[PTL 5] Japanese Patent Application Laid-open No. H01-198631

[PTL 6] Japanese Patent Application Laid-open No. H02-184513

[PTL 7] Japanese Patent Application Laid-open No. H05-032785

[PTL 8] Japanese Patent Application Laid-open No. H03-183613

[PTL 9] Japanese Translation of PCT Application No. 2013-506541

[Non Patent Literature]

[0004]

[NPL 1] Hydrogen Compounds of Silicon. I. The Preparation of Mono- and Disilane, WARREN C. JOHNSON and SAMPSON ISENBERG, J. Am. Chem. Soc., 1935, 57, 1349.

[NPL 2] The Preparation and Some Properties of Hydrides of Elements of the Fourth Group of the Periodic System and of their Organic Derivatives, A. E. FINHOLT, A. C. BOND Jr., K. E. WILZBACH and H. I. SCHLESINGER, J. Am. Chem. Soc., 1947, 69, 2692.

[Summary]

[0004a] In one aspect of the present disclosure, there is provided a method for producing an oligosilane, comprising a reaction step of producing an oligosilane by dehydrogenative coupling of hydrosilane,
wherein the reaction step is carried out in the presence of a zeolite having pores with a minor diameter of at least 0.43 nm and a major diameter of not more than 0.69 nm.

[Technical Problem]

[0005] The acid decomposition of magnesium silicide, reduction of hexachlorodisilane, and electric discharge in monosilane reported as oligosilane production methods generally have tended to readily impose high production costs. There has also been room for improvement with, for example, thermal silane decomposition and catalytic dehydrogenative coupling with regard to the selective synthesis of a particular oligosilane, e.g., disilane.