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(54) Title: COMPONENT MAPPER FOR USE IN CONNECTION WITH REAL-TIME OPTIMIZATION PROCESS

(57) Abstract

A component mapper (22) is provided in connection with a process (Fig. 2) wherein a fluid stream having multiple physical components is modeled as a plurality of pseudo components (401, 402). Each pseudo component in the model has a varying pre-defined property and a varying amount. A plurality of sub-pseudo components are defined for each pseudo component such that the pseudo component is replaceable therewith. Each sub-pseudo component (401) has a pre-defined value for the pre-defined physical property of the control process for each pseudo component, a current value of the pre-defined property and a current amount of the pseudo component are obtained, and a current amount for each sub-pseudo component (401) of the pseudo component is then calculated. The pre-defined value of the pre-defined property and the calculated current amount for each sub-pseudo component of each pseudo component are then utilized in a real-time optimization process.

