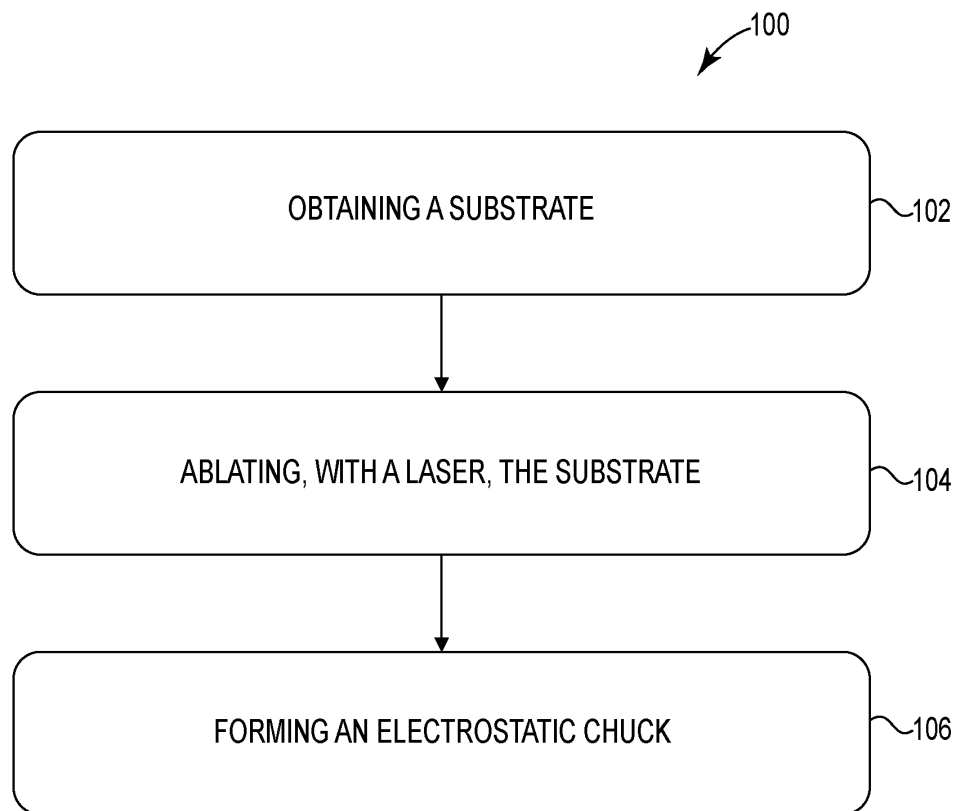


**FIG. 1**

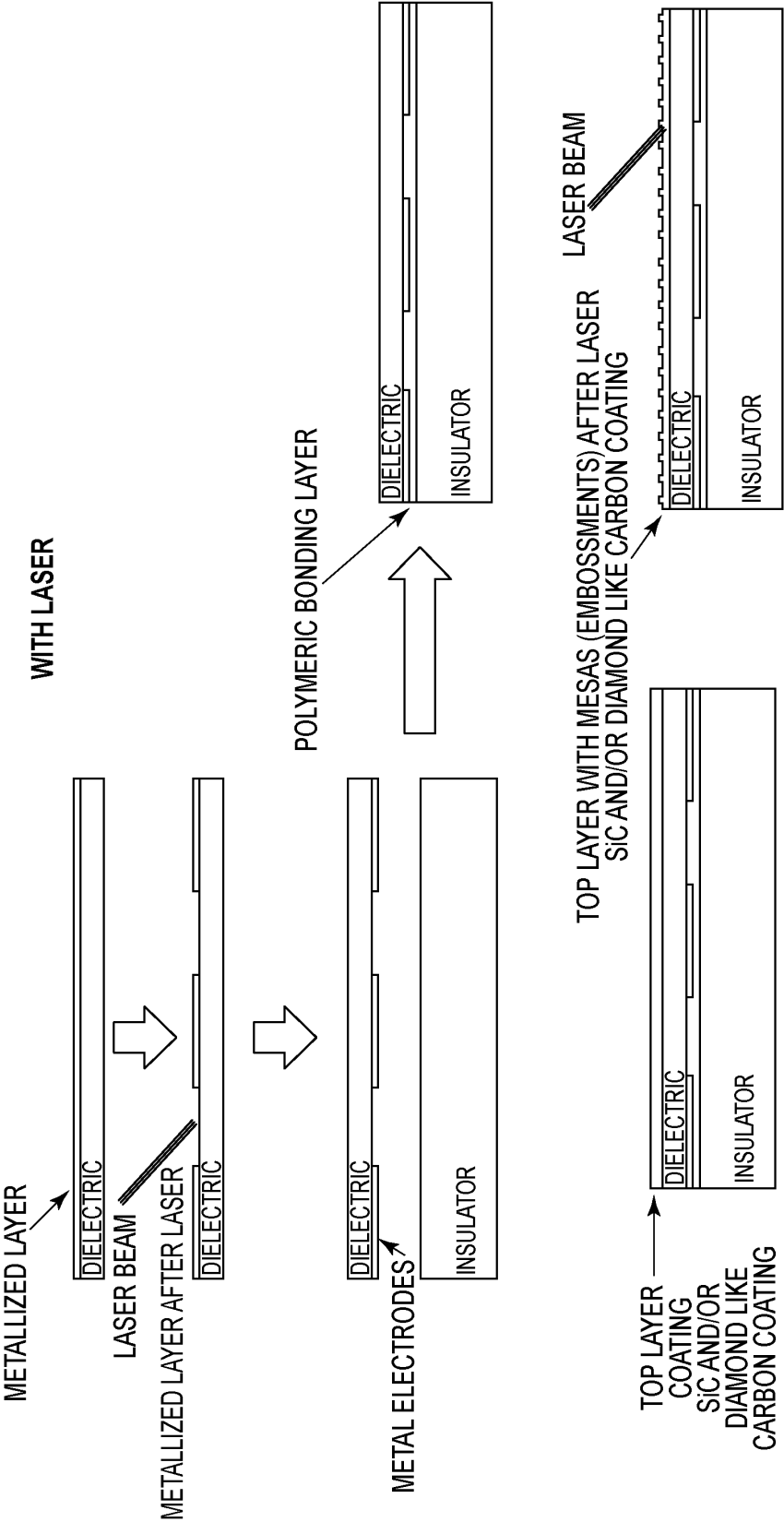


FIG. 2

| AREA                | Sa                 | Sz                | Ra(X)              | Ra(Y)              | CYCLE | RATE                       |
|---------------------|--------------------|-------------------|--------------------|--------------------|-------|----------------------------|
| ORIGINAL            | 0.37 $\mu\text{m}$ | 5.6 $\mu\text{m}$ | 0.39 $\mu\text{m}$ | 0.26 $\mu\text{m}$ |       |                            |
| UV ABLATION         | 0.66 $\mu\text{m}$ | 8.5 $\mu\text{m}$ | 0.66 $\mu\text{m}$ | 0.52 $\mu\text{m}$ | 798 s | 0.5 $\text{mm}^2/\text{s}$ |
| IR NS ABLATION      | 0.59 $\mu\text{m}$ | 5.8 $\mu\text{m}$ | 0.57 $\mu\text{m}$ | 0.58 $\mu\text{m}$ | 65 s  | 6.3 $\text{mm}^2/\text{s}$ |
| IR PS FAST ABLATION | 0.38 $\mu\text{m}$ | 3.8 $\mu\text{m}$ | 0.31 $\mu\text{m}$ | 0.29 $\mu\text{m}$ | 48 s  | 8.5 $\text{mm}^2/\text{s}$ |
| IR PS SLOW ABLATION | 0.31 $\mu\text{m}$ | 4.2 $\mu\text{m}$ | 0.21 $\mu\text{m}$ | 0.19 $\mu\text{m}$ | 96 s  | 4.3 $\text{mm}^2/\text{s}$ |

| Ra SPEC: <0.51 $\mu\text{m}$        |                               |
|-------------------------------------|-------------------------------|
| LOCATION                            | STEP HEIGHT ( $\mu\text{m}$ ) |
| UV NC LASER                         | 5.71                          |
| IR NC LASER                         | 3.52                          |
| IR PS FAST                          | 1.29                          |
| IR PS SLOW                          | 1.866                         |
| SURFACE ROUGHNESS ( $\mu\text{m}$ ) |                               |
|                                     | 0.757                         |
|                                     | 0.498                         |
|                                     | 0.408                         |
|                                     | 0.468                         |
| ELECTRICAL ISOLATION                |                               |
|                                     | 328 G $\Omega$                |
|                                     | 1.16 T $\Omega$               |
|                                     | 552 M $\Omega$                |
|                                     | 53.5 M $\Omega$               |
| ABLATED REGION TRACE RESISTANCE     |                               |
|                                     | > E13 $\Omega$                |
|                                     | > E13 $\Omega$                |
|                                     | 3 E12 $\Omega$                |
|                                     | 2.37 E9 $\Omega$              |

FIG. 3