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(54) Title: HEXAKIS (MONOHYDROCARBYLAMINO) DISILANES AND METHOD FOR THE PREPARATION THEREOF

(57) Abstract: (Problems) - To provide silane compounds that are free of chlorine, that provide excellent film-forming characteristics at low temperatures in the case of silicon nitride films and silicon oxynitride films, and that also have excellent handling characteristics. Also, to provide a method for preparing these silane compounds. (Solution) - Hexakis (monohydrocarbylamino) disilanes with general formula (I) $((R)HN)_3-Si-Si-(NH(R))_3$ (I) wherein each R independently represents C_1 to C_4 hydrocarbyl. These disilanes can be synthesized by reacting hexachlorodisilane in organic solvent with at least 6-fold moles of the monohydrocarbylamine RNH_2 (wherein R is C_1 to C_4 hydrocarbyl).



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