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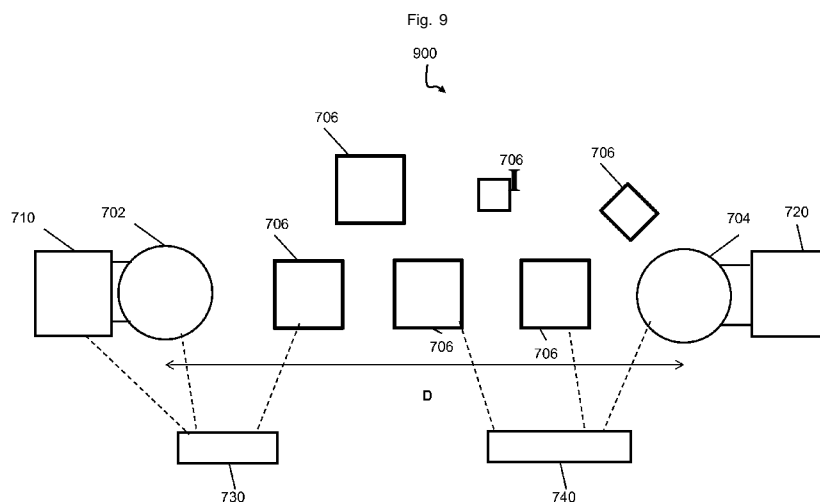
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DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
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KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME,
MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ,
OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA,
SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM,
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(54) **Title:** WIRELESS ENERGY TRANSFER



(57) **Abstract:** A wireless power system includes: i) a power source (710); ii) a source resonator (702) configured to receive power from the power source; iii) a receiver resonator (704) configured to provide power to a load (720); and iv) at least one repeater resonator (706) configured to couple power wirelessly from the source resonator to the receiver resonator. The power source is configured to provide power to the source resonator at a first frequency f_1 different from at least one of the resonant frequencies corresponding to the resonators.



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A. CLASSIFICATION OF SUBJECT MATTER
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 ADD.
 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

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 practicable, search terms used)
EPO-Internal , INSPEC, 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	DUKJU AHN ET AL: "A study on magnetic field repeater in wireless power transfer", IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, vol. 60, no. 1, January 2013 (2013-01) , pages 360-371 , XP002727881 , IEEE USA ISSN: 0278-0046, DOI : 10.1109/TIE.2012.2188254	1-6, 8-10,25 , 26,28, 32,34-46
Y	Section I. Introduction figure 2b Section V. Systems with even number of repeaters ; figures 6, 8, 9 Section VI. Experimental results; figures 11, 12, 13, 15, 16 ----- -/-	24,27 , 29-31

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
"E" earlier application or patent but published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"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
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search 5 August 2014	Date of mailing of the international search report 05/09/2014
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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 Varela Fraile, Pablo
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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.
X	<p>wo 2011/135571 A2 (POWERMAT LTD [IL]; WEISSENTERN ERAN [IL]; ROFE ARIK [IL]; BEN-SHALOM A) 3 November 2011 (2011-11-03)</p> <p>page 6, lines 26-29; figure 1 page 21, lines 5-10 page 23, line 30 - page 24, line 2 page 27, line 23 - page 28, line 21 page 29, lines 13-18 page 32, line 10 - page 40, line 14 page 42, lines 1-16; figure 16c</p> <p>-----</p>	<p>1-6, 10, 13-23 , 32-37 , 39-42 , 44,45</p>
Y	<p>US 2012/242225 AI (KARALIS ARISTEIDIS [US] ET AL) 27 September 2012 (2012-09-27)</p>	<p>24,27 , 29-31</p>
A	<p>paragraphs [0044] , [0522] , [0737] , [0742] , [0752] , [0842] , [0981] , [1069] , [1077] ; figures 78, 89, 129b, 131</p> <p>-----</p>	<p>8,9 ,28, 43</p>
A	<p>Andre Kurs : "Power Transfer Through Strongly Coupled Resonances" , , September 2007 (2007-09) , pages 1-42 , XP055131834, Retrieved from the Internet: URL: http://dspace.mit.edu/bitstream/handle/1721.1/45429/317879200.pdf [retrieved on 2014-07-28] Section 2.2 "Single oscillator driven at constant frequency" (page 15)</p> <p>-----</p>	<p>1,32</p>

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

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WO 2011135571 A2	03-11-2011	CN 103109333 A	15-05-2013
		EP 2564403 A2	06-03-2013
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