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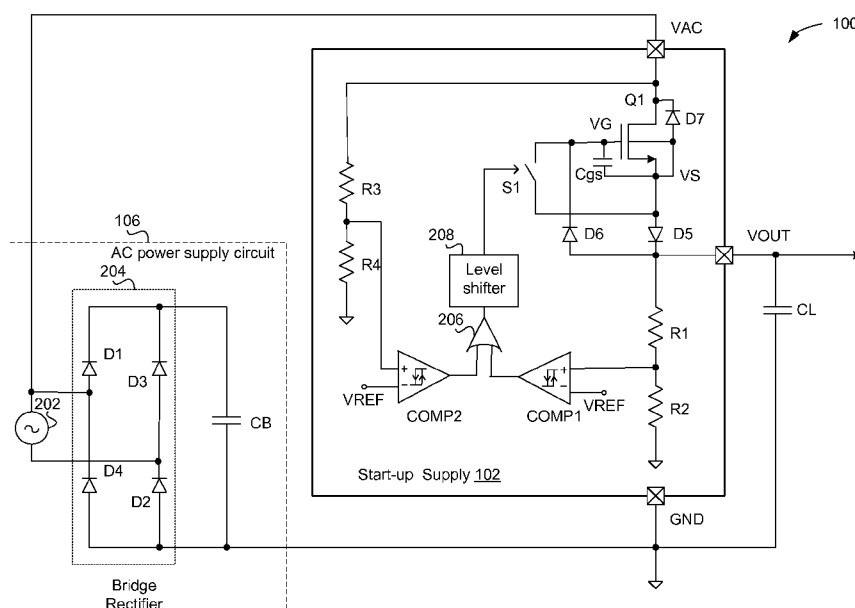


Fig. 2

(57) Abstract: In one embodiment, an apparatus includes a transistor having a gate, a drain, and a source. The drain is coupled to receive an AC power supply signal. A component is coupled between an output node and the gate of the transistor. The component couples an output voltage from the output node to charge a gate-source capacitor during a first portion of the AC power supply signal. The transistor is configured to turn on during a second portion of the AC power supply signal to send a charge to the output node where the charge is used to power a circuit of a power supply.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB 10/03465

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - H02M 1/00 (2011.01)

USPC - 363/49

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)

USPC: 363/49

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
IPC: H02M 1/00 (2011.01), USPC: 323/205-209; 363/13, 34, 37, 49, 74, 123, 178 (keyword limited; terms below)

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

PubWEST (USPT, PGPB, EPAB, JPAB); Google Scholar; Google Patents

Keywords: transistor; gate; source; drain; gate-source capacitor; diode; switches; resistor; power factor correction; external capacitor

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,359,281 A (BARROW et al.) 25 October 1994 (25.10.1994), entire document, especially; col. 1, ln 1-24; col. 2, ln 47-68; col. 3, ln 38-61, 67 - col. 4, ln 16, 29-31, 35-47, 63 - col. 5, ln 26; col. 6, ln 14-54, 62-63	1 - 20
Y	US 4,859,921 A (ARCHER) 22 August 1989 (22.08.1989), entire document, especially; col. 13, ln 38-45; col. 15, ln 41-45 ---	1 - 20
Y	US 5,546,043 A (POLLMEIER) 13 August 1996 (13.08.1996), entire document especially Fig 2; col 7, lns 15-23	1-20
A	US 2006/0062026 A1 (WITTENBREDE) 23 March 2006 (23.03.2006), entire document especially Fig 6	1-20
A	US 2006/0034109 A1 (BENABDELAZIZ et al.) 16 February 2006 (16.02.2006), entire document	1 - 20
A	US 2003/0057871 A1 (KOMINAMI et al.) 27 March 2003 (27.03.2003), entire document	1 - 20
A	US 2007/0274104 A1 (FURUKOSHI et al.) 29 November 2007 (29.11.2007), entire document	1 - 20
A	US 5,559,395 A (VENKITASUBRAHMANIAN et al.) 24 Septemebr 1996 (24.09.1996), entire document	1-20
A	US 2009/0230870 A1 (QUAZI) 17 September 2009 (17.09.2009), entire document especially Fig 7	1-20

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


* Special categories of cited documents:

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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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"&" document member of the same patent family

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