Combination of General Ray Method and Rotating Projection Algorithm for Fast Recognition of Discreet Micro Scale Compound Structures

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A new fast method of high resolvability for identification of discreet compound structures is proposed. Its mathematical model is constructed on the basis of General Ray Principle, proposed by the author for distribution of different, in particular electrostatic and thermostatic, fields. Constructed combination of General Ray Method and Rotating Projection algorithm opens possibility for high resolvability and fast computer recognition of compound structures with micro components, using Electrical or Thermo tomography. Computer simulation of developed scheme is realized as MATLAB software and justified by numerical experiments.

Keywords: General Ray Method, Rotating Projection algorithm, discreet compound structure