

Title (en)
METHODS AND APPARATUS FOR POWER GENERATION

Title (de)
VERFAHREN UND VORRICHTUNG ZUR ENERGIEERZEUGUNG

Title (fr)
PROCEDES ET APPAREIL DE PRODUCTION D'ENERGIE ELECTRIQUE

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Application
EP 05818424 A 20051223

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- NZ 54272205 A 20050928

Abstract (en)
[origin: WO2006066347A1] A refrigeration apparatus (7200) includes a heat pump circuit (7201) and a power generation circuit (7100). The power generation circuit (7100) includes an evaporator (701) including a first and a second heat exchanger (710a, 710b), a turbine (702), a condenser (703) and a pump (704). The first heat exchanger (710a) absorbs heat rejected from the heat pump circuit (7201) into a power generation circuit (7100) while the second heat exchanger (710b) further heats the fluid. The power generation circuit (7100) includes a bypass (707) which allows a portion of working liquid to enter the turbine (702) without passing through the evaporator (701). A heat pump (704) with similar bypass is also disclosed. Also disclosed are dual stage turbine design and a nozzle (10300) for a turbine which includes two fluid paths (1011, 1014) that adapted to receive and mix the liquid and vapour streams of working fluid, so that the liquid working fluid is vaporized by the heat from the vapour working fluid.

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