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[54] PROCESS FOR IMPROVING DOSAGE FORM DELIVERY KINETICS

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[58] **Field of Search** 424/473, 464

[56] **References Cited**

U.S. PATENT DOCUMENTS

4,837,111	6/1989	Deters	424/473
4,940,465	7/1990	Theeuwes	604/892.1
4,971,790	11/1990	Magruder	424/78
5,019,396	5/1991	Ayer	424/473

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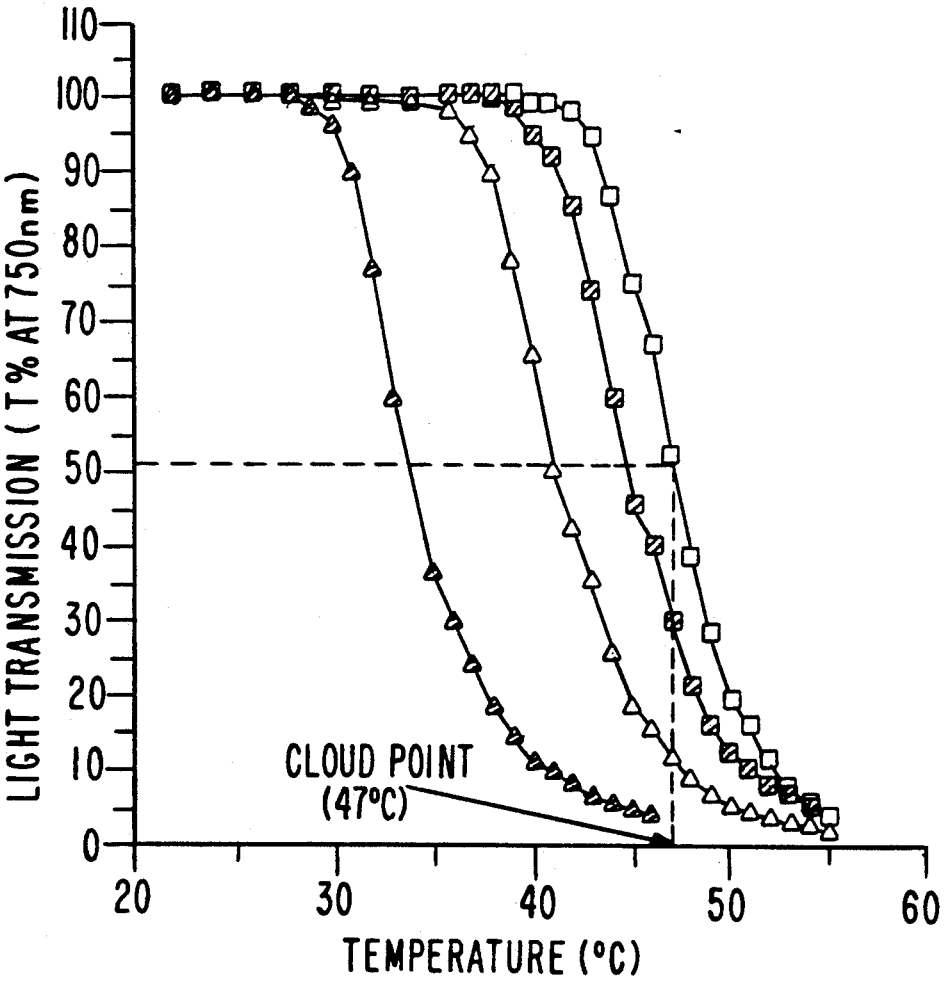
[57] **ABSTRACT**

A dosage form is disclosed comprising means for lessening the tackiness and/or irritation of the components of the dosage form to mucosal tissue. The dosage form provides means for forming in the dosage form a floc comprising a drug, which floc, when delivered from the dosage form, lessens the tackiness and/or irritation of the mucosal tissue of a warm-blooded recipient.

3 Claims, 7 Drawing Sheets