Title (en)

METHOD OF MANUFACTURING A SEMICONDUCTOR DEVICE WITH A SEMICONDUCTOR BODY HAVING A SURFACE PROVIDED WITH A MULTILAYER WIRING STRUCTURE

Title (de)

HERSTELLUNGSVERFAHREN FÜR EINE HALBLEITERANORDNUNG AUSGESTATTET MIT EINER HALBLEITERKÖRPEROBERFLÄCHE MIT MEHRSCHICHTLEITERSTRUKTUR

Title (fr)

PROCEDE DE FABRICATION D'UN DISPOSITIF SEMICONDUCTEUR PRESENTANT UN CORPS SEMICONDUCTEUR DOTE EN SURFACE D'UNE STRUCTURE DE CABLAGE A COUCHES MULTIPLES

Publication

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Application

EP 95910699 A 19950317

Priority

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Abstract (en)

[origin: WO9528000A2] A method of manufacturing a semiconductor device with a semiconductor body (2) having a surface (1) which is provided with a multilayer wiring structure (3, 9) of conductor tracks made of a same conductive material. A first wiring layer (3) comprising conductor tracks (4, 16, 18, 19, 22, 23, 24, 29, 30) is formed on the surface. These tracks are covered with an insulating layer (5, 20, 21, 25, 26, 27, 31, 32) in which contact windows (8) are formed by means of a wet etching process capable of etching the material of the insulation layer selectively relative to the conductive material, which windows expose at least a portion of the conductor tracks of the first wiring layer locally. Then a layer (10) of the conductive material is deposited on the surface, and a second wiring layer (9) of conductor tracks (11) is formed therein. Before the contact windows are formed, an auxiliary layer (12, 15) of insulating material is provided on the insulation layer. Openings (13) are etched into the auxiliary layer at the areas of the contact windows. Then the contact windows are formed in that the semiconductor body is subjected to a wet etching process capable of selectively etching the insulating material of the insulation layer not only relative to the conductive material but also relative to the insulating material of the auxiliary layer. Thanks to the use of the auxiliary layer, the conductor tracks of the second wiring layer may be made comparatively narrow.

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IPC 8 full level

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