

EXHIBIT 1

**Right of Appeal Notice
(37 CFR 1.953)**

Control No.	Patent Under Reexamination
95/001,699	7685276
Examiner	Art Unit
KAVITA PADMANABHAN	3992

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

Responsive to the communication(s) filed by:

Patent Owner on 12 March, 2012

Third Party(ies) on 10 April, 2012

Patent owner and/or third party requester(s) may file a notice of appeal with respect to any adverse decision with payment of the fee set forth in 37 CFR 41.20(b)(1) within **one-month or thirty-days (whichever is longer)**. See MPEP 2671. In addition, a party may file a notice of **cross** appeal and pay the 37 CFR 41.20(b)(1) fee **within fourteen days of service** of an opposing party's timely filed notice of appeal. See MPEP 2672.

All correspondence relating to this inter partes reexamination proceeding should be directed to the **Central Reexamination Unit** at the mail, FAX, or hand-carry addresses given at the end of this Office action.

If no party timely files a notice of appeal, prosecution on the merits of this reexamination proceeding will be concluded, and the Director of the USPTO will proceed to issue and publish a certificate under 37 CFR 1.997 in accordance with this Office action.

The proposed amendment filed _____ will be entered will not be entered*

*Reasons for non-entry are given in the body of this notice.

1a. Claims 1,3,5-7,14 and 21-24 are subject to reexamination.

1b. Claims _____ are not subject to reexamination.

2. Claims _____ have been cancelled.

3. Claims _____ are confirmed. [Unamended patent claims].

4. Claims _____ are patentable. [Amended or new claims].

5. Claims 1,3,5-7,14 and 21-24 are rejected.

6. Claims _____ are objected to.

7. The drawings filed on _____ are acceptable. are not acceptable.

8. The drawing correction request filed on _____ is approved. disapproved.

9. Acknowledgment is made of the claim for priority under 35 U.S.C. 119 (a)-(d) or (f). The certified copy has:

been received. not been received. been filed in Application/Control No. _____.

10. Other _____

Attachments

1. Notice of References Cited by Examiner, PTO-892

2. Information Disclosure Citation, PTO/SB/08

3. _____

Transmittal of Communication to Third Party Requester Inter Partes Reexamination	Control No.	Patent Under Reexamination
	95/001,699	7685276
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Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above-identified reexamination proceeding. 37 CFR 1.903.

Prior to the filing of a Notice of Appeal, each time the patent owner responds to this communication, the third party requester of the *inter partes* reexamination may once file written comments within a period of 30 days from the date of service of the patent owner's response. This 30-day time period is statutory (35 U.S.C. 314(b)(2)), and, as such, it cannot be extended. See also 37 CFR 1.947.

If an *ex parte* reexamination has been merged with the *inter partes* reexamination, no responsive submission by any *ex parte* third party requester is permitted.

All correspondence relating to this *inter partes* reexamination proceeding should be directed to the **Central Reexamination Unit** at the mail, FAX, or hand-carry addresses given at the end of the communication enclosed with this transmittal.

RIGHT OF APPEAL NOTICE (RAN)

This action addresses the reexamination of claims 1, 3, 5-7, 14, and 21-24 of United States Patent Number 7,685,276 (hereinafter "the '276 patent"). Per Action Closing Prosecution mailed 2/10/12, claims 1, 3, 5-7, 14, and 21-24 are rejected.

This action responds to Patent Owner's submission filed on 3/12/12 and the Third Party Requester's submission filed on 4/10/12.

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. 314(c) requires that inter partes reexamination proceedings "will be conducted with special dispatch" (37 CFR 1.937). Patent Owner extensions of time in *inter partes* reexamination proceedings are provided for in 37 CFR 1.956. Extensions of time are not available for third party requester comments, because a comment period of 30 days from service of patent owner's response is set by statute. 35 U.S.C. 314(b)(3).

Notification of Other Proceedings

The patent owner is reminded of the continuing responsibility under 37 CFR 1.985(a) to apprise the Office of any litigation activity, or other concurrent proceeding, involving USPN 7,685,276 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 proceeding throughout the course of this reexamination proceeding. See MPEP §2686 and 2686.04.

References

Dunja Mladenic, "Personal WebWatcher: design and implementation" (1996)
(hereinafter "Mladenic")

Ahmad M. Ahmad Wasfi, "Collecting User Access Patterns for Building User Profiles and Collaborative Filtering," Proceedings of the 4th International Conference on Intelligent User Interfaces (January 1999) (hereinafter "Wasfi")

Aviv Refuah et al., U.S. Patent No. 7,631,032 (hereinafter "Refuah")

Gary Culliss, U.S. Patent No. 6,182,068 (hereinafter "Culliss")

Matthew Montebello et al., "A Personal Evolvable Advisor for WWW Knowledge-Based Systems," Proceedings of the 7th World-Wide Web Conference (March 1998)
(hereinafter "Montebello")

Rob Barrett et al., "How to Personalize the Web," IBM Almaden Research Center (1997)
(hereinafter "Barrett")

Fabio A. Asnicar et al., "ifWeb: a Prototype of User Model-Based Intelligent Agent for Document Filtering and Navigation in the World Wide Web," Proceedings of the Sixth International Conference on User Modeling (June 1997) (hereinafter "Asnicar")

Anna Stefani et al., "Personalizing Access to Web Sites: The SiteIF Project," Proceedings of the 2nd Workshop on Adaptive Hypertext and Hypermedia (June 1998) (hereinafter "Stefani")

37 CFR 1.132 Declarations

The 37 CFR 1.132 declaration of Charles K. Nicholas (hereinafter the "Nicholas Declaration") in support of the Patent Owner, received on 3/12/12, has been considered and entered into the prosecution record.

Claim Rejection Paragraphs

The following are quotations from the MPEP regarding the types of rejections to be utilized below:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, 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. Patentability shall not be negated by the manner in which the invention was made.

Status of Grounds of Rejection

Issue 1

Claims 1, 5, 6, 14, 21, and 23 are rejected under 35 U.S.C. §§ 102(a) and 102(b) as being anticipated by Mladenic. The rejections were adopted in the Office Action mailed 10/24/11. These rejections are now **NOT ADOPTED** for reasons explained below under "Discussion of Issues."

Issue 2

Claim 3 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Mladenic in view of Culliss. The rejection was adopted in the Office Action mailed 10/24/11. The rejection is now **NOT ADOPTED** for reasons explained below under "Discussion of Issues."

Issue 3

Claims 7 and 22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Mladenic in view of Refuah. The rejections were adopted in the Office Action mailed 10/24/11.

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These rejections are now **NOT ADOPTED** for reasons explained below under "Discussion of Issues."

Issue 4

Claim 24 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Mladenic in view of Refuah. The rejection was adopted in the Office Action mailed 10/24/11. The rejection is now **NOT ADOPTED** for reasons explained below under "Discussion of Issues."

Issue 5

Claims 23 and 24 are rejected under 35 U.S.C. § 102(a) as being anticipated by Wasfi. The rejection was adopted in the Office Action mailed 10/24/11 as proposed on pages 29-33 of the request, as well as in claim chart Exhibit CC-B, which are incorporated by reference.

ADOPTION MAINTAINED.

Issue 6

Claims 1, 3, 5, 6, 14, 21, and 22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Wasfi in view of Mladenic. The rejection was adopted in the Office Action mailed 10/24/11 as proposed on pages 33-39 of the request, as well as in claim chart Exhibit CC-B, which are incorporated by reference. **ADOPTION MAINTAINED.**

Issue 7

Claim 7 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Wasfi in view of Mladenic, further in view of Refuah. The rejection was adopted in the Office Action mailed

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10/24/11 as proposed on pages 39-40 of the request, as well as in claim chart Exhibit CC-B, which are incorporated by reference. **ADOPTION MAINTAINED.**

Issue 8

Claims 1, 3, 5, 6, 7, 14, and 21-24 are rejected under 35 U.S.C. § 102(a) as being anticipated by Refuah. The rejections were adopted in the Office Action mailed 10/24/11 as proposed on pages 40-50 of the request, as well as in claim chart Exhibit CC-C, which are incorporated by reference. **ADOPTION MAINTAINED** with respect to claims 1, 3, 5, 6, 7, and 21-24. The rejection is now **NOT ADOPTED** with respect to claim 14 for reasons explained below under "Discussion of Issues."

Issue 9

Claims 1, 3, 6, 7, 21, 22, and 23 are rejected under 35 U.S.C. § 102(e) as being anticipated by Culliss. The rejections were adopted with modification in the Office Action mailed 10/24/11 as proposed on pages 50-60 of the request, as well as in claim chart Exhibit CC-D, which are incorporated by reference. The reason for the modification was that the requester proposed a rejection of claims 1, 3, 6, 7, 21, 22, and 23 under 35 U.S.C. § 102(a) and 35 U.S.C. § 102(e) as being anticipated by Culliss. However, since Culliss does not qualify as prior art under 35 U.S.C. § 102(a), the claims were only rejected under 35 U.S.C. § 102(e) as being anticipated by Culliss. **ADOPTION MAINTAINED (as previously modified).**

Issue 10

Claim 5 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Culliss in view of Mladenic. The rejection was adopted in the Office Action mailed 10/24/11 as proposed on pages 60-61 of the request, as well as in claim chart Exhibit CC-D, which are incorporated by reference. **ADOPTION MAINTAINED.**

Issue 11

Claim 14 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Culliss in view of Refuah. The rejection was adopted in the Office Action mailed 10/24/11. The rejection is now **NOT ADOPTED** for reasons explained below under "Discussion of Issues."

Issue 12

Claim 24 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Culliss in view of Montebello. The rejection was adopted in the Office Action mailed 10/24/11 as proposed on pages 61-62 of the request, as well as in claim chart Exhibit CC-D, which are incorporated by reference. **ADOPTION MAINTAINED.**

Issue 13

Claims 1, 3, 6, 7, and 21-24 are rejected under 35 U.S.C. §§ 102(a) and 102(b) as being anticipated by Montebello. The rejections were adopted in the Office Action mailed 10/24/11 as proposed on pages 62-72 of the request, as well as in claim chart Exhibit CC- E, which are incorporated by reference. **ADOPTION MAINTAINED.**

Issue 14

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Claim 5 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Montebello in view of Mladenic. The rejection was adopted in the Office Action mailed 10/24/11 as proposed on pages 72-73 of the request, as well as in claim chart Exhibit CC-E, which are incorporated by reference. **ADOPTION MAINTAINED.**

Issue 15

Claim 14 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Montebello in view of Refuah. The rejection was adopted in the Office Action mailed 10/24/11. The rejection is now **NOT ADOPTED** for reasons explained below under "Discussion of Issues."

Issue 16

Claims 23 and 24 are rejected under 35 U.S.C. §§ 102(a) and 102(b) as being anticipated by Barrett. The rejections were adopted in the Office Action mailed 10/24/11 as proposed on pages 74-78 of the request, as well as in claim chart Exhibit CC- F, which are incorporated by reference. **ADOPTION MAINTAINED.**

Issue 17

Claims 1, 3, 5, 6, 21, and 22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Barrett in view of Mladenic. The rejections were adopted in the Office Action mailed 10/24/11 as proposed on pages 78-85 of the request, as well as in claim chart Exhibit CC-F, which are incorporated by reference. **ADOPTION MAINTAINED.**

Issue 18

Claims 7 and 14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Barrett in view of Mladenic, further in view of Refuah. The rejections were adopted in the Office Action mailed 10/24/11 as proposed on pages 85-86 of the request, as well as in claim chart Exhibit CC-F, which are incorporated by reference. **ADOPTION MAINTAINED** with respect to claim 7. The rejection is now **NOT ADOPTED** with respect to claim 14 for reasons explained below under "Discussion of Issues."

Issue 19

Claims 23 and 24 are rejected under 35 U.S.C. §§ 102(a) and 102(b) as being anticipated by Asnicar. The rejections were adopted in the Office Action mailed 10/24/11 as proposed on pages 86-90 of the request, as well as in claim chart Exhibit CC-G, which are incorporated by reference. **ADOPTION MAINTAINED.**

Issue 20

Claims 1, 5, 6, 14, 21, and 22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Asnicar in view of Mladenic. The rejections were adopted in the Office Action mailed 10/24/11 as proposed on pages 90-95 of the request, as well as in claim chart Exhibit CC-G, which are incorporated by reference. **ADOPTION MAINTAINED.**

Issue 21

Claims 3 and 7 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Asnicar in view of Mladenic, further in view of Culliss. The rejections were adopted in the Office Action

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mailed 10/24/11 as proposed on pages 95-96 of the request, as well as in claim chart Exhibit CC-G, which are incorporated by reference. **ADOPTION MAINTAINED.**

Issue 22

Claims 23 and 24 are rejected under 35 U.S.C. §§ 102(a) and 102(b) as being anticipated by Stefani. The rejections were adopted in the Office Action mailed 10/24/11 as proposed on pages 96-100 of the request, as well as in claim chart Exhibit CC-H, which are incorporated by reference. **ADOPTION MAINTAINED.**

Issue 23

Claims 1, 5, 6, and 21 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Stefani in view of Mladenic. The rejections were adopted in the Office Action mailed 10/24/11 as proposed on pages 100-105 of the request, as well as in claim chart Exhibit CC-H, which are incorporated by reference. **ADOPTION MAINTAINED.**

Issue 24

Claims 3 and 7 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Stefani in view of Mladenic, further in view of Culliss. The rejections were adopted in the Office Action mailed 10/24/11 as proposed on pages 105-106 of the request, as well as in claim chart Exhibit CC-H, which are incorporated by reference. **ADOPTION MAINTAINED.**

Issue 25

Claims 14 and 22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Stefani in view of Mladenic, further in view of Refuah. The rejections were adopted in the Office Action mailed 10/24/11 as proposed on pages 106-107 of the request, as well as in claim chart Exhibit CC-H, which are incorporated by reference. **ADOPTION MAINTAINED** with respect to claim 22. The rejection is now **NOT ADOPTED** with respect to claim 14 for reasons explained below under "Discussion of Issues."

Discussion of Issues

Rejections Based on Primary Reference Mladenic

Issue 1: Claims 1, 5, 6, 14, 21, and 23 as anticipated by Mladenic

Patent Owner:

PO argues (PO Response, 12/23/11) that Mladenic does not teach receiving a search query from a user and retrieving a plurality of documents based on the search query, as recited in claim 1. PO argues that Mladenic does not describe any such search query or any documents returned in response to it. Instead, PO argues that Mladenic's Personal WebWatcher operates on specific Web pages requested by a user via a browser, storing the addresses of those pages for the later, learning phase. PO argues that while the prior WebWatcher system described by Mladenic may have interacted with its users in the context of a search, Mladenic's Personal WebWatcher does not employ such a mechanism ("it doesn't ask the user for any keywords", Mladenic, p.3, ln. 5). Therefore, PO argues that Mladenic does not teach "receiving a search query from the user," as claimed.

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PO argues (PO Response, 12/23/11) that because Mladenec does not teach receiving a search query from the user, it follows that Mladenec cannot teach "retrieving a plurality of documents based on the search query," as further recited in claim 1. Instead, PO argues that Mladenec relies on users to specify particular documents of interest, and the Personal WebWatcher "watches over the user's shoulder" to record the addresses of those documents. See Mladenec, p.2, Ins. 18-19, p.3 Ins. 3-7. PO goes on to argue that because Mladenec does not teach retrieved documents that are based on a search query, it follows that Mladenec cannot teach the remainder of the claim limitations, since they rely upon those retrieved documents that are based on the search query.

Third Party Requester:

Requester argues (Requester Response, 1/23/12) that PO has employed an overly narrow reading of the Mladenec reference in its arguments. Requester argues that while the main system described by Mladenec, i.e. Personal WebWatcher, does not require the user to enter search queries, Mladenec states that Personal WebWatcher is an offshoot of the WebWatcher system (Mladenec, p.2), and further explains that WebWatcher does require the user to enter search queries (Mladenec, p.2 -- "The idea is that the user provides a few keywords describing a search goal and WebWatcher highlights related hyperlinks on the current page and/or adds new hyperlinks to the current page.") Therefore, Requester argues that Mladenec discloses the "search query" limitations of claim 1 and argues that PO has improperly limited its analysis of Mladenec to the Personal WebWatcher system, rather than considering the entire publication as required under 35 U.S.C. § 102(a) and 102(b).

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Requester goes on to argue (Requester Response, 1/23/12) that even if only Personal WebWatcher is considered, and not the related WebWatcher, PO also reads Personal WebWatcher too narrowly. Requester argues that although Personal WebWatcher does not ask the user to enter any keywords, it does observe the user's browsing behavior and highlight hyperlinks that it thinks will be of interest based on the user's browsing behavior (Mladenic, p.2). Requester argues that a person of ordinary skill would understand that normal browsing behavior often includes entering search queries in search engines, and in such instances Personal WebWatcher will highlight hyperlinks that it believes to be of interest from the search results page. Therefore, Requester argues that whenever a Personal WebWatcher user engages in the common task of using a search engine, Personal WebWatcher would meet the "search query" limitations of claim 1.

Examiner:

Examiner agrees with PO that Mladenic does not disclose "receiving a search query from the user," and "retrieving a plurality of documents based on the search query," as recited in claim 1.

Mladenic recites,

"Unlike WebWatcher, Personal WebWatcher (PWW) is structured to specialize for a particular user, modeling her/his interests. It "watches over the user's shoulder" the similar way WebWatcher does, but it avoids involving the user in its learning process (it doesn't ask the user for any keywords or opinions about pages). It solely records the addresses of pages requested by the user and highlights hyperlinks that it believes will be of interest. In the

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learning phase (typically during the night), **requested pages are analyzed** and a model of user interests is generated/updated. This model is used to give advice for hyperlinks on retrieved HTML-pages requested by and presented to the user via Web browser." See, Mladenic, p.3, lns. 2-10).

It is clear that the Personal WebWatcher disclosed by Mladenic does not receive a search query from a user or retrieve resultant pages based on such a search query. Rather, the Examiner agrees with the PO that Personal WebWatcher operates on specific Web pages requested by a user via a browser, storing the addresses of those pages for the later, learning phase.

Since Mladenic's Personal WebWatcher relies on users to specify particular documents of interest and "watches over the user's shoulder" to record the addresses of those documents (Mladenic, p.2, lns 18-19, p.3 lns. 3-7), Examiner agrees that Mladenic does not teach documents that are *retrieved based on a search query*, as claimed, and therefore also does not teach the remainder of the claim limitations, since they rely upon retrieved documents that are based on a search query.

In response to Requester's argument that Mladenic also describes WebWatcher, a precursor to Personal WebWatcher, and that WebWatcher requires users to enter search queries, the Examiner notes that Mladenic explicitly states that Personal WebWatcher is different from its precursor WebWatcher in that very respect ("It "watches over the user's shoulder" the similar way WebWatcher does, **but it avoids involving the user in its learning process (it doesn't ask the user for any keywords or opinions about pages)**," Mladenic, p.3, lines 3-5). In the context of a 35 USC 102 rejection, the Requester may not pick and choose certain features of both the WebWatcher system and the Personal WebWatcher system to reject the claim. Rather, ""The

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identical invention must be shown in as complete detail as is contained in the ... claim.”

Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).”

and “The elements must be arranged as required by the claim,” per MPEP 2131.

Similarly, in response to Requester’s argument that Personal WebWatcher observes the user’s browsing behavior and that a person of ordinary skill would understand that normal browsing behavior often includes entering search queries in search engines, and that whenever a user engages in the common task of using a search engine, Personal WebWatcher would meet the “search query” limitations, the Examiner disagrees with the Requester’s argument and notes that the rejection is a 35 USC 102 rejection based upon anticipation, and that Personal WebWatcher does not disclose a user entering search queries or retrieving documents based upon those search queries. Mladenic makes it clear that the monitored user actions contemplated by the Personal WebWatcher system are specific pages requested by the user, as explained above. **Therefore, Mladenic does not anticipate claim 1.**

Patent Owner:

PO argues (PO Response, 12/23/11) that Mladenic’s Personal WebWatcher does not disclose “transparently monitoring” user interactions with data, as recited by claim 1. Instead, PO argues that Personal WebWatcher is explicitly overt in its monitoring. Links that are believed to point to Web pages that will be of interest to a user are highlighted and/or annotated (Mladenic p.9, Fig. 3) and users are continuously reminded that Personal WebWatcher is watching their activity through the addition of the banners shown in the highlighted section of the Web page illustrated in Mladenic’s Fig. 3. PO argues that returning pages that are specially

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highlighted and/or annotated and reminding users of the monitoring that is taking place is not "transparent monitoring."

Third Party Requester:

Requester argues (Requester Response, 1/23/12) that because the Personal WebWatcher system of Mladenic learns by observing user actions rather than requiring explicit feedback from the user, Mladenic meets the "transparently monitoring" limitation. In response to PO's argument that returning pages that are specially highlighted and/or annotated is not "transparent monitoring," Requester argues that the personalized, annotated pages created by Mladenic relate to how Mladenic *presents* interesting hyperlinks to the user, not how Mladenic monitors user browsing behavior to learn user interests and decide which hyperlinks to highlight. Requester also points to Fig. 20, reference character 216, the '276 patent which also discloses highlighting of the type disclosed in Mladenic, and cites the '276 patent specification which recites, "[i]n this application, *the hyperlinks in a document being viewed by the user are graphically altered, e.g., in their color, to indicate the degree of interest of the linked documents to the use.* [sic]" ('276 patent, col. 28, lns. 64-67) (emphasis added). Requester argues that PO's interpretation of the "transparently monitoring" limitation as requiring that the personalized information services, rather than the monitoring, be "transparently" provided is therefore at odds with the claim language itself and the disclosure in the '276 patent specification.

Examiner:

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Examiner agrees with the Requester that Mladenic's Personal WebWatcher discloses transparently monitoring user interactions with data, as claimed. Mladenic's Personal WebWatcher "avoids involving the user in its learning process (it doesn't ask the user for any keywords or opinions about pages)," (Mladenic, p.3, lines 3-5) and Examiner agrees that because Personal WebWatcher learns by observing user actions rather than requiring explicit feedback from the user, Mladenic meets the "transparently monitoring" limitation. Examiner also agrees with Requester that returning personalized, annotated pages created by Mladenic relates to how Mladenic *presents* interesting hyperlinks to the user, not how Mladenic *monitors* user behavior to learn user interests. Lastly, Examiner agrees with Requester that '276 patent's own specification describes highlighting of the type disclosed in Mladenic ('276 patent, col. 28, lns. 64-67 - "[i]n this application, *the hyperlinks in a document being viewed by the user are graphically altered, e.g., in their color, to indicate the degree of interest of the linked documents to the use.* [sic]"). Therefore, highlighting links that are believed to be of interest to the user is not a persuasive argument to show that Mladenic does not teach transparent monitoring. Therefore, Mladenic's Personal WebWatcher discloses transparently monitoring user interactions with data, as required by the claim.

Patent Owner:

PO argues (PO Response, 12/23/11) that Mladenic does not teach "applying the identified properties of the retrieved document to the user-specific learning machine to estimate a probability that the retrieved document is of interest to the user", as recited in claim 1. PO argues that there are no "retrieved documents" as claimed in claim 1 and also that Personal

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WebWatcher "actually predict[s] interestingness of [a] document based on the hyperlink pointing to it, and not [on the] document itself" (Mladenec, p.10, lns. 5-6). PO argues that, regardless of interpretation, Mladenec does not teach the claimed feature.

Third Party Requester:

Requester argues (Requester Response, 1/23/12) that Mladenec teaches that the WebWatcher system, the precursor to the Personal WebWatcher, teaches analyzing words of the documents retrieved behind the hyperlinks (Mladenec, p.4), and accordingly teach analyzing properties of the retrieved documents themselves. Requester also argues that Personal WebWatcher itself analyzes the link rather than the document due to time-constraints, and that by December 1999, the priority date of the '276 patent, it would be obvious to one of skill in the art, to have Personal WebWatcher analyze the document, not just the hyperlink pointing to it, during the advice phase since document retrieval would have been less time-consuming by that time.

Examiner:

Examiner agrees with PO that Mladenec does not teach "applying the identified properties of the retrieved document to the user-specific learning machine to estimate a probability that the retrieved document is of interest to the user", as recited in claim 1. As explained above, the Examiner agrees that Mladenec's Personal WebWatcher does not disclose retrieved documents, as claimed in claim 1, and therefore does not teach applying the identified properties of *the retrieved document* to the user-specific learning machine to estimate a probability that *the*

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retrieved document is of interest to the user. Furthermore, Examiner also agrees with PO, as explained a page 7, line 28 - page 8, line 11 of PO's response, that if the Web Page currently being viewed by a user is the "retrieved document," and hyperlinks on that page are properties of that retrieved document, those hyperlinks are not applied to any learning machine to estimate a probability that the same currently viewed document is of interest to the user, and the limitation is not taught. On the other hand, if the hyperlinks on the currently viewed Web page are considered properties of the documents to which they point, then the hyperlinks are not properties of the retrieved document, and the limitation is not taught.

Furthermore, in response to Requester's attempt to rely on WebWatcher, the precursor to Personal WebWatcher, and Requester's statement that it would be obvious to one of skill in the art to have Personal WebWatcher analyze the documents that the hyperlinks point to during the advice phase, Examiner notes that the rejection is a 35 USC 102 rejection and not a 35 USC 103(a) obviousness rejection. **Mladenic's Personal WebWatcher does not disclose the claimed limitation and does not anticipate the claim.**

Patent Owner:

PO argues (PO Response, 12/23/11) that Mladenic does not teach "estimating parameters of a user-specific learning machine," as recited in claim 1. Instead, PO argues that the "learner" assembles a scored word map that is used for comparison purposes whenever new hyperlinks are encountered. PO argues that such a word map does not rise to the level of the user-specific learning machine recited in claim 1.

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Third Party Requester:

In response to PO's argument that "the scored word map" of Mladenec "does not rise to the level of the user-specific learning machine recited in claim 1," Requester argues (Requester Response, 1/23/12) that PO provides no explanation to support this argument. Requester argues that the '276 patent itself lists a scored word map as a User Model at Fig. 4A ('276 patent, col. 6, lns. 13-14). Moreover, the '276 patent explains that the User Model is an implementation of a learning machine. ('276 patent, col. 8, lns. 45-46). Therefore, since a scored word map qualifies as a "User Model" under the '276 patent, it qualifies as a "learning machine." To further emphasize the fact that a scored word map qualifies as a User Model or user-specific learning machine under the '276 patent, the Requester points out that the '276 specification explains that "[t]he informative word and phrase list of FIG. 4A contains the most informative words and phrases found in user documents, along with a measure of each informative phrase or word's importance to the user." ('276 patent, col. 10, lns. 50-53.) The specification goes on to state that "[a] preferred embodiment uses the TFIDF measure" to determine the scores, which is the same measure described in Mladenec. ('276 patent, col. 11, lns. 9-18; Mladenec, pp.3-4).

Examiner:

Examiner agrees with the Requester that Mladenec teaches "estimating parameters of a user-specific learning machine," as recited in claim 1. Specifically, Examiner agrees PO has not provided any specific reasoning to support the argument that a scored word map does not rise to the level of the claimed user-specific learning machine. Furthermore, Examiner agrees with Requester that the scored word map of Mladenec constitutes a user-specific learning machine that

is consistent with the description of a user-specific learning machine provided by the disclosure of the '276 patent.

With respect to claims 5, 6, 14, and 21, Examiner agrees with PO that, based on their dependency on claim 1, Mladenec does not anticipate these claims for at least the same reasons as explained above.

With respect to claim 23, Examiner agrees with PO that, Mladenec does not anticipate the claim for the reasons explained above with respect to claim 1.

Conclusion:

Accordingly, the rejections presented above under "Status of Grounds of Rejection" with respect to Issue 1 are now **NOT ADOPTED** with respect to claims 1, 5, 6, 14, 21, and 23.

Issue 2: Claim 3 as obvious over Mladenec in view of Culliss

Examiner:

Claim 3 depends from claim 1. The rejection is not adopted for the same reasons as indicated above with regard to claim 1 in Issue 1.

Accordingly, the rejection presented above under "Status of Grounds of Rejection" with respect to Issue 2 is now **NOT ADOPTED** with respect to claim 3.

Issue 3: Claims 7 and 22 as obvious over Mladenec in view of Refuah

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Examiner:

Claims 7 and 22 depend from claim 1. The rejections are not adopted for the same reasons as indicated above with regard to claim 1 in Issue 1.

Accordingly, the rejections presented above under "Status of Grounds of Rejection" with respect to Issue 3 are now **NOT ADOPTED** with respect to claims 7 and 22.

Issue 4: Claim 24 as obvious over Mladenic in view of Montebello

Examiner:

Claim 24 depends from claim 23. The rejection is not adopted for the same reasons as indicated above with regard to claim 23 in Issue 1.

Accordingly, the rejection presented above under "Status of Grounds of Rejection" with respect to Issue 4 are now **NOT ADOPTED** with respect to claim 24.

Rejections Based on Primary Reference Wasfi

Issue 5: Claims 23 and 24 as anticipated by Wasfi

Patent Owner:

PO argues (PO Response, 12/23/11, pp. 21-23) that Wasfi fails to teach a user-specific learning machine. PO argues that the context model taught by Wasfi is not specific to a specific user, but rather is assembled from monitored actions of a large number of users and that the learning module of Wasfi is constructed on the basis of Web-site specific data files that represent the activities of many users. PO argues that this is in contrast to claim 23, which recites a user-

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specific learning-machine, estimating parameters of the user-specific learning machine, and applying properties of collected documents to the user-specific learning machine.

PO also argues (PO Response, 12/23/11, pp. 21-23 and 3/12/12, pp. 8-9) that Wasfi does not teach "applying the identified properties of the collected document to the user-specific learning machine to estimate a probability that the collected document is of interest to the user," as in claim 23. PO argues that in Wasfi document properties are applied to a page entropy model, which is not a user-specific learning machine as it is constructed on the basis of the actions of multiple visitors to the subject web site. PO argues that while Wasfi also discusses keyword matching with vector space representations of a user profile, this content-based filtering does not determine a probability that a document is of interest to the user. Rather, it computes a similarity metric, which PO argues is not a probability.

With respect to claim 24, PO argues that the web page shown in Fig. 2 of Wasfi is not a web page associated with the user. Although Wasfi recites that the interface includes "a separate resizable HTML frame at the top," PO argues that there is no indication that this separate frame is associated with the user.

Third Party Requester:

Requester argues (Requester Response, 1/23/12, pp. 12-16) that Wasfi discloses a "learning module" that "handles the task of mapping user interests to the [user] profile and maintaining the correlation between the two" (Wasfi, p.61). Requester argues that the parameters of the learning module are determined based on the specific web pages the user visits, and thus the learning module is user-specific (Wasfi, p.58).

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In response to PO's argument that the context model in Wasfi is not specific to a specific user, Requester argues that the context model relates to the *collaborative* filtering mechanism in Wasfi and has no relevance to the *content*-filtering mechanism in Wasfi that actually meets the limitation of a user-specific learning machine. Wasfi discloses that the ProfBuilder system discloses "keep[ing] track of each individual user" and providing "[c]ontent-based filtering [] based on the correlation between the content of the pages and the user's preferences" (Wasfi, p.60, col. 2).

With respect to the limitation of "applying the identified properties of the collected document to the user-specific learning machine to estimate a probability that the collected document is of interest to the user," Requester argues that PO provides no explanation of why computing the similarity of a given document and a user profile does not qualify as estimating the probability that the document is of interest to the user. Given that the goal of Wasfi's ProfBuilder system is "finding relevant local pages for the site's users" (Wasfi, p.60), the purpose of calculating the similarity between a given document and a user profile is to estimate the probability that the document is "relevant", i.e. of interest, to the user. The Requester further notes (Requester Response, 4/10/12, pp. 2-3) that the '276 patent itself uses distance metrics as a means of estimating probabilities and acknowledges that measuring the vector distance between two items is one way of estimating the probability that those items are related. Requester argues that Wasfi similarly explains that its vector-distance measurements are a type of probability measurement (Wasfi, p.58).

With respect to claim 24, in response to PO's argument that there is no indication that the separate frame shown in Fig. 2 of Wasfi is associated with the user, the Requester argues

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(Requester Response, 1/23/12, pp. 15-16) that the separate frame includes a certain number of "ball" icons that indicate how relevant reach recommended page is to the particular user who is viewing the frame. Therefore, the frame is associated with the user, as claimed.

Examiner:

Examiner agrees with the Requester that Wasfi discloses a user-specific learning machine. Wasfi at p.60 recites that "ProfBuilder keeps track of each individual user and provides that person online assistance." ProfBuilder includes both collaborative filtering and content-based filtering, and it is agreed that the content-based filtering is user-specific, as argued by Requester. Wasfi recites that "[c]ontent-based filtering is based on the correlation between the content of the pages and the user's preferences," making it clear that it filters pages based on a specific user and constitutes a user-specific learning machine.

Examiner also agrees with the Requester that Wasfi discloses a "learning module" that "handles the task of mapping user interests to the [user] profile and maintaining the correlation between the two" (Wasfi, p.61). Wasfi discloses that a "profile is a description of user interests. To deliver information a user wants to see, we should search for pages that are similar to his/her profile. An appropriate representation for profiles and pages is based on vector-space representation ... For this representation, the method for profile reformulation in response to the changes of user's interest is based on vector adjustment." (Wasfi, p.58, col. 1). Wasfi teaches content-based filtering that is performed by comparing the vector-space representations of pages with the vector-space representations of user interests. The vector representation of user interests is adjusted in response to changes in a user's interests according to the formula at page 58, col. 1

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of Wasfi. Therefore, the parameters of the user-specific learning machine described by Wasfi are based on the specific web pages the user visits, i.e. based at least in part on documents of interest to the user (Wasfi, p.58, col. 1).

With respect to the limitation of "applying the identified properties of the collected document to the user-specific learning machine to estimate a probability that the collected document is of interest to the user," Examiner agrees with Requester that this is taught by Wasfi. Examiner agrees that since the goal of Wasfi's ProfBuilder system is "finding relevant local pages for the site's users" and Wasfi discloses filtering web pages "based on the correlation between the content of the pages and the user's preferences" (Wasfi, p.60, col. 2), calculating the similarity between a given document and a user profile is clearly done to determine if the document would be "relevant", i.e. of interest, to the user. The calculated similarity metric is an indication of the probability that the given document is of interest to the user. Examiner agrees with Requester that PO has not provided any reasons as to why computing the similarity of a given document and a user profile does not qualify as estimating the probability that the document is of interest to the user in the context of the content-based filtering of Wasfi. Examiner agrees with Requester that vector-distance measurements are a type of probability measurement that is consistent with the '276 specification.

With respect to claim 24, Examiner agrees with Requester that Wasfi teaches that displaying said collected documents to said user on a personal web page *associated with the user*. As argued by Requester, the separate frame shown in Fig. 2 of Wasfi includes a certain number of "ball" icons that indicate how relevant each recommended page is to the particular user who is viewing the frame. Wasfi also recites that, "the frame also shows two buttons for

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choosing the type of filtering. In the content-based filtering, the selected pages are sorted in decreasing order of their interestingness" (Wasfi, p.61). Since content-based filtering in Wasfi is specific to a particular user, as explained above, and the frame displays recommended pages based upon the content-based filtering, Wasfi therefore teaches that the frame is tailored to, i.e. associated with, the user who is viewing the frame.

Conclusion:

Accordingly, the rejections presented under "Status of Grounds of Rejection" with respect to Issue 5 remain **ADOPTED** with respect to 23 and 24.

Issue 6: Claims 1, 3, 5, 6, 14, 21, and 22 as obvious over Wasfi in view of Mladenic

Examiner:

PO argues (PO Response, 12/23/11 and 3/12/12, pp. 10-11) that Wasfi fails to teach the limitations of claim 1 for the reasons argued above with respect to claim 23 and that Mladenic fails to remedy the deficiencies of Wasfi. However, Examiner agrees with Requester that Wasfi does teach the limitations of claim 1, as explained above with respect to claim 23 in Issue 5.

Accordingly, the rejections presented above under "Status of Grounds of Rejection" with respect to Issue 6 remain **ADOPTED** with respect to claims 1, 3, 5, 6, 14, 21, and 22.

Issue 7: Claim 7 as obvious over Wasfi in view of Mladenic and Refuah

Examiner:

Claim 7 depends from claim 1. PO argues (PO Response, 12/23/11 and 3/12/12, p.11) that Wasfi fails to teach the limitations of claim 1 for the reasons argued above and that Refuah also fails to remedy the deficiencies of Wasfi. However, Examiner agrees with Requester that Wasfi teaches the limitations of claim 1 being argued, as explained above with respect to claim 23 in Issue 5.

Accordingly, the rejection presented above under "Status of Grounds of Rejection" with respect to Issue 7 remains **ADOPTED** with respect to claim 7.

Rejections Based on Primary Reference Refuah

Issue 8: Claims 1, 3, 5, 6, 7, 14, and 21-24 as anticipated by Refuah

Patent Owner:

PO argues (PO Response, 12/23/11, pp. 26-27 and 3/12/12, p.13) that Refuah does not teach estimating parameters of a user-specific learning machine, as recited in claim 1 and 23. PO argues that Refuah relies on personas and moods which are selected by a user and may be shared by several users. PO argues that the ability to share personalities and the related ability to select from among a set of predefined personalities and/or upload personalities for use by others, (Refuah, col. 5, lns. 25-30), suggests that the personalities are not "user-specific" and that there is no estimation occurring, as the personality switches are being effected by selections from among predefined personas and moods.

PO further argues (PO Response, 3/12/12, pp. 13-14) that Refuah necessarily produces results that are query-dependent, whereas claim 1 recites a query-independent estimation of probability of user-interest.

PO also argues (PO Response, 3/12/12, p.14) that the use of cookies and subject categories in updating a persona and/or mood, as in Refuah, is not equivalent to estimating probabilities using a learning machine.

Third Party Requester:

Requester argues (Requester Response, 1/23/12, pp. 17-18 and 4/10/12, pp. 6-8) that Refuah teaches estimating parameters of a user-specific learning machine. Requester states that the persona of Refuah is a model of user interests, and so qualifies as a "learning machine" under the '276 patent. ('276 patent, col. 8, lns. 45-46 - "The User Model 13, with its associated representations, is an implementation of a learning machine.") In response to PO's argument that Refuah does not estimate parameters of a learning machine, because the persona or mood is selected by a user when they begin Internet activity, Requester argues that PO ignores Refuah's teaching about how the user's Internet activities are used to modify and adapt the persona to the user. (Refuah col. 6, lns. 60-62 ("a parameter may be reflexive towards the persona, for example defining how to modify the persona and/or a mood based on user activities.") In response to PO's argument that that the learning machine in Refuah is not user-specific because several users may share a set of personalities or moods, Requester argues that PO again ignores Refuah's teaching about how a user's activities help modify that user's persona. Because Refuah modifies a user's persona based on observations of that specific user's activities, the persona (i. e., learning

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machine) is "user-specific." Finally, Requester argues that users of Refuah's system are not limited to swapping one predefined persona for another - rather, the parameters of their persona may be modified based on their Internet activities.

Requester also argues (Requester Response, 4/10/12, p.7) that PO does not provide any rationale as to why Refuah's persona and mood do not qualify as a learning machine and submits that Refuah's persona and mood meet the criteria of a learning machine.

Examiner:

Examiner agrees with Requester that Refuah teaches estimating parameters of a user-specific learning machine. Contrary to PO's argument, Examiner finds that personas and moods in Refuah need not be manually selected by a user, but rather may be updated based on a user's activities. Refuah discloses, "In a preferred embodiment of the invention, **a mood and/or a persona may be updated by modifying continuous parameters.**" (Refuah, col. 6, lns. 5-7) Refuah further specifies updating parameters so as to influence the persona: "a parameter may be reflexive towards the persona, for example defining **how to modify the persona and/or a mood based on user activities.**" (Refuah, col. 6, lns. 60-62). Accordingly, the parameters define the persona specific to the user, and these parameters are modified "based on user activities." Furthermore, Examiner agrees with requester that because this persona is a model of user interests, it qualifies as a "learning machine" under the '276 patent.

Examiner disagrees with PO's argument that Refuah does not estimate parameters of a learning machine because the persona or mood is selected by a user when they begin Internet activity. Refuah also teaches that a mood or persona may be automatically updated in response

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to user activities (Refuah, col. 3, lines 3-11 – “an ability of **automatically updating a mood based on actions of a user on the Internet**”; col. 5, lines 34-56). Furthermore, Refuah teaches that the persona or mood has parameters that are modified based on a user’s activities (Refuah, col. 6, lns. 5-7).

Examiner disagrees with PO’s argument that the learning machine in Refuah is not user-specific because several users may share a set of personalities or moods. Rather, as explained by Requester, Refuah teaches that a persona or mood may be defined for a particular user (Refuah, col. 2, lines 3-14) and that user’s activities help modify that user’s persona (Refuah, col. 3, lines 3-11; col. 5, lines 34-56). Therefore, Refuah teaches a persona (i. e., learning machine) that is “user-specific.”

In response to PO’s argument (PO Response, 3/12/12, pp. 13-14) that Refuah necessarily produces results that are query-dependent, whereas claim 1 recites a query-independent estimation of probability of user-interest, the Examiner respectfully disagrees with this characterization of Refuah and maintains that the teachings of Refuah meet the claim limitations, as recited. Refuah states that personalization responsive to a mood and/or persona may be alternatively to personalization responsive to a particular search (Refuah, col. 3, lines 56-61), indicating that the estimation of user interest is not necessarily responsive to the current information need, as alleged. Furthermore, the claim does not recite that the estimation must be query-independent, as argued by PO, but merely recites “applying the identified properties of the retrieved document to the user-specific learning machine to estimate a probability that the retrieved document is of interest to the user,” which is clearly taught by Refuah (Refuah, col. 17, lines 44-56).

Examiner agrees with Requester (Requester Response, 4/10/12, p.7) that Refuah's persona and mood meet the criteria of a learning machine, in that it is a mathematical function quantified by mathematical weights, is used to make a prediction of what sites are interesting to a user, and attempts to improve its predictive ability over time by adapting to a user's changing preferences.

Patent Owner:

PO also argues (PO Response, 12/23/11) that Refuah does not teach estimating probabilities that a retrieved or collected document is of interest to a user or using the estimated probabilities to select or present at least a portion of any retrieved or collected documents to the user, as recited in claim 1 and 23. Specifically, PO argues that the personalities in Refuah are used as filters, but that the filtering uses matching and does not estimate probabilities.

Third Party Requester:

Requester argues (Requester Response, 1/23/12 and 4/10/12, p.8) that Refuah does teach estimating a probability that a retrieved or collected document is of interest to the user, as claimed. Refuah recites, "[i]n the evaluation technique, a site is evaluated for suitability and/or qualities which are preferred and/or match a particular persona" (Refuah, col. 17, lns. 44-46). Requester argues that this involves estimating the probability that the site is of interest to the user, as determined by the user's persona.

In response PO's argument that Refuah's filtering uses a matching approach and does not estimate probabilities, Requester argues that PO provides no explanation for why determining

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the degree of match between a site and the user's persona is different from estimating the probability that the site is of interest to the user. Rather, Requester argues that, given that the persona is designed to represent the interests of the user, determining how well a site matches the user's persona is tantamount to estimating the probability that the site is of interest to the user.

Examiner:

Examiner agrees with Requester that Refuah teaches estimating a probability that a retrieved or collected document is of interest to the user, as claimed. Examiner agrees that in the "evaluation technique" described by Refuah (Refuah, col. 17, lns. 44-46), evaluating a site for suitability and/or qualities which are preferred by a particular persona involves estimating the probability that the site is of interest to the user, as determined by the user's persona. Examiner further agrees that, given that the persona is designed to represent the interests of the user, determining how well a site matches the user's persona constitutes estimating the probability that the site is of interest to the user. PO has not provided an explanation for why determining the degree of match between a site and the user's persona is different from estimating the probability that the site is of interest to the user.

Furthermore, Refuah recites, "Various combinations of thresholding, grading and sorting may be applied on search results, by comparing them to a persona" (Refuah, col. 17, lns. 34-36) and "in one case, a strong match will be shown even if its associated geographical location is 1000 miles away" (Refuah, col. 17, lns. 49-56). Refuah's use of thresholding and grading, and determining strong matches, is further evidence of estimating a probability, or likelihood, that a document is of interest to the user.

Examiner also agrees with Requester (Requester Response, 4/10/12, p.8) that the persona in Refuah is not dependent on a given query, but rather "are designed to affect the results of substantially any query" (Refuah, col. 17, lines 28-30).

Patent Owner:

With respect to claim 14, PO argues (PO Response, 12/23/11 and 3/12/12, pp. 14-15) that Refuah does not teach whether at least one of said documents of interest contains a link to said retrieved document, as claimed. Rather, Refuah discusses properties including the "number of links from the site," which PO argues would be links *from* a retrieved document, not *to* a retrieved document.

Third Party Requester:

Refuah recites, "Various characteristics of a site may be automatically determined... The characteristics preferably include one or more of:... (h) number of links; number of links visited..." (Refuah, col. 21, Ins. 9-26). Requester argues (Requester Response, 1/23/12) that nothing in this Refuah passage states that the links are necessarily *from* the retrieved document to documents of interest. It simply says states that one salient property of a retrieved site is whether that site is linked to other sites that the user visited. Sites that the user chose to visit are presumptively "documents of interest" to the user, and thus Requester argues that Refuah discloses "determining whether at least one of said documents of interest contains a link to said retrieved document."

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Examiner:

Claim 14 recites, "wherein identifying properties of the retrieved document comprises determining whether at least one of said documents of interest contains a link to said retrieved document." Examiner agrees with PO that Refuah does not explicitly teach this limitation of claim 14. The claim requires determining whether at least one of the documents determined to be of interest to the user contains a link to said retrieved document. While the passage of Refuah cited by Requester may not state that the links are *necessarily from* the retrieved document to documents of interest, the rejection is a 35 USC 102 rejection, and Examiner finds that Refuah does not anticipate this limitation. There is no teaching that Refuah determines whether at least one of said documents of interest *contains a link to said retrieved document*, as required by the claim.

Patent Owner:

With respect to claim 24, PO argues (PO Response, 12/23/11 and 3/12/12, p.15) that Refuah does not teach displaying said selected collected documents to said user on a personal page associated with the user because Refuah describes a web page personalized to a user's current personas, which are not user-specific, since they may be shared, and are therefore not personal.

Third Party Requester:

Requester argues (Requester Response, 1/23/12 and 4/10/12, p.9) that personas in Refuah are not merely "predefined." They can be modified based on that user's Internet activities, and are therefore "user-specific."

Examiner:

Examiner agrees with Requester that the personas in Refuah are indeed "user-specific" and, therefore, clearly considered personal, for reasons explained above.

Conclusion:

Accordingly, the rejections presented above under "Status of Grounds of Rejection" with respect to Issue 8 remain **ADOPTED** with respect to claims 1, 3, 5, 6, 7, and 21-24.

The rejection presented above under "Status of Grounds of Rejection" with respect to Issue 8 is now **NOT ADOPTED** with respect to claim 14.

Rejections Based on Primary Reference Culliss

Issue 9: Claims 1, 3, 6, 7, 21, 22, and 23 as anticipated by Culliss

Patent Owner:

PO argues (PO Response, 12/23/11, pp. 28-31 and 3/12/12, p.17) that Culliss does not transparently monitor a user's interactions and analyze the monitored data to determine documents of interest to the user, as recited by claims 1 and 23. Rather, PO argues that Culliss uses monitored activities of previous users to make decisions about what documents might interest a current user (Culliss; col. 1, lines 46-48).

Third Party Requester:

Requester argues (Requester Response, 1/23/12, p.21 and 4/10/12, pp. 12-13) that Culliss creates a learning machine or user model for each user by transparently monitoring that very user's interactions with network data. A user is defined by the "personal data" categories for which he qualifies, and these qualifications are based on the user's own activities (Culliss, col. 4, ln. 54 – col. 5, ln. 16).

Examiner:

Examiner agrees with Requester that Culliss transparently monitors a user's interactions and analyzes the monitored data to determine documents of interest to the user, as recited by claims 1 and 23. As stated by Requester, Culliss creates a learning machine or user model for a user by transparently monitoring that very user's interactions with network data. A user is defined by the "personal data" categories for which he qualifies, and these qualifications are based on the user's own activities. For example, Culliss recites, "the user can be identified as having the personal data characteristic of being a sports fan and having an interest in finance because there are three queries relating to sports," which shows that the user's interactions are monitored and it is determined that the user is interested in sports (Culliss, col. 4, ln. 54 – col. 5, ln. 16).

Culliss also recites that "Users can explicitly specify their own personal data, or it can be **inferred from a history of their search requests or article viewing habits**. In this respect, certain key words or terms, such as those relating to sports (i.e. 'football' and 'soccer'), can be

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detected within search requests and used to classify the user as someone interested in sports.

Also, certain known articles or URLs can be detected in a users searching or browsing habits, such as those relating to CNNfn (www.cnnfn.com) or Quote.com (www.quote.com), and also used to classify the user as someone interested in finance" (Culliss, col. 3, lns. 46-56). This also teaches that Culliss monitors a user's interactions to determine documents of interest to that user.

Patent Owner:

PO argues (PO Response, 12/23/11, pp. 28-31) that Culliss does not teach estimating parameters of a user-specific learning machine, as recited in claims 1 and 23. PO argues that the cumulative score and personal data item scores of Culliss are calculated and do not include any estimations, and therefore do not constitute parameters of a user-specific learning machine that are estimated.

PO also argues (PO Response, 12/23/11, pp. 28-31 and 3/12/12, p.17) that the Culliss system operates according to activities of prior users, and the mechanism employed by Culliss is not specific to the claimed user.

PO further argues (PO Response, 3/12/12, p.16) that Culliss does not teach the "learning machine" as recited in the claims.

Third Party Requester:

Requester argues that, while it is true that the cumulative scores disclosed by Culliss are calculated rather than estimated, the scores or "informative measures" disclosed in the '276

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patent specification are also calculated. For example, the score might be "measured by the word's frequency in user documents." ('276 patent, col. 10, ln. 67 – col. 11, ln. 1). The score might use the Term-Frequency / Inverse Document Frequency (TFIDF) measure, which is calculated through a mathematical formula. ('276 patent, col. 11, lns. 9-18). The score might also be derived through the concept of mutual information, which is again calculated through a mathematical formula. ('276 patent, col. 11, lns. 41-57). In short, all of the scores described in the specification are "calculated" rather than "estimated." Thus, Requester argues that PO's argument that Culliss does not "estimate" parameters because these parameters are mathematically calculated would read out every embodiment from the '276 patent specification.

Requester also argues that Culliss creates a learning machine or user model for each user by transparently monitoring that very user's interactions with network data.

In response to PO's argument that Culliss does not teach the "learning machine" as recited in the claims, Requester argues (Requester Response, 4/10/12, pp. 11-12) that there is nothing to preclude Culliss's system that relies on term matching between the user's personal data and documents under review from being considered a learning machine as claimed. Furthermore, Requester argues that Culliss's system does attempt to improve its predictive ability over time (Culliss, col. 4, lines 61-64). Moreover, Requester notes that the system of the '276 patent also relies on common terms between the user's personal data and the document under review, much like Culliss' system.

Examiner:

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Examiner agrees with Requester that Culliss teaches estimating parameters of a user-specific learning machine. As argued by Requester, the calculations in Culliss are consistent with estimations as disclosed by the '276 patent. Using mathematical formulas to calculate a score does not preclude those calculations from being considered estimates. Therefore, Examiner agrees with Requester that Culliss teaches "estimating" parameters in a manner that appears consistent with the descriptions of "estimating" provided in the '276 patent specification.

Examiner also agrees with Requester that Culliss creates a learning machine or user model for each user by transparently monitoring that very user's interactions with network data (Culliss, col. 4, ln. 65 – col. 5, ln. 4). Therefore, it is agreed that the learning machine or user model of Culliss is user-specific.

Lastly, Examiner agrees with Requester that the system of Culliss does in fact teach a learning machine as claimed and that PO has not provided any reason to preclude Culliss's system that relies on term matching between the user's personal data and documents under review from being considered a learning machine as claimed (Requester Response, 4/10/12, pp. 11-12). The Examiner further agrees with Requester that Culliss's system attempts to improve its predictive ability over time (Culliss, col. 4, lines 61-64).

Patent Owner:

PO argues (PO Response, 12/23/11, p.30 and 3/12/12, p.16) that Culliss does not teach estimating a probability that the retrieved/collected document is of interest to the user, as recited in claims 1 and 23. PO argues that it is the computed score of a particular article that is used to determine its relevancy to a query. PO argues that the groupings and relevancy scores taught by

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Culliss do not establish an estimation of a probability. Rather, PO argues that Culliss relies on direct numerical computations to group users together and determine the relevancy of a particular article to a particular query. PO argues that, at best, user data is used to interpret a query and determine how relevant a given document is to the query, not a particular user, as required by claims 1 and 23.

PO further argues (PO Response, 3/12/12, p.16) that Culliss does not teach estimating probabilities that are independent of information-need.

Third Party Requester:

Requester argues (Requester Response, 1/23/12, pp. 23-24) that Culliss teaches estimating a probability that the retrieved/collected document is of interest to the user. Requester argues that, as stated in the Request, Culliss discloses that, when a user enters a search request, the search request and the user's personal data are combined to form various groupings: key term groupings, category and personal data groupings, etc. Based on these groupings, the system determines how relevant a given document is to the searching user (Culliss, col. 5, lns. 40-48 - "Articles associated with these groupings are then retrieved from the index, and their relevancy scores are used or combined to determine their rankings.").

In response to PO's argument that the relevancy score computed by Culliss is a "direct numerical computation" and thus not an estimated probability, Requester argues that PO does not provide any explanation of why relevancy scores are not "estimated probabilities."

In response to PO's argument that Culliss "determines how relevant a given document is to the query, not a particular user as required by claims 1 and 23," Requester argues that this

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argument is based on the definition of "query." Culliss discloses, "[w]hen a first user enters a search query, the personal data can be considered part of the request and stored within or added to the index, individually or in groupings with other items of data such as key terms, categories, or ratings." (Culliss, col. 5, Ins. 18-21) (emphasis added). Accordingly, the "query" in Culliss includes the user data, and Culliss explicitly stores keywords (conventional queries) as paired with personal data. (Culliss, col. 5, Ins. 25-48). Accordingly, Requester argues that the query used in Culliss includes both keywords and user information, and Culliss therefore determines the relevancy of a particular article to a particular keyword and a particular category of user.

In response to PO's argument that Culliss makes query-dependent estimations of user interest, Requester argues (Requester Response, 4/10/12, p.10) that while it is true that Culliss' system involves bundling personal data with search queries (Culliss, col. 5, lines 18-48), the personal data can be appended to any search query to personalize search results for the user and does not change depending on which query it is appended to. Therefore, Requester argues that Culliss provides a query-independent means of filtering search results for relevance to the user.

Examiner:

Examiner agrees with Requester that Culliss teaches estimating a probability that the retrieved/collected document is of interest to the user. Culliss discloses that, when a user enters a search request, the search request and the user's personal data are combined to form various groupings. Based on these groupings, the system determines how relevant a given document is to the searching user based on the document's relevancy score (Culliss, col. 5, Ins. 40-48 -

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"Articles associated with these groupings are then retrieved from the index, and their relevancy scores are used or combined to determine their rankings.").

Examiner disagrees with PO that the relevancy scores are not estimated probabilities, and agrees with requester that PO has not provided an explanation of why the relevancy scores would not qualify as estimated probabilities. Examiner finds that the relevancy scores, even if directly computed, serve to estimate a probability, or likelihood, that the document is relevant to the user, and therefore meet the "estimating a probability" limitation of the claims.

Examiner also agrees with Requester that the "query" in Culliss includes the user data, and Culliss explicitly stores keywords (conventional queries) as paired with personal data (Culliss, col. 5, lns. 25-48 -- "it is possible to simply store all elements of personal data, individually or in key term groupings, within the index separately, with components of the query or otherwise."). Accordingly, Examiner agrees with Requester that the query used in Culliss includes both keywords and user information, and Culliss therefore determines the relevancy of a particular article to a particular keyword *and a particular category of user*, meeting the claim limitation.

Lastly, Examiner agrees with Requester that Culliss provides a query-independent means of filtering search results for relevance to the user since the personal data of Culliss can be appended to any search query to personalize search results for the user and does not change depending on which query it is appended to (Requester Response, 4/10/12, p.10).

Conclusion:

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Accordingly, the rejections presented under "Status of Grounds of Rejection" with respect to Issue 9 remain **ADOPTED** with respect to claims 1, 3, 6, 7, 21, 22, and 23.

Issue 10: Claim 5 as obvious over Culliss in view of Mladenic

Patent Owner:

PO argues (PO Response, 12/23/11 and 3/12/12, pp. 17-18) that Mladenic and Culliss are not in related fields of art and that because Mladenic specially chose not to build a system that was based on search, one of ordinary skill in the art would not seek to combine the teachings of Culliss and Mladenic.

PO also argues that Mladenic fails to remedy the deficiencies of Culliss with respect to claim 1.

Third Party Requester:

In response to PO's argument that one of ordinary skill would not seek to combine the teachings of Mladenic and Culliss because these references are supposedly in unrelated fields of art, Requester argues (Requester Response, 1/23/12 and 4/10/12, pp. 13-14) that this is unavailing, since both Mladenic and Culliss are indisputably in the field of providing personalized information recommendations to Internet users.

Examiner:

Claim 5 depends from claim 1. First, Examiner finds that Culliss teaches the limitations of claim 1, as explained above in Issue 9. Furthermore, Examiner disagrees with PO that

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Mladenic and Culliss are in unrelated fields of art and agrees with requester that both Mladenic and Culliss are in the field of providing personalized information recommendations to Internet users.

Conclusion:

Accordingly, the rejection presented above under "Status of Grounds of Rejection" with respect to Issue 10 remains **ADOPTED** with respect to claim 5.

Issue 11: Claim 14 as obvious over Culliss in view of Refuah

Patent Owner:

PO argues (PO Response, 12/23/11, p.32) that Refuah fails to remedy the deficiencies of Culliss with respect to claim 1.

PO also argues that Refuah does not teach whether at least one of said documents of interest contains a link to said retrieved document, as claimed. Rather, Refuah discusses properties including the "number of links from the site," which PO argues would be links *from* a retrieved document, not *to* a retrieved document.

Third Party Requester:

Requester argues (Requester Response, 1/23/12 and 4/10/12, pp. 14-15) that Refuah teaches the limitation of claim 14, for reasons explained in Issue 8 above.

Examiner:

Claim 14 depends from claim 1. First, Examiner finds that Culliss teaches the limitations of claim 1, as explained above in Issue 9. However, as explained in Issue 8 above, Examiner agrees with PO there is no teaching that Refuah determines whether at least one of said documents of interest contains a link to said retrieved document. Therefore, even if combined with Culliss, the combination does not teach this feature as required by claim 14. Moreover, the Requester has not provided any rationale to support its conclusion that it would have been obvious to modify the teachings to analyze incoming links instead of outgoing links, and has not established a prima facie case of obviousness.

Conclusion:

Accordingly, the rejection presented above under "Status of Grounds of Rejection" with respect to Issue 11 is now **NOT ADOPTED** with respect to claim 14.

Issue 12: Claim 24 as obvious over Culliss in view of Montebello

Examiner:

PO argues (PO Response, 12/23/11, p.32 and 3/12/12, p.19) that Montebello fails to remedy the deficiencies of Culliss with respect to claim 23. However, Examiner agrees with Requester (Requester Response, 1/23/12, p.25 and 4/10/12, p.15) that Culliss teaches the limitations of claim 23, as explained above in Issue 9.

Conclusion:

Accordingly, the rejection presented above under "Status of Grounds of Rejection" with respect to Issue 12 remains **ADOPTED** with respect to claim 24.

Rejections Based on Primary Reference Montebello

Issue 13: Claims 1, 3, 6, 7, and 21-24 as anticipated by Montebello

Patent Owner:

PO argues (PO Response, 12/23/11, p.33 and 3/12/12, pp. 20-21) that Montebello fails to teach applying identified properties of retrieved/collected documents to a user-specific learning machine to estimate the probability that the retrieved document is of interest to the user, as recited in claims 1 and 23. Specifically, PO argues that the *prediction* employed by Montebello's PEA is not an estimation of a probability that the collected document is of interest to the user as recited in the claims. PO argues that a prediction may be a forecast or prophecy, but this is not sufficient to conclude that it is an estimation of a probability. Indeed, by referring to it as a prediction, Montebello appears to suggest that the PEA has some knowledge about the subject that allows the system to arrive at the conclusion being advanced. Such activities do not bear the hallmarks of estimations of probabilities

PO also argues (PO Response, 3/12/12, p.20) that Montebello does not teach query-independent estimations of probabilities of user interest.

PO argues (PO Response, 3/12/12, p.21) that Montebello uses feature comparison between the document and the profile, which is an approach based on distance measures rather than probabilistic measures.

PO further argues (PO Response, 3/12/12, p.21) that Montebello is concerned with solving a different problem than the claimed invention. Specifically, PO argues that Montebello uses existing search results and tries to determine which documents are most similar to ones already viewed by the user, whereas claim 1 recites a method where a search query is received from a user and a prediction is made as to which results from the query will be of interest to the user.

Third Party Requester:

In response to PO's argument, Requester argues (Requester Response, 1/23/12, p.26 and 4/10/12, p.17) that PO presents no actual distinction between "predicting" whether a document is of interest to a user and "estimating a probability" that a document is of interest to a user.

Requester argues that PO's proposed construction in the Pending Litigation for "estimating a probability" is "approximately or roughly calculating the degree of belief or likelihood" (OTH-B at 23), and this is synonymous with "predicting." Requester provides an example that, if a weatherman "approximately or roughly calculates the likelihood" that the weather will be fair or foul tomorrow, the weatherman is "predicting" the weather under any sensible point of view.

In response to PO's argument that Montebello makes query-dependent estimations of probabilities of user interest, Requester argues (Requester Response, 4/10/12, pp. 15-16) that Montebello does not consider the content of the user query when estimating the probability that retrieved documents are of interest to the user.

Requester argues (Requester Response, 4/10/12, p.17) that while Montebello does not mention distance measures, distance measurements are indeed one way of estimating the probability that two items are related.

Requester argues (Requester Response, 4/10/12, pp. 17-18) that Montebello does indeed receive a search query from a user as recited in claim 1.

Examiner:

Examiner agrees with Requester that Montebello teaches applying identified properties of retrieved/collected documents to a user-specific learning machine to estimate the probability that the retrieved document is of interest to the user, as recited in claims 1 and 23. As set forth in the Request, Montebello recites, "Documents that have been retrieved and stored within the main index by the retrieval agent will have their **features extracted and compared to the profile of each individual user** generated by the profile generator., **if any of the documents from the main index happen to fit the user's interests or needs, then they will be eventually suggested to the user** the next time the user logs in." (Montebello, p.4) Examiner finds that extracting features of a document, comparing them against a user's profile, and suggesting documents to a user that fit the user's interests meets the claimed limitation. Specifically, Examiner finds that suggesting documents to a user that are likely to be of interest to the user constitutes estimating a probability that the document is of interest to the user. The examiner disagrees with the PO's argument the Montebello's use of the word "prediction" does not read on the claimed feature of estimating a probability.

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In response to PO's argument (PO Response, 3/12/12, p.20) that Montebello does not teach query-independent estimations of probabilities of user interest, the Examiner respectfully disagrees with this characterization of Montebello and maintains that the teachings of Montebello meet the claim limitations, as recited. The Examiner agrees with Requester (Requester Response, 4/10/12, p.16) that Montebello does not consider the content of the user query when estimating the probability that retrieved documents are of interest to the user. Rather, Montebello uses search results provided by third-party search engines as the input for its PEA recommender system. Moreover, the Examiner notes that the claim does not recite that the estimation must be query-independent, as argued by PO, but merely recites "applying the identified properties of the retrieved document to the user-specific learning machine to estimate a probability that the retrieved document is of interest to the user," which is clearly taught by Montebello (Montebello, p.4).

Examiner agrees with Requester that distance measurements are a type of probability measurement that is consistent with the '276 specification (Requester Response, 4/10/12, p.17), as also explained above with respect to Issue 5.

Examiner agrees with Requester that Montebello receives a search query from a user, as recited in claim 1, and meets the limitations of the claim as recited. The distinctions that PO is attempting to draw (PO Response, 3/12/12, p.21) are not evident in the language of claim 1, as it is presently recited. Examiner agrees with Requester that, while Montebello uses third-party search engines to generate its search results, Montebello teaches that users may submit search queries which are run on the third-party search engines to generate search results (Requester Response, p.18; Montebello, pp. 2, 5).

Conclusion:

Accordingly, the rejections presented above under "Status of Grounds of Rejection" with respect to Issue 13 remain **ADOPTED** with respect to claim 1, 3, 6, 7, and 21-24.

Issue 14: Claim 5 as obvious over Montebello in view of Mladenic

Examiner:

Claim 5 depends from claim 1. PO argues (PO Response, 12/23/11, p.34 and 3/12/12, p.22) that Montebello fails to teach the limitations of claim 1 for the reasons argued above and that Mladenic also fails to remedy the deficiencies of Montebello. However, Examiner agrees with Requester (Requester Response, 1/23/12, p.27 and 4/10/12, pp. 18-19) that Montebello teaches the limitations of claim 1, as explained above in Issue 13.

PO also argues (PO Response, 3/12/12, p.22) that Montebello indicates (Montebello, p. 4, lines 9-10) that documents not of interest are ignored and each suggestion is deleted completely, implying that negative examples are not saved or used to affect the profile. PO argues that this teaches away from a combination with Mladenic. However, the Examiner agrees with Requester (Requester Response, 4/10/12, pp. 19) that just because Montebello does not use documents that are deemed not to be of interest does not preclude the conclusion that it would have been obvious to do so. Furthermore, the Examiner notes that Montebello states, "Each suggestion, if considered interesting, may be explicitly added to the personal database by the user, or deleted completely" (Montebello, p. 4, lines 9-10). The language of this statement does not make it clear that documents not of interest are necessarily deleted completely, as alleged by PO. Rather, it

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merely states, as supported by Fig. 2 of Montebello, that *suggested documents* may be added or deleted. Therefore, the Examiner maintains that the combination is proper and that it would indeed have been obvious to modify Montebello with Mladenic to use documents not of interest to the user to refine the user profile (Requester Response, 4/10/12, pp. 19).

Conclusion:

Accordingly, the rejection presented above under "Status of Grounds of Rejection" with respect to Issue 14 remains **ADOPTED** with respect to claim 5.

Issue 15: Claim 14 as obvious over Montebello in view of Refuah

Patent Owner:

PO argues (PO Response, 12/23/11, p.35) that Refuah fails to remedy the deficiencies of Montebello with respect to claim 1.

PO also argues that Refuah does not teach whether at least one of said documents of interest contains a link to said retrieved document, as claimed. Rather, Refuah discusses properties including the "number of links from the site," which PO argues would be links *from* a retrieved document, not *to* a retrieved document.

Third Party Requester:

Requester argues (Requester Response, 1/23/12, p.27 and 4/10/12, pp. 19-20) that Refuah teaches the limitation of claim 14, for reasons explained in Issues 8 and 11 above.

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Examiner:

Claim 14 depends from claim 1. First, Examiner finds that Montebello teaches the limitations of claim 1, as explained above in Issue 13. However, as explained in Issues 8 and 11 above, Examiner agrees with PO there is no teaching that Refuah determines whether at least one of said documents of interest contains a link to said retrieved document. Therefore, even if combined with Montebello, the combination does not teach this feature as required by claim 14.

Conclusion:

Accordingly, the rejection presented above under "Status of Grounds of Rejection" with respect to Issue 15 is now **NOT ADOPTED** with respect to claim 14.

Rejections Based on Primary Reference Barrett

Issue 16: Claims 23 and 24 as anticipated by Barrett

Patent Owner:

PO argues (PO Response, 12/23/11) that that Barrett does not teach estimating parameters of a user-specific learning machine and estimating a probability that the collected document is of interest to the user, as recited in claim 23. PO argues that Barrett recites, agents to "derive clusters and keywords from the [user's] personal history and then [find] documents containing those keywords" (Barrett, p.11), but has left for the future the task of creating more sophisticated agents. PO argues that parsing documents for keywords is not estimating parameters of a user-specific learning machine and that running searches to find additional

documents containing those keywords is not "estimating a probability that the collected document is of interest to the user".

PO argues (PO Response, 3/12/12, pp. 23-24) that the "user models" of Barrett are not "user-specific learning machines" as claimed because they do not attempt to improve their predictive ability over time.

PO argues (PO Response, 3/12/12, p.24) Barrett does not teach "estimating a probability that the collected document is of interest to the user," because no estimation of probabilities is involved. The decision of whether a document is interesting or not in Barrett is not probabilistic in nature, i.e. it lacks a numerical degree of belief of likelihood.

Third Party Requester:

In response to PO's argument that Barrett does not estimate parameters of a user-specific learning machine, on the theory that Barrett only teaches "parsing documents for keywords," Requester argues (Requester Response, 1/23/12) that Barrett's WBI system extracts text and keywords from documents the user has viewed and uses these extracted features to model the user's interests (Barrett, p.4). Requester notes that, as discussed above in Issue 1, the '276 patent itself explicitly lists a scored word map as a User Model, and explains that a User Model is an implementation of a learning machine ('276 patent, col. 3, lns. 13-14, col. 8, lns. 45-46). Therefore, Requester argues that since a scored word map qualifies as a "User Model" under the '276 patent, it qualifies as a "user-specific learning machine." Further, Requester argues that Barrett "estimates the parameters" of this user-specific learning machine by determining which keywords best represent the user's interests (Barrett, p.12 - describing "the agent that derives

clusters and keywords from the personal history and then finds documents containing those keywords. This agent tries to determine what is of interest to the user - under the assumption that keywords identify interesting documents.").

In response to PO's argument that Barrett does not "estimate a probability that a collected document is of interest to the user," Requester argues (Requester Response, 1/23/12 and 4/10/12, p.21) that determining that a collected document matches a keyword from the model of user interests is itself an estimation that the collected document is of interest to that user. Requester argues that even though Barrett does not make any precise mathematical calculations of the likelihood that a collected document is of interest to the user (because Barrett relies on the rough technique of keyword matching), PO has construed "estimating a probability" as "approximating or roughly calculating the degree of belief or likelihood." (OTH-B at 23). Thus, Barrett "estimates a probability" under Respondent's construction.

In response to PO's argument that the "user models" of Barrett are not "user-specific learning machines" as claimed because they do not attempt to improve their predictive ability over time, Requester argues (Requester Response, 4/10/12, p.20) that Barrett's WBI system monitors a user's web browsing activity over a period of time to steadily learn more about the user's interests and construct new keywords to reflect those interests (Barrett, p.4). Requester argues that, due to the iterative nature of Barrett's user models, these models do "attempt to improve their predictive ability over time" and thus qualify as "user-specific learning machines."

Examiner:

Examiner agrees with Requester that Barrett teaches estimating parameters of a user-specific learning machine and estimating a probability that the collected document is of interest to the user, as recited in claim 23.

As set forth in the Request, Barrett recites, "[a]gents **build user models** which generalize, recognize, and classify user activity to predict future activity" (Barrett, p.7) and that "User modeling., requires: (a) inferring what the user is thinking **based on what the user is doing on the computer**, and (b) determining what the computer should do based on what the user is (presumably) thinking. We have built a few simple examples of these transformations, such as the agent that **derives clusters and keywords from the personal history and then finds documents containing those keywords**. This agent tries to determine what is of interest to the user---under the assumption that keywords identify interesting documents --- and then translates those keywords into undiscovered documents using a search service. " (Barrett, p.12). Therefore, Examiner agrees with Requester that Barrett's WBI system extracts text and keywords from documents the user has viewed and uses these extracted features to model the user's interests. Examiner further agrees with Requester that Barrett "estimates the parameters" of this user-specific learning machine, i.e. the user models, by determining which keywords best represent the user's interests. This constitutes estimating parameters of a user-specific learning machine, as claimed.

Furthermore, since in Barrett, the agent "**derives clusters and keywords from the personal history and then finds documents containing those keywords**" and "this agent tries to determine what is of interest to the user---under the assumption that keywords identify interesting documents --- and then translates those keywords into undiscovered documents

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using a search service," the Examiner also agrees with Requester that determining that a collected document matches a keyword from the model of user interests in Barrett is an estimation of the probability, or likelihood, that the collected document is of interest to that user, as claimed. These estimations are used to select documents (Barrett, p.4 - WBI "searches the web for additional pages related to subjects the user has browsed, and adds links to subsequently accessed pages that suggest additional pages of interest.").

The Examiner also agrees with Requester (Requester Response, 4/10/12, p.21) that the broadest reasonable interpretation of "estimating a probability," which is consistent with PO's previous position, does not require a numerical calculation and the claims, as presently recited, do not recite a numerical limitation.

In response to PO's argument that the "user models" of Barrett are not "user-specific learning machines" as claimed because they do not attempt to improve their predictive ability over time, the Examiner respectfully disagrees. The Examiner agrees with Requester (Requester Response, 4/10/12, p.20) that, due to the iterative nature of Barrett's user models, these models do "attempt to improve their predictive ability over time" and thus qualify as "user-specific learning machines." Barrett's WBI system monitors a user's web browsing activity over a period of time to steadily learn more about the user's interests and construct new keywords to reflect those interests (Barrett, p.4 - "*WBI monitors the web activity of a particular user, classifies accessed web pages according to subject, searches the web for additional pages related to subjects the user has browsed... An autonomous agent is triggered on a time interval, periodically digesting the text the user has viewed, grouping the pages into clusters, and extracting keywords that describe the clusters*").

Conclusion:

Accordingly, the rejections presented above under "Status of Grounds of Rejection" with respect to Issue 16 remain **ADOPTED** with respect to claims 23 and 24.

Issue 17: Claims 1, 3, 5, 6, 21, and 22 as obvious over Barrett in view of Mladenic

Patent Owner:

PO argues (PO Response, 12/23/11, pp. 37-39 and 3/12/12, pp. 25-26) that Barrett fails to teach the limitations of claim 1 for the reasons argued above with respect to claim 23 and that Mladenic fails to remedy the deficiencies of Barrett.

PO also argues that the Office Action is wrong when it adopts the Requestor's view of Mladenic's teachings regarding search. PO argues that it is important to recognize the Requestor cites Mladenic's comments regarding the WebWatcher, and NOT the Personal WebWatcher, when it comes to search requests. PO argues that, as argued above in Issue 1, Mladenic's Personal WebWatcher eschews such an approach and no such search query or any documents returned in response to it are found in that system. Therefore, PO argues that once cannot convincingly argue that Mladenic teaches "receiving a search query from the user" and "retrieving a plurality of documents based on the search query," as recited in claim 1.

Third Party Requester:

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Requester argues (Requester Response, 1/23/12, p.29 and 4/10/12, p.21) that PO simply repeats its arguments that Mladenec fails to disclose various elements of claim 1. Requester submits that these arguments are unfounded, as Mladenec discloses all the elements of claim 1.

Examiner:

First, Examiner finds that Barrett does teach the limitations of claim 1 being argued by PO, as explained above with respect to claim 23 in Issue 16.

Examiner also agrees with Requester that the conclusion of obviousness with respect to claim 1 over Barrett in view of Mladenec is proper. While it is true that the Request relies upon Mladenec's comments regarding the WebWatcher, and not the Personal WebWatcher, when it comes to search requests, that is not relevant to the fact that Mladenec's WebWatcher does indeed teach search requests and retrieving documents based on the search requests (Mladenec, p.2 - "The idea is that the user provides a few keywords describing a search goal and WebWatcher highlights related hyperlinks on the current page and/or adds new hyperlinks to the current page."). Therefore, Mladenec teaches the features for which it has been relied upon, and in combination with the teachings of Barrett, renders the claim obvious, as set forth in the Request at p.81.

PO's remaining arguments stem from the argument above, which is not convincing. Furthermore, the Examiner notes that the rejections are 35 USC 103(a) rejections using an obviousness rationale and, in response to PO's arguments against the references individually, Examiner one cannot show nonobviousness by attacking references individually where the

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rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Conclusion:

Accordingly, the rejections presented above under "Status of Grounds of Rejection" with respect to Issue 17 remain **ADOPTED** with respect to claims 1, 3, 5, 6, 21, and 22.

Issue 18: Claims 7 and 14 as obvious over Barrett in view of Mladenic and Refuah

Patent Owner:

PO argues (PO Response, 12/23/11, p.39 and 3/12/12, p.26) that Refuah fails to remedy the deficiencies of Barrett and Mladenic with respect to claim 1.

PO also argues (PO Response, 12/23/11, p.40) that Refuah does not teach whether at least one of said documents of interest contains a link to said retrieved document, as claimed. Rather, Refuah discusses properties including the "number of links from the site," which PO argues would be links *from* a retrieved document, not *to* a retrieved document.

Third Party Requester:

Requester argues (Requester Response, 1/23/12, pp. 29-30 and 4/10/12, p.22) that Refuah teaches the limitation of claim 14, for reasons explained in Issues 8 and 11 above.

Examiner:

Claim 14 depends from claim 1. First, Examiner finds that Barrett in view of Mladenic teach the limitations of claim 1, as explained above in Issue 17. However, as explained in Issues 8 and 11 above, Examiner agrees with PO there is no teaching that Refuah determines whether at least one of said documents of interest contains a link *to* said retrieved document. Therefore, even if combined with Barrett and Mladenic, the combination does not teach this feature as required by claim 14.

Conclusion:

Accordingly, the rejection presented above under "Status of Grounds of Rejection" with respect to Issue 18 remains **ADOPTED** with respect to claim 7.

The rejection presented above under "Status of Grounds of Rejection" with respect to Issue 18 is now **NOT ADOPTED** with respect to claim 14.

Rejections Based on Primary Reference Asnicar

Issue 19: Claims 23 and 24 as anticipated by Asnicar

Patent Owner:

PO states (PO Response, 12/23/11, pp. 40-43) that the ifWeb system of Asnicar offers has two modes of operation: a navigation support mode and a document search mode, both of which are initiated when a user selects an initial document (Asnicar, p.2). PO further states that both the classification and navigation strategies are based on a model that, "is constituted by a set of attribute-value pairs corresponding to the structured part of the documents (host, size, number

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of images,...), and a weighted semantic network whose nodes correspond to terms (concepts) found in documents and where arcs link together terms which co-occurred in some document." (Asnicar, p.2). PO then argues that although this model is termed a "user model", its description makes clear that it is really a document model in that the model's constituents are attributes of the document, and are not user-specific. PO argues that while Asnicar does make provisions for updating this document model through "implicit relevance feedback provided by the user" it remains the case that the model is a document model (See Asnicar, p.4 explaining that a Document Processor Agent is used to extract information concerning the structure and content of a document and to build a document internal representation, which subsequently is used as the basis for any classification decision - it is apparent that such a classification must compare similar document structure representations, hence, the model is a document model). Therefore, PO argues that the document model of Asnicar is specific to a document, not to a user, and therefore Asnicar does not teach "estimating parameters of a user-specific learning machine," as claimed in claim 23.

PO also argues that Asnicar fails to describe any estimation of parameters for the document model. Instead, Asnicar teaches the use of attribute-value pairs corresponding to the structured parts of documents, and a weighted semantic network whose nodes correspond to terms found in documents and where arcs link together co-occurrence of those terms. PO argues that such attributes are not estimated parameters, they are extracted values.

PO further argues (PO Response, 3/12/12, p.28) that there is no disclosure in Asnicar of probabilistic modeling. Rather, Asnicar describes classifying a document into three categories,

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"interesting," "not-interesting," and "indifferent," based on user-selectable criteria, which does not constitute estimating a probability.

PO lastly argues (PO Response, 3/12/12, p.28) that Asnicar does not teach a user-specific machine as claimed.

Third Party Requester:

Requester argues (Requester Response, 1/23/12, pp. 30-33) that Asnicar plainly discloses a user-specific learning machine in the form of a "user model that is updated and refined by implicit relevance feedback provided by the user." (Asnicar, p.2). Requester argues that the model disclosed in Asnicar is tailored to a single user: "This work describes the ifWeb system, a prototype of a user model-based intelligent agent capable of supporting the user in the navigation of the World Wide Web, the retrieval and filtering of documents taking into account the *specific information needs of the user*." (Asnicar, Abstract (emphasis added)). Requester points out that Asnicar frequently and explicitly refers to the model as a "user model" and discloses that the user model is updated based on user interactions (rather than, say, document changes). (Asnicar, p.2 - "The user model is updated and refined by implicit relevance feedback provided by the user.").

Requester argues that, even though the user model in Asnicar does contain attribute-value pairs representing information about documents, PO fails to show how this falls outside the claimed "user-specific learning machine based at least in part on the documents of interest to the user," as claimed. Claim 23 does not forbid use of document features in the user model, but actually requires that the user model be based at least in part on documents. The descriptions of the user-specific learning machine in the '276 specification are similar to those in Asnicar,

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because both models are based in part on documents. Specifically, the '276's description of the user model at 10:40-41 and in Figures 4A through 4E is very similar to Asnicar's description of a user model that has "a set of attribute-value pairs corresponding to the structured part of the document (host, size, number of images ...)" (Asnicar, p.2).

Moreover, Requester argues that nothing in PO's proposed construction of "user-specific learning machine" prohibits document information from being incorporated into this learning machine. (See OTH-B at 18 (construing "user-specific learning machine" as "a model or mathematical function that is used to make a prediction or intelligent decision that attempts to improve performance in part by altering the values/weights given to its variables depending upon past observations or experiences specific to the user.") Because the user-specific learning machine under Respondent's construction "depend[s] upon past observations or experiences specific to the user," it naturally incorporates information about the documents that the user has observed or experienced.

In response to PO's argument that Asnicar's disclosure of a "Document Processor Agent [] used to extract information concerning the structure and content of a document and to build a document internal representation" as evidence that Asnicar's model is centered on documents, not users, the Requester argues that the '276 patent specification calls for a similar document analyzer that identifies a document's format, parses text from images, and tokenizes the text. ('276 patent, col. 17, lns. 35-59). "Parsed portions of the documents and extracted information are processed to initialize or update the user representations in the User Model." ('276 patent, col. 17, lns. 60-62).

In response to PO's argument that, even if Asnicar does disclose a user-specific learning machine, it does not "estimate parameters" of this learning machine but rather relies on attributes and "extracted values," Requester submits that this argument falls flat, since Asnicar states on its face that these extracted values can be weights. (See Asnicar, p.2 - "ifWeb includes a mechanism for temporal decay, *which lowers the weights associated with concepts* which have been included in the model and are untouched by the relevance feedback mechanism since a long time.") (emphasis added). In turn, Respondent has construed "estimating parameters of a user-specific learning machine" as "estimating *values or weights* of the variables of a user-specific learning machine." (OTH-B at 16) (emphasis added). Thus, Requester argues that the values/weights of Asnicar's learning machine are clearly "parameters" under Respondent's own construction.

In response to PO's argument that there is no disclosure in Asnicar of probabilistic modeling and estimating a probability, Requester first argues (Requester Response, 4/10/12, p.23) that measuring the distance between two items is one way of calculating the probability that those two items are related, consistent with the '276 patent specification ('276 Patent, col. 4, line 67- col. 5, line 39). Requester also argues that Asnicar "estimates a probability that a collected document is of interest to the user" in the same way as described in the '276 Patent.

In response to PO's argument that Asnicar does not teach a user-specific learning machine, Requester argues (Requester Response, 4/10/12, p.24) that contrary to PO's argument, Asnicar does approximate or calculate the degree of likelihood that a collected document is of interest to the user.

Examiner:

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Claim 23 requires, "estimating parameters of a user-specific learning machine based at least in part on the documents of interest to the user." Examiner agrees with Requester that Asnicar discloses this limitation.

As set forth in the Request, Asnicar discloses a "user model, which includes concepts which represent the interests and non-interests of the user." (Asnicar, p.2). Asnicar also discloses that "The user model is updated and refined by implicit relevance feedback provided by the user: ifWeb extracts autonomously from the documents on which the user explicitly expressed some (positive or negative) feedback, all the information necessary to update the user model." (Asnicar, p.2). Therefore, the parameters, i.e. concepts, of the learning machine, i.e. user model, are "based at least in part on the documents of interest to the user," as claimed.

Examiner disagrees with PO's argument that the document model of Asnicar is specific to a document, not to a user, and therefore Asnicar does not teach "estimating parameters of a user-specific learning machine." Rather, Examiner agrees with Requester that the model disclosed in Asnicar is specific to a single user: "This work describes the ifWeb system, a prototype of a user model-based intelligent agent capable of supporting the user in the navigation of the World Wide Web, the **retrieval and filtering of documents taking into account the specific information needs of the user.**" (Asnicar, Abstract (emphasis added)).

Examiner also agrees with Requester that, even though the user model in Asnicar does contain attribute-value pairs representing information about documents, PO fails to show how this falls outside the claimed "user-specific learning machine based at least in part on the documents of interest to the user," as claimed. Examiner agrees that claim 23 does not preclude use of document features in the user model, but actually requires that the user model be based at

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least in part on documents. Furthermore, in response to PO's argument that Asnicar's disclosure of a "Document Processor Agent [] used to extract information concerning the structure and content of a document and to build a document internal representation" as evidence that Asnicar's model is centered on documents, not users, the Examiner agrees with Requester that the '276 patent specification calls for a similar document analyzer that identifies a document's format, parses text from images, and tokenizes the text. ('276 patent, col. 17, lns. 35-59). "Parsed portions of the documents and extracted information are processed to initialize or update the user representations in the User Model." ('276 patent, col. 17, lns. 60-62).

Examiner disagrees with PO's argument that Asnicar does not "estimate parameters" of the learning machine, i.e. user model, but rather relies on attributes and "extracted values." Examiner agrees with Requester that Asnicar states that these extracted values can be weights. (See Asnicar, p.2 - "ifWeb includes a mechanism for temporal decay, **which lowers the weights associated with concepts** which have been included in the model and are untouched by the relevance feedback mechanism since a long time."), and that adjusting weights/values constitutes estimating parameters under the broadest reasonable interpretation of the term.

Examiner disagrees with PO's argument that Asnicar does not teach probabilistic modeling and estimating a probability. Examiner agrees with Requester that measuring the distance between two items is one way of calculating the probability that those two items are related, consistent with the '276 patent specification ('276 Patent, col. 4, line 67- col. 5, line 39). Examiner also agrees with Requester that Asnicar "estimates a probability that a collected document is of interest to the user" in a way that is consistent with what is described in the '276 Patent. As stated by Requester, "Asnicar parses the text of a collected document to create a

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document internal representation and then compares this document representation against the user model (which has concept terms representing the user's interests). (See Asnicar at 2 (explaining how the user model contains a weighted semantic network of terms representing the user's interests); 4 ("The document internal representation produced is then sent to the IFTool Agency for comparison with the user model.") This is the same type of comparison that the '276 Patent uses in order to estimate a document's interestingness to the user. (See '276 Patent at 24:43-48 ("From the parsed text, the words of the document 120 are intersected with the words or phrases in the user informative word list 128. For every word or phrase in common, the stored mutual information between the two indicator variables I_w and I_u is summed to obtain the word score.") Thus, Asnicar "estimates a probability that a collected document is of interest to the user" in the same way as the '276 Patent" (Requester Response, 4/10/12, p.23).

Examiner disagrees with PO's argument that Asnicar does not teach a user-specific learning machine. Examiner agrees with Requester that Asnicar does approximate or calculate the degree of likelihood that a collected document is of interest to the user. As stated by Requester, "in deciding how to navigate the Web to search for additional relevant documents, Asnicar's system considers *"the values of the degree of promise* of the documents previously accessed on the path which concludes with the currently analyzed document." (Asnicar at 4) (emphasis added). Furthermore, Asnicar's system "shows to the user the set of documents which have been classified as the most relevant ones, *ordered downward from the most interesting.*" (Asnicar at 2) (emphasis added). The fact that Asnicar is able to create a rank ordering of each document's relevance to the user underscores how Asnicar must calculate each document's relevance in order to create this rank order" (Requester Response, 4/10/12, p.24).

Patent Owner:

PO argues (PO Response, 12/23/11, p.42) that Asnicar does not teach "transparently monitoring user interactions," as required by the claim. Rather, PO argues that Asnicar requires explicit feedback and that users are expected to modify system parameters and orders of analysis, request access to links, exclude documents from navigation and ask for display (Asnicar, Fig. 4, p.6). PO also argues that user feedback was needed even to seed the ifWeb system before any results were even available (Asnicar, p.5).

Third Party Requester:

Requester argues (Requester Response, 1/23/12, pp. 32-33) that while Asnicar can accept explicit feedback, it generally operates autonomously and uses implicit feedback, thus remaining transparent to the user. Asnicar plainly states that the disclosed ifWeb system can "start[] an *autonomous navigation*, [where] it collects WWW documents, it analyzes and classifies them..." (Asnicar, p.2) (emphasis added). Asnicar specifically discloses that its user model is "updated and refined by implicit relevance feedback provided by the user," further indicating that Asnicar discloses "transparent monitoring of user interactions."

Requester argues that Asnicar allows users to "modify system parameters and order of analysis, request access to links, exclude documents from navigation, and ask for display," but none of these capabilities is inconsistent with the ability to transparently monitor, as disclosed in Asnicar and described above. Similarly, although PO argues that Figure 3 of Asnicar shows that user feedback is required, the text explaining Figure 3 makes clear that even if some initial seed

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material is required, ifWeb operates autonomously during browsing, rendering it transparent. See Asnicar, p.5 ("The model was later incrementally "learned/refined" by ifWeb, thank [sic] to the feedback provided by the user. *During each session ifWeb was working autonomously*, and at the end of the session, it displayed the results to the subject.") (emphasis added).

Examiner:

Examiner agrees with Requester that Asnicar discloses transparently monitoring user interactions. Asnicar discloses that its user model is "updated and refined by **implicit relevance feedback provided by the user**," indicating that Asnicar discloses "transparent monitoring of user interactions." Examiner agrees with Requester that while Asnicar accepts explicit feedback, Asnicar also clearly discloses transparent monitoring of user interactions. Asnicar discloses that ifWeb system "starts an **autonomous navigation**, it collects WWW documents, it analyzes and classifies them..." (Asnicar, p.2) Furthermore, Examiner agrees that even if some initial seed material is required, ifWeb operates autonomously during browsing ("**During each session ifWeb was working autonomously**," Asnicar, p.5), rendering it transparent. Because ifWeb updates the user model using implicit feedback from the user and conducts its monitoring "autonomously," Examiner agrees with Requester that Asnicar discloses transparently monitoring user interactions.

Patent Owner:

With respect to claim 24, PO argues (PO Response, 12/23/11, p.43 and 3/12/12, p.28) that Asnicar does not disclose "displaying said selected documents to said user on a personal

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web page associated with the user." Specifically, Asnicar shows the use of a separate web page to display recommendations, but PO argues that it is not clear that this is a *personal web page associated with the user*, as required by the claim. PO argues that because Asnicar operates on a specific starting document chosen by a user, recommendations depend on characteristics of this initial document (Asnicar p.2), and therefore the web page with the recommendations is associated with that initial document and should not be considered a personal web page associated with the user.

Third Party Requester:

Requester argues (Requester Response, 1/23/12, pp. 33-34 and 4/10/12, pp. 24-25) that, as discussed above, PO's argument that Asnicar discloses a document model and not a user model is incorrect, and for that reason alone, the resulting web page is associated with a user rather than a document. Moreover, Requester notes that Asnicar repeatedly emphasizes the importance of meeting the "specific information needs of the user" and describes ifWeb's output as "the set of documents which have been classified as the most relevant ones, ordered downward from the most interesting." (Asnicar at 2). Therefore, the results window of ifWeb changes with the user's interests, making it a personal web page associated with the user.

Examiner:

Examiner agrees with Requester that Asnicar discloses "displaying said selected documents to said user on a personal web page associated with the user." As explained above, Examiner agrees with Requester that Asnicar's user model is user-specific. Therefore, Examiner

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agrees with Requester that the resulting web page is associated with a user rather than a document. Asnicar is directed to meeting the "specific information needs of the user" and describes ifWeb's output as "the set of documents which have been classified as the most relevant ones, ordered downward from the most interesting." (Asnicar at 2). Therefore, Examiner agrees with Requester that the results window of ifWeb changes with the user's interests, making it a personal web page associated with the user, as claimed.

Conclusion:

Accordingly, the rejections presented above under "Status of Grounds of Rejection" with respect to Issue 19 remain **ADOPTED** with respect to claims 23 and 24.

Issue 20: Claims 1, 5, 6, 14, 21, and 22 as obvious over Asnicar in view of Mladenic

Patent Owner:

PO argues (PO Response, 12/23/11, pp. 43-45 and 3/12/12, pp. 29-30) that Asnicar fails to teach the limitations of claim 1 for the reasons argued above with respect to claim 23 and that Mladenic fails to remedy the deficiencies of Barrett.

PO also argues that Mladenic and Asnicar are not in related fields of art and that because Mladenic specially chose not to build a system that was based on search, one of ordinary skill in the art would not seek to combine the teachings of Asnicar and Mladenic.

Third Party Requester:

Requester argues (Requester Response, 1/23/12, pp. 34-35 and 4/10/12, pp. 25-26) that PO repeats its arguments that Asnicar does not disclose various elements of claim 1 and that Mladenic suffers from the same failings. Requester submits that these arguments are unavailing, as Asnicar discloses the elements of claim 1 being argued.

In response to PO's argument that one of ordinary skill would not seek to combine the teachings of Mladenic and Asnicar because these references are supposedly in unrelated fields of art, Requester argues that this is incorrect, since both Mladenic discloses providing personalized information recommendations in response to user search queries.

Examiner:

First, Examiner finds that Asnicar does teach the limitations of claim 1 being argued by PO, as explained above with respect to claim 23 in Issue 19.

Furthermore, Examiner disagrees with PO that Mladenic and Asnicar are in unrelated fields of art and agrees with requester that both Mladenic and Asnicar are in the field of providing personalized information recommendations to Internet users. Examiner also agrees with Requester that the conclusion of obviousness with respect to claim 1 over Asnicar in view of Mladenic is proper. Mladenic's WebWatcher does indeed teach search requests and retrieving documents based on the search requests (Mladenic, p.2 - "The idea is that the user provides a few keywords describing a search goal and WebWatcher highlights related hyperlinks on the current page and/or adds new hyperlinks to the current page."). Therefore, Mladenic teaches the features for which it has been relied upon, and in combination with the teachings of Asnicar, renders the claim obvious, as set forth in the Request at p.92.

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Conclusion:

Accordingly, the rejections presented above under "Status of Grounds of Rejection" with respect to Issue 20 remain **ADOPTED** with respect to claims 1, 5, 6, 14, 21, and 22.

Issue 21: Claims 3 and 7 as obvious over Asnicar in view of Mladenic and Culliss

Examiner:

Claims 3 and 7 depend from claim 1. PO argues (PO Response, 12/23/11, p.45 and 3/12/12, p.30) that Asnicar and Mladenic fail to teach the limitations of claim 1 for the reasons argued above and that Culliss fails to remedy the deficiencies of Asnicar and Mladenic. PO also argues Culliss and Mladenic are not in related fields of art, as argued previously. However, Examiner agrees with Requester (Requester Response, 1/23/12, p.35 and 4/10/12, p.26) that Asnicar and Mladenic teach the limitations of claim 1 being argued, as explained above in Issue 20 and that Culliss and Mladenic are indeed in related fields of art, as explained above in Issue 10.

Conclusion:

Accordingly, the rejections presented above under "Status of Grounds of Rejection" with respect to Issue 21 remain **ADOPTED** with respect to claims 3 and 7.

Rejections Based on Primary Reference Stefani

Issue 22: Claims 23 and 24 as anticipated by Stefani

Patent Owner:

PO argues (PO Response, 12/23/11, pp. 46-47 and 3/12/12, p.31) that Stefani describes SiteIF, a system that takes into account a user's past browsing behavior to try and anticipate what documents in a web site could be interesting for the user (Stefani, Abstract, p.1), but reveals very little about how a determination is made that a document is or is not worth a user's attention. Specifically, PO argues that there is no suggestion of any estimate of probability being made.

PO also argues that Stefani does not teach estimating parameters of a user-specific learning machine. Rather, PO argues that the model in Stefani is not based on estimated parameters, but on directly extracted attributes of prior web pages, and that while the nodes and arcs are weighted, Stefani does not discuss how the weights are computed.

PO further argues (PO Response, 3/12/12, p.31) that the method recited in claim 23 is not one with only two possible outcomes, as in Stefani's SiteIF system, but one that accommodates variations, gradations, and ranges of user interest.

Third Party Requester:

In response to PO's argument that Stefani does not provide enough detail about SiteIF's operation to establish that SiteIF "estimates a probability that a collected document is of interest to a user," Requester disagrees and argues (Requester Response, 1/23/12, pp. 36-38 and 4/10/12, pp. 26-27) that Stefani does detail SiteIF's operation in sufficient detail. Requester argues that PO presents no logical reason why determining whether a document is worth the user's attention is different from estimating a probability that such document is of interest to the user, especially given that Stefani makes its determination of document interestingness by comparing the

document representation against the user model and counting how many terms co-occur in both the document representation and the user model (See Stefani, p.4). Requester argues that, because Stefani determines the degree of match between the document representation and the user model, Stefani thereby estimates the probability that the document is of interest to the user. Requester also notes that PO has construed "estimating a probability" as "approximating or roughly calculating the degree of belief or likelihood." OTH-B at 23 (emphasis added), thereby underscoring how determining the *degree* of match between a document and a user profile (as Stefani does) qualifies as "estimating a probability that the document is of interest to the user."

Requester also argues that the '276 patent itself discloses using direct observations of the user's browsing behavior to construct the learning machine/User Model. For instance, the '276 patent explains that "[u]ser interactions are monitored during multiple distinct modes of user interaction with data... Based on the monitored interactions, parameters of the learning machine are updated." ('276 patent, col. 4, lns. 60-67). The '276 patent also discloses that the learning machine/User Model is based on "directly extracted attributes of prior web pages." For instance, the '276 patent explains that components of the User Model include words that are directly extracted from documents the user has viewed. ('276 patent, col. 10, lns. 40-53 - "User-dependent inputs are represented by components of the User Model shown in FIGS. 4A-4E... The informative word and phrase list of FIG. 4A contains the most informative words and phrases found in user documents, along with a measure of each informative phrase or word's importance to the user."). Therefore, Requester argues that PO's argument that "estimating parameters of a learning machine" does not include using "direct observations of the user's

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browsing behavior" or "directly extracted attributes of prior web pages" would read out the techniques that the '276 specification itself discloses for this element.

In response to PO's argument that Stefani does not meet the "estimating a probability" limitation because it does not accommodate ranges of user interest, Requester disagrees (Requester Response, 4/10/12, p.27) and argues that Stefani's system also provides ranges of estimated user interest in the collected documents (Stefani, p.5 - "the list box on the right shows the documents of the class selected in the left list, *ordered by a decreasing way following the value of interest.*")

Examiner:

Examiner disagrees with PO's argument that Stefani does not provide enough detail to anticipate the claimed limitation of "estimat[ing] a probability that the collected document is of interest to a user."

Stefani recites, "SiteIF takes into account the user's browsing behavior and tries to anticipate what documents in the web site could be interesting for the user. The system dynamically learns the user's areas of interest generating/updating a user model." (Stefani, Abstract). As explained by Requester, Stefani describes a document representation module that creates an internal representation of a document's content (Stefani, p.3), a user model comprised of a semantic net of terms and term relationships, with each term and relationship being assigned a specific weight based on its interest for the user (Stefani, p.4), and a "matching module" that compares the internal document representation against the user model to make a determination of whether the document is "worth [] the user's attention." (See Stefani, p.4 - "During the filtering

phase, the matching module receives as input the internal representation of a document and the current user model. It produces as output a classification of the document (i.e. it is worth or not the user's attention").

Examiner agrees with Requester's position that determining whether a document is worth the user's attention constitutes estimating a probability that such document is of interest to the user, especially given that Stefani makes its determination of document interestingness by comparing the document representation against the user model and counting how many terms co-occur in both the document representation and the user model (See Stefani, p.4). Examiner agrees with Requester that Stefani determines the degree of match between the document representation and the user model, thereby estimating the probability, or likelihood, that the document is of interest to the user.

Examiner also disagrees with PO's argument that Stefani does not teach estimating parameters of a user-specific learning machine because Stefani relies on direct observations of user's browsing behavior and directly extracted attributes of prior web pages. Rather, Examiner agrees with Requester that the teachings of Stefani are consistent with the '276 patent specification in this regard. The '276 patent explains that "[u]ser interactions are monitored during multiple distinct modes of user interaction with data... **Based on the monitored interactions, parameters of the learning machine are updated.**" ('276 patent, col. 4, lns. 60-67). The '276 patent also explains that components of the User Model include words that are directly extracted from documents the user has viewed. ('276 patent, col. 10, lns. 40-53). Therefore, the use of direct observations and extracted attributes does not preclude Stefani from anticipating the claim, as the '276 patent itself describes these techniques.

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Examiner disagrees with PO's argument that Stefani does not meet the "estimating a probability" limitation because it does not accommodate ranges of user interest. The Examiner first notes that the features upon which applicant relies (i.e., accommodating "variations, gradations, or ranges of user interest") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). However, nevertheless, Examiner agrees with Requester that Stefani's system does indeed accommodate ranges of user interest (Stefani, p.5 - "the list box on the right shows the documents of the class selected in the left list, *ordered by a decreasing way following the value of interest.*").

Conclusion:

Accordingly, the rejections presented above under "Status of Grounds of Rejection" with respect to Issue 22 remain **ADOPTED** with respect to claims 23 and 24.

Issue 23: Claims 1, 5, 6, and 21 as obvious over Stefani in view of Mladenic

Patent Owner:

PO argues (PO Response, 12/23/11, pp. 47-48 and 3/12/12, p.32) that Stefani fails to teach the limitations of claim 1 for the reasons argued above with respect to claim 23 and that Mladenic fails to remedy the deficiencies of Stefani.

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PO also argues that Mladenec does not teach "receiving a search query," "retrieved documents," or using "estimated probabilities for the respective plurality of retrieved documents to present at least a portion of the retrieved documents to the user," as in claim 1.

Third Party Requester:

Requester argues (Requester Response, 1/23/12, p.38 and 4/10/12, pp. 27-28) that PO simply repeats its arguments that Mladenec fails to disclose various elements of claim 1. Requester submits that these arguments are unfounded, as Mladenec discloses all the elements of claim 1.

Examiner:

First, Examiner finds that Stefani does teach the limitations of claim 1 being argued by PO, as explained above with respect to claim 23 in Issue 22.

Examiner also agrees with Requester that the conclusion of obviousness with respect to claim 1 over Stefani in view of Mladenec is proper. Mladenec's WebWatcher does teach search requests and retrieving documents based on the search requests (Mladenec, p.2 - "The idea is that the user provides a few keywords describing a search goal and WebWatcher highlights related hyperlinks on the current page and/or adds new hyperlinks to the current page."). Therefore, Mladenec teaches the features for which it has been relied upon, and in combination with the teachings of Stefani, renders the claim obvious, as set forth in the Request at p.102.

PO's remaining arguments stem from the arguments above, which are not convincing. Furthermore, the Examiner notes that the rejections are 35 USC 103(a) rejections using an

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obviousness rationale and, in response to PO's arguments against the references individually, Examiner one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Conclusion:

Accordingly, the rejections presented above under "Status of Grounds of Rejection" with respect to Issue 23 remain **ADOPTED** with respect to claims 1, 5, 6, and 21.

Issue 24: Claims 3 and 7 as obvious over Stefani in view of Mladenic and Culliss

Examiner:

Claims 3 and 7 depend from claim 1. PO argues (PO Response, 12/23/11, p.48 and 3/12/12, p.33) that Stefani and Mladenic fail to teach the limitations of claim 1 for the reasons argued above and that Culliss fails to remedy the deficiencies of Stefani and Mladenic. PO also argues Culliss and Mladenic are not in related fields of art, as argued previously. However, Examiner agrees with Requester (Requester Response, 1/23/12, p.39 and 4/10/12, p.28) that Stefani and Mladenic teach the limitations of claim 1 being argued, as explained above in Issue 23 and that Culliss and Mladenic are indeed in related fields of art, as explained above in Issue 10.

Conclusion:

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Accordingly, the rejections presented above under "Status of Grounds of Rejection" with respect to Issue 24 remain **ADOPTED** with respect to claims 3 and 7.

Issue 25: Claims 14 and 22 as obvious over Stefani in view of Mladenic and Refuah

Patent Owner:

PO argues (PO Response, 12/23/11, p.49 and 3/12/12, p.33) that Refuah fails to remedy the deficiencies of Stefani and Mladenic with respect to claim 1.

PO also argues that one of ordinary skill in the art would not make the combination of Mladenic and Refuah because they are not in related fields of art, as explained at pages 17-18 of PO's response.

With respect to claim 14, PO also argues (PO Response, 12/23/11, p.49) that Refuah does not teach whether at least one of said documents of interest contains a link to said retrieved document, as claimed. Rather, Refuah discusses properties including the "number of links from the site," which PO argues would be links *from* a retrieved document, not *to* a retrieved document.

Third Party Requester:

Requester argues (Requester Response, 1/23/12, p.39 and 4/10/12, pp. 28-29) that Mladenic and Refuah are in related fields of art, as explained at page 10 of its response, and argues that Refuah teaches the limitation of claim 14, for reasons explained in Issues 8 and 11 above.

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Examiner:

Claims 14 and 22 depend from claim 1. First, Examiner finds that Stefani in view of Mladenic teach the limitations of claim 1, as explained above in Issue 23.

Examiner also agrees with Requester that Mladenic and Refuah are in related fields and properly combined, since both do indeed concern search (Mladenic's WebWatcher teaches search requests and retrieving documents based on the search requests as explained above in Issue 23).

However, as explained in Issues 8 and 11 above, Examiner agrees with PO there is no teaching that Refuah determines whether at least one of said documents of interest contains a link to said retrieved document. Therefore, even if combined with Barrett and Mladenic, the combination does not teach this feature as required by claim 14.

Conclusion:

Accordingly, the rejection presented above under "Status of Grounds of Rejection" with respect to Issue 25 is now **NOT ADOPTED** with respect to claim 14.

The rejection presented above under "Status of Grounds of Rejection" with respect to Issue 25 remains **ADOPTED** with respect to claim 22.

Conclusion

This is a RIGHT OF APPEAL NOTICE (RAN); see MPEP § 2673.02 and § 2674. The decision in this Office action as to the patentability or unpatentability of any original patent

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claim, any proposed amended claim and any new claim in this proceeding is a FINAL

DECISION.

No amendment can be made in response to the Right of Appeal Notice in an *inter partes* reexamination. 37 CFR 1.953(c). Further, no affidavit or other evidence can be submitted in an *inter partes* reexamination proceeding after the right of appeal notice, except as provided in 37 CFR 1.981 or as permitted by 37 CFR 41.77(b)(1). 37 CFR 1.116(f).

Each party has a **thirty-day or one-month time period, whichever is longer**, to file a notice of appeal. The patent owner may appeal to the Board of Patent Appeals and Interferences with respect to any decision adverse to the patentability of any original or proposed amended or new claim of the patent by filing a notice of appeal and paying the fee set forth in 37 CFR 41.20(b)(1). The third party requester may appeal to the Board of Patent Appeals and Interferences with respect to any decision favorable to the patentability of any original or proposed amended or new claim of the patent by filing a notice of appeal and paying the fee set forth in 37 CFR 41.20(b)(1).

In addition, a patent owner who has not filed a notice of appeal may file a notice of cross appeal within **fourteen days of service** of a third party requester's timely filed notice of appeal and pay the fee set forth in 37 CFR 41.20(b)(1). A third party requester who has not filed a notice of appeal may file a **notice of cross appeal within fourteen days of service** of a patent owner's timely filed notice of appeal and pay the fee set forth in 37 CFR 41.20(b)(1).

Any appeal in this proceeding must identify the claim(s) appealed, and must be signed by the patent owner (for a patent owner appeal) or the third party requester (for a third party requester appeal), or their duly authorized attorney or agent.

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Any party that does not file a timely notice of appeal or a timely notice of cross appeal will lose the right to appeal from any decision adverse to that party, but will not lose the right to file a respondent brief and fee where it is appropriate for that party to do so. If no party files a timely appeal, the reexamination prosecution will be terminated, and the Director will proceed to issue and publish a certificate under 37 CFR 1.997 in accordance with this Office action.

All correspondence relating to this *inter partes* reexamination proceeding should be directed:

By Mail to: Mail Stop *Inter Partes* Reexam
Attn: Central Reexamination Unit
Commissioner of Patents
United States Patent & Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

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

By hand: 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

<https://efs.uspto.gov/efile/myportal/efs-registered>

Art Unit: 3992

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.

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

/Kavita Padmanabhan/

Primary Examiner, Art Unit 3992

Conferees:

/RSD/

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

AK