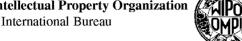
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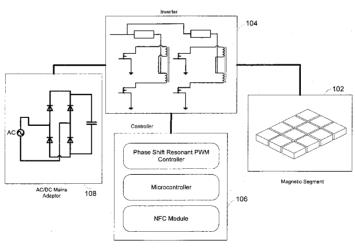


FIG. 1

(57) Abstract: Systems and methods for wireless power transfer are disclosed. Primary windings generate magnetic fields which are inductively coupled to secondary windings to transfer power in a wireless manner. One embodiment includes a plurality of tiles (102) of magnetic cores and windings for the primary windings. The tiles (102) can be arranged in a magnetic segment with windings of tiles being orthogonal with respect to windings of adjacent tiles. For example, a winding of a first tile can be horizontal, and windings of adjacent tiles can be vertical. One embodiment further groups these magnetic segments (100a, 100b) into larger entities, wherein each magnetic segment (100a, 100b) can be independently activated. One embodiment includes a magnetic amplifier (440) or an electronic device (Ql) for secondary side control of power. This permits multiple devices to be powered or charged to be able to regulate power or charging independently from one another.



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A. CLASSIFICATION OF SUBJECT MATTER

H02J 17/00(2006.01)i

According to International Patent Classification (IPC) or to both national classification and IPC

FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC8: 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 since 1975.

Japanese utility models and applications for utility models since 1975.

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) eKIPASS(KIPO internal) "wireless, inductive, power transfer, charging, multiple, plural, core, tile, winding"

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Y	US 6160374 B1 (HAYES, J. G., et al.) 12 Dec. 2000 See abstract; claims 1-2	20-27
A	US 6906495 B2 (Cheng, L. K. L., et al.) 14 January 2005 See abstract; figure 3 and 9a, claims 1-2 and 21-22; column 3, line 30 - column 14, line 15.	1-32
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