

- [54] **OSMOTIC DISPENSER WITH MEANS FOR DISPENSING ACTIVE AGENT RESPONSIVE TO OSMOTIC GRADIENT**
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Related U.S. Application Data

- [63] Continuation-in-part of Ser. No. 106,161, Jan. 13, 1971, abandoned.

Foreign Application Priority Data

- Jan. 11, 1972 Israel 38539
- [52] U.S. Cl. **128/260; 222/95; 128/270; 128/271**
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- [58] Field of Search 210/23; 128/127-131, 128/172, 213, 252, 260, 261, 271, 272; 222/193, 130, 94, 95, 97, 105, 106, 386, 386.5, 389

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[57] **ABSTRACT**

An osmotic active agent dispenser is comprised of a chamber having controlled permeability to an external fluid, i.e., water, and containing an osmotically effective solute which, in solution, exhibits an osmotic pressure gradient against said external fluid, said chamber housing a flexible bag of relatively impervious material containing an active agent and provided with means or dispensing head for releasing said active agent to the exterior of the dispenser. The flexible bag is disposed within the said housing chamber such that as the, e.g., water permeates from the external environment through the permeable walls of the chamber and migrates or diffuses by osmosis into the solution contained therein, same increases in volume thereby generating mechanical compressing or deflating force on the flexible bag, which force in turn ejects the active agent out of the apparatus at an osmotically controlled rate over a prolonged period of time.

10 Claims, 8 Drawing Figures

