

(54) Title of the invention : ADVANCED AI-ALGORITHM-BASED DEVICE TO DETECT CERVICAL CANCER

<div>(51) International classification :G06T7/00, G16H50/20, G06N3/08, G06N20/00, G06F18/213, G06V10/70</div> <div>(86) International Application No :NA</div> <div>Filing Date :NA</div> <div>(87) International Publication No: NA</div> <div>(61) Patent of Addition to Application Number :NA</div> <div>Filing Date :NA</div> <div>(62) Divisional to Application Number :NA</div> <div>Filing Date :NA</div>	<div>(71)Name of Applicant : 1)Chitkara University Address of Applicant :Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura ----- 2)Chitkara Innovation Incubator Foundation Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor : 1)Dr. Sanjeev Verma Address of Applicant :Chitkara University Research & Innovation Network, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura ----- 2)Dr. S. N. Panda Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura ----- 3)Dr. Rajesh Kumar Kaushal Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura ----- 4)Dr. Naveen Kumar Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India Rajpura ----- 5)Dr. S. Sreenivasa Address of Applicant :Professor, Tumkur University, Tumkur, Karnataka-572103, India Tumkur ----- 6)Dr. Prabin Panigrahi Address of Applicant :Professor, IIM Indore, Indore, Madhya Pradesh 453556 Indore -----</div>
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(57) Abstract :
ABSTRACT The present disclosure introduces an advanced AI-algorithm-based device to detect cervical cancer 100. The invention integrates a comprehensive system involving cervical cancer raw data input unit 102, attribute analysis unit 104, preprocessing unit 106, feature selection unit 108, data scaling unit 110, and data splitting unit 112 to prepare and analyze cervical cancer data effectively. The AI-trained model 116 processes input images (from Colposcope test) 114 to classify cervical tissue into diagnostic categories: normal classification, mild dysplasia classification, moderate dysplasia classification, severe dysplasia classification, and carcinoma in situ classification. Reference Fig 1

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