

SELF-POWERED PHOTODETECTOR AND METHOD OF FABRICATION THEREOF

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ABSTRACT

10 A self-powered photodetector is provided including: a photovoltaic sensor
element for generating an electrical charge under exposure to electromagnetic
radiation; a charge storage section for accumulating the electrical charge
generated by the photovoltaic sensor element; an electrical load configured to be
powered by the accumulated electrical charge from the charge storage section
15 and outputs a signal in response thereto, the signal being analyzable to
determine a measurement of the electromagnetic radiation; and a switch for
controlling a flow of the accumulated electrical charge from the charge storage
section to the electrical load for powering the electrical load. There is also
provided a wireless receiver for analyzing a signal from the self-powered
20 photodetector to provide a measurement of the electromagnetic radiation, a
photodetector system including the self-powered photodetector and the wireless
receiver, and a method of fabricating the self-powered photodetector.

FIG. 2

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