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(54) **Title:** ADDITIVE COMPOSITION COMPRISING AN AMIDIZED OR IMIDIZED POLYMER

(57) **Abstract:** The invention relates to a process for an additive composition comprising an amidized or imidized polymer. The invention further relates to a highly grafted, multi-functional lubricant additive useful to improve the viscosity index and dispersancy properties of a lubricating oil composition. The present invention also relates to a method of extending lubricant drain intervals and improving fuel economy and fuel economy durability. The additive composition is prepared by: (A) reacting an olefin copolymer of ethylene and at least one C₃ to C₂₃ α-olefin comprising from about 15 to 80 mole percent of ethylene, from about 20 to 85 mole percent of said C₃ to C₂₃ α-olefin and from about 0 to 15 wt percent of a polyene, said copolymer having a number average molecular weight ranging from 1,000 to 500,000, with an olefinic carboxylic acid acylating agent, said process comprising heating said polymer to a molten condition at a temperature in the range of 60°C to 240°C, grafting, in a first extruder or a first mixing device, said olefinic carboxylic acylating agent onto said copolymer, optionally subsequently reducing the molecular weight of said copolymer at a temperature in the range of 250°C to 350°C, thereby producing a grafted, reduced molecular weight acylated copolymer having a number average molecular weight ranging from 1,000 to 80,000 and having at least 0.2 - 20 molecules of said carboxylic acid acylating agent grafted per 1000 C atoms of said olefin copolymer, and (B) reacting, in a second extruder or a second mixing device, said acylated copolymer made in (A) with a polyamine.

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