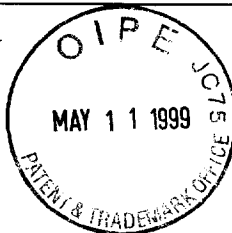


05-21-1999


 101042461  
 5-11-99

 U.S. Department of Commerce  
 Patent and Trademark Office  
**PATENT**
**RECORDATION FORM COVER SHEET  
 PATENTS ONLY**
**TO: The Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies).**
**Submission Type**

☒ **New**

☐ **Resubmission (Non-Recordation)**  
 Document ID#

☐ **Correction of PTO Error**  
 Reel #  Frame #

☐ **Corrective Document**  
 Reel #  Frame #

**Conveyance Type**

☒ **Assignment** ☐ **Security Agreement**

☐ **License** ☐ **Change of Name**

☐ **Merger** ☐ **Other**

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☐ **Departmental File** ☐ **Secret File**

**Conveying Party(ies)**

☐ **Mark if additional names of conveying parties attached**

**Name (line 1)**  **Execution Date**  
 Month Day Year  
 05-14-98

**Name (line 2)**

**Second Party**

**Name (line 1)**  **Execution Date**  
 Month Day Year  
 03-27-98

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**Receiving Party**

☐ **Mark if additional names of receiving parties attached**

**Name (line 1)**  ☒ **If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)**

**Name (line 2)**

**Address (line 1)**

**Address (line 2)**

**Address (line 3)**     
 City State/Country Zip Code

**Domestic Representative Name and Address**

Enter for the first Receiving Party only.

**Name**

**Address (line 1)**

**Address (line 2)**

**Address (line 3)**

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05/19/1999 MTHA11 00000206 08955097

01 FC:581

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Mail documents to be recorded with required cover sheet(s) information to:  
 Commissioner of Patents and Trademarks, Box Assignments, Washington, D.C. 20231

**PATENT**  
 REEL: 009955 FRAME: 0717

**Correspondent Name and Address**

Area Code and Telephone Number

503-621-3286

Name

Robert L. Flye

Address (line 1)

Borealis Exploration Incorporated

Address (line 2)

23545 NW Skyline Blvd.

Address (line 3)

North Plains, OR 97133-9204

Address (line 4)

**Pages**

Enter the total number of pages of the attached conveyance document including any attachments.

#

2

**Application Number(s) or Patent Number(s)**

☐

Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)

08/955,097

Patent Number(s)

If this document is being filed together with a new Patent Application, enter the date the patent application was signed by the first named executing inventor.

Month Day Year

**Patent Cooperation Treaty (PCT)**

Enter PCT application number

only if a U.S. Application Number has not been assigned.

PCT

PCT

PCT

PCT

PCT

PCT

**Number of Properties**

Enter the total number of properties involved.

#

1

**Fee Amount**

Fee Amount for Properties Listed (37 CFR 3.41): \$

40.00

Method of Payment:

Enclosed

☒

Deposit Account

☐

Deposit Account

(Enter for payment by deposit account or if additional fees can be charged to the account.)

Deposit Account Number:

#

Authorization to charge additional fees:

Yes

☐

No

☐

**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. Charges to deposit account are authorized, as indicated herein.

Rodney T. Cox, CEO/Chairman

Name of Person Signing

Signature

May 11, 1999

Date

## ASSIGNMENT OF APPLICATION

Docket Number (Optional)

Whereas, I, Jonathan Sidney Edelson of \_\_\_\_\_, hereafter  
referred to as applicant, have invented certain new and useful improvements in \_\_\_\_\_  
Low Work Function Electrode

☒ for which an application for a United States Patent was filed on 10/22/97,  
Application Number 08 / 955,097.

☐ for which an application for a United States Patent was executed on \_\_\_\_\_, and

Borealis Technical Limited  
Whereas, \_\_\_\_\_ of London, England herein referred to  
"assignee" whose post office address is 27 Heathway Court is de-  
sirous of acquiring the entire right, title and interest in the same;

Now, therefore, in consideration of the sum of Twenty dollars (\$ 20.00 ), the receipt whereof is ac-  
knowledged, and other good and valuable consideration, I, the applicant, by these presents do sell, assign  
and transfer unto said assignee the full and exclusive right to the said invention in the United States and the  
entire right, title and interest in and to any and all Patents which may be granted therefor in the United States,  
I hereby authorize and request the Commissioner of Patents and Trademarks to issue said United States  
Patent to said assignee, of the entire right, title, and interest in and to the same, for his sole use and behoof;  
and for the use and behoof of his legal representatives, to the full end of the term for which said Patent may  
be granted, as fully and entirely as the same would have been held by me had this assignment and sale not  
been made.

Executed this 14th day of May, 19 98,  
at Massachusetts

State of MASS SS:  
County of Dorchester

Before me personally appeared said Jonathan Sidney Edelson  
and acknowledged the foregoing instrument to be his free act and deed this 14th  
day of MAY, 19 98.

Seal

(Signature)

(Notary Public)

Burden Hour Statement: This form is estimated to take 0.1 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner of Patents and Trademarks, Washington, DC 20231.

PATENT  
REEL: 009955 FRAME: 0719

## ASSIGNMENT OF APPLICATION

Docket Number (Optional)

Whereas, I, Isaiah Watas Cox of \_\_\_\_\_, hereafter referred to as applicant, have invented certain new and useful improvements in \_\_\_\_\_  
Low Work Function Electrode

☒ for which an application for a United States Patent was filed on 10/22/97,  
Application Number 08/955,097.

☐ for which an application for a United States Patent was executed on \_\_\_\_\_, and

Whereas, Borealis Technical Limited of London, England herein referred to "assignee" whose post office address is 27 Heathway Court is desirous of acquiring the entire right, title and interest in the same;

Now, therefore, in consideration of the sum of Twenty dollars (\$ 20.00 ), the receipt whereof is acknowledged, and other good and valuable consideration, I, the applicant, by these presents do sell, assign and transfer unto said assignee the full and exclusive right to the said invention in the United States and the entire right, title and interest in and to any and all Patents which may be granted therefor in the United States, I hereby authorize and request the Commissioner of Patents and Trademarks to issue said United States Patent to said assignee, of the entire right, title, and interest in and to the same, for his sole use and behoof; and for the use and behoof of his legal representatives, to the full end of the term for which said Patent may be granted, as fully and entirely as the same would have been held by me had this assignment and sale not been made.

Executed this 27th day of March, 19 98,  
at New York City, NY

State of New York SS:  
County of New York

Before me personally appeared said ISAIAH WATAS COX  
and acknowledged the foregoing instrument to be his free act and deed this 27th  
day of March, 19 98.

Notary Public, State of New York  
No. 24-4874643  
Qualified in Kings County

Commission Expires Nov. 24, 19 98

(Signature)

Seal

(Notary Public)

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PTO/SB/21 (12-97)  
Approved for use through 9/30/00. OMB 0651-0031  
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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<b>TRANSMITTAL FORM</b> <i>(to be used for all correspondence after initial filing)</i>	<b>Application Number</b>	08/955,097	
	<b>Filing Date</b>	10/22/97	
	<b>First Named Inventor</b>	EDELSON	
	<b>Group Art Unit</b>	1762	
	<b>Examiner Name</b>	T. Meeks	
<b>Total Number of Pages in This Submission</b>	6	<b>Attorney Docket Number</b>	

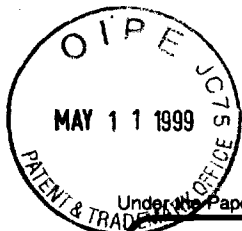
ENCLOSURES (check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form <input checked="" type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Response <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input checked="" type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition Routing Slip (PTO/SB/69) and Accompanying Petition <input type="checkbox"/> To Convert a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Small Entity Statement <input type="checkbox"/> Request for Refund	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Additional Enclosure(s) (please identify below):
Remarks		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	Jonathan S. Edelson
Signature	
Date	May 11, 1999

CERTIFICATE OF MAILING		EJ 732985495US	
I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on this date: 05/11/99			
Typed or printed name	Robert L. Flye		
Signature		Date	May 11, 1999

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PATENT  
REEL: 009955 FRAME: 0721



312

PTO/SB/17 (12-97)

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Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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## FEE TRANSMITTAL

Note: Effective October 1, 1997.  
Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT (\$) 40

### Complete if Known

Application Number	08/955,097
Filing Date	10/22/97
First Named Inventor	EDELSON
Group Art Unit	1762
Examiner Name	T. Meeks
Attorney Docket Number	

### METHOD OF PAYMENT (check one)

1. ☐ The Commissioner is hereby authorized to charge indicated fees and credit any over payments to:

Deposit Account Number   
Deposit Account Name

- ☐ Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17 ☐ Charge the Issue Fee Set in 37 CFR 1.18 at the Mailing of the Notice of Allowance

2. ☐ Payment Enclosed:  
☐ Check ☐ Money Order ☐ Other

### FEE CALCULATION

#### 1. FILING FEE

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
101 790	201 395	Utility filing fee	
106 330	206 165	Design filing fee	
107 540	207 270	Plant filing fee	
108 790	208 395	Reissue filing fee	
114 150	214 75	Provisional filing fee	
SUBTOTAL (1) (\$)			

#### 2. CLAIMS

	Extra	Fee from below	Fee Paid
Total Claims <input type="text"/> - 20 =	<input type="text"/>	X <input type="text"/>	<input type="text"/>
Independent Claims <input type="text"/> - 3 =	<input type="text"/>	X <input type="text"/>	<input type="text"/>
Multiple Dependent Claims <input type="text"/>	<input type="text"/>	X <input type="text"/>	<input type="text"/>

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description
103 22	203 11	Claims in excess of 20
102 82	202 41	Independent claims in excess of 3
104 270	204 135	Multiple dependent claim
109 82	209 41	Reissue independent claims over original patent
110 22	210 11	Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$)

### FEE CALCULATION (continued)

#### 3. ADDITIONAL FEES

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
105 130	205 65	Surcharge - late filing fee or oath	
127 50	227 25	Surcharge - late provisional filing fee or cover sheet	
139 130	139 130	Non-English specification	
147 2,520	147 2,520	For filing a request for reexamination	
112 920*	112 920*	Requesting publication of SIR prior to Examiner action	
113 1,840*	113 1,840*	Requesting publication of SIR after Examiner action	
115 110	215 55	Extension for reply within first month	
116 400	216 200	Extension for reply within second month	
117 950	217 475	Extension for reply within third month	
118 1,510	218 755	Extension for reply within fourth month	
128 2,060	228 1,030	Extension for reply within fifth month	
119 310	219 155	Notice of Appeal	
120 310	220 155	Filing a brief in support of an appeal	
121 270	221 135	Request for oral hearing	
138 1,510	138 1,510	Petition to institute a public use proceeding	
140 110	240 55	Petition to revive - unavoidable	
141 1,320	241 660	Petition to revive - unintentional	
142 1,320	242 660	Utility issue fee (or reissue)	
143 450	243 225	Design issue fee	
144 670	244 335	Plant issue fee	
122 130	122 130	Petitions to the Commissioner	
123 50	123 50	Petitions related to provisional applications	
126 240	126 240	Submission of Information Disclosure Stmt	
581 40	581 40	Recording each patent assignment per property (times number of properties)	40
146 790	246 395	Filing a submission after final rejection (37 CFR 1.129(a))	
149 790	249 395	For each additional invention to be examined (37 CFR 1.129(b))	

Other fee (specify) \_\_\_\_\_

Other fee (specify) \_\_\_\_\_

\* Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$) 40

### SUBMITTED BY

Typed or Printed Name Borealis Technical Limited

Signature

Date 5/11/99

### Complete (if applicable)

Reg. Number

Deposit Account User ID

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