

Title (en)
AIRSHIP/SPACECRAFT

Title (de)
LUFTSCHIFF/RAUMFAHRZEUG

Title (fr)
DIRIGEABLE/ENGIN SPATIAL

Publication
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Application
EP 00953628 A 20000411

Priority

- US 0009617 W 20000411
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Abstract (en)
[origin: WO0066425A2] An airship/spacecraft, which, in a preferred embodiment, uses its lifting gas as fuel for thrusters, which may be of the turbo-type or rocket type, or both, to achieve transition to space flight. The airship aspect has gas retaining structures that can withstand internal and external pressure and can change in volume and shape. The gas retaining structures may be compartmentalized with a folded diaphragm membrane and also configured as pressure vessels. The spacecraft aspect provides control, power, services, and space for missions of the airship/spacecraft. The best mode includes a turbo-rocket thruster in which the turbine compressor is used to intake and compress a gaseous fuel for combustion with a stored oxidizer injected into the compressed gaseous fuel stream. The compressor stage is driven by the turbine stage, which is driven by burning gaseous fuel passing across the turbine blades. The burned gases are then expanded through an exhaust nozzle and thereby ejected to produce reaction thrust.
[origin: WO0066425A2] An airship/spacecraft, which, in a preferred embodiment, uses its lifting gas (64) as fuel for thrusters, which may be of the turbo-type or rocket type, or both, to achieve transition to space flight. The airship aspect has gas retaining structures (61) that can withstand internal and external pressure and can change in volume and shape. The gas retaining structures (61) may be compartmentalized with a folded diaphragm membrane (63) and also configured as pressure vessels. The spacecraft aspect provides control, power, services, and space for missions of the airship/spacecraft. The best mode includes a turbo-rocket thruster in which the turbine compressor is used to intake and compress a gaseous fuel for combustion with a stored oxidizer injected into the compressed gaseous fuel stream. The compressor stage (6) is driven by the turbine stage (7), which is driven by burning gaseous fuel passing across the turbine blades (13). The burned gases are then expanded through an exhaust nozzle and thereby ejected to produce reaction thrust.

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Citation (search report)

- [XA] WO 9532896 A1 19951207 - ISHKOV JURY GRIGORIEVICH [RU]
- [A] US 3897032 A 19750729 - PAPST HERMANN ERNST ROBERT
- [A] GB 2229155 A 19900919 - MIHAJLOVIC VLADIMIR
- See references of WO 0066425A2

Cited by
US9638111B2

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