

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-12. (Cancelled)

13. (Currently amended) A ~~user equipment~~ receiving device comprising:

circuitry configured to receive a signal transmitted by a plurality of antennas; wherein the received signal includes a single user data that was combined with a ~~plurality of different pseudo noise sequence[[s]]~~ for each antenna; ~~wherein the user data was weighted prior to transmission~~; wherein the received signal includes pilot bits for each of the plurality of antennas ~~pilot bits~~; wherein the pilot bits for each antenna were derived from a ~~plurality of different pseudo noise sequence[[s]]~~ for that antenna;

the circuitry is further configured to derive preferred weights for ~~a subsequent received signal based on~~ the received signal based on the pilot bits for each antenna;

~~the circuitry is further configured to transmit an indication of the preferred weights to a base station~~;

the circuitry is further configured to recover the single user data signal from each of the different ~~pseudo-noise~~ sequences; and

the circuitry is further configured to combine the recovered single user data signal from each of the different ~~pseudo-noise~~ sequences.

14. (Currently amended) A method for use by a receiving device ~~user equipment (UE)~~, the method comprising:

receiving, by the receiving device ~~UE~~, a signal transmitted by a plurality of antennas; wherein the received signal includes a single user data signal that was combined with a ~~plurality of different pseudo-noise sequence~~ for each antenna; ~~wherein the user data was weighted prior to transmission~~; wherein the received signal includes pilot bits for each of the plurality of antennas ~~pilot bits~~; wherein the pilot bits for each antenna were derived from a ~~plurality of different pseudo-noise sequence~~ for that antenna;

deriving, by the receiving device ~~UE~~, preferred weights for ~~a subsequent received signal based on~~ the received signal based on the pilot bits for each antenna;

~~transmitting, by the UE, an indication of the preferred weights to a base station~~;

recovering, by the receiving device ~~UE~~, the single user data signal from each of the different ~~pseudo-noise~~ sequences; and

combining, by the receiving device UE, the recovered single user data signal from each of the different ~~pseudo-noise~~ sequences.

15. (Currently amended) A transmitting network device comprising:  
circuitry configured to receive weights from a user equipment (UE);  
~~the~~ circuitry is further configured to ~~produce~~ generate a single user data signal for transmission to a receiving device the UE;

the circuitry is further configured to combine the single user data signal with a ~~plurality of different pseudo-noise sequence[s]~~ for each antenna of a plurality of antennas;

~~the circuitry is further configured to weight the user data combined with the plurality of different pseudo-noise sequences~~;

the circuitry is further configured to produce pilot bits for each antenna of the a plurality of antennas; wherein the pilot bits for each antenna are derived using a different pseudo-noise sequence[s] from a plurality of different sequences for each antenna to permit the receiving device to derive weights for each antenna; and

the plurality of antennas configured to transmit the ~~weighted~~ single user data combined with the plurality of different ~~pseudo-noise~~ sequences and the produced pilot bits for the plurality of antennas to the receiving device UE.