

Title (en)

IONIC SILYLATED COPOLYURETHANE AND MASTIC COMPOSITION COMPRISING SAME

Title (de)

IONISCHES SILYLIERTES COPOLYURETHAN UND KITZUSAMMENSETZUNG DAMIT

Title (fr)

COPOLYURETHANE SILYLE IONIQUE ET COMPOSITION DE MASTIC LE COMPRENANT

Publication

**EP 4048713 A1 20220831 (FR)**

Application

**EP 20807469 A 20201021**

Priority

- FR 1911896 A 20191024
- FR 2020051902 W 20201021

Abstract (en)

[origin: WO2021079063A1] 1) Ionic silylated copolyurethane with a formula: (I) in which R1 is a hydrocarbon radical; R2 is a C2-C4 alkylene; n is an integer such that the molecular mass of -[OR2]<sub>n</sub> is 2500-20,000 g/mol; R° is H or C1-C18 alkyl; R, R' and R", are a hydrocarbon radical; x and y are integers from 1 to 8; z is an integer from 0 to 8; m and q are an integer greater than or equal to 1, such that q/m varies from 0.04 to 20; F1 is a radical with the formula (IIa) and F2 is a radical with the formula (IIb): (IIa) (IIb) in which R3 is methylene or n-propylene; R4 and R5 are a methyl or ethyl; p equals 0 or 1; R6 is a C1-C4 alkyl. 2) Method for preparing copolyurethane 1) comprising: (i) a polyaddition between a polyisocyanate, a polyether diol and a carboxylic diol; (ii) a neutralization of the product formed with the amine N(R)(R')(R"'); then (iii) a reaction with an aminosilane derived from a secondary amine. 3) Composition, usable as mastic and/or adhesive, comprising copolyurethane 1) and a filler.

IPC 8 full level

**C08G 18/75** (2006.01); **C08G 18/08** (2006.01); **C08G 18/28** (2006.01); **C08G 18/34** (2006.01); **C08G 18/48** (2006.01); **C09J 175/08** (2006.01)

CPC (source: CN EP US)

**C08G 18/0823** (2013.01 - CN EP US); **C08G 18/10** (2013.01 - US); **C08G 18/227** (2013.01 - US); **C08G 18/285** (2013.01 - US);  
**C08G 18/289** (2013.01 - CN EP US); **C08G 18/348** (2013.01 - CN EP US); **C08G 18/4825** (2013.01 - CN EP US); **C08G 18/6692** (2013.01 - CN);  
**C08G 18/755** (2013.01 - CN EP); **C08L 75/08** (2013.01 - US); **C09J 175/08** (2013.01 - CN EP US); **C08G 2170/00** (2013.01 - US);  
**C08G 2190/00** (2013.01 - CN EP US)

Citation (search report)

See references of WO 2021079063A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**FR 3102481 A1 20210430; FR 3102481 B1 20211001;** CN 114599702 A 20220607; CN 114599702 B 20231128; EP 4048713 A1 20220831;  
US 2022389219 A1 20221208; WO 2021079063 A1 20210429

DOCDB simple family (application)

**FR 1911896 A 20191024;** CN 202080074475 A 20201021; EP 20807469 A 20201021; FR 2020051902 W 20201021;  
US 202017771063 A 20201021