RECORDATION FORM COVER SHEET U.S. DEPARTMENT OF COMMERCE FORM PTO-1595 Patent and Trademark Office (Rev. 6-93) **PATENTS ONLY** OMB No. 0651-0011 (exp. 4/94) To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof. 2. Name and address of receiving party(ies): 1. Name of conveying party(ies): ROBIN E. SHEPHERD **UOP LLC** Name: MARK D. MOSER JOHN Y.G. PARK Internal address: ANDRZEJ Z. RINGWELSKI 25 EAST ALGONQUIN ROAD Street Address: P.O. BOX 5017 Additional name(s) of conveying party(ies) attached? XXX No 3. Nature of conveyance: City: DES PLAINES State: ILLINOIS Zip:60017-5017 XXX Assignment Change of Name Security Agreement Other Yes XXX No Additional name(s) & address(es) attached? Execution Date: 12/14/00, 12/15/00, 12/20/00, 1/4/01 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application s:_____ B. Patent No.(s) A. Patent Application No.(s) 09/754,677 XXX No Additional numbers attached? Yes 5. Name and address of party to whom correspondence Total number of applications and patents involved: 1 concerning document should be mailed: **UOP LLC** Internal address: ATTN: JOHN G. TOLOMEI \$40.00 7. Total fee (37 CFR 3.41) Enclosed XXX Authorized to be charged to deposit account **25 EAST ALGONQUIN ROAD** Street Address: 8. Deposit account number: P.O. BOX 5017 City: DES PLAINES State: ILLINOIS Zip: 60017-5017 21-0600 (Attach duplicate copy of this page if paying by deposit account) DO NOT USE THIS SPACE 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.

FRANK S. MOLINARO

Name of Person Signing

Frank & mplinars

3(⊩JAN. 2002

Signatur

Date

Total number of pages including cover sheet, attachments, and documents: 4

Mail documents to be recorded with required cover sheet information to:

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Washington, D.C. 20231

PATENT REEL: 012349 FRAME: 0247

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ASSIGNMENT

| U.S. Provisional Application | U.S. Utility Patent Application | | |
|---|--|--|--|
| Attorney Docket No. 105518 | | | |
| WHEREAS, ROBIN E. SHEPHERD, a citizen of residing in the City of HAUGHTON, in the County of LOUISIANA, MARK D. MOSER, a citizen of UNITED the City of ELK GROVE VILLAGE, in the County of CO. Y.G. PARK, a citizen of UNITED STATES OF A NAPERVILLE, in the County of WILL and State RINGWELSKI, a citizen of UNITED STATES OF MARENGO, in the County of MCHENRY and State of IL. "the inventors" have invented certain new and useful improve | STATES OF AMERICA, residing in OOK and State of ILLINOIS, JOHN MERICA, residing in the City of of ILLINOIS, and ANDRZEJ Z. AMERICA, residing in the City of LINOIS, and hereinafter referred to as | | |
| ATTRITION RESISTANT CATALYST WITH RE | EDUCED SURFACE AREA; | | |
| WHEREAS, the inventors hereby authorize and rechave inserted on each page (where indicated below) the filing application when known; and | quest their attorney/agent of record to ng date and application number of said | | |
| WHEREAS, UOP LLC, a company organized and existing under the laws of the State of Delaware having a principal place of business at Des Plaines, Illinois, is desirous of acquiring an interest in and to said application, the inventions disclosed therein, and the Letters Patent of the United States that may be issued thereon. | | | |
| NOW, THEREFORE in consideration of the sum of One Dollar (\$1.00) and other good and valuable considerations the receipt of which is hereby acknowledged, said inventors do hereby transfer, set over and assign unto said UOP LLC, its successors and assigns, the entire right, title and interest in, to and under said application; the invention(s) covered thereby; any and all resultant patent or patents thereon; any renewals, reissues, extensions, reexaminations, substitutions, continuations, or divisions thereof, and all foreign rights thereunder including all rights to claim any priority in and to the inventions disclosed therein. Inventors hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to said UOP LLC, its successors and assigns. | | | |
| IN WITNESS WHEREOF, the inventors have se specified below. | | | |
| Application No09/754 6.77 | filed /-4-0/ | | |

Atty. Docket # 105518

PATENT_{V. 05-21-00)} **REEL: 012349 FRAME: 0248**

Page 2 of 3

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| ROBIN E. SHEPHERD | Date | Date Executed Application for Letters Patent |
| ate of IXIkosksx Louisiana xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx | 0 | |
| Before me, on this day, 12/14/ me personally known, who duly acknowluntary act and deed for the purposes the | wledged the foregoing | peared ROBIN E. SHEPHER instrument to be his/her free a Notary Public |
| EAL | | SONIA R. COX, Notary Publi; Caddo-Bossier Parish, Louisiana My Commission is for Life |
| Mad A. Marin | Dec. 15, 2000 | 12/15/00 |
| MARK D. MOSER | Date | Date Executed Application for Letters Patent |
| Before me, on this day, | , persona | ily appeared MARK D. MOSE |
| oluntary act and deed for the purposes to open the purpose the purpose to open th | therein expressed. L" NOIS | g instrument to be his/her free a Motary Public |
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| EAL OFFICIAL SEA MARIE G. COOPEF NOTARY PUBLIC, STATE OF ILLI MY COMMISSION EXPIRES 6/20/ MY COMMISSION EXPIRES 6/20/ JOHN Y.G. PARK State of Illinois County of Cook Before me, on this day, The personally known, who duly acknown. | NOIS 2001 Date Date Date Description of therein expressed. | Notary Public Notary Public Date Executed Application for Letters Patent ally appeared JOHN Y.G. P.A.I. ng instrument to be his/her free |
| SEAL OFFICIAL SEA MARIE G. COOPER NOTARY PUBLIC, STATE OF ILLI MY COMMISSION EXPIRES 6/20/ JOHN Y.G. PARK State of Illinois County of Cook | NOIS 2001 Date Date | Notary Public Notary Public Date Executed Application for Letters Patent |

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| AND | RZEJZ RINGWELSKI | 1/4/2 em/ Date | Date Executed Application for Letters Patent |
| State of Ill | | | |
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| to me perso | fore me, on this day, <u> </u> | owledged the foregoing in | ANDRZEJ Z. RINGWELSKI, nstrument to be his/her free and |
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Application No. 09/754 677 filed 1-4-01

Atty. Docket # 105518 RECORDED: 01/30/2002 PATENT . 03-21-00)
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