

Title (en)
METHOD FOR OBTAINING AN ELASTOMER GRAFT WITH FUNCTIONAL GROUPS ALONG THE CHAIN AND RUBBER COMPOSITIONS

Title (de)
HERSTELLUNGSVERFAHREN EINES PFROPFELASTOMERS MIT FUNKTIONELLEN GRUPPEN ENTLANG DER KETTE UND KAUTSCHUKMISCHUNG

Title (fr)
PROCEDE D'OBTENTION D'UN ELASTOMERE GREFFE A GROUPES FONCTIONNELS LE LONG DE LA CHAINE ET COMPOSITION DE CAOUTCHOUC

Publication
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Application
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Abstract (en)
[origin: WO2004096865A2] The invention concerns a method for obtaining a grafted diene elastomer comprising functional groups along the chain, a rubber composition comprising said grafted elastomer and having in particular hysteretic properties when crosslinked, and a method for preparing said composition. The invention also concerns a tyre running tread comprising said composition and a tyre with reduced running resistance incorporating said running tread. The method for obtaining said grafted elastomer consists in performing a free radical grafting reaction carried out in solution or in mass using a mercaptan type reagent and designed to graft said groups on the chain of an initial elastomer. The invention is characterized in that it consists in treating said initial elastomer with an antioxidant comprising at least one aromatic amine function prior to the grafting reaction, so that the grafted elastomer has a macrostructure almost identical to that of the initial elastomer. The inventive rubber composition comprises a reinforcing inorganic filler, and said grafted elastomer has a proportion of molar units derived from conjugated dienes higher than 30 %.

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