

Deriving A More Accurate Estimate From
Prediction Data In Closed Loop Transmit Diversity Modes



162162



G00002

Abstract of the Disclosure

5 Prediction of a future state of a channel from common pilot channel signals
transmitted from a transceiver (12) (e.g., a base station) may be formed at a mobile user
equipment (14) to control future transmission patterns of the transceiver (12) at a specified
time. The matching accuracy of the future transmission patterns to the channel may be
improved by adaptively calculating channel prediction terms from past and present channel
10 estimates. Using channel prediction terms, a wireless communication system (10) with the
base station (12) having antennas operate in a closed loop transmit diversity mode, and a
channel controller application (24) at the mobile user equipment (14) may select best antenna
transmission characteristics for active antennas (30) of the base station (12).