

(12) **United States Patent**
Mei

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(54) **GLASS UNIT**

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(71) Applicant: **Aaron Mei**, Taichung (TW)

(58) **Field of Classification Search**

(72) Inventor: **Aaron Mei**, Taichung (TW)

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See application file for complete search history.

(73) Assignee: **APA Solutions Holdings, LLC**, Riviera Beach, FL (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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Primary Examiner — Eric R Smith

(74) *Attorney, Agent, or Firm* — IP Law Leaders, PLLC

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B82Y 30/00 (2011.01)

(57) **ABSTRACT**

A glass unit includes an energy collecting layer attached to a light directing device for collecting a light energy from the light directing device, and an energy converting layer electrically coupled to the energy collecting layer for converting the light energy into an electric energy, and the light directing device includes a number of nanometer particles to direct the light energy toward the energy collecting layer. The light directing device includes one or more glass layers, and a light collecting panel attached to the glass layer with a bonding layer and made of polymer materials which are mixed with the nanometer particles to form the light collecting panel.

(52) **U.S. Cl.**

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16 Claims, 4 Drawing Sheets

