

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
2 April 2009 (02.04.2009)

PCT

(10) International Publication Number
WO 2009/042885 A3

(51) International Patent Classification:
H04W 72/08 (2009.01) *H04W 72/14* (2009.01)

(21) International Application Number:
PCT/US2008/077894

(22) International Filing Date:
26 September 2008 (26.09.2008)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/975,566 27 September 2007 (27.09.2007) US

(71) Applicant (for all designated States except US): **INTER-DIGITAL PATENT HOLDINGS, INC.** [US/US]; 3411 Silverside Road, Concord Plaza, Suite 105, Hagley Building, Wilmington, Delaware 19810 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **ROY, Vincent** [CA/CA]; 6254 De La Roche, Montreal, Québec H2S 2E1 (CA). **MARINIER, Paul** [CA/CA]; 1805 Stravinski, Brossard, Québec J4X 2J7 (CA). **PELLETIER, Benoit** [CA/CA]; 11-13th Street, Roxboro, Québec H8Y 1L3

(CA). **CAVE, Christopher, R.** [CA/CA]; 201 chemin du Golf, Apt. 304, Ile-des-soeurs (verdun), Québec H3E 1Z4 (CA). **DIGIROLAMO, Rocco** [CA/CA]; 632 de Fribourg Street, Laval, Québec H7K 3Y3 (CA).

(74) Agent: **HWANG, Yong, Beom**; Volpe and Koenig, 30 South 17th Street, United Plaza, Suite 1600, Philadelphia+, Pennsylvania 91903 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL,

[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR MANAGING A COLLISION IN COMMON E-DCH TRANSMISSIONS

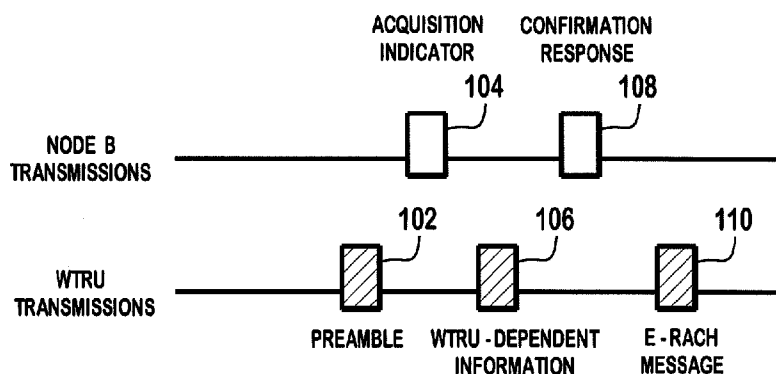


FIG. 1

(57) Abstract: A method and apparatus for managing a collision in random access channel (RACH) access transmissions are disclosed. A wireless transmit/receive unit (WTRU) transmits WTRU-dependent information (100) to confirm that a detected acquisition indicator (AI) (104) is intended to the WTRU. The WTRU-dependent information (106) may be transmitted separately after detecting the AI (104), may be transmitted along with a RACH preamble (102), or may be sent in an E-RACH message (110). The WTRU-dependent information (106) may be a random number, a sequence or scrambling code randomly selected from a pre-determined set of sequences or scrambling codes. Alternatively, the WTRU-dependent information (106) may be a pre-configured identifier, or information derived from the pre-configured identifier. Alternatively, after detecting an AI (104), the WTRU may randomly select an enhanced dedicated channel (E-DCH) resource from a set of E-DCH resources associated with an RACH resource used for transmission of the RACH preamble (102) and transmit an E-RACH message (110) using the selected E-DCH resource.



WO 2009/042885 A3



NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

Published:

— *with international search report*

(88) Date of publication of the international search report:

14 May 2009

INTERNATIONAL SEARCH REPORT

International application No

PCT/US2008/077894

A. CLASSIFICATION OF SUBJECT MATTER

INV. H04W74/08

ADD. H04W72/14

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, 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	US 2007/206531 A1 (PAJUKOSKI KARI [FI] ET AL) 6 September 2007 (2007-09-06)	1-7, 10, 12-19, 22, 23, 25-35, 38, 40-47, 50, 51, 53-60, 63-69, 72-74
Y	paragraphs [0004], [0038], [0045], [0056]; figure 4	8, 11, 20, 24, 36, 39, 48, 52, 61, 62, 70, 71
A	paragraph [0081] - paragraph [0091] ----- -/--	9, 21, 37, 49



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.

* & * document member of the same patent family

Date of the actual completion of the international search

5 March 2009

Date of mailing of the international search report

17/03/2009

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040.
Fax: (+31-70) 340-3016

Authorized officer

Orfanos, Georgios

INTERNATIONAL SEARCH REPORT

International application No

PCT/US2008/077894

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2007/077250 A (IPWIRELESS INC [US]; KODIKARA PATEBANDI CHANDRIKA [GB]; ANDERSON NICHOL 12 July 2007 (2007-07-12)	72
Y	page 6, line 27 - page 7, line 5; figures 5,6B	8,20,36, 48,61,70
A		1-7, 9-19, 21-35, 37-47, 49-60, 62-69, 71,73,74
Y	----- WO 2007/078165 A (LG ELECTRONICS INC [KR]; PARK SUNG-JUN [KR]; LEE YOUNG-DAE [KR]; CHUN) 12 July 2007 (2007-07-12)	11,24, 39,52, 62,71
A	paragraphs [0026], [0033]; figure 7 -----	1-10, 12-23, 25-38, 40-51, 53-61, 63-70, 72-74

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2008/077894

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2007206531 A1	06-09-2007	NONE	
WO 2007077250 A	12-07-2007	EP 1974575 A2 KR 20080091198 A	01-10-2008 09-10-2008
WO 2007078165 A	12-07-2007	AU 2007203861 A1 EP 1969738 A1 US 2009011769 A1	12-07-2007 17-09-2008 08-01-2009