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Lin et al.

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(54) **RECONFIGURABLE ANTENNA**
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H01Q 1/48 (2006.01)
(52) **U.S. Cl.**
CPC **H01Q 3/46** (2013.01); **H01Q 1/48** (2013.01)

(57) **ABSTRACT**

(58) **Field of Classification Search**
CPC H01Q 3/46; H01Q 1/48; H01Q 15/0086
See application file for complete search history.

The present invention is a reconfigurable antenna, which includes a total reflection part, a partial reflection part, a partial transmission part, and a radiation part stacked in sequence. A resonant cavity is formed between the partial reflection part and the total reflection part. The radiation part is arranged in the resonant cavity. So that the electromagnetic wave radiated by the radiation part is reflected in the resonant cavity. The electromagnetic wave forms constructive interference during the reflection of the resonant cavity. The resonant cavity makes the electromagnetic wave form the same phase electromagnetic wave and radiation penetrating the reflection part. The partial transmission part is regulated to form beam reconstruction conditions, and the same-phase electromagnetic waves are formed into beams and radiated into space by the beam control conditions.

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17 Claims, 9 Drawing Sheets

