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Josypenko

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(54) **TAPERED DIRECT FED QUADRIFILAR HELIX ANTENNA**

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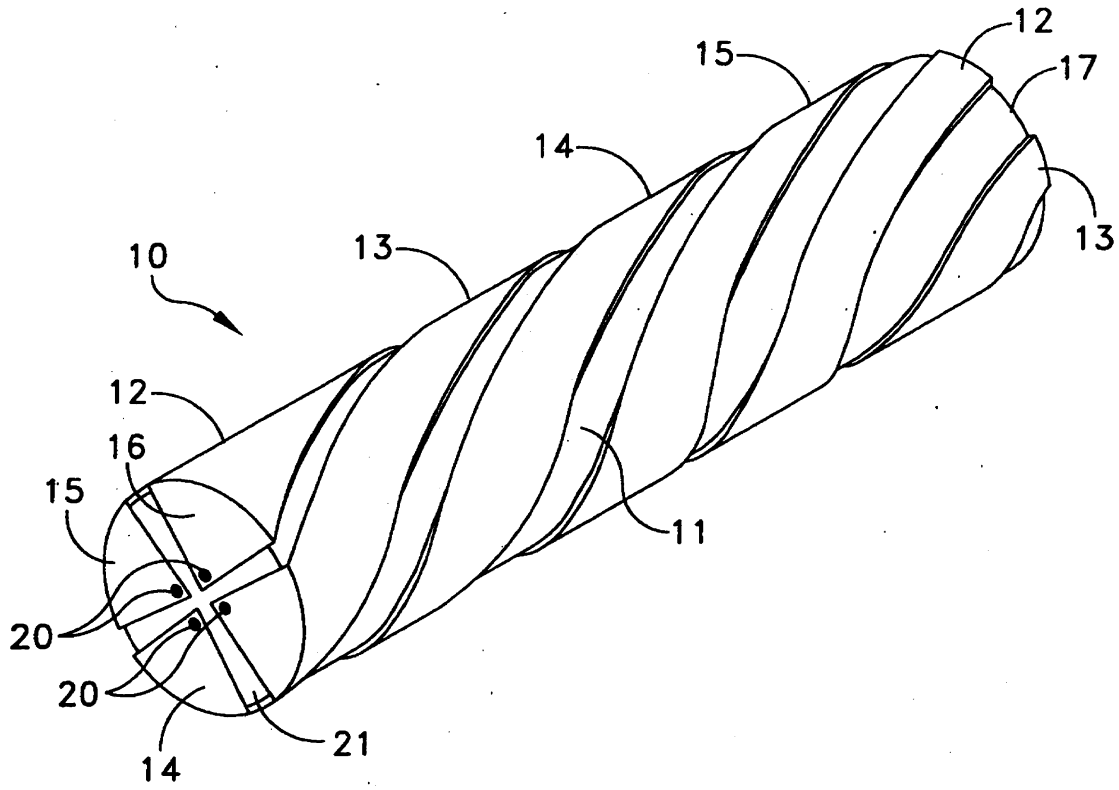
(57) **ABSTRACT**

A quadrifilar helical antenna is provided having a feedpoint for the antenna connecting to individual helical antenna elements. Each antenna element tapers from a maximum width at the feedpoint to a minimum width. The tapered antenna elements provide impedance transformation. The antenna produces a cardioid pattern that corresponds to antennas with constant width antenna elements.

19 Claims, 9 Drawing Sheets