



US 20230231147A1

(19) **United States**  
(12) **Patent Application Publication** (10) **Pub. No.: US 2023/0231147 A1**  
**Bangel et al.** (43) **Pub. Date: Jul. 20, 2023**

(54) **METHOD OF PROVIDING A CLEANED GAS  
DIFFUSION LAYER FOR  
ELECTROCHEMICAL APPLICATIONS**

**Publication Classification**

(51) **Int. Cl.**  
**H01M 4/88** (2006.01)  
(52) **U.S. Cl.**  
**CPC H01M 4/8807** (2013.01)

(71) Applicant: **Greenerity GmbH**, Alzenau (DE)

(72) Inventors: **Dieter Bangel**, Hüttenberg (DE);  
**Sarayut Leeratanaphanit**, Offenbach  
am Main (DE); **Jens-Peter Suchsland**,  
Alzenau (DE)

(57) **ABSTRACT**

A method of providing a cleaned gas diffusion layer for electrochemical applications includes providing a gas diffusion layer such that a first side of the gas diffusion layer is arranged on a first vacuum conveyor belt, cleaning an exposed second side of the gas diffusion layer, the second side being situated opposite the first side of the gas diffusion layer, transferring the partially cleaned gas diffusion layer to a second vacuum conveyor belt partially situated opposite the first vacuum conveyor belt, wherein the first vacuum conveyor belt and the second vacuum conveyor belt have a transfer region in which the gas diffusion layer is transferred from the first vacuum conveyor belt to the second vacuum conveyor belt such that the first side of the gas diffusion layer is exposed, and cleaning the first side of the gas diffusion layer.

(21) Appl. No.: **17/928,744**

(22) PCT Filed: **Jun. 9, 2021**

(86) PCT No.: **PCT/EP2021/065511**

§ 371 (c)(1),

(2) Date: **Nov. 30, 2022**

(30) **Foreign Application Priority Data**

Jun. 12, 2020 (DE) ..... 10 2020 115 623.5

