CLAIMS

1. A ship desulfurization device for desulfurizing exhaust gas discharged from an exhaust gas generation device mounted to a ship, the ship desulfurization device comprising:

an absorber including an absorber body unit that defines an interior space and includes an exhaust gas inlet communicating with the interior space, the absorber including an exhaust gas introducing unit connected to the exhaust gas inlet; and

an exhaust gas cooling device capable of spraying cooling water over exhaust gas before being introduced into the interior space after being introduced into the exhaust gas introducing unit,

wherein the exhaust gas introducing unit has an oblique portion extending obliquely upward from the exhaust gas inlet of the absorber body unit and a vertical portion extending upward from an end of the oblique portion along a vertical direction, the vertical portion being configured such that exhaust gas flows from an upper side toward a lower side, the vertical portion having a constant horizontal cross section,

wherein the exhaust gas cooling device has a first spray pipe disposed inside the vertical portion, a first cooling water nozzle configured to inject the cooling water toward an upstream side in a flow direction of exhaust gas, a cooling water feeding pipe for feeding seawater to the first spray pipe, the cooling water feeding pipe connected to the first spray pipe, and a seawater feeding device for feeding the seawater,

wherein the ship desulfurization device further comprises an emergency cooling device capable of spraying emergency cooling water over exhaust gas, in case of emergency, before being introduced into the interior space after being introduced into the exhaust gas introducing unit,

wherein

the emergency cooling device has a second spray pipe disposed inside the exhaust gas introducing unit, a second cooling water nozzle provided in the second spray pipe, an emergency cooling water conduit for feeding emergency water to the second spray pipe, the emergency cooling water conduit connected to the second spray pipe, and an emergency tank in which emergency cooling water is stored, or

the emergency cooling device has the first spray pipe, the first cooling water nozzle, an emergency cooling water conduit for feeding emergency water to the first spray pipe, the emergency cooling water conduit connected to the first spray pipe, and an emergency tank in which emergency cooling water is stored,

wherein an emergency on-off valve is provided in the emergency cooling water conduit, the emergency on-off valve configured to be closed while a power supply is supplying electricity and be opened when loss of power occurs, and

wherein the emergency cooling device further includes an emergency bypass device for causing exhaust gas to bypass the absorber and precluding exhaust gas from flowing to the absorber in case of emergency, the emergency bypass device provided in a middle of exhaust gas piping for introducing exhaust gas to the exhaust gas introducing unit.

2. The ship desulfurization device according to claim 1, wherein

the exhaust gas cooling device has:

a cooling water control valve provided in the cooling water feeding pipe and capable of controlling an amount of the cooling water sprayed through the first cooling water nozzle.

3. The ship desulfurization device according to claim 2, wherein

the ship desulfurization device further comprises a pressure gauge provided on a wake flow side of the cooling water control valve in the cooling water conduit, and

the cooling water control valve is configured to adjust a degree of opening thereof such that a pressure of the cooling water detected by the pressure gauge is kept constant.

4. A ship comprising the ship desulfurization device according to any one of claims 1 to 3 mounted therein.