Patent Document 1: Japanese patent laid-open No. H07-301372 (paragraphs [0002] and [0025], and Fig. 5)

SUMMARY OF THE INVENTION

PROBLEM TO BE SOLVED BY THE INVENTION

[0014]

The present invention has been made in view of the above situation, and an object thereof is to provide a floating structure provided with a liquefied gas storage facility, in which a space can be allocated for additionally arranging a new cargo loading and unloading facility, a new superstructure, or a new large-scale fitting, while mitigating risk due to a high-pressure gas leakage from a high-pressure fuel gas pipe.

MEANS FOR SOLVING THE PROBLEM

[0015]

To achieve the above object, a floating structure provided with a liquefied gas storage facility according to the present invention is one having a cargo area and an engine room in a rear of the cargo area, and having a portion or all of an accommodation space which is arranged on an upper deck, in which a cargo equipment room is arranged rearward of the cargo area and over a portion or the entirety of an upper side of the engine room. Note that the expression "arranged over a portion or the entirety of an upper side of the engine room" means the case where a portion of the ceiling of the engine room serves as the floor of the cargo equipment room, and the case where the entirety of the ceiling of the engine room serves as the floor of the cargo equipment room.

[0015a]

According to a first aspect of the present invention, there is provided a floating structure provided with a liquefied

gas storage facility, having a cargo area and an engine room in a rear of the cargo area, and having a portion or all of an accommodation space which is arranged on an upper deck, characterized in that a cargo equipment room is arranged rearward of the cargo area and over a portion or the entirety of an upper side of the engine room, and the accommodation space is arranged rearward of the cargo equipment room, and a compartment in which one or more of a cofferdam, a void space, a fuel oil tank, and a water tank are disposed is arranged rearward of the cargo equipment room, and the accommodation space is arranged rearward of this compartment.

[0015b]

According to a second aspect of the present invention, there is provided a floating structure provided with a liquefied gas storage facility, having a cargo area and an engine room in a rear of the cargo area, and having a portion or all of an accommodation space which is arranged on an upper deck, characterized in that a cargo equipment room is arranged rearward of the cargo area and over a portion or the entirety of an upper side of the engine room, and the accommodation space is arranged rearward of the cargo equipment room, and an engine room protruding portion formed by a portion of the engine room protruding above the upper deck is arranged rearward of the cargo equipment room, and the accommodation space is arranged rearward of this engine room protruding portion.

[0015c]

According to a third aspect of the present invention, there is provided a floating structure provided with a liquefied gas storage facility, having a cargo area and an engine room in a rear of the cargo area, and having a portion or all of an

accommodation space which is arranged on an upper deck, characterized in that a cargo equipment room is arranged rearward of the cargo area and over a portion or the entirety of an upper side of the engine room, and the accommodation space is arranged rearward of the cargo equipment room, and a compartment in which one or both of a machinery room and a storeroom are arranged, the former is another compartment separated from the engine room, is arranged rearward of the cargo equipment room, and the accommodation space is arranged rearward of this compartment.

[0015d]

According to a fourth aspect of the present invention, there is provided a floating structure provided with a liquefied gas storage facility, having a cargo area and an engine room in a rear of the cargo area, and having a portion or all of an accommodation space which is arranged on an upper deck, characterized in that a cargo equipment room is arranged rearward of the cargo area and over a portion or the entirety of an upper side of the engine room, and an engine room upper compartment in which one or more of a cofferdam, a void space, a fuel oil tank, and a water tank are disposed is arranged below the cargo equipment room and at an upper portion of the engine room.

[0016]

According to this structure, the cargo equipment room storing equipment for conveying fuel gas is moved from between

CLAIMS

[Claim 1]

A floating structure provided with a liquefied gas storage facility, having a cargo area and an engine room in a rear of the cargo area, and having a portion or all of an accommodation space which is arranged on an upper deck, characterized in that

a cargo equipment room is arranged rearward of the cargo area and over a portion or the entirety of an upper side of the engine room, and the accommodation space is arranged rearward of the cargo equipment room, and

a compartment in which one or more of a cofferdam, a void space, a fuel oil tank, and a water tank are disposed is arranged rearward of the cargo equipment room, and the accommodation space is arranged rearward of this compartment.

[Claim 2]

A floating structure provided with a liquefied gas storage facility, having a cargo area and an engine room in a rear of the cargo area, and having a portion or all of an accommodation space which is arranged on an upper deck, characterized in that

a cargo equipment room is arranged rearward of the cargo area and over a portion or the entirety of an upper side of the engine room, and the accommodation space is arranged rearward of the cargo equipment room, and

an engine room protruding portion formed by a portion of the engine room protruding above the upper deck is arranged rearward of the cargo equipment room, and the accommodation space is arranged rearward of this engine room protruding portion.

[Claim 3]

A floating structure provided with a liquefied gas storage facility, having a cargo area and an engine room in a rear of the cargo area, and having a portion or all of an accommodation space which is arranged on an upper deck, characterized in that

a cargo equipment room is arranged rearward of the cargo area and over a portion or the entirety of an upper side of the engine room, and the accommodation space is arranged rearward of the cargo equipment room, and

a compartment in which one or both of a machinery room and a storeroom are arranged, the former is another compartment separated from the engine room, is arranged rearward of the cargo equipment room, and the accommodation space is arranged rearward of this compartment.

[Claim 4]

A floating structure provided with a liquefied gas storage facility, having a cargo area and an engine room in a rear of the cargo area, and having a portion or all of an accommodation space which is arranged on an upper deck, characterized in that

a cargo equipment room is arranged rearward of the cargo area and over a portion or the entirety of an upper side of the engine room, and

an engine room upper compartment in which one or more of a cofferdam, a void space, a fuel oil tank, and a water tank are disposed is arranged below the cargo equipment room and at an upper portion of the engine room.

[Claim 5]

The floating structure provided with a liquefied gas

storage facility, according to claim 4, characterized in that the accommodation space is arranged forward of the cargo area.

[Claim 6]

The floating structure provided with a liquefied gas storage facility, according to claim 4, characterized in that the accommodation space is arranged rearward of the cargo equipment room.

[Claim 7]

The floating structure provided with a liquefied gas storage facility, according to claim 6, characterized in that a compartment in which one or more of a cofferdam, a void space, a fuel oil tank, and a water tank are disposed is arranged rearward of the cargo equipment room, and the accommodation space is arranged rearward of this compartment.

[Claim 8]

The floating structure provided with a liquefied gas storage facility, according to claim 6, characterized in that an engine room protruding portion formed by a portion of the engine room protruding above the upper deck is arranged rearward of the cargo equipment room, and the accommodation space is arranged rearward of this engine room protruding portion.

[Claim 9]

The floating structure provided with a liquefied gas storage facility, according to claim 6, characterized in that a compartment in which one or both of a machinery room and a storeroom are arranged, the former is another compartment separated from the engine room, is arranged rearward of the cargo equipment room, and the accommodation space is arranged rearward of this compartment.

[Claim 10]

The floating structure provided with a liquefied gas storage facility, according to any one of claims 1 to 9, characterized in that an engine room front compartment is arranged forward of the engine room located below the cargo equipment room, the engine room front compartment including one or more of a cofferdam, a void space, a fuel oil tank, a water tank, a fuel oil transfer pump, a ballast pump, and a ballast water treatment apparatus.

[Claim 11]

The floating structure provided with a liquefied gas storage facility, according to any one of claims 1 to 10, characterized in that a deck tank or a liquefied gas fuel tank is arranged above the cargo equipment room.

[Claim 12]

The floating structure provided with a liquefied gas storage facility, according to any one of claims 1 to 11, characterized in that a flange or a valve of a fuel gas pipe led to a main engine is arranged inside the cargo equipment room.

[Claim 13]

The floating structure provided with a liquefied gas storage facility, according to any one of claims 1 to 12, characterized in that the floating structure is one of a liquefied gas carrier ship with a liquefied gas storage facility, a ship with a liquefied gas fuel tank, a floating structure with a liquefied gas fuel tank, and a floating structure with a liquefied gas storage facility.