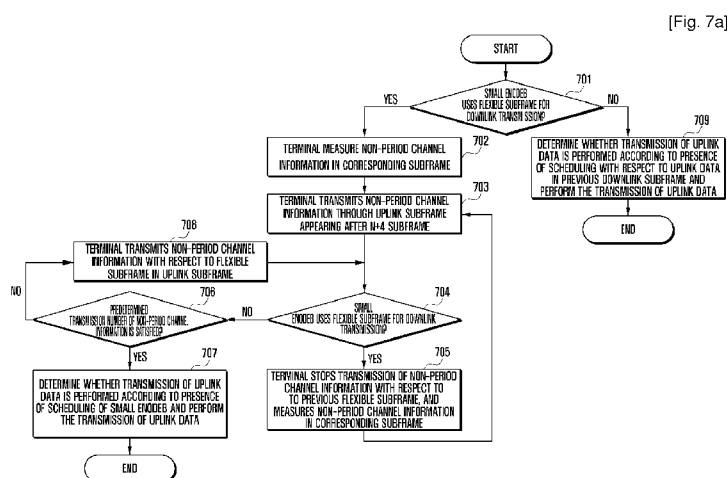




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- (81) **Designated States (unless otherwise indicated, for every kind of national protection available):** AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, 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, QA, RO, RS, RU, RW, 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.
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- with international search report (Art. 21(3))
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[Continued on next page]

(54) **Title:** METHOD AND APPARATUS FOR OPERATING SUBFRAME AND TRANSMITTING CHANNEL INFORMATION FOR CONTROLLING INTERFERENCE IN COMMUNICATION SYSTEM



(57) **Abstract:** A method and an apparatus for operating a subframe and transmitting channel information for controlling interference in a communication system are provided. If a macro evolved Node B (eNodeB) determines and reports an uplink protection subframe for suppressing uplink transmission to a neighboring eNodeB, transmits scheduling information for uplink data through a downlink subframe corresponding to an uplink protection subframe, and the uplink protection subframe determined by the neighboring eNodeB is reported, a small eNodeB sets the reported uplink protection subframe as a flexible subframe, and uses the flexible subframe for downlink transmission. If the flexible subframe is used for the downlink transmission, a terminal of the small eNodeB measures and transmits non-period channel information in the flexible subframe through at least one uplink subframe.



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INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR2012/002760**A. CLASSIFICATION OF SUBJECT MATTER****H04J 11/00(2006.01)i, H04B 7/26(2006.01)i, H04B 15/00(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)

H04J 11/00; H04W 56/00; H04J 3/00; H04L 5/14

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: flexible subframe, non-period channel information, aperiodic sound reference signal, interference

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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A	KR 10-2010-0106364 A (ZTE U.S.A., INC.) 01 October 2010 See abstract; paragraphs [64]-[75], [102], [140]; figures 4-6, 10, 14; claim 34.	1-15
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☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

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"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

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Date of the actual completion of the international search

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INTERNATIONAL SEARCH REPORT

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