(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
21 February 2002 (21.02.2002)

PCT

(10) International Publication Number
WO 02/15412 A3

(51) International Patent Classification[7]: H04B 7/08

(21) International Application Number: PCT/GB01/03638

(22) International Filing Date: 14 August 2001 (14.08.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0019993.5 14 August 2000 (14.08.2000) GB

(71) Applicant *(for all designated States except US)*: **SIMOCO INTERNATIONAL LIMITED** [GB/GB]; St. Andrews Road, P.O. Box 24, Cambridge CB4 1DP (GB).

(72) Inventor; and

(75) Inventor/Applicant *(for US only)*: **POPPLE, Martin** [GB/GB]; 3 Lyles Road, Cottenham, Cambridgeshire CB4 8QR (GB).

(74) Agent: **FRANK B. DEHN & CO.**; 179 Queen Victoria Street, London EC4V 4EL (GB).

(81) Designated State *(national)*: US.

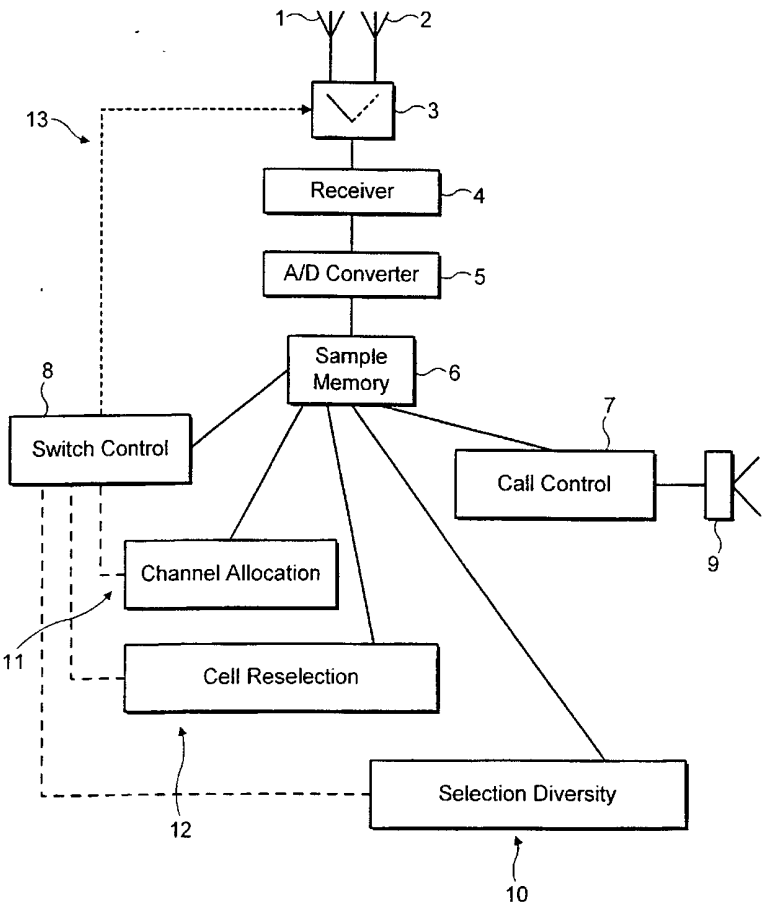
(84) Designated States *(regional)*: European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR).

Published:
— *with international search report*
— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(88) Date of publication of the international search report:
10 May 2002

[Continued on next page]

(54) Title: SIGNAL MEASUREMENT IN RADIO COMMUNICATIONS SYSTEMS



(57) Abstract: A mobile unit of a digital mobile communications system includes a diverse antenna receiver arrangement comprising a main antenna branch (1), a second diverse antenna branch (2), and a diverse antenna switch (3) for switching between the two antenna branches. A channel acquisition controller (11) runs a channel acquisition process which causes the mobile unit to scan plural frequencies of the radio system in turn and take successive signal samples on each frequency, in which scan two signal samples are taken on each carrier frequency, one on the main antenna branch (1), and then one from the diverse antenna branch (2), before the receiver retunes to the next frequency to be sampled. After all the frequencies have been dual-sampled in this way, the process is redone a number of times and after a selected overall sampling period the mean signal strength of each frequency is determined from the samples taken. The mobile unit then, for example, selects the frequency with the greatest signal strength as the frequency (radio channel) to use.

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II ERNATIONAL SEARCH REPORT

Int. ional Application No
PCT/GB 01/03638

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H04B7/08

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H04B G08C G08G

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal, WPI Data, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	US 5 159 707 A (KASA KOICHI ET AL) 27 October 1992 (1992-10-27) abstract column 1, line 9 -column 2, line 53 column 3, line 31 -column 4, line 44 figures 1,2A,2B,2C,2D ---	1-8, 10-19 9
X A	DE 38 27 310 A (PIONEER ELECTRONIC CORP) 2 March 1989 (1989-03-02) abstract column 9, line 18 -column 12, line 5 column 5, line 29-34 figures 1A,2 --- -/--	1-8, 10-19 9

[X] Further documents are listed in the continuation of box C.

[X] Patent family members are listed in annex.

° Special categories of cited documents :

'A' document defining the general state of the art which is not considered to be of particular relevance

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'&' document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
28 January 2002	06/03/2002

Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo nl, Fax: (+31–70) 340–3016	Helms, J

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication,where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 002 672 A (TODD STEPHEN ROSS) 14 December 1999 (1999-12-14)	1-8, 10-19
A	abstract column 4, line 10 -column 5, line 62 figures 1,2	9
A	US 6 006 113 A (MEREDITH SHELDON KENT) 21 December 1999 (1999-12-21) abstract column 11, line 22-57 figure 9	1-19

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 20, 21

Claims 20 and 21 consist of references to the drawings. According to Rule 6.2(a) PCT, claims should not contain such references except where absolutely necessary, which is not the case here.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

INTERNATIONAL SEARCH REPORT

Information on patent family members

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