

Title (en)
REBALANCING CELL FOR REDOX FLOW BATTERY SYSTEM

Title (de)
AUSGLEICHSZELLE FÜR EIN REDOX-DURCHFLUSSBATTERIESYSTEM

Title (fr)
CELLULE DE RÉÉQUILIBRAGE POUR SYSTÈME DE BATTERIE À FLUX REDOX

Publication
EP 4348742 A1 20240410 (EN)

Application
EP 22843035 A 20220713

Priority

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Abstract (en)
[origin: WO2023288245A1] Systems and methods are provided for a rebalancing cell for a redox flow battery. In one example, the rebalancing cell may include a stack of electrode assemblies, wherein each electrode assembly may include a negative electrode interfacing with a flow field plate for inducing flow of H₂ gas from the redox flow battery. In some examples, each electrode assembly may further include a positive electrode formed from a wicking carbon felt for inducing flow of an electrolyte from the redox flow battery. In some examples, no electric current may be directed away from the rebalancing cell and the negative and positive electrodes of each electrode assembly may be continuously electrically conductive. In this way, each electrode assembly of the rebalancing cell may be internally shorted, thereby increasing reduction rates of the rebalancing cell without sacrificing overall reliability.

IPC 8 full level
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