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# United States Patent [19]

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Lee

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[54] **METHODS AND DEVICE FOR PERCUTANEOUS SEALING OF ARTERIAL PUNCTURE SITES**

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[21] Appl. No.: **41,573**

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### Related U.S. Application Data

[63] Continuation-in-part of Ser. No. 918,614, Jul. 27, 1992, Pat. No. 5,292,332.

### [57] ABSTRACT

[51] Int. Cl.<sup>6</sup> ..... **A61B 17/04**; A61M 29/00; A61M 39/00

A method is provided for closing a puncture in a wall of an artery made for the purpose of moving an elongated cardiovascular catheter into the artery. The method includes the steps of withdrawing the cardiovascular catheter from the artery while ensuring that the location of the puncture remains identified, and introducing a thrombogenic, hemostatic material so as to contact the wall of the artery at the puncture location, enabling the material to precipitate clot formation and seal the puncture. A device is also provided to employ the method.

[52] U.S. Cl. .... **606/213**; 606/214; 604/15; 604/49; 604/285; 604/54; 604/96

[58] Field of Search ..... 606/213-215, 606/216; 604/13, 15, 49, 51, 285-288, 54, 96

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**46 Claims, 4 Drawing Sheets**

