

Title (en)

METHOD OF FORMING VERY SMALL IMPURITY REGIONS IN A SEMICONDUCTOR SUBSTRATE

Publication

EP 0000326 B1 19800917 (DE)

Application

EP 78100081 A 19780602

Priority

US 81482977 A 19770712

Abstract (en)

[origin: US4131497A] A method of forming extremely small impurity regions within other impurity regions without the need for providing critical masks. In the preferred embodiment this is achieved by forming an undercut band within masking layers atop a substrate to define a first impurity region, such as the base region of a bipolar transistor. After this region is formed by the introduction of impurities, the undercut is filled-in by a chemical vapor deposition process. A blocking mask may then be used for the formation of the second impurity region, in this case the emitter, within the first region. The window of the second region is defined by the filled-in band, thereby insuring a selected distance between the peripheries of said first and second impurity regions. The same mask may also be used to form other self-aligned regions with the first region.

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IPC 8 full level

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CPC (source: EP US)

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