

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
23 October 2003 (23.10.2003)

PCT

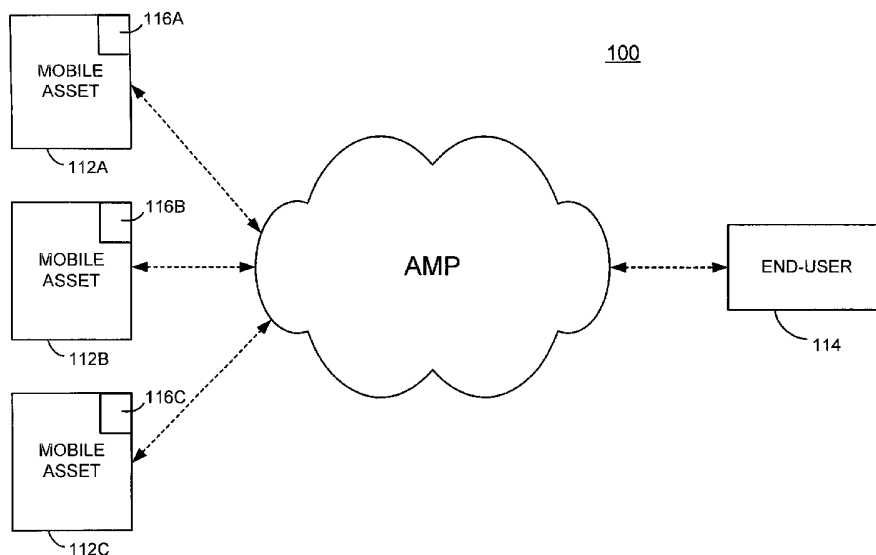
(10) International Publication Number  
WO 2003/088508 A3

- (51) International Patent Classification<sup>7</sup>: **G06F 9/46**
- (21) International Application Number: PCT/US2003/011218
- (22) International Filing Date: 8 April 2003 (08.04.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
 

60/371,544	9 April 2002 (09.04.2002)	US
60/385,010	31 May 2002 (31.05.2002)	US
60/385,008	31 May 2002 (31.05.2002)	US
60/385,009	31 May 2002 (31.05.2002)	US
60/421,928	28 October 2002 (28.10.2002)	US
- (71) Applicant: **SAPIAS, INC.** [US/US]; Suite 440, 55 Hawthorne Street, San Francisco, CA 94105 (US).
- (72) Inventors: **PANTTAJA, James, T.**; 4016 West Soda Rock Lane, Healdsburg, CA 95448-9631 (US). **HENTON, John**; 4250 Flat Rock Circle, Santa Rosa, CA 95409 (US). **KINSFATHER, David, A.**; 1550 Irving Street, Apt. 4, San Francisco, CA 94122 (US). **SIPAHIMALANI, Mahesh, I.**; P.O. Box 77172, San Francisco, CA 94107 (US). **SORENTINO, Margaret, L.**; 2126 Northwood Drive, Santa Rosa, CA 95404 (US).
- (74) Agents: **LEE, Michelle, K.** et al.; Fenwick & West LLP, Silicon Valley Center, 801 California Street, Mountain, CA 94041 (US).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: ASSET MANAGEMENT PLATFORM



(57) Abstract: An asset management platform (AMP) (100) processes messages from mobile assets (112A-112C) to enable data-driven monitoring and management of the assets (112A-112C). The mobile assets transmit messages to the AMP specifying the asset's current locations and other information. Modules in the AMP normalize and augment the messages using state information and other data stored in a database. A router routes copies of the messages to multiple destinations (114), including applications and a business operations middleware (BOM) module. The BOM includes queues for holding messages of different types and subscribers for processing the messages in the queues. An event-action subscriber processes messages as specified by event-action rules. The event-action rules provide flexible and extensible asset tracking (116A-116C), fleet management, and notification capabilities.

WO 2003/088508 A3



**Published:**

— *with international search report*

**(88) Date of publication of the international search report:**

31 December 2003

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/11218

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(7) : G06F 9/46  
 US CL : 709/318, 310, 315; 707/1, 100

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)  
 U.S. : 709/318, 310, 315; 707/1, 100

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

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

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,758,313 A (SHAH et al) 26 May 1998 (26.05.1998), the whole document.	1-24
A	US 5,922,040 A (PRABHAKARAN) 13 July 1999 (13.07.1999), the whole document.	1-24

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:		"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
"A"	document defining the general state of the art which is not considered to be of particular relevance	"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
"E"	earlier application or patent published on or after the international filing date	"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
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&"	document member of the same patent family
"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		

Date of the actual completion of the international search

29 September 2003 (29.09.2003)

Date of mailing of the international search report

15 OCT 2003

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US  
 Commissioner for Patents  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450

Facsimile No. (703)305-3230

Authorized officer

JOHN FOLLANSBEE

Telephone No. (703) 305-3665

*James R. Matthews*