

Title (en)

CLOSELY SPACED ELECTRODES WITH A UNIFORM GAP

Title (de)

DICHT ANGEORDNETE ELEKTRODEN MIT EINHEITLICHER LÜCKE

Title (fr)

ELECTRODES ETROITEMENT ESPACEES PAR UN ENTREPRE UNIFORME

Publication

EP 1984625 A2 20081029 (EN)

Application

EP 07756398 A 20070122

Priority

- US 2007060871 W 20070122
- US 34462206 A 20060131
- US 84126206 P 20060830

Abstract (en)

[origin: WO2007100941A2] An improved design for maintaining separation between electrodes in tunneling, diode, thermionic, thermophotovoltaic and other devices is disclosed. At least one electrode is made from flexible material. A magnetic field is present to combine with the current flowing in the flexible electrode and generate a force that counterbalances the electrostatic force or other attracting forces between the electrodes. The balancing of forces allows the separation and parallelism between the electrodes to be maintained at a very small spacing without requiring the use of multiple control systems, actuators, or other manipulating means, or spacers. The shape of one or both electrodes is designed to maintain a constant separation over the entire overlapping area of the electrodes. The end result is an electronic device that maintains two closely spaced parallel electrodes in stable equilibrium with a uniform gap therebetween over a large area in a simple configuration for simplified manufacturability and use to convert heat to electricity or electricity to cooling.

IPC 8 full level

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CPC (source: EP KR)

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DOCDB simple family (publication)

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