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## (54) METHOD FOR PRODUCING SEMICONDUCTOR APPARATUS AND SEMICONDUCTOR APPARATUS

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#### (57)ABSTRACT

A method for producing a semiconductor apparatus capable of producing a semiconductor apparatus with improved transmission loss characteristic using an interposer substrate in which semiconductor devices formed on a silicon single crystal substrate are connected to each other by a through electrode, the method including: a step of providing the silicon single crystal substrate containing a dopant; a step of forming the semiconductor devices and the through electrode on the silicon single crystal substrate to obtain the interposer substrate; and a step of irradiating a particle beam to at least around a formation part for the through electrode on the silicon single crystal substrate to deactivate the dopant in a region around the formation part for the through electrode.

