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Improved fluid mixing and power density in reverse electro dialysis stacks with chevron-profiled membranes

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Abstract

Spacer-less RED stacks using membranes with integrated spacer profiles have been investigated during the last years to eliminate the spacer shadow effect. The presence of spacers partially blocks the membrane surface and creates a tortuous and thus longer path for ions in the channel, meaning higher ohmic resistance. Consequently, power outputs are

¹ Both authors (S. Pawlowski & T. Rijnaarts) contributed equally to this work

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