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To the Director of the U.S	. Patent and Trac	103101	525

<u>L.</u>	01525 nents or the new address(es) below.				
2. Name and address of receiving party(ies)Name:					
	Name: STUDIENGESELLSCHAFT KOHLE MBH				
y	Internal Address:				
	Street Address: Kaiser-Wilhelm-Platz 1				
City: Mülheim an der Ruhr					
	State:				
	Country: Germany Zip: 45470				
_	Additional name(s) of conveying party(ies) attached? □Yes ☒No				
ocument is being filed together with a new application.					
	B. Patent No.(s)				
 ched? □Yes ⊠No					
	6. Total number of applications and patents				
1	involved: 1				
	7. Total Fee (37 CFR 1.21(h) & 3.41) \$ 40.00				
	☐ Authorized to be charged by credit card				
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	□ Enclosed				
1	☐ None required (government interest not affecting title)				

1. Name of conveying party(ies)/Execution Date(s): 1. Manfred T. REETZ, Mülheim an der Ruhr, Germany 2. Thorsten SELL, Frankfurt am Main, Germany 3. Andreas MEISWINKEL, Mülheim an der Ruhr, Germany 4. Gerlinde MEHLER, Mülheim an der Ruhr, Germany Execution Date(s) March 3, 2005; March 1, 2005; February 25, 2005; February 24, 2005 Additional name(s) of conveying party(ies) attached? □Yes ☒No 3. Nature of Conveyance: **☒** Assignment □ Merger ☐ Security agreement ☐ Change of Name ☐ Government Interest Assignment ☐ Executive Order 9423, Confirmatory License ☐ Other IX This d 4. Application or patent number(s): A. Patent Application No.(s) Additional numbers attac 5. Name and address to whom correspondence concerning document should be mailed: Name: NORRIS McLAUGHLIN & MARCUS, P.A. Internal Address: Kurt G. Briscoe Street Address: 875 Third Avenue – 18th Floor City: New York State: New York Zip. 10022 Phone Number: (212) 808-0700 8. Payment Information a. Credit card Last 4 Numbers Fax Number: (212) 808-0844 Expiration Date _ Email Address: kgbriscoe@nmmlaw.com 04/14 2005 MKAYPAGH 00000056 141263 1930818 b. Deposit Account Number 14-1263 **4**0.00 DA 01 FC 8021 Authorized User Name Kurt G. Briscoe 9. Signature: Signat

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

G. BRISCOE, Reg. No. 33,141

Name and Registration No. of Person Signing

PATENT

Total number of pages including cover sheet,

attachments, and documents: 3

REEL: 017077 FRAME: 0288

Attorney Docket. No.:

ASSIGNMENT

In consideration of One Dollar (\$1.00) in hand paid and other good and valuable considerations, the receipt of which is hereby acknowledged, the undersigned [hereinafter (collectively) named "Assignor"] hereby assigns and transfers to

Studiengesellschaft Kohle mbH Kaiser-Wilhelm-Platz 1 45470 Mülheim an der Ruhr GERMANY

, a German corporation (hereinafter named "Assignee"), its successors, legal representatives and assigns, the entire right, title and interest in and to Assignor's application for Letters Patent of the United States, executed concurrently herewith unless otherwise indicated herein, entitled

Mixtures of Chiral Monophosphorous Compounds Used as Ligand Systems for Asymmetric Transition Metal Catalysis

and to Assignor's entire right, title and interest in any and all inventions, whether joint or sole, disclosed in said application for Letters Patent, and in any and all divisional or continuation or renewal applications that may be filed for United States Letters Patent for any and all of said inventions, and in and to any and all patents that may be granted on the foregoing applications and any reissue or extension thereof, and in any and all improvements thereon or relating thereto which the Assignor has invented or may hereafter invent.

The Assignor hereby authorizes and requests the Commissioner of Patents to issue any and all of said Letters Patent to said Assignee.

For said consideration, the Assignor hereby agrees upon the request of said Assignee, its successors, legal representatives or assigns, to execute any and all United States divisional, continuation and renewal applications for said invention or ilmprovements, and any and all necessary oaths, supplemental oaths or declarations or supplemental declarations or affidavits relating thereto, and any application for the reissue or extension of any United States Letters Patent that may be granted upon said application that said Assignee, its successors, legal representatives or assigns may deem necessary or expedient.

For the said consideration the Assignor further agrees upon the request of said Assignee, its successors, legal representatives or assigns, in the event of said application or any division thereof, or Letters Patent issued thereon or any reissue or application for the reissue thereof, becoming involved in interference, to cooperate to the best of the ability of the Assignor with said Assignee, its successors, legal representatives or assigns in the matters of preparing and executing the Preliminary Statement, and giving and producing evidence in support thereof, the Assignor hereby agreeing to perform upon such request, any and all affirmative acts necessary to obtain said Letters Patent and vest all rights therein

PATENT REEL: 017077 FRAME: 0289 hereby conveyed in said Assignee, its successors, legal representatives or assigns as fully and entirely as the same would have been held and enjoyed by the assignor if this assignment and sale had not been made.

Assignor hereby binds himself, his heirs, legal representatives, administrators, and assigns properly to execute without further consideration, any and all applications, petitions, oaths, assignments or other papers and instruments which may be necessary in order to carry into full force and effect the sale, assignment and transfer hereby made, or intended or agreed to be made.

And for said considerations, the Assignor hereby assigns to said Assignee, its successors, legal representatives and assigns, the entire right, title and interest in said invention or improvement for any and all foreign countries and agrees upon the request of said Assignee, its successors, legal representatives or assigns to execute any and all documents that shall be required of the Assignor to be executed in connection with any and all applications for foreign Letters Patent therefor, including the prosecution thereof, and to execute any and all documents necessary to invest title in said foreign applications and patents in said Assignee, its successors, legal representatives or assigns.

Signature:	Manfred T. Reetz	Date: March 3, 2005
Signature:	Thorsten Sell	Date: Here(1, 2005
Signature:	Andreas Meiswinkel	Date: Felming 25, 2005
Signature:	gerlinde Mehler	Date: February 24, 2005
Signature:		Date:
Signature:		Date:

RECORDED: 04/08/2005