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[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR SUPPORTING HOME NODE B SERVICES

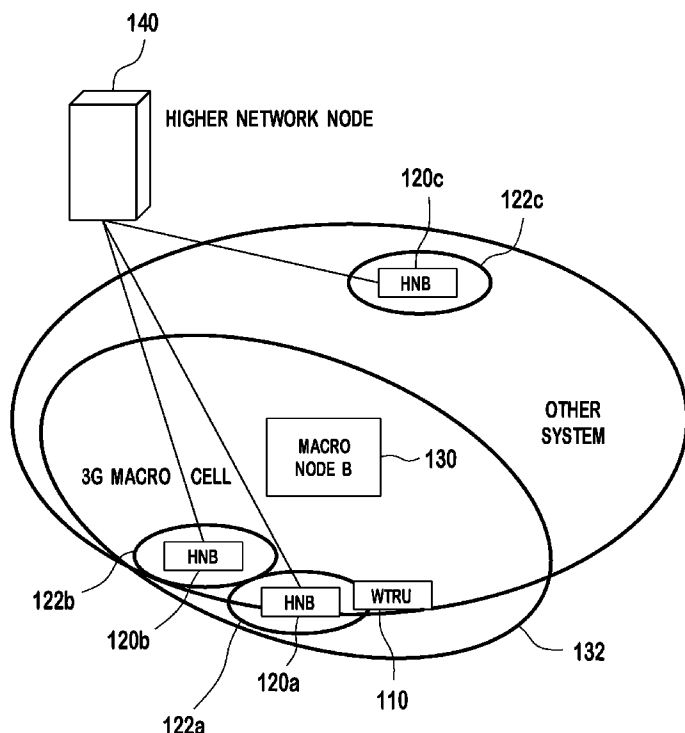


FIG. 1

(57) Abstract: A method and apparatus for supporting home Node B (HNB) services are disclosed. A wireless transmit/receive unit (WTRU) receives HNB access restriction information from an HNB and accesses the HNB if an access to the HNB is allowed based on the HNB access restriction information. The HNB access restriction information may be a closed subscriber group identity (CSG ID), a status bit indicating whether an HNB cell is available or not, an identity of WTRUs that are allowed to access the HNB, information indicating whether an access to a cell is barred or not. The WTRU may trigger measurements for cell reselection even though signal strength on a currently connected cell is above a threshold. The measurement may be triggered manually, periodically, under the instruction from the network, or based on a neighbor cell list including information about HNB cells located nearby.

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TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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INTERNATIONAL SEARCH REPORT

International application No
PCT/US2008/078116

A. CLASSIFICATION OF SUBJECT MATTER
INV. H04W48/02

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)
H04W

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, INSPEC, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	ERICSSON: "Idle state access restriction for home eNB" 3GPP DRAFT; R2-073415, 3RD GENERATION PARTNERSHIP PROJECT (3GPP), MOBILE COMPETENCE CENTRE ; 650, ROUTE DES LUCIOLES ; F-06921 SOPHIA-ANTIPOLIS CEDEX ; FRANCE, vol. tsg_ran\WG2_RL2\TSGR2_59\Docs, no. Athens, Greece; 20070820, 14 August 2007 (2007-08-14), XP050136120 pages 1,3	1, 3, 5, 6, 28, 30, 32, 33, 55, 57, 58, 60-64, 66, 67, 69-72
Y	----- -/--	2, 4, 29, 31, 56, 59, 65, 68

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
- *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.
- *8* document member of the same patent family

Date of the actual completion of the international search

27 February 2009

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03/06/2009

Name and mailing address of the ISA/

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2008/078116

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 all searchable 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.:

1-6, 28-33, 55-72

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: 1-6, 28-33, 55-72

Restricting access of WTRUs to a home nodeB by transmitting access restriction information to the WTRUs for allowing only a subset of WTRUs to access the home NodeB.

2. claims: 7-20, 34-46

Preferably reselecting a home nodeB by performing neighbour measurements even if the current cell is strong.

3. claims: 21, 22, 47, 48

Multi-step paging technique (if the location area spans across more than one home nodeB gateway) for paging a WTRU in different home nodeB gateways.

4. claims: 23, 49

Precise paging technique by dividing a home nodeB gateway into a plurality of home nodeB paging areas and sending the paging message only to a last accessed home nodeB paging area.

5. claims: 24-27, 50-54

Dynamically changing the URA list (list of UTRAN registration areas the cell belongs to) of a home nodeB cell when the home nodeB is moved.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/US2008/078116
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