PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5990448

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JINMING XU	10/29/2019
SISI FAN	10/29/2019
YANQIANG HUANG	10/29/2019
TAO ZHANG	01/02/2020
CHIN LIEN HUANG	11/01/2019
WAN TUN HUNG	10/29/2019
YU CHENG CHEN	10/29/2019
CHIEN HUI WU	10/29/2019
YA WEN CHENG	10/30/2019
MING HSIEN WEN	10/29/2019
CHAO CHIN CHANG	12/29/2019
TSAO CHENG HUANG	10/29/2019

RECEIVING PARTY DATA

Name:	DALIAN INSTITUTE OF CHEMICAL PHYSICS, CHINESE ACADEMY OF SCIENCES
Street Address:	NO.457 ZHONGSHAN ROAD
City:	DALIAN CITY, LIAONING PROVINCE
State/Country:	CHINA
Postal Code:	116023
Name:	FORMOSA PLASTICS CORPORATION
Street Address:	100, SUEI-GUAN ROAD, JEN-WU DISTRICT
City:	KAOHSIUNG CITY, TAIWAN
State/Country:	CHINA

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16643617

CORRESPONDENCE DATA

Fax Number: (703)991-7071

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

REEL: 051976 FRAME: 0183

PATENT

505943729

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 703-740-8322

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Correspondent Name: MAIER & MAIER, PLLC

Address Line 1: 345 SOUTH PATRICK STREET Address Line 4: ALEXANDRIA, VIRGINIA 22314

ATTORNEY DOCKET NUMBER:	12040010US	
NAME OF SUBMITTER:	CHRISTOPHER J. MAIER	
SIGNATURE:	/Christopher J. Maier/	
DATE SIGNED:	03/02/2020	
	This document serves as an Oath/Declaration (37 CFR 1.63).	

Total Attachments: 12

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source=Combined Declaration and Assignment#page12.tif

Title of Invention: CATALYST FOR CRACKING 1,2-DICHLOROETHANE TO PREPARE CHLOROETHYLENE, PREPARATION AND REGENERATION METHOD THEREOF

		2021		
As a below nan	ed inventor, I hereby declare that:			
This declaration				
□ ⊠	The attached application, or United States application or PCT international application numb	_{er} 16643617	_, filed on 02-MAR-2020	
ncluding the cla naterial to pater	ified application was made or authorized to be made by me. I be simed invention in the application. I have reviewed and understed ims, and any claim amendments made in the application. I acknowlability as defined in 37 CFR 1.56.	ood the contents of owledge the duty to	f the above-identified application of disclose all information which	ion, h is
hereby ackno- mprisonment o	wledge that any willful false statement made in this declarated not more than five (5) years, or both.	on is punishable	under 18 USC 1001 by fine	; ог
	<u>ASSIGNMENT</u>			
TO PREPARE (NVENTION) for v	inming XU, whose post office address is No.457 Zhongshan Road red to as Assignor, am the owner of useful improvements in CATA THLOROETHYLENE, PREPARATION AND REGENERATION which the above application for United States Letters Patent was file PCT International Patent Application No.: a;	LYST FOR CRAC METHOD THER dog: 02 MAP 20	CKING 1,2-DICHLOROETHA EOF (hereinafter referred to as 20 Serial No.: 16643617	NE s the
post office addr	DALIAN INSTITUTE OF CHEMICAL PHYSICS, CHINESE AC gshan Road, Dalian City, Liaoning Province, P.R.China 116023, a ess is 100, Suei-guan Road, Jen-wu District, Kaohsiung City, Taiv irring the entire right, title and interest in and to the same in the Un	und <u>FORMOSA PL</u>	A STICS CODDOD ATTOM	h
do sen, assign a	REFORE, for good and valuable consideration, receipt of which is and transfer unto said ASSIGNEES, the entire right, title, and interest of America, including any and all Letters Patent granted on any dion.	in and to said Invi	ENTION and application through	Lane
that may be req without further and information testimony on be any patent appl	GNOR hereby agrees to execute any documents that legally may be a said application or any other patent application(s) in the United States and to affirm the rights of Assignees in and to said Invention, all consideration and at Assignees's expense, to identify and communa concerning the Invention that are within Assignor's possessional of Assignees that lawfully may be required of Assignor in relication or patent encompassed within the terms of this instrument shor's heirs, executors, administrators and other legal representations.	ies for said INVENTIGE I without further conticate to Assignees on or control, and espect of the prosect Assignme's obti	ON, including additional docum nsideration. Assignor also ago at Assignees's request docum to provide further assurances	nents rees, nents and
and behoof; an	GNOR hereby authorizes and requests the Director of the U.S. Parto above to Assignees, as the Assignees of the entire right, title ard for the use and behoof of Assignees's legal representatives and may be granted, as fully and entirely as the same would have been	nd interest in and to	the same, for Assignees's sol	le use
ASSIGNOR needed to effect	authorizes any member of the firm of Maier & Maier, PLLC to tits recorded in the U.S. Patent and Trademark Office.	insert or complete	e any information in this docu	iment
	Inventor: Januaring XU			
XJiamin	Q X U	x ×6/	9. 10.29	
Inventor's Sign	ture	<u> </u>	· · · · · /	

PATENT REEL: 051976 FRAME: 0185

Date

Title of Invention: CATALYST FOR CRACKING 1.2-DICHLOROETHANE TO PREPARE CHLOROETHYLENE, PREPARATION AND REGENERATION METHOD THEREOF

DECLARATION As a below named inventor, I hereby declare that: This declaration is directed to: The attached application, or X United States application or PCT international application number 16643617 filed on 02-MAR-2020 The above-identified application was made or authorized to be made by me. I believe I am the original inventor or an original joint inventor of a claimed invention in the application. I have reviewed and understood the contents of the above-identified application, including the claims, and any claim amendments made in the application. I acknowledge the duty to disclose all information which is I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both. ASSIGNMENT WHEREAS, I, Sisi FAN, whose post office address is No.457 Zhongshan Road, Dalian City, Liaoning Province, P.R.China 116023. hereinafter referred to as Assignor, am the owner of useful improvements in CATALYST FOR CRACKING 1,2-DICHLOROETHANE TO PREPARE CHLOROETHYLENE, PREPARATION AND REGENERATION METHOD THEREOF (hereinafter referred to as the Invention) for which the above application for United States Letters Patent was filed on: 02-MAR-2020 Serial No.: 16643617 or established by PCT International Patent Application No.: filed: States of America; _designating the United WHEREAS, DALIAN INSTITUTE OF CHEMICAL PHYSICS, CHINESE ACADEMY OF SCIENCES, whose post office address is No.457 Zhongshan Road, Dalian City, Liaoning Province, P.R.China 116023, and FORMOSA PLASTICS CORPORATION, whose post office address is 100, Suei-guan Road, Jen-wu District, Kaohsiung City, Taiwan, China, hereinafter referred to as Assignees, are desirous of acquiring the entire right, title and interest in and to the same in the United States; NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, I, Assignor, by these presents do sell, assign and transfer unto said Assignees, the entire right, title, and interest in and to said invention and application throughout the United States of America, including any and all Letters Patent granted on any division, continuation, continuation-in-part and reissue ALSO, Assignor hereby agrees to execute any documents that legally may be required in connection with the filing, prosecution and maintenance of said application or any other patent application(s) in the United States for said INVENTION, including additional documents that may be required to affirm the rights of Assignees in and to said Invention, all without further consideration. Assignor also agrees, without further consideration and at Assigners's expense, to identify and communicate to Assignees at Assignees's request documents and information concerning the Invention that are within Assignor's possession or control, and to provide further assurances and testimony on behalf of Assigners that lawfully may be required of Assignor in respect of the prosecution, maintenance and defense of any patent application or patent encompassed within the terms of this instrument. Assignor's obligations under this instrument shall extend to Assignor's heirs, executors, administrators and other legal representatives. ALSO, ASSIGNOR hereby authorizes and requests the Director of the U.S. Patent and Trademark office to issue any and all Letters Patent referred to above to Assignees, as the Assignees of the entire right, title and interest in and to the same, for Assignees's sole use and behoof; and for the use and behoof of Assignees's legal representatives and successors, to the full end of the term for which such Letters Patent may be granted, as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made. ASSIGNOR authorizes any member of the firm of Maier & Maier, PLLC to insert or complete any information in this document needed to effect its recordal in the U.S. Patent and Trademark Office. Legal Name of Inventor; Sisi PAN x x0/9, 10.>

Title of Invention: <u>CATALYST FOR CRACKING 1,2-DICHLOROETHANE TO PREPARE CHLOROETHYLENE</u>, <u>PREPARATION AND REGENERATION METHOD THEREOF</u>

As a below named inventor, I hereby declare that:
This declaration is directed to:
The attached application, or United States application or PCT international application number 16643617, filed on 02-MAR-2020
The above-identified application was made or authorized to be made by me. I believe I am the original inventor or an original joint inventor of a claimed invention in the application. I have reviewed and understood the contents of the above-identified application, including the claims, and any claim amendments made in the application. I acknowledge the duty to disclose all information which is material to patentability as defined in 37 CFR 1.56.
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both.
<u>ASSIGNMENT</u>
WHEREAS, I, Yanqiang HUANG, whose post office address is No.457 Zhongshan Road, Dalian City, Liaoning Province, P.R.China 116023, hereinafter referred to as ASSIGNOR, am the owner of useful improvements in CATALYST FOR CRACKING 1,2-DICHLOROETHANE TO PREPARE CHLOROETHYLENE, PREPARATION AND REGENERATION METHOD THEREOF (hereinafter referred to as the INVENTION) for which the above application for United States Letters Patent was filed on: 02-MAR-2020 certain No.: 16643617 crestablished by PCT International Patent Application No.:filed: designating the United States of America;
WHEREAS, <u>DALIAN INSTITUTE OF CHEMICAL PHYSICS</u> , <u>CHINESE ACADEMY OF SCIENCES</u> , whose post office address is <u>No.457 Zhongshan Road</u> , <u>Dalian City</u> , <u>Liaoning Province</u> , <u>P.R.China 116023</u> , and <u>FORMOSA PLASTICS CORPORATION</u> , whose post office address is <u>100</u> , <u>Suci-guan Road</u> , <u>Jen-wu District</u> , <u>Kaohsiung City</u> , <u>Taiwan</u> , <u>China</u> , hereinafter referred to as ASSIGNEES, are desirous of acquiring the entire right, title and interest in and to the same in the United States;
NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, I, ASSIGNOR, by these presents do sell, assign and transfer unto said ASSIGNEES, the entire right, title, and interest in and to said INVENTION and application throughout the United States of America, including any and all Letters Patent granted on any division, continuation, continuation-in-part and reissue of said application.
ALSO, ASSIGNOR hereby agrees to execute any documents that legally may be required in connection with the filing, prosecution and maintenance of said application or any other patent application(s) in the United States for said INVENTION, including additional documents that may be required to affirm the rights of ASSIGNEES in and to said INVENTION, all without further consideration. ASSIGNOR also agrees, without further consideration and at ASSIGNEES's expense, to identify and communicate to ASSIGNEES at ASSIGNEES's request documents and information concerning the INVENTION that are within ASSIGNOR's possession or control, and to provide further assurances and testimony on behalf of ASSIGNEES that lawfully may be required of ASSIGNOR in respect of the prosecution, maintenance and defense of any patent application or patent encompassed within the terms of this instrument. ASSIGNOR's obligations under this instrument shall extend to ASSIGNOR's heirs, executors, administrators and other legal representatives.
ALSO, ASSIGNOR hereby authorizes and requests the Director of the U.S. Patent and Trademark office to issue any and all Letters Patent referred to above to ASSIGNEES, as the ASSIGNEES of the entire right, title and interest in and to the same, for ASSIGNEES's sole use and behoof; and for the use and behoof of ASSIGNEES's legal representatives and successors, to the full end of the term for which such Letters Patent may be granted, as fully and entirely as the same would have been held by ASSIGNOR had this assignment and sale not been made.
ASSIGNOR authorizes any member of the firm of Maier & Maier, PLLC to insert or complete any information in this document needed to effect its recordal in the U.S. Patent and Trademark Office.
Legal Name of Inventor: Yanqiang HUANG
x Hiallo x x019, 10.29
Inventor's Signature Date

Title of Invention: CATALYST FOR CRACKING 1,2-DICHLOROETHANE TO PREPARE CHLOROETHYLENE, PREPARATION AND REGENERATION METHOD THEREOF

As a below named inventor, I hereby declare that:
This declaration is directed to:
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The above-identified application was made or authorized to be made by me. I believe I am the original inventor or an original join inventor of a claimed invention in the application. I have reviewed and understood the contents of the above-identified application including the claims, and any claim amendments made in the application. I acknowledge the duty to disclose all information which material to patentability as defined in 37 CFR 1.56.
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 USC 1001 by fine comprisonment of not more than five (5) years, or both.
<u>ASSIGNMENT</u>
WHEREAS, I. Tao ZHANG, whose post office address is No.457 Zhongshan Road, Dalian City, Liaoning Province, P.R.China 11602 hereinafter referred to as Assignor, am the owner of useful improvements in CATALYST FOR CRACKING 1.2-DICHLOROETHAN TO PREPARE CHLOROETHYLENE, PREPARATION AND REGENERATION METHOD THEREOF (hereinafter referred to as the Invention) for which the above application for United States Letters Patent was filed on: 02-MAR-2020 Serial No.:16643617 or established by PCT International Patent Application No.: filed: designating the United States of America:
WHEREAS, DALIAN INSTITUTE OF CHEMICAL PHYSICS, CHINESE ACADEMY OF SCIENCES, whose post office address is No.457 Zhongshan Road, Dalian City, Liaoning Province, P.R.China 116023, and FORMOSA PLASTICS CORPORATION, whose post office address is 100, Suei-guan Road, Jen-wu District, Kaohsiung City, Taiwan, China, hereinafter referred to as Assignees, are desirous of acquiring the entire right, title and interest in and to the same in the United States;
NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, I. Assignor, by these present do sell, assign and transfer unto said Assignees, the entire right, title, and interest in and to said Invention and application throughouthe United States of America, including any and all Letters Patent granted on any division, continuation, continuation-in-part and reissu of said application.
ALSO, Assignor hereby agrees to execute any documents that legally may be required in connection with the filing, prosecution an maintenance of said application or any other patent application(s) in the United States for said Invention, including additional document that may be required to affirm the rights of Assignees in and to said Invention, all without further consideration. Assignor also agrees without further consideration and at Assignees's expense, to identify and communicate to Assignees at Assignees's request document and information concerning the Invention that are within Assignor's possession or control, and to provide further assurances an testimony on behalf of Assignees that lawfully may be required of Assignor in respect of the prosecution, maintenance and defense of any patent application or patent encompassed within the terms of this instrument. Assignor's obligations under this instrument shall extend to Assignor's heirs, executors, administrators and other legal representatives.
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ASSIGNOR authorizes any member of the firm of Maier & Maier, PLLC to insert or complete any information in this documen needed to effect its recordal in the U.S. Patent and Trademark Office.
Legal Name of Inventor: Tao ZHANG
x Tan. 2, 2020
Inventor's Signature Date

Title of Invention: CATALYST FOR CRACKING 1,2-DICHLOROETHANE TO PREPARE CHLOROETHYLENE, PREPARATION AND REGENERATION METHOD THEREOF

<u>DECLARATION</u>
As a below named inventor, I hereby declare that: This declaration is directed to:
The attached application, or
United States application or PCT international application number 16643617 , filed on 02-MAR-2020
The above-identified application was made or authorized to be made by me. I believe I am the original inventor or an original joint inventor of a claimed invention in the application. I have reviewed and understood the contents of the above-identified application, including the claims, and any claim amendments made in the application. I acknowledge the duty to disclose all information which is material to patentability as defined in 37 CFR 1.56.
I hereby acknowledge that any willful faise statement made in this declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both.
ASSIGNMENT
WHEREAS, I. Chin Lien HUANG, whose post office address is 100, Suei-guan Road, Jen-wu District, Kaohsiung City, Taiwan, China, hereinafter referred to as ASSIGNOR, am the owner of useful improvements in CATALYST FOR CRACKING 1.2-DICHLOROETHANE TO PREPARE CHLOROETHYLENE, PREPARATION AND REGENERATION METHOD THEREOF (hereinafter referred to as the INVENTION) for which the above application for United States Letters Patent was filed on: 02-MAR-2020Serial No.: 16643617 or established by PCT International Patent Application No.: filed: designating the United States of America:
WHEREAS, <u>DALIAN INSTITUTE OF CHEMICAL PHYSICS</u> , <u>CHINESE ACADEMY OF SCIENCES</u> , whose post office address is <u>No.457 Zhongshan Road</u> , <u>Dalian City</u> , <u>Liaoning Province</u> , <u>P.R.China 116023</u> , and <u>FORMOSA PLASTICS CORPORATION</u> , whose post office address is <u>100</u> , <u>Suci-guan Road</u> , <u>Jen-wu District</u> , <u>Kaohsiung City</u> , <u>Taiwan</u> , <u>China</u> , hereinafter referred to as Assignees, are desirous of acquiring the entire right, title and interest in and to the same in the United States;
NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, I. ASSIGNOR, by these presents do sell, assign and transfer unto said ASSIGNEES, the entire right, title, and interest in and to said INVENTION and application throughout the United States of America, including any and all Letters Patent granted on any division, continuation, continuation-in-part and reissue of said application.
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ASSIGNOR authorizes any member of the firm of Maier & Maier, PLLC to insert or complete any information in this document needed to effect its recordal in the U.S. Patent and Trademark Office.
Legal Name of Inventor: Chin Lien HUANG
x Chin-Lion HUNG x 01-NOV-2019
Inventor's Signature Date

Attorney Docket No. 12040010US

DECLARATION AND ASSIGNMENT

 $\begin{array}{c} \text{Title of Invention: } \underline{\text{CATALYST FOR CRACKING 1.2-DICHLOROETHANE TO PREPARE CHLOROETHYLENE,}} \\ \underline{\text{PREPARATION AND REGENERATION METHOD THEREOF}} \end{array}$

DECLARATION

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<u>ASSIGNMENT</u>
WHEREAS, I, Wan Tun HUNG, whose post office address is 100. Suei-guan Road, Jen-wu District, Kaohsiung City. Taiwan, China hereinafter referred to as ASSIGNOR, am the owner of useful improvements in CATALYST FOR CRACKING 1,2-DICHLOROETHANI TO PREPARE CHLOROETHYLENE, PREPARATION AND REGENERATION METHOD THEREOF (hereinafter referred to as the Invention) for which the above application for United States Letters Patent was filed on: 02-MAR-2020 Serial No.:16643617 or established by PCT International Patent Application No.: filed: designating the United States of America;
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NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, I, ASSIGNOR, by these present do sell, assign and transfer unto said ASSIGNEES, the entire right, title, and interest in and to said INVENTION and application throughout the United States of America, including any and all Letters Patent granted on any division, continuation, continuation-in-part and reissue of said application.
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ASSIGNOR authorizes any member of the firm of Maier & Maier, PLLC to insert or complete any information in this document needed to effect its recordal in the U.S. Patent and Trademark Office.
Legal Name of Inventor: Wan Tun HUNG
x Wan Tun Hung x >079, 10, 29
Inventor's Signature Date

Title of Invention: CATALYST FOR CRACKING 1.2-DICHLOROETHANE TO PREPARE CHLOROETHYLENE, PREPARATION AND REGENERATION METHOD THEREOF

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I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both.
ASSIGNMENT
WHEREAS, I, Yu Cheng CHEN, whose post office address is 100, Suei-guan Road, Jen-wu District, Kaohsiung City, Taiwan, China, hereinafter referred to as ASSIGNOR, am the owner of useful improvements in CATALYST FOR CRACKING 1.2-DICHLOROETHANE TO PREPARE CHLOROETHYLENE, PREPARATION AND REGENERATION METHOD THEREOF (hereinafter referred to as the INVENTION) for which the above application for United States Letters Patent was filed on: 02-MAR-2020 Serial No.: 16643617 or established by PCT International Patent Application No.: filed: designating the United States of America;
WHEREAS, <u>DALIAN INSTITUTE OF CHEMICAL PHYSICS</u> , CHINESE ACADEMY OF SCIENCES, whose post office address is <u>No.457 Zhongshan Road</u> , <u>Dalian City</u> , <u>Liaoning Province</u> , <u>P.R.China 116023</u> , and <u>FORMOSA PLASTICS CORPORATION</u> , whose post office address is <u>100</u> , <u>Suei-guan Road</u> , <u>Jen-wu District</u> , <u>Kaohsiung City</u> , <u>Taiwan</u> , <u>China</u> , hereinafter referred to as Assignees, are desirous of acquiring the entire right, title and interest in and to the same in the United States;
NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, I, Assignor, by these presents do sell, assign and transfer unto said Assignees, the entire right, title, and interest in and to said Invention and application throughout the United States of America, including any and all Letters Patent granted on any division, continuation, continuation-in-part and reissue of said application.
ALSO, ASSIGNOR hereby agrees to execute any documents that legally may be required in connection with the filing, prosecution and maintenance of said application or any other patent application(s) in the United States for said INVENTION, including additional documents that may be required to affirm the rights of ASSIGNEES in and to said INVENTION, all without further consideration. ASSIGNEES'S expense, to identify and communicate to ASSIGNEES at ASSIGNEES's request documents and information concerning the INVENTION that are within ASSIGNOR'S possession or control, and to provide further assurances and testimony on behalf of ASSIGNEES that lawfully may be required of ASSIGNOR in respect of the prosecution, maintenance and defense of any patent application or patent encompassed within the terms of this instrument. ASSIGNOR'S obligations under this instrument shall extend to ASSIGNOR'S heirs, executors, administrators and other legal representatives.
ALSO, ASSIGNOR hereby authorizes and requests the Director of the U.S. Patent and Trademark office to issue any and all Letters Patent referred to above to Assignees, as the Assignees of the entire right, title and interest in and to the same, for Assignees's sole use and behoof, and for the use and behoof of Assignees's legal representatives and successors, to the full end of the term for which such Letters Patent may be granted, as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made.
ASSIGNOR authorizes any member of the firm of Maier & Maier, PLLC to insert or complete any information in this document needed to effect its recordal in the U.S. Patent and Trademark Office.
Legal Name of Inventor: Yu Cheng CHEN
x Millieng Clien X 299, 10-29 Inventor's Signature Date
Date

Title of Invention: <u>CATALYST FOR CRACKING 1,2-DICHLOROETHANE TO PREPARE CHLOROETHYLENE, PREPARATION AND REGENERATION METHOD THEREOF</u>

DECLARATION

<u>DECLARATION</u>
As a below named inventor, I hereby declare that: This declaration is directed to:
The attached application, or
United States application or PCT international application number 16643617 , filed on 02-MAR-2020
The above-identified application was made or authorized to be made by me. I believe I am the original inventor or an original join inventor of a claimed invention in the application. I have reviewed and understood the contents of the above-identified application including the claims, and any claim amendments made in the application. I acknowledge the duty to disclose all information which is material to patentability as defined in 37 CFR 1.56.
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 USC 1001 by fine of imprisonment of not more than five (5) years, or both.
<u>ASSIGNMENT</u>
WHEREAS, I, Chien Hui WU, whose post office address is 100, Suei-guan Road, Jen-wu District, Kaohsiung City, Taiwan, China hereinafter referred to as ASSIGNOR, am the owner of useful improvements in CATALYST FOR CRACKING 1.2-DICHLOROETHANE TO PREPARE CHLOROETHYLENE, PREPARATION AND REGENERATION METHOD THEREOF (hereinafter referred to as the INVENTION) for which the above application for United States Letters Patent was filed on: O2-MAR-2020
WHEREAS, <u>DALIAN INSTITUTE OF CHEMICAL PHYSICS</u> , <u>CHINESE ACADEMY OF SCIENCES</u> , whose post office address is <u>No.457 Zhongshan Road</u> , <u>Dalian City</u> , <u>Liaoning Province</u> , <u>P.R.China 116023</u> , and <u>FORMOSA PLASTICS CORPORATION</u> , whose post office address is <u>100</u> , <u>Suei-guan Road</u> , <u>Jen-wu District</u> , <u>Kaohsiung City</u> , <u>Taiwan</u> , <u>China</u> , hereinafter referred to as Assignees, are desirous of acquiring the entire right, title and interest in and to the same in the United States;
NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, I, ASSIGNOR, by these presents do sell, assign and transfer unto said ASSIGNEES, the entire right, title, and interest in and to said INVENTION and application throughout the United States of America, including any and all Letters Patent granted on any division, continuation, continuation-in-part and reissue of said application.
ALSO, ASSIGNOR hereby agrees to execute any documents that legally may be required in connection with the filing, prosecution and maintenance of said application or any other patent application(s) in the United States for said Invention, including additional documents that may be required to affirm the rights of ASSIGNEES in and to said Invention, all without further consideration. Assignor also agrees, without further consideration and at ASSIGNEES's expense, to identify and communicate to ASSIGNEES at ASSIGNEES's request documents and information concerning the Invention that are within ASSIGNOR's possession or control, and to provide further assurances and testimony on behalf of ASSIGNEES that lawfully may be required of ASSIGNOR in respect of the prosecution, maintenance and defense of any patent application or patent encompassed within the terms of this instrument. ASSIGNOR's obligations under this instrument shall extend to ASSIGNOR's heirs, executors, administrators and other legal representatives.
ALSO, ASSIGNOR hereby authorizes and requests the Director of the U.S. Patent and Trademark office to issue any and all Letters Patent referred to above to ASSIGNEES, as the ASSIGNEES of the entire right, title and interest in and to the same, for ASSIGNEES's sole use and behoof; and for the use and behoof of ASSIGNEES's legal representatives and successors, to the full end of the term for which such Letters Patent may be granted, as fully and entirely as the same would have been held by ASSIGNOR had this assignment and sale not been made.
ASSIGNOR authorizes any member of the firm of Maier & Maier, PLLC to insert or complete any information in this document needed to effect its recordal in the U.S. Patent and Trademark Office.
Legal Name of Inventor: Chien Hui WU
x Ch'en fon: Wa X 8019, 10. 29 Inventor's Signature Date
Inventor's Signature Date

 $\frac{\text{CATALYST FOR CRACKING 1.2-DICHLOROETHANE TO PREPARE CHLOROETHYLENE,}}{\text{PREPARATION AND REGENERATION METHOD THEREOF}}$

DECLARATION

As a below named inventor, I hereby declare that: This declaration is directed to:
The attached application, or
United States application or PCT international application number 16643617, filed on02-MAR-2020
The above-identified application was made or authorized to be made by me. I believe I am the original inventor or an original joi inventor of a claimed invention in the application. I have reviewed and understood the contents of the above-identified application including the claims, and any claim amendments made in the application. I acknowledge the duty to disclose all information which material to patentability as defined in 37 CFR 1.56.
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 USC 1001 by fine imprisonment of not more than five (5) years, or both.
ASSIGNMENT
WHEREAS, I, Ya Wen CHENG, whose post office address is 100, Suei-guan Road, Jen-wu District, Kaohsiung City, Taiwan, Chim hereinafter referred to as ASSIGNOR, am the owner of useful improvements in CATALYST FOR CRACKING 1.2-DICHLOROETHAN TO PREPARE CHLOROETHYLENE, PREPARATION AND REGENERATION METHOD THEREOF (hereinafter referred to as to Invention) for which the above application for United States Letters Patent was filed on: 02-MAR-2020 Serial No.: 16643617 designating the United States of America;
WHEREAS, <u>DALIAN INSTITUTE OF CHEMICAL PHYSICS</u> , <u>CHINESE ACADEMY OF SCIENCES</u> , whose post office addres is <u>No.457 Zhongshan Road</u> , <u>Dalian City</u> , <u>Liaoning Province</u> , <u>P.R.China 116023</u> , and <u>FORMOSA PLASTICS CORPORATION</u> , who post office address is <u>100</u> , <u>Suei-guan Road</u> , <u>Jen-wu District</u> , <u>Kaohsjung City</u> , <u>Taiwan</u> , <u>China</u> , hereinafter referred to as Assigness, a desirous of acquiring the entire right, title and interest in and to the same in the United States;
NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, I, ASSIGNOR, by these present do sell, assign and transfer unto said ASSIGNEES, the entire right, title, and interest in and to said INVENTION and application throughout the United States of America, including any and all Letters Patent granted on any division, continuation, continuation-in-part and reisst of said application.
ALSO, ASSIGNOR hereby agrees to execute any documents that legally may be required in connection with the filing, prosecution ar maintenance of said application or any other patent application(s) in the United States for said INVENTION, including additional document that may be required to affirm the rights of ASSIGNEES in and to said INVENTION, all without further consideration. ASSIGNOR also agree without further consideration and at ASSIGNEES's expense, to identify and communicate to ASSIGNEES at ASSIGNEES's request document and information concerning the INVENTION that are within ASSIGNOR's possession or control, and to provide further assurances are testimony on behalf of ASSIGNEES that lawfully may be required of ASSIGNOR in respect of the prosecution, maintenance and defense of any patent application or patent encompassed within the terms of this instrument. ASSIGNOR's obligations under this instrument shall extend to ASSIGNOR's heirs, executors, administrators and other legal representatives.
ALSO, ASSIGNOR hereby authorizes and requests the Director of the U.S. Patent and Trademark office to issue any and all Lette Patent referred to above to ASSIGNEES, as the ASSIGNEES of the entire right, title and interest in and to the same, for ASSIGNEES's sole us and behoof; and for the use and behoof of ASSIGNEES'S legal representatives and successors, to the full end of the term for which suc Letters Patent may be granted, as fully and entirely as the same would have been held by ASSIGNOR had this assignment and sale no been made.
ASSIGNOR authorizes any member of the firm of Maier & Maier, PLLC to insert or complete any information in this documen needed to effect its recordal in the U.S. Patent and Trademark Office.
Legal Name of Inventor: Ya Wen CHENG
X YA WAN CHENG Inventor's Signature X >0/9. (D. 3D) Date

Title of Invention: <u>CATALYST FOR CRACKING 1.2-DICHLOROETHANE TO PREPARE CHLOROETHYLENE</u>, <u>PREPARATION AND REGENERATION METHOD THEREOF</u>

DECLARATION

As a below named inventor. Hiereby declare that: This declaration is directed to:
The attached application, or
United States application or PCT international application number 16643617 , filed on 02-MAR-2020
The above-identified application was made or authorized to be made by me. I believe I am the original inventor or an original joint inventor of a claimed invention in the application. I have reviewed and understood the contents of the above-identified application, including the claims, and any claim amendments made in the application. I acknowledge the duty to disclose all information which is material to patentability as defined in 37 CFR 1.56.
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both.
<u>ASSIGNMENT</u>
WHEREAS, I, Ming Hsien WEN, whose post office address is 100, Suei-guan Road, Jen-wu District, Kaohsining City, Taiwan, China, hereinafter referred to as Assichor, and the owner of useful improvements in CATALYST FOR CRACKING 1.2-DICHLOROETHANE TO PREPARE CHLOROETHYLENE, PREPARATION AND REGENERATION METHOD THEREOF (hereinafter referred to as the INVENTION) for which the above application for United States Letters Patent was filed on: 02-MAR-2020 Serial No.:16643617 or established by PCT International Patent Application No.:
WHEREAS, <u>DALIAN INSTITUTE OF CHEMICAL PHYSICS</u> , <u>CHINESE ACADEMY OF SCIENCES</u> , whose post office address is <u>No.457 Zhongshan Road</u> , <u>Dalian City</u> , <u>Liaoning Province</u> , <u>P.R. China 116023</u> , and <u>FORMOSA PLASTICS CORPORATION</u> , whose post office address is <u>100</u> , <u>Suei-guan Road</u> , <u>Jen-wu District</u> , <u>Kaohsiung City</u> , <u>Taiwan</u> , <u>China</u> , hereinafter referred to as Assignees, are desirous of acquiring the entire right, title and interest in and to the same in the United States:
NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged; I. ASSIGNOR, by these presents do sell, assign and transfer unto said ASSIGNEES, the entire right, title, and interest in and to said INVENTION and application throughout the United States of America, including any and all Letters Patent granted on any division, continuation, continuation-in-part and reissue of said application.
ALSO, ASSIGNOR hereby agrees to execute any documents that legally may be required in connection with the filing, prosecution and maintenance of said application or any other patent application(s) in the United States for said INVENTION, including additional documents that may be required to affirm the rights of ASSIGNEES in and to said INVENTION, all without further consideration. ASSIGNOR also agrees, without further consideration and at ASSIGNEES'S expense, to identify and communicate to ASSIGNEES at ASSIGNEES's request documents and information concerning the INVENTION that are within ASSIGNOR'S possession or control, and to provide further assurances and testimony on behalf of ASSIGNEES that lawfully may be required of ASSIGNOR in respect of the prosecution, maintenance and defense of any patent application or patent encompassed within the terms of this instrument. ASSIGNOR'S obligations under this instrument shall extend to ASSIGNOR'S heirs, executors, administrators and other legal representatives.
ALSO, Assignoit hereby authorizes and requests the Director of the U.S. Patent and Trademark office to issue any and all Letters Patent referred to above to Assignees, as the Assignees of the entire right; title and interest in and to the same, for Assignees's sole use and behoof, and for the use and behoof of Assignees's legal representatives and successors, to the full end of the term for which such Letters Patent may be granted, as fully and entirely as the same would have been held by Assignore had this assignment and sale not been made.
ASSIGNOR authorizes any member of the firm of Maier & Maier, PLLC to insert or complete any information in this document needed to effect its recordal in the U.S. Patent and Trademark Office,
Legal Name of Inventor: Ming Hsien WEN
x Many Holen WEN x 2019, 10,29
Inventor's Signature Date

Title of Invention: <u>CATALYST FOR CRACKING L2-DICELOROETHANE TO PREPARE CHLOROETHYLENE, PREPARATION AND REGENERATION METHOD THEREOF</u>

DECLARATION

As a below nan This declaration	ned inventor, I hereby declare that: n is directed to:		
	The attached application, or United States application or PCT i	nternational application number 16643617	156 cm 02-MAR-2020
1Z.X	emina nimo abbazación (a 1.6.)	mestational approximation manager 10040011	. 11850 (1)10
inventor of a cla including the cla material to pater	amed invention in the application. sims, and any claim amendments ma stability as defined in 37 CPR 1.56.	orized to be made by me. I believe I am the or I have reviewed and understood the contents of the in the application. I acknowledge the duty to	f the above-identified application, o disclose all information which is
I hereby acknow imprisonment of	wledge that any willful false state f not more than five (5) years, or bo	ment made in this declaration is punishable th.	under 18 USC 1001 by fine or
		ASSIGNMENT	
TO PREPARE C INVENTION) for w	ed to as ASSIGNOR, am the owner of in HLOROETHYLENE, PREPARAT! which the above application for United PCT International Patent Application	e address is 100, <u>Saei-guan Road, Jen-wu Distrit</u> useful improvements in <u>CATALYST FOR CRAC</u> ION AND REGENERATION METHOD THER I States Letters Patent was filed on: <u>02-MAR-20</u> m No.: filed:	EVENT 1.2-DICHLOROFTHANE EVENT (hereinafter referred to as the 20 Serial No. 16643617
is No.457 Zhong post office addre	shan Road, Dalian City, Liaoning P ss is 100, Suet-guan Road, Jen-wu	AL PHYSICS, CHINESE ACADEMY OF SCII rovince, P.R.China 116023, and FORMOSA PL District, Kaohsiung City, Thiwan, China, herein t in and to the same in the United States;	ASTICS CORPORATION, whose
do sell, assign an	nd transfer unto said Assignees, the of America, including any and all L	ideration, receipt of which is hereby acknowledge entire right, title, and interest in and to said Invi- etters Patent granted on any division, continuation	ENTION and application throughout
maintenance of si that may be requi without further of and information testimony on beh any patent applic	aid application or any other patent ap ired to affirm the rights of ASSIGNEES'S expo concerning the INVENTION that are alf of ASSIGNEES that lawfully may	cuments that legally may be required in connecti- plication(s) in the United States for said INVENTIC in and to said INVENTION, all without further con- ense, to identify and communicate to ASSIGNEES within ASSIGNOR'S possession or control, and be required of ASSIGNOR in respect of the prosec- the terms of this instrument. ASSIGNOR'S oblig- and other legal representatives.	N. including additional documents is ideration. ASSICNOR also agrees, at ASSIGNEES'S request documents to provide further assurances and ution, maintenance and defense of
Patent referred to and behoof; and	above to Assignees, as the Assignifor the use and behoof of Assignee.	the Director of the U.S. Patent and Trademark EES of the entire right, title and interest in and to s's legal representatives and successors, to the fi as the same would have been held by Assignos	the same, for AssionEES's sole use all end of the term for which such
	nthorizes any member of the firm of secondal in the U.S. Patent and To	of Maier & Maier, PLLC to insert or complete ademark Office.	any information in this document
	tventor: Chao Chin CHANG		
x Choo	Chin CHANG	<u>x 24/9/7</u>	s, <i>s</i> 9
Inventor's Signat	inte t	Date	

Title of Invention: <u>CATALYST FOR CRACKING 1.2-DICHLOROETHANE TO PREPARE CHLOROETHYLENE.</u>
<u>PREPARATION AND REGENERATION METHOD THEREOF</u>

DECLARATION

As a below named inventor, I hereby declare that: This declaration is directed to:
The attached application, or
United States application or PCT international application number 16643617 filed on 02-MAR-2020
The above-identified application was made or authorized to be made by me. I believe I am the original inventor or an original joint inventor of a claimed invention in the application. I have reviewed and understood the contents of the above-identified application, including the claims, and any claim amendments made in the application. I acknowledge the duty to disclose all information which is material to patentability as defined in 37 CFR 1.56.
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both.
ASSIGNMENT
WHEREAS, I, Tsan Cheng HUANG, whose post office address is 100. Suei-guan Road, Jen-wu District, Kaohsiung City, Taiwan, China, hereinafter referred to as Assignor, and the owner of useful improvements in CATALYST FOR CRACKING 1.2-DICHLOROETHANE. TO PREPARE CHLOROETHYLENE, PREPARATION AND REGENERATION METHOD THEREOF (hereinafter referred to as the INVENTION) for which the above application for United States Letters Patent was filed on:
WHEREAS, <u>DALIAN INSTITUTE OF CHEMICAL PHYSICS</u> , CHINESE ACADEMY OF SCIENCES, whose post office address is <u>No.457 Zhongshan Road</u> , <u>Dalian City</u> , <u>Liaoning Province</u> , <u>P.R.China 116023</u> , and <u>FORMOSA PLASTICS CORPORATION</u> , whose post office address is <u>100</u> , <u>Suei-guan Road</u> , <u>Jen-wu District</u> , <u>Kaobsiung City</u> , <u>Taiwan</u> , <u>China</u> , bereinafter referred to as Assigneds, are desirous of acquiring the entire right, title and interest in and to the same in the United States;
NOW, THEREPORE, for good and valuable consideration, receipt of which is hereby acknowledged, I, Assignor, by these presents do sell, assign and transfer unto said Assignores, the entire right, title, and interest in and to said invention and application throughout the United States of America, including any and all Letters Patent gramed on any division, continuation, continuation-in-part and refissue of said application.
ALSO, Assignor hereby agrees to execute any documents that legally may be required in connection with the filing, prosecution and maintenance of said application or any other patent application(s) in the United States for said Invention, including additional documents that may be required to affirm the rights of Assigners in and to said Invention, all without further consideration. Assigners also agrees, without further consideration and at Assigners's expense, to identify and communicate to Assigners at Assigners's request documents and information concerning the Invention that are within Assignor's possession or control, and to provide further assurances and testimony on behalf of Assigners that lawfully may be required of Assignor in respect of the prosecution, maintenance and defense of any patent application or patent encompassed within the terms of this instrument. Assignor's obligations under this instrument shall extend to Assignor's heirs, executors, administrators and other legal representatives.
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ASSIGNOR authorizes any member of the firm of Maier & Maier, PLLC to insert or complete any information in this document needed to effect its recordal in the U.S. Patent and Trademark Office.
Legal Name of Inventor: Tsao Cheng HUANG
x TSAO Chang Huang x Z019, 10 29 Inventor's Signature 9 Date
Inventor's Signature O Date

RECORDED: 03/02/2020