

Title (en)

HIGH ENERGY DENSITY CAPACITOR AND WIRELESS CHARGING SYSTEM

Title (de)

KONDENSATOR MIT HOHER ENERGIEDICHTE UND DRAHTLOSES LADESYSYSTEM

Title (fr)

CONDENSATEUR À HAUTE DENSITÉ D'ÉNERGIE ET SYSTÈME DE CHARGE SANS FIL

Publication

EP 3631825 A1 20200408 (EN)

Application

EP 18806703 A 20180525

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- US 201762511754 P 20170526
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- US 201815942705 A 20180402
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Abstract (en)

[origin: CN111052279A] A high energy density capacitor comprising a substrate, a positive electrode, a negative electrode, a plurality of intermediate dielectric layers and a metal layer deposited on each of the intermediate dielectric layers. Each intermediate dielectric layer comprises sequential layers of a high surface area dielectric material, an electrolyte and a polar organic solvent deposited onto the substrate. The plurality of intermediate dielectric layers and metal layers are arranged in series to form a stack, and at least one an internal passivation layer is disposed between each stack. The positive and negative electrodes extend along a height of the capacitor and have poles in an alternating arrangement around an edge thereof. Dipoles of the intermediate dielectric layers are aligned in an opposite direction of an electric field created between the positive and negative electrodes while charging.

IPC 8 full level

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