

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202311041890 A

(19) INDIA

(22) Date of filing of Application :23/06/2023

(43) Publication Date : 21/07/2023

(54) Title of the invention : SYSTEM AND METHOD FOR DEFECT DETECTION AND LOCALIZATION FOR NATURAL LEATHER SURFACES

<p>(51) International classification :B64C 390200, C09D 750400, G01N 291400, G01N 294400, G01N 330000</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)Chitkara University Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala -----</p> <p>2)Chitkara Innovation Incubator Foundation Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : 1)TIWARI, Raj Gaurang Address of Applicant :Professor, Department of Computer Science and Engineering, Chitkara University Institute of Engineering and Technology, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala -----</p> <p>2)JAIN, Anuj Kumar Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Chitkara University Institute of Engineering and Technology, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala -----</p>
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(57) Abstract :

The present disclosure relates to a system 100 for detecting and classifying defects on natural leather surfaces. The system 100 includes an image obtainment module 102 configured to collect images of leather surfaces, a detection module 104 configured to process and classify the defects from the images, a feature extraction module 110, configured to extract features from the images, comprising one or more extraction techniques, such as a Feature Pyramid Networks (FPN), a Region Proposal Network (RPN), and a Side Aware Boundary Localization (SABL); and includes a spatial attention module and a channel attention module. The detected defects are displayed on a display terminal 112.

No. of Pages : 29 No. of Claims : 10