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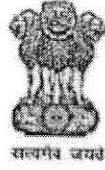
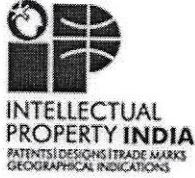
(54) Title of the invention : A SYSTEM AND METHOD FOR SEGMENTING SUSPICIOUS HYPERTHERMIC REGIONS FROM BREAST THERMOGRAMS

(51) International classification	:G06T0007000000, G06T0007110000, G06K0009000000, A61B0005000000, G06F0017270000	(71)Name of Applicant : <b>1)TRIPURA UNIVERSITY</b> Address of Applicant :(A Central University) Department of Computer Science & Engineering, Suryamaninagar-799022, Tripura West, India.
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(57) Abstract :

The Appearance of suspicious hyperthermic regions (SHRs) in breast thermograms is the single most marker of breast abnormality. Hence, accurate segmentation and analysis of SHRs are very crucial for grading the degree of severity in breast thermograms. A novel breast abnormality grading approach namely Morphology Model of Suspicious Hyperthermic Regions (MMSHRs) has been proposed here. The proposed MMSHRs method first segments the SHRs and then, the morphology of the SHRs has been analyzed to grade the thermograms according to their degree of severity. The experimental results show that the proposed segmentation method can extract the SHRs more accurately with higher average accuracy rate compared to the other state-of-the-art methods. The segmentation of SHRs is followed by the extraction of morphological features of SHRs, which categorizes the abnormal thermograms into mild abnormal and severely abnormal with classification accuracy of 91% based on the degree of severity present in the thermograms.

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Received documents purporting to be an application for patent numbered 202031027352 dated 27-06-2020 by TRIPURA UNIVERSITY of (A Central University) Department of Computer Science & Engineering, Suryamaninagar-799022, Tripura West, India relating to A SYSTEM AND METHOD FOR SEGMENTING SUSPICIOUS HYPERTHERMIC REGIONS FROM BREAST THERMOGRAMS together with the Complete and fee(s) of ₹19200 (Nineteen Thousand Two Hundred only).

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