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- (74) **Agents:** PETERS, Carl-Heinrich et al.; NXP Semiconductors Germany GmbH, Intellectual Property Department, Stresemannallee 101, 22529 Hamburg (DE).
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CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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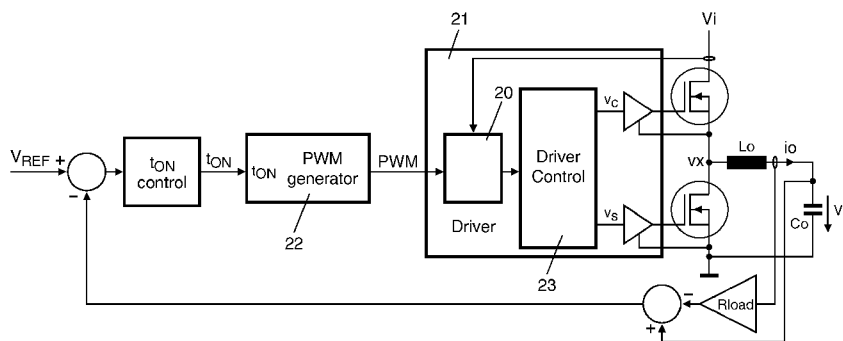


FIG. 10

(57) **Abstract:** The invention relates to an electronic power switching device including at least one control field effect transistor (control FET) characterised in that a switching node resonant oscillation between a half-bridge path parasitic inductances and an output capacitance of a further FET is exploited during the control FET turn-off.

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# INTERNATIONAL SEARCH REPORT

International application No  
PCT/IB2008/053447

**A. CLASSIFICATION OF SUBJECT MATTER**  
INV. H02M3/158 H02M1/08

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)  
H02M

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 practical, search terms used)

EPO-Internal, WPI Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	US 6 341 073 B1 (LEE NAI-CHI [US]) 22 January 2002 (2002-01-22) column 1, line 7 - line 67; figures 1,3,4,7 column 3, lines 4-7,36 - line 41; figure 7C column 4, line 8 - line 30 column 8, line 37 - line 45  -----  -/--	1-4,6, 8-16 5,7

Further documents are listed in the continuation of Box C.

See patent family annex.

\* Special categories of cited documents:

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- \*E\* earlier document but published on or after the international filing date
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Name and mailing address of the ISA/

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## INTERNATIONAL SEARCH REPORT

International application No

PCT/IB2008/053447

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>TONI LOPEZ; REINHOLD ELFERICH:  "Quantification of Power MOSFET Losses in  a Synchronous Buck Converter"  APPLIED POWER ELECTRONICS CONFERENCE, APEC  2007, [Online]  1 February 2007 (2007-02-01), pages  1594-1600, XP002540733  ISBN: 978-1-4244-0713-2  Retrieved from the Internet:  URL: <a href="http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&amp;arnumber=4195933&amp;isnumber=4195691">http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&amp;arnumber=4195933&amp;isnumber=4195691</a>  &gt; [retrieved on 2009-08-07]  page 1594; figures 1,2</p>	5,7
A	<p>BARSELL D ET AL: "High accuracy  simulation for high current multi-phase  DC-DC power converters"  INTELEC 2002. 24TH. INTERNATIONAL  TELECOMMUNICATIONS ENERGY CONFERENCE.  MONTREAL, QUEBEC, CANADA, SEPT. 29 - OCT.  3, 2002; [INTELEC. INTERNATIONAL  TELECOMMUNICATIONS ENERGY CONFERENCE], NEW  YORK, NY : IEEE, US,  vol. CONF. 24,  29 September 2002 (2002-09-29), pages  504-509, XP010614669  ISBN: 978-0-7803-7512-3  page 506</p>	1
A	<p>US 6 356 059 B1 (YU HO-YUAN [US])  12 March 2002 (2002-03-12)  cited in the application</p>	1
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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

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