

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2024/0222978 A1 Yoscovich

(43) **Pub. Date:**

Jul. 4, 2024

(54) MAXIMIZING POWER IN A PHOTOVOLTAIC DISTRIBUTED POWER **SYSTEM**

(71) Applicant: Solaredge Technologies Ltd., Herzeliya

Inventor: Ilan Yoscovich, Givatayim (IL)

Appl. No.: 18/436,241

(22) Filed: Feb. 8, 2024

Related U.S. Application Data

Continuation of application No. 16/787,730, filed on Feb. 11, 2020, now Pat. No. 11,929,620, which is a continuation of application No. 15/720,919, filed on Sep. 29, 2017, now Pat. No. 10,608,553, which is a continuation of application No. 13/754,059, filed on Jan. 30, 2013, now Pat. No. 9,812,984.

(30)Foreign Application Priority Data

Jan. 30, 2012 (GB) 1201499.9

Publication Classification

(51) Int. Cl. H02J 3/38 (2006.01)H02J 3/46 (2006.01)H02M 7/42 (2006.01)

(52)U.S. Cl. CPC (2013.01); H02J 3/46 (2013.01); H02M 7/42 (2013.01); H02J 2300/26 (2020.01); Y02E

10/56 (2013.01)

(57)**ABSTRACT**

A power harvesting system including multiple parallelconnected photovoltaic strings, each photovoltaic string includes a series-connection of photovoltaic panels. Multiple voltage-compensation circuits may be connected in series respectively with the photovoltaic strings. The voltage-compensation circuits may be configured to provide respective compensation voltages to the photovoltaic strings to maximize power harvested from the photovoltaic strings. The voltage-compensation circuits may be include respective inputs which may be connected to a source of power and respective outputs which may be connected in series with the photovoltaic strings.

