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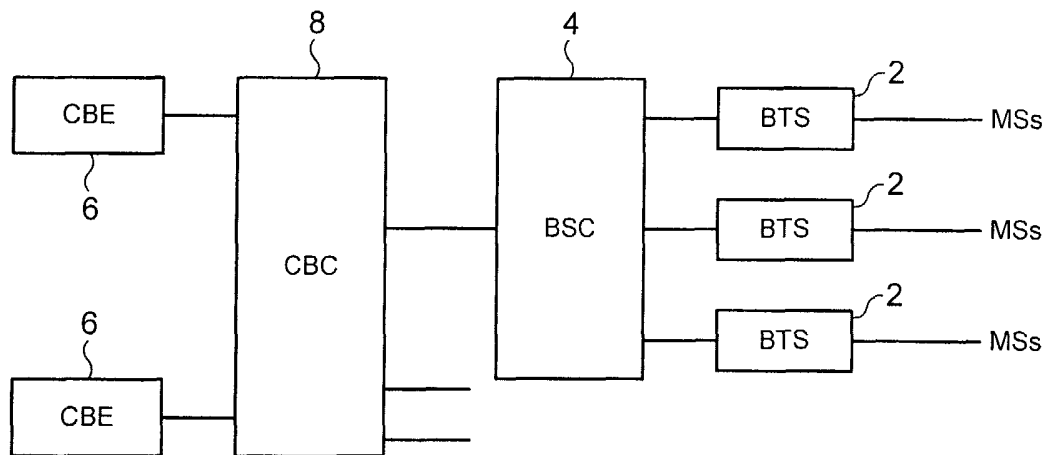
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: TRANSMISSION OF A SMS CELL BROADCAST MESSAGE IN A CELLULAR COMMUNICATIONS NETWORK INFRASTRUCTURE



(57) Abstract: A cellular radio communications network uses multicast messages for transmitting SMS cell broadcast messages over the network. Thus, a single multicast message is sent from a base station controller to a group of addressed base stations, which respond by transmitting SMS cell broadcast messages over the air interface. The multicast group for receiving page requests may include all base stations, in which case the base stations must be capable of determining whether they are specifically addressed, and should respond by transmitting a SMS cell broadcast message.

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# INTERNATIONAL SEARCH REPORT

Internationa Application No  
PCT/EP 02/05925

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 H04Q7/22

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 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)

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.                      |
|------------|---|--|
| X<br><br>Y | WO 99 35862 A (NOKIA TELECOMMUNICATIONS OY<br>;RUUTU JUSSI (FI))<br>15 July 1999 (1999-07-15)<br>page 1, line 12 -page 3, line 32<br><br>page 6, line 10 -page 7, line 27<br>figures 1,3<br><br>---<br><br>-/-- | 1,2,4,5,<br>8,9,11,<br>12<br>3,6,10,<br>13 |

Further documents are listed in the continuation of box C.

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

- "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
- "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
- "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.
- "&" document member of the same patent family

Date of the actual completion of the international search

27 August 2002

Date of mailing of the international search report

11.12.02

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## INTERNATIONAL SEARCH REPORT

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| Internal        | Application No |
| PCT/EP 02/05925 |                |

| C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT |  |                       |
|--|--|-----------------------|
| Category °   | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No. |
| Y  | <p>"DIGITAL CELLULAR TELECOMMUNICATIONS SYSTEM (PHASE 2+); TECHNICAL REALIZATION OF SHORT MESSAGE SERVICE CELL BROADCAST (SMSCB) (GSM 03.41 VERSION 5.6.1), ETSI" EUROPEAN TELECOMMUNICATION STANDARD, XX, XX,<br/> January 1998 (1998-01), pages 1-28,<br/> XP002111356<br/> cited in the application<br/> page 8, paragraph 1 -page 11, paragraph 7<br/> figure 1</p> <p style="text-align: center;">---</p> | 3,6,10,<br>13         |
| A  | <p>WO 00 72485 A (MOTOROLA INC)<br/> 30 November 2000 (2000-11-30)<br/> page 7, line 5 - line 12<br/> page 8, line 9 - line 25<br/> figures 1,5</p> <p style="text-align: center;">---</p>   | 1-6,8-13              |
| A  | <p>COURAU F ET AL: "IMPLEMENTATION OF BROADCAST AND PERSONAL MESSAGE SERVICES IN AN EXPERIMENTAL MOBILE RADIO SYSTEM" INTERNATIONAL CONFERENCE ON DIGITAL LAND MOBILE RADIO COMMUNICATIONS, XX, XX,<br/> 30 June 1987 (1987-06-30), pages 144-151,<br/> XP002019072<br/> page 146, paragraph 1.2.1<br/> page 148, paragraph 2.2</p> <p style="text-align: center;">-----</p>                                   | 1,5,8,12              |

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/EP 02/05925

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2.  Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
  
3.  Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1.  As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
  
2.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
  
3.  As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
  
4.  No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:  
  
1-6, 8-13

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-6,8-13

Method for transmitting a SMS cell broadcast message in a cellular communications network infrastructure, comprising transmitting a multicast message over the infrastructure to a group of base stations which respond thereto by transmitting a SMS cell broadcast message over an air interface; corresponding network node and base station

2. Claim : 7

Method of testing a cellular radio communications infrastructure, wherein a test device is dynamically allocated to a multicast SMS cell broadcast group, and SMS cell broadcast messages received thereby are monitored

# INTERNATIONAL SEARCH REPORT

Information on patent family membership

|                 |                |
|-----------------|----------------|
| Internationa    | Application No |
| PCT/EP 02/05925 |                |

| Patent document cited in search report | A | Publication date | Patent family member(s) | Publication date |
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|  |   |                  | EP 1183803 A1           | 06-03-2002       |
|  |   |                  | WO 0072485 A1           | 30-11-2000       |
|  |   |                  |                         |                  |