The problem mentioned above is solved by one of constituent features (1)-(9).

(1) A method for producing a combustible gas by reacting carbon dioxide and OHMASA-GAS with a predetermined mixing ratio under a predetermined pressure at a predetermined temperature.

(2) The method for producing the combustible gas according to (1), wherein the pressure is set in a range of 0.1MPa-10MPa.

(3) The method for producing the combustible gas according to (1), wherein the temperature is set in a rage of 5℃-50℃.

(4) The method for producing the combustible gas according to (1), wherein the mixing ratio is set in a range of 90%-10% of carbon dioxide and in a range of 10%-90% of OHMASA-GAS.

(5) A system for recycling carbon dioxide generated by combusting the combustible gas produced by the method specified in one of (1)-(4) in producing the combustible gas specified in one of (1)-(4).

(6) A new combustible gas obtained by mixing the combustible gas specified in one of (1)-(4) with a fossil fuel consisting of propane and methane with an optional mixing ratio.

(7) A system comprising an OHMASA-GAS production apparatus and a mixing tank, wherein: the mixing tank receives OHMASA-GAS from the apparatus and 10-50% of exhaust gas from gas combustion machines outside, and therein the new fuel gas can be synthesized by reacting carbon dioxide and OHMASA-GAS.

(8) A system for synthesizing a combustible gas by blowing carbon dioxide directly onto platinum electrodes in electrolysis vessels of an OAMASA-GAS production apparatus.

(9) A system for producing a new fuel gas, wherein: a combustible gas or a mixture gas consisting of the combustible gas and OHMASA-GAS is

combusted as a fuel for generators or boilers; and carbon dioxide in the exhaust gas generated by the combustion is reacted with OHMASA-GAS again in order to almost prevent newly generated carbon dioxide from exhausting into the atmosphere.

Effects Attained by the Invention

Since carbon dioxide is able to be reduced by using carbon dioxide effectively as claimed in the present invention, it is possible to suppress the global warming. And since OHMASA-GAS is able to produce by utilizing inexpensive late-night power, the new fuel gas by the present invention is able to produce at low cost.

It is a great discovery on the global scale to discover the fact that carbon dioxide excessively exists in the atmosphere can be used in the new fuel.

Preferred Embodiments by the Present Invention

Carbon dioxide in the atmosphere, generated by combusting substances and the like may be used as raw materials for the new fuel gas by the present invention. The carbon dioxide is not specially designated, but any ordinary carbon dioxide may be used.

However, as "oxy-hydrogen gas", the conventional oxy-hydrogen gas (which is not reactive with carbon dioxide) may not be used, but the inventor's oxy-hydrogen combined gas (namely OHMASA-GAS) obtained by the methods already protected by patent rights by the inventor (see patent references 1-3) should be used in order to react with carbon dioxide.

Hereinafter embodiments of the new fuel gas produced by reacting carbon dioxide with OHMASA-GAS and combustion test results of the new fuel gas, are explained.

Embodiment 1

After a high pressure glass tube with a diameter of 100mm, a height of 800mm and capacity of 6.28 liter is vacuumed (gauge pressure −0.1MPa),

CLAIMS

1. A method for producing a combustible gas by reacting carbon dioxide and OHMASA-GAS with a predetermined mixing ratio under a predetermined pressure at a predetermined temperature.

2. The method for producing the combustible gas according to claim 1, wherein the pressure is set in a range of 0.1MPa-10MPa.

3. The method for producing the combustible gas according to claim 1, wherein the temperature is set in a rage of 5℃-50℃.

4. The method for producing the combustible gas according to claim 1, wherein the mixing ratio is set in a range of 90%-10% of carbon dioxide and in a range of 10%-90% of OHMASA-GAS.

5. A system for recycling carbon dioxide generated by combusting the combustible gas produced by the method specified in one of claims 1-4 in producing the combustible gas specified in one of claims 1-4.

6. A new combustible gas obtained by mixing the combustible gas specified in one of claims 1-4 with a fossil fuel consisting of propane and methane with an optional mixing ratio.

7. A system comprising an OHMASA-GAS production apparatus and a mixing tank, wherein:

the mixing tank receives OHMASA-GAS from the apparatus and 10-50% of exhaust gas from gas combustion machines outside, and therein the new fuel gas can be synthesized by reacting carbon dioxide and OHMASA-GAS.

8. A system for synthesizing a combustible gas by blowing carbon dioxide directly onto platinum electrodes in electrolysis vessels of an OAMASA-GAS production apparatus.

9. A system for producing a new fuel gas, wherein:

a combustible gas or a mixture gas consisting of the combustible gas and

OHMASA-GAS is combusted as a fuel for generators or boilers; and

carbon dioxide in the exhaust gas generated by the combustion is reacted with OHMASA-GAS again in order to almost prevent newly generated carbon dioxide from exhausting into the atmosphere.

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Paragraphs describing "Means to Solve the Problem" are amended according to amendments in claims

Means to Solve the Problem

The problem mentioned above is solved by one of constituent features (1), (4)-(9).

(1) A method for producing a combustible gas by reacting carbon dioxide and OHMASA-GAS with a predetermined mixing ratio without using any catalyst under a pressure of 0.1MPa-10MPa at a temperature of 5℃-50℃.

(4) The method for producing the combustible gas according to (1), wherein the mixing ratio is set in a range of 50%-10% of carbon dioxide and in a range of 50%-90% of OHMASA-GAS.

(5) A system for recycling carbon dioxide generated by combusting the combustible gas produced by the method specified in (1) or (4) in producing the combustible gas specified in (1) or (4).

(6) A new combustible gas obtained by mixing the combustible gas specified in (1) or (4) with a fossil fuel consisting of propane and methane with an optional mixing ratio.

(7) A system comprising an OHMASA-GAS production apparatus and a mixing tank, wherein: the mixing tank receives OHMASA-GAS from the apparatus and 10-50% of exhaust gas from gas combustion machines outside, and therein the new fuel gas can be synthesized by reacting carbon dioxide and OHMASA-GAS without using any catalyst.

(8) A system for synthesizing a combustible gas without using any catalyst by blowing carbon dioxide directly onto platinum electrodes in electrolysis vessels of an OAMASA-GAS production apparatus.

(9) A system for producing a new fuel gas, wherein: a combustible gas or a mixture gas consisting of the combustible gas and OHMASA-GAS is

combusted as a fuel for generators or boilers; and carbon dioxide in the exhaust gas generated by the combustion is reacted with OHMASA-GAS again without using any catalyst in order to almost prevent newly generated carbon dioxide from exhausting into the atmosphere.

Claims are amended in order to overcome the rejections described in the opinion of the International Searching Authority mailed on 2 September 2014. The amendments were received on 20 February 2015.

1. (Amended) A method for producing a combustible gas by reacting carbon dioxide and OHMASA-GAS with a predetermined mixing ratio without using any catalyst under a ~~predetermined~~ pressure of 0.1MPa-10MPa at a ~~predetermined~~ temperature of 5℃-50℃.

2. (Deleted) ~~The method for producing the combustible gas according to claim 1, wherein the pressure is set in a range of 0.1MPa-10MPa.~~

3. (Deleted) ~~The method for producing the combustible gas according to claim 1, wherein the temperature is set in a rage of 5℃-50℃.~~

4. (Amended) The method for producing the combustible gas according to claim 1, wherein the mixing ratio is set in a range of ~~90~~50%-10% of carbon dioxide and in a range of ~~10~~50%-90% of OHMASA-GAS.

5. (Amended) A system for recycling carbon dioxide generated by combusting the combustible gas produced by the method specified in ~~one of~~ claim~~s~~ 1-or 4 in producing the combustible gas specified in ~~one of~~ claim~~s~~ 1-or 4.

6. (Amended) A new combustible gas obtained by mixing the combustible gas specified in ~~one of~~ claim~~s~~ 1-or 4 with a fossil fuel consisting of propane and methane with an optional mixing ratio.

7. (Amended) A system comprising an OHMASA-GAS production apparatus and a mixing tank, wherein:

the mixing tank receives OHMASA-GAS from the apparatus and 10-50% of exhaust gas from gas combustion machines outside, and therein the new fuel gas can be synthesized by reacting carbon dioxide and OHMASA-GAS without using any catalyst.

8. (Amended) A system for synthesizing a combustible gas without using any catalyst by blowing carbon dioxide directly onto platinum electrodes in electrolysis vessels of an OAMASA-GAS production apparatus.

9. (Amended) A system for producing a new fuel gas, wherein:

a combustible gas or a mixture gas consisting of the combustible gas and OHMASA-GAS is combusted as a fuel for generators or boilers; and

carbon dioxide in the exhaust gas generated by the combustion is reacted with OHMASA-GAS again without using any catalyst in order to almost prevent newly generated carbon dioxide from exhausting into the atmosphere.

Amended results are as follows.

1. (Amended) A method for producing a combustible gas by reacting carbon dioxide and OHMASA-GAS with a predetermined mixing ratio without using any catalyst under a pressure of 0.1MPa-10MPa at a temperature of 5℃ -50℃.

2. (Deleted)

3. (Deleted)

4. (Amended) The method for producing the combustible gas according to claim 1, wherein the mixing ratio is set in a range of 50%-10% of carbon dioxide and in a range of 50%-90% of OHMASA-GAS.

5. (Amended) A system for recycling carbon dioxide generated by combusting the combustible gas produced by the method specified in claim 1 or 4 in producing the combustible gas specified in claims 1 or 4.

6. (Amended) A new combustible gas obtained by mixing the combustible gas specified in claims 1 or 4 with a fossil fuel consisting of propane and methane with an optional mixing ratio.

7. (Amended) A system comprising an OHMASA-GAS production apparatus and a mixing tank, wherein:

the mixing tank receives OHMASA-GAS from the apparatus and 10-50% of exhaust gas from gas combustion machines outside, and therein the new fuel gas can be synthesized by reacting carbon dioxide and OHMASA-GAS without using any catalyst.

8. (Amended) A system for synthesizing a combustible gas without using any catalyst by blowing carbon dioxide directly onto platinum electrodes in electrolysis vessels of an OAMASA-GAS production apparatus.

9. (Amended) A system for producing a new fuel gas, wherein:

a combustible gas or a mixture gas consisting of the combustible gas and

OHMASA-GAS is combusted as a fuel for generators or boilers; and

carbon dioxide in the exhaust gas generated by the combustion is reacted with OHMASA-GAS again without using any catalyst in order to almost prevent newly generated carbon dioxide from exhausting into the atmosphere.

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(1) A method for producing a combustible gas by reacting carbon dioxide and OHMASA-GAS with a predetermined mixing ratio without using any catalyst under a pressure of 0.1MPa-10MPa at a temperature of 5℃-50℃.

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combusted as a fuel for generators or boilers; and carbon dioxide in the exhaust gas generated by the combustion is reacted with OHMASA-GAS again without using any catalyst in order to almost prevent newly generated carbon dioxide from exhausting into the atmosphere.

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Hereinafter embodiments of the new fuel gas produced by reacting carbon dioxide with OHMASA-GAS and combustion test results of the new fuel gas, are explained.

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CLAIMS

1. A method for producing a combustible gas by reacting carbon dioxide and OHMASA-GAS with a predetermined mixing ratio without using any catalyst under a pressure of 0.1MPa-10MPa at a temperature of 5℃-50℃.

2. The method for producing the combustible gas according to claim 1, wherein the mixing ratio is set in a range of 50%-10% of carbon dioxide and in a range of 50%-90% of OHMASA-GAS.

3. A system for recycling carbon dioxide generated by combusting the combustible gas produced by the method specified in claim 1 or 2 in producing the combustible gas specified in claim 1 or 2.

4. A new combustible gas obtained by mixing the combustible gas specified in claim 1 or 2 with a fossil fuel consisting of propane and methane with a mixing ratio of 0.1-5% of the fossil fuel, 20-50% of carbon dioxide and the balance of OHMASA gas.

5. A system comprising an OHMASA-GAS production apparatus and a mixing tank, wherein:

the mixing tank receives OHMASA-GAS from the apparatus and 10-50% of exhaust gas from gas combustion machines outside, and therein the new fuel gas can be synthesized by reacting carbon dioxide and OHMASA-GAS without using any catalyst.

6. A system for synthesizing a combustible gas without using any catalyst by blowing carbon dioxide directly onto platinum electrodes in electrolysis vessels of an OHMASA-GAS production apparatus.