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## EXHIBIT A



US009367521B2

## (12) United States Patent O'Sullivan et al.

#### (54) CONTENT AND CONTEXT BASED HANDLING OF INSTANT MESSAGES

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U.S.C. 154(b) by 2487 days.

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(51) Int. Cl.

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 (2006.01)

 G06F 1/00
 (2006.01)

 G06F 17/21
 (2006.01)

 H04L 12/58
 (2006.01)

(52) U.S. Cl.

CPC ............... *G06F 17/211* (2013.01); *H04L 12/581* (2013.01); *H04L 51/04* (2013.01)

(58) Field of Classification Search

#### (56) References Cited

#### U.S. PATENT DOCUMENTS

7,827,561	B2 *	11/2010	McKee et al	719/313
2004/0201623	A1	10/2004	Hamilton, II et al.	
2004/0205161	A1	10/2004	Hamilton, II et al.	
2004/0215730	A1	10/2004	Hamilton, II et al.	
2005/0132011	$\mathbf{A}1$	6/2005	Muller et al.	

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(45) **Date of Patent:** 

Jun. 14, 2016

2006/0168048	Al	7/2006	Lyle et al.
2006/0227943	A1	10/2006	Yan
2006/0248150	A1	11/2006	Chaar et al.
2007/0156832	A1	7/2007	Daniels-Farrar et al.
2009/0063639	A1*	3/2009	Lingafelt et al 709/206
2009/0089417	A1*	4/2009	Giffin et al 709/224
2009/0100497	A1*	4/2009	Goldberg et al 726/1

#### OTHER PUBLICATIONS

Matt Hines, CNET News.com, IM status: More worms on the way, Mar. 23, 2005, pp. 1-3, http://www.zdnetasia.com/news/security/0,39044215,39222828,00.htm.

Carroll Communications Inc., Solutions That Work, 2008, pp. 1-2, http://www.carrollcommunications.com/ipoffice/5donotdisturb. html.

South Central Rural Telephone Company, Do Not Disturb Services, 2006, pp. 1-2, http://www.scrtc.com/donotdisturbservice.html.

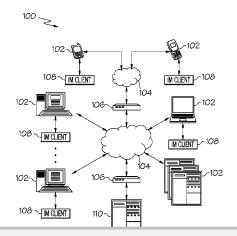
(Continued)

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#### (57) ABSTRACT

Instant message systems are enhanced by establishing at least one handling rule that is evaluated in an instant messaging environment, each established handling rule defining a condition based upon at least one of identified content or identified context, and a corresponding event handling action to be performed within the instant message environment. Upon identifying an instant message conversation within the instant message environment between a user and a correspondent, each handling rule is evaluated and the event handling action of an associated handling rule is performed if it is determined that the condition of handling rule is satisfied. Further, an indication that the corresponding event action was performed is conveyed to a corresponding user.

#### 2 Claims, 7 Drawing Sheets





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#### (56) References Cited

#### OTHER PUBLICATIONS

Ecma International, Standard ECMA-193, Private Integrated Services Network (PISN)—Specification, Functional Model and Information Flows—Do Not Disturb and Do Not Disturb Override

Supplementary Services (DND(O)SD), 2nd edition (Jun. 1997), 1 pg., http://www.ecma/-international.org/flat/publications/Standards/ecma-193.htm.

\* cited by examiner



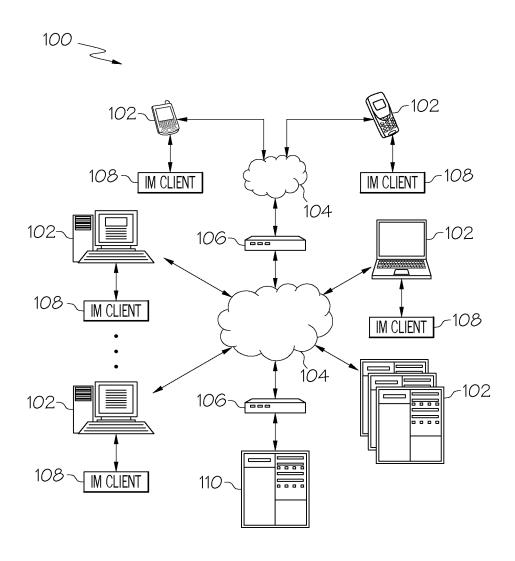
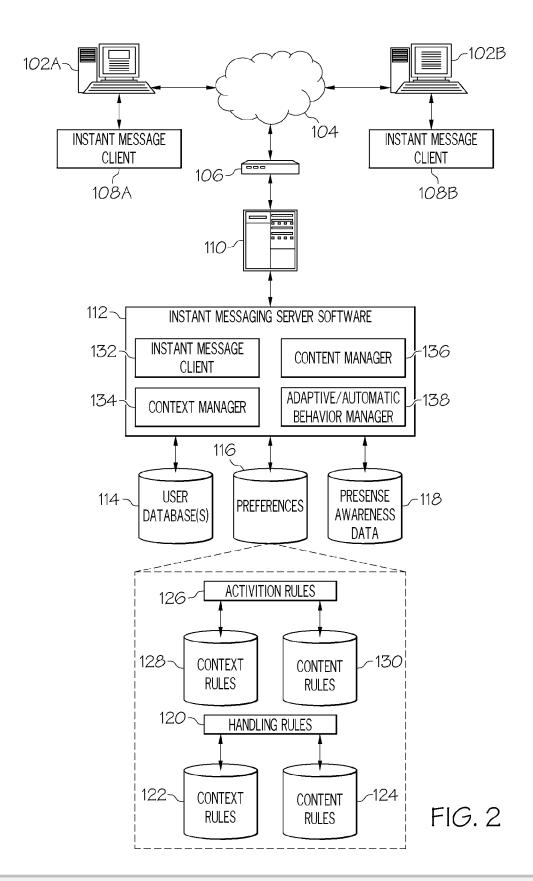


FIG. 1



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