



US 20090121675A1

(19) **United States**

(12) **Patent Application Publication**  
HO et al.

(10) **Pub. No.: US 2009/0121675 A1**

(43) **Pub. Date: May 14, 2009**

(54) **ELECTRONIC CONTROL METHOD FOR A PLANAR INDUCTIVE BATTERY CHARGING APPARATUS**

**Publication Classification**

(51) **Int. Cl.**  
*H02J 7/02* (2006.01)

(75) **Inventors:** **Wing Choi HO**, Hong Kong (HK);  
**Chi Kwan LEE**, Hong Kong (HK);  
**Ron Shu Yuen HUI**, Hong Kong (HK);  
**Shu Hung CHUNG**, Hong Kong (HK)

(52) **U.S. Cl.** ..... 320/108

(57) **ABSTRACT**

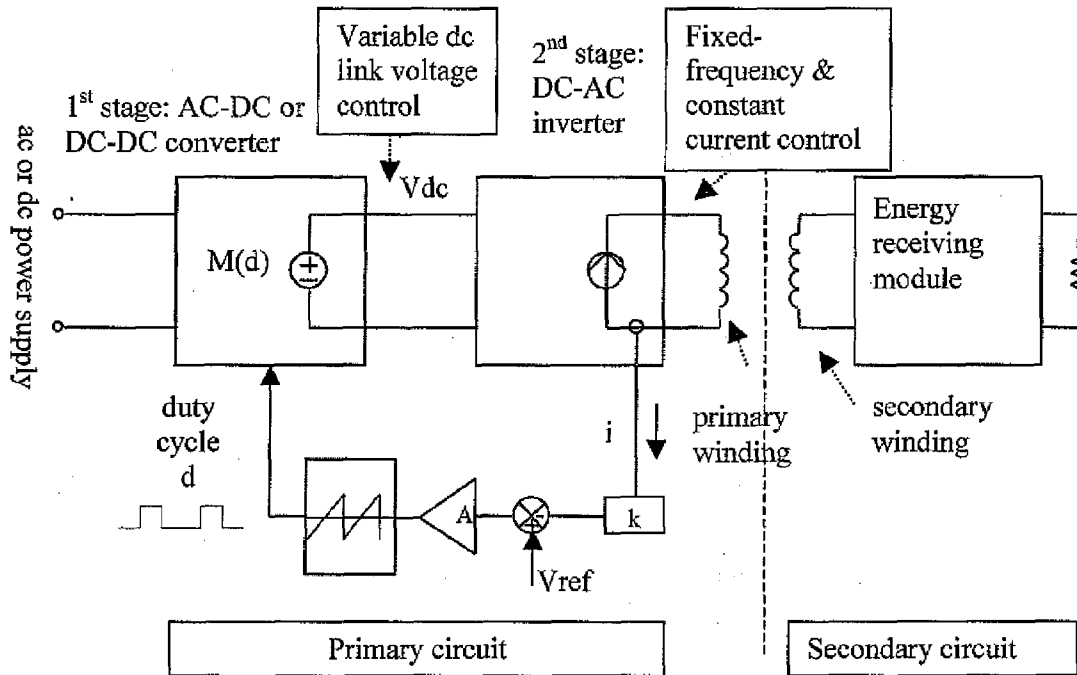
This invention provides an electronic control method for a planar inductive battery charging apparatus on which one or more electronic loads such as mobile phones, MP3 players etc can be placed and charged simultaneously. The power control circuit of the charging pad consists of two power conversion stages. Depending on the nature of the input power supply, the first power stage is an AC-DC power converter with variable output voltage control and a second stage is a DC-AC power inverter with constant current control. The combination of the two stages provides power control of the charging pad and generates AC magnetic flux of ideally constant magnitude over the charging areas within a group of primary windings that are excited.

Correspondence Address:  
**HESLIN ROTHENBERG FARLEY & MESITI PC**  
**5 COLUMBIA CIRCLE**  
**ALBANY, NY 12203 (US)**

(73) **Assignee:** **CITY UNIVERSITY OF HONG KONG**, Hong Kong (HK)

(21) **Appl. No.:** **11/938,042**

(22) **Filed:** **Nov. 9, 2007**



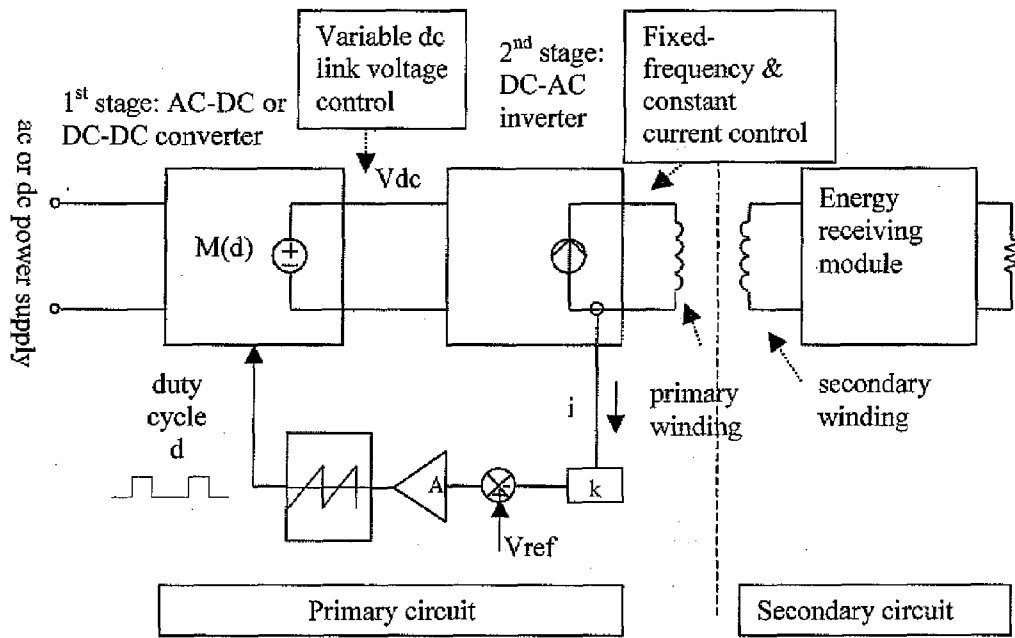


FIG.1

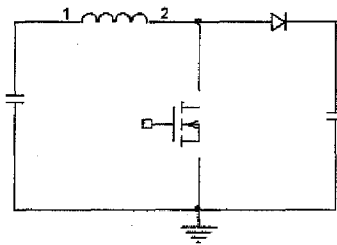


FIG.2

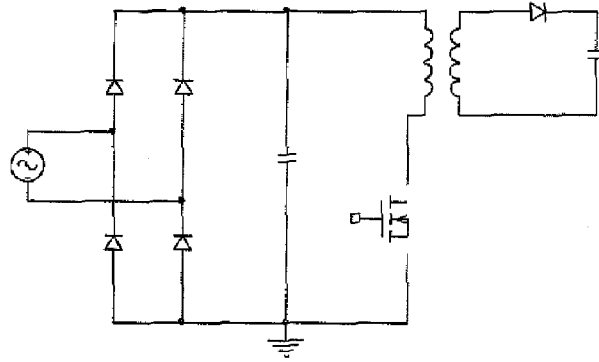


FIG.3

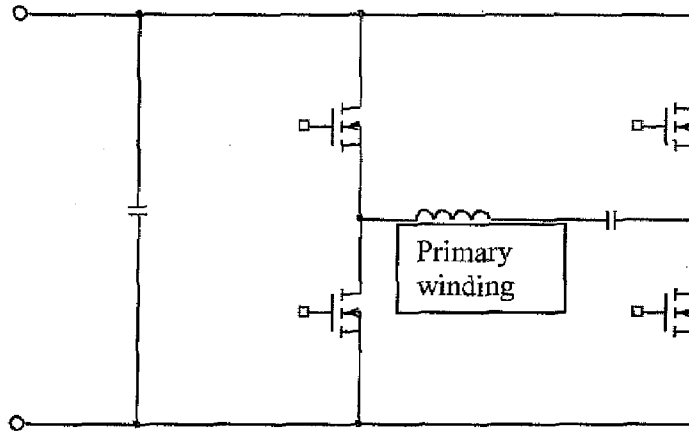


FIG.4

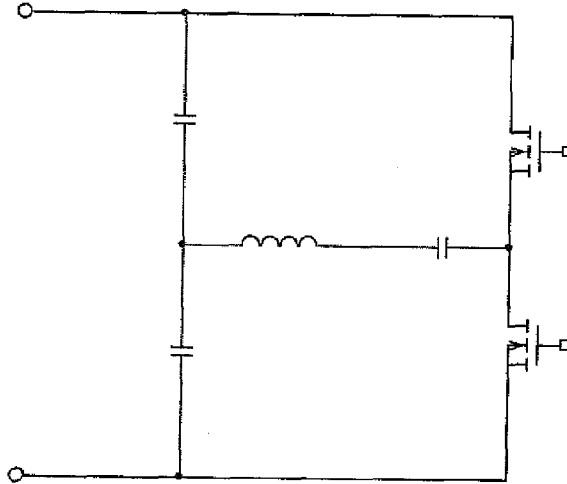


FIG.5

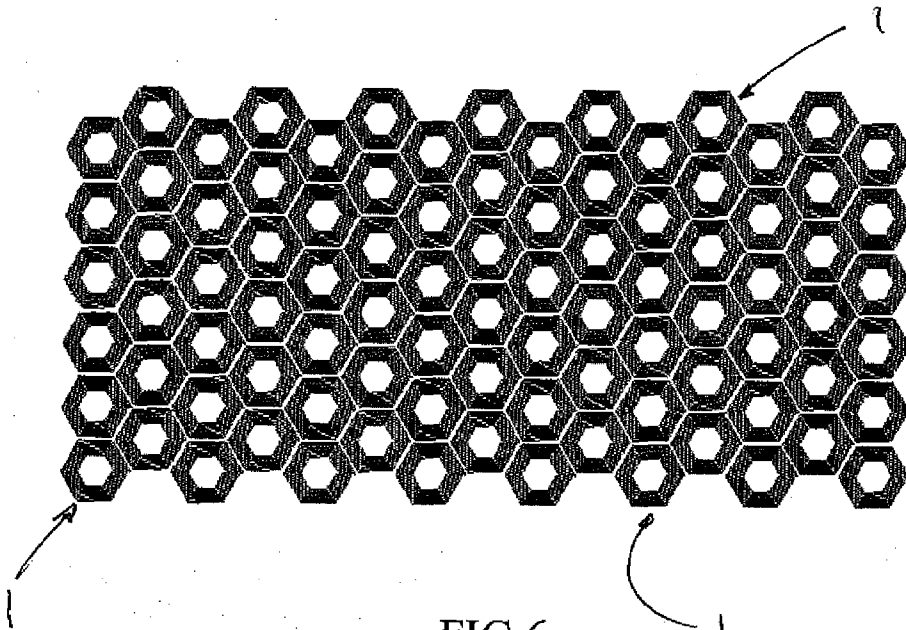


FIG.6

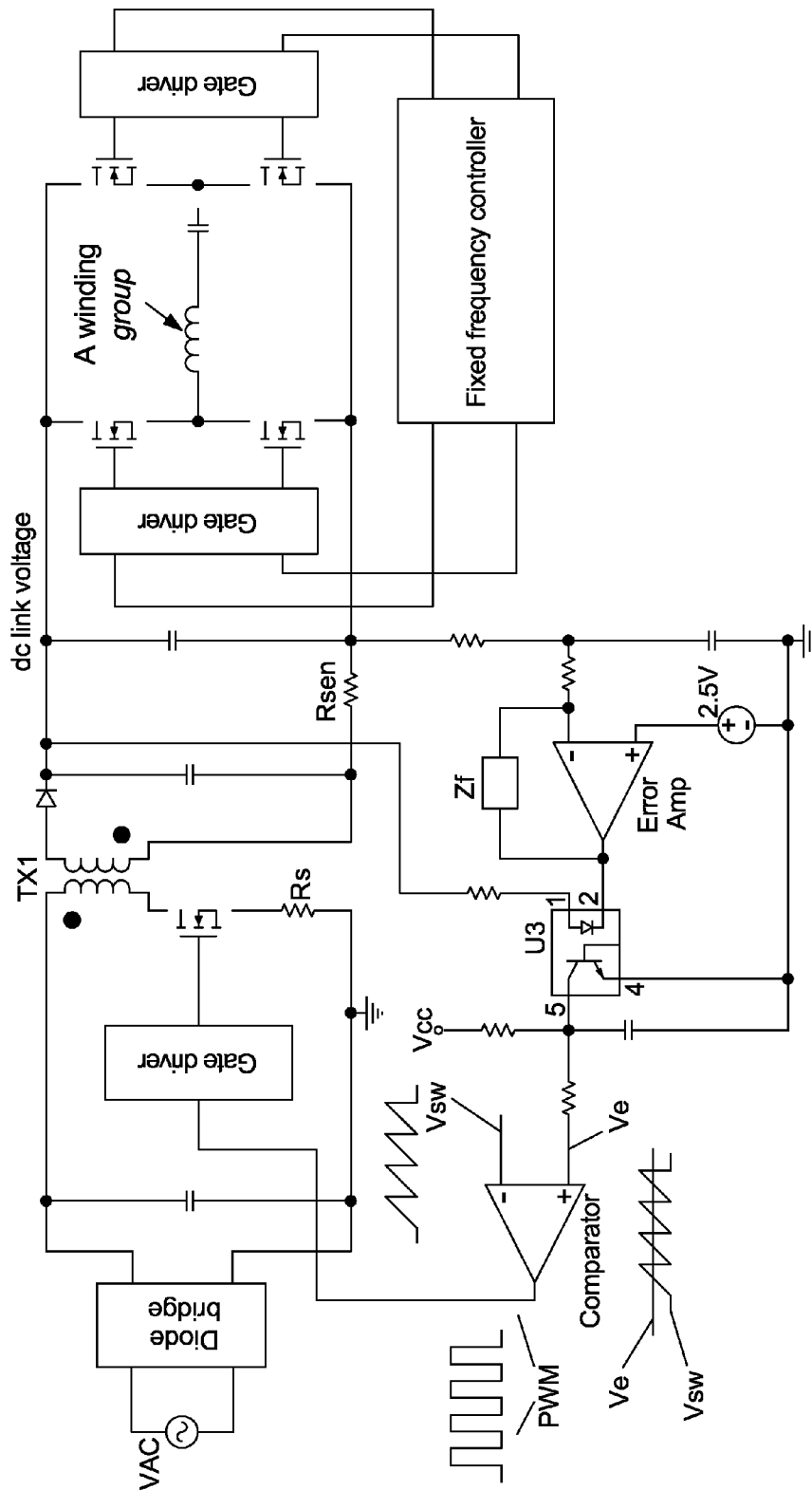


FIG. 7

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