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Melker

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(54) **METHOD AND APPARATUS FOR MONITORING RESPIRATORY GASES DURING ANESTHESIA**

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A61B 5/08 (2006.01)

(52) **U.S. Cl.** **600/532**; 600/529

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See application file for complete search history.

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(57) **ABSTRACT**

A method and system is provided for monitoring delivery of anesthesia (inhalational and intravenous) and detecting the depth of anesthesia wherein at least one anesthetic agent is absorbed in patient's bloodstream during the administration of anesthesia, which includes sampling inspired and expired gas; analyzing the gas for concentration of at least one substance indicative of the anesthetic agent using sensor technology such as free (unmetabolized) anesthetic agent or its metabolites; determining the effect of the agent based on that concentration; and determining depth of anesthesia based thereon.

36 Claims, 10 Drawing Sheets