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(54) **ANTENNA ON SAPPHIRE STRUCTURE**

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CPC . ***H01Q 1/24*** (2013.01); ***H01Q 1/38*** (2013.01); *H01Q 1/243* (2013.01); *H01Q 3/26* (2013.01); *H01Q 3/44* (2013.01); *H01Q 7/00* (2013.01)

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See application file for complete search history.

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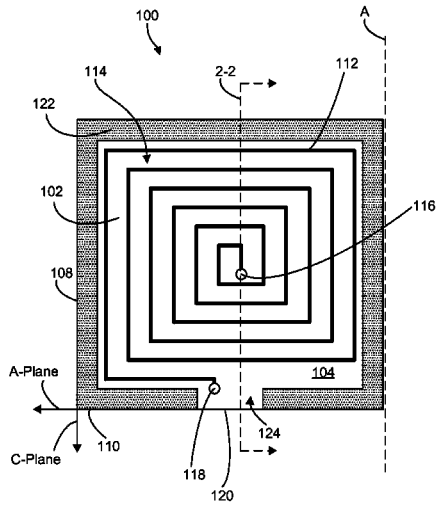
(57) **ABSTRACT**

An antenna on a sapphire structure. The antenna includes a sapphire structure having a first side, and a second side positioned opposite the first side. The antenna also includes a first antenna trace positioned on the first side of the sapphire structure, and a second antenna trace positioned on the second side of the sapphire structure. Additionally, the antenna includes at least one via formed through the sapphire structure. The at least one via electrically connects the first antenna trace to the second antenna trace.

20 Claims, 9 Drawing Sheets