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Kotliar

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[54] **HYPOXIC CLEANROOM SYSTEMS FOR INDUSTRIAL APPLICATIONS**

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[21] Appl. No.: **858,099**

[57] **ABSTRACT**

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Related U.S. Application Data

Hypoxic cleanroom system is provided for industrial applications. The equipment of the system provides clean low-oxygen or oxygen free environments with climate control and at normal atmospheric or increased pressure. The system employs an oxygen-extraction device, which supplies oxygen-depleted air inside an enclosure communicating with the device. The system may employ a gas-recycling feature by drawing oxygen-depleted gas mixture from the enclosure back into an intake of the oxygen-extraction device wherein it is mixed with an ambient air intaken by the device or by using additional oxygen-extraction device for gas recycling. For cleanroom applications the system employs a gas-recirculating device, which draws internal gas mixture from a cleanroom interior for cleaning and regulating its temperature and humidity, and sends it back through a perforated ceiling, producing laminar flow inside cleanroom. The system may be applied to interior space inside any structure.

[63] Continuation-in-part of Ser. No. 445,677, May 22, 1995, and a continuation-in-part of Ser. No. 505,621, Jul. 21, 1995, and a continuation-in-part of Ser. No. 739,379, Oct. 29, 1996, and a continuation-in-part of Ser. No. 797,242, Feb. 8, 1997.

[51] Int. Cl.⁶ **A61L 9/00**

[52] U.S. Cl. **62/78; 426/418**

[58] Field of Search **62/78; 426/418, 426/419; 454/187; 99/467**

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19 Claims, 6 Drawing Sheets

