	United States Patent and Trademark Office	
OMB No. 0651-0027 (exp. 6/30/2005) RECORDATION FORM COVER SHEET		
PATENTS ONLY		
To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.		
1. Name of conveying party(ies)/Execution Date(s):	2. Name and address of receiving party(ies)	
ZHAO, Shizhong CAI, Yeping	Name: Sud-Chemie Inc.	
HU, XD LADEBECK, Jurgen WAGNER, Jon P.	Internal Address: <u>A Delaware Corporation</u>	
Execution Date(s) July 9. 2004	Street Address: 1600 West Hill Street	
Additional name(s) of conveying party(ies) attached?		
3. Nature of conveyance:		
Assignment Merger	City: Louisville	
Security Agreement Change of Name	State: Kentucky	
Government Interest Assignment		
Executive Order 9424, Confirmatory License	Country: USA Zip: 40210	
Other	Additional name(s) & address(es) attached? 🗌 Yes 🗹 No	
4. Application or patent number(s):		
A. Patent Application No.(s)	B. Patent No.(s)	
10/888,645		
Additional numbers attached?		
5. Name and address to whom correspondence	6. Total number of applications and patents	
concerning document should be mailed:	involved: 1	
Name: <u>Sud-Chemie Inc.</u>	7. Total fee (37 CFR 1.21(h) & 3.41) \$_N/A	
Internal Address: IP/Legal Department	Authorized to be charged by credit card	
	Authorized to be charged to deposit account	
Street Address: 1600 West Hill Street	Enclosed	
	None required (government interest not affecting title)	
City: Louisville	8. Payment Information	
State: Kentucky Zip: 40210	a. Credit Card Last 4 Numbers	
Phone Number: 502-634-7200	Expiration Date	
Fax Number: <u>502-634-7724</u>	b. Deposit Account Number	
Email Address: jsimunic@sud-chemieinc.com	Authorized User Name	
	-lal-	
9. Signature: Signature		
	Total number of pages including cover	
Joan L. Simunic, Reg. No. 43,125 Name of Person Signing	sheet, attachments, and documents:	

Documents to be recorded (including cover sheet) should be faxed to (703) 306-5995, or mailed to: Mall Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandría, V.A. 22313-1450 -

	ase record the attached documents or the new address(es) below.
1. Name of conveying party(ies)/Execution Date(s):	
ZHAO, Shizhong; CAI; Yeping;	Name: Sud-Chemie Inc.
CAI; Yeping; HU, X.D.; LADEBECK, Jurgen; WAGNER, Jon P.	Internal Address: <u>A Delaware Corporation</u> ຊົ່ງ ທູ່ເດ
Execution Date(s)	8
Additional name(s) of conveying party(ies) attached?	Street Address:
3. Nature of conveyance:	
Assignment Merger	City: Louisville
Security Agreement Change of Name	State: Kentucky
Government Interest Assignment	
Executive Order 9424, Confirmatory License	Country: USA Zip: 40210
Other	Additional name(s) & address(es) attached? - Yes
Additional numbers a	attached? TYes IND 10888645
Additional numbers a 5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents
5. Name and address to whom correspondence	6. Total number of applications and patents involved:
5. Name and address to whom correspondence concerning document should be mailed: Name: <u>Sud-Chemie Inc.</u>	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41)
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40,00 Image: Authorized to be charged by credit card
5. Name and address to whom correspondence concerning document should be mailed: Name: <u>Sud-Chemie Inc.</u> Internal Address: <u>IP/Legal Department</u>	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Image: Authorized to be charged by credit card Authorized to be charged to deposit account
5. Name and address to whom correspondence concerning document should be mailed: Name: <u>Sud-Chemie Inc.</u>	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Image: Authorized to be charged by credit card Image: Authorized to be charged to deposit account Image: Enclosed
5. Name and address to whom correspondence concerning document should be mailed: Name: <u>Sud-Chemie Inc.</u> Internal Address: <u>IP/Legal Department</u> Street Address: <u>1600 West Hill Street</u>	 6. Total number of applications and patents involved: 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Authorized to be charged by credit card Authorized to be charged to deposit account Enclosed None required (government interest not affecting title)
5. Name and address to whom correspondence concerning document should be mailed: Name: <u>Sud-Chemie Inc.</u> Internal Address: <u>IP/Legal Department</u>	 6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Authorized to be charged by credit card Authorized to be charged to deposit account Enclosed None required (government interest not affecting title) 8. Payment Information
5. Name and address to whom correspondence concerning document should be mailed: Name: <u>Sud-Chemie Inc.</u> Internal Address: <u>IP/Legal Department</u> Street Address: <u>1600 West Hill Street</u>	 6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Authorized to be charged by credit card Authorized to be charged to deposit account Enclosed None required (government interest not affecting title) 8. Payment Information a. Credit Card Last 4 Numbers 9355
5. Name and address to whom correspondence concerning document should be mailed: Name: <u>Sud-Chemie Inc.</u> Internal Address: <u>IP/Legal Department</u> Street Address: <u>1600 West Hill Street</u>	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 ✓ Authorized to be charged by credit card Authorized to be charged by credit card Enclosed None required (government interest not affecting title) 8. Payment Information a. Credit Card Last 4 Numbers 9355 Expiration Date 04/06
5. Name and address to whom correspondence concerning document should be mailed: Name: <u>Sud-Chemie Inc.</u> Internal Address: <u>IP/Legal Department</u> Street Address: <u>1600 West Hill Street</u> City: <u>Louisville</u> State: <u>Kentucky</u> Zip: <u>40210</u>	 6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Authorized to be charged by credit card Authorized to be charged by credit card Authorized to be charged to deposit account Enclosed None required (government interest not affecting title) 8. Payment Information a. Credit Card Last 4 Numbers <u>9355</u> Expiration Date <u>04/06</u> b. Deposit Account Number
5. Name and address to whom correspondence concerning document should be mailed: Name: <u>Sud-Chemie Inc.</u> Internal Address: <u>IP/Legal Department</u> Street Address: <u>1600 West Hill Street</u> City: Louisville State: <u>Kentucky</u> Zip: <u>40210</u> Phone Number: <u>502-634-7200</u>	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 ✓ Authorized to be charged by credit card Authorized to be charged by credit card Enclosed None required (government interest not affecting title) 8. Payment Information a. Credit Card Last 4 Numbers 9355 Expiration Date 04/06
5. Name and address to whom correspondence concerning document should be mailed: Name: <u>Sud-Chemie Inc.</u> Internal Address: <u>IP/Legal Department</u> Street Address: <u>1600 West Hill Street</u> City: <u>Louisville</u> State: <u>Kentucky</u> Phone Number: <u>502-634-7200</u> Fax Number: <u>502-634-7724</u> Email Address: <u>Jalmunic@sud-chemieinc.com</u> 9. Signature:	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40,00 Image: Authorized to be charged by credit card Authorized to be charged by credit card Authorized to be charged to deposit account Enclosed None required (government interest not affecting title) 8. Payment Information a. Credit Card Last 4 Numbers 9355 Expiration Date 04/06 b. Deposit Account Number Authorized User Name
5. Name and address to whom correspondence concerning document should be mailed: Name: <u>Sud-Chemie Inc.</u> Internal Address: <u>IP/Legal Department</u> Street Address: <u>1600 West Hill Street</u> City: <u>Louisville</u> State: <u>Kentucky</u> Phone Number: <u>502-634-7200</u> Fax Number: <u>502-634-7724</u> Email Address: <u>Jalmunic@sud-chemieinc.com</u>	 6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Authorized to be charged by credit card Authorized to be charged by credit card Authorized to be charged to deposit account Enclosed None required (government interest not affecting title) 8. Payment Information a. Credit Card Last 4 Numbers <u>9355</u> Expiration Date <u>04/06</u> b. Deposit Account Number
5. Name and address to whom correspondence concerning document should be mailed: Name: <u>Sud-Chemie Inc.</u> Internal Address: <u>IP/Legal Department</u> Street Address: <u>1600 West Hill Street</u> City: Louisville State: <u>Kentucky</u> Zip: <u>40210</u> Phone Number: <u>502-634-7200</u> Fax Number: <u>502-634-7724</u> Email Address: <u>jslmunic@sud-chemieinc.com</u> 9. Signature:	 6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 ✓ Authorized to be charged by credit card Authorized to be charged by credit card Authorized to be charged to deposit account Enclosed None required (government interest not affecting title) 8. Payment Information a. Credit Card Last 4 Numbers <u>9355</u> Expiration Date <u>04/06</u> b. Deposit Account Number

REEL: 015694 FRAME: 0586

ASSIGNMENT OF INVENTION AND OF LETTERS PATENT

Whereas, we, the **Inventors**, Shizhong Zhao, whose post office address is 3411 Ascot Circle, Louisville, KY 40241, and Yeping Cai, whose post office address is 12910 Willow Forest Drive, Louisville, KY 40245, and X.D. Hu, whose post office address is 7201 Wood Briar Road, Louisville, KY 40241, and Jürgen Ladebeck, whose post office address is 8210 Eagle Creek Drive, Louisville, KY 40222, and Jon P. Wagner, whose post office address is 9906 Wyncliff Court, Louisville, KY 40241 have invented certain improvements in a **PROMOTED CALCIUM-ALUMINATE SUPPORTED CATALYSTS FOR SYNTHESIS GAS GENERATION ("Invention")**, and have executed a utility application for United States Letters Patent of the same title filed herewith "**Application**"); and

Whereas, Assignee, Sud-Chemie Inc., of Louisville, Kentucky, a(n) Delaware corporation whose post office address is 1600 West Hill Street, Louisville, Kentucky 40210 (including its successors and assigns), desires to acquire our entire right, title and interest in said Application and Invention, and any United States and foreign patents to be obtained therefor;

Now therefore, for good and valuable consideration, the receipt of which is hereby acknowledged, we hereby sell, assign and transfer unto said **Assignee**, the entire right, title and interest in said **Application** and the **Invention** disclosed therein for the United States of America and all countries foreign thereto, including rights of priority under the International Convention of Paris (1883) as amended and the entire right, title, and interest in and to any and all patent applications, patents, continuations, continuations-in-part, divisionals, and reissues based thereon which may be filed or granted therefor in the United States or any foreign country. We also agree that **Assignee**, may apply for foreign Letters Patent on the **Invention**, and we agree to cooperate

PATENT REEL: 015694 FRAME: 0587

with **Assignee**, and to execute without additional consideration any additional documents as deemed necessary by **Assignee**, to apply for or maintain patents or other legal protection for the **Invention** in any country of the world.

We hereby authorize and request the U.S. Commissioner of Patents and Trademarks to issue any Letters Patent granted upon the invention set forth in this **Application** to said **Assignee**.

Shir Thong Mr Executed this <u>M</u>day of <u>Hally</u> , 2004 at Louisville, Kentucky. STATE OF KENTUCKY) SS: COUNTY OF JEFFERSON Before me personally appeared Shizhong Zhao, and acknowledged the foregoing instrument to be his free act and deed this *III* day of 2004. My Commission expires: ALLIT (Seal) Yening Cai

, 2004 at Louisville, Kentucky. Executed this $\frac{1}{100}$ day of \leq Heler

SS:

STATE OF KENTUCKY

COUNTY OF JEFFERSON

Before me personally appeared Yeping Cai, and acknowledged the foregoing instrument to be his free act and deed this ff_{h} day of f_{h} , 2004.

-2-

PATENT REEL: 015694 FRAME: 0588

My Commission expires: December 27, 2006 Jaisen (Seal) Executed this the day of 2004 at Louisville, Kentucky. STATE OF KENTUCKY) SS: COUNTY OF JEFFERSON Before me personally appeared Xiaodong Hu, and acknowledged the foregoing instrument to be his free act and deed this fth day of Julia . 2004. My Commission expires: 1 X (Seal) Executed this $\frac{1}{2}$ day of $\frac{1}{7}$ 2004 at Louisville, Kentucky. STATE OF KENTUCKY) SS: COUNTY OF JEFFERSON Before me personally appeared Jürgen Ladebeck, and acknowledged the foregoing instrument to be his free act and deed this the day of , 2004. My Commission expires: (Seaf)

-3-

PATENT REEL: 015694 FRAME: 0589

	Jn P. Wayn
	Jon P Wagner
Executed this $2 \text{ day of } July$, 2004 at Louisville, Kentucky.
STATE OF KENTUCKY)
COUNTY OF JEFFERSON) SS:)
instrument to be his free act and deed this $\frac{1}{6}$ day of	P. Wagner, and acknowledged the foregoing $f = \frac{f(f_{1}, f_{2}, f_{2})}{f(f_{2}, f_{2})}$, 2004.
My Commission expires: <u>AUCE</u>	Mbr 21, 2006
(Seal)	Julia M. Daisey Notary Public

PATENT REEL: 015694 FRAME: 0590

-4-

-

..

RECORDED: 07/09/2004