

AMENDMENTS TO THE CLAIMS

Please amend claims 1, 2, 4-13, and 15-20 as follows:

1. (currently amended) A fuel cell system, comprising:

~~a~~-fuel gas supply means for supplying a fuel gas;

~~an~~-oxidant gas supply means for supplying an oxidant gas;

a fuel cell to which the fuel gas and the oxidant gas are supplied for generation of electricity;

an idle stop means for stopping generation of electricity by the fuel cell to perform an idle stop; and

an unstable state detection means for detecting whether the generation of electricity by the fuel cell is unstable;

wherein if the unstable state detection means detects that the generation of electricity by the fuel cell is unstable, the idle stop by the idle stop means is prohibited so that the fuel cell continues to generate electricity.

2. (currently amended) A fuel cell system according to claim 1, further comprising a temperature sensing means for detecting an operation temperature of the fuel cell, wherein the unstable state detection means carries out a detection in accordance with the operation temperature of the fuel cell that is detected by the temperature sensing means and a first predetermined temperature under which generation of electricity by the fuel cell becomes unstable.

3. (original) A fuel cell system according to claim 2, wherein the unstable state detection means determines that the generation of electricity is unstable if the operation temperature detected by the temperature sensing means is lower than the first predetermined temperature.

4. (currently amended) A fuel cell system according to claim 1, wherein the fuel cell ~~includes~~ comprises a plurality of single cells, and the fuel cell system further comprises a voltage sensing means for detecting a voltage of each single cell, and wherein the unstable state detection means calculates a first voltage deviation that is a deviation between the voltage of one single cell having a low voltage and an average voltage of the single cells, and determines that the generation of electricity is unstable if the first voltage deviation is more than a first threshold value.

5. (currently amended) A fuel cell system according to claim 1, wherein the fuel cell ~~includes~~ comprises a plurality of single cells, and the fuel cell system further comprises a voltage sensing means for detecting a voltage of each single cell, and wherein the unstable state detection means calculates a second voltage deviation that is a deviation between a voltage of one single cell having the highest voltage and a voltage of one single cell having the lowest voltage, and determines that the generation of electricity is unstable if the second voltage deviation is more than a second threshold value.

6. (currently amended) A fuel cell system according to claim 4, further comprising ~~an~~ electricity storage means for storing electric power generated by the fuel cell, wherein the

electricity storage means stores electric power from the fuel cell if voltage of the electricity storage means is lower than voltage of the fuel cell.

7. (currently amended) A fuel cell system according to claim 6, wherein the electricity storage means ~~is~~ comprises a capacitor.

8. (currently amended) A fuel cell system according to claim 5, further comprising ~~an~~ electricity storage means for storing electric power generated by the fuel cell, wherein the electricity storage means stores electric power from the fuel cell if a voltage of the electricity storage means is lower than a voltage of the fuel cell.

9. (currently amended) A fuel cell system according to claim 8, wherein the electricity storage means ~~is~~ comprises a capacitor.

10. (currently amended) A fuel cell system according to claim 1, wherein the prohibition of the idle stop is released at a time when generation of electricity by the fuel cell becomes stable.

11. (currently amended) A fuel cell system according to claim 10, wherein the generation of electricity is determined as stable at a time when a predetermined time elapses after the prohibition of the idle stop is carried out.

12. (currently amended) A fuel cell system according to claim 10, wherein the generation of electricity is determined as stable at a time when a predetermined number of purging is carried out after the prohibition of the idle stop is carried out.

13. (currently amended) A fuel cell system according to claim 1, wherein the generation of electricity is determined as stable at a time when an operation, by which at least one of the fuel gas and the oxidant gas is supplied to the fuel cell to an amount larger than a normal supply amount, is carried out for a predetermined period of time after the prohibition of the idle stop is carried out.

14. (original) A fuel cell system according to claim 1, wherein the fuel cell is mounted on a fuel cell mounted movable body which is driven by electric power of the fuel cell.

15. (currently amended) A method of controlling idle stop of a fuel cell system, which includes:

a fuel gas supply means for supplying a fuel gas;

~~an~~ oxidant gas supply means for supplying an oxidant gas;

a fuel cell to which the fuel gas and the oxidant gas are supplied for generation of electricity; and

an idle stop means for stopping generation of electricity by the fuel cell to perform an idle stop,

the method comprising the ~~step~~ steps of:

a first step for detecting whether the generation of electricity by the fuel cell is unstable;

and

a second step for prohibiting the idle stop by the idle stop means, if the unstable state detection means detects that the generation of electricity by the fuel cell is unstable, so that the fuel cell continues to generate electricity.

16. (currently amended) A method of controlling idle stop of a fuel cell system according to claim 15, wherein the fuel cell system further comprises a temperature sensing means for detecting an operation temperature of the fuel cell, and wherein a detection is carried out in the first step in accordance with the operation temperature of the fuel cell that is detected by the temperature sensing means and a first predetermined temperature under which generation of electricity by the fuel cell becomes unstable.

17. (currently amended) A method of controlling idle stop of a fuel cell system according to claim 15, wherein the fuel cell includes a plurality of single cells, and the fuel cell system further comprises a voltage sensing means for detecting a voltage of each single cell, and wherein the first step further comprises the steps of:

calculating a first voltage deviation that is a deviation between a voltage of one single cell having a low voltage and an average voltage of the single cells; and

determining that the generation of electricity is unstable if the first voltage deviation is more than a first threshold value.

18. (currently amended) A method of controlling idle stop of a fuel cell system according to claim 15, wherein the fuel cell includes a plurality of single cells, and the fuel cell system further comprises a voltage sensing means for detecting a voltage of each single cell, and wherein the first step further comprises the steps of:

calculating a second voltage deviation that is a deviation between a voltage of one single cell having the highest voltage and a voltage of one single cell having the lowest voltage; and
determining that the generation of electricity is unstable if the second voltage deviation is more than a second threshold value.

19. (currently amended) A method of controlling an idle stop of a fuel cell system according to claim 17, wherein the fuel cell system further comprises ~~an~~ electricity storage means for storing electric power generated by the fuel cell, and wherein the electricity storage means stores electric power from the fuel cell if a voltage of the electricity storage means is lower than a voltage of the fuel cell.

20. (currently amended) A method of controlling ~~idle stop of a fuel cell system~~ according to claim 18, wherein the fuel cell system further comprises ~~an~~ electricity storage means for storing electric power generated by the fuel cell, and wherein the electricity storage means stores electric power from the fuel cell if a voltage of the electricity storage means is lower than a voltage of the fuel cell.