

METHOD FOR PRODUCING SECONDARY BATTERY MATERIAL FROM BLACK MASS

ABSTRACT

The embodiments disclosed herein relates to a method for producing a secondary battery material from black mass. The method for producing a secondary battery material from black mass according to one embodiment includes a roasting step of roasting black mass, a pre-extraction step of leaching a roasted black mass roasted in the roasting step with water to separate a lithium solution and a cake, a first evaporation concentration step of producing lithium carbonate crystals by evaporating and concentrating the lithium solution produced in the pre-extraction step, a leaching step of leaching the cake separated in the pre-extraction step, a first purification step of removing copper and aluminum from the leaching solution produced in the leaching step, a post-extraction step of neutralizing the solution prepared in the first purification step and separating the solution into a lithium solution and a cake containing Ni, Co, and Mn (NCM cake), a feeding step of feeding the lithium carbonate crystals produced in the first evaporation concentration step and the lithium solution prepared in the post-extraction step to a lithium hydroxide production step.

Fig. 1