



US006478961B2

(12) **United States Patent**
Petty et al.

(10) **Patent No.:** **US 6,478,961 B2**
(45) **Date of Patent:** **Nov. 12, 2002**

(54) **DEVICE FOR SEQUESTRATION AND CONCENTRATION OF POLAR ORGANIC CHEMICALS FROM WATER**

(58) **Field of Search** 210/651, 500.23, 210/663, 660, 670, 321.8, 321.74, 502.1, 263; 435/2, 31, 32

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(*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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(21) **Appl. No.:** **09/881,244**

(57) **ABSTRACT**

(22) **Filed:** **Jun. 15, 2001**

A device is provided for the sequestration and concentration of polar chemicals from water. The device includes a microporous hydrophilic membrane enclosure formed by a tube or facing membranes. A mixed sequestration media, contained within the enclosure, transforms dissolved polar organic chemicals into non-mobile species. The sequestration media is a triphasic admixture of a hyper-crosslinked polystyrene-divinylbenzene resin, and a carbonaceous sorbent dispersed on a size exclusion styrene-divinylbenzene copolymer.

(65) **Prior Publication Data**

US 2002/0036166 A1 Mar. 28, 2002

Related U.S. Application Data

(60) Provisional application No. 60/234,949, filed on Sep. 26, 2000.

(51) **Int. Cl.⁷** **B01D 24/00; B01D 63/00**

(52) **U.S. Cl.** **210/502.1; 210/500.23; 210/321.8; 210/263**

19 Claims, 1 Drawing Sheet

