

A B S T R A C T

A METHOD OF CONTROLLING AN ION IMPLANTER IN PLASMA
IMMERSION MODE

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The present invention relates to a method of controlling an ion implanter having a plasma power supply AP and a substrate power supply, the substrate power supply comprising:

- 10 · an electricity generator;
 · a first switch SW1 connected between the generator and the output terminal of the substrate power supply;
and

- a second switch SW2 connected between the output
15 terminal and a neutralization terminal;

the method including an implantation stage A-D and a neutralization stage E-H. The method also includes a relaxation stage C-F overlapping the implantation stage and the neutralization stage, during which relaxation
20 stage the plasma power supply is inactivated.
Furthermore, the neutralization stage includes a preliminary step E-F for closing the second switch, this preliminary step being followed by a cancellation step F-G for activating the plasma power supply AP.

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Figure 4