ABSTRACT OF THE DISCLOSURE

APPARATUS AND METHOD FOR DETECTING PARTICLES IN REACTIVE AND TOXIC GASES

An apparatus and a method are disclosed for detecting particles in a particle-containing gas at a pressure greater than about 0 psig. The apparatus includes a gas distribution line containing a pressurized gas having a pressure greater than about 0 psig and a condensation nucleus counter in fluid communication with the pressurized gas in the gas distribution line. The condensation nucleus counter is adapted to receive a stream of the pressurized gas at a pressure substantially equal to the pressure of the pressurized gas in the gas distribution line. The condensation nucleus counter is constructed of materials resistant to corrosion and to reaction with the pressurized gas, which may be one or more reactive or toxic gases, such as those used in microchip processing, or an inert gas.

(Figure 2)