Patent for invention “Method for the integrated processing of dolomite”

The Institute of General and Inorganic Chemistry, Academy of Sciences of the Republic of Uzbekistan received a patent for the invention “Method for the integrated processing of dolomite”, issued by the Intellectual Property Agency under the Ministry of Justice of the Republic of Uzbekistan. The authors of this patent are employees of J. Adylov and E. Safonov.

This invention relates to a technology for processing mineral raw materials of dolomite, and can be used to produce magnesium oxide or its derivatives, as well as chemically precipitated calcium carbonate, which are used in the production of paper and plastic fillers, mineral fertilizers, in metallurgy, in the production of refractories, and the production of heat-resistant products, ceramics, glass, pharmaceuticals, etc.

The invention of scientists solves the problem of complex processing of dolomite to obtain basic magnesium carbonate, magnesium oxide and hydroxide, precipitated calcium carbonate while saving energy and reagents.

The method of complex processing of dolomite includes its heat treatment with addition and grinding, treatment with a solution of carbon ammonium salts, precipitation of calcium carbonate, filtration, separation of a solution of magnesium-containing salts, heat treatment, followed by precipitation of basic magnesium carbonate.

The technical result from the use of the invention is to simplify the technology to obtain chemically pure products.