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- (71) **Applicant: ICHOR SYSTEMS, INC.** [US/US]; 3185 Laurelview Ct., Fremont, CA 94538 (US).
- (72) **Inventors: BARROS, Philip Ryan;** 8113 War Glory Pl., Pleasanton, CA 94566 (US). **MULLIGAN, Greg Patrick;** 2173 Cuesta Drive, Milpitas, CA 95035 (US).
- (74) **Agent: HERD, Matthew E.;** The Belles Group, P.C., 1800 John F. Kennedy Boulevard, Suite 1010, Philadelphia, PA 19103 (US).
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(54) **Title:** FLUID FLOW CONTROL SYSTEM COMPRISING A MANIFOLD ASSEMBLY

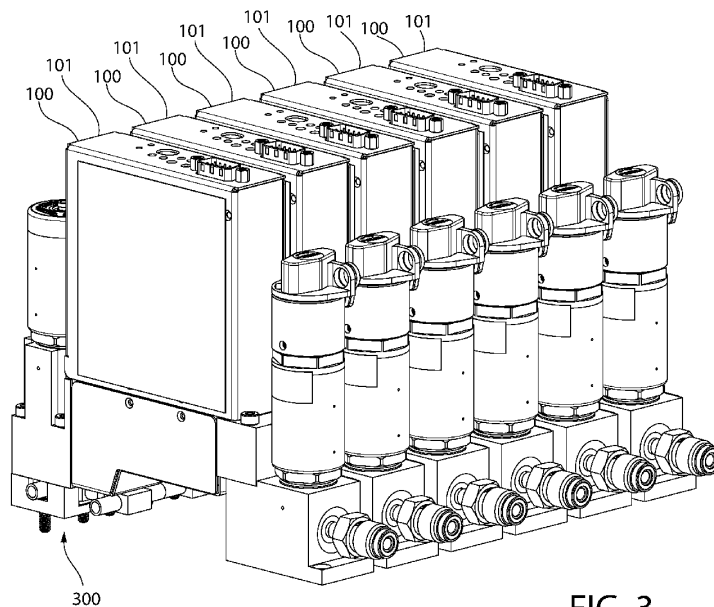


FIG. 3

(57) **Abstract:** Systems for processing articles are essential for semiconductor fabrication. In one embodiment, a system is disclosed comprising a plurality of fluid supplies configured to supply process fluids, a plurality of apparatuses for controlling flow, a plurality of mounting substrates, a vacuum manifold fluidly coupled to the plurality of mounting substrates, an outlet manifold fluidly coupled to the plurality of mounting substrates, a vacuum source fluidly coupled to the vacuum manifold, and a processing chamber fluidly coupled to the outlet manifold. The plurality of apparatuses for controlling flow have a bleed port and an outlet. The outlets of the plurality of apparatuses are fluidly coupled to corresponding outlet ports of the plurality of mounting substrates. The bleed ports of the plurality of apparatuses are fluidly coupled to the corresponding vacuum ports of the plurality of mounting substrates.

[Continued on next page]



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