

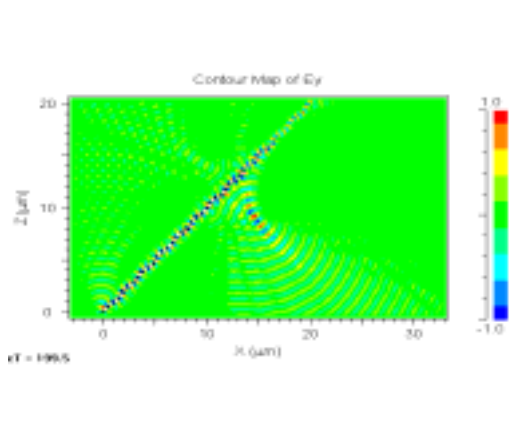
Optical focusing characteristics and its applications of chirped grating with tilted FBG

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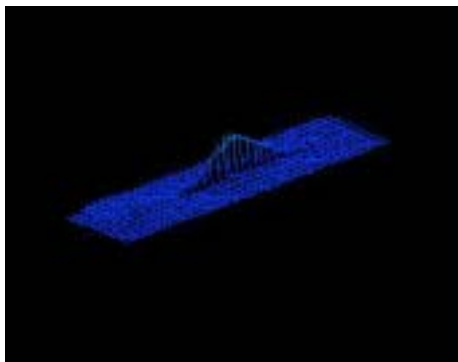
Abstract A novel method to focus outgoing radiation from a tilted fiber Bragg grating with chirping is suggested. A tilted angle of fiber grating is chosen at 45° in order to satisfy an optimum radiation condition. The periodicity of gratings is selected for the separation of 1.55um. It could be utilized as a bidirectional fiber in-line optical transceiver.

가 (FTTP)
 TO can BiDi duplex
 ,
 triplexer 가 ,
 PLC [1][2][3].
 가
 가
 가
 (), ()
 (chirped and tilted)
 V-groove 가
 [4].
 (tilted and chirped FBG)
 WDM PON 1.31um LD
 1.55um FBG
 1.55um (single
 wavelength) chirped FBG photon grating momentum
 (interaction)



[1]

[1]
 ()
 (um)
 chirp parameter
 가
 가 (Y
)
 X ,
 chirped grating (Z)



[2]

[2]
 . Chirp rate
 5nm/cm 1533nm~1554nm
 grating 가
 FFP(far field pattern)
 2cm
 . x, y

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