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(54) Title: METHOD FOR PRODUCING AMORPHOUS SILICON SACRIFICE FILM AND AMORPHOUS SILICON FORMING COMPOSITION

(57) Abstract: The present invention provides a method for producing a novel amorphous silicon sacrifice film and an amorphous silicon forming composition capable of filling trenches having a high aspect ratio to form an amorphous silicon sacrifice film that is excellent in affinity with a substrate. A method for producing an amorphous silicon sacrifice film, comprising (i) polymerizing a cyclic polysilane comprising 5 or more silicon or a composition comprising the cyclic polysilane by light irradiation and/or heating to form a polymer having a polysilane skeleton, (ii) applying an amorphous silicon forming composition comprising said polymer having a polysilane skeleton, polysilazane and a solvent above a substrate to form a coating film, and (iii) heating the coating film in a non-oxidizing atmosphere.



WO 2020/109301 A1