



(<http://ipindia.nic.in/index.htm>)



(<http://ipindia.nic.in/inc>)

Patent Search

Invention Title	DESIGN OF N-BY-1 RECTANGULAR PATCH ANTENNA FOR 2.45 GHZ AND 5 GHZ GEOMETRY
Publication Number	19/2021
Publication Date	07/05/2021
Publication Type	INA
Application Number	202141019068
Application Filing Date	26/04/2021
Priority Number	
Priority Country	
Priority Date	
Field Of Invention	ELECTRONICS
Classification (IPC)	H01Q0021060000, G06F0011360000, H01Q0009040000, H01Q0001380000, H01Q0021000000

Inventor

Name	Address	Country	Nat
Damaraju Sri Sai Satyanarayana	Department of Electronics and Communication Engineering Sreyas Institute of Engineering and Technology, Hyderabad, India	India	Indi
Dr ANANDHI MEENA B	Teaching Fellow ECE Anna University University College of Engineering-Dindigul Tamilnadu, India	India	Indi
Dr.S.THENAPPAN	PROFESSOR, DEPT. Of ECE, KNS INSTITUTE OF TECHNOLOGY, BANGALORE	India	Indi
Vikas Mendi	Assistant Professor, Department of Civil Engineering, RV College of Engineering, Mysuru Road, Bengaluru	India	Indi
Dr Yerram Srinivas	Professor & HOD Department of ECE VBIT, HYDERABAD	India	Indi
Dr Varun V L	Asst Professor, Department of Mathematics, SJB Institute of Technology, Kengeri, Bangalore	India	Indi
Dr. Harikumar Pallathadka	Director, Manipur International University, Imphal, Manipur, India	India	Indi
DR.V.KISHEN AJAY KUMAR	Associate Professor Institute of Aeronautical Engineering, Dundigal Road, Dundigal, Hyderabad, 500043, Telangana, India.	India	Indi
S.Nithya	Assistant Professor (Sr.G) Department of ECE KPR Institute of Engineering and Technology, Arasur Coimbatore	India	Indi
Mohammad Shabaz	Assistant Professor Dept of Computer Science Engineering. School of Computer Science Engineering, Lovely Professional University, Phagwada, Punjab, India,	India	Indi
Mr. Sankararao Majji	Assistant Professor Department of ECE GRIET, Hyderabad, Telangana	India	Indi
Kaviyaraj	Research Scholar School of Computing SRM IST	India	Indi

Applicant

Name	Address	Country	Nat
Damaraju Sri Sai Satyanarayana	Department of Electronics and Communication Engineering Sreyas Institute of Engineering and Technology, Hyderabad, India	India	Indi
Dr ANANDHI MEENA B	Teaching Fellow ECE Anna University University College of Engineering-Dindigul Tamilnadu, India	India	Indi
Dr.S.THENAPPAN	PROFESSOR, DEPT. Of ECE, KNS INSTITUTE OF TECHNOLOGY, BANGALORE	India	Indi
Vikas Mendi	Assistant Professor, Department of Civil Engineering, RV College of Engineering, Mysuru Road, Bengaluru	India	Indi
Dr Yerram Srinivas	Professor & HOD Department of ECE VBIT, HYDERABAD	India	Indi
Dr Varun V L	Asst Professor, Department of Mathematics, SJB Institute of Technology, Kengeri, Bangalore	India	Indi
Dr. Harikumar Pallathadka	Director, Manipur International University, Imphal, Manipur, India	India	Indi
DR.V.KISHEN AJAY KUMAR	Associate Professor Institute of Aeronautical Engineering. Dundigal Road, Dundigal, Hyderabad, 500043, Telangana, India.	India	Indi
S.Nithya	Assistant Professor (Sr.G) Department of ECE KPR Institute of Engineering and Technology, Arasur Coimbatore	India	Indi
Mohammad Shabaz	Assistant Professor Dept of Computer Science Engineering. School of Computer Science Engineering, Lovely Professional University, Phagwada, Punjab, India,	India	Indi
Mr. Sankararao Majji	Assistant Professor Department of ECE GRIET, Hyderabad, Telangana	India	Indi
Kaviyaraj	Research Scholar School of Computing SRM IST	India	Indi

Abstract:

ABSTRACT In the present era, advancement in communication systems requires the development of minimal weight, low profile antennas and low cost which can maintain performance over a wide spectrum of frequencies. Microstrip patch antenna has provided the needs of the modern era with various designs. The objective of this paper is design and simulate a 2x1, 4x1 and 8x1 Rectangular patch array antenna at 2.4 GHz and 5 GHz then compare the performance analysis using Antenna Magus software. It being tested for better gain and high directivity for applications such as wireless systems and satellite communications.

Complete Specification

Claims: CLAIMS:

The Invention Claimed is:

1. The Antenna will operate at multiple frequencies adjusting the parameters
2. The Antenna designed shows multiple characteristics as frequency changes
3. The loss in dielectrics and metals are reduced by using the antennas designed and varied accordingly which will be eco-friendly go-green earth
4. Materials used in the antenna as design is very less as a result volumetric miniaturization takes place which will result in the reduction of number of materials.
5. The antenna designed requires less amplification so that it can be used in transmitter section.

, Description: FIELD OF INVENTION

This invention relates to the field of protection of copyright in the content of wireless communication technology. More particularly, the invention of N-by-1 Rectangular Patch Antenna to compare it with different frequencies and study its parameters and characteristics.

BACKGROUND ART

In this era 21st century the advancement in the field of science and technology is due to the development in the wireless communication. More importantly the configuration of antenna technology plays an important role in wireless system. The performance of antenna will have a direct effect on the overall performance of the wireless system. The demand of wide bandwidth and directivity is the major challenge for future wireless communication. For achieving high bandwidth various researchers have worked and implemented various techniques through which the enhancement in the electrical performance parameters is appreciable. Various factors

[View Application Status](#)



Terms & conditions (<http://ipindia.gov.in/terms-conditions.htm>) Privacy Policy (<http://ipindia.gov.in/privacy-policy.htm>)

Copyright (<http://ipindia.gov.in/copyright.htm>) Hyperlinking Policy (<http://ipindia.gov.in/hyperlinking-policy.htm>)

Accessibility (<http://ipindia.gov.in/accessibility.htm>) Archive (<http://ipindia.gov.in/archive.htm>) Contact Us (<http://ipindia.gov.in/contact-us.htm>)

Help (<http://ipindia.gov.in/help.htm>)

Content Owned, updated and maintained by Intellectual Property India, All Rights Reserved.

Page last updated on: 26/06/2019



Office of the Controller General of Patents, Designs & Trade Marks
Department of Industrial Policy & Promotion,
Ministry of Commerce & Industry,
Government of India

सत्यमेव जयते

(<http://ipindia.nic.in/index.htm>)



(<http://ipindia.nic.in/index.htm>)

Application Details

APPLICATION NUMBER	202141019068
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	26/04/2021
APPLICANT NAME	1 . Damaraju Sri Sai Satyanarayana 2 . Dr ANANDHI MEENA B 3 . Dr.S.THENAPPAN 4 . Vikas Mendi 5 . Dr Yerram Srinivas 6 . Dr Varun V L 7 . Dr. Harikumar Pallathadka 8 . DR.V.KISHEN AJAY KUMAR 9 . S.Nithya 10 . Mohammad Shabaz 11 . Mr. Sankararao Majji 12 . Kaviyaraj
TITLE OF INVENTION	DESIGN OF N-BY-1 RECTANGULAR PATCH ANTENNA FOR 2.45 GHZ AND 5 GHZ GEOMETRY
FIELD OF INVENTION	ELECTRONICS
E-MAIL (As Per Record)	kaviyaraj.r@gmail.com
ADDITIONAL-EMAIL (As Per Record)	
E-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	--
PUBLICATION DATE (U/S 11A)	07/05/2021

Application Status

APPLICATION STATUS

Awaiting Request for Examination

[View Documents](#)

➡ Filed ➡ Published ➡ RQ Filed ➡ Under Examination

➡ Disposed

In case of any discrepancy in status, kindly contact ipe-helpdesk@nic.in

FORM 1
THE PATENTS ACT, 1970
(39 of 1970)
&
THE PATENTS RULES, 2003
APPLICATION FOR GRANT OF PATENT
[See sections 7,54 & 135 and rule 20(1)]

(FOR OFFICE USE ONLY)

Application No.:

Filing Date:

Amount of Fee Paid:

CBR No.:

Signature:

1. APPLICANT(S):

Sr.No.	Name	Nationality	Address	Country	State
1	Damaraju Sri Sai Satyanarayana	India	Department of Electronics and Communication Engineering Sreyas Institute of Engineering and Technology, Hyderabad, India	India	Karnataka
2	Dr ANANDHI MEENA B	India	Teaching Fellow ECE Anna University University College of Engineering-Dindigul Tamilnadu, India	India	Tamil Nadu
3	Dr.S.THENAPPAN	India	PROFESSOR, DEPT. Of ECE, KNS INSTITUTE OF TECHNOLOGY, BANGALORE	India	Karnataka
4	Vikas Mendi	India	Assistant Professor, Department of Civil Engineering, RV College of Engineering, Mysuru Road, Bengaluru	India	Karnataka
5	Dr Yerram Srinivas	India	Professor & HOD Department of ECE VBIT, HYDERABAD	India	Karnataka
6	Dr Varun V L	India	Asst Professor, Department of Mathematics, SJB Institute of Technology, Kengeri, Bangalore	India	Karnataka
7	Dr. Harikumar Pallathadka	India	Director, Manipur International University, Imphal, Manipur, India	India	Manipur
8	DR.V.KISHEN AJAY KUMAR	India	Associate Professor Institute of Aeronautical Engineering, Dundigal Road, Dundigal, Hyderabad, 500043, Telangana, India.	India	Telangana
9	S.Nithya	India	Assistant Professor	India	Tamil Nadu

			(Sr.G) Department of ECE KPR Institute of Engineering and Technology, Arasur Coimbatore		
10	Mohammad Shabaz	India	Assistant Professor Dept of Computer Science Engineering. School of Computer Science Engineering, Lovely Professional University, Phagwada, Punjab, India,	India	Punjab
11	Mr. Sankararao Majji	India	Assistant Professor Department of ECE GRIET, Hyderabad, Telangana	India	Telangana
12	Kaviyaraj	India	Research Scholar School of Computing SRM IST	India	Tamil Nadu

2. INVENTOR(S):

Sr.No.	Name	Nationality	Address	Country	State
1	Damaraju Sri Sai Satyanarayana	India	Department of Electronics and Communication Engineering Sreyas Institute of Engineering and Technology, Hyderabad, India	India	Karnataka
2	Dr ANANDHI MEENA B	India	Teaching Fellow ECE Anna University University College of Engineering-Dindigul Tamilnadu, India	India	Tamil Nadu
3	Dr.S.THENAPPAN	India	PROFESSOR, DEPT. Of ECE, KNS INSTITUTE OF TECHNOLOGY, BANGALORE	India	Karnataka
4	Vikas Mendi	India	Assistant Professor, Department of Civil Engineering, RV College of Engineering, Mysuru Road, Bengaluru	India	Karnataka
5	Dr Yerram Srinivas	India	Professor & HOD Department of ECE VBIT, HYDERABAD	India	Karnataka
6	Dr Varun V L	India	Asst Professor, Department of Mathematics, SJB Institute of Technology, Kengeri, Bangalore	India	Karnataka
7	Dr. Harikumar Pallathadka	India	Director, Manipur	India	Manipur

			International University, Imphal, Manipur, India		
8	DR.V.KISHEN AJAY KUMAR	India	Associate Professor Institute of Aeronautical Engineering. Dundigal Road, Dundigal, Hyderabad, 500043, Telangana, India.	India	Telangana
9	S.Nithya	India	Assistant Professor (Sr.G) Department of ECE KPR Institute of Engineering and Technology, Arasur Coimbatore	India	Tamil Nadu
10	Mohammad Shabaz	India	Assistant Professor Dept of Computer Science Engineering. School of Computer Science Engineering, Lovely Professional University, Phagwada, Punjab, India,	India	Punjab
11	Mr. Sankararao Majji	India	Assistant Professor Department of ECE GRIET, Hyderabad, Telangana	India	Telangana
12	Kaviyaraj	India	Research Scholar School of Computing SRM IST	India	Tamil Nadu

3. TITLE OF THE INVENTION: Design of N-by-1 Rectangular Patch Antenna for 2.45 GHz and 5 GHz Geometry

4. ADDRESS FOR CORRESPONDENCE OF APPLICANT / AUTHORISED PATENT AGENT IN INDIA:

Department of Electronics and Communication Engineering Sreyas Institute of Engineering and Technology

Telephone No.:

Fax No.:

Mobile No:

E-mail: kaviyaraj.r@gmail.com

5. PRIORITY PARTICULARS OF THE APPLICATION(S) FILED IN CONVENTION COUNTRY:

Sr.No.	Country	Application Number	Filing Date	Name of the Applicant	Title of the Invention
--------	---------	--------------------	-------------	-----------------------	------------------------

6. PARTICULARS FOR FILING PATENT COOPERATION TREATY (PCT) NATIONAL PHASE APPLICATION:

International Application Number	International Filing Date as Allotted by the Receiving Office
PCT//	

7. PARTICULARS FOR FILING DIVISIONAL APPLICATION

Original (first) Application Number

Date of Filing of Original (first) Application

8. PARTICULARS FOR FILING PATENT OF ADDITION:

Main Application / Patent Number:

Date of Filing of Main Application

9. DECLARATIONS:**(i) Declaration by the inventor(s)**

I/We ,Damaraju Sri Sai Satyanarayana,Dr ANANDHI MEENA B,Dr.S.THENAPPAN,Vikas Mendi,Dr Yerram Srinivas,Dr Varun V L,Dr. Harikumar Pallathadka,DR.V.KISHEN AJAY KUMAR,S.Nithya,Mohammad Shabaz,Mr. Sankararao Majji,Kaviyaraj, is/are the true & first inventor(s) for this invention and declare that the applicant(s) herein is/are my/our assignee or legal representative.

(a) Date: 26/04/2021 N.S.S Satyanarayana Dr Anandhi Meena B Dr S Thenappan Vikas Mendi Dr Yerram Srinivas Dr Varun V L Dr. Harikumar Pallathadka DR.V.KISHEN AJAY KUMAR S.Nithya Mohammad Shabaz Mr. Sankararao Majji Kaviyaraj

(b) Signature(s) of the inventor(s):

(c) Name(s): Damaraju Sri Sai Satyanarayana,Dr ANANDHI MEENA B,Dr.S.THENAPPAN,Vikas Mendi,Dr Yerram Srinivas,Dr Varun V L,Dr. Harikumar Pallathadka,DR.V.KISHEN AJAY KUMAR,S.Nithya,Mohammad Shabaz,Mr. Sankararao Majji,Kaviyaraj

(ii) Declaration by the applicant(s) in the convention country

I/We, the applicant(s) in the convention country declare that the applicant(s) herein is/are my/our assignee or legal representative.

(a) Date: 26/04/2021 N.S.S Satyanarayana Dr Anandhi Meena B Dr S Thenappan Vikas Mendi Dr Yerram Srinivas Dr Varun V L Dr. Harikumar Pallathadka DR.V.KISHEN AJAY KUMAR S.Nithya Mohammad Shabaz Mr. Sankararao Majji Kaviyaraj

(b) Signature(s) :

(c) Name(s) of the singnatory: Damaraju Sri Sai Satyanarayana,Dr ANANDHI MEENA B,Dr.S.THENAPPAN,Vikas Mendi,Dr Yerram Srinivas,Dr Varun V L,Dr. Harikumar Pallathadka,DR.V.KISHEN AJAY KUMAR,S.Nithya,Mohammad Shabaz,Mr. Sankararao Majji,Kaviyaraj

(iii) Declaration by the applicant(s)

- The Complete specification relating to the invention is filed with this application.
- I am/We are, in the possession of the above mentioned invention.
- There is no lawful ground of objection to the grant of the Patent to me/us.
- I am/We are, the assignee or legal representative to true first inventors.

10. FOLLOWING ARE THE ATTACHMENTS WITH THE APPLICATION:

Sr.	Document Description	FileName
-----	----------------------	----------

I/We hereby declare that to the best of my/our knowledge, information and belief the fact and matters stated hering are correct and I/We request that a patent may be granted to me/us for the said invention.

Dated this(Final Payment Date): 26/04/2021

Signature: Kaviyaraj R

Name: Kaviyaraj R

To The Controller of Patents

The Patent office at CHENNAI

This form is electronically generated.