

(54) Title of the invention : Artificial Intelligence based Automatic Healthcare Management system for detection and Prevention of Pancreatic Cancer using Multidetector Computed Tomography, image processing and Machine Learning algorithms

(51) International classification :A61B0006000000, A61B0005000000, A61B0006030000, A61B0005055000, G16H0050200000

(86) International Application No :PCT//
Filing Date :01/01/1900

(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)E. Elamaran
 Address of Applicant :Assistant Professor Department of Electronics and Communication Engineering SRM Institute of Science and Technology, Potheri, Kattankulathur,603203, Chengalpattu District, Tamilnadu, India. -----
2)Dr.Renuka Agrawal
3)Saroj Kumar Nanda
4)Dr. Srikanta Mohapatra
5)Dr.M Rajan Babu
6)Dr.K.Ravikumar
7)Dunna Suresh Kumar
8)Ravindra Kumar Moningi
9)Shaik Azeez
10)Dr. Brijesh Sathian
11)Dr B Laxmi Kantha
 Name of Applicant : NA
 Address of Applicant : NA
 (72)Name of Inventor :
1)E. Elamaran
 Address of Applicant :Assistant Professor Department of Electronics and Communication Engineering SRM Institute of Science and Technology, Potheri, Kattankulathur,603203, Chengalpattu District, Tamilnadu, India. -----
2)Dr.Renuka Agrawal
 Address of Applicant :Kota Rajasthan, 492 New Rajeev Gandhi Nagar Kota Pin code 324005, Rajasthan -----
3)Saroj Kumar Nanda
 Address of Applicant :Assistant Professor Department of Computer Science & Engineering, ICFAI University, Kamalghat, Mohanpur, Agartala, Tripura 799210, India -----
4)Dr. Srikanta Mohapatra
 Address of Applicant :Associate Professor, School of Electrical Engineering, KIIT Deemed to be University, Bhubaneswar, Khordha, Odisha, India, PIN Code: 751024 -----
5)Dr.M Rajan Babu
 Address of Applicant :Professor Department of Electronics and Communication Engineering Lendi Institute of Engineering and Technology, Jonnada, Vizianagaram, Andhra Pradesh, India. -----
6)Dr.K.Ravikumar
 Address of Applicant :Associate Professor, Department of Computer science and Engineering, RRASE College of Engineering, Chennai , Tamilnadu, India. -----
7)Dunna Suresh Kumar
 Address of Applicant :Associate Professor Department of Electronics and Communication Engineering Lendi Institute of Engineering and Technology, Jonnada, Vizianagaram, Andhra Pradesh, India. -----
8)Ravindra Kumar Moningi
 Address of Applicant :Assistant Professor Department of Electronics and Communication Engineering Lendi Institute of Engineering and Technology, Jonnada, Vizianagaram, Andhra Pradesh, India -----
9)Shaik Azeez
 Address of Applicant :Assistant Professor Department of Electronics and Communication Engineering Lendi Institute of Engineering and Technology, Jonnada, Vizianagaram, Andhra Pradesh, India. -----
10)Dr. Brijesh Sathian
 Address of Applicant :Scientist, Geriatrics and Long term care Department, Rumailah Hospital, Hamad Medical Corporation, Doha, Qatar, P. O BOX 3050, Doha, Qatar. -----
11)Dr B Laxmi Kantha
 Address of Applicant :Assistant Professor , St. Martin' s Engineering College Dhulapally, Secunderabad , 500100,, Telangana, India. -----

(57) Abstract :
 Artificial Intelligence based Automatic Healthcare Management system for detection and Prevention of Pancreatic Cancer using Multidetector Computed Tomography, image processing and Machine Learning algorithms Abstract: If a diagnosis of pancreatic cancer is suspected, a computed tomography, or X-ray, is performed first. Magnetic resonance cholangiopancreatography (MRCP) is a screening test for pancreatic cancer that is used as a last resort. It is only used in cases of unclear diagnosis. Pancreatic cancer is detectable in up to 96 percent of CT scans and 93.53 percent of MRI scans, making them exceptionally accurate diagnostic tools. Magnetic resonance imaging (MRI) has an accuracy rate of 78 percent. Computed tomography has a rate of 86 percent, which is greater. Secondary signs of pancreatic cancer, such as dilatation, fast size change, and parenchymal atrophy, must be examined continually to ensure the cancer does not spread. Radiomics and molecular imaging, which became available just lately, are capable of detecting malignant precursors, allowing for early disease identification and perhaps saving lives. Clinical trials with a larger sample size are required before these intriguing approaches may be considered conclusive.

No. of Pages : 14 No. of Claims : 8