

(12) **United States Patent**
Lazaridis et al.

(10) **Patent No.:** **US 6,401,113 B2**
(45) **Date of Patent:** ***Jun. 4, 2002**

(54) **SYSTEM AND METHOD FOR PUSHING INFORMATION FROM A HOST SYSTEM TO A MOBILE DATA COMMUNICATION DEVICE**

FOREIGN PATENT DOCUMENTS

AU	7843498	5/1997
EP	0617373	9/1994
EP	0736989	10/1996

(75) Inventors: **Mihal Lazaridis; Gary P. Mousseau**, both of Waterloo (CA)

(List continued on next page.)

(73) Assignee: **Research In Motion Limited**, Waterloo (CA)

OTHER PUBLICATIONS

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

Feibus, "A Desktop In Your Palm", Informationweek, Aug. 25, 1997, pp. 65ff.

Behr, "Handheld Solutions", Informationweek, Oct. 27, 1997, pp. 106-113.

This patent is subject to a terminal disclaimer.

Moody's Investors Service, Socket Communications Inc.—History & Debt, Investex Report No. 3240276.

(21) Appl. No.: **09/781,989**

(List continued on next page.)

(22) Filed: **Feb. 13, 2001**

Related U.S. Application Data

(62) Division of application No. 09/087,623, filed on May 29, 1998, now Pat. No. 6,219,694.

(51) **Int. Cl.**⁷ **G06F 15/16**; G06F 15/173; G06F 17/00; H04Q 7/00

(52) **U.S. Cl.** **709/207**; 709/206; 709/245; 709/219; 709/238; 709/253; 707/201; 340/7.21; 340/7.29; 455/556

(58) **Field of Search** 709/206, 245, 709/253, 238, 207; 455/555-557; 340/7.21, 7.29, 7.51; 707/201

Primary Examiner—Dung C. Dinh
Assistant Examiner—Bradley Edelman

(74) *Attorney, Agent, or Firm*—Jones, Day, Reavis & Pogue; Krishna K. Pathiyal; Charles B. Meyer

(57) **ABSTRACT**

A system and method for pushing information from a host system to a mobile data communication device upon sensing a triggering event is disclosed. A redirector program operating at the host system enables a user to continuously redirect certain user-selected data items from the host system to the user's mobile data communication device upon detecting that one or more user-defined triggering events has occurred. The redirector program operates in connection with event generating applications and repackaging systems at the host system to configure and detect a particular user-defined event, and then to repackage the user-selected data items in an electronic wrapper prior to pushing the data items to the mobile device. The host system can be a desktop computer that redirects messages received from a network to the mobile device and that redirects reply messages from the mobile device to the network.

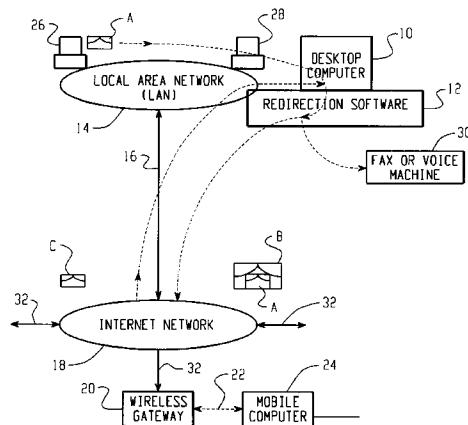
(56) **References Cited**

U.S. PATENT DOCUMENTS

5,086,502 A	2/1992	Malcolm
5,159,592 A	10/1992	Perkins
5,313,582 A	5/1994	Hendel et al.
5,392,390 A	2/1995	Crozier
5,416,473 A	5/1995	Dulaney, III et al.
5,416,842 A	5/1995	Fleming, III
5,436,960 A	7/1995	Campana, Jr. et al.

(List continued on next page.)

34 Claims, 5 Drawing Sheets



U.S. PATENT DOCUMENTS

5,438,611	A	8/1995	Campana, Jr. et al.		6,092,114	A	7/2000	Shaffer et al.
5,452,356	A	* 9/1995	Albert	380/271	6,092,191	A	7/2000	Shimbo et al.
5,479,472	A	12/1995	Campana, Jr. et al.		6,101,531	A	* 8/2000	Eggleston et al. 709/206
5,487,100	A	1/1996	Kane		6,125,281	A	9/2000	Wells et al.
5,493,692	A	2/1996	Theimer et al.		6,128,739	A	10/2000	Fleming, III
5,495,484	A	2/1996	Self et al.		6,134,432	A	10/2000	Holmes et al.
5,579,472	A	11/1996	Keyworth, II et al.		6,138,146	A	10/2000	Moon et al.
5,588,009	A	12/1996	Will		6,144,671	A	11/2000	Perinpanathan et al.
5,603,054	A	2/1997	Theimer et al.		6,154,839	A	11/2000	Arrow et al.
5,604,788	A	2/1997	Tett		6,163,274	A	12/2000	Lindgren
5,625,670	A	4/1997	Campana, Jr. et al.		6,167,379	A	12/2000	Dean et al.
5,627,829	A	5/1997	Gleeson et al.		6,185,603	B1	2/2001	Henderson et al.
5,630,060	A	5/1997	Tang et al.		6,240,088	B1	5/2001	Gayton et al.
5,631,946	A	5/1997	Campana, Jr. et al.		6,256,666	B1	7/2001	Singhal
5,638,450	A	6/1997	Robson		6,272,545	B1	8/2001	Flanagin et al.
5,666,553	A	9/1997	Crozier		6,275,848	B1	8/2001	Arnold
5,673,322	A	9/1997	Pepe et al.		6,275,850	B1	8/2001	Beyda et al.
5,706,211	A	1/1998	Beletic et al.					
5,727,202	A	3/1998	Kucala					
5,729,735	A	3/1998	Meyering					
5,737,531	A	4/1998	Ehley					
5,742,905	A	4/1998	Pepe et al.					
5,745,689	A	4/1998	Yeager et al.					
5,751,960	A	5/1998	Matsunaga					
5,754,954	A	5/1998	Cannon et al.					
5,757,901	A	5/1998	Hiroshige					
5,764,639	A	6/1998	Staples et al.					
5,765,170	A	6/1998	Morikawa					
5,781,614	A	7/1998	Brunson					
5,781,901	A	7/1998	Kuzma					
5,790,790	A	8/1998	Smith et al.					
5,790,974	A	8/1998	Tognazzini					
5,813,016	A	9/1998	Sumimoto					
5,819,172	A	10/1998	Campana, Jr. et al.					
5,819,284	A	10/1998	Farber et al.					
5,822,434	A	* 10/1998	Caronni et al.	380/49				
5,826,062	A	10/1998	Fake, Jr. et al.					
5,838,252	A	11/1998	Kikinis					
5,838,926	A	11/1998	Yamagishi					
5,844,969	A	12/1998	Goldman et al.					
5,878,434	A	3/1999	Draper et al.					
5,889,845	A	3/1999	Staples et al.					
5,903,723	A	5/1999	Beck et al.					
5,905,777	A	5/1999	Foladare et al.					
5,937,161	A	8/1999	Mulligan et al.					
5,941,956	A	8/1999	Shirakihara et al.					
5,948,066	A	9/1999	Whalen et al.					
5,961,590	A	* 10/1999	Mendez et al.	709/206				
5,964,833	A	10/1999	Kikinis					
5,973,612	A	10/1999	Deo et al.					
5,974,180	A	10/1999	Schwendeman					
5,974,238	A	10/1999	Chase, Jr.					
5,978,837	A	11/1999	Foladare et al.					
5,983,073	A	11/1999	Ditzik					
5,987,508	A	11/1999	Agraharam et al.					
5,995,597	A	11/1999	Woltz et al.					
6,000,000	A	12/1999	Hawkins et al.					
6,006,274	A	12/1999	Hawkins et al.					
6,014,429	A	* 1/2000	LaPorta et al.	397/88.15				
6,018,762	A	1/2000	Brunson et al.					
6,023,000	A	2/2000	Owens et al.					
6,023,700	A	2/2000	Owens et al.					
6,034,621	A	3/2000	Kaufman					
6,035,104	A	3/2000	Zahariev					
6,052,563	A	4/2000	Macko					
6,052,735	A	4/2000	Ulrich et al.					
6,073,165	A	6/2000	Narasimhan et al.					
6,084,969	A	7/2000	Wright et al.					
6,085,231	A	7/2000	Agraharam et al.					
6,085,232	A	7/2000	Kikinis					

FOREIGN PATENT DOCUMENTS

EP	0772327	5/1997
EP	0777394	6/1997
EP	0788287	8/1997
EP	09214556	8/1997
EP	0793387	9/1997
EP	0825788	2/1998
EP	0838774	4/1998
EP	0838934	4/1998
EP	0772327	2/1999
EP	0930766	7/1999
EP	0001552	5/2001
JP	11289346	10/1999
US	0029531	10/2001
WO	9619064	6/1996
WO	9726709	7/1997
WO	9727717	7/1997
WO	9732251	9/1997
WO	9733421	9/1997
WO	9741654	11/1997
WO	9744942	11/1997
WO	9800787	1/1998
WO	9823108	5/1998
WO	9848560	10/1998
WO	9917505	4/1999
WO	9821911	5/1999
WO	9945484	9/1999
WO	9963709	12/1999

OTHER PUBLICATIONS

Newsletter, E-Mail Merges With Voice Through Infinite Technologies, Voice Technology & Services News, May 26, 1998.

Newsletter, VODAPAGE: Vodapage demos increasing convergence of pagers and mobile communications at TMA 29, M2 Presswire, Nov. 28, 1996.

Mosher, Microsoft Exchange User's Handbook, Duke Press, 1997, pp. 547-549.

Copy of DTS Wireless Website located at D.R.L. <http://www.dtswireless.com>.

"3Com PalmPilot Gets Wireless Link for E-Mail", Spooner, John G., PC Week, Dec. 8, 1997.

"Have Your Pager Call My Pager", Sullivan, Kristina B., PC Week, Dec. 8, 1997.

Briere, Daniel, et al., "One Mailbox, Just Like Old Times," Network World, vol. 14, issue 16, p. 21 (Apr. 21, 1997).

Egevang, K. et al., "The IP Network Address Translator," Network Working Group, pp. 1-10, May 1994.

Manual, "Server and BBS Software for the Packet Radio" by Jean Paul Roubelat, pp. 1-173.

Book, "Internetwork Mobility The CDPD Approach," by Mark S. Taylor, William Waung, and Mohsen Banan, Jun. 11, 1996.

"BlackBerry Technical White Paper," Research In Motion Ltd., Version 1.0, 1998-1999.

Newsletter, "Battery Friendly Bulletin," vol. 1, Issue 3, pp. 1-7 and unnumbered page, 1999.

Article, Comerford, "Handhelds Duke It Out for the Internet," Wireless Internet, pp. 35-38 and 41, Aug. 2000.

Press Detail, "Extended Systems and Motorola Bring Short-Range Wireless to the Paging E-volution," Jan. 13, 2000 (3 pp.).

Press Detail, "3Com Corporation Licenses Bluetooth Technology from Extended Systems," Feb. 22, 2000 (2 pp.).

Web site Article, Hawaleshka, "The Web in Your Pocket," Maclean's, May 15, 2000 (3 pp.).

Claxton, "Messaging API's for Voice Networks," Telecommunications, pp. 116-120, 1998.

* cited by examiner

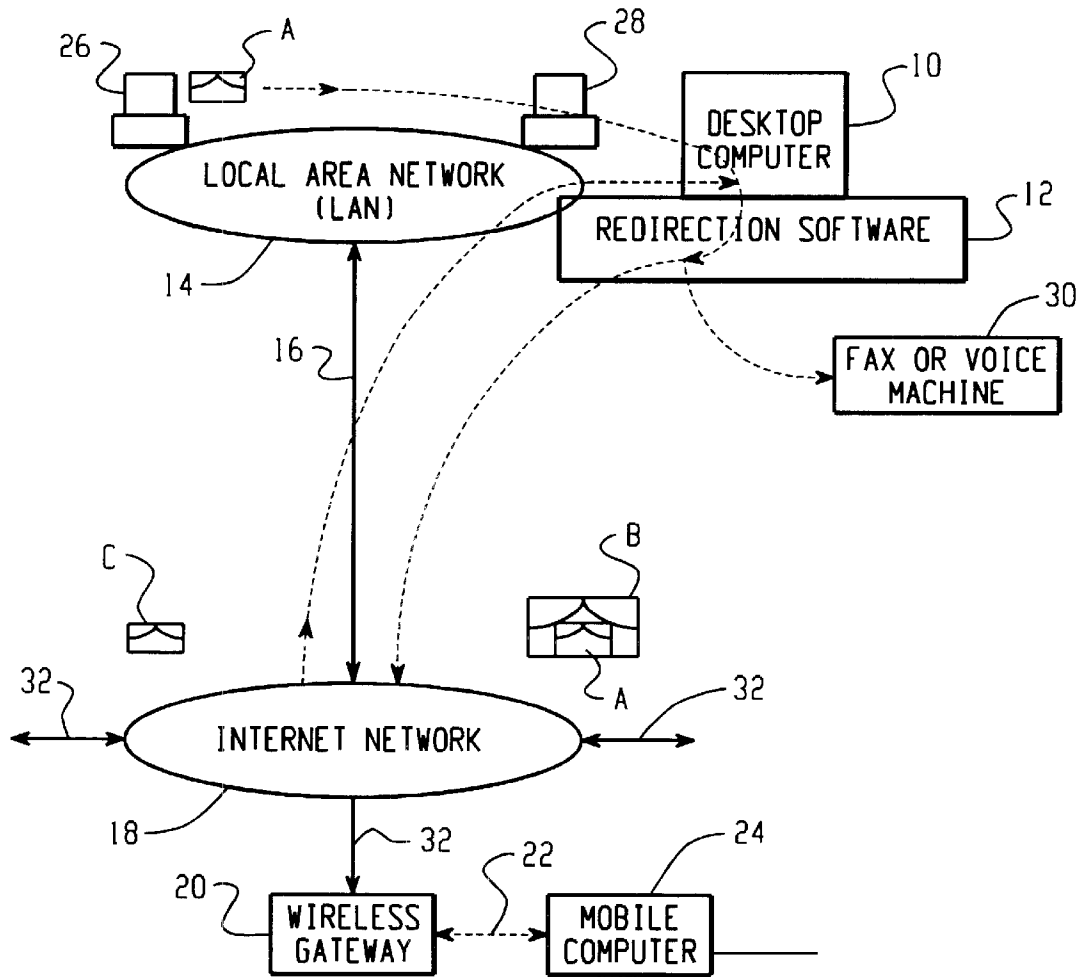


Fig. 1

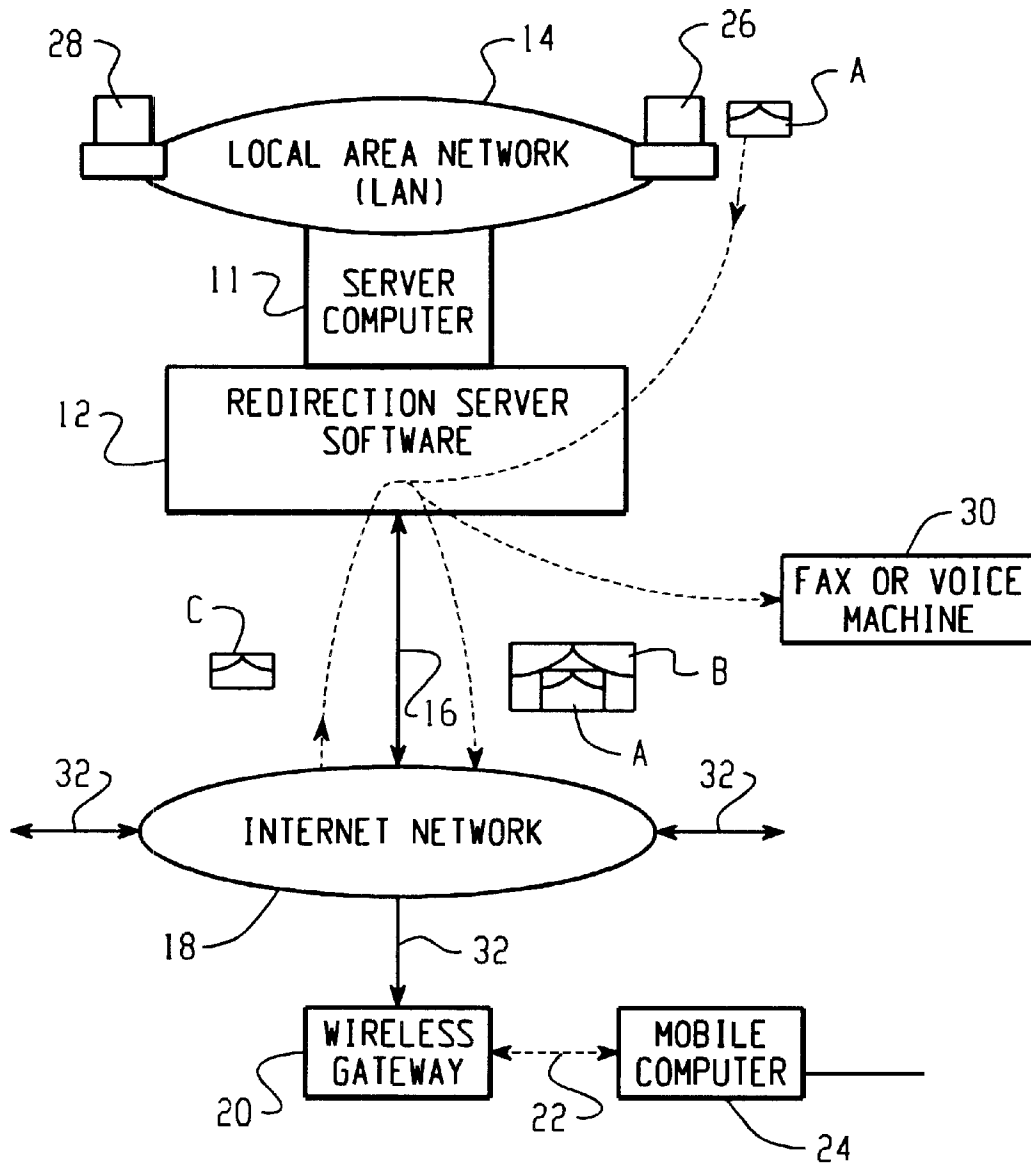


Fig. 2

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.