Claims

1. A device for treating a gas stream, having at least

an absorption device which is suitable for removing flammable constituents from a first gas stream by absorption using a liquid medium;

a desorption device which is suitable for separating flammable constituents dissolved in the liquid medium into a second gas stream, which is an air stream; and

a gas turbine comprising an air inlet,

wherein the desorption device is suitable for setting the concentration of flammable constituents in the second gas stream to a predetermined value, such that a gas stream that is suitable for operating the gas turbine is generated; and

wherein the device is configured to supply the second gas stream, containing the flammable constituents, to the air inlet of the gas turbine as fuel.

2. The device as claimed in claim 1, wherein the gas turbine is supplied with no other fuel in addition to the second gas stream containing the flammable constituents.

3. The device as claimed in either of the preceding claims, wherein the absorption device comprises the following:

a carrier arrangement having an inlet and an outlet for the liquid medium, the carrier arrangement being configured such that, between the inlet and the outlet, the liquid medium is guided past a number of carriers and forms a flowing liquid film on the surface of the carriers; and

a gas stream guide which is configured such that the first gas stream comes into contact with the flowing liquid film on the surface of the number of carriers.

4. A method for treating a gas stream, having the steps of:

removing flammable constituents from a first gas stream by absorption using a liquid medium;

separating the flammable constituents dissolved in the liquid medium into a second gas stream, which is an air stream, by desorption;