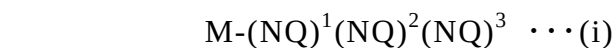


ABSTRACT

METHOD FOR PRODUCING POLYBUTADIENE, POLYBUTADIENE, RUBBER COMPOSITION AND TIRE

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The present invention provides a method for synthesizing a polybutadiene more efficiently and stably which is possible to obtain a rubber composition and a tire excellent in durability (fracture resistance, wear resistance and crack growth resistance). A method for producing a polybutadiene, where a butadiene monomer is polymerized with the existence of rare-earth element compounds represented by the following formula (i):



(in the formula, M is at least one selected from lanthanides, scandium and yttrium; $(NQ)^1$, $(NQ)^2$ and $(NQ)^3$ are amide groups which may be the same or different to each other, and have M-N bonds).

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No Figure