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(54) **Title:** ACTIVE SNUBBER FOR TRANSITION MODE POWER CONVERTER

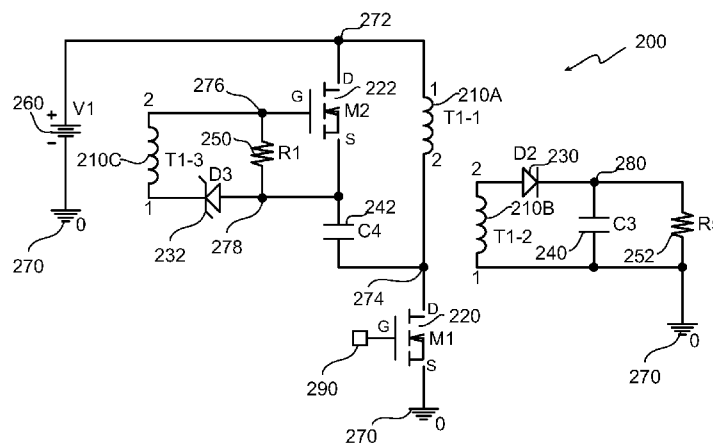


FIG. 2

(57) **Abstract:** A transition mode power converter having an active snubber the operation of which is controlled using an auxiliary winding on the transformer of the power converter. In one embodiment, the power converter includes a transformer having a primary winding connected to a voltage source, a primary switch, an auxiliary switch, a capacitor, and an auxiliary winding on the transformer. The primary switch includes a first terminal connected to the primary winding of the transformer and a second terminal connected to a common node. The auxiliary switch includes a first terminal connected to the voltage source and to the primary winding. The capacitor is connected between a second terminal of the auxiliary switch and the first terminal of the primary switch. The auxiliary winding of the transformer is connected to a third terminal of the auxiliary switch and controls operation of the auxiliary switch via the third terminal.

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A. CLASSIFICATION OF SUBJECT MATTER***H02M 1/34(2007.01)i, H02M 3/28(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)

IPC8 H02M, H02H

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 since 1975

Japanese Utility models and applications for Utility models since 1975

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

PAJ, FPD, USPAT, eKIPASS "Keyword: converter, transformer, auxiliary winding, clamp, high power, boost"

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,314,002 B1 (JINRONG QIAN et al.) 06 November 2001 See the abstract; claim 1; figure 4.	1-2, 5-7, 10-12, 15-17, 20-24, 27, 29-31
A		3-4, 8-9, 13-14, 18-19, 25-26, 28
X	US 6,473,318 B1 (JINRONG QIAN et al.) 29 October 2002 See the abstract; claim 1; figure 6.	1-2, 5-7, 10-12, 15-17, 20-24, 27, 29-31
A		3-4, 8-9, 13-14, 18-19, 25-26, 28
A	US 5,883,795 A (RICHARD W. FARRINGTON) 16 March 1999 See the abstract; claim 1; figure 2.	1-31
A	US 6,421,255 B1 (FABRICE FREBEL et al.) 16 July 2002 See the abstract; claim 1; figure 1.	1-31
A	US 7,012,817 B2 (YA LIU et al.) 14 March 2006 See the abstract; claim 1; figure 3.	1-31

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

* Special categories of cited documents:

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