

Title (en)

FUNCTIONALIZED SILICA FOR SILICA WET MASTERBATCHES AND STYRENE BUTADIENE RUBBER COMPOSITIONS

Title (de)

FUNKTIONALISIERTE KIESELSÄURE FÜR KIESELSÄURE-NASSMASTERBATCHES UND STYROL-BUTADIEN-KAUTSCHUKZUSAMMENSETZUNGEN

Title (fr)

SILICE FONCTIONNALISÉE DESTINÉE À DES MÉLANGES-MAÎTRES DE SILICE HUMIDES ET À DES COMPOSITIONS DE CAOUTCHOUC STYRÈNE-BUTADIÈNE

Publication

**EP 2877531 A4 20160622 (EN)**

Application

**EP 13823883 A 20130729**

Priority

- US 201213560844 A 20120727
- US 2013052574 W 20130729

Abstract (en)

[origin: WO2014018980A1] A rubber composition and a tire using the rubber composition utilizing a functionalized silica dry precipitated silica with a specific surface area in the range of 100 to 300 m<sup>2</sup>/gm treated with a plurality of silanes coupling agents to form a wet polymer silica masterbatch, then blending the masterbatch with a latex rubber component that includes a styrene-butadiene copolymer rubber or a blend of the styrene-butadiene copolymer rubber and another conjugated diene base rubber using a plurality of coupling agents simultaneously.

IPC 8 full level

**C08L 9/08** (2006.01); **C07F 7/08** (2006.01); **C07F 7/18** (2006.01); **C08J 5/22** (2006.01); **C08K 5/54** (2006.01); **C08K 5/548** (2006.01); **C08K 9/06** (2006.01)

CPC (source: EP)

**C07F 7/18** (2013.01); **C07F 7/1804** (2013.01); **C08J 5/22** (2013.01); **C08K 9/06** (2013.01); **C08J 2309/08** (2013.01); **C08K 5/54** (2013.01); **C08K 5/548** (2013.01)

Citation (search report)

- [X] EP 0795577 A1 19970917 - GOODYEAR TIRE & RUBBER [US]
- [X] US 2012165477 A1 20120628 - KO YOUNG HOON [KR], et al
- [X] US 2009163633 A1 20090625 - KO YOUNG HOON [KR], et al
- [X] US 2008161461 A1 20080703 - CRUSE RICHARD W [US], et al
- [X] EP 0890606 A1 19990113 - BRIDGESTONE CORP [JP]
- [X] EP 0864605 A2 19980916 - GOODYEAR TIRE & RUBBER [US]
- See references of WO 2014018980A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

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DOCDB simple family (application)

**US 2013052574 W 20130729**; EP 13823883 A 20130729; KR 20157005095 A 20130729; MX 2013008803 A 20130729