

Title (en)
COATING APPARATUS AND COATING METHOD HAVING DIVIDED PULSES

Title (de)
BESCHICHTUNGSVORRICHTUNG UND BESCHICHTUNGSVERFAHREN MIT UNTERTEILTEN PULSEN

Title (fr)
APPAREIL DE REVÊTEMENT ET PROCÉDÉ DE REVÊTEMENT AYANT DES IMPULSIONS DIVISÉES

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Application
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Abstract (en)
[origin: WO2022058193A1] The invention relates to a coating method and to a coating apparatus for coating a body (40). A magnetron-cathode (22a, 22b, 22c, 22d) having a target (24a, 24b, 24c, 24h) is arranged in the vacuum chamber (12). Electrical power is supplied to the magnetron-cathode (22a, 22b, 22c, 22d) such that a plasma is generated and the target (24a, 24b, 24c, 24h) is atomized in order to deposit a coating (44) on the body (40). The electrical power is periodically supplied within a period duration T according to the HIPIMS method as a cathode pulse (60), wherein each cathode pulse (60) comprises at least two cathode sub-pulses (62) and an intermediate cathode sub-pulse break (64). In order to be able to deposit coatings (44) having favorable properties, using the chopped HIP IMS method in a particularly favorable manner, a bias voltage is applied to the substrate (40) to be coated with bias voltage pulses (66), wherein each bias voltage pulse (66) comprises at least two bias sub-pulses (68) and an intermediate bias sub-pulse break (70).

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