MRD 10.21.99	10-25-1999		
FORM PTO-1595 (modified)	I INDIE I NEW SECTION AND LIES AND DELVASOR OF THE PROPERTY OF	R SHEET	U.S. DEPARTMENT OF COMMERC Patent and Trademark Offic
			ratent and Hadeniark Citio
To the Honorable Assistant Secretary or copy(les) thereof.	101180765	rks: Please record t	he attached original document(s)
1. Name of conveying party(ies):	OF	2. Name and address of red	eiving party(ies):
Mitsuru SHIRAISHI, Masanori BA Osamu NISHIMURA and Naoyuki	KANZAKI ( OCT 2 1 1999	Name: TAKEDA CHEMIC	CAL INDUSTRIES, LTD.
Additional name(s) of conveying party(ies) at 3. Nature of conveyance:	\	Osaka 541-0045, Japan	
•	PENT & TRADE	City: Country:	
X Assignment Security Agreement Other Execution Date: September 1, 8	_ Merger _ Change of Name and 20, 1999,	Additional name(s) & address(es) a	attached? <u>NO</u>
respectively 4. Application number(s) or patent r	number(s):		
If this document is being filed together with a new application, the execution date of the application is: <u>, respect</u> A. Patent Application No.(s)  09/377, 040, filed August 19, 1999  Additional numbers attached? NO			
Name and address of party to whom correspondence concerning document should be mailed:		6. Total number of applicat	ions and patents involved: 1
Name: <u>WENDEROTH, LIND &amp; PONACK, L.L.P.</u> <u>Attn: Warren M. Cheek, Jr., Esq.</u>		7. Total fee (37 C.F.R. § 3.	
Street Address: 2033 K Street, N.W., Suite 800		. —	No. 3537 <sub>6</sub> ) Irged to deposit account
City: <u>Washington</u> , State: <u>DC</u> ZIP: <u>20006</u>		8. Deposit account number	
	DO NOT USE T		page if paying by deposit account)
9. Statement and signature.  To the best of my knowledge and be original document.  Warren M. Cheek, Jr., Reg. No. 33, Name of Person Signing	esta a l	Octob Date	eched copy is a true copy of the er 21, 1999  pages including cover sheet:
OMB No. 0651-0011 (exp. 4/94)			
/22/1999 DNGUYEN 00000247 09377040	Do not detach	this portion	
FC:581 40.00 OP		THE COMM	80 care
Mail documents to be recorded with req	uired cover sheet information	19 07 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	To Williams
Comr	nissioner and Assistant Secre Box Assig Washington, D	nments	25-0975.
Public burden reporting for this sample of time for reviewing the document and gallow comments regarding this burden estimate Washington, D.C. 20231, and the Office 20503.	thering the data needed, and te to the U.S. Patent and Trac	completing and reviewing the sa demark Office, Office of Informa	imple cover sheet. Send tion Systems, PK2-1000C,

11

PATENT REEL: 010328 FRAME: 0114

## ASSIGNMENT

In consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration paid to each of the undersigned

ln:	sert	Nam	e(s)
of	Inv	entor	(s)

Insert Name(s)

of Assignee(s)

Address

Mitsuru SHIRAISHI, Masanori BABA, Yoshio ARAMAKI, Osamu NISHIMURA and Naoyuki KANZAKI

and
the undersigned hereby sell(s) and assign(s) to

TAKEDA CHEMICAL INDUSTRIES, LTD.

of 1-1, Doshomachi 4-chome, Chuo-ku, Osaka 541-0045, Japan

(hereinafter designated as the Assignee) the entire right, title and interest for the United States as defined in 35 USC 100, in the invention known as

Title of Invention

## QUATERNARY AMMONIUM SALTS AND THEIR USE

for which an application for patent in the United States has been executed by the undersigned

Date of Signing of Application

The undersigned agree(s) to execute all papers necessary in connection with this application and any continuing, divisional or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation, division or reissue thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.

The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee.

The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patents of the United States resulting from said application or any division or divisions or continuing or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) full right to convey the entire interest herein assigned, and that he has (they have) not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby grant(s) the firm of WENDEROTH, LIND & PONACK, 2033 K Street, N.W., Suite 800, Washington, D.C. 20006, the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent Office for recordation of this document.

PATENT REEL: 010328 FRAME: 0115

In witness whereof, executed by the und	fersigned on the date(s) opposite the undersigned name(s).
Date September 30, 1999	Mitsuru SHIRAISHI (1)
Date September 1, 1999	Masanori BABA (2)
Date Saptember 20, 1999	Yoshio ARAMAKI (3)
Date September 8, 1999	Osamu Nishimura (4)
Date September 20, 1999	Naoyuki Kanzake Naoyuki KANZAKI (5)
Date Sep	
the Inventor(s) should be witnessed by at least two	
(2) Witness _ <b>国本</b> 実佳 (1	Mika OKAMOTO) ラワ 木リ エルザ (Masaki KAWAMURA)
(4) Witness 施澤幸夫 (Yi (1) (3) (5) Witness hetorica hugaki (Mot ACKN	Mika OKAMOTO) 河村 正輝 (Masaki KAWAMURA) ukio FUJISAWA) 日沼 州司 (Shuji HINUMA) tonari KUMAZAKI) Jadaaki HITAO) NOWLEDGEMENT
ss	
This day of	, 19, before me personally came the
above-named the individual(s) who executed the foregoing assign his (their) own free will for the purposes therein se	to me personally known as nment, who did acknowledge to me that he (they) executed the same of et forth.
SEAL	Official Signature
	Official Title
The above application may be more partic	ularly identified as follows:
U.S. Application Serial No.	
Applicant Reference Number 2542USON	
Title of Invention QUATERNARY AMMO	NIUM SALTS AND THEIR USE

-2-

**PATENT REEL: 010328 FRAME: 0116** 

**RECORDED: 10/21/1999**