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(54) **POLARIZATION-INDEPENDENT GRATING COUPLER FOR SILICON ON INSULATOR**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 14 days.

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(65) **Prior Publication Data**

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(52) **U.S. Cl.**
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(57) **ABSTRACT**

(58) **Field of Classification Search**
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See application file for complete search history.

A grating structure has a plurality of gratings. In one example, one or more of the gratings are configured: to be non-uniformly spaced with respect to one or more other ones of the gratings; and to optically couple a first light conduit and a second light conduit enabling light having a first polarization and light having a second polarization to pass through the grating structure and propagate in the same direction in the first light conduit or the second light conduit. The non-uniform spacing of the gratings may represent an intersection or a union of a period associated with the light having the first polarization and a period associated with the light having the second polarization.

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20 Claims, 8 Drawing Sheets

