

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
8 June 2006 (08.06.2006)

PCT

(10) International Publication Number
WO 2006/060253 A1

(51) International Patent Classification:
F01K 25/08 (2006.01) **F01K 1/00** (2006.01)

(21) International Application Number:
PCT/US2005/042441

(22) International Filing Date:
22 November 2005 (22.11.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
11/000,112 30 November 2004 (30.11.2004) US

(71) Applicant (for all designated States except US): **CARRIER CORPORATION** [US/US]; Carrier Parkway, P.O. Box 4800, Syracuse, NY 13221 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **SUNDEL, Timothy, N.** [US/US]; 3 Drury Lane, West Hartford, CT 06117 (US).

(74) Agent: **GOETTEL, Frederick, G.**; Carrier Corporation, One Carrier Place, Farmington, CT 06034 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

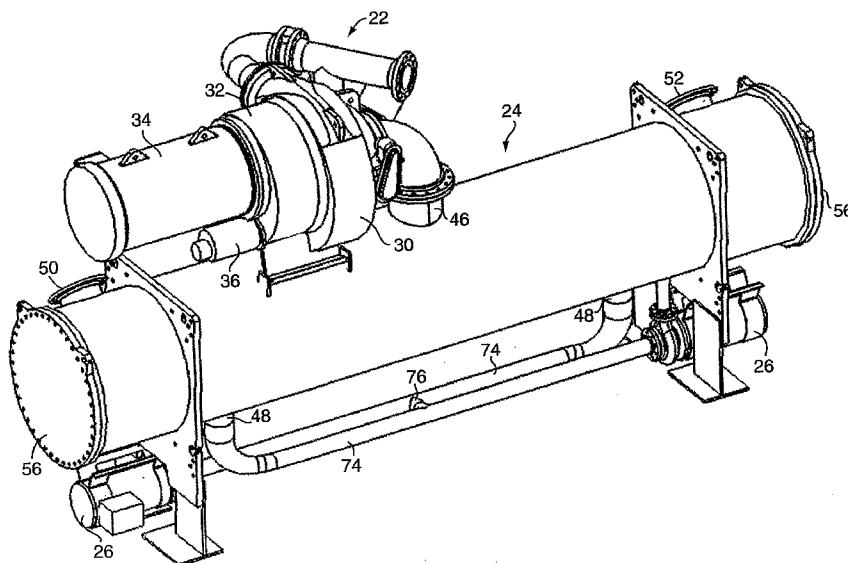
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD AND APPARATUS FOR POWER GENERATION USING WASTE HEAT



(57) Abstract: According to the present invention, a method and apparatus for generating power aboard a marine vessel is provided. The method comprises the steps of: (a) providing a Rankine Cycle device that includes at least one of each of an evaporator, a turbo-generator that includes a turbine coupled with an electrical generator, a condenser, and a refrigerant feed pump; (b) disposing the one or more evaporators within an exhaust duct of a power plant of the marine vessel; (c) operating the power plant; and (d) selectively pumping refrigerant through the Rankine Cycle device, wherein refrigerant exiting the evaporator powers the turbine, which in turn powers the generator to produce power.

WO 2006/060253 A1