1,2/2,160

Practitioner's Docket No. U 012429-4



PATENT

IN THE UNITED STATES PATES

101254778

Box Assignments Commissioner of Patents and Trademarks Washington, D.C. 20231

NOTE: "Documents and cover sheets to be recorded should be addressed to Assistant Commissioner for Patents, Box Assignments, Washington, D.C. 20231, unless they are filed together with new applications or with a petition under § 3.81(b)." 37 C.F.R. § 3.27.

ASSIGNMENT (DOCUMENT) COVER SHEET (37 C.F.R. § 3.31)

NOTE: "A cover sheet may not refer to both patents and trademarks." 37 C.F.R. § 3.31(b).

Attached please find an assignment (document) for recordal.

CERTIFICATION UNDER 37 C.F.R. §§ 1.8(a) and 1.10*

(When using Express Mail, the Express Mail label number is mandatory; Express Mail certification is optional.)

I hereby certify that, on the date shown below, this correspondence is being:

MAILING

×		with the United States Postal Service in a Washington, D.C. 20231.	n envelope ade	dressed to the Assistant Commissioner for
		37 C.F.R. § 1.8(a)		37 C.F.R. § 1.10*
×	with suff	icient postage as first class mail.		as "Express Mail Post Office to Addressee" Mailing Label No (mandatory)
	transmitte	TRANSI ed by facsimile to the Patent and Trademar	MISSION k Office. Signa	ituye B
Date:	Decembe	er 21, 1999	Jo ph (type	Richards or print name of person centifying)
*WARN	ING:	placed thereon prior to mailing. 37 C.F.R. "Since the filing of correspondence under	R. § 1.10(b). r § 1.10 witho cise of reason	he number of the "Express alail" mailing label set the Express Mail mailing label thereon is an able care, requests for waiger of this requirement 26, 60 Fed. Reg. 56,439, at 56,442.

REEL: 010505 FRAME: 0980

-page 1 of 6) 16-6

(Assignment (Document) Cover Sh

IDENTIFICATION OF APPLICATION(S) AND/OR PATENT(S) FOR ASSIGNMENT (DOCUMENT) RECORDAL

(37 C.F.R. § 3.21 and 37 C.F.R. § 3.31(a)(4))

	NOTE:	See 37 C.F.R. §3.21.		
	NOTE:	§ 3.21 does not apply to documents 667).	other than assignment. Notice of June 24, 1992 (1140 O.G. 63-72 $lpha$	
1.	This as	ssignment is for the following p	atent application or issued patent:	
	NOTE:	Do NOT enter both application AND	patent number.	
Natio	nal applic	cation: SN: 09/411,990	filed on October 4, 1999	
Provis	sional ap	plication:	filed on	
		pplication: PCT		
Patent		F F	Issued:	
		(complete if applicable) which was previously assigned and recorded		
		Date	Reel	
			Frame	
	NOTE:	subsequent to, the execution of the poidentify the patent application by its so that there can be no mistake as to application under \S 1.53(c) is execut	ion filed under § 1.53(b) is executed concurrently with, or attent application, but before the patent application is filed, it must date of execution, name of each inventor, and title of the invention the patent application intended. If an assignment of a provisional ed before the provisional application is filed, it must identify the ach inventor and title of the invention so that there can be no tion intended. 37 C.F.R. § 3.21.	
		(also complete th	e following, if applicable)	
[]	and als	so for the applications and/or pa	tents	
l J	and an	shown on the attached list of FURTHER		
			TENT(S) BEING ASSIGNED	
			Number of pages added	
	NOTE:	"Where there is a listing of propertie	es contained within a document, any listing may be copied and	

NOTE: "Where there is a listing of properties contained within a document, any listing may be copied and attached to the cover sheet to reduce the amount of typing necessary. A notation of this attachment can be made in lieu of entering every property identification number on the cover sheet." Notice of June 24,

1992 (1140 O.G. 63-72 at 67).

TOTAL NUMBER OF APPLICATIONS AND/OR PATENTS AND TOTAL FEE

NOTE: All requests to record documents must be accompanied by the appropriate fee; a fee is required for each application or patent against which the document is recorded as identified in the cover sheet. The recording fee is set in § 1.21(h). 37 C.F.R. §3.41.

(Assignment (Document) Cover Sheet—page 2 of 6)16-6

2.	A.	The total number of a	pplications and/or patents identified in this cover sheet is1			
	В.	The total fee is (37 C.)	F.R. § 1.21(h)):			
		1 Total number of application and/or patents	x \$40.00 = \$40.00			
	C.	[] P	le by: he attached check for \$ 40.00 lease charge Account the sum of \$ clicate of this cover sheet is attached.			
	Dlease					
	i icase	Please charge Account 12-0425 for any fee deficiency or credit to account any overpayment. NAME OF PARTY(IES) CONVEYING INTEREST (37 C.F.R. § 3.31(a)(1))				
	NOTE	to be recorded, that person	in this rule [§ 3.31] means the person whose name appears on the documents a's attorney or registered agent, or a corporate officer where a corporation's ments." Notice of June 24, 1992 (1140 O.G. 63-72, at 65); M.P.E.P. §			
3.	The pa	arty(ies) conveying inter	rest is (are):			
	Name Name Name Name Name	 Soon Haeng CHO Sang Sup HAN Jong Nam KIM Nettem Venkateswar Prakash KUMAR Sodankoor Garadi Ti NAME AND ADDRES				
			(37 C.F.R. § 3.31 (a)(2))			
4.	The ri	ghts are being conveyed Name: Address:	KOREA INSTITUTE OF ENERGY RESEARCH 71-2, Jangdong, Yusungku, Taejon 305 343 KOREA			
		Name: Address:	-AND- INDIAN PETROCHEMICALS CORP. LTD. P.O. Petrochemicals District Vadodara 391 346 Gujarat, INDIA			
		DESCRIPTI TRANSACTIO	ION OF INTEREST CONVEYED OR ON RECORDED (37 C.F.R. § 3.31 (a)(3))			
5.	The a	[X] an assignment assignment [] a security ag [] a merger.	t intends to accomplish: nt. reement.			
			(Assignment (Document) Cover Sheet—page 3 of 6)16-6			

		[]	a change of a other:	address.
	C	CORRE		D ADDRESS OF PARTY TO WHOM E SHOULD BE MAILED (37 C.F.R. § 3.31 (a)(5))
6.	Please	address	corresponden	ce to:
			Name:	John Richards
			Address:	c/o Ladas & Parry
				26 West 61st Street
				New York, New York 10023
			Telephone N	No.: (212) 708-1915
			DATE ASSIG	GNMENT (DOCUMENT) EXECUTED (37 C.F.R. § 3.31(a)(7))
7. A .	[] Th	e attach	ed assignment	t (document) was executed on
			C	Date
OR			an one conveying ment for each con	g party who executed on different dates, indicate the date of execution of the veying party.
В.	[X]	The at	tached assignn	ment was executed by Soon Haeng CHO
	on		ber 10, 1999	Name ·
		Da	ate	
	[X]	The at	tached assignn	nent was executed by <u>Sang Sup HAN</u> Name
	on		ber 10, 1999 ate	
	[X]	The at	tached assignr	ment was executed by <u>Jong Nam KIM</u> Name
	on	Novem	ber 10, 1999	- (
	OII		ate	 -
	[X]	The at	ttached assignr	ment was executed by <u>Nettem V. CHOUDARY</u> Name
	on	Octobe	er 27, 1999	·
			ate	
	[X]	The a	ttached assign	ment was executed by <u>Prakash KUMAR</u> Name
	or		er 27, 1999 Pate	·
	[X]			ment was executed by <u>Sodankoor G.T. BHAT</u> Name
	OI	_	er 27, 1999 Date	•

[]

a license.

a change of name.

(Assignment (Document) Cover Sheet-page 4 of 6)16-6

LANGUAGE OF ASSIGNMENT (DOCUMENT) TO BE RECORDED

	NOTE:	"The Office will accept and record non-English language documents only if accompanied by an English translation signed by the individual making the translation," 37 C.F.R. § 3.26.
8.	[X]	ached document: is in the English language. is not in the English language and an English translation signed by the individual making the translation is attached.
		ORIGINAL DOCUMENT OR TRUE COPY SUBMITTED
	NOTE:	See 37 C.F.R. § 3.24.
9.	[X]	ted herewith is: the original document. a true copy of the original document, which I certify to be a true copy.
	NOTE:	"If the original [assignment] document is two-sided or the wrong size, the practitioner can comply with the requirement [set out in 37 C.F.R. § 3.24] by providing a true copy of the original document using only one side of each page on the correct size paper." Notice of June 24, 1992, 1140 O.G. 63-76, at 67.
·	NOTE:	"Certification shall be made by the person submitting a copy of an original document that the document submitted is a true copy of the original. The certification is not required to be in an oath or declaration form." M.P.E.P., 6th ed., § 302.01.
		ASSIGNMENT (DOCUMENT) TO RECORD CHANGE OF ADDRESS
		(check item, if applicable)
10.	the	cause the purpose of the attached documents is to record a change of address of the assignee, particulars of the previously recorded assignments for each application and/or patent are own.
		ASSIGNMENT (DOCUMENT) TO RECORD CHANGE OF NAME
		(check item, if applicable)
11.	the	cause the purpose of the attached documents is to record a change of name of the assignee, particulars of the previously recorded assignments for each application and/or patent are own.

(Assignment (Document) Cover Sheet—page 5 of 6)16-6

CHANGE OF PATENT MAINTENANCE FEE ADDRESS

(check item, if applicable)

12. []	A change of address to which correspondence is to be sent regarding patent maintenance fees is
	being sent to the Office separately.

STATEMENT (37 C.F.R. § 3.31(a)(9)) **AND SIGNATURE** (37 C.F.R. § 3.31(a)(10))

13. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

NOTE: "The term 'party' as used in this rule [§ 3.31] means the person whose name appears on the documents to be recorded, that person's attorney or registered agent, or a corporate officer where a corporation's name appears on the document." Notice of June 24, 1992, 1140 O.G. 63-76, at 65; M.P.E.P. § 302.07 6th ed.

Date: <u>December 21, 1999</u>	Name of party submitting document
	Signature of party submitting document
	(complete the following, if the party submitting the document is applicant's attorney)
Reg. No.: 31,053	SIGNATURE OF PRACTITIONER John Richards
Tel. No.: (212) 708-1915	(type or print name of practitioner) P.O. Address
Customer No.:	
	c/o Ladas & Parry 26 West 61 st Street New York, N.Y. 10023

TOTAL NUMBER OF PAGES BEING SUBMITTED

14.	The total number of pages being submitted, including cover sheet attachment(s), and documents
	are:

9 Total number of pages submitted

(Assignment (Document) Cover Sheet—page 6 of 6)16-6

ASSIGNMENT (DOCUMENT) COVER SHEET (ADDED PAGE____)

PATENTS BEING ASS	DETAILS OF PRIOR RECORDAL (IF ANY)		
[] In re application: Application No.: Filed: For:	[]	International Application PCT/	Reel Frame Date
[] Patent:		Issued:	
[] In re application: Application No.: Filed: For:	[]	International Application PCT/	Reel Frame Date
[] Patent:		Issued:	
[] In re application: Application No.: Filed: For:	[]	International Application PCT/	Reel Frame Date
[] Patent:		Issued:	
[] In re application: Application No.: Filed:	[]	International Application PCT/	Reel Frame Date
For: [] Patent:		Issued:	
[] In re application: Application No.: Filed: For:	[]	International Application PCT/	Reel Frame Date
[] Patent:		Issued:	

(add additional page for further application(s) and/or patent(s) being assigned)

(Assignment (Document) Cover Sheet-Added page) 16-6

Practitioner's Docket No. <u>U 012429-7</u>	PATENT
	For: [] U.S. and/or [] Foreign Rights For: [x] U.S. Application or
ASSIGNMENT OF INVEN	TION (MULTIPLE INVENTORS)
In consideration of the payment by ASSIGN receipt of which is hereby acknowledged, and ASSIGNORS (Inventors):	NEE to ASSIGNOR of the sum of One Dollar (\$1.00), the for other good and valuable consideration,
Soon Haeng CHO (type or print name of inventors)	Korea Institute of Energy Research Korean Address Nationality 71-2, Jangdong, Yusungku, Taejon, 305 343, KOREA
Sang Sup HAN	Korean Institute of Energy Research Korean 71-2, Jangdong, Yusungku, Taejon, 305 343 KOREA
Jong Nam KIM	Korean Institute of Energy Research Korean 71-2, Jangdong, Yusungku, Taejon, 305-343 KOREA
Nettem Venkateswarlu CHOUDARY	Indian Petrochemicals Corp. Ltd. Indian P.O. Petrochemicals, District Vadodara 391 346 Gujarat, INDIA
Prakash KUMAR	Indian Petrochemicals Corp. Ltd. Indian P.O. Petrochemicals, District Vadodara 391 346 Gujarat, INDIA
Sodankoor Garadi Thirumaleshwara BHAT	Indian Petrochemicals Corp. Ltd. Indian P.O. Petrochemicals, District Vadodara, 391 346, Gujarat, INDIA
hereby sells, assigns and transfers to	

ASSIGNEES

Korea Institute of Energy Research (type or print name of ASSIGNEE)

Korean Nationality 71-2, Jangdong, Yusungku, Taejon

Address

305 343, KOREA

AND

(Assignment of Invention—Multiple Inventors—page 1 of 3) 16-3.2

Indian Petrochemicals Corp. Ltd.		Corp. Ltd.	P.O. Petrochemicals District Vadodara
(type or print name of ASSIGNEE)		GNEE)	Address
Indian			391 346, Gujarat, INDIA
Nationality			
and the suc	cessors, ass	signs and legal represer	ntatives of the ASSIGNEE
		(complete	te one of the following)
the enti	ire right, titl	le and interest	
[] an undi	- .	percent (%) interest
		nd its territorial posses	
		(check the following box,	if foreign rights are also to be assigned)
[] and in a	all foreign c	countries, including all	rights to claim priority,
			disclosed in the invention entitled:
IMPROVE	D ADSORI	BENTS, METHOD FO	R THE PREPARATION AND METHOD FOR THE
SEPARAT	<u>ION OF UN</u>	ISATURATED HYDR	OCARBONS FOR GAS MIXTURE
Name of in	ventor(s <u>) So</u> RY: Prakash	oon Haeng CHO; Sang	Sup HAN; Jong Nam KIM; Nettem Venkateswarlu Garadi Thirumaleshwara BHAT.
CHOODIN	<u>XI, IIakasi</u>	r ikowi ik, bodankooi	Garadi Tilitumaiesiiwara BITAT.
		(check and comple	te (a), (b), (c), (d), (e), (f) or (g))
and which i	is found in ((37 C.F.R. § 3.21)	
(a)	[]	• •	on executed on even date herewith
(b)	įį	U.S. patent application	on executed on
(c)	[]	U.S. provisional applentitled invention.	ication naming the above inventor(s) for the above-
			label no.:
		Mailed:	
	[]		.F.R. 3.21 for recordal of this assignment, I, an
			below, hereby authorize and request my attorney to
		•	g date and application number when they become
<i>(</i> 1)	r 1	known. U.S. application no	09/411 990
(d)	[x]		ber 4, 1999
(e)	[]	International applicat	tion no. PCT//
(f)	[]	IIS natent no	issued
(-)		[] A change of	address to which correspondence is to be sent regarding
		patent mainte	enance fees is being sent separately.
		(also check (g), if foreign	n application(s) is also being assigned)
(g)	[]	and any legal equiva	alent thereof in a foreign country, including the right to
(6)		claim priority	

and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, renewal, or substitute thereof, and as to letters patent any reissue or reexamination thereof.

(Assignment of Invention—Multiple Inventors—page 2 of 3) 16-3.2

ASSIGNOR hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

ASSIGNOR further covenants that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof.

IN WITNESS WHEREOF, We have hereunto set hand and seal

WARNING: The date of signing must be the same as the date of execution of the application, if item (a) was checked above.

Soon Haeng CHO	(X) 517/12	_ this (x) November 10, 1997
(type name of Inventor)	Signature of INVENTOR	date of signing
Sang Sup HAN (type name of Inventor)	Signature of INVENTOR	this (x) New party 10 1444 date of signing
Jong Nam KIM (type name of Inventor)	Signature of INVENTOR	this (x) November 10, 1999 date of signing
Nettem V. CHOUDARY (type name of Inventor)	Signature of INVENTOR	this (x) October 27, 1999 date of signing
Prakash KUMAR (type name of Inventor)	(X) (raligal, leux. Signature of INVENTOR	this (x) October 27, 1999 date of signing
Sodankoor G.T.BHAT (type name of Inventor)	Signature of INVENTOR	this (x) CEECON 27 1999 date of signing
(type name of Inventor)	Signature of INVENTOR	this date of signing
(type name of Inventor)	Signature of INVENTOR	this date of signing
(type name of Inventor)	Signature of INVENTOR	this date of signing
(type name of Inventor)	Signature of INVENTOR	this date of signing

[] Notarization or Legalization Page Added.

RECORDED: 12/27/1999

NOTE: No witnessing, notarization or legalization is necessary. If the assignment is notarized or legalized then it will only be prima facie evidence of execution. 35 USC 261. Use next page if notarization is desired.

(Assignment of Invention—Multiple Inventors—page 1 of 3) 16-3.2