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Huang et al.(10) **Pub. No.: US 2023/0231299 A1**(43) **Pub. Date: Jul. 20, 2023**(54) **BASE STATION ANTENNAS HAVING
STAGGERED LINEAR ARRAYS WITH
IMPROVED PHASE CENTER ALIGNMENT
BETWEEN ADJACENT ARRAYS****Publication Classification**(51) **Int. Cl.**
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(2013.01)(71) Applicant: **CommScope Technologies LLC,**
Hickory, NC (US)(72) Inventors: **Bo Huang,** Suzhou (CN); **Yunzhe Li,**
Suzhou (CN)(57) **ABSTRACT**(21) Appl. No.: **18/123,392**(22) Filed: **Mar. 20, 2023****Related U.S. Application Data**(63) Continuation of application No. 17/153,958, filed on
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A base station antenna includes first and second arrays that include respective pluralities of first and second radiating elements arranged along the longitudinal direction of the base station antenna, the second array transversely adjacent the first array. A longitudinal position of each second radiating element is staggered from that of the corresponding first radiating element. The first array comprises first and second sub-arrays, each of which comprises one or a plurality of adjacent first radiating elements. A phase center of the combination of the first and second subarrays is basically aligned with a sub-phase center of the second array

