A seventh aspect of the present disclosure is any of the first to sixth aspects, wherein in the crushing, the photovoltaic module or the photovoltaic sheet-like structure is crushed so that the particle size of the debris is 10 mm or less.

[0020]

An eighth aspect of the present disclosure is any of the third to seventh aspects, wherein the particle size of the fine powder is 4 mm or less.

[0021]

A ninth aspect of the present disclosure is any of the first to eighth aspects, wherein in the crushing, a uniaxial crusher is used.

ADVANTAGEOUS EFFECT OF THE DISCLOSURE

[0022]

According to the present disclosure, the valuable metal contained in the photovoltaic module can be concentrated and recovered.

BRIEF DESCRIPTION OF DRAWINGS

[0023]

FIG. 1 is a schematic cross-sectional view of a photovoltaic sheet-like structure.

FIG. 2 is a schematic cross-sectional view of a photovoltaic module.

DESCRIPTION OF EMBODIMENTS

[0024]

<An embodiment of the present disclosure >

The metal recovery method according to an embodiment of the present disclosure will be hereinafter described taking as an example a metal recovery from a photovoltaic sheet-like structure which is a partially decomposed intermediate of the photovoltaic module. The metal recovery method of this embodiment includes preparation, crushing, and sorting, each of which will be hereinafter described in detail.

[0025]

(Preparation)

First, the photovoltaic sheet-like structure (hereinafter also referred to simply as sheet-like structure) is prepared, which is an object to be processed. The sheet-like structure is obtained by removing the glass substrate and the frame member from the photovoltaic module.

[0026]

CLAIMS

1. A metal recovery method, comprising:

crushing a photovoltaic module or a photovoltaic sheet-like structure to form debris; and

sorting the debris,

wherein the photovoltaic sheet-like structure is obtained by removing a glass substrate and a frame member from the photovoltaic module, and includes at least a photovoltaic cell, a metal pattern wired from the photovoltaic cell, and an encapsulant to encapsulate the photovoltaic cell and the metal pattern.

2. The metal recovery method according to claim 1, wherein the crushing provides a shearing action to obtain the debris.

3. The metal recovery method according to claim 1 or 2, wherein the sorting comprises classifying the debris into fine powder having smaller particle size and coarse powder having larger particle size, thereby collecting the fine powder.

4. The metal recovery method according to any of claims 1 to 3, wherein the sorting comprises air-sorting.

5. The metal recovery method according to claim 4, wherein in the air-sorting, the coarse powder is separated into heavy materials and other light materials by the air-sorting, and the heavy materials are collected.

6. The metal recovery method according to claim 4 or 5, wherein in the air-sorting, a wind speed is 5 m/s or more and 20 m/s or less.

7. The metal recovery method according to any one of claims 1 to 6, wherein in the crushing, the photovoltaic module or the photovoltaic sheet-like structure is crushed so that the particle size of the debris is 10 mm or less.

8. The metal recovery method according to any one of claims 3 to 7, wherein the particle size of the fine powder is 4 mm or less.

9. The metal recovery method according to any one of claims 1 to 8, wherein in the crushing, a uniaxial crusher is used.