



# Vivekanand Education Society's Institute Of Technology

(Affiliated to University of Mumbai, Approved by AICTE & Recognized by Govt. of Maharashtra)

<b>Institute Name</b>	Vivekanand Education Society's Institute Of Technology
<b>India Ranking 2021 ID</b>	IR-E-C-33895
<b>Discipline</b>	Engineering
<b>Parameter</b>	Patents Details 2019

## 1. Obstacle detection article for blinds

**Mrs.Shoba Krishnan, Mrs. Manisha Joshi, VESIT**

**Application no. 308566**

**Granted Date of Published: 26/07/2019**

**Abstract-** The system of the present invention facilitates the blind user to have normal social interactions without the need to touch the face of a person to recognize him/her, using a convenient wearable device.

## 2. Helmet

**Mrs. Manisha Joshi ,VESIT**

**Application no.286364**

**Granted Date of Published:9/8/2019**

**Abstract-** Working under high temperature is always a tedious job for human beings, especially the construction workers, high temperature service conditions and soldiers. To improve human comfort in high temperature conditions this is an attempt to design a solar cooled helmet. This solar cooled helmet generates electricity using a solar panel installed on the helmet and cooling

effect is produced by a peltier thermo electric plate, which reduces temperature in the helmet to the range of 20-24 0 C. The unique feature of this product is that the air is circulated throughout the helmet body through cavities in it. The purpose of the project is to solve the problem of soldiers during patrolling, to provide a cooling effect inside the helmet by using some compact, lightweight, portable, easy to handle attachment on their present helmet. During day time when the temperature is high the solar energy available from the sun can be utilized to generate electricity using solar panels and the cooling effect is produced by thermoelectric plates to improve the head and human comfort. It is also necessary to store the available solar power in the battery. A lithium ion battery is used for storage purposes due to its compactness and light weight structure. Also battery charging is possible during non-working hours with the help of electricity

### **3. Laser mouse navigation sensor system for thickness measurement**

**Dr. Nadir N. Charniya (VESIT), Dr. Sanjay. V. Dudul (SGBAUA)**

**Application number:1287/MUM/2010**

**Date of Grant: 23/10/2019**

**Abstract-** A simple low cost sensor system for thickness measurement of plates by means of high resolution laser mouse navigation sensor and a lightweight displacement probe is designed. An experimental prototype is developed which involves the release of the probe freely on the plain surface of any plate under test. A signal is generated from the laser mouse during the release of the probe. The first minima of the signals are related to the thickness of the plates.

### **4. Multiresolution Based Hybrid Filters For Despeckling Digital Images**

**Dr. R. K. Kulkarni, Shilpa Joshi**

**Application no. 201821042111A**

**Granted Date of Published : 25/10/2019**

**Abstract-**The present invention relates to denoising images and resolution enhancement, particularly of medical images.

## **5. Robust Fluid Dispensing System**

**Mrs. Deepti Khimani(VESIT), Mr. Rakeshkumar Barai, Dr. Machhindranath Patil(VESIT)**

**Application No.-201921025601**

**Date of Published: 16/08/2019**

**Abstract-** Fluid dispensing system is primarily responsible for the controlled flow of liquids such as solvents, inks, and glues for diverse applications including medical devices and electrical and electronics assembly. Most processes involve some or the other fluid flow from one point to another. For example, a fuel dispensing system at fuel stations. It is of utmost importance to accurately regulate the fuel flow from the source to the tank of the vehicle, here one cannot afford any less or more quantity to be dispensed. During this process, the velocity of fluid changes rapidly in several working conditions, which results in a temperature, pressure change which affect Fluid properties. This invention relates to the design of control law that alters the fluid flow-rate as per the specified quantity of the fluid to be dispensed.

## **6. A System and Method for Blockchain based Energy Trading**

**Dr. Nupur Giri ,VESIT**

**Application No. 201921031929**

**Published Patent Filed :7/8/2019**

**Abstract-** A system and method for blockchain based energy trading, comprising the energy generating devices which generates and trades that energy with other energy generating devices. These devices can earn digital currency by validating the submitted transactions. Validation is an activity wherein a device can verify the authenticity of the transaction by investing its own compute time and resources. The digital currency indicates the device's stake in the ecosystem. The system and method for blockchain based energy trading comprises Block-Trade and Block-Gen modules, which allow the system to perform buying, selling and lending functionalities. The buying and selling of energy may be executed by a smart contract deployed on the blockchain. The system makes use of a supply-demand equilibrium model to dynamically calculate the digital currency equivalence of energy. The energy generating devices may also lend digital currency. The terms of the loan will be set by a smart contract.

## **7. A Method and a System for Rating and Reward Distribution on a Decentralized Blockchain Platform**

**Dr. Nupur Giri ,VESIT.**

**Application No. 201921034418**

**Published Patent Filed :27/08/2019**

**Abstract-** A method and system for rating and reward distribution on a decentralized blockchain platform wherein the recruiters may hire professionals with a reliable rating, as measured by a token (the reputation score). It serves as an evaluation of the users on the respective skill sets. Working professionals or students can ensure that their skills are evaluated by an unbiased majority, called evaluators. Evaluators whose responses get accepted are able to earn rewards with monetary value, such as, cryptocurrency, electronic wallet-based tokens, or any form of money widely accepted. The concept of a proof-of-skill, where a person becomes an evaluator when his reputation score is more than the average score of all the users in that particular skill. The evaluator receives rewards proportional to his score and the deviation of his score (for the claimant) from the mean of the scores as provided by other evaluators.

## **8. System for aiding visually impaired**

**Dr. Sharmila Sengupta,VESIT.**

**Application No. 202021016810**

**Published Patent Filed:20/04/2020**

**Abstract-** Visually impaired persons try to recognize daily use items, for example, currency by holding a currency note in hand and inspecting the length of the note, or repeatedly rubbing fingers over the notes to feel identification marks, braille marks, etc. Despite the presence of such identification features on currency notes, a visually impaired person faces a lot of difficulties in recognizing currency. In addition to this, a visually impaired person faces many other challenges in his quotidian activities. Therefore, there is a need to develop a system that can aid a visually impaired person in his/her daily chores, at the same time being cost effective.

## **9. System for Common Mode Voltage Removal**

**Nilima Warke, Dr. J .M. Nair, Dr. P. P. Vaidya, VESIT**

**Application No.-201921042142**

**Published Patent Filed:17/10/2019**

**Abstract-** The present invention relates to electronic systems for reducing common mode voltage signals and more particularly to a system for common mode voltage removal having effective common mode rejection ratio (CMRR) without affecting differential voltage.

## **10. Device and method for generating pulses for calibration of high-resolution spectroscopy instruments.**

**Asma Parveen I.Siddavatam, Dr. P. P. Vaidya, Dr. Mrs. J. M. Nair, VESIT**

**Application No.-201921043615**

**Published Patent Filed :3/11/2019**

**Abstract-** The present invention relates to electronic systems for generation of pulses for calibration of high-resolution spectroscopy and more particularly to a system and method generating pulses for calibration of high-resolution spectroscopy using resistive network, programmable counters and switches