

United States Patent [19]

Bodenheimer et al.

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[54] REFRACTOMETER FOR FLUIDS

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[57] ABSTRACT

There is provided an apparatus for measuring the refractive index of fluids. The apparatus comprises a substantially U-shaped sensor rod made of a transparent material and is submersible in the fluid. The bent portion of the sensor rod has a diameter of curvature at least two times larger than the diameter of the sensor rod, and chosen so as to optimize sensitivity for a given range of indices. The two ends of the U-shaped sensor rod are connectable to a housing and a light source inside the housing has optical access to the face of one of the sensor-rod ends. A light detector means also disposed inside the housing has optical access to the face of the other one of the sensor rod ends.

8 Claims, 3 Drawing Sheets

