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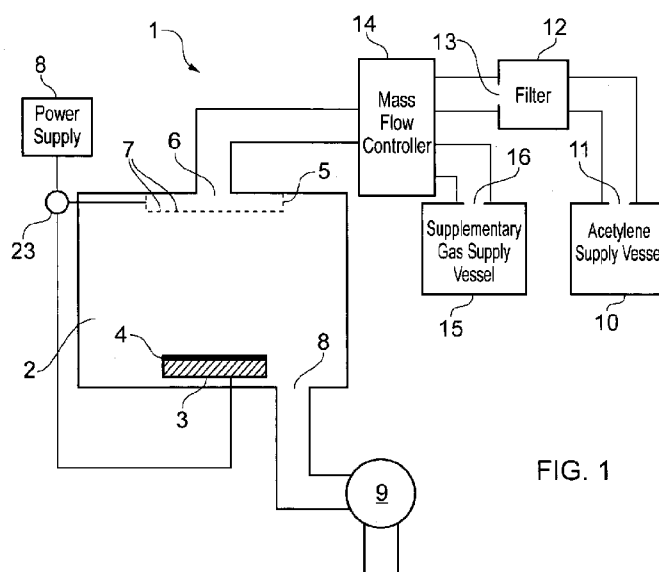


FIG. 1

(57) Abstract: In a Chemical Vapour Deposition (CVD) process for forming carbon nanomaterials, a supply (10) of acetylene gas is filtered by a filter (12) to remove a volatile hydrocarbon gas before the acetylene gas is provided to a mass flow controller (14). The mass flow controller (14) can mix the filtered acetylene gas with a supply of the volatile hydrocarbon gas so that a gas mixture has a selected proportion of the volatile hydrocarbon gas. The filter (12) performs the filtering by passing the acetylene gas over active carbon.