~~Amended Claims under Article 19(1) PCT~~

[Claim 1]

A photovoltaic cell, comprising:

a cell formed by charging an alkaline solution, which contains lignin and porphyrin as solutes, into a space at least partly formed by a transparent member pervious to light; and

a pair of electrodes provided to oppose the alkaline solution of the cell while making contact with the alkaline solution.

[Claim 2]

A photovoltaic cell, comprising:

one cell formed by charging an alkaline solution, which contains lignin and porphyrin as solutes, into one of at least two spaces separated from each other by a membrane, the one cell being at least partly formed by a transparent member pervious to light;

the other cell formed by charging the alkaline solution into the other of the spaces;

one electrode in contact with the alkaline solution of the one of the cells; and

the other electrode in contact with the alkaline solution of the other of the cells.

~~[Claim 3] (Deleted)~~

~~[Claim 4] (Deleted)~~

~~[Claim 5] (Amended)~~

The photovoltaic cell according to claim 1 or 2, wherein the alkaline solution is a solution of potassium hydroxide.

~~[Claim 6] (Amended)~~

The photovoltaic cell according to claim 2 or ~~5~~, wherein the membrane is formed of an ion exchange membrane.

~~[Claim 7] (Amended)~~

The photovoltaic cell according to claim 2 or ~~5~~, wherein the membrane is formed of a water repellent carbon membrane.

~~[Claim 8] (Amended)~~

The photovoltaic cell according to claim 1 or 2, wherein the porphyrin is coproporphyrin.

CLAIMS

[Claim 1]

A photovoltaic cell, comprising:

a cell formed by charging an alkaline solution, which contains lignin and porphyrin as solutes, into a space at least partly formed by a transparent member pervious to light; and

a pair of electrodes provided to oppose the alkaline solution of the cell while making contact with the alkaline solution.

[Claim 2]

A photovoltaic cell, comprising:

one cell formed by charging an alkaline solution, which contains lignin and porphyrin as solutes, into one of at least two spaces separated from each other by a membrane, the one cell being at least partly formed by a transparent member pervious to light;

the other cell formed by charging the alkaline solution into the other of the spaces;

one electrode in contact with the alkaline solution of the one of the cells; and

the other electrode in contact with the alkaline solution of the other of the cells.

[Claim 3]

The photovoltaic cell according to claim 1 or 2, wherein the alkaline solution is a solution of potassium hydroxide.

[Claim 4]

The photovoltaic cell according to claim 2 or **3**, wherein the membrane is formed of an ion exchange membrane.

[Claim 5]

The photovoltaic cell according to claim 2 or **3**, wherein the membrane is formed of a water repellent carbon membrane.

[Claim 6]

The photovoltaic cell according to claim 1 or 2, wherein the porphyrin is coproporphyrin.