

Title (en)
MULTIPLE-BEAM ANTENNA WITH PHOTONIC BANDGAP MATERIAL

Title (de)
MEHRFACHSTRAHLANTENNE MIT PHOTONISCHEM BANDLÜCKENMATERIAL

Title (fr)
ANTENNE MULTI-FAISCEAUX A MATERIAU BIP

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Application
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Abstract (en)
[origin: WO2004040694A1] The invention concerns a system comprising a device for focusing electromagnetic waves, and a multiple-beam antenna. The antenna comprises: a photonic bandgap material (20) having at least one band gap, at least one periodicity defect (36) of the photonic bandgap material so as to produce at least one narrow bandwidth within said bandgap material, and excitation elements (40 to 43) for transmitting and/or receiving electromagnetic waves within said at least one narrow bandwidth, said elements being arranged relative to one another so as to produce overlapping radiating spots.

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