

RECOVERY METHOD FOR COPPER-INDIUM-GALLIUM-SELENIUM MATERIAL

Abstract

Provided is a recovery method for a copper-indium-gallium-selenium material, mainly comprising the steps of sulfuric acid aeration leaching at a high temperature, reducing selenium with sodium sulfite, separating copper by extracting, separating indium and gallium with an alkali, replacing indium, electrolyzing gallium, etc. In the recovery method for a copper-indium-gallium-selenium material, a sulfuric acid aeration leaching means is used, thus reducing acid gas pollution; at the same time, an extraction agent for copper is used to extract copper, wherein the separating effect is good and the cost is low, and the extracted copper is directly electrolyzed so as to obtain a high-purity metal copper; moreover, an alkali is used to separate gallium, wherein realizing the separation of indium and gallium only requires the adjustment of the pH value of a solution, the separating effect is good and the obtained indium and gallium products have a relatively high purity.

(Figure 1)