Rubio, Monica

From: Ashburg, Ray (R)
Sent: Thursday, June 08, 2006 2:30 PM
To: Tipps, Tammy (TL)
Cc: Rubio, Monica
Subject: FW: Request to correct
Information Classification: DOW RESTRICTED - For internal use only

----Original Message-----
From: TSB1700_2900 IFW_PALM [mailto:TSB1700_2900IFW_PAL@USPTO.GOV]
Sent: Tuesday, June 06, 2006 2:49 PM
To: Ashburg, Ray (R)
Cc: Wagstaff, Mamye; Nutter, Nathan
Subject: Request to correct

In patent #'s 6,723,398; 6,111,023; 5,5677,383 there does appear to be an office error between what's printed on the patent and what's in public PAIRS. Certificate of Corrections branch would seem to be the area to correct the problem. Mary Diggs or Monyna Dorsey at 703-308-9390. Because it appears to be an office error there should be no fee. But you will probably have to file a Certificate of Correction paperwork to fix the problem. If you need more assistance, please contact Bob Warden at 571-272-1281.
Thanks

Janee Conley
PALM / IFW Contract Troubleshooter for TC1700
Remsen Bldg, Room 6B84
571-272-5523 Work Phone
571-273-5523 Fax
703-987-7067 Cell

PATENT APPLICATION FEE DETERMINATION RECORD
Effective October 1, 1996

Application or Docket Number: 08/927,393

CLAIMS AS FILED - PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	SMALL ENTITY RATE	SMALL ENTITY FEE	OR	OTHER THAN SMALL ENTITY RATE	OTHER THAN SMALL ENTITY FEE
BASIC FEE				385.00	OR		770.00
TOTAL CLAIMS	23 minus 20 =	* 3	x$11=		OR	x$22=	66
INDEPENDENT CLAIMS	6 minus 3 =	* 3	x40=		OR	x80=	240
MULTIPLE DEPENDENT CLAIM PRESENT			+130=		OR	+260=	260
			TOTAL		OR	TOTAL	1336

* If the difference in column 1 is less than zero, enter "0" in column 2

CLAIMS AS AMENDED - PART II

AMENDMENT A

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA
Total	* 16	Minus	** 23	= —
Independent	* 2	Minus	*** 3	= —
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM				

SMALL ENTITY RATE	SMALL ENTITY ADDITIONAL FEE	OR	OTHER THAN SMALL ENTITY RATE	OTHER THAN SMALL ENTITY ADDITIONAL FEE
x$11=		OR	x$22=	
x40=		OR	x80=	
+130=		OR	+260=	
TOTAL ADDIT. FEE		OR	TOTAL ADDIT. FEE	

AMENDMENT B

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA
Total	*	Minus	**	=
Independent	*	Minus	***	=
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM				

SMALL ENTITY RATE	SMALL ENTITY ADDITIONAL FEE	OR	OTHER THAN SMALL ENTITY RATE	OTHER THAN SMALL ENTITY ADDITIONAL FEE
x$11=		OR	x$22=	
x40=		OR	x80=	
+130=		OR	+260=	
TOTAL ADDIT. FEE		OR	TOTAL ADDIT. FEE	

AMENDMENT C

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA
Total	*	Minus	**	=
Independent	*	Minus	***	=
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM				

SMALL ENTITY RATE	SMALL ENTITY ADDITIONAL FEE	OR	OTHER THAN SMALL ENTITY RATE	OTHER THAN SMALL ENTITY ADDITIONAL FEE
x$11=		OR	x$22=	
x40=		OR	x80=	
+130=		OR	+260=	
TOTAL ADDIT. FEE		OR	TOTAL ADDIT. FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20."
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3."
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

FORM PTO-875 (Rev. 10/96)
*U.S. Government Printing Office: 1996 - 413-285/45191
Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

FORM PTO 948 (REV. 01-01) U.S. DEPARTMENT OF COMMERCE-Patent and Trademark Office Application No. 927393

NOTICE OF DRAFTPERSON'S PATENT DRAWING REVIEW

The drawing filed (insert date) 8/27/97 is/are:

A. _____ not objected to by the Draftperson under 37 CFR 1.84 or 1.152.

B. X objected to by the Draftperson under 37 CFR 1.84 or 1.152 as indicated below. The Examiner will require submission of new, corrected drawings whe necessary. Corrected drawings must be submined according to the instructions on the back of this notice.

1. DRAWINGS. 37 CFR 1.84(a): Acceptable categories of drawings: Black ink. Color.
   - _____ Color drawing are not acceptable until petition is granted. Fig.(s) _____
   - _____ Pencil and non black ink is not permitted. Fig(s) _____
2. PHOTOGRAPHS. 37 CFR 1.84(b)
   - _____ Photographs are not acceptable until petition is granted.
   - _____ 3 full-tone sets are required. Fig(s) _____
   - _____ Photographs not properly mounted (must brystol board or photographic double-weight paper). Fig(s) _____
   - _____ Poor quality (half-tone). Fig(s) _____
3. TYPE OF PAPER. 37 CFR 1.84(e)
   - _____ Paper not flexible, strong, white and durable. Fig.(s) _____
   - _____ Erasures, alterations, overwritings, interlineations, folds, copy machine marks not acceptable. (too thin)
   - _____ Mylar, vellum paper is not acceptable (too thin). Fig(s) _____
4. SIZE OF PAPER. 37 CFR 1.84(f): Acceptable sizes:
   - _____ 21.0 cm by 29.7 cm (DIN size A4)
   - _____ 21.6 cm by 27.9 cm (8 1/2 x 11 inches)
   - _____ All drawings sheets not the same size. Sheet(s) _____
5. MARGINS. 37 CFR 1.84(g): Acceptable margins:
   - Top 2.5 cm Left 2.5 cm Right 1.5 cm Bottom 1.0 cm SIZE: A4 Size
   - Top 2.5 cm Left 2.5 cm Right 1.5 cm Bottom 1.0 cm SIZE: 8 1/2 x 11
   - X Margins not acceptable. Fig(s) 1-2
   - _____ Top (T) _____ Left (L)
   - _____ Right (R) _____ Bottom (B)
6. VIEWS. CFR 1.84(h)
   REMINDER: Specification may require revision to correspond to drawing changes.
   - _____ Views connected by projection lines or lead lines. Fig.(s) _____

   Partial views. 37 CFR 1.84(h)(2)
   - _____ Brackets needed to show figure as one entity. Fig.(s) _____
   - _____ Views not labeled separately or properly. Fig.(s) _____
   - _____ Enlarged view not labeled separately or properly. Fig.(s) _____
7. SECTIONAL VIEWS. 37 CFR 1.84(h)(3)
   - _____ Hatching not indicated for sectional portions of an object. Fig.(s) _____
   - _____ Sectional designation should be noted with Arabic or Roman numbers. Fig.(s) _____
8. ARRANGEMENT OF VIEWS. 37 CFR 1.84(i)
   - _____ Words do not appear on a horizontal, left-to-right fashion when page is either upright or turned, so that the top becomes the right side, except for graphs. Fig.(s) _____
   - _____ Views not on the same plane on drawing sheet. Fig.(s) _____
9. SCALE. 37 CFR 1.84(k)
   - _____ Scale not large enough to show mechanism with crowding when drawing is reduced in size to two-thirds in reproduction. Fig.(s) _____
10. CHARACTER OF LINES, NUMBERS, & LETTERS. 37 CFR 1.84(l)
    - X Lines, numbers & letters not uniformly thick and well defined, clean, durable, and black (poor line quality). Fig.(s) 1-2
11. SHADING. 37 CFR 1.84(m)
    - _____ Solid black areas pale. Fig.(s) _____
    - _____ Solid black shading not permitted. Fig.(s) _____
    - _____ Shade lines, pale, rough and blurred. Fig.(s) _____
12. NUMBERS, LETTERS, & REFERENCE CHARACTERS. 37 CFR 1.48(p)
    - _____ Numbers and reference characters not plain and legible. Fig.(s) _____
    - _____ Figure legends are poor. Fig.(s) _____
    - _____ Numbers and reference characters not oriented in the same direction as the view. 37 CFR 1.84(p)(3) Fig.(s) _____
    - _____ English alphabet not used. 37 CFR 1.84(p)(3) Fig.(s) _____
    - _____ Numbers, letters and reference characters must be at least .32 cm (1/8 inch) in height. 37 CFR 1.84(p)(3) Fig.(s) _____
13. LEAD LINES. 37 CFR 1.84(q)
    - _____ Lead lines cross each other. Fig.(s) _____
    - _____ Lead lines missing. Fig.(s) _____
14. NUMBERING OF SHEETS OF DRAWINGS. 37 CFR 1.48(t)
    - _____ Sheets not numbered consecutively, and in Arabic numerals beginning with number 1. Fig.(s) _____
15. NUMBERING OF VIEWS. 37 CFR 1.84(u)
    - _____ Views not numbered consecutively, and in Arabic numerals, beginning with number 1. Fig.(s) _____
16. CORRECTIONS. 37 CFR 1.84(w)
    - _____ Corrections not made from PTO-948 dated _____
17. DESIGN DRAWINGS. 37 CFR 1.152
    - _____ Surface shading shown not appropriate. Fig.(s) _____
    - _____ Solid black shading not used for color contrast. Fig.(s) _____

COMMENTS

REVIEWER _____ DATE 2/2/98 TELEPHONE NO. 305-8404

ATTACHMENT TO PAPER NO. _____

PTO COPY

REMINDER

Drawing changes may also require changes in the specification, e.g., if Fig. 1 is changed to Fig. 1A, Fig. 1B, Fig. 1C, etc., the specification, at the Brief Description of the Drawings, must likewise be changed. Please make such changes by 37 CFR 1.312 Amendment at the time of submitting drawing changes.

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

rection of Informalities—37 CFR 1.85

w drawings with the changes incorporated therein. The application number or the title of the invention, ır's name, docket number (if any), and the name and telephone number of a person to call if the Office is to match the drawings to the proper application, should be placed on the back of each sheet of drawings in ance with 37 CFR 1.84(c). Applicant may delay filing of the new drawings until receipt of the Notice of ibility (PTOL-37). Extensions of time may be obtained under the provisions of 37 CFR 1.136. The drawing be filed as a separate paper with a transmittal letter addressed to the Drawing Review Branch.

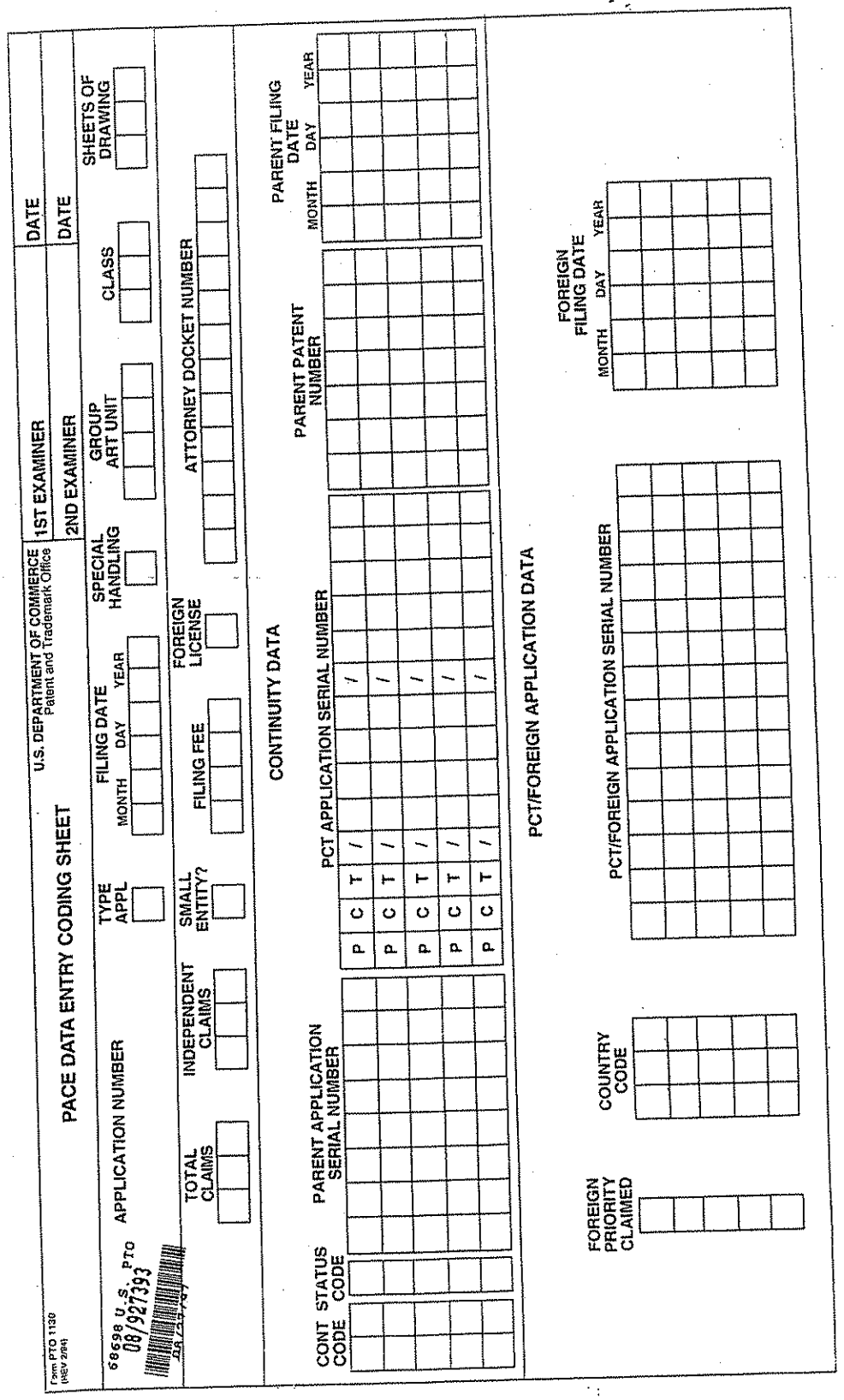
ing of Corrections

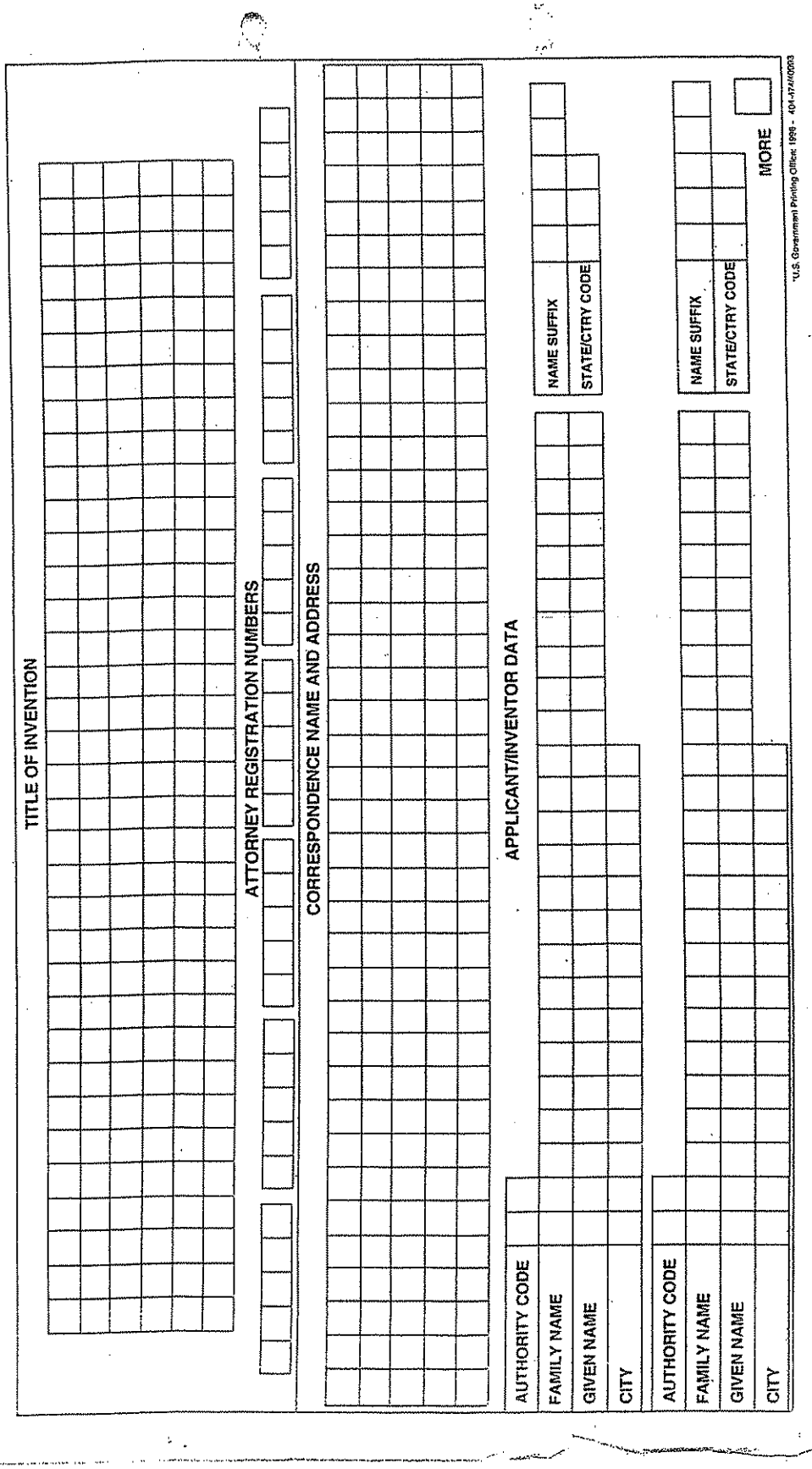
ant is required to submit **acceptable** corrected drawings within the three-month shortened statutory period set Notice of Allowability (PTOL-37). If a correction is determined to be unacceptable by the Office, applicant range to have acceptable correction resubmitted within the original three-month period to avoid the necessity ining as extension of time and paying the extension fee. Therefore, applicant should file corrected drawings ı as possible.

: to take corrective action within set (or extended) period will result in **ABANDONMENT** of the Application.

rections other than Informalities Noted by the Drawing Review Branch on the Form PTO 948

inges to the drawings, other than informalities noted by the Drawing Review Branch, **MUST** be approved by miner before the application will be allowed. No changes will be permitted to be made, other than correction rmalities, unless the examiner has approved the proposed changes.


Form PTO 1130 (REV 2/94)
U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office
PACE DATA ENTRY CODING SHEET
1ST EXAMINER
DATE
2ND EXAMINER
DATE
APPLICATION NUMBER
TYPE APPL
FILING DATE
MONTH
DAY
YEAR
SPECIAL HANDLING
GROUP ART UNIT
CLASS
SHEETS OF DRAWING
TOTAL CLAIMS
INDEPENDENT CLAIMS
SMALL ENTITY?
FILING FEE
FOREIGN LICENSE
ATTORNEY DOCKET NUMBER
CONTINUITY DATA
CONT STATUS CODE
PARENT APPLICATION SERIAL NUMBER
PCT APPLICATION SERIAL NUMBER
PARENT PATENT NUMBER
PARENT FILING DATE
PCT/FOREIGN APPLICATION DATA
FOREIGN PRIORITY CLAIMED
COUNTRY CODE
PCT/FOREIGN APPLICATION SERIAL NUMBER
FOREIGN FILING DATE


TITLE OF INVENTION
ATTORNEY REGISTRATION NUMBERS
CORRESPONDENCE NAME AND ADDRESS
APPLICANT/INVENTOR DATA
AUTHORITY CODE
FAMILY NAME
GIVEN NAME
CITY
NAME SUFFIX
STATE/CTRY CODE
MORE
U.S. Government Printing Office: 1998 - 404-472/40003

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant (s): Pak-Wing S. Chum, et al.

Serial No.: 08/927,393 Group Art Unit: 1713

Filed: August 27, 1997 Examiner: Harlan, R.

For: FABRICATED ARTICLES MADE FROM ETHYLENE POLYMER BLENDS



I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE AS FIRST CLASS MAIL WITH SUFFICIENT POSTAGE IN AN ENVELOPE ADDRESSED TO: ASSISTANT COMMISSIONER FOR PATENTS, WASHINGTON, DC 20231, ON:

January 31, 2000
DATE OF DEPOSIT

Osborne K McKinney
PRINT OR TYPE NAME OF PERSON SIGNING CERTIFICATE

SIGNATURE OF PERSON SIGNING CERTIFICATE

01-31-00
DATE OF SIGNATURE

Assistant Commissioner for Patents
Washington, D.C. 20231

RECEIVED
FEB 15 2000
TC 1700 MAIL ROOM

Sir:

EXTENSION OF TIME

Applicant(s) hereby request(s) that the shortened statutory period for response now set to expire December 30, 1999 in this application be extended for a period of one month(s), the extended period then expiring on January 31, 2000. This is a first request for an extension of time.

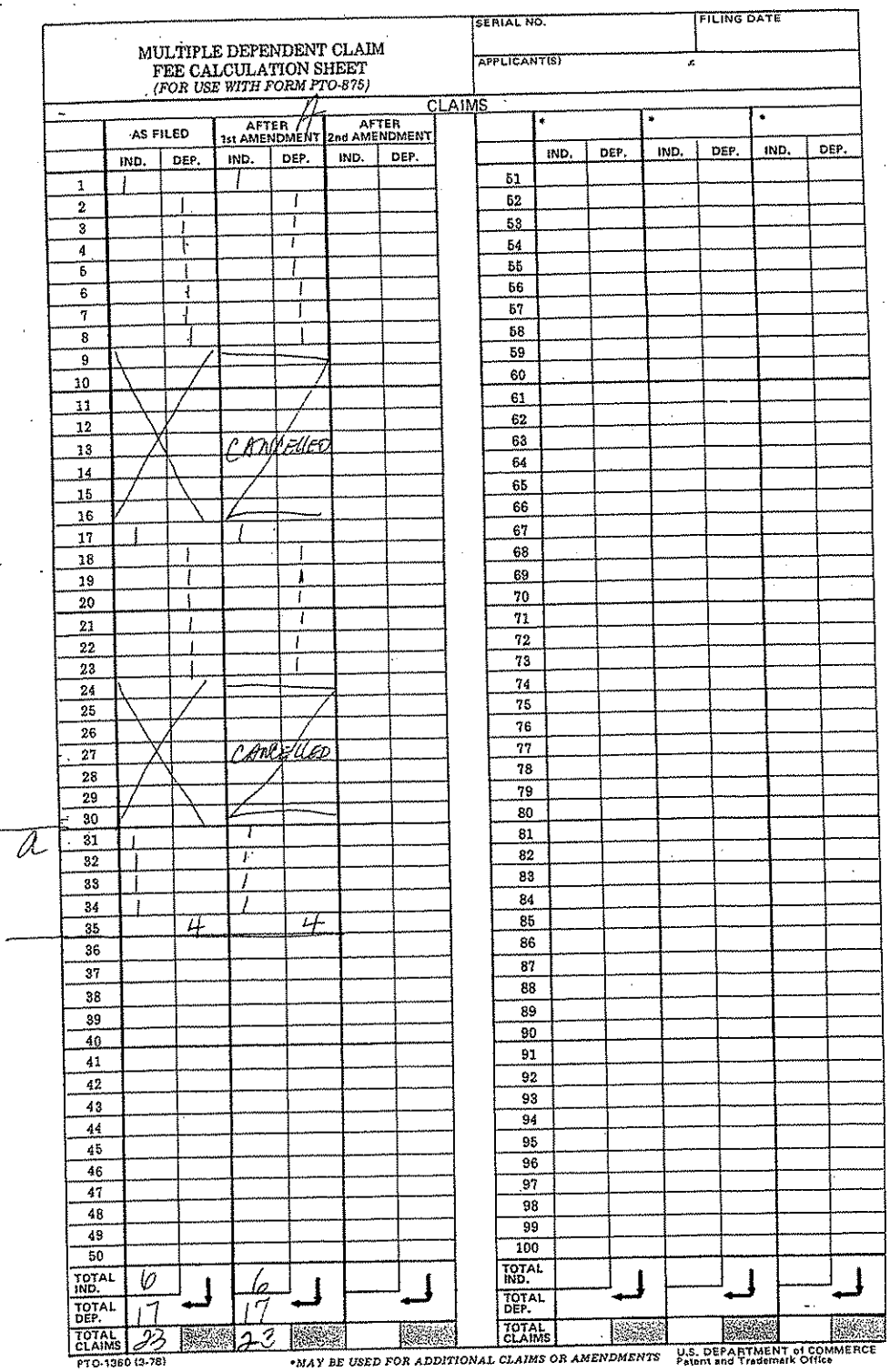
Please charge $110.00 to our Deposit Account No. 04-1512. If this estimate is incorrect, please charge or credit our account accordingly. Two duplicate copies of this sheet are enclosed.

Respectfully submitted,

Osborne K. McKinney
Registration No. 40,084
Phone: (409) 238-7889

Date: 01-31-00
2301 Brazosport Blvd., B-1211
Freeport, Texas 77541

40121BU



MULTIPLE DEPENDENT CLAIM
FEE CALCULATION SHEET
(FOR USE WITH FORM PTO-875)

SERIAL NO. | FILING DATE

APPLICANT(S)

CLAIMS

	AS FILED		AFTER 1st AMENDMENT		AFTER 2nd AMENDMENT	
	IND.	DEP.	IND.	DEP.	IND.	DEP.
1	1		1			
2		1		1		
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TOTAL IND.	6		6			
TOTAL DEP.	17		17			
TOTAL CLAIMS	23		23			

	*		*		*	
	IND.	DEP.	IND.	DEP.	IND.	DEP.
51						
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100						
TOTAL IND.						
TOTAL DEP.						
TOTAL CLAIMS						

PTO-1360 (2-78) **MAY BE USED FOR ADDITIONAL CLAIMS OR AMENDMENTS* U.S. DEPARTMENT of COMMERCE Patent and Trademark Office

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant (s): Pak-Wing S. Chum, et al.

Serial No.: 08/927,393 Group Art Unit: 1713

Filed: August 27, 1997 Examiner: Harlan, R.

For: FABRICATED ARTICLES MADE FROM ETHYLENE POLYMER BLENDS



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January 31, 2000
DATE OF DEPOSIT

Osborne K McKinney
PRINT OR TYPE NAME OF PERSON SIGNING CERTIFICATE

SIGNATURE OF PERSON SIGNING CERTIFICATE

01-31-00
DATE OF SIGNATURE

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

EXTENSION OF TIME

Applicant(s) hereby request(s) that the shortened statutory period for response now set to expire December 30, 1999 in this application be extended for a period of one month(s), the extended period then expiring on January 31, 2000. This is a first request for an extension of time.

Please charge $110.00 to our Deposit Account No. 04-1512. If this estimate is incorrect, please charge or credit our account accordingly. Two duplicate copies of this sheet are enclosed.

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Osborne K. McKinney
Registration No. 40,084
Phone: (409) 238-7889

Date: 01-31-00
2301 Brazosport Blvd., B-1211
Freeport, Texas 77541

40121BU

RECEIVED
FEB 15 2000
TC 1700 MAIL ROOM

PRINT OF DRAWINGS
AS ORIGINALLY FILED

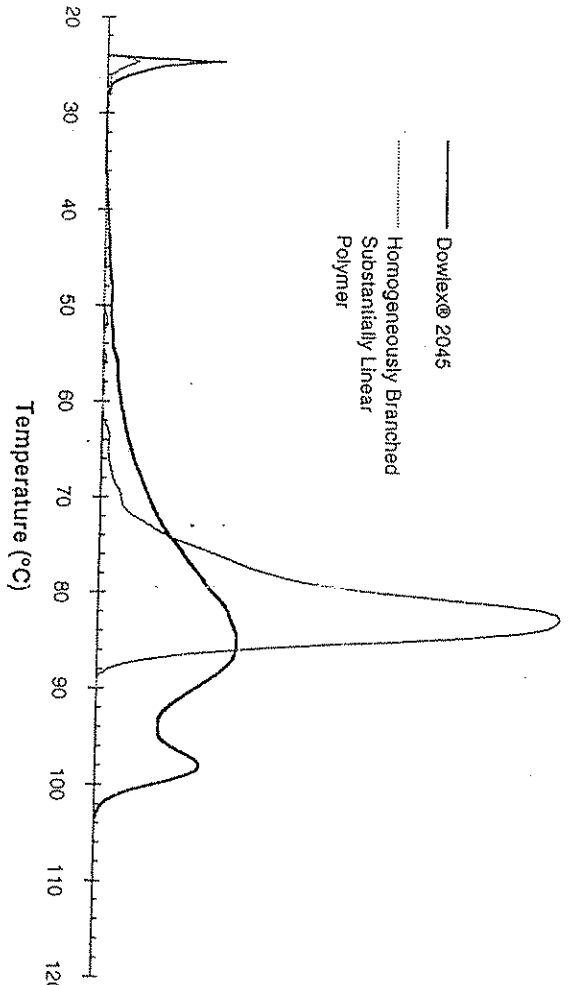
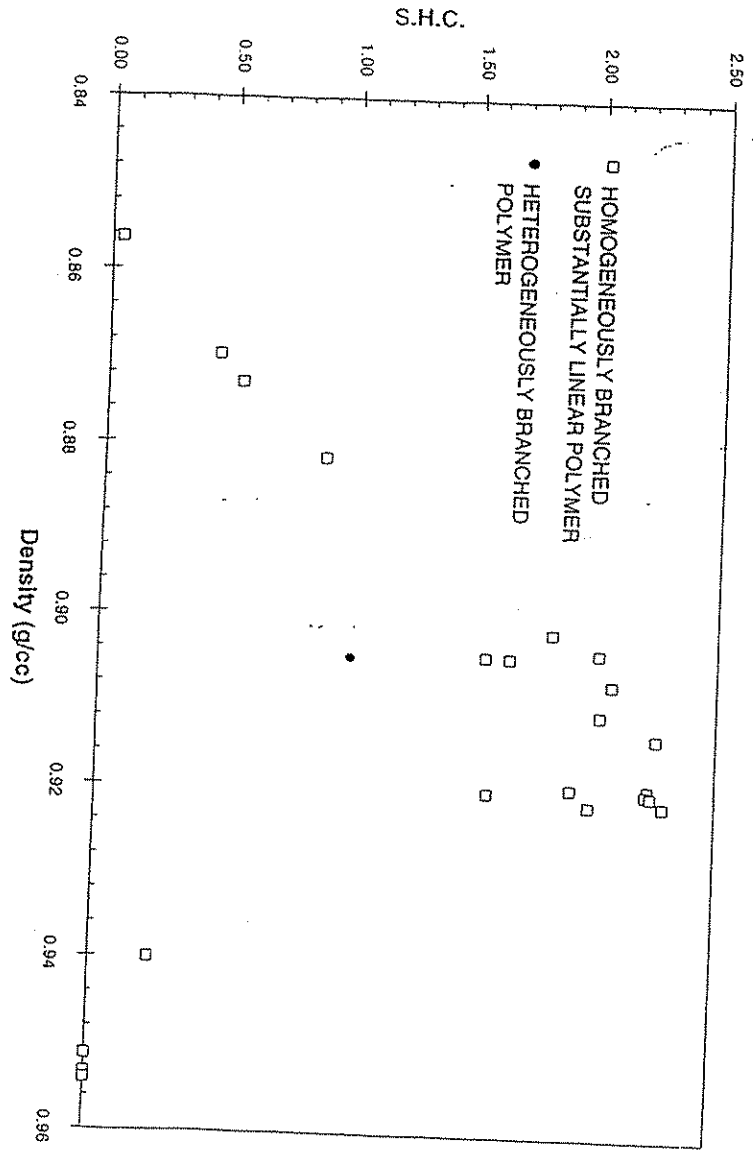


Figure 2

NT OF DRAWINGS
ORIGINALLY FILED



SLOPE OF STRAIN-HARDENING COEFFICIENT (S.H.C.) VS. DENSITY

FIGURE 1

PRINT OF DRAWINGS
AS ORIGINALLY FILED

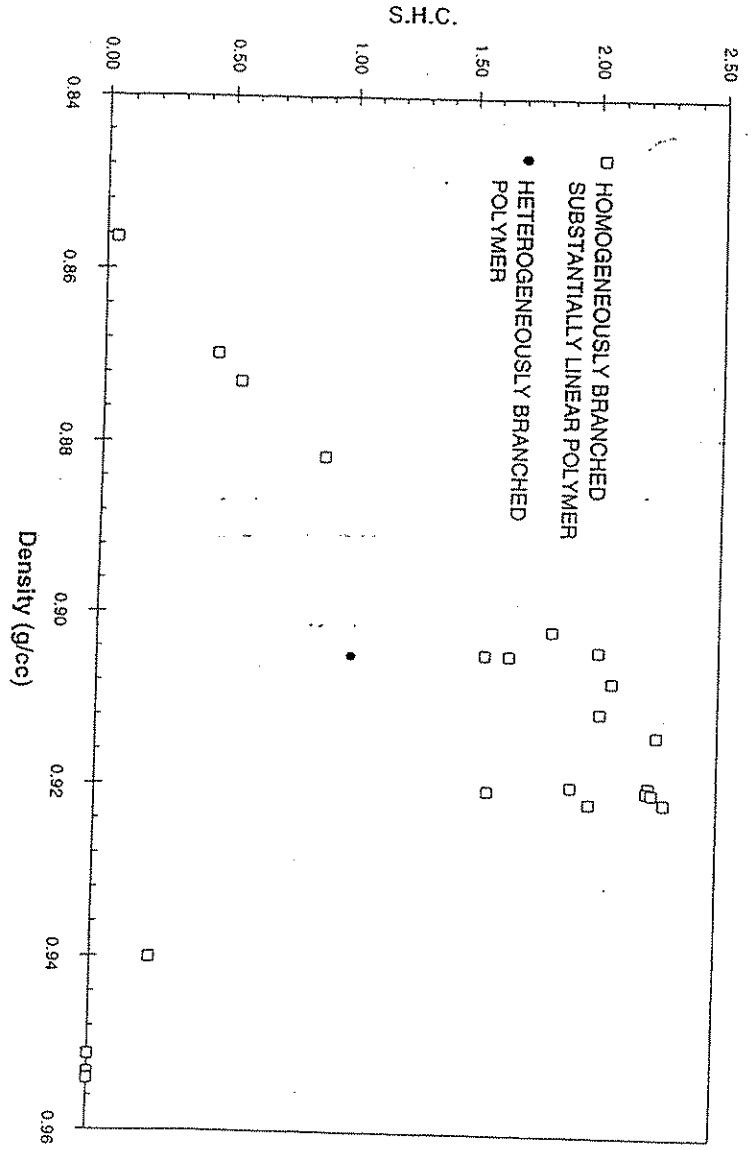


FIGURE 1

SLOPE OF STRAIN-HARDENING COEFFICIENT (S.H.C.) VS. DENSITY

PRINT OF DRAWINGS
AS ORIGINALLY FILED

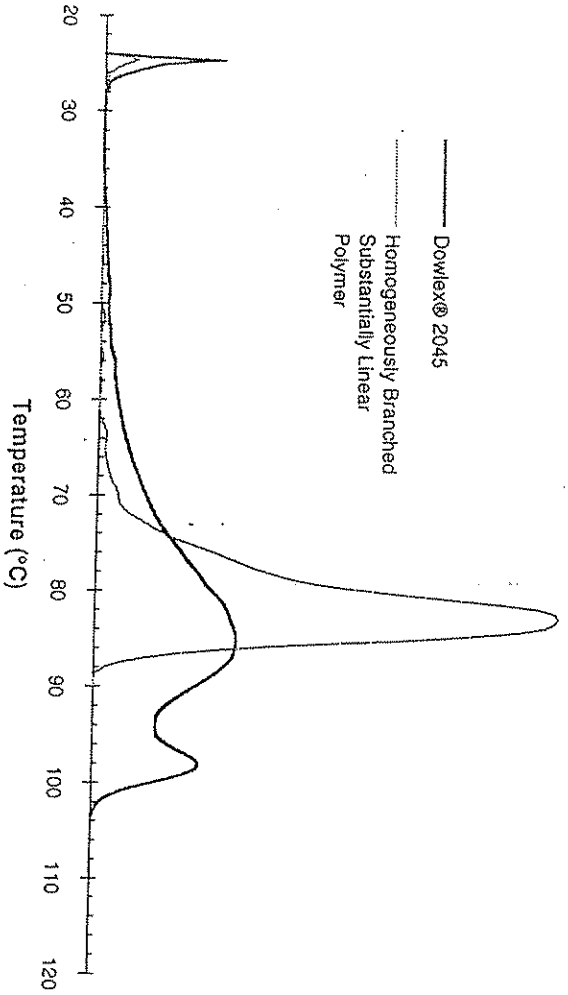
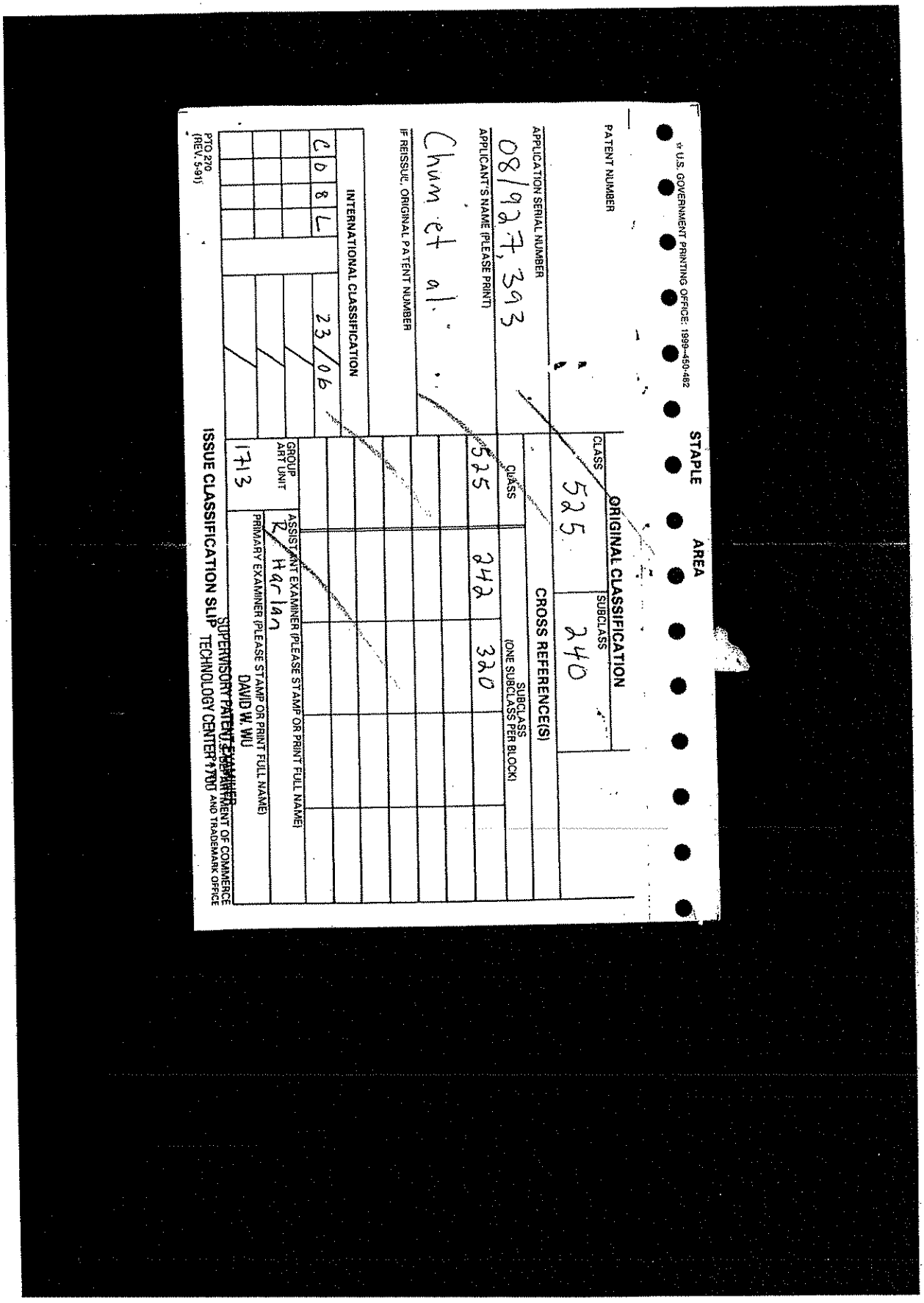


Figure 2



U.S. GOVERNMENT PRINTING OFFICE: 1999—450-462

STAPLE AREA

PATENT NUMBER

ORIGINAL CLASSIFICATION

CLASS	SUBCLASS
525	240

CROSS REFERENCE(S)

CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)
525	242
	320

APPLICATION SERIAL NUMBER: 08/927,393

APPLICANT'S NAME (PLEASE PRINT): Chum et al.

IF REISSUE, ORIGINAL PATENT NUMBER

INTERNATIONAL CLASSIFICATION: C08L 23/06

GROUP ART UNIT: 1713

ASSISTANT EXAMINER (PLEASE STAMP OR PRINT FULL NAME): R. Harlan

PRIMARY EXAMINER (PLEASE STAMP OR PRINT FULL NAME): DAVID W. WU

SUPERVISORY PATENT EXAMINER

ISSUE CLASSIFICATION SLIP

TECHNOLOGY CENTER 1700

PTO 270 (REV. 5-91)

U.S. DEPARTMENT OF COMMERCE AND TRADEMARK OFFICE

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO. : 6,111,023
APPLICATION NO. : 08/927393
DATED : August 29, 2000
INVENTOR(S) : Pak-Wing S. Chum et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

"Related U.S. Application Data"

"(63) This application is a Rule 1.60 continuation application of application of application Ser. No. 08/544,497, now U.S. Pat. No. 5,677,383, filed Oct. 18, 1995 as a Rule 1.60 continuation application of abandoned application Ser. no. 08/378,998, filed Jan. 27, 1995 as a Rule 1.62 continuation application of abandoned application Ser. No. 08/054,379, filed Apr. 28, 1993 as a continuation-in-part application of application Ser. No. 07/776,130, filed Oct. 15, 1991, now U.S. Pat. No. 5,272,236 and as a continuation-in-part application of application Ser. No. 07/939,281, filed Sep. 2, 1992, now U.S. Pat. No. 5,278,272. This application is also related to application Ser. No. 08/834,050, filed Apr. 11, 1997, now issued U.S. Pat. no. 5,847,053. The disclosures of each of the above are incorporated herein, in their entireties, by reference. This application is also related to pending application Ser. No. 08/010,958, filed Jan. 29, 1993 in the names of Brian W. S. Kolthammer and Robert S. Cardwell and entitled Ethylene Interpolymerizations, the disclosure of which is incorporated herein by reference.

Signed and Sealed this

Twenty-ninth Day of August, 2006



JON W. DUDAS
Director of the United States Patent and Trademark Office

PTO/SB/44 (04-05)
Approved for use through 04/30/2007. OMB 0651-0033
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.
(Also Form PTO-1050)

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO.	:	6,111,023
APPLICATION NO.	:	08/927,393
ISSUE DATE	:	August 29, 2000
INVENTOR(S)	:	Pak-Wing S. Chum et al.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

"Related U.S. Application Data"

"(63) This application is a Rule 1.60 continuation application of application Ser. No. 08/544,497, now U.S. Pat. No. 5,677,383, filed Oct. 18, 1995 as a Rule 1.60 continuation application of abandoned application Ser. No. 08/378,998, filed Jan. 27, 1995 as a Rule 1.62 continuation application of abandoned application Ser. No. 08/054,379, filed Apr. 28, 1993 as a continuation-in-part application of application Ser. No. 07/776,130, filed Oct. 15, 1991, now U.S. Pat. No. 5,272,236 and as a continuation-in-part application of application Ser. No. 07/939,281, filed Sep. 2, 1992, now U.S. Pat. No. 5,278,272. This application is also related to application Ser. No. 08/834,050, filed Apr. 11, 1997, now issued U.S. Pat. No. 5,847,053. The disclosures of each of the above are incorporated herein, in their entireties, by reference. This application is also related to pending application Ser. No. 08/010,958, filed Jan. 29, 1993 in the names of Brian W. S. Kolthammer and Robert S. Cardwell and entitled Ethylene Interpolymerizations, the disclosure of which is incorporated herein by reference."

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the U.S. Postal Service on the date shown below with sufficient postage as First Class Mail, in an envelope addressed to: Attention: Certificate of Correction Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Dated: June 9, 2006 Signature: Monica Rubio (Monica Rubio)

MAILING ADDRESS OF SENDER (Please do not use customer number below):
Ray Ashburg
THE DOW CHEMICAL CO.
2030 Dow Center
Midland, Michigan 48674

440 (Rev. 10/93) Summons In a Civil Action

United States District Court

WESTERN DISTRICT OF TEXAS
MIDLAND_ODESSA DIVISION

EXXON CORPORATION

V.

DOW CHEMICAL COMPANY

SUMMONS IN A CIVIL CASE

CASE NUMBER: MO98CA107

TO: (Name and address of defendant)

DOW CHEMICAL COMPANY
c/o C.T. Corporation Systems
350 North St. Paul Street
Dallas, Texas 75201

YOU ARE HEREBY SUMMONED and required to serve upon PLAINTIFF'S ATTORNEY (name and address)

Shannon H. Ratliff, Esq.
McGinnis, Lochridge & Kilgore, L.L.P.
1300 Capitol Center
919 Congress Avenue
Austin, Texas 78701

answer to the complaint which is herewith served upon you, within 20 days after service of this mmons upon you, exclusive of the day of service. If you fail to do so, judgment by default will be taken against you for the relief nanded in the complaint. You must also file your answer with the Clerk of this Court within a reasonable period of time after vice.

WILLIAM G. PUTNICKI
K

7-2-98
DATE

DEPUTY CLERK

FILED

JUN 24 1998

CLERK, U.S. DISTRICT COURT
WESTERN DISTRICT OF TEXAS
BY _____ DEPUTY CLERK

THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
MIDLAND - ODESSA DIVISION

EXXON CORPORATION, §
Plaintiff, §
v. §
THE DOW CHEMICAL COMPANY, §
Defendant. §

Civil Action No. M098CA107

COMPLAINT

Exxon Corporation, for its complaint against The Dow Chemical Company, avers:

The Nature Of The Action

1. This is an action for a declaratory judgment of noninfringement, invalidity and unenforceability with respect to U.S. patent 5,665,800 (the " '800 patent").

The Jurisdiction Of This Court

2. This action arises under the patent laws of the United States, Title 35, United States Code. This Court has jurisdiction over the subject matter of this action under Title 28, United States Code, Sections 1331, 1338(a), 2201 and 2202.

The Parties

3. Plaintiff Exxon Corporation ("Exxon") is a New Jersey corporation, having its principal place of business in Irving, Texas.

4. Defendant The Dow Chemical Company ("Dow") is a Delaware corporation, having its principal place of business in Midland, Michigan. Dow is licensed and qualified to do business in Texas. On information and belief, Dow has been, and is now, directly

and through its agents and intermediaries, doing business continuously and systematically in this judicial district and elsewhere in Texas.

The Patent In Suit

5. On September 9, 1997, the '800 patent issued to Dow. On information and belief, Dow is the owner of all right, title and interest in the '800 patent, including the right to sue for alleged infringement.

The Existence Of An Actual Controversy

6. An actual, justiciable controversy exists between Exxon and Dow as to noninfringement, invalidity and unenforceability of the '800 patent, based on at least the following events:

a. *Exxon's Pioneering Efforts.* Exxon is the pioneer in the worldwide development of metallocene catalysts for use in the production of polyolefin polymers, including polyethylenes. Exxon produces a variety of polymers marketed under different trademarks. Exxon makes and sells polyethylene polymers made by use of metallocene catalysts under the trademark EXACT.

b. *Dow's Attempts To Catch Up.* By virtue of its research and development efforts, Exxon has made significant advances relating to metallocene catalysts and to the use of such catalysts in the commercial production of polyolefin polymers. Since Exxon first introduced the use of metallocene catalysts in the commercial production of polyethylene, Dow has sought to narrow the metallocene technology gap between it and Exxon. Dow now markets polyethylene polymers made using metallocene catalysts.

c. *Exxon's First Commercial Line.* In 1991, Exxon opened the world's first commercial line for the production of polyethylene polymers using metallocene catalysts. Since that time, Exxon has expanded its commercial

capacity for producing polyethylenes in its own facilities and through joint ventures with other companies.

d. *Exxon's European Activities.* One such joint venture is DEX-PLASTOMERS V.O.F. ("DEX"). DEX is a venture between Exxon's Netherlands subsidiary Exxon Holland Ventures B.V. ("Exxon Holland") and DSM Plastomers B.V. ("DSM") of the Netherlands. DEX produces Exxon's EXACT polyethylene polymers in DSM's plant in Geleen, Netherlands. The EXACT polymers produced by DEX are known as plastomers. Since December 1996, DEX has been producing the EXACT plastomers in commercial quantities. These polymers have been sold to customers in Europe. DEX's customers have used these polymers in many applications including blends to produce other products.

e. *Exxon's United States Activities.* The EXACT plastomers made by DEX have now been offered for sale by Exxon and imported into the United States. Exxon has prospective customers in the United States for the EXACT polymers made by DEX in Geleen, Netherlands.

f. *Dow's Threats In The Netherlands.* In an effort to close the worldwide technology gap between it and Exxon, Dow has unfairly threatened Exxon Holland with infringement of Dow's European Patent No. 0.608.369.B1 (the "European '369 patent") issued on May 28, 1997. Dow made this threat even though Dow had represented to the European Patent Office that polymers of the kind claimed in Dow's European '369 patent cannot be made with metallocene catalysts of the kind used by DEX to make the EXACT plastomer polymers that are the subject of this complaint. On September 2, 1997, Dow formally charged Exxon Holland, DSM and DEX with infringement. On that date, Dow served on Exxon Holland, DSM and DEX a writ of notification under the Netherlands Patent Act, article 70.3, charging that the EXACT polymers made by DEX

infringe Dow's European '369 patent. This writ reserved Dow the right to claim damages. The Dow patent in controversy in the Netherlands is a European counterpart of the '800 patent. The Dow European '369 patent claims priority to U.S. patent application Ser. No. 776,130, filed October 15, 1991, the same application as to which the '800 patent claims priority.

g. *Dow's Actions In The United Kingdom.* In the United Kingdom, on September 12, 1997, *Exxon's* United Kingdom subsidiary, namely Exxon Chemical Limited, sent a letter to counsel for Dow, enclosing samples of the EXACT polymers and requesting that Dow acknowledge that the polymers do not infringe the European '369 patent. Dow did not respond to Exxon Chemical Limited's letter. Dow refused to provide the requested acknowledgment. Subsequently, Exxon Chemical Limited was compelled to file a request that the United Kingdom court determine that the EXACT polymer does not infringe *Dow's* European '369 patent.

h. *Other Adversarial Proceedings — In The United States And Elsewhere.* In addition, in the United States and numerous foreign countries besides the United Kingdom and the Netherlands, there is a history of adversarial proceedings between Exxon and Dow relating to metallocene catalyst technology and to polymers made using this technology. Dow and Exxon are adversaries in several cases in the United States and in over a dozen pending interferences in the United States Patent and Trademark Office related to this technology. 35 U.S.C. § 135(a); 37 C.F.R. §§ 1.601-690. In other countries, Exxon and Dow are adverse parties in over thirty adversarial proceedings relating to this technology.

7. The facts set out in paragraph 6 demonstrate that Exxon has engaged in and has the immediate capacity to engage in allegedly infringing activity.

8. The facts set out in paragraph 6 demonstrate that Dow has engaged in a course of conduct that has given Exxon a reasonable apprehension that Dow will sue Exxon for

alleged infringement of the '800 patent based on Exxon's importation and offer for sale of EXACT polymers made by DEX for EXXON at DSM's plant in Geleen, Netherlands.

Noninfringement

9. Exxon has not infringed, induced infringement of or contributed to infringement of the Dow '800 patent. Among other things, Dow represented to the United States Patent and Trademark Office that polymers of the kind claimed in the '800 patent cannot be made from hafnium- or zirconium-centered metallocene catalysts. The catalysts used by DEX to make the EXACT plastomer polymers that are the subject of this complaint are either hafnium-centered or hafnium- and zirconium-centered.

Invalidity

10. The Dow '800 patent is invalid for failure to comply with conditions and requirements for patentability set forth in 35 U.S.C. §§ 101, 102, 103 and 112 and for double patenting.

Unenforceability

11. The '800 patent is based on the following applications:

Ser. No. 730,766, filed October 16, 1996 (the "'766 application") as a continuation of,

Ser. No. 606,633, filed February 26, 1996 (the "'633 application") as a continuation of,

Ser. No. 433,784 filed May 3, 1995 (the "'784 application") as a division of,

Ser. No. 370,051, filed January 9, 1995 (the "'051 application"), as a division of,

Ser. No. 44,426, filed April 7, 1993 (the "'426 application") as a division of,

Ser No. 776,130, filed October 15, 1991 (the "'130 application").

12. The '800 patent is related to the following applications:

Ser. No. 305,631, filed September 14, 1994 (the "'631 reissue application") for a reissue of U.S. patent 5,272,236 which had issued on the '130 application,

Ser. No. 618,182, filed March 19, 1996 (the "'182 application") as division of the '631 application,

Ser. No. 618,224, filed March 19, 1996 (the "'224 application") as another division of the '631 application,

Ser. No. 939,281, filed September 2, 1992 (the "'281 application") as a continuation-in-part of the '130 application,

Ser. No. 840,362, filed April 29, 1997 (the "'362 reissue application") for a reissue of U.S. patent 5,278,272 which had issued on the '281 application,

Ser. No. 301,948, filed September 7, 1994 (the "'948 application") and related PCT application no. PCT/US95/11034, published as WO 96/07680, March 14, 1996.

13. The '800 patent is unenforceable because Dow did not discharge its duties of candor and disclosure during the prosecution in the Patent and Trademark Office of the patent applications that the '800 patent is based on and is related to. Dow engaged in inequitable conduct during the prosecution of these applications. Dow misrepresented and withheld information that was material to the Patent and Trademark Office's consideration of *Dow's* applications. On information and belief, Dow's acts of misrepresentation and withholding were carried out with an intent to mislead and to deceive the Patent and Trademark Office. Specifically,

a. During prosecution of the '130 application in June 1992, Dow inventors James C. Stevens and Shih-Yaw Lai submitted to the Patent and Trademark Office declarations (the "Stevens and Lai Declarations") including data on the processability of sample polymers made using a batch reactor. The polymers allegedly represented prior art polymers. At the time the batch reactor

was used to generate the sample polymers, Stevens knew that the batch reactor was producing unreliable results. In addition, although he used that batch reactor to generate 22 sample polymers, Stevens disclosed only ten favorable test results and concealed the other results. Dow relied on Stevens' misleading declaration during the prosecution of the '130 application, during the '404 interference and during the prosecution of the '631 reissue application.

b. During prosecution of the '130 application, in an effort to distinguish the claimed polymers from prior art polymers cited by the examiner, Dow made two misrepresentations: (1) that its claimed polymers had novel properties that enhance their processability in a manner not found in the prior art, and (2) that these enhanced properties were attributable to *Dow's* allegedly novel continuous polymerization process. Dow made these misrepresentations based, in part, on the unreliable, biased results reported in the Stevens and Lai Declarations.

c. During prosecution of the '130 application, Dow also concealed other Dow test data that did not support *Dow's* representations to the Patent and Trademark Office. In addition to the concealed data for the other 12 sample polymers made using the "unreliable" batch reactor, Dow also concealed unfavorable data for several other sample polymers made in batch reactors, including polymers that met the property limitation of *Dow's* patent claims.

d. During prosecution of the '130 application, Dow intentionally misrepresented that the "improved processability" of its allegedly new polymer was achieved without the addition of a processing agent, when in fact, the allegedly "improved processability" of its polymers was, in whole or in part, due to the addition of a significant quantity of calcium stearate, a known processing agent. Further, Dow made an unfair and misleading comparison of the processability of its allegedly new polymer to polymers known in the art. Dow

stacked-the-deck in its favor by only adding calcium stearate to samples of its polymer and not adding calcium stearate to samples representing the prior art.

e. During prosecution of the '130 application and the '631 reissue application, Dow failed to disclose that certain of its patent claims are based on language that Dow knew to be too indefinite to support a valid patent claim. Claim 12 of *Dow's* '236 patent and many of the claims of the '800 patent employ the "constrained geometry" language to describe the metal complexes used in the catalyst. While the '130 application was pending, Dow made several express admissions in four interferences (Interference No. 102,953, 102,954, 102,955 and 103,067) acknowledging the indefiniteness of the "constrained geometry" language. Yet, Dow continued to prosecute claim 12 on an admittedly flawed basis without advising the examiner in that proceeding, and then prosecuted additional claims containing the "constrained geometry" in the '631 reissue application and in the '766 application.

f. During prosecution of the '281 application, the examiner made a "same invention double patenting" rejection on the basis that all pending claims recited the same invention as claimed in the '130 application. In order to overcome that rejection, Dow misrepresented that there are significant differences between the polymers claimed in the '130 application and the '281 application. Dow either misled the examiner to believe that the claimed polymers in the '130 application and the '281 application are different because they have different densities, or, at minimum, Dow failed to correct the examiner's erroneous conclusion in this regard derived from his conversations with *Dow's* representatives. In the examiner's written statement of his reasons for allowance of the claims in the '281 application, he states that the double patenting rejection was overcome due to the differences in the onset of surface melt fracture (OSMF) and onset of gross melt fracture (OGMF) properties of the polymers claimed in

the '236 patent and the '281 application, which the examiner believed was due to a difference in densities between the claimed polymers. In fact, both the '236 patent and the '281 application identify an identical range of densities for the polymers claimed therein.

g. During prosecution of the '281 application, Dow filed a PCT application WO 93/08221, that claimed priority from both the '130 application and the '281 application. The PCT application contains data that refutes arguments made to the Examiner to obtain allowance of the '281 application. This PCT data was not disclosed to the Examiner in the Patent and Trademark Office.

h. During prosecution of the '130 application, Dow misled the Patent and Trademark Office about two prior art publications (Ramamurthy and Kalika & Denn) by mischaracterizing these references in the text of the '130 application and in a February 5, 1992 Information Disclosure Statement filed in connection with the '130 application. Both publications disclose an ethylene 1-butene copolymer that anticipated or rendered obvious various claims of the '236 patent (which issued from the '130 application) and the '272 patent (which issued from the '281 application).

i. During prosecution of the '766 application, Dow failed to disclose to the Examiner the Administrative Patent Judge's ruling on Exxon's preliminary motions in the '404 interference. In that ruling the APJ analyzed a number of prior art references submitted by Exxon and found that 24 of the 38 claims of the '236 patent are invalid in view of those references.

j. In an effort to have claims allowed in the '631 reissue application proceedings, Dow presented incomplete and misleading versions of Exxon's submissions in the '404 interference. In an amendment filed on February 25, 1996, Dow represented to the Examiner that its pending product-by-process

claims were patentable over Mitsui Canadian Patent Application No. CA 2008315-A ("the Mitsui reference"). Dow supported this argument on the basis that Exxon, in the '404 interference, did not dispute that the claims were patentable over that reference. Dow's representation was not consistent with Exxon's submission in that interference.

k. During prosecution of the '130 application, Dow failed to adequately disclose the Mitsui reference. Dow concealed that reference by burying it in a supplemental disclosure filed on April 28, 1992. Subsequently, based on that reference, the Administrative Patent Judge found that 24 of the 38 claims of the '236 patent are not patentable.

l. In the prosecution of the '948 application and the related PCT application no. PCT/US95/11034, published as WO 96/07680 on March 14, 1996, Dow changed Example 1 in Table 1, which is the same as Example 1 in the '800 patent so that it became "a Comparative Example since the copolymer has onset of gross melt fracture of less than 4×10^6 dyne/cm^2" (p. 31, footnote), changed the M_w/M_n value from 1.86 (as in the '800 patent) to 1.91. But Dow never made this change in any of the applications leading to the '800 patent and never informed the Examiner during the prosecution of those applications that the change was necessary.

Prayer for Relief

WHEREFORE, Exxon prays for entry of a judgment:

A. Declaring that Exxon has not infringed, has not contributed to the infringement of and has not induced infringement of Dow's '800 patent by the importation into or the offer for sale in the United States of the EXACT polyethylene polymers made by DEX for Exxon in DSM's plant in Geleen, Netherlands;

B. Declaring that the '800 patent is invalid and unenforceable;

C. Declaring this an exceptional case and awarding to Exxon its attorney fees;

D. Awarding to Exxon its costs; and

E. Granting to Exxon such further necessary or proper relief as the Court may deem just.

Respectfully submitted,

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By: Shannon H. Ratliff
Shannon H. Ratliff
State Bar No. 16573000

ATTORNEYS FOR EXXON CORPORATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

68698 U.S. PTO
08/927393
08/27/97

Docket No. 40121BU
Anticipated Classification of this Application:
Class 525 Subclass 240.000
Prior Application:
Examiner D. Wu
Art Unit 1505

EXPRESS MAIL MAILING LABEL NO.
EM 400556222 US
DATE OF DEPOSIT: August 27,1997

Assistant Commissioner for Patents
Washington D.C. 20231

Sir:

This is a request for filing a ☐ continuation)
☒ divisional)
application under 37 CFR 1.60 and claiming benefit under 35 USC 120
of pending prior application Serial No. 08/544,497
filed on October 18, 1995 of Pak-Wing S. Chum; Ronald P. Markovich; George W. Knight; Shih-Yaw Lai.
for FABRICATED ARTICLES MADE FROM ETHYLENE POLYMER BLENDS.

1. ☒ Enclosed is a copy of the prior application, including the oath or declaration and drawings (if any) as originally filed.
2. ☒ Cancel in this application original claims _____ of the prior application before calculating the filing fee.
3. ☒ The filing fee is calculated below.

For	Number Filed		Number Extra		Rate		Basic Fee
							$770.00
Total Claims	23	- 20 =	3	x	$ 22.00	=	$66.00
Independent Claims	10	- 3 =	7	x	80.00	=	$616.00
Multiple Dependent Claims Presented			4		260.00	=	$1040.00
	Total Filing Fee					=	$2492.00

4. ☒ The Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment, to Account No. 04-1512. This sheet is enclosed in triplicate.
5. ☐ Amend the specification by inserting after Title of the Invention -- Cross-Reference to Related Application.
This is a --☐ continuation ☐ divisional of application Serial No. _____ filed _____--.
6. ☐ Transfer the drawings from the prior application to this application and abandon said prior application as of the filing date accorded this application. A duplicate copy of this sheet is enclosed for filing in the prior application file. (May only be used if signed by person authorized in Rule 138 and before payment of base issue fee.)
7. ☒ New drawings are enclosed.
8. ☒ The prior application is assigned to The Dow Chemical Company by virtue of an unrecorded assignment.
☐ The prior application is assigned of record to _____ and is recorded at Reel No. _____ Frame No. _____.
9. ☒ The inventorship of this application is the same as that of the prior copending U.S. application.
☐ Fewer inventors are to be named in this application than in the prior copending U.S. application. Delete _____ as inventor(s) in this application.
10. ☒ The Power of Attorney in the prior application is to Stephen P. Krupp, Reg. No. 34,366, L. Wayne White, Reg. No. 25,415, Glenn H. Korfhage, Reg. No. 27,204, Richard G. Waterman, Reg. No. 20,128; and Stephen S. Grace, Registration No. 24,834
Please address all communications to Osborne K. McKinney, 2301 Brazosport Blvd. B-1211, Freeport, Texas 77541.
a. ☒ The power appears in the original papers in the prior application.
b. ☒ The power does not appear in the original papers. A copy of the power in the prior application is enclosed.
c. ☐ Recognize as Associate Attorney _____ whose Registration No. is _____ and whose phone number is_____.
11. ☒ A Preliminary Amendment is enclosed. (Claims added by this amendment have been properly numbered consecutively beginning with the number next following the highest numbered original claim in the prior application.)
12. ☐ A new Disclosure Statement is enclosed.
☒ Applicant(s)' Disclosure Statement is as filed with the parent application (copy attached w/o references).
13. ☒ I hereby verify that the attached papers are a true copy of prior application Serial No. 08/544,497 as originally filed on October 18, 1995, with the exception that the attorney's docket number in the lower left-hand corner of each paper has been adjusted to reflect the instant application.

The undersigned declares further that all statements made herein of his/her own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements may jeopardize the validity of the application or any patent issuing thereon.

August 27, 1997
(Date)

Osborne K. McKinney
Registration No. 40,084
Phone: -(409) 238-7889

40121BU

IN THE UNITED STATES DISTRICT COURT
FOR DISTRICT OF DELAWARE

CLERK U.S. DISTRICT COURT
DISTRICT OF DELAWARE
JUL 21 11 30 AM '05

THE DOW CHEMICAL COMPANY,

Plaintiff,

v.

EXXON CORPORATION,

Defendant.

Civil Action No. _____

DEMAND FOR JURY TRIAL

COMPLAINT FOR PATENT INFRINGEMENT

The Dow Chemical Company brings this action against Exxon Corporation for infringement of United States Patent No. 5,783,638 ("the '638 Patent") entitled ELASTIC SUBSTANTIALLY LINEAR OLEFIN POLYMERS, and alleges as follows:

Jurisdiction and Venue

1. This action arises under the patent laws of the United States, Title 35, United States Code, Section 271. Jurisdiction is based on Title 28, United States Code, Sections 1331 and 1338(a).

2. Venue is proper in this Court pursuant to Title 28, United States Code, Sections 1391(b), 1391(c), and 1400(b). Defendant Exxon is subject to personal jurisdiction and resides in this judicial district.

The Parties

3. Plaintiff Dow is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business in the State of Michigan.

4. Defendant Exxon is a New Jersey Corporation, with its headquarters in Irving, Texas. Exxon has been and currently is found, has an agent, or transacts its affairs directly and through its agents and intermediaries by doing business continuously and systematically in this judicial district.

Count I – Infringement of Dow's '638 Patent

5. On July 21, 1998, the United States Patent and Trademark Office duly and legally issued the '638 patent to Dow. Dow is the assignee of Shih-Yaw Lai, John R. Wilson, George W. Knight and James C. Stevens, who invented the subject matter of the '638 patent. A copy of the '638 patent is attached as Exhibit A. The '638 patent is now, and has been at all times since its date of issuance, valid and enforceable.

6. The '638 patent has claims directed to a new form of ethylene polymer. The new ethylene polymer described and claimed as an invention in the '638 patent is substantially linear.

7. Exxon entered into a joint venture called Dex-Plastomers V.O.F. ("Dex"). Dex is a joint venture between Exxon's Netherlands subsidiary Exxon Holland Ventures B.V. and DSM Plastomers B.V. ("DSM") of the Netherlands.

8. Dex produces, and has been producing since December 1996, EXACT polyethylene polymers at DSM's plant in Geleen, Netherlands.

9. On information and belief, the EXACT polyethylene polymers made by Dex have been offered for sale by Exxon and imported into the United States.

10. On information and belief, these EXACT polyethylene polymers made by Dex are the same substantially linear ethylene polymers that Dow invented and are covered by one or more claims of the '638 patent.

11. Dow has not authorized Exxon to make, use, sell, offer to sell, or import any polyethylene polymers that are covered by one or more claims of the '638 patent within the United States.

12. Exxon's act of offering for sale within the United States substantially linear EXACT polyethylene polymers that are covered by one or more claims of the '638 patent without authority from Dow constitutes patent infringement.

13. The continuation by Exxon of its infringing activities after being notified of the '638 patent and this Complaint constitutes willful infringement of the '638 patent.

WHEREFORE, Dow prays for judgment against Exxon as follows:

a. That Exxon be enjoined from infringing the '638 patent.

b. That Dow be awarded damages adequate to compensate Dow for Exxon's infringement of the '638 patent;

c. That Dow be awarded treble the amount of damages awarded, in view of the willful nature of Exxon's infringement in disregard of Dow's lawful patent rights;

d. That Dow be awarded the costs of this action, interest and reasonable attorney fees pursuant to Title 35, United States Code, Sections 284 and 285 in view of the willful nature of Exxon's infringement; and

e. That Dow be granted such other relief as this Court deems appropriate and just.

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JUL 21 4 55 PM '05
CLERK U.S. DISTRICT COURT
DISTRICT OF DELAWARE

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

THE DOW CHEMICAL COMPANY, *Plaintiff,* v: UNIVATION TECHNOLOGIES, LLC, *Defendant.*	Civil Action No. 98-434 DEMAND FOR JURY TRIAL

COMPLAINT FOR PATENT INFRINGEMENT AND DECLARATORY JUDGMENT OF PATENT INFRINGEMENT

The Dow Chemical Company brings this action against Univation Technologies LLC for patent infringement and for a declaratory judgment of patent infringement of United States Patent No. 5,665,800 ("the '800 patent"), entitled ELASTIC SUBSTANTIALLY LINEAR OLEFIN POLYMERS, and alleges as follows:

Jurisdiction and Venue

1. This action arises under the patent laws of the United States, Title 35, United States Code, Section 271. Jurisdiction is based on Title 28, United States Code, Sections 1331 and 1338(a) and the Declaratory Judgment Act, Title 28, United States Code, Section 2201.

2. Venue is proper in this Court pursuant to Title 28, United States Code, Sections 1391(c) and 1400(b). Defendant Univation is subject to personal jurisdiction and resides in this judicial district.

UNIV.COM

Parties

3. Plaintiff Dow is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business in the State of Michigan.

4. Defendant Univation is a limited liability company organized and existing under the laws of Delaware, with its principal place of business in the State of Texas.

Count I: Infringement of Dow's '800 Patent

5. On September 9, 1997, the United States Patent and Trademark Office duly and legally issued the '800 patent to Dow. Dow is the assignee of Shih-Yaw Lai, John R. Wilson, George W. Knight and James C. Stevens, who invented the subject matter of the '800 patent. A copy of the '800 patent is attached as Exhibit A. The '800 patent is now, and has been at all times since its date of issuance, valid and enforceable.

6. The '800 patent has claims directed to a new form of polyethylene. The polyethylene described and claimed in the '800 patent contains long chain branches.

7. Univation licenses and markets technology used for the manufacture of polyethylene, and to sell catalysts used in the manufacture of polyethylene. Univation markets this technology under the trade name "EXXPOL."

8. Univation is marketing and has announced its intention to license EXXPOL catalyst technology for the manufacture of what Univation refers to as "Type III" polyethylene polymers. Univation's Type III polyethylene polymers contain long chain branches.

9. Univation has manufactured quantities of its Type III polyethylene polymers at a pilot plant located in Charleston, West Virginia.

10. Univation's manufacture of its Type III polyethylene polymers infringes one or more claims of the '800 patent.

11. Univation has been, and still is, infringing by making, using, selling and/or offering to sell, without any license or authority from Dow, polyethylene polymers that infringe the '800 patent.

12. Univation has had actual knowledge of the '800 patent from a time preceding the activities complained of by Dow.

13. The continuation by Univation of its infringing activities after becoming aware of the '800 patent constitutes willful infringement of the '800 patent.

14. Dow is being irreparably injured by Univation's infringing activities. Such infringing activities will continue, to Dow's detriment, unless this Court restrains Univation from such activities.

Count II: Declaratory Judgment of Patent Infringement

15. Paragraphs 1-14 are incorporated herein by reference.

16. Univation has constructed facilities located at Mont Belvieu, Texas at which it intends to manufacture catalysts used to produce polyethylene polymers that would fall within the scope of the '800 patent claims. Univation has the ability and intent to begin production of the catalysts used for the production of such polyethylene polymers. Univation has announced its intention to commence production and sale of such catalysts by the end of 1998.

17. Univation's activities are such that it is sufficiently near production so as to represent an immediate threat to Dow.

18. Univation's manufacture, use, sale or offer to sell its catalysts intended to make its Type III polyethylene polymers, without any license or authority from Dow, will infringe or will actively induce or contribute to the infringement of the '800 patent and will cause irreparable

injury to Dow unless restrained by the Court. Accordingly, there is an actual controversy between Dow and Univation that warrants the grant of declaratory relief to Dow.

WHEREFORE, Dow prays for judgment against Univation as follows:

a. That Univation be enjoined from infringing, actively inducing others to infringe, and committing acts of contributory infringement of the '800 patent;

b. That Dow be awarded damages adequate to compensate Dow for Univation's infringement of the '800 patent;

c. That Dow be awarded treble the amount of damages awarded, in view of the willful nature of Univation's infringement in disregard of Dow's lawful patent rights;

d. That Dow be awarded the costs of this action, interest and reasonable attorney fees pursuant to Title 35, United States Code, Sections 284 and 285 in view of the willful nature of Univation's infringement; and

e. That Dow be granted such other relief as this Court deems appropriate and just.

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The Dow Chemical Company

JUL 21 4 [illegible]

CLERK U.S. DISTRICT COURT
DISTRICT OF DELAWARE

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

THE DOW CHEMICAL COMPANY, *Plaintiff,* v: UNIVATION TECHNOLOGIES, LLC, *Defendant.*	Civil Action No. 98-434 DEMAND FOR JURY TRIAL

COMPLAINT FOR PATENT INFRINGEMENT AND DECLARATORY JUDGMENT OF PATENT INFRINGEMENT

The Dow Chemical Company brings this action against Univation Technologies LLC for patent infringement and for a declaratory judgment of patent infringement of United States Patent No. 5,665,800 ("the '800 patent"), entitled ELASTIC SUBSTANTIALLY LINEAR OLEFIN POLYMERS, and alleges as follows:

Jurisdiction and Venue

1. This action arises under the patent laws of the United States, Title 35, United States Code, Section 271. Jurisdiction is based on Title 28, United States Code, Sections 1331 and 1338(a) and the Declaratory Judgment Act, Title 28, United States Code, Section 2201.

2. Venue is proper in this Court pursuant to Title 28, United States Code, Sections 1391(c) and 1400(b). Defendant Univation is subject to personal jurisdiction and resides in this judicial district.

UNIV.COM

Parties

3. Plaintiff Dow is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business in the State of Michigan.

4. Defendant Univation is a limited liability company organized and existing under the laws of Delaware, with its principal place of business in the State of Texas.

Count I: Infringement of Dow's '800 Patent

5. On September 9, 1997, the United States Patent and Trademark Office duly and legally issued the '800 patent to Dow. Dow is the assignee of Shih-Yaw Lai, John R. Wilson, George W. Knight and James C. Stevens, who invented the subject matter of the '800 patent. A copy of the '800 patent is attached as Exhibit A. The '800 patent is now, and has been at all times since its date of issuance, valid and enforceable.

6. The '800 patent has claims directed to a new form of polyethylene. The polyethylene described and claimed in the '800 patent contains long chain branches.

7. Univation licenses and markets technology used for the manufacture of polyethylene, and to sell catalysts used in the manufacture of polyethylene. Univation markets this technology under the trade name "EXXPOL."

8. Univation is marketing and has announced its intention to license EXXPOL catalyst technology for the manufacture of what Univation refers to as "Type III" polyethylene polymers. Univation's Type III polyethylene polymers contain long chain branches.

9. Univation has manufactured quantities of its Type III polyethylene polymers at a pilot plant located in Charleston, West Virginia.

10. Univation's manufacture of its Type III polyethylene polymers infringes one or more claims of the '800 patent.

11. Univation has been, and still is, infringing by making, using, selling and/or offering to sell, without any license or authority from Dow, polyethylene polymers that infringe the '800 patent.

12. Univation has had actual knowledge of the '800 patent from a time preceding the activities complained of by Dow.

13. The continuation by Univation of its infringing activities after becoming aware of the '800 patent constitutes willful infringement of the '800 patent.

14. Dow is being irreparably injured by Univation's infringing activities. Such infringing activities will continue, to Dow's detriment, unless this Court restrains Univation from such activities.

Count II: Declaratory Judgment of Patent Infringement

15. Paragraphs 1-14 are incorporated herein by reference.

16. Univation has constructed facilities located at Mont Belvieu, Texas at which it intends to manufacture catalysts used to produce polyethylene polymers that would fall within the scope of the '800 parent claims. Univation has the ability and intent to begin production of the catalysts used for the production of such polyethylene polymers. Univation has announced its intention to commence production and sale of such catalysts by the end of 1998.

17. Univation's activities are such that it is sufficiently near production so as to represent an immediate threat to Dow.

18. Univation's manufacture, use, sale or offer to sell its catalysts intended to make its Type III polyethylene polymers, without any license or authority from Dow, will infringe or will actively induce or contribute to the infringement of the '800 patent and will cause irreparable

injury to Dow unless restrained by the Court. Accordingly, there is an actual controversy between Dow and Univation that warrants the grant of declaratory relief to Dow.

WHEREFORE, Dow prays for judgment against Univation as follows:

a. That Univation be enjoined from infringing, actively inducing others to infringe, and committing acts of contributory infringement of the '800 patent;

b. That Dow be awarded damages adequate to compensate Dow for Univation's infringement of the '800 patent;

c. That Dow be awarded treble the amount of damages awarded, in view of the willful nature of Univation's infringement in disregard of Dow's lawful patent rights;

d. That Dow be awarded the costs of this action, interest and reasonable attorney fees pursuant to Title 35, United States Code, Sections 284 and 285 in view of the willful nature of Univation's infringement; and

e. That Dow be granted such other relief as this Court deems appropriate and just.

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Attorneys for Plaintiff
The Dow Chemical Company

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Pak-Wing Steve Chum, et al.

Application No.: 08/927,393
Filed: August 27, 1997
Attorney Docket No.: 40121BU

Art Unit: 1713
Examiner: Wu, D.

7/B

For: FABRICATED ARTICLES MADE FROM ETHYLENE POLYMER BLENDS

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Hon. Commissioner of Patents & Trademarks
Washington, D.C. 20231

Sir:

SECOND PRE-EXAMINATION AMENDMENT

Prior to examination of the above-identified continuation application, Applicants respectfully request entry and consideration of the amendments that follow. Also submitted herewith, for consideration by the Examiner, is a copy of the Third Markovich Declaration which was originally submitted concurrent with a Second Pre-Examination Amendment in parent application number 08/544,497, filed October 18, 1995, now issued U.S. Patent No. 5,677,383.

In the Specification

At page 1, lines 2-8, please amend the section headed "Cross-Reference to Relation Applications" by deleting "This application . . . by reference." and inserting therefor

B1

-- This application is a Rule 1.60 continuation application of application number 08/544,497, now U.S. Patent No. 5,677,383, filed October 18, 1995 as a Rule 1.60 continuation application of abandoned application number 08/378,998, filed January 27, 1995 as a Rule 1.62 continuation application of abandoned application number 08/054,379, filed April 28, 1993 as a continuation-in-part application of application number 07/776,130, filed October 15, 1991, now U.S. Patent No. 5,272,236 and as a continuation-in-part application of application number 07/939,281, filed September 2, 1992, now U.S. Patent No. 5,278,272. This application is also related to application number 08/834,050, filed April 11, 1997, now issued U.S. Patent No. 5,847,053. The disclosures of each of the above are incorporated herein, in their entireties, by reference. --

In the Claims

Please delete Claims 1-8, 17-23 and 31-35 in favor of new Claims 36-51.

Please amend the claims by adding the following new claims:

B2

-- 36. An ethylene polymer composition comprising

(A) from about 10 percent (by weight of the total composition) to about 95 percent (by weight of the total composition) of at least one ethylene interpolymer having:

(i) a density from about 0.89 grams/cubic centimeter (g/cm^3) to about 0.935 g/cm^3,
(ii) a melt index (I_2) from about 0.001 grams/10 minutes (g/10 min.) to about 10 g/10 min.,
(iii) a slope of strain hardening coefficient greater than or equal to 1.3, and
(iv) a Composition Distribution Branch Index (CDBI) greater than 50 percent; and

(B) from about 5 percent (by weight of the total composition) to about 90 percent (by weight of the total composition) of at least one ethylene polymer characterized as having a density from about 0.93 g/cm^3 to about 0.965 g/cm^3 and comprising a linear polymer fraction, as determined using a temperature rising elution fractionation (TREF) technique.

37. The composition of claim 36 wherein the ethylene interpolymer (A) has a slope of strain hardening coefficient greater than or equal to 1.5.

38. The composition of claim 36 wherein the ethylene interpolymer (A) is further characterized as having a molecular weight distribution (M_w/M_n) from about 1.8 to about 2.8, as determined using gel permeation chromatography.

39. The composition of claim 36 wherein the ethylene interpolymer (A) is further characterized as having no high density polymer fraction, as determined using a temperature rising elution fractionation technique.

40. The composition of claim 36 wherein the ethylene interpolymer (A) is further characterized as having a single melting point, as determined using differential scanning calorimetry.

41. The composition of claim 36 wherein the ethylene interpolymer (A) is further characterized as having a molecular weight distribution (M_w/M_n) from about 1.8 to about 2.8, as determined using gel permeation chromatography, and no high density polymer fraction, as determined using a temperature rising elution fractionation technique.

42. The composition of claim 36 wherein the ethylene interpolymer (A) is further characterized as having a molecular weight distribution (M_w/M_n) from about 1.8 to about 2.8, as determined using gel permeation chromatography, and a single melting point as determined using differential scanning calorimetry.

43. The composition of claim 36 or claim 38 wherein the ethylene interpolymer (A) is further characterized as having a no high density polymer fraction, as determined using a temperature rising elution fractionation technique, and a single melting point, as determined using differential scanning calorimetry.

44. A film made from an ethylene polymer composition, wherein the composition comprises

(A) from about 10 percent (by weight of the total composition) to about 95 percent (by weight of the total composition) of at least one ethylene interpolymer having:
(i) a density from about 0.89 grams/cubic centimeter (g/cm^3) to about 0.935 g/cm^3,
(ii) a melt index (I_2) from about 0.001 grams/10 minutes (g/10 min.) to about 10 g/10 min.,
(iii) a slope of strain hardening coefficient greater than or equal to 1.3, and
(iv) a Composition Distribution Branch Index (CDBI) greater than 50 percent; and

(B) from about 5 percent (by weight of the total composition) to about 90 percent (by weight of the total composition) of at least one ethylene polymer characterized as having a density

from about 0.93 g/cm^3 to about 0.965 g/cm^3 and comprising a linear polymer fraction, as determined using a temperature rising elution fractionation (TREF) technique.

45. The film of claim 44 wherein the ethylene interpolymer (A) has a slope of strain hardening coefficient greater than or equal to 1.5.

46. The film of claim 44 wherein the ethylene interpolymer (A) is further characterized as having a molecular weight distribution (M_w/M_n) from about 1.8 to about 2.8, as determined using gel permeation chromatography.

47. The film of claim 44 wherein the ethylene interpolymer (A) is further characterized as having no high density polymer fraction, as determined using a temperature rising elution fractionation technique.

48. The film of claim 44 wherein the ethylene interpolymer (A) is further characterized as having a single melting point, as determined using differential scanning calorimetry.

49. The film of claim 44 wherein the ethylene interpolymer (A) is further characterized as having a molecular weight distribution (M_w/M_n) from about 1.8 to about 2.8, as determined using gel permeation chromatography, and no high density polymer fraction, as determined using a temperature rising elution fractionation technique.

50. The film of claim 44 wherein the ethylene interpolymer (A) is further characterized as having a molecular weight distribution (M_w/M_n) from about 1.8 to about 2.8, as determined using gel permeation chromatography, and a single melting point as determined using differential scanning calorimetry.

51. The film of claim 44 or claim 46 wherein the ethylene interpolymer (A) is further characterized as having a no high density polymer fraction, as determined using a temperature rising elution fractionation technique, and a single melting point, as determined using differential scanning calorimetry. —

REMARKS

The amendment to the specification under the section heading "Cross-Reference to Related Applications" makes clearer and updates priority data.

New Claims 36-51 are reformulations that Applicants believe set forth only the essential features of their invention.

Support for the density limitation of the at least one ethylene interpolymer (A) in new Claims 36 and 44 can be found in the original specification at page 7, lines 9-14.

Support for the melt index limitation of the at least one ethylene interpolymer (A) in new Claims 36 and 44 can be found in the original specification at page 7, line 29 to page 8, line 2.

Support for the slope of strain hardening coefficient (SHC) limitation of the at least one ethylene interpolymer (A) in new Claims 36, 37, 44 and 45 can be found in the original specification at page 10, lines 25-28.

Support for the Composition Distribution Branch Index (CDBI) limitation of the at least one ethylene interpolymer (A) in new Claims 36 and 44 can be found in the original specification at page 5, lines 20-23.

Support for the density limitation of the at least one ethylene polymer (B) in new Claims 36 and 44 can be found in the original specification at page 14, lines 15-19.

Support for the TREF linear polymer fraction limitation of the at least one ethylene polymer (B) in new Claims 36 and 44 can be found in the original specification at page 13, line 9 to page 14, line 7.

US005272236A

United States Patent [19]

Lai et al.

[11] Patent Number: 5,272,236

[45] Date of Patent: Dec. 21, 1993

[54] ELASTIC SUBSTANTIALLY LINEAR OLEFIN POLYMERS

[75] Inventors: Shih-Yaw Lai, Sugar Land; John R. Wilson, Richwood; George W. Knight, Lake Jackson, all of Tex.; James C. Stevens, Midland, Mich.; Pak-Wing S. Chum, Lake Jackson, Tex.

[73] Assignee: The Dow Chemical Company, Midland, Mich.

[21] Appl. No.: 776,130

[22] Filed: Oct. 15, 1991

[51] Int. Cl.[5] C08F 210/08; C08F 210/14

[52] U.S. Cl. 526/348.5; 526/127; 526/160; 526/170; 526/348.2; 526/348.4; 526/348.6; 502/152

[58] Field of Search 526/160, 170, 127, 348, 526/348.2, 348.4, 348.5, 348.6

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(List continued on next page.)

Primary Examiner—Joseph L. Schofer
Assistant Examiner—David Wu
Attorney, Agent, or Firm—Stephen P. Krupp; L. Wayne White

[57] ABSTRACT

Substantially linear olefin polymers having a melt flow ratio, $I_{10}/I_2 \geq 5.63$, a molecular weight distribution, M_w/M_n, defined by the equation: $M_w/M_n \leq (I_{10}/I_2)-4.63$, and a critical shear stress at onset of gross melt fracture of greater than about 4×10^6 dyne/cm^2 and their method of manufacture are disclosed. The substantially linear olefin polymers preferably have at least about 0.01 long chain branches/1000 carbons and a molecular weight distribution from about 1.5 to about 2.5. The new polymers have improved processability over conventional olefin polymers and are useful in producing fabricated articles such as fibers, films, and molded parts.

38 Claims, 5 Drawing Sheets

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Derwent 90–239017/31.

526-348.6 AU 1505 EX
CCC48 XR 5,272,236

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO. : 5,272,236 Page 1 of 5
DATED : December 21, 1993
INVENTOR(S) : Shih-Yaw Lai et al.

It is certified that error appears in the above-indentified patent and that said Letters Patent is hereby corrected as shown below:

On the cover page, under Other Publications, after pp. 2869-2880, "(1993))," should read --(1963)),--.

On page 2, under Other Publications, first column, Makromol. Chem. Rapid Commun., in the title, "Aluminoxiane" " should read --Aluminoxane"--.

On page 2, under Other Publications, first column, Journal of Polymer Science, in the title "Transaction" should be --Transition--.

On page 2, under Other Publications, second column, Makromol. Chem. Commun., in the title "Zicronocene" should read --Zirconocene--.

On drawing sheet

In Fig.5, the "dashed line" describing peel strength between 215°F and 225°F for Comparative Example 11 should be a --solid line--.

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO. : 5,272,236 Page 2 of 5

DATED : December 21, 1993

INVENTOR(S) : Shih-Yaw Lai et al.

It is certified that error appears in the above-indentified patent and that said Letters Patent is hereby corrected as shown below:

Column 4, line 59, "an" should read -- a --.

Column 5, line 35, "(R)" should read -- Σ --.

Column 7, line 42, "a" should read -- as --.

Column 7, line 64, "-N(R"-" should read -- -N(R")- --.

Column 7, line 15, "51" should read -- M --.

Column 8, line 40, "ramethyl-η^5-cydoperitadienyl)-1,2-ethanediyltitanium" should read - - ramethyl-η^5-cydopentadienyl)-1,2-ethanediyltitanium - -.

Column 10, line 65, "Rot" should read -- not --.

Column 11, line 1 i, "(L-H)$^+$[A]" should read -- (L-H)$^+$[A]$^-$ --.

Column 11, line 35, "[L-H]$^+$[BQ$_4$]" should read -- [L-H]$^+$[BQ$_4$]$^-$ --.

Column 12, line 36, "Cp" should read -- Cp* --.

Column 12, line 59, "-Tris(pentafluorphenyl)borane" should read -- Tris(pentafluorophenyl)borane --.

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO. : 5,272,236
DATED : December 21, 1993
INVENTOR(S) : Shih-Yaw Lai et al.

It is certified that error appears in the above-indentified patent and that said Letters Patent is hereby corrected as shown below:

Column 13, line 11, "η-bonding" should read -- π-bonding --.

Column 14, line 12, "include-nu" should read -- including --.

Column 14, line 54 (1st instance), "or" should read -- of --.

Column 15, line 13, "tainer" should read -- taining --.

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO. : 5,272,236
DATED : December 21, 1993
INVENTOR(S) : Shih-Yaw Lai et al.

It is certified that error appears in the above-indentified patent and that said Letters Patent is hereby corrected as shown below:

Column 15, line 13, "4Ln" should read -- in --.

Column 15, line 49, "Prep [MgCl]2[Me4C5Si Me2NtBu](THF)x" should read -- Prep of [MgCl]2[Me4C5Si Me2NtBu](THF)x --.

Column 15, line 55, in the formula "BU" should read -- Bu --.

Column 16, line 36, "m l" should read -- ml --.

Column 16, line 47, "TiCl3(thf)3" should read -- TiCl3(THF)3 --.

Column 17, line 14, "Calcium Stearate" should read -- calcium stearate --.

Column 17, line 34, "Insitu" should read -- *in situ* --.

Column 18, line 15, "exit steam" should read -- exit stream --.

Column 20, line 32, "(0.323 Mpa)" should read -- (0.323 MPa) --.

Column 20, line 55, "examples 11 and 13)." should read -- examples 11 and 13). --.

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO. : 5,272,236
DATED : December 21, 1993
INVENTOR(S) : Shih-Yaw Lai et al.

It is certified that error appears in the above-indentified patent and that said Letters Patent is hereby corrected as shown below:

Column 22, line 62, "≦" should read -- ≥ --.

Column 16, line 37, "tame" should read -- time --.

Column 17, line 15, "1600 ppm Irgafos 168," should read -- 1600 ppm Irgafos 168. --.

Column 17, line 25, "one, stream" should read -- one stream --.

Signed and Sealed this

Twenty-ninth Day of November, 1994

Bruce Lehman

Attest:

BRUCE LEHMAN

Attesting Officer

Commissioner of Patents and Trademarks