FORM PTO-1595 $10-14-199$ (Rev. 6-93) m23 R 10-14-199 $10.12.99$ R 10.12.99 101171495	HEET			
To the Assistant Commissioner for Patents: Please record the attached original documents or copy thereof.	ATTN: BOX ASSIGNMENT			
1. Name of conveying party(ies):	2. Name and address of receiving party(ies):			
John Paul MAYE, Jianping XU, Scott W. WEIS and George GAUTHIER	Name: Haas Hop Products, Inc.			
	Street Address			
Additional name(s) of conveying party(ies) attached? <u>Yes X</u> No	5185 MacArthur Boulevard Washington, DC 20016-3341			
3. Nature of conveyance:				
X Assignment Merger Security Agreement Other	Additional name(s) & address(es) attached? YesXNo			
Execution Date: July 15, August 16 and 20 and September 29, 1999				
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:				
A. Patent Application No.(s) $\begin{pmatrix} 09/329,299 \\ Yes \\ X \\ No \end{pmatrix}$ B. Patent No.(s)				
 5. Name and address of party to whom correspondence concerning document should be mailed: 	6. Total number of applications and patents involved: $\underline{1}$			
Name:Erin M. HarrimanInternal Address:Customer No. 009629Morgan, Lewis & Bockius LLP	 7. Total fee (37 C.F.R §3.41): <u>\$40.00</u> <u>X</u> Enclosed <u>Authorized to be charged to deposit account 50-0310</u> 			
Street Address:1800 M Street, N.W.City: WashingtonState: D.C.Zip: 20036	 Deposit account number: 50-0310 Attach duplicate of page if paying by deposit account 			
9. Statement and Signature 0/14/1999 MTHAI1 00000030 093292999 To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of 1 FC:581 the original document. Erin M. Harriman October 12, 1999 Name of Person Signing Signature Date Total number of pages including cover sheet, attachments and documents: _9				

ASSIGNMENT

WHEREAS I/We, the below named inventor(s), [hereinafter referred to as Assignor(s)], have made an invention entitled:

PROCESS FOR HYDROGENATION OF ISOALPHA ACIDS

for which I/WE executed an application for United States Letters Patent concurrently herewith; or on______; or filed an application for United States Letters Patent on <u>June 10, 1999</u>, (Serial No. <u>09/329,299</u>); and

WHEREAS, <u>Haas Hop Products, Inc.</u>, a corporation of <u>Delaware</u>, whose post office address is <u>5185 MacArthur</u> <u>Boulevard, Washington, D.C. 20016-3341</u> (hereinafter referred to as Assignee), is desirous of securing the entire right, title, and interest in and to this invention in all countries throughout the world, and in and to the application for United States Letters Patent on this invention and the Letters Patent to be issued upon this application;

NOW THEREFORE, be it known that, for good and valuable consideration the receipt of which from assignee is hereby acknowledged, I/WE, as assignor(s), have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the assignee, its lawful successors and assigns, MY/OUR entire right, title, and interest in and to this invention and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof, and all rights to claim priority on the basis of such application, and all applications for Letters Patent which may hereafter be filed for this invention in any foreign country and all Letters Patent which may be granted on this invention in any foreign country, and all extensions, renewals, and reissues thereof; and I/WE hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue all Letters Patent for this invention to assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, I/WE HEREBY covenant that I/WE have the full right to convey the interest assigned by this Assignment, and I/WE have not executed and will not execute any agreement in conflict with this Assignment;

AND, I/WE HEREBY further covenant and agree that I/WE will, without further consideration, communicate with assignee, its successors and assigns, any facts known to ME/US respecting this invention, and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said assignee, its successors or assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by the assignee, its successors and assigns.

AND, I/WE HEREBY authorize and request the attorneys I/WE have empowered in the Declaration and Power of Attorney in this application, to insert here in parentheses (Application No. <u>09/329,299</u>, filed <u>June 10, 1999</u>) the filing date and application number of said application when known.

 IN TESTIMONT WHEREOF, I/WE have infecting set out nand(s).

 County of _______
 John Paul MAYE

 State of _______
 Full Name of Sole or First Assignor

 State of _______
 5185 MacArthur Boulevard, Washington, D.C. 20016-3341

 Subscribed and sworn to before me
 Address

 this __ day of _______
 19_.

 First Assignor's Signature

 Date

 Names of additional inventors attached [X] Yes
] No

IN TESTIMONY WHEREOF, I/WE have hereunto set our hand(s).

1-WA/1230838.1

Morgan, Lewis & Bockius LLP

PATENT REEL: 010296 FRAME: 0782

ATTORNEY DOCKET NO.: 046436-5008 ASSIGNMENT (Worldwide Rights) Page 2

County of		Jianping XU Full Name of Second Assignor	
State of	SS.	5185 MacArthur Boulevard, Washington, D.C. 20016-3341 Address	
Subscribed and sworn to before me this day of, 19		Second Assignor's Signature	
Notary Public		Date	
County of		Scott W. WEIS Full Name of Third Assignor	
State of	SS.	4054 North 64th Street, Milwaukee, Wisconsin 53216 Address	
Subscribed and sworn to before me this day of, 19		Third Assignor's Signature	
Notary Public		<u>August 20, 1999</u> Date	
Names of additional inventors attached [] Yes [X] No			

ASSIGNMENT

WHEREAS I/We, the below named inventor(s), [hereinafter referred to as Assignor(s)], have made an invention entitled:

PROCESS FOR HYDROGENATION OF ISOALPHA ACIDS

for which I/WE executed an application for United States Letters Patent concurrently herewith; or on _____; or filed an application for United States Letters Patent on _June 10, 1999, (Serial No. _09/329,299); and

WHEREAS, <u>Haas Hop Products, Inc.</u>, a corporation of <u>Delaware</u>, whose post office address is <u>5185 MacArthur</u> <u>Boulevard, Washington, D.C. 20016-3341</u> (hereinafter referred to as Assignee), is desirous of securing the entire right, title, and interest in and to this invention in all countries throughout the world, and in and to the application for United States Letters Patent on this invention and the Letters Patent to be issued upon this application;

NOW THEREFORE, be it known that, for good and valuable consideration the receipt of which from assignee is hereby acknowledged, I/WE, as assignor(s), have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the assignee, its lawful successors and assigns, MY/OUR entire right, title, and interest in and to this invention and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof, and all rights to claim priority on the basis of such application, and all applications for Letters Patent which may hereafter be filed for this invention in any foreign country and all Letters Patent which may be granted on this invention in any foreign country, and all extensions, renewals, and reissues thereof; and I/WE hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue all Letters Patent for this invention to assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, I/WE HEREBY covenant that I/WE have the full right to convey the interest assigned by this Assignment, and I/WE have not executed and will not execute any agreement in conflict with this Assignment;

AND, I/WE HEREBY further covenant and agree that I/WE will, without further consideration, communicate with assignee, its successors and assigns, any facts known to ME/US respecting this invention, and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said assignee, its successors or assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by the assignee, its successors and assigns.

AND, I/WE HEREBY authorize and request the attorneys I/WE have empowered in the Declaration and Power of Attorney in this application, to insert here in parentheses (Application No. <u>09/329,299</u>, filed <u>June 10, 1999</u>) the filing date and application number of said application when known.

IN TESTIMONY WHEREOF, I/WE have hereunto set our hand(s).

County of		John Paul MAYE Full Name of Sole or First Assignor
State of		5185 MacArthur Boulevard, Washington, D.C. 20016-3341
	SS.	Address Address
Subscribed and sworn to before me this day of, 19		First Assignor's Signature
Notary Public		8/16/99 Date
Names of additional inventors attached [X] Yes [] No		

1-WA/1230838.1

Morgan, Lewis & Bockius LLP

PATENT REEL: 010296 FRAME: 0784

ATTORNEY DOCKET NO.: 046436-5008 ASSIGNMENT (Worldwide Rights) Page 2

County of		Jianping XU Full Name of Second Assignor	
	SS .	5185 MacArthur Boulevard, Washington, D.C. 20016-3341 Address	
Subscribed and sworn to before me this day of, 19		Second Assignor's Signature	
Notary Public		Date	
County of		Scott W. WEIS Full Name of Third Assignor	
State of	SS .	4054 North 64th Street, Milwaukee, Wisconsin 53216 Address	
Subscribed and sworn to before me this day of, 19		Third Assignor's Signature	
Notary Public		Date	
Names of additional inventors attached [] Yes [X] No			

<u>ASSIGNMENT</u>

For valuable consideration, the receipt and adequacy of which is hereby acknowledged, I, GEORGE GAUTHIER of GROTON, NEW LONDON COUNTY, CONNECTICUT hereby sell, assign, and transfer unto PFIZER INC., a corporation organized and existing under the laws of the State of Delaware, and having its principal place of business at 235 East 42nd Street, New York, New York, the entire right, title, and interest in and to my application for Letters Patent of the United States entitled PROCESS FOR HYDROGENATION OF ISOALPHA ACIDS (Serial Number 09/329,299) filed June 10, 1999, and my entire right, title, and interest in and to all my inventions, whether joint or sole, disclosed in said application for Letters Patent, and in and to all applications filed for Letters Patent for any of said inventions in any country, and in and to all patents granted on the foregoing applications, and I hereby agree, whenever requested, to communicate to said assignee, its successors and assigns, any facts known to me respecting said inventions, to testify in any legal proceeding, and to execute all applications or papers necessary to obtain and maintain proper patent protection on said inventions in all countries.

Executed this 15^{th} day of $\overline{J_{ULY}}$, 1999

In the presence of:

Jane A. Pierce Jane A. Pierce

For valuable consideration, the receipt and adequacy of which is hereby acknowledged, **PFIZER INC.**, a corporation organized and existing under the laws of the State of Delaware, and having a place of business at 235 East 42nd Street, New York, New York, hereby sells, assigns, and transfers unto CULTOR CORPORATION, a corporation organized and existing under the laws of Finland, and having a place of business at 2 Kyllikinportti, Helsinki, Finland its entire right, title, and interest United patent application entitled **PROCESS** in the States FOR HYDROGENATION OF ISOALPHA ACIDS (Serial Number 09/329,299) filed June 10, 1999, in and to all its inventions disclosed in said Patent Application, and in and to all applications filed for Letters Patent for any of said inventions in all countries of the world and in and to all patents granted on the foregoing applications.

Executed this 15th day of July, 1999

PFIZER INC.

Pfizer Inc.

Milne, М. rae Vice President

In the presence of:

(Typed or Printed Name of Witness)

WORLDWIDE PATENT ASSIGNMENT

For valuable consideration, the receipt and adequacy of which is hereby acknowledged, **CULTOR CORPORATION**, a corporation organized and existing under the laws of Finland, and having a place of business at 2 Kyllikinportti, Helsinki, Finland, hereby sells, assigns, and transfers unto **HAAS HOP PRODUCTS, INC.**, a corporation organized and existing under the laws of Delaware, and having a place of business at 5185 MacArthur Boulevard, Washington, D.C. 20016 the entire right, title, and interest in and to the application for Letters Patent of the United States entitled **PROCESS FOR HYDROGENATION OF ISOALPHA ACIDS** (Serial Number 09/329,299) filed June 10, 1999, and the entire right, title, and interest in and to all inventions, whether joint or sole, disclosed in said application for Letters Patent, and in and to all applications filed for Letters Patent for any of said inventions in any country, and in and to all patents granted on the foregoing applications, and hereby agrees, whenever requested, to communicate to said assignee, its successors and assigns, any facts known respecting said inventions, to testify in any legal proceeding, and to execute all applications or papers necessary to obtain and maintain proper patent protection on said inventions in all countries.

Executed this 29 day of September, 1999

CULTOR CORPORATION

Manger Karkay-

Name: Juha Kurkinen Merja Karhapää Title: Group General Counsel Director, IP Cultor Corporation

1-WA:1273886.1

RECORDED: 10/12/1999