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# (12) United States Patent Morrison et al.

## (54) COMPLIANCE MONITORING MODULE FOR A BREATH-ACTUATED INHALER

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See application file for complete search history.

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#### (57) ABSTRACT

A compliance monitoring module for a breath-actuated inhaler comprising: a miniature pressure sensor, a sensor port of said sensor being pneumatically coupled to a flow channel through which a user can inhale; a processor configured to: receive a signal originating from a dosing mechanism of the inhaler indicating that medication has been released; receive data from a sensing element of the sensor; and based on said signal from said dosing mechanism and said data from said sensing element, make a determination that inhalation of a breath containing medication through said flow channel complies with one or more predetermined requirements for successful dosing; and a transmitter configured to, responsive to said determination, issue a dosing report.

#### 36 Claims, 15 Drawing Sheets



