501837743 03/01/2012

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Cynthia C. Webb	02/27/2012
Karl J. Kreder III	02/27/2012

RECEIVING PARTY DATA

Name:	Southwest Research Institute	
Street Address:	6220 Culebra Road	
City:	San Antonio	
State/Country:	TEXAS	
Postal Code:	78238-5166	

PROPERTY NUMBERS Total: 1

Prope	erty Type	Number
Application Nun	nber:	13406994

CORRESPONDENCE DATA

Fax Number: (210)522-8365 Phone: 210-522-5560

Email: shirley.mcdonald@swri.org

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

via US Mail.

Shirley E. McDonald Correspondent Name: Address Line 1: 6220 Culebra Road

Address Line 4: San Antonio, TEXAS 78238-5166

ATTORNEY DOCKET NUMBER: 3548

NAME OF SUBMITTER: Shirley E. McDonald

Total Attachments: 3

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PATENT REEL: 027787 FRAME: 0791

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of	§	
Cynthia C. Webb, et al	§	
	§	
Serial No.: Not Yet Assigned	§	Action: Assignment
	§	
Filed:	§	

Title: Use of Braking Energy to Augment Exhaust Heat for Improved Operation of

Exhaust Aftertreatment Devices

TO: Commissioner of Patents and Trademarks Alexandria, VA 22313

WHEREAS, we, CYNTHIA C. WEBB, a citizen of the United States, residing at 5223 Timberhurst, San Antonio, Bexar County, Texas, and KARL J. KREDER III, a citizen of the United States, residing at 8837 Brigadoon Street, San Antonio, Bexar County, Texas, are joint inventors of new and useful improvements in *USE OF BRAKING ENERGY TO AUGMENT EXHAUST HEAT FOR IMPROVED OPERATION OF EXHAUST AFTERTREATMENT DEVICES* for which we have executed an application for Letters Patent; and,

WHEREAS, we represent that we are joint owners of said invention and application for Letters Patent; and,

WHEREAS, SOUTHWEST RESEARCH INSTITUTE, hereinafter called "ASSIGNEE," a Texas Corporation having its principal office at 6220 Culebra Road, San Antonio, Bexar County, Texas 78238-5166, is desirous of acquiring our right, title and interest in and to the said application and the invention therein described and claimed and any Letters Patent that may be issued upon said application or for the invention therein contained;

NOW, THEREFORE, for and in consideration of the sum of Sixty-Five Dollars (\$65.00), lawful money of the United States, and other valuable consideration, the receipt and sufficiency whereof we hereby acknowledge, we, the said CYNTHIA C. WEBB and KARL J. KREDER III, hereinafter called "ASSIGNORS," have sold, assigned and transferred, and do hereby sell, assign and transfer unto the said ASSIGNEE, its successors and assigns, our entire right, title and interest in and to (a) said invention and worldwide rights therein, including the right to claim the priority date of

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said application and all other rights arising under the International Convention for the Protection of

Industrial Property; (b) said application, including all divisions, continuations, continuations-in-part

and substitutions thereof; and (c) all United States and foreign patents which shall issue on said

invention, including all reissues, renewals, divisions and extensions thereof, for the United States, its

territories and possessions and all foreign countries, including the right to file applications for Letters

Patent on said invention in any and all foreign countries, the same to be held and enjoyed by said

ASSIGNEE, its assigns and successors, as fully and entirely as the same would have been held and

enjoyed by us, had this Assignment and sale not been made.

ASSIGNORS request that any and all such Letters Patent for said invention be issued to

ASSIGNEE, its successors, assigns and legal representatives, or to such nominees as it may

designate.

ASSIGNORS covenant and agree that we and our executors or administrators will, at any

time upon the request and at the expense of said ASSIGNEE, execute and deliver any and all papers

and perform all lawful acts that may be necessary or desirable, in the opinion of said ASSIGNEE, to

enable and assist said ASSIGNEE to (a) obtain Letters Patent, both domestic and foreign, on said

invention; (b) establish, maintain and secure title in said ASSIGNEE, its successors and assigns, to

said invention, application and Letters Patent, including making such title of lawful public record;

and (c) defend, establish or otherwise preserve the validity of said Letters Patent against any and all

infringers, and perform such other acts as are necessary to give full force and effect to this

Assignment.

ASSIGNORS further covenant with ASSIGNEE that the rights and property herein conveyed

are free and clear of any encumbrances, and that ASSIGNORS have the full right to convey the same

as herein expressed.

IN TESTIMONY WHEREOF, ASSIGNORS have duly executed this Assignment on the date

indicated below.

Zvnthia C. Webb

212+120

Date

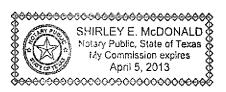
PATENT REEL: 027787 FRAME: 0793

find I finder III	
Karl J. Kreder III	
02/27/2012	
Date	

STATE OF TEXAS \$
COUNTY OF BEXAR \$

BEFORE ME, the undersigned authority, on this day personally appeared CYNTHIA C. WEBB, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that she executed the same for the purposes and consideration therein expressed.

GIVEN under my hand and seal of office this <u>27 Hy</u>day of <u>February</u>, 2012.



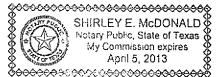
Mulin E Modoral Notary Public, State of Texas

STATE OF TEXAS \$

COUNTY OF BEXAR \$

BEFORE ME, the undersigned authority, on this day personally appeared KARL J. KREDER III, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed.

GIVEN under my hand and seal of office this 27Hday of February ,2012.



Notary Public, State of Texas

PATENT REEL: 027787 FRAME: 0794

RECORDED: 03/01/2012