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(54) **Title:** LOW CONCENTRATION SINGLE PASS TANGENTIAL FLOW FILTRATION TO DE-BOTTLENECK CONNECTED AND/OR HIGH TITER FED BATCH PROCESSES

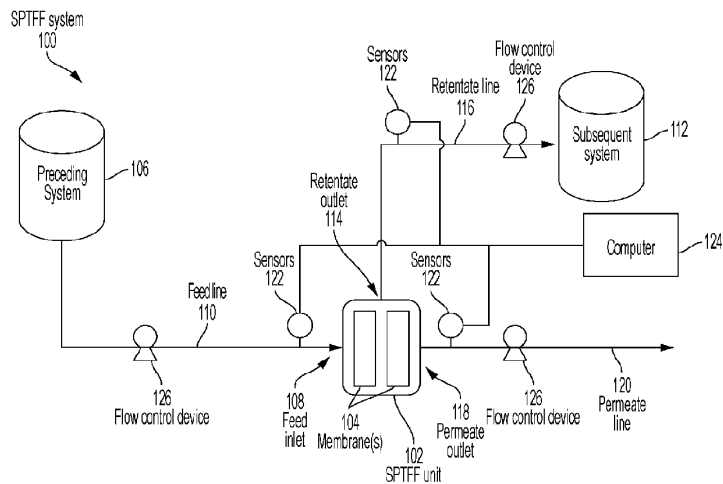


FIG. 1

(57) **Abstract:** Exemplary systems and methods are provided for receiving a feed flow at a feed flow inlet of a single pass tangential flow filtration unit, wherein the single pass tangential flow filtration unit includes one or more membranes or membrane devices in a one- or two-stage configuration, and wherein a pressure drop across the one or more membranes or membrane devices is less than or equal to 3Opsi. The systems and methods are configured to separate, using the one or more membranes or membrane devices in a one- or two-stage configuration, the feed stream into a permeate stream and a retentate stream and output the permeate stream through one or more permeate outlets and the retentate stream through one or more retentate outlets.

[Continued on next page]

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