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(54) **Title:** FABRICATION OF SEMICONDUCTOR STRUCTURES

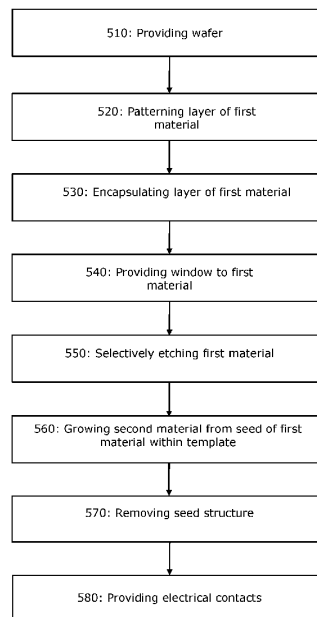


FIG. 5 500

(57) **Abstract:** A method for fabricating a semiconductor structure. The method comprises fabricating a photonic crystal structure (113) of a first material, in particular a first semiconductor material and selectively removing the first material within a predefined part of the photonic crystal structure (113). The method further comprises replacing the first material within the predefined part of the photonic crystal structure (113) with one or more second materials by selective epitaxy. The one or more second materials may be in particular semiconductor materials. A device is obtained by such a method.

[Continued on next page]

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