

(12) PATENT APPLICATION PUBLICATION

(21) Application No.201811025948 A

(19) INDIA

(22) Date of filing of Application : 11/07/2018

(43) Publication Date : 03/08/2018

(54) Title of the invention : PARABOLIC SOLAR COOKER SYSTEM TO TRACK SUNLIGHT IN REAL-TIME

(51) International classification

:F24B1/26

(31) Priority Document No

:NA

(32) Priority Date

:NA

(33) Name of priority country

:NA

(86) International Application No

:NA

Filing Date

:NA

(87) International Publication No

:NA

(61) Patent of Addition to Application Number

:NA

Filing Date

:NA

(62) Divisional to Application Number

:NA

Filing Date

:NA

(71)Name of Applicant :

1)Dr. Ashish Nayyar

Address of Applicant :Swami Keshvanand Institute of
Technology Management & Gramothan, Ramnagaria, Jagatp
Jaipur-302017, Rajasthan India Rajasthan India

2)Praveen Saraswat

3)Keshav Gupta

4)Satyan Vijayvergiya

(72)Name of Inventor :

1)Dr. Ashish Nayyar

2)Praveen Saraswat

3)Keshav Gupta

4)Satyan Vijayvergiya

5)Navpratap Singh Sran

6)Chandan Kumar Prajapati

7)Mahima Bhoi

8)Jitendra K Sen

(57) Abstract :

A parabolic solar cooker system to track sunlight in real-time. The parabolic solar cooker system comprises light dependent resistors (LDRs), micro-controller unit, a plurality of stepper motors, solar panels, a power unit, lead screw, ball bearing, and coupler. The LDRs sense intensity of the sunlight received on the outer surface. The micro-controller unit computes the intensity of the sunlight to determine a direction of the sunlight and further initiates an actuation signal. The plurality of stepper motors are configured with the micro-controller unit to receive the actuation signal. The stepper motors hold a plurality of solar panels and utilize the received actuation signal to position the solar panels in a way to receive the sunlight from the direction having a maximum computed intensity of the sunlight. The plurality of stepper motors comprises a front stepper motor, a right stepper motor, a rear stepper motor, and a left stepper motor.

No. of Pages : 22 No. of Claims : 7