

A B S T R A C T

A MACHINE FOR IMPLANTING IONS IN PLASMA IMMERSION MODE
FOR A LOW-PRESSURE METHOD

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The present invention provides an ion implantation machine comprising:

· an enclosure ENV that is connected to a pump device VAC;

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· a negatively polarized HT substrate-carrier PPS that is arranged inside said enclosure ENV; and

· a plasma feed device AP in the form of a generally cylindrical body extending between an initial section and a terminal section, the device having a main chamber PR provided with an ionization cell BC1, ANT1;

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said main chamber PR being provided with a gas delivery orifice ING; and

the final section CL of said main chamber being provided with head-loss means for creating a pressure drop relative to said body AP.

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Furthermore, said plasma feed device AP also includes an auxiliary chamber AUX arranged beyond said final section, said auxiliary chamber opening out into said enclosure ENV at said terminal section.

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Figure 1