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Inoue et al.

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(54) **COMMUNICATION SCHEME FOR REALIZING EFFECTIVE DATA INPUT/SETUP IN COMPACT SIZE PORTABLE TERMINAL DEVICE USING LOCALLY CONNECTED NEARBY COMPUTER DEVICE**

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G06F 15/16 (2006.01)

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(58) **Field of Classification Search** 709/217–219, 709/245, 236, 249, 228, 203, 227, 232, 234; 345/157, 751, 163; 455/3.01; 379/93.01, 379/93.24
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,796,394	A	*	8/1998	Wicks et al. 345/751
5,838,926	A	*	11/1998	Yamagishi 709/249
5,930,472	A	*	7/1999	Smith 709/203
6,065,120	A	*	5/2000	Laursen et al. 709/227
6,072,468	A	*	6/2000	Hocker et al. 345/157
6,112,244	A	*	8/2000	Moore et al. 709/228
6,137,476	A	*	10/2000	Hocker et al. 345/163
6,243,739	B1	*	6/2001	Schwartz et al. 709/219
6,249,516	B1	*	6/2001	Brownrigg et al. 370/338

6,272,545	B1	*	8/2001	Flanagin et al. 709/228
6,278,454	B1	*	8/2001	Krishnan 345/846
6,397,259	B1	*	5/2002	Lincke et al. 709/236
6,415,330	B1	*	7/2002	Okanoue 709/245
6,473,609	B1	*	10/2002	Schwartz et al. 455/406
6,622,174	B1	*	9/2003	Ukita et al. 709/206
6,694,366	B1	*	2/2004	Gernert et al. 709/227

FOREIGN PATENT DOCUMENTS

JP	7-175547 A	7/1995
JP	10-021060 A	1/1998
JP	10-275132	10/1998
JP	2000-505621 A	5/2000

(Continued)

OTHER PUBLICATIONS

Kazuki Kasahara et al., "Detailed Analysis, Windows CE Japanese Version", Mobile PC, Sep. 1997, pp. 42-54, vol. 3, No. 9.

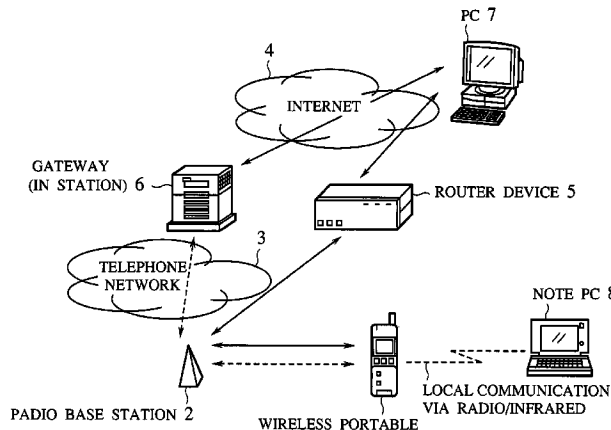*Primary Examiner*—William C. Vaughn, Jr.
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(57) **ABSTRACT**

A communication scheme in which it becomes possible to improve handling of a user interface or omit tedious operations in a portable terminal device by cooperating the computer device with the portable terminal device is disclosed. The portable terminal device obtains a prescribed information regarding the computer network that is necessary or utilizable in operating an application program to be operated on the portable terminal device by being connected to the computer network, from the computer device connected to the portable terminal device via the local network, carries out a prescribed processing for the application program according to at least a part of the prescribed information, and executes the application program by using a result of the prescribed processing and being connected to the computer network.

13 Claims, 25 Drawing Sheets

FOREIGN PATENT DOCUMENTS

WO	9-190353 A	7/1997
WO	WO 97/32439 A2	9/1997

* cited by examiner

FIG.1

FIG.2

WIRELESS PORTABLE
TERMINAL 1

11

RADIO
COMMUNICATION
UNIT

12

LOCAL NETWORK
COMMUNICATION
UNIT

13

VOICE FORMAT
PROCESSING
UNIT

TCP/IP
PROCESSING
UNIT

~14

15

A/D-D/A
CONVERSION
UNIT

16

VOICE
INPUT/OUTPUT
PROCESSING UNIT
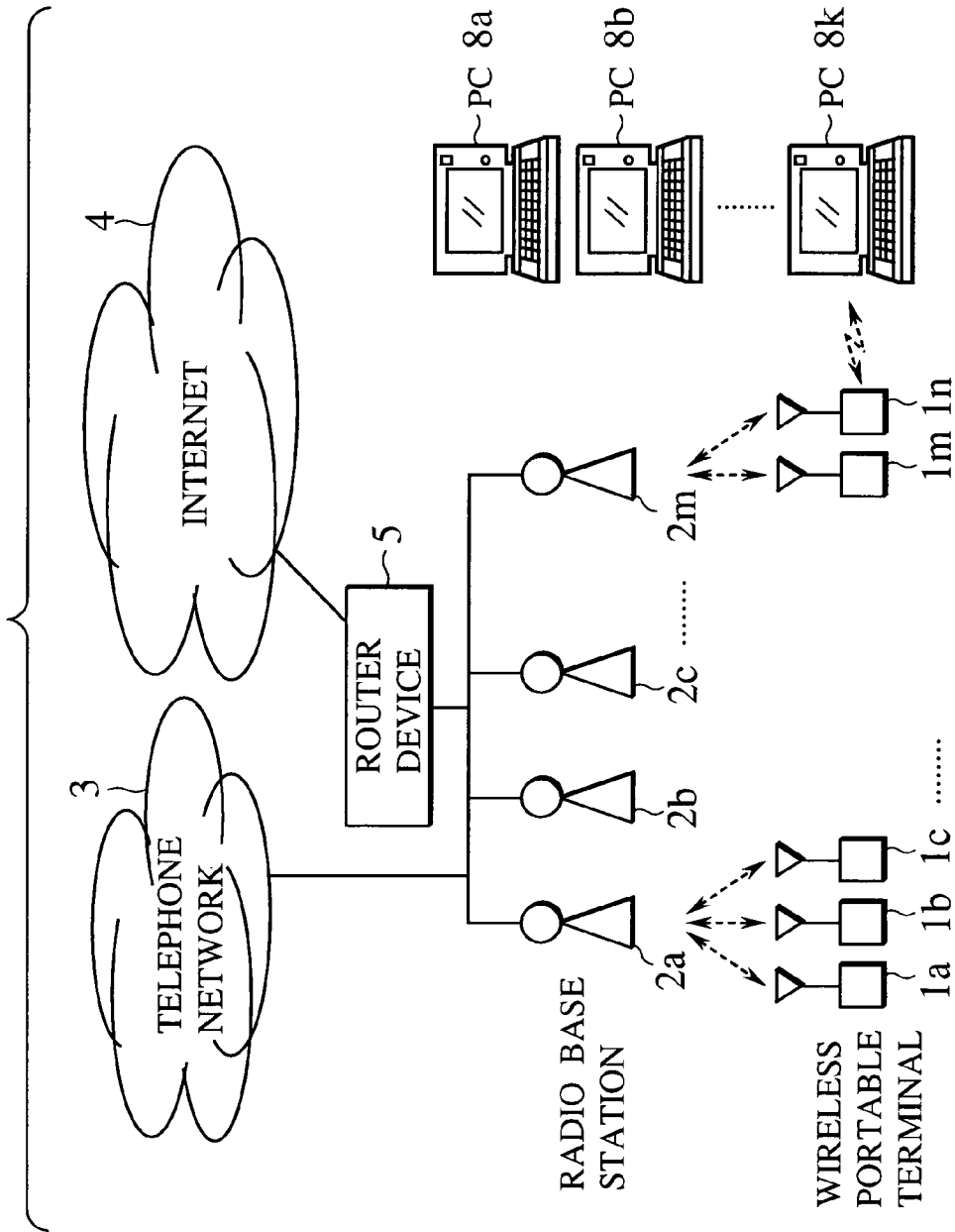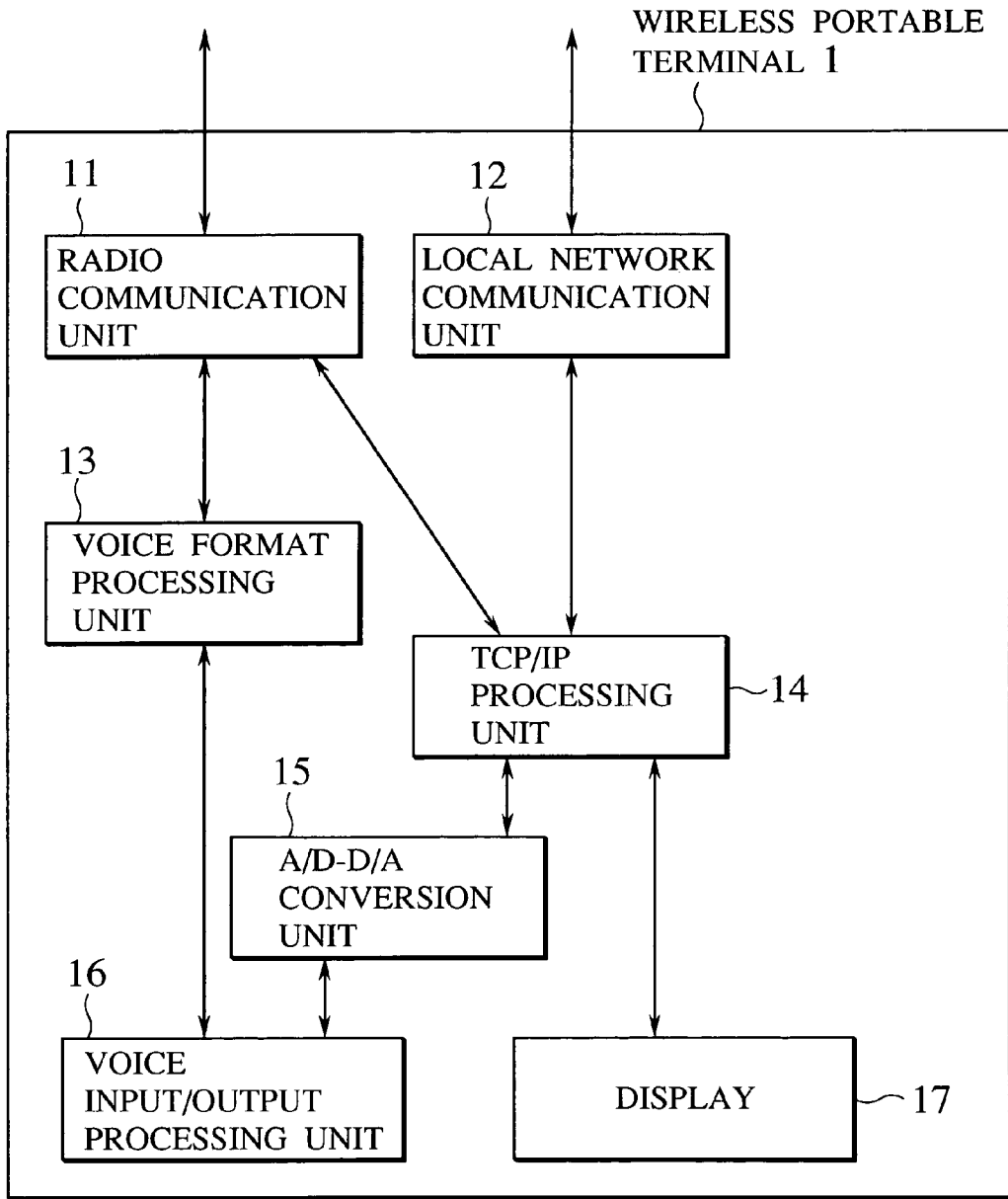
DISPLAY ~17

FIG.3

PAGE
DISPLAY
REGION 32

DOCKET ALARM
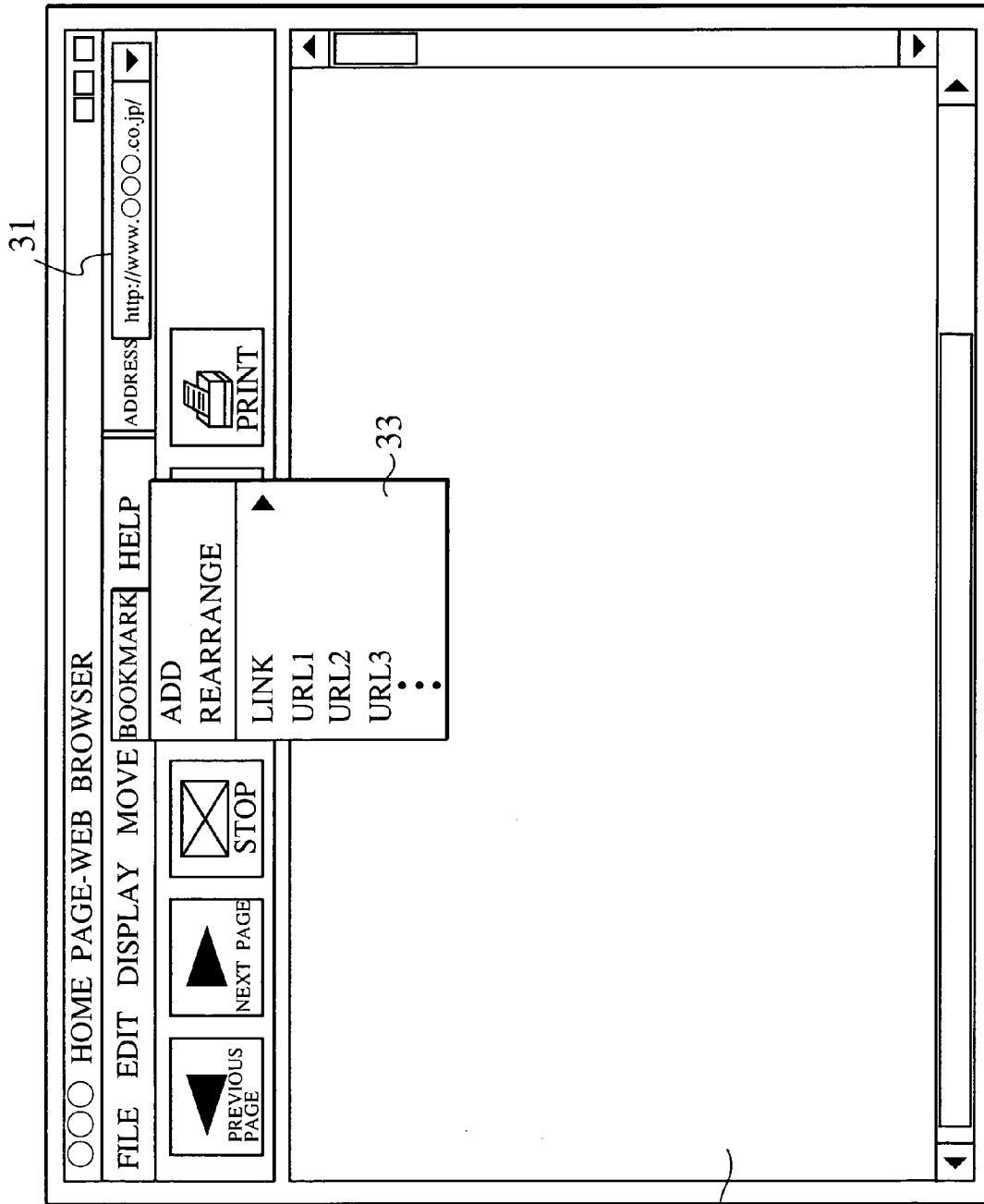
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