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Baran

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[54] **CATHETER SYSTEM FOR DELIVERY OF AEROSOLIZED MEDICINE FOR USE WITH PRESSURIZED PROPELLANT CANISTER**

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Related U.S. Application Data

[62] Division of application No. 08/261,490, Jun. 17, 1994, Pat. No. 5,642,730.

[51] **Int. Cl.**⁷ **A61M 16/00**; A62B 9/06

[52] **U.S. Cl.** **128/207.14**; 128/200.23; 128/200.26; 128/203.12; 128/207.15

[58] **Field of Search** 128/200.18, 200.21, 128/205.11, 203.12, 200.23, 200.26, 207.14, 207.15; 604/284

[57] ABSTRACT

An improved system for delivery of an aerosolized medicine to a patient's respiratory system. The system uses a pressurized canister that contains a mixture of a medicine and a propellant which may be in a liquid state. The canister has an outlet from which the mixture can exit. The system includes an extension catheter that connects at a proximal end to the outlet of the canister. The extension catheter has a length such that a distal end can be positioned either in an endotracheal tube or deep in the respiratory tract of the patient while the proximal end of the extension catheter is connected to the canister which is located outside the patient's body. The extension catheter includes at least one lumen extending therethrough for conveying the medicine and liquid propellant mixture from the canister to a distal exit orifice where an aerosol can be generated as the propellant evaporates. The aerosolized medicine is carried by the patient's inhalation and delivered to the lungs. The extension catheter may be positioned in an endotracheal tube or alternatively may be used with a patient who is not intubated.

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11 Claims, 7 Drawing Sheets

