

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
19 October 2000 (19.10.2000)

PCT

(10) International Publication Number
WO 00/61498 A3

(51) International Patent Classification⁷: **C25D 17/12**

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(21) International Application Number: **PCT/US00/10120**

(22) International Filing Date: **13 April 2000 (13.04.2000)**

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(25) Filing Language: **English**

(26) Publication Language: **English**

(81) Designated States (*national*): **CN, JP, KR, SG, US.**

(30) Priority Data:
60/129,055 13 April 1999 (13.04.1999) US
60/143,769 12 July 1999 (12.07.1999) US
60/182,160 14 February 2000 (14.02.2000) US

(84) Designated States (*regional*): European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).

Published:

— *With international search report.*

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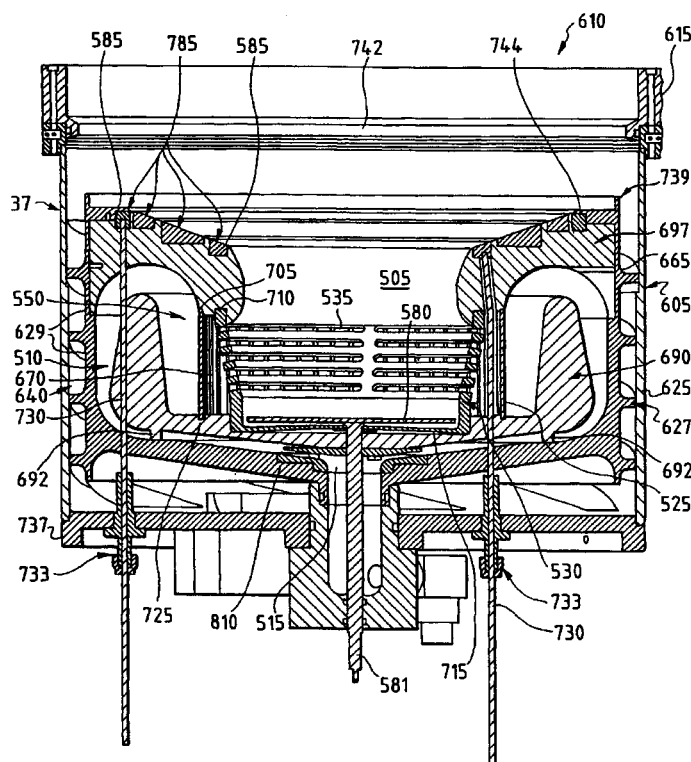
(88) Date of publication of the international search report:
25 January 2001

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **SYSTEM FOR ELECTROCHEMICALLY PROCESSING A WORKPIECE**



(57) Abstract: A reactor for electrochemically processing at least one surface of a microelectronic workpiece is set forth. The reactor comprises a reactor head including a workpiece support that has one or more electrical contacts positioned to make electrical contact with the microelectronic workpiece. The reactor also includes a processing container (610) having a plurality of nozzles (530) angularly disposed in a sidewall of a principal fluid flow chamber at a level within the principal fluid flow chamber below a surface of a bath of processing fluid normally contained therein during electrochemical processing. A plurality of anodes (785) are disposed at different elevations in the principal fluid flow chamber so as to place them at different distances from a microelectronic workpiece under process without an intermediate diffuser between the plurality of anodes and the microelectronic workpiece under process. One or more of the plurality of anodes may be in close proximity to the workpiece under process. Still further, one or more of the plurality of anodes may be a virtual anode. The present invention also relates to multi-level anode configurations within a principal fluid flow chamber and methods of using the same.

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