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### (54) LIGHT SENSING ELEMENT AND MANUFACTURING METHOD THEREOF

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#### (57)**ABSTRACT**

The present invention provides a manufacturing method of a light sensing element. The method includes the following steps: providing a preformed structure, wherein the preformed structure includes a semiconductor structure and a bandpass filter layer stacked on the semiconductor structure; performing a laser cutting process on the preformed structure along a direction perpendicular to a surface of the bandpass filter layer so that the preformed structure is cut into a plurality of light sensing elements. Each light sensing element has a plurality of sidewalls. Each sidewall forms a scorched surface by the laser cutting process to block the entry of external light.

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Providing a preformed structure, wherein the preformed structure includes a semiconductor structure and a bandpass filter layer stacked on the semiconductor structure

Performing at least one laser cutting process on the preformed structure in a direction perpendicular to a surface of the bandpass filter layer to cut the preformed structure into a plurality of light sensing elements; wherein each of the light sensing elements has a plurality of sidewalls, and each of the sidewalls forms a scorched surface by the laser cutting process to block an entry of external light