Annex 1 to the Statement of Grounds for Amendment for EP (UK) 1 623 511 (as amended in HP-2015-00063)

Claim 1

A radio station (100) comprising transmitter means (110) for transmitting over a channel in a predetermined time period (0 to tF) a data block comprising information symbols (I) and parity check symbols (C) and control means (150) responsive to an indication of a reduction in channel quality according to a first criterion for decreasing the data transmit power and responsive to an indication within the predetermined time period of an increase in channel quality according to a second criterion for increasing the data transmit power, wherein, during operation, after decreasing the transmit power following the first criterion being met and before the second criterion is met, the transmission of the data block continues at a lower power level (P_1), and wherein the lower power level (P_1) varies during the predetermined time period.

Claim 2

A radio station as claimed in claim 1, wherein the indication of a reduction in channel quality according to the first criterion is an indication to increase transmit power above a predetermined threshold (*P2*).

Claim 3

A radio station as claimed in claim 2, wherein the indication to increase transmit power is a received command.

Claim 4

A radio station as claimed in claim 2, wherein the indication to increase transmit power is a measurement of reduced channel quality on a received signal.

Claim 5

A radio station as claimed in any of claims 1 to 3, wherein the transmitter means (110) is further adapted to, in the time period between the first criterion being met and the second criterion being met, transmit a control signal at a variable transmit power responsive to received power control commands, and wherein the second criterion is the transmit power of the control signal becoming equal to or less than the transmit power of the control signal when the first criterion was met.

Claim 6

A radio station as claimed in any of claims 1 to 3, wherein the transmitter means (110) is further adapted to, in the time period between the first

criterion being met and the second criterion being met, transmit a control signal at a constant power level, and wherein the second criterion is a received command to reduce transmit power.

Claim 7

A radio station as claimed in claim 6, wherein the second criterion is a predetermined number of commands to reduce power received within a further predetermined time period.

Claim 8

A radio station as claimed in any of claims 1 to 4, wherein the increase in channel quality according to the second criterion is an increase in channel quality above a predetermined level measured on a received signal.

Claim 9

A radio station as claimed in any preceding claim, wherein the transmission of the data block takes place on a plurality of data signals simultaneously, and the decrease and increase in data transmit power takes place on at least one of the data signals.

Claim 10

A radio station as claimed in claim 9, wherein the decrease in data transmit power takes place at least on the highest powered data signal.

Claim 11

A radio station as claimed in claim 9, wherein the plurality of data signals are transmitted on a plurality of carrier frequencies.

Claim 12

A radio communication system comprising at least one radio station (100) as claimed in any of claims 1 to 11.

Claim 13

A method of operating a radio communication system (100, 200), comprising, at a first radio station (100), transmitting (500) over a channel in a predetermined time period (510, 550) to a second radio station (200) a data block comprising information symbols (I) and parity check symbols (C), and, in response to an indication of a reduction in channel quality according to a first criterion (520), decreasing the data transmit power (530) and, in response to an indication within the predetermined time period (550) of an increase in channel quality according to a second criterion (560), increasing the data transmit power (570), wherein, during operation, after decreasing the transmit power following the first criterion being met and before the

second criterion is met, the transmission of the data block continues at a lower power level (P_1) , and wherein the lower power level (P_1) varies during the predetermined time period.

Claim 14

A method as claimed in claim 13, wherein the indication of a reduction in channel quality according to the first criterion is an indication to increase transmit power above a predetermined threshold (*P2*).

Claim 15

A method as claimed in claim 14, wherein the indication to increase transmit power is a received command.

Claim 16

A method as claimed in claim 14, wherein the indication to increase transmit power is a measurement of reduced channel quality on a received signal.

Claim 17

A method as claimed in any of claims 13 to 15, <u>further comprising</u> <u>transmitting in the time period between the first criterion being met and the second criterion being met a control signal at a variable transmit power responsive to received power control commands, and wherein the second criterion is the transmit power of the control signal becoming equal to or less than the transmit power of the control signal when the first criterion was met.</u>

Claim 18

A method as claimed in any of claims 13 to 15, further comprising transmitting in the time period between the first criterion being met and the second criterion being met a control signal at a constant transmit power level, and wherein the second criterion is a received command to reduce transmit power.

Claim 19

A method as claimed in any of claims 13 to 16, wherein the indication of an increase in channel quality according to the second criterion is an increase in channel quality measured on a received signal.

Claim 20

A method as claimed in any of claims 13 to 19, wherein the transmission of the data block takes place on a plurality of data signals simultaneously, and the decrease and increase in data transmit power takes place on at least one of the data signals.

Claim 21

A method as claimed in claim 20, wherein the decrease in data transmit power takes place at least on the highest powered data signal.

Claim 22

A method as claimed in claim 20, wherein the plurality of data signals are transmitted on a plurality of carrier frequencies.

Annex 2 to the Statement of Grounds for Amendment for EP (UK) 1 623 511 (as amended in HP-2015-000063)

Claim 1

A radio station (100) comprising transmitter means (110) for transmitting over a channel in a predetermined time period (0 to *tF*) a data block comprising information symbols (*I*) and parity check symbols (*C*) and control means (150) responsive to an indication of a reduction in channel quality according to a first criterion for decreasing the data transmit power and responsive to an indication within the predetermined time period of an increase in channel quality according to a second criterion for increasing the data transmit power, wherein, during operation, after decreasing the transmit power following the first criterion being met and before the second criterion is met, the transmission of the data block continues at a lower power level.

Claim 2

A radio station as claimed in claim 1, wherein the indication of a reduction in channel quality according to the first criterion is an indication to increase transmit power above a predetermined threshold (*P2*).

Claim 3

A radio station as claimed in claim 2, wherein the indication to increase transmit power is a received command.

Claim 4

A radio station as claimed in claim 2, wherein the indication to increase transmit power is a measurement of reduced channel quality on a received signal.

Claim 5

A radio station as claimed in any of claims 1 to 3, wherein the transmitter means (110) is further adapted to, in the time period between the first criterion being met and the second criterion being met, transmit a control signal at a variable transmit power responsive to received power control commands, and wherein the second criterion is the transmit power of the control signal becoming equal to or less than the transmit power of the control signal when the first criterion was met.

Claim 6

A radio station as claimed in any of claims 1 to 3, wherein the transmitter means (110) is further adapted to, in the time period between the first criterion being met and the second criterion being met, transmit a control

signal at a constant power level, and wherein the second criterion is a received command to reduce transmit power.

Claim 7

A radio station as claimed in claim 6, wherein the second criterion is a predetermined number of commands to reduce power received within a further predetermined time period.

Claim 8

A radio station as claimed in any of claims 1 to 4, wherein the increase in channel quality according to the second criterion is an increase in channel quality above a predetermined level measured on a received signal.

Claim 9

A radio station as claimed in any preceding claim, wherein the transmission of the data block takes place on a plurality of data signals simultaneously, and the decrease and increase in data transmit power takes place on at least one of the data signals.

Claim 10

A radio station as claimed in claim 9, wherein the decrease in data transmit power takes place at least on the highest powered data signal.

Claim 11

A radio station as claimed in claim 9, wherein the plurality of data signals are transmitted on a plurality of carrier frequencies.

Claim 12

A radio communication system comprising at least one radio station (100) as claimed in any of claims 1 to 11.

Claim 13

A method of operating a radio communication system (100, 200), comprising, at a first radio station (100), transmitting (500) over a channel in a predetermined time period (510, 550) to a second radio station (200) a data block comprising information symbols (I) and parity check symbols (C), and, in response to an indication of a reduction in channel quality according to a first criterion (520), decreasing the data transmit power (530) and, in response to an indication within the predetermined time period (550) of an increase in channel quality according to a second criterion (560), increasing the data transmit power (570), wherein, during operation, after decreasing the transmit power following the first criterion being met and before the

second criterion is met, the transmission of the data block continues at a lower power level.

Claim 14

A method as claimed in claim 13, wherein the indication of a reduction in channel quality according to the first criterion is an indication to increase transmit power above a predetermined threshold (*P2*).

Claim 15

A method as claimed in claim 14, wherein the indication to increase transmit power is a received command.

Claim 16

A method as claimed in claim 14, wherein the indication to increase transmit power is a measurement of reduced channel quality on a received signal.

Claim 17

A method as claimed in any of claims 13 to 15, <u>further comprising</u> transmitting in the time period between the first criterion being met and the <u>second criterion being met a control signal at a variable transmit power</u> responsive to received power control commands, and wherein the second criterion is the transmit power of the control signal becoming equal to or less than the transmit power of the control signal when the first criterion was met.

Claim 18

A method as claimed in any of claims 13 to 15, further comprising transmitting in the time period between the first criterion being met and the second criterion being met a control signal at a constant transmit power level, and wherein the second criterion is a received command to reduce transmit power.

Claim 19

A method as claimed in any of claims 13 to 16, wherein the indication of an increase in channel quality according to the second criterion is an increase in channel quality measured on a received signal.

Claim 20

A method as claimed in any of claims 13 to 19, wherein the transmission of the data block takes place on a plurality of data signals simultaneously, and the decrease and increase in data transmit power takes place on at least one of the data signals.

Claim 21

A method as claimed in claim 20, wherein the decrease in data transmit power takes place at least on the highest powered data signal.

Claim 22

A method as claimed in claim 20, wherein the plurality of data signals are transmitted on a plurality of carrier frequencies.