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(54) Title: ADJUSTABLE EXPIRATORY RELIEF IN RESPIRATORY THERAPY

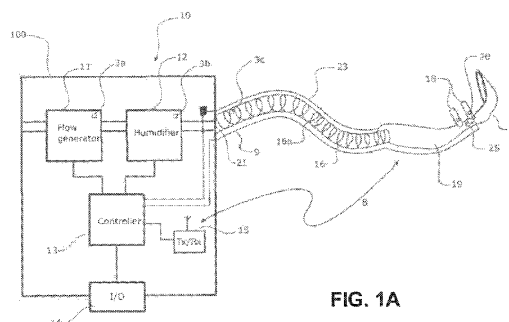


FIG. 1A

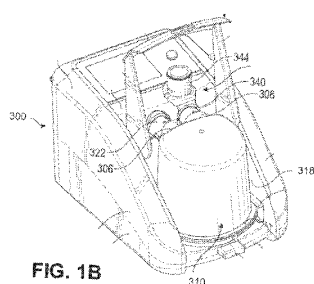


FIG. 1B

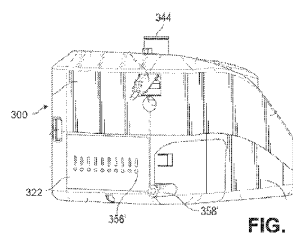


FIG. 1C

(57) Abstract: Systems and methods for conducting respiratory therapy in a respiratory system can adjust a flow of respiratory gases to a patient based upon a detected patient breath cycle. The respiratory system can include a non-sealed patient interface. The respiratory system can be configured to deliver a high flow therapy. The system can synchronize the flow rate with the detected breath cycle of the patient. The amplitude of the flow rate variation can be based partially on a value selected by the user. The adjustments to the flow rate can be done by controlling the motor speed using a positive feedback system. The adjustments to the flow rate can also be limited by the controller preventing the flow rate from crossing a minimum and/or maximum threshold.

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