

Patent Details

Sl. No.	Name of the Faculty/student author of the patent	Patent Number	Date of Award	Patenet Awarding Agency
1	Prof. Shailendra Kumar	361768-001	21.9.2022	The Patent Office, Government of India
2	Kundan Meshram	2021102807	30.6.2021	Australian Government
3	Kundan Meshram	US 11288954	29.3.2022	United States patent & Trademark Office
4	Kundan Meshram	7783	28.9.2022	The South African Patent Office



ORIGINAL

No. 116987

भारत सरकार
GOVERNMENT OF INDIA
पेटेंट कार्यालय
THE PATENT OFFICE

CERTIFICATE OF REGISTRATION OF DESIGN

Design No. 361768-001
Date 01/04/2022
Reciprocity Date*
Country

Certified that the design of which a copy is annexed hereto has been registered as of the number and date given above in class 10-06 in respect of the application of such design to ARTIFICIAL INTELLIGENCE ENABLED ACCIDENT NOTIFYING DEVICE FOR VEHICLES in the name of 1.DR. SHAILENDRA KUMAR, PROFESSOR, DEPARTMENT OF CIVIL ENGINEERING, SCHOOL OF STUDIES OF ENGINEERING & TECHNOLOGY, GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR, CHHATTISGARH, INDIA 2. DR. ALOK KUMAR SINGH KUSHWAHA, ASSOCIATE PROFESSOR, DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING, SCHOOL OF STUDIES OF ENGINEERING & TECHNOLOGY, GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR, CHHATTISGARH, INDIA 3. DR. ABHISHEK KUMAR, ASSISTANT PROFESSOR, SCHOOL OF COMPUTER SCIENCE & IT JAIN (DEEMED TO BE UNIVERSITY), BENGALURU, INDIA 4. ANKIT KUMAR, ASSISTANT PROFESSOR, DEPARTMENT OF COMPUTER ENGINEERING & APPLICATIONS, GLA UNIVERSITY, MATHURA, ET AL.

in pursuance of and subject to the provisions of the Designs Act, 2000 and the Designs Rules, 2001.

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*The reciprocity date (if any) which has been allowed and the name of the country.

Copyright in the design will subsist for ten years from the date of Registration, and may under the terms of the Act and Rules, be extended for a further period of five years.

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Date of Issue 21/09/2022 12:43:14



Australian Government

IP Australia

CERTIFICATE OF GRANT INNOVATION PATENT

Patent number: 2021102807

The Commissioner of Patents has granted the above patent on 30 June 2021, and certifies that the below particulars have been registered in the Register of Patents.

Name and address of patentee(s):

KUNDAN MESHARAM of Near Panchmukhi Hanuman Temple, Ward No. 06, Chitragupt Nagar Balaghat-481001
Madhya Pradesh India

Title of invention:

A DEVICE AND METHOD TO IMPROVE THE EFFICIENCY OF CONSTRUCTION SITES USING IOT
ENABLED DIGITAL TWINS

Name of inventor(s):

MESHARAM, KUNDAN

Term of Patent:

Eight years from 24 May 2021

NOTE: This Innovation Patent cannot be enforced unless and until it has been examined by the Commissioner of Patents and a Certificate of Examination has been issued. See sections 120(1A) and 129A of the Patents Act 1990, set out on the reverse of this document.



Dated this 30th day of June 2021

Commissioner of Patents

PATENTS ACT 1990

The Australian Patents Register is the official record and should be referred to for the full details pertaining to this IP Right.

This data, for application number 2021102807, is current as of 2021-07-15 21:00 AEST

United
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To Promote the Progress

of Science and Useful Arts

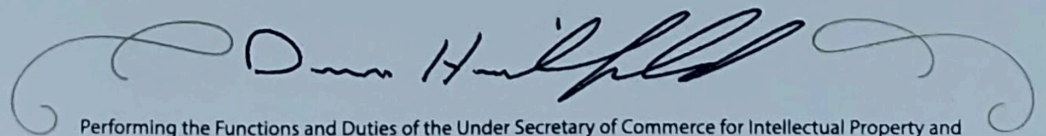
The Director

of the United States Patent and Trademark Office has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

Therefore, this United States

Patent

grants to the person(s) having title to this patent the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States of America or importing the invention into the United States of America, and if the invention is a process, of the right to exclude others from using, offering for sale or selling throughout the United States of America, products made by that process, for the term set forth in 35 U.S.C. 154(a)(2) or (c)(1), subject to the payment of maintenance fees as provided by 35 U.S.C. 41(b). See the Maintenance Fee Notice on the inside of the cover.



Performing the Functions and Duties of the Under Secretary of Commerce for Intellectual Property and

Director of the United States Patent and Trademark Office



US011288954B2

(12) **United States Patent**
Meshram

(10) **Patent No.:** **US 11,288,954 B2**
(45) **Date of Patent:** **Mar. 29, 2022**

(54) **TRACKING AND ALERTING TRAFFIC MANAGEMENT SYSTEM USING IOT FOR SMART CITY**

(71) Applicant: **Kundan Meshram**, Balaghat (IN)

(72) Inventor: **Kundan Meshram**, Balaghat (IN)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **17/144,173**

(22) Filed: **Jan. 8, 2021**

(65) **Prior Publication Data**

US 2021/0134146 A1 May 6, 2021

(51) **Int. Cl.**

G08G 1/005 (2006.01)
G06K 9/00 (2022.01)
G16Y 40/60 (2020.01)
G06V 20/52 (2022.01)
G06K 9/62 (2022.01)

(52) **U.S. Cl.**

CPC **G08G 1/005** (2013.01); **G06K 9/00** (2013.01); **G06K 9/0057** (2013.01); **G06K 9/00557** (2013.01); **G06K 9/6289** (2013.01); **G06V 20/53** (2022.01); **G16Y 40/60** (2020.01)

(58) **Field of Classification Search**

CPC . **G06F 3/01**; **G06F 3/011**; **G06F 3/018**; **G06F 3/0481**; **G06K 9/00**; **G06K 9/0063**; **G06K 9/00664**; **G06K 9/00677**; **G06K 9/00785**; **G06K 9/00791**; **G06K 9/6201**; **G06K 9/00778**; **G06K 9/0055**; **G06K 9/00557**; **G06K 9/0057**; **G06K 9/62**; **G06K 9/6276**; **H04L 12/18**; **H04L 12/1818**; **G08G 1/00**; **G08G 1/005**

See application file for complete search history.

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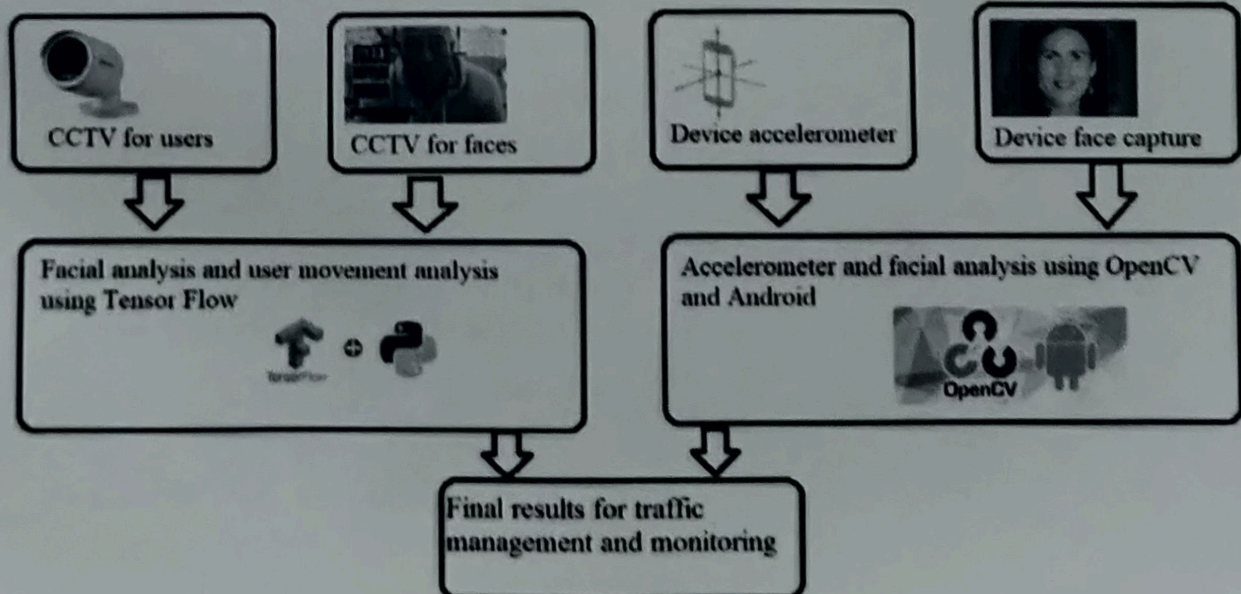
Primary Examiner — Van T Trieu

(74) *Attorney, Agent, or Firm* — Rumit Ranjit Kanakia

(57) **ABSTRACT**

Tracking and alerting Traffic management system using IoT for smart city to determine a social distance or norms violation between a plurality of communicative pairs, each of the image have plurality of communicative pairs including two communicating entities participating in a corresponding one or more of the communicative acts, the system comprising: CCTV for captured User's data i.e User movements, facial data, Smartphone data in case of accident detection; wireless trans-receiver for event propagation and sending the data to database; Sensor for getting the data of smart phones based on GPS system specially in case of accidental case; processor having CNN technology for analyzing and reverting data to control room based and configured to determine the pairwise social distancing based on particular behavior like movement and stopping or falling; hardware for storing data captured based on classification and analyzed parameters; machine learning for integration of data received from processor or sensors for visualization and processing final data to the citizens or to governments for monitoring and sending data to alarming sensor for non instructive alert if violations of social distancing norms.

7 Claims, 7 Drawing Sheets





REPUBLIC OF SOUTH AFRICA

REPUBLIEK VAN SUID AFRIKA

PATENTS ACT, 1978

CERTIFICATE

accordance with section 44 (1) of the Patents Act, No. 57 of 1978, it is hereby certified that:

DR. DOLLY THANKACHAN; DR. KUNDAN MESHRAM

Has been granted a patent in respect of an invention described and claimed in complete specification deposited at the Patent Office under the number

2022/07783

A copy of the complete specification is annexed, together with the relevant Form P2.

In testimony thereof, the seal of the Patent Office has been affixed at Pretoria with effect from the 28th day of **September 2022**

Registrar of Patents





Intellectual
Property
Office

Certificate of Registration for a UK Design

Design number: 6302539

Grant date: 08 September 2023

Registration date: 09 August 2023

This is to certify that,

in pursuance of and subject to the provision of Registered Designs Act 1949, the design of which a representation or specimen is attached, had been registered as of the date of registration shown above in the name of

Dr. Ashish Kumar Parashar, Mr. Deepak Saxena

in respect of the application of such design to:

INTERLOCKING BRICK FOR BUILDING CONSTRUCTION

International Design Classification:

Version: 14-2023

Class: 25 BUILDING UNITS AND CONSTRUCTION ELEMENTS

Subclass: 01 BUILDING MATERIALS

Adam Williams

Comptroller-General of Patents, Designs and Trade Marks

Intellectual Property Office

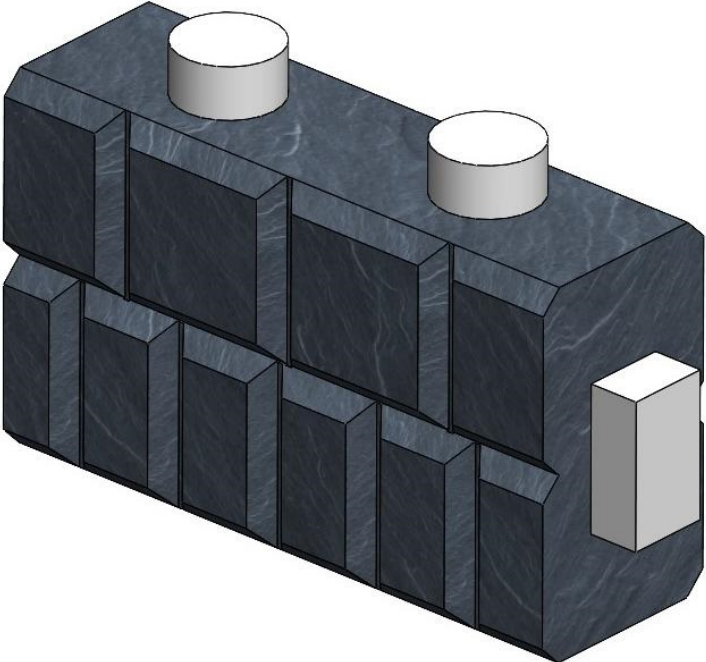
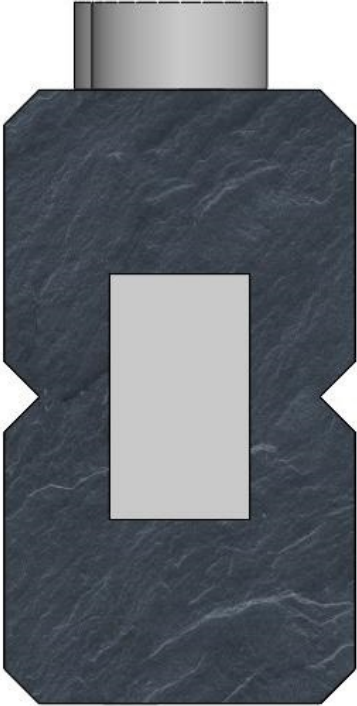
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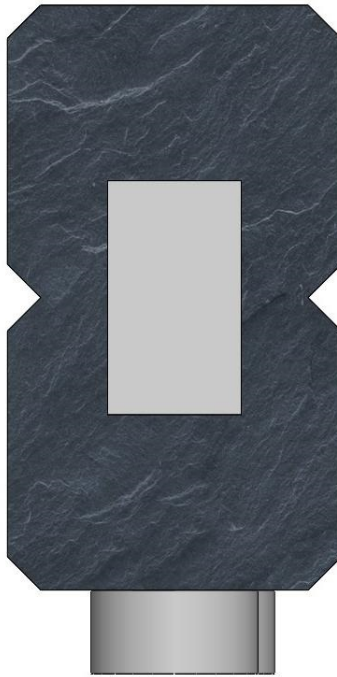
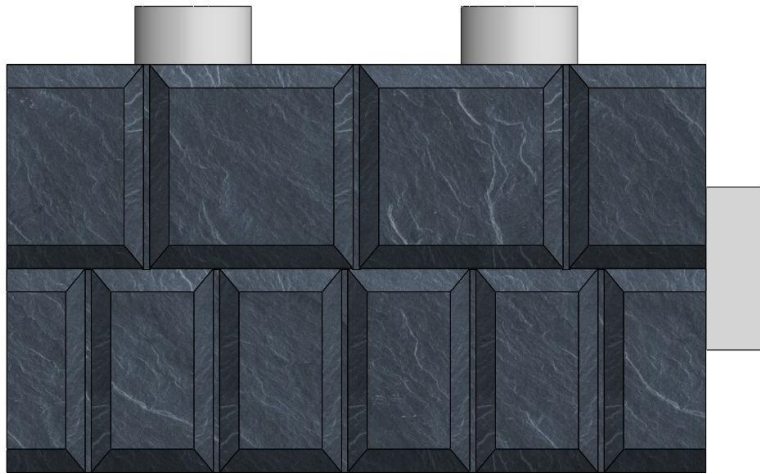


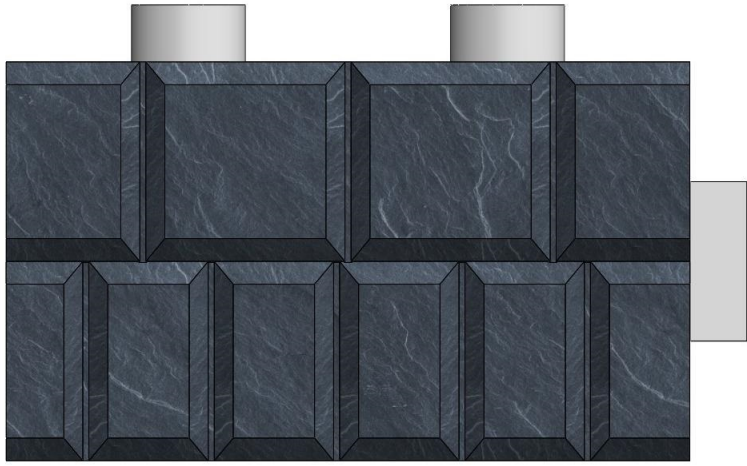
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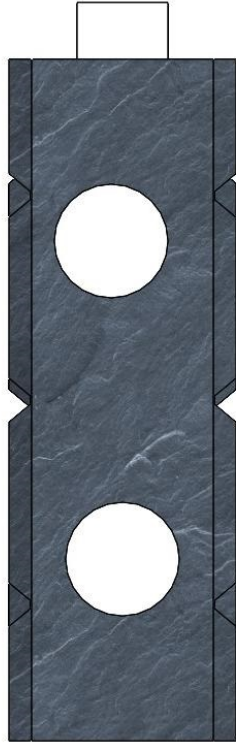
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Representation of Designs









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