

Title (en)

INTER-PENETRATING ELASTOMER NETWORK DERIVED FROM GROUND TIRE RUBBER PARTICLES

Title (de)

INTERPENETRIERENDES ELASTOMERNETZWERK AUS GEMAHLENEN REIFENGUMMIPARTIKELN

Title (fr)

RÉSEAU ÉLASTOMÈRE INTER-PÉNÉTRANT DÉRIVÉ DE PARTICULES DE CAOUTCHOUC DE PNEUS BROYÉS

Publication

EP 3735440 A4 20211117 (EN)

Application

EP 18898637 A 20181023

Priority

- US 201862613744 P 20180104
- US 201862621465 P 20180124
- US 2018028656 W 20180420
- US 201862703366 P 20180725
- US 201816053708 A 20180802
- US 2018045061 W 20180802
- US 2018057110 W 20181023

Abstract (en)

[origin: WO2019135815A1] Crumb rubber obtained from recycled tires is subjected to an interlinked substitution process. The process utilizes a reactive component that interferes with sulfur bonds. The resulting treated rubber exhibits properties similar to those of the virgin composite rubber structure prior to being granulated, and is suitable for use in fabricating new tires, engineered rubber articles, and asphalt rubber for use in waterproofing and paving applications.

IPC 8 full level

C08L 19/00 (2006.01); **B29B 17/04** (2006.01); **B32B 25/04** (2006.01); **C08J 3/00** (2006.01); **C08J 3/24** (2006.01); **C08K 3/04** (2006.01);
C08K 5/098 (2006.01); **C08L 7/00** (2006.01); **C08L 9/06** (2006.01); **C08L 17/00** (2006.01)

CPC (source: EP KR)

C08J 3/246 (2013.01 - EP); **C08K 5/098** (2013.01 - EP KR); **C08L 7/00** (2013.01 - EP); **C08L 9/00** (2013.01 - EP KR);
C08L 9/06 (2013.01 - EP KR); **C08L 17/00** (2013.01 - EP KR); **C08L 19/00** (2013.01 - EP); **C08L 21/00** (2013.01 - EP KR);
C08L 95/00 (2013.01 - EP KR); **C08J 2317/00** (2013.01 - EP); **C08J 2400/26** (2013.01 - EP); **C08J 2407/00** (2013.01 - EP);
C08J 2409/00 (2013.01 - EP); **C08J 2409/06** (2013.01 - EP); **C08J 2421/00** (2013.01 - EP); **C08L 2205/02** (2013.01 - EP);
C08L 2207/24 (2013.01 - KR); **C08L 2555/22** (2013.01 - EP KR); **C08L 2555/34** (2013.01 - EP KR); **C08L 2555/80** (2013.01 - EP KR);
Y02W 30/62 (2015.05 - EP KR)

C-Set (source: EP)

1. **C08L 17/00 + C08K 3/04 + C08L 9/00 + C08L 9/06**
2. **C08L 19/00 + C08K 3/04 + C08L 9/00 + C08L 9/06**
3. **C08L 95/00 + C08L 9/00 + C08L 9/06 + C08L 17/00**

Citation (search report)

- [A] EP 1435372 A1 20040707 - GOODYEAR TIRE & RUBBER [US]
- [XA] DATABASE WPI Week 201442, Derwent World Patents Index; AN 2014-L30185, XP002804267
- [A] DATABASE WPI Week 201154, Derwent World Patents Index; AN 2011-J87141, XP002804268
- [A] DATABASE WPI Week 201639, Derwent World Patents Index; AN 2016-24669V, XP002802830
- See also references of WO 2019135815A1

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 2019135815 A1 20190711; AU 2018400200 A1 20200507; AU 2018400200 B2 20200917; AU 2020256340 A1 20201112;
AU 2020256340 B2 20230105; CA 3080627 A1 20190711; CN 111479870 A 20200731; CN 111479870 B 20240319; EP 3735440 A1 20201111;
EP 3735440 A4 20211117; JP 2021509694 A 20210401; JP 7379340 B2 20231114; KR 102586008 B1 20231005; KR 20200096940 A 20200814;
KR 20230145227 A 20231017; MX 2020006750 A 20210326; MX 2021003540 A 20210527; NZ 763644 A 20240223;
RU 2020115429 A 20220204; SA 520412374 B1 20230306; SG 10202013259U A 20210225; SG 11202003514Q A 20200528

DOCDB simple family (application)

US 2018057110 W 20181023; AU 2018400200 A 20181023; AU 2020256340 A 20201013; CA 3080627 A 20181023;
CN 201880076456 A 20181023; EP 18898637 A 20181023; JP 2020537151 A 20181023; KR 20207019094 A 20181023;
KR 20237033563 A 20181023; MX 2020006750 A 20181023; MX 2021003540 A 20200713; NZ 76364418 A 20181023;
RU 2020115429 A 20181023; SA 520412374 A 20200702; SG 10202013259U A 20181023; SG 11202003514Q A 20181023