



PROCESS OF ACHIEVING DIELECTRIC SUBSTRATE ON DEMAND

Design of materials with selected dielectric properties.

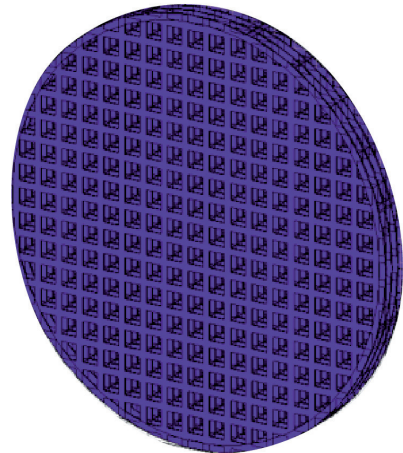
Technological benefits

Adaptable

- Realization of custom antenna substrate.
- Choice of the electric properties and shape.
- Anisotropic electrical property possible.
- Fine consideration of parameters.
- Using qualified materials.

Powerful

- Multiphysics optimization possible (mechanical, thermal, etc.)
- Low loss substrate.
- Better control of electrical properties.
- Accurate achievement (sizing).
- Easy adjustment.
- More powerful antenna.
- Lightness and strength.
- Answer to specific and optimized needs.



Example of substrate for circular patch antenna.

Invention overview

Process of achieving substrate for antenna or electrical microwave device with properties on demand.

This method allows the production of substrate with adjustable physical parameters (permittivity, mechanical properties, etc.) The substrate is designed according to the shape and dimensions selected.

This invention uses a unique method of fabrication (3D printer) and a single material.

Potential applications

- Antenna fabrication.
- Manufacture of hyper frequency devices.
- Telecommunications (avionics, marine, aeronautics, etc.)

Commercial benefits

Economic

- Process generic realization (printer 3D).
- Reduction to small manufacturing costs ladder.
- Time saving.
- Gain efficiency / performance.

TRL : 2

Invention available under license.