

The invention relates to electric and electronic measurements and can be used for high-precision measurement of impedance components.

The method consists in the formation of a series measuring circuit from the measured object, output terminals of an impedance converter with separate regulation of active and reactive components of the reproduced impedance and a signal generator, formation of a non-equilibrium signal from the total voltage drop on the measured object and the output circuit of the converter, control of phase shift between the non-equilibrium signal and reference signals, equilibration of the measuring circuit by regulating the components of the impedance reproduced by the converter and determination of components of the measured impedance from their known dependence on the components of the impedance reproduced by the converter in the equilibrium state. Regulation of components of the impedance reproduced by the converter is performed concomitantly, up to the attainment of a phase shift of  $180^\circ$  or  $0^\circ$  between the non-equilibrium and reference signals, and as reference signals for regulation of active and reactive components are used, respectively, the voltage drops on the reactive and active components of the impedance reproduced by the converter.

Claims: 1

Fig.: 3