(12) PATENT APPLICATION PUBLICATION

(22) Date of filing of Application :08/02/2024

(54) Title of the invention : CLOTH RECOGNITION AND WASHING ASSISTANCE SYSTEM FOR VISUALLY IMPAIRED (71)Name of Applicant : 1)Chitkara University Address of Applicant : Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala ------ -----2)Chitkara Innovation Incubator Foundation :G06N0003080000, G06N0003040000, (51) International Name of Applicant : NA G09B0021000000, A61H0003060000, classification Address of Applicant : NA G01J0003460000 (72)Name of Inventor: (86) International :NA 1)SHARMA, Jagdeep Application No Address of Applicant : Manager, Chitkara Alumni Association :NA Filing Date Network, Chitkara University, Chandigarh-Patiala National (87) International Highway, Village Jhansla, Rajpura, Punjab - 140401, India. : NA Publication No Patiala -----(61) Patent of Addition :NA to Application Number :NA 2)SHARMA, Ishu Address of Applicant : Assistant Professor-Research, Chitkara Filing Date University Institute of Engineering and Technology, Chitkara (62) Divisional to University, Chandigarh-Patiala National Highway, Village :NA Application Number Jhansla, Rajpura, Punjab - 140401, India. Patiala ------:NA Filing Date 3)PAHUJA, Vanshika Address of Applicant : B.E., Computer Science Engineering, Chitkara University Institute of Engineering and Technology, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala ------

(57) Abstract :

A color recognition of cloth and washing assistance system (102) is disclosed that revolutionizes laundry for the visually impaired. The system (102) includes an image acquisition unit (106) and a controller (104) employing machine learning techniques, this system (102) identifies cloth colors using deep learning. The system (102) generates voice signals instructing users about washability and color characteristics, ensuring effective cloth management. Additionally, a wood stick, with a detachable pad, aids in color detection and intensity analysis. The controller (104) equipped with a neural network, accurately quantifies color intensity on the wood stick. Additionally, the system receives user washing preferences via a microphone, enhancing personalization. Seamlessly integrating technology and user-friendly features, this system empowers (102) visually impaired individuals to confidently manage their laundry, providing a level of independence and convenience.

No. of Pages : 32 No. of Claims : 10