→ USPTO_LIC 2001/002

ı

REEL: 030220 FRAME: 0156

CMB No. 0651-0027 (exp. 6/30/2008) United States Patent				
PSL	PATEN	STA COVER SHEET S-126,833		
To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.				
	veying party(les)	2. Name and address of receiving party(les)		
AIR PRODUCTS AND CHEMICALS, INC.		Name: United States Department of Energy		
		Internal Address:		
Additional name(s) of				
Additional name(s) of conveying party(les) attached? Yes / No 3. Nature of conveyance/Execution Date(s):		Street Address: <u>1000 Independence Ave</u>	SV	
Execution Date(s			and an and a set	
Assignment	Merger			
Security Agre	eement Change of Name	City: Washington		
Joint Researd	ch Agreement	State: D.C.		
Government	Interest Assignment		<u></u>	
Executive Or	der 9424, Confirmatory License	Country: <u>USA</u> Zip: <u>20585</u>		
Other		Additional name(s) & address(es) attached?	٧Ŋ	
		document is being filed together with a new appl	icatior	
A. Patent Application No.(s)		B. Patent No.(s)		
08/870,012				
00/07 0,012		6,077,323		
00/070,012		6,077,323		
00/07/0,012	Additional numbers at			
	Additional numbers at dress to whom correspondence	ached? Yes / No		
5. Name and add concerning doc	dress to whom correspondence ument should be mailed:			
5. Name and add concerning doc	dress to whom correspondence	6. Total number of applications and patents		
5. Name and add concerning docu Name:Mark P.	dress to whom correspondence ument should be mailed:	tached? Yes No 6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$		
5. Name and add concerning docu Name:Mark P.	dress to whom correspondence ument should be mailed: Dvorscak	6. Total number of applications and patents		
5. Name and add concerning docu Name: <u>Mark P.</u> Internal Address	dress to whom correspondence ument should be mailed: Dvorscak : <u>U. S. Dept. of Energy, IPLD</u>	tached? Yes ✓ No 6. Total number of applications and patents involved:	nt	
5. Name and add concerning docu Name: <u>Mark P.</u> Internal Address	dress to whom correspondence ument should be mailed: Dvorscak	tached? Yes No 6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$		
5. Name and add concerning docu Name: <u>Mark P.</u> Internal Address Street Address: <u>9</u>	dress to whom correspondence ument should be mailed: Dvorscak : <u>U. S. Dept. of Energy, IPLD</u>	tached? Yes No 6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$		
5. Name and add concerning docu Name: <u>Mark P.</u> Internal Address Street Address: <u>9</u> City: <u>Argonne</u>	dress to whom correspondence ument should be mailed: Dvorscak : <u>U. S. Dept. of Energy, IPLD</u> 8800 S. Cass Ave	tached? Yes ✓ No 6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$	ing title	
5. Name and add concerning docu Name: <u>Mark P.</u> Internal Address Street Address: <u>9</u> City: <u>Argonne</u> State: <u>IL</u>	dress to whom correspondence ument should be mailed: Dvorscak : <u>U. S. Dept. of Energy, IPLD</u> 0800 S. Cass Ave Zip:60439	tached? Yes ✓ No 6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$	ing title	
5. Name and add concerning docu Name: <u>Mark P.</u> Internal Address	dress to whom correspondence ument should be mailed: Dvorscak : <u>U. S. Dept. of Energy, IPLD</u> 2800 S. Cass Ave 	ached? Yes No 6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ Authorized to be charged by credit card Authorized to be charged to deposit account Enclosed ✓ None required (government interest not affect 8. Payment Information a. Credit Card Last 4 Numbers b. Deposit Account Number	ing title	
5. Name and add concerning doce Name: <u>Mark P.</u> Internal Address Street Address: <u>9</u> City: <u>Argonne</u> State: <u>11</u> Phone Number: <u>63</u>	dress to whom correspondence ument should be mailed: Dvorscak : <u>U. S. Dept. of Energy, IPLD</u> 2800 S. Cass Ave 	tached? Yes ✓ No 6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$	ing title	
5. Name and add concerning docu Name: <u>Mark P.</u> Internal Address Street Address: <u>9</u> City: <u>Argonne</u> State: <u>11</u> Phone Number: <u>63</u> Email Address:_	dress to whom correspondence ument should be mailed: Dvorscak : <u>U. S. Dept. of Energy, IPLD</u> 2800 S. Cass Ave 	ached? Yes No 6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ Authorized to be charged by credit card Authorized to be charged to deposit account Enclosed ✓ None required (government interest not affect 8. Payment Information a. Credit Card Last 4 Numbers b. Deposit Account Number	ing title	
5. Name and add concerning docu Name: <u>Mark P.</u> Internal Address Street Address: <u>9</u> City: <u>Argonne</u> State: <u>II</u> Phone Number: <u>6</u>	dress to whom correspondence ument should be mailed: Dvorscak : <u>U. S. Dept. of Energy, IPLD</u> 2800 S. Cass Ave 	ached? Yes No 6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ Authorized to be charged by credit card Authorized to be charged to deposit account Enclosed ✓ None required (government interest not affect 8. Payment Information a. Credit Card Last 4 Numbers b. Deposit Account Number	ing title	
5. Name and add concerning docu Name: <u>Mark P.</u> Internal Address Street Address: <u>9</u> City: <u>Argonne</u> State: <u>11</u> Phone Number: <u>63</u> Email Address:_	dress to whom correspondence ument should be mailed: Dvorscak :U. S. Dept. of Energy, IPLD 0800 S. Cass Ave 	ached? Yes ✓ No 6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$	ing title	

.



Department of Energy Office of Science • Chicago Office • Intellectual Property Law Division 9800 South Cass Avenue Argonne, Illinois 60439 (630) 252-2171 Volce • (630) 252-2779 Fax Chicago-Ip@ch.doe.gov www.ch.doe.gov/

CONFIRMATORY LICENSE

Title of Invention:	Synthesis Gas Production By Ion Transport Membranes		
Inventor(s):	Shankar Nataraj; Steven Lee Russek, both of Allentown, PA		
Patent Application Serial No:	08/870,012	Filing Date June 6, 1997	
Patent Number: Name of Contractor (i.e. Contrac	6,077,323 ctor, Subcontractor, Grant, or Cooperative Agreement,	Issue Date: June 20, 2000 as applicable):	
Name of Contractor: Air Prod DOE Contract No. (i.e. Contract,	ucts and Chemicals, Inc. Subcontract, Grant, or Cooperative Agreement, as ap	plicable):	

DE-FC26-97FT96052 DOE Case No.: S-126,833

Contractor Docket No.: 05686

The Contractor has reported the above-identified invention as a Subject Invention to DOE and has elected to retain title thereto.

Accordingly, this document is confirmatory of the nonexclusive, nontransferable, irrevocable, paid-up, worldwide license in this subject invention, patent application and any resulting patent, including any continuation, divisional, reissue, or supplemental application thereof, to practice or to have practiced for or on behalf of the United States throughout the world; and of all other rights acquired by the Government by the patent rights clause in the above-identified contract.

It is understood and agreed that this license does not preclude the Government from asserting rights under the provisions of said contract or of any other agreement between the Government and the Contractor, or from asserting any other rights of the Government with respect to the above-identified subject invention.

The Government is hereby granted an irrevocable power to inspect and make copies of the above-identified patent application.

1 Air Products and Chemicals, Inc. **Contractor Name** Official's Name Guillermo Novo Senior Vice President and General Manager

Official's Title Electronics, Performance Materials, Strategy and Technology

Business Address 7201 Hamilton Boulevard, Allentown, PA 18195-1501

PATENT REEL: 030220 FRAME: 0157

Signed on: 20 February 2013

RECORDED: 04/16/2013