



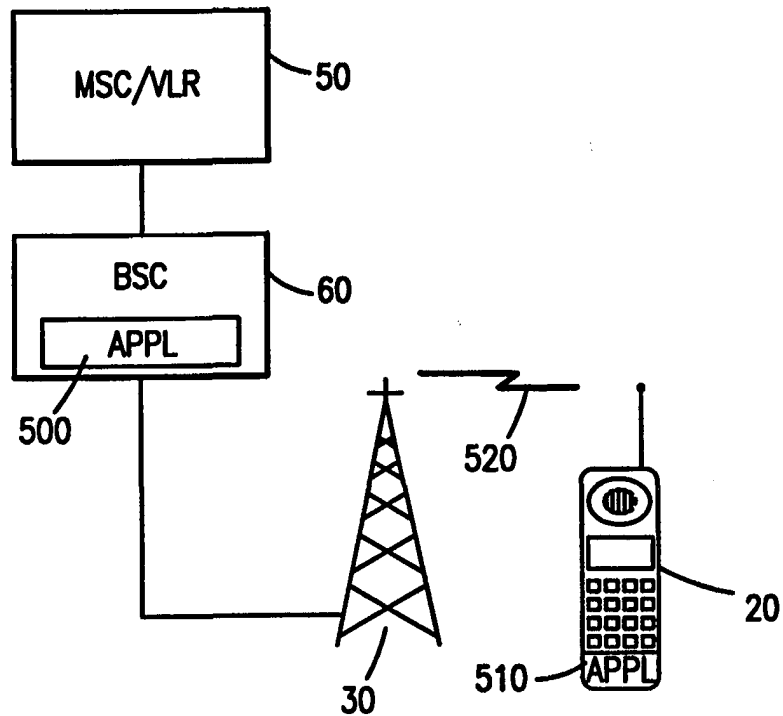
INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<p>(51) International Patent Classification <sup>6</sup> : <b>H04Q 7/38</b></p>	<p><b>A3</b></p>	<p>(11) International Publication Number: <b>WO 98/26523</b> (43) International Publication Date: 18 June 1998 (18.06.98)</p>
<p>(21) International Application Number: PCT/US97/23223 (22) International Filing Date: 12 December 1997 (12.12.97) (30) Priority Data: 08/766,727 13 December 1996 (13.12.96) US (71) Applicant: ERICSSON INC. [US/US]; 7001 Development Drive, P.O. Box 13969, Research Triangle Park, NC 27709 (US). (72) Inventors: ALPEROVICH, Vladimir; 18149 Rain Dance Trail, Dallas, TX 75252 (US). BHATIA, Ranjit; 12920 Audelia, Dallas, TX 75243 (US). (74) Agents: MOORE, Stanley, R. et al.; Jenkins &amp; Gilchrist, P.C., Suite 3200, 1445 Ross Avenue, Dallas, TX 75202 (US).</p>	<p>(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).</p> <p><b>Published</b> <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i></p> <p>(88) Date of publication of the international search report: 29 October 1998 (29.10.98)</p>	

(54) Title: OPTIMAL USE OF LOGICAL CHANNELS WITHIN A MOBILE TELECOMMUNICATIONS NETWORK

(57) Abstract

A broadcast message indicating the utilization level associated with Stand-alone Dedicated Control Channels (SDCCH) within a mobile telecommunications network serving a particular geographic area is transmitted over a broadcast channel. A plurality of mobile stations located within that particular geographic area monitoring the broadcast channel then receives the transmitted message. Thereafter, a mobile service request with a lower priority level than the indicated status level is queued by the associated mobile station and delayed until the channel utilization level rescinds to a network acceptable level.



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# INTERNATIONAL SEARCH REPORT

Intern. Application No

PCT/US 97/23223

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 6 H04Q7/38

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 6 H04Q

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)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 93 10600 A (MOTOROLA INC) 27 May 1993  see page 4, line 3 - line 15 ---	1,5-10, 12-23
A	COLLESEI S ET AL: "SHORT MESSAGE SERVICE BASED APPLICATIONS IN THE GSM NETWORK" IEEE INTERNATIONAL SYMPOSIUM ON PERSONAL, INDOOR AND MOBILE RADIO COMMUNICATIONS, vol. 3, 18 September 1994, pages 939-943, XP000612265 see page 941, paragraph III - page 942, right-hand column, line 15 ---	1,5-8, 10-14, 16-18, 20-22
A	EP 0 545 533 A (AMERICAN TELEPHONE & TELEGRAPH) 9 June 1993  see page 6, line 43 - page 7, line 2 ---	1-5,10, 11, 13-15,20
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Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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Date of the actual completion of the international search

11 September 1998

Date of mailing of the international search report

18/09/1998

Name and mailing address of the ISA

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

Authorized officer

Nielsen, O

# INTERNATIONAL SEARCH REPORT

International Application No

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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.
A	<p>OKABE J ET AL: "SOFTWARE FOR A UNITED STATES TDMA SYSTEM CELLULAR PORTABLE TELEPHONE"                      OKI TECHNICAL REVIEW,                      vol. 61, no. 154, December 1995, pages 59-62, XP000671994                      see page 59 - page 60, left-hand column, line 13</p> <p style="text-align: center;">-----</p>	1-22

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