

[54] **SILICON-CONTAINING POLYBUTADIENE DERIVATIVES AND METHOD FOR THE PREPARATION THEREOF**

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[57] **ABSTRACT**

Novel silicon-containing derivatives of polybutadiene or copolymers of butadiene with other copolymerizable monomer or monomers in which organosilicon-containing groups are bonded to the carbon atoms in the main chain of the butadiene polymers through the carbon-silicon linkages. These derivatives of butadiene polymers are produced by the addition reaction of an organosilicon compound having one hydrogen atom directly bonded to the silicon atom in the molecule to the double bonds in the butadiene polymers. They have a good fluidity, a small temperature dependency of viscosity, an excellent thermal stability and a high anti-oxidation resistance, as well as a good compatibility with siliceous fillers which are added to give improved workability and transparency to the compositions. The compositions to which a crosslinking agent and a curing catalyst are added can be cured into a rubber-like elastomer having excellent properties suitable for applications in various fields.

4 Claims, No Drawings