CLAIMS

1. A method for communications using a gated pilot pattern, comprising:

receiving an RX frame, the RX frame being formatted into a plurality of sub-segments;

determining whether a received pilot signal associated with the RX frame was transmitted according to a first gated pilot pattern; and

if the received pilot signal is determined to be transmitted according to a first gated pilot pattern, processing the RX frame as a null rate frame.

2. The method of claim 1, the receiving an RX frame comprising receiving the RX frame at a base station over a reverse link of a cdma2000 wireless communications system.

3. The method of claim 1, further comprising:

processing a power control command received during a sub-segment designated for transmission according to the first gated pilot pattern;

transmitting a TX frame, the TX frame being formatted into a plurality of sub-segments; and

adjusting the transmission power of a sub-segment of the TX frame following the processing the received power control command, the transmission power adjusted according to the processed received power control command.

4. The method of claim 1, the first gated pilot pattern providing for no transmission during groups of two consecutive sub-segments of the RX frame, and for transmission during groups of two consecutive sub-segments of the RX frame.

5. The method of claim 1, the first gated pilot pattern providing for transmission in every other sub-segment of the RX frame.

6. A method for communications using a gated pilot pattern, comprising:

receiving an RX frame, the RX frame being formatted into a plurality of sub-segments;

transmitting a TX frame, the TX frame being formatted into a plurality of sub-segments, the transmitting comprising transmitting a pilot signal according to a first gated pilot pattern if the TX frame is a null rate frame.

7. The method of claim 6, the receiving the RX frame comprising receiving the RX frame at a mobile station over a forward link of a cdma2000 wireless communications system.

8. The method of claim 6, further comprising receiving a power control command in every other sub-segment of the RX frame.

9. The method of claim 8, further comprising:

processing a power control command received in a sub-segment of the RX frame; and

adjusting the transmission power of a sub-segment of the TX frame following the processing the received power control command, the transmission power adjusted according to the processed received power control command.

10. The method of claim 9, the first gated pilot pattern providing for no transmission during groups of two consecutive sub-segments of the RX frame, and for transmission during groups of two consecutive sub-segments of the RX frame, the adjusting the transmission power of a sub-segment comprising, if the TX frame is a null rate frame:

ignoring every other processed received power control command; and

adjusting the transmission power of every fourth sub-segment of the TX frame.

11. An apparatus for communications using a gated pilot pattern, comprising:

a receiver configured to receive an RX frame, the RX frame being formatted into a plurality of sub-segments;

a processor configured to determine whether a received pilot signal associated with the RX frame was transmitted according to a first gated pilot pattern, the processor

further configured to process the RX frame as a null rate frame if the received pilot signal is determined to be transmitted according to a first gated pilot pattern.

12. The apparatus of claim 11, the apparatus comprising a base station for a cdma2000 wireless communications system.

13. The apparatus of claim 11, the processor further configured to process a power control command received during a sub-segment designated for transmission according to the first gated pilot pattern; the apparatus further comprising:

a transmitter configured to transmit a TX frame, the TX frame being formatted into a plurality of sub-segments, the transmitter further configured to adjust the transmission power of a sub-segment of the TX frame following the processing the received power control command, the transmission power adjusted according to the processed received power control command.

14. The apparatus of claim 11, the first gated pilot pattern providing for no transmission during groups of two consecutive sub-segments of the RX frame, and for transmission during groups of two consecutive sub-segments of the RX frame.

15. The apparatus of claim 11, the first gated pilot pattern providing for transmission in every other sub-segment of the RX frame.

16. An apparatus for communications using a gated pilot pattern, comprising:

a receiver configured to receive an RX frame, the RX frame being formatted into a plurality of sub-segments;

a transmitter configured to transmit a TX frame, the TX frame being formatted into a plurality of sub-segments, the transmitter further configured to transmit a pilot signal according to a first gated pilot pattern if the TX frame is a null rate frame.

17. The apparatus of claim 16, the apparatus comprising a mobile station for a cdma2000 wireless communications system.

18. The apparatus of claim 16, the receiver further configured to receive a power control command in every other sub-segment of the RX frame.

19. The apparatus of claim 18, the processor further configured to:

process a power control command received in a sub-segment of the RX frame; and

adjust the transmission power of a sub-segment of the TX frame following the processing the received power control command, the transmission power adjusted according to the processed received power control command.

20. The apparatus of claim 19, the first gated pilot pattern providing for no transmission during groups of two consecutive sub-segments of the RX frame, and for transmission during groups of two consecutive sub-segments of the RX frame, the processor configured to adjust the transmission power of a sub-segment by:

ignoring every other processed received power control command and adjusting the transmission power of every fourth sub-segment of the TX frame if the TX frame is a null rate frame.

21. An apparatus for controlling transmission power, comprising:

means for receiving an RX frame, the RX frame being formatted into a plurality of sub-segments;

means for determining whether to process the RX frame as a null rate frame;

means for transmitting a TX frame, the TX frame being formatted into a plurality of sub-segments; and

means for adjusting the transmission power of a sub-segment of the TX frame in response to a power control command received in the RX frame.

22. A computer-readable storage medium storing instructions for causing a computer to control transmission power, the medium further storing instructions for causing a computer to:

receive an RX frame, the RX frame being formatted into a plurality of sub-segments;

determine whether a received pilot signal associated with the RX frame was transmitted according to a first gated pilot pattern; and

if the received pilot signal is determined to be transmitted according to a first gated pilot pattern, process the RX frame as a null rate frame.

23. The computer-readable storage medium of claim 22, the medium further storing instructions for causing a computer to:

process a power control command received during a sub-segment designated for transmission according to the first gated pilot pattern;

transmit a TX frame, the TX frame being formatted into a plurality of sub-segments; and

adjust the transmission power of a sub-segment of the TX frame following the processing the received power control command, the transmission power adjusted according to the processed received power control command.

24. A computer-readable storage medium storing instructions for causing a computer to control transmission power, the medium further storing instructions for causing a computer to:

receive an RX frame, the RX frame being formatted into a plurality of sub-segments;

transmit a TX frame, the TX frame being formatted into a plurality of sub-segments, the instruction for causing computer to transmit the TX frame comprising instructions for causing a computer to transmit a pilot signal according to a first gated pilot pattern if the TX frame is a null rate frame.

25. The computer-readable storage medium of claim 24, the medium further storing instructions for causing a computer to:

process a power control command received in a sub-segment of the RX frame; and

adjustt the transmission power of a sub-segment of the TX frame following the processing the received power control command, the transmission power adjusted according to the processed received power control command.

CLAIMS

1. A method for communications using a gated pilot pattern, comprising:

receiving an RX frame formatted into a first plurality of sub-segments;

processing the RX frame as a null rate frame if a received pilot signal associated with the RX frame was transmitted according to a gated pilot pattern;

processing power control commands received in one or more of the first plurality of sub-segments associated with the RX frame that were designated for transmission according to the gated pilot pattern;

adjusting a transmission power of one or more sub-segments of a TX frame formatted into a second plurality of sub-segments subsequent to processing the received power control commands, the transmission power adjusted according to the processed power control commands, wherein if the TX frame is a null rate frame, adjusting the transmission power of the one or more sub-segments of the TX frame further comprises:

ignoring one or more of the processed power control commands according to a first predetermined sequence; and

selecting the one or more sub-segments of the TX frame to associate with the adjusted transmission power according to a second predetermined sequence; and

transmitting the second plurality of sub-segments associated with the TX frame according to the adjusted transmission power.

2. The method of claim 1, the RX frame received at a base station over a reverse link of a cdma2000 wireless communications system and the second plurality of sub-segments associated with the TX frame transmitted from the base station over a forward link of the cdma2000 wireless communications system.

3. The method of claim **1**, the gated pilot pattern providing for transmission and no transmission during alternating groups of two or more consecutive sub-segments of the RX frame.

4. The method of claim **1**, the gated pilot pattern providing for alternating between transmission and no transmission in every other sub-segment of the RX frame.

5. The method of claim **1**, the RX frame received at a mobile station over a forward link of a cdma2000 wireless communications system and the second plurality of sub-segments associated with the TX frame transmitted from the mobile station over a reverse link of the cdma2000 wireless communications system.

6. A method for communications using a gated pilot pattern, comprising:

receiving an RX frame formatted into a first plurality of sub-segments;

receiving power control commands in every other one of the first plurality of sub-segment of the RX frame;

processing the received power control commands;

adjusting a transmission power of one or more sub-segments of a TX frame formatted into a second plurality of sub-segments subsequent to processing the received power control commands, the transmission power adjusted according to processed power control commands, wherein adjusting the transmission power of the one or more sub-segments of the TX frame further comprises, if the TX frame is a null rate frame:

ignoring every other one of the processed power control commands; and

adjusting the transmission power of every fourth sub-segment of the second plurality of sub-segments associated with the TX frame; and

transmitting the TX frame according to the adjusted transmission power, the transmitting comprising transmitting a pilot signal according to a gated pilot pattern if the TX frame is a null rate frame, the gated pilot pattern providing for transmission and no transmission during alternating groups of two or more consecutive sub-segments of the TX frame.

7. The method of claim **6**, the RX frame received at a mobile station over a forward link of a cdma2000 wireless communications system and the TX frame transmitted from the mobile station over a reverse link of the cdma2000 wireless communications system.

8. The method of claim **6**, the RX frame received at a base station over a reverse link of a cdma2000 wireless communications system and the TX frame transmitted from the base station over a forward link of the cdma2000 wireless communications system.

9. An apparatus for communications using a gated pilot pattern, comprising:

a receiver configured to receive an RX frame formatted into a first plurality of sub-segments;

a processor configured to process the RX frame as a null rate frame if a received pilot signal associated with the RX frame was transmitted according to a gated pilot pattern, process power control commands received in one or more of the first plurality of sub-segments associated with the RX frame that were designated for transmission according to the gated pilot pattern, and adjust a transmission power of one or more sub-segments of a TX frame formatted into a second plurality of sub-segments according to the processed control commands subsequent to processing the received power control commands, wherein if the TX frame is a null rate frame, the processor is further configured to ignore one or more of the processed power control commands according to a first predetermined sequence and select the one or

more sub-segments of the TX frame to associate with the adjusted transmission power according to a second predetermined sequence; and

a transmitter configured to transmit the second plurality of sub-segments associated with the TX frame according to the adjusted transmission power.

10. The apparatus of claim **9**, the apparatus comprising a base station for a cdma2000 wireless communications system.

11. The apparatus of claim **9**, the gated pilot pattern providing for transmission and no transmission during alternating groups of two or more consecutive sub-segments of the RX frame.

12. The apparatus of claim **9**, the gated pilot pattern providing for alternating between transmission and no transmission in every other sub-segment of the RX frame.

13. The apparatus of claim **9**, the apparatus comprising a mobile station for a cdma2000 wireless communications system.

14. An apparatus for communications using a gated pilot pattern, comprising:

a receiver configured to receive an RX frame formatted into a first plurality of sub-segments and power control commands in every other one of the first plurality of sub-segment of the RX frame;

a processor configured to process the power control commands received in every other one of the first plurality of sub-segments of the RX frame and adjust a transmission power of one or more sub-segments of a TX frame formatted into a second plurality of sub-segments according to the processed power control commands subsequent to processing the received power control commands, wherein if the TX frame is a null rate frame, the processor is further configured to adjust the trans-

mission power of the one or more sub-segments of the TX frame by ignoring every other one of the processed power control commands and adjusting the transmission power of every fourth sub-segment of the second plurality of sub-segments associated with the TX frame; and

a transmitter configured to transmit the TX frame according to the adjusted transmission power and transmit a pilot signal according to a gated pilot pattern if the TX frame is a null rate frame, the gated pilot pattern providing for transmission and no transmission during alternating groups of two or more consecutive sub-segments of the TX frame.

15. The apparatus of claim **14**, the apparatus comprising a mobile station for a cdma2000 wireless communications system.

16. The apparatus of claim **14**, the apparatus comprising a base station for a cdma2000 wireless communications system.

17. An apparatus for controlling transmission power, comprising:

means for receiving an RX frame formatted into a first plurality of sub-segments;

means for processing the RX frame as a null rate frame if a received pilot signal associated with the RX frame was transmitted according to a gated pilot pattern;

means for processing power control commands received in one or more of the first plurality of sub-segments associated with the RX frame that were designated for transmission according to the gated pilot pattern;

means for adjusting a transmission power of one or more sub-segments of a TX frame formatted into a second plurality of sub-segments according to the processed power control commands subsequent to processing the

received power control commands at the means for processing the received power control commands, wherein if the TX frame is a null rate frame, the means for adjusting the transmission power of the one or more sub-segments of the TX frame further comprises:

means for ignoring one or more of the processed power control commands according to a first predetermined sequence; and

means for selecting the one or more sub-segments of the TX frame to associate with the adjusted transmission power according to a second predetermined sequence; and

means for transmitting the second plurality of sub-segments associated with the TX frame according to the adjusted transmission power.

18. A non-transitory computer-readable storage medium storing instructions for causing a computer to control transmission power, the medium further storing instructions for causing a computer to:

receive an RX frame formatted into a first plurality of sub-segments;

process the RX frame as a null rate frame if a received pilot signal associated with the RX frame was transmitted according to a first gated pilot pattern;

process power control commands received in one or more of the first plurality of sub-segments associated with the RX frame that were designated for transmission according to the gated pilot pattern;

adjust a transmission power of one or more sub-segments of a TX frame formatted into a second plurality of sub-segments subsequent to processing the received power control commands, the transmission power adjusted according to the processed power control commands, wherein if the TX frame is a null rate frame, the instruc-

tion for causing the computer to adjust the transmission power of the one or more sub-segments of the TX frame further comprises instructions for causing the computer to:

ignore one or more of the processed power control commands according to a first predetermined sequence; and

select the one or more sub-segments of the TX frame to associate with the adjusted transmission power according to a second predetermined sequence; and

transmit the second plurality of sub-segments associated with the TX frame according to the adjusted transmission power.

19. A non-transitory computer-readable storage medium storing instructions for causing a computer to control transmission power, the medium further storing instructions for causing a computer to:

receive an RX frame formatted into a first plurality of sub-segments;

receive power control commands in every other one of the first plurality of sub-segment of the RX frame;

process the received power control commands;

adjust a transmission power of one or more sub-segments of a TX frame formatted into a second plurality of sub-segments subsequent to processing the received power control commands, the transmission power adjusted according to the processed power control commands, wherein if the TX frame is a null rate frame, the instruction for causing the computer to adjust the transmission power of the one or more sub-segments of the TX frame further comprises instructions for causing the computer to:

ignore every other one of the processed power control commands; and

adjust the transmission power of every fourth sub-segment of the second plurality of sub-segments associated with the TX frame; and

transmit the TX frame according to the adjusted transmission power, wherein if the TX frame is a null rate frame, the instruction for causing computer to transmit the TX frame further comprises instructions for causing the computer to transmit a pilot signal according to a gated pilot pattern that provides for transmission and no transmission during alternating groups of two or more consecutive sub-segments of the TX frame.

20. An apparatus for communications using a gated pilot pattern, comprising:

means for receiving an RX frame formatted into a first plurality of sub-segments;

means for receiving power control commands in every other one of the first plurality of sub-segment of the RX frame;

means for processing the received power control commands;

means for adjusting a transmission power of one or more sub-segments of a TX frame formatted into a second plurality of sub-segments according to the processed power control commands subsequent to processing the received power control commands at the means for processing the received power control commands, wherein if the TX frame is a null rate frame, the means for adjusting the transmission power of the one or more sub-segments of the TX frame further comprises:

means for ignoring every other one of the processed power control commands; and

means for adjusting the transmission power of every fourth sub-segment of the second plurality of sub-segments associated with the TX frame; and

means for transmitting the TX frame according to the adjusted transmission power, wherein the means for transmitting further comprises means for transmitting a pilot signal according to a gated pilot pattern if the TX frame is a null rate frame, the gated pilot pattern providing for transmission and no transmission during alternating groups of two or more consecutive sub-segments of the TX frame.