

Title (en)
METHOD FOR GENERATING ELECTRICAL ENERGY USING MULTIPLE COMBINED RANKINE CYCLES

Title (de)
VERFAHREN ZUR ERZEUGUNG VON ELEKTRISCHER ENERGIE UNTER VERWENDUNG MEHRERER KOMBINierter RANKINE-ZYKLEN

Title (fr)
PROCÉDÉ DE PRODUCTION D'ÉNERGIE ÉLECTRIQUE UTILISANT PLUSIEURS CYCLES DE RANKINE COMBINÉS

Publication
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Application
EP 20754327 A 20200720

Priority

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Abstract (en)
[origin: WO2021019146A1] The invention relates to a method for generating electrical energy using at least a first Rankine cycle and a second Rankine cycle, the first Rankine cycle involving vaporizing at least a portion of a first working fluid (W1) against at least one first hot stream (C1), expanding the first working fluid (W1) in a first expansion member cooperating with an electrical generator so as to generate electrical energy, then condensing at least a portion of the first working fluid (W1) against at least one first cold stream (F1), then increasing the pressure of the first working fluid (W1) and closing the first cycle. The second Rankine cycle involves vaporizing at least a portion of a second working fluid (W2) against at least one second hot stream, expanding to a second low pressure Pb2 in a second expansion member cooperating with an electrical generator so as to generate electrical energy, then condensing at least a portion of the second working fluid (W2) against at least one second cold stream (F2), then increasing the pressure and closing the second cycle. According to the invention, the second hot stream of the second Rankine cycle is formed at least in part by the first working fluid (W1) condensed in the first Rankine cycle, and the first cold stream (F1) is formed by the second cold stream (F2) from the second Rankine cycle.

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