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(71) Applicant (for all designated States except US): **UOP LLC** [US/US]; John G. Tolomei, Assistant Secretary-Patent Matters, 25 East Algonquin Road, P.O. Box 5017, Des Plaines, Illinois 60017-5017 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **XU, Zhanping** [US/US]; UOP LLC, 175 East Park Drive, Tonawanda, New York 14150 (US). **NOWAK, Brian J.** [US/US]; UOP LLC, 175 East Park Drive, Tonawanda, New York 14150 (US). **HELDWEIN, Thomas C.** [US/US]; UOP LLC, 175 East Park Drive, Tonawanda, New York 14150 (US). **AGNELLO, Joseph** [US/US]; UOP LLC, 175 East Park Drive, Tonawanda, New York 14150 (US). **CRISCIONE,**

Andrew J. [US/US]; UOP LLC, 175 East Park Drive, Tonawanda, New York 14150 (US). **MUCK, Aaron J.** [US/US]; UOP LLC, 175 East Park Drive, Tonawanda, New York 14150 (US).

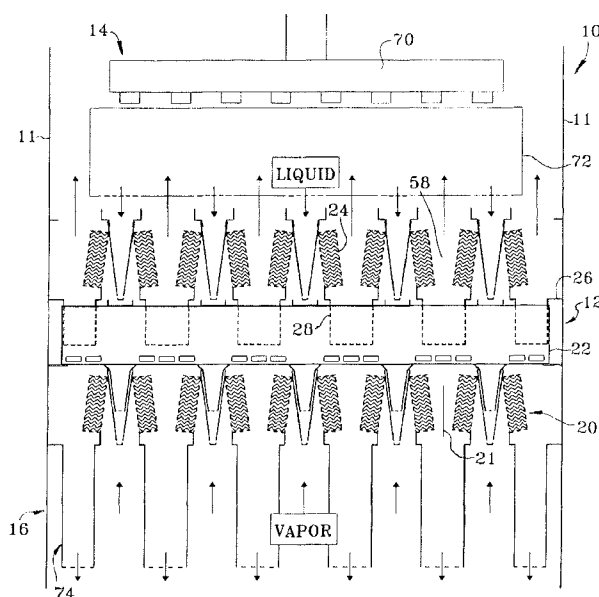
(74) Common Representative: **UOP LLC**; John G. Tolomei, Assistant Secretary-Patent Matters, 25 East Algonquin Road, P.O. Box 5017, Des Plaines, Illinois 60017-5017 (US).

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[Continued on next page]

(54) Title: CO-CURRENT VAPOR-LIQUID CONTACTING APPARATUS



(57) Abstract: The invention is a high capacity and high efficiency co-current vapor-liquid contacting apparatus for use in distillation columns (10) and other vapor-liquid contacting processes. The apparatus is characterized by an arrangement of modules (20) in horizontal stages rather than tray-like construction. The modules define a co-current contacting volume (56) and in an exemplary configuration the modules (20) include a liquid distributor (22), a demister (24), a receiving pan (26) and a duct (28). The modules of one stage are rotated to be non-parallel with respect to the modules of an inferior stage, a superior stage, or both. Variations relate to the design of the individual elements such as the demister, liquid distributor, ducts, and contacting volumes, and the overall arrangement of the apparatus.

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