11-15-2002 RE	EET	Docket Number ATMI 506
TO THE H(  Please record the attacked 289	'ATENTS AND TRADEMARKS:	
	or copy thereof.	
1. Name of conveying party (ies):	<ul> <li>Name and address of receiving party:</li> <li>Advanced Technology Materials, Inc.</li> <li>7 Commerce Drive</li> <li>Danbury, Connecticut 06810</li> <li>Additional name(s) and addresses attached? ☐ Yes ☒ No</li> </ul>	
Jose I. Arno //-/2 02		
Additional name(s) of conveying party (ies) attached?   Yes  No		
3. Nature of conveyance:		
☑ Assignment ☐ Merger ☐ Security	Agreement	nge of Name
□ Other		
Execution Date: October 1, 2002		
A. Patent Application No.(s)	B. Patent No.(s)	
Additional numbers	s attached?  Yes N	0
5. Name and address of party to whom correspondence concerning document	7. Total Fee (37 CFF	3.41): \$ = 40 = 5
should be mailed:	☐ Enclosed	
Oliver A. Zitzmann Advanced Technology Materials, Inc.	Authorized to be charged to deposit account	
7 Commerce Drive Danbury, Connecticut 06810 Telephone: 203-794-1100		
Danbury, Connecticut 06810	8. Deposit account n	umber:
Danbury, Connecticut 06810 Telephone: 203-794-1100  6. Total number of applications and patents	50-0860	umber:

PATENT REEL: 013478 FRAME: 0648

## ASSIGNMENT

We have made an invention described in the U.S. Patent Application entitled "SYSTEM FOR IN-SITU GENERATION OF FLUORINE RADICALS AND/OR FLUORINE-CONTAINING INTERHALOGEN (XF<sub>n</sub>) COMPOUNDS FOR USE IN CLEANING SEMICONDUCTOR PROCESSING CHAMBERS" which has been executed by us on the same date as this Assignment for filed in the United States Patent and Trademark Office.

We assign to Advanced Technology Materials, Inc., 7 Commerce Drive, Danbury, Connecticut 06810, all of our ownership and rights in:

- (i) the invention and U.S. Patent Application;
- (ii) U.S. Patents on the invention; and
- (iii) corresponding foreign patent applications and patents.

We are making this assignment based on our relationship with Advanced Technology Materials, Inc.

We request the Commissioner of Patents and Trademarks of the United States and the appropriate officers of all foreign countries to issue patents on the invention to Advanced Technology Materials, Inc.

We agree to execute any other legal documents that may be required to effectuate this Assignment.

We agree that we will promptly communicate to Advanced Technology Materials, Inc. all facts that come to our attention affecting the invention or patent rights.

We agree that we will testify in any interference or litigation involving the invention or patent rights.

We state that we have not previously taken any action in conflict with this Assignment.

Page 1 of 2

Full Name of first inventor: Jose I. Arno
Inventor's Signature Date

Residence: 13 Twilight Lane, Brookfield, CT 06804

Citizenship: Spain

Post Office Address: 13 Twilight Lane, Brookfield, CT 06804

**RECORDED: 11/12/2002**