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(54) Title: PROPYLENE POLYMERS FOR FILMS

(57) Abstract: This invention relates generally to crystalline propylene polymers, to methods for their production and to methods for their use in film applications. Specifically, this invention relates to crystalline propylene polymers comprising both propylene homopolymer and propylene copolymer. The compositions are prepared using metallocene catalyst systems comprising at least two metallocenes in a polymerization process that involves the sequential or parallel polymerization of propylene homopolymer and copolymer using propylene with a small amount of comonomer, preferably ethylene. The polymerization is catalyzed by a dual metallocene catalyst system. The resulting polymers have a broad, bimodal molecular weight distribution. The resulting polymers are excellent for use in the production of biaxially oriented films or non-oriented films. Films prepared with these propylene polymers have a significantly broader processability range and can be evenly stretched at lower temperature compared to films prepared from traditional propylene polymer.



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