Materials & Chemicals

Photoresponsive, Form-Stable Phase Change Composites And Photodetectors Made Therefrom

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Inventors: Shaoqin Gong, Zhenqiang Ma, Yunming Wang, Hongyi Mi

The Invention

Composite materials comprising electrically conductive particles in a form-stable phase change materials (PCMs) are provided. Also provided as radiation sensors incorporating the composites and methods for detecting radiation using the composites. The PCMs comprise crosslinked polyether polyol that undergoes a reversible solid-solid phase change upon heating. Prior to the phase change, the crosslinked polyether polyol comprises microscopic crystalline domains. When the PCM is heated beyond its phase transition temperature these microscopic crystalline domains melt. However, the form-stable PCMs retain their solid form at the macroscopic level.

Additional Information

For More Information About the Inventors

- Shaoqin Gong
- Zhenqiang Ma

Tech Fields

- Materials & Chemicals : Composites

For current licensing status, please contact Jeanine Burmania at jeanine@warf.org or 608-960-9846