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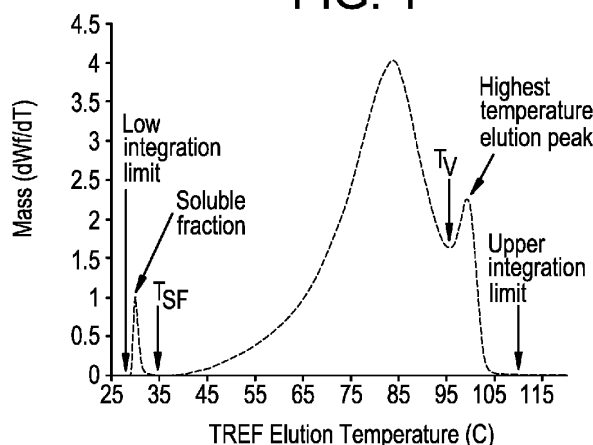
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(54) Title: DETERMINATION OF THE AMORPHOUS CONTENT OF POLYMERS

FIG. 1



(57) **Abstract:** A method to determine the weight percent of an "amorphous" fraction in an olefin-based polymer composition, comprising one or more olefin-based polymers; said method comprising the following steps: a) dissolving the olefin-based polymer composition in an organic solvent to form a polymer solution; b) injecting at least a portion of the polymer solution onto a support material, and wherein the support material has a Co-crystallization Index (CI) value from 0.70 to 1.20; c) cooling the support material at a rate greater than, or equal to, 0.2C/min; d) increasing the temperature of the support material to elute the polymers of the olefin-based polymer composition; e) generating a chromatogram; f) determining the peak area of the first elution from its lower integration limit to its upper integration limit; g) calculating the "amorphous" fraction based on the following Equation A below: wt% "amorphous" fraction = $PA_{\text{amorphous}}/PA_{\text{total}} \times 100$ (Eqn. A); wherein PA_{amorph} = peak area of the first elution, and $PA_{\text{total}} = 191$ = total peak area of the polymers of the olefin-based polymer composition.

[Continued on next page]

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