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NOTICE OF ALLOWANCE AND FEE(S) DUE

23483 7590 10/19/2011
WILMERHALE/BOSTON
60 STATE STREET
BOSTON, MA 02109

EXAMINER

WONG, HUEN

ART UNIT

PAPER NUMBER

2154

DATE MAILED: 10/19/2011

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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11/246,432

10/07/2005

Murali Aravamudan

0290672.00128US2

5356

TITLE OF INVENTION: METHOD AND SYSTEM FOR INCREMENTAL SEARCH WITH REDUCED TEXT ENTRY WHERE THE RELEVANCE OF RESULTS IS A DYNAMICALLY COMPUTED FUNCTION OF USER INPUT SEARCH STRING CHARACTER COUNT

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
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nonprovisional

YES

\$870

\$300

\$0

\$1170

01/19/2012

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE
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or Fax (571)-273-2885**

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

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Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

23483 7590 10/19/2011
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BOSTON, MA 02109

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I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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11/246,432 10/07/2005 Murali Aravamudan 0290672.00128US2 5356

TITLE OF INVENTION: METHOD AND SYSTEM FOR INCREMENTAL SEARCH WITH REDUCED TEXT ENTRY WHERE THE RELEVANCE OF RESULTS IS A DYNAMICALLY COMPUTED FUNCTION OF USER INPUT SEARCH STRING CHARACTER COUNT

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$870	\$300	\$0	\$1170	01/19/2012

EXAMINER	ART UNIT	CLASS-SUBCLASS
WONG, HUEN	2154	707-003000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____
(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
☐ Publication Fee (No small entity discount permitted)
☐ Advance Order - # of Copies _____

4b. Payment of Fee(s); (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.
☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/246,432	10/07/2005	Murali Aravamudan	0290672.00128US2	5356
23483	7590	10/19/2011	EXAMINER	
WILMERHALE/BOSTON			WONG, HUEN	
60 STATE STREET			ART UNIT	
BOSTON, MA 02109			PAPER NUMBER	
			2154	
DATE MAILED: 10/19/2011				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 184 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 184 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability	Application No.	Applicant(s)	
	11/246,432	ARAVAMUDAN ET AL.	
	Examiner	Art Unit	
	HUEN WONG	2154	

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

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Interview on 09/26/2011 and Examiner's Amendment.
2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
3. ☒ The allowed claim(s) is/are 34, 36-50, and 52-65.
4. ☐ 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 the:
 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)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. <input type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date <u>3/25/2008</u> 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>09/26/2011</u>. 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other ____. |
|---|---|

/Vincent Boccio/
Primary Examiner, Art Unit 2158

/H. W./
Examiner, AU 2154

DETAILED ACTION

1. **Claims 34, 36-50, and 52-65** are allowed.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to Applicants, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given **John V. Hobgood (Reg. No. 61,540)** on 26 September 2011.

3. **The application has been amended as follows.**
4. **This listing of claims, replace all prior versions and listings of claims in the applications.**

Claims 1-33 (Cancelled)

34. (Currently Amended) 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;

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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, the terms associated with the items being organized into searchable subspace categories, each subspace category having a relevance bias value;

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 prefixes for terms the user is using to identify a desired item;

in response to receiving a text character, performing a first incremental find to compare the one or more user-entered prefixes with the terms associated with the items and to retrieve the relevance values for the one or more user-entered prefixes matching terms associated with the items;

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;

in response to receiving at least one subsequent text character, performing a second incremental find to compare the one or more 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

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retrieve the relevance values for said one or more user-entered prefixes matching terms associated with the items;

determining a count of the number of characters of text received from the user;

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 one or more user-entered prefixes, wherein the adjusting of the relevance value is based on the count of the number of text characters received from the user;

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; and

ordering and presenting one or more items to the user based on the second ranking order so that the relative order of the items found in both the first and second incremental finds is adjusted as characters are entered;

wherein at least one of determining the first ranking order and determining the second ranking order is further based on the relevance bias values of the subspace categories.

35. (Cancelled)

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36. (Currently Amended) The method of claim 34, wherein the relevance bias values are based on the count of the number of text characters received from the user.

37. (Currently Amended) The method of claim 34, wherein the subspace categories include a personalized history category containing terms associated with items identified from previous incremental finds conducted by the user.

38. (Currently Amended) The method of claim 34, wherein the ordering and presenting of one or more items is limited to items having associated terms of one or more selected subspace categories.

39. (Previously Presented) The method of claim 0, wherein the one or more selected subspace categories are selected based on the count of the number of text characters received from the user.

40. (Currently Amended) The method of claim 34, wherein 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.

41. (Previously Presented) The method of claim 34, wherein the hand-held text input

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device includes a set of overloaded keys generating an ambiguous text input.

42. (Previously Presented) The method of claim 0, wherein the hand-held text input device is a phone, a mobile computing device, or a remote control device for a television.

43. (Previously Presented) The method of claim 34, wherein the ordered and presented one or more items are presented on a display constrained device.

44. (Previously Presented) The method of claim 0, wherein the display device is a phone, a mobile computing device, or a non-intrusive interface display area of a television.

45. (Previously Presented) The method of claim 34, 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.

46. (Previously Presented) 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.

47. (Previously Presented) The method of claim 34, wherein at least one of determining the first ranking order and determining the second ranking order is further based on the number of prefixes of the received text.

48. (Previously Presented) The method of claim 34, wherein a portion of the set of items resides on a computer remote from the user.

49. (Previously Presented) The method of claim 34, wherein a computer remote from the user performs at least one of the steps of receiving text entered by the user, performing the first incremental find, determining the first ranking order, performing the second incremental find, determining the count of the number of characters of text received, adjusting the relevance values of the terms associated with the items, and determining the second ranking order.

50. (Currently Amended) A system for 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 system comprising:

a first memory for storing at least a first portion of 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, and each item being

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associated with a set of terms to describe the item, each term being assigned a relevance value based on a relevance of an informational content of the term in identifying the item, the terms associated with the items being organized into searchable subspace categories, each subspace category having a relevance bias value;

a device input for receiving text entered by the user on a hand-held text input device, the text having two or more text characters of one or more prefixes for terms the user is using to identify a desired item, the two or more text characters including a first text portion and a second text portion, the second text portion being received subsequent to the first text portion;

a processor for performing a first incremental find in response to receiving the first text portion and for ordering one or more items found in the first incremental find based on a first ranking order, the first incremental find comparing the one or more user-entered prefixes with the terms associated with the items and retrieving the relevance values for the one or more user-entered prefixes matching terms associated with the items, the first ranking order of the one or more items found in the first incremental find being based on the assigned popularity values of the items and being based on the retrieved relevance values for the one or more user-entered prefixes matching terms associated with the items, so that relatively more popular and more relevant items appear earlier in the order for user selection or activation, the processor also for performing a

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second incremental find in response to receiving the second text portion and for ordering one or more items found in the second incremental find based on a second ranking order, the second incremental find comparing the one or more user-entered prefixes with the terms associated with the items and retrieving the relevance values for the one or more user-entered prefixes matching terms associated with the items, the second ranking order of the one or more items found in the second incremental find being based on the assigned popularity values of the items and being based on adjusted relevance values for the one or more user-entered prefixes matching terms associated with the items, the relevance values of the terms associated with the items being adjusted in response to the count of the number of text characters received from the user, [[and]]the order of at least a portion of the one or more items being changed based on the adjusted relevance values of the terms, and at least one of the first ranking order and the second ranking order being further based on the relevance bias values of the subspace categories; and

a device output for presenting at least one of the first and the second ordered one or more items to the user.

51. (Cancelled)

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52. (Currently Amended) The system of claim 50, wherein the relevance bias values are based on the count of the number of text characters received from the user.

53. (Currently Amended) The system of claim 50, wherein the subspace categories include a personalized history category containing terms associated with items identified from previous incremental finds conducted by the user.

54. (Currently Amended) The system of claim 50, wherein the incremental find is limited to items having associated descriptive terms of one or more selected subspace categories.

55. (Previously Presented) The system of claim **Error! Reference source not found.**, wherein the one or more selected subspace categories are selected based on the count of the number of text characters received from the user.

56. (Currently Amended) The system of claim 50, further comprising a display device for presenting the at least one of the first and the second ordered one or more items, the display device having display space allocated according to the subspace categories.

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57. (Previously Presented) The system of claim 0, wherein the text entered by the user on the hand-held text input device includes a set of overloaded keys generating an ambiguous text input.

58. (Previously Presented) The system of claim 0, wherein the hand-held text input device is a phone, a mobile computing device, or a remote control device for a television.

59. (Previously Presented) The system of claim 0, further comprising a display constrained device for presenting the at least one of the first and the second ordered one or more items.

60. (Previously Presented) The system of claim 0, wherein the display device is a phone, a mobile computing device, or a non-intrusive interface display area of a television.

61. (Previously Presented) The system of claim 0, wherein the assigned popularity value of one or more items of the set of items is based on a relative measure of popular opinion of the item.

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62. (Previously Presented) The system of claim 0, wherein the assigned popularity value of one or more items of the set of items is based on a temporal relevance of the item or a location relevance of the item.

63. (Previously Presented) The system of claim 0, wherein at least one of the first ranking order and the second ranking order of the one or more items is further based on a count of the number of prefixes of the received text.

64. (Previously Presented) The system of claim 0, further comprising a second memory on a computer remote from the user for storing at least a second portion of the set of items.

65. (Previously Presented) The system of claim 0, wherein the processor is disposed in a computer remote from the user.

Allowable Subject Matter

5. **Claims 34, 36-50, and 52-65** are allowed.

6. The following is an examiner's statement for reasons for allowance:

The combination, as claimed in the independent claims, are not deemed taught, disclosed, or fairly suggested by the prior art of record.

The scope of each independent claim is substantially similar and the independent claims are allowed for substantially the same reasons.

Also see Applicant's Remarks filed 06 July 2011.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

7. 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 (9:30 EST - 6:00 EST).

If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, John Breene can be reached on (571) 272-4107. 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.

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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 2154

27 September 2011

/Vincent Boccio/

Primary Examiner, Art Unit 2158

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	188	((ARAVAMUDAN near5 MURALI) (BARVE near5 RAKESH) (VENKATARAMAN near5 SASHIKUMAR) (RAJASEKHARAN near5 AJIT)).in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2011/10/01 00:47
L2	57	l1 and prefix\$2	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2011/10/01 00:48
L6	36	l1 and prefix\$2 and (bias\$2 weigh\$4 scor\$4 popularit\$3) and (categor\$5 subspace\$1 sub\$1space\$1) and relevance\$1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2011/10/01 00:53
L7	13	l1 and prefix\$2 and (bias\$2 weigh\$4 scor\$4 popularit\$3) and (categor\$5 subspace\$1 sub\$1space\$1) and (relevance\$1 near6 (word\$1 keyword\$1 term\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2011/10/01 00:53
L8	2	l1 and prefix\$2 and (bias\$2 weigh\$4 scor\$4 popularit\$3) and (categor\$5 subspace\$1 sub\$1space\$1).clm. and (relevance\$1 near6 (word\$1 keyword\$1 term\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2011/10/01 00:56
L9	3980	707/752.ccls. 707/706.ccls. 707/748.ccls. 715/816.ccls. 725/39.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2011/10/01 01:02
L10	2182	(707/752.ccls. 707/706.ccls. 707/748.ccls. 715/816.ccls. 725/39.ccls.) and (@ad<"20051015" @rlad<"20051015")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2011/10/01 01:03

EAST Search History (Prior Art)

L11	99	I10 and prefix\$2	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2011/10/01 01:03
L12	128	I10 and (prefix\$2 (partial near5 search\$4))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2011/10/01 01:04
L13	47	I10 and (prefix\$2 (partial near5 search\$4)) and ((number count\$3) near5 (character\$1 letter\$1))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2011/10/01 01:06
L17	21	I10 and (prefix\$2 (partial near5 search\$4)) and ((number count\$3) near5 (character\$1 letter\$1)) and (bias\$2 weigh\$4 scor\$4 popularit\$3 favorite relevance\$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2011/10/01 01:14
L18	4	I17 and (bias\$3 skew\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2011/10/01 01:15
L22	8	I10 and (prefix\$2 (partial near5 search\$4)) and ((number count\$3) near5 (character\$1 letter\$1)) and (favorite\$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2011/10/01 01:16
L23	12	I10 and (prefix\$2 (partial near5 search\$4)) and (incremental\$2 near4 search\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2011/10/01 01:22

EAST Search History (Prior Art)

L24	8	l10 and (autocomplet\$4 auto\$1complet\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2011/10/01 01:23
L26	3	l10 and (prefix\$2 (partial near\$5 search\$4)) and (autocomplet\$4 auto\$1complet\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2011/10/01 01:25
L27	2	l10 and (autocomplet\$4 auto\$1complet\$4) and (bias\$2 weigh\$4 scor\$4 popularit\$3 relevance\$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2011/10/01 01:29

EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L33	55	((prefix\$2 (partial near\$4 search\$3) (autocomplet\$4 auto\$1complet\$4)) and (bias\$2 weigh\$4 scor\$4 popularit\$3 relevance) and (categor\$5 subcategor\$5 sub\$1categor\$5 subspace\$1 sub\$1space\$1)).clm.	US-PGPUB; USPAT; UPAD	OR	OFF	2011/10/01 01:43
L34	5	((prefix\$2 (partial near\$4 search\$3) (autocomplet\$4 auto\$1complet\$4)) and ((adjust\$3 chang\$4 modif\$4 modification modify\$4 increas\$4 decreas\$4 reduc\$4) near\$5 (bias\$2 weigh\$4 scor\$4 popularit\$3 relevance)) and (categor\$5 subcategor\$5 sub\$1categor\$5 subspace\$1 sub\$1space\$1)).clm.	US-PGPUB; USPAT; UPAD	OR	OFF	2011/10/01 01:45
L44	5	((prefix\$2 (partial near\$4 search\$3) (autocomplet\$4 auto\$1complet\$4)) and ((adapt\$4 adjust\$3 chang\$4 modif\$4 modification modify\$4 increas\$4 decreas\$4 reduc\$4) near\$5 (bias\$2 weigh\$4 scor\$4 popularit\$3 relevance)) and (categor\$5 subcategor\$5 sub\$1categor\$5 subspace\$1 sub\$1space\$1)).clm.	US-PGPUB; USPAT; UPAD	OR	OFF	2011/10/01 01:53

EAST Search History (Interference)

L45	5	((prefix\$2 (partial near4 search\$3) (autocomplet\$4 auto\$1complet\$4)) and ((re\$1adjust\$4 readjust\$4 adapt\$4 adjust\$3 chang\$4 modif\$4 modification modify\$4 increas\$4 decreas\$4 reduc\$4) near5 (bias\$2 weigh\$4 scor\$4 popularit\$3 relevance)) and (categor\$5 subcategor\$5 sub\$1categor\$5 subspace\$1 sub\$1space\$1)).clm.	US-PGPUB; USPAT; UPAD	OR	OFF	2011/10/01 01:53
L46	6	((prefix\$2 (partial near4 search\$3) (autocomplet\$4 auto\$1complet\$4)) and ((re\$1adjust\$4 readjust\$4 adapt\$4 adjust\$3 chang\$4 modif\$4 modification modify\$4 increas\$4 decreas\$4 reduc\$4) with (bias\$2 weigh\$4 scor\$4 popularit\$3 relevance)) and (categor\$5 subcategor\$5 sub\$1categor\$5 subspace\$1 sub\$1space\$1)).clm.	US-PGPUB; USPAT; UPAD	OR	OFF	2011/10/01 01:56

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	11/246,432-Conf. #5356
				Filing Date	October 7, 2005
				First Named Inventor	Murali ARAVAMUDAN
				Art Unit	4474 2154
				Examiner Name	H. Wong
Sheet	1	of	4	Attorney Docket Number	0290672.00128US2

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	AA*	US-60/548,589	09-01-2005	Flinchem	
	AB*	US-11/855661		Venkataraman et al.	
	AC*	US-11/862917		Aravamudan	
	AD*	US-11/939086		Ramakrishnan et al.	
	AE*	US-12/018566		Venkataraman et al.	
	AF*	US-2003/0011573	01-16-2003	Villet et al.	
	AG*	US-2004/0021691-A1	02-05-2004	Dostie et al.	
	AH*	US-2004/0046744	03-11-2004	Rafii et al.	
	AI*	US-2004/0261021-A1	12-23-2004	Mittal et al.	
	AJ*	US-2005/0086234-A1	04-21-2005	Tosey	
	AK*	US-2005/0192944-A1	09-01-2005	Flinchem	
	AL*	US-2005/0210020-A1	09-22-2005	Gunn et al.	
	AM*	US-2005/0210402-A1	09-22-2005	Gunn et al.	
	AN*	US-2005/0223308-A1	10-06-2005	Gunn et al.	
	AO*	US-2005/0240580-A1	10-27-2005	Zamir et al.	
	AP*	US-2005/0283468	12-22-2005	Kamvar et al.	
	AQ*	US-2006/0059044-A1	03-16-2006	Chan et al.	
	AR*	US-2006/0075429	04-06-2006	Istvan et al.	
	AS*	US-2006/0101499	05-11-2006	Aravamudan et al.	
	AT*	US-2006/0101503-A1	05-11-2006	Venkataraman	
	AU*	US-2006/0101504	05-11-2006	Aravamudan et al.	
	AV*	US-2006/0112162-A1	05-25-2006	Marot et al.	
	AW*	US-2006/0163337-A1	07-27-2006	Unruh	
	AX*	US-2006/0167676-A1	07-27-2006	Plumb	
	AY*	US-2006/0167859	07-27-2006	Verbeck Sibley et al.	
	AZ*	US-2006/0256078-A1	11-16-2006	Flinchem et al.	
	AA1*	US-2006/0274051-A1	12-07-2006	Longe et al.	
	AB1*	US-2007/0005563-A1	01-04-2007	Aravamudan	
	AC1*	US-2007/0027852	02-01-2007	Howard et al.	
	AD1*	US-2007/0050337-A1	03-01-2007	Venkataraman et al.	
	AE1*	US-2007/0061321-A1	03-15-2007	Venkataraman	
	AF1*	US-2007/0061754-A1	03-15-2007	Ardhanari et al.	
	AG1*	US-2007/0088681	04-19-2007	Aravamudan et al.	
	AH1*	US-2007/0130128-A1	06-07-2007	Garg et al.	
	AI1*	US-2007/0143567-A1	06-21-2007	Gorobets	
	AJ1*	US-2007/0150606-A1	06-28-2007	Flinchem et al.	
	AK1*	US-2007/0219984	09-20-2007	Aravamudan et al.	
	AL1*	US-2007/0219985	09-20-2007	ARAVAMUDAN et al.	
	AM1*	US-2007/0255693	11-01-2007	Ramaswamy et al.	
	AN1*	US-2007/0260703	11-08-2007	Ardhanari et al.	
	AO1*	US-2007/0266021	11-15-2007	ARAVAMUDAN et al.	
	AP1*	US-2007/0266026	11-15-2007	ARAVAMUDAN et al.	
	AQ1*	US-2007/0266406	11-15-2007	Aravamudan et al.	
	AR1*	US-2007/0271205	11-22-2007	Aravamudan et al.	
	AS1*	US-2007/0276773	11-29-2007	Aravamudan et al.	

Examiner Signature	/Huen Wong/	Date Considered	10/11/2011
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Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	11/246,432-Conf. #5356
				Filing Date	October 7, 2005
				First Named Inventor	Murali ARAVAMUDAN
				Art Unit	4474 2154
				Examiner Name	H. Wong
Sheet	2	of	4	Attorney Docket Number	0290672.00128US2

	AT1*	US-2007/0276821	11-29-2007	Aravamudan et al.	
	AU1*	US-2007/0276859	11-29-2007	ARAVAMUDAN et al.	
	AV1*	US-2007/0288456	12-13-2007	Aravamudan et al.	
	AW1*	US-2007/0288457	12-13-2007	Aravamudan et al.	
	AX1*	US-5,224,060-A	06-29-1993	Ma et al.	
	AY1*	US-5,337,347-A	08-09-1994	Halstead-Nussloch et al.	
	AZ1*	US-5,369,605	11-29-1994	Parks	
	AA2*	US-5,805,155	09-08-1998	Allibhoy et al.	
	AB2*	US-5,818,437	10-06-1998	Grover et al.	
	AC2*	US-5,828,420	10-27-1998	Marshall et al.	
	AD2*	US-5,828,991	10-27-1998	Skiena et al.	
	AE2*	US-5,912,664	06-15-1999	Eick et al.	
	AF2*	US-5,937,422	08-10-1999	Nelson et al.	
	AG2*	US-5,945,928	08-31-1999	Kushler et al.	
	AH2*	US-5,953,541	09-14-1999	King et al.	
	AI2*	US-6,005,597	12-21-1999	Barrett et al.	
	AJ2*	US-6,006,225	12-21-1999	Bowman et al.	
	AK2*	US-6,011,554	01-04-2000	King et al.	
	AL2*	US-6,189,002	02-13-2001	Roitblat	
	AM2*	US-6,260,050	07-10-2001	Yost et al.	
	AN2*	US-6,266,048-B1	07-24-2001	Carau, Sr.	
	AO2*	US-6,269,361-B1	07-31-2001	Davis et al.	
	AP2*	US-6,286,064	09-04-2001	King et al.	
	AQ2*	US-6,307,548	10-23-2001	Flinchem et al.	
	AR2*	US-6,466,933	10-15-2002	Huang et al.	
	AS2*	US-6,529,903-B2	03-04-2003	Smith	
	AT2*	US-6,564,213	05-13-2003	Ortega et al.	
	AU2*	US-6,594,657	07-15-2003	Livowsky et al.	
	AV2*	US-6,785,671-B1	08-31-2004	Bailey et al.	
	AW2*	US-6,839,702	01-04-2005	Patel et al.	
	AX2*	US-6,907,273	06-14-2005	Smethers	
	AY2*	US-6,965,374	11-15-2005	Villet et al.	
	AZ2*	US-7,013,304	03-14-2006	Schuetze et al.	
	AA3*	US-7,136,854-B2	11-14-2006	Smith	
	AB3*	US-7,225,180	05-29-2007	Donaldson et al.	
	AC3*	US-7,225,184	05-29-2007	Carrasco et al.	
	AD3*	US-7,225,455	05-29-2007	Bennington et al.	
	AE3*	US-7,293,231	11-06-2007	Gunn et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				
	BA	EP-1143691	10-10-2001	Speeq S A		√
	BB	WO-05/033967-A3	04-14-2005	Google, Inc.		√
	BC	WO-05/084235-A2	09-15-2005	Melodeo, Inc.		√

Examiner Signature	/Huen Wong/	Date Considered	10/11/2011
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Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete if Known	
				Application Number	11/246,432-Conf. #5356
				Filing Date	October 7, 2005
				First Named Inventor	Murali ARAVAMUDAN
				Art Unit	4474 2154
				Examiner Name	H. Wong
Sheet	3	of	4	Attorney Docket Number	0290672.00128US2

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. * CITE NO.: Those application(s) which are marked with an single asterisk (*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

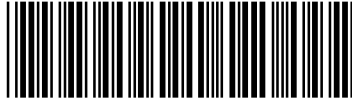
NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	CA	Digital Video Broadcasting, http://www.dvb.org (12 October 2007)	
	CB	GOOD, N. et al., Combining Collaborative Filtering with Personal Agents for Better Recommendations, in Proc. of the 16th National Conference on Artificial Intelligence, pp. 439-446, Orlando, Florida, July 18-22, 1999.	
	CC	International Search Report, International Application No. PCT/US06/25249, mailed January 29, 2008 (2 pages).	
	CD	International Search Report, International Application No. PCT/US06/33204, mailed 21 Sept. 2007 (2 pages)	
	CE	International Search Report, International Application No. PCT/US06/40005, mailed July 3, 2007 (4 Pages).	
	CF	International Search Report, International Application No. PCT/US07/65703, mailed January 25, 2008 (2 pages).	
	CG	International Search Report, International Application No. PCT/US07/67100, mailed March 7, 2008 (2 pages).	
	CH	MATTHOM, "Text Highlighting in Search Results", July 22, 2005. Available at www.matthom.com/archive/2005/07/22/text-highlighting-in-search-results ; retrieved June 23, 2006. (4 pages)	
	CI	MOKOTOFF, Soundexing and Genealogy, Available at http://www.avotaynu.com/soundex.html , retrieved March 19, 2008, last updated September 8, 2007 (6 pages)	
	CJ	Review of Personalization Technologies: Collaborative Filtering vs. ChoiceStream's Attributized Bayesian Choice Modeling, Technology Brief, ChoiceStream Technologies, Cambridge, MA. JULY 2007 /HW/	
	CK	TALBOT, David. "Soul of a New Mobile Machine." <i>Technology Review: The Design Issue</i> May/June 2007. (pp. 46-53)	
	CL	Wikipedia's entry for Levenshtein distance (n.d.). Retrieved 11/15/2006 from http://en.wikipedia.org/wiki/Levenshtein_distance	
	CM	Written Opinion of the International Searching Authority, International Application No. PCT/US06/25249, mailed January 29, 2008 (4 pages).	
	CN	Written Opinion of the International Searching Authority, International Application No. PCT/US06/33204, mailed September 21, 2007 (3 pages).	
	CO	Written Opinion of the International Searching Authority, International Application No. PCT/US06/40005, mailed July 3, 2007 (4 Pages).	
	CP	Written Opinion of the International Searching Authority, International Application No. PCT/US07/65703, mailed January 25, 2008 (4 pages).	
	CQ	Written Opinion of the International Searching Authority, International Application No. PCT/US07/67100, mailed March 7, 2008 (3 pages).	
Examiner Signature	/Huen Wong/		Date Considered 10/11/2011

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	11/246,432-Conf. #5356
				Filing Date	October 7, 2005
				First Named Inventor	Murali ARAVAMUDAN
				Art Unit	4174 2154
				Examiner Name	H. Wong
Sheet	4	of	4	Attorney Docket Number	0290672.00128US2

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

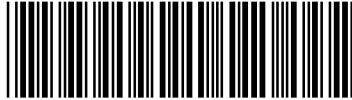
¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature	/Huen Wong/	Date Considered	10/11/2011
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<i>Index of Claims</i> 	Application/Control No. 11246432	Applicant(s)/Patent Under Reexamination ARAVAMUDAN ET AL.
	Examiner Wong, Huen	Art Unit 2169


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

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CLAIM		DATE								
Final	Original	01/15/2008	01/22/2009	08/14/2009	03/26/2010	01/27/2011	02/25/2011	09/27/2011		
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<i>Index of Claims</i> 	Application/Control No. 11246432	Applicant(s)/Patent Under Reexamination ARAVAMUDAN ET AL.
	Examiner Wong, Huen	Art Unit 2169

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


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CLAIM		DATE													
Final	Original	01/15/2008	01/22/2009	08/14/2009	03/26/2010	01/27/2011	02/25/2011	09/27/2011							
	37		✓	✓	✓	✓	✓	=							
	38		✓	✓	✓	✓	✓	=							
	39		✓	✓	✓	✓	✓	=							
	40		✓	✓	✓	✓	✓	=							
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	47		✓	✓	✓	✓	✓	=							
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	50		✓	✓	✓	✓	✓	=							
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	64		✓	✓	✓	✓	✓	=							
	65		✓	✓	✓	✓	✓	=							

Issue Classification 	Application/Control No. 11246432	Applicant(s)/Patent Under Reexamination ARAVAMUDAN ET AL.
	Examiner HUEN WONG	Art Unit 2154

ORIGINAL						INTERNATIONAL CLASSIFICATION												
CLASS		SUBCLASS				CLAIMED					NON-CLAIMED							
707		752				G	0	6	F	7 / 00 (2006.01.01)								
CROSS REFERENCE(S)						G	0	6	F	13 / 00 (2006.01.01)								
						G	0	6	F	3 / 048 (2006.01.01)								
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)																	
707	706	748																
715	816																	
725	39																	

<input checked="" type="checkbox"/> Claims renumbered in the same order as presented by applicant <input type="checkbox"/> CPA <input type="checkbox"/> T.D. <input type="checkbox"/> R.1.47															
Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
1	34	17	52												
2	36	18	53												
3	37	19	54												
4	38	20	55												
5	39	21	56												
6	40	22	57												
7	41	23	58												
8	42	24	59												
9	43	25	60												
10	44	26	61												
11	45	27	62												
12	46	28	63												
13	47	29	64												
14	48	30	65												
15	49														
16	50														

/HUEN WONG/ Examiner.AU 2154 (Assistant Examiner)	9/28/2011 (Date)	Total Claims Allowed: 30	
/Vincent Boccio/ Primary Examiner, Art Unit 2158 (Primary Examiner)	 (Date)	O.G. Print Claim(s) 1	O.G. Print Figure 5

Search Notes 	Application/Control No. 11246432	Applicant(s)/Patent Under Reexamination ARAVAMUDAN ET AL.
	Examiner Wong, Huen	Art Unit 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
707	706, 748, 752	09/27/2011	HW
715	816	09/27/2011	HW
725	39	09/27/2011	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
Consulted with Primary Examiner Vincent Boccio	09/27/2011	HW
Conducted search in EAST using Class/Subclass and Inventors	09/27/2011	HW

INTERFERENCE SEARCH			
Class	Subclass	Date	Examiner

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INTERFERENCE SEARCH

Class	Subclass	Date	Examiner
	Claims, EAST search attached	09/27/2011	HW

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