

(54) Title of the invention : IOT-ENABLED NAIL SHAPE RECOGNITION AND PRECISION CUTTING SYSTEM

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(71)**Name of Applicant :**
1)NOIDA INSTITUTE OF ENGINEERING & TECHNOLOGY
 Address of Applicant :19, KNOWLEDGE PARK-II, INSTITUTIONAL AREA, GREATER NOIDA-201306, GAUTAM BUDDHA NAGAR, UTTAR PRADESH, INDIA -----

Name of Applicant : NA
Address of Applicant : NA

(72)**Name of Inventor :**
1)RAHUL KUMAR SHARMA
 Address of Applicant :Noida Institute Of Engineering & Technology, 19, Knowledge Park-II, Institutional Area, Greater Noida-201306, Gautam Buddha Nagar, Uttar Pradesh, India Greater Noida -----
2)MEGHA GUPTA
 Address of Applicant :Noida Institute Of Engineering & Technology, 19, Knowledge Park- II, Institutional Area, Greater Noida-201306, Gautam Buddha Nagar, Uttar Pradesh, India Greater Noida -----
3)DR. RAMAN BATRA
 Address of Applicant :Noida Institute Of Engineering & Technology, 19, Knowledge Park- II, Institutional Area, Greater Noida-201306, Gautam Buddha Nagar, Uttar Pradesh, India Greater Noida -----

(57) Abstract :
 The present invention relates to an IoT enabled nail cutting tool (102). The nail cutting tool (102) further includes a camera module (202), a cutting tool module (204), a communication unit module (206), a controller (208), and a storage module (210). The method (300) involves capturing real-time images of a user's nails, receiving a user-selected nail profile through an application (114), processing the captured nail images using advanced machine learning algorithms to detect nail contours, edges, shape, length, width, and curvature radius, analyzing the processed nail images to identify the specific area of the nails that require trimming to match the user-selected profile, generating an activation signal based on the determined area and the user-selected profile, activating a cutting tool module (204) to trim the nails according to the generated activation signal, and communicating progress updates and notifications to the user device (104) through a communication unit module (206).

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