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(54) Title: A METHOD FOR ARQ-ENABLED PRE-TRANSMISSIONS IN MULTICAST AND BROADCAST SERVICES OF RELAY NETWORKS UTILIZING THE IDLE PERIODS

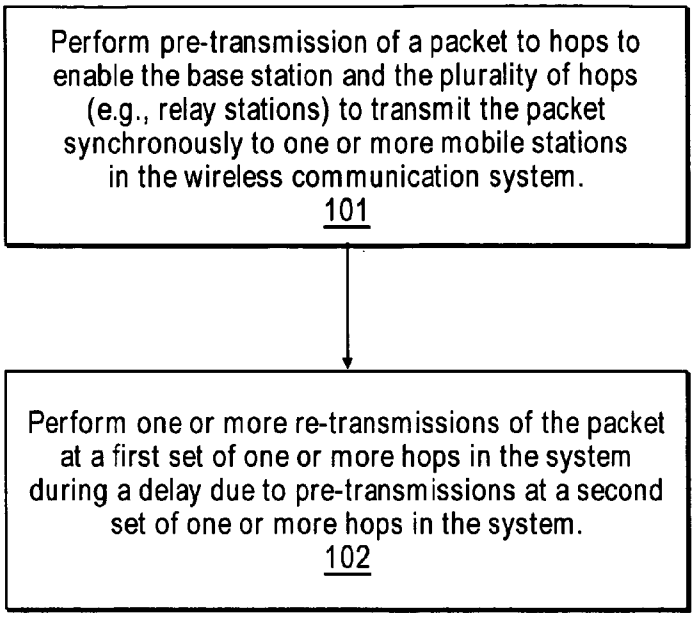


FIG. 1A

(57) Abstract: A method and apparatus is disclosed herein for transmitting data in a network (e.g., a relay network). In one embodiment, the method comprises performing pre-transmission of a packet to hops to enable the base station and the plurality of hops to transmit the packet synchronously to one or more mobile stations in the wireless communication system; and performing one or more re-transmissions of the packet at a first set of one or more hops in the system during a delay due to pre-transmissions at a second set of one or more hops in the system.

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Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal, WPI Data, IBM-TDB, INSPEC, COMPENDEX

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	YANG LIU ET AL: "Synchronous MBS Transmission for Macro Diversity in MR Networks" IEEE 802.16 BROADBAND WIRELESS ACCESS WORKING GROUP, [Online] 5 July 2007 (2007-07-05), XP002518223 Retrieved from the Internet: URL:http://wirelessman.org/relay/contrib/C80216j-07_446r3.doc> [retrieved on 2009-02-06] page 2 page 6, last paragraph ----- -/--	1-3

[X] Further documents are listed in the continuation of Box C. [ ] See patent family annex.

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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.
P,X	YOUNGBIN CHANG ET AL: "Minimum change to apply ARQ operation in relay link" IEEE 802.16 BROADBAND WIRELESS ACCESS WORKING GROUP, [Online] 15 March 2008 (2008-03-15), XP002518224 Retrieved from the Internet: URL:http://www.ieee802.org/16/relay/contrib/C80216j-08_082.doc> [retrieved on 2009-02-06] pages 2,3	1-3
A	RELAY TASK GROUP OF IEEE 802 16 ET AL: "Part 16: Air Interface for Fixed and Mobile Broadband Wireless Access Systems Multihop Relay Specification; 802.16j-06/026r3" IEEE 802.16J BASELINE DOCUMENT,, 10 April 2007 (2007-04-10), pages 1-9, XP002495999 * page 89, section 6.3.23.3 *	1-3
A	GANG SHEN ET AL: "Comments on Synchronous MBS Transmission in MR Networks" IEEE 802.16 BROADBAND WIRELESS ACCESS WORKING GROUP, [Online] 5 July 2007 (2007-07-05), XP002518225 Retrieved from the Internet: URL:http://www.ieee802.org/16/relay/contrib/C80216j-07_420r1.doc> [retrieved on 2009-02-06] page 2	1-3