FORM PTO-1595

02-09-2006



Docket No.

IEET

U.S. DEPT. OF COMMERCE

103176282 Please record attached original documents. To: Commissioner for Patents 2. Name and address of receiving party(ies): 1. Name of conveying party(ies): Michael Patrick Galligan 1. ENGELHARD CORPORATION Josech Charles Dettling 101 Wood Avenue - P.O. Box 770 3. Nature of conveyance: Iselin, New Jersey 08830-0770 ■ Assignment ☐ Merger □ Security Agreement □ Change of Name □ Other Execution Dates February 1, 2006, February 3, 2006 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. 11/316,594 | B. Patent No. * Additional numbers attached? ☐ Yes ☒ No 5. Name and address of party to whom correspondence 6. Total number of applications and patents involved _ concerning document should be mailed:

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9. STATEMENT AND SIGNATURE.

Chief Patent Counsel

ENGELHARD CORPORATION 101 Wood Avenue - P.O. Box 770

Iselin, New Jersey 08830-0770

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.

Richard A. Negin

Name of person signing

Signature

February 3 , 2006

7. Total fee (37 CFR 3.41).....\$40.00

■ Authorized to be charged to deposit account

8. Deposit Account Number: ___05-1070

Total number of pages including cover sheet, attachments, and document: 3

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

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Alexandria, VA 22313-1450

PATENT

REEL: 017538 FRAME: 0970

ASSIGNMENT

Joint

WHEREAS, WE,

Michael Patrick Galligan, 4 Victoria Court, Cranford, New Jersey 07016 Joseph Charles Dettling, 8 Spicy Pond Road, Howell, New Jersey 07731

all Citizens of the United States of America, are the inventors of an invention in

EXHAUST INLET METALLIC FOAM TRAP COUPLED TO A DOWNSTREAM MONOLITHIC PRECIOUS METAL CATALYST

for which we have executed an application for Letters Patent of the United States; and

WHEREAS, <u>ENGELHARD CORPORATION</u> is desirous of obtaining the entire right, title and interest in, to and under the said invention and the said application:

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, we the undersigned have sold assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ENGELHARD CORPORATION, its successors, legal representatives and assigns, the entire right, title and interest in, to and under the said invention, and the said application and all divisions, renewals and continuations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all applications for Letters Patent which may hereafter be filed for said invention in any country or countries foreign to the United States, and all extensions, renewals and reissues thereof and all rights of priority in any such country or countries based upon the filing of the said application for Letters Patent of the United States which are created by any law, treaty or international convention; and we hereby authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said invention to the said ENGELHARD CORPORATION, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.

AND WE HEREBY further covenant and agree that we will communicate to said ENGELHARD CORPORATION, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths and generally doeverything possible to aid the said ENGELHARD CORPORATION, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said invention in all countries.

IN TESTIMONY WHEREOF, we hereunto set our hands and seals the day and year set opposite our respective signatures.

Date 2-1, 2006

Michael Patrick Galligan

Date 2-3, 2006

Joseph Charles Dettling

PATENT REEL: 017538 FRAME: 0971

State of New Jersey)
	SS.:
County of Middlesex)

On this day of February, 2006, before me, a Notary Public in and for the State and County aforesaid, personally appeared Michael Patrick Galligan, to me known and known to me to be the person of that name, who signed and sealed the foregoing instrument, and he acknowledged the same to be his free act and deed.

Notary Public

PHYLLIS NOVA
Notary Public of New Jersey
My Commission Expires August 31, 2009

State of New Jersey)
ss.:
County of Middlesex)

On this 3 day of February, 2006, before me, a Notary Public in and for the State and County aforesaid, personally appeared Joseph Charles Dettling, to me known and known to me to be the person of that name, who signed and sealed the foregoing instrument, and he acknowledged the same to be his free act and deed.

Notary Public

PHYLLIS NOVA
Notary Public of New Jersey
My Commission Expires August 31, 2009

PATENT REEL: 017538 FRAME: 0972

RECORDED: 02/06/2006