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(54) **SEMICONDUCTOR STRUCTURE AND PROCESS FOR FORMING OHMIC CONNECTIONS TO A SEMICONDUCTOR STRUCTURE**

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(57) **ABSTRACT**

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A semiconductor apparatus is disclosed. The apparatus includes a first doped volume of semiconductor material, the first doped volume having a front surface and first and second adjacent regions. The first region has a first concentration of dopant and a first exposed area on the front surface. The second region has a second concentration of dopant and a second exposed area on the front surface, the second concentration being higher than the first concentration. The apparatus also includes a first external conductor and an alloy bonding the first external conductor to the second exposed area to ohmically connect the conductor to the second region.

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