



Atty Docket No.: 227591US0XPST

FORM PTO-1595
1-31-92

REGISTRATION FORM COVER SHEET

PATENTS ONLY

1-15-03

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Adolf KUEHNLE Guido FRIES Roger Arthur SHELDON
Mark DUDA Jochen KIRCHHOFF Sasidharan MANICKAM
Carsten JOST Thomas SCHIFFER Isabella W.C.E ARENDSAdditional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of Conveyance:

- ☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Other

Execution Date: 11/29/02; 11/29/02; 11/29/02;
11/29/02; 11/29/02; 11/29/02; 10/02/02; 10/25/02; 10/03/02

2. Name and address of receiving party(ies):

Name: CREAVIS Gesellschaft fuer Technologie und
Innovation mbH
Address: Paul-Baumann-Strasse 1, D-45764 Marl,
Germany

01-22-2003



102343516

Additional name(s) and address(es) attached? ☒ Yes ☐ No

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 is:

A. Patent Application No.(s)

10/239,215

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:



22850

Tel. (703) 413-3000
Fax. (703) 413-2220

6. Total 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: 15-0030

(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.

Norman F. Oblon

Name of Person Signing

Corwin Paul Umbach

Signature

January 15, 2003

Date

Registration Number: 24,618

Corwin P. Umbach, Ph.D.
Registration No. 40,211

Total number of pages including this cover sheet: 3

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

01/21/2003 DBYRME 00000109 10239215

01 FC:8021

40.00 OP

Commissioner of Patents and Trademarks
Box Assignments
Washington, D.C. 20231PATENT
REEL: 013666 FRAME: 0566

ASSIGNMENT

WHEREAS the below named inventor (if only one inventor is named below) or inventors (if plural inventors are named below) hereinafter referred to as the ASSIGNOR invented a certain improvement relating to

1. Dr. Adolf KÜHNLE, Greifenberger Straße 30, D-45770 Marl, GERMANY;
2. Dr. Mark DUDA, Pfarrer-Barth-Weg 11, D-67071 Ludwigshafen, GERMANY;
3. Dr. Carsten JOST, Bebelstraße 14 a, D-45770 Marl, GERMANY

- ☐ for which an application for Letters Patent to be filed in the United States Patent and Trademark Office was executed on even date.
- ☐ for which U.S. Application Serial No. _____ for Letters Patent was filed in the U.S. Patent and Trademark Office on _____.
- ☒ for which an International Application was filed on _____ PCT/ EP01/03289 / designating the United States.

AND WHEREAS CREAVIS Gesellschaft für Technologie und Innovation mbH
Paul-Baumann-Straße 1, D-45764 Marl, GERMANY

Process for oxidizing hydrocarbons

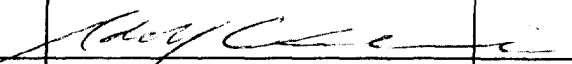
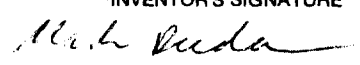
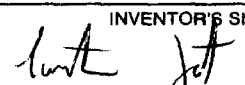
hereinafter referred to as the ASSIGNEE, is desirous of acquiring the entire right, title, and interest in and to said invention and application, including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted thereof, including any and all renewals, reissues, and prolongations thereof.

NOW, THIS WITNESSETH that for good and valuable considerations, the receipt whereof is hereby acknowledged, ASSIGNOR hereby assigns, sells, and transfers to ASSIGNEE, its assigns and legal representatives, the entire and exclusive right, title, and interest in and to said invention and application, including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted therefor, including any and all renewals, reissues, and prolongations thereof, ASSIGNEE and its assigns and legal representatives to have, hold, exercise, and enjoy the said invention and application, including any and all divisions and continuations thereof, and any and all Letters Patents which may be granted therefor, including any and all renewals, reissues, and prolongations thereof, with all the rights, powers, privileges and advantages in anywise arising from or appertaining thereto, for and during the term or terms of any and all such Letters Patent when granted, including any and all renewals, reissues, prolongations thereof, for the use and benefit of ASSIGNEE and its assigns and legal representatives, in as ample and beneficial a manner to all intents and purposes as the ASSIGNOR might or could have held and enjoyed the same, if the assignment had not been made.

AND ASSIGNOR hereby agrees to execute all papers that may be necessary to file applications in the United States for said invention and to assign the same to said ASSIGNEE or its assigns or legal representative and to execute any other papers that may be needed in connection with filing said application and securing a Letters Patent thereon.

AND ASSIGNOR authorizes and requests the Commissioner of Patents and Trademarks to issue a Letters Patent on said application, and on any and all divisions and continuations thereof, to ASSIGNEE, its assigns and legal representatives, in accordance herewith.

IN TESTIMONY WHEREOF this assignment is executed by ASSIGNOR.

201	FULL NAME OF SOLE OR FIRST INVENTOR	INVENTOR'S SIGNATURE	DATE
	Dr. Adolf KÜHNLE		29. NOV. 2002
202	FULL NAME OF SECOND JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE
	Dr. Mark DUDA		29. NOV. 2002
203	FULL NAME OF THIRD JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE
	Dr. Carsten JOST		
204	FULL NAME OF FOURTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE
205	FULL NAME OF FIFTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE
206	FULL NAME OF SIXTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE
207	FULL NAME OF SEVENTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE
208	FULL NAME OF EIGHTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE
209	FULL NAME OF NINTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE
210	FULL NAME OF TENTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE
211	FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE
212	FULL NAME OF TWELFTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE

PATENT

ASSIGNMENT

WHEREAS the below named inventor (if only one inventor is named below) or inventors (if plural inventors are named below) hereinafter referred to as the ASSIGNOR invented a certain improvement relating to

4. Dr. Guido FRIES, Erlbruch 11, D-45657 Recklinghausen, GERMANY;
5. Dr. Jochen KIRCHHOFF, Freistraße 18, D-59348 Lüdinghausen, GERMANY;
6. Dr. Thomas SCHIFFER, Brinkweg 7 c, D-45721 Haltern, GERMANY

☐ for which an application for Letters Patent to be filed in the United States Patent and Trademark Office was executed on even date.

☐ for which U.S. Application Serial No. _____ for Letters Patent was filed in the U.S. Patent and Trademark Office on _____.

☒ for which an International Application was filed on _____ PCT/ EP01/03289 / designating the United States.

AND WHEREAS CREAVIS Gesellschaft für Technologie und Innovation mbH
Paul-Baumann-Straße 1, D-45764 Marl, GERMANY
Process for oxidizing hydrocarbons



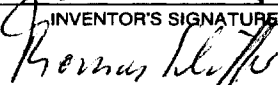
hereinafter referred to as the ASSIGNEE, is desirous of acquiring the entire right, title, and interest in and to said invention and application, including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted thereof, including any and all renewals, reissues, and prolongations thereof.

NOW, THIS WITNESSETH that for good and valuable considerations, the receipt whereof is hereby acknowledged, ASSIGNOR hereby assigns, sells, and transfers to ASSIGNEE, its assigns and legal representatives, the entire and exclusive right, title, and interest in and to said invention and application, including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted therefor, including any and all renewals, reissues, and prolongations thereof, ASSIGNEE and its assigns and legal representatives to have, hold, exercise, and enjoy the said invention and application, including any and all divisions and continuations thereof, and any and all Letters Patents which may be granted therefor, including any and all renewals, reissues, and prolongations thereof, with all the rights, powers, privileges and advantages in anywise arising from or appertaining thereto, for and during the term or terms of any and all such Letters Patent when granted, including any and all renewals, reissues, prolongations thereof, for the use and benefit of ASSIGNEE and its assigns and legal representatives, in as ample and beneficial a manner to all intents and purposes as the ASSIGNOR might or could have held and enjoyed the same, if the assignment had not been made.

AND ASSIGNOR hereby agrees to execute all papers that may be necessary to file applications in the United States for said invention and to assign the same to said ASSIGNEE or its assigns or legal representative and to execute any other papers that may be needed in connection with filing said application and securing a Letters Patent thereon.

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IN TESTIMONY WHEREOF this assignment is executed by ASSIGNOR.

201	FULL NAME OF FOURTH INVENTOR Dr. Guido FRIES	INVENTOR'S SIGNATURE 	DATE 29. NOV. 2002
202	FULL NAME OF FIFTH JOINT INVENTOR, IF ANY Dr. Jochen KIRCHHOFF	INVENTOR'S SIGNATURE 	DATE 29. NOV. 2002
203	FULL NAME OF SIXTH JOINT INVENTOR, IF ANY Dr. Thomas SCHIFFER	INVENTOR'S SIGNATURE 	DATE
204	FULL NAME OF FOURTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE
205	FULL NAME OF FIFTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE
206	FULL NAME OF SIXTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE
207	FULL NAME OF SEVENTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE
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209	FULL NAME OF NINTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE
210	FULL NAME OF TENTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE
211	FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE
212	FULL NAME OF TWELFTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE

PATENT

REEL: 013666 FRAME: 0568

ASSIGNMENT

WHEREAS the below named inventor (if only one inventor is named below) or inventors (if plural inventors are named below) hereinafter referred to as the ASSIGNOR invented a certain improvement relating to

7. Prof. Dr. Roger Arthur SHELDON, Regentesselaan 13, NL-2281 VA Rijswijk, THE NETHERLANDS;
8. Dr. Sasidharan MANICKAM, 110/BMinNager 1st Street, Tiruvannamalia, 606604 Tamil Nadu, INDIA

☐ for which an application for Letters Patent to be filed in the United States Patent and Trademark Office was executed on even date. LANDS

☐ for which U.S. Application Serial No. _____ for Letters Patent was filed in the U.S. Patent and Trademark Office on _____

☒ for which an International Application was filed on _____ PCT/EP01/03289 / designating the United States.

AND WHEREAS CREAVIS Gesellschaft für Technologie und Innovation mbH
Paul-Baumann-Straße 1, D-45764 Marl, GERMANY

Process for oxidizing hydrocarbons

hereinafter referred to as the ASSIGNEE, is desirous of acquiring the entire right, title, and interest in and to said invention and application, including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted thereof, including any and all renewals, reissues, and prolongations thereof.

NOW, THIS WITNESSETH that for good and valuable considerations, the receipt whereof is hereby acknowledged, ASSIGNOR hereby assigns, sells, and transfers to ASSIGNEE, its assigns and legal representatives, the entire and exclusive right, title, and interest in and to said invention and application, including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted therefor, including any and all renewals, reissues, and prolongations thereof, ASSIGNEE and its assigns and legal representatives to have, hold, exercise, and enjoy the said invention and application, including any and all divisions and continuations thereof, and any and all Letters Patents which may be granted therefor, including any and all renewals, reissues, and prolongations thereof, with all the rights, powers, privileges and advantages in anywise arising from or appertaining thereto, for and during the term or terms of any and all such Letters Patent when granted, including any and all renewals, reissues, prolongations thereof, for the use and benefit of ASSIGNEE and its assigns and legal representatives, in as ample and beneficial a manner to all intents and purposes as the ASSIGNOR might or could have held and enjoyed the same, if the assignment had not been made.

AND ASSIGNOR hereby agrees to execute all papers that may be necessary to file applications in the United States for said invention and to assign the same to said ASSIGNEE or its assigns or legal representative and to execute any other papers that may be needed in connection with filing said application and securing a Letters Patent thereon.

AND ASSIGNOR authorizes and requests the Commissioner of Patents and Trademarks to issue a Letters Patent on said application, and on any and all divisions and continuations thereof, to ASSIGNEE, its assigns and legal representatives, in accordance herewith.

IN TESTIMONY WHEREOF this assignment is executed by ASSIGNOR.

201	FULL NAME OF <u>7th</u> INVENTOR	INVENTOR'S SIGNATURE	DATE
	Prof. Dr. Roger Arthur SHELDON	<i>RASheldon</i>	02-10-2002
202	FULL NAME OF <u>3th</u> JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE
	Dr. Sasidharan MANICKAM	<i>MSasidharan</i>	25-10-2002
203	FULL NAME OF <u>3th</u> JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE
	Dr. Isabella W. C. E. ARENDS	<i>ICrends</i>	03-10-2002
204	FULL NAME OF FOURTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE
205	FULL NAME OF FIFTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE
206	FULL NAME OF SIXTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE
207	FULL NAME OF SEVENTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE
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210	FULL NAME OF TENTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE
211	FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE
212	FULL NAME OF TWELFTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE

PATENT

RECORDED: 01/15/2003

REEL: 013666 FRAME: 0569