

**Patent Number:** 

6,134,548

## **United States Patent** [19]

## Gottsman et al. [45] Date of Patent: Oct. 17, 2000

[11]

#### [54] SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR ADVANCED MOBILE BARGAIN SHOPPING

[75] Inventors: Edward Gottsman, Evanston; Adam

Brody, Chicago, both of Ill.

[73] Assignee: AC Properties B.V., S'Gravenhage,

Netherlands

[21] Appl. No.: 09/196,339

[22] Filed: Nov. 19, 1998

[51] Int. Cl.<sup>7</sup> ...... G06F 17/30

217

#### [56] References Cited

#### U.S. PATENT DOCUMENTS

| 5,279,882 | 1/1994 | Daude et al 428/192   |
|-----------|--------|-----------------------|
| 5,519,608 | 5/1996 | Kupiec                |
| 5,606,602 | 2/1997 | Johnson et al 379/115 |

(List continued on next page.)

#### FOREIGN PATENT DOCUMENTS

| 0 651 531A2  | 5/1995  | European Pat. Off |
|--------------|---------|-------------------|
|              |         | -                 |
| 0 856 812 A2 | 8/1998  | European Pat. Off |
| 0883313 A2   | 12/1998 | European Pat. Off |
| 0890907 A1   | 1/1999  | European Pat. Off |
| 10171758     | 6/1998  | Japan .           |
| 10177613     | 6/1998  | Japan .           |
| WO 97/17815  | 5/1997  | WIPO .            |
| WO/97/40451  | 10/1997 | WIPO .            |
| WO 97/45814  | 12/1997 | WIPO .            |
| WO 98/03923  | 1/1998  | WIPO .            |
| WO 98/06055  | 2/1998  | WIPO .            |
| WO 98/10541  | 3/1998  | WIPO .            |
| WO 98/11744  | 3/1998  | WIPO .            |
| WO 98/12833  | 3/1998  | WIPO .            |
| WO 98/24036  | 6/1998  | WIPO .            |
| WO 98/24050  | 6/1998  | WIPO .            |
| WO 98/39909  | 9/1998  | WIPO .            |
| WO 98/40823  | 9/1998  | WIPO .            |
| WO 98/49813  | 11/1998 | WIPO .            |

| WO 98/52371 | 11/1998 | WIPO . |
|-------------|---------|--------|
| WO 98/57474 | 12/1998 | WIPO . |
| WO 98/58476 | 12/1998 | WIPO . |
| WO 99/01969 | 1/1999  | WIPO . |

#### OTHER PUBLICATIONS

Chu-Sing Yang, Kun-da Wu, Chun-Wei Tseng; Support an Efficient Connection for Mobile IP; Proceedings, Ninth International Workshop on Database and Expert Systems Applications; Aug. 1998, IEE, Computer Society, pp. 514–519.

Mary Carmen Cupito; Emerging technologies: Has Their time come? Enterprise Integration; Health Management Technology; Dec. 1998, pp. 12–16.

Toh Han Shih; Online life-line; Wired for Business; Singapore Business Times; Dec. 1998, p. 1.

Chris Bradley; Remote and Mobile Computing Wigh TCP/IP; Enterprise Systems Journal; Jan. 1998, pp. 38–48.

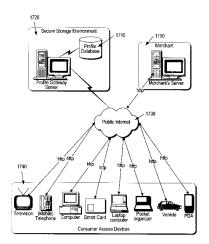
(List continued on next page.)

Primary Examiner—Jean R. Homere Attorney, Agent, or Firm—Hickman Stephens Coleman & Hughes, LLP

#### [57] ABSTRACT

A system is disclosed that facilitates web-based comparison shopping in conventional, physical, non-web retail environments. A wireless phone or similar hand-held wireless device with Internet Protocol capability is combined with a miniature barcode reader (installed either inside the phone or on a short cable) and utilized to obtain definitive product identification by, for example, scanning a Universal Product Code (UPC) bar code from a book or other product. The wireless device transmits the definitive product identifier to a service routine (running on a Web server), which converts it to (in the case of books) its International Standard Book Number or (in the case of other products) whatever identifier is appropriate. The service routine then queries the Web to find price, shipping and availability information on the product from various Web suppliers. This information is formatted and displayed on the hand-held device's screen. The user may then use the hand-held device to place an order interactively.

#### 17 Claims, 27 Drawing Sheets





#### U.S. PATENT DOCUMENTS

| 5,640,193 | 6/1997  | Wellner 348/7              |
|-----------|---------|----------------------------|
| 5,673,322 | 9/1997  | Pepe et al 389/49          |
| 5,721,421 | 2/1998  | VanDonkelaar 235/462       |
| 5,732,074 | 3/1998  | Spaur et al 370/313        |
| 5,854,624 | 12/1998 | Grant                      |
| 5,913,210 | 6/1999  | Call 707/4                 |
| 5,938,727 | 8/1999  | Ikeda 709/218              |
| 5,950,173 | 9/1999  | Perkowski 705/26           |
| 5,971,277 | 10/1999 | Cragun et al 235/462.01    |
| 5,978,773 | 11/1999 | Hudetz et al 705/23        |
| 5,979,757 | 11/1999 | Tracy et al 235/383        |
| 5,992,752 | 11/1999 | Wilz, Sr. et al 235/472.01 |
|           |         |                            |

#### OTHER PUBLICATIONS

Enhanced Services: Telecom customers will soon have one-stop, easy-to-use access to their services portfolio form anywhere, at any time, and in any way; Edge, on & about AT&T; May 1997, pp. 1–2, Anonymous.

Bob Emmerson; The Mobile Intranet: The next generation of GSM services will offer faster data rates and smarter messaging; May 1998; Byte Magazine, pp. 1–7.

Timo Alanko, Markku Kojo, Mika Liljeberg; Mobile access to the Internet; a mediator-based solution; Internet Research; Electronis Networking Applications and Policy vol. 9, No. 1, pp. 58–65, 1999.

Andrezej Duda, Stephane Perret; A Network Programming Model for Mobile Applications and Information Access; Proceedings JENC7, pp. 141.1–141.9, No Date.

Nokia, Ericsson, Unwired Planet and Motorola unite to create an open common protocol for interactive wireless applications; Jun. 26, 1997, pp. 1–3.

Unisource in GSM trial of mobile electronic banking and shopping; Mobile Communications; Mar. 20, 1997, 1–3, Anonymous.

Dynamic Mobile Data Announces Mobile Server Wireless Solution For Enterprise and internet Access; Mar. 1999, pp. 1–2, Anonymous.

Philip R. Cohen, Adam Cheyer, Michelle Wang, Soon Cheol Baeg; An Open Agent Architecture; Software Agent Papers, AAAI Spring Symposium 1994, pp. 1–129.

Katia Sycara, Anandeep S. Pannu; The RETSINA Multiagent System: Towards Integrating Planning, Execution and Information Gathering; Proceedings of the Second International Conference on Autonomous Agents, May 1998, pp. 350–351.



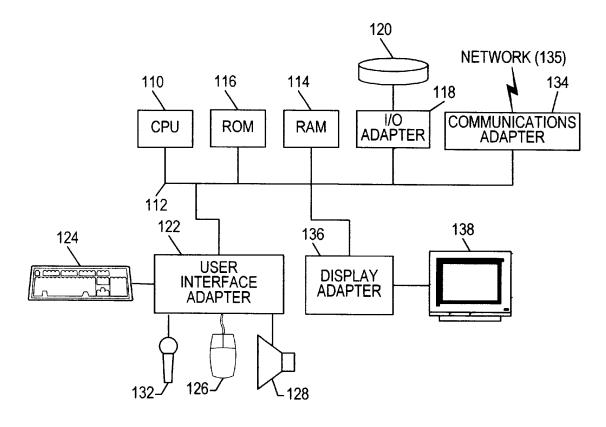


FIG.1

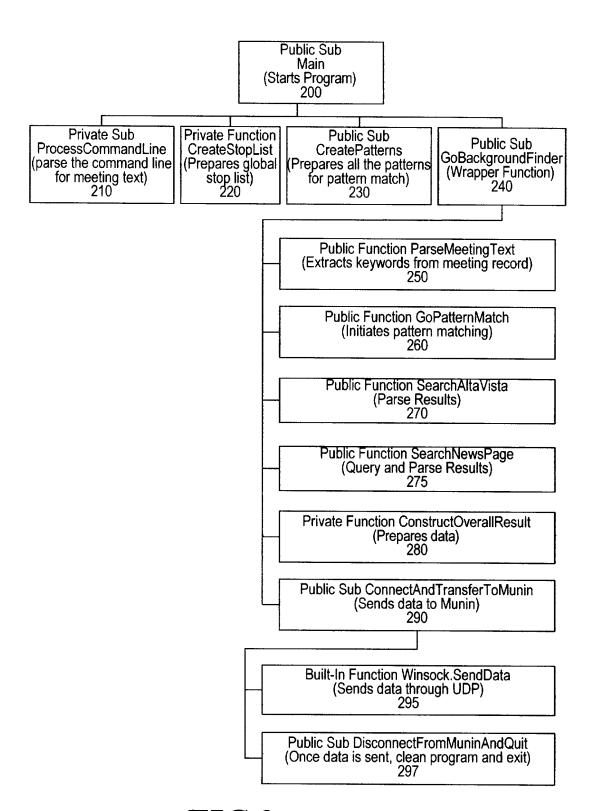
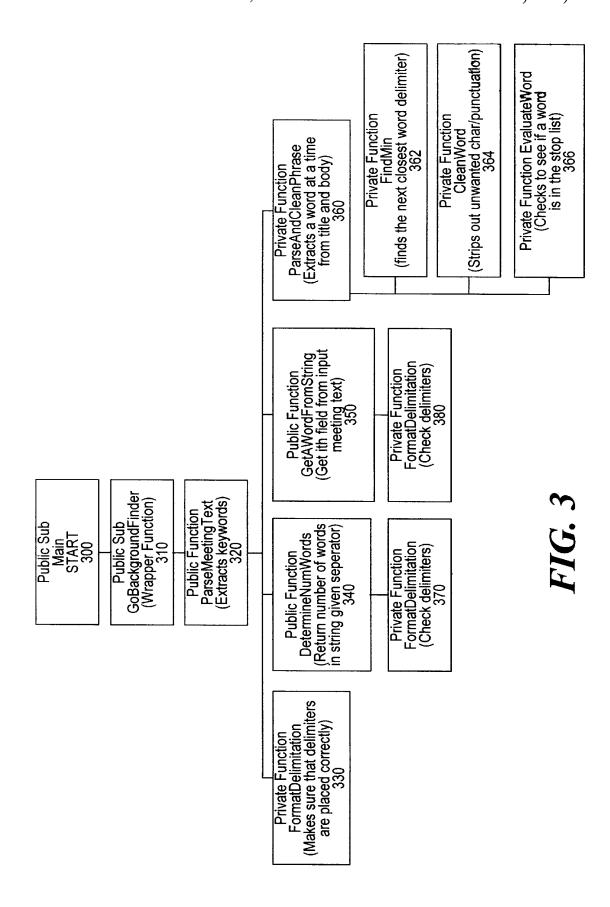


FIG.2



# DOCKET

# 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.

