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# United States Patent [19]

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**Thompson**

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[54] **MEDICAL DEVICES CONTAINING TRIGGERABLE DISINTEGRATION AGENTS**

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[51] Int. Cl.<sup>6</sup> ..... **A61K 9/22**; A61K 9/14; A61F 2/00

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[58] Field of Search ..... **604/93, 891.1**; 424/485, 486, 487, 488; 523/113, 115

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[57] **ABSTRACT**

The invention discloses temporary medical devices such as stent implants which can be disintegrated in-vivo upon demand by release of an agent held trapped within the device. The device is fabricated from a matrix polymer material which is essentially insoluble in body fluids and a disintegration agent which acts to initiate decomposition of the matrix polymer when contacted therewith. The disintegration agent is trapped within and chemically isolated from the matrix polymer such as by encapsulation, and is releasable within the matrix polymer upon contact of the device with a releasing agent which liberates the encapsulated disintegration agent.

**37 Claims, No Drawings**