

- [54] **AUTOMATIC PRECIPITATION SAMPLER**
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- [58] **Field of Search** 73/171, 421 R; 141/130
- [56] **References Cited**

U.S. PATENT DOCUMENTS

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[57] **ABSTRACT**

An automatic precipitation sampler contains a precipitation detector which signals a control system to remove a cover above the collector surface at initiation of precipitation. Water flows from the inert collector surface, through a sample distributor having an inert surface, to a storage means. The cover is replaced over the collector at the termination of the precipitation event and the storage means is automatically sealed to prevent contamination and evaporation. The time of initiation of sampling and duration of sample collection are measured with a digital clock and stored in memory for later retrieval. Multiple storage means attached to a sequencing sample distributor permit collection of samples from a number of separate events or multiple samples from the same event. Power to operate the system is obtained from a battery and compressed gas making possible operation in remote locations for long intervals.

7 Claims, 12 Drawing Figures

