

Title (en)

WIRELESS ELECTROMAGNETIC ENERGY TRANSFER SYSTEM

Title (de)

DRAHTLOSES SYSTEM ZUR ÜBERTRAGUNG ELEKTROMAGNETISCHER ENERGIE

Title (fr)

SYSTÈME DE TRANSFERT D'ÉNERGIE ÉLECTROMAGNÉTIQUE SANS FIL

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2022243729A1] The invention relates to a wireless electromagnetic energy transfer system comprising primary and secondary magnetic elements spaced apart from each other to be able to transfer circular magnetic fluxes created by primary and secondary conductors disposed at about or in the primary and secondary magnetic elements. The system may comprise a repeating electromagnetic interface, may provide bidirectional energy flow, a combined light-energy transfer, wireless data transmissions, may be provided in a cloud/fog/edge computing system and in a static/dynamic power transfer system. Energy transfer may take place in direct contact with a liquid. The system elements may be shielded, insulated, thermally managed, heat resistant, flexible, movable, modular, enlarged, etc. The system may be coupled with engineering constructions, electric vehicles, offshore interfaces, offshore vessels, medical applications. The system elements may be comprised of defined magnetic materials and conductive paths. A method of providing an electromagnetic energy transfer interface is proposed.

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