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(54) Title: FUNCTIONAL CYCLIC OLEFIN POLYMER, PROCESS FOR OBTAINING THE SAME AND COMPOSITIONS CONTAINING THE SAME

(57) Abstract: The present invention relates to a functional cyclic olefin polymer obtained from hydrogenation of a cyclic olefin polymer, wherein the cyclic olefin polymer comprises at least a monomeric unit A' derived from a monomer A having a norbornene ring and a polar functional group, wherein the amount of the monomeric unit A' is in the range of from 20% to 100% by mole, 50% to 100% by mole, from 60% to 100% by mole, or from 70% to 100% by mole, based on the total amount of the monomeric units of the cyclic olefin polymer. The present invention further relates to a process for producing the functional cyclic olefin polymer, a composition comprising the functional cyclic olefin polymer, and the use of the functional cyclic olefin polymer. The functional cyclic olefin polymer of the present invention exhibits improved properties, especially in terms of mechanical properties and barrier properties.



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