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(54) **APPARATUS AND METHOD FOR SWITCHING BETWEEN AN AMC MODE AND A DIVERSITY MODE IN A BROADBAND WIRELESS COMMUNICATION SYSTEM**

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See application file for complete search history.

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(57) **ABSTRACT**

An apparatus and method for switching between an AMC mode and a diversity mode adaptively according to a channel environment in a broadband wireless communication system are provided. According to the present invention, a transmitter (a base station) determines a transmission mode according to frequency-domain and time-domain channel measurement information received from a receiver (a mobile station). If the transmission mode is the AMC mode, the transmitter selects a coding and modulation scheme according to a frequency-domain CQI received from the receiver. If the transmission mode is a diversity mode, the transmitter selects a predetermined coding and modulation scheme.

**11 Claims, 12 Drawing Sheets**

