

METHOD FOR PRODUCING AQUEOUS SOLUTION CONTAINING NICKEL, COBALT AND MANGANESE

ABSTRACT

A method for producing an aqueous solution containing nickel, cobalt and manganese, includes: a leaching process including a pressure-leaching process of leaching a raw material under pressure to form a leachate containing nickel, cobalt, manganese and impurities; an impurity removal process of removing the impurities from the leachate; a target substance precipitation process of precipitating a mixed hydroxide precipitate containing nickel, cobalt and manganese by introducing a neutralizing agent into a filtrate from which the impurities are removed; and a dissolution process. The pressure-leaching process includes a first-stage pressure-leaching process and a second-stage pressure-leaching process of pressure-leaching a residue of the first-stage pressure-leaching process with an acidity higher than an acidity in the first-stage pressure-leaching process. The impurity removal process includes a first-stage solvent extraction process of selectively extracting zinc from the impurities and a second-stage solvent extraction process of selectively extracting magnesium from the impurities.

Fig. 1