08-24-2000 U.S. DEPARTMENT OF COMMERCE SHEET FORM PTO-1595 (Modified) (Rev. 6-93) Patent and Trademark Office OMB No. 0651-0011 (exp.4/94) _Y Copyright 1996-97 LegalStar P08A/REV02 101440224 Tab settings → → To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereo 2. Name and address of receiving party(ies): 1. Name of conveying party(ies): 1.00 Brian D. Mallen Name: MALLEN RESEARCH LTD. PARTNERSHIP? Address: 946 Grady Avenue, Suite 4 ☐ Yes 🛛 No Additional names(s) of conveying party(ies) 3. Nature of conveyance: ☒ Assignment Merger City: Charlottesville State/Prov.: VA Change of Name Security Agreement Country: U.S.A. Other Execution Date: August 1, 2000 ⊠ No Additional name(s) & address(es) 631887 4. Application number(s) or registration numbers(s): () 9 If this document is being filed together with a new application, the execution date of the application is: August 1, 2000 B. Patent No.(s) Filing date Patent Application No. Yes X No Additional numbers 6. Total number of applications and patents involved: 5. Name and address of party to whom correspondence concerning document should be mailed: 08/16/2000 SDAVIS 00000023 09631282 7. Total fee (37 CFR 3.41):....\$ 40.00 02 FName: BRIAN C. ALTMILLER 00 00 ☑ Enclosed - Any excess or insufficiency should be 37,271 Registration No. credited or debited to deposit account Address: JONES VOLENTINE, L.LC. ☐ Authorized to be charged to deposit account 12200 SUNRISE VALLEY DRIVE 8. Deposit account number: SUITE 150 _____ State/Prov.: VA City: RESTON 50-0238 ZIP: 20191 Country: U.S.A. DO NOT USE THIS SPACE To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy 9. Statement and signature. of the original document. **AUGUST 2, 2000** BRIAN C. ALTMILLER Date Signature Name of Person Signing Total number of pages including cover sheet, attachments, and

> PATENT REEL: 011010 FRAME: 0050

Docket No.: MALLEN.024

J O N E S

ACCICAIMENT

VOLENTINE L.L.P. (4/99)	ASSIGNMENT
	In consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration paid to each
V	of the undersigned
Insert Name(s) of Inventor(s)	Brian D. MALLEN
	and
Insert Name(s) of Assignee(s)	the undersigned hereby sell(s) and assign(s) to
-	MALLEN RESEARCH LTD. PARTNERSHIP
Address	of 946 Grady Avenue, Suite 4, Charlottesville, Virginia 22903
	(hereinafter designated as the Assignee) the entire right, title and interest for the United States as defined in 35 USC 100, in the invention known as
Title of Invention	HOT WALL COMBUSTION INSERT FOR A ROTARY VANE PUMPING MACHINE
	for which an application for patent in the United States of America has been executed by the undersigned
Date of Signing of Application	on August 1, 2000
	The undersigned agree(s) to execute all papers necessary in connection with this application and any continuing, divisional or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.
	The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation, division or reissue thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.
	The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.
	The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee.
	The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patents of the United States resulting from said application or any division or divisions or continuing or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) full right to convey the entire interest herein assigned, and that he has (they have) not executed, and will not execute, any agreement in conflict herewith.
}	

Page 1 of 2

PATENT **REEL: 011010 FRAME: 0051**

members of the firm	signed hereby grant(s) to Raymond C. Jones, Reg. No. 34,631 and Adam C. Volentine, Reg. No. 33,289, of JONES VOLENTINE, L.L.P. the power to insert on this assignment any further identification which may irable in order to comply with the rules of the United States Patent Office for recordation of this document.
in withess	whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).
Date	Name of Inventor Brian D. MALLEN
Date	, Name of Inventor
not required two witnes Assignmen	rding Witnessing and/or Acknowledgment: Acknowledgment before a United States Consul is preferred but it. If not acknowledged, then it is recommended that the execution by the Inventor(s) be witnessed by at least sees who sign here. However, the current practice of the U.S. Patent and Trademark Office is to record an t even if it has not been acknowledged and/or witnessed.)
	itness
	ACKNOWLEDGMENT ss
This	day of, 19, before me personally came the above-
named	
	to me
personally known as the same of his (the	the individual(s) who executed the foregoing assignment, who did acknowledge to me that he (they) executed it) own free will for the purposes therein set forth.
	Official Signature
SEAL	Official Title
* * * * * * * * * *	***************
Applicant Reference	e No.:Atty Docket No.:MALLEN.024
	Filing Date:
	Page 2 of 2

PATENT **REEL: 011010 FRAME: 0052**