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(54) Title: SPLIT FLOW REACTOR TRAYS FOR VERTICAL STAGED POLYCONDENSATION REACTORS

(57) Abstract

This invention relates to a vertically disposed polymerization reactor (2) having a series of essentially circular tray assemblies (10); each tray assembly (10) having a central open vapor chimney (18) and two split-flow paths (26) each split-flow path (26) containing one reverse flow path wherein the liquid polymer flow is reversed by means of a substantially semi-circular turnaround region (24); said trays (10) having a liquid polymer tray inlet (14) and a liquid polymer tray outlet (16) for conducting a flow of the liquid polymer by means of a hyraulic gradient; each tray assembly (10) being open at the top for escape of vapor from the liquid polymer flow to the central open vapor chimney (18); and said trays (10) arranged in vertical disposition one above the other.

