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- (71) **Applicants (for all designated States except US):** **SAMSUNG ELECTRONICS CO., LTD.** [KR/KR]; 416, Maetan-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do 443-742 (KR). **SUNGKYUNKWAN UNIVERSITY Foundation for Corporate Collaboration** [KR/KR]; 300 Cheoncheon-dong, Jangan-gu, Suwon-si, Gyeonggi-do, 440-746 (KR).
- (72) **Inventors:** **CHOI, Jin Sung**; c/o Samsung Advanced Institute of Technology, Mt. 14-1, Nongseo-dong, Giheung-gu, Yongin-si, Gyeonggi-do 449-712 (KR). **HONG, Young Tack**; c/o Samsung Advanced Institute of Technology, Mt. 14-1, Nongseo-dong, Giheung-gu, Yongin-si, Gyeonggi-do 449-712 (KR). **KWON, Sang Wook**; c/o Samsung Advanced Institute of Technology, Mt. 14-1, Nongseo-dong,

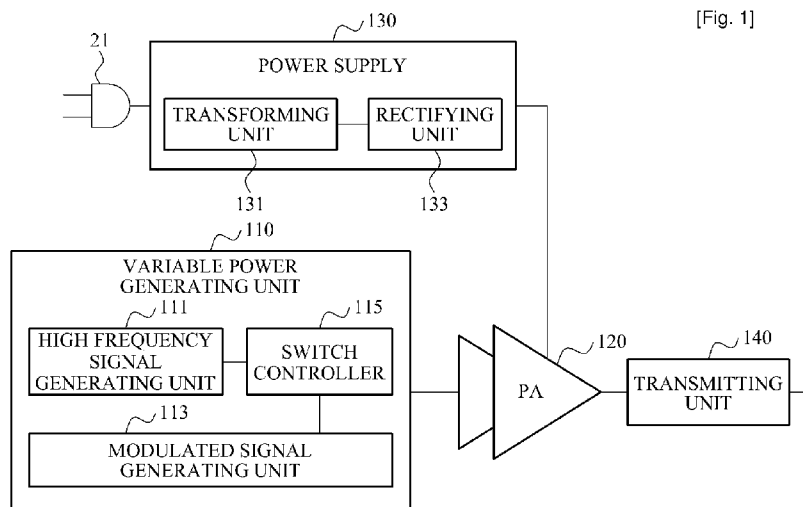
Giheung-gu, Yongin-si, Gyeonggi-do 449-712 (KR). **PARK, Yun Kwon**; c/o Samsung Advanced Institute of Technology, Mt. 14-1, Nongseo-dong, Giheung-gu, Yongin-si, Gyeonggi-do 449-712 (KR). **YANG, Young Goo**; Natural Sciences Campus, Sungkyunkwan Univ., 300 Cheoncheon-dong, Jangan-gu, Suwon-si, Gyeonggi-do, 440-746 (KR). **PARK, Eun Seok**; c/o Samsung Advanced Institute of Technology, Mt. 14-1, Nongseo-dong, Giheung-gu, Yongin-si, Gyeonggi-do 449-712 (KR). **KIM, Ki Young**; c/o Samsung Advanced Institute of Technology, Mt. 14-1, Nongseo-dong, Giheung-gu, Yongin-si, Gyeonggi-do 449-712 (KR). **RYU, Young Ho**; c/o Samsung Advanced Institute of Technology, Mt. 14-1, Nongseo-dong, Giheung-gu, Yongin-si, Gyeonggi-do 449-712 (KR). **KIM, Nam Yun**; c/o Samsung Advanced Institute of Technology, Mt. 14-1, Nongseo-dong, Giheung-gu, Yongin-si, Gyeonggi-do 449-712 (KR). **KIM, Dong Zo**; c/o Samsung Advanced Institute of Technology, Mt. 14-1, Nongseo-dong, Giheung-gu, Yongin-si, Gyeonggi-do 449-712 (KR).

(74) **Agent:** **MUHANN PATENT & LAW FIRM**; 2, 5, 6th Floor, Myeonglim Building, 51-8 Nonhyeon-dong, Gangnam-gu, Seoul 135-814 (KR).

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[Continued on next page]

(54) **Title:** APPARATUS AND METHOD FOR HIGH EFFICIENCY VARIABLE POWER TRANSMISSION



[Fig. 1]

(57) **Abstract:** A high efficiency variable power transmitting apparatus outputs a variable power by modulating, with respect to a time axis, a high frequency signal having a constant amplitude by turning the high frequency signal ON and OFF, amplifying the variable power to satisfy a requested power level of a target device based on a supply voltage having a predetermined level, converting an alternating current (AC) voltage received from a power source to a direct current (DC) voltage, generating the supply voltage having the predetermined level based on the DC voltage, and providing the supply voltage having the predetermined level to the PA.



MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR2012/001126**A. CLASSIFICATION OF SUBJECT MATTER*****H02J 17/00(2006.01)i, H02J 7/02(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)

H02J 17/00; H04B 7/00; H05B 37/00; H03G 3/10; H03F 3/68; H04B 1/16

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

Japanese utility models and applications for utility models

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

eKOMPASS(KIPO internal) & Keywords: variable power, amplifier, convert, AC, DC, high frequency

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 7768353 B2 (CHANG JAEJOON et al.) 03 August 2010 See the abstract; claim 1; figures 1-2.	1-31
A	US 7064606 B2 (LOUIS; EDWARD VINCENT) 20 June 2006 See the abstract; claim 1; figure 8.	1-31
A	US 5722057 A (WU; YOU-SUN) 24 February 1998 See the abstract; claim 1; figure 1.	1-31
A	US 4717863 A (ZEILER; KENNETH T.) 05 January 1988 See the abstract; claim 1; figure 1.	1-31

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

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"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

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Korean Intellectual Property Office
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Authorized officer

WEE Jae Woo

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

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