

(54) Title of the invention : THERMALLY STABLE ANTENNA

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(57) Abstract :

The present disclosure provides a thermally stable antenna. The antenna includes, a substrate with predefined dielectric constant, a radiator element disposed on the substrate, one or more channels and one or more find, designed on the surface of the substrate and a ground plane disposed below the substrate. The substrate may be made of BaTiO3-based ceramic, but not limited to the same. The one or more channels may be of a predetermined size and a fluid such as a coolant may be made to flow through it. The coolant in the pipe may rise naturally with the increase in temperature which may result in efficient cooling of the antenna.

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