



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



(12) PATENT APPLICATION PUBLICATION

(21) Application No.202331056926 A

(19) INDIA

(22) Date of filing of Application :24/08/2023

(43) Publication Date : 29/09/2023

(54) Title of the invention : HYDROPONICS UNIT WITH HYDROPOWER SYSTEMS

<p>(51) International classification :A01G0031000000, G06Q0010060000, A01G0031020000, A01G0031060000, H02K0053000000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : 1)SWAMI VIVEKANANDA UNIVERSITY Address of Applicant :Telinipara, Barasat - Barrackpore Rd, Bara Kanthalia, West Bengal – 700121, India. Barrackpore -----</p> <p>Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : 1)DR. TANMOY SARKAR Address of Applicant :SWAMI VIVEKANANDA UNIVERSITY Telinipara, Barasat - Barrackpore Rd, Bara Kanthalia, West Bengal – 700121, India. Barrackpore -----</p> <p>2)MR.VIBHOR RAJ Address of Applicant :SWAMI VIVEKANANDA UNIVERSITY Telinipara, Barasat - Barrackpore Rd, Bara Kanthalia, West Bengal – 700121, India. Barrackpore -----</p> <p>3)Mr. Abhishek Dhar Address of Applicant :SWAMI VIVEKANANDA UNIVERSITY Telinipara, Barasat - Barrackpore Rd, Bara Kanthalia, West Bengal – 700121, India. Barrackpore -----</p> <p>4)Mr. Saurabh Adhikari Address of Applicant :SWAMI VIVEKANANDA UNIVERSITY Telinipara, Barasat - Barrackpore Rd, Bara Kanthalia, West Bengal – 700121, India. Barrackpore -----</p> <p>5)Dr. Subhranil Som Address of Applicant :SWAMI VIVEKANANDA UNIVERSITY Telinipara, Barasat - Barrackpore Rd, Bara Kanthalia, West Bengal – 700121, India. Barrackpore -----</p>
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(57) Abstract :

This abstract presents a novel hydroponic unit that generates electricity using hydropower systems. The unit combines soilless farming with renewable energy to create a self-sustaining and environmentally friendly agricultural solution. Through hydropower, the unit harnesses energy from water flow to produce clean electricity, powering essential components such as pumps and lighting. This integration optimizes resource usage, boosts crop yields, and promotes eco-friendliness. The hydroponic unit offers a promising approach to sustainable agriculture, ensuring food security and contributing to environmental conservation by reducing dependence on external power sources and mitigating the impact of conventional farming practices.

No. of Pages : 17 No. of Claims : 7