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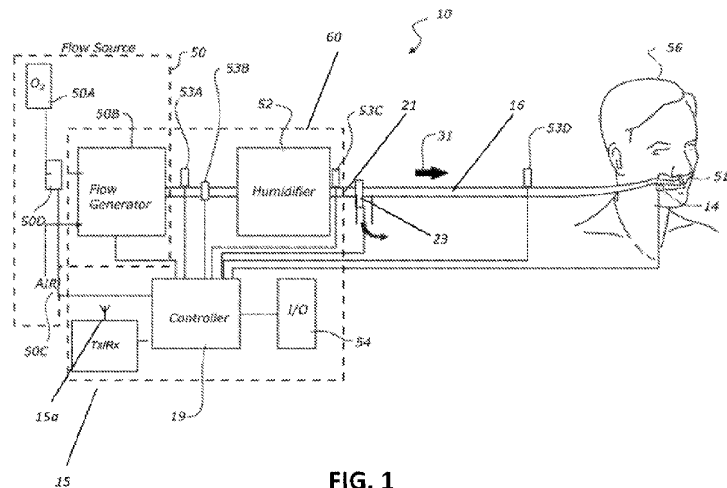


FIG. 1

(57) Abstract: A method of estimating an off-therapy respiratory parameter of a patient during therapy is provided. The method includes the steps of providing a flow of gases at a plurality of flow rates via a flow generator, the flow rates comprising at least an operating flow rate and one or more intermediate flow rates; receiving flow parameter data indicative or representative of one or more properties the flow of gases provided by the flow generator at each of the plurality of flow rates from one or more sensors; estimating or determining a respiratory parameter of the patient at each of the plurality of flow rates based at least on the data received; and estimating an off-therapy respiratory parameter of the patient based at least on the estimated or determined respiratory parameters at each of the plurality of flow rates.

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