1810 581.40 'ER SHEET FORM PTO-1595 (modified) 09-26-2001 JC18 Rec'd PCT/PTC To the Honorable Assistant Secretal narks: Please record the attached original document(s) or copy(ies) thereof. 101856147 1. Name of conveying party(ies): 2. Name and address of receiving party(ies): Akihiro TASAKA, Takenori HITAKA and Etsuya Name: TAKEDA CHEMICAL INDUSTRIES, LTD. **MATSUTANI** Street Address: 1-1, Doshomachi 4-chome, Chuo-ku, Additional name(s) of conveying party(ies) attached? NO Osaka-shi, Osaka 541-0045, Japan 3. Nature of conveyance: City: Country: X Assignment Merger Additional name(s) & address(es) attached? NO Security Agreement Change of Name Other Execution Date: July 12, 2001 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: July 12, 2001 A. Patent Application No.(s) B. Patent No.(s) NEW, filed July 24, 2001 , issued Additional numbers attached? NO 5. Name and address of party to whom correspondence 6. Total number of applications and patents involved: 1 concerning document should be mailed: Name: WENDEROTH, LIND & PONACK, L.L.P. 7. Total fee (37 CFR 3.41).\$40.00 Attn: Warren M. Cheek, Jr., Esq. X Enclosed (Check No. Street Address: 2033 K Street, N.W., Suite 800 Authorized to be charged to deposit account 8. Deposit account number: 23-0975 City: Washington, State: DC ZIP: 20006-1021 (Attach duplicate copy of this page if paying by deposit account) DO NOT USE THIS SPACE 9. Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of original document. Warren M. Cheek, Jr., Reg. No. 33,367 July 24, 2001 Name of Person Signing Date Total number of pages including cover s OMB No. 0651-0011 (exp. 4/94) Do not detach this portion 27/2001 MKAYPAGH 00000066 09889974 FC:581 Mail documents to be recorded with required cover sheet information: Commissioner and Assistant Secretary of Patents and Trademarks **Box Assignments** Washington, D.C. 20231 Public burden reporting for this sample cover sheet is estimated to average about 30 minutes per document to be recorded, il time for reviewing the document and gathering the data needed, and completing and reviewing the sample cover sheet. Sen

Public burden reporting for this sample cover sheet is estimated to average about 30 minutes per document to be recorded, in time for reviewing the document and gathering the data needed, and completing and reviewing the sample cover sheet. Sen comments regarding this burden estimate to the U.S. Patent and Trademark Office, Office of Information Systems, PK2-1004 Washington, D.C. 20231, and the Office of Management and Budget, Paperwork Reduction Project (0651-0011), Washington 20503.

ATTACHMENT D

PATENT REEL: 012185 FRAME: 0502

ASSIGNMENT

	In consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration paid to each of the undersigned			
	TASAKA Akihiro, HITAKA Takenori and MATSUTANI Etsuya			
nsert Name(s) f Inventor(s)				
nsert Name(s) f Assignee(s)	the undersigned hereby sell(s) and assign(s) to Takeda Chemical Industries, Ltd.			
Address	of 1-1, Doshomachi 4-chome, Chuo-ku, Osaka-shi, Osaka 541-0045 Japan (hosinfordericated as the Assistant) the articulate title and identify the University of the University o			
	(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			
	HETEROCYCLIC COMPOUNDS, THEIR PRODUCTION AND USE			
itle of nvention				
	for which an application for patent in the United States has resulted from International			
	Application No. PCT/JP01/02937 filed on April 5, 2001			

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.

PATENT REEL: 012185 FRAME: 0503 The undersigned hereby grant(s) the firm of WENDEROTH, LIND & PONACK, L.L.P., 2033 K Street, N.W., Suite 800, Washington, DC 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.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date July 12, 20	Name of Inventor	akifriro Tasaka	Akihiro TASAKA
Date July 12, 200	Name of Inventor	Takenore Sitaka	Takenori HITAKA
Date July 121 20	O, Name of Inventor	Akifriro Tasaka Takenore Kitaka Grayn Makutis	Etsuya MATSUTANI
Date	Name of Inventor		
Inventor(s) should be with	ald preferably be acknowledge essed by at least two witnesse while Tangaci		
Witness TON	10HRO KAKU	Tomohiro KAKU	
		, 20	, before me
(they) executed the same of		ted the foregoing assignment, who did act the purposes therein set forth. Official Signat	
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The above application		Official Titl	e
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U.S. Application Serial No. Applicant Reference No.)	entified as follows:Filing Date	

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PATENT REEL: 012185 FRAME: 0504