



Office of the Controller General of Patents, Designs & Trade Marks
 Department of Industrial Policy & Promotion,
 Ministry of Commerce & Industry,
 Government of India

(<http://ipindia.nic.in/index.htm>)



(<http://ipindia.nic.in/index.htm>)

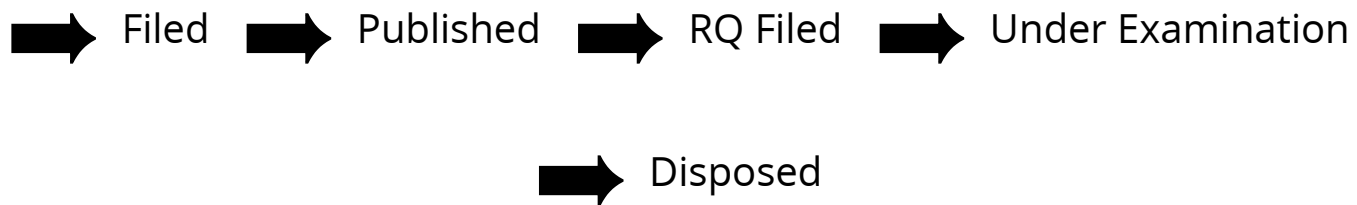
Application Details

APPLICATION NUMBER	202241033629
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	13/06/2022
APPLICANT NAME	VALLURUPALLI NAGESWARA RAO VIGNANA JYOTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY
TITLE OF INVENTION	Eco-friendly solar desalinator
FIELD OF INVENTION	CHEMICAL
E-MAIL (As Per Record)	lipi.kaundilya@gmail.com
ADDITIONAL-EMAIL (As Per Record)	admin@iprsrg.com
E-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	23/07/2022
PUBLICATION DATE (U/S 11A)	17/06/2022

Application Status

APPLICATION STATUS	FER Issued, Reply not Filed
--------------------	------------------------------------

[View Documents](#)



In case of any discrepancy in status, kindly contact ipo-helpdesk@nic.in

(54) Title of the invention : Eco-friendly solar desalinator

(51) International classification :C02F0103080000, C02F0001140000, A61K0031125000, C02F0001040000, A61K0036880000

(86) International Application No :PCT//
Filing Date :01/01/1900

(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)VALLURUPALLI NAGESWARA RAO VIGNANA JYOTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY**

Address of Applicant :Centre for Solar Energy Materials, Vignana Jyothi Nagar, Pragathi Nagar, Nizampet (S.O), Hyderabad 500 090 Telangana State, India Nizampet -----

Name of Applicant : NA**Address of Applicant : NA****(72)Name of Inventor :****1)Dr. Ajay Kumar Kaviti**

Address of Applicant :Associate Professor Centre for Solar Energy Materials, Department of Mechanical Engineering, VNRVJIET, Vignana Jyothi Nagar, Pragathi Nagar, Nizampet (S.O), Hyderabad 500 090 Telangana State, India Nizampet -----

2)Mr. Sai Snehith Pilli

Address of Applicant :Department of Mechanical Engineering, VNRVJIET Nizampet -----

3)Mr. Mahesh Moodepally

Address of Applicant :Department of Mechanical Engineering, VNRVJIET Nizampet -----

(57) Abstract :

An eco-friendly solar desalinator (1) comprises a plurality of banana stem slices (2), a glass cover (3), insulation (4), an outlet (5), and a distillate jar (6). A plurality of banana stem slices (2) is Floating on the water surface of the solar desalinator (1). The camphor soothed banana stem slice that is physically in contact with water by floating on water. The camphor soothed banana stem slice absorbs thermal radiation from the sun and through conduction heat is transferred to water resulting in interfacial heating, followed by evaporation to increase the distillate of saline/ brackish water in the solar desalination system. The banana stem has good capillarity, which is so vital in interfacial desalination to absorb water from one side and evaporate that thin layer of water from the counter side.

No. of Pages : 15 No. of Claims : 5