

[54] **OSMOTIC DISPENSING DEVICE WITH MAXIMUM AND MINIMUM SIZES FOR THE PASSAGEWAY**

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[*] Notice: The portion of the term of this patent subsequent to Nov. 5, 1974, has been disclaimed.

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Related U.S. Application Data

[63] Continuation-in-part of Ser. Nos. 354,325, April 25, 1973, abandoned, and Ser. No. 259,469, June 5, 1972, Pat. No. 3,845,770.

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[51] Int. Cl. **A61m 31/00**

[58] Field of Search 128/127-130, 128/213, 260, 261, 269; 99/77.1; 424/15, 19-21, 37; 222/386.5, 389; 206/5

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3,811,444 5/1974 Heller et al. 128/260

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[57] **ABSTRACT**

A device is disclosed comprised of a wall surrounding and forming a compartment for containing a useful composition of matter and having a passageway for dispensing the composition. The wall is comprised in at least a part of a material permeable to an external fluid. The composition is soluble in the fluid and exhibits an osmotic pressure gradient against the fluid or the composition has limited solubility and is admixed with an osmotically effective compound soluble in the fluid that exhibits an osmotic pressure gradient against the fluid. In operation composition is dispensed from the device by fluid permeating into the compartment producing a solution of the soluble composition or a solution of the osmotically effective compound containing the composition, which solution in either operation is released through the passageway to the exterior of the device at a rate controlled by the permeability of the wall and the osmotic pressure gradient across the wall of the device.

36 Claims, 14 Drawing Figures

