

Title (en)

METHOD AND CIRCUIT ARRANGEMENT FOR DETERMINING AN ELECTRIC MEASUREMENT VALUE FOR A RESISTANCE ELEMENT, PREFERABLY FOR DETERMINING AN ELECTRIC CURRENT THAT FLOWS THROUGH SAID RESISTANCE ELEMENT

Title (de)

VERFAHREN UND SCHALTUNGSAORDNUNG ZUR BESTIMMUNG EINES ELEKTRISCHEN MESSWERTS FÜR EIN WIDERSTANDSELEMENT, VORZUGSWEISE ZUR BESTIMMUNG EINES ELEKTRISCHEN STROMS DURCH DAS WIDERSTANDSELEMENT

Title (fr)

PROCEDE ET CIRCUIT POUR LA DETERMINATION D'UNE VALEUR DE MESURE ELECTRIQUE RELATIVE A UN ELEMENT DE RESISTANCE, DE PREFERENCE POUR LA DETERMINATION D'UN COURANT ELECTRIQUE TRAVERSANT UN TEL ELEMENT DE RESISTANCE

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Abstract (en)

[origin: WO2004070401A1] The invention relates to a method and a circuit arrangement for determining an electric measurement value for a resistance element (R22), preferably for determining an electric current that flows through said resistance element (R22), whereby the resistance element (R22) to be measured is interconnected to additional resistance elements within a resistance array (2) consisting of columns (CL1, CL2, CL3) and rows (R1, R2, R3) of resistance elements. According to the invention, the load of a basic load resistance element (R13), which is connected between the output of a measurement/supply unit (1) and the common ground terminal connection of the resistance array (2), is applied to the measurement voltage (MEAS). The measurement voltage (MEAS) is simultaneously connected to the input of an impedance transformer (OCL, OR), whose output is connected in a subsequent step to the resistance elements in the resistance array (2) that are not to be measured. This prevents a voltage differential at the input of the operation amplifier, eliminating to a great extent undesired signal fluctuations, which could falsify the measurement result.

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