

# United States Patent [19]

Schiraldi et al.

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[54] **BIOADHESIVE EXTRUDED FILM FOR INTRA-ORAL DRUG DELIVERY AND PROCESS**

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[58] Field of Search ..... **424/21, 28, 449, 435, 424/151**

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[57] **ABSTRACT**

A bioadhesive extruded single or multi-layered thin film, especially useful in intra-oral controlled-releasing delivery, having a water soluble or swellable polymer matrix bioadhesive layer which can adhere to a wet mucous surface and which bioadhesive layer consists essentially of 40–95% by weight of a hydroxypropyl cellulose, 5–60% of a homopolymer of ethylene oxide, 0–10% of a water-insoluble polymer such as ethyl cellulose, propyl cellulose, polyethylene and polypropylene, and 2–10% of a plasticizer, said film having incorporated therein a medicament, e.g., anesthetics, analgesics, anticaries agents, anti-inflammatories, antihistamines, antibiotics, antibacterials, fungistats, etc.

**9 Claims, No Drawings**