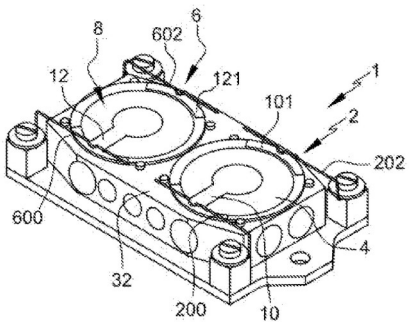
DEVICE FOR MEASURING AIR MOISTURE CONTENT

Technological advantages

- Improvement in the accuracy of the air moisture measurements



Schematic view of the sensors
4) and 8) quartz disks
2) and 6) piezoelectric sensors
10) and 12) electrode mounted on each disk
200) 202) 600) 602) metal shafts or spring wires

Invention synthesis

The measurement device for the air moisture content is equipped with 2 piezoelectric sensors each mounted with a quartz disk. The first sensor allows measuring the change in the quartz disk resonant frequency allowing for a direct measurement of the condensed water mass onto the quartz disk. The second sensor allows for an accurate temperature measurement at the disk center. This temperature is close to the dew or frost point.

Potential applications

- Well suited to air environments exhibiting very low water concentration in its vapor state.

Commercial benefits

- Reliable measurements in dry atmospheres such as in the stratosphere.

Patented invention - under license.

For more information :

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