# (19) World Intellectual Property Organization International Bureau



## 

# (43) International Publication Date 7 February 2002 (07.02.2002)

#### **PCT**

# (10) International Publication Number WO 02/11485 A3

(51) International Patent Classification<sup>7</sup>: H04Q 7/38

(21) International Application Number: PCT/EP01/08573

(22) International Filing Date: 24 July 2001 (24.07.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: 0018371.5 27 July 2000 (27.07.2000) GB

(71) Applicant (for all designated States except US): MO-TOROLA INC [US/US]; 1303 E.Algonquin Road, Schaumburg, IL 60196 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): EMBERSON, Grant, Michael [GB/GB]; 6 Pintail Close, Kempshott, Basingstoke, Hampshire RG22 5UG (GB). SHAHAF,, Mark [IL/IL]; 5/5 Kakal Avenue, Ashdod, 77462 Israel (IL). CARMON, Rafael [IL/IL]; David Tzadok 8/16, 58679 Holon (IL). GLAZER, Nimrod [IL/IL]; 12 Dov Klein, 67836 Rehovot (IL).

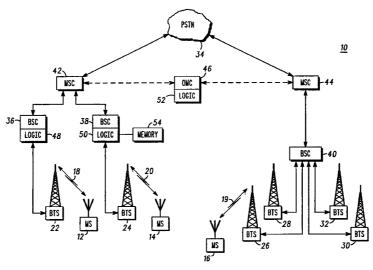
- (74) Agent: MCCORMACK, Derek; Motorola European Intellectual Property, Midpoint, Alencon Link, Basingstoke, Hampshire RG21 7PL (GB).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### 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

[Continued on next page]

#### (54) Title: COMMUNICATION SYSTEM, RADIO UNIT AND METHOD OF PERFORMING A HANDOVER



(57) Abstract: A cell-based communication system (10,58) having at least two cells (60,62) facilitating a communication link between at least one of a plurality of mobile stations (88-92) and at least one of a plurality of base transceiver stations (74-86) is characterised by at least one mobile station (88) and/or its respective serving base transceiver station (74) having means (94, 96, 108) for providing cell parameter information of a neighbour cell (62) which information is known to both the mobile station and its serving base transceiver station so as to facilitate handover of a communication between the respective serving base transceiver station (74) and a second base transceiver station (76) serving the neighbouring cell (62) without the mobile station accessing or receiving information from the neighbouring cell providing said neighbouring cell parameter information. A radio transceiver unit, base station transceiver and method for use in the system are also described.







(88) Date of publication of the international search report: 18 April 2002

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

### IN :RNATIONAL SEARCH REPORT

Inte. ..ional Application No PCT/EP 01/08573

A. CLASSIFI	ICATION OF SUBJECT MA	TTER
IPC 7	H04Q7/38	

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

### B. FIELDS SEARCHED

 $\label{localization} \begin{array}{ll} \mbox{Minimum documentation searched (classification system followed by classification symbols)} \\ \mbox{IPC 7} & \mbox{H04Q} \end{array}$ 

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, PAJ, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT				
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.		
Х	US 5 987 332 A (PATEL ANIL N ET AL) 16 November 1999 (1999-11-16)	1,3, 11-13, 15,17, 19-24		
	column 2, line 41-61 column 5, line 8 -column 6, line 23			
X	US 5 761 240 A (CROUCHER JR RUSSELL L) 2 June 1998 (1998-06-02)	1-3, 11-13, 19-21, 23,24		
	column 3, line 45 -column 6, line 3 column 8, line 9-57			
Χ	GB 2 337 426 A (SIMOCO INT LTD) 17 November 1999 (1999-11-17) page 2, line 12-29 page 42, line 14-36	1,11-14, 17-24		
,	-/			
	<u></u>			

Further documents are listed in the continuation of box C.	χ 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  'E' earlier document but published on or after the international filing date  'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  'O' document referring to an oral disclosure, use, exhibition or other means  'P' document published prior to the international filing date but later than the priority date claimed	<ul> <li>'T' later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</li> <li>'X' document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</li> <li>'Y' document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</li> <li>'&amp;' document member of the same patent family</li> </ul>
Date of the actual completion of the international search	Date of mailing of the international search report
14 February 2002	20/02/2002
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	Weinmiller, J

2

### IN :RNATIONAL SEARCH REPORT

Inte Lional Application No PCT/EP 01/08573

C (C-=*!:	CHANT DOCUMENTS CONSIDERED TO BE DELEVANT	FC17EF 01708373				
C.(Continua Category °						
	Citation of document, with indication, where appropriate, of the relevant passages  EKSTROM T G: "Site hand off operation in a SmartZone system"  VEHICULAR TECHNOLOGY CONFERENCE, 1994 IEEE 44TH STOCKHOLM, SWEDEN 8-10 JUNE 1994, NEW YORK, NY, USA, IEEE, 8 June 1994 (1994-06-08), pages 106-110, XP010123125  ISBN: 0-7803-1927-3 the whole document	Relevant to claim No.				

2

## II' :RNATIONAL SEARCH REPORT

Information on patent family members

Inte .tional Application No
PCT/EP 01/08573

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 5987332	Α	16-11-1999	CN	1212593 A	31-03-1999
US 5761240	Α	02-06-1998	AU WO	2260997 A 9729611 A1	28-08-1997 14-08-1997
GB 2337426	Α	17-11-1999	AU EP WO	3941899 A 1078548 A1 9959368 A1	29-11-1999 28-02-2001 18-11-1999