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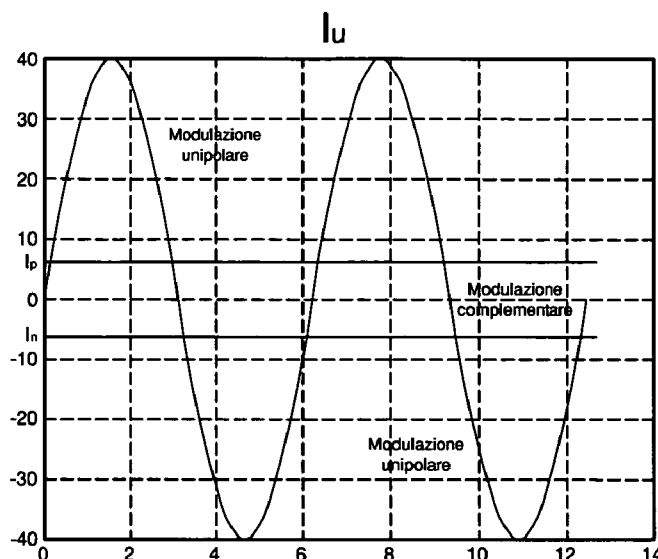
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[Continued on next page]

(54) Title: DEVICE AND METHOD FOR CONVERTING DIRECT CURRENT INTO ALTERNATE CURRENT

Fig. 7



(57) Abstract: The device for converting direct current into alternate current comprises a multilevel converter associated with at least a source of direct current and a modulation unit having piloting means for piloting the converter for the conversion of the direct current into an alternate output current, in which the modulation unit comprises comparison means for comparing the output current value with a preset positive threshold value and a preset negative threshold value, the piloting means being suitable for piloting the converter with a pulse modulation of the unipolar type in the event of the output current value being above the positive threshold value or below the negative threshold value and with a pulse modulation of the complementary type in the event of the output current value being below the positive threshold value and above the negative threshold value. The method for converting direct current into alternate current comprises a piloting phase of a multilevel converter for the conversion of a direct voltage into an alternate output voltage, a comparison phase of the output current value with a preset positive threshold value and a preset negative threshold value, the piloting phase being suitable for piloting the converter with a pulse modulation of the unipolar type in the event of the output current value being above the positive threshold value or below the negative threshold value and with a pulse modulation of the complementary type in the event of the output current value being below the positive threshold value and above the negative threshold value.

...tive threshold value, the piloting phase being suitable for piloting the converter with a pulse modulation of the unipolar type in the event of the output current value being above the positive threshold value or below the negative threshold value and with a pulse modulation of the complementary type in the event of the output current value being below the positive threshold value and above the negative threshold value.

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**A. CLASSIFICATION OF SUBJECT MATTER**  
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**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)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>VELAERTS B ET AL: "NEW DEVELOPMENTS OF 3-LEVEL PWM STRATEGIES" PROCEEDINGS OF THE EUROPEAN CONFERENCE ON POWER ELECTRONICS AND APPLICATIONS. (EPE). AACHEN, 9 - 12 OCTOBER, 1989, DUSSELDORF, EPE SECRETARIAT, DE, vol. 1, 9 October 1989 (1989-10-09), pages 411-416, XP000143426 the whole document</p> <p align="center">----- -/--</p>	1-30

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

\* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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Date of the actual completion of the international search  <b>29 October 2010</b>	Date of mailing of the international search report  <b>16/11/2010</b>
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Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer  <b>Hanisch, Thomas</b>
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## INTERNATIONAL SEARCH REPORT

International application No

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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