

Title (en)

TWO-PHASE COLD GAS PROPULSION SYSTEM AND TANK FOR SUCH A SPACE CRAFT PROPULSION SYSTEM

Title (de)

ZWEIPHASIGES KALTGASANTRIEBSSYSTEM UND TANK FÜR EIN SOLCHES RAUMFAHRZEUGANTRIEBSSYSTEM

Title (fr)

SYSTEME DE PROPULSION A GAZ FROID DIPHASIQUE ET RESERVOIR POUR UN TEL SYSTEME DE PROPULSION D ENGIN SPATIAL

Publication

**EP 1868891 A2 20071226 (FR)**

Application

**EP 06743600 A 20060324**

Priority

- FR 2006000658 W 20060324
- FR 0503479 A 20050407

Abstract (en)

[origin: WO2006106204A2] The invention concerns a tank (10) for a two-phase cold gas propulsion system of a space craft comprising a microporous structure (3) capable of ensuring, in a part of the tank (10) which opposite to an orifice (4) discharging gas outside the tank (10), capillary retention in liquid phase of a two-phase fluid contained in the tank (10). A device for thermal control of the tank (10) comprises at least one heater (2) associated with the part of the tank (10) containing the gas phase, as well as a thermistor (5) in said part, and at least one other thermistor (6) in the part of the tank (6) containing the microporous structure (3) and the liquid phase. The mechanical structure (1) of the tank (10) is mounted on the structure of the space craft through a rigidly mounted interface (7) and a flexibly mounted interface (8). The invention is useful in particular for equipping satellites weighing some tenths to some hundreds of kilograms.

IPC 8 full level

**B64G 1/40** (2006.01); **B64G 1/26** (2006.01); **F02K 9/60** (2006.01); **F03H 99/00** (2009.01); **F17C 13/00** (2006.01)

CPC (source: EP)

**B64G 1/26** (2013.01); **B64G 1/4021** (2023.08); **F02K 9/605** (2013.01); **F17C 13/008** (2013.01); **F17C 2201/0128** (2013.01); **F17C 2201/056** (2013.01); **F17C 2201/06** (2013.01); **F17C 2203/032** (2013.01); **F17C 2203/0636** (2013.01); **F17C 2203/066** (2013.01); **F17C 2203/0685** (2013.01); **F17C 2205/0323** (2013.01); **F17C 2205/0341** (2013.01); **F17C 2221/014** (2013.01); **F17C 2221/08** (2013.01); **F17C 2223/0153** (2013.01); **F17C 2223/033** (2013.01); **F17C 2223/035** (2013.01); **F17C 2227/0304** (2013.01); **F17C 2227/0372** (2013.01); **F17C 2227/0374** (2013.01); **F17C 2250/043** (2013.01); **F17C 2250/0439** (2013.01); **F17C 2250/0631** (2013.01); **F17C 2270/0194** (2013.01); **F17C 2270/0197** (2013.01)

Citation (search report)

See references of WO 2006106204A2

Cited by

WO2013057193A1; US9517590B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**WO 2006106204 A2 20061012**; **WO 2006106204 A3 20070201**; EP 1868891 A2 20071226; FR 2884224 A1 20061013; FR 2884224 B1 20081121

DOCDB simple family (application)

**FR 2006000658 W 20060324**; EP 06743600 A 20060324; FR 0503479 A 20050407