



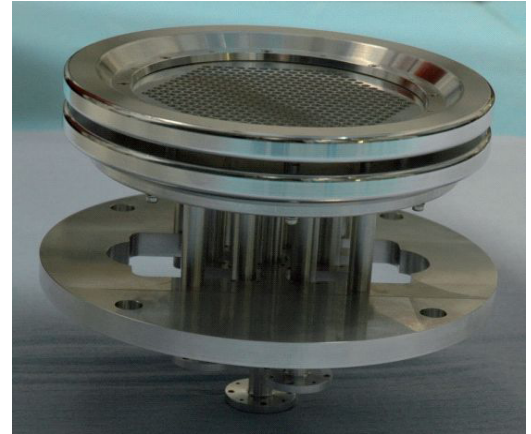
# ELECTROMAGNETIC BANDGAP MULTIBEAM ANTENNA

*Innovative system for interleaving antenna beams using  
an electromagnetic bandgap material*

## Technological benefits

### Innovative, efficient process

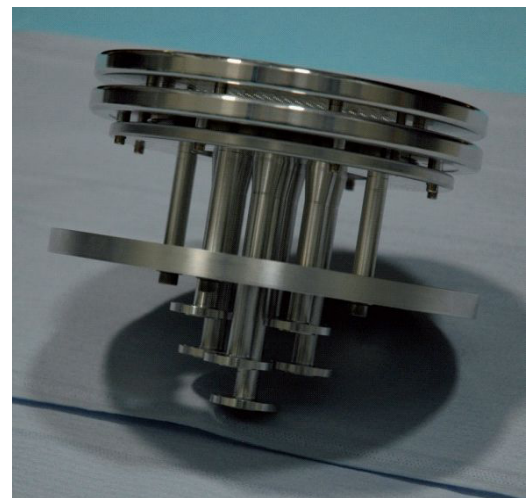
- Reduces the number of reflector antennas needed on a telecom satellite
- Increases the source gain without increasing diameter
- Channels the energy
- Reduced weight
- Fewer thermal control needs
- Lower electrical consumption



Electromagnetic bandgap antenna

## Invention overview

Adding electromagnetic bandgap materials in front of a reflector antenna source will enable the beams to be interleaved  
The materials used focus the waves and direct the radiation along one axis in particular



## Potential applications

Telecom satellites

## Commercial benefits

### Optimized system

- Much greater amplification
- Substantial cost savings

TRL : 4

Patented invention, available under license