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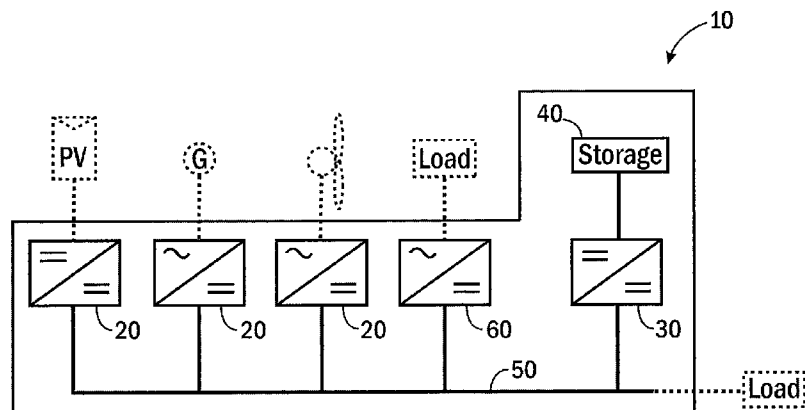
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(54) Title: METHOD AND APPARATUS FOR CONTROLLING A HYBRID POWER SYSTEM



**Fig. 1**

(57) Abstract: The present invention provides a simplified method of controlling power among the various sources and loads in a power system. Power generating sources are each connected to a common DC bus through a converter. The converter selectively transfers energy to the DC bus at a maximum rate or at a reduced rate according to the level of the DC voltage present on the DC bus. At least one storage device is preferably connected to the common DC bus through a power regulator. The power regulator selectively transfers energy to or from the DC bus as a function of DC voltage level present on the DC bus. Further, an inverter may be provided to bidirectionally convert between the DC voltage and an AC voltage for connection to a customer load or the utility grid. Each power conversion device is independently controlled to provide a modular and simplified power control system.

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**A. CLASSIFICATION OF SUBJECT MATTER*****H02J 3/36(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 3/36; H02J 1/00; H02J 3/32; G05F 1/569; H02J 1/12; H01M 8/00; H02J 9/00

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) &amp; Keywords: hybrid, photovoltaic, energy storage, DC bus, energy transfer

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2010-0181837 A1 (SEEKER STEVEN et al.) 22 July 2010 See abstract, paragraphs [0033]-[0044], claims 1-17, and figures 1-9.	1-20
Y	JP 2003-339118 A (MY WAY GIKEN KK) 28 November 2003 See abstract, paragraphs [0031]-[0033],[0046]-[0047] and figures 1,8,17.	1-20
A	WO 2009-149518 A1 (CERAMIC FUEL CELLS LIMITED et al.) 17 December 2009 See abstract, page 13 - page 20, claims 1,2,12,14, and figures 1,2,5,6,8.	1-20
A	US 2010-0219688 A1 (SHYU SHIAN-SHING et al.) 02 September 2010 See abstract, paragraphs [0015]-[0026], claims 1-7, and figures 1,2.	1-20

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

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"&amp;" document member of the same patent family

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**INTERNATIONAL SEARCH REPORT**

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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