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## Patent Search

Invention Title	A METHOD AND SYSTEM FOR GLOBAL PEAK DETECTION UNDER NON-UNIFORM INSOLATION CONDITIONS
Publication Number	41/2022
Publication Date	14/10/2022
Publication Type	INA
Application Number	202141016770
Application Filing Date	09/04/2021
Priority Number	
Priority Country	
Priority Date	
Field Of Invention	COMMUNICATION
Classification (IPC)	H04W0052500000, H02S0050100000, G06F0001329600, G05F0001670000, G06F0001320600

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### Abstract:

The present invention relates to a method and system of tracking global peak under non-uniform insolation conditions. In one embodiment, the method (700) of tracking a solar PV array, the method comprising: measuring a value of PV voltage (V), current (I) and calculating power (P) at an initial operating point (710), computing minimum voltage (Vmin) and a minimum current (Imin) of the solar PV array (720), comparing the computed values with the measured values (V) at the initial operating point (730), performing a backward search, if the measured value (V) at the initial operating point is greater than the computed value (Vmin) and storing a power of the initial point and shifting to the next operating point to track one or more operating points (740) and shifting a pattern of tracking the operating point, when there is a change in insolation, where the change in insolation (shading pattern) is observed directly from measured current value (750).

### Complete Specification

#### Claims:

1. A method (700) of tracking MPPT of a solar PV array for global peak detection, the method comprising: measuring a value of PV voltage (V), current (I) and calculating power (P) at an initial operating point (710); computing values of minimum voltage (Vmin) and a minimum current (Imin) of the solar PV array (720); comparing the computed values with the measured values (V) at the initial operating point (730); performing a backward search, if the measured value (V) at the initial operating point is greater than the computed value (Vmin) and storing a power of the initial operating point and shifting to the next operating point to track one or more operating points (740); and shifting a pattern of tracking the operating point, when there is a change in insolation, where the change in insolation (shading pattern) is observed directly from measured current value (750).
2. The method as claimed in claim 1, further comprising setting an initial value of current and voltage and activating a boost converter with duty ratio corresponding to the initial set current and voltage (705).
3. The method as claimed in claim 1, wherein performing the backward search further comprises continuing the steps of measuring the values of PV voltage (V), c

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Page last updated on: 26/06/2019