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- (54) **HYBRID PASSIVE/AUTOMATED FLOW PROPORTIONAL FLUID SAMPLER**
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(51) **Int. Cl.**⁷ **G01N 1/14; G01N 1/20**

(52) **U.S. Cl.** **73/863.03; 73/864.34**

(58) **Field of Search** **73/863.03, 863.33, 73/863.34, 864.34, 863.02, 863.51**

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(57) **ABSTRACT**

The invention discloses a flow proportional fluid sampler. A turbine pump unit has a pump that is powered by the fluid flow of the test site, such as a stream, thereby eliminating the need for outside power for the pump and proportioning the volume of sample taken to the flow velocity. The invention also incorporates a simple pulse counter that monitor's the revolutions of the turbine propeller and can be used to measure velocity. The invention also provides a collection and distribution unit that can collect and store numerous samples in a small, light-weight container.

6 Claims, 9 Drawing Sheets

