US005944996A

United States Patent [19]

DeSimone et al.

[11] Patent Number: 5,944,996

[45] Date of Patent: Aug. 31, 1999

[54] **CLEANING PROCESS USING CARBON DIOXIDE AS A SOLVENT AND EMPLOYING MOLECULARLY ENGINEERED SURFACTANTS**

[75] Inventors: **Joseph M. DeSimone**, Chapel Hill; **Timothy Romack**, Durham; **Douglas E. Betts**, Chapel Hill; **James B. McClain**, Carrboro, all of N.C.

[73] Assignee: **The University of North Carolina at Chapel Hill**, Chapel Hill, N.C.

[21] Appl. No.: **08/850,371**

[22] Filed: **May 2, 1997**

Related U.S. Application Data

[63] Continuation-in-part of application No. 08/553,082, Nov. 3, 1995, Pat. No. 5,783,082.

[51] **Int. Cl.**[6] **B01D 11/00**

[52] **U.S. Cl.** **210/634**; 210/638; 210/767; 134/10; 134/11

[58] **Field of Search** 210/634, 638, 210/639, 767; 134/10–13

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Primary Examiner—Ana Fortuna
Attorney, Agent, or Firm—Myers Bigel Sibley & Sajovec

[57] **ABSTRACT**

The separation of a contaminant from a substrate that carries the contaminant is disclosed. The process comprises contacting the substrate to a carbon dioxide fluid containing an amphiphilic species so that the contaminant associates with the amphiphilic species and becomes entrained in the carbon dioxide fluid. The substrate is then separated from the carbon dioxide fluid, and then the contaminant is separated from the carbon dioxide fluid.

31 Claims, No Drawings