REMARKS/ARGUMENTS

After the foregoing Amendment, claims 13-15 are currently pending in this application.

Claim Rejections - 35 USC § 102

Claim 15 is rejected under U.S.C. 102(b) as being unpatentable over Yoshida et al., Yoshida hereinafter (U.S. 6,359,864, of a record).

Yoshida discloses in FIG.1 that user spreading circuits 101-1 to 101-k in the transmitter spread users signals 10-1 to 10-k stations with unique codes. Each respective user is assigned a unique code for use in the transmission of data. Yoshida also discloses that the receiver detects the reception signal and extracts the user signal. However, Yoshida does not teach or suggest the combining of user data with a plurality of different pseudo noise sequences. Yoshida clearly states each respective user is assigned a unique code which is used to transmit and receive data. Also, Yoshida does not teach or suggest producing pilot bits for each antenna of a plurality of antennas, wherein the pilot bits for each antenna are derived using different pseudo noise sequences. Yoshida describes the pilot signal spreading circuits (encoder) as, "pilot spreading circuits 104-1 to 104-N (N is an integer not less than two). The Applicant respectfully disagrees with the Examiner assertion that the pilot spreading encoder may be interpreted as, "the circuit configured to

- 5 -

produce pilot bits for each antenna of a plurality of antennas; wherein the pilot bits

for each antenna are derived using different pseudo noise sequences."

Based on the arguments presented above, withdrawal of the 102(b) rejection

of claim 15 is respectfully requested.

Claim Rejections - 35 USC § 103(a)

Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Yoshida et al., Yoshida hereinafter (U.S. patent number 6,359,864, of a record)

in view Vook et al., Vook hereinafter (U.S. patent number 5,982,327, previously

cited by Applicant).

Yoshida discloses in FIG.2 that a user will receive the signal produced and

transmitted from one of the spreading circuits 101-1 to 101-k comprising a unique

code. However, Yoshida does not teach or suggest the combining of user data with a

plurality of different pseudo noise sequences. Yoshida clearly states each respective

user is assigned a unique code. Also, Yoshida does not teach or suggest producing

pilot bits for each antenna of a plurality of antennas, wherein the pilot bits for each

antenna are derived using different pseudo noise sequences. Yoshida describes the

pilot signal spreading circuits (encoder) as, "pilot spreading circuits 104-1 to 104-N

(N is an integer not less than two). The pilot encoder describe as an integer not less

than two cannot be interpreted as the pilot bits for each antenna are derived using different pseudo noise sequences.

Vook teaches a method of a subscriber unit receiving the same data signal over several antennas based on a process using at least two covariance matrices and at least two steering vectors determined from the pilot symbols. Vook also teaches that if more than one transmitter is assigned to transmit to the receiver in a time-frequency slot, then an access technique called spatial division multiple access (SDMA) is used by the receiver. Vook teaches the communication receiver to receive, separately, the signals transmitted by the multiple transmitters sharing the same time-frequency slot. However, Vook does not teach the recovering of user data from each of the different pseudo noise sequences and combining of the recovered user data from each of the different pseudo noise sequences. Covariance matrices and steering vectors are not pseudo noise sequences.

Claim 14 is dependent upon claim 13 and the Applicant believes this claim is allowable over the cited references of record for the same reasons provided above.

Based on the arguments presented above, withdrawal of the 103(a) rejection of claims 13 and 14 is respectfully requested.

Conclusion

If the Examiner believes that any additional minor formal matters need to be addressed in order to place this application in condition for allowance, or that a telephonic interview will help to materially advance the prosecution of this application, the Examiner is invited to contact the undersigned by telephone at the Examiner's convenience.

In view of the foregoing amendment and remarks, Applicant respectfully submits that the present application is in condition for allowance and a notice to that effect is respectfully requested.

Respectfully submitted,

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