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- (71) **Applicant** (for all designated States except US): **ENERGY RECOVERY SYSTEMS INC.** [CA/CA]; Unit 102 - 4381 Dawson Street, Burnaby, British Columbia V5C 4B4 (CA).
- (72) **Inventors; and**
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- (81) **Designated States** (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO,

DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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(54) **Title:** RETRO-FIT ENERGY EXCHANGE SYSTEM FOR TRANSPARENT INCORPORATION INTO A PLURALITY OF EXISTING ENERGY TRANSFER SYSTEMS

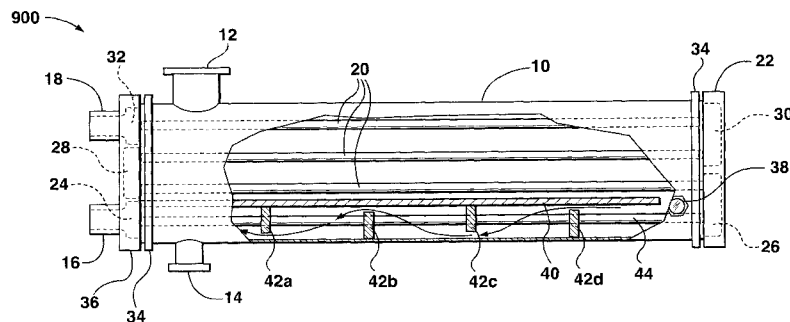


FIG. 11

(57) **Abstract:** A condenser with subcooling is provided. The condenser comprises apparatus for collecting liquid refrigerant and increasing a velocity of the liquid refrigerant as the liquid refrigerant interfaces with at least one wall of a first pass liquid medium compartment, thereby removing heat from the liquid refrigerant, subcooling the liquid refrigerant and heating a liquid medium.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/CA2011/000406

A. CLASSIFICATION OF SUBJECT MATTER IPC: F25B 40/02 (2006.01) , F25B 39/04 (2006.01) According to International Patent Classification (IPC) or to both national classification and IPC																							
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC (2006.01) : F25B 40/02, F25B 39/04, F25B 40, F25B 39, F25B 29/00 ECLA: F25B 29/00B Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic database(s) consulted during the international search (name of database(s) and, where practicable, search terms used) EPOQUE (Epodoc), Canadian Patents Database Keywords (shell, tube, condenser, exchange+, potable, drink+, window, level, double, wall, retro+)																							
C. DOCUMENTS CONSIDERED TO BE RELEVANT <table border="1"> <thead> <tr> <th>Category*</th> <th>Citation of document, with indication, where appropriate, of the relevant passages</th> <th>Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td>X</td> <td>JP2011058649 A (KAWAI, K. et al.) 24 March 2011 (24-03-2011) *Whole document*</td> <td>1-6, 8, 11, 13, 14</td> </tr> <tr> <td>Y</td> <td></td> <td>7, 9, 10, 12, 15, 16, 17</td> </tr> <tr> <td>X</td> <td>JP8233408 A (NAKADA, H. et al.) 13 September 1996 (13-09-1996) *Whole document*</td> <td>1-6, 8, 11, 13, 14</td> </tr> <tr> <td>Y</td> <td></td> <td>7, 9, 10, 12, 15, 16, 17</td> </tr> <tr> <td>Y</td> <td>US4265094 A (HAASIS, J.) 05 May 1981 (05-05-1981) * abstract*</td> <td>7, 15</td> </tr> <tr> <td>Y</td> <td>US5622057 A (BUSSJAGER, R. et al.) 22 April 1997 (22-04-1997) * Col.3, Lns.5-16; *</td> <td>9, 10, 12, 16, 17</td> </tr> </tbody> </table>			Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	X	JP2011058649 A (KAWAI, K. et al.) 24 March 2011 (24-03-2011) *Whole document*	1-6, 8, 11, 13, 14	Y		7, 9, 10, 12, 15, 16, 17	X	JP8233408 A (NAKADA, H. et al.) 13 September 1996 (13-09-1996) *Whole document*	1-6, 8, 11, 13, 14	Y		7, 9, 10, 12, 15, 16, 17	Y	US4265094 A (HAASIS, J.) 05 May 1981 (05-05-1981) * abstract*	7, 15	Y	US5622057 A (BUSSJAGER, R. et al.) 22 April 1997 (22-04-1997) * Col.3, Lns.5-16; *	9, 10, 12, 16, 17
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Name and mailing address of the ISA/CA Canadian Intellectual Property Office Place du Portage I, C114 - 1st Floor, Box PCT 50 Victoria Street Gatineau, Quebec K1A 0C9 Facsimile No.: 001-819-953-2476		Authorized officer Jarret Diggins (819) 953-1611																					

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
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Patent document Cited in Search report	Publication Date	Patent Family Member(s)	Publication Date
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