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(54) Title: AUTOMATED OXYGEN DELIVERY SYSTEM

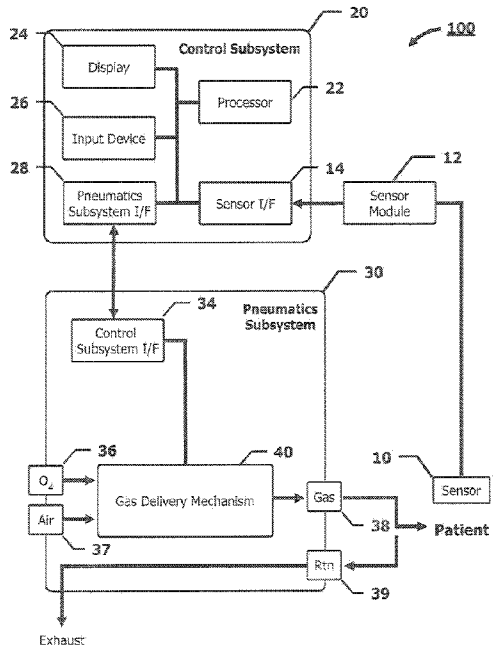


FIG. 1

(57) Abstract: The present invention advantageously provides a system for automatically delivering oxygen to a patient, including a sensor to measure an amount of oxygen in a bloodstream of a patient, a pneumatics subsystem (30) and a control subsystem (20). The pneumatics subsystem includes an oxygen inlet (36), an air inlet (37), a gas mixture outlet (38), and a gas delivery mechanism to blend the oxygen and air to form a gas mixture having a delivered oxygen concentration, and to deliver the gas mixture to the patient. The control subsystem includes an input device to receive a desired concentration of oxygen in the bloodstream of the patient, a sensor interface (14) to receive measurement data and status information associated with the measurement data from the sensor (10), a pneumatics subsystem interface (34) to send commands to, and receive data from, the pneumatics subsystem, and a processor (22) to control the delivered oxygen concentration based on the desired oxygen concentration, the measurement data and the status information.

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