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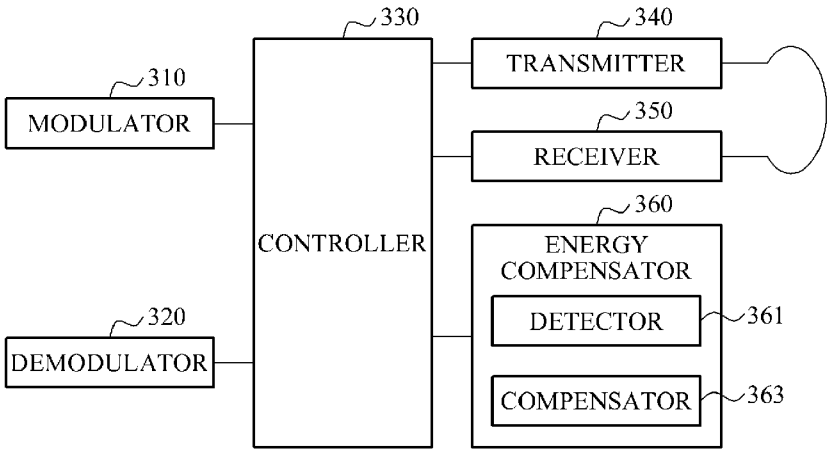
(54) **Title**: COMMUNICATION SYSTEM USING WIRELESS POWER




(57) **Abstract**: Provided is an apparatus and method for wirelessly transmitting power. According to one general aspect, a communication device using wireless power may include: a transmitter configured to transmit, to a target resonator, energy stored in a source resonator through mutual resonance; an energy compensator configured to compensate for energy expended in the source resonator; and a controller configured to control an electrical connection providing energy to the source resonator.

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**INTERNATIONAL SEARCH REPORT**

International application No.
**PCT/KR2012/006785**

**A. CLASSIFICATION OF SUBJECT MATTER**

***H04L 27/00(2006.01)i, H04B 5/02(2006.01)i, H02J 17/00(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)

H04L 27/00; H04B 5/02; H04B 5/00; H01F 38/00; G06F 17/00; H02J 7/00; H02J 17/00

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: wireless power transmission , mutual resonance , energe compensator , quality factor

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|---|---|---|
| A | US 2010-0301678 A1 (KIM YONG HAE et al.) 02 December 2010<br>See abstract; figures 1-2, 7; claims 1-4. | 1-30 |
| A | US 2011-0184888 A1 (LEE JEONG MAN et al.) 28 July 2011<br>See abstract; figure 2; paragraphs [0038]-[0049]. | 1-30 |
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☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

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| Date of the actual completion of the international search | Date of mailing of the international search report |
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Information on patent family members

International application No.

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