

Resource- and Energy-Saving Method for Obtaining Hydrogen Fluoride and Hydrite Fluoride

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Abstract: An ecologically and economically effective technical solution has been developed for the production of hydrogen fluoride and fluorine hydrite by using fluorosulfonic acid in the decomposition technology of fluorspar. The stages of the technology of obtaining hydrogen fluoride and fluorine hydrite are shown: obtaining fluorosulfonic acid itself, decomposition of calcium fluoride with fluorosulfonic acid and hydrolysis of calcium fluorosulfonate with water vapor to form fluorosulfonic acid, recycled, hydrogen fluoride and fluorine hydrite. Experimental data have shown the promise of this technology.

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