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(54) Title of the invention : PERSONALIZED ASTHMA TRIGGER PREDICTION AND PREVENTION SYSTEM

(51) International classification :A61B0005000000, A61B0005024000, A61B0005053100, A61B0090300000, A61B0005160000 (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)**Chitkara University** Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India ----------- ----------- 2)**Chitkara Innovation Incubator Foundation** **Name of Applicant : NA** **Address of Applicant : NA** (72)**Name of Inventor :** 1)**Thakur Gurjeet Singh** Address of Applicant :Chitkara College of Pharmacy, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India ----------- ----------- 2)**Akanksha Charde** Address of Applicant :Chitkara College of Pharmacy, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India ----------- ----------- 3)**Suruchi Chaubey** Address of Applicant :Chitkara College of Pharmacy, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India ----------- ----------- 4)**Rashib Seth** Address of Applicant :Chitkara College of Pharmacy, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India ----------- ----------- 5)**Rajan Swami** Address of Applicant :Chitkara College of Pharmacy, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India ----------- -----------

(57) Abstract :
The present invention relates to a Personalized Asthma Trigger Prediction and Prevention System (100) designed to provide early warnings and preventive guidance for asthma patients. The system comprises a wearable biosensor module (102) to monitor physiological parameters such as breathing pattern, heart rate variability, and skin conductance, and an environmental sensor module (104) to measure air quality, allergen levels, temperature, and humidity. An AI-based processing system (106) analyzes aggregated data to predict asthma risk levels. The results are shown on a risk display interface (108) using a green-yellow-red visual indicator. A mobile application (110) enables user interaction, visualization, and history tracking. A power supply unit(114) and connectivity unit (112) ensures continuous operation and data transmission respectively. Reference Fig 1

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