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(54) Title: ATMOSPHERIC PRESSURE MICROWAVE PLASMA TREATED POROUS MEMBRANES

(57) Abstract: Versions of the invention include compositions and methods for making them that include a polymeric porous membrane with one or more atmospheric pressure microwave plasma modified surfaces. The modified porous membrane is stable, non-dewetting, and retains its mechanical strength.

# INTERNATIONAL SEARCH REPORT

International application No.

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**A. CLASSIFICATION OF SUBJECT MATTER**

IPC: **B01D 39/00**( 2006.01),**B01D 39/14**;**H05H 1/32**( 2006.01)  
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USPC: 210/500.36,500.42,500.27,490;264/48,49;427/538,539,358

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**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
 U.S. : 210/500.36,500.42,500.27,490;264/48,49;427/538,539,358

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
 none

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

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,282,965 A (URAIRI et al) 01 February1, 1994, entire disclosure.	10-11, 113, 14, 15-17, 19-22
X	US 5,451,453 A (GAGNON et al ) 19 September 1995, entire disclosure.	10-11, 15-17, 19, 21

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See patent family annex.

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"A"	document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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"O"	document referring to an oral disclosure, use, exhibition or other means	
"P"	document published prior to the international filing date but later than the priority date claimed	"&" document member of the same patent family

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