【CLAIMS】

【Claim 1】

A fuel supply method for ships, comprising:

1) supplying an excess amount of liquefied gas as fuel to an incompressible fluid-fueled engine ~~(E)~~;

2) cooling unconsumed fuel discharged from the engine ~~(E)~~ through heat exchange with liquefied gas discharged from a storage tank ~~(T)~~;

3) returning the unconsumed fuel discharged from the engine ~~(E)~~ and having been cooled through heat exchange in step 2) to the storage tank ~~(T)~~; and

4) supplying the liquefied gas discharged from the storage tank ~~(T)~~ and having been used as refrigerant for heat exchange in step 2) to the engine ~~(E)~~,

whereby cavitation in the engine ~~(E)~~ is prevented through supply of the excess amount of liquefied gas sufficient to accommodate variation in load of the engine ~~(E)~~ to the engine ~~(E)~~.

【Claim 2】

A fuel supply system for ships, comprising:

a line through which unconsumed fuel discharged from an incompressible fluid-fueled engine ~~(E)~~ is returned to a storage tank ~~(T)~~; and

a heat exchanger ~~(30)~~ provided to the line and cooling the unconsumed fuel through heat exchange with liquefied gas discharged from the storage tank ~~(T)~~,

wherein the liquefied gas discharged from the storage tank ~~(T)~~ and having been used as refrigerant in the heat exchanger ~~(30)~~ is supplied to the engine ~~(E)~~,

an excess amount of liquefied gas is supplied as fuel to the engine ~~(E)~~ to accommodate variation in load of the engine ~~(E)~~, and

fuel remaining after use in the engine ~~(E)~~ is discharged from the engine ~~(E)~~ and is sent back to the storage tank ~~(T)~~ after passing through the heat exchanger ~~(30)~~.

【Claim 3】

The fuel supply system according to claim 2, further comprising:

a first pump ~~(10)~~ disposed in the storage tank ~~(T)~~ and pumping the liquefied gas out of the storage tank ~~(T)~~.

【Claim 4】

The fuel supply system according to claim 2, further comprising:

a second pump ~~(20)~~ disposed upstream of the heat exchanger ~~(30)~~ and pumping the liquefied gas discharged from the storage tank ~~(T)~~.

【Claim 5】

The fuel supply system according to claim 2, further comprising:

a second pump ~~(20)~~ disposed downstream of the heat exchanger ~~(30)~~ and pumping the liquefied gas having undergone heat exchange in the heat exchanger ~~(30)~~.

【Claim 6】

The fuel supply system according to claim 2, further comprising:

a heater ~~(40)~~ heating the liquefied gas discharged from the storage tank ~~(T)~~ and having been used as refrigerant in the heat exchanger ~~(30)~~ to a temperature required for the engine ~~(E)~~.

【Claim 7】

The fuel supply system according to claim 2, further comprising:

a decompression unit ~~(50)~~ decompressing the unconsumed fuel discharged from the engine ~~(E)~~ and having been cooled by the heat exchanger ~~(30)~~ to an internal pressure of the storage tank ~~(T)~~ and sending the decompressed fuel to the storage tank ~~(T)~~.