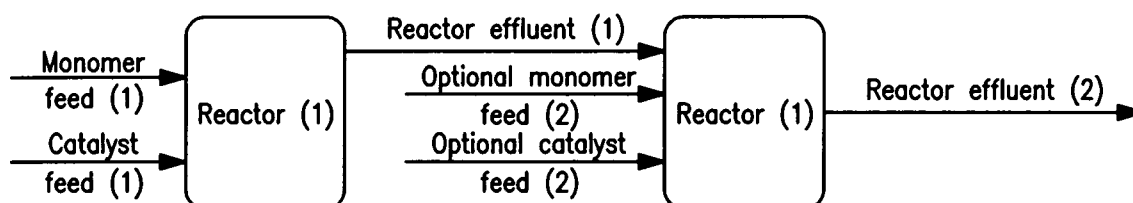


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Production of polymer blends in two-stage series reactor configuration
(Prior Art)

**FIG. 1**

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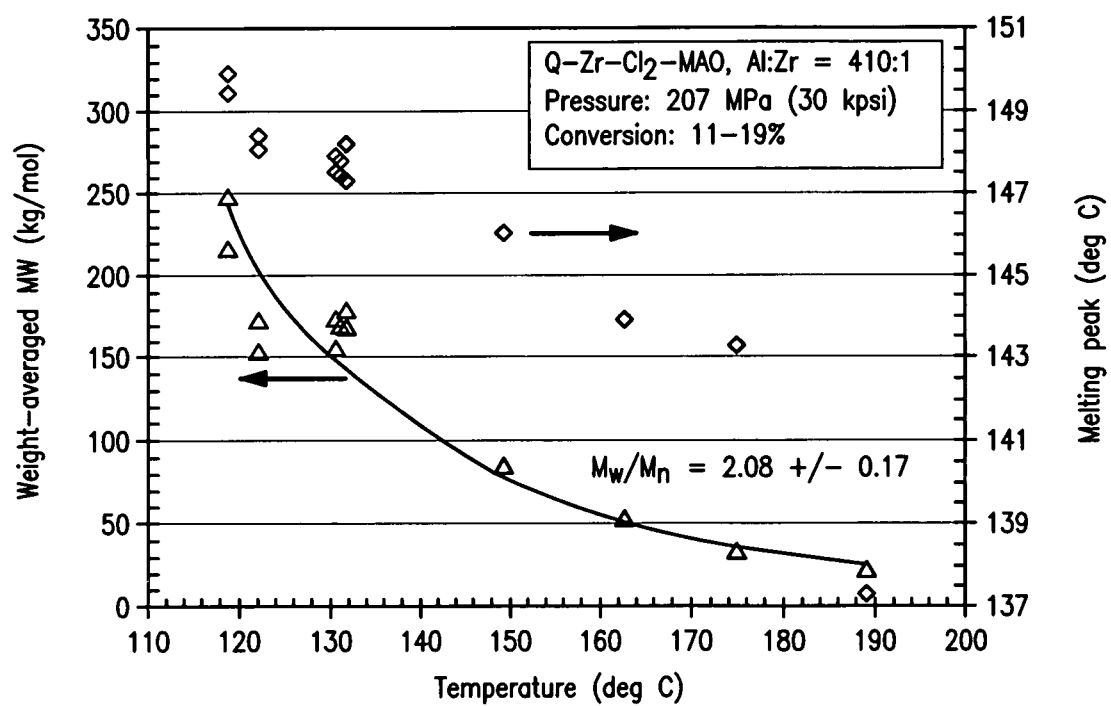


FIG. 2

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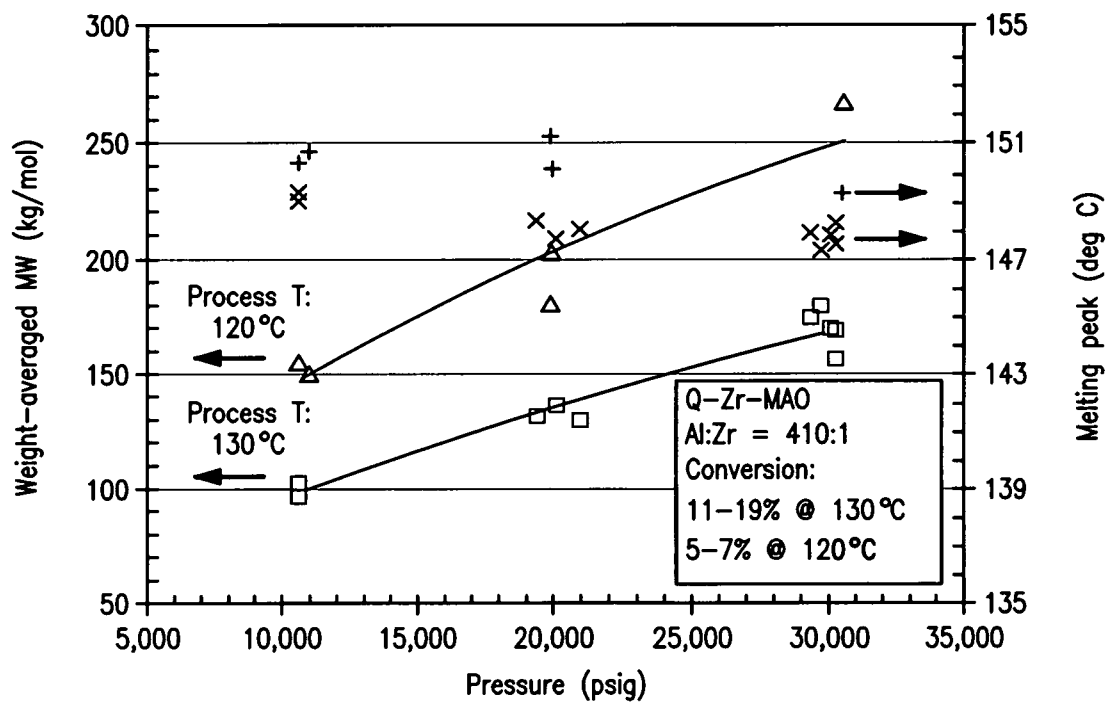


FIG. 3

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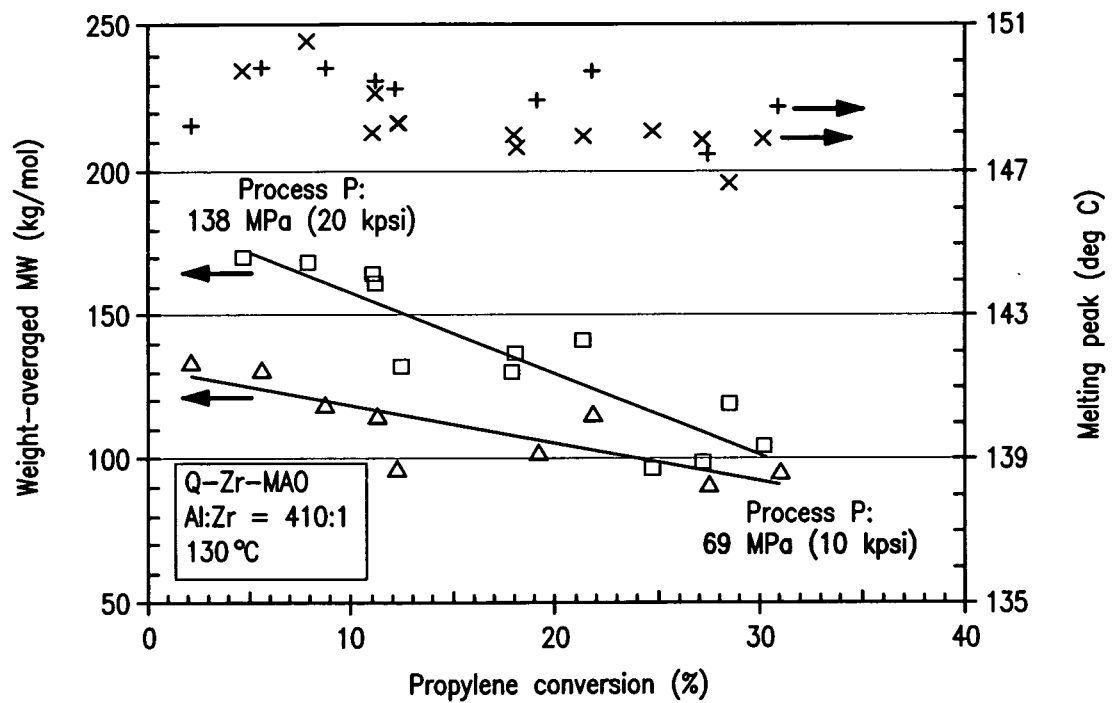


FIG. 4

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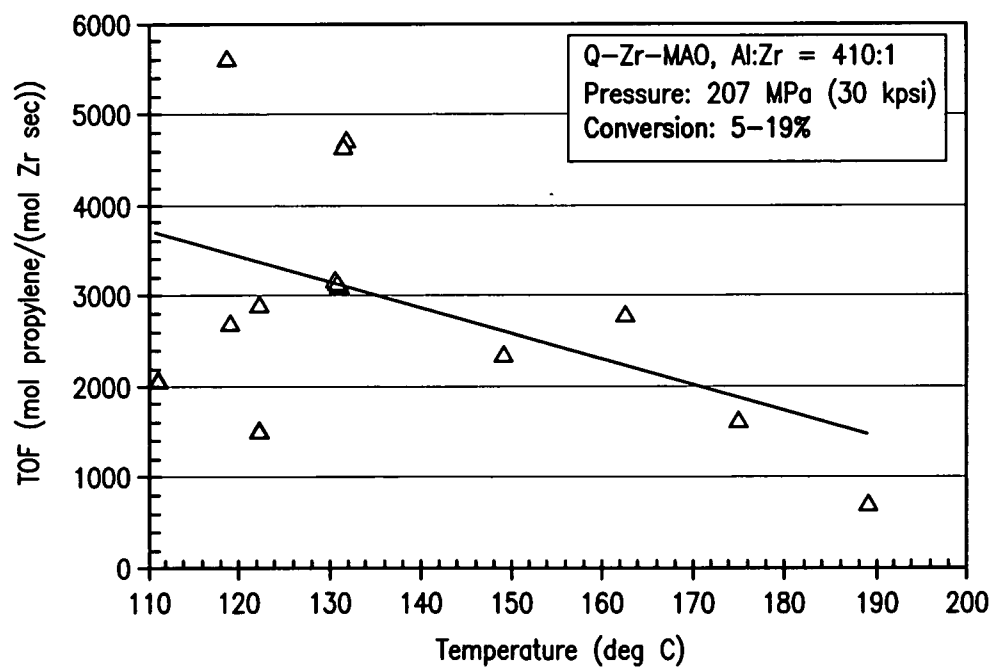


FIG. 5

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In-line plasticized polymer blending process with single separation vessel

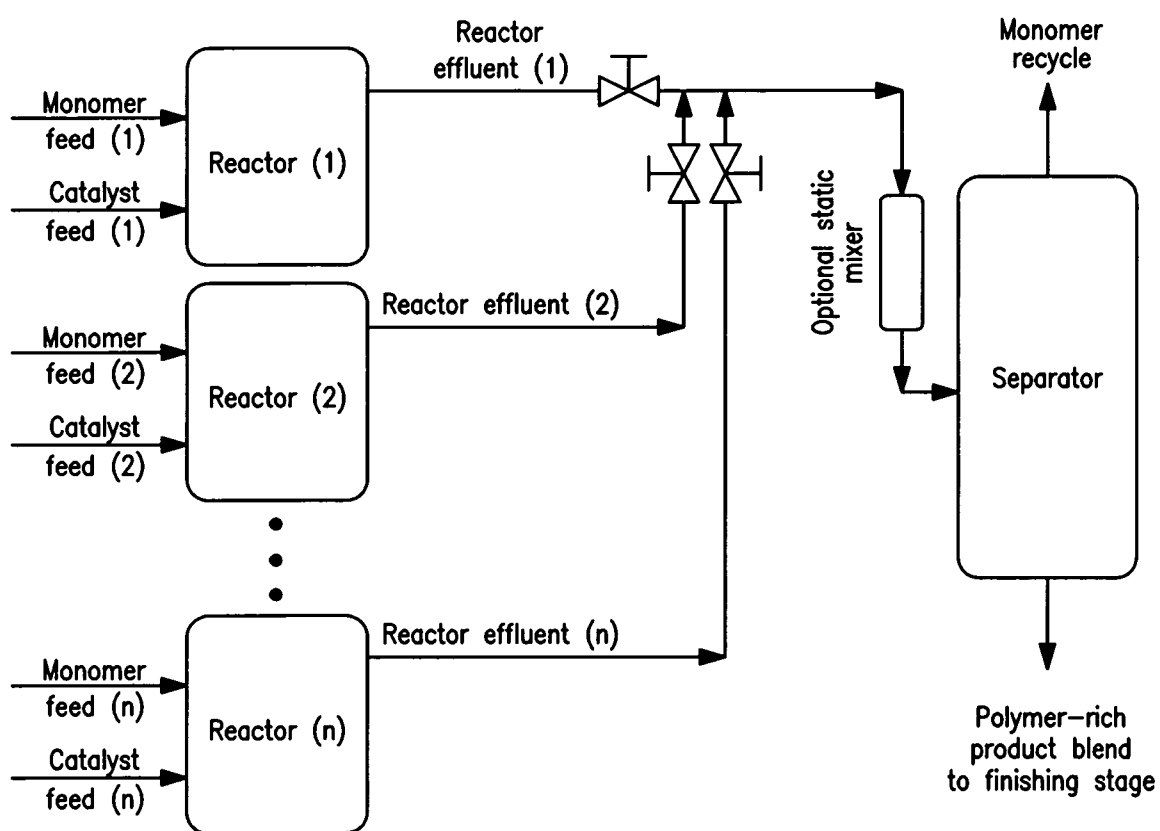


FIG. 6

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In-line plasticized polymer blending process schematic with multiple separation vessels

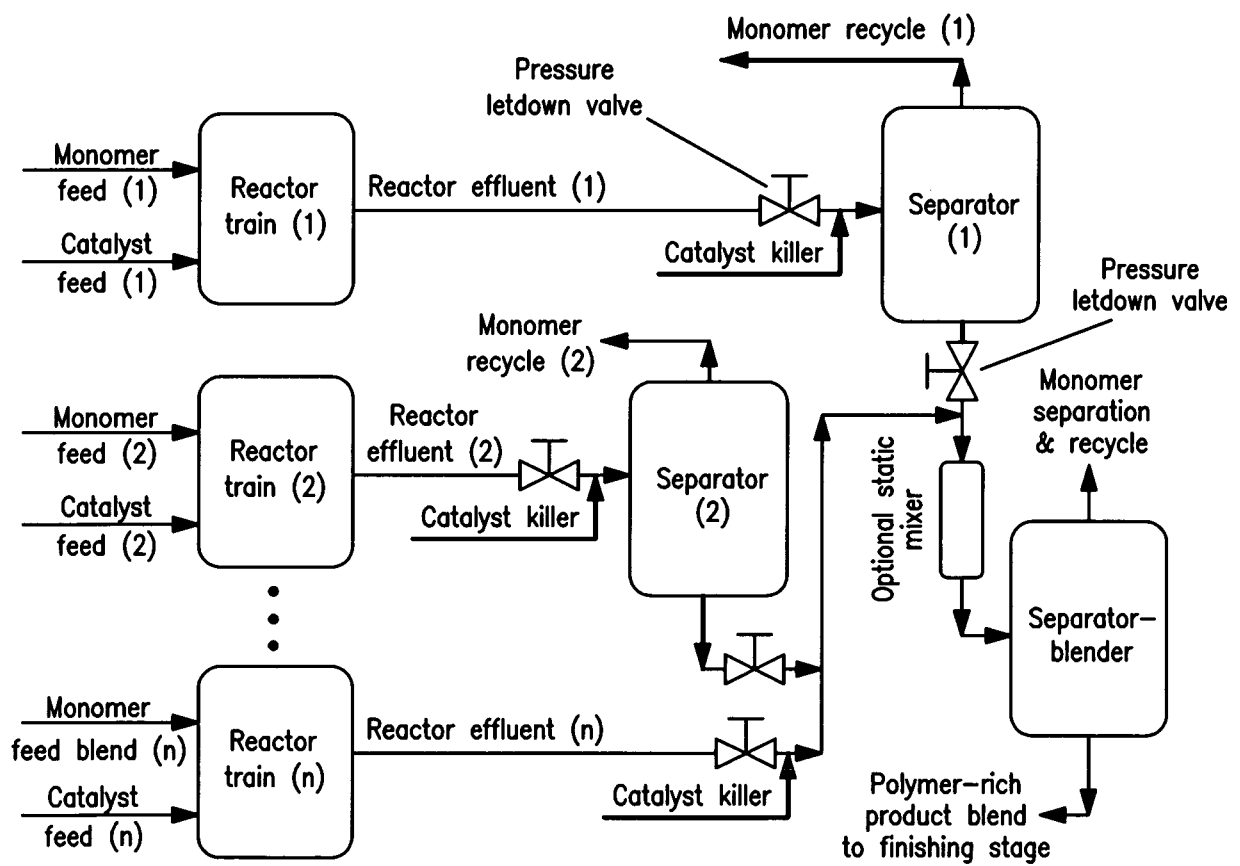
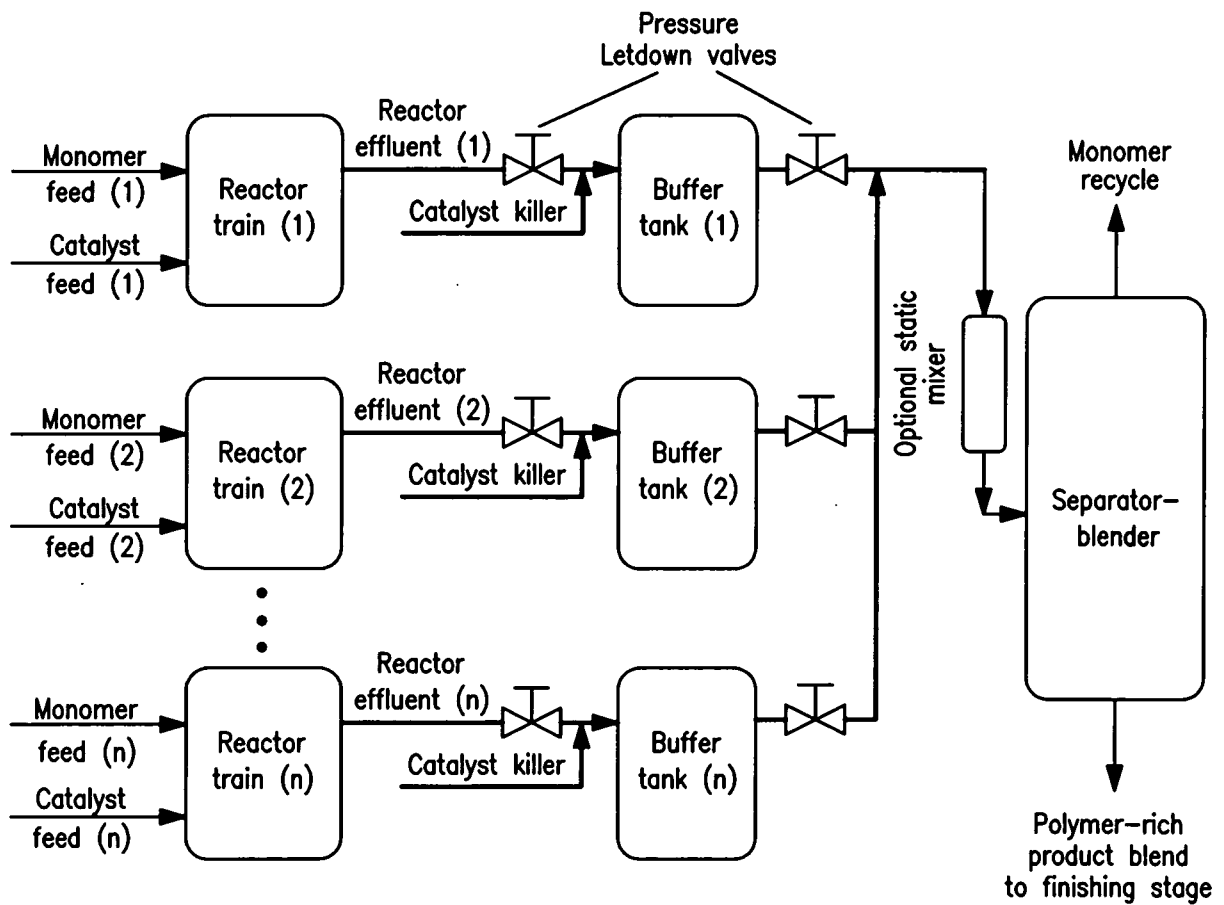


FIG. 7

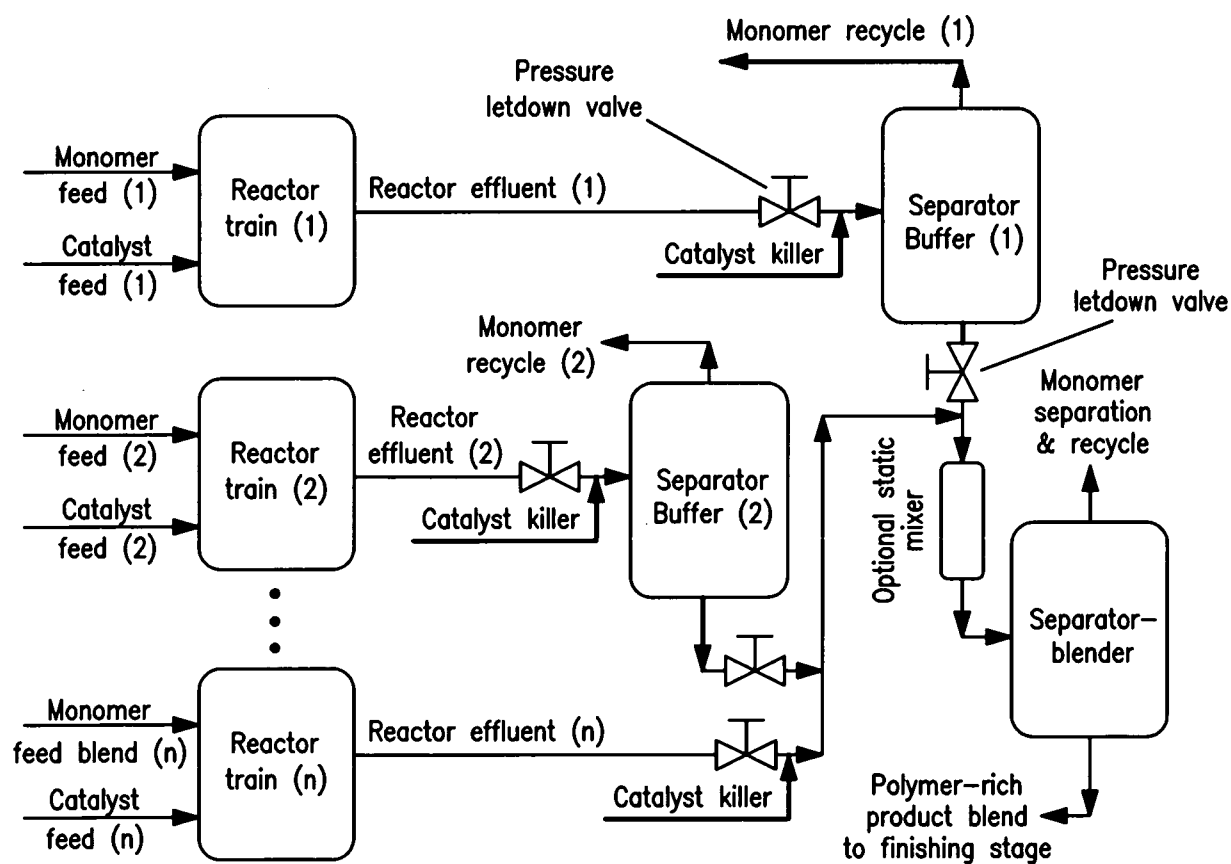
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In-line plasticized polymer blending with product effluent buffer tanks for improved blend ratio control and a single separation vessel

**FIG. 8**

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In-line plasticized polymer blending with product effluent buffer tanks that also serve as monomer/product separators for improved blend ratio control

**FIG. 9**

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In-line plasticized polymer blending with one slurry reactor train

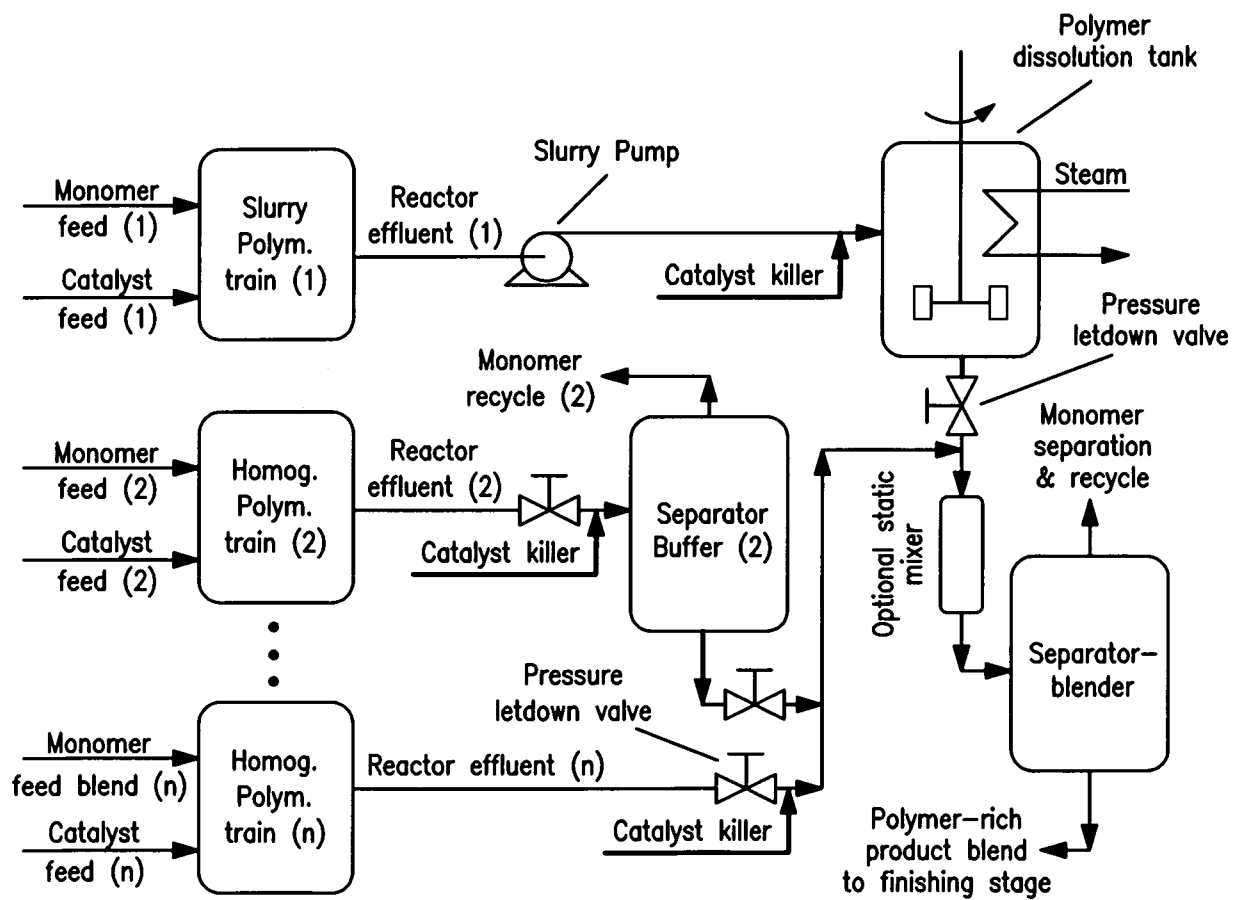
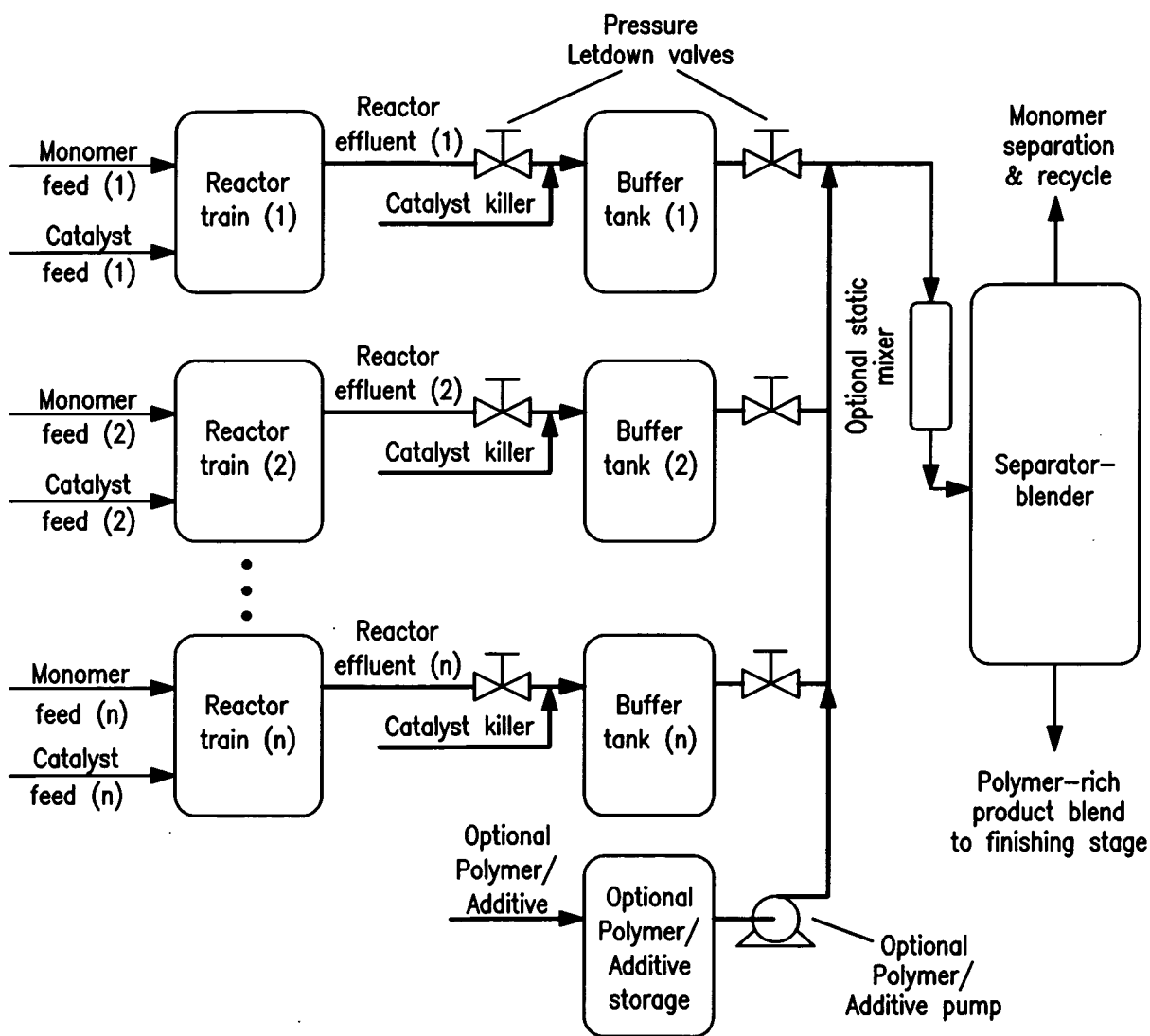


FIG. 10

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In-line plasticized polymer blending with buffer tanks for improved blend ratio control and with the option for additive/polymer blending component

**FIG. 11**

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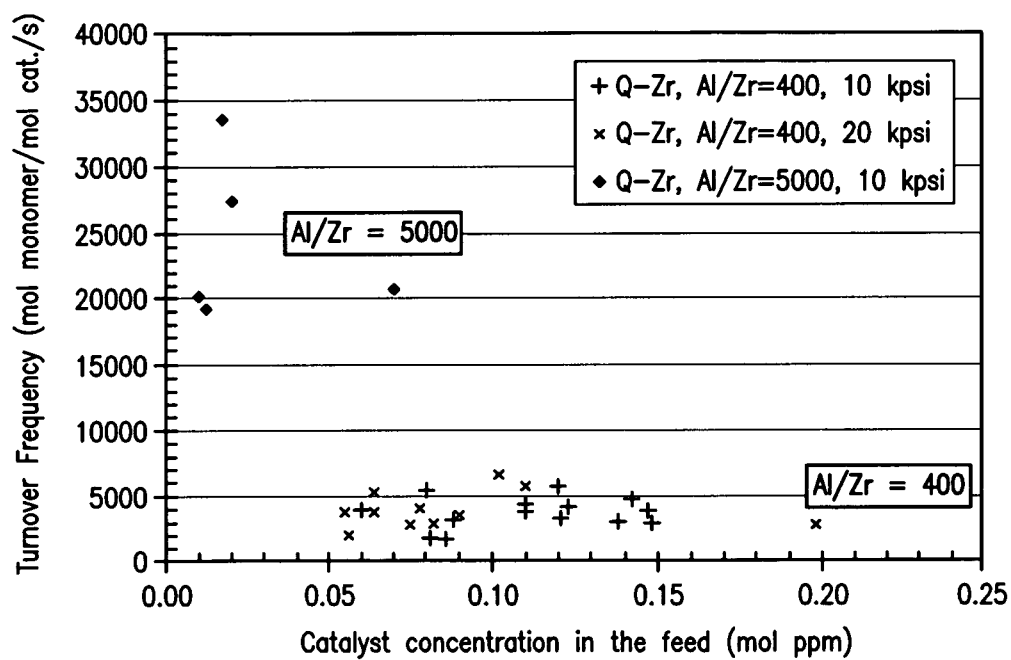


FIG. 12

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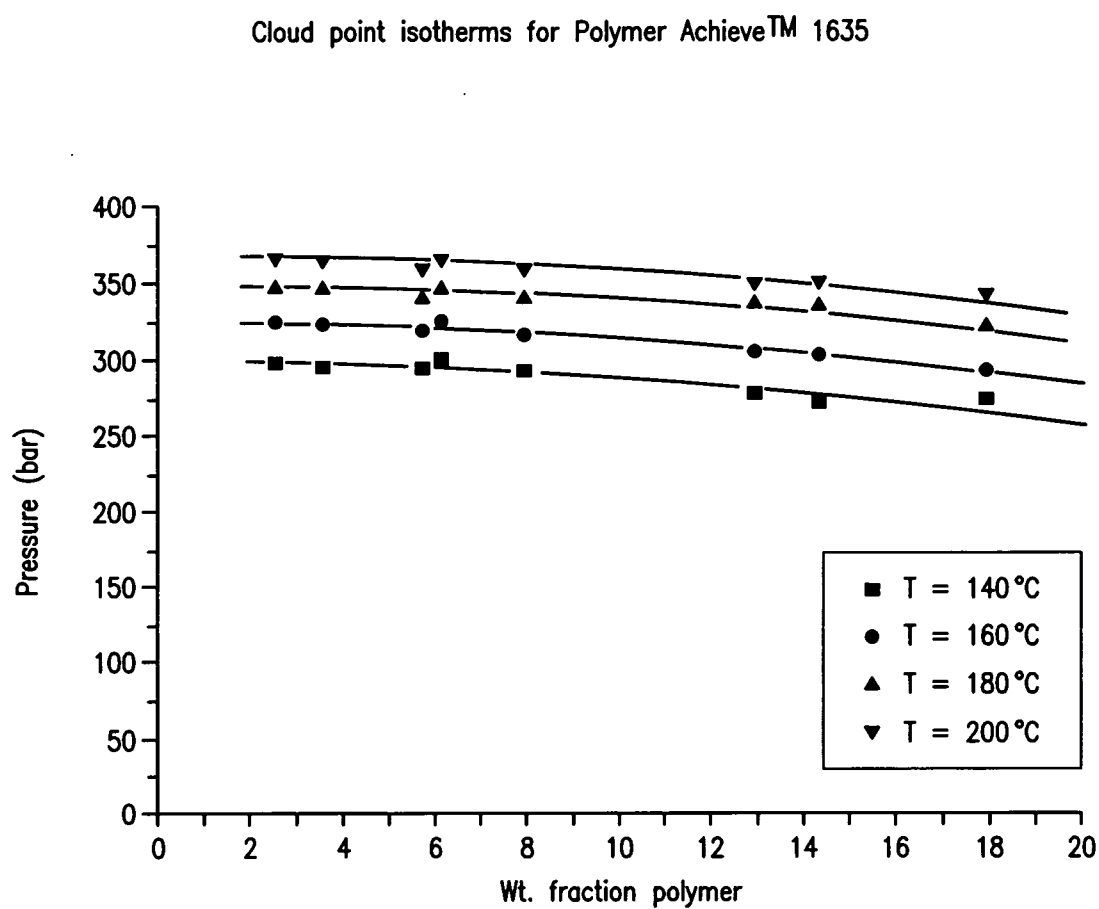


FIG. 13

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Cloud point isotherms for Polymer PP 45379 dissolved in bulk propylene

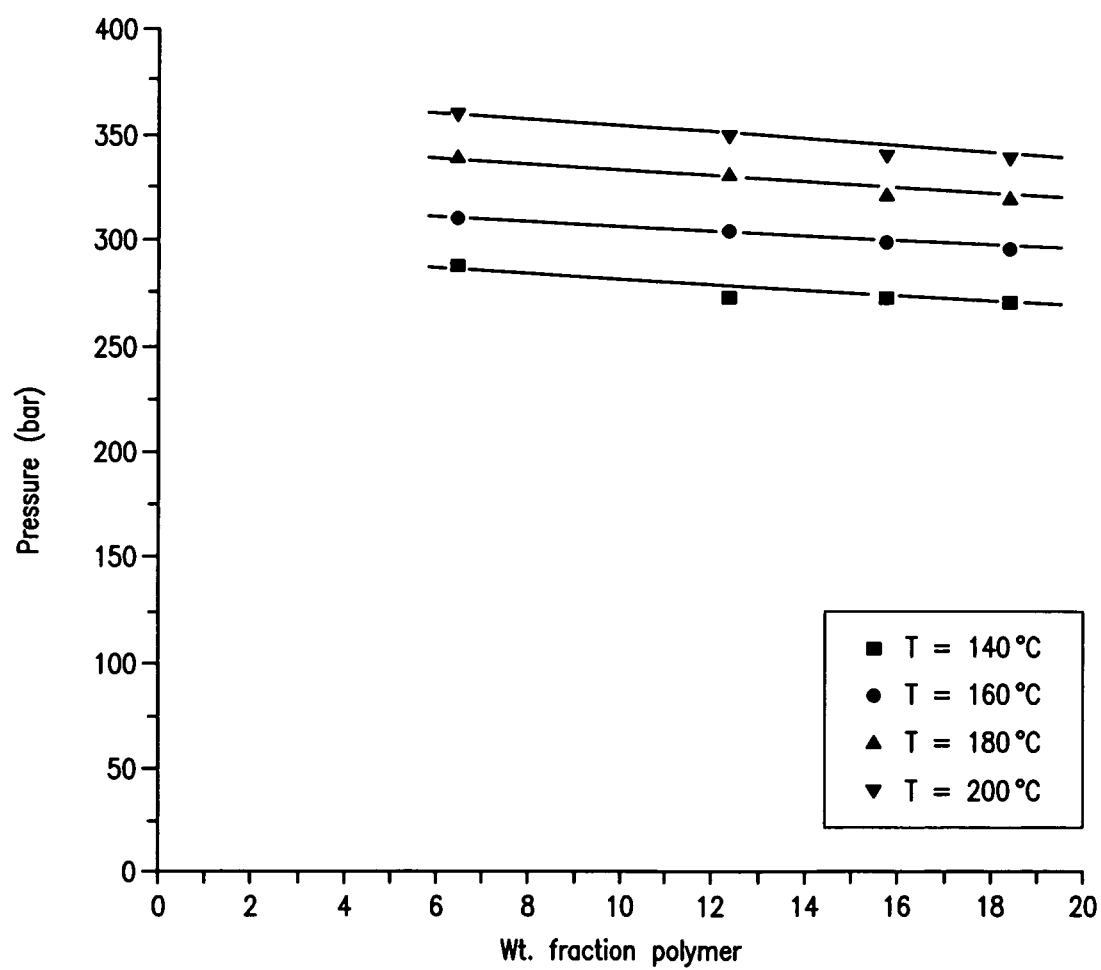


FIG. 14

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Cloud point isotherms for Polymer PP 4062 dissolved in bulk propylene

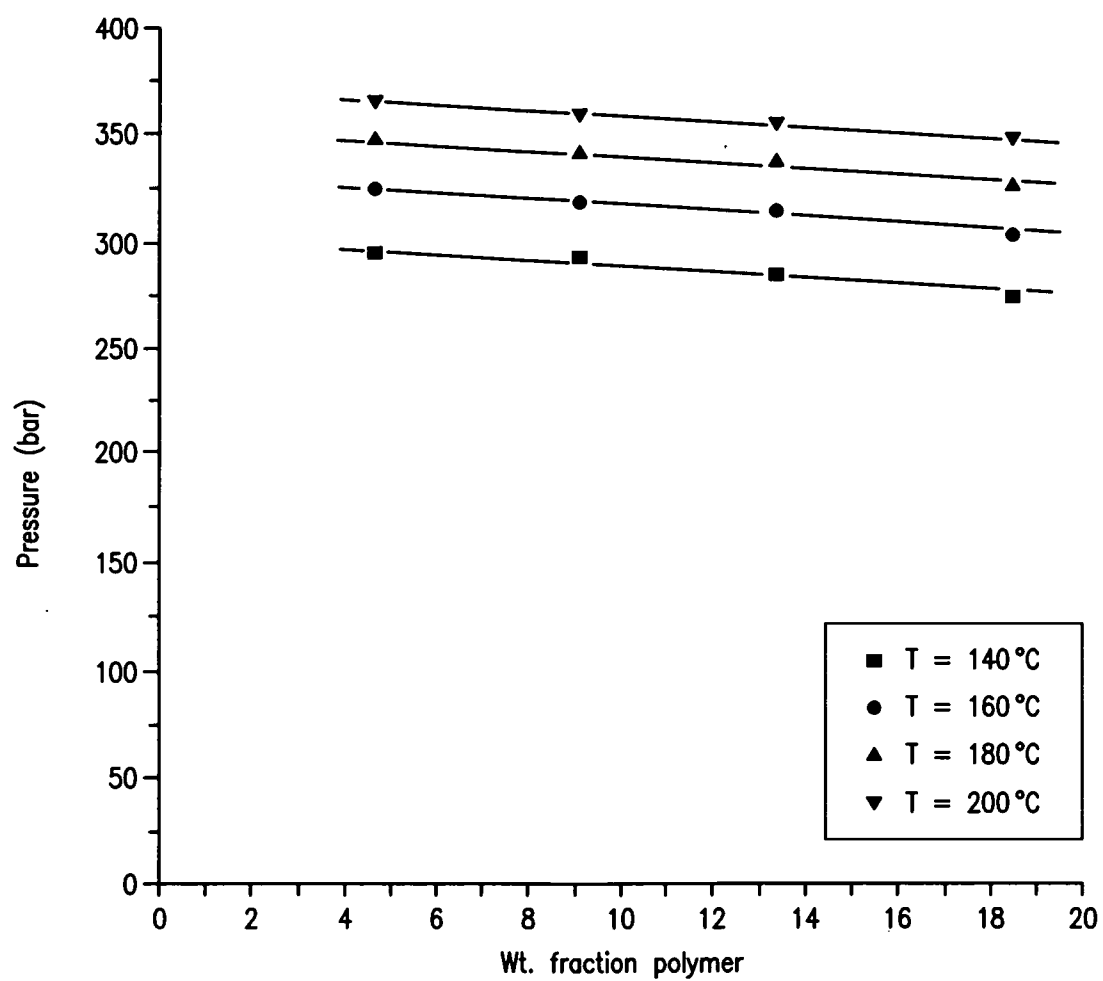


FIG. 15

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Cloud point isotherms for Polymer Achieve™ 1635 dissolved in bulk propylene

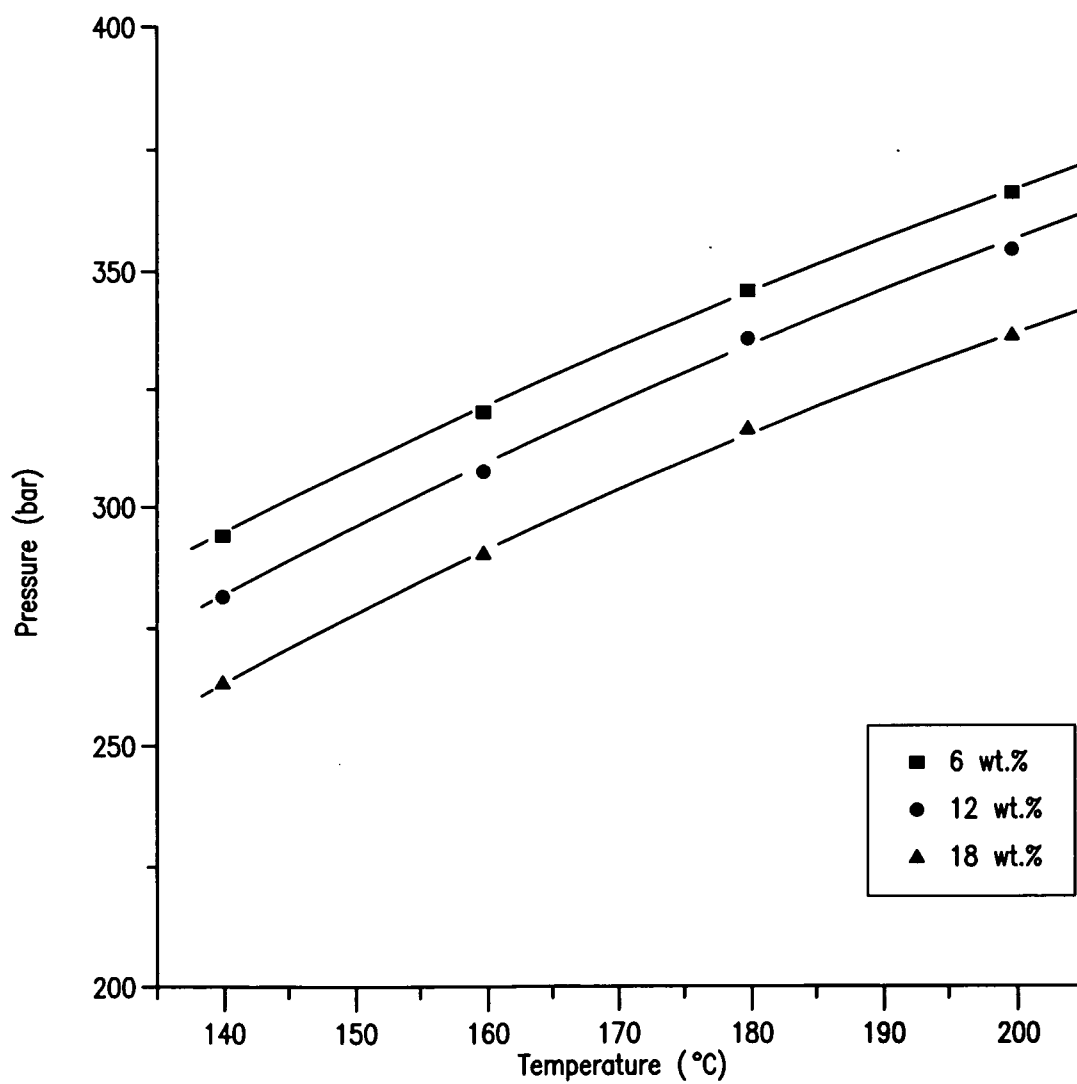


FIG. 16

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Cloud point isopleths for Polymer PP 45379 dissolved in bulk propylene

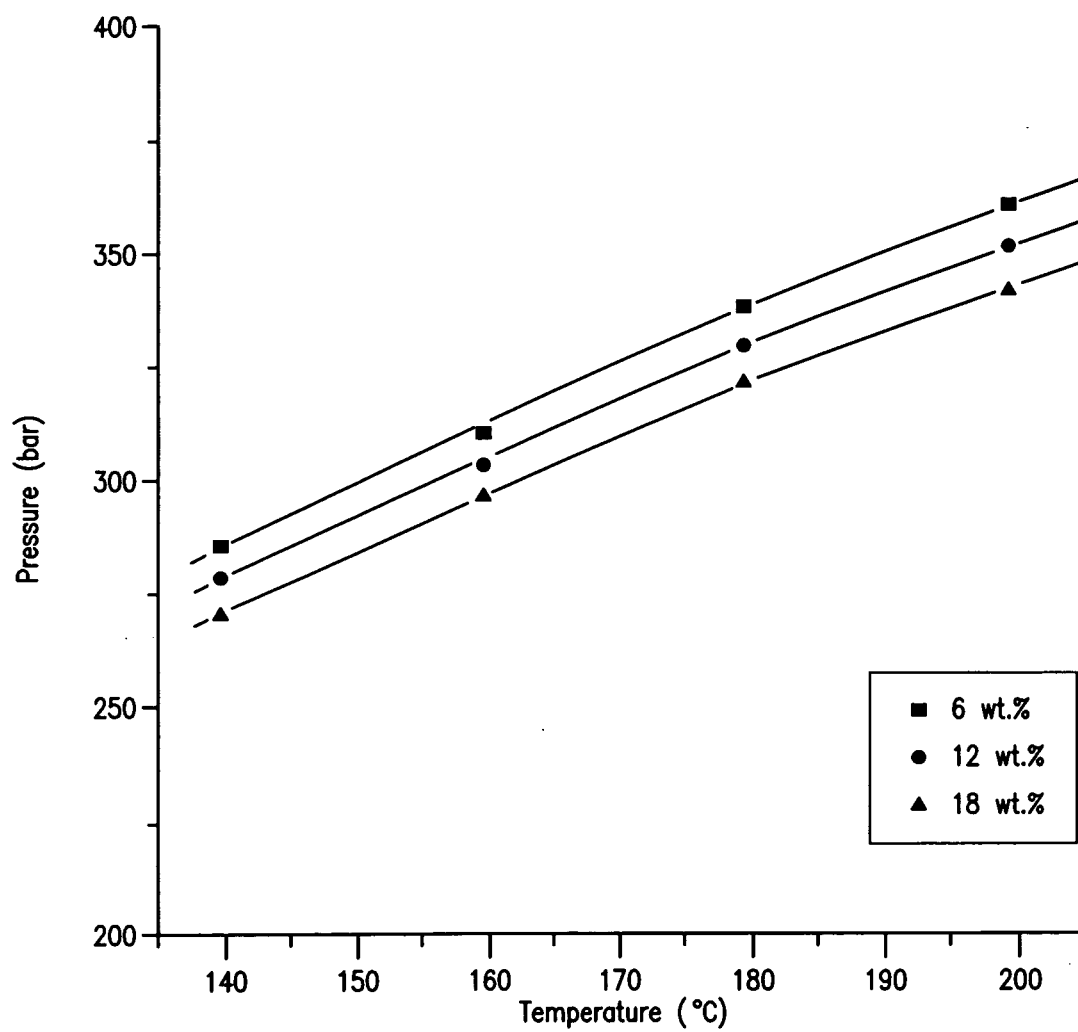
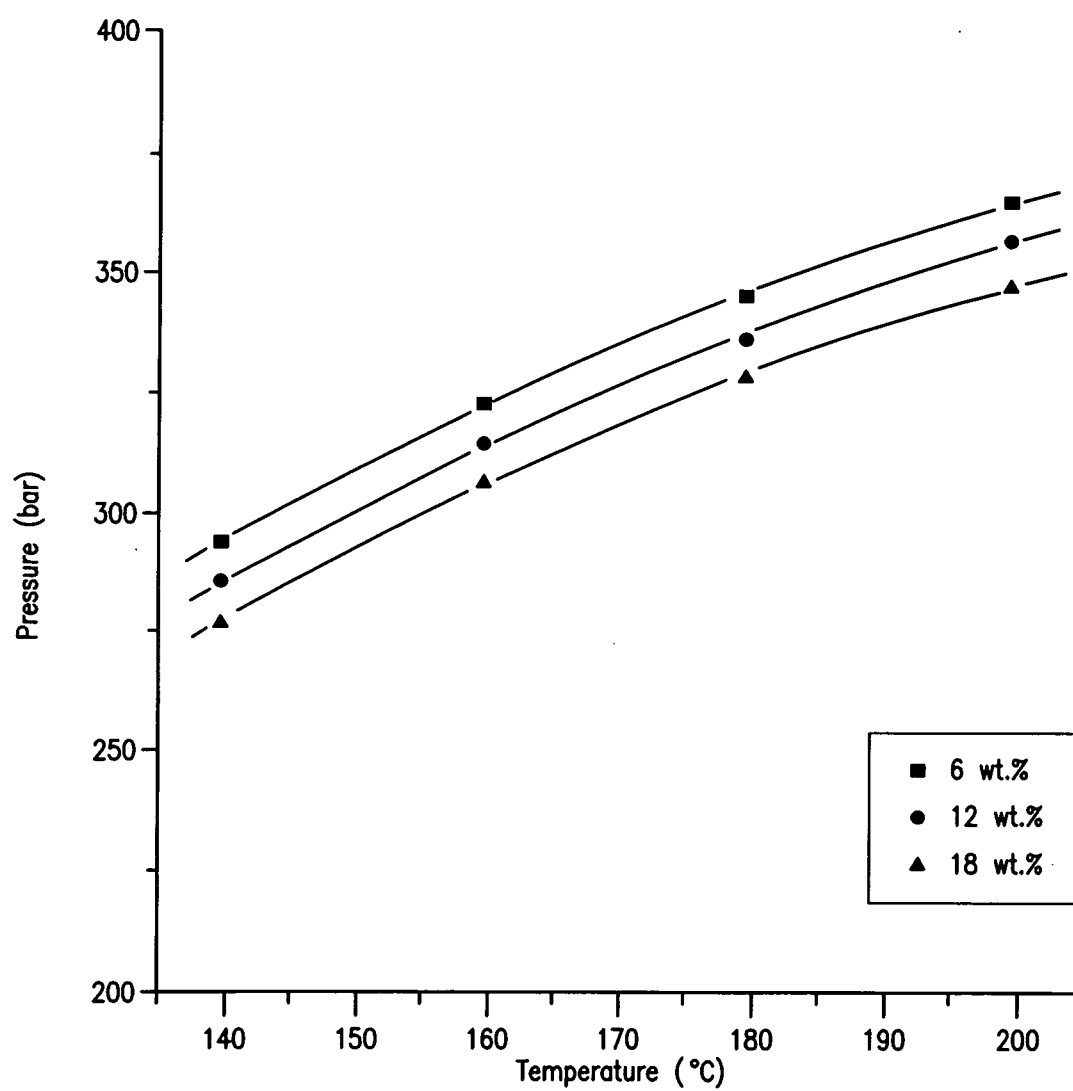


FIG. 17

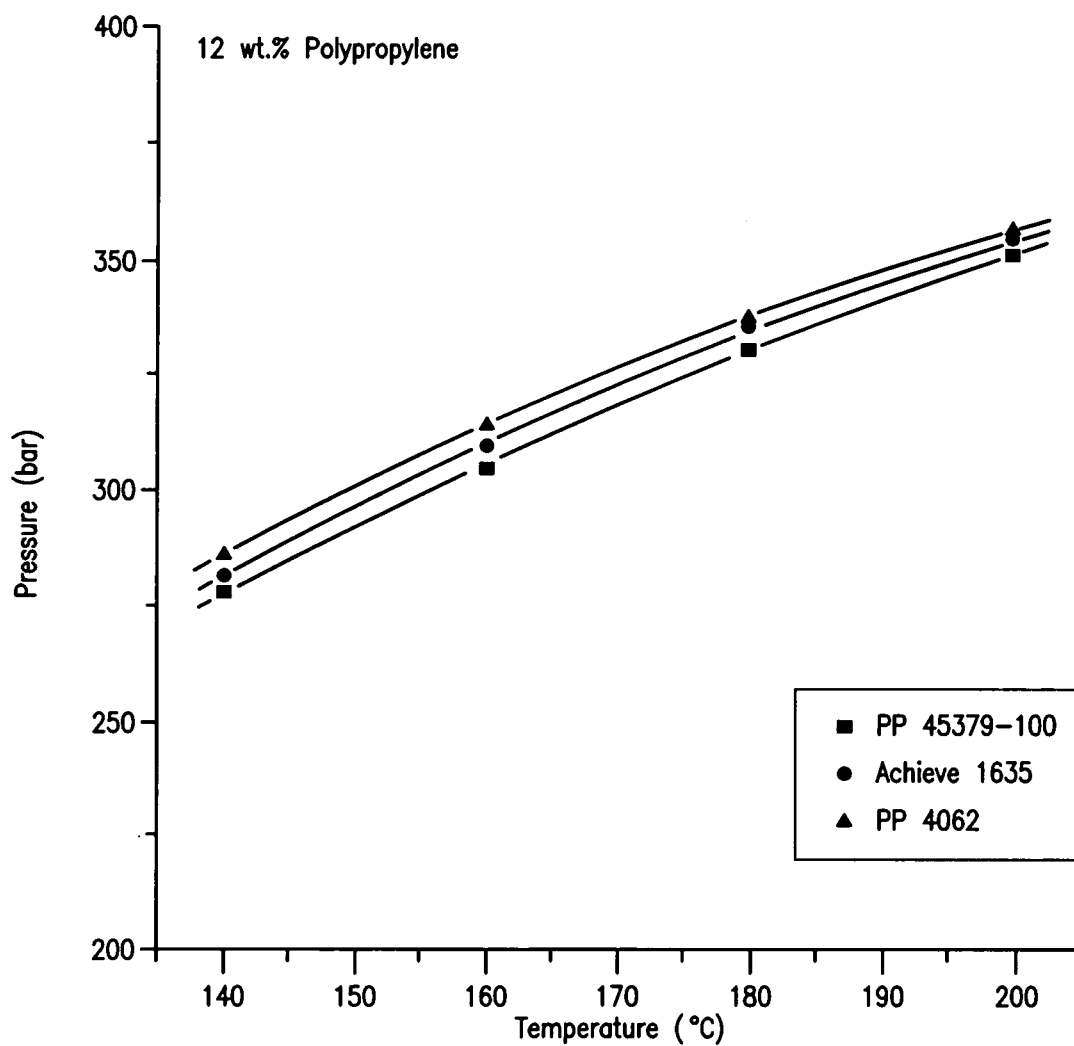
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Cloud point isopleths for Polymer PP 4062 dissolved in bulk propylene

**FIG. 18**

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Comparison of isopleths for PP 45379, Achieve™ 1635 and PP 4062 dissolved in bulk propylene

**FIG. 19**

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Comparison of isopleths for Achieve™ 1635 and literature data

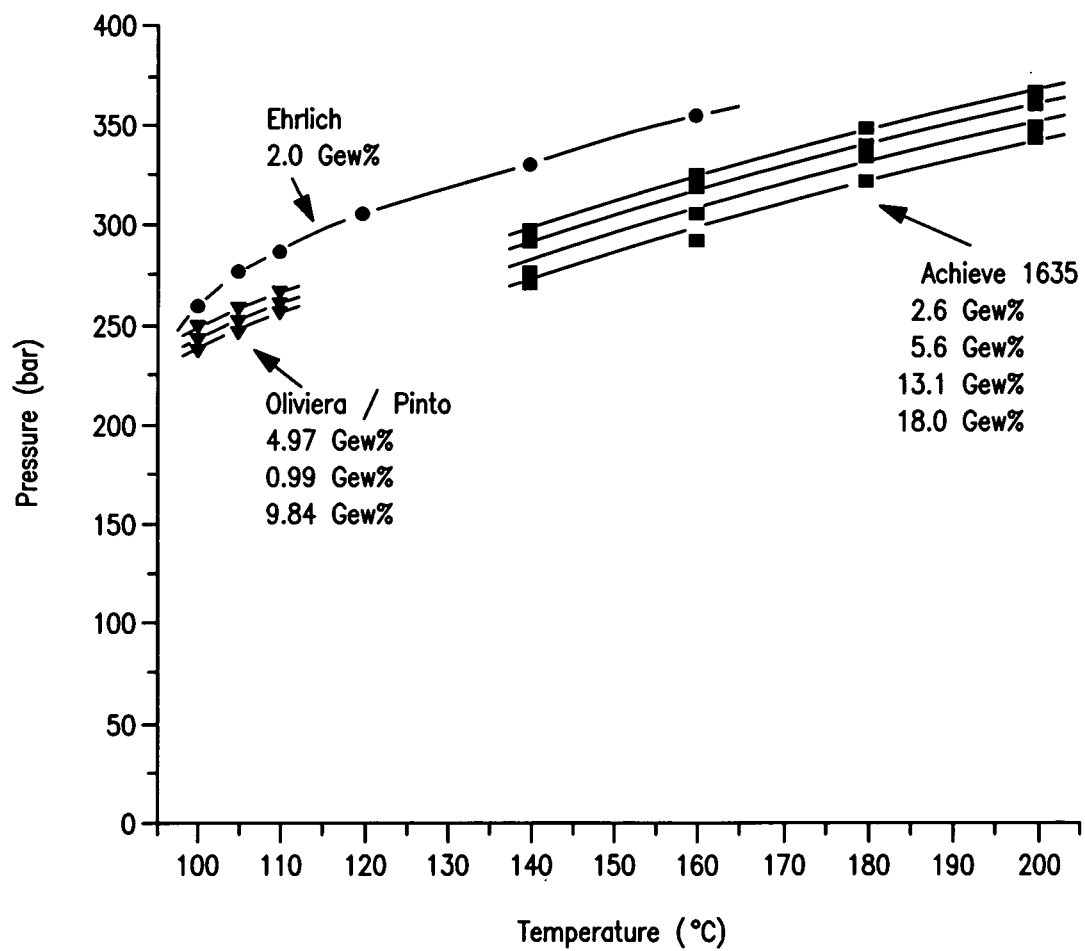


FIG. 20

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Comparison of isopleths for PP 45379 and literature data

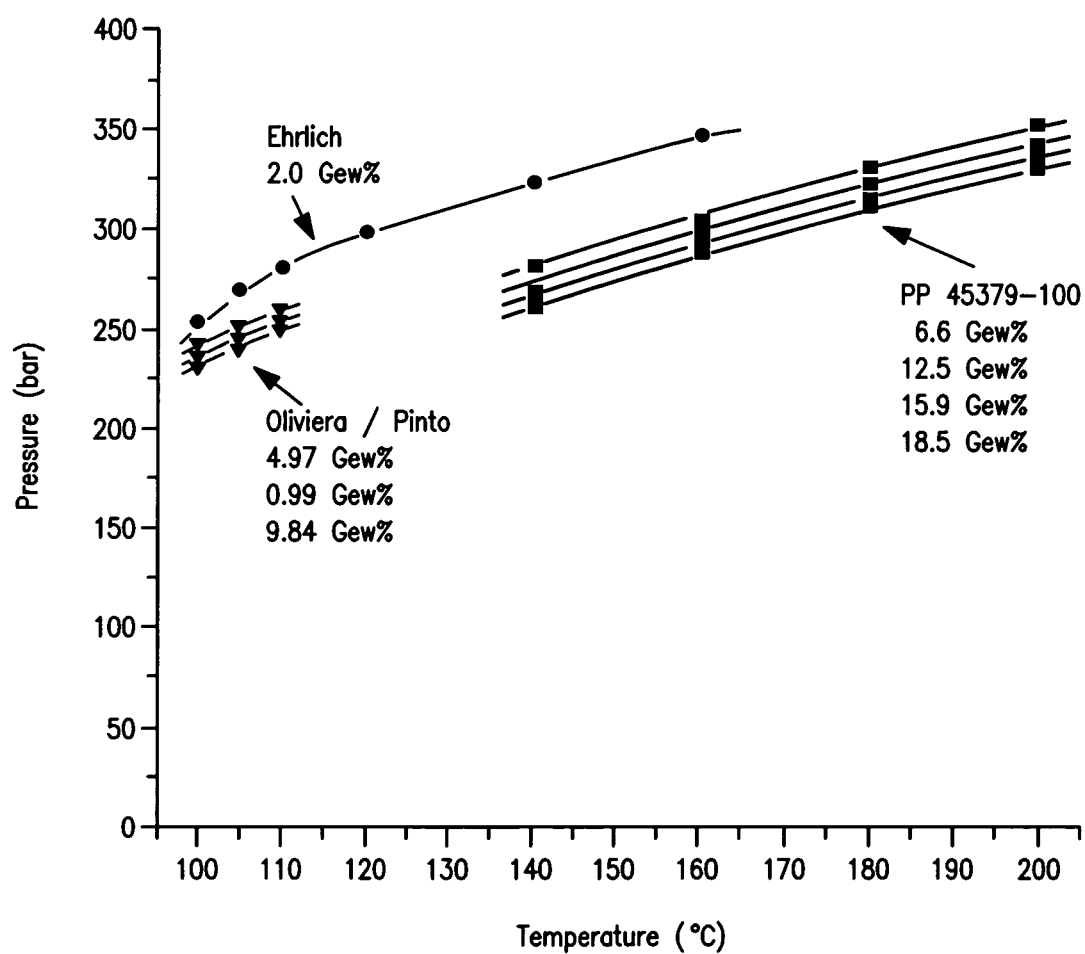


FIG. 21

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Comparison of isopleths for PP 4062 and literature data

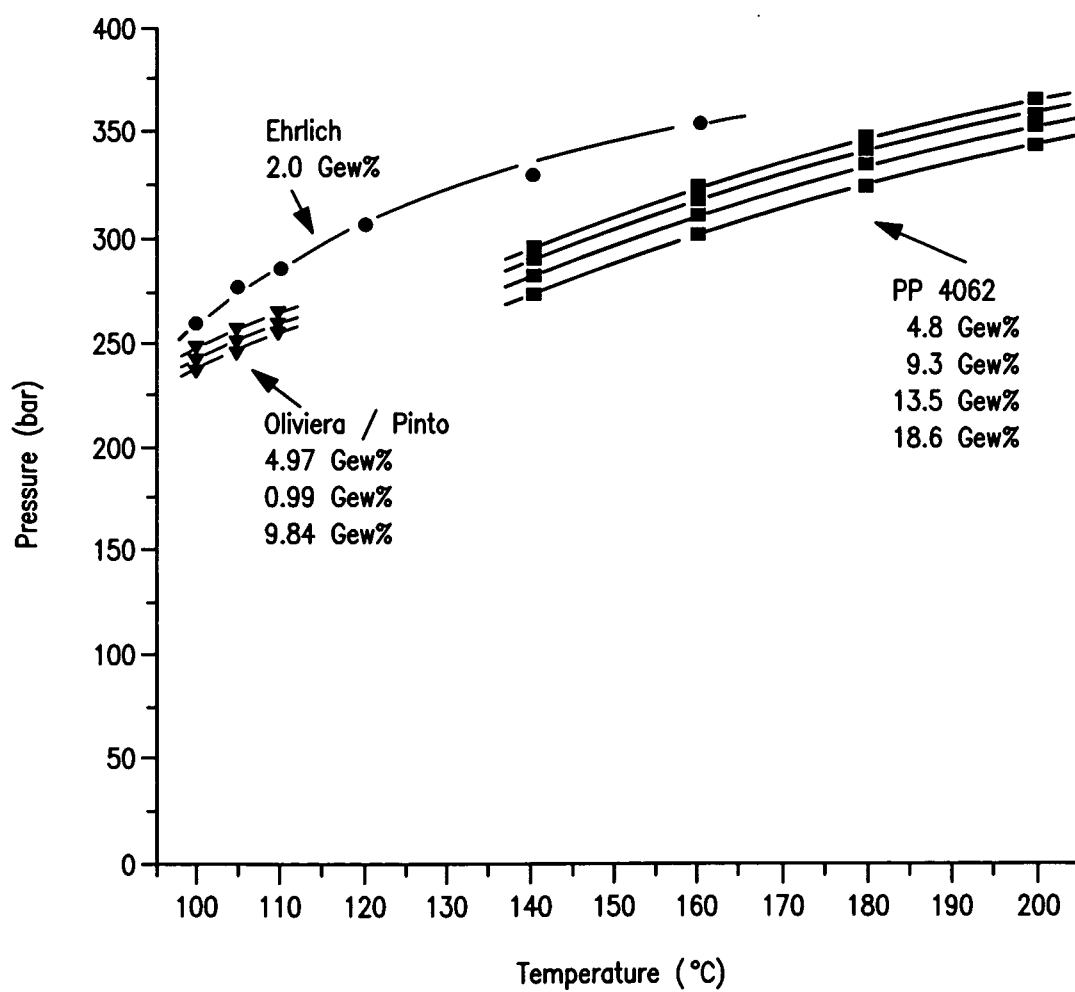


FIG. 22

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Basic phase diagram for mixture of propylene monomer with polymer

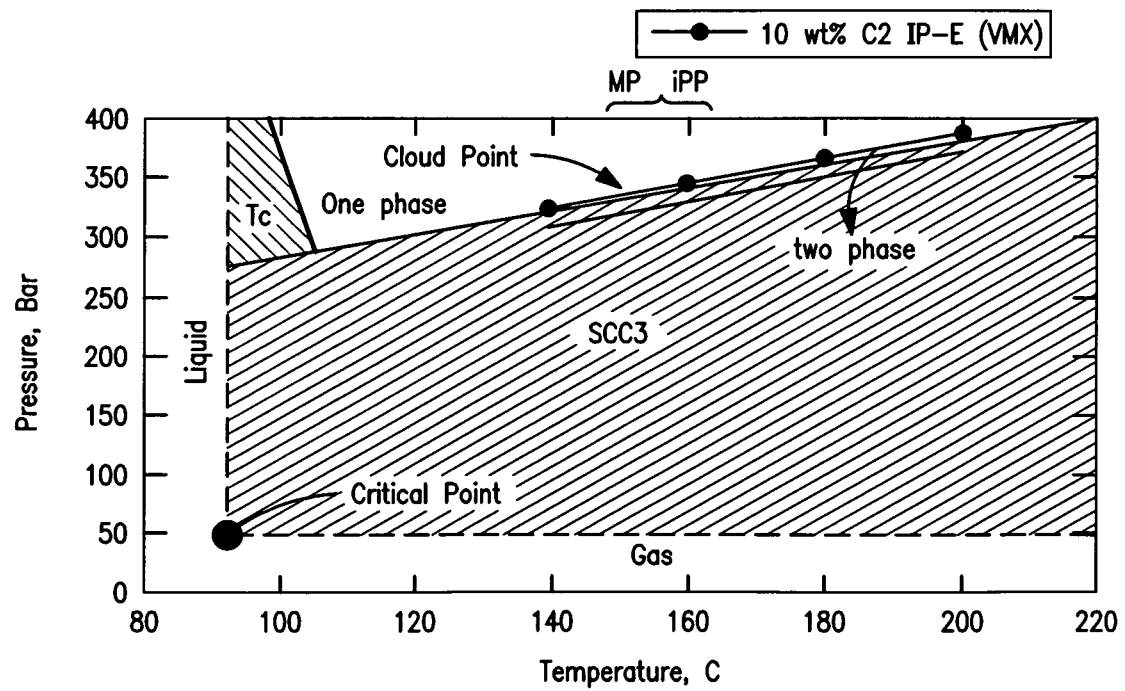
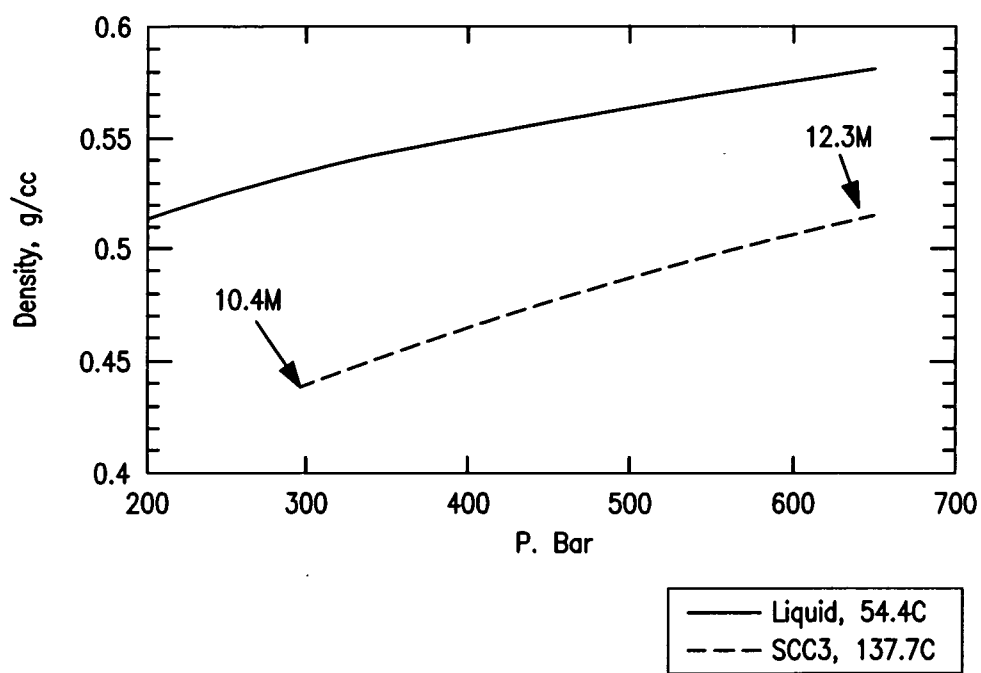


FIG. 23

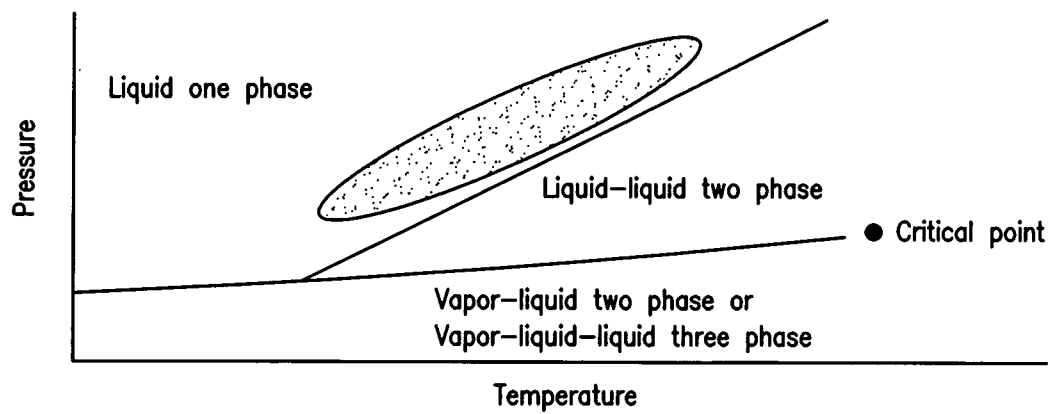
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Comparison of the density of supercritical propylene with liquid propylene

**FIG. 24**

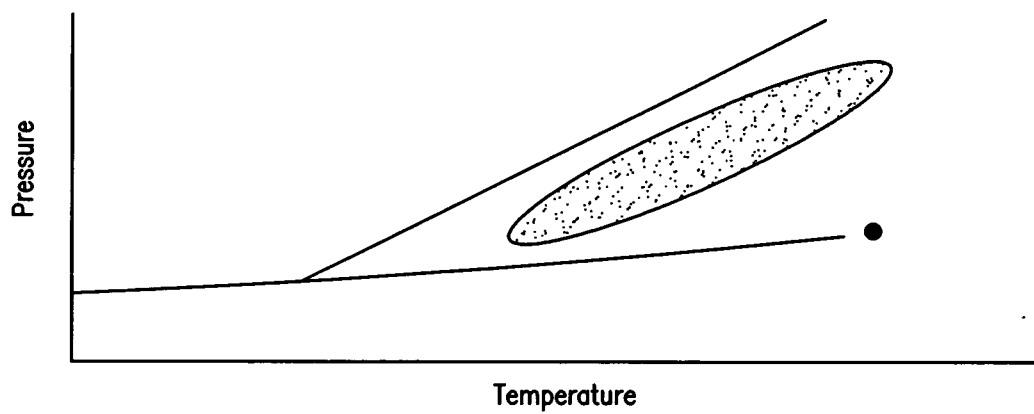
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Operating regime with process disclosed for a reactor operating in a single fluid phase

**FIG. 25**

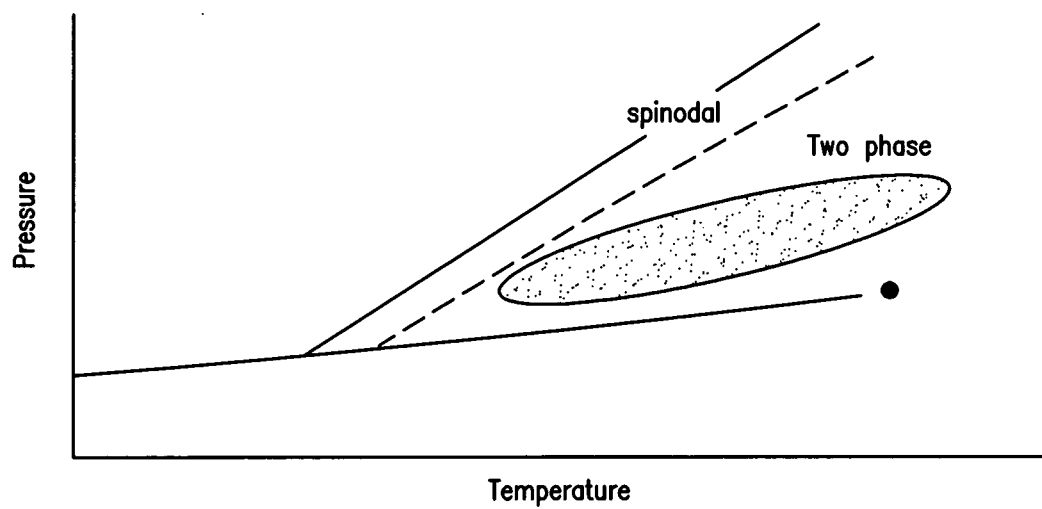
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Operating regime with process disclosed for a reactor operating in a fluid–fluid phase

**FIG. 26**

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Operating regime with process disclosed herein for a gravity separator

**FIG. 27**

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Graphical Depiction of the Thermodynamic Definition of Binodal and Spinodal Boundaries

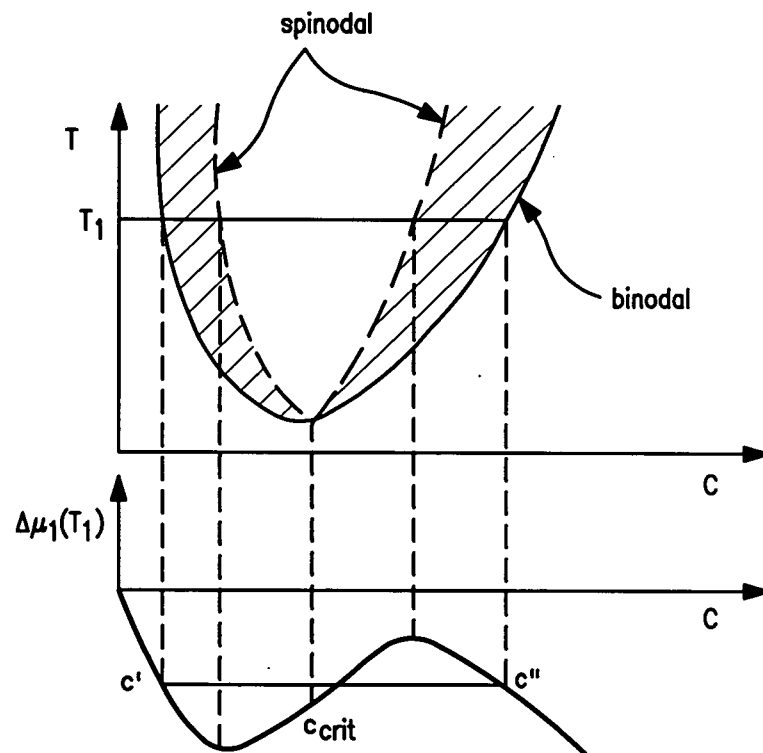


FIG. 28

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Phase Diagram for a Typical Polymerization Medium

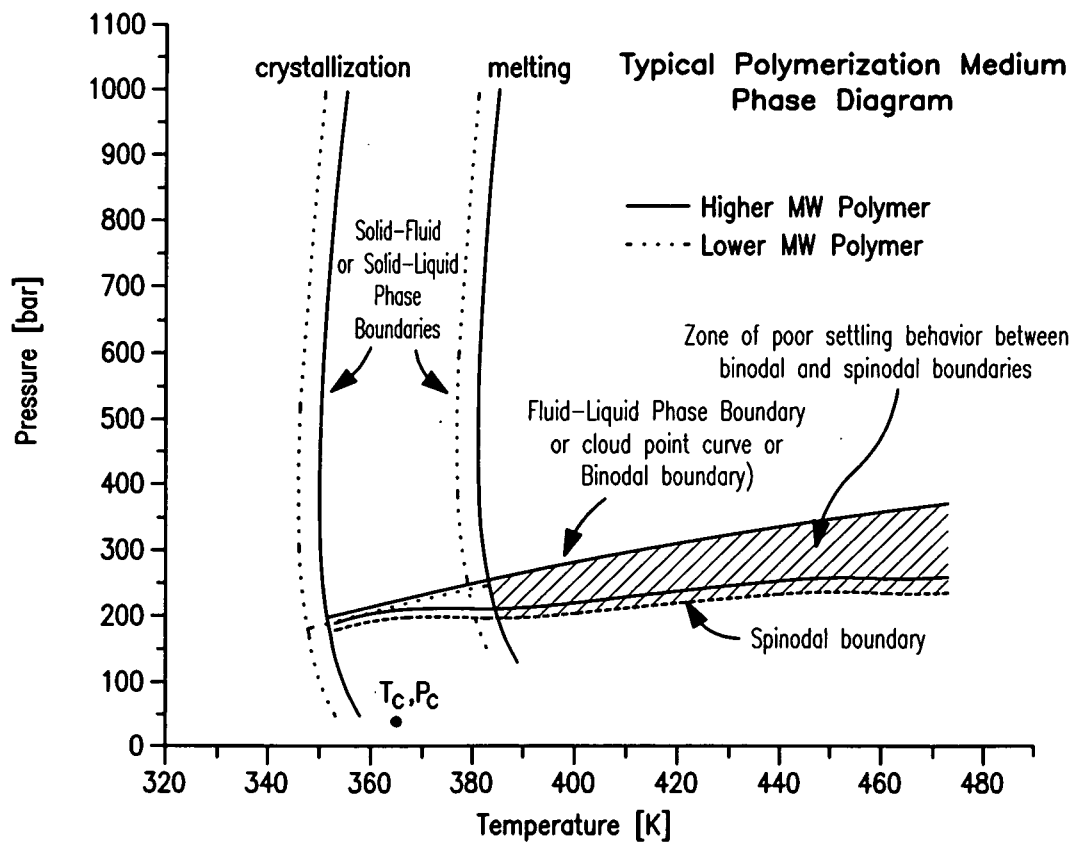


FIG. 29