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The invention relates to a process for nanodispersed titanium dioxide obtaining that may be used as pigment in the varnish-and-paint materials, as well as catalyst in different branches of industry.
The process includes treatment of the 20…50% aqueous solution of titanium tetrachloride with ammonia, extrusion of the obtained complex solution through a system of microholes with jet interruption into a liquid cooling agent with formation of titanium-containing cryohydrate complex spherical particles, subsequent fluidization of the super-cooled particles and hydrolytic decomposition, with formation of titanium dioxide particles, into an airflow heated up to the temperature of 200…500°C.
At the same time, as liquid cooling agent is used liquefied nitrogen.

Claims: 2