

METHOD FOR RECYCLING COPPER INDIUM GALLIUM SELENIUM MATERIALS

Abstract

A method for recycling copper indium gallium selenium materials comprises the steps of sulphating roasting, acid dissolution, extraction and electrolysis of metal copper, production of a gallium hydroxide deposition, replacement of indium, and the like. In the method, deselenization is carried by using sulphating roasting, and residues after roasting are oxidizing slags capable of being directly subjected to acid dissolution, thereby reducing acid gas pollution; in addition, copper is extracted by using a copper extractant, the separation effect is good and costs are low, the extracted copper can be directly electrolyzed, so as to obtain high-purity metal copper; and in another aspect, in the method, alkali separation of gallium is carried out, separation between indium and gallium can be implemented by merely adjusting the pH of a solution, thereby resolving the problem of co-extraction in the extraction of indium and gallium and the separation between indium and gallium, the separation effect is good, the purities of obtained indium and gallium products are high.

(Figure 1)