

Title (en)

SYSTEMS FOR DELIVERING LIQUEFIED NATURAL GAS TO AN ENGINE

Title (de)

SYSTEME ZUR BSCHICKUNG EINES MOTORS MIT VERFLÜSSIGTEM ERDGAS

Title (fr)

SYSTEMES DESTINES A ALIMENTER UN MOTEUR EN GAZ NATUREL LIQUEFIE

Publication

**EP 1177401 A4 20060215 (EN)**

Application

**EP 98966747 A 19981221**

Priority

US 9827231 W 19981221

Abstract (en)

[origin: WO0037847A1] A fuel delivery system includes a fuel tank (14) configured to receive liquid natural gas. A first conduit (36) extends from a vapor holding portion (24) of the fuel tank (14) to an economizer valve (38). A second conduit (48) extends from a liquid holding portion (20) of the fuel tank (14) to the economizer valve (38). Fluid coupled to the economizer valve is a vaporizer (100) which is heated by coolant from the engine (30) and is positioned below the fuel tank (14). The economizer valve (38) selectively withdraws either liquid natural gas or vaporized natural gas from the fuel tank (14) depending on the pressure within the vapor holding portion (24) of the tank (14). A delivery conduit (114) extends from the vaporizer (100) to the engine (30). A return conduit (116) having a check valve (118) formed therein extends from the delivery conduit (114) to the vapor holding portion (24) of the fuel tank (14) for pressurizing the fuel tank (14).

IPC 1-7

**F17C 7/04; F17C 9/02; F17C 9/04**

IPC 8 full level

**F17C 5/06** (2006.01); **F17C 7/04** (2006.01); **F17C 9/02** (2006.01)

CPC (source: EP)

**F17C 5/06** (2013.01); **F17C 7/04** (2013.01); **F17C 9/02** (2013.01); **F17C 2205/0382** (2013.01); **F17C 2221/033** (2013.01);  
**F17C 2223/0153** (2013.01); **F17C 2223/0161** (2013.01); **F17C 2227/0393** (2013.01); **F17C 2270/0176** (2013.01)

Citation (search report)

- [X] US 3070968 A 19630101 - GARDNER PAUL J
- [X] US 2958204 A 19601101 - SPAULDING ROY H
- See references of WO 0037847A1

Cited by

US9903535B2

Designated contracting state (EPC)

DE FR GB IT SE

DOCDB simple family (publication)

**WO 0037847 A1 20000629**; AU 2449599 A 20000712; CA 2365521 A1 20000629; CA 2365521 C 20070227; DE 69840780 D1 20090604;  
EP 1177401 A1 20020206; EP 1177401 A4 20060215; EP 1177401 B1 20090422

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