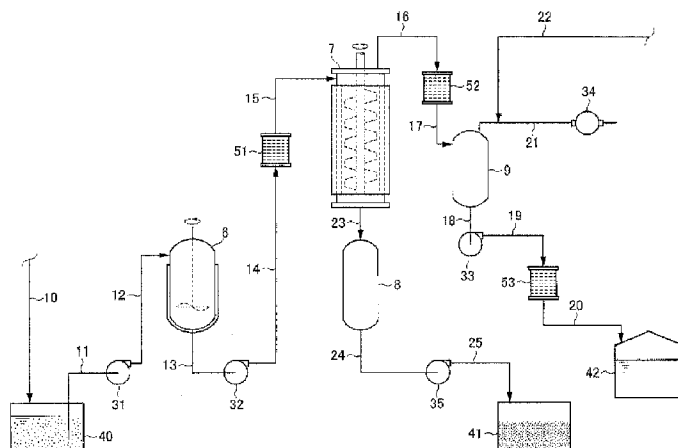




(86) Date de dépôt PCT/PCT Filing Date: 2020/09/29
(87) Date publication PCT/PCT Publication Date: 2021/04/15
(45) Date de délivrance/Issue Date: 2023/11/28
(85) Entrée phase nationale/National Entry: 2022/04/08
(86) N° demande PCT/PCT Application No.: JP 2020/036992
(87) N° publication PCT/PCT Publication No.: 2021/070689
(30) Priorités/Priorities: 2019/10/09 (JP2019-186434);
2020/09/23 (JP2020-159055)

(51) Cl.Int./Int.Cl. *B01D 1/22* (2006.01),
C22B 7/00 (2006.01), *H01M 10/54* (2006.01),
H01M 4/139 (2010.01)
(72) Inventeurs/Inventors:
TAMURA, TAKAHIRO, JP;
NISHIJIMA, YOTARO, JP;
TANG, YUAN, JP;
FANG, NANRI, CN
(73) Propriétaires/Owners:
MITSUBISHI CHEMICAL ENGINEERING
CORPORATION, JP;
LG ENERGY SOLUTION NANJING CO., LTD., CN
(74) Agent: GOWLING WLG (CANADA) LLP

(54) Titre : APPAREIL DE TRAITEMENT POUR LE NETTOYAGE DE DECHET LIQUIDE ET PROCEDE DE
TRAITEMENT POUR LE NETTOYAGE DE DECHET LIQUIDE
(54) Title: TREATMENT APPARATUS FOR WASTE CLEANING LIQUID AND TREATMENT METHOD FOR WASTE
CLEANING LIQUID



(57) Abrégé/Abstract:

The present invention provides an apparatus and a method for treating cleaning liquid waste that is discharged during the electrode production process of a lithium ion secondary battery, namely a treatment apparatus for cleaning liquid waste and a treatment method for cleaning liquid waste, said apparatus and method being capable of efficiently separating liquid components and solid components from each other, and being capable of sufficiently recovering the liquid components for volume reduction. A treatment apparatus for cleaning liquid waste according to the present invention is provided with: a stirring tank 6 serving as a stirring means for stirring cleaning liquid waste; a liquid sending line that takes out the cleaning liquid waste from the stirring tank; and a thin film evaporator 7 serving as an evaporative separation means for separating solid components by evaporating cleaning liquid in the cleaning liquid waste. With respect to a treatment method for cleaning liquid waste according to the present invention, cleaning liquid waste is stirred by a stirring means, and the cleaning liquid waste in a state where the solid components are diffused is fed to an evaporative separation means, so that cleaning liquid in the cleaning liquid waste is evaporated.



Date Submitted: 2022/04/08

CA App. No.: 3154180

Abstract:

The present invention provides an apparatus and a method for treating cleaning liquid waste that is discharged during the electrode production process of a lithium ion secondary battery, namely a treatment apparatus for cleaning liquid waste and a treatment method for cleaning liquid waste, said apparatus and method being capable of efficiently separating liquid components and solid components from each other, and being capable of sufficiently recovering the liquid components for volume reduction. A treatment apparatus for cleaning liquid waste according to the present invention is provided with: a stirring tank 6 serving as a stirring means for stirring cleaning liquid waste; a liquid sending line that takes out the cleaning liquid waste from the stirring tank; and a thin film evaporator 7 serving as an evaporative separation means for separating solid components by evaporating cleaning liquid in the cleaning liquid waste. With respect to a treatment method for cleaning liquid waste according to the present invention, cleaning liquid waste is stirred by a stirring means, and the cleaning liquid waste in a state where the solid components are diffused is fed to an evaporative separation means, so that cleaning liquid in the cleaning liquid waste is evaporated.

