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(54) **Title:** METHOD AND SYSTEM OF MODIFYING A LIQUID LEVEL DURING START-UP OPERATIONS

(57) **Abstract:** The present disclosure provides a method for separating a feed stream in a distillation tower. The method includes operating a controlled freeze zone section in a distillation tower that separates a feed stream at a temperature and pressure at which the feed stream forms a solid in the controlled freeze zone section, wherein the feed stream includes a first contaminant; maintaining a melt tray assembly in the controlled freeze zone section; introducing the feed stream to the controlled freeze zone section; and accumulating a liquid in the melt tray assembly until the liquid is at a predetermined liquid level in the controlled freeze zone section, by: feeding a second contaminant to the controlled freeze zone section; and adding the second contaminant to the melt tray assembly, wherein the liquid comprises the second contaminant.

