



ATTITUDE CONTROL SYSTEM

Economic and compact configuration using three reaction wheels

Technological benefits

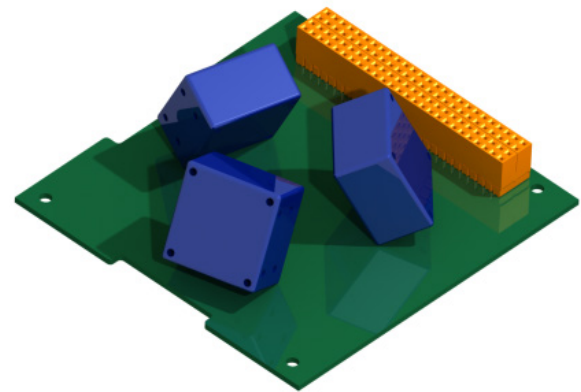
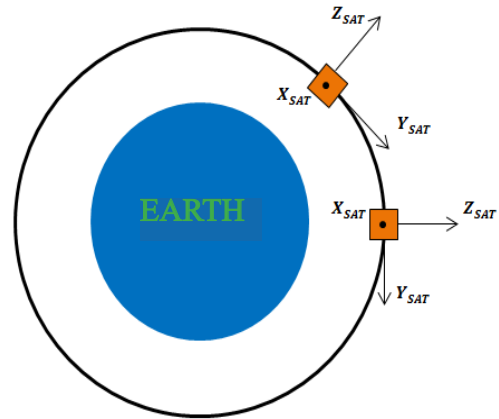
Innovative and efficient technology

- Stable pointing
- Absence of discontinuity, the wheels can be maintained around high speeds
- Compact
- Gain of actuation given by the off-axis configuration of the wheels

Invention overview

The invention deals with a 3 wheel configuration for a satellite attitude control.

This innovative system, in particular having wheels in an off-axis configuration of the satellite, allows to control the 3 wheels simultaneously with a non-zero speed for a non inertial pointing.



Potential applications

Spatial

- Cubesat (gain in terms of weight, size and cost)

Robotic

Commercial benefits

Gain in terms of weight and size

Costs

- Allows the use of less accurate and less expensive wheels

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Patented invention, available under license