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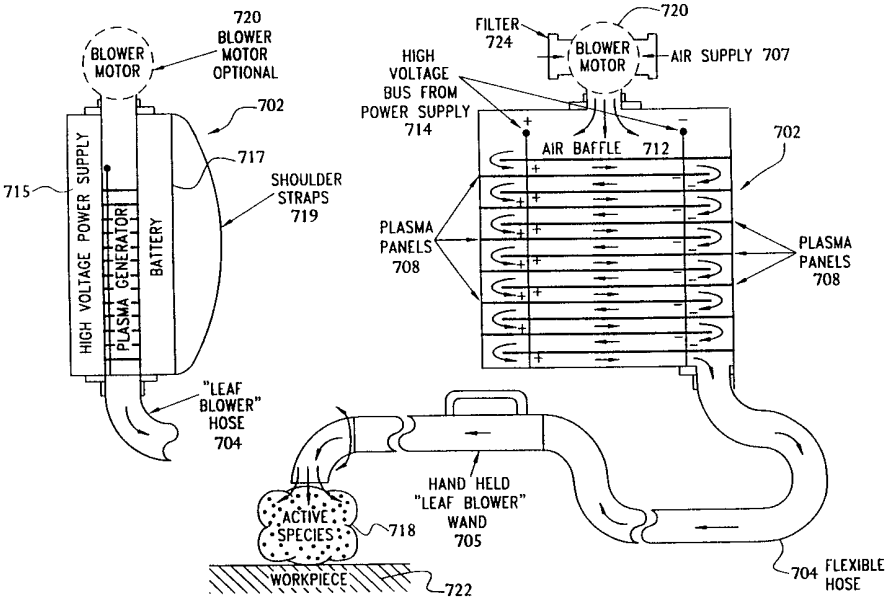
(54) Title: REMOTE EXPOSURE OF WORKPIECES USING A ONE ATMOSPHERE UNIFORM GLOW DISCHARGE PLASMA



(57) Abstract

An OAUGD plasma is generated using, for example, paraelectric or peristaltic electohydrodynamic (EHD) techniques, in the plasma generator of a remote–exposure reactor, wherein one or more active species, especially oxidizing species in the plasma are convected away from the plasma–generation region and directed towards a workpiece that is located outside of the plasma–generation region (e.g., within an optional remote–exposure chamber configured to the plasma generator). In this way, the workpiece can be subjected to the one or more active species without directly being subjected to either the plasma or to the electric fields used to generate the plasma. The plasma generator may have a set of flat panels arranged within an air baffle to convect the active species in a serpentine manner through the plasma generator. The remote–exposure reactor can also be configured as a portable backpack unit with tubing that is used to direct the active species onto the workpiece, rather than placing the workpiece within a remote–exposure chamber of the reactor.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 H05H1/24 H01J37/32

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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 6 H05H H01J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

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Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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A	figure 4	12,13, 18,29,30

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[X] Further documents are listed in the continuation of box C.

[X] Patent family members are listed in annex.

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Date of the actual completion of the international search	Date of mailing of the international search report
2 September 1999	15/09/1999

Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo nl, Fax: (+31–70) 340–3016	Capostagno, E

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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