1-31-42 MRT) 10-30-98 Tab sentings \$\infty\$ \$\infty\$ \$\infty\$	11-09-19				
To the Honorable Commissioner of	10087119	e attached original documents or copy thereof.			
1. Name of conveying party(ies): Durga Prasad Beesabat Prasad Rao Kalvala Karl Erik Wiedemann Additional name(s) of conveying party(ies)	hina	Analytical Services and Name: Materials Inc. Internal Address:			
3. Nature of conveyance:		or E			
☐ Assignment	☐ Merger ☐ Change of Name	Street Address: 107 Research Drive			
☐ Security Agreement		City: Hampton State: VA ZIP: 23666			
Other					
Execution Date:		Additional name(s) & address(es) attached?			
A. Patent Application No.(s)	Additional numbers attact	B. Patent No.(s) ned? □ Yes ፟ No			
Name and address of party to whom correspondence concerning document should be mailed:		6. Total number of applications and patents involved:			
Name: <u>Karl Erik Wiede</u>	emann				
Internal Address:		7. Total fee (37 CFR 3.41)\$ 40.00			
		☐ Authorized to be charged to deposit account			
Street Address: 107 Research Drive		8. Deposit account number:			
	e: VA ZIP: 23666	(Attach duplicate copy of this page if paying by deposit account)			
11/04/1998 TSTOKES 00000065-09183181 03 FC:581 40.00 OP	1/04/1998 TSTOKES 00000065-09183181 DO NOT USE THIS SPACE 3 FC:581 40.00 OP				
9. Statement and signature To the best of my knowledge and be of the original document.	pelief, the foregoing inform	nation is true and correct and any attached copy is a true copy			
Karl Erik Wiedemann	- And	Signature Date			
Name of Person Signing	/	Signature Dafe			

PATENT REEL: 9561 FRAME: 0772

Assignment of Invention and Patent Application

For value received, Durga Prasad Beesabathima Ph.D. of 1365, Peabody Drive, Hampton, Virginia 23666 (hereinafter "Assignor"), hereby sells, assigns, transfers, and sets over unto Analytical Services & Materials, Inc. of 107 Research Drive, Hampton, Virginia 23666-1340 and her or his successors or assigns (hereinafter "Assignee") 100 % of the following:

- (A) Assignor's right, title and interest in and to the invention entitled "Stabilized Two-Phase Glass Diffusion Barrier" invented by Assignor;
- (B) the application for Untied States patent therefor, signed by Assignor on October 30, 1998, U.S. Patent and Trademark Office Serial Number ______; Filed October 30, 1998;
- (C) any patent or reissues of any patent that may be granted thereon; and
- (D) any applications which are continuations, continuations-in-part, substitutes, or divisions of said application. Assignor authorizes Assignee to enter the date of signature and/or Serial Number and Filing Date in the spaces above. Assignor also authorizes and requests the Commissioner of Patents and Trademarks to issue any resulting patent(s) as follows: 0 % to Assignor and 100 % to the Assignee. (The singular shall include the plural and vice-versa herein.)

Assignor hereby further sells, assigns, transfers, and sets over unto Assignee, the above percentage of Assignor's entire right, title and interest in and to said invention in each and every country foreign to the United States; and Assignor further conveys to Assignee the above percentage of all priority rights resulting from the above-identified application for United States patent. Assignor agrees to execute all papers, give any required testimony and perform other lawful acts, at Assignee's expense, as Assignee may require to enable Assignee to perfect Assignee's interest in any resulting patent of the United States and countries foreign thereto, and to acquire, hold, enforce, convey, and uphold the validity of said patent and reissues and extensions thereof, and Assignee's interest therein.

In testimony whereof Assignor has hereunto set its hand and seal on the date below.

B. Dunga prand	10/30/1998
Ctate: Virginia	
State: Virginia	
Subscribed and swern to before me this date 30 th Notary Public:	day of actober 1998
Mey commission Expired	

PATENT REEL: 9561 FRAME: 0773

Assignment of Invention and Patent Application

For value received, Prasad Rao Kalvala Ph.D. of 14L, Tradewind Quay, Hampton, Virginia 23666 (hereinafter "Assignor"), hereby sells, assigns, transfers, and sets over unto Analytical Services & Materials, Inc. of 107 Research Drive, Hampton, Virginia 23666-1340 and her or his successors or assigns (hereinafter "Assignee") 100 % of the following:

- (A) Assignor's right, title and interest in and to the invention entitled "Stabilized Two-Phase Glass Diffusion Barrier" invented by Assignor;
- (B) the application for Untied States patent therefor, signed by Assignor on October 30, 1998, U.S. Patent and Trademark Office Serial Number ; Filed October 30, 1998;
- (C) any patent or reissues of any patent that may be granted thereon; and
- (D) any applications which are continuations, continuations-in-part, substitutes, or divisions of said application. Assignor authorizes Assignee to enter the date of signature and/or Serial Number and Filing Date in the spaces above. Assignor also authorizes and requests the Commissioner of Patents and Trademarks to issue any resulting patent(s) as follows: 0 % to Assignor and 100 % to the Assignee. (The singular shall include the plural and vice-versa herein.)

Assignor hereby further sells, assigns, transfers, and sets over unto Assignee, the above percentage of Assignor's entire right, title and interest in and to said invention in each and every country foreign to the United States; and Assignor further conveys to Assignee the above percentage of all priority rights resulting from the above-identified application for United States patent. Assignor agrees to execute all papers, give any required testimony and perform other lawful acts, at Assignee's expense, as Assignee may require to enable Assignee to perfect Assignee's interest in any resulting patent of the United States and countries foreign thereto, and to acquire, hold, enforce, convey, and uphold the validity of said patent and reissues and extensions thereof, and Assignee's interest therein.

In testimony	whereof Assignor has hereunto se	t its hand and seal on the o	date below.
	(Spranov _	10/30/0	18
State: Virgin	nia Hampton		
Subscribed a Notary Publi	and sworn to before me this date sic:	of day of Octobe	w 1998
Muz	Commission expire	10 11-30-95.	

PATENT REEL: 9561 FRAME: 0774

Assignment of Invention and Patent Application

For value received, Karl Erik Wiedemann of 104 Rebecca Drive, Seaford, Virginia 23696-2313 (hereinafter "Assignor"), hereby sells, assigns, transfers, and sets over unto Analytical Services & Materials, Inc. of 107 Research Drive, Hampton, Virginia 23666-1340 and her or his successors or assigns (hereinafter "Assignee") 100 % of the following:

- (A) Assignor's right, title and interest in and to the invention entitled "Stabilized Two-Phase Glass Diffusion Barrier" invented by Assignor;
- (B) the application for Untied States patent therefor, signed by Assignor on October 30, 1998, U.S. Patent and Trademark Office Serial Number
 ______; Filed October 30, 1998;
- (C) any patent or reissues of any patent that may be granted thereon; and
- (D) any applications which are continuations, continuations-in-part, substitutes, or divisions of said application. Assignor authorizes Assignee to enter the date of signature and/or Serial Number and Filing Date in the spaces above. Assignor also authorizes and requests the Commissioner of Patents and Trademarks to issue any resulting patent(s) as follows: 0 % to Assignor and 100 % to the Assignee. (The singular shall include the plural and vice-versa herein.)

Assignor hereby further sells, assigns, transfers, and sets over unto Assignee, the above percentage of Assignor's entire right, title and interest in and to said invention in each and every country foreign to the United States; and Assignor further conveys to Assignee the above percentage of all priority rights resulting from the above-identified application for United States patent. Assignor agrees to execute all papers, give any required testimony and perform other lawful acts, at Assignee's expense, as Assignee may require to enable Assignee to perfect Assignee's interest in any resulting patent of the United States and countries foreign thereto, and to acquire, hold, enforce, convey, and uphold the validity of said patent and reissues and extensions thereof, and Assignee's interest therein.

In testimony whereof Assignor has hereunto set its hand and seal on the date below.
State: Virginia City County: 4 ampton Subscribed and sworn to before me this date 30th day of October 1995 Notary Public: parbara W. Benson My Commission Clipine 11-30-95.

PATENT
RECORDED: 10/30/1998 REEL: 9561 FRAME: 0775