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Calanchi et al.

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[54] **METHOD FOR TARGETED AND CONTROLLED RELEASE OF DRUGS IN THE INTESTINAL TRACT AND MORE PARTICULARLY IN THE COLON**

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[58] **Field of Search** 424/451, 463, 424/464, 474, 489, 490, 457, 458, 462, 494, 496, 497, 459

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[57] ABSTRACT

The object of the present invention is to obtain a targeted and controlled release of drugs, the pharmacological action and absorption of which takes place in the intestine and in particular in the ileum and in the colon.

To achieve this objective the drug is coated with two membranes, one having pH dependent solubility and the other insoluble but permeable to intestinal juices.

As long as the coated drug remains in the stomach and in the upper part of the intestinal tract, that is as long as the pH is lower than 5.5, it is not released.

Only when it reaches an environment with a higher pH (small intestine and/or colon), the pH dependent membrane dissolves and the release of the drug can begin.

From this moment the second membrane, pH-independent but permeable to intestinal juices, carries out its action which is to slow down and control the dissolution of the drug in the small intestine-colon tract.

8 Claims, No Drawings