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(54) Title: DETERMINING THE MOBILE NETWORK CODE (MNC) HAVING A LENGTH OF TWO OR THREE DIGITS FROM THE INTERNATIONAL MOBILE SUBSCRIBER IDENTITY (IMSI)

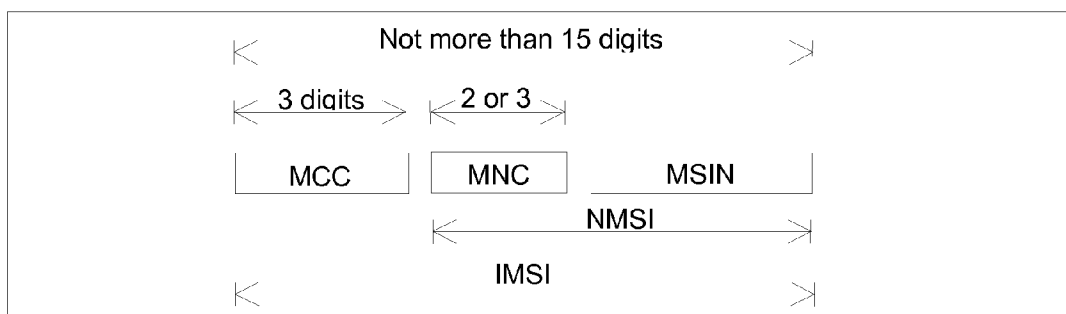


FIG. 2

(57) Abstract: Solutions are described that enable a user equipment (UE) for a communication system always to derive required identifiers using an international mobile subscriber identity (IMSI). The Mobile Network Code (MNC) may be two or three digits long. The SIM may not provide information regarding the MNC length. One solution is based on a table, or list, that is maintained in the UE and which is used to retrieve the MNC for a given Mobile Country Code (MCC). Another solution is based on always taking a predetermined number of digits of the IMSI and determining the MNC in a DNS server. Yet another solution is based on try-and-fail signaling with a DNS server. In consequence, the UE does not always need to know how many digits of the IMSI are used to indicate the mobile network code (MNC), which in some situations is impossible to know anyway.



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INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2008/050934

A. CLASSIFICATION OF SUBJECT MATTER
INV. H04Q7/32

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)
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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	"Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); Numbering, addressing and identification (3GPP TS 23.003 version 6.11.0 Release 6); ETSI TS 123 003" ETSI STANDARDS, LIS, SOPHIA ANTIPOLIS CEDEX, FRANCE, vol. 3-CN2;3-CN4, no. V6.11.0, 1 September 2006 (2006-09-01), XP014035447 ISSN: 0000-0001	1,6,8, 13,15,20
Y	pages 10/11, par. 2.2; page 33, par. 14.2; pages 38-41; par.17	2-5, 9-12, 16-19
A	-/--	7,14,21

Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents :

A document defining the general state of the art which is not considered to be of particular relevance	*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
E earlier document but published on or after the international filing date	*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
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)	*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.
O document referring to an oral disclosure, use, exhibition or other means	*&* document member of the same patent family
P document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search 25 September 2008	Date of mailing of the international search report 01/10/2008
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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 Möll, Hans-Peter
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INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP2008/050934

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 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 No. III Observations where unity of invention is lacking (Continuation of item 3 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 allsearchable claims.
2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
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.:

Remark on Protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- 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: 1-5,8-12,15-19

determining the mobile network code MNC by consulting a table stored in the user equipment based on the mobile country code MCC determined from the international mobile subscriber identity IMSI

2. claims: 1,6,7,8,13,14,15,20,21

determining the mobile network code MNC by selecting a group of digits of the international subscriber identity IMSI and subsequently interacting with an external entity for MNC determination

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2008/050934

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2006021146 A	02-03-2006	CN 1741673 A	01-03-2006
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EP 1496716 A	12-01-2005	CN 1578492 A	09-02-2005
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