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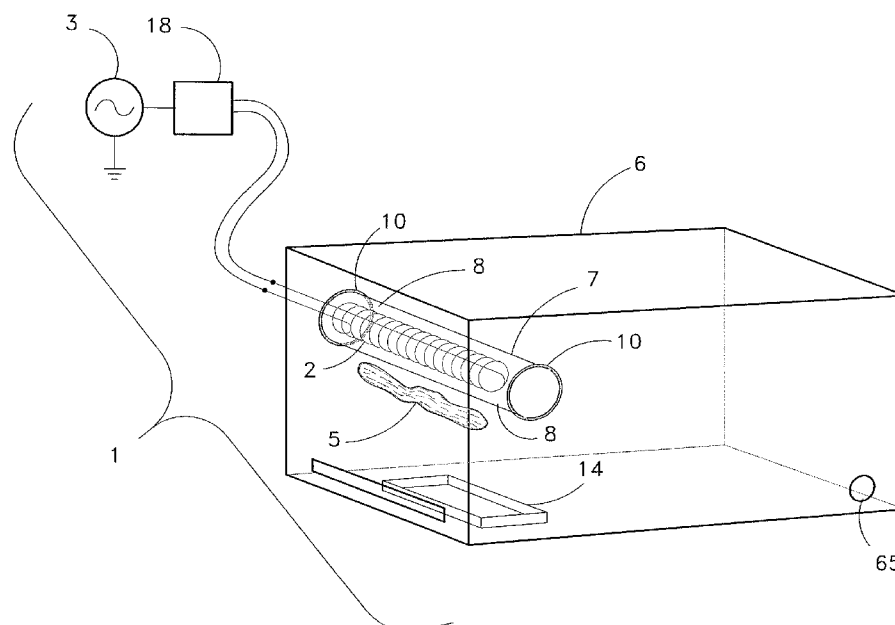
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(54) Title: **INDUCTIVELY COUPLED PLASMA SYSTEM WITH INTERNAL COIL**



(57) **Abstract:** Embodiments of the inventive technology may be a plasma system that comprises a coil powered by a power source so as to generate or enhance a plasma in a process chamber; and a dielectric form that itself is established within the process chamber and that defines an internal volume in which at least a portion of a coil is established. In various embodiments, the dielectric form has two ends supported by at least one support member at two support sites and/or has a form centerline in a system with a substrate support adapted to support a substrate with a process surface that defines a process surface plane that is parallel the form centerline.

WO 2008/014196 A3

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US07/74073

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - C23F 1/00 (2007.10)

USPC - 156/345.48

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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USPC - 156/345.24; 156/345.48; 204/192.17

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 practicable, search terms used)

PatBase, Google Scholar, Google Patent, Google

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|------------------------------------------------------------------------------------|-----------------------|
| X         | US 2002/0157793 A1 (COX et al) 31 October 2002 (31.10.2002) entire document        | 1-23                  |
| A         | US 6,132,566 A (HOFMANN et al) 17 October 2000 (17.10.2000) entire document        | 1-23                  |
| A         | US 2004/0007326 A1 (ROCHE et al) 15 January 2004 (15.01.2004) entire document      | 1-23                  |
| A         | US 2005/0034811 A1 (MAHONEY et al) 17 February 2005 (17.02.2005) entire document   | 1-23                  |

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