Eva Villalon Martin

UPC Universitat Politècnica de Catalunya

Bilateral Meetings

- 02.03.2015 Monday (11.00h - 13.05h)
- 02.03.2015 Monday (13.05h - 15.10h)
- 02.03.2015 Monday (15.10h - 18.05h)
- 03.03.2015 Tuesday (9.00h - 11.05h)
- 03.03.2015 Tuesday (11.05h - 13.10h)
- 03.03.2015 Tuesday (13.10h - 15.15h)
- 03.03.2015 Tuesday (15.15h - 16.55h)
- 04.03.2015 Wednesday (9.00h - 11.05h)
- 04.03.2015 Wednesday (11.05h - 13.10h)
- 04.03.2015 Wednesday (13.10h - 15.15h)
- 04.03.2015 Wednesday (15.15h - 16.55h)

Description
Technical University
Organization Type
University
Organization Size
250+
Areas of Activities

HARDWARE

1. Antennas, aerial, masts and towers
2. Batteries
3. Femtocells
4. In-building systems
5. Location technologies and services

SOFTWARE/INTERNET

1. Application development

Offer

DIFFERENTIAL TEMPERATURE SENSOR WITH IMMUNITY TO THERMAL INTERFERENCES

The technology relates to an electronic circuit designed so as to be built into a semiconductor crystal that can provide an electric magnitude at the output thereof depending on the temperature difference between two areas of the surface of said semiconductor crystal, simultaneously demonstrating a high rejection of potential thermal interferences from other areas of the same crystal. Partners to further develop the system and/or to establish commercial agreements along with technical cooperation are sought.

Cooperation Offered

1. Technical co-operation
2. License agreement

Offer

CORRELATOR FOR MULTIPLE RADIOFREQUENCY SIGNAL RECEIVERS, IMPLEMENTED WITH OPTICAL TECHNOLOGY

The technology relates to a system for correlating radiofrequency signals (RF) with optical processing techniques, applied to interferometric and passive image-forming systems. The system consists of a subsystem of electro-optical conversion that converts the signals from the RF receivers to the optical domain, a subsystem for the distribution and combination of the optical signals, and a subsystem for optoelectronic conversion and detection of power that obtains, as a result, the correlation value between each pair of radiofrequency receivers. The system solves the problem of the distribution and correlation of large bandwidth signals. This type of correlation is especially necessary in passive image systems working in a millimetric frequency band. The electro-optical conversion allows the use of components and methodology that are used in photonics in order to combine the signals obtained by each pair of receivers. As a result of the ease of guiding of the optical signals and the capacity of integration of the photonic components, the technology eliminates complexity in relation to the current state of the art. Partners to further develop the system and/or to establish commercial agreements along with technical cooperation are sought.

Cooperation Offered

1. Technical co-operation
2. License agreement

Offer

METHOD AND SYSTEMS FOR DESCENTRALIZED INTERFERENCE MANAGEMENT IN A WIRELESS COMMUNICATION SYSTEM

This technology relates to the field of wireless communications. More specifically, technology relates to methods and systems for decentralized managing of interference in multi-antenna systems, that includes transmitter design for

controlling the generated interference and receiver design for mitigating the interference, through the self-configuration of the transmit power, the transmit precoding, and the receive filter, in a multi-cell network based on Time Division Duplexing (TDD). The proposed methods rely on propagation channel reciprocity for decentralized interference management. The technology is applicable to a communication resource access, particularly for an enhanced downlink and uplink of packet-based data employed in an Orthogonal Frequency Division Multiple Access (OFDMA)-based system, as used in the 3rd Generation Partnership Project (3GPP) Long Term Evolution Advanced (LTE-Advanced) standard. Partners to further develop the system and/or to establish commercial agreements along with technical cooperation are sought.

Cooperation Offered

1. Technical co-operation
2. License agreement

Offer

METHOD FOR ENCODING/DECODING SIGNAL AMPLITUDE BY MEANS OF FOLDING AND AUXILIARY INFORMATION LABELS

The technology relates to the encoding and decoding of a data signal. The encoded signal is obtained on the basis of a multi-level signal with information and using symmetry and folding at limits determined by the physical characteristics of the devices. The technique consists in indicating the limits of the amplitude of the signal, which serve as axes of symmetry, about which the signal is folded as many times as necessary until a signal is obtained that has an amplitude within the defined limits. Auxiliary information labels are added to the transmitted signal in order to indicate the number of folds in each sample of the signal. This information is detected and used by the decoder in the receiver in order to correctly recover the information from the signal. Partners to further develop the system and/or to establish commercial agreements along with technical cooperation are sought.

Cooperation Offered

1. Technical co-operation
2. License agreement