ABSTRACT

SILICEOUS FILM WITH SMALLER FLAT BAND SHIFT AND METHOD FOR PRODUCING SAME

There are provided a process for producing a siliceous film having excellent insulating properties, and a coating composition for use in the process. The coating composition comprises a perhydropolysilazane or modified perhydropolysilazane having a number average molecular weight of 100 to 50,000 and an aluminum compound, the composition having an aluminum content of not less than 10 ppb and not more than 100 ppm in terms of the molar ratio of the aluminum atom to the silicon atom. The siliceous film is produced by coating the coating composition onto a substrate and firing the coated substrate in an atmosphere containing steam, oxygen, or a mixed gas composed of steam and oxygen.