

Title (en)
SPECTRAL FILTER HAVING A STRUCTURED MEMBRANE AT THE SUB-WAVELENGTH SCALE, AND METHOD FOR MANUFACTURING SUCH A FILTER

Title (de)
SPEKTRALFILTER MIT STRUKTURIERTER MEMBRAN AUF SUBWELLENLÄNGENSKALA UND VERFAHREN ZUR HERSTELLUNG EINES DERARTIGEN FILTERS

Title (fr)
FILTRE SPECTRAL AVEC MEMBRANE STRUCTUREE A L'ECHELLE SUB-LONGUEUR D'ONDE ET METHODE DE FABRICATION D'UN TEL FILTRE

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Abstract (en)
[origin: WO2012000928A1] The present invention, according to a first aspect thereof, relates to a spectral filter suitable for filtering an incident wave having at least one given first central wavelength λ_0 , said filter including a substrate having a through-opening, and a membrane made of a dielectric material. The membrane is suspended above the opening, and is structured so as to form a set of bars organized in the form of a two-dimensional pattern (33) that repeats in two directions (D1, D2), the repetition of the pattern in at least one direction being periodic or quasiperiodic, a first period (T1) being less than the central wavelength λ_0 .

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