

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202311041660 A

(19) INDIA

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

(43) Publication Date : 21/07/2023

(54) Title of the invention : A SYSTEM AND A METHOD FOR DETECTING VERTEBRAL FRACTURES

(51) International classification :A61B 177000, A61B 177200, A61F 024400, F16H 594000, G06F 215500

(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. Patiala -----

2)Chitkara Innovation Incubator Foundation
Name of Applicant : NA
Address of Applicant : NA

(72)Name of Inventor :
1)GARG, Meenu
 Address of Applicant :Department of Electronics and Communication Engineering, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala -----

2)AGGARWAL, Sonam
 Address of Applicant :Department of Electronics and Communication Engineering, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala -----

(57) Abstract :

A system (100) and a method (200) for detecting vertebral fractures is provided. The system (100) includes deep learning techniques including a convolutional neural network (CNN) model to detect vertebral fractures and image segmentation techniques to accurately locate a position of the detected vertebral fractures. The system (100) leads to more accurate and reliable fracture detection, reducing the risk of misdiagnosis and unnecessary treatments. The system (100) analyses CT scans much faster than a human radiologist, which can lead to faster diagnosis and treatment. The system (100) reduces the need for additional tests and treatments, ultimately lowering healthcare costs. The system (100) has a potential to revolutionize the way the vertebral fractures are diagnosed and treated, leading to better health outcomes for patients.

No. of Pages : 20 No. of Claims : 10