

FORM PTO-1588 (Rev. 9-93) REC 09-16-1998 SET U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office

OMB No. 0951-0011 (exp. 4-94) Tab settings

To the Honorable Commissioner of Patents 100831164 2 original documents or copy thereof.

1. Name of conveying party(ies):  
**ASHLAND OIL, INC**  
**ASHLAND, KY**  
 Additional name(s) of conveying party(ies) attached?  Yes  No

2. Name and address of receiving party(ies)  
 Name: **DR. W. P. HETTINGER, JR.**  
 Internal Address: \_\_\_\_\_  
 Street Address: **605 VIA VERONA**  
**DEERFIELD**  
 City: **BEACH** State: **FL** ZIP: **33442**  
**954-570-7927**  
 Additional name(s) & address(es) attached?  Yes  No

3. Nature of conveyance:  
 Assignment  Merger  
 Security Agreement  Change of Name  
 Other \_\_\_\_\_  
 Execution Date: **FEB 1, 1995**

4. Application number(s) or patent number(s): **4,412,298**  
**516,484 61568**  
 If this document is being filed together with a new application, the execution date of the application is: \_\_\_\_\_  
 A. Patent Application No.(s) \_\_\_\_\_ B. Patent No.(s) \_\_\_\_\_  
 Additional numbers attached?  Yes  No

5. Name and address of party to whom correspondence concerning document should be mailed:  
 Name: **DR. W. P. HETTINGER, JR.**  
 Internal Address: \_\_\_\_\_  
 Street Address: **605 VIA VERONA**  
**DEERFIELD**  
 City: **BEACH** State: **FL** ZIP: **33442**

6. Total number of applications and patents involved: **1**

7. Total fee (37 CFR 3.41).....\$ **40.00**  
 Enclosed  
 Authorized to be charged to deposit account

8. Deposit account number: \_\_\_\_\_  
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9. Statement and signature.  
 To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.  
**WILLIAM P. HETTINGER, JR.** *William P. Hettinger* **9/8/98**  
 Name of Person Signing Signature Date  
 Total number of pages including cover sheet, attachments, and document: **4**

09/16/1998 BNGUYEN 00000172 4612298

Mail documents to be recorded with required cover sheet information to: Commissioner of Patents & Trademarks, Box Assignments Washington, D.C. 20531

01 FC:581

40.00 OP



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3/14/95

**Ashland Petroleum Company**  
DIVISION OF ASHLAND OIL, INC.

P. O. BOX 391 • ASHLAND, KENTUCKY 41114 • (606) 329-3333

*Leach Pat No*  
*# 4,612,298*  
*3,500,000 etc*

February 1, 1995

*6156 BUS 1, 195,968*  
*no U.S. action*

Dr. William P. Hettinger, Jr.  
147 Deer Creek Blvd.  
Hidden Woods In Deer Creek  
Deerfield Beach, FL 33442

*6156 BUS # 4,612,298 method of*  
*Sept 16, 1996 Still going - annuity, OK*

*6156 BUS -*  
*6156 MUS -*  
*6156 NUS*

*6156 BUS 4,877,514*  
*Patent depend*  
*Oct 31, 1989*

Re: Limited Release of Rights in Invention  
Rated "release" at the October 21, 1994 Technology Committee  
RI-6156BUS - Carbo-Metallic Oil Conversion Catalysts

Dear Dr. Hettinger:

Ashland Petroleum Company assigns to you, all its rights in the Invention, except that Ashland retains for itself and its divisions and subsidiaries in which Ashland Inc. ("ASHLAND") owns or controls 50% or more of the voting rights: the right to make, to have made, and to use within ASHLAND and its divisions or subsidiaries the Invention.

You agree that Ashland Petroleum Company has no responsibility for taking any actions necessary to maintain the Invention, or related applications or patents, that you will check with a competent lawyer, and that your receipt of this assignment does not constitute any conflict of interest. In consideration, you agree to pay to Ashland 50% of all monies received by you arising from the above Invention.

If you agree to the above, please sign and return both copies, we will forward a fully signed copy for your files.

Ashland Inc.

BY: *Charles B. Miller*  
Charles B. Miller  
Attorney-in-Fact

*[Signature]*

Accepted: *William P. Hettinger, Jr.*  
Dr. William P. Hettinger, Jr.  
ddg:74510aus.rel  
*2/14/95*



United States Patent [19]

Hettinger, Jr. et al.

[11] Patent Number: 4,612,298

[45] Date of Patent: Sep. 16, 1986

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2003

Low Na

annuity due

method of manufacture

[54] CARBO-METALLIC OIL CONVERSION CATALYSTS

[75] Inventors: William P. Hettinger, Jr.; Hubert W. Beck, both of Russell, Ky.

[73] Assignee: Ashland Oil, Inc., Ashland, Ky.

[21] Appl. No.: 516,484

[22] Filed: Jul. 22, 1983

Related U.S. Application Data

[63] Continuation of Ser. No. 328,353, Dec. 7, 1981, abandoned.

[51] Int. Cl. B01J 29/06

[52] U.S. Cl. 502/65; 502/64;

[58] Field of Search 502/67; 502/68; 502/69; 502/65, 68, 69, 64, 502/67

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Primary Examiner—Carl F. Dees  
Attorney, Agent, or Firm—Richard C. Willson, Jr.; James L. Wilson

[57] ABSTRACT

Commercial catalysts are prepared combining the various ingredients into a catalytic binder system which has been freed of sodium so that the catalyst ingredients can be preferably spray dried and used in Fluid Catalytic Cracking or Reduced Crude Conversion hydrocarbon conversion operations without subsequent washing or drying. Catalysts can even be prepared on site, e.g., in spray drier operations performed in the FCC/RCC regenerator. Low-sodium slurries of any or all of the following ingredients can be employed in the manufacture: zeolites, clays, sola, carbon blacks, sacrificial sieves, acid matrix substances, and getters.

44 Claims, 1 Drawing Figure

Patents dangerous to many practicing chemists



Ashland Petroleum Company

RICHARD C. WILLSON, JR.  
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Reply to: 2000 Ashland Drive  
Russell, KY 41169  
Telex: 218476 AOINC ASHN  
Fax: (606) 329-3939

RICHARD C. WILLSON

RELEASE FOR 6156 BUS

Pay annuity before  
Sept 16, 1997 last date  
Sept 16, 1998  
Paid

September 5, 1996

By a small  
entity  
\$ 1,495.00  
+ 65.00  
6 months  
later

Dr. W. P. Hettinger, Jr.  
Organocat, Inc.  
605 Via Verona Villa D'Este  
Deerfield Beach, FL 33442

Sept 16, 1986

Re: Annuity on RI 6156BUS -  
Released to You on February 1, 1995

Filed 1983, July 22

Dear Bill:

U.S. PATENT OFFICE  
NOTE: ANNUITY PAID SEPT 8, 1998  
THRU OLCOTT INTERNATIONAL WDA 28-95

This is to notify you that the 12th annuity of \$3,015.00 will fall due for the above case on September 16, 1997. Since this case has been released to you, and if you wish to keep this case alive, please arrange to have this annuity paid.

If we can be of any assistance please let me or Debbie Gannon know.

Sincerely,

4,612,298

Richard C. Willson, Jr.  
Richard C. Willson, Jr. ddg

RCW/ddg  
6156bus.wph

Call Nales  
Call Jim Marcelli

Patent office  
allowance for age as prior inventor

Rate Payment Sept 16, 1998  
\$ 1,835 - paid  
see Olcott International

Committed to a  
Quality Environment

Headquarters:  
P.O. Box 391  
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