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[54] **PITCH-CATCH ONLY ULTRASONIC FLUID DENSITOMETER**

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[75] Inventors: **Margaret S. Greenwood**, Richland;
Robert V. Harris, Pasco, both of Wash.

[73] Assignee: **Battelle Memorial Institute**, Richland, Wash.

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Related U.S. Application Data

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[51] Int. Cl.⁶ **G01N 9/00**

[52] U.S. Cl. **073/32 A; 73/54.41**

[58] Field of Search 73/32 A, 54.01,
73/54.41, 64.53, 61.75, 61.79, 597, 628,
644

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Primary Examiner—Hezron Williams
Assistant Examiner—Richard A. Moller
Attorney, Agent, or Firm—Paul W. Zimmerman

[57] ABSTRACT

The present invention is an ultrasonic fluid densitometer that uses a material wedge and pitch-catch only ultrasonic transducers for transmitting and receiving ultrasonic signals internally reflected within the material wedge. Density of a fluid is determined by immersing the wedge into the fluid and measuring reflection of ultrasound at the wedge-fluid interface.

10 Claims, 3 Drawing Sheets

