

Title (en)
FLAME RESISTANT MATERIAL AND RESULTANT PRODUCTS

Title (de)
FLAMMWIDRIGES MATERIAL UND RESULTIERENDE PRODUKTE

Title (fr)
MATÉRIAU IGNIFUGE ET PRODUITS RÉSULTANTS

Publication
EP 3529335 A4 20200624 (EN)

Application
EP 17861439 A 20171019

Priority
• US 201662410177 P 20161019
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• US 2017057420 W 20171019

Abstract (en)
[origin: WO2018075787A1] Disclosed herein are compositions, formulations, applications, and methods of making a fire resistant material. The fire resistant material is a transparent acrylic material that incorporates a primary polymer, nanostructured fillers, and crosslinkers. The nanostructured filler is polyhedral oligomeric silsesquioxane (POSS) or a POSS derivative that has a cage like structure. The fire resistant material may also include various components such as brominated additives and phosphorous based synergists. The fire resistant material may be used for various applications including wall claddings and glazings.

IPC 8 full level
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CPC (source: EP)
C08L 33/12 (2013.01); **C09K 21/12** (2013.01); **C09K 21/14** (2013.01); **C08G 77/045** (2013.01)

Citation (search report)
• [X1] US 2005282018 A1 20051222 - VAN DEN BERGEN HUGUES [BE], et al
• [XA] US 2002128414 A1 20020912 - JAMES BONAFINI A [US], et al
• [X1] GUI ZHI LI ET AL: "Synthesis and properties of poly(isobutyl methacrylate-co-butanediol dimethacrylate-co-methacryl polyhedral oligomeric silsesquioxane) nanocomposites", JOURNAL OF POLYMER SCIENCE, PART A: POLYMER CHEMISTRY, vol. 43, no. 2, 1 January 2004 (2004-01-01), US, pages 355 - 372, XP055693176, ISSN: 0887-624X, DOI: 10.1002/pola.20503
• See references of WO 2018075787A1

Designated contracting state (EPC)
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DOCDB simple family (publication)
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EP 3529335 A1 20190828; EP 3529335 A4 20200624; JP 2020514491 A 20200521; MX 2019004495 A 20191218; RU 2019114967 A 20201120

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