The invention relates to the field of identification of material resources by means of obtaining spectral characteristics and may be used both at the identification of documents, banknotes, stamps, persons, transport facilities, liquid, gaseous, powder media and identification of any other objects.

The process for spectral identification of material resources objects consists in the concomitant use of at least two independent processes for obtaining spectral characteristics both of the mark and the proper object, being in different frequency ranges, the information about two or more spectral characteristics is processed in the form of multidimensional hologram, and the object identification is carried out by comparing the multidimensional reference hologram, stored in the central database of the object, with the multidimensional hologram obtained from the object.

The peculiarity of the installation for isotopic mark obtaining consists in that the installation additionally comprises a random-number generator, connected to the control unit and to each metering valve, as well as at least a second reservoir for the obtained isotopic marks, connected to the reservoirs for storage of isotopic substances analogously to the first one.

Claims: 50 Fig.: 22