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## (54) Title of the invention : COOLING PAD WITH AI-DRIVEN RGB ILLUMINATION AND FAN CONTROL (71)Name of Applicant : 1)Chitkara University Address of Applicant : Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Raipura, Punjab - 140401, India. Patiala -----2)Chitkara Innovation Incubator Foundation Name of Applicant : NA Address of Applicant : NA :G06F0001200000, H05K0007200000, (51) International (72)Name of Inventor : A61F0007000000, A61F0007020000, classification 1)KANIKA G06F0009500000 Address of Applicant : Assistant Professor, CSE, CUIET, Chitkara (86) International :NA University, Chandigarh-Patiala National Highway, Village Application No Jhansla, Rajpura, Punjab - 140401, India. Patiala ------:NA Filing Date (87) International : NA 2)SHARMA. Shail Publication No Address of Applicant :Computer Science and Engineering, (61) Patent of Addition :NA CUIET, Chitkara University, Chandigarh-Patiala National to Application Number :NA Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Filing Date Patiala -----(62) Divisional to 3)GUPTA, Pratham :NA Application Number Address of Applicant :Computer Science and Engineering, :NA Filing Date CUIET, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala -----4)SAINI, Sonali Address of Applicant :Computer Science and Engineering, CUIET, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India.

## (57) Abstract :

The present disclosure discloses a cooling pad (100) to address the challenges of laptop overheating and user discomfort. Incorporating an innovative integration of cooling technology and artificial intelligence (AI), the cooling pad (100) includes an elevated frame (102) equipped with sensors (108) monitoring temperature, CPU/GPU usage, and workload. A control unit (114) dynamically adjusts the speed of integrated fans (104) and heat sinks (106) based on real-time data, ensuring efficient cooling during varying tasks. The cooling pad (102) also boasts RGB lighting synchronized with the laptop's activities, creating an immersive visual experience. Ergonomic design, cable management, wireless technology, and user-friendly controls further enhance user comfort and versatility. The cooling pad (100) optimizes laptop performance, extends device lifespan, and caters to the diverse needs of users in a modern, wire-free workspace.

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