



## SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:  
EP 20 95 27 06

Classification of the application (IPC):  
H02M 7/487, H02M 1/00, H02M 1/32

Technical fields searched (IPC):  
H02M

DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
X	CN 103401455 A (SHANXI LU AN ENVIRONMENTAL ENERGY DEV CO LTD; INST ELECTRICAL ENG CAS) 20 November 2013 (2013-11-20) * paragraph [0018] - paragraph [0051] * * paragraph [0096] - paragraph [0097] * * figures 1-4 *	1-4, 11-13
X	CN 110932580 A (SUNGROW POWER SUPPLY CO LTD) 27 March 2020 (2020-03-27) * figures 1,8 *	1-15
A	<b>GUI HANDONG ET AL:</b> "A Simple Control to Reduce Device Over-Voltage Caused by Non-Active Switch Loop in Three-Level ANPC Converters" 2019 <i>IEEE APPLIED POWER ELECTRONICS CONFERENCE AND EXPOSITION (APEC), IEEE</i> , 17 March 2019 (2019-03-17), DOI: 10.1109/APEC.2019.8722213, pages 1337-1343, XP033555241 * page 1388 - page 1340 *	1-15

The supplementary search report has been based on the last set of claims valid and available at the start of the search.

Place of search Munich	Date of completion of the search 05 September 2023	Examiner Lochhead, Steven
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### CATEGORY OF CITED DOCUMENTS

X: particularly relevant if taken alone	P: intermediate document
Y: particularly relevant if combined with another document of the same category	T: theory or principle underlying the invention
A: technological background	E: earlier patent document, but published on, or after the filing date
O: non-written disclosure	D: document cited in the application
& : member of the same patent family, corresponding document	L: document cited for other reasons

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## ANNEX TO SUPPLEMENTARY EUROPEAN SEARCH REPORT

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on 05-09-2023  
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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
CN 103401455	A	20-11-2013	NONE	
CN 110932580	A	27-03-2020	NONE	