

Title (en)
METHOD FOR RECOVERING REFRIGERATING ENERGY WITH ELECTRICITY PRODUCTION OR LIQUEFYING OF A GASEOUS STREAM

Title (de)
VERFAHREN ZUR RÜCKGEWINNUNG VON KÄLTEENERGIE MIT STROMERZEUGUNG ODER VERFLÜSSIGUNG EINES GASSTROMES

Title (fr)
PROCÉDÉ DE RÉCUPÉRATION D'ÉNERGIE FRIGORIFIQUE AVEC PRODUCTION D'ÉLECTRICITÉ OU LIQUÉFACTION D'UN COURANT GAZEUX

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Application
EP 20754325 A 20200716

Priority
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Abstract (en)
[origin: WO2021019143A1] The invention relates to a method for recovering refrigerating energy from a cold stream (F), in a system comprising a storage tank (203), at least one electric generator (G) and at least one heat exchange device comprising a plurality of passages configured for the flow of fluids to be placed in a thermal exchange relationship, said method comprising, in a first operating mode, vaporising at least some of the first working fluid (W1) in at least one first passage against at least one first hot stream (C1), expanding the first working fluid (W1) originating from step a) of the first passage (1) in a first expansion component cooperating with a first electric generator so as to produce electric energy, condensing at least some of the first working fluid (W1) expanded against at least the first cold stream (F), increasing the pressure of the first working fluid (W1) and reintroducing the first working fluid (W1) in the first passage. According to the invention, a second operating mode comprises the following steps: introducing a supply stream (200), condensing at least some of said supply stream (200) against the cold stream (F) so as to produce an at least partially liquefied supply stream (201), and filling the storage tank (203) with the at least partially liquefied supply stream (201).

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