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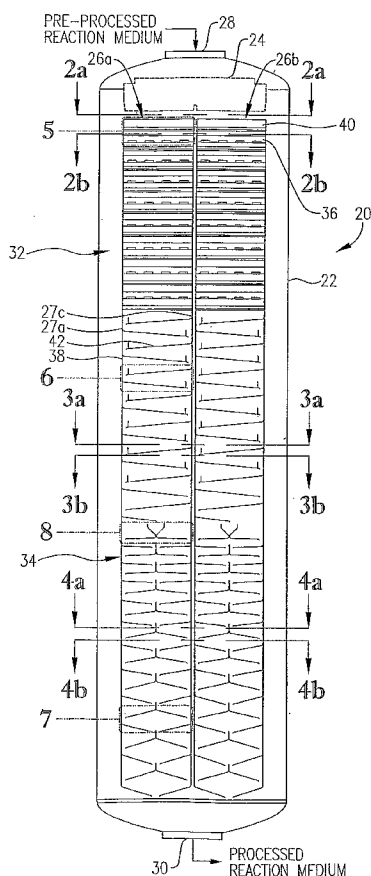
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(54) Title: REACTOR WITH OPTIMIZED INTERNAL TRAY DESIGN



(57) Abstract: A system for processing large quantities of a reaction medium while maintaining the reaction medium in sheets. The system includes a reactor having a plurality of vertically-spaced downwardly-sloped trays over which the reaction medium flows while it is subjected to reaction conditions. The slope of the trays increases downwardly to accommodate for the increased viscosity of the reaction medium while the reaction medium flows downwardly through the reactor. An upper portion of the trays have a uni-directional configuration, while a lower portion of the trays have a bi-directional configuration. Further, the orientation of flow across the uni-directional trays is rotated by 90 degrees in at least one location as the reaction medium flows down the uni-directional trays.



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