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AMENDMENT TRANSMITTAL LETTER (Large Entity) Applicant(s): Kenichi MIYOSHI, et al.						Docket No. L9289.02149B	
Application No.	Filing Date	Examiner		Customer	No. (Group Art Unit	Confirmation No.
10/321,623	December 18, 2002	D. Le		52989		2617	5366
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	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST # PREV. PAID FOR	1	ER EXTRA		RATE	ADDITIONAL
TOTAL CLAIMS	8 -	20 =		0	x	\$50.00	\$0.00
NDEP. CLAIMS	8 -	9 =		0	x	\$200.00	\$0.00
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Registration No. 28,732 Stevens, Davis, Miller & Mosher, LLP 1615 L Street, N.W., Suite 850 Washington, DC 20036 Tel: 202-785-0100 Fax: 202-408-5200				I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on (Date)			
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HTC v. INVT INVT Exhibit 2002 - Page 1

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Inventor:	Kenichi MIYOSHI et al.	Group Art Unit: 2683
Appln. No.:	10/321,623	Examiner: D.C. Le
Filed:	December 18, 2002	Conf. No. 5366
For:	COMMUNICATION TERMINAL A APPARATUS, AND RADIO COM	•

AMENDMENT UNDER 37 CFR § 1.111

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

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In response to the Office Action dated August 1, 2006,

please amend the above-captioned application as follows:

IN THE CLAIMS

Please amend the claims to read as follows: Listing of Claims

1-20. (Canceled).

21. (Withdrawn) A communication terminal apparatus comprising:

a measuring device that measures downlink channel quality; and

a transmitter that transmits a notification signal to notify a base station apparatus of information generated based on said measured downlink channel quality, wherein:

the transmitter transmits the notification signal using a higher transmission power than a pilot signal transmission power, when said measured downlink channel quality is better than a predetermined channel quality, and

the transmitter transmits the notification signal using a lower transmission power than the pilot signal transmission power, when said measured downlink channel quality is poorer than the predetermined channel quality.

22. (Withdrawn) A communication terminal apparatus comprising:

a measuring device that measures downlink channel quality;

a transmitter that transmits a notification signal to notify a base station apparatus of information generated based on said measured downlink channel quality;

a table that indicates a correspondence between the notification signal and transmission power; and

a rewriting device that rewrites contents of said table in accordance with a control signal from the base station apparatus, wherein:

the transmitter adjusts the transmission power used to transmit the notification signal based on the contents of said table.

23. (Previously Presented) A communication terminal apparatus comprising:

a measuring device that measures downlink channel quality; and

a transmitter that transmits a notification signal to notify a base station apparatus of information generated based on said measured downlink channel quality, wherein:

the information of the notification signal, prior to its transmission, is converted to a code word whose code-word minimum distance is proportional to the degree of measured downlink channel quality.

24. (Previously Presented) A communication terminal apparatus, comprising:

a measuring device that measures downlink channel quality;

a transmitter that transmits a notification signal to notify a base station apparatus of information generated based on said measured downlink channel quality;

a table that indicates a correspondence between the notification signal and a code word; and

a rewriting device that rewrites contents of said table in accordance with a control signal from the base station apparatus, wherein:

the transmitter converts the notification signal, prior to its transmission, to a code word based on the contents of said table.

25. (Currently Amended) A communication terminal apparatus comprising:

a measuring device that measures downlink channel quality; and

a transmitter that transmits a notification signal to notify a base station apparatus of information generated based on said measured downlink channel quality, wherein:

each of a plurality of digits representing the information of the notification signal is converted, prior to its transmission, to a code word whose code length is proportional <u>to</u> the digit's degree of significance.

26. (Canceled).

27. (Withdrawn) A communication terminal apparatus comprising:

a measuring device that measures downlink channel quality; and

a transmitter that transmits a notification signal to notify a base station apparatus of information generated based on said measured downlink channel quality, wherein:

the transmitter transmits each of a plurality of digits representing the information of the notification signal using a spreading code whose spreading factor is proportionate to the digit's degree of significance.

5

28. (Previously Presented) A communication terminal apparatus comprising:

a measuring device that measures reception quality of a pilot signal to output information having a plurality of bits that indicate the measured reception quality;

a coding device that encodes the information to obtain a code word; and

a transmitter that transmits the code word, wherein:

the coding device encodes the information such that the most significant bit of the plurality of bits is less susceptible to errors in a propagation path than other bits of the plurality of bits.

29. (Withdrawn) A base station apparatus comprising:

a receiver that receives a notification signal transmitted from a communication terminal apparatus;

a measurement device that measures reception power or the likelihood of having received the notification signal correctly;

a detector that detects whether the measured reception power or measured likelihood is less than a first threshold value;

a determination device that determines downlink communication resource allocation based on one or more received notification signals, while excluding from use a received

6

notification signal whose measured reception power or measured likelihood is detected to be less than the first threshold value;

a calculator that calculates the ratio of excluded notification signals to received notification signals; and

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a transmitter that transmits a control signal instructing the communication terminal apparatus to rewrite a table based on a result of comparison of the calculated ratio a second threshold value.

REMARKS

Reconsideration and allowance of this application are respectfully requested in light of the above amendments and the following remarks.

The Applicants acknowledge with appreciation the indication in the Office Action that claim 24 is directed to allowable subject matter.

Claim 26 is hereby canceled.

Turning to the prior art rejections, claims 23, 25 and 28 stand rejected under 35 USC §103(a) as unpatentable over Kitagawa et al. (USPN 6,603,980) in view of Kumar (US 2001/0050926). These rejections are respectfully traversed in accordance with the discussion set forth below.

The Applicants note that Kitagawa et al. disclose in column 4, line 50 to column 5, line 25 the use of a TPC bit with a variable amplitude based on the received quality, with the variable amplitude of the TPC bit being different from the amplitude of other bits of the transmission signal. The transmission signal other than the TPC bit is sent with an amplitude instructed by the communicating party and the amplitude of the TPC bit is changed based on the correction value which is proportional to a difference between the received quality and the desired quality. Kitagawa et al. further disclose that in one

slot, the amplitude of only the TPC bit is variable and the amplitude of transmission signals other than the TPC bit is fixed. That is, Kitagawa et al. disclose that, in one slot, the amplitude of the TPC bit is different from the amplitude of the bits other than the TPC bit.

The office action acknowledges that Kitagawa et al. teach the use of a TPC bit rather than the use of a code word wherein information of the notification signal, prior to its transmission, is converted to the code word. The office action cites Kumar for a teaching that information is converted to a code word, citing paragraph [0082] of Kumar.

The Applicants respectfully submit that Kitagawa et al. and Kumar have individual and collective deficiencies vis-a-vis claims 23, 25 and 28, given that both Kitagawa et al. and Kumar are completely silent with respect to at least the below-noted features of claims 23, 25 and 28:

Claim 23 recites that the information of the notification signal, prior to its transmission, is converted to a code word whose code-word minimum distance is proportional to the degree of measured downlink channel quality.

Claim 25 recites that each of a plurality of digits representing the information of the notification signal is

converted, prior to its transmission, to a code word whose code length is proportional to the digit's degree of significance.

Claim 28 recites that a coding device encodes measured reception quality information comprising a plurality of bits such that the most significant bit of the plurality of bits is less susceptible to errors in a propagation path than other bits of the plurality of bits.

Due to the above-noted individual deficiencies of Kitagawa et al. and Kumar, it is submitted that the combined teachings of these references *per force* fail to achieve or render obvious the above-noted features of claims 23, 25 and 28.

Accordingly, Kitagawa et al. and Kumar, considered alone or together, fail to disclose or suggest the subject matter of claims 23, 25 and 28.

In view of the above, it is submitted that the obviousness rejections of claims 23, 25 and 28 are unwarranted and should be withdrawn.

Having resolved all pending objections and objections, The Applicants respectfully submit that this application is in condition for allowance, and a notice to that effect is respectfully solicited.

If any issues remain which may best be resolved through a telephone communication, the Examiner is requested to telephone

10

the undersigned at the local Washington, D.C. telephone number

listed below.

Respectfully submitted,

Date: November 1, 2006 JEL/DWW/att

Jamés E. Ledbetter Registration No. 28,732

Attorney Docket No. <u>L9289.02149B</u> STEVENS DAVIS, MILLER & MOSHER, L.L.P. 1615 L Street, N.W., Suite 850 P.O. Box 34387 Washington, D.C. 20043-4387 Telephone: (202) 785-0100 Facsimile: (202) 408-5200