**ABSTRACT**

**CONVERTER FOR USE WITH SENSING DEVICES**

A system and method are disclosed for utilizing sensors with existing devices. An interface module is used in combination with a newer sensor, such as a fluorescence oxygen sensor, and an older legacy device. The older legacy device supplies a polarizing voltage, and anticipates a measured current of between 0 and 100 nA. The newer sensor requires no polarizing voltage and delivers an output of 0-10 volts in one embodiment, and 4-20 mA in another embodiment. The interface module receives the output from the sensor, and converts it into a useable signal to the legacy device. In another embodiment, the interface module comprises a number of outputs, such that both legacy devices and newer devices can be in communication with the sensor simultaneously. The interface module can be used in conjunction with a reactor chamber or other pharmaceutical process.

Fig. 3