

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202411010481 A

(19) INDIA

(22) Date of filing of Application :15/02/2024

(43) Publication Date : 23/02/2024

(54) Title of the invention : COORDINATED RATE IMPROVEMENT SYSTEM AND METHOD FOR ULTRA-DENSE NETWORKS USING ADAPTIVE MULTIPLE ACCESS SCHEME

(51) International classification :H04W0072040000, H04L0005000000, H04L0027260000, H04J0011000000, H04W0072080000

(86) International Application No :NA
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA
Filing Date :NA

(62) Divisional to Application Number :NA
Filing Date :NA

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(57) Abstract :

ABSTRACT COORDINATED RATE IMPROVEMENT SYSTEM AND METHOD FOR ULTRA-DENSE NETWORKS USING ADAPTIVE MULTIPLE ACCESS SCHEME The present disclosure discloses a Coordinated Rate Improvement System (102) for Ultra-dense networks using an Adaptive Multiple Access scheme, comprising a plurality of base stations (BSs) (104) deployed in high-traffic hotspots a processor (106) configured to coordinate resources in time-domain among the BSs for downlink communication in ultra-dense networks (UDN), an adaptive channel gain Multiple Access (ACGMA) module (108) configured to dynamically assign suitable Multiple Access (MA) schemes based on target rate requirements and channel gains of individual users. A Rate Splitting Multiple Access (RSMA) implementation (110) is provided with one Successive Interference Cancellation (SIC) layer to optimize network performance. FIG. 1

No. of Pages : 18 No. of Claims : 10