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EXAMINER	
WONG, HUEN	

ART UNIT	PAPER NUMBER
2169	

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

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	11/246,432	ARAVAMUDAN ET AL.	
	Examiner	Art Unit	
	Huen Wong	2169	

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

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 August 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *34-65* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *34-65* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 October 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. The amendment filed ***08/06/2010*** has been received and considered.

2. **Claims 34-36, 39, 47, 49-52, 55-56, 59, and 63** are amended.

3. **Claims 34-65** are presented for examination.

4. The claims and only the claims form the metes and bounds of the invention. "Office personnel are to give claims their broadest reasonable interpretation in light of the supporting disclosure. In re Morris, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969)" (MPEP p 2100-8, c 2, l 45-48; p 2100-9, c 1, l 1-4). The Examiner has full latitude to interpret each claim in the broadest reasonable sense. The Examiner will reference prior art using terminology familiar to one of ordinary skill in the art. Such an approach is broad in concept and can be either explicit or implicit in meaning.

Response to Arguments

5. Applicant's arguments have been considered, but are moot in view of new ground(s) of rejection.

Remarks

6. **Claims 34 and 50** are amended to include at least the feature of "determining a count of the number of characters of text received from the user" and using said count of the number of characters in *adjusting relevance value* assigned to at least one of the terms associated with one or more items received. According to Applicant's Specification, the count of the number of characters appears to be strongly related to the feature of "subspace relevance biasing" (*see* Applicant's Specification, ¶0038-0042). As such, Applicant is respectfully suggested to include limitations that describe "subspace relevance biasing" and how the count of the number of characters is used in subspace relevance biasing.

7. **Amended Claim 1** recites "adjusting the relevance value assigned to … in response to the ***user-entered prefixes based on the count*** of the number of text characters …" It is the ***user-entered prefixes*** that is **based on** said **count of the number of text characters**.

Claim Objections

8. **Claim 34** is objected to because of the following informalities:

Claim 34 recites "... the text having one or more text characters of one or more prefixes for terms the user us using to identify a desired item" and "… first incremental

find to compare the user-entered prefixes with the terms associated with the items and to retrieve the relevance values for user-entered prefixes matching terms associated with the items". Since only "one or more text characters of one or more prefixes" are received on the hand-held text input device, the first incremental find cannot operate on ***the*** user-entered prefixes" (***note***: "user-entered prefixes" means at least two user-entered prefixes; this is not consistent with "one or more prefixes").

Claim 50 recites similar limitations, and is similarly objected to.

Appropriate correction(s) is required.

Claim Rejections - 35 USC § 103

9. 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 negatived by the manner in which the invention was made.

10. **Claims 34-40, 43, 45-56, 59, and 61-65 are rejected under U.S.C 103(a) as being unpatentable over Dutta US Patent 6480837 in view of US PGPUB 2005/0283468 by Kamvar et al. (hereinafter "Kamvar"), and further in view of US PGPUB 2005/0256846 by Zigmond et al. ("Zigmond").**

11. As to **claim 34**, *Dutta* teaches a method of processing a search request received from a user operating a hand-held text input device, the search request directed at

identifying a desired item from a set of items, each of the items having one or more associated terms, the method comprising:

providing the set of items, **the items having assigned popularity values to indicate a relative measure of a likelihood that the item is desired by the user** (*Dutta*: Fig. 2, Col. 4 Lines 31-42, Col. 5 Lines 7-20; averages of weights; also, popularity weight\);

for each item, **associating a set of terms to describe the item** and **assigning a relevance value for each term based on a relevance of the term in identifying the item** (*Dutta*: Fig. 2, Col. 4 Lines 20-26, Col. 5 Lines 7-20; weights);

receiving text on the hand-held text input device entered by the user, **the text having one or more text characters of one or more terms the user is using to identify a desired item** (*Dutta*: Fig. 2, Col. 3 Lines 60-65, Col. 4 Lines 20-42, Col. 5 Lines 7-20; Col. 6 Lines 33-36; matching keywords);

in response to receiving text characters, **performing a <u>first</u> incremental find** (*Dutta*: Fig. 2, Fig. 3a, Fig. 3b, Col. 3 Lines 60-65, Col. 4 Lines 20-42, Col. 5 Lines 7-20; Col. 6 Lines 33-36; matching keywords; also, searching incrementally by adding more search keywords and clicking on search button (*result set too large*) or erasing search keywords and clicking on search button (*result set too small*) is well-known) to **compare the user-entered terms with the terms associated with the items** and **to retrieve the relevance values for user-entered terms matching terms associated with the items** (*Dutta*: Fig. 2, Fig. 3a, Fig. 3b, Col. 3 Lines 60-65, Col. 4 Lines 20-42, Col. 5

Lines 2-20; Col. 6 Lines 33-36; receive search keywords; also, matching keywords; further, weights and averages of weights);

determining a first ranking order of items found in the first incremental find based at least in part on the retrieved relevance values and the assigned popularity values of the items found in the first incremental find; ordering and presenting one or more items to the user found in the first incremental find based on the first ranking order (*Dutta*: *at least* Col. 2 Lines 1-7; Col. 3 Lines 1-9; "… ordering based on a measured popularity").

Dutta does not explicitly disclose **in response to receiving at least one subsequent text character, performing a second incremental find to compare the user-entered prefixes, including the at least one subsequent text character and any preceding text characters, with the terms associated with the items and to retrieve the relevance values for said user-entered prefixes matching terms associated with the items**.

However, performing a second incremental find appears to be merely *a repeat* of the first incremental find (***note***: this would read on entering more characters and pressing enter/return key to perform another search using *Dutta*'s invention).

Dutta further discloses **adjusting the relevance value assigned to at least one of the terms associated with one or more of the items retrieved in response to the user-entered terms based on the number of text characters received from the**

user (*Dutta*: Fig. 2, Fig. 3a, Fig. 3b, Col. 3 Lines 60-65, Col. 4 Lines 20-43 & 64-67, Col. 5 Lines 2-20 & 29-33 & 50-56, Col. 6 Lines 33-36; adjustment of weights; *number can be interpreted as a group of one kind*)**; and**

determining a second ranking order of the items found in the second incremental find based at least in part on the adjusted relevance values and the assigned popularity values of the items found in the second incremental find (*Dutta*: *at least* Col. 2 Lines 1-7; Col. 3 Lines 1-9; "… ordering based on a measured popularity"; ***note***: based on repeated find explained above)**; and**

ordering and presenting one or more items to the user based on **the second ranking order** ~~the assigned popularity values of the items and (b) on a weighing of the adjusted relevance values for user-entered terms matching terms associated with the items~~ so that the **relative** order of the items **found in both the first and second incremental finds** is adjusted as characters are entered (*Dutta*: Fig. 2, Fig. 3a, Fig. 3b, Abstract, Col. 3 Lines 60-65, Col. 4 Lines 20-50 & 64-67, Col. 5 Lines 2-20 & 29-33 & 50-56, Col. 6 Lines 33-36; adjustment of weights; also, ordering; one of ordinary skill would recognize that weights of search keywords continue to adjust and, as such, ordering based on these adjusted weights continues to adjust as search keywords consisting of characters are used to activate search).

Dutta discloses **receiving text having one or more text characters of one or more terms the user is using to identify a desired item**, but does not explicitly disclose **receiving text having one or more text characters of one or more prefixes for terms the user is using to identify a desired item**. Also, *Dutta* discloses **in**

response to receiving text characters, **performing a first incremental find** to **compare the user-entered terms with the terms associated with the items** and **to retrieve the relevance values for user-entered terms matching terms associated with the items**, but does not explicitly disclose in response to **receiving a text character**, **performing an incremental find** to **compare the user-entered prefixes with the terms associated with the items** and **to retrieve the relevance values for user-entered prefixes matching terms associated with the items**. Also, *Dutta* discloses **adjusting the relevance value assigned to at least one of the terms associated with one or more of the items retrieved in response to the user-entered terms based on the number of text characters received from the user**, but does not explicitly disclose **adjusting is in response to the user-entered prefixes**.

However, *Kamvar* discloses **receiving text having one or more text characters of one or more prefixes for terms the user is using to identify a desired item** (*Kamvar*: Pgs. 3-4, ¶0002, ¶ 0041 - ¶ 0049; Fig. 6; Fig. 7; wherein *Kamvar* discloses that as characters are included in search query, matching items are identified; e.g. those items identified by "Bri" and those items identified by "Britney"; also, top N most popular search terms),

in response to **receiving a text character**, **performing an incremental find** to **compare the user-entered prefixes with the terms associated with items** and **to retrieve the relevance values for user-entered prefixes matching terms associated with items** (*Kamvar*: Pgs. 3-4, ¶ 0002, ¶ 0020, ¶ 0031, ¶ 0041 - ¶ 0049; Fig. 6; Fig. 7; wherein Kamvar discloses that as characters are included in search query, matching

items are identified; e.g. those items identified by "Bri" and those items identified by "Britney");

user-entered prefixes as search terms that activate searches as more characters are inputted (*Kamvar*: Pgs. 3-4, ¶ 0002, ¶ 0020, ¶ 0031, ¶ 0041 - ¶ 0049; Fig. 1, Fig. 6; Fig. 7; portion or a few characters of query sent to search engine; also, as characters are included in search query, matching items are identified; e.g. those items identified by "Bri" and those items identified by "Britney) in order to speed up query search by continuously sending search terms (including prefixes of search terms) to search engine (*Kamvar*: Pgs. 3-4, ¶ 0002, ¶ 0020, ¶ 0028-¶ 0031, ¶ 0041 - ¶ 0049; Fig. 1, Fig. 6; Fig. 7).

It would have been obvious to one having ordinary skill in the art and the teachings of *Dutta* and *Kamvar* before them at the time the present invention was made to incorporate *Kamvar*'s features of **receiving text having one or more text characters of one or more prefixes for terms the user is using to identify a desired item** (*Kamvar*: Pgs. 3-4, ¶0002, ¶ 0041 - ¶ 0049; Fig. 6; Fig. 7; wherein *Kamvar* discloses that as characters are included in search query, matching items are identified; e.g. those items identified by "Bri" and those items identified by "Britney"; also, top N most popular search terms),

in response to **receiving a text character**, **performing an incremental find** to **compare the user-entered prefixes with the terms associated with items** and **to retrieve the relevance values for user-entered prefixes matching terms associated with items** (*Kamvar*: Pgs. 3-4, ¶ 0002, ¶ 0031, ¶ 0041 - ¶ 0049; Fig. 6; Fig. 7; wherein

Kamvar discloses that as characters are included in search query, matching items are identified; e.g. those items identified by "Bri" and those items identified by "Britney"); and

user-entered prefixes as search terms that activate searches as more characters are inputted (*Kamvar*: Pgs. 3-4, ¶ 0002, ¶ 0020, ¶ 0031, ¶ 0041 - ¶ 0049; Fig. 1, Fig. 6; Fig. 7; portion or a few characters of query sent to search engine; also, as characters are included in search query, matching items are identified; e.g. those items identified by "Bri" and those items identified by "Britney) with the *Dutta*'s method.

The suggestions/motivations for doing so would have been to speed up query search by continuously sending search terms (including prefixes of search terms) to search engine (*Kamvar*: Pgs. 3-4, ¶ 0002, ¶ 0020, ¶ 0028-¶ 0031, ¶ 0041 - ¶ 0049; Fig. 1, Fig. 6; Fig. 7).

Dutta and *Kamvar* do not explicitly disclose **determining a count of the number of characters of text received from the user** and **prefixes based on the count**. However, *Zigmond* discloses **determining a count of the number of characters of text received from the user** and **prefixes based on the count** (*Zigmond*: Abstract, Figs. 2-4, ¶¶0039-0048; n-character prefix, claim 1) in order to continuously update search display using sparse subset of results.

It would have been obvious to one having ordinary skill in the art and the teachings of *Dutta*, *Kamvar* and *Zigmond* before them at the time the present invention

was made to incorporate *Zigmond*'s features of **determining a count of the number of characters of text received from the user** and **prefixes based on the count** (*Zigmond*: Abstract, Figs. 2-4, ¶¶0039-0048; n-character prefix, claim 1) with the method taught by *Dutta* and *Kamvar*.

The suggestion/motivation for doing so would have been to continuously update search display using sparse subset of results.

Claim 50, a system claim, contains subject matter similar claim 34 and is rejected on the same ground.

12. As to **claim 35**, the combination of *Dutta*, *Kamvar* and *Zigmond* teaches the method of claim 34. *Kamvar* further discloses the terms associated with the items being organized into searchable subspace categories (*Kamvar*: Pg. 4, ¶ 0043 - ¶ 0051; Fig. 6; Fig. 7), each subspace category having a relevance bias value, wherein **at least one of determining the first ranking order and determining the second order** ~~ordering and presenting the one or more items~~ is further based on the relevance bias values of the subspace categories (*Kamvar*: Pg. 4, ¶ 0043 - ¶ 0051; Fig. 6; Fig. 7; wherein *Kamvar* discloses "popularity", “user profiles”, “user information”, measure of how recent an item is and the difference in order due to length of query string).

Claim 51, a system claim, contains subject matter similar claim 35 and is rejected on the same ground.

13. As to **claim 36**, the combination of *Dutta*, *Kamvar* and *Zigmond* teaches the method of claim 35. Kamvar further discloses wherein the relevance bias values are based on **the count of** the number of text characters received from the user (Kamvar: Pg. 4, ¶ 0043 - ¶ 0051; Fig. 6; Fig. 7; wherein Kamvar discloses "popularity", “user profiles”, “user information”, measure of how recent an item is and the difference in order due to length of query string).

Claim 52, a system claim, contains subject matter similar claim 36 and is rejected on the same ground.

14. As to **claim 37**, the combination of *Dutta*, *Kamvar* and *Zigmond* teaches the method of claim 35. *Kamvar* further discloses wherein the subspace categories include a personalized history category containing terms associated with items identified from previous incremental finds conducted by the user (*Kamvar*: Pgs. 3-4, ¶ 0041 - ¶ 0051; Fig. 6; Fig. 7; wherein *Kamvar* discloses previous search requests).

Claim 53, a system claim, contains subject matter similar claim 37 and is rejected on the same ground.

15. As to **claim 38**, the combination of *Dutta*, *Kamvar* and *Zigmond* teaches the method of claim 35. *Kamvar* further discloses wherein the ordering and presenting of one or more items is limited to items having associated terms of one or more selected subspace categories *Kamvar*: Pg. 4, ¶ 0043 - ¶ 0051; Fig. 6; Fig. 7; wherein *Kamvar* discloses "popularity", “user profiles”, “user information”, measure of how recent an item is and the difference in order due to length of query string.

Claim 54, a system claim, contains subject matter similar claim 38 and is rejected on the same ground.

16. As to **claim 39**, the combination of *Dutta*, *Kamvar* and *Zigmond* teaches the method of claim 38. *Kamvar* further discloses wherein the one or more selected subspace categories are selected based on **the count of** the number of text characters received from the user (*Kamvar*: Pg. 4, ¶ 0043 - ¶ 0051; Fig. 6; Fig. 7; wherein *Kamvar* discloses "popularity", “user profiles”, “user information”, measure of how recent an item is and the difference in order due to length of query string).

Claim 55, a system claim, contains subject matter similar claim 39 and is rejected on the same ground.

17. As to **claim 40**, the combination of *Dutta*, *Kamvar* and *Zigmond* teaches the method of claim 35 Kamvar further discloses the ordered and presented one or more items are presented on a display device, the display device having display space allocated according to the subspace categories (Kamvar: Pg. 4, ¶ 0043 - ¶ 0049; Fig. 6; Fig. 7; Fig. 10; Fig. 11).

Claim 56, a system claim, contains subject matter similar claim 40 and is rejected on the same ground.

18. As to **claim 43**, the combination of *Dutta*, *Kamvar* and *Zigmond* teaches the method of claim 34. *Dutta* further discloses wherein the ordered and presented one or more items are presented on a display constrained device (*Dutta*: Fig. 1, Fig. 2, Fig. 3a,

Fig. 3b, Col. 3 Lines 47-65, Col. 4 Lines 20-50 & 64-67, Col. 5 Lines 2-20 & 29-33 & 50-56; Col. 6 Lines 33-36; network and client submits searches to search engine; also, display of results; all displays have size constraints).

Claim 59, a system claim 43, contains subject matter similar to claim 48 and is rejected on the same ground.

19. As to **claim 45**, the combination of *Dutta*, *Kamvar* and *Zigmond* teaches the method of claim 34. *Dutta* further discloses wherein the assigned popularity values of one or more items of the set of items is based on a relative measure of popular opinion of the item (*Dutta*: Fig. 2, Fig. 3a, Fig. 3b, Col. 3 Lines 60-65, Col. 4 Lines 20-43 & 64-67, Col. 5 Lines 2-20 & 29-33 & 50-56, Col. 6 Lines 33-36; weights and averages of weights, adjustment of weights).

Claim 61, a system claim 45, contains subject matter similar to claim 48 and is rejected on the same ground.

20. As to **claim 46**, the combination of *Dutta*, *Kamvar* and *Zigmond* teaches the method of claim 34, wherein the assigned popularity values of one or more items of the set of items is based on a temporal relevance of the items or a location relevance of the items. *Dutta* further discloses wherein the assigned popularity values of one or more items of the set of items is based on a temporal relevance of the items or a location relevance of the items (*Dutta*: Fig. 2, Fig. 3a, Fig. 3b, Col. 3 Lines 60-65, Col. 4 Lines 20-43 & 64-67, Col. 5 Lines 2-20 & 29-33 & 50-56, Col. 6 Lines 33-36; weights and averages of weights, adjustment of weights based on matches and frequency of

matches)

Claim 62, a system claim, contains subject matter similar claim 46 and is rejected on the same ground.

21. As to **claim 47**, the combination of *Dutta*, *Kamvar* and *Zigmond* teaches the method of claim 34. *Dutta* discloses wherein **at least one of determining the first ranking order and determining the second ranking order** ~~ordering and presenting the one or more items~~ is further based on the number of terms of the received text (*Dutta*: Fig. 1, Fig. 2, Fig. 3a, Fig. 3b, Col. 3 Lines 47-65, Col. 4 Lines 20-42, Col. 5 Lines 7-20; Col. 6 Lines 33-36. *Dutta* does not explicitly disclose wherein ordering and presenting the one or more items is further based on the number of prefixes of the received text.

However, *Kamvar* discloses **user-entered prefixes** as search terms that activate searches as more characters are inputted (*Kamvar*: Pgs. 3-4, ¶ 0002, ¶ 0020, ¶ 0031, ¶ 0041 - ¶ 0049; Fig. 1, Fig. 6; Fig. 7; portion or a few characters of query sent to search engine; also, as characters are included in search query, matching items are identified; e.g. those items identified by "Bri" and those items identified by "Britney) in order to speed up query search by continuously sending search terms (including prefixes of search terms) to search engine (*Kamvar*: Pgs. 3-4, ¶ 0002, ¶ 0020, ¶ 0028-¶ 0031, ¶ 0041 - ¶ 0049; Fig. 1, Fig. 6; Fig. 7).

Claim 63, a system claim, contains subject matter similar claim 47 and is rejected on the same ground.

22. As to **claim 48**, the combination of *Dutta*, *Kamvar* and *Zigmond* teaches the method of claim 34. *Dutta* further discloses wherein a portion of the set of items resides on a computer remote from the user (*Dutta*: Fig. 1, Fig. 2, Fig. 3a, Fig. 3b, Col. 3 Lines 47-65, Col. 4 Lines 20-42, Col. 5 Lines 7-20; Col. 6 Lines 33-36; network and client submits searches).

Claim 64, a system claim 48, contains subject matter similar to claim 48 and is rejected on the same ground.

23. As to **claim 49**, the combination of *Dutta*, *Kamvar* and *Zigmond* teaches the method of claim 34. *Dutta* further discloses wherein a computer remote from the user performs at least one of the steps of receiving text entered by the user, performing [[an]] **the first** incremental find, **determining the first ranking order , performing the second incremental find, determining the count of characters of text received,** ~~ordering and presenting one or more items to the user, and~~ adjusting the relevance values of the terms associated with the items**, and determining the second ranking order** (*Dutta*: Fig. 1, Fig. 2, Fig. 3a, Fig. 3b, Col. 3 Lines 47-65, Col. 4 Lines 20-42, Col. 5 Lines 7-20; Col. 6 Lines 33-36; network and client submits searches to search engine).

24. As to **claim 65**, the combination of *Dutta*, *Kamvar* and *Zigmond* teaches the system of claim 50. *Dutta* further discloses wherein the processor is disposed in a computer remote from the user (*Dutta*: Fig. 1, Fig. 2, Fig. 3a, Fig. 3b, Col. 3 Lines 47-

65, Col. 4 Lines 20-42, Col. 5 Lines 7-20; Col. 6 Lines 33-36; network and client submits searches to search engine).

25. **Claims 41-42, 44 and 57-58, and 60 are rejected under U.S.C 103(a) as being unpatentable over US Patent 6480837 by Dutta, in view of US PGPUB 2005/0283468 by Kamvar et al. (hereinafter "Kamvar"), and further in view of US PGPUB 2005/0256846 by Zigmond et al. ("Zigmond"), and in further view of US PGPUB 2004/0021691 by Dostie et al. (hereinafter "Dostie").**

26. As to **claim 41**, the combination of *Dutta*, *Kamvar* and *Zigmond* teaches the method of claim 34. *Dutta* and *Kamvar* do not explicitly disclose wherein the hand-held text input device includes a set of overloaded keys generating an ambiguous text input.

However, *Dostie* discloses QWERTY input with overloaded keys used for generating ambiguous character input system (*Dostie*: Pgs. 6-7, ¶ 0079 - ¶ 0082; Fig. 3; wherein *Dostie* discloses that "each key [ ] can contain one of more letters") for the purpose of rapidly entering data, such as text (*Dostie*: Pg. 1, ¶ 0007- ¶ 0008).

It would have been obvious to one of ordinary skill in the art at the time of the Applicant's invention that it is quite advantageous to incorporate the method taught by of *Dutta* and *Kamvar* with Dostie's "data entry system". The motivation for doing so would have been to allow rapid text entry by user (Dostie: Pg. 1, ¶ 0007- ¶ 0008).

Claim 57, a system claim, contains subject matter similar claim 41 and is rejected on the same ground.

27. As to **claim 42**, the combination of *Dutta*, *Kamvar*, *Zigmond* and *Dostie* teaches the method of claim 41. *Dutta* and *Kamvar* do not explicitly disclose wherein the hand-held text_input device is a phone, a mobile computing device, or a remote control device for a television.

However, *Dostie* discloses “personal computing devices” and “hand-held devices” with overloaded keys (*Dostie*: Pg. 5, ¶ 0067- ¶ 0068; Fig. 1; wherein *Dostie* discloses “personal computing devices” and “hand-held devices”) for the purpose of rapidly entering data, such as text (*Dostie*: Pg. 1, ¶ 0007- ¶ 0008).

It would have been obvious to one of ordinary skill in the art at the time of the Applicant’s invention that it is quite advantageous to incorporate the method taught by *Dutta* and *Kamvar* with *Dostie*’s "data entry system". The motivation for doing so would have been to allow rapid text entry by user (*Dostie*: Pg. 1, ¶ 0007- ¶ 0008).

Claim 58, a system claim, contains subject matter similar claim 42 and is rejected on the same ground.

28. As to **claim 44**, the combination of *Dutta*, *Kamvar* and *Zigmond* teaches the method of claim 43. *Dutta* and *Kamvar* do not explicitly disclose wherein the display device is a phone, a mobile computing device, or a non-intrusive interface display area of a television.

However, *Dostie* discloses “personal computing devices” and “hand-held devices” with overloaded keys (*Dostie*: Pg. 5, ¶ 0067- ¶ 0068, ¶ 0071- ¶ 0073, Fig. 1; wherein *Dostie* discloses “personal computing devices” and “hand-held devices”) for the purpose of rapidly entering data, such as text (*Dostie*: Pg. 1, ¶ 0007- ¶ 0008).

It would have been obvious to one of ordinary skill in the art at the time of the Applicant's invention that it is quite advantageous to incorporate the method taught by *Dutta* and *Kamvar* with *Dostie*'s "data entry system". The motivation for doing so would have been to allow rapid text entry by user (*Dostie*: Pg. 1, ¶ 0007- ¶ 0008).

Claim 60, a system claim, contains subject matter similar claim 44 and is rejected on the same ground.

Conclusion

29. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Huen Wong whose telephone number is (571) 270-3426. The examiner can normally be reached on Monday - Friday (8:30 EST - 5:00 EST).

If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Tony Mahmoudi can be reached on (571) 272-4078. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. W./

Examiner, Art Unit 2169

/Vincent Boccio/

Primary Examiner, Art Unit 2158

25 February 2011

Notice of References Cited	Application/Control No. 11/246,432	Applicant(s)/Patent Under Reexamination ARAVAMUDAN ET AL.	
	Examiner Huen Wong	Art Unit 2169	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2005/0256846	11-2005	Zigmond et al.	707/003
*	B	US-2005/0120004	06-2005	Stata et al.	707/003
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11246432	ARAVAMUDAN ET AL.
	Examiner	Art Unit
	Wong, Huen	2169

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
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Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11246432	ARAVAMUDAN ET AL.
	Examiner	Art Unit
	Wong, Huen	2169

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
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Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	11246432	ARAVAMUDAN ET AL.
	Examiner	Art Unit
	Wong, Huen	4171

SEARCHED

Class	Subclass	Date	Examiner
707	1	1/10/2008	HW
707	3	1/10/2008	HW
707	5	1/10/2008	HW
707	6	1/10/2008	HW
707	7	1/10/2008	HW
709	230	1/10/2008	HW
709	231	1/10/2008	HW
EAST	update search with text	08/13/2009	HW
EAST	update search with text	03/25/2010	HW
EAST	update search with text	02/24/2011	HW

SEARCH NOTES

Search Notes	Date	Examiner
EAST Search (US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	1/10/2008	HW
Inventor Search	1/10/2008	HW
Google Search	1/10/2008	HW
Google Web, Patent Search	01/21/2009	HW
EAST Search (US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	08/13/2009	HW
Google Web, Patent Search	08/14/2009	HW
EAST Search (US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	03/25/2010	HW
EAST Search (US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	02/24/2011	HW

INTERFERENCE SEARCH

Class	Subclass	Date	Examiner

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L11	4	("6480837" "20050283468").pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2011/02/28 07:29
L12	8	search$3as$6typ$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2011/02/28 07:29
L13	0	l2 and (weigh$3 scor$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2011/02/28 07:29
L14	2	("6480837" "20050283468").pn. and (rank$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2011/02/28 07:29
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EAST Search History (Prior Art)

L18	3	"20050256846"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2011/02/28 07:29
L19	2	"20050256846" and $3character$1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2011/02/28 07:29