Smart Antenna System for 802.11A Applications

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TECHNOLOGY DESCRIPTION

Given here is an innovative multiple sub-carrier selection diversity receiver architecture for WLAN OFDM systems with multiple antennas. With a small increase in analog complexity, it is shown that significant gain can be achieved by the proposed technique over selection diversity for WLAN OFDM systems. The technique requires only a single A/D and DFT, which eases the baseband hardware requirements significantly.

APPLICATIONS

The invention will find applications in RF receiver design for WLAN OFDM systems with multiple antennas. It is also anticipated to be a good candidate for OFDM systems using a more complex frequency-domain combining. For example, in a system with four receiver antennas, MSCS combining can be employed to yield two outputs with an optimized SNR for subsequent maximal ration combining, thereby requiring only two complex A/D and DFTs.

RELATED MATERIALS

A detailed paper on this invention can be reviewed under available NDA.

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	8,462,868	06/11/2013	2004-191

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OTHER INFORMATION

CATEGORIZED AS

- Communications
  - Internet
  - Networking
  - Wireless
- Computer
  - Other

RELATED CASES

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