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Declarations under Rule 4.17:

— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*

[Continued on next page]

(54) Title: ENHANCED UPLINK FOR INACTIVE STATE IN A WIRELESS COMMUNICATION SYSTEM

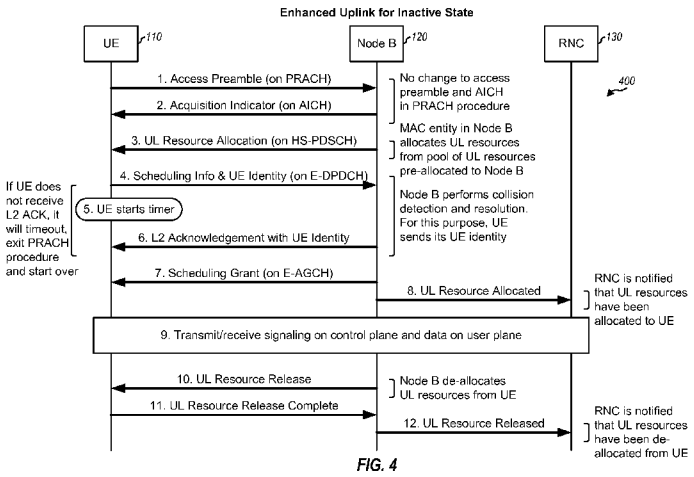


FIG. 4

(57) Abstract: Techniques for supporting operation with enhanced uplink in inactive state are described. A user equipment (UE) may send an access preamble for random access while in an inactive state and may receive a message containing resources allocated to the UE. The allocated resources may be selected by a Node B from a pool of resources pre-allocated to the Node B for the enhanced uplink. The UE may send information (e.g., scheduling information and/or its UE identity) to the Node B using the allocated resources. The UE may receive an acknowledgement addressed to the UE based on the UE identity. The UE may remain in the inactive state and continue to use the allocated resources until they are de-allocated. Alternatively, the UE may transition to an active state and either continue to use the allocated resources or receive an allocation of new resources for the active state.

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— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

Published:

— *with international search report (Art. 21(3))*

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

(88) Date of publication of the international search report:
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INTERNATIONAL SEARCH REPORT

International application No
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A. CLASSIFICATION OF SUBJECT MATTER
INV. H04W74/08

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, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2006/000876 A (NOKIA CORP [FI]; NOKIA INC [US]; RANTA-AHO KARRI [FI]; TOSKALA ANTTI [) 5 January 2006 (2006-01-05) abstract page 5, line 7 - page 6, line 8 page 9, line 19 - line 27 page 12, line 14 - page 14, line 2 page 15, line 1 - page 16, line 2	1-25
A	US 6 574 267 B1 (KANTERAKIS EMMANUEL [US] ET AL) 3 June 2003 (2003-06-03) abstract column 1, line 1 - column 2, line 11 column 5, line 59 - column 7, line 32 column 8, line 15 - line 40 figures 5-10	1-25

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[X] Further documents are listed in the continuation of Box C.

[X] 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.

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
10 September 2009	17/09/2009

Name and mailing address of the ISA/	Authorized officer
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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	US 6 850 504 B1 (CAO QIANG [GB] ET AL) 1 February 2005 (2005-02-01) abstract column 1, line 65 - column 2, line 21 column 3, line 39 - column 4, line 37	1-25
X	EP 1 505 847 A (NIPPON ELECTRIC CO [JP]) 9 February 2005 (2005-02-09) abstract paragraph [0005] - paragraph [0007] paragraph [0018] - paragraph [0027] paragraph [0036] - paragraph [0054]	26-43
A	WO 2007/088854 A (MATSUSHITA ELECTRIC IND CO LTD [JP]; IWAI TAKASHI; IMAMURA DAICHI; FUT) 9 August 2007 (2007-08-09) abstract paragraph [0010] paragraph [0022] - paragraph [0033] paragraph [0037] paragraph [0062] - paragraph [0074]	26-43

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2008/078385

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 reportcovers 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: 1-25

The first invention claimed by claims 1-25 deals with a method for wireless communication, the method comprising:
- sending an access preamble from a user equipment for random access;
- receiving from a Node B a message comprising resources allocated to the user equipment, which are selected from a pool of resources pre-allocated to the Node B and
- sending information to the Node B using the allocated resources.
wherein the method is further characterized by (see claims 3, 7, 11, 15):
- operating in an inactive state (ie. a CELL_FACH state) prior to sending the access preamble and also while sending the information using the allocated resources.

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2. claims: 26-43

The second claimed invention (claims 26-43) concerns a method for wireless communication, the method comprising:
- sending an access preamble from a user equipment for random access;
- receiving an acquisition indicator from a Node B for the access preamble;
- sending a UE identity to the Node B for collision detection;
- receiving from the Node B an acknowledgement addressed to the UE based on the UE identity.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/US2008/078385

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