ABSTRACT

FILTER WITH MEMORY, COMMUNICATION AND TEMPERATURE SENSOR

The present invention describes a system and method for accurately measuring the temperature of a filter element. A temperature transducer, and a communications device are coupled so as to be able to measure and transmit the temperature of a filter element while in use. This system can comprise a single component, integrating both the communication device and the temperature transducer. Alternatively, the system can comprise separate temperature transducer and transmitter components, in communication with one another. In yet another embodiment, a storage element can be added to the system, thereby allowing the device to store a set of temperature values. The use of this device is beneficial to many applications. For example, the ability to read filter temperatures in situ allows improved Sterilization-In-Place (SIP) protocol compliance, since the temperatures of actual filter elements can be directly measured, rather than interpolated as is done currently.

Figure 1