

Title (en)

METHOD FOR PRODUCING TRICHLOROSILANE BY THERMAL HYDRATION OF TETRACHLOROSILANE

Title (de)

VERFAHREN ZUR HERSTELLUNG VON TRICHLORSILAN MITTELS THERMISCHER HYDRIERUNG VON SILICIUMTETRACHLORID

Title (fr)

PROCEDE DE PRODUCTION DE TRICHLOROSILANE PAR HYDROGENATION THERMIQUE DE TETRACHLORURE DE SILICIUM

Publication

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Application

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Abstract (en)

[origin: WO2006081980A2] The invention relates to method, wherein a tetrachlorosilane-containing feed gas and a hydrogen-containing feed gas are reacted at a temperature of 700 °C to 1500 °C, thereby producing a thrichlorosilane-containing product mixture. The inventive method is characterized by cooling the product mixture during a retention time of the reaction gas in the heat exchanger t [ms] to a temperature T<SUB>Abkühlung</SUB>, with (equation 1), wherein A = 4000, 6 = B = 50, and 100 °C = T<SUB>Abkühlung</SUB> = 900 °C, and by using the energy of the product gas dissipated via the heat exchanger to heat the feed gases.

IPC 8 full level

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