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(12) United States Patent

Bell

(54) REMOTE CONTROL OF AN ELECTRONIC DEVICE THROUGH DOWNLOADING OF A CONTROL INTERFACE OF THE ELECTRONIC DEVICE IN A MOBILE STATION

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- (52) U.S. Cl. 370/466; 455/41.2; 709/203

(56) References Cited

U.S. PATENT DOCUMENTS

5,204,768 A *	4/1993	Tsakiris et al 340/825.72
5,614,906 A *		Hayes et al
5,636,211 A	6/1997	Newlin et al 370/465
5,909,183 A	6/1999	Borgstahl et al 340/825.22
5,949,351 A	9/1999	Hahm 340/825.22
6,088,340 A *	7/2000	Buchholz et al 455/517
6,104,334 A *	8/2000	Allport 340/825.24
6,223,029 B1*	4/2001	Stenman et al 455/420
6,356,529 B1*	3/2002	Zarom 370/466
6,490,291 B1*	12/2002	Lee et al 370/401
6,490,626 B1*	12/2002	Edwards et al 709/229

(10) Patent No.: US 7,894,474 B1

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6,509,913 B2*	1/2003	Martin et al 455/566
6,587,684 B1*	7/2003	Hsu et al 370/401
6,661,784 B1*	12/2003	Nykanen 370/338

FOREIGN PATENT DOCUMENTS

EP	0838768 A2	4/1998
WO	WO 9849818	11/1998
WO	9859282 A2	12/1998

OTHER PUBLICATIONS

Todd D. Hodes et al, Composable Ad-hoc Mobile Services for Universal Interaction, Aug. 2, 1997, MOBICOM 97.*

Japanese Abstract of Japan A 09153952, Date of Publication Jun. 10, 1997. Microsoft Handbook "MSCE: TCP/IP Study Guide", SYBEX, 1997,

pp. 3, 16-24, 421.

Bluetooth Spec. V. 1. OA, July 26, 1999, pp. 41-45, 191, 249, 325-336, 342-347, 387, 504-513.

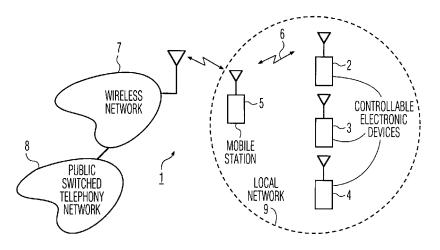
* cited by examiner

Primary Examiner—Andrew Lee

(57) **ABSTRACT**

A wireless communication system includes a number of controllable electronic devices and a mobile station for communication with one of the controllable electronic devices through a short-range wireless communication link, when in-range with the one controllable electronic device. The mobile station includes a display screen and a browser. The mobile station and the one controllable electronic device form a client-server pair. Through the short-range wireless communication link, the client requests the server to download a control interface stored at the server. Upon downloading, a browser is used to navigate through control menu pages included in the control interface, and to post control parameter settings to the server. In the server, a program runs to interpret received control parameter settings, to invoke a control action in accordance with the received control parameter settings, and to instruct the client what to do next.

22 Claims, 4 Drawing Sheets

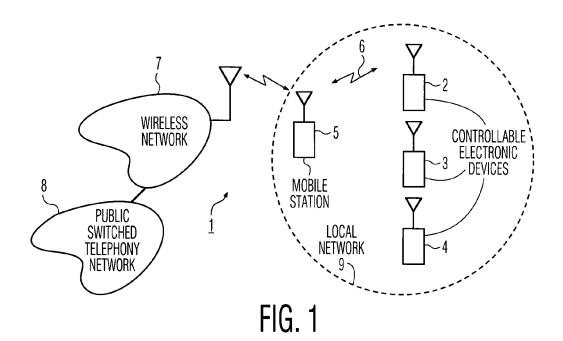


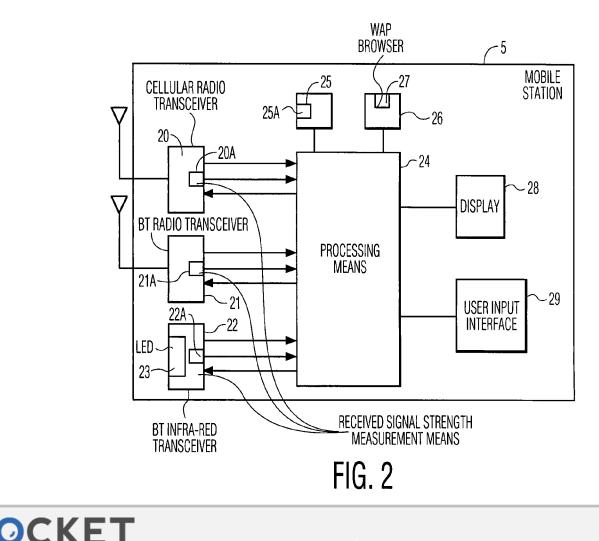
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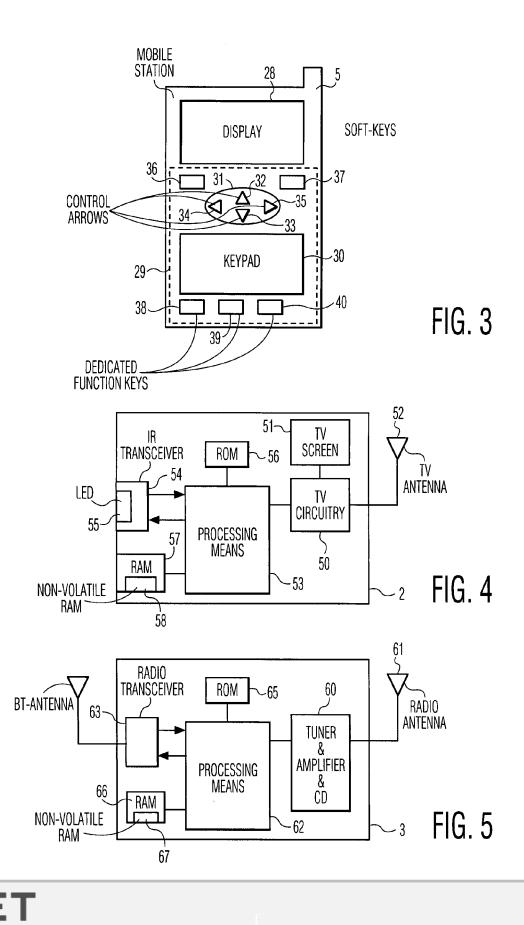




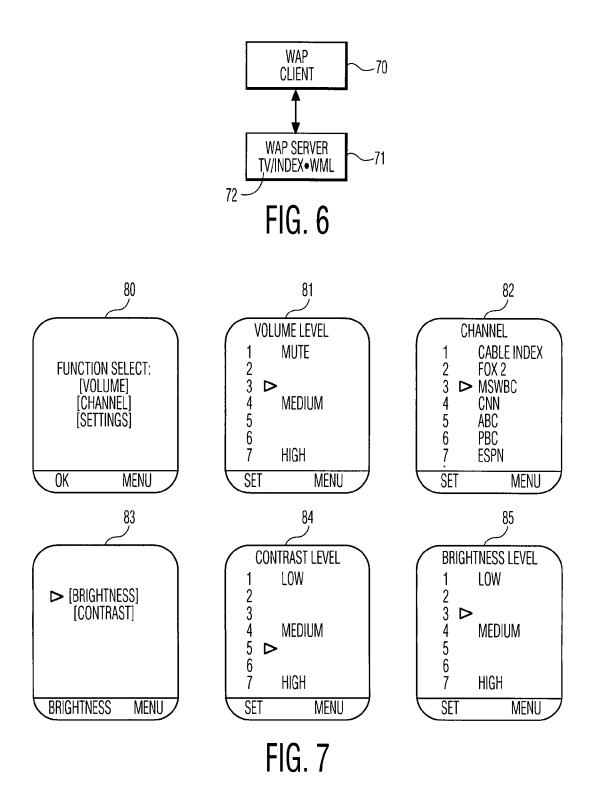
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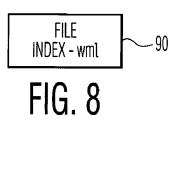
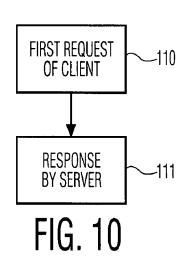




FIG. 9



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