

Title (en)  
GRAFT POLYMER, AND THERMOREVERSIBLY CROSS-LINKED BITUMEN/POLYMER COMPOSITION CONTAINING SUCH A GRAFT POLYMER

Title (de)  
PFROPFPOLYMER UND WÄRMEUMKEHRBARE VERNETZTE BITUMEN-/POLYMER-ZUSAMMENSETZUNG MIT EINEM SOLCHEN PFROPFPOLYMER

Title (fr)  
POLYMERES GREFFE ET COMPOSITION BITUME/POLYMERES A RETICULATION THERMOREVERSIBLE CONTENANT UN TEL POLYMERES

Publication  
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Application  
**EP 12818500 A 20121220**

Priority

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- EP 2012076295 W 20121220

Abstract (en)  
[origin: WO2013092809A2] The invention relates to a thermoreversibly cross-linked graft polymer, to the method for preparing same, and to the use of such a graft polymer in preparing a thermoreversibly cross-linked bitumen/polymer composition. The present invention also relates to a thermoreversibly cross-linked bitumen/polymer composition comprising such a graft polymer, to the method for preparing same, and to bituminous asphalt including such a composition. The polymer comprises: a main polymer chain P consisting of conjugated diene units; at least one side graft G having the following general formula (1):  $R-(OCH_2CH_2)_m-S---$ , where R is a straight or branched saturated hydrocarbon chain having at least 18 carbon atoms, and m is an integer varying from 0 to 20, said graft G being connected to the main polymer chain P via the sulfur atom of formula (1); and at least one graft G' having the following general formula (4):  $---S-R'-S---$ , where R' is a straight or branched, saturated or unsaturated hydrocarbon grouping having 2 to 40 carbon atoms, optionally including one or more heteroatoms, said graft G' being connected to the main polymer chain P via each sulfur atom of formula (4).

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