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**Declarations under Rule 4.17:**

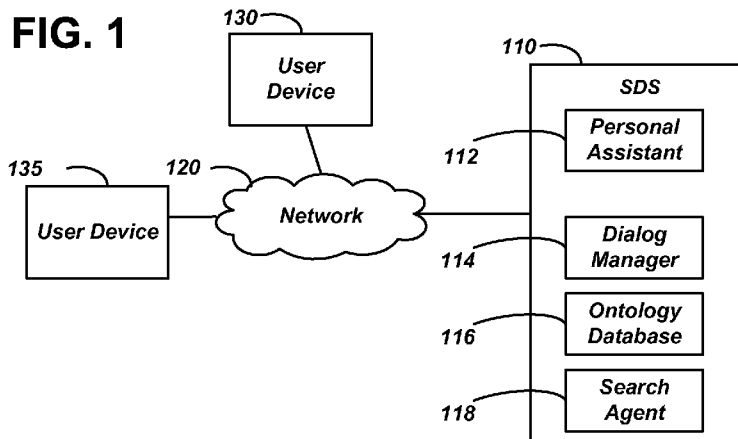
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

**Published:**

- 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))

[Continued on next page]

(54) **Title**: PERSONALIZATION OF QUERIES, CONVERSATIONS, AND SEARCHES



(57) **Abstract**: Personalization of user interactions may be provided. Upon receiving a phrase from a user, a plurality of semantic concepts associated with the user may be loaded. If the phrase is determined to comprise at least one of the plurality of semantic concepts associated with the user, a first action may be performed according to the phrase. If the phrase is determined not to comprise at least one of the plurality of semantic concepts associated with the user, a second action may be performed according to the phrase.



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**A. CLASSIFICATION OF SUBJECT MATTER****G06F 17/28(2006.01)i, G06F 17/30(2006.01)i, G10L 15/00(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 17/28

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)

personalization of queries, conversation search, ontology search

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	M. NAMITA et al., "A Hybrid Approach of Personalized Web Information Retrieval." Proc. of the 2010 IEEE/WIC/ACM International Conference on Web Intelligence and Intelligent Agent Technology, August 31 2010, vol. 1, pp. 308-313, ISBN: 978-1-4244-8482-9.	1,4
Y	See pages 308-309, and figure 1.	2,3,5-8
A		9,10
Y	US 2007-0038436 A1 (CRISTO, PHILIPPE DI et al.) 15 February 2007	2,3,5-8
A	See paragraphs [0122], [0143]-[0158], [0215]-[0217]; claims 1-4; figures 1-3.	1,4,9-10
A	US 2008-0140657 A1 (AZVINE BEHNAM et al.) 12 June 2008	1-10
	See paragraphs [0029]-[0031], [0043]; claims 1-5; figures 2, 5.	
A	KR 10-1007336 B1 (한국과학기술정보연구원) 13 January 2011	1-10
	See paragraphs [0036], [0048]-[0057]; claim 1; figures 3, 5.	



Further documents are listed in the continuation of Box C.



See patent family annex.

\* Special categories of cited documents:

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

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"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

"&amp;" document member of the same patent family

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**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No.

**PCT/US2012/031736**

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2007-0038436 A1	15.02.2007	US 2010-0023320 A1 US 2011-0131036 A1 US 7620549 B2 WO 2007-021587 A2 WO 2007-021587 A3	28.01.2010 02.06.2011 17.11.2009 22.02.2007 27.09.2007
US 2008-0140657 A1	12.06.2008	CN 101116072 A CN 101116072 B EP 1844410 A1 GB 0502259 D0 US 7836077 B2 WO 2006-082410 A1	30.01.2008 01.06.2011 17.10.2007 09.03.2005 16.11.2010 10.08.2006
KR 10-1007336 B1	13.01.2011	EP 2400408 A1 US 2011-0320505 A1 WO 2011-162445 A1	28.12.2011 29.12.2011 29.12.2011