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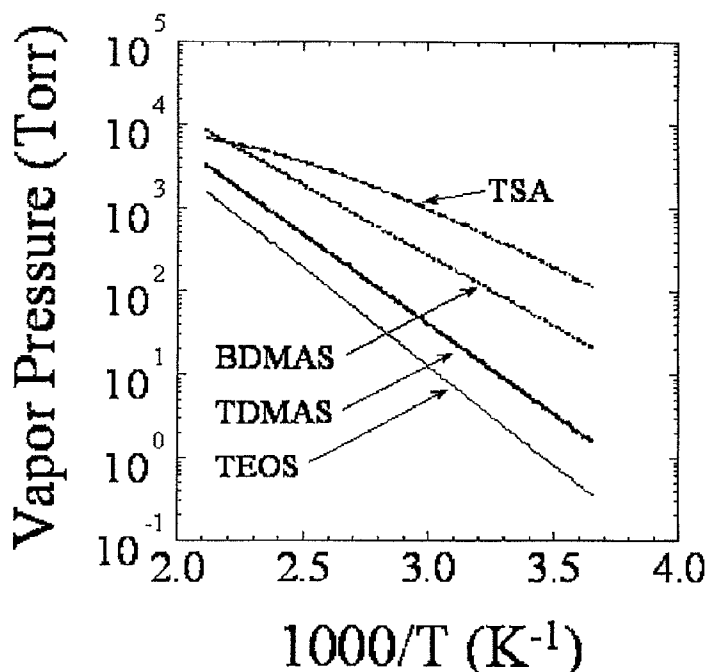
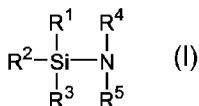
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(54) Title: METHOD OF FORMING A HIGH DIELECTRIC CONSTANT FILM AND METHOD OF FORMING A SEMICONDUCTOR DEVICE



(57) Abstract: The method for forming a high dielectric constant film metal silicate on a substrate by atomic layer deposition using the gas of a metal-containing compound and the gas of a silicon-containing compound represented by the general formula (I), wherein R^1 , R^2 and R^3 in the preceding general formula are each independently selected from the hydrogen atom, C_{1-3} alkyl, and $\text{N}(\text{R}^6)_2$ (wherein each of the plurality of R^6 groups is independently selected from the hydrogen atom, C_{1-3} alkyl, and $\text{Si}(\text{R}^7)_3$ (wherein each of the plurality of R^7 groups is independently selected from the hydrogen atom and C_{1-3} alkyl)); R^4 and R^5 are each independently selected from the hydrogen atom, C_{1-3} alkyl, and $\text{Si}(\text{R}^8)_3$ (wherein each of the plurality of R^8 groups is independently selected from the hydrogen atom, C_{1-3} alkyl, and $\text{NHSi}(\text{R}^9)_3$ (wherein each of the plurality of R^9 groups is independently selected from the hydrogen atom and C_{1-3} alkyl)); and the value of (the number of carbon atoms in the preceding general formula)/(number of silicon atoms in the preceding general formula) is no more than 7.



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