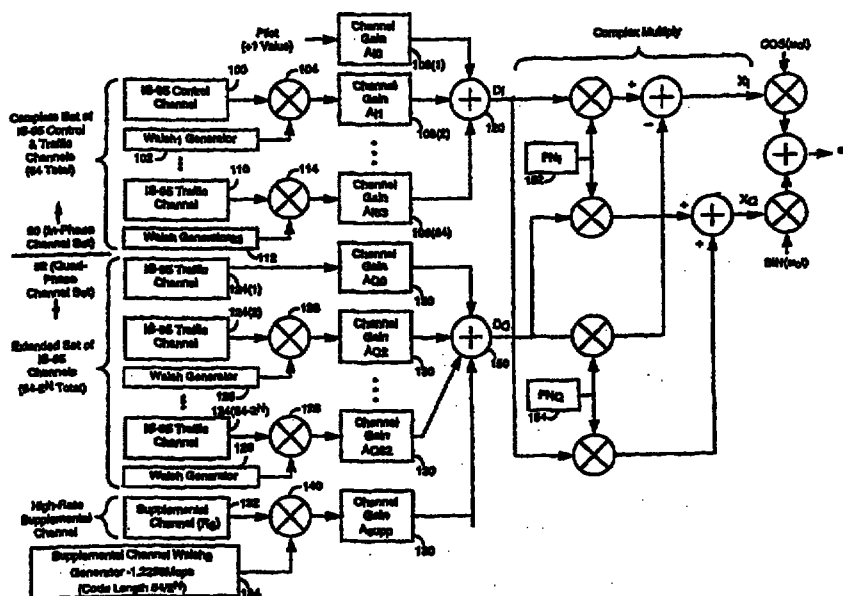




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(54) Title: HIGH-DATA-RATE SUPPLEMENTAL CHANNEL FOR CDMA TELECOMMUNICATIONS SYSTEM



(57) Abstract

A novel and improved method for implementing a high-transmission-rate over-the-air interface is described. A transmit system provides an in-phase channel set (90) and a quadrature-phase channel set (92). The in-phase channel set (90) is used to provide a complete set of orthogonal medium rate control and traffic channels. The quadrature-phase channel (92) set is used to provide a high-rate supplemental channel and an extended set of medium rate channels that are orthogonal to each other and the original medium rate channels. The high-rate supplemental channel is generated over a set of medium rate channels using a short channel code. The medium rate channel are generated using a set of long channel codes.