(12) PATENT APPLICATION PUBLICATION

(21) Application No.202011034091 A

(19) INDIA

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

(43) Publication Date: 11/02/2022

## (54) Title of the invention : 4×4 FRACTAL MIMO ANTENNA INCLUDING HIGH DIVERSITY PERFORMANCE FOR HIGH-SPEED WIDEBAND WIRELESS APPLICATIONS AND ELIMINATING TWO INTERFERING BANDS

(51) International classification	:H01Q0021280000, H01Q0021300000, H01Q0005280000, H01Q0009420000, B42D0025351000	(71)Name of Applicant:  1)Chitkara Innovation Incubator Foundation Address of Applicant: SCO: 160-161, Sector - 9c, Madhya Marg, Chandigarh- 160009, India. Chandigarh India (72)Name of Inventor:
(31) Priority Document No	:NA	1)SHARMA, Manish
(32) Priority Date	:NA	2)AHUJA, Rakesh
(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 Number Filing Date	:NA :NA	
(62) Divisional to Application Number Filing Date	:NA :NA	

## (57) Abstract:

The present disclosure relates to a multiple input multiple output (MIMO) antenna. The antenna includes a substrate made of dielectric material and the one or more radiating elements configured on a first side of the substrate. The one or more radiating elements are configured with a ground on an opposite second side of the dielectric substrate. The one or more radiating elements are positioned orthogonal to one another, and are configured to operate in one or more bands. The one or more radiating elements include one or more stop band filters for mitigating interference between one or more bands. The one or more stop band filters can include an inverted T-shaped stub and a etched C-shaped slot.

No. of Pages: 38 No. of Claims: 8