Claims

[Claim 1]

Gas removal equipment ~~having portability capable of being equipped on a vessel using fuel gas as fuel, the gas removal equipment~~ comprising:

a gas compression section that compresses the gas extracted from ~~the~~ an inside of a tank of ~~the~~a marine vessel that uses fuel gas as fuel;

a gas heater section that heats the gas extracted from the inside of the tank of the marine vessel;

a gas combustion section that combusts the fuel gas discharged from the inside of the tank by being gasified or expanded in volume through heating in the gas heater section; and

an inert gas supply section that delivers inert gas into the tank of the marine vessel,

wherein at least one of the sections is housed in a container-like casing, and

wherein the casing has portability capable of being equipped onto the marine vessel or barge .

[Claim 2]

The gas removal equipment according to Claim 1,

wherein the gas compression section, the gas heater section, the inert gas supply section, and the gas

combustion section are housed in individual casings, respectively.

[Claim 3]

The gas removal equipment according to Claim 1 or 2, further comprising:

a water spray device that sprays water onto the casing.

[Claim 4]

The gas removal equipment according to any one of Claims 1 to 3,

wherein a gas-detecting device is provided within the casing, and

wherein the gas removal equipment is stopped when the gas is detected using the gas-detecting device.

[Claim 5]

A gas removal ~~vessel~~ barge comprising:

gas removal equipment ~~having portability~~ that removes fuel gas within (a) tank(s) of a marine vessel using the fuel gas as fuel; and

a barge having the gas removal equipment equipped thereon and being capable of approaching the marine vessel,

wherein the gas removal equipment includes at least one of:

a gas compression section that compresses the gas extracted from ~~the~~ an inside of the tank of the marine

vessel;

a gas heater section that heats the gas extracted from the inside of the tank of the marine vessel;

a gas combustion section that combusts the fuel gas discharged from the inside of the tank by being gasified or expanded in volume through heating in the gas heater section; and

an inert gas supply section that delivers inert gas into the tank of the marine vessel,

wherein at least one of the gas compression section, the gas heater section, the inert gas supply section, and the gas combustion section ~~are~~ is housed in a container-like casing, ~~and~~

wherein the casing has portability capable of being equipped onto the marine vessel or barge.

[Claim 6]

A method for removing gas from a tank, which is equipped on a marine vessel and stores a fuel gas, using the gas removal equipment according to any one of Claims 1 to 4, the method comprising:

a process of connecting the gas removal equipment to the tank of the marine vessel;

a process of compressing the gas within the tank in the gas compression section to circulate the gas within

heater section;

a process of combusting the gas pushed out from the tank in the gas combustion section and discharging the combusted gas to the outside, as the gas is heated and expanded in volume in the gas heater section; and

a process of delivering inert gas into the tank.