



ROBUST GYROSCOPIC SYSTEM USING SIX ACTUATORS

Highly robust configuration using 6 actuators for satellite and articulated arm with innovative control method

Technological benefits

An innovative and efficient system

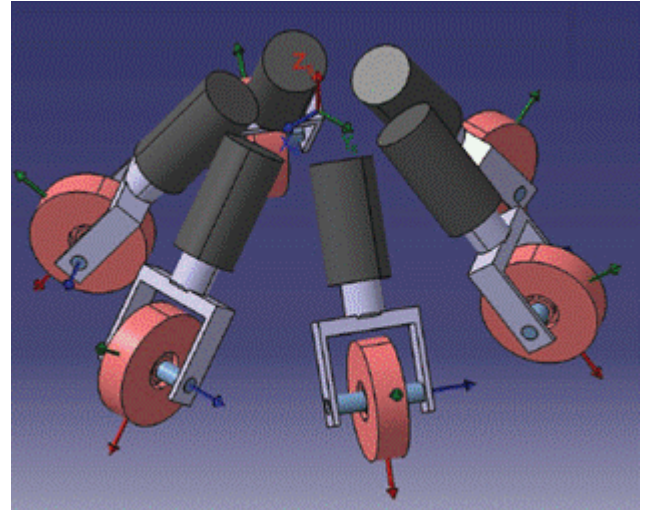
- Enables the dynamic monitoring and the variation of the acceleration of precession
- Works with 1-2 actuators down,
- Reconfigurable in case of failure
- Robust to singularities
- Requires less energy in comparison with an inertia wheel system

Invention overview

The invention deals with the use of a configuration using 6 gyroscopic actuators for control processes and devices:

- Arms redundant manipulators used in robotics,
- Clusters of gyroscopic actuators used for satellite attitude control.

It allows to be more robust than traditional configurations using 4 actuators.



Potential applications

Spatial

Robotic

Commercial benefits

Improved performance

Efficient and robust system

Better reliability

Works with 1-2 actuators down
Reconfigurable in case of failure

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Patented invention, available under license