

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202431065838 A

(19) INDIA

(22) Date of filing of Application :30/08/2024

(43) Publication Date : 13/09/2024

(54) Title of the invention : "Smart Helmet for Industrial Workers"

<p>(51) International classification :F21Y0115100000, F21V0023040000, A42B0003280000, A42B0003040000, F04D0025060000</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 Barasat -----</p> <p>Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : 1)SANIYA DE Address of Applicant :SWAMI VIVEKANANDA UNIVERSITY Telinipara, Barasat - Barrackpore Rd,Bara Kanthalia, West Bengal – 700121 Barasat -----</p> <p>2)PINTU GHOSH Address of Applicant :SWAMI VIVEKANANDA UNIVERSITY Telinipara, Barasat - Barrackpore Rd,Bara Kanthalia, West Bengal – 700121 Barasat -----</p> <p>3)PAPAI MAL Address of Applicant :SWAMI VIVEKANANDA UNIVERSITY Telinipara, Barasat - Barrackpore Rd,Bara Kanthalia, West Bengal – 700121 Barasat -----</p> <p>4)MR. ABHISHEK DHAR Address of Applicant :SWAMI VIVEKANANDA UNIVERSITY Telinipara, Barasat - Barrackpore Rd,Bara Kanthalia, West Bengal – 700121 Barasat -----</p> <p>5)MR. PROMIT KUMAR SAHA Address of Applicant :SWAMI VIVEKANANDA UNIVERSITY Telinipara, Barasat - Barrackpore Rd,Bara Kanthalia, West Bengal – 700121 Barasat -----</p> <p>6)DR. RITUPARNA MUKHERJEE Address of Applicant :SWAMI VIVEKANANDA UNIVERSITY Telinipara, Barasat - Barrackpore Rd,Bara Kanthalia, West Bengal – 700121 Barasat -----</p> <p>7)DR. RITUPARNA MITRA Address of Applicant :SWAMI VIVEKANANDA UNIVERSITY Telinipara, Barasat - Barrackpore Rd,Bara Kanthalia, West Bengal – 700121 Barasat -----</p> <p>8)MR. SAURABH ADHIKARI Address of Applicant :SWAMI VIVEKANANDA UNIVERSITY Telinipara, Barasat - Barrackpore Rd,Bara Kanthalia, West Bengal – 700121 Barasat -----</p>
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(57) Abstract :

The invention is a multifunctional safety helmet designed for industrial environments that integrates a cooling fan and LED light to enhance worker comfort and visibility. The helmet features a cooling fan to alleviate heat stress in high-temperature conditions and an LED light for illumination in dark or low-light settings. Powered by a solar panel and Li-ion battery, it operates independently of external power sources, making it portable and eco-friendly. The helmet includes user controls for easy activation of the cooling fan and LED light, combining protection, comfort, and practicality in a single wearable device.

No. of Pages : 10 No. of Claims : 8