

ALL-IN-ONE NICKEL RECOVERING METHOD FOR NICKEL HYDROXIDE RECOVERY FROM RAW MATERIALS CONTAINING NICKEL

ABSTRACT

Provided herein is a nickel recovering method, comprising: (A-i) a reduction heat treatment process for thermally treating a first raw material containing nickel and lithium; (B) a first leaching process for leaching the heat-treated product produced by the reduction heat treatment process; (A-ii) a roasting process for thermally treating a second raw material containing nickel and sulfur; (C) a second leaching process for leaching the first leaching residue produced by the first leaching process and calcine produced by the roasting process; (D) a neutralization process for neutralizing the second leachate produced by the second leaching process; (E) a purification process for removing impurities contained in the neutralized solution produced by the neutralization process; and (F) a precipitation process of performing a precipitation method to recover nickel from the purified solution produced by the purification process, and a nickel hydroxide is recovered by the precipitation process.

Fig. 1