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**(12) United States Patent**  
**Schroeder****(10) Patent No.:** US 8,545,915 B2  
**(45) Date of Patent:** Oct. 1, 2013**(54) METHOD AND APPARATUS FOR VITAMIN D ENHANCEMENT IN MUSHROOMS****(75) Inventor:** Gary M. Schroeder, Landenberg, PA (US)**(73) Assignee:** Oakshire Holdings, Inc., Kennett Square, PA (US)**(\* ) Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 385 days.**(21) Appl. No.:** 12/425,428**(22) Filed:** Apr. 17, 2009**(65) Prior Publication Data**  
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**A23L 1/28** (2006.01)**(52) U.S. Cl.**  
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See application file for complete search history.

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An apparatus and method for increasing Vitamin D content in mushrooms irradiates the mushroom(s) for a duration of up to six seconds with one or more pulses of light with wavelengths in the range of about 200 to about 1000 nanometers. The light is emitted by an electric glow discharge lamp, such as a xenon lamp, that emits ultra-violet light. The intensity of the light is such that after irradiation the mushrooms have a Vitamin D2 content of at least about 400 IU/84 g of mushrooms, which is 100% Daily Value of recommended Vitamin D for human consumption.

10 Claims, 4 Drawing Sheets

