



## SYSTEM AND METHOD FOR DETERMINING AIRWAY OBSTRUCTION

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## SYSTEM AND METHOD FOR DETERMINING AIRWAY OBSTRUCTION

[Kline, Jeffrey A.](#)



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### Abstract:

A method and system for detecting the presence of restriction to expired airflow in humans or animals by analyzing the expired capnogram and oxygram, as well as the geometric analysis of the real-time plot of the waveform that depicts the instantaneous ratio of CO<sub>2</sub> to O<sub>2</sub> (the carboxygram ratio). Airway obstructions causes an increase in the Q-angle between the slope of phase 11 and slope of phase III in the expired carboxygram. The diagnostic accuracy of the detection of airways obstruction is further enhanced by measuring the ratio of time spent in exhalation (Te) versus inhalation (Ti). The system uses the combination of an increased carboxygram Q-angle, and a prolonged Te/Ti to detect presence of airways obstruction.

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