Santenna
Smart Antenna Networks

Santenna proposes novel adaptive Multiple-Input Multiple-Output – Space-Polarization Division Multiple-Access (MIMO-SPDMA) technology for wireless smart antenna applications.

Goals

- Enhanced-capacity, high-rate data transmission, wide coverage and reliable communication services for WiMAX and 4G Cellular communications.
- Efficient low-cost handling of these tasks.
- Deployment of enhanced-capacity high-rate data transmission without a large array of base stations and antennas.
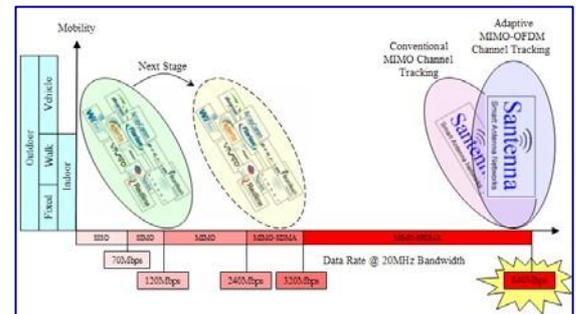
Benefits

- Able to extend the capacity of current wireless systems, such as WiMAX and 4G Cellular communications, by 40–100%
- Supports enhanced-capacity, high-rate, high-speed internet connections, video phone calls and video on demand (VoD).

Potential Commercial Uses

WiMAX – sales projection of $290 million by 2008; initial response to new WiMAX-based chips expected to be strongest in China, Southeast Asia, and Eastern Europe.
4G Cellular – communications-market sales projection of $800 billion by 2009-2010.

Development Stage and Development Status Summary

The Santenna prototype is designed and ready. Its unique smart antenna technology has been extensively tested by computer simulation.
Development plan - The objective of the development stage is to create a prototype system that includes a base-station communicating with several mobile units.

Patent Status

Patent Pending

Research Team

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