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- (81) **Designated States** (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.
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Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*

[Continued on next page]

- (54) **Title:** PROVIDING ADDITIONAL INFORMATION RELATED TO A VAGUE TERM IN A MESSAGE

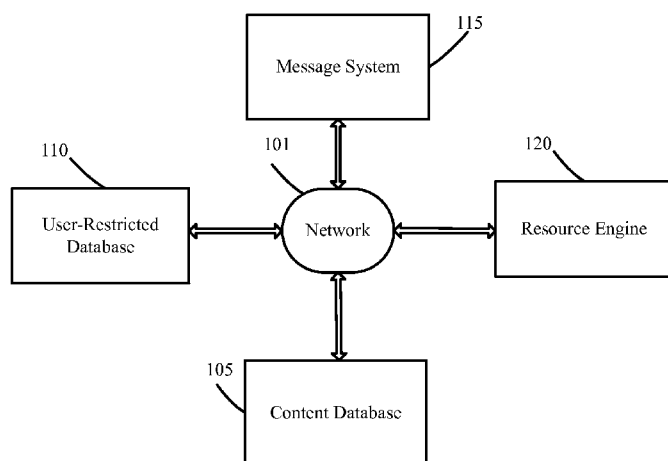


FIG. 1

(57) **Abstract:** Methods and apparatus related to providing additional information related to a vague term in a message. For example, in some implementations, one or more messages sent by a sender and received by one or more recipients may be identified, a vague term in the message may be identified, a user-restricted database may be identified that is associated with the sender or a recipient, and additional information related to the vague term may be determined from the user-restricted database. A vague term is a term which may have multiple meanings and that can be clarified with additional information. In some implementations, a user-restricted database may include additional information that is associated with the user and that may be utilized to replace the vague term with a clarified term.

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- *with international search report (Art. 21(3))*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 14/2712

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - G06N 7/02 (2015.01)

CPC - G06N 5/048; G06N 7/005; G06N 7/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC(8): G06N 7/02 (2015.01)

CPC: G06N 5/048; G06N 7/005; G06N 7/04

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

IPC(8): G06N 7/02 (2015.01); CPC: G06N 5/048; G06N 7/005; G06N 7/04; G06N 99/005; G06N 5/04; USPC: 706/52; 706/46; 706/20; 706/934; 707/917; 707/922 (keyword limited; terms below)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

PatBase; Google(Web); Search terms used: location awareness local semantic scoring feature geographic area sampling feature model threshold map indicator displayed

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2008/0059421 A1 (Baartman et al.) 06 March 2008 (06.03.2008), entire document especially Fig 1, 3; para [0007]-[0011], [0019]-[0023], [0034], [0042]-[0044]	1-7, 9-20, 22, 23
-		8, 21
Y	US 2010/0035639 A1 (Gupta et al.) 11 February 2010 (11.02.2010), entire document especially para [0003], [0027], [0031], [0049]	8, 21

☐ Further documents are listed in the continuation of Box C.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

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"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

27 May 2015 (27.05.2015)

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