

(19) World Intellectual Property Organization  
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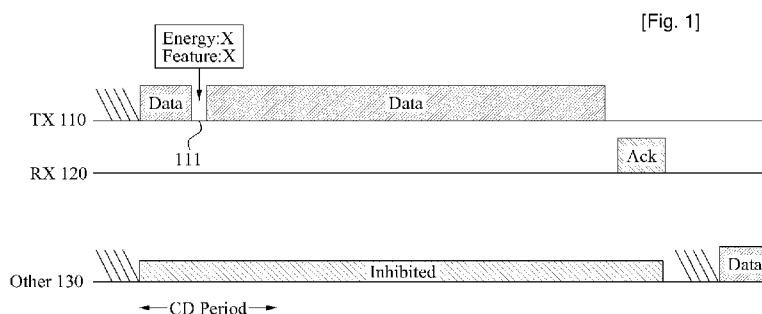
(43) International Publication Date  
15 April 2010 (15.04.2010)

PCT

(10) International Publication Number  
WO 2010/041802 A3

- (51) **International Patent Classification:**  
H04W 16/14 (2009.01) H04L 12/413 (2006.01)  
H04W 72/04 (2009.01)
  - (21) **International Application Number:**  
PCT/KR2009/001503
  - (22) **International Filing Date:**  
25 March 2009 (25.03.2009)
  - (25) **Filing Language:** English
  - (26) **Publication Language:** English
  - (30) **Priority Data:**  
10-2008-0099798 10 October 2008 (10.10.2008) KR
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  - (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, 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, MK, MT, NL, 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).
- 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:**  
29 September 2011

(54) **Title:** COGNITIVE RADIO COMMUNICATION TERMINAL AND METHOD FOR DETECTING COLLISION USING FEATURE DETECTION



(57) **Abstract:** A cognitive radio communication terminal including a transmission processing unit to divide data by a quiet time slot that is allocated at a first point in time of a collision detection period, to transmit at least one portion of the divided data to a reception side, and a sensing unit to determine whether at least one of a feature information and an energy of another terminal is detected in a channel with the reception side during the quiet time slot of the first point in time. Where neither the feature information nor the energy of the other terminal is detected based on a determination of the sensing unit, the transmission processing unit transmits the remaining divided data.

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## INTERNATIONAL SEARCH REPORT

International application No.

PCT / KR 2009/001503

A. CLASSIFICATION OF SUBJECT MATTER IPC: <i>H04W 16/14</i> (2009.01); <i>H04W 72/04</i> (2009.01); <i>H04L 12/413</i> (2006.01) 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, H04Q, H04L 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 practicable, search terms used) WPII, EPODOC		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	CORDEIRO, C. et al. "Spectrum Sensing for Dynamic Spectrum Access of TV Bands", 2nd International Conference on Cognitive Radio Oriented Wireless Networks and Communications, CrownCom 2007, 1 August 2007 (01.08.2007), pages 225-233, ISBN 978-1-4244-0814-6, XP031276051 Sections I, III, V.	1-19
A	US 2008090581 A1 (HU, W.) 17 April 2008 (17.04.2008) abstract, fig. 1; paragraphs [0030]-[0040].	1-19
A	WO 2007096819 A2 (KONINKLIJKE PHILIPS ELECTRONICS, N.V.) 30 August 2007 (30.08.2007) abstract, figs. 1, 3-5; page 1, line 12 - page 2, line 11; page 3, line 16 - page 4, line 26; page 6, line 5 - page 8, line 16.	1-19
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
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"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
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"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 21 July 2011 (21.07.2011)	Date of mailing of the international search report 26 July 2011 (26.07.2011)	
Name and mailing address of the ISA/AT Austrian Patent Office Dresdner Straße 87, A-1200 Vienna Facsimile No. +43 / 1 / 534 24-535	Authorized officer LOIBNER K. Telephone No. +43 / 1 / 534 24-323	

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	AKYILDIZ, I.F. et al. "NeXt generation/dynamic spectrum access/cognitive radio wireless networks: A survey", Computer Networks, 15. September 2006, Vol.50, No.30, pages 2127-2159, ISSN 1389-1286, XP025182788 Sections 2-4.	1-19

**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

International application No.

PCT / KR 2009/001503

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			EP	A2	1989902	2008-11-12
			JP	A	2009527972	2009-07-30
			KR	A	20080097199	2008-11-04
			US	A1	2010061315	2010-03-11
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