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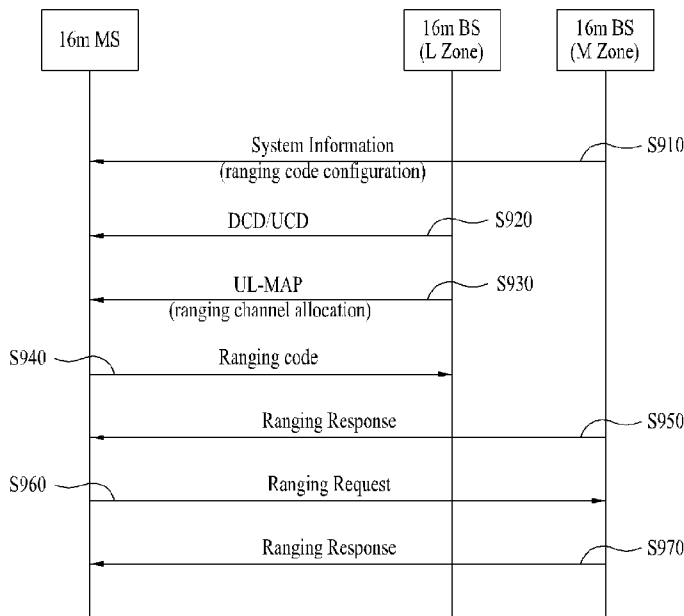
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[Continued on next page]

(54) **Title:** METHOD FOR PERFORMING RANGING IN WIRELESS COMMUNICATION SYSTEM SUPPORTING TWO WIRELESS COMMUNICATION SCHEMES

[Fig. 9]



(57) **Abstract:** A method for performing ranging is disclosed. The method for performing ranging in a wireless communication system which simultaneously supports a legacy system and a new system includes a method for additionally allocating a ranging channel to a zone other than a legacy zone and a method for re-using a legacy ranging channel within the legacy zone. When the legacy ranging channel is re-used, ranging codes may be shared by a legacy mobile station and a new system mobile station or may be separated on a ranging code domain. Limited radio resources can be effectively employed by re-using the legacy ranging channel.

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B. FIELDS SEARCHED

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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 since 1975

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

eKOMPASS(KIPO internal) "ranging, channel, legacy, wireless, communication, 802.16, mobile, base, station"

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2008-0062907 A1 (MICHAEL JOHN BEEMS HART et al.) 13 March 2008 abstract; paragraphs [0037] - [0045]; Fig. 4.	1-12
A	US 2006-0194579 A1 (KIN K. LEUNG et al.) 31 August 2006 abstract; paragraphs [0017] - [0026]; Fig. 2.	1-12
A	JP 2007-214920 A (MITSUBISHI ELECTRIC CORP.) 23 August 2007 abstract; paragraphs [0070] - [0084]; Figs. 4-6.	1-12
E	KR 10-2008-0062234 A (SAMSUNG ELECTRONICS CO., LTD.) 03 July 2008 abstract; paragraphs [0046] - [0052]; Fig. 4.	1-12

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

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