computer processor, the computer program modules comprising:”
- Software instructions are stored on a computer-readable storage medium.
- Software instructions are “execute[d] on a computer processor.”

Resp. (Paper 17), at 15-18 (citing EX2029, ¶¶26-48)

Padmanabhan & Dawson, P.L.L.C.

“Computer Program Module” Terms

- Specification defines “module” as “any program, circuitry, logic, and/or functionality implemented in either software and/or hardware.” Ex. 1001, 6:36-38.
 - Given the claim language,
 - “modules” per this definition are software instructions.
- “[T]he functionality . . . of the modules . . . may be . . . carried out in response to one or more processors executing software instructions stored on the computer-readable medium.” Ex. 1001, 7:2-12.

Resp. (Paper 17), at 16 n. 4 & EX2029, ¶¶26-48

Padmanabhan & Dawson, P.L.L.C.

“Computer Program Module” Terms

- Dyfan and Zeroclick establish that software instructions are structure:
 - Zeroclick - holding that words in a claim giving context to the disputed word can indicate the structure of the disputed word
 - “graphical user interface” providing a basis for a POSA to understand it was structure – i.e., code.
 - *Zeroclick v. Apple*, 891 F.3d 1003, 1008 (Fed. Cir. 2018).
 - Dyfan - “Intrinsic evidence, such as the claims themselves and the prosecution history, can be informative in determining whether the disputed claim language recites sufficiently definite structure or was intended to invoke § 112 ¶ 6.”
 - *Dyfan v. Target*, 28 F.4th 1360, 1365-66 (Fed. Cir. 2022).

Resp. (Paper 17), at 15-18 (citing EX2029, ¶¶26-48)

Padmanabhan & Dawson, P.L.L.C.

19

“cognate to the user”

- Contrary to the Board’s understanding, as reflected in the Institution Decision, Patent Owner is **not** seeking to impose the following two requirements on the term “cognate”:
 - that the “cognate” limitation “requires that the other users’ past user actions and assessments must be tracked for the same electronic content as the user received” (Decision, at 15); or
 - that the “cognate to the user” limitation requires that the past users’ actions must be used to determine a relevance score for that same electronic content (Decision, at 15).
- Respectfully, both are not correct.

Resp. (Paper 17), at 18-21

“cognate to the user”

- The Board construed “cognate to the user” to mean:
 - “identifying at least one user in a group of other users who share similar past user actions and assessments, and/or are defined by direct input by the user.”
Decision, at 15.
- This construction ignores that the claim requires that the second user must “share similar past user actions and assessments” (or the same direct input) **with a particular other user** – i.e., the first user for which relevancy is being determined.
 - Claim language is “cognate **to the [first] user.**”

Resp. (Paper 17), at 18-21

“cognate to the user”

- To give meaning to the full phrase being construed, the term “cognate to the user” should be construed as follows:
 - “identifying at least one user in a group of other users who share similar past user actions and assessments as the first user and/or are ~~defined by~~ share similar direct input by as the first user.”

Resp. (Paper 17), at 18-21

Padmanabhan & Dawson, P.L.L.C.

“a recipient”

- “a recipient” in the claim phrase “a recipient of the piece of electronic content” should be construed to mean:
 - a “user” that has received electronic content “sent from a sender.”
- The claim language supports this construction:
 - “A computer-implemented system for determining a relevance score of a piece of electronic content sent from a sender to a user, the relevance score determined with respect to the user”
 - “identify at least one other of the plurality of users that is a recipient of the piece of electronic content and that is cognate to the user”
 - EX1001, claim 1.

Resp. (Paper 17), at 21-22 (citing EX2029, ¶¶133 & 170).

Padmanabhan & Dawson, P.L.L.C.

23

“a recipient”

Ex. 2029, ¶133.
Specification supports
the construction

133. It is apparent that Dr. Houh is defining “*recipient*” to be any user that “interact[ed]” with, or “used,” a data item. EX1004, ¶¶ 245, 247. That definition is incorrect. A POSA would understand that, in the ‘217 Patent, “*a recipient*” is another user that received a piece of sent electronic content from a sender. EX1001, at 2:26-28 (“an electronic mail object may be sent to external recipients”); EX1001, at 5:1-2 (same); EX1001, at 5:3-5 (“a user ... sends ... to recipients”); EX1001, at 5:12-14); EX1001, at 5:21-23); EX1001, at 10:15-18 (discussing whether a user was “one of fifty other recipients” or “the sole recipient”). Thus, a POSA would understand that, in the ‘217 Patent, a “*recipient*” is a user that received a sent piece of electronic content from a sender; not just any user that interacted with, or used, a piece of electronic content.

Resp. (Paper 17), at 21-22 (citing EX2029, ¶¶133 & 170).

Padmanabhan & Dawson, P.L.L.C.

“a recipient”

- Petitioner’s construction of “recipient”:
 - any “user” that “access[ed],” “interact[ed] with,” or “used,” a piece of electronic content. Ex. 1004, ¶¶245, 247, 505
- This construction is incorrect.
 - The claims and the specification make clear that the “recipient” is not just a “user” that interacted with, used, or looked at content – but instead **MUST** be a “user” that actually **received** the piece of electronic content **sent** from a **sender**.

Resp. (Paper 17), at 21-22 (citing EX2029, ¶¶133 & 170).

Padmanabhan & Dawson, P.L.L.C.

Petitioner's Kircher-Krug Combination Fails to Render Obvious Any Claim

Kircher

- Kircher's ranking algorithm is based on what actions the recipient took. Also, considers:
 - sender importance
 - degree of personalization
 - content importance

Ex. 1007, ¶¶53, 14, 16-18.

Elements Missing in Kircher

- In addition to other limitations missing from Kircher, in determining the relevance of a piece of electronic content, Kircher does **not**:
 - Consider the actions of other users on the same electronic content
 - Identify a second user that both receives the same electronic content and is cognate to the first user that received the electronic content.

Resp. (Paper 17), at 28-29 (citing EX2029, ¶¶191-198)

Padmanabhan & Dawson, P.L.L.C.

Petitioner's Kircher-Krug Combination Fails to Render Obvious Any Claim

Krug

- In Krug, relevance is determined by calculating the Euclidean distance between:
 - object profiles (a model of the typical user of an object); and
 - user profiles describing the user's characteristic properties (e.g., gender).
 - Ex. 1008, ¶¶11, 16, 22.
- Group profile is “an average user profile of the group.” Ex. 1008, ¶56.
- Individual user may be assigned to a group profile or select one for use in a search.

Elements Missing in Krug

- Krug does not identify a second user that **both**:
 - received the same electronic content as the first user doing the searching (i.e., the user for which relevancy is being determined); **and also**
 - has a cognate relationship to the first user.
- This aspect of the claimed invention is not recognized or used as part of the analysis for the relevance determination in Krug.

Resp. (Paper 17), at 26 & 30-34 (citing EX2029, ¶¶168-190)

Padmanabhan & Dawson, P.L.L.C.

27

Petitioner's Evidence on "Identify[ing]" a "Recipient" Is Insufficient

505. Krug describes how “the intrinsic value of an object can be determined separately for each user, **for a group of users, or for all users collectively for a specific object.**” *Id.*, [0027], emphasis added. Krug explains that “user groups” (*i.e.*, a cognate group) can each be “provided with their own user profile” such that the entire cognate group has a profile. *Id.*, [0031]. For example, “[t]he groups of users can be specified (for example, all women) or determined automatically (for example, **all users who access a specific object**).” *Id.* Therefore, a POSA would understand that in the combination “user groups” are a “*plurality of users that is a recipient of the piece of electronic content.*”

EX1004, ¶505.

Padmanabhan & Dawson, P.L.L.C.

Does not have the word “identify[ing].”

Does not even include “identify[ing] in the concluding sentence.

There is no evidence for finding “identify[ing]” a second user that is a recipient of **the** piece of electronic content – *i.e.*, the piece of content for which relevancy is being determined.

Resp. (Paper 17), at 30- 31

Why “Relevance” for Search Misses the Mark

- Krug is an algorithm for search on the Internet.
 - Krug does not disclose, teach, or suggest:
 - another “user” or “users” that received electronic content “sent by a sender.”
- The user groups in Krug exist so that the user doing the searching can search using a “group profile” instead of that user’s own profile.
 - In that context, there is no teaching or suggestions for the desirability of identifying a second user that received the piece of content for which relevancy is being determined.
 - As such, there is no motivation for a person of ordinary skill to add that feature to Kircher.

Resp. (Paper 17), at 26-28, 31

Padmanabhan & Dawson, P.L.L.C.

Petitioner's Evidence on "Identify" Limitation Is Insufficient

- The limitation requires "identify[ing]" a "user" that is **BOTH**:
 - "a recipient of the piece of electronic content" and **also**
 - "cognate to the [first] user."
- Petitioner points to a "user group" for "all users who access a specific object." Ex. 1004, ¶505.
- Petitioner points to a "user group" of "users who share similar past user actions assessments." Ex. 1004, ¶589.
- But, there is no disclosure for "identifying" at least one user that both accesses a specific object and is cognate to the first user.

Resp. (Paper 17), at 32-34

Padmanabhan & Dawson, P.L.L.C.

Petitioner's Evidence on "Identify" Limitation Is Insufficient

USER GROUP #1

"ALL WOMEN"
(BASED UPON THEIR
DIRECT INPUT IN
PROFILES)

Krug does not disclose, teach, or suggest "identify[ing]" at least one "user" that falls into **both** groups.

No reason Krug would do that. Krug is just providing additional profiles to use in conducting a search.

USER GROUP #2

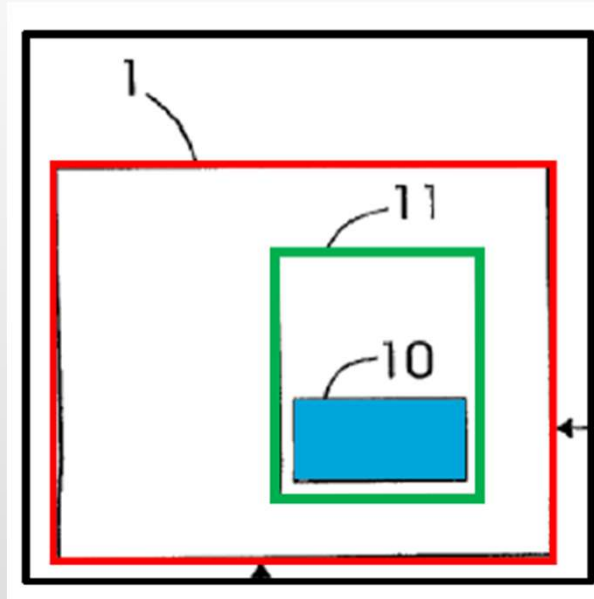
"ALL USERS THAT
ACCESSED A
PARTICULAR
OBJECT"

Resp. (Paper 17), at 32-34

Kircher Rendered Inoperable In Proposed Combo

“A software program according to the invention is installed on the user computer 1 as a **plug-in** 10 for a commercially available Internet browser 11.”

Ex. 1004, ¶ 423 (citing EX1008, ¶ 99.) .



Kircher is not an Internet browser – it is an electronic message system.

Petitioner fails address (much less analyze) how to add Krug’s “plug-in” to a **non**-Internet browser environment.

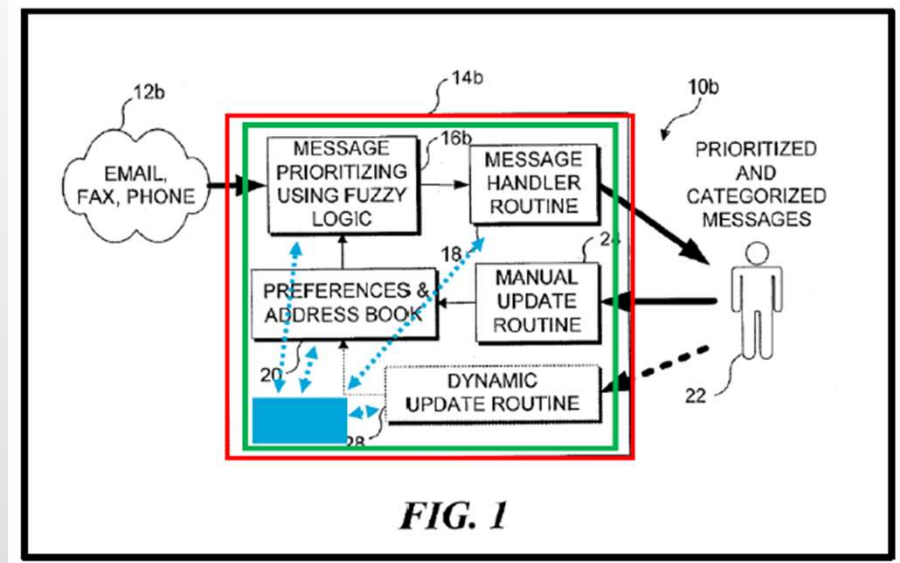
Resp. (Paper 17), at 34-37 (citing EX2029, ¶¶212-223)

Padmanabhan & Dawson, P.L.L.C.

Kircher Rendered Inoperable In Proposed Combo

427. Therefore, it would be a matter of simple substitution to include the plug-in that embodies the invention of Krug (Blue) (including its relevance measurement and ranking system) into the “computer program” (Green) of Kircher (including the fuzzy logic of Kircher), for example, as shown below.

EX1004, ¶427



Resp. (Paper 17), at 34-37 (citing EX2029, ¶¶212-223)

Padmanabhan & Dawson, P.L.L.C.

Kircher Rendered Inoperable In Proposed Combo

- Krug’s algorithm for calculating rankings uses the search engine itself. For both,
 - the initial priority (Ex. 2029, ¶¶ 215, 216); and
 - the final comparison between an object’s profile and a user’s profile (Ex. 2029, ¶220).
- In Kircher’s method, the “initial priority” weight does not exist. Ex. 2029, ¶217.
- A person of skill would understand that use of the Krug “plug-in” with the Kircher as suggested would not work:
 - Kircher is an e-mail system; and
 - “search engines do not have access to, not do they index, private email content. Therefore, search engines cannot be used to rank email messages.” Ex. 2029, ¶218.

Resp. (Paper 17), at 34-37 (citing EX2029, ¶¶212-223)

Padmanabhan & Dawson, P.L.L.C.

Kircher Rendered Inoperable In Proposed Combo

- Krug's algorithm for calculating rankings uses the search engine itself.

219. If the search engine function in Krug's invention were discarded (as it would need to be in Kircher's system), Krug's formula for calculating the initial priority of objects would no longer work.

220. Moreover, in Krug, the evaluation of the initial priority is also used in calculating the final comparison between an object's profile and a user's profile. Therefore, the final comparison also would not work.

Ex. 2029,
¶¶219, 220

Resp. (Paper 17), at 34-37 (citing EX2029, ¶¶212-223)

Padmanabhan & Dawson, P.L.L.C.

Kircher Rendered Inoperable In Proposed Combo

- Petitioner's conclusion is NOT supported by the evidence:

221. Dr. Houh does not acknowledge this problem – i.e., that Krug's formula relies upon search engines. Instead, he opines that "it would have been obvious to include the numerical rankings of Krug into the system of Kircher." EX1004, ¶ 432. That is incorrect. Krug's "numerical rankings" are based upon search engines and are, therefore, incompatible with Kircher's system.

Ex. 2029, ¶221.

Resp. (Paper 17), at 34-37 (citing EX2029, ¶¶212-223)

Padmanabhan & Dawson, P.L.L.C.

Kircher Fails to Disclose Many Claim Elements

- “a monitoring module **configured to track actions by a plurality of users** . . .”;
- “a first relevance measurement module coupled to the monitoring module and configured to determine a first measure of relevance of the piece of electronic content **based at least in part on one or more actions of the user on the piece of electronic content**”;
- “a second relevance measurement module coupled to the monitoring module”;
- “identify[ing] at least one other of the plurality of users that is a recipient of the piece of electronic content and that is cognate to the user”;
- “determine a second measure of relevance of the piece of electronic content as based at least in part on one or more measures derived from the group consisting of: a local importance . . . [or] a global importance”;
- “determine a second measure of relevance of the piece of electronic content as based at least in part on one or more measures derived from the group consisting of: . . . one or more actions on the piece of electronic content of the at least one other of the plurality of users that is a recipient of the piece of electronic content and that is cognate to the user”;
- “determin[ing] the relevance score ... based at least in part on the first determined measure of relevance”
- “the relevance score being determined based at least in part on the first determined measure of relevance and on the second determined measure of relevance”

Resp. (Paper 17), at 29 (citing EX2029, ¶¶ 191-198)

Krug Is Non-Analogous Art

- Kircher (relevance for e-mails) v. Krug (search on the Internet)
 - Managing e-mails and searching for content on the Internet are not the same field of endeavor (Ex. 2029, ¶209).
 - Search on the Internet does not relate to counteracting proliferation of spam (Ex. 2029, ¶210).
- Petitioner never explains:
 - why a POSA would look to Krug; or
 - why a POSA would select each of the “missing” features from Krug and insert them into Kircher.

Resp. (Paper 17), at 38-40 (citing EX2029, ¶¶207-210)

Padmanabhan & Dawson, P.L.L.C.

Hindsight Reasoning

- Many elements missing from Kircher.
- Borrowing those elements from Krug is not driven by the art, but rather by the claims, which is improper.

226. A POSA would expect that simple substitution of elements between Kircher and Krug may not work. On one hand, Kircher's scoring function is based on three factors (sender importance, degree of personalization, and content importance). On the other hand, Krug's scoring function is based on a number of factors such as intrinsic value of an object, distance between user profile and object profile. These two score functions are incompatible to each other-- heterogeneous in nature. Therefore, simple merging/substitution will not work.

Ex. 2029, ¶226.

Resp. (Paper 17),
at 28-34 & 39-41
(citing EX2029,
¶¶205-228)

Dumais Is NOT Prior Art

- Dumais' Priority Date is **June 29, 2005**.
- The Marstons conceived this invention before that date.

3. Paul Marston and I first conceived of the inventions in the '217 Patent at least as early as June 7, 2005.

- Ex. 2003, ¶3.
- Among other exhibits evidencing conception, Exs. 2004, 2005, 2006, and EX2049 show the work on the math and all of the claim elements. As such, the evidence demonstrates conception.

Resp. (Paper 17), at 42-48 (citing EX2003, EX2004-EX2014, EX2030, EX2031, EX2032-EX2078);
Sur-Reply (Paper 38), at 18-20 (citing EX2004, EX2006, EX2014, EX2049)

Padmanabhan & Dawson, P.L.L.C.

Diligence

- From June 2005 until the filing of the provisional, the Marstons continued to work on aspects of the disclosure.
 - Justin Marston continued to work on the TransMail, which was the product into which he intended to integrate the invention. Without securing funding, he could not continue to work on TransMail or the Patent.
 - Justin Marston worked on running BlueSpace.
 - Under the rule of reason, the purpose is “to assure that, in light of the evidence as a whole, ‘the invention was not abandoned or unreasonably delayed.’”
 - Perfect Surgical Techniques, Inc. v. Olympus Am., Inc., 841 F.3d 1004, 1011 (Fed. Cir. 2016).
- Resp. (Paper 17), at 42-48 (citing EX2003, EX2004-EX2014, EX2030, EX2031, EX2032-EX2078; Sur-Reply, at 24 n. 5

Diligence

- Here, the complete picture is that:
 - The two inventors continued to work on refining the disclosure
 - Justin Marston was working on the TransMail product itself (to which this invention was to be added)
 - Justin Marston ran BlueSpace – the software company developing and marketing TransMail
 - Justin Marston was obtaining financing for the BlueSpace
 - Paul Marston was teaching full-time at a University in England
 - Paul Marston was writing books
- This evidence shows that the inventors worked diligently and did not abandon or unreasonably delay the filing of the provisional.

Resp. (Paper 17), at 42-48 (citing EX2003, EX2004-EX2014, EX2030, EX2031, EX2032-EX2078)

Padmanabhan & Dawson, P.L.L.C.

42

Conception Documents Disclose All Elements

- Conception documents disclose the “identify[ing]” limitation. E.g.:
 - “In the following scenarios, other users’ actions can be used to help determine the relevance of content to a given user: ... If a user sends a TransMail to a group of users, and most reply to it, forward it or copy it to custom folders, it is more likely to be relevant than if they all delete it immediately.... If the vast majority of the users in a given department read a piece of content sent globally, then the content is likely to be relevant to another user in that department.”
 - EX2004, at 15-16.
- This shows identifying a cognate user that received the same piece of electronic content.
- Pointing to just one citation which doesn’t specifically cite to recipient fails to look at the disclosure as a whole.

Resp. (Paper 17), at 42-43 (citing EX2003, EX2004-EX2014); Sur-Reply (Paper 38), at 18-20 (citing EX2004, EX2006, EX2014, EX2049); EX2014, at 5 (citing EX2004, at 4, 13, 15, 15-16; EX2006, at 22 & 58)

Padmanabhan & Dawson, P.L.L.C.

Dumais Does Not Render Obvious Any Claim

- Dumais fails to disclose, teach, or suggest the “identify[ing]” limitation.
- Dumais is for searching and ranking search results. It does not disclose, teach, or suggest a “recipient” of a piece of electronic content “sent from a sender.”
- So, it does not disclose, teach, or suggest “identify[ing]” “a recipient” of the piece of electronic content.

Resp. (Paper 17), at 49-53 (citing EX2029, ¶¶131-147); EX2029, ¶¶ 135 & 142; Sur-Reply, at 1 & 26

Padmanabhan & Dawson, P.L.L.C.

Dumais Does Not Render Obvious Any Claim

245. Moreover, because the “[s]imilarity computations can be based on the content and/or **usage of items**” a POSA would have understood that at least one user **“is a recipient of the piece of electronic content”** because for collaborative filtering to function the users must have similar usage of items. *Id.*; *supra* §IV.B. Indeed, Dumais discloses a “global database 490 of user statistics” which “can be associated with user activity or interaction data.” *Id.*, [0040]. Dumais also explains that “[m]onitoring can occur via a background and/or foreground component (not shown) and employed to determine when the data items 130 are interacted with by **users**” (plural). EX1006, [0022]. Therefore, Dumais is tracking the actions of multiple users on a single data item. A POSA would have understood that two users who interact with the same item offer the greatest indicator of relevance for that data item—*i.e.*, data about a specific data item is more valuable than data about a different data item.

- Does not address the claim requirement to “identify” “a recipient” – just argues that there is “a recipient.”

Ex. 1004, ¶245.

Resp. (Paper 17), at 49-53 (citing EX2029, ¶¶131-147)

Padmanabhan & Dawson, P.L.L.C.

Dumais Does Not Render Obvious Any Claim

- Does not address the claim requirement to “identify” “a recipient” – just that there is “a recipient.”

247. Dumais also explains that one way to personalize a retrieval algorithm is to limit it “to those aspects of the user's corpus that pertain to the query (e.g., documents that contain the query term or past interaction with data).” EX1006., [0051]. A POSA would have understood that a document with “past interaction[s]” would indicate that another user *“is a recipient of the piece of electronic content.”*

Ex. 1004, ¶247.

Resp. (Paper 17), at 49-53 (citing EX2029, ¶¶131-147)

Padmanabhan & Dawson, P.L.L.C.

Dumais Does Not Render Obvious Any Claim

- Dumais describes use of collaborative filtering “for possible profiles for new users of the system.” Ex. 1006, ¶55.
 - Collaborative filtering is not being used to identify a cognate user that is also a recipient of the piece of electronic content for which relevance is being determined.
- Petitioner’s evidence fails to show that Dumais discloses, teaches, or suggests identifying a second user that is a **recipient** of the piece of electronic content who is also cognate the first user.
- Simply disclosing use of collaborative filtering for possible profiles does not disclose, teach, or suggest “identify[ing]” such person as part of a relevance algorithm

Resp. (Paper 17), at 49-53 (citing EX2029, ¶¶131-147)

Padmanabhan & Dawson, P.L.L.C.

Dumais Does Not Render Obvious Any Claim

- Dumais is for query modification. It does not address the desirability of identifying another user that is cognate to the first user for a relevancy analysis.
 - There is no such discussion in Dumais.
 - There is no math shown for using such information to predict relevance in Dumais.

Resp. (Paper 17), at 49-53 (citing EX2029, ¶¶131-147); Sur-Reply, at 1
Padmanabhan & Dawson, P.L.L.C.

Grounds 2, 3, and 5: Adding Marston and/or the AAPA to Petitioner's Combinations Does Not Render Obvious Any Claim

- As set forth above, Kircher and Krug do not teach or disclose the “identify...” limitation.
 - In Ground 5, Petitioner does not rely upon Marston for this limitation.
 - Therefore, the combination of Kircher, Krug, and Marston does not render obvious any independent claim of the ‘217 Patent.
- As set forth above, Dumais does not teach or disclose the “identify...” limitation.
 - In Grounds 2 and 3, Petitioner does not rely upon Marston or the AAPA for this limitation.
 - Therefore, the combination of Dumais with either AAPA or Marston does not render obvious any independent claim of the ‘217 Patent.

Resp. (Paper 17), at 41 & 53 (citing EX2029, ¶¶148-149 & 229-231)

Padmanabhan & Dawson, P.L.L.C.

49