M V G R COLLEGE OF ENGINEERING(A)

Chintalavalasa, Vizianagaram-535005 Accredited by NAAC with 'A' Grade & Listed u/s 2(f) & 12(B) of UGC (Approved by AICTE, New Delhi and Permanently Affiliated by JNTUK-Kakinada)

3.2.4.

Average percentage of departments having Research projects funded by government and non-government agencies during the last five years

Any additional Information: Patents published in the last five years

s.no	Year	Page Nos.
1	2019-20	
2	2018-19	
3	2017-18	1 - 13
4	2016-17	
5	2015-16	

PATENTS

Sl	Title of patent	Faculty	Application no:	Year	Status
1	Geo Polymer Concrete Composition Using Quary Dust and Contrived Aggregates	Dr P Sudheer	202041035216	2020	Published
2	A Contrived Aggregate Composition for Concrete and Equipment for its Preparation	Dr P Sudheer	202041035217	2020	Published
3	Artificial Intelligence Based automated Music Composing Model	Dr P Srinivasa Rao	201941022847	2019	Published
4	Wearable device to monitor dehydration	Dr P Srinivasa Rao	201941013991	2019	Published
5	Hybrid Concrete Composition	Dr P Sudheer	201941011593	2019	Published
6	Hybrid Mortar Composition	Dr P Sudheer	201941011594	2019	Published
7	A Modified Bow-Tie Slotted Circular Patch Antenna	Dr R Ramana Reddy	201741034823	29.09.2017	Published
8	A Quad-band Asymmetric Dual L –Slot fed Dielectric Resonator Antenna (DRA) with Circularly Polarized Bands	Dr R Ramana Reddy	201741035252	05.10.2017	Published
9	Curvy Rectangular Slotted Substrate Integrated Cylindrical DRA with Wide CP Bandwidth and Enhanced Gain	Dr R Ramana Reddy	201741035257	05.10.2017	Published
10	A Compact Hexagonal Triangular Fractal Antenna for Wideband Applications	Dr R Ramana Reddy	201741035252A	22-12-2016	Published
11	A New PCB Based Antenna for IoT Applications	Dr R Ramana Reddy	201641043764A	22-12-2016	Published
12	Multipurpose Modular Semi- Autonomous Underwater Platform for Maintenance, Surveillance and Reconnaissance	Mr K Praveen	TEMP/E- 1/13660/2018- CHE	04.04.18	Published

(21) Application No.202041035216 A

(19) INDIA

(22) Date of filing of Application: 15/08/2020

(43) Publication Date: 04/09/2020

(54) Title of the invention : GEO POLYMER CONCRETE COMPOSITION USING QUARRY DUST AND CONTRIVED AGGREGATES

 (51) International classification (31) Priority Document No (32) Priority Date (33) Name of priority country (86) International Application No Filing Date (87) International Publication No (61) Patent of Addition to Application Number Filing Date (62) Divisional to Application Number Filing Date 	:C04B26/02 :NA :NA :NA :NA :NA :NA :NA :NA :NA :NA	(71)Name of Applicant: 1)Dr.Sudheer Ponnada Address of Applicant: Assistant Professor, Civil Engineering, Maharaj Vijayaram Gajapathi Raj College of Engineering (Autonomous), Vijayaram Nagar Campus, Chintalavalasa, Vizianagaram-535005, Andhra Pradesh, India. Andhra Pradesh India (72)Name of Inventor: 1)Dr.Sudheer Ponnada 2)Dr.Partheepan Ganesan 3)Dr.P.Markandeya Raju 4)Dr.S.S.S.V.Gopala Raju
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(57) Abstract:

ABSTRACT: Title: Geo Polymer Concrete Composition using Quarry Dust and Contrived Aggregates The present disclosure proposes a geo polymer concrete composition that utilizes a contrived coarse aggregate and quarry dust as fine aggregate. The geo polymer concrete composition comprises contrived coarse aggregate made of fly ash and thermosetting polymer, quarry dust as a fine aggregate, fly ash, GGBS, sodium Hydroxide (NaOH), and sodium silicate (Na2SiO3). The proposed concrete composition eliminates the problem of disposal of wastes from industries by converting wastes such as fly ash, quarry dust and thereof as resources for concrete preparation. The cost of concrete is reduced by utilizing industrial waste as resources and thereby provides wide range of economic and environmental benefits.

No. of Pages: 12 No. of Claims: 7

(21) Application No.202041035217 A

(19) INDIA

(22) Date of filing of Application: 15/08/2020

(43) Publication Date: 04/09/2020

(54) Title of the invention : A CONTRIVED AGGREGATE COMPOSITION FOR CONCRETE AND EQUIPMENT FOR ITS PREPARATION

 (51) International classification (31) Priority Document No (32) Priority Date (33) Name of priority country (86) International Application No Filing Date (87) International Publication No (61) Patent of Addition to Application Number Filing Date (62) Divisional to Application Number Filing Date 	:NA :NA	(71)Name of Applicant: 1)Dr.Sudheer Ponnada Address of Applicant: Assistant Professor, Civil Engineering, Maharaj Vijayaram Gajapathi Raj College of Engineering (Autonomous), Vijayaram Nagar Campus, Chintalavalasa, Vizianagaram-535005, Andhra Pradesh, India. Andhra Pradesh India (72)Name of Inventor: 1)Dr.Sudheer Ponnada 2)Dr.Partheepan Ganesan 3)Dr.P.Markandeya Raju 4)Dr.S.S.S.V.Gopala Raju
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(57) Abstract:

ABSTRACT: Title:A Contrived Aggregate Composition for Concrete and Equipment for Its Preparation Thereof The present disclosure proposesa contrived aggregate composition that utilizes industrial disposed waste materials as raw materials for concrete. The present invention provides a contrived coarse aggregate that is prepared using a specially designed pressing equipment. The coarse aggregate composition comprises a mixture of thermosetting polymer and fly ashthat provides best workability. The proposed coarse aggregate provides desired strength with minimum effect on the environment through minimal mining of natural resources. The coarse aggregate aids to provide concrete with good compressive, impact and crushing strength, also less water absorption and self-weight when compared to concrete with conventional coarse aggregates.

No. of Pages: 22 No. of Claims: 7





Controller General of Patents, Designs and Trademarks Department of Industrial Policy and Promotion Ministry of Commerce and Industry

Application Details

APPLICATION NUMBER	201941022847
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	10/06/2019
APPLICANT NAME	MVGR College of Engineering (Autonomous)
TITLE OF INVENTION	ARTIFICIAL INTELLIGENCE BASED AUTOMATED MUSIC COMPOSING MODEL
FIELD OF INVENTION	COMPUTER SCIENCE
E-MAIL (As Per Record)	ganapathi@novelpatent.com
ADDITIONAL-EMAIL (As Per Record)	hima@novelpatent.com
E-MAIL (UPDATED Online)	
PRIORITY DATE	NA
REQUEST FOR EXAMINATION DATE	
PUBLICATION DATE (U/S 11A)	02/08/2019

	Application Status	
APPLICATION STATUS	Application Published	

View Documents





Controller General of Patents, Designs and Trademarks Department of Industrial Policy and Promotion Ministry of Commerce and Industry

Application Details

	1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
APPLICATION NUMBER	201941013991
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	08/04/2019
APPLICANT NAME	Dr.P.Srinivasa Rao
TITLE OF INVENTION	WEARABLE DEVICE TO MONITOR DEHYDRATION
FIELD OF INVENTION	BIO-MEDICAL ENGINEERING
E-MAIL (As Per Record)	ganapathi@novelpatent.com
ADDITIONAL-EMAIL (As Per Record)	hima@novelpatent.com
E-MAIL (UPDATED Online)	
PRIORITY DATE	NA
REQUEST FOR EXAMINATION DATE	
PUBLICATION DATE (U/S 11A)	26/04/2019

Application Status					
APPLICATION STATUS	Application Published				

View Documents

(21) Application No.201941011593 A

(19) INDIA

(22) Date of filing of Application: 26/03/2019

(43) Publication Date: 02/10/2020

(54) Title of the invention: HYBRID CONCRETE COMPOSITION

(51) International classification	:C04B0028020000, E01C0007140000, C04B0028240000, B32B0005260000, E02B0003060000	(71)Name of Applicant: 1)MVGR College of Engineering (Autonomous) Address of Applicant: Vijayaram Nagar Campus, Chintalavalasa, Vizianagaram Andhra Pradesh India (72)Name of Inventor:
(31) Priority Document No	:NA	1)Dr.Sudheer Ponnada
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
Filing Date	:NA	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Numl	ber:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract:

Title: Hybrid Concrete Composition The present disclosure proposes a hybrid concrete composition which can be used in structures of coastal zones. In specific, the hybrid concrete composition is prepared by mixing numerous combinations of innovative composite mortar (i.e. fly ash, quarry dust with design percentages of thermosetting polymer) and with conventional coarse aggregates. The hybrid composite concrete composition is capable of protecting coastal structures from degradation (corrosion and erosion). The hybrid concrete composition allows attaining high strength, durable nature, resistant against sea water and also has better corrosion resistant. The hybrid concrete composition has improved economic benefit in major applications such as rehabilitation and retrofitting of structures.

No. of Pages: 16 No. of Claims: 10

(21) Application No.201941011594 A

(19) INDIA

(22) Date of filing of Application :26/03/2019

(43) Publication Date: 02/10/2020

(54) Title of the invention: HYBRID MORTAR COMPOSITION

(51) International classification	:C04B0028240000, E02B0003060000, E02B0003040000, C08G0059560000, C04B0111230000	(71)Name of Applicant: 1)MVGR College of Engineering (Autonomous) Address of Applicant: Department of Civil Engineering, Vijayaram Nagar Campus, Chintalavalasa, Vizianagaram 535005 Andhra Pradesh India
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	1)Dr.Sudheer Ponnada
(33) Name of priority country	:NA	
(86) International Application No	:NA	[1] 14 : 사람이 살아가 있었다. 글 보고 있는 사람이 있는 사람들이 살아 있다. 그는 그 사람
Filing Date	:NA	
(87) International Publication No	: NA	[14] : [4] : [15] [15] [15] [15] [15] [15] [15] [15]
(61) Patent of Addition to Application Numb	per:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract:

Title: Hybrid Mortar Composition The present disclosure proposes a hybrid mortar composition which can be used in structures of coastal zones. In specific, the hybrid mortar composition is prepared by mixing combinations of fly ash, quarry dust and with design percentages of epoxy resin. The hybrid mortar composition is capable of protecting coastal structures from degradation (corrosion and erosion). The hybrid mortar composition allows attaining high strength, durable nature, resistant against sea water and also has better corrosion resistant. The hybrid mortar composition has improved economic benefit in major applications such as rehabilitation and retrofitting of structures.

No. of Pages: 14 No. of Claims: 5

(21) Application No.201741034823 A

(19) INDIA

(22) Date of filing of Application: 30/09/2017

(43) Publication Date: 23/03/2018

(54) Title of the invention: A MODIFIED BOW-TIE SLOTTED CIRCULAR PATCH ANTENNA

	:H01Q1/48;	(71)Name of Applicant :
(51) International classification	H01Q13/10;	1)Maharaj Vijayaram Gajapathi Raj College of Engineering
	H01Q21/065	(Autonomous)
(31) Priority Document No	:NA	Address of Applicant: Vijayaram Nagar campus,
(32) Priority Date	:NA	Chintalavalasa, Vizianagaram, Andhra Pradesh 535005. Andhra
(33) Name of priority country	:NA	Pradesh India
(86) International Application No	:NA	(72)Name of Inventor:
Filing Date	:NA	1)Dr. Ragipindi Ramana Reddy
(87) International Publication No	: NA	2)Darimireddy Naresh Kumar
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract:

Title: A Modified Bow-Tie Slotted Circular Patch Antenna The present invention provides asymmetric modified Bow Tie (ABT) and symmetric modified bow-tie slotted patch antennas. The patch antenna provides a resonant mode at a desired frequency. The modified bow-tie slot is shaped by combining the portion of a trapezoid and a semi-ellipse arranged geometrically to ensure circular polarization. The invention proposes a circular patch antenna with different dimensions of 40 X 40 mm2 for asymmetric and symmetric slotted antennas. A feed port is provided on the bottom of the ground plane to feed the circular patch antenna through a feed line. ABT slotted circular patch offers 10 dB Return Loss (RL) bandwidth of 350MHz with CP, and 3dB AR bandwidth of 100MHz with a peak gain of 5dBi. SBT slotted patch provides 10dB bandwidth of 530MHz with CP, 3dB AR bandwidth of 100MHz with a peak gain of 5.1dBi. The proposed antennas are suitable for S-band applications. The scaled up symmetric bow tie SBT-CSSP (50mm X 50mm) version provides 10dB return loss (RL) bandwidth of 340MHz (2390MHz-2730MHz) with circular polarization (CP), 3dB AR bandwidth of 80MHz with a gain of 5dBi and the scaled down symmetric bow tie SBT-CSSP (30mm X 30mm) version provides 10dB return loss (RL) bandwidth of 710MHz (4800MHz-5510MHz) with circular polarization (CP), 3dB AR bandwidth of 180MHz with a gain of 5.25dBi. The scaled versions are suitable for IEEE 802.11a WLAN (2.4GHz), ISM (2.4-2.483GHz) and IEEE 802.11ac (5GHz) applications. The measured and simulation results are in close agreement. The small deviations in practical results when compared to simulation results are attributed to fabrication tolerances, which are not considered in the process of simulation.

No. of Pages: 31 No. of Claims: 10

(21) Application No.201741035252 A

(19) INDIA

(22) Date of filing of Application:05/10/2017

(43) Publication Date: 23/03/2018

(54) Title of the invention: A QUAD-BAND ASYMMETRIC DUAL L SLOT FED DIELECTRIC RESONATOR ANTENNA (DRA) WITH CIRCULARLY POLARIZED BANDS

 (51) International classification (31) Priority Document No (32) Priority Date (33) Name of priority country (86) International Application No Filing Date (87) International Publication No (61) Patent of Addition to Application Number Filing Date (62) Principle of Addition Number 	H01Q1/24; :NA :NA :NA :NA :NA :NA :NA :NA	(71)Name of Applicant: 1)MVGR College of Engineering (Autonomous) Address of Applicant: Vijayaram Nagar campus, Chintalavalasa, Vizianagaram, Andhra Pradesh 535005 Andhra Pradesh India (72)Name of Inventor: 1)Dr. Ragipindi Ramana Reddy 2)Darimireddy Naresh Kumar
(62) Divisional to Application Number Filing Date	:NA :NA	

(57) Abstract:

Title: A Quad-band Asymmetric Dual L Slot fed Dielectric Resonator Antenna (DRA) with Circularly Polarized Bands The present invention provides a quad-band asymmetric slotted cylindrical dielectric resonator with dual circularly polarized bands. The dielectric resonator antenna comprising a cylindrical dielectric resonator to provide a circular polarization at a predetermined frequency bands with dual asymmetric L slots is arranged geometrically to ensure circular polarization. A substrate is integrated between the ground plane and dielectric resonator and a feed port to provide or transfer energy to cylindrical dielectric resonator. The proposed DRA model radiates at four bands (5-5.3GHz, 6.25-6.5GHz, 7-8.3GHz and 9.8-11GHz) with a gain of 5.5dBi, 5.1dBi, 6.1dBi and 7.8dBi respectively and dual CP bands at 7.8GHz and 10.35GHz are obtained with 10dB return loss bandwidth of 1.3GHz and 1.2GHz. The proposed DRA is suitable for different wireless (WiFi-5GHz, WLAN-5.2GHz/5.5GHz and WiMax-5.8GHz) applications in communication and X-band (8-12.5GHz) applications such as Military mobiles (Ships and Aircrafts) and radio relays and thereof.

No. of Pages: 29 No. of Claims: 9

(19) INDIA

(22) Date of filing of Application :05/10/2017

(43) Publication Date: 23/03/2018

(54) Title of the invention: CURVY RECTANGULAR SLOTTED SUBSTRATE INTEGRATED CYLINDRICAL DRA WITH WIDE CP BANDWIDTH AND ENHANCED GAIN

 (51) International classification (31) Priority Document No (32) Priority Date (33) Name of priority country (86) International Application No Filing Date (87) International Publication No (61) Patent of Addition to Application Number Filing Date (62) Divisional to Application Number Filing Date 	:H01Q9/0485; H01Q9/065 :NA :NA :NA :NA :NA :NA :NA :NA	(71)Name of Applicant: 1)Maharaj Vijayaram Gajapathi Raj College of Engineering (Autonomous) Address of Applicant: Vijayaram Nagar campus, Chintalavalasa, Vizianagaram, Andhra Pradesh 535005 Andhra Pradesh India (72)Name of Inventor: 1)Dr. Ragipindi Ramana Reddy 2)Darimireddy Naresh Kumar
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(57) Abstract:

Title: Curvy Rectangular Slotted Substrate Integrated Cylindrical DRA with Wide CP Bandwidth and Enhanced Gain The present invention provides a curvy rectangular slotted cylindrical DRA. The dielectric resonator antenna comprises a cylindrical dielectric resonator having dimensions for providing a resonant mode at desired frequencies and having four independent slots with each slot being curvy rectangular in shape and which is geometrically arranged to ensure circularly polarization. The invention proposes two DRA models with different dimensions of 50 X 50 mm2 and 25 X 25 mm2 and operatively coupled with the cylindrical dielectric resonators. A probe feed is provided on the bottom of the ground plane to feed the cylindrical dielectric resonator antenna. From the results it is evident that, DRA with higher dimension having a wide bandwidth of 55% (4.14GHz to 7.31GHz) with CP and 3dB AR bandwidth of 38% (4.82GHz to 7.07GHz) with a peak gain of 6dBi. Scaled down version of the DRA provides an impedance bandwidth of 57.5% (7.34GHz to 12.94GHz) with CP, maximum 3dB AR bandwidth of 0.76GHz with a gain of 5.52dBi. The minimum AR values obtained for scaled down version is 0.33dB at 7.94GHz and 0.07dB at 11.65GHz. The dielectric resonator antenna is suitable for commercial wireless (WiFi-5GHz, WLAN-5.2GHz/5.5GHz and WiMax-5.8GHz) communication, X-band (8-12.5GHz) applications such as military mobiles (Ships and Aircrafts) and radio relays and thereof.

No. of Pages: 31 No. of Claims: 8

(21) Application No.201641043763 A

(19) INDIA

(22) Date of filing of Application: 22/12/2016

(43) Publication Date: 23/03/2018

(54) Title of the invention: A COMPACT HEXAGONAL-TRIANGULAR FRACTAL ANTENNA FOR WIDEBAND APPLICATIONS

(51) International classification	:H01Q 1/00	(71)Name of Applicant: 1)MVGR College of Engineering (Autonomous)
(31) Priority Document No	:NA	Address of Applicant : MVGR campus, Chintalavalasa,
(32) Priority Date	:NA	Vizianagaram, Andhra Pradesh, India-535005 Andhra Pradesh
(33) Name of priority country	:NA	India
(86) International Application No	:NA	(72)Name of Inventor:
Filing Date	:NA	1)Dr. Ragipindi Ramana Reddy
(87) International Publication No	: NA	2)Darimireddy Naresh Kumar
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract:

Title: A Compact Hexagonal-Triangular Fractal Antenna for Wideband Applications The present invention proposes a compact hexagonal-triangular fractal antenna for wideband applications such as defence and aerospace communication systems, wireless applications such as WLAN, Wi-Fi, UWB, and X-Band etc. The small sized fractal antenna comprises of hexagonal rings where the sides of the rings are connected by triangular elements and a feeding means is connected to the hexagonal rings. A triangular slotted symmetrical defective ground structure (DGS) with a recess at the center is formed on other side of the substrate to attain a wide bandwidth frequency ranging from 3GHz to 25.2GHz with an offered bandwidth of 22.2GHz. The fractal antenna works at different frequencies for each step of frequency iteration made from hexagonal rings and determines the voltage standing wave ratio (VSWR) and return losses for each variation of frequencies. The radiation produced by the antenna is distributed in symmetric patterns to achieve wideband characteristics.

No. of Pages: 29 No. of Claims: 8

(21) Application No.201641043764 A

(19) INDIA

(22) Date of filing of Application: 22/12/2016

(43) Publication Date: 23/03/2018

(54) Title of the invention: A NEW PCB BASED ANTENNA FOR IOT APPLICATIONS

(C) T	:H01Q	(71)Name of Applicant:
(51) International classification	1/00	1)MVGR College of Engineering
(31) Priority Document No	:NA	Address of Applicant : MVGR campus, Chintalavalasa,
(32) Priority Date	:NA	Vizianagaram, Andhra Pradesh, India-535005 Andhra Pradesh
(33) Name of priority country	:NA	India
(86) International Application No	:NA	2)M/s Phytec Embedded Pvt. Ltd
Filing Date	:NA	(72)Name of Inventor:
(87) International Publication No	: NA	1)Dr. Ragipindi Ramana Reddy
(61) Patent of Addition to Application Number	:NA	2)Dr. Shaik Mastan Vali
Filing Date	:NA	3)Baipalli Vallab Rao
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract

Title: A New PCB Based Antenna for IoT Applications The present invention proposes a PCB based antenna for IoT applications. The printed circuit board (PCB) based antenna is a small sized antenna which works in sub 1GHz frequency. The designed helical structured antenna is attached to a printed circuit board (PCB) and occupies a diminished space on the PCB. The helical structured antenna covers a variety of communication bands for features such as M2M communications, Internet of Things (IoT), Bluetooth low energy, 6 LoWPAN, IEEE 802.15.4MAC architectures, low power consumption and thereof. The PCB based antenna is designed with a reduced dimension at low frequency on the PCB substrate with a bandwidth of 100 MHz ranging from 910 MHz to 1010 MHz and total gain of 2.90dBi.

No. of Pages: 18 No. of Claims: 9



Controller General of Patents, Designs & Trade

G.A.R.6 [See Rule 22(1)] RECEIPT



Date/Time 2018/04/06 15:21:01

Userld: hi2sandip

Docket No 26680

Marks

SANDIP KUMAR CHAKRABORTY

8-7-33/1 RR Nagar, Old Bowenpally, Secunderabad, Pin: 500011, Telangana

CBR Detail:

Sr. Na.	Ret. No./Application No.	App, Number	Amonat Paid	C.B.R. No.	Form Name	Remarks
1	201841013180	TEMP/E- 1/13660/2018- CHE	1600	9449	FORM 1	MULTIPURPOSE MODULAR SEMI-AUTONOMOUS UNDERWATER PLATFORM FOR MAINTENANCE, SURVEILLANCE AND RECONNAIS

N-0000363713	Online Bank Transfer	02806340604201850391	1600.00	1475001020000001
TransactionHD	Payment Mode	Chollan Identification Number	Amount Paid	Head of A/C No

Total Amount : ₹ 1600

Amount in Words: Rupees One Thousand Six Hundred Only

Received from SANDIP KUMAR CHAKRABORTY the sum of [₹] 1600 on account of Payment of fee for above mentioned Application/Forms.

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