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

(10) **Patent No.:** **US 6,185,413 B1**
(45) **Date of Patent:** ***Feb. 6, 2001**

(54) **MOBILE STATION HAVING A COST-EFFICIENT CALL MANAGEMENT METHOD AND SYSTEM**

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(*) Notice: This patent issued on a continued prosecution application filed under 37 CFR 1.53(d), and is subject to the twenty year patent term provisions of 35 U.S.C. 154(a)(2).

Under 35 U.S.C. 154(b), the term of this patent shall be extended for 0 days.

(21) Appl. No.: **08/877,192**

(22) Filed: **Jun. 17, 1997**

(51) **Int. Cl.**[7] **H04Q 7/20**
(52) **U.S. Cl.** **455/405**; 455/414
(58) **Field of Search** 455/405, 414, 455/432, 419; 379/114

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(57) **ABSTRACT**

A mobile station for transmitting a mobile radio signal to a base station has a memory device in which a number of available applications are stored which can relate to different "carriers," i.e., mobile radio network systems or service providers within a single mobile radio network. A selection device of the mobile station calculates expected charges for a desired connection for each of these applications which are being considered for the transmission connection. Based upon the calculations, the most cost-efficient application for the desired transmission is selected. The actual transmission of the communication data for the base station is then carried out on the basis of this application.
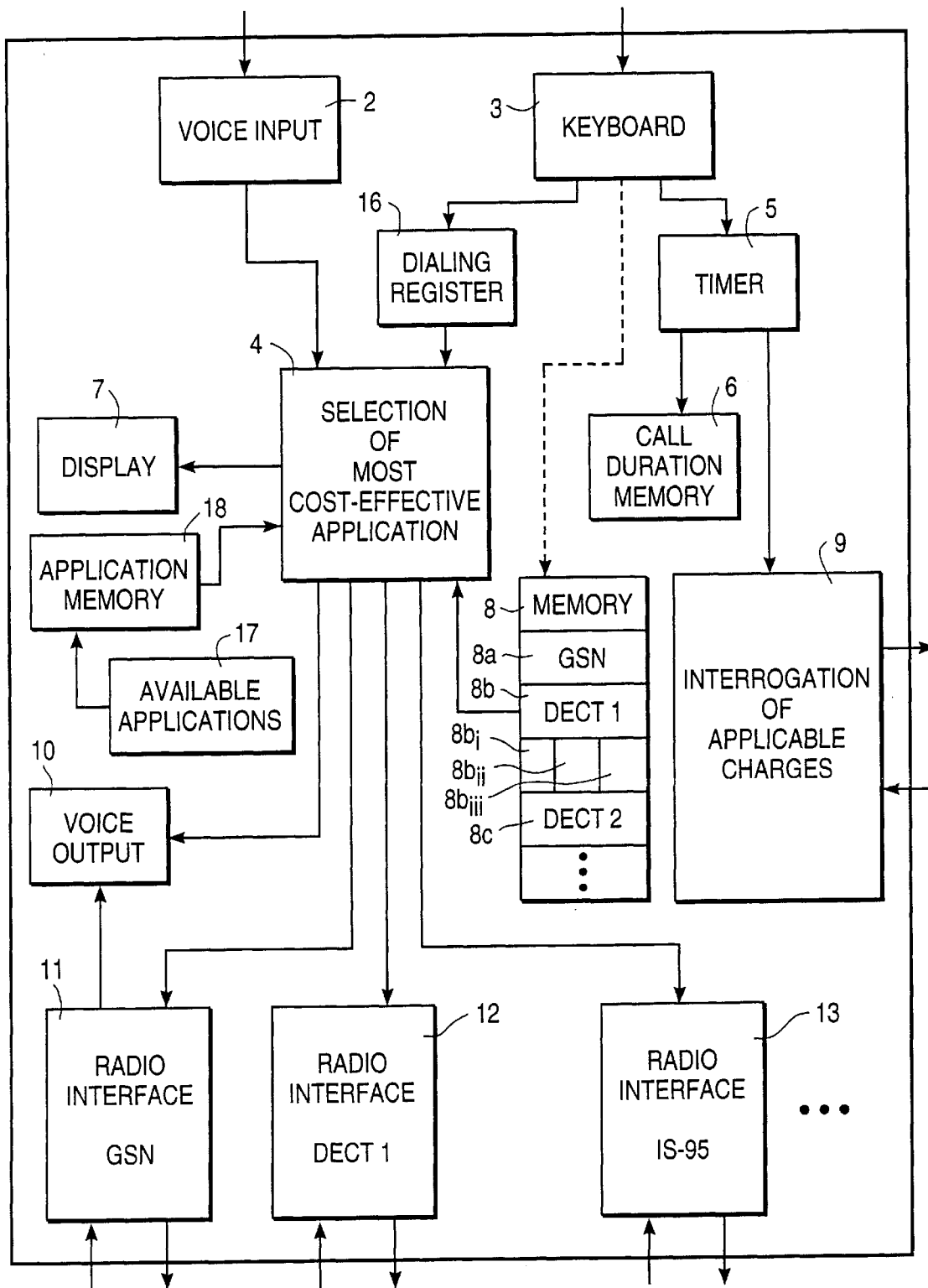
12 Claims, 4 Drawing Sheets
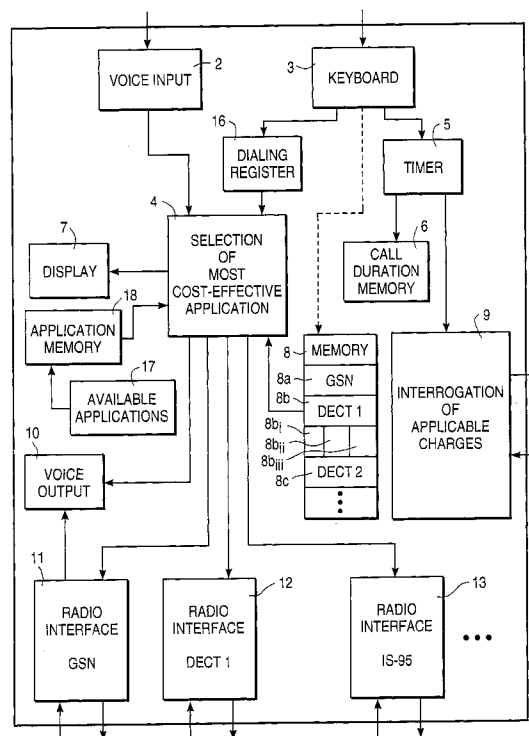
FIG_1

MOBILE RADIO STANDARD	GSM (D1/D2)	DCS 1800 (E1)	DECT	D-AMPS (IS-54)	IS-95	JDC (PDC)
FREQUENCY BAND	890-915 MHz (UL) 935-960 MHz (DL)	1710-1785 MHz (UL) 1805-1880 MHz (DL)	1880-1900 MHz	824-849 MHz (UL) 869-894 MHz (DL)	800-900 MHz 1850-1990 MHz	940-960 MHz (UL) 810-830 MHz (DL)
CHANNEL SPACING	200 kHz	200 kHz	1,728 MHz	30 kHz	123 MHz	25 kHz
CHANNELS PER CARRIER	8	8	12	3	64	3
ACCESS METHOD	TDMA	TDMA	TDMA	TDMA	CDMA	TDMA
TRANSMISSION METHOD (MODULATION)	GMSK	GMSK	GMSK	$\pi/4$-DQPSK	QPSK	$\pi/4$-DQPSK

FIG_2

FIG_3A

FIG_3B

FIG_4

IV

LOCAL NETWORK

15

LANDLINE NETWORK

III

14

I

A

II

LOCAL NETWORKS
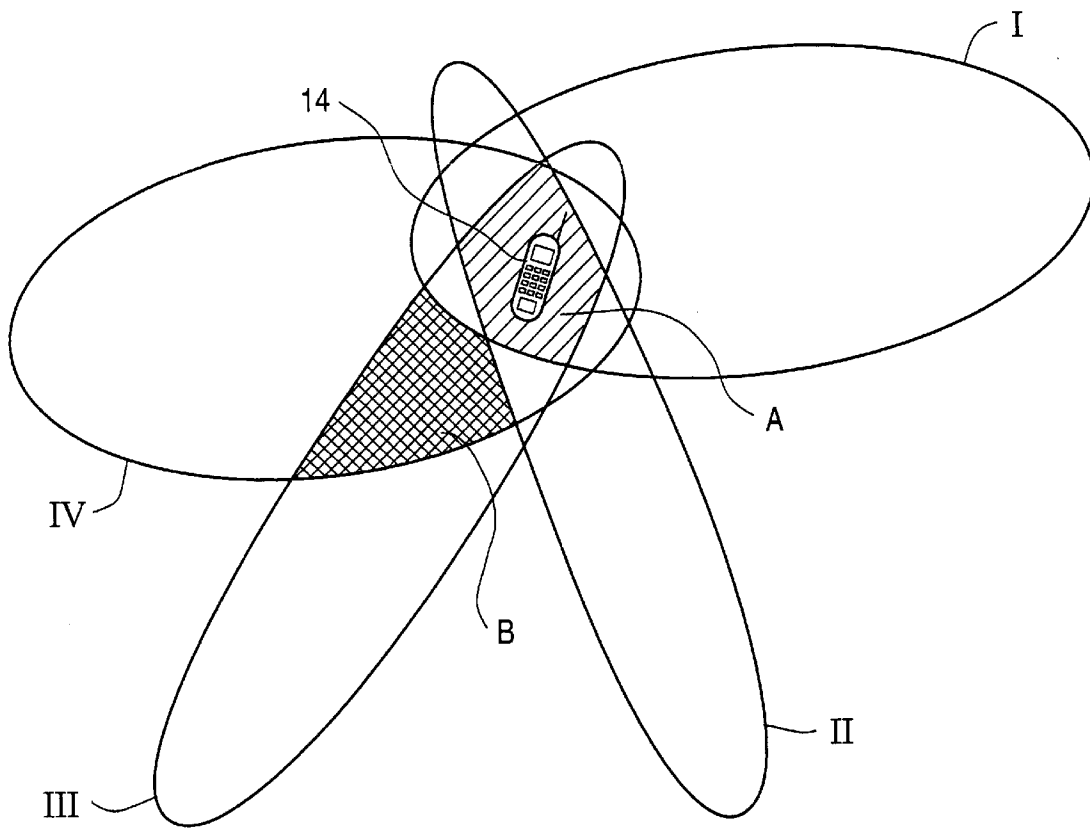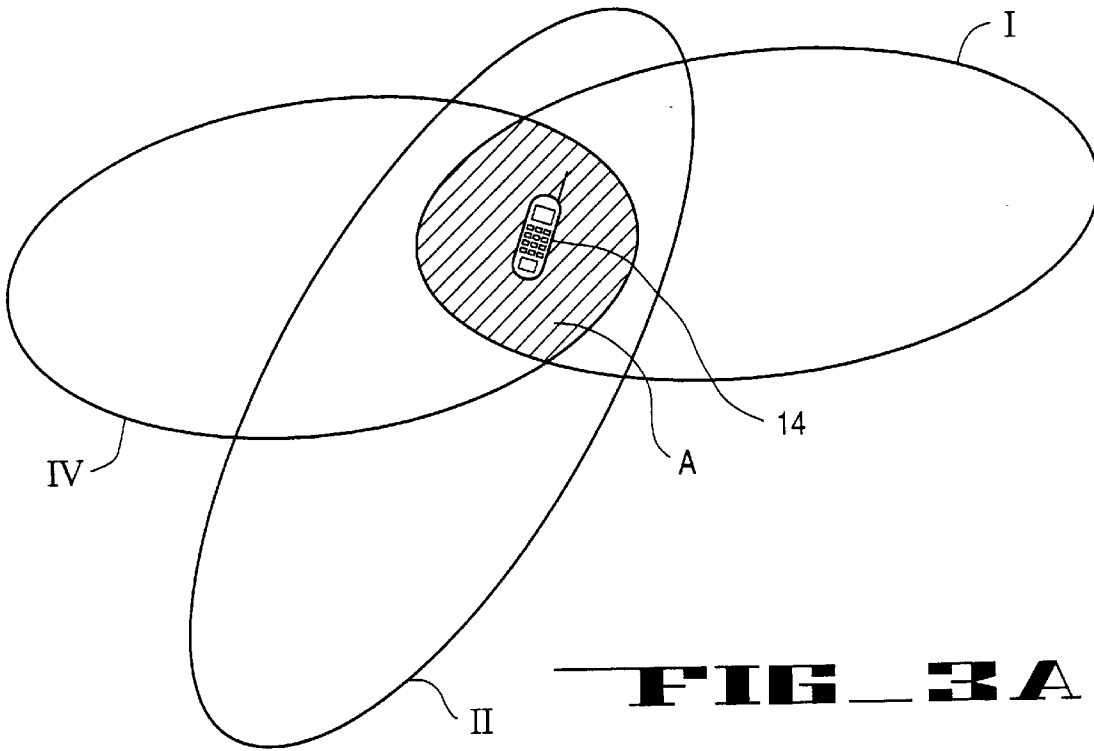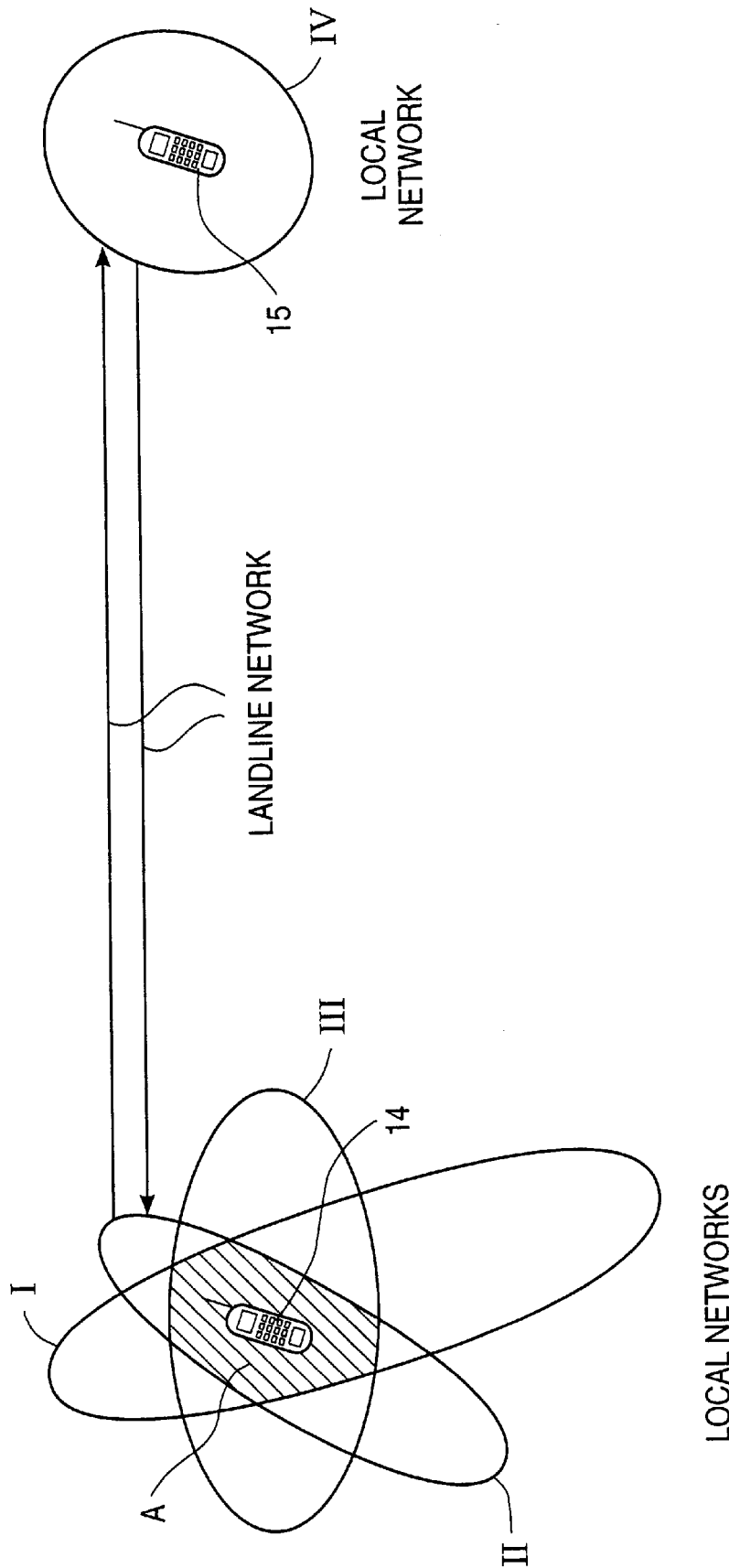
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