

Title (en)

Transmission system for electrical energy, in the microwave field, with gyromagnetic effect, such as a circulator, isolator or filter

Title (de)

Übertragungssystem für elektrische Energie, im Mikrowellenbereich, mit kreismagnetischem Effekt, wie ein Zirkulator, Isolator oder Filter

Title (fr)

Système de transmission d'énergie électrique, aux hyperfréquences, à effet gyromagnétique, tel que circulateur, isolateur ou filtre

Publication

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Application

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Abstract (en)

[origin: EP0446107A1] The invention relates to a system for transmitting electrical energy, at microwave frequencies, with gyromagnetic effect. <??>This system is of the type comprising a gyrator device (1) which includes at least one advantageously disc-shaped insert (34 or 35), made of a gyromagnetic material such as ferrite material, one face of which is placed at a reference potential, and at least two tuning networks each including an inductor (23 to 25) arranged on the other face of the said insert and one end of which is placed at the earth of the gyrator device whilst the other is connected to an input terminal of the transmission system, the gyrator device being subjected to a homogeneous magnetostatic field for exciting the gyrator. The system is characterised in that a layer of an electrically insulating material of low permittivity (32, 33) is arranged between the inductors (23 to 25) and the insert of gyromagnetic material (34 or 35). <??>The invention is usable for circulators, isolators or filters. <IMAGE>

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