

Title (en)

A SILICONE-PHENOLIC-CERAMIC FABRIC COMPOSITE AND A PROCESS FOR PREPARING THE SAME

Title (de)

SILIKON-PHENOLKERAMIK-GEWEBEVERBUNDSTOFF UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)

COMPOSITE TEXTILE EN RÉSINE SILICONE-PHÉNOLIQUE-CÉRAMIQUE ET PROCÉDÉ DE PRÉPARATION DE CELUI-CI

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2017055933A1] The present disclosure relates to a Silicone-Phenolic-Ceramic fabric composite (SiPC composite) and a method of preparing the same. In one embodiment, the SiPC composite comprises a resin mixture a resin mixture comprising silicone and phenolic resin, a ceramic fabric layer and a dielectric lossy material such that the resin mixture has a mixture viscosity in the range of 50-120cP. The disclosed SiPC composite exhibits minimum 80% reflection loss of microwaves having frequency in the range of 2-18GHz and thermal stability upto 300°C. The present disclosure also provides a light weight thermally insulating stealth structure in the form of SiPC composite for 2-10 18GHz microwave range.

IPC 8 full level

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Citation (search report)

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