

(51) International Patent Classification:
H04B 7/26 (2006.01)

(21) International Application Number:

PCT/KR2010/000039

(22) International Filing Date:

5 January 2010 (05.01.2010)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/142,618 5 January 2009 (05.01.2009) US

61/145,956 20 January 2009 (20.01.2009) US

10-2009-0108788

11 November 2009 (11.11.2009) 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, CL, 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, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, 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, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

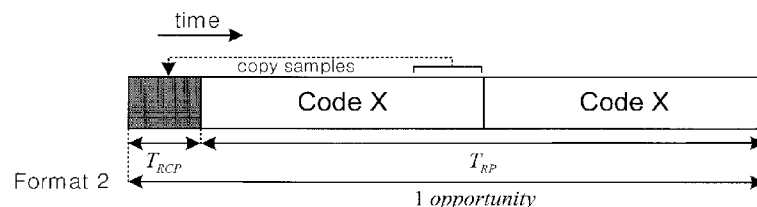
- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

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

14 October 2010

(54) Title: METHOD FOR TRANSMITTING RANGING INFORMATION IN WIRELESS COMMUNICATION SYSTEM AND TERMINAL THEREOF

[Fig. 9]



(57) Abstract: Disclosed is a method for configuring a ranging channel in various frame structures and using the same in a communication system. A ranging channel is effectively configured according to a data structure, namely, frame structure, transmitted and received between a mobile station (MS) and a base station (BS) in a wireless communication system, and ranging information is transmitted therethrough to thereby improve performance of a communication channel and resource efficiency. In the wireless communication system, a ranging channel is configured by using a time interval, such as an idle time, an idle symbol, an RTG, a TTG, and the like, not actually used for transmission of data or a signal in a data structure, namely, in a frame structure, transmitted and received between an MS and a BS, to transmit ranging information, so the channel performance and resource efficiency can be improved.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR2010/000039**A. CLASSIFICATION OF SUBJECT MATTER****H04B 7/26(2006.01)i**

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)

H04B 7/26; H04B 7/216; H04J 11/00; none

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: ranging channel, frame structure, wireless communication, and similar terms.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2005-0195791 A1 (SANG-HOON SUNG et al.) 08 September 2005 See the abstract, claim 1, and figure 10.	1-15
A	WO 2006-016765 A2 (LG ELECTRONICS INC.) 16 February 2006 See the abstract and claim 1.	1-15
A	KR 10-0589898 B1 (ELECTRONICS AND TELECOMMUNICATIONS RESEARCH INSTITUTE et al.) 14 June 2006 See the abstract, claim 1, and figure 4.	1-15

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

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"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

17 AUGUST 2010 (17.08.2010)

Date of mailing of the international search report

18 AUGUST 2010 (18.08.2010)

Name and mailing address of the ISA/KR

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Facsimile No. 82-42-472-7140

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/KR2010/000039

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