



Acronym for the French name translated as «Guidance in attitude manoeuvres with avoidance»

Technological advantages

Performance

Optimised trajectory for reaching the destination in the least possible time

Heuristics-enhanced search for a solution to optimise computing time

Autonomy

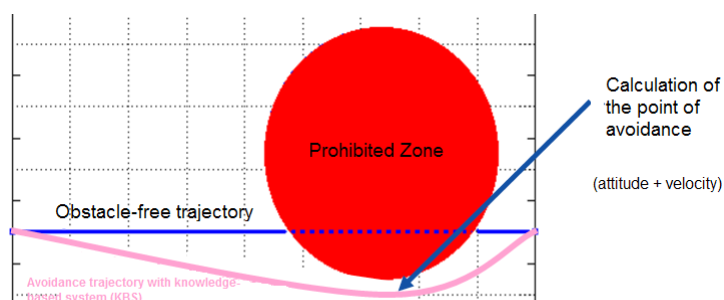
Directions to avoid taken into account automatically when calculating attitude manoeuvres

Moon and Sun models taken into account by default, as well as Earth occultation

Robustness

Very robust method

Simple and independent principle for calculating manoeuvres



Summary of the invention

Method for determining guidance by attitude for a change of pointing angle that takes into account constraints concerning the directions to avoid (glare on instrument, masking, risks of deterioration, etc.).

The solution is based on an external calculation of attitude manoeuvres.

Potential applications

Space: Earth observation, environment, science (any mission with sensors needing to avoid specific directions)

Other than space applications: Security, shipbuilding, acquisition drones

Commercial advantages

Reduced engineering costs

Automatic avoidance management, simplification of programming systems, robustness

Ease of onboard implementation

Possible extensions to any other system with calculation of pointing changes (surveillance camera, camera or laser-beam device on robot or machine-tool, etc.)

TRL : 4

Patented invention available under licence

For further information