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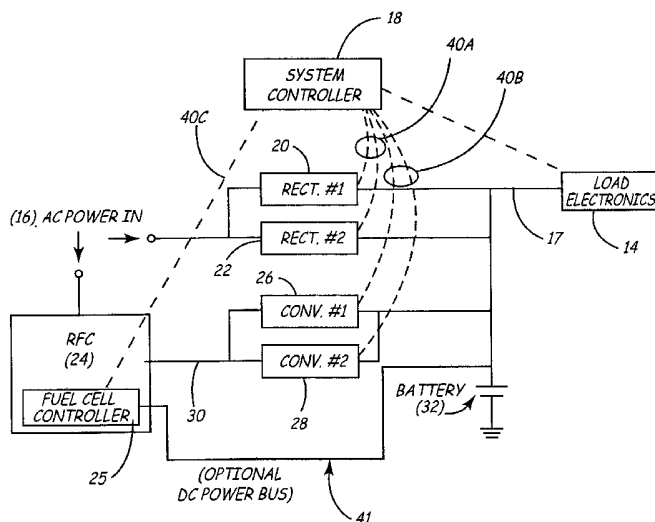
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(54) Title: SYSTEM FOR PROVIDING BACKUP POWER FROM A REGENERATIVE FUEL CELL OR BATTERY ARRANGEMENT



(57) Abstract: A regulated DC power supply facilitates extended and uninterrupted power to a load (14) by using a secondary power source such as a regenerative fuel cell (24) that has its DC power output (30) conditioned by a power converter (26, 28). The DC power supply includes a rectifier (20, 22) that converts AC power (16) from an AC power source to DC power for a load (14) coupled to a DC bus (17). A fuel cell (24) arrangement is electrically coupled to a power converter (26, 28) that is coupled in turn to the DC bus (17), the converter conditions an unconditioned DC power output of the fuel cell (24) to the load (14). A system controller (18) is communicatively coupled to the rectifier (20, 22), the converter (26, 28) and to a fuel cell controller (25), the fuel cell controller (25) initiating DC power output from the fuel cell arrangement (24) upon detecting the AC power outage or disengaging the fuel cell upon resumption of AC power.



— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

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## A. CLASSIFICATION OF SUBJECT MATTER

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US CL : 429/22, 23

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)

U.S. : 429/22, 23

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

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

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6,304,006 B1 (JUNGREIS) 16 October 2001 (16.10.2001), see entire document.	1-26
A	US 6,188,139 B1 (THAXTON et al) 13 February 2001 (13.02.2001), see entire document.	1-26
A	US 6,104,162 A (SAINSBURY et al) 15 August 2000 (15.10.2000), see entire document.	1-26
A	US 5,225,712 A (ERDMAN) 06 July 1993 (06.07.1993), see entire document.	1-26

☐ Further documents are listed in the continuation of Box C:

☐ See patent family annex.

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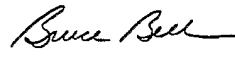
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