

Title (en)
INTERNAL LOAD FOR TRAVELLING-WAVE TUBE USING A DELAY LINE IN A FOLDED WAVEGUIDE

Title (de)
INTERNE LADUNG FÜR LEITUNG MIT PROGRESSIVEN WELLEN, DIE EINE VERZÖGERUNGSLEITUNG MIT GEBOGENER FÜHRUNG VERWENDET

Title (fr)
CHARGE INTERNE POUR TUBE À ONDES PROGRESSIVES UTILISANT UNE LIGNE À RETARD EN GUIDE REPLIE

Publication
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Application
EP 18205842 A 20181113

Priority
FR 1701253 A 20171128

Abstract (en)
[origin: CA3025335A1] Folded-waveguide slow-wave structure equipped with an internal load, comprising: - a central plate (20) comprising a rectilinear beam tunnel (21) of same direction as the longitudinal axis (z) of the central plate (20), and a serpentine-shaped folded slit (22) having its folds in the direction of the width of the waveguide; - a lower plate (23) and an upper plate (24) closing the waveguide, said plates being placed on and under the central plate (20), respectively; - at least one groove (25) of cross section that may be variable, produced along the longitudinal axis (z) of the waveguide, in at least one face internal to the waveguide of the lower plate (23), the upper plate (24) or the central plate (20), and at least partially comprising a lossy material; in order to form a closed slow-wave structure through which propagates a hybrid slow wave the amplitude of which is attenuated by at least 20 dB between the start and the end of the portion of the one or more grooves containing a lossy material.

IPC 8 full level
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