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(54) **ADAPTIVE, FULL-SPECTRUM SOLAR ENERGY SYSTEM**

(75) Inventors: **Jeffrey D. Muhs**, Lenoir City, TN (US); **Dennis D. Earl**, Knoxville, TN (US)

(73) Assignee: **UT-Battelle, LLC**, Oak Ridge, TN (US)

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(58) **Field of Search** 136/246, 253, 136/291, 248; 435/292.1; 250/227.11; 126/683, 685, 690; 385/900; 60/641.8

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Primary Examiner—Alan Diamond

(74) *Attorney, Agent, or Firm*—Kirk A. Wilson

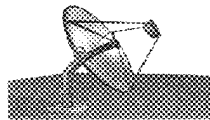
(57) **ABSTRACT**

An adaptive full spectrum solar energy system having at least one hybrid solar concentrator, at least one hybrid luminaire, at least one hybrid photobioreactor, and a light distribution system operably connected to each hybrid solar concentrator, each hybrid luminaire, and each hybrid photobioreactor. A lighting control system operates each component.

9 Claims, 10 Drawing Sheets



Hybrid Solar Bioreactor



Hybrid Solar Concentrator

