



[54] PERSONAL COMMUNICATIONS TERMINAL HAVING SWITCHES WHICH INDEPENDENTLY ENERGIZE A MOBILE TELEPHONE AND A PERSONAL DIGITAL ASSISTANT

Andy Reis . . . ; "EO's Personal Communicator Ushers in a New Era"; BYTE Magazine; Mar. 1993, p. 52.

ARDIS advertisement; ARDIS Company; 1994.

Smith Corona HandiFax catalog listing; 1994.

[75] Inventor: Nam D. Nguyen, Quebec, Canada

Steven B. Weisman; "PDAs Today: Technology Trends and Market Dynamics"; BIS Strategic Decisions: Dec. 1992.

[73] Assignee: Telefonaktiebolaget LM Ericsson (publ), Stockholm, Sweden

"Mitsubishi handheld combines cellular phone, electronic organizer"; PC Week Magazine; Nov. 7, 1994; p. 57.

[21] Appl. No.: 524,867

[22] Filed: Sep. 7, 1995

[51] Int. Cl.⁶ H04M 11/00

[52] U.S. Cl. 455/403; 455/556; 455/557; 455/553

[58] Field of Search 379/58, 59, 96, 379/98, 100; 455/33.1, 403, 556, 557, 553, 566, 572, 575

Primary Examiner—William Cumming

Assistant Examiner—Keith Ferguson

Attorney, Agent, or Firm—Smith & Catlett, P.C.

[57] ABSTRACT

A personal communications terminal (PCT) in a case having a first half hingedly connected to a second half. The PCT operates in an open and a closed position and comprises a mobile telephone unit and a personal digital assistant (PDA) unit electronically connected to the mobile telephone unit. The PDA unit is a fully functional personal computer. The PDA unit comprises a memory for application software programs, a memory for data, a processor for performing operations with the data and the application programs, a modem for passing data between the PDA unit and the mobile telephone unit, and a mobile data interface for passing data between the PDA unit and the mobile telephone unit without utilizing the modem. When the PCT is in the open position, it forms two interior faces which include a PDA display screen on one face and a full alpha-numeric keyboard on the other face. The PCT may be operated as a standard wireless telephone, as a personal computer, or in an integrated mode for FAX, wireless data transfer, or sending and receiving short message service (SMS) messages.

[56] References Cited

U.S. PATENT DOCUMENTS

| | | | |
|-----------|---------|------------------|----------|
| 4,972,457 | 11/1990 | O'Sullivan | 379/59 |
| 5,475,866 | 12/1995 | Ruthenberg | 455/33.1 |
| 5,479,479 | 12/1995 | Braitberg et al. | 379/59 |
| 5,522,089 | 5/1996 | Kikinis et al. | 379/96 |
| 5,572,573 | 11/1996 | Sylvan et al. | 379/58 |
| 5,581,261 | 12/1996 | Hickman et al. | 455/33.1 |
| 5,584,054 | 12/1996 | Tyneski et al. | 379/58 |

FOREIGN PATENT DOCUMENTS

| | | | |
|--------------|---------|--------------------|---|
| 0 472 361 A2 | 8/1991 | European Pat. Off. | . |
| 0 651 544 A2 | 10/1994 | European Pat. Off. | . |
| WO 90/03076 | 3/1990 | WIPO | . |
| WO 96/38970 | 12/1996 | WIPO | . |

OTHER PUBLICATIONS

Yvonne L. Lee; "Is it a phone or a PDA? Here's what Simon says"; Infoworld Magazine; Sep. 26, 1994; p. 124. Steve Mann; "Searching for the Perfect PDA"; Wireless For the Corporate User Magazine; vol. 3, No. 6, 1994.

22 Claims, 4 Drawing Sheets

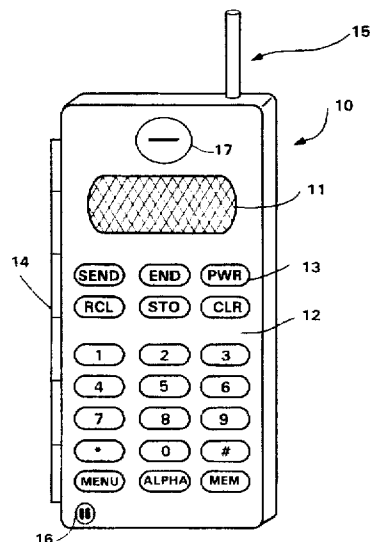
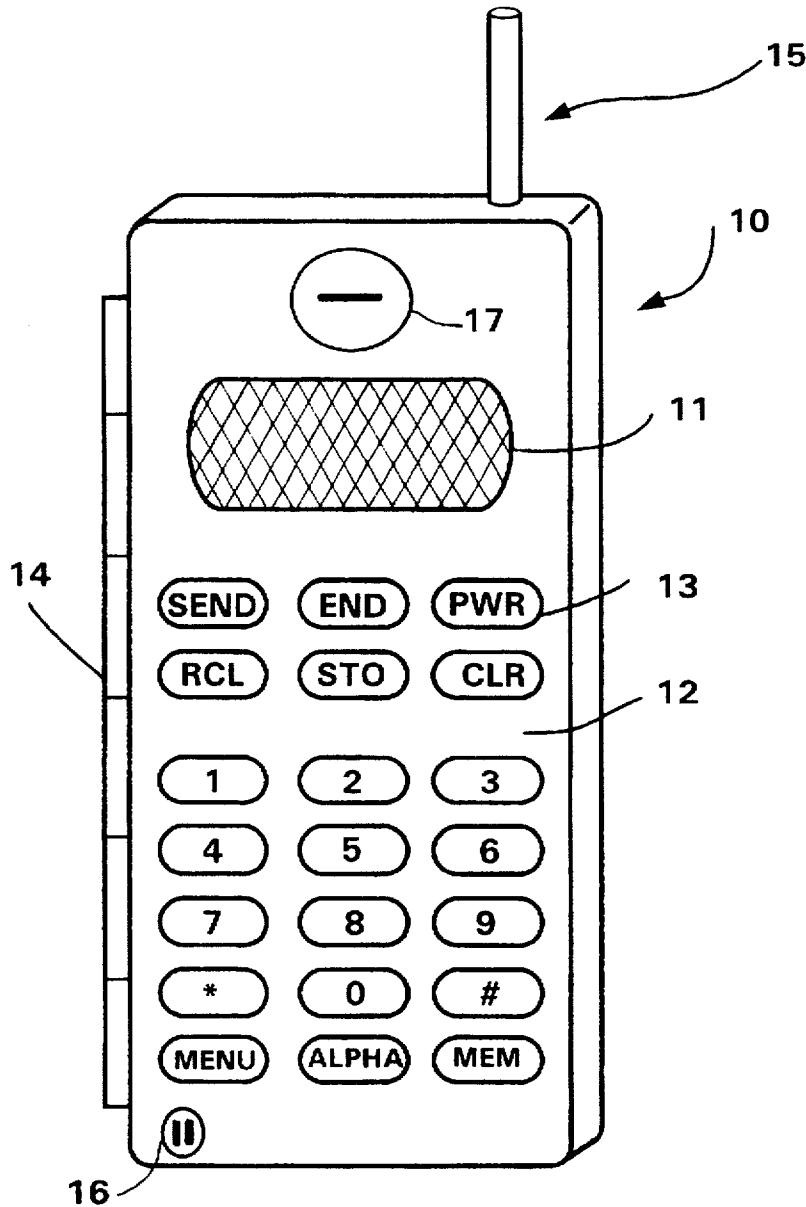


FIG. 1



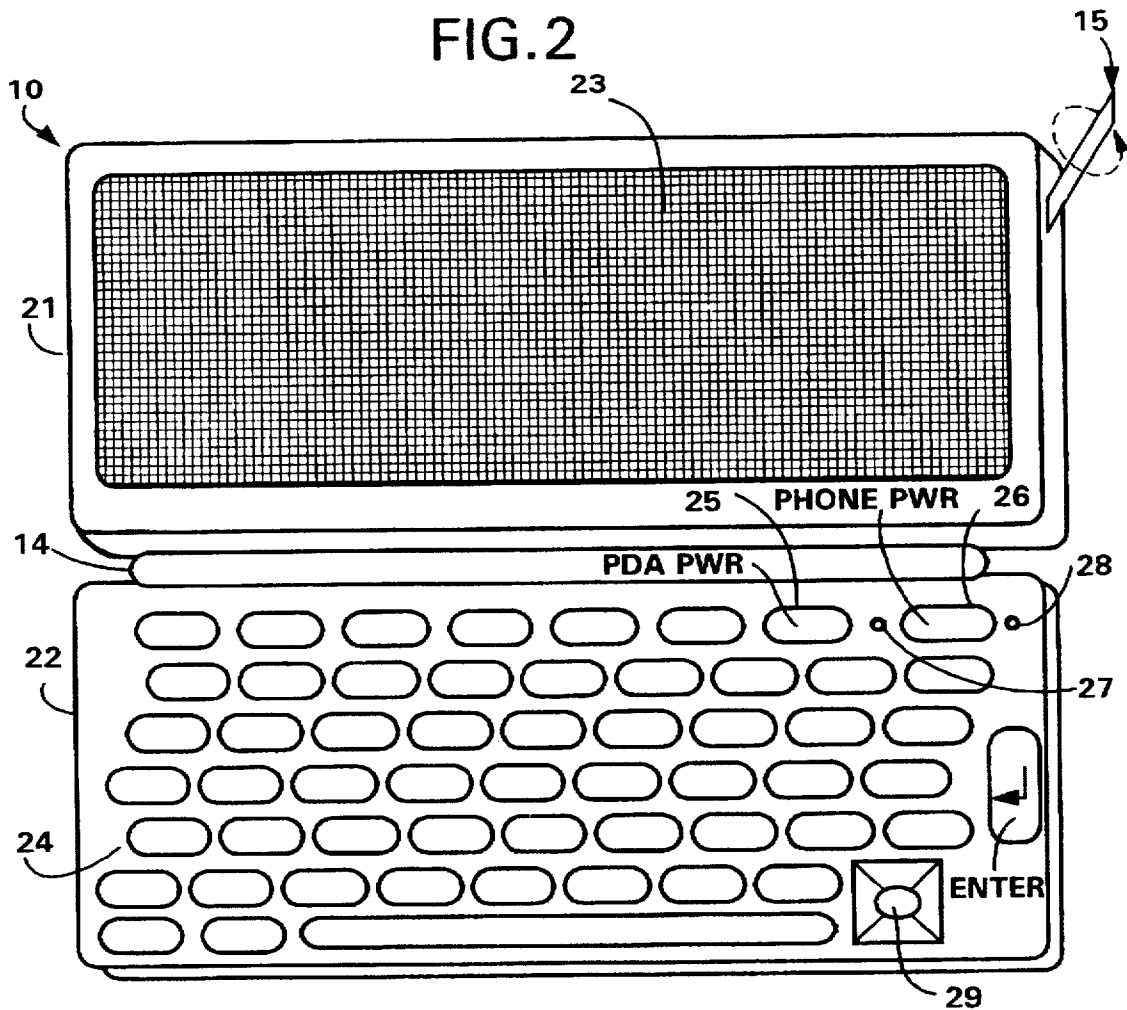


FIG. 3

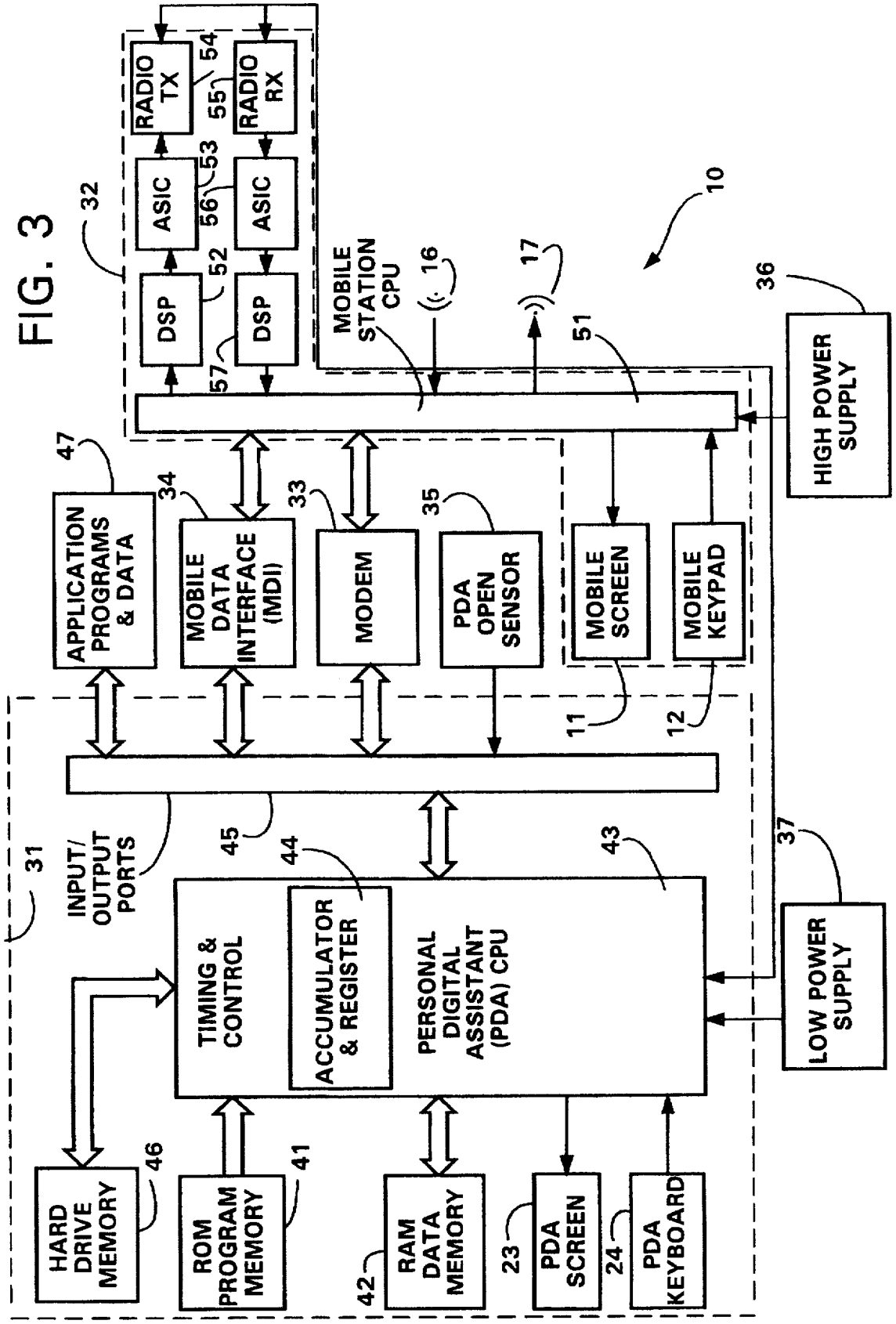
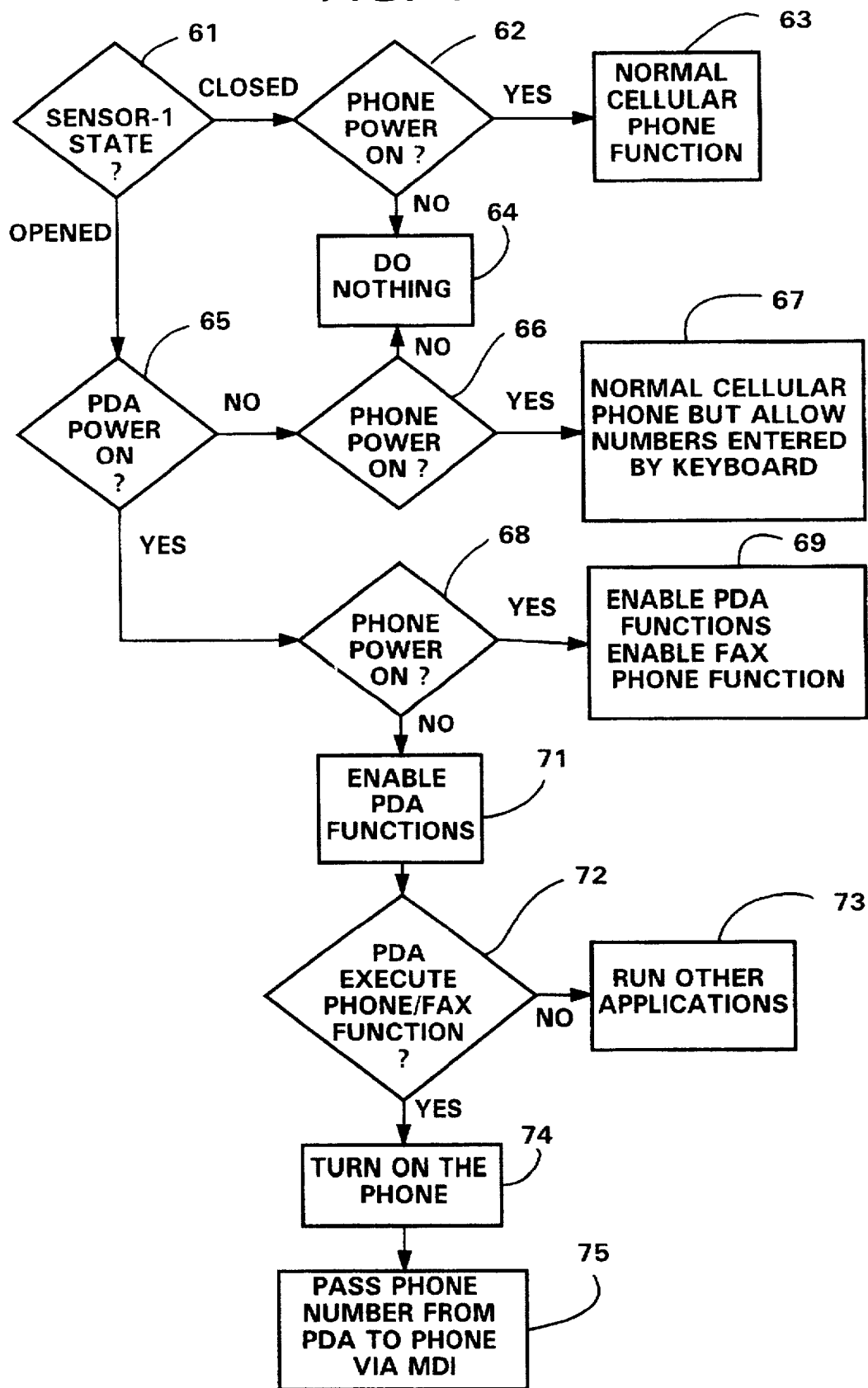


FIG. 4



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.