

to create grooves with different periods; as such, multibeam interference can lead to two or more destructive interference points in OTF curve. Finally, it is worth noting that, while our analysis has thus far been performed with TM wave, SWIA can also work with TM/TE combination or TE wave as well. A detailed study of the proposed SWIA, for example, the role of SP and surface scattered wave, the coupling efficiency of the groove, the phase shift of the SW coupling, the OTF design procedure and its relation to the conventional analogue filter design methods, is highly desired in the future.

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