		06-24-2002						
	FORM PTO-1595 Rev. 08/28/92 FFICE OF PLOT A RECORDATI	102132283 TENT OF COMMERCE and Trademark Office						
	FINANCE SECTION	6.503						
	Assistant Commissioner for Patents and Trademarks:	Assistant Commissioner for Patents and Trademarks: Please record the attached original documents or copy thereof.						
	 Name of conveying party(ies): Kaoru Ohba Hideki Akimoto 	2. Name and address of receiving party(ies): DOW CHEMICAL JAPAN LIMITED 2-24, Higashi Shinagawa 2-Chome Shinagawa-ku, Tokyo 140 JAPAN						
	Additional name(s) of conveying party(ies) is attached.	THE DOW CHEMICAL COMPANY						
	3. Nature of conveyance:							
	X Assignment Security Agreement Other	☐ Merger ☐ Change of Name						
	Execution Date(s) May 12, 2000 Effective as of February 2, 2000							
	4. Application Number(s) or Patent Number(s):							
	09/496,495 February 2, 2000							
	If this document is being filed together with a new application, the execution date of the application is: Additional Application Number(s) or Patent Number(s) are attached.							
	Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: 1						
	Graham E. Taylor The Dow Chemical Company Intellectual Property P. O. Box 1967	7. Total fee (37 CFR 3.41) \$40.00 ☐ Enclosed ☑ Please deduct the above fee from our Deposit Account						
	Midland, Michigan 48641-1967 United States of America	Deposit Account <u>04-1512</u> . If this estimate is incorrect, please debit or credit our account accordingly.						
06/21/2002 I								
01 FC:581	40.00 CH DO NOT U	ISE THIS SPACE						
	9. Statement and signature:							
	To the best of my knowledge and belief, the foregoing in of the original document.	formation is true and correct and any attached copy is a true copy						
	Dated: May 14, 2002	Crystal S. Honaman Office Professional						

44,635

Total number of pages including attachments: $\underline{6}$

(989) 636-1954

PATENT REEL: 13005 FRAME: 0836

This Assignment 110 is in the ENGLISH language and has the same meaning in other languages with the same 110 number and R/Date

FORM 110 (R. 5/97)

Docket Ref. 44635

INDIVIDUAL ASSIGNMENT AND INVENTOR'S DECLARATION (WITH PRIORITY RIGHTS)

I/we verily believe I am/we are the original, first and sole/joint inventor(s) of the subject matter which is embraced by and for which a patent is sought on the invention entitled:

TOUGHENED BENZOCYCLOBUTENE BASED POLYMERS AND THEIR USE IN BUILDING-UP PRINTED WIRING BOARDS

which invention was made and invented by me/us out of and in the course of my/our employment with my/our respective employers as stated below my/our name(s). I/we acknowledge that I/we hold the invention and all patent and other rights and powers obtainable or exercisable in respect thereof in trust for our respective employers. As trustee(s), and for good and valuable consideration and/or the remuneration received for my/our work, I/we sell, assign and transfer unto:

DOW CHEMICAL JAPAN LIMITED 2-24, Higashi Shinagawa 2-chome Shinagawa-ku, Tokyo 140-8617 JAPAN

a corporation organized and existing under the laws of Japan

(hereinafter referred to as the "Assignee");

Application No. 00/406 405

my/our entire right, title and interest throughout the world, in and to the invention and all rights and powers to make applications, including provisional applications when permitted by law, for Letters Patent in its own name, or in the name of its designee (or nominee(s)); and all rights and powers to file any corresponding or equivalent applications in any and all countries, including all rights to claim priority under all United States domestic laws, International Convention(s) and Treaties in the name of Assignee, and do hereby authorize Assignee or its designee to insert here the

Filing Data Fahrman, 2 2000

in country the United States of America									
of the application, on which the claim for priority will be based; and in and to any Letters Patent that may be issued for	or the invention								
	any and all countries. I/we do hereby agree to assist Assignee in the prosecution of the application(s) and in any interference,								
	offict, opposition or litigation which may arise involving the invention or the patent or patents thereon, and to execute for any and								
Il countries any document relating to applications derived from, corresponding to or equivalent to the above identified application as									
Assignee may request; and I/we do hereby authorize Assignee or its designee (or nominee(s)) to insert here any corresponding									
equivalent									
Application No Filing Date									
in country									
in country									
to the above Priority application of any country where that country's patent property must be identified and entere									
for recordal of this Assignment. I'we authorize Assignee or its designee to translate this Assignment into all language									
and we request that any such Letters Patent be issued to Assignee; and consent to the recordal of this Assignment, or	a Notarial True								
Copy thereof, being under covenant not only that I/we have full power to make the same, but also that such assigned to	rights are not								
encumbered by any grant, license, or other right heretofore given.									
chedinated by any grant, needed, or other right networks given.									
Gulancitad and Danton discourage									
Subscribed and Declared by me/us:									
	At: Shinagawa, Tokyo, Japan this 12 day of May 2000								
At: Shinagawa, Tokyo, Japan At: Shinagawa, Tokyo, Japan									
this 12 day of May 20 00 this 12 day of May									
Effective as of February 2, 2000 Effective as of February 2, 2000	20								
Effective as of February 2, 2000									
Signature: Hawarda Signature: H. Alds.									
Full Name: Kaoru Ohba Full Name: Hideki Akimoto									
Residence: 64-14 Kamo, Mishima-shi Residence: 2-28-17 Senpukugaoka Sus	iono-shi								
Shizuoka-ken 411-0023 Shizuoka-ken 410-1115									
Country: Japan Country: Japan									
Citizenship: Japan Citizenship: Japan									
P. O. Address: Same as Residence									
Employed By: Dow Chemical Japan Limited Employed By: Dow Chemical Japan Limited	ited								
Of Country: Japan Of Country: Japan	ittu								
Of Country. Japan									
At:									
At:									
this day of 20 this day of	20								
Pioneture:									
Signature: Signature:									
Full Name: Full Name:									
Residence: Residence:									
, and the second									
Country: Country:									
Citizenship:									
P. O. Address: Same as Residence P. O. Address: Same as Residence									
Employed By: Employed By:									
Of Country: Of Country:									

This Form 881 is in the ENGLISH language and has the same meaning in other languages with the same 881 number

FORM 881

Dow Case No. 44635

SUBSCRIBING WITNESS AFFIDAVIT OF EXECUTION OF AN ASSIGNMENT

I,

Mina Yamauchi

Whose full post office address is:

2-3-907, Komatsugawa 1-chome, Edogawa-ku Tokyo 162-0034 JAPAN

Make oath and say that I was personally present and did see:

Kaoru Ohba

Who is/are personally known or identified to me to be the inventor(s) named in the attached assignment, duly sign and execute the same for the purposes therein stated.

Mina Jamavchi
Subscribing Witness

08/90

This Form 881 is in the ENGLISH language and has the same meaning in other languages with the same 881 number.

FORM 881

Dow Case No. 44635

SUBSCRIBING WITNESS AFFIDAVIT OF EXECUTION OF AN ASSIGNMENT

I,

Mina Yamauchi

Whose full post office address is:

2-3-907, Komatsugawa 1-chome, Edogawa-ku Tokyo 162-0034 JAPAN

Make oath and say that I was personally present and did see:

Hideki Akimoto

Who is/are personally known or identified to me to be the inventor(s) named in the attached assignment, duly sign and execute the same for the purposes therein stated.

Signed at: Shinagawa, Tokyo, Japan

On this _12_day of _May _______, 2000

Mina Famauchi
Subscribing Witness

08/90

This Assignee Acceptance 660 is in the ENGLISH language and has the same meaning in other languages with the same 660 number. FORM 660

ASSIGNEE ACCEPTANCE

WE, the ASSIGNEE:

DOW CHEMICAL JAPAN LIMITED 2-24, Higashi Shinagawa 2-chome Shinagawa-ku, Tokyo 140-8617

JAPAN

hereby accept the ASSIGNMENT attached hereto which is dated: May 12, 2000

From, the ASSIGNOR: Kaoru Ohba, 64-14 Kamo, Mishima-shi, Shizuoka-ken 411-0023, Japan; and Hideki Akimoto, 2-28-17 Senpukugaoka Susono-shi, Shizuoka-ken 410-1115, Japan

of the invention entitled:

TOUGHENED BENZOCYCLOBUTENE BASED POLYMERS AND THEIR USE IN BUILDING-UP PRINTED WIRING BOARDS

without any restrictions and with all rights and obligations deriving therefrom and declare that this confirmation of acceptance shall be deemed a part of the said ASSIGNMENT.

Signed at Midland, Michig	an 48674, U.S.A.	
this 18 day of lept	ember, 2000	
	DOW CHEMICAL JAPAN LII	MITED
CORP. SEAL	By: Int For	
		Intellectual Property, THE ANY, authorized to act for and CAL JAPAN LIMITED
NOTARIAL	CERTIFICATE (C	Corporation)
UNITED STATES OF AMER	CICA)	
STATE OF Michigan) SS	
County/Parish of Midland)	
On this 18^{44} day of $5e$	ptronber, 2000	, personally appeared
before me, GRAHAM E. TAYLO	OR, Assistant General Counsel,	Intellectual Property, THE
DOW CHEMICAL COMPANY,	authorized to act for and on bel	half of DOW CHEMICAL
JAPAN LIMITED, known or identified to me to be the and acknowledged the same as a fre of the said Corporation incorporated	e act and deed for uses and purpo	
I further certify that said authority, o	iated April 27, 2000	, is based on
a Power of Attorney		
which I have seen, appointing the sa	uid individual Attorney-in-fact w	ith full nower to sign the

foregoing document on behalf of the said corporation and that the purposes for which said document is

Lavora.

granted are within the scope of the objects or activities of said corporation.

SEAL

Notary Public

Karen A. LaCroix

NOTARY PUBLIC, MIDLAND COUNTY, MICHIGAN
MY COMMISSION EXPIRES FEBRUARY 10, 2005

PATENT REEL: 13005 FRAME: 0840

TRUE COPY

TO ALL TO WHOM THESE PRESENTS SHALL COME,

I Do Hereby Certify that the annexed document(s) are TRUE COPIES of the original document(s) which I have compared.

atMidland, Michigan 48674, USA							
this 14 th	day of	May		20 <u>02</u>			
	Crystal S. Honaman Office Professional THE DOW CHEMICAL COMPANY						
	NOTAR	AL CE	RTIFICATE				
UNITED STATE STATE OF MIC County/Parish o)) SS)					
On this 14 th appeared before	day of <u>M</u> e me,	lay		_20 <u>02</u>	_, personally		
	C	rystal S. H	onaman				
	ied to me to be the jed the same as a						
SEAL		Notar	Notary Public.	Alyn A. Gray Midland County, I on Expires April 2	, Michigan		

RECORDED: 06/05/2002

PATENT REEL: 13005 FRAME: 0841