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(54) **ELASTIC TERPOLYMER INCLUDING DIENE GROUP AND PREPARATION METHOD THEREOF**

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See application file for complete search history.

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(57) **ABSTRACT**

The present invention relates to an elastic terpolymer which can satisfy excellent processability and elasticity (flexibility) at the same time, and a preparation method thereof. The elastic terpolymer is a copolymer of 40 to 70 weight % of ethylene, 15 to 55 weight % of a C_3-C_{20} alpha-olefin, and 0.5 to 20 weight % of a diene obtained in the presence of a group 4 transition metal catalyst, of which i) the weight average molecular weight measured by GPC is 100,000 to 500,000, and ii) the Mooney viscosity (ML) and the Mooney relaxation area (MLR) measured by a Mooney viscometer (1+4+2 ⓐ 125° C.) can satisfy a specific relation.

5 Claims, 4 Drawing Sheets