Title (en)

OLEFINIC OLIGOMERS HAVING LUBRICATING PROPERTIES AND PROCESS OF MAKING SUCH OLIGOMERS.

Title (de)

OLEFINOLIGOMERE MIT SCHMIERUNGSEIGENSCHAFTEN UND VERFAHREN ZU IHRER HERSTELLUNG.

Title (fr)

OLIGOMERES OLEFINIQUES AYANT DES PROPRIETES LUBRIFIANTES ET LEUR PROCEDE DE PRODUCTION.

Publication

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Application

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Priority

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Abstract (en)

[origin: WO8912662A1] Novel lubricant compositions comprising polyalpha-olefins are disclosed having high viscosity indices with low pour point. The compositions are characterized by a uniform molecular structure with low branch ratios. The invention describes a liquid lubricant composition comprising C30-C1300 hydrocarbons, said composition having a branch ratio of less than 0.19, weight average molecular weight between 300 and 45,000, number average molecular weight between 300 and 18,000, molecular weight distribution between 1 and 5 and pour point below -15 DEG C. 1-decene trimer comprising 9-methyl, 11-octylheneicosane and 11-octyldocosane is disclosed. The lubricant compositions are produced by contacting said alpha olefin with a supported solid reduced Group VIB (e.g., chromium) catalyst under oligomerization conditions at a temperature of about 90 to 250 DEG C to produce liquid lubricant hydrocarbon. The hydrogenated lubricant range hydrocarbon product has viscosity index of about 130 to 280 and a viscosity up to about 750 mm<2>/s(cs). The process is particularly useful where the starting alpha olefin consists essentially of olefinic hydrocarbon having 8 to 14 carbon atoms or mixtures thereof; wherein the process conditions include reaction temperature of about 100 to 180 DEG C; and wherein the support catalyst includes porous inert silica.

IPC 1-7

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IPC 8 full level

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