LIST OF KEY PUBLICATIONS AND PATENTS

BOOKS

PAPERS IN INTERNATIONAL JOURNALS
(On Communications: CDMA, Code acquisition, MIMO, Modulation, OFDM, etc)

(On Information Theory and Mathematics: Coding, Sequence, Series, etc)

(On Signal Detection: LO detection, Nonparametric detection, Quantization, etc)
(On Statistical Signal Processing: Equalizer, Nonlinear filtering, Parameter estimation, etc)


(On Miscellaneous Topics)


Further details on publications are available at
http://bungae.kaist.ac.kr/publist.htm
INTERNATIONAL PATENTS

KOREAN PATENTS
1. Method for allocating signature sequence in CDMA system (registered as 0267706 on July 6, 2000; originally filed as 1998-0029984 on July 24, 1998)
2. SP sequences and its application methods to DS/CDMA systems (registered as 0350237 on Aug. 13, 2002; originally filed as 2000-61081 on Oct. 17, 2000)
3. Multicarrier DS/CDMA systems using a turbo code with nonuniform repetition coding (registered as 0361033 on Oct. 31, 2002; originally filed as 2001-2470 on Jan. 16, 2001)
4. An adaptive transmission scheme for multicarrier DS/CDMA systems (registered as 0368794 on Jan. 8, 2003; originally filed as 2000-79866 on Dec. 21, 2000)
5. A new detector for fast code acquisition in frequency-selective fading channels (registered as 0375148 on Feb. 24, 2003; originally filed as 2001-23510 on Apr. 30, 2001)
6. A combiner of two correct cells for fast code acquisition (registered as 0387946 on June 24, 2003; originally filed as 2000-83713 on Dec. 28, 2000)
7. A fast code acquisition method based on sign and rank statistics (registered as 0407772 on Nov. 19, 2003; originally filed as 2001-2469 on Jan. 16, 2001)
8. The space-based alarm system and method of wireless phone using GPS (registered as 0445779 on Aug. 16, 2004; originally filed as 2002-008111 on Feb. 15, 2002)
10. A method of rapid acquisition of PN sequences with a new decision logic (registered as 0562679 on Mar. 14, 2006; originally filed as 10-2004-0048603 on June 25, 2004)
12. A blind equalization method based on a novel convergence detector (registered as 0662245 on Dec. 21, 2006; originally filed as 10-2004-72360 on Sep. 9, 2004)
13. A truncated adaptive transmission scheme for a CDMA/FDM system in forward link (registered as 10-0684032 on Feb. 10, 2007; originally filed as 2005-114672 on Nov. 29, 2005)
14. An optimum rake receiver appropriate for impulsive environment with reduced complexity (registered as 10-0689246 on Feb. 23, 2007; originally filed as 2005-51424 on June 15, 2005)
15. A novel detection method for weak M-ary signals in ultra wideband multiple access systems (registered as 10-0699719 on Mar. 20, 2007; originally filed as 2005-51862 on June 16, 2005)
16. A difference threshold test for M-FSK signals (registered as 10-0720861 on May 16, 2007; originally filed as 2005-114673 on Nov. 29, 2005)