REMARKS

These remarks and the accompanying amendments are responsive to the Office Action dated February 27, 2008 (hereinafter referred to as the “Office Action”). At the time of the last examination, Claims 1, 2, 4-6, 8, 18-20, 22, 23, 33-37, 47, 49 and 53-85 were pending, of which Claims 1, 4, 5, 6, 8, 18, 19, 23, 33, 35, 36, 37, 47, 49, 53, 54, 62, 69, 70, 78 and 85 are independent. The Office Action rejected Claims 62 and 78, allowed Claims 1, 2, 4-6, 8, 18-20, 22, 23, 33-37, 47, 49, 53-61, 64-77 and 80-85, and objected to Claims 63 and 79.

Section 4 of the Office Action rejects Claims 62 and 78 under 35 U.S.C. 103(a) as being unpatentable over article IEEE, “Channel Estimation Using Time Multiplexed Pilot Symbols for Cohnernet Rake Combining for DS-CDMA Mobile Radio” which was authored by Andoh et al. (the article hereinafter referred to simply as “Andoh”) in view of United States patent number 6,487,236 issued to Iwamatsu et al. (the patent hereinafter referred to simply as “Iwamatsu”).

Claims 62 and 78, each of which being independent claims, have been amended herein. The amended language clearly specifies that the reliability is calculated for each of the plurality of demodulated data, and that the selection of the output data sequence is based on the reliability of the plurality of demodulated data sequences. Andoh and Iwamatsu (or any of the other art of record) do not disclose or suggest these features of Claims 62 and 78, especially when used in relation to the other recited features of Claims 62 and 78.

The Office Action concedes that Andoh reference does not disclose deriving a plurality of demodulated data sequences or selecting one output data sequence based on the reliability of the plurality of demodulated data sequences (see, e.g., page 3 of the Office Action, lines 1-4). The Office Action does, however, assert that Iwamatsu teaches these features (see, e.g., page 3 of
the Office Action, lines 4-7. The Office Action cites the Iwamatsu passage extending from column 20, line 65 to column 21, line 14 in an attempt to support this assertion.

However, the cited Iwamatsu passage differs from the arrangement recited in the amended claims 62 and 78 in that Iwamatsu selects the largest one of the corrected correlation energies, each of which corresponds to, a Walsh number. There is no selecting of an output data sequence, or the use of the reliabilities of the demodulate data sequences in making the selection in Iwamatsu.

More specifically, in Iwamatsu, each of the reliability decision units 67 obtains an optimum reliability by averaging reliability values from all the demodulation fingers 11-1 to 11-4 (see Iwamatsu, column 21, lines 15-21 and Figures 23-24). Each of the reliabilities thus calculated is further multiplied with a corrected correlation energy, which corresponds to a Walsh number. The maximum energy selecting means 19 selects maximum corrected correlation energy from among a plurality of corrected correlation energies that are correlated with different Walsh numbers (see Iwamatus, column 2, lines 28-34).

Walsh numbers are, as discussed in column 4, lines 22-26 of Iwamatus, a 6-bit input code to be spread to a 64-bit output code (Walsh code). They are used for M-sequence orthogonal modulation, which is used in an asynchronous detection system. On the other hand, a detection system using an externally inserted pilot signal, which the recitation of Claims 62 sand 78 may use, is a synchronous detection system, to be contrasted with an asynchronous detection system. In other words; the recited Claims 62 and 78 and the Iwamatsu patent come from very different technological underpinnings. Furthermore, Iwamatsu discourages the use of a synchronous detection system, as such synchronous detection system requires a major increase in the size of the hardware (See Iwamatsu, col. 1, line 60 through column 2, line 10). Thus, the Applicants
respectfully submit that the recited Claims 62 and 78 would not occur to a person of ordinary skill in the art even if Iwamatsu and Andoh were combined, the appropriateness of the combination not being conceded.

Accordingly, the 35 U.S.C. 103(a) rejection of Claims 62 and 78 should be withdrawn, and thus favorable action is respectfully requested. In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney.

Dated this 27th day of May, 2008.

Respectfully submitted,

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