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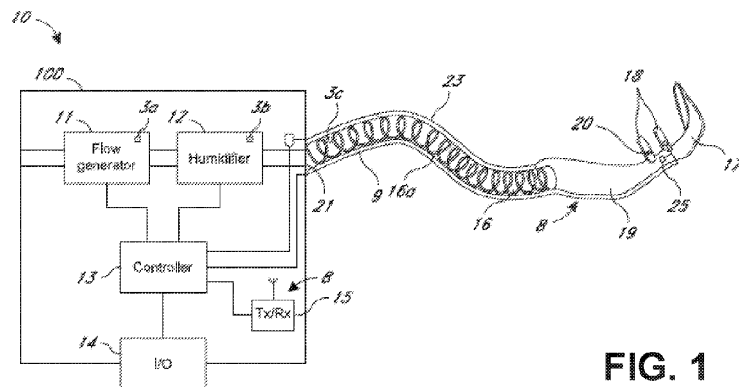


FIG. 1

(57) Abstract: A respiratory support system can be configured to automatically mitigate a risk of patient discomfort and/or harm associated with the flow of heated, humidified gases provided to a patient. The system includes a humidifier unit which holds and heats a volume of water, and which receives a flow of gases via an inlet port. The flow of gases passes through the humidifier and exits via an exit port. The system also includes a controller which receives data from various sensors in the system, and which can control heating of a heater plate in the humidifier. The control output is configured to adjust the maximum power limit to the heater plate to prevent dangerous enthalpy levels and/or dew points of the gases leaving the patient interface.

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