United States Patent [19]

Taylor

[11] **4,311,532**

[45] **Jan. 19, 1982**

[54] **METHOD OF MAKING JUNCTION ISOLATED BIPOLAR DEVICE IN UNISOLATED IGFET IC**

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[21] Appl. No.: **61,775**

[22] Filed: **Jul. 27, 1979**

[51] **Int. Cl.**[3] **H01L 21/263**; H01L 21/02; H01L 21/20; H01L 29/72

[52] **U.S. Cl.** **148/1.5**; 148/186; 148/187; 357/43; 357/91

[58] **Field of Search** 148/1.5, 187, 186; 357/43, 91

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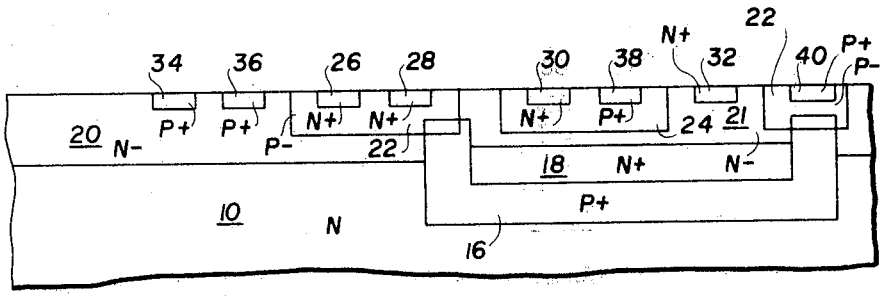
[57] **ABSTRACT**

A bipolar device is formed in an N epitaxial layer region isolated from an N substrate and the remainder of the N epitaxial layer by a P surface ring and a buried P region. An N channel device is formed in the P surface ring and a P channel device is formed in the N epitaxial layer. A buried N region is formed in the buried P region using the same mask used to form the buried P region.

10 Claims, 9 Drawing Figures