CLAIMS

[Claim 1] A fuel supply system for supplying supercritical hydrogen to an internal combustion engine as fuel, the fuel supply system comprising:

a tank that stores liquefied hydrogen;

a fuel supply line through which the liquefied hydrogen is led out of the tank;

a first pump that is located on the fuel supply line;

an agitator that is located on the fuel supply line at a position downstream of the first pump;

a second pump that is located on the fuel supply line at a position downstream of the agitator and that increases a pressure of the liquefied hydrogen such that the liquefied hydrogen has a pressure higher than or equal to a critical pressure; and

a reflux flow line that is branched off from the fuel supply line at a position downstream of the second pump and connects to the agitator and on which a pressure reducing valve is located, wherein

the agitator agitates hydrogen gas that is generated as a result of pressure reduction by the pressure reducing valve with the liquefied hydrogen flowing through the fuel supply line to condense the hydrogen gas.

[Claim 2] The fuel supply system according to claim 1, further comprising:

a gas-liquid separator that is located on the reflux flow line at a position downstream of the pressure reducing valve; and

a liquid feed line that connects the gas-liquid separator and the tank.

[Claim 3] The fuel supply system according to claim 1 or 2, wherein

the first pump, the second pump, and the agitator are located outside the tank.

[Claim 4] The fuel supply system according to claim 1 or 2, wherein

the agitator is located inside the tank, and the first pump and the second pump are located outside the tank.

[Claim 5] The fuel supply system according to claim 1 or 2, wherein

the agitator and the first pump are located inside the tank, and the second pump is located outside the tank.

[Claim 6] A ship comprising the fuel supply system according to any one of claims 1 to 5.