Patent Search

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Inventor

Name	Address	Country
Mr. Narender Chinthamu	45, second floor, chenkumar complex, pari nagar, Palayapalayam, Erode Tamil Nadu India	India
Ms. M. Suganthi	Assistant Professor, Department of Information Technology, Kongunadu College of Engineering and Technology, Thottiyam,Trichy Tamilnadu India	India
Dr. Darshan Ashok ingle	Assistant professor, IT dept, thadomal shahani engineering college, Advocate Nari Gursahani Marg, 37th Road,(Off Linking Road), TPS III, Bandra (west), Mumbai	India
Dr. S. Tamil Selvan	Assistant professor, computer science and engineering, erode sengunthar engineering college, thudupathi post, perundurai, Erode Tamilnadu India	India
Dr. T. Sounderrajan	Assistant Professor, Department of Computer Science and Engineering Siddhartha Institute of Technology & Sciences, Hyderabad	India
Mr. Anoushka Prabhu	Amity University Mumbai, Mumbai-Pune Expressway, Bhatan, Post- Somathne, Panvel, Mumbai	India
Dr. V. Rajakumareswaran	Assistant Professor, Department of Computer Science and Design Erode Sengunthar Engineering College, Thuduppathi Tamil Nadu India	India
Dr. L. Rajeshkumar	Associate Professor, Department of Mechanical engineering, KPR Institute of Engineering and Technology, Arasur, Coimbatore Tamil Nadu India	India

Applicant

Name	Address	Country
Mr. Narender Chinthamu	45, second floor, chenkumar complex, pari nagar, Palayapalayam, Erode Tamil Nadu India	India
Ms. M. Suganthi	Assistant Professor, Department of Information Technology, Kongunadu College of Engineering and Technology, Thottiyam,Trichy Tamilnadu India	India
Dr. Darshan Ashok ingle	Assistant professor, IT dept, thadomal shahani engineering college, Advocate Nari Gursahani Marg, 37th Road,(Off Linking Road), TPS III, Bandra (west), Mumbai	India
Dr. S. Tamil Selvan	Assistant professor, computer science and engineering, erode sengunthar engineering college, thudupathi post, perundurai, Erode Tamilnadu India	India
Dr. T. Sounderrajan	Assistant Professor, Department of Computer Science and Engineering Siddhartha Institute of Technology & Sciences, Hyderabad	India
Mr. Anoushka Prabhu	Amity University Mumbai, Mumbai-Pune Expressway, Bhatan, Post- Somathne, Panvel, Mumbai	India
Dr. V. Rajakumareswaran	Assistant Professor, Department of Computer Science and Design Erode Sengunthar Engineering College, Thuduppathi Tamil Nadu India	India
Dr. L. Rajeshkumar	Associate Professor, Department of Mechanical engineering, KPR Institute of Engineering and Technology, Arasur, Coimbatore Tamil Nadu India	India

Abstract:

The present invention is a foreign object detection in an image analysis, comprises of, a projection beams 3 of a light source 2 are projected to a solution 1 to be mea reflection beams due to each kind of foreign object in the solution 1 is observed by a foreign object detection device 7 from a direction on a surface at 9015 in a proje direction. An appearance frequency and a size are analyzed and measured from the obtained images of the foreign objects. More specifically, by visually counting the foreign objects in the projected beams 3, the amount of foreign objects can be recognized semi- quantitatively. Further, by inputting digital data that are obtained by converting an image through a digital camera or the like into an image analysis device for image processing and analysis, the size and the number of the foreign obje measured. In this case, the maximum length of the foreign object that becomes a problem in terms of the blemish in film quality is approximately 20 m or more and minimum length is determined by performance such as the magnification of a microscope and a telescope.

Complete Specification

Description:Title of the Invention
Foreign object detection in an image analysis

Field of the invention:
The present invention generally relates to the field of an image analysis, particularly relates to a foreign object detection in an image analysis.

Prior art to the invention:

WO2023200516 – Titled - “foreign object detection for wireless power transfer systems " discloses a foreign objects (1004, 1104) impinging on a ground transceiver assembly (GTA) (406) of a wireless power transfer (WPT) station (FIG. 4) are detected using a two-stage foreign object detection system (FIG. 2). In a first stage, at lea camera (201, 202) is positioned to observe a charging position of the GTA and an area surrounding the charging position. In a second stage, an impedance measure circuit (FIG. 12) measures an impedance of a wireless power transfer coil of the GTA. An imaging processor (204) analyzes images from the at least one camera to id changes or features indicative of introduction of a foreign object onto an exposed surface of the GTA or in the area surrounding the charging position. A foreign obj detection (FOD) controller (205) triggers an impedance inspection of the GTA by the impedance measurement circuit and initiates a failsafe operation when movem an object crossing into or over the charging position is detected

View Application Status