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Title:THZ/GHZ wideband quasioptical spatial multiplexers and demultiplexers of electromagnetic waves

Authors:Bezborodov, V.I. (1); Kiseliov, V.K. (1); Kuleshov, Ye.M. (1); Laptiy, V.K. (1); Nesterov, P.K. (1); Scherbatko, I.V. (1); Yanovskiy, M.S. (1)

Author affiliation:(1) A. Usikov Institute of Radio Physics and Electronics, National Academy of Sciences of Ukraine, 12, Academician Proskura St., Kharkiv 61085, Ukraine

Corresponding author: Kiseliov, V.K. (kiseliov@ire.kharkov.ua)

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Abstract:Wideband quasioptical spatial multiplexers and demultiplexers were developed and tested for GHz and THz bands. These elements are based on dielectric splitting plates and metal strip gratings, placed in diagonal planes of orthogonal branches in metal-dielectric waveguides with square cross-section. Optimization of such devices have been done as well. © 2012 by Begell House, Inc.

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Main heading:Demultiplexing

 $Controlled \ terms: Electromagnetic \ waves - Multiplexing - Multiplexing \ equipment - Optical \ beam \ splitters - Strip \ metal$ 

Uncontrolled terms:Demultiplexers - Metal strip grating - Metal-dielectric waveguide - Quasi optics - Quasi-optical - Square cross-section - Wide-band

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