

ABSTRACT

A controlled dilution fluid flow pattern is described. In an embodiment, a fluid supply device is configured for controlling a pattern of a flow of a fluid within a critical room. The critical room comprises a critical area subject to contamination. A first fluid supply nozzle is configured to provide a first fluid supply jet to provide a first flow of the fluid towards a substantial center of the critical area. A second fluid nozzle is configured to provide a second fluid supply jet to provide a second flow of the fluid towards a perimeter of the room. A momentum of the first fluid supply jet and a momentum of the second fluid supply jet are adjusted so that the substantial center of the critical area is flushed by the first flow and penetration of the second flow into the substantial center of the critical area is generally prevented. In other embodiments, a HVAC system and method are discussed along with the features of the device.

Fig. 1