

The invention relates to the field of electric measurements and may be used for transmission of the electric resistance unit from the primary standard to collective standards, for check-out of the accurate voltage and current dividers, as well as for measurement of the current voltage, resistance etc.

Summary of the invention consists in that in the first stage it is carried out the adjustment of the second arm first step, in the second stage it is carried out the adjustment of the second arm, for the purpose of which it is formed the second arm consisted of the first and second resistive steps connected in series and the third resistive step connected in parallel to the first two, the second resistive step is formed of n resistors connected in parallel, each having the resistance value $((n+p) \cdot n \cdot (k_1 \cdot m_2) / (k_2 \cdot m_1)) \cdot R_0$, the third resistive step is formed of p resistors connected in parallel, each having the resistance $(n+p) \cdot R_0$, it is carried out change of resistance of the second arm of the voltage divider up to the value equal to the resistance value of the first arm of the voltage divider by changing the resistance of the third resistive step, and in the third stage there are finally formed the arms of the voltage divider in the form of series, parallel or series-parallel connection of the adjusted steps thereof, in the first stage in the capacity of first step of the second arm of the voltage divider being used the matrix of $k_1 \cdot m_1$ resistors connected in series-parallel, in the capacity of first arm of the voltage divider being used the matrix of $k_0 \cdot m_0$ resistors, the first resistive step is transformed in the second stage in matrix of $k_2 \cdot m_2$ resistors, and in the third stage - in matrix of $k_3 \cdot m_3$ resistors, moreover with a view of realization of the transformation it is observed the condition:

$k_1 \cdot m_1 = k_2 \cdot m_2 = k_3 \cdot m_3$, wherein:

n is the number of resistors in the second step of the voltage divider;

p – the number of resistors in the third step of the voltage divider;

k_0 - k_3 – the number of ramifications (lines) in the matrix of resistors;

m_0 - m_3 is the number of resistors in the ramification (line) of the matrix of resistors;

R_0 – the nominal value of resistance of the first (reference) arm of the voltage divider;

and the first arm of the voltage divider is transformed in matrix of $k_{01} \cdot m_{01}$ resistors.

Claims: 1

Fig.: 6