

Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology



Amphibious Solar Antenna Module (ANTSOL) For Next Generation Communication

Seeking parties interested in licensing and commercializing of technology.

Applications:

 It acts as a powering equipment in space or remote areas where grid power either is not available, or it is too expensive to extend to.

Technology Description:

This invention relates to an amphibious solar panel antenna comprising a slot antenna metal structure with plurality of technically modified solar cells connected in series and parallel connection with positive and negative terminals. The said solar cells are directly grown on a stainless-steel ground-plate or glued onto a standard copper layer printed on a dielectric substrate. The strips and slots in the solar panel is converted into antenna module. Then the array formation of the antenna is done by connecting the solar cells in series and parallel connection. This connection is made by interconnecting and harnessing the grids and the connection strips of all the solar cells using the metal contacts. The antenna connection of the solar cell consists of a bus bar, finger, emitter, base, substrates, and the antenna connections are fabricated upon it.

Advantages of the Technology:

- The cost of installation of extra setup for antenna will be reduced efficiently.
- A wide range of advantages in terms of volume, weight, smart appearance when compared with a simple juxtaposition-of antennas.
- Highly reliable and incur minimal maintenance.

Development Status:

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Inventors:

- R.Prasanna
- C.Malathi
- Manoj Aravind.S
- Chaman Shishodia
- Adarsh Kumar Gupta.B

Technology Transfer from the institute:

For more details

Office of R&D - IPR Cell
Room no:29304, Research Park, Vel Tech
8754416297, ipr@veltech.edu.in