



AEROSTAT INTENDED TO PERFORM MISSIONS FOR TRANSPORTING A PAYLOAD

Technological advantages

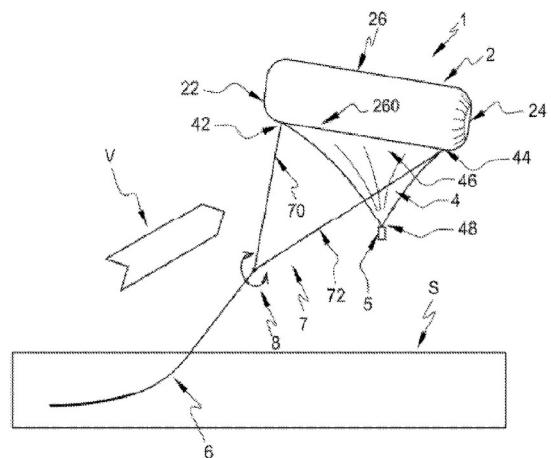
- ⌚ Ease of manufacturing
- ⌚ Simple and quick to set-up
- ⌚ No rigid part (safe to use)

Invention synthesis

The invention deals with an aerostat for atmospheric missions to transport a payload.

Aerostat can be tethered or drifting, they generally make use of empennage and have complex shapes. Their manufacturing and use may become complex.

The invention presents an aerostat simply created from a cylindrical body with two poles linked one another with an elastic cable inside the body. The cylindrical body generates lift. A triangular foil is attached to the aerostat to generate a drag force to transport a payload directly attached to the foil. A set of simple straps and strands is placed at the body poles to attach the aerostat to the ground. The length of the cables can be adjusted with a motorized system.



Detailed description for the aerostat

- (2) Inflatable cylindrical body
- (22,24) Polar ends
- (4) Triangular foil
- (42) First end for the triangular foil attached to the body
- (44) Second end for the triangular foil attached to the body
- (48) Third end of the foil (free)
- (5) Payload
- (6) Cable to tie to the ground
- (7) Cable set
- (70,72) Strands attached to the body

Commercial benefits

- Simple system, reduced costs of manufacturing and operations
- Reduces risks in case of collision

Potential applications

- Payload transportation

Patented invention - under license.

For more information :

Valo-TT@cnes.fr