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- as to the identity of the inventor (Rule 4.17(i))
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))
- of inventorship (Rule 4.17(iv))

(54) Title: NOVEL ELECTROCHEMICAL CELLS, STACKS, MODULES AND SYSTEMS

(57) Abstract: This present invention describes novel cells, stacks modules and systems that serve as i) liquid-phase electrochemical reformers (ECR) for capturing carbonaceous species in ionically conductive liquid electrolytes and producing hydrogen, ii) carbon capture and reuse (CCR) cells, that use hydrogen, and/or heat and/or electricity to decarbonize ionically conductive electrolyte evolving oxygen at one electrode and hydrocarbons or oxygenated hydrocarbons at the other, iii) fuel cells, iv) integrated ECR/ CCR stacks, modules and systems, and, v) integrated ECR/Fuel Cell/CCR modules and systems.

WO 2021/162800 A1