WIDE-BANDWIDTH COUPLING DEVICE FOR POWER LINES

TECHNOLOGY DESCRIPTION

Coupling device wide bandwidth that consists in a coupling device of high bandwidth that is to enable signals to be measured higher than those of the power mains, typically ranging from 20 to 5 Hz and 400 Hz.

The device can measure frequencies from units to tens of kilohertz megahertz, separating the portion corresponding to the operating frequency of the electrical power grid along with thei rharmonic signals of higher frequency signal.

The main novelty of the invention lies in the particular filter configuration 50 "T," which presents the peculiarity that the input capacitor voltage is high, the inductor consists of an induction circuit simulator and the filter output "T" comprises low voltage components are determined by a capacitor and / or resistor.

This invention is applicable in the lines of the distribution networks of electricity high, medium and low voltage to measure higher mains power frequencies such as those used to send communication signals through the power line.

APLICATION BUSINESS SECTORS

Distribution networks and high power medium voltage (equipment manufacturers, monitoring and diagnosis of power grid).

TECHNICAL ADVANTAGES AND BUSINESS BENEFITS

- Can measure frequencies from units to tens of kilohertz megahertz, separating the portion corresponding to the operating frequency of the electrical power grid along with their harmonic signals of higher frequency signal.
- The invention is applicable in the lines of the distribution networks of electricity high, medium and low voltage.
- Filter in "T" of the conventional type in which the invention is based to obtain acoupling device of high bandwidth.
- Connection in steps of two stages of filters in "T" in accordance with the prior art.
- Block diagram of a generic device in step filtering configuration, in which alsoincludes an auxiliary circuit which allows monitoring the voltage waveform of the power line.

CURREN STAGE OF THE TECHNOLOGY

Prototype.

INTELLECTUAL PROPERTY RIGHTS

The technology comes from research conducted through a project and belongs to the Institute for Energy Technology. The technology is protected by patent:

- “Dispositivo de acoplamiento de gran ancho de banda para líneas eléctricas”.ES2402508.
- ”Wide-bandwidth Coupling device for power lines” ApplicationWO2013/045727A1

COLLABORATION SOUGHT

Companies interested in the following forms of cooperation:

- Agreement patent license for implementation and use of technology.
- Agreement for the development of the R & D (TC) to complete the development of technology, or application to other sectors.

RELATED IMAGES

CONTACT DATA

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