Annex 1 to the Amended Statement of Grounds for Amendment for EP (UK) 1 623 511 B1

Claim 1

A radio station (100) comprising transmitter means (110) for transmitting over a channel in a predetermined time period (0 to t_F) 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 between the times of the first and second criterion being 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 transmitter means (110) is adapted to suspend transmission of the data block in response to the indication of a reduction in channel quality according to the first criterion and to resume transmission of the data block in response to the increase in channel quality according to the second criterion.~~

~~Claim 3~~

~~A radio station as claimed in claim 2, wherein the resumption proceeds from the portion of the data block corresponding to the unexpired portion of the predetermined period.~~

~~Claim 4~~

~~A radio station as claimed in claim 2, wherein the resumption proceeds from the point of suspension of the data block and the data block is truncated if the predetermined time period expires before the whole of the data block is transmitted.~~

~~Claim 5~~

~~A radio station as claimed in claim 4, wherein the transmitter means (110) is adapted to transmit at least some of the parity check symbols (*C*) after transmitting all of the information symbols (*I*).~~

~~Claim 6~~

~~A radio station as claimed in any of claims 2 to 5, wherein the transmitter means (110) is further adapted to transmit an indication of what portion of the data block the resumption proceeds from.~~

~~Claim 7~~

~~A radio station as claimed in any of claims 2 to 6, wherein the transmitter means (110) is further adapted to, in response to completing transmission of the information (*I*) and parity check symbols (*C*) before the end of the predetermined time period~~

~~(t_E), retransmit at least a portion of the information or parity check symbols within the predetermined time period.~~

~~**Claim 8**~~

~~A radio station as claimed in claim 2, wherein the transmitter means (110) is further adapted to resume transmission of the data block if the unexpired portion of the predetermined time period ceases to exceed the time required to complete transmission of at least the information symbols (I).~~

Claim 2 ~~9~~

A radio station as claimed in ~~any of~~ claim~~s~~ 1 ~~to 8~~, 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 (P_2).

Claim 3 ~~10~~

A radio station as claimed in claim 2 ~~9~~, wherein the indication to increase transmit power is a received command.

Claim 4 ~~11~~

A radio station as claimed in claim 2 ~~9~~, wherein the indication to increase transmit power is a measurement of reduced channel quality on a received signal.

Claim 5 ~~12~~

A radio station as claimed in any of claims 1 to 3 ~~10~~, 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 ~~13~~

A radio station as claimed in any of claims 1 to 3 ~~10~~, 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 ~~14~~

A radio station as claimed in claim 6 ~~13~~, wherein the second criterion is a predetermined number of commands to reduce power received within a further predetermined time period.

Claim 8 ~~15~~

A radio station as claimed in any of claims 1 to 4 ~~11~~, 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 16~~

~~A radio station as claimed in any of claims 2 to 15, wherein the transmitter means (110) is adapted to transmit an indication of whether transmission of the data block is in progress or suspended.~~

~~Claim 17~~

~~A radio station as claimed in claim 16, wherein the indication of whether transmission of the data block is in progress or suspended comprises a first control signal when transmission of the data block is in progress, and a second control signal when transmission of the data block is suspended.~~

~~Claim 18~~

~~A radio station as claimed in any preceding claim, wherein the decrease in the data transmit power is a decrease to zero transmit power.~~

Claim 9 ~~19~~

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 ~~20~~

A radio station as claimed in claim 9 ~~19~~, wherein the decrease in data transmit power takes place at least on the highest powered data signal.

Claim 11 ~~21~~

A radio station as claimed in claim 9 ~~19~~, wherein the plurality of data signals are transmitted on a plurality of carrier frequencies.

~~Claim 22~~

~~A radio station (200) for use in a radio communication system comprising at least one radio station as claimed in claim 1, comprising quality assessment means (220) for assessing the quality of received signals, means (220) for determining whether transmission of a data block is in progress or suspended, and transmitter means (210) for transmitting a first indication of received signal quality while transmission of the data block is in progress and for transmitting a second indication of received signal quality while transmission of the data block is suspended.~~

Claim 12 ~~23~~

A radio communication system comprising at least one radio station (100) as claimed in any of claims 1 to 11 ~~21~~.

Claim 13 ~~24~~

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 between the times of the first and second criterion being met, the transmission of the data block continues at a lower power level.

~~**Claim 25**~~

~~A method as claimed in claim 24, further comprising suspending transmission of the data block in response to the indication of a reduction in channel quality according to the first criterion and resuming transmission of the data block in response to the indication within the predetermined time period of an increase in channel quality according to the second criterion.~~

~~**Claim 26**~~

~~A method as claimed in claim 25, wherein the resumption proceeds from the portion of the data block corresponding to the unexpired portion of the predetermined period.~~

~~**Claim 27**~~

~~A method as claimed in claim 25, wherein the resumption proceeds from the point of suspension of the data block and the data block is truncated if the predetermined time period expires before the whole of the data block is transmitted.~~

~~**Claim 28**~~

~~A method as claimed in claim 27, further comprising transmitting at least some of the parity check symbols (*C*) after transmitting all of the information symbols (*I*).~~

~~**Claim 29**~~

~~A method as claimed in any of claims 25 to 28, further comprising transmitting an indication of what portion of the data block the resumption proceeds from.~~

~~**Claim 30**~~

~~A method as claimed in any of claims 26 to 29, further comprising, in response to completing transmission of the information and parity check symbols (*I*, *C*) before the end of the predetermined time period, retransmitting at least a portion of the information or parity check symbols within the predetermined time period.~~

~~**Claim 31**~~

~~A method as claimed in claim 25, further comprising resuming transmission of the data block if the unexpired portion of the predetermined time period ceases to exceed the time required to complete transmission of at least the information symbols (*I*).~~

Claim 14 ~~32~~

A method as claimed in ~~any of~~ claim~~s~~ 13 ~~24 to 31~~, 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 (P_2).

Claim 15 ~~33~~

A method as claimed in claim 14 ~~32~~, wherein the indication to increase transmit power is a received command.

Claim 16 ~~34~~

A method as claimed in claim 14 ~~32~~, wherein the indication to increase transmit power is a measurement of reduced channel quality on a received signal.

Claim 17 ~~35~~

A method as claimed in any of claims 13 ~~24~~ to 15 ~~33~~, further comprising 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.

Claim 18 ~~36~~

A method as claimed in any of claims 13 ~~24~~ to 15 ~~33~~, 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 ~~37~~

A method as claimed in any of claims 13 ~~24~~ to 16 ~~34~~, 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 38**~~

~~A method as claimed in any of claims 25 to 37, further comprising transmitting an indication of whether transmission of the data block is in progress or suspended.~~

~~**Claim 39**~~

~~A method as claimed in claim 38, wherein the indication of whether transmission of the data block is in progress or suspended comprises a first control signal when transmission of the data block is in progress, and a second control signal when transmission of the data block is suspended.~~

~~**Claim 40**~~

~~A method as claimed in any of claims 24 to 39, wherein the decreasing of the transmit power is a decrease to zero transmit power.~~

Claim 20 ~~41~~

A method as claimed in any of claims 13 ~~24~~ to 19 ~~40~~, 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 ~~42~~

A method as claimed in claim 20 ~~41~~, wherein the decrease in data transmit power takes place at least on the highest powered data signal.

Claim 22 ~~43~~

A method as claimed in claim 20 ~~41~~, wherein the plurality of data signals are transmitted on a plurality of carrier frequencies.

~~**Claim 44**~~

~~A method as claimed in any of claims 25 to 43, further comprising, at the second radio station (200), assessing the quality of received signals, determining whether transmission of a data block is in progress or suspended, and transmitting a first indication of received signal quality while transmission of the data block is in progress and for transmitting a second indication of received signal quality while transmission of the data block is suspended.~~

Annex 2 to the Amended Statement of Grounds for Amendment for EP (UK) 1 623 511 B1

Claim 1

A radio station (100) comprising transmitter means (110) for transmitting over a channel in a predetermined time period (0 to t_F) 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 between the times of the first and second criterion being met, the transmission of the data block continues at a lower power level, and wherein the power level at which the data block is transmitted between the times of the first and second criteria being met, (P_1), varies during the predetermined time period.

~~Claim 2~~

~~A radio station as claimed in claim 1, wherein the transmitter means (110) is adapted to suspend transmission of the data block in response to the indication of a reduction in channel quality according to the first criterion and to resume transmission of the data block in response to the increase in channel quality according to the second criterion.~~

~~Claim 3~~

~~A radio station as claimed in claim 2, wherein the resumption proceeds from the portion of the data block corresponding to the unexpired portion of the predetermined period.~~

~~Claim 4~~

~~A radio station as claimed in claim 2, wherein the resumption proceeds from the point of suspension of the data block and the data block is truncated if the predetermined time period expires before the whole of the data block is transmitted.~~

~~Claim 5~~

~~A radio station as claimed in claim 4, wherein the transmitter means (110) is adapted to transmit at least some of the parity check symbols (C) after transmitting all of the information symbols (I).~~

~~Claim 6~~

~~A radio station as claimed in any of claims 2 to 5, wherein the transmitter means (110) is further adapted to transmit an indication of what portion of the data block the resumption proceeds from.~~

~~Claim 7~~

~~A radio station as claimed in any of claims 2 to 6, wherein the transmitter means (110) is further adapted to, in response to completing transmission of the information (I) and parity check symbols (C) before the end of the predetermined time period (t_E), retransmit at least a portion of the information or parity check symbols within the predetermined time period.~~

~~Claim 8~~

~~A radio station as claimed in claim 2, wherein the transmitter means (110) is further adapted to resume transmission of the data block if the unexpired portion of the predetermined time period ceases to exceed the time required to complete transmission of at least the information symbols (I).~~

Claim 2 ~~9~~

A radio station as claimed ~~in any of~~ claim~~s~~ 1 ~~to 8~~, 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 (P_2).

Claim 3 ~~10~~

A radio station as claimed in claim 2 ~~9~~, wherein the indication to increase transmit power is a received command.

Claim 4 ~~11~~

A radio station as claimed in claim 2 ~~9~~, wherein the indication to increase transmit power is a measurement of reduced channel quality on a received signal.

Claim 5 ~~12~~

A radio station as claimed in any of claims 1 to 3 ~~10~~, 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 ~~13~~

A radio station as claimed in any of claims 1 to 3 ~~10~~, 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 ~~14~~

A radio station as claimed in claim 6 ~~13~~, wherein the second criterion is a predetermined number of commands to reduce power received within a further predetermined time period.

Claim 8 ~~15~~

A radio station as claimed in any of claims 1 to 4 ~~11~~, 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 16**~~

~~A radio station as claimed in any of claims 2 to 15, wherein the transmitter means (110) is adapted to transmit an indication of whether transmission of the data block is in progress or suspended.~~

~~**Claim 17**~~

~~A radio station as claimed in claim 16, wherein the indication of whether transmission of the data block is in progress or suspended comprises a first control signal when transmission of the data block is in progress, and a second control signal when transmission of the data block is suspended.~~

~~**Claim 18**~~

~~A radio station as claimed in any preceding claim, wherein the decrease in the data transmit power is a decrease to zero transmit power.~~

Claim 9 ~~19~~

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 ~~20~~

A radio station as claimed in claim 9 ~~19~~, wherein the decrease in data transmit power takes place at least on the highest powered data signal.

Claim 11 ~~21~~

A radio station as claimed in claim 9 ~~19~~, wherein the plurality of data signals are transmitted on a plurality of carrier frequencies.

~~**Claim 22**~~

~~A radio station (200) for use in a radio communication system comprising at least one radio station as claimed in claim 1, comprising quality assessment means (220) for assessing the quality of received signals, means (220) for determining whether transmission of a data block is in progress or suspended, and transmitter means (210) for transmitting a first indication of received signal quality while transmission of the data block is in progress and for transmitting a second indication of received signal quality while transmission of the data block is suspended.~~

Claim 12 ~~23~~

A radio communication system comprising at least one radio station (100) as claimed in any of claims 1 to 11 ~~21~~.

Claim 13 ~~24~~

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 between the times of the first and second criterion being met, the transmission of the data block continues at a lower power level, and wherein the power level at which the data block is transmitted between the times of the first and second criteria being met, (P_1), varies during the predetermined time period.

~~**Claim 25**~~

~~A method as claimed in claim 24, further comprising suspending transmission of the data block in response to the indication of a reduction in channel quality according to the first criterion and resuming transmission of the data block in response to the indication within the predetermined time period of an increase in channel quality according to the second criterion.~~

~~**Claim 26**~~

~~A method as claimed in claim 25, wherein the resumption proceeds from the portion of the data block corresponding to the unexpired portion of the predetermined period.~~

~~**Claim 27**~~

~~A method as claimed in claim 25, wherein the resumption proceeds from the point of suspension of the data block and the data block is truncated if the predetermined time period expires before the whole of the data block is transmitted.~~

~~**Claim 28**~~

~~A method as claimed in claim 27, further comprising transmitting at least some of the parity check symbols (*C*) after transmitting all of the information symbols (*I*).~~

~~**Claim 29**~~

~~A method as claimed in any of claims 25 to 28, further comprising transmitting an indication of what portion of the data block the resumption proceeds from.~~

~~**Claim 30**~~

~~A method as claimed in any of claims 26 to 29, further comprising, in response to completing transmission of the information and parity check symbols (*I*, *C*) before the end of the predetermined time period, retransmitting at least a portion of the information or parity check symbols within the predetermined time period.~~

~~Claim 31~~

~~A method as claimed in claim 25, further comprising resuming transmission of the data block if the unexpired portion of the predetermined time period ceases to exceed the time required to complete transmission of at least the information symbols (I).~~

Claim 14 ~~32~~

A method as claimed in ~~any of~~ claims 13 ~~24 to 31~~, 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 (P_2).

Claim 15 ~~33~~

A method as claimed in claim 14 ~~32~~, wherein the indication to increase transmit power is a received command.

Claim 16 ~~34~~

A method as claimed in claim 14 ~~32~~, wherein the indication to increase transmit power is a measurement of reduced channel quality on a received signal.

Claim 17 ~~35~~

A method as claimed in any of claims 13 ~~24~~ to 15 ~~33~~, further comprising 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.

Claim 18 ~~36~~

A method as claimed in any of claims 13 ~~24~~ to 15 ~~33~~, 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 ~~37~~

A method as claimed in any of claims 13 ~~24~~ to 16 ~~34~~, 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 38~~

~~A method as claimed in any of claims 25 to 37, further comprising transmitting an indication of whether transmission of the data block is in progress or suspended.~~

~~Claim 39~~

~~A method as claimed in claim 38, wherein the indication of whether transmission of the data block is in progress or suspended comprises a first control signal when transmission of the data block is in progress, and a second control signal when transmission of the data block is suspended.~~

~~Claim 40~~

~~A method as claimed in any of claims 24 to 39, wherein the decreasing of the transmit power is a decrease to zero transmit power.~~

Claim 20 ~~41~~

A method as claimed in any of claims 13 ~~24~~ to 19 ~~40~~, 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 ~~42~~

A method as claimed in claim 20 ~~41~~, wherein the decrease in data transmit power takes place at least on the highest powered data signal.

Claim 22 ~~43~~

A method as claimed in claim 20 ~~41~~, wherein the plurality of data signals are transmitted on a plurality of carrier frequencies.

~~Claim 44~~

~~A method as claimed in any of claims 25 to 43, further comprising, at the second radio station (200), assessing the quality of received signals, determining whether transmission of a data block is in progress or suspended, and transmitting a first indication of received signal quality while transmission of the data block is in progress and for transmitting a second indication of received signal quality while transmission of the data block is suspended.~~

Annex 3 ~~1~~ to the Amended Statement of Grounds for Amendment for EP (UK) 1 623 511 B1

Claim 1

A radio station (100) comprising transmitter means (110) for transmitting over a channel in a predetermined time period (0 to t_F) 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 and the radio station continues to transmit a control signal with varying power to continue to track changes in channel quality to some extent.

~~Claim 2~~

~~A radio station as claimed in claim 1, wherein the transmitter means (110) is adapted to suspend transmission of the data block in response to the indication of a reduction in channel quality according to the first criterion and to resume transmission of the data block in response to the increase in channel quality according to the second criterion.~~

~~Claim 3~~

~~A radio station as claimed in claim 2, wherein the resumption proceeds from the portion of the data block corresponding to the unexpired portion of the predetermined period.~~

~~Claim 4~~

~~A radio station as claimed in claim 2, wherein the resumption proceeds from the point of suspension of the data block and the data block is truncated if the predetermined time period expires before the whole of the data block is transmitted.~~

~~Claim 5~~

~~A radio station as claimed in claim 4, wherein the transmitter means (110) is adapted to transmit at least some of the parity check symbols (C) after transmitting all of the information symbols (I).~~

~~Claim 6~~

~~A radio station as claimed in any of claims 2 to 5, wherein the transmitter means (110) is further adapted to transmit an indication of what portion of the data block the resumption proceeds from.~~

~~**Claim 7**~~

~~A radio station as claimed in any of claims 2 to 6, wherein the transmitter means (110) is further adapted to, in response to completing transmission of the information (*I*) and parity check symbols (*C*) before the end of the predetermined time period (t_E), retransmit at least a portion of the information or parity check symbols within the predetermined time period.~~

~~**Claim 8**~~

~~A radio station as claimed in claim 2, wherein the transmitter means (110) is further adapted to resume transmission of the data block if the unexpired portion of the predetermined time period ceases to exceed the time required to complete transmission of at least the information symbols (*I*).~~

Claim 2 ~~9~~

A radio station as claimed in ~~any of~~ claim~~s~~ 1 ~~to 8~~, 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 (P_2).

Claim 3 ~~10~~

A radio station as claimed in claim 2 ~~9~~, wherein the indication to increase transmit power is a received command.

Claim 4 ~~11~~

A radio station as claimed in claim 2 ~~9~~, wherein the indication to increase transmit power is a measurement of reduced channel quality on a received signal.

Claim 5 ~~12~~

A radio station as claimed in any of claims 1 to 3 ~~10~~, 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 ~~13~~

A radio station as claimed in any of claims 1 to 3 ~~10~~, 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 ~~14~~

A radio station as claimed in claim 6 ~~13~~, wherein the second criterion is a predetermined number of commands to reduce power received within a further predetermined time period.

Claim 8 ~~15~~

A radio station as claimed in any of claims 1 to 4 ~~11~~, 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 16**~~

~~A radio station as claimed in any of claims 2 to 15, wherein the transmitter means (110) is adapted to transmit an indication of whether transmission of the data block is in progress or suspended.~~

~~**Claim 17**~~

~~A radio station as claimed in claim 16, wherein the indication of whether transmission of the data block is in progress or suspended comprises a first control signal when transmission of the data block is in progress, and a second control signal when transmission of the data block is suspended.~~

~~**Claim 18**~~

~~A radio station as claimed in any preceding claim, wherein the decrease in the data transmit power is a decrease to zero transmit power.~~

Claim 9 ~~19~~

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 ~~20~~

A radio station as claimed in claim 9 ~~19~~, wherein the decrease in data transmit power takes place at least on the highest powered data signal.

Claim 11 ~~21~~

A radio station as claimed in claim 9 ~~19~~, wherein the plurality of data signals are transmitted on a plurality of carrier frequencies.

~~**Claim 22**~~

~~A radio station (200) for use in a radio communication system comprising at least one radio station as claimed in claim 1, comprising quality assessment means (220) for assessing the quality of received signals, means (220) for determining whether transmission of a data block is in progress or suspended, and transmitter means (210) for transmitting a first indication of received signal quality while transmission of the data block is in progress and for transmitting a second indication of received signal quality while transmission of the data block is suspended.~~

Claim 12 ~~23~~

A radio communication system comprising at least one radio station (100) as claimed in any of claims 1 to 11 ~~21~~.

Claim 13 ~~24~~

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 and the radio station continues to transmit a control signal with varying power to continue to track changes in channel quality to some extent.

~~**Claim 25**~~

~~A method as claimed in claim 24, further comprising suspending transmission of the data block in response to the indication of a reduction in channel quality according to the first criterion and resuming transmission of the data block in response to the indication within the predetermined time period of an increase in channel quality according to the second criterion.~~

~~**Claim 26**~~

~~A method as claimed in claim 25, wherein the resumption proceeds from the portion of the data block corresponding to the unexpired portion of the predetermined period.~~

~~**Claim 27**~~

~~A method as claimed in claim 25, wherein the resumption proceeds from the point of suspension of the data block and the data block is truncated if the predetermined time period expires before the whole of the data block is transmitted.~~

~~**Claim 28**~~

~~A method as claimed in claim 27, further comprising transmitting at least some of the parity check symbols (*C*) after transmitting all of the information symbols (*I*).~~

~~**Claim 29**~~

~~A method as claimed in any of claims 25 to 28, further comprising transmitting an indication of what portion of the data block the resumption proceeds from.~~

~~**Claim 30**~~

~~A method as claimed in any of claims 26 to 29, further comprising, in response to completing transmission of the information and parity check symbols (*I*, *C*) before the end of the predetermined time period, retransmitting at least a portion of the information or parity check symbols within the predetermined time period.~~

~~Claim 31~~

~~A method as claimed in claim 25, further comprising resuming transmission of the data block if the unexpired portion of the predetermined time period ceases to exceed the time required to complete transmission of at least the information symbols (*I*).~~

Claim 14 ~~32~~

A method as claimed in ~~any of~~ claim~~s~~ 13 ~~24 to 31~~, 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 (P_2).

Claim 15 ~~33~~

A method as claimed in claim 14 ~~32~~, wherein the indication to increase transmit power is a received command.

Claim 16 ~~34~~

A method as claimed in claim 14 ~~32~~, wherein the indication to increase transmit power is a measurement of reduced channel quality on a received signal.

Claim 17 ~~35~~

A method as claimed in any of claims 13 ~~24~~ to 15 ~~33~~, ~~further comprising 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.

Claim 18 ~~36~~

A method as claimed in any of claims 13 ~~24~~ to 15 ~~33~~, 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 ~~37~~

A method as claimed in any of claims 13 ~~24~~ to 16 ~~34~~, 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 38~~

~~A method as claimed in any of claims 25 to 37, further comprising transmitting an indication of whether transmission of the data block is in progress or suspended.~~

~~Claim 39~~

~~A method as claimed in claim 38, wherein the indication of whether transmission of the data block is in progress or suspended comprises a first control signal when transmission of the data block is in progress, and a second control signal when transmission of the data block is suspended.~~

~~Claim 40~~

~~A method as claimed in any of claims 24 to 39, wherein the decreasing of the transmit power is a decrease to zero transmit power.~~

Claim 20 ~~41~~

A method as claimed in any of claims 13 ~~24~~ to 19 ~~40~~, 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 ~~42~~

A method as claimed in claim 20 ~~41~~, wherein the decrease in data transmit power takes place at least on the highest powered data signal.

Claim 22 ~~43~~

A method as claimed in claim 20 ~~41~~, wherein the plurality of data signals are transmitted on a plurality of carrier frequencies.

~~Claim 44~~

~~A method as claimed in any of claims 25 to 43, further comprising, at the second radio station (200), assessing the quality of received signals, determining whether transmission of a data block is in progress or suspended, and transmitting a first indication of received signal quality while transmission of the data block is in progress and for transmitting a second indication of received signal quality while transmission of the data block is suspended.~~

Annex 4 to the Statement of Grounds for Amendment for EP (UK) 1 623 511 B1

Claim 1

A radio station (100) comprising transmitter means (110) for transmitting over a channel in a predetermined time period (0 to t_F) 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 and the radio station continues to transmit a control signal with varying power to continue to track changes in channel quality to some extent, and wherein the power level at which the data block is transmitted between the times of the first and second criteria being met, (P_1), varies during the predetermined time period.

~~Claim 2~~

~~A radio station as claimed in claim 1, wherein the transmitter means (110) is adapted to suspend transmission of the data block in response to the indication of a reduction in channel quality according to the first criterion and to resume transmission of the data block in response to the increase in channel quality according to the second criterion.~~

~~Claim 3~~

~~A radio station as claimed in claim 2, wherein the resumption proceeds from the portion of the data block corresponding to the unexpired portion of the predetermined period.~~

~~Claim 4~~

~~A radio station as claimed in claim 2, wherein the resumption proceeds from the point of suspension of the data block and the data block is truncated if the predetermined time period expires before the whole of the data block is transmitted.~~

~~Claim 5~~

~~A radio station as claimed in claim 4, wherein the transmitter means (110) is adapted to transmit at least some of the parity check symbols (C) after transmitting all of the information symbols (I).~~

~~Claim 6~~

~~A radio station as claimed in any of claims 2 to 5, wherein the transmitter means (110) is further adapted to transmit an indication of what portion of the data block the resumption proceeds from.~~

~~Claim 7~~

~~A radio station as claimed in any of claims 2 to 6, wherein the transmitter means (110) is further adapted to, in response to completing transmission of the information (*I*) and parity check symbols (*C*) before the end of the predetermined time period (t_E), retransmit at least a portion of the information or parity check symbols within the predetermined time period.~~

~~Claim 8~~

~~A radio station as claimed in claim 2, wherein the transmitter means (110) is further adapted to resume transmission of the data block if the unexpired portion of the predetermined time period ceases to exceed the time required to complete transmission of at least the information symbols (*I*).~~

Claim 2 ~~9~~

A radio station as claimed ~~in any of~~ claim~~s~~ 1 ~~to 8~~, 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 (P_2).

Claim 3 ~~10~~

A radio station as claimed in claim 2 ~~9~~, wherein the indication to increase transmit power is a received command.

Claim 4 ~~11~~

A radio station as claimed in claim 2 ~~9~~, wherein the indication to increase transmit power is a measurement of reduced channel quality on a received signal.

Claim 5 ~~12~~

A radio station as claimed in any of claims 1 to 3 ~~10~~, 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 ~~13~~

A radio station as claimed in any of claims 1 to 3 ~~10~~, 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 ~~14~~

A radio station as claimed in claim 6 ~~13~~, wherein the second criterion is a predetermined number of commands to reduce power received within a further predetermined time period.

Claim 8 ~~15~~

A radio station as claimed in any of claims 1 to 4 ~~11~~, 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 16**~~

~~A radio station as claimed in any of claims 2 to 15, wherein the transmitter means (110) is adapted to transmit an indication of whether transmission of the data block is in progress or suspended.~~

~~**Claim 17**~~

~~A radio station as claimed in claim 16, wherein the indication of whether transmission of the data block is in progress or suspended comprises a first control signal when transmission of the data block is in progress, and a second control signal when transmission of the data block is suspended.~~

~~**Claim 18**~~

~~A radio station as claimed in any preceding claim, wherein the decrease in the data transmit power is a decrease to zero transmit power.~~

Claim 9 ~~19~~

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 ~~20~~

A radio station as claimed in claim 9 ~~19~~, wherein the decrease in data transmit power takes place at least on the highest powered data signal.

Claim 11 ~~21~~

A radio station as claimed in claim 9 ~~19~~, wherein the plurality of data signals are transmitted on a plurality of carrier frequencies.

~~**Claim 22**~~

~~A radio station (200) for use in a radio communication system comprising at least one radio station as claimed in claim 1, comprising quality assessment means (220) for assessing the quality of received signals, means (220) for determining whether transmission of a data block is in progress or suspended, and transmitter means (210) for transmitting a first indication of received signal quality while transmission of the data block is in progress and for transmitting a second indication of received signal quality while transmission of the data block is suspended.~~

Claim 12 ~~23~~

A radio communication system comprising at least one radio station (100) as claimed in any of claims 1 to 11 ~~21~~.

Claim 13 ~~24~~

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 and the radio station continues to transmit a control signal with varying power to continue to track changes in channel quality to some extent, and wherein the power level at which the data block is transmitted between the times of the first and second criteria being met, (P_1), varies during the predetermined time period.

~~**Claim 25**~~

~~A method as claimed in claim 24, further comprising suspending transmission of the data block in response to the indication of a reduction in channel quality according to the first criterion and resuming transmission of the data block in response to the indication within the predetermined time period of an increase in channel quality according to the second criterion.~~

~~**Claim 26**~~

~~A method as claimed in claim 25, wherein the resumption proceeds from the portion of the data block corresponding to the unexpired portion of the predetermined period.~~

~~**Claim 27**~~

~~A method as claimed in claim 25, wherein the resumption proceeds from the point of suspension of the data block and the data block is truncated if the predetermined time period expires before the whole of the data block is transmitted.~~

~~**Claim 28**~~

~~A method as claimed in claim 27, further comprising transmitting at least some of the parity check symbols (*C*) after transmitting all of the information symbols (*I*).~~

~~**Claim 29**~~

~~A method as claimed in any of claims 25 to 28, further comprising transmitting an indication of what portion of the data block the resumption proceeds from.~~

~~**Claim 30**~~

~~A method as claimed in any of claims 26 to 29, further comprising, in response to completing transmission of the information and parity check symbols (*I*, *C*) before the end of the predetermined time period, retransmitting at least a portion of the information or parity check symbols within the predetermined time period.~~

~~Claim 31~~

~~A method as claimed in claim 25, further comprising resuming transmission of the data block if the unexpired portion of the predetermined time period ceases to exceed the time required to complete transmission of at least the information symbols (I).~~

Claim 14 ~~32~~

A method as claimed in ~~any of~~ claim~~s~~ 13 ~~24 to 31~~, 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 (P_2).

Claim 15 ~~33~~

A method as claimed in claim 14 ~~32~~, wherein the indication to increase transmit power is a received command.

Claim 16 ~~34~~

A method as claimed in claim 14 ~~32~~, wherein the indication to increase transmit power is a measurement of reduced channel quality on a received signal.

Claim 17 ~~35~~

A method as claimed in any of claims 13 ~~24~~ to 15 ~~33~~, ~~further comprising 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.

Claim 18 ~~36~~

A method as claimed in any of claims 13 ~~24~~ to 15 ~~33~~, 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 ~~37~~

A method as claimed in any of claims 13 ~~24~~ to 16 ~~34~~, 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 38~~

~~A method as claimed in any of claims 25 to 37, further comprising transmitting an indication of whether transmission of the data block is in progress or suspended.~~

~~Claim 39~~

~~A method as claimed in claim 38, wherein the indication of whether transmission of the data block is in progress or suspended comprises a first control signal when transmission of the data block is in progress, and a second control signal when transmission of the data block is suspended.~~

~~Claim 40~~

~~A method as claimed in any of claims 24 to 39, wherein the decreasing of the transmit power is a decrease to zero transmit power.~~

Claim 20 ~~41~~

A method as claimed in any of claims 13 ~~24~~ to 19 ~~40~~, 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 ~~42~~

A method as claimed in claim 20 ~~41~~, wherein the decrease in data transmit power takes place at least on the highest powered data signal.

Claim 22 ~~43~~

A method as claimed in claim 20 ~~41~~, wherein the plurality of data signals are transmitted on a plurality of carrier frequencies.

~~Claim 44~~

~~A method as claimed in any of claims 25 to 43, further comprising, at the second radio station (200), assessing the quality of received signals, determining whether transmission of a data block is in progress or suspended, and transmitting a first indication of received signal quality while transmission of the data block is in progress and for transmitting a second indication of received signal quality while transmission of the data block is suspended.~~