

Abstract

METHOD AND APPARATUS FOR EFFICIENT PRECODING INFORMATION VALIDATION FOR MIMO COMMUNICATIONS

A method and apparatus for efficient precoding matrix verification in a multiple-input multiple-output MIMO wireless communication system are disclosed. A wireless transmit/receive unit WTRU sends a precoding matrix index PMI to an eNodeB. The eNodeB sends a verification message including a PMI indicator indicating whether or not the PMI of the WTRU and a PMI of the eNodeB are identical. If the PMI of the WTRU and of the eNodeB are identical, the eNodeB sends just a PMI indicator otherwise the eNodeB sends to the WTRU a PMI indicator and the PMI of the eNodeB. A plurality of PMIs may be sent simultaneously, and the PMIs may be partitioned into a plurality of groups. The PMI indicator may be either attached to or inserted into control signaling. PMI validation messages can be signaled to WTRU by control signaling or use of a dedicated reference signal.

Figure: 3A