

## ELECTRICAL FIELD SENSOR

### DESCRIPTION OF THE TECHNOLOGY

An electrical field sensor based on a virtually floating electrode and purpose of which consists of providing a continuous and low frequency electrical field meter that overcomes the drawbacks of the electrical field meters of the state of the art such as lack of stability or requiring mechanical elements.

The measuring sensor or device of said invention comprises a floating electrode that is placed in small areas of its surface on an insulator attached to a control electrode provided with an opening in which an electrostatic probe with shielding that allows performing surface

potential measurements without physical contact is applied, and which is connected to a measuring block that is in turn connected to an attenuator attached to a controlled high voltage source connected to the control electrode, thereby providing potential measurements on the control electrode without mechanical components and without physical contact, so that the measurement does not cause the discharge of said control electrode and the introduction there in of eddy current that could overlap the measurements made.

### BUSINESS APLICATION SECTORS

Those requiring measurement of atmospheric electric field:

- Manufacturers of lightning rod
- Meteorology (general)

### TECHNICAL ADVANTAGES AND BUSINESS BENEFITS

- The discharge electrode is prevented by measuring leakage current determining unstable signals and producing long-term errors.
- Allows measuring the potential of the floating plate or electrode without contact, and therefore without discharging that plate and introducing no eddy currents that could overlap with the measurements themselves.
- Allows the discharge currents characteristic of the floating electrode or plate to be zero by controlling a potential that virtually cancels the potential difference to ground.

### CURRENT STATE OF THE TECHNOLOGY

Prototype tested.

### 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:

- "Sensor de campo eléctrico" - ES2338975
- "Electrical field sensor" -EP2365347A1
- "Electrical field sensor"- WO2010055180

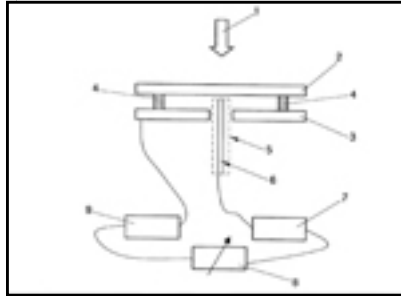
### COLLABORATION SOUGHT

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 IMÁGES



#### CONTACT DATA

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