

EXHIBIT A



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
90/009,991	05/24/2012	6314420	S0217.0002/P002-RE	4797
24998	7590	07/18/2012	EXAMINER	
DICKSTEIN SHAPIRO LLP 1825 EYE STREET NW Washington, DC 20006-5403			ART UNIT	PAPER NUMBER

DATE MAILED: 07/18/2012

Please find below and/or attached an Office communication concerning this application or proceeding.

Order Granting / Denying Request For Ex Parte Reexamination	Control No.	Patent Under Reexamination
	90/009,991	6314420
	Examiner	Art Unit
	JASON PROCTOR	3992

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

The request for *ex parte* reexamination filed 24 May 2012 has been considered and a determination has been made. An identification of the claims, the references relied upon, and the rationale supporting the determination are attached.

Attachments: a) PTO-892, b) PTO/SB/08, c) Other: _____

1. The request for *ex parte* reexamination is GRANTED.

RESPONSE TIMES ARE SET AS FOLLOWS:

For Patent Owner's Statement (Optional): TWO MONTHS from the mailing date of this communication (37 CFR 1.530 (b)). **EXTENSIONS OF TIME ARE GOVERNED BY 37 CFR 1.550(c).**

For Requester's Reply (optional): TWO MONTHS from the **date of service** of any timely filed Patent Owner's Statement (37 CFR 1.535). **NO EXTENSION OF THIS TIME PERIOD IS PERMITTED.** If Patent Owner does not file a timely statement under 37 CFR 1.530(b), then no reply by requester is permitted.

2. The request for *ex parte* reexamination is DENIED.

This decision is not appealable (35 U.S.C. 303(c)). Requester may seek review by petition to the Commissioner under 37 CFR 1.181 within ONE MONTH from the mailing date of this communication (37 CFR 1.515(c)). **EXTENSION OF TIME TO FILE SUCH A PETITION UNDER 37 CFR 1.181 ARE AVAILABLE ONLY BY PETITION TO SUSPEND OR WAIVE THE REGULATIONS UNDER 37 CFR 1.183.**

In due course, a refund under 37 CFR 1.26 (c) will be made to requester:

- a) by Treasury check or,
b) by credit to Deposit Account No. _____, or
c) by credit to a credit card account, unless otherwise notified (35 U.S.C. 303(c)).

/Jason Proctor/
Primary Examiner, Art Unit 3992

cc:Requester (if third party requester)

U.S. Patent and Trademark Office
PTOL-471 (Rev. 08-06)

Office Action in *Ex Parte* Reexamination

Part of Paper No. 20120703

**DECISION ON REQUEST
FOR *EX PARTE* REEXAMINATION**

A Substantial New Question of Patentability affecting claims 10, 14, 15, 25, 27, and 28 of US Patent No. 6,314,420 issued to Lang et al. ("the '420 Patent") is raised by the Request for *Ex Parte* Reexamination filed on 24 May 2012 ("the Request"). Accordingly, *ex parte* reexamination of claims 10, 14, 15, 25, 27, and 28 of the '420 Patent is ordered.

Ex Parte Reexamination is granted for claims 10, 14, 15, 25, 27, and 28.

Claims 1-9, 11-13, 16-24, 26, and 29-36 are not subject to reexamination.

References Cited

US Patent No. 6,202,058 to Rose et al. ("Rose")

US Patent No. 5,835,087 to Herz et al. ("Herz")

David Goldberg et al., "Using Collaborative Filtering to Weave an Information Tapestry," Communications of the ACM (December 1992) ("Goldberg")

Yezdezard Lashkari, "Feature Guided Automated Collaborative Filtering," MIT Masters Thesis (September 1995) ("Lashkari")

Paul Resnick et al., "GroupLens: An Open Architecture for Collaborative Filtering of Netnews," Proceedings of ACM 1994 Conference (1994) ("Resnick")

Shoshana Loeb, "Architecting Personalized Delivery of Multimedia Information," Communications of the ACM (December 1992) ("Loeb")

Prosecution History of the '420 Patent

Reasons for Allowance

Art Unit: 3992

The '420 Patent issued from US Patent Application 09/204,149 ("the '149 Application"), which is a Continuation-In-Part of US Patent Application 08/627,436 which issued as US Patent No. 5,867,799 ("the '799 Patent").

During prosecution of the '420 Patent, the Examiner initially rejected all pending claims over the '799 Patent under the judicially created doctrine of nonstatutory double patenting. (the '149 Application, Office Action entered on 6 December 2000). Applicant overcame this rejection by filing a Terminal Disclaimer (the '149 Application, Amendment entered on 7 May 2001). In response, the Examiner entered a Notice of Allowance with the following statement of reasons for allowance:

The following is an examiner's statement of reasons for allowance: The present invention is directed to a search engine operated with collaborative and content-based filtering. The closest prior art [Michael Persin, Document Filtering for Fast Ranking, ACM, July 6, 1994, pages 339-348] discloses a similar filtering method. However, Michael Persin fails to show "storing a linked list of relevant informons as a wire and providing a system for returning a wire to an individual user." These limitations, in conjunction with all other limitations of the base claims were not shown by, would not have been obvious over, nor would have been fairly suggested by the prior art of record. (the '149 Application, Notice of Allowability entered on 21 May 2001, emphasis in original)

Accordingly, the Examiner relied on the "wire" aspect of the claimed invention to distinguish the patent from the prior art.

However, none of the claims for which reexamination is requested (claims 10, 14, 15, 25, 27, and 28) recite the "wire" or "wire search" that the Examiner identified in the statement of reasons for allowance.

Therefore, the prosecution history does not reveal a specific reason for allowance for claims 10, 14, 15, 25, 27, or 28 of the '420 Patent. Therefore, it appears that the claimed invention as a whole was relied upon to distinguish over the prior art of record.

Art Unit: 3992

Priority Date of the Claimed Inventions

Requester argues on pages 9-11 of the Request that independent claims 10 and 25 both describe a "search engine system" which is not adequately disclosed by the parent '799 Patent for the purposes of 35 U.S.C. § 112, first paragraph, and therefore these claims should not benefit from the filing date of the parent '799 Patent.

The '799 Patent appears to primarily disclose a method of *filtering* "informons". Informons are defined in the '799 Patent and the '420 Patent as "entities of information relevant to the user" (the '420 Patent, 3:18-19). The '799 Patent appears to discuss search engines in only one passage:

Although databases are relatively static and can be searched using conventional network search engines, current information filtering schemes are ill-suited to thoroughly search the massive, dynamic stream of new information passing through the network each day. (the '799 Patent, 1:24-28)

In contrast, the '420 Patent appears to substantially disclose a *search engine* and teaches that:

The invention of this continuation-in-part application, as shown in FIGS. 8 and 9, provides a collaborative and preferably adaptive search engine system in which elements of the structure and principles of operation of the apparatus of FIGS. 1-7 are applied. Accordingly, a search engine system of the invention, as preferably embodied, integrates collaborative filtering with adaptive content-based filtering to provide improved search engine performance. The acronym "CASE" refers to a search engine system of the invention, i.e., a collaborative, adaptive search engine. (the '420 Patent, 23:23-33)

The '420 Patent proceeds to disclose a search engine system and method for operating a search engine system (the '420 Patent, columns 23-26). This disclosure is not found in the '799 Patent.

Therefore, the "search engine system" recited by claims 10 and 25 of the '420 Patent does not appear to be adequately disclosed by parent '799 Patent for the purposes of 35 U.S.C. § 112, first paragraph. Consequently, these claims (and their dependents) do not appear to be entitled to the benefit of the filing date of the '799 Patent.

The priority date for claims 10, 14, 15, 25, 27, and 28 of the '420 Patent is determined to be the filing date of the '149 Application, 3 December 1998.

Criteria for Deciding Request

According to MPEP 2242, the presence or absence of "a substantial new question of patentability" determines whether or not reexamination is ordered. A prior art patent or printed publication raises a substantial question of patentability where there is a substantial likelihood that a reasonable Examiner would consider the prior-art patent or printed publication important in deciding whether or not the claim is patentable.

If the prior art patents and printed publications raise a substantial question of patentability of at least one claim of the patent, then a substantial new question of patentability is present, unless the same question of patentability has already been decided by (A) a final holding of invalidity, after all appeals, or (B) by the Office in a previous examination or pending reexamination of the patent.

In the case of claims 10, 14, 15, 25, 27, and 28 of the '420 Patent, where it appears that the claimed invention as a whole was relied upon to distinguish over the prior art of record, there may be many different ways to establish a substantial likelihood that a reasonable Examiner would consider a prior art patent or printed publication important in deciding whether or not the

Art Unit: 3992

claim is patentable. However, where the prior art reference appears to teach the claimed invention as a whole, there exists a substantial likelihood that a reasonable Examiner would have considered the reference important in deciding whether or not the claim is patentable.

Analysis

The Request proposes that 11 Substantial New Questions of Patentability are raised by the six references cited in the request (Request, pages 12-13). For the purpose of this analysis, the proposed SNQs are grouped according to the primary reference.

None of the cited references were previously considered or addressed in the prosecution history or a final holding of invalidity of the Federal Courts. All of the cited references are "new art". See MPEP 2258.01.

Proposed SNQ 1 Rose

Proposed SNQ 2 Rose in view of Herz

Proposed SNQ 3 Rose in view of Loeb

Rose discloses a method for ranking information according to a prediction of the likely degree of relevance to the user's interests. (Rose at Abstract.) The prediction of relevance is carried out by combining data pertaining to the content of each item of information with other data regarding correlations of interests between users. (*Id.*) The ranked information may consist of email messages, electronic bulletin board posts, or text retrieved from static databases. (Rose at 3:26-28; see generally *id.* at 1:16-40.)

Art Unit: 3992

More specifically, Rose discloses filtering incoming information using user-aided content-based filtering. The content of the document is analyzed to derive a "document vector," which is a measure of the various words appearing in the document and their statistical relevance. (Rose at 6:11-19.)

Rose also discloses supplementing the content-based rating with a collaborative feedback mechanism. Independent of the content of the document, Rose stores a table containing all users and their responses (if any) to all available documents. (Rose at 6:59-63; Fig. 6.) This table is then transformed into a correlation matrix, which tracks how often two users agree. (Rose at 6:64 to 7:6; Fig. 6.) When evaluating a prospective document for a user, Rose computes a "correlation value" based on how various other users responded to the document, multiplied by the degree of agreement (or disagreement) between each other user and the prospective user. (Rose at 7:7-19.) This correlation-based prediction is combined with the content-based prediction to arrive at a final score. (Rose at 7:35-50.)

When used with text retrieved from static databases (Rose at 3:26-28), Rose discloses "a search engine operated with collaborative and content-based filtering."

Rose, either alone or in combination with Herz or Loeb, appears to teach the claimed invention as a whole. Therefore, it is AGREED that Rose, Rose in view of Herz, and Rose in view of Loeb raises a Substantial New Question of Patentability with respect to at least claims 10 and 25 of the '420 Patent.

Proposed SNQ 4 Herz

Art Unit: 3992

Herz discloses customized filtering of documents according to a user profile. (Herz at Abstract.) Users can enter search profiles directly by submitting keywords. (*Id.* at 56:23-25.) Herz computes target profiles for each potential document, then compares the target profiles to the search profiles. (*Id.* at 56:53-62.) Matching articles are then presented to the user, and the user's interactions with those articles monitored. (*Id.* at 58:30-38; 58:58-62.) The user's profile is then adjusted based on the user's estimated degree of interest in the article. (*Id.* at 58:62 to 59:10.)

Target profiles are computed using a combination of content-based and collaborative filtering. For the content-based analysis, Herz discloses breaking up the content of a document into words or n-grams, computing Term Frequency / Inverse Document Frequency (TF/IDF) for those words, and representing the document as a vector corresponding to the TF/IDF scores. (Herz at 13:6-28.) On the collaborative side, Herz tracks each user's score for each document, under the rationale that "if the user has often liked movies that Customer C17 and Customer C190 have rented, then the user may like other such movies." (*Id.* at 10:45-47; 14:3-19.) When comparing the search profile to the target profile, Herz compares textual (content-based) attributes by comparing their respective content vectors, and compares associated (collateral) attributes by comparing their respective association vectors. (*Id.* at 14:59 to 15:10.)

Herz accordingly discloses "a search engine operated with collaborative and content-based filtering."

Herz appears to teach the claimed invention as a whole. Therefore, it is AGREED that Herz raises a Substantial New Question of Patentability with respect to at least claims 10 and 25 of the '420 Patent.

Proposed SNQ 5 Goldberg

Goldberg discloses a mail system termed "Tapestry." Rather than overwhelming users with all incoming mail messages, or filtering messages based solely on the content of the message, Tapestry allows users to use both content-based and collaborative filters to weed out uninteresting messages. (Goldberg at 61.) Tapestry is not limited to e-mail systems: "it is designed to handle any incoming stream of electronic documents," including newswire stories and NetNews articles. (*Id.* at 63 (emphasis added).)

More specifically, Tapestry allows users to set complex filters on the incoming stream of documents. Some filters may be content-based, e.g. "documents with the subject line 'Next Tapestry Meeting.'" (Goldberg at 65.) Other filters may be collaborative, e.g. "documents replied to by Smith, Jones, or O'Brien." (*Id.* at 62.) Users may also combine both types of filters, e.g. "documents that contain the word 'filtering' and received at least three endorsements." (*Id.* at 63.) Tapestry also supports ad hoc queries, allowing users to access information on the document server independent of their existing filters. (*Id.* at 64.)

Goldberg accordingly discloses "a search engine operated with collaborative and content-based filtering."

Goldberg appears to teach the claimed invention as a whole. Therefore, it is AGREED that Goldberg raises a Substantial New Question of Patentability with respect to at least claims 10 and 25 of the '420 Patent.

Proposed SNQ 6 Lashkari

Art Unit: 3992

Proposed SNQ 7 Lashkari in view of Herz

Proposed SNQ 8 Lashkari in view of Loeb

Lashkari discloses Webhound, a filtering system designed for use with existing search engines. Webhound uses collaborative filtering, which it terms "automated collaborative filtering" or "ACF." As Lashkari states, collaborative filtering "relies on a deceptively simple idea: if a person A correlates strongly with person B in rating a set of items then it is possible to predict the rating of a new item for A, given B's rating for that item." (Lashkari at 14.)

Webhound then extracts the words from the preferred documents and generates scores based on term frequency inverse document frequency (TF/IDF), which are then combined to create a user profile. (*Id.* at 62-64.) Users can then request new documents using collaborative filtering alone (ACF) or using content-based collaborative filtering (FGACF). (*Id.* at 59-60.) Furthermore, Lashkari contemplates using Webhound to filter search results from search engines like Lycos, Webcrawler, and Yahoo. (*Id.* at 78.)

Lashkari accordingly discloses "a search engine operated with collaborative and content-based filtering."

Lashkari, either alone or in combination with Herz or Loeb, appears to teach the claimed invention as a whole. Therefore, it is AGREED that Lashkari, Lashkari in view of Herz, and Lashkari in view of Loeb raises a Substantial New Question of Patentability with respect to at least claims 10 and 25 of the '420 Patent.

Proposed SNQ 9 Resnick

Proposed SNQ 10 Resnick in view of Herz

Art Unit: 3992

Proposed SNQ 11 Resnick in view of Loeb

Resnick discloses the GroupLens system for filtering articles from netnews. As Resnick states:

GroupLens provides a new mechanism to help focus attention on interesting articles. It draws on a deceptively simple idea: people who agreed in their subjective evaluation of past articles are likely to agree again in the future. After reading articles, users assign them numeric ratings. GroupLens uses the ratings in two ways. First, it correlates the ratings in order to determine which users' ratings are most similar to each other. Second, it predicts how well users will like new articles, based on ratings from similar users.

(Resnick at 2.)

GroupLens was designed to work with existing netnews systems. (Resnick at 1.) Many news readers include string search capabilities; for example, a user can retrieve all articles that mention "collaborative filtering." (Resnick at 2.) News readers may also include "kill files," which identify text strings that are not interesting to a particular user. (*Id.*; see also *id.* at 3: "Cognitive, or content-based filtering techniques select documents based on the text in them. For example, the kill files and string search features provided by news clients perform content filtering.") Accordingly, incoming news articles may be filtered first by the news reader's content-based filtering, followed by the additional collaborative filtering provided by GroupLens.

Resnick accordingly discloses "a search engine operated with collaborative and content-based filtering."

Resnick, either alone or in combination with Herz or Loeb, appears to teach the claimed invention as a whole. Therefore, it is AGREED that Resnick, Resnick in view of Herz, and Resnick in view of Loeb raises a Substantial New Question of Patentability with respect to at least claims 10 and 25 of the '420 Patent.

Conclusion

Ex Parte Reexamination is granted for claims 10, 14, 15, 25, 27, and 28.

Claims 1-9, 11-13, 16-24, 26, and 29-36 are not subject to reexamination.

Extensions of Time

Extensions of time under 37 CFR 1.136(a) will not be permitted in these proceedings because the provisions of 37 CFR 1.136 apply only to "an applicant" and not to parties in a reexamination proceeding. Additionally, 35 U.S.C. 305 requires that *ex parte* reexamination proceedings "will be conducted with special dispatch" (37 CFR 1.550(a)). Extensions of time in *ex parte* reexamination proceedings are provided for in 37 CFR 1.550(c).

Waiver of Right to File Patent Owner Statement

In a reexamination proceeding, Patent Owner may waive the right under 37 C.F.R. 1.530 to file a Patent Owner Statement. The document needs to contain a statement that Patent Owner waives the right under 37 C.F.R. 1.530 to file a Patent Owner Statement and proof of service in the manner provided by 37 C.F.R. 1.248, if the request for reexamination was made by a third party requester, see 37 C.F.R. 1.550. The Patent Owner may consider using the following statement in a document waiving the right to file a Patent Owner Statement:

Patent Owner waives the right under 37 C.F.R. 1.530 to file a Patent Owner Statement.

Amendment in Reexamination Proceedings

Patent owner is notified that any proposed amendment to the specification and/or claims in this reexamination proceeding must comply with 37 CFR 1.530(d)-(j), must be formally presented pursuant to 37 CFR § 1.52(a) and (b), and must contain any fees required by 37 CFR § 1.20(c). See MPEP § 2250(IV) for examples to assist in the preparation of proper proposed amendments in reexamination proceedings.

Service of Papers

Any paper filed with the USPTO, *i.e.*, any submission made, by either the Patent Owner or the Third Party Requester must be served on every other party in the reexamination proceeding, including any other third party requester that is part of the proceeding due to merger of the reexamination proceedings. As proof of service, the party submitting the paper to the Office must attach a Certificate of Service to the paper, which sets forth the name and address of the party served and the method of service. Papers filed without the required Certificate of Service may be denied consideration. 37 CFR 1.550; MPEP 2266.03.

Notification of Concurrent Proceedings

The patent owner is reminded of the continuing responsibility under 37 CFR 1.565(a) to apprise the Office of any litigation activity, or other prior or concurrent proceeding, involving Patent No. 6,314,420 throughout the course of this reexamination proceeding. The third party requester is also reminded of the ability to similarly apprise the Office of any such activity or

Art Unit: 3992

proceeding throughout the course of this reexamination proceeding. See MPEP §§ 2207, 2282 and 2286.

All correspondence relating to this *ex parte* reexamination proceeding should be directed as follows:

By U.S. Postal Service Mail to:

Mail Stop *Ex Parte* Reexam
ATTN: Central Reexamination Unit
Commissioner for Patents P.O. Box 1450
Alexandria, VA 22313-1450

By FAX to: (571) 273-9900
Central Reexamination Unit

By hand to: Customer Service Window
Randolph Building
401 Dulany St.
Alexandria, VA 22314

By EFS-Web:

Registered users of EFS-Web may alternatively submit such correspondence via the electronic filing system EFS-Web, at

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EFS-Web offers the benefit of quick submission to the particular area of the Office that needs to act on the correspondence. Also, EFS-Web submissions are "soft scanned" (i.e., electronically uploaded) directly into the official file for the reexamination proceeding, which offers parties the opportunity to review the content of their submissions after the "soft scanning" process is complete.

Application/Control Number: 90/009,991

Page 15

Art Unit: 3992

Any inquiry concerning this communication or as to the status of this proceeding should be directed to the Central Reexamination Unit at telephone number (571) 272-7705.

/Jason Proctor/
Primary Examiner, Art Unit 3992

Conferees:

/Adam L Basehoar/
Primary Examiner, Art Unit 3992

ALEXANDER J. KOSOWSKI
Supervisory Patent Reexamination Specialist
CRU -- Art Unit 3992

ADK

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		Complete if Known	
		Application Number	
		Filing Date	
		First Named Inventor	Andrew K. Lang
		Art Unit	
Examiner Name		Attorney Docket Number	
Sheet	2	of	2

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
/J.P./		DAVID GOLDBERG et al., "Using Collaborative Filtering to Weave an Information Tapestry," Communications of the ACM (December 1992)	
/J.P./		YEZDEZARD LASHKARI, "Feature Guided Automated Collaborative Filtering," MIT Masters Thesis (Sept. 1995)	
/J.P./		PAUL RESNICK et al., "GroupLens: An Open Architecture for Collaborative Filtering of Netnews," Proceedings of ACM 1994 Conference (1994)	
/J.P./		SHOSHANA LOEB, "Architecting Personalized Delivery of Multimedia Information," Communications of the ACM (Dec. 1992)	

Examiner Signature	/Jason Proctor/	Date Considered	07/05/2012
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 608. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.