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(54) Title: SYNTHESIS OF POLY-ALPHA OLEFIN AND USE THEREOF

(57) Abstract: One or more oligomers of an olefin are prepared in the presence of a single-site catalyst. Preferably, the olefin is an α -olefin, and the oligomers are a poly-alpha-olefin (PAO). The PAO so prepared is completely or substantially free of tertiary hydrogen resulting from isomerization. Consequently, the P AO possesses improved biodegradability, improved oxidation resistance, and/or a relatively higher viscosity index. The PAO has many useful applications, such as a component of a lubricant-



WO 03/020856 A1