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- (71) **Applicant (for all designated States except US):**
DUQUESNE UNIVERSITY OF THE HOLY SPIRIT [US/US]; 505 Administration Building, Pittsburgh, PA 15282 (US).
- (72) **Inventors; and**
- (71) **Applicants :** **JUOLA, Patrick** [US/US]; 4 Heinen Way, Pittsburgh, PA 15236 (US). **OVERLY, James, Orlo** [US/US]; 333 Horatio Street, Punxsutawney, PA 15767 (US). **NOECKER, John, Isaac** [US/US]; 1569 Long Run Road, Schuylkill Haven, PA 17972 (US). **RYAN, Michael** [US/US]; 1007 Allegheny Avenue, Pittsburgh, PA 15233 (US). **GRAY, Christine** [US/US]; 725 Acom Lane, Jefferson Hills, PA 15025 (US).
- (74) **Agent:** **JOHNSON, Barbara, E.**; 555 Grant Street, Suite 323, Pittsburgh, PA 15219 (US).

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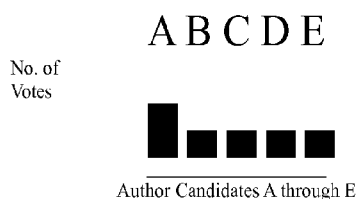


Figure 1(a)

(57) **Abstract:** Novel distractorless authorship verification technology optionally combines with novel algorithms to solve authorship attribution as to an open set of candidates—such as without limitation by analyzing the voting of "mixture of experts" and outputting the result to a user using the following: if z ($z = p_i - p_j \sqrt{p_i + p_j - (p_i - p_j)^2 / n}$) is larger than a first predetermined threshold then author j cannot be the correct author; or if z ($z = p_i - p_j \sqrt{p_i + p_j - (p_i - p_j)^2 / n}$) is smaller than a second predetermined threshold then author i cannot be the correct author; or if no author garners significantly more votes than all other contenders then none of the named authors is the author of a document in question— in a number of novel applications. Personality profiling and authorship attribution may also be used to verify user identity to a computer.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2012/036478**A. CLASSIFICATION OF SUBJECT MATTER****G06F 21/00(2006.01)i, G06F 17/00(2006.01)i**

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)

G06F 21/00; G06F 19/00; G06F 15/00; G06F 9/44; G06F 17/30; G06F 17/27; G06N 7/02

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

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

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

eKOMPASS(KIPO internal) & Keywords: authorship, stylometric, vote, e-mail, profile, identification, verification

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	US 2007-0239433 A1 (CAROLE CHASKI) 11 October 2007 See the abstract, paragraphs 7-11, 198, 199 and claim 1.	1,3,4 2,5,6
X	JP 09-016697 A (JONAN SHINYOU KINKO) 17 January 1997 See the abstract, paragraphs 6-39.	6
A	US 2007-0288458 A1 (GARY J. KACMARCIK AND MICHAEL GAMON) 13 December 2007 See the abstract, paragraphs 1, 4, 17 and claims 1, 5.	1-6
A	US 7558774 B1 (NAKANO RUSSELL TOSHIO) 07 July 2009 See the abstract, column 1, lines 47-67, column 2, lines 50-58.	1-6

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

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"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

17 DECEMBER 2012 (17.12.2012)

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Korean Intellectual Property Office
189 Cheongsa-ro, Seo-gu, Daejeon Metropolitan
City, 302-701, Republic of Korea

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Authorized officer

Soak, Sang Moon

Telephone No. 82-42-481-8470



INTERNATIONAL SEARCH REPORT

Information on patent family members

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