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[54] AUTOMATIC FLUID SAMPLING AND FLOW MEASURING APPARATUS AND METHOD

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[58] **Field of Search** 364/510; 141/130, 94, 141/91, 89, 1; 73/863.03, 863.02, 863.01, 863, 864.34

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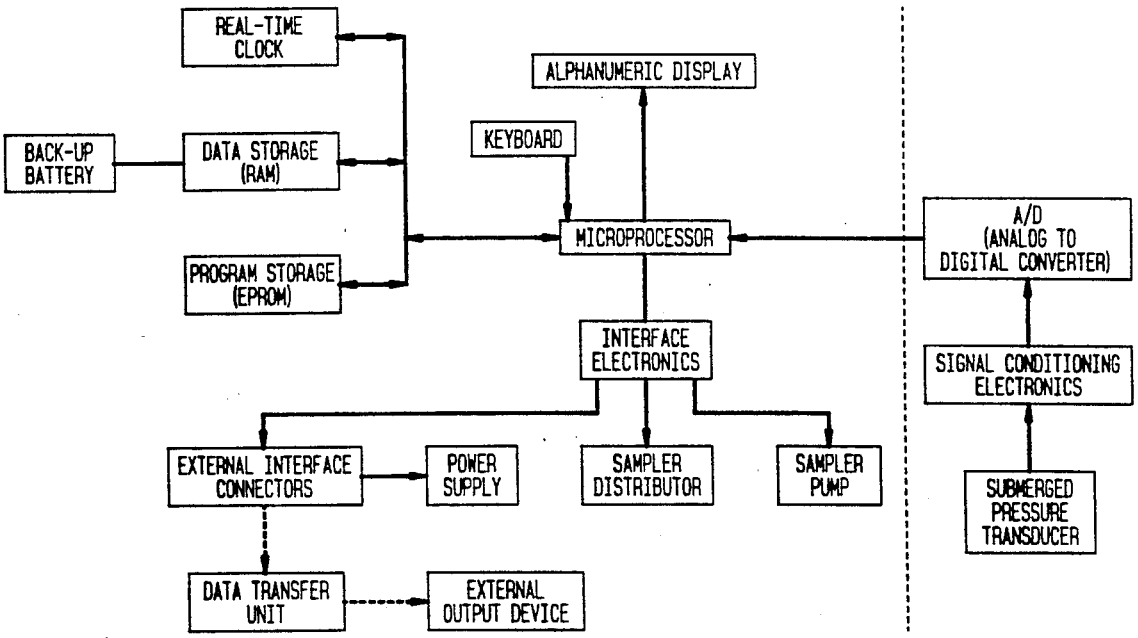
[57] **ABSTRACT**

An automatic liquid sampling and flow measuring apparatus provided as a unitary structure within a case, and capable of collecting liquid samples at selected intervals, measuring flow rate through a channel at selected intervals, and collecting and storing sampling and flow rate data for later retrieval. The apparatus is provided with its own self-contained microprocessor for automatically controlling sampling operations, calculating flow rate on the basis of signals from a sensor, and storing data relating to sample collection and flow rate measurement. The stored data can be called up on a display of the apparatus, or can be transferred via a portable transfer unit to an external output device, such as a printer capable of producing a hard copy of the data.

36 Claims, 13 Drawing Sheets