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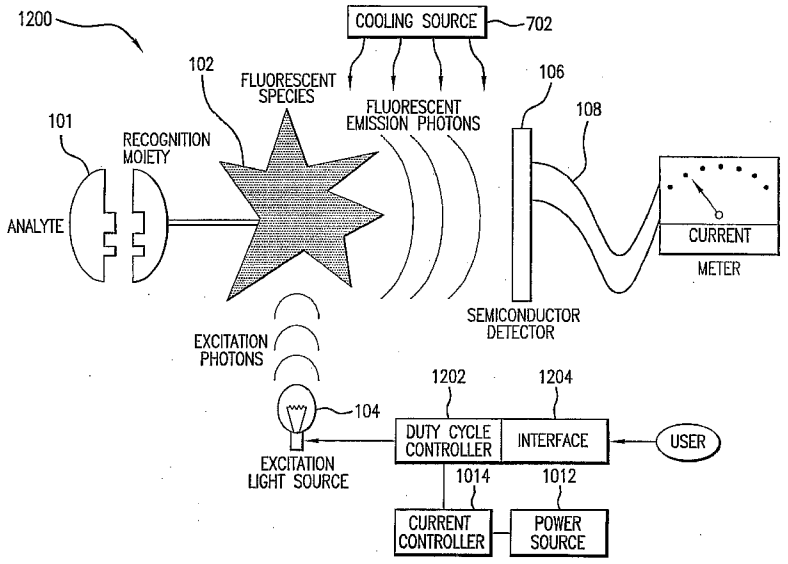
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[Continued on next page]

(54) Title: SYSTEMS AND METHODS FOR EXTENDING THE USEFUL LIFE OF OPTICAL SENSORS



(57) Abstract: The present invention provides a method for increasing the lifetime of an optical sensor. In one aspect, the method includes the step of configuring the optical sensor so that the duty cycle of sensor's radiant source is less than 100% over a continuous period amount of time when the sensor is periodically obtaining data regarding an analyte. By operating the sensor according to the above inventive method, the indicator molecules of the optical sensor are not excited during the entire continuous period of time during which the sensor is needed to provide data regarding the presence or concentration of a substance. Thus, the method increases the life of the indicator molecules.

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