# United States Patent [19]

**Szycher et al.**

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[54] **DRUG DISPENSING WOUND DRESSING**


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[58] **Field of Search** ..... 528/75; 204/159.14, 204/159.19; 604/304, 372; 424/28, 32; 522/6, 44, 46



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[57] **ABSTRACT**

The disclosed wound dressings have a drug dispersed throughout a polyurethane matrix that is the reaction product of: (A) An isocyante terminated prepolymer formed by reaction of isophorone diisocyanate and a macroglycol and (B) a monomer containing hydroxyl and vinyl groups. The reaction product is a vinyl terminated polyurethane oligomer which is liquid at room temperature and which may be readily admixed with a pharmacoactive substance and a photosensitizer, formed into a film and cured by exposure to UV light without release of heat.

In the most preferred embodiments the foregoing oligomer is codissolved in an organic solvent with a polyurethane polymer which is the reaction product of:

dicyclohexyl methane diisocyanate;

a polytetramethylene ether polyol having a molecular weight in the range of 1000–3000 daltons; and

1,4-butane diol.

That solution is then admixed with the pharmacoactive agent, formed into a film and cured.


**35 Claims, No Drawings**