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- (71) Applicant (for all designated States except US): **ALENCON ACQUISITION CO., LLC.** [US/US]; 5150 Campus Drive, Plymouth Meeting, Pennsylvania 19462 (US).

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- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **FISHMAN, Oleg, S.** [US/US]; 1 Saljon Court, Maple Glen, Pennsylvania 19002 (US). **SCHWABE, Ulrich, K.W.** [US/US]; 50 Meadow Lane, Norristown, Pennsylvania 19403 (US).
- (74) Agent: **POST, Philip, O.**; INDEL, INC., 10 Indel Avenue, P.O. Box 157, Rancocas, NJ 08073 (US).
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(54) Title: HIGH VOLTAGE ENERGY HARVESTING AND CONVERSION RENEWABLE ENERGY UTILITY SIZE ELECTRIC POWER SYSTEMS AND VISUAL MONITORING AND CONTROL SYSTEMS FOR SAID SYSTEMS

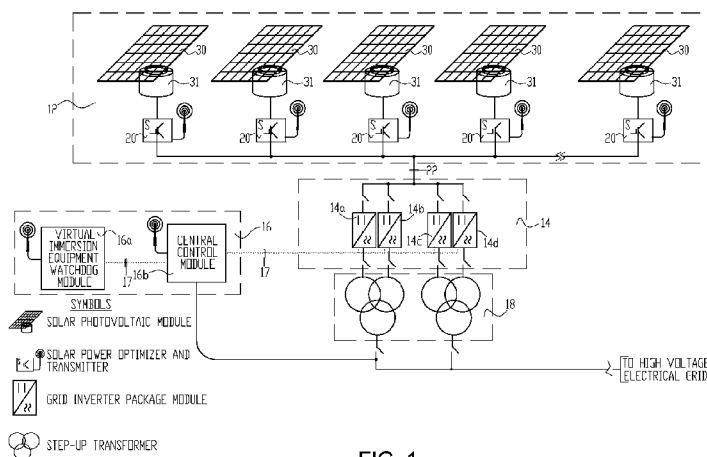


FIG. 1

(57) Abstract: A renewable energy, utility size electric power system is provided with a high voltage, renewable energy harvesting network connected by a direct current link to a centralized grid synchronized multiphase regulated current source inverter system. The harvesting network includes distributed renewable energy power optimizers and transmitters that control delivery of renewable energy to the grid synchronized multiphase regulated current source inverter system. A visual immersion monitoring and control system can be provided for a three dimensional, visually-oriented, virtual reality display, command and control environment.

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A. CLASSIFICATION OF SUBJECT MATTER**H02J 3/38(2006.01)i, H02J 7/35(2006.01)i, F03D 7/04(2006.01)i**

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)

H02J 3/38; H02M 3/335; H02J 1/00; H02M 7/537; H02M 7/42; H02J 3/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: renewable energy, photovoltaic, MPPT

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y A	US 2010-0133911 A1 (WILLIAMS BERTRAND JEFFERY et al.) 03 June 2010 See paragraph 0017, claim 2 and figures 4,5.	1,2,4,6-9,11,12 ,14-17 3,5,10,13
Y A	US 2007-0217239 A1 (DIETER ROTTGER et al.) 20 September 2007 See paragraphs [0028]-[0032], claims 1,14 and figure 1.	1,2,4,6-9,11,12 ,14-17 3,5,10,13
A	US 2010-0156188 A1 (FISHMAN OLEG S.) 24 June 2010 See abstract, claims 1-21 and figures 1-16.	1-17
A	US 7672149 B2 (FALK ANDREAS) 02 March 2010 See abstract, claims 1-23 and figures 1-8.	1-17

 Further documents are listed in the continuation of Box C. See patent family annex.

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Korean Intellectual Property Office
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Authorized officer

Kwak In Gu

Telephone No. 82-42-481-8537



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Information on patent family members

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