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(71) Applicant: UMICORE [BE/BE]; 31, rue du Marais, 1000 Brussels (BE).

(72) Inventor: ROOSEN, Joris; Rue du Marais 31, 1000 Brussels (BE).

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(54) Title: PROCESS FOR THE SEPARATION OF METALS BY SOLVENT EXTRACTION

(57) Abstract: The present invention concerns a process for the recovery of Li, and one or more of Ni, Mn and Co, from aqueous acidic solutions such as those obtained by leaching of Li-ion batteries or their waste. The process is based on the use of a saponified organic extractant. The extractant is saponified with LiOH instead of with NaOH. This avoids the introduction of another alkali metal to the raffinate, which would interfere with the recovery of Li. The saponification is performed in conditions suitable for the obtention of a homogeneous and clear micro-emulsion. Such an emulsion is stable and therefore particularly suitable for an industrial application. Ni, Mn and Co are extracted and can be recovered from the organic phase, while Li can be recovered from the aqueous phase. Part of the Li can be converted to LiOH and re-used for the saponification.



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