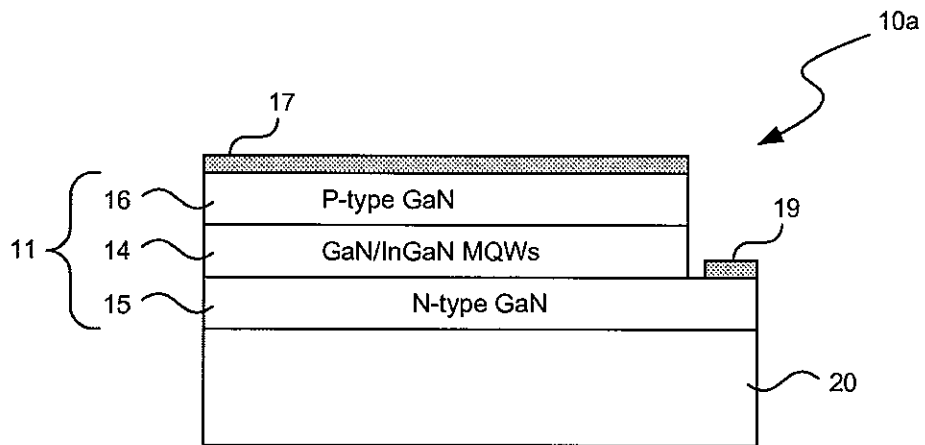
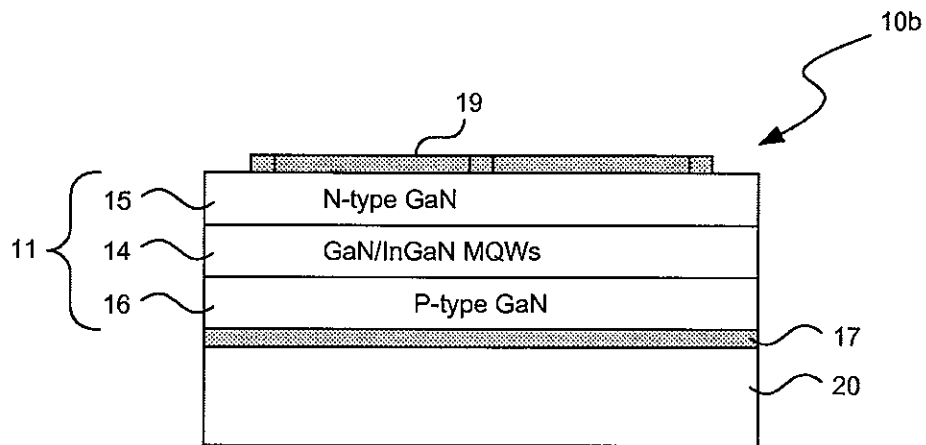
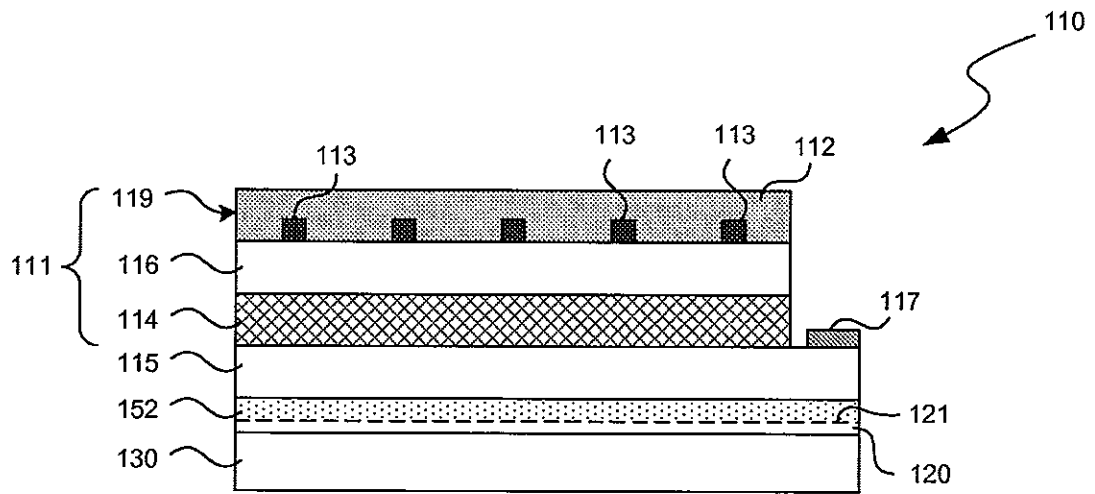




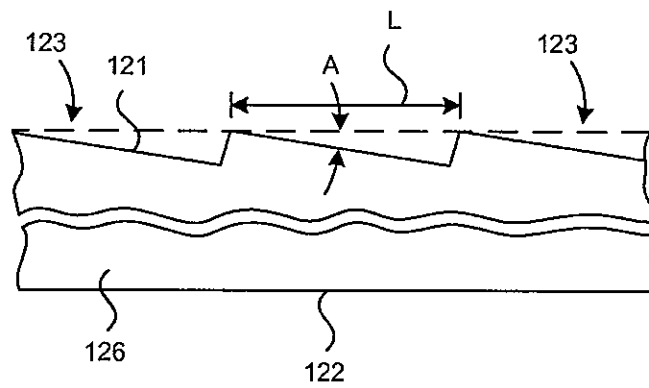
**FIG. 1A**  
**(Prior Art)**



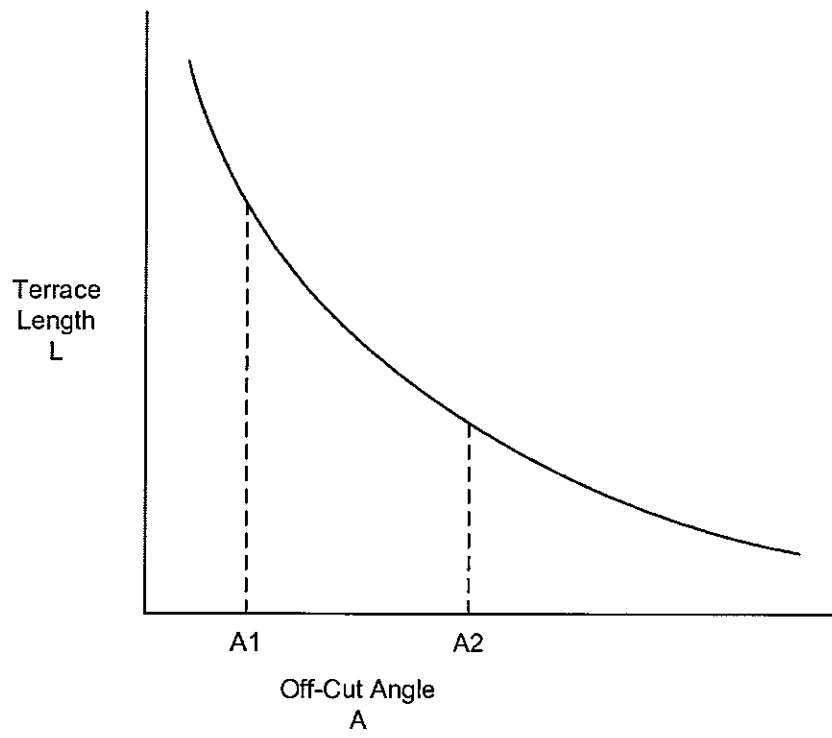
**FIG. 1B**  
**(Prior Art)**



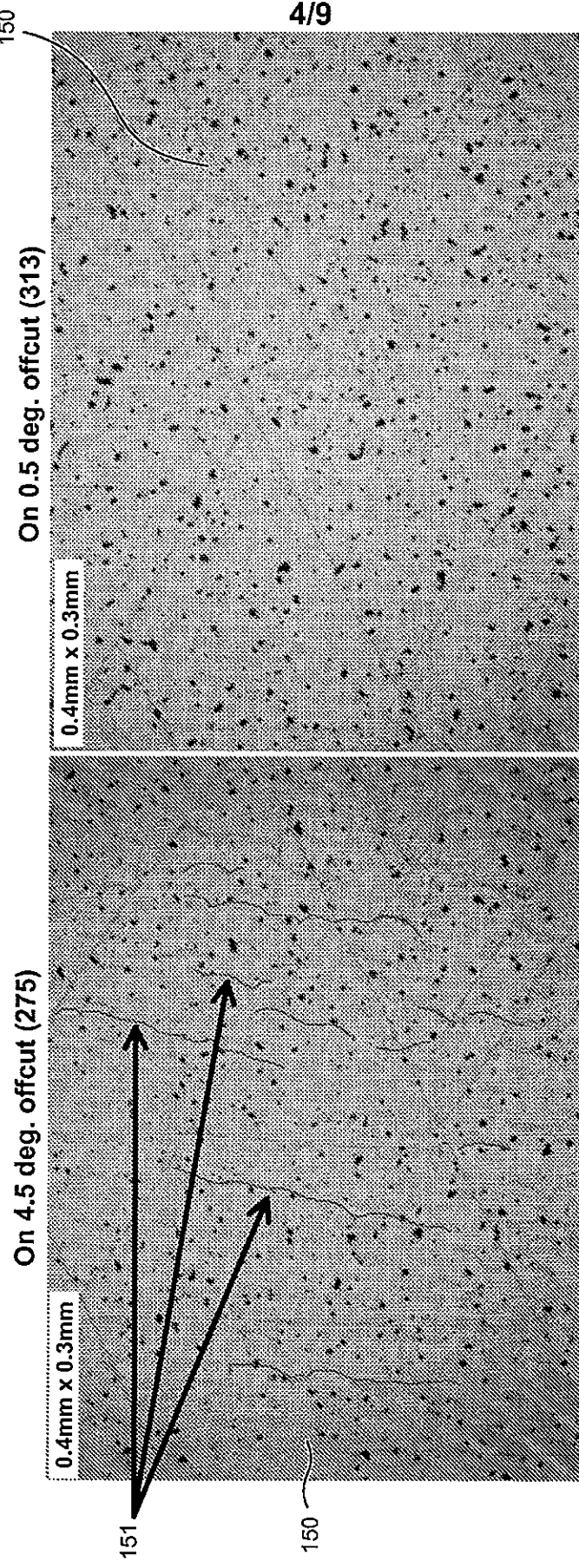
**FIG. 2A**



**FIG. 2B**

***FIG. 2C***

2um n-GaN w/ singleSiNx IL on 4" Si (1)



**FIG. 3A**

**FIG. 3B**

2 $\mu$ m n-GaN w/ singleSiNx IL on 4" Si (2)

On 4.5 deg. offcut (275)

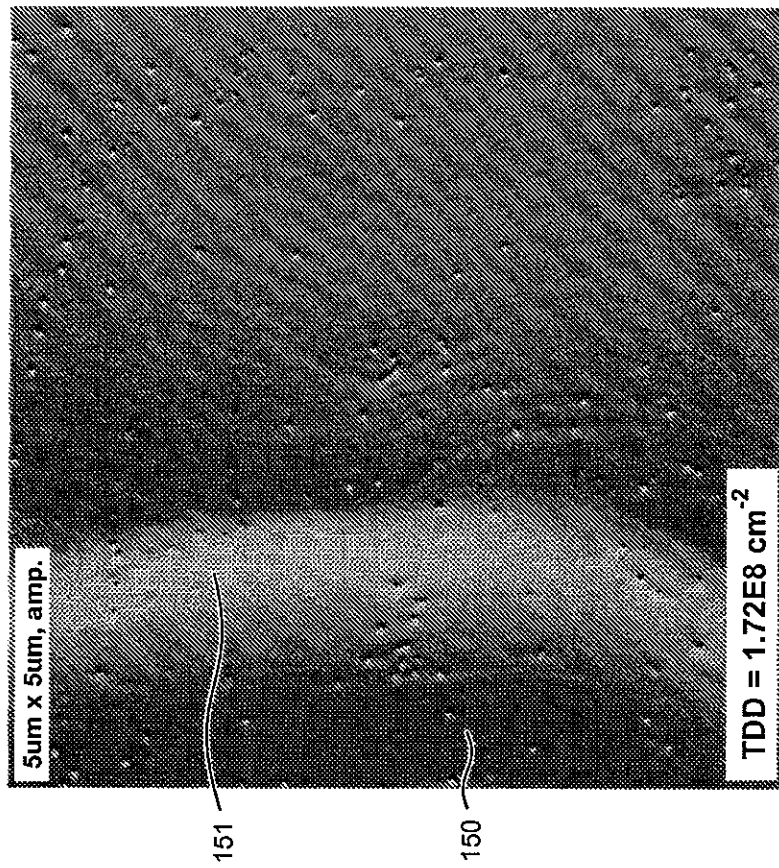


FIG. 4A

On 0.5 deg. offcut (313)

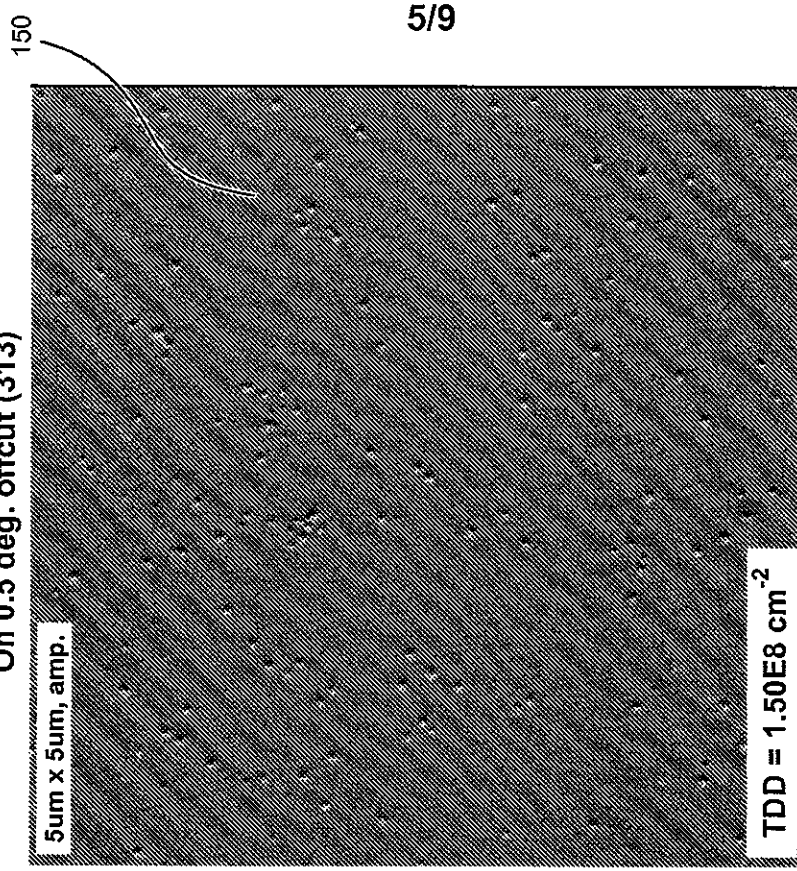
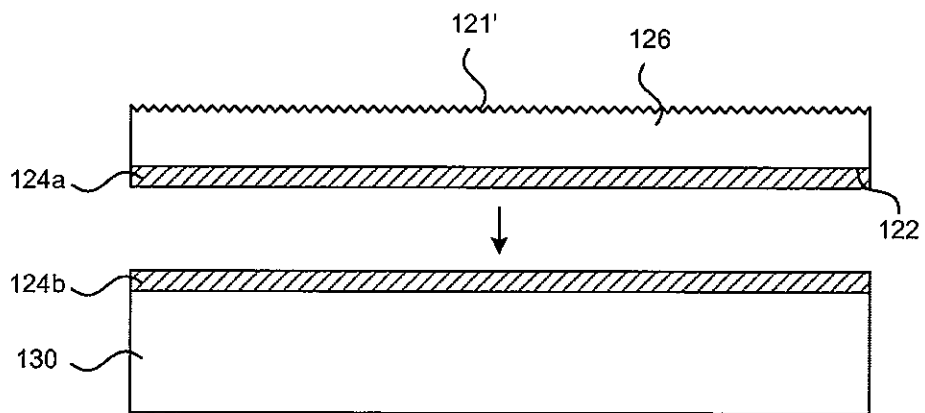
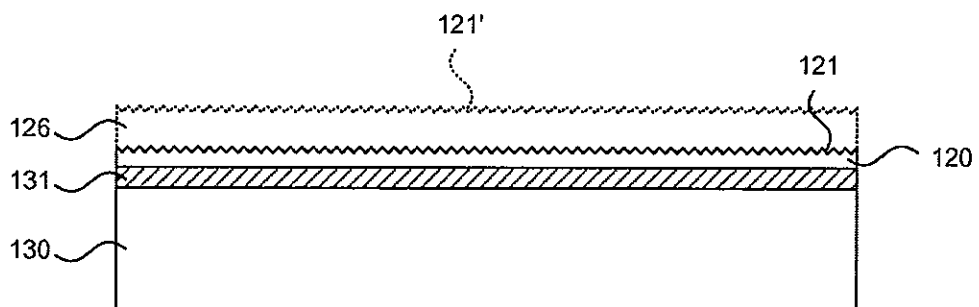


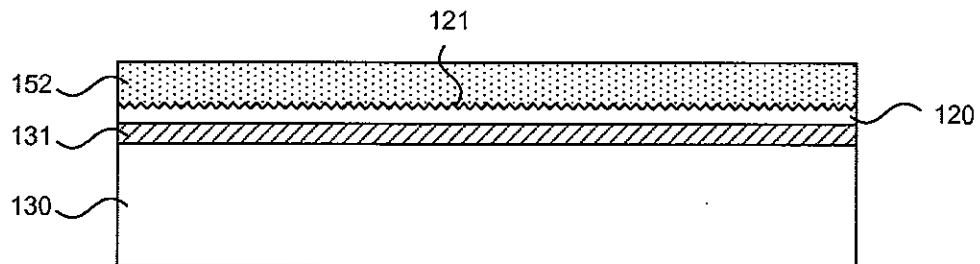
FIG. 4B



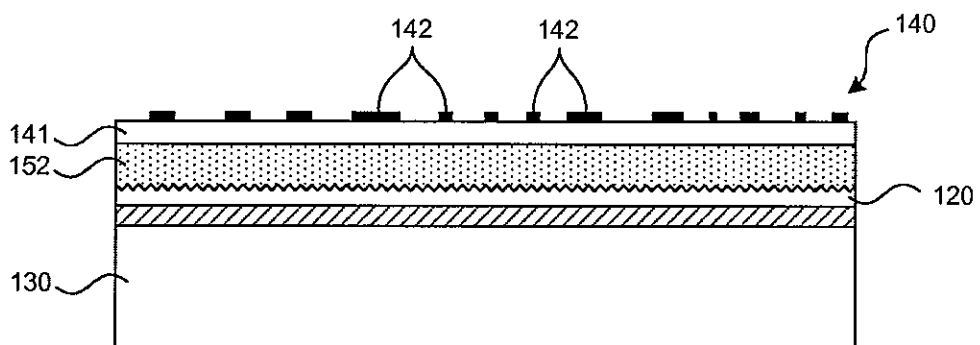
**FIG. 5A**



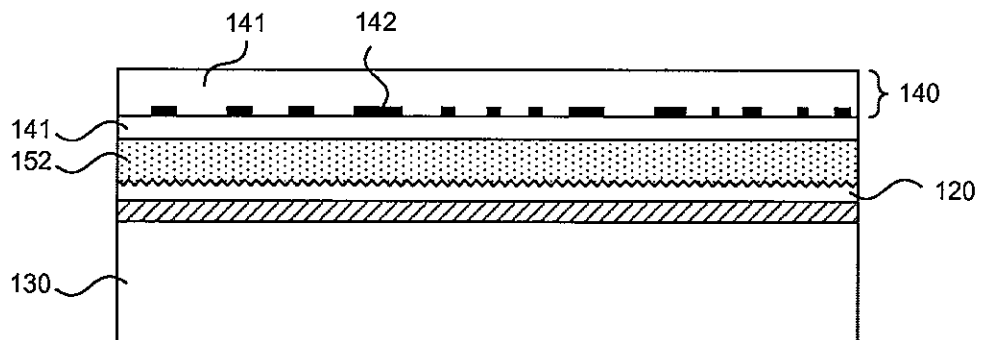
**FIG. 5B**



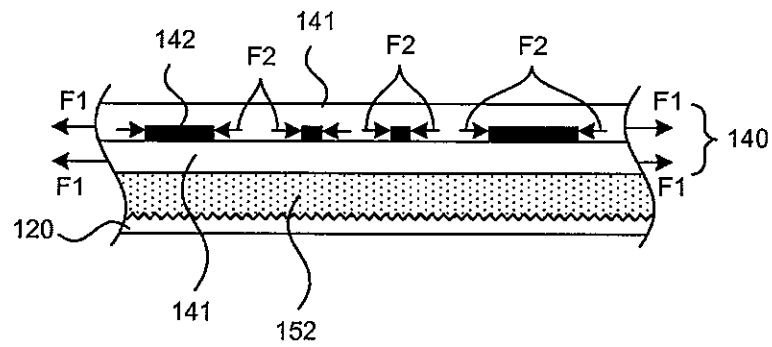
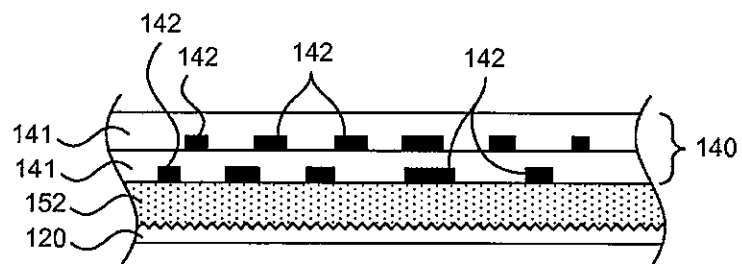
**FIG. 5C**

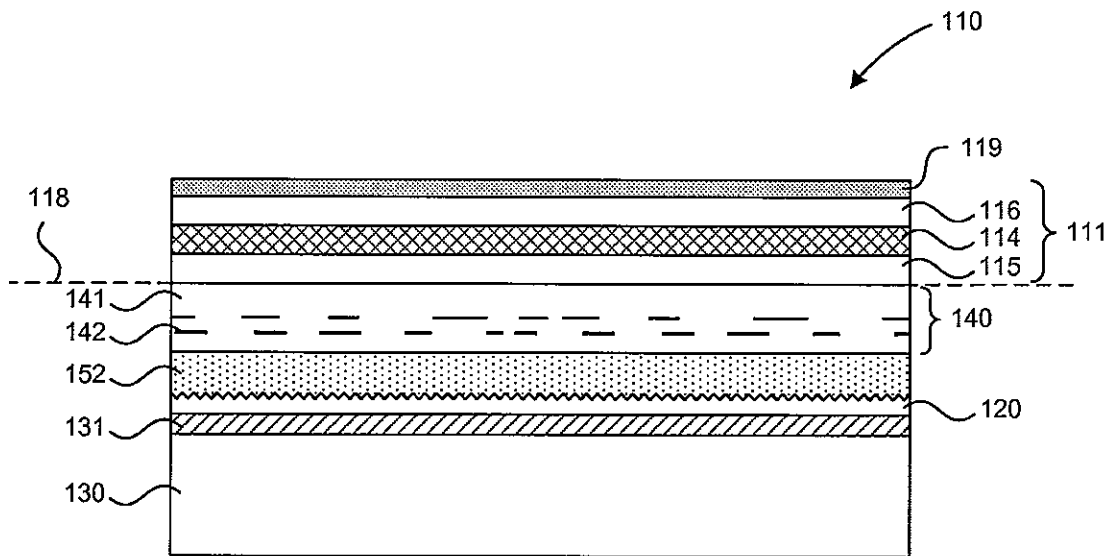


**FIG. 5D**



**FIG. 5E**

**FIG. 6A****FIG. 6B**



**FIG. 7**