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Gurewich

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[54] **COMPOSITIONS AND METHODS FOR THE DELIVERY OF DRUGS BY PLATELETS FOR THE TREATMENT OF CARDIOVASCULAR AND OTHER DISEASES**

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[58] Field of Search **424/94.63, 94.64; 435/215; 530/311, 300**

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[57] **ABSTRACT**

A fusion drug including an isolated portion of the A-chain of a urokinase-type plasminogen activator linked to a drug, wherein the A-chain portion binds stably to an outer membrane of a platelet. The T_{1/2} of the fusion drug in plasma is thereby increased to about 4 to 5 days, and the fusion drug is automatically targeted to forming thrombi and sites of vascular injury. The fusion drug can thus be used to treat cardiovascular diseases, e.g., as adjunctive therapy to inhibit reocclusions in a patient after thrombolytic therapy or angioplasty.

11 Claims, 6 Drawing Sheets