(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) **EP 4 345 980 A8**

(12) **CORRECTED EUROPEAN PATENT APPLICATION**

(15) Correction information:
Corrected version no 1 (W1 A1)
Corrections, see
Bibliography INID code(s) 72

(48) Corrigendum issued on:
08.05.2024 Bulletin 2024/19

(43) Date of publication:
03.04.2024 Bulletin 2024/14

(21) Application number: **22215023.7**

(22) Date of filing: **20.12.2022**

(51) International Patent Classification (IPC):
H01M 10/54 *(2006.01)*

(52) Cooperative Patent Classification (CPC):
H01M 10/54

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR
Designated Extension States:
BA
Designated Validation States:
KH MA MD TN

(30) Priority: **30.09.2022 US 202217957753**

(71) Applicant: **Ascend Elements, Inc.**
Westborough, MA 01581 (US)

(72) Inventors:
- **Kim, Kee-Chan**
  Westborough, 01581 (US)
- **Matthew, Eggert**
  Westborough, 01581 (US)

(74) Representative: **Greaves Brewster LLP**
Copa House
Station Road
Cheddar, Somerset BS27 3AH (GB)

(54) NICKEL-METAL HYDRIDE (NIMH) BATTERY RECYCLING

(57) Recycling of nickel-metal hydride (NiMH) batteries extracts substantially pure nickel based on adding a leach agent to granular cathode material resulting from agitation of the NiMH batteries to form a leach solution. A pH of the leach solution is maintained for precipitating iron, aluminum and lanthanide rare earth elements (REE) for yielding a nickel solution for forming a cathode material precursor in a recycled battery, often with a high nickel content.

EP 4 345 980 A8