

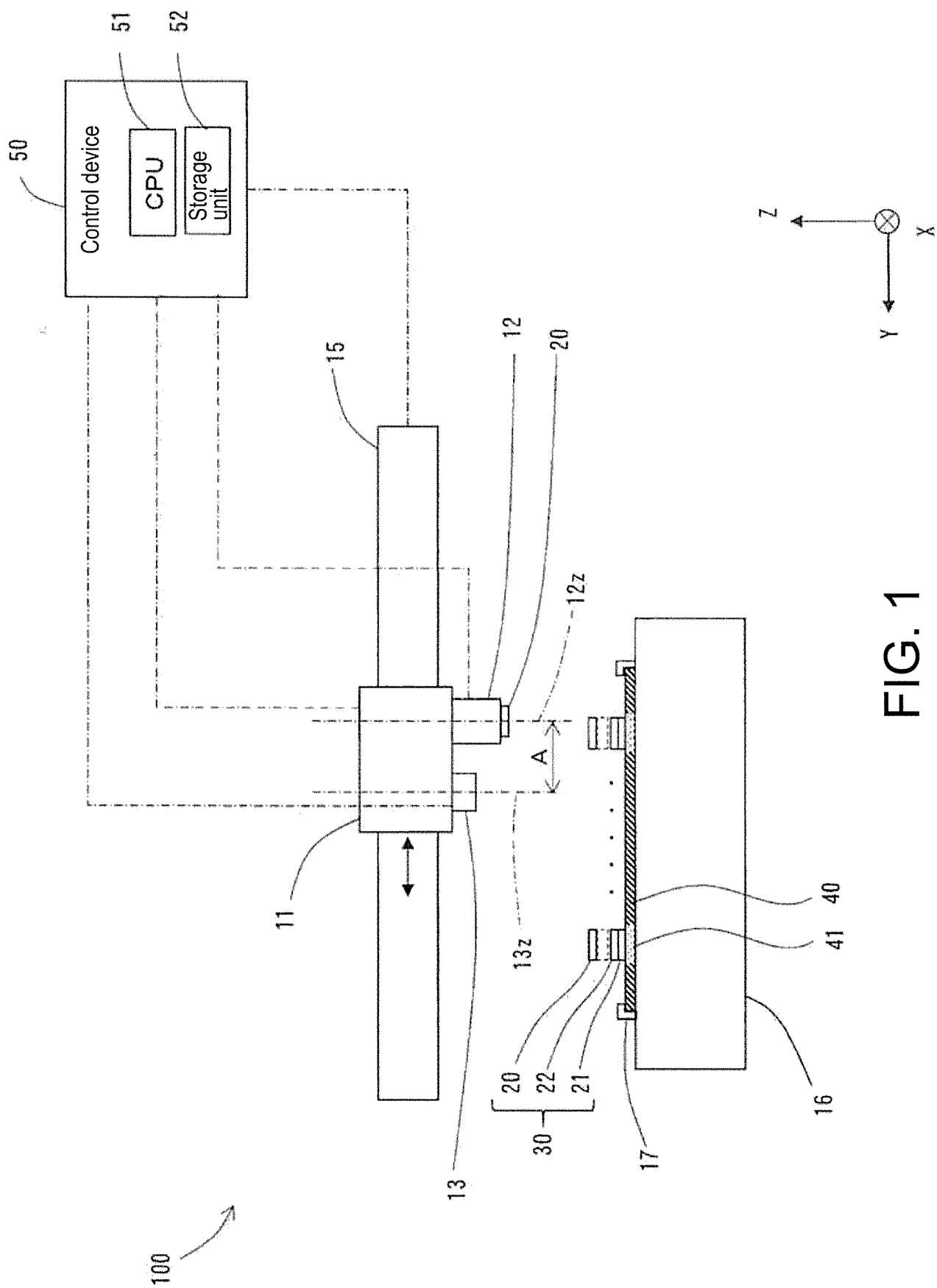


FIG. 1

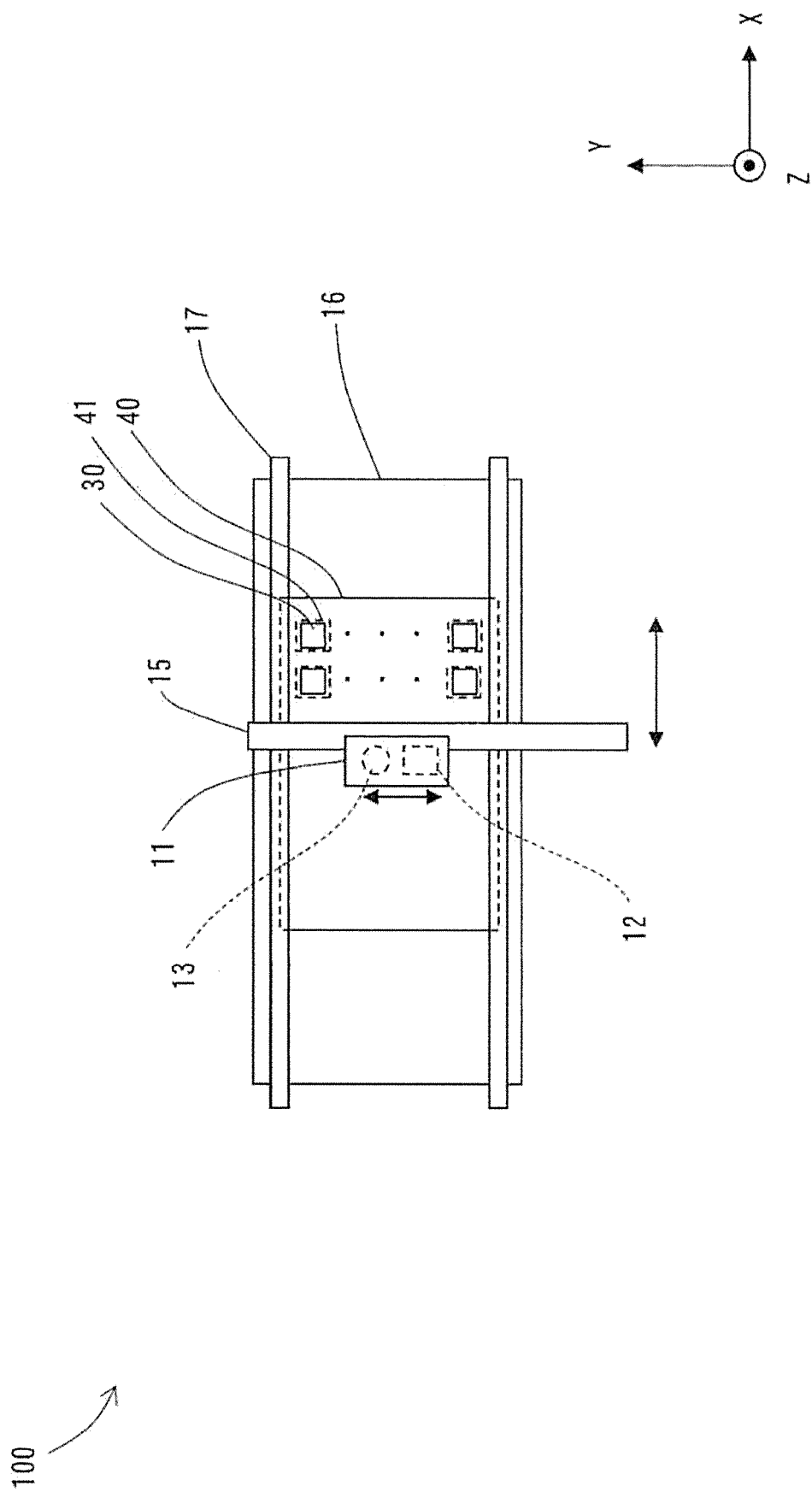


FIG. 2

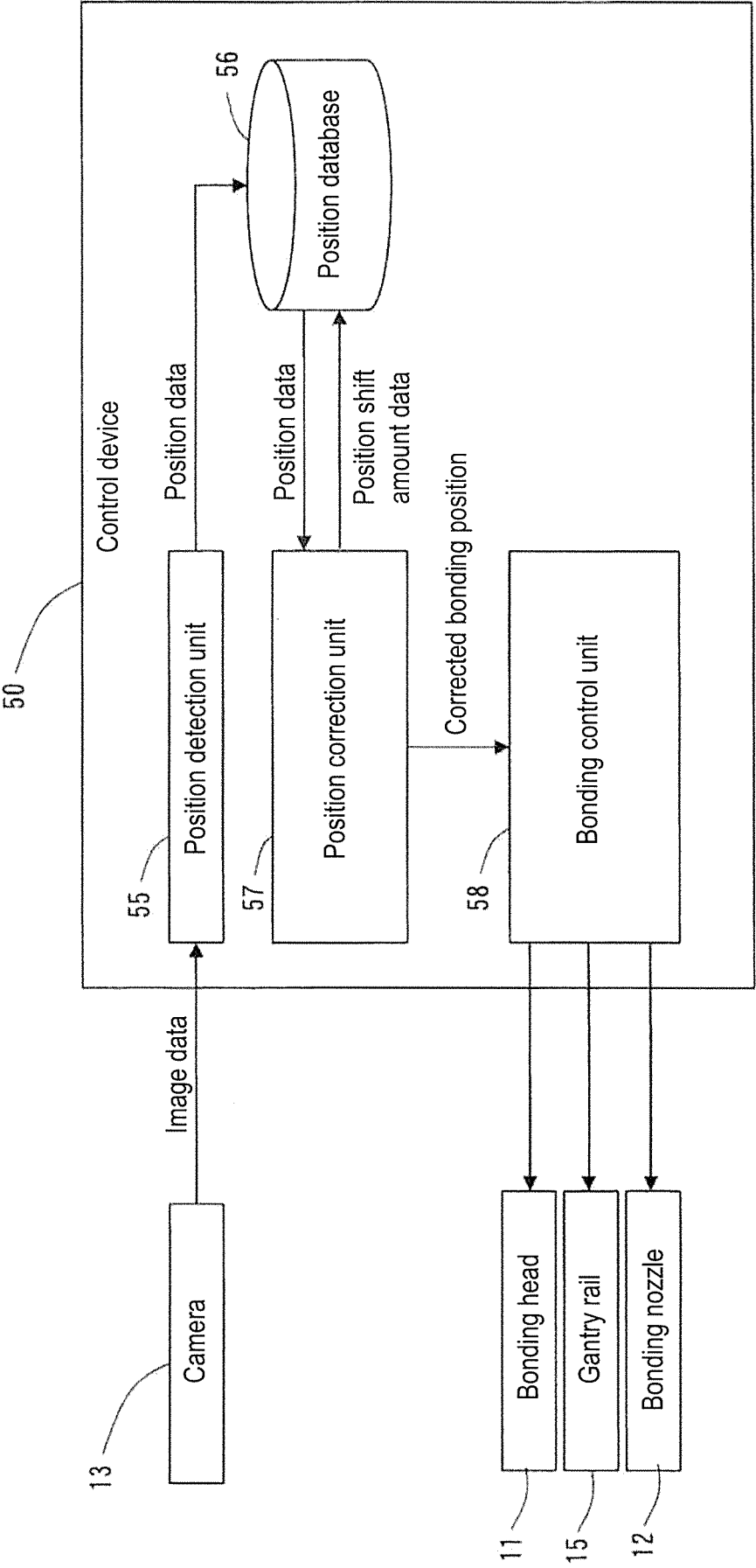


FIG. 3

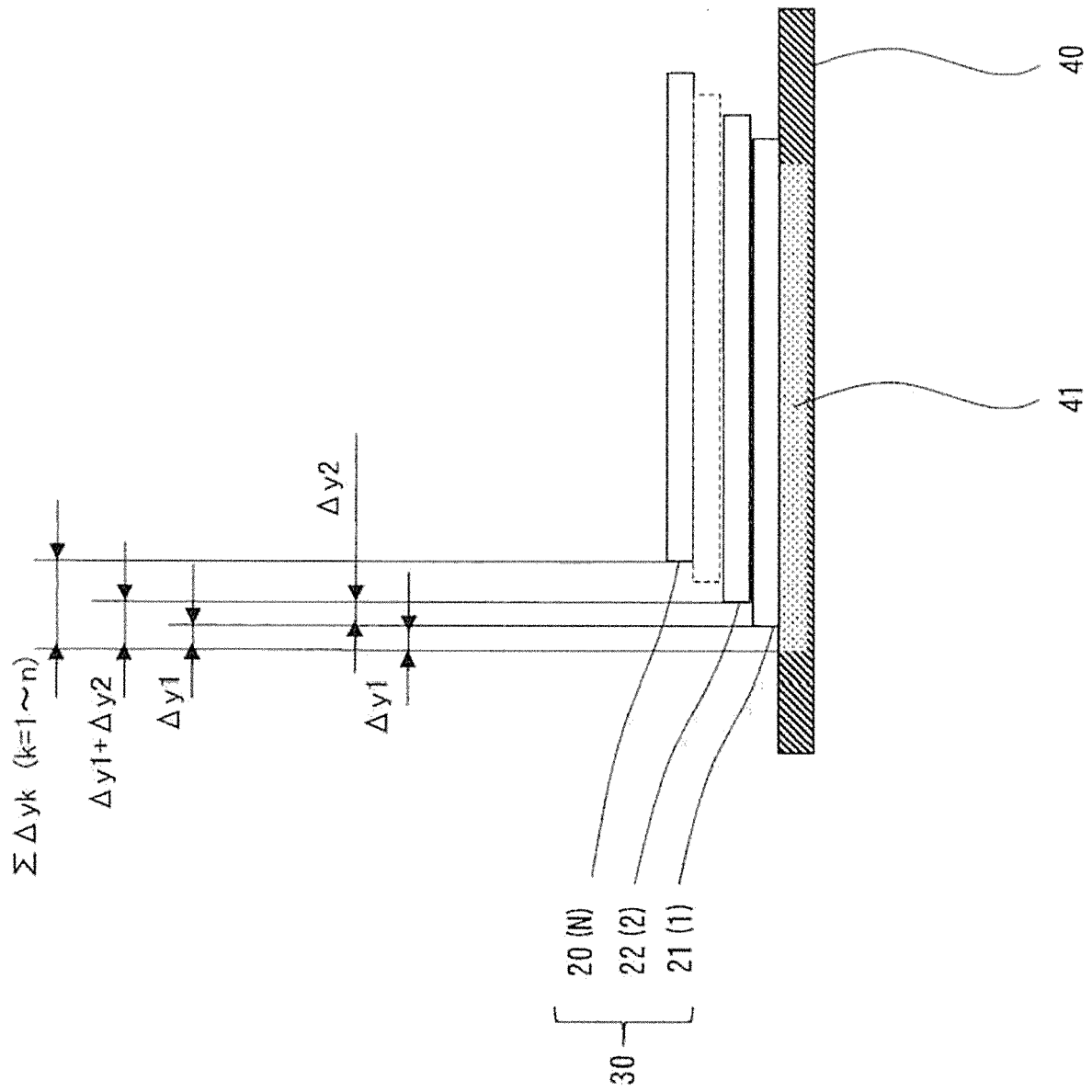


FIG. 4

## Position database

| Island number |                                       | 1                                  |                                                              |
|---------------|---------------------------------------|------------------------------------|--------------------------------------------------------------|
| Stage number  | Island or semiconductor chip position | Position shift amount              | Accumulated position shift amount                            |
| 0             | $(x_0, y_0)$                          |                                    |                                                              |
| 1             | $(x_1, y_1)$                          | $(\Delta x_1, \Delta y_1)$         | $(\Delta x_1, \Delta y_1)$                                   |
| 2             | $(x_2, y_2)$                          | $(\Delta x_2, \Delta y_2)$         | $(\Delta x_1 + \Delta x_2, \Delta y_1 + \Delta y_2)$         |
| 3             | $(x_3, y_3)$                          | $(\Delta x_3, \Delta y_3)$         | $(\sum_{K=1}^3 \Delta x_K, \sum_{K=1}^3 \Delta y_K)$         |
| ..            | ...                                   | ...                                | ...                                                          |
| N-1           | $(x_{N-1}, y_{N-1})$                  | $(\Delta x_{N-1}, \Delta y_{N-1})$ | $(\sum_{K=1}^{N-1} \Delta x_K, \sum_{K=1}^{N-1} \Delta y_K)$ |
| N             | $(x_N, y_N)$                          | $(\Delta x_N, \Delta y_N)$         | $(\sum_{K=1}^N \Delta x_K, \sum_{K=1}^N \Delta y_K)$         |
| N+1           | $(x_{N+1}, y_{N+1})$                  | $(\Delta x_{N+1}, \Delta y_{N+1})$ | $(\sum_{K=1}^{N+1} \Delta x_K, \sum_{K=1}^{N+1} \Delta y_K)$ |

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| Island number |                                       | 2                          |                                                      |
|---------------|---------------------------------------|----------------------------|------------------------------------------------------|
| Stage number  | Island or semiconductor chip position | Position shift amount      | Accumulated position shift amount                    |
| 0             | $(x_0, y_0)$                          |                            |                                                      |
| 1             | $(x_1, y_1)$                          | $(\Delta x_1, \Delta y_1)$ | $(\Delta x_1, \Delta y_1)$                           |
| 2             | $(x_2, y_2)$                          | $(\Delta x_2, \Delta y_2)$ | $(\Delta x_1 + \Delta x_2, \Delta y_1 + \Delta y_2)$ |
| 3             | $(x_3, y_3)$                          | $(\Delta x_3, \Delta y_3)$ | $(\sum_{K=1}^3 \Delta x_K, \sum_{K=1}^3 \Delta y_K)$ |
| ..            | ...                                   | ...                        | ...                                                  |

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FIG. 5

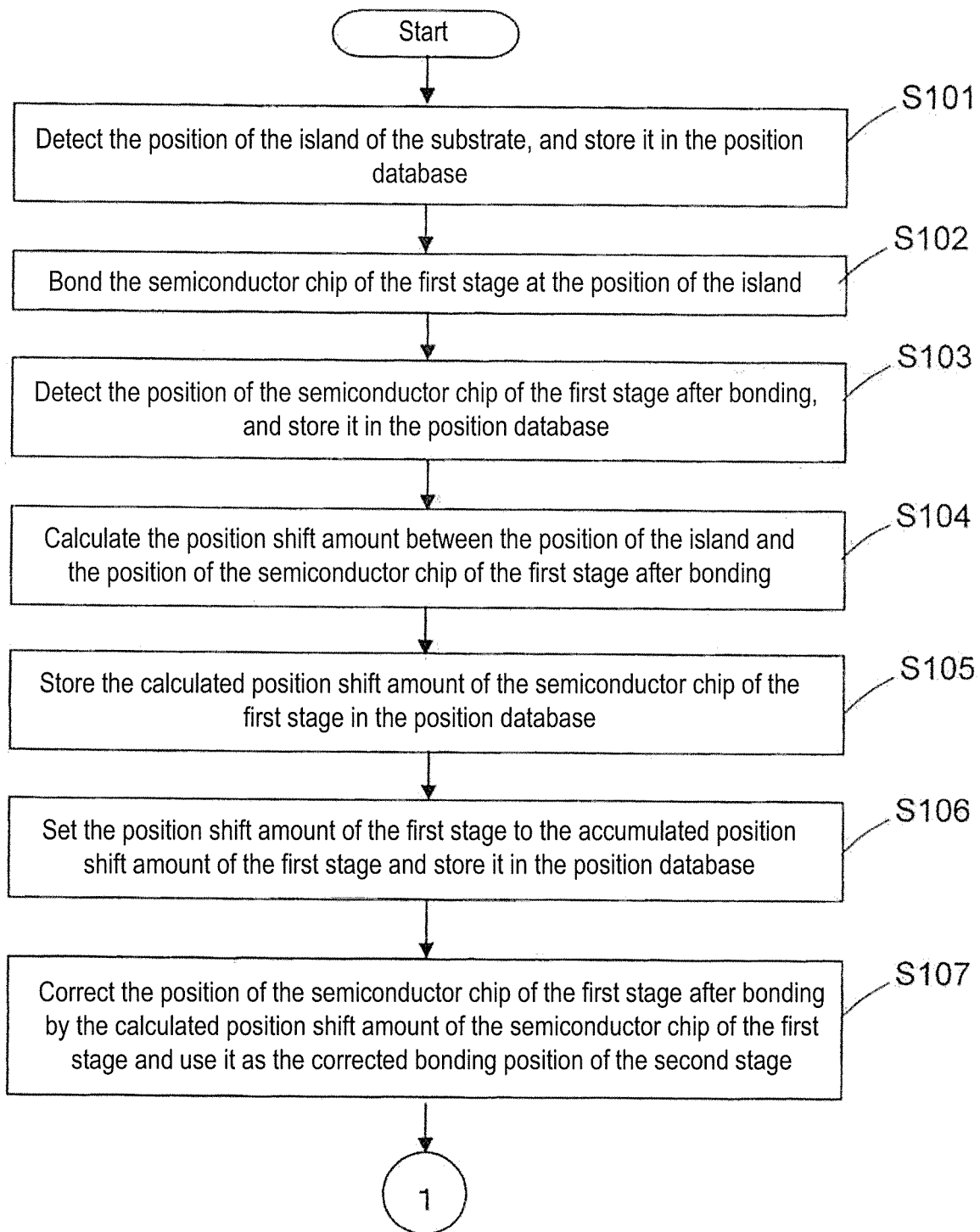


FIG. 6

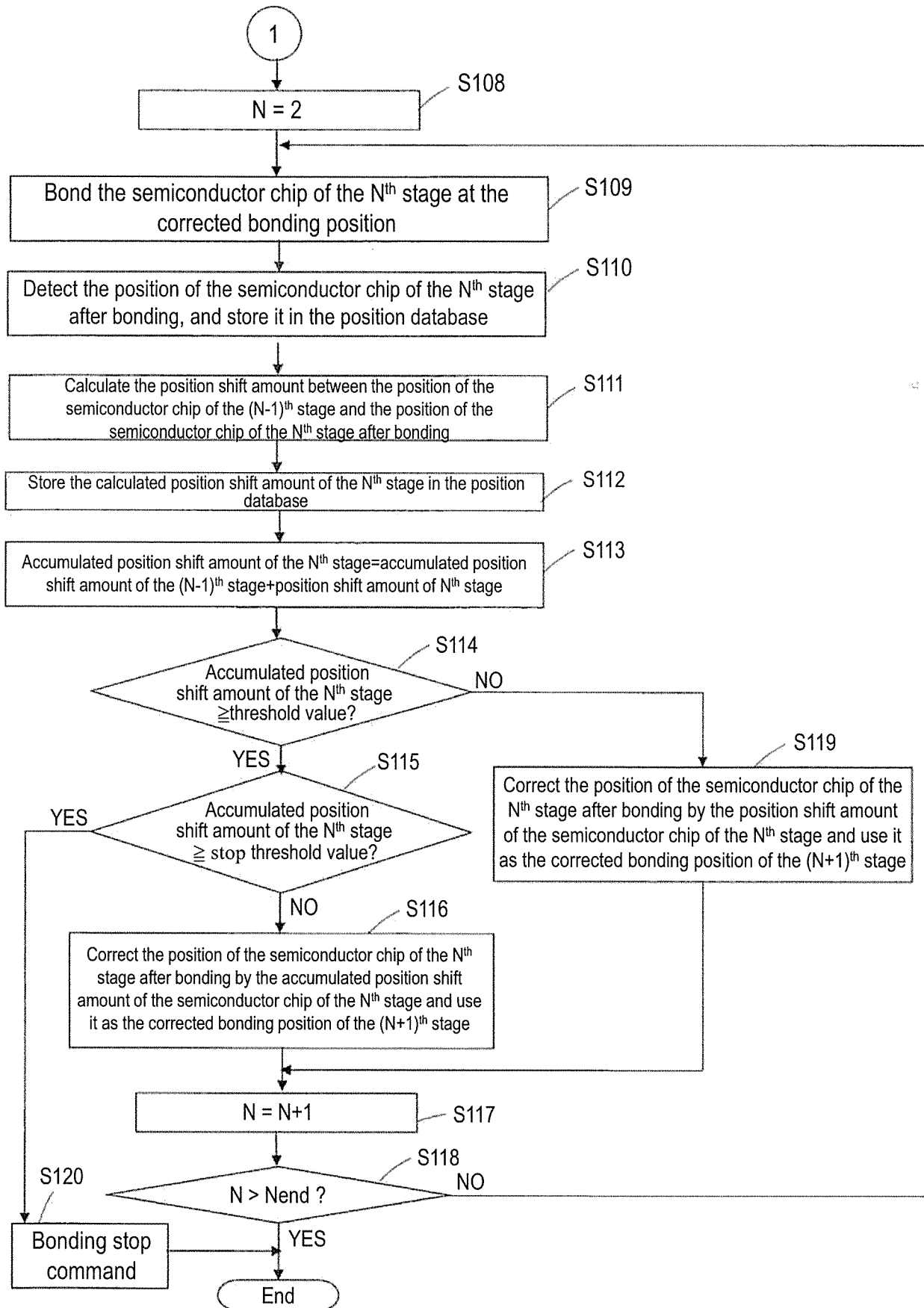


FIG. 7

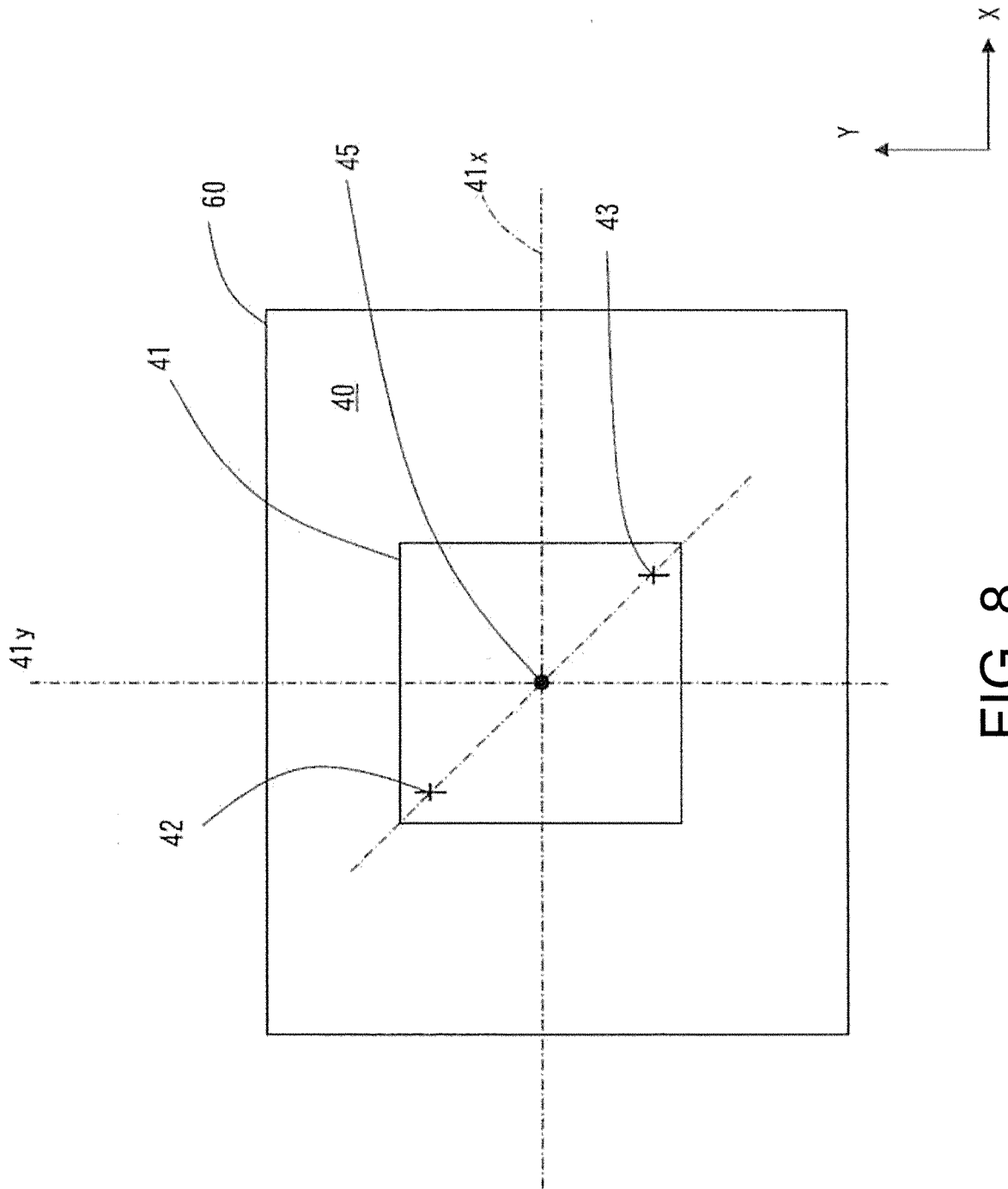


FIG. 8



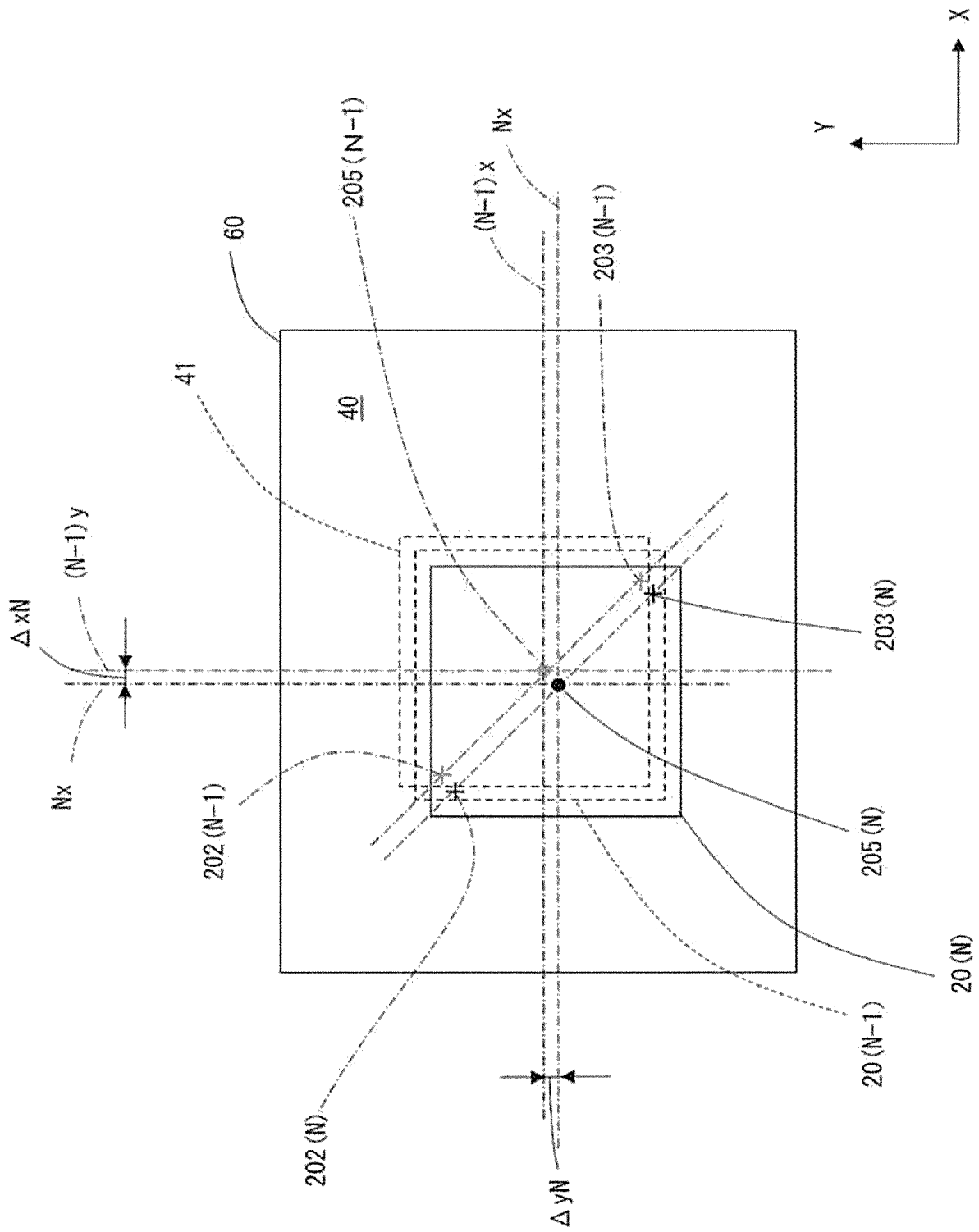
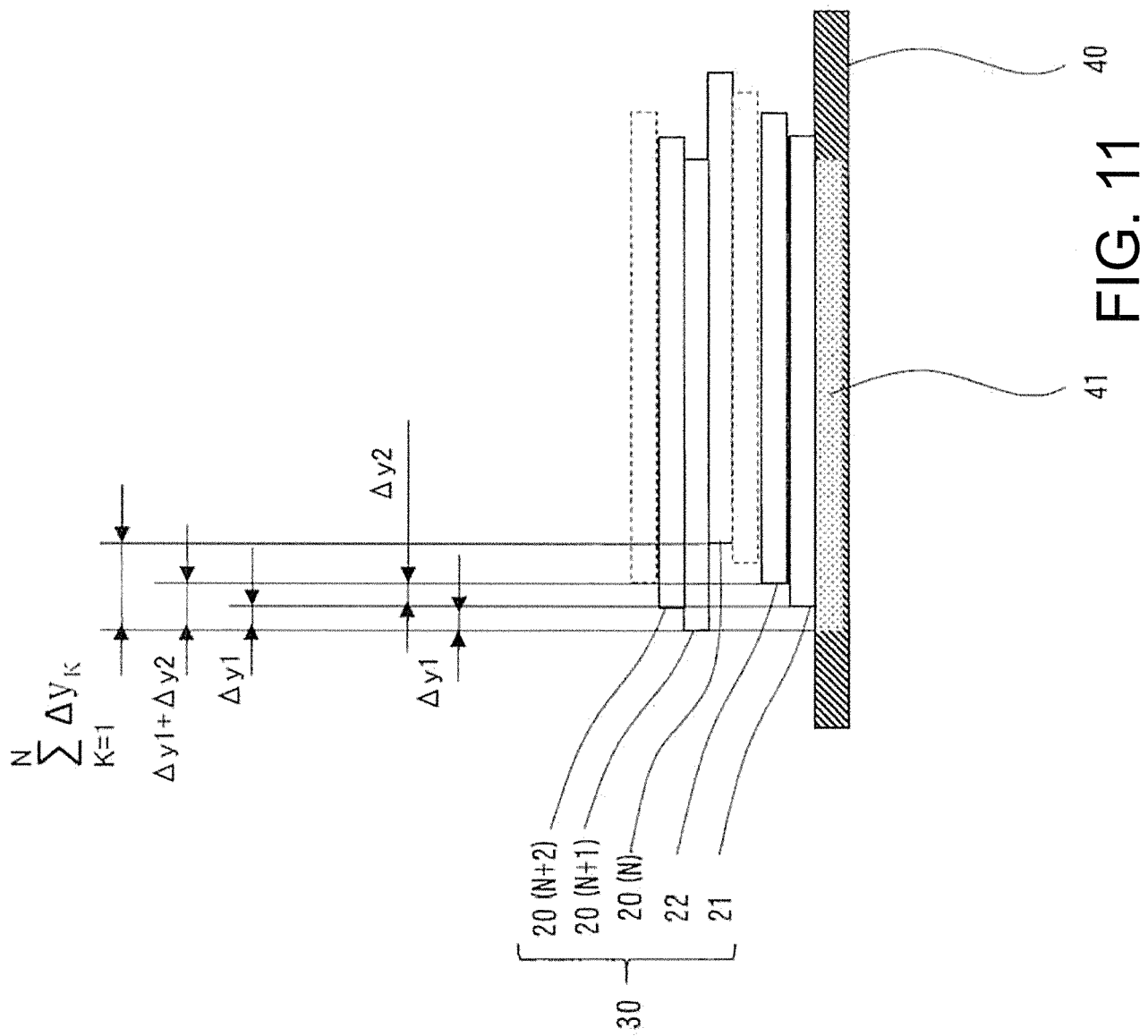


FIG. 10



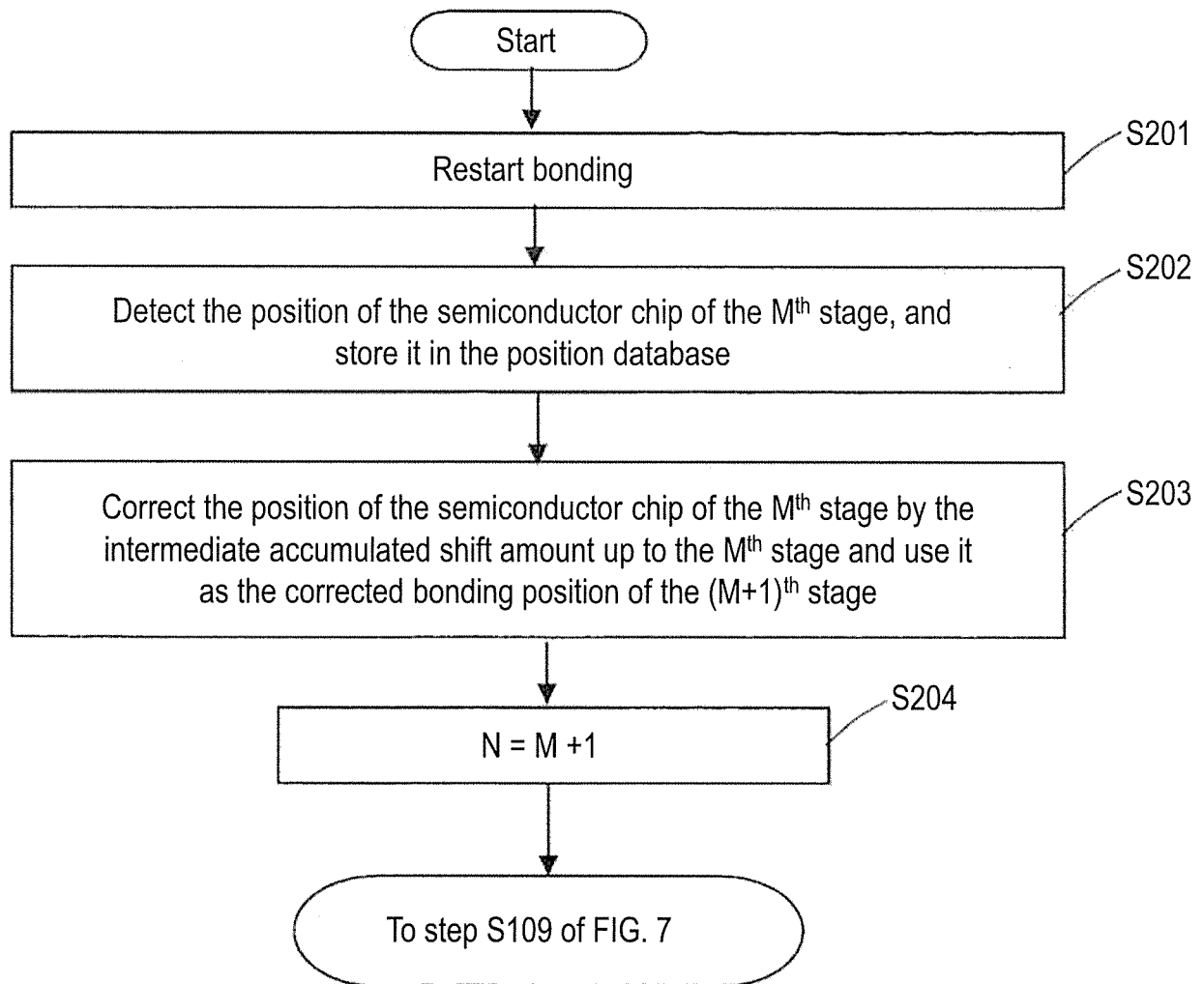


FIG. 12

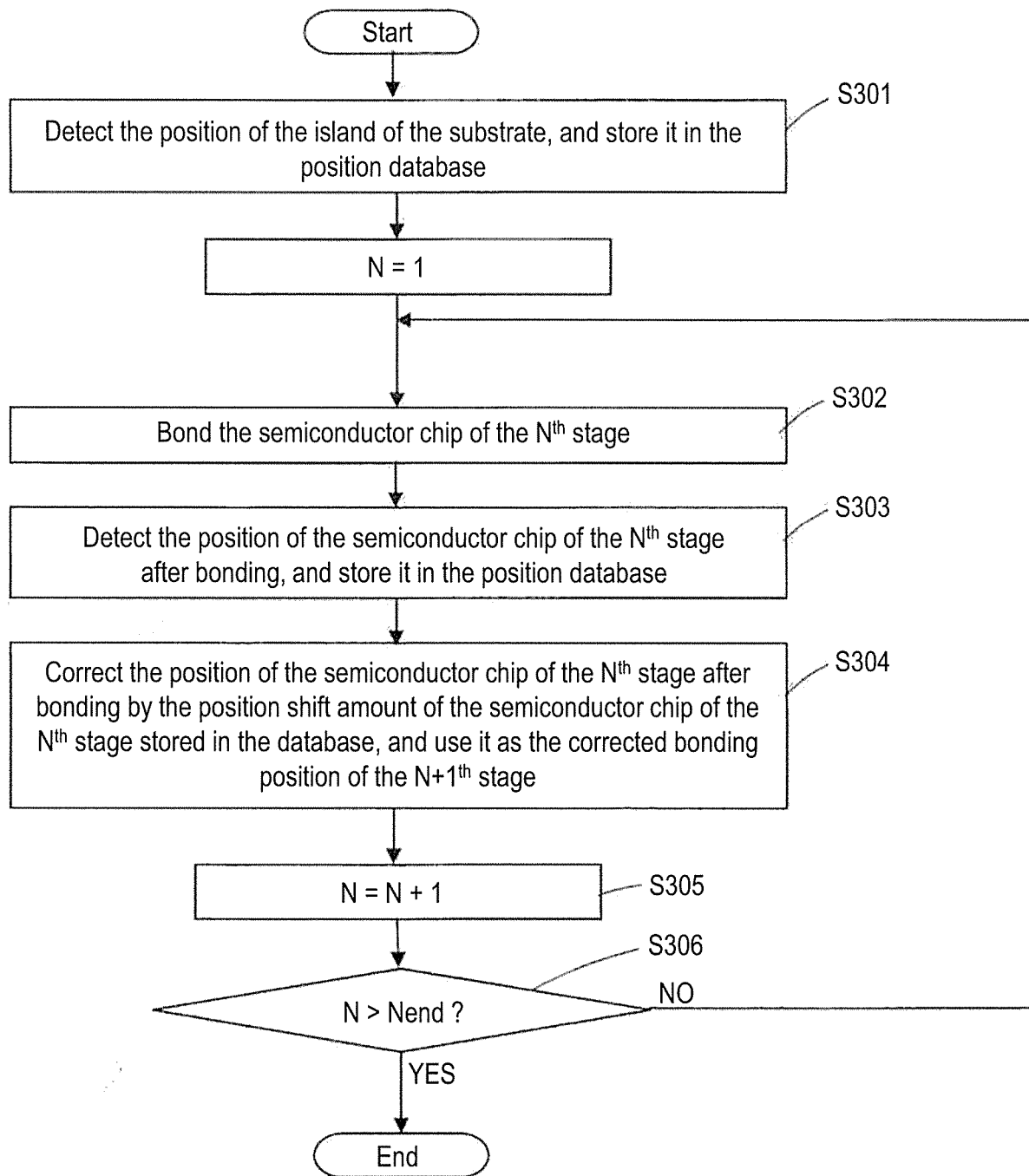


FIG. 13