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(71) Applicant: **COMPART SYSTEMS PTE. LTD.** [SG/SG];
8 Joring Town Hall Road, The JTC Summit, #24-05, Singa-
pore 018981 (SG).

(72) Inventors: **REZAEI, Frederick**; 1334 East Chandler
Blvd., Suite 5-D-42, Phoenix, AZ 85048 (US). **VU, Kim,**
Ngoc; 5605 Vista Del Mar, Yorba Linda, CA 92887 (US).

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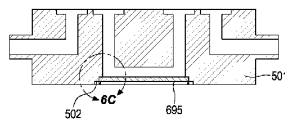


FIG. 6A

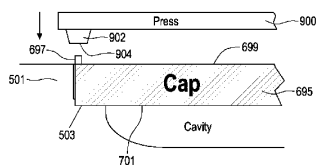


FIG. 6B

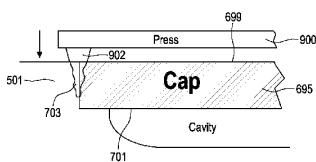


FIG. 6C

(57) Abstract: A flow substrate comprising a substrate body formed from a solid block of a first material, the substrate body having a first surface and a second surface opposing the first surface, a plurality of pairs of component conduit ports defined in the first surface of the substrate body, a plurality of fluid pathways extending between each respective pair of component conduit ports and in fluid communication with each component conduit port of the respective pair of component conduit ports, each respective fluid pathway being formed in the second surface of the substrate body; and at least one cap formed from a second material, the at least one cap having a first cap surface that is constructed to seal at least one fluid pathway, and a second cap surface opposing the first surface, wherein the substrate body includes an opening configured to couple with the at least one cap.

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