FORM PTO-1619A Expires 06/20/09 OMD 0651-0027	00.	U.S. Department of Commen
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TO: The Commissioner of Pater Submission Type	its and Trademarks: Please record the	he attached original document(s) or copy(les)?
New 1	(A) Conveyance T	Type
0 /	X Assignment	Security Agreement
Resubmission (Non-Record	dation) License	Change of Name Other U.S. Government
Correction of PTO Error		<u></u>
Reel # Frame Corrective Document		U.S. Government
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Conveying Party(ies)		Departmental File Secret File
Name (line 1) Bernard P.	Breen	nal names of conveying parties attached Execution Date Month Day Year
Name (line 2)		07 09 02
Second Party		
Name (line 1) James E. Gab	rielson	Execution Date Month Day Year
Name (line 2)		07 09 02
Receiving Party		
		Mark if additional names of receiving parties attached
Name (line 1) ESA Corrosion	n Solutions, LLC	If document to be reco
Name (line 2)		is an assignment and receiving party is not domicited in the United
Address (line 1) 2 Park Drive		Siztes, an appointment of a domestic
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Address (line 2)		separate document fro
Address (1600 3) Lawrence	Pennsylvania	•
Domestic Representative		
	Ente	er for the first Receiving Party only.
Name		
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FORM PTO-1619B Expires 05/30/09 OMB 0651-0027	Page 2	U.S. Department of Commerce Patent and Trademark Office PATENT
Correspondent Name and Address	Area Code and Telephone Number 4	
Name Lynn J. Alstadt		
Address (line 1) Buchanan Ingersoll,	P.C.	
Address (line 2) 301 Grant Street, 2	Oth Floor	
Address (line 3) Pittsburgh, PA 152	19	
Address (line 4)		
Pages Enter the total number of including any attachmen	pages of the attached conveyance docum	ent # 7
Application Number(s) or Patent N	umbar(a)	dditional numbers attached
Enter either the Patent Application Number or to	he Patent Number (DO NOT ENTER BOTH numbers	for the same property).
Patent Application Number(s)		Number(s)
10/114,362		
signed by the first named executing inventor.	Patent Application, enter the date the patent application	on was Konth Day Year
Patent Cooperation Treaty (PCT)		
Enter PCT application number	PCT PCT	PCT
only if a U.S. Application Num has not been assigned.	ber PCT PCT	РСТ
Number of Properties Enter the	total number of properties involved. #	1
Fee Amount Fee Amou	int for Properties Listed (37 CFR 3.41): \$	40.00
Deposit Account	nclosed 🛣 Deposit Account 🗌	
(Enter for payment by deposit account or if	additional fees can be charged to the account.) Deposit Account Number:	# 02–4553
	Authorization to charge additional fees:	Yes X No
Statement and Signature		
attached copy is a true copy of the indicated herein.	d belief, the foregoing information is true the original document. Charges to deposit	account are authorized, as
Lynn J. Alstadt Name of Person Signing	- 1 What	19cg 6 200 Z
Name of Person Signing	/Signature	/ Date

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RECORDATION FORM COVER SHEET CONTINUATION PATENTS ONLY

U.S. Department of Commerce Patent and Trademark Office PATENT

Omb 0031-0027	PATENTS ONLY	PATENT
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Enter additional C	conveying Parties	Execution Date Month Day Year
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Name (line 1)		Land Cay Teal
Name (line 2)		
		Execution Date Month Day Year
Name (line 1)		
Name (line 2)		
Receiving Pa	rty(ies) Mark if additional names of receiving parti	es attached
Enter additional F	Receiving Party(ies)	
Name (line 1)		If document to be recorded is an assignment and the
Name (line 2)		receiving party is not domiciled in the United
Address (line 1)		States, an appointment of a domestic representative
Address (line i)		is attached. (Designation must be a separate
Address (line 2)		document from Assignment.)
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Name (line 1)		If document to be recorded is an assignment and the
Name (line 2)		receiving party is not domiciled in the United
		States, an appointment of a domestic representative is
Address (line 1)		attached. (Designation must be a separate document from
Address (line 2)		Assignment.)
Address (line 3)		
	City State/Country Zip (ode
,	umber(s) or Patent Number(s) Mark if additional numbers attached Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the s	ame property)
	tent Application Number(s) Patent Num	i
L		

ASSIGNMENT

WHEREAS, We, Bernard P. Breen, James E. Gabrielson and David Eden, residing at 650-B Trimont Lane, Pittsburgh, Pennsylvania 15211; 11585 Riverview Road, Hanover, Minnesota 55341 and 17723 Shadow Valley Drive, Spring, Texas 77379, respectively, have invented certain new and useful improvements in "Ammonia Detection by Corrosion Measurement and Spatial Feedback for Control of Ammonia Injection" for which we filed an application for United States Letters Patent on April 2, 2002, bearing Serial No. 10/114,362; and

WHEREAS, ESA CORROSION SOLUTIONS, LLC, having its business address at 2 Park Drive, Lawrence, PA 15055 (hereinafter the "Assignee"), is desirous of acquiring the entire right, title and interest in and to said application and the inventions and improvements therein disclosed;

NOW, THEREFORE, in consideration of One (\$1.00) Dollar and other good and valuable consideration paid to us by said assignee, receipt whereof we acknowledge, we do hereby assign, sell, transfer, and set over unto said assignee the entire right, title, and interest in and to said application and the inventions and improvements therein disclosed for the United States and all foreign countries and any Letters Patent which may issue therefor in the United States and all foreign countries and all divisions, reissues, continuations, renewals, and/or extensions thereof including all priority rights under the International Convention associated therewith for each country and the Union, said assignee to have and to hold the interests herein assigned to the full ends of the terms of said Letters Patent and any and all divisions, reissues, continuations, renewals, and/or extensions thereof, respectively, as fully and entirely as the same would have been held and enjoyed by us had this assignment not been made.

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The Commissioner of Patents and Trademarks is requested to issue such Letters

Patent in accordance herewith. We covenant that we are the lawful owners of said application,
inventions, and improvements, that the same are unencumbered, that no license has been granted to
make, use or vend the said inventions or improvements or any of them, and that we have the full
right to make this assignment.

And for the consideration aforesaid, we agree jointly and individually that we will communicate to said assignee or the representatives thereof any facts known to us respecting said inventions and improvements, and will, upon request, but without expense to us, testify in any legal proceedings, sign all lawful papers, execute all divisional, reissue, continuation, renewal and/or extension applications, make all rightful oaths, and generally do all other and further lawful acts, deemed necessary or expedient by said assignee or by counsel for said assignee, to assist or enable said assignee to obtain and enforce full benefits from the rights and interests herein assigned. This assignment shall be binding upon our heirs, executors, administrators, and/or assigns, and shall inure to the benefit of the successors, and/or assigns, as the case may be, of said assignee.

DATED:

July 9 = , 2002

Bernard P. Breen

(SEAL)

7 July ,2002

James E. Gabrielson

1st Hunt, 2002

David Eden

(SEAL)

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a la Cama da	
State of fennsylvania: : ss:	
County of Mahanet:	
Before me, a Notary Public in and for the said County and State, personally	
appeared Bernard P. Breen who acknowledged that he is the person who executed the forego	oing
assignment and acknowledged it to be his free and voluntary act and deed.	
Witness my hand and notarial seal this Aday of	, 2002.
Andrea M. Hacker, Novay Public City of Pittsburgh, Altegraphy County My Commission Expired June 17, 2006 Mamber, Pennsylvania Acceptance Notaries	
(NOTARIAL SEAL)	
State of Pennsylvania:	
County of Allegheny: ss:	
Before me, a Notary Public in and for the said County and State, personally	
appeared James E. Gabrielson who acknowledged that he is the person who executed the for	regoing
assignment and acknowledged it to be his free and voluntary act and deed.	
Witness my hand and notarial seal this At day of July	_, 2002.
andre Whale	
Notary Public	
(NOTARIAL SEAL)	
Notarial Seal Andrea M. Hacker, Notary Public City of Pittsburgh, Allegheny County My Commission Expires June 17, 2006	
Member, Pennsylvania Association of Notaries	

State of PENNSYLVANIA

County of WASHINGTON:

Before me, a Notary Public in and for the said County and State, personally appeared David Eden who acknowledged that he is the person who executed the foregoing assignment and acknowledged it to be his free and voluntary act and deed.

Witness my hand and notarial seal this 1st day of August, 2002.

(NOTARIAL SEAL)

NOTARIAL SEAL Mary Jane Silcott, Notary Public Cecil TWP, County of Washington

My Commission Expires Feb. 19, 2004

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RECORDED: 08/12/2002

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