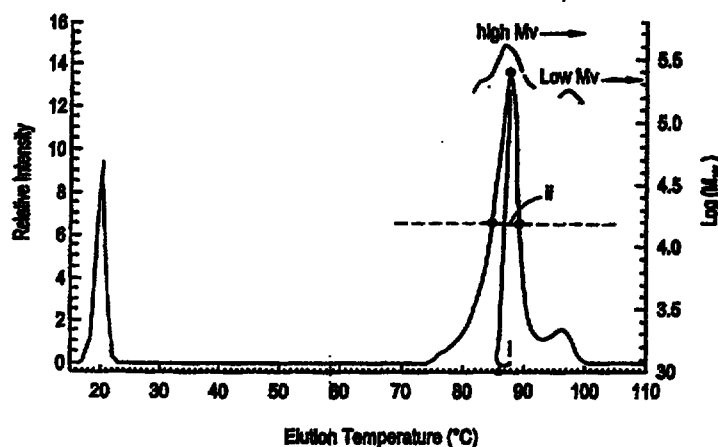




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(54) Title: OLEFIN POLYMERS PREPARED WITH SUBSTITUTED INDENYL CONTAINING METAL COMPLEXES



Example 45 (e)

(57) Abstract

The subject invention is directed to an olefin polymer produced by polymerizing at least one α -olefin in the presence of a Group 4 metal complex comprising an indenyl group substituted in the 2 or 3 position with at least one group selected from hydrocarbyl, perfluoro-substituted hydrocarbyl, silyl, germyl and mixtures thereof, said indenyl group further being covalently bonded to the metal by means of a divalent ligand group, wherein the divalent ligand comprises nitrogen or phosphorus having an aliphatic or alicyclic hydrocarbyl group covalently bonded thereto via a primary or secondary carbon. Preferred olefin polymers of the invention will be characterized as having a high molecular weight, narrow molecular weight distribution, high vinyl content, and a bimodal DSC melting curve or a deconvoluted ATREF or GPC curve which shows at least two distinct narrow peaks. The olefin polymer will have utility in a variety of applications, including but not limited to films, fibers, foams, molded parts, and as components of formulations such as adhesives, sealants, coatings, caulks, and asphalt.