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Martinsen

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(54) **METHOD AND APPARATUS FOR CONTROLLING THERMAL VARIATIONS IN AN OPTICAL DEVICE**

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(57) **ABSTRACT**

A method and apparatus are provided for reducing thermal gradients in optical devices. According to an embodiment of the invention, the size of the heat sink interface is adapted to correspond to a region of principal heat generation within the device. Doing so can make the heat generating region within the device have a more laterally uniform temperature gradient. The reduction (or elimination) of such temperature gradients can lead to a marked reduction in thermal lensing and greatly diminish the change in lensing with applied current, thereby improving the performance of the optical device over a wide operating range.

21 Claims, 9 Drawing Sheets

