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

[Continued on next page]

(54) Title: WIRELESS COMMUNICATION COLLISION DETECTION

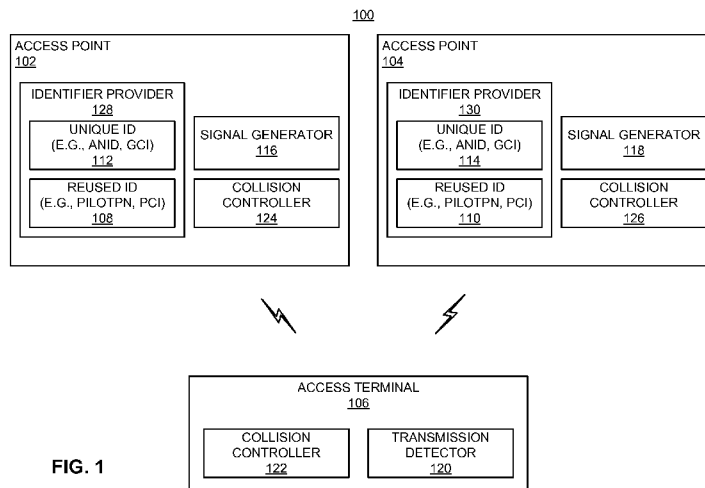
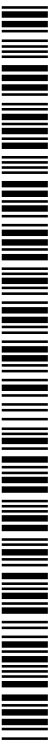


FIG. 1

(57) Abstract: Collisions in a wireless network are detected and resolved through the use of transmissions by access points in the network. In some aspects, each access point may select a resource from a set of resources and transmit an indication of a unique identifier (e.g., a long identifier) of that access point on the selected resource. In some aspects, each access point may select a bit and append that bit to a reused identifier (e.g., a short identifier) of that access point to provide a channelization parameter that is used to channelize signals transmitted by the access point. The selection by a given access point may be based on a unique identifier assigned to that access point. The selection by a given access point may be a pseudorandom selection (e.g., based on a corresponding unique identifier). Another node (e.g., an access terminal) in the network may identify a collision based on the transmissions by the access points. In this case, the node may transmit an indication of the collision to cause one of the access points to cease transmitting. The node may then inform one colliding access point of the existence and identity of the other colliding access point to enable the access points to resolve the collision.



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- *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))*

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2009/035895

A. CLASSIFICATION OF SUBJECT MATTER
INV. H04W16/14

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>WO 2007/149997 A (QUALCOMM INC [US]; GOROKHOV ALEXEI [US]; KHANDEKAR AAMOD [US]; PALANKI) 27 December 2007 (2007-12-27)</p> <p>abstract; figure 7 paragraphs [0048] - [0052] paragraphs [0088], [0089]</p> <p align="center">----- -/--</p>	<p>1-3, 15-17, 25-27, 35, 36, 39, 41-43, 54-56, 62-65, 70-72</p>

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
- *Z* document member of the same patent family

Date of the actual completion of the international search

1 September 2009

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Name and mailing address of the ISA/

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INTERNATIONAL SEARCH REPORT

International application No

PCT/US2009/035895

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>US 6 289 007 B1 (KIM DONG IN [KR] ET AL) 11 September 2001 (2001-09-11)</p> <p>column 1, line 15 - line 43 column 2, lines 1-12 column 5, line 36 - line 40 column 6, line 16 - line 28</p>	<p>1-11, 15-23, 25-33, 35-38</p>
X	<p>ERICSSON: "MCI conflict detection and resolution" 3GPP DRAFT; S5-071569 E MCI CONFLICT DETECTION AND RESOLUTION, 3RD GENERATION PARTNERSHIP PROJECT (3GPP), MOBILE COMPETENCE CENTRE ; 650, ROUTE DES LUCIOLES ; F-06921 SOPHIA-ANTIPOLIS CEDEX ; FRANCE, vol. SA WG5, no. Roma; 20070827, 22 August 2007 (2007-08-22), XP050306211 para. 3, 4, 5.2</p>	<p>39-41, 44-50, 54,55, 57-60, 62,63, 66-68, 70,73,74</p>
X	<p>WO 02/43430 A (ERICSSON TELEFON AB L M [SE]; JANSSON CHRISTIAN [SE]) 30 May 2002 (2002-05-30)</p> <p>pages 4-7</p>	<p>1, 15, 25, 39, 44-47, 54, 57, 58, 70, 73</p>
A	<p>ERICSSON: "Automatic neighbour cell configuration" 3GPP DRAFT; S5-071484 E AUTOMATIC NEIGHBOUR CELL CONFIGURATION, 3RD GENERATION PARTNERSHIP PROJECT (3GPP), MOBILE COMPETENCE CENTRE ; 650, ROUTE DES LUCIOLES ; F-06921 SOPHIA-ANTIPOLIS CEDEX ; FRANCE, vol. SA WG5, no. Roma; 20070827, 17 August 2007 (2007-08-17), XP050306143 the whole document</p>	<p>1, 12-15, 24, 25, 34, 35, 39, 51-54, 61, 62, 69</p>
A	<p>TOMCIK JIM: "MBFDD and MBTDD Wideband Mode: Technology Overview" INTERNET CITATION, [Online] XP002422172 Retrieved from the Internet: URL: http://www.ieee802.org/20/Contribution_s.html [retrieved on 2007-02-26] page 51 - page 52</p>	<p>1, 15, 25, 35, 39</p>

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2009/035895

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: 1-3,15-17,25-27,35,36,39,41-43,54-56,62-65,70-72

method and apparatus for selecting a first identifier to identify the access point.

2. claims: 1,4-6,15,18-20,25,28-30,35,37,39,40,48,50,
54,59,60,62,67,68,70,74

method and apparatus for selecting a channelisation parameter for wireless communications

3. claims: 1,7-11,15,21-23,25,31-33,35,38,39,49

method and apparatus for transmitting an indication of the access point identifier

4. claims: 1,12-14,15,24,25,34,39,51-53,54,61,62,69

method and apparatus for communicating occurrence of a collision.

5. claims: 39,44-47,54,57,58,62,66,70,73

method and apparatus for identifying a collision among access points

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2009/035895

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2007149997	A	27-12-2007	EP 2039044 A2 25-03-2009
			US 2008056183 A1 06-03-2008
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			AU 2429502 A 03-06-2002
			EP 1336318 A1 20-08-2003
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