

# EXHIBIT A



US009367521B2

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

(10) **Patent No.:** **US 9,367,521 B2**  
(45) **Date of Patent:** **Jun. 14, 2016**

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

(75) Inventors: **Patrick J. O'Sullivan**, Dublin (IE); **Edith H. Stern**, Yorktown Heights, NY (US); **Robert C. Weir**, Westford, MA (US); **Barry E. Willner**, Briarcliff Manor, NY (US); **Marjorie R. Willner**, Briarcliff Manor, NY (US)

(73) Assignee: **International Business Machines Corporation**, Armonk, NY (US)

(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 2487 days.

(21) Appl. No.: **12/023,027**

(22) Filed: **Jan. 30, 2008**

(65) **Prior Publication Data**

US 2009/0192970 A1 Jul. 30, 2009

(51) **Int. Cl.**

**G06N 5/00** (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**

USPC ..... 706/48; 709/224; 726/1  
See application file for complete search history.

(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 A1 6/2005 Muller et al.

2006/0168048 A1 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.srtc.com/donotdisturbservice.html>.

(Continued)

*Primary Examiner* — Stanley K Hill

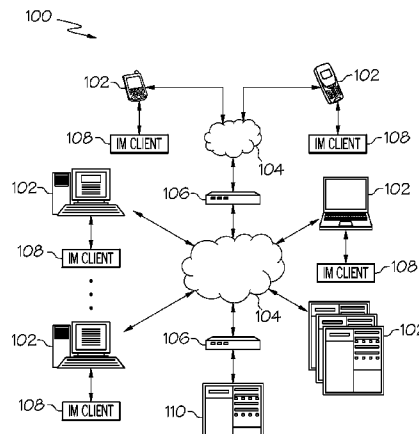
*Assistant Examiner* — Kalpana Bharadwaj

(74) *Attorney, Agent, or Firm* — Stevens & Showalter, LLP

(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**



(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

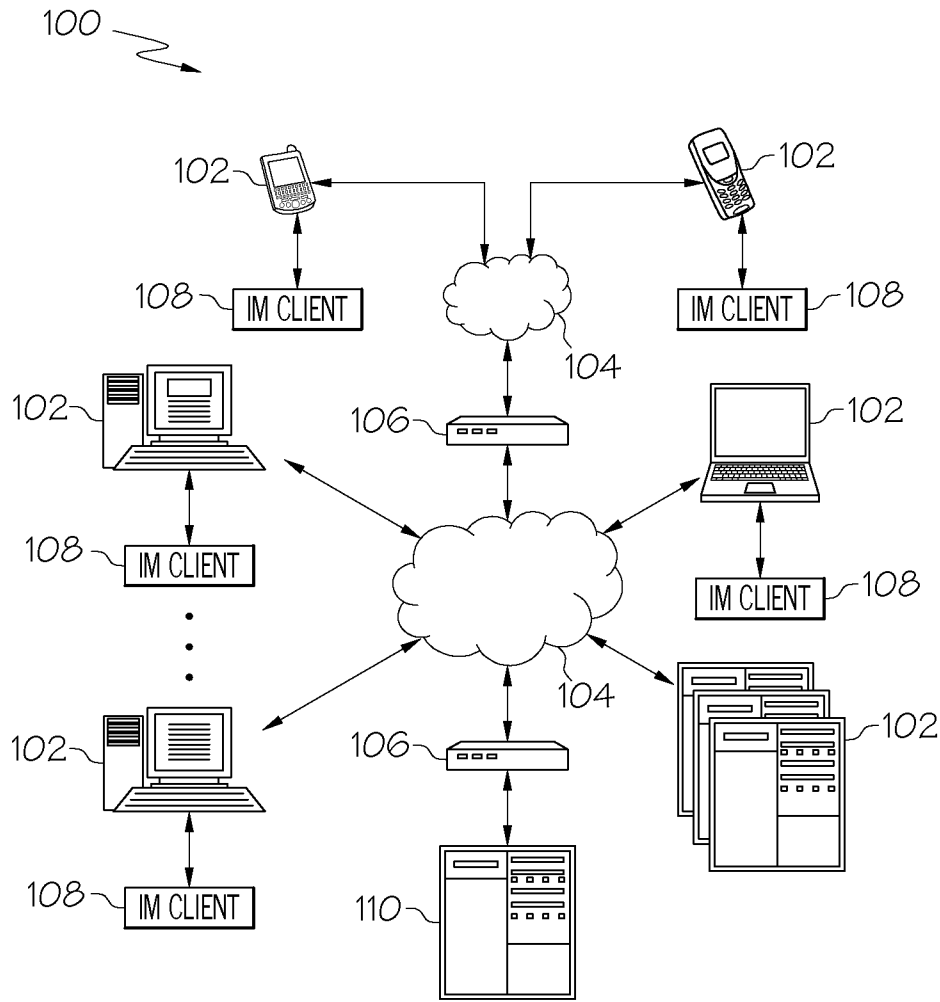


FIG. 1

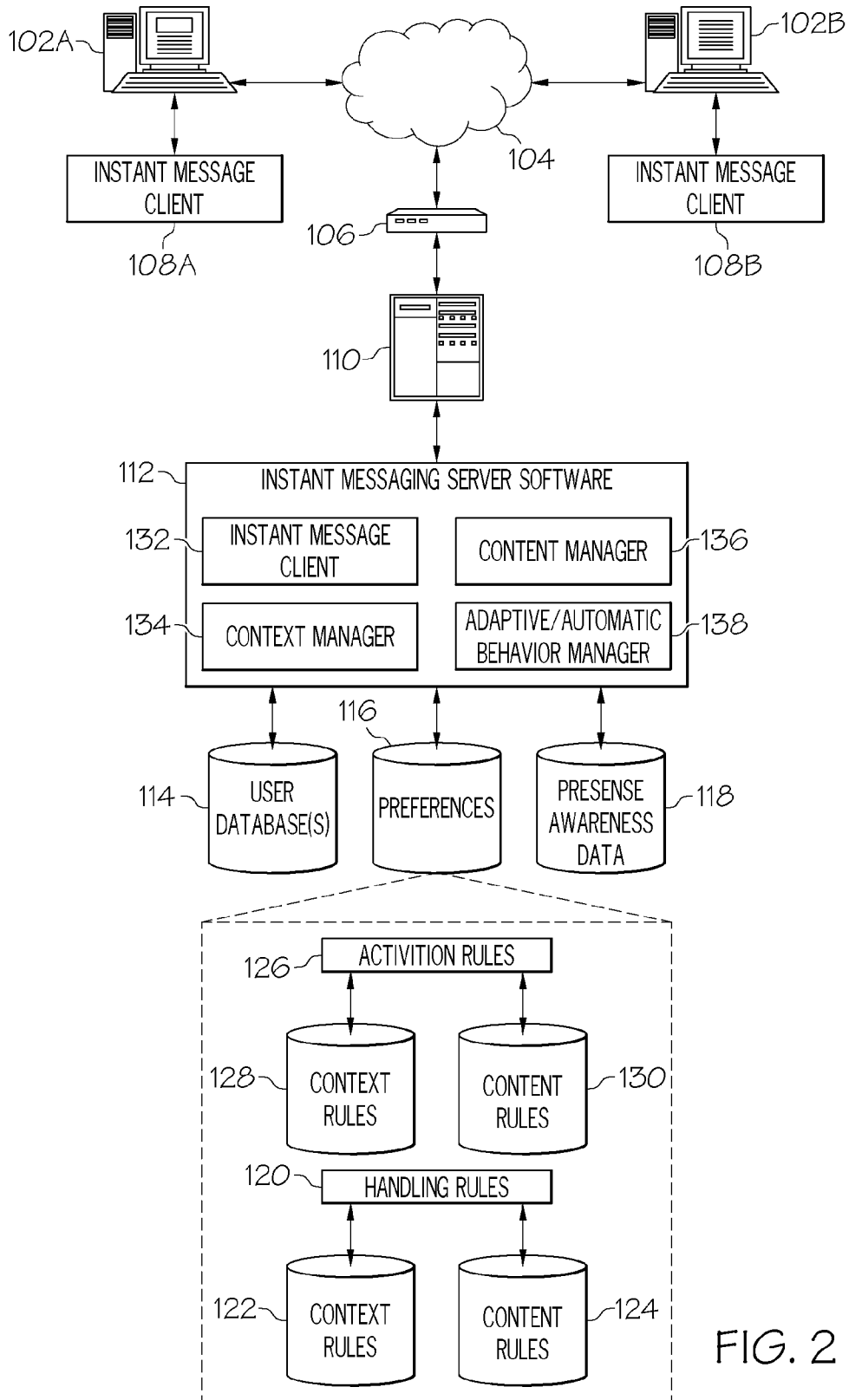


FIG. 2

# Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

## API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

## LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

## FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

## E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.