ABSTRACT

SILICON PHOTONIC HYBRID DISTRIBUTED FEEDBACK LASER WITH BUILT-IN GRATING

A hybrid distributed feedback (DFB) laser formed from III-V and silicon materials can include a grating in the III-V material to provide optical feedback for mode selection. The grating can include a shift feature in a middle or other parts of the grating to change light output from the gain region.. The grating can be a top-surface grating or regrowth can be applied to the III-V structure, which can then be bonded to a silicon structure to couple DFB laser light from the III-V structure to one or more silicon waveguides in the silicon structure.

No Figure.