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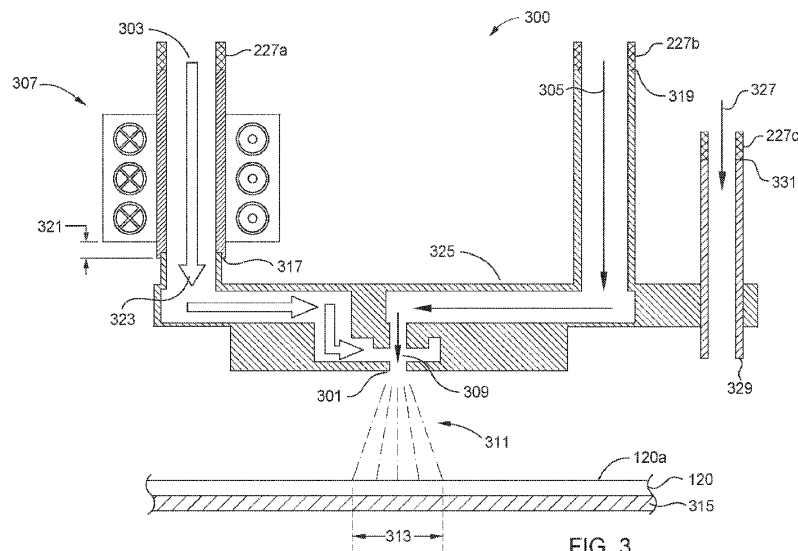


FIG. 3

(57) Abstract: Embodiments of the disclosure include an apparatus and method of cleaning a substrate. The disclosure describes a method of cleaning a substrate includes supplying a gas at a gas temperature and a gas mass flow rate to a nozzle. The method also includes supplying a liquid at a liquid temperature and a liquid mass flow rate to the nozzle. The method also includes mixing the gas with the liquid in the nozzle to form a fluid mixture having a mixture temperature of not more than about 10°C below the liquid temperature. The method also includes spraying the fluid mixture onto a surface of the substrate through an orifice in the nozzle.

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