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	T COMMISSIONER FOR PATENTS: Please	101 ise recora t	212 ine attac	861 cnea originai aocu	ments	or copy the	ereof.	PT0			
 Name of conveying party(ies): (If multiple assignors, list numerically) Michael W. Halpin Additional name(s) of conveying party(ies) attached? Yes No 		2.	 Name and address of receiving party(ies): Name: ASM America, Inc. Internal Address: Street Address: 3440 East University Drive City: Phoenix State: AZ ZIP: 85034-7200 Additional name(s) of receiving party(ies) attached 					09/44355			
3. Nature of conve	yance:	4.	Appl	() Ye	-	()	No (s):	7/4	<u>7</u> 3 5 2		
 (X)Assignmen () Merger () Security Ag () Change of J () Other: 	greement		(X) ()	Application(s) Execution Date Patent Applicat	(s): No	ovember 3.	, 1999	·			
Execution Date: (If multiple assignors, list execution dates in numerical order corresponding to numbers indicated in 1 above) November 3, 1999			Filing Date: () Patent No.: Issue Date:								
				I numbers attache		Yes	(X)	No			
concerning document should be mailed:) Encl			- <u>.</u>					
KNOB Custo Internal Addres	n H. Olson BE, MARTENS, OLSON & BEAR, LLP mer No. 20,995 ss: Sixteenth Floor 620 Newport Center Drive	(X) Authorized to be charged to deposit account if any additional fees are required, or to credit any overpayment									
City: Newport Beach State: CA ZIP: 92660 Attorney's Docket No.: ASMEX.215A		 Deposit account number: 11-1410 Please charge this account for any additional fees which may be required, or credit any overpayment to this account. 									

Total number of applications and patents involved: 1 6.

Statement and signature. 9.

> 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.

Gordon H. Olson

Un H. Olson

<u>Mar. 14, 1</u> Date



ASSIGNMENT

WHEREAS, I, Michael W. Halpin, a U.S. citizen, residing at 3435 E. Desert Trumpet Rd., Phoenix, AZ 85044, have invented certain new and useful improvements in a EXHAUST SYSTEM FOR VAPOR DEPOSITION **REACTOR** for which I have executed an application for Letters Patent in the United States, on even date herewith;

AND WHEREAS, ASM AMERICA, INC. (hereinafter "ASSIGNEE"), a Delaware Corporation, with its principal place of business at 3440 East University Drive, Phoenix, AZ 85034-7200, desires to acquire the entire right, title, and interest in and to the said improvements and the said Application:

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to me in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, I, the said inventor, do hereby acknowledge that I have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, the entire right, title, and interest throughout the world in, to and under the said improvements, 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 rights of priority under International Conventions and applications for Letters Patent which may hereafter be filed for said improvements in any country or countries foreign to the United States, and all Letters Patent which may be granted for said improvements in any country or countries foreign to the United States and all extensions, renewals and reissues thereof; and I 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 improvements to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND I HEREBY covenant and agree that I will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to me respecting said improvements, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said improvements in all countries.

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this $\frac{3}{100}$ day of $\frac{1000}{1000}$ 1977

Michael W. Habin

STATE OF Charles And ss.

On $\frac{1163}{100}$, before me, $\frac{12000}{100}$, before me, $\frac{12000}{100}$, personally appeared Michael W. Halpin personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(3) whose name(3) is/aresubscribed to the within instrument, and acknowledged to me that he executed the same in his authorized capacity(ies), and that by his signature (x) on the instrument the person (x), or the entity upon behalf of which the person (x) acted, executed the instrument.

WITNESS my hand and official seal.	
SEAL] I:DOCS:GHO:GHO CONSTRUCT: DOCS:GHO:GHO SEAL] DEBBIE KELLEY Notary Public - Arizona MARICOPA COUNTY Commission Expires MAY 2, 2003	Notary Signature

PATENT REEL: 010403 FRAME: 0935

RECORDED: 11/18/1999