Figure 1

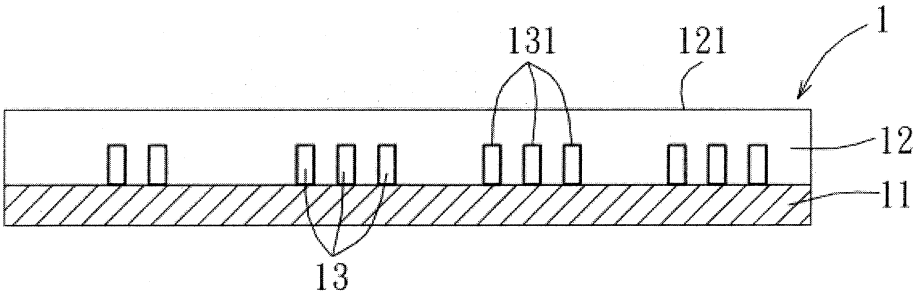


Figure 2

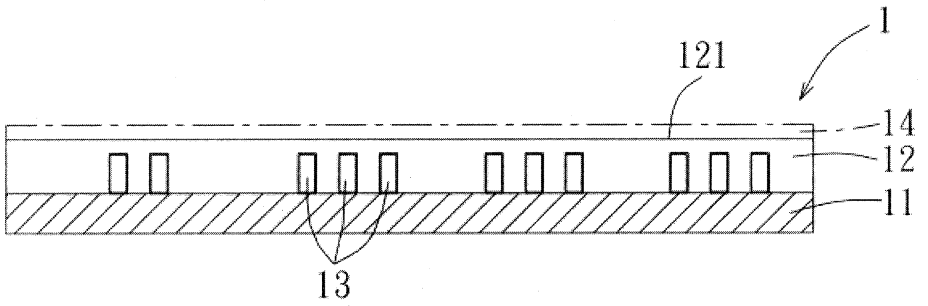


Figure 3

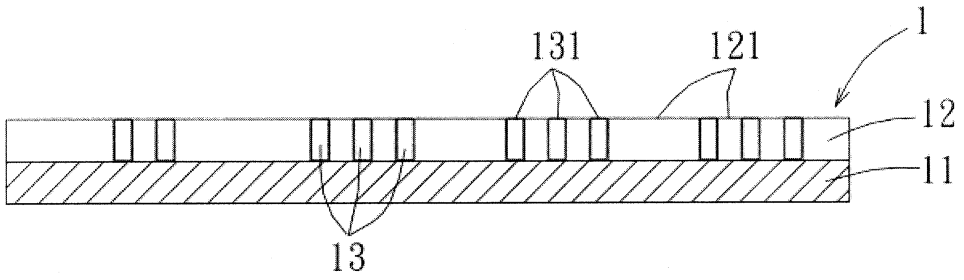
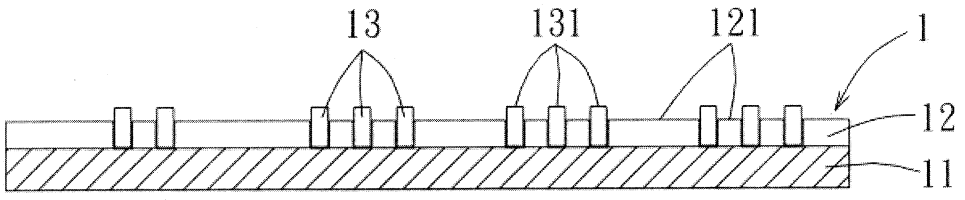


Figure 4



BRIEF DESCRIPTION OF NUMERICAL

1. TSV wafer
11. integrated circuit layer
12. silicon wafer layer
121. surface of silicon wafer layer
13. conductive material
131. surface of conductive material
14. damaged layer