

OPTICAL CIRCUIT SWITCH COLLIMATOR

ABSTRACT

A collimator device and a collimator lens array for an optical circuit switch are provided.

5 The collimator includes a fiber array including multiple optical fibers disposed in a hole array. An optical lens array is aligned and coupled to the fiber array. A spacer is disposed between the fiber array and the optical lens array and provides substantially uniform spacing between lenses in the optical lens array and corresponding fibers in the fiber array. Multiple pads are positioned along edges of a surface of the spacer facing the optical lens array defining a first separation gap
10 between the spacer and the optical lens array. A first epoxy bonds the spacer to the optical lens array, and a second epoxy bonds the spacer to the fiber array. The optical lens array includes a glass substrate having a first surface defining lenses in a two-dimensional array.

Fig.1

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