

# Dual-band Antenna for Global Positioning System

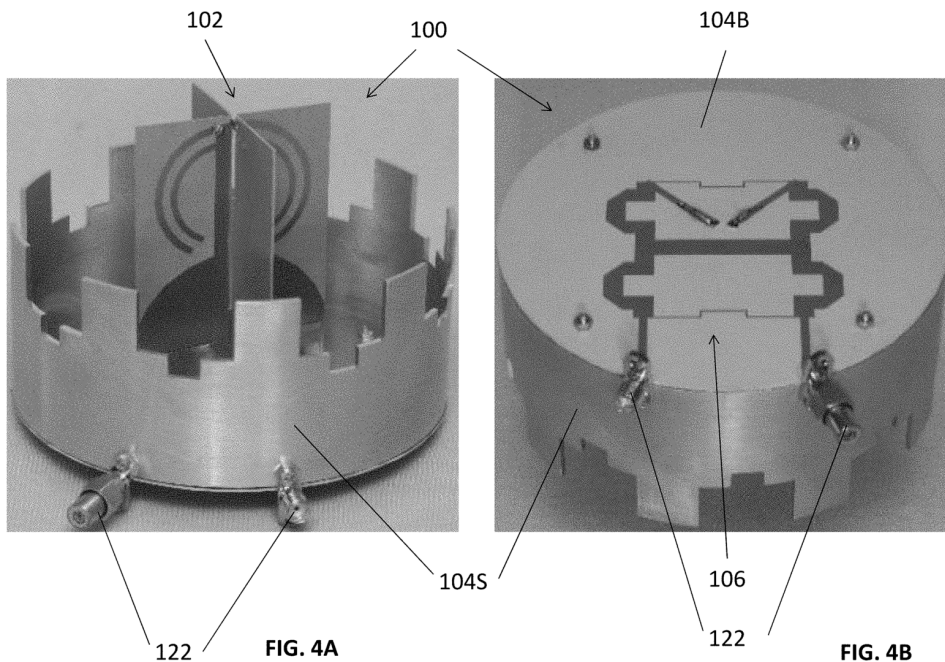


## Communications & Information


Digital Broadcasting, Telecommunication and Optoelectronics

Sensors

Smart Mobility and Electric Vehicle



**IP Status**  
Patent granted



Technology Readiness Level (TRL) ?

3

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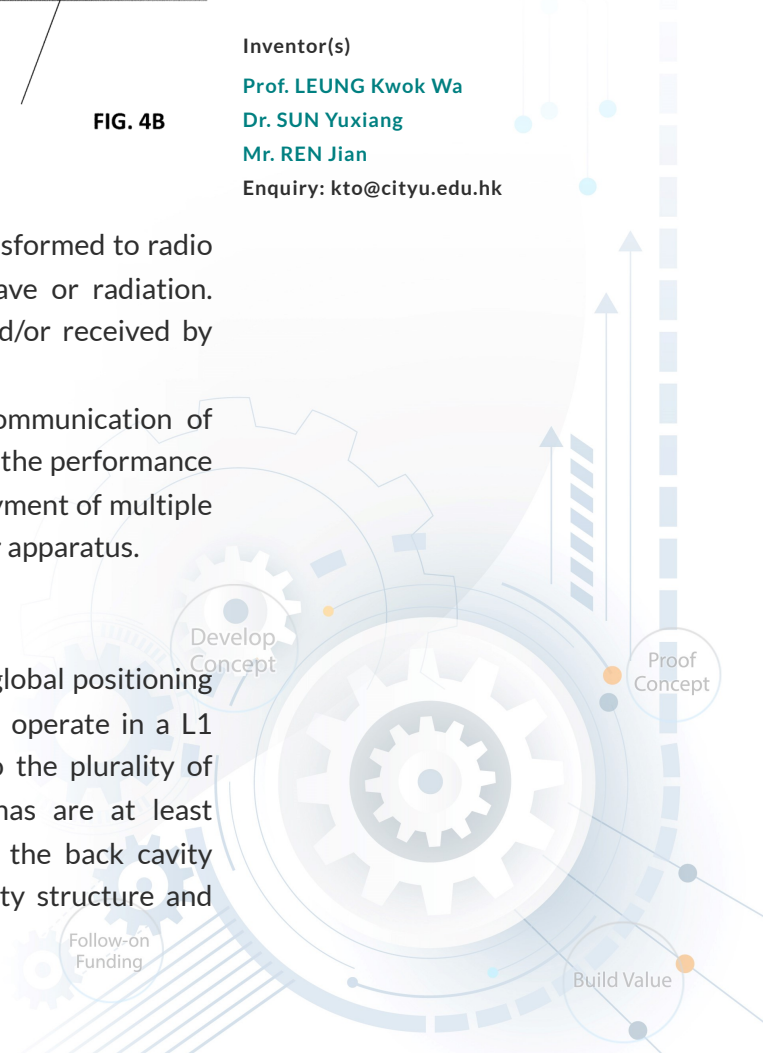
## Opportunity

In a radio signal communication system, information is transformed to radio signal for transmitting in form of an electromagnetic wave or radiation. These electromagnetic signals are further transmitted and/or received by suitable antennas.

Some wireless applications may require simultaneous communication of radio signals in more than one frequency bands to improve the performance of these applications, which therefore may require a deployment of multiple units of antennas with different designs in a single system or apparatus.

## Technology

The present invention relates to a dual-band antenna, for global positioning system includes a plurality of dipole antenna arranged to operate in a L1 band and a L2 band; a back cavity structure mounted to the plurality of dipole antennas, wherein the plurality of dipole antennas are at least partially accommodated within a back cavity defined by the back cavity structure; and a feed network provided on the back cavity structure and coupled to the plurality of dipole antennas.



## Advantages

- The antenna has wide AR beamwidths that can cover the upper hemisphere for both frequency bands.

## Applications

- GPS application for ground terminals, vehicles, and ships, etc.

