

## **A composite soft magnetic material and products on its basis**

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The experimental-industrial technology for producing a soft magnetic material based on iron powder ASC100.29, covered with a layer of nanometer magnetic insulator is developed. The magnetic characteristics of the materials in the frequency range up to 1 MHz was investigated. As a result shown, that the saturation magnetic flux density is  $B_m = 2,1$  Tesla and the maximal permeability  $\mu_m = 800 - 1000$ . The prototypes of power supplies for various purposes, generators, motors, chokes, and other devices are developed with using the soft magnetic composite material.