

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

**EP 3380576 A4 20191127 (EN)**

Application

**EP 16850460 A 20160128**

Priority

- IN 3166DE2015 A 20151001
- IB 2016050426 W 20160128

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

**C09D 161/00** (2006.01); **B05D 7/00** (2006.01); **B29C 70/40** (2006.01); **B82Y 30/00** (2011.01); **C08G 77/00** (2006.01); **C08J 5/04** (2006.01); **C08K 9/06** (2006.01); **C08L 61/06** (2006.01); **H01Q 17/00** (2006.01); **B29K 83/00** (2006.01)

CPC (source: EP)

**B29C 70/40** (2013.01); **B82Y 30/00** (2013.01); **C08J 5/0405** (2021.05); **C08K 9/06** (2013.01); **C08L 61/06** (2013.01); **H01Q 17/002** (2013.01); **B29K 2083/00** (2013.01); **C08J 2361/06** (2013.01); **C08J 2483/04** (2013.01)

C-Set (source: EP)

**C08L 61/06** + **C08L 83/04**

Citation (search report)

- [XA] CN 104261851 A 20150107 - AEROSPACE RES INST MATERIALS & PROC TECHNOLOGY, et al
- [A] JP 2008258253 A 20081023 - TECHNES CO LTD
- [A] JP 2005093908 A 20050407 - FINE RUBBER KENKYUSHO KK
- [A] CN 103626512 B 20141210 - HARBIN INST OF TECHNOLOGY
- [A] US 2006167139 A1 20060727 - NELSON JOHN K [US], et al
- [A] US 4190686 A 19800226 - MUIS LOUIS H [US]
- See references of WO 2017055933A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**WO 2017055933 A1 20170406**; EP 3380576 A1 20181003; EP 3380576 A4 20191127

DOCDB simple family (application)

**IB 2016050426 W 20160128**; EP 16850460 A 20160128