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(71) Applicant (for all designated States except US): **MYKROLIS CORPORATION** [US/US]; 129 Concord Road, Billerica, MA 01821-4600 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **DOH, Cha, P.**

[US/US]; 43 Allan Avenue, Sudbury, MA 01776 (US). **CHENG, Kwok-Shun** [US/US]; 7 Federal Hill Road, Nashua, NH 03062 (US). **BRIGGS, Alicia** [US/US]; 158 Parlmont Park, Billerica, MA 01862 (US).

(74) Agents: **KING, Timothy, J.** et al.; Mykrolis Corporation, 129 Concord Road, Billerica, MA 01821-4600 (US).

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(54) Title: EXCHANGE APPARATUS

(57) **Abstract:** An exchange apparatus comprised of hollow thermoplastic tubes infusion bonded into a thermoplastic material is disclosed. In a preferred embodiment the hollow tubes are shaped by plaiting the tubes into cords and then thermally annealing the cords to set the crests and bends of the plait. The cords provide improved flow distribution of fluid about the hollow tube tubes in the exchange apparatus. The exchange apparatus is chemically inert and is useful for cross flow filtration, as well as heat and mass transfer in harsh chemical environments.



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