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08-27-2001



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To the Honorable Commiss	sioner of Patents	10182	3660	documents or copy thereof.
Name of conveying party				of receiving party(ies):
	.y (100).	edeal	Name:	Arthur D. Little, Inc.
Lawrence G. Clawson Matthew H. Dorson William L. Mitchell Brian J. Nowicki	l	18/22/01	Street Address:	Acorn Park Cambridge, Massachusetts 0214
Jeffrey M. Bentley Robert Davis Jennifer W. Rumsey			Additional name(s)	& address(es) attached? □ Yes ■ No
Additional name(s) of conve	eying party(ies) atta	ached?□Yes ■No		
3. Name of conveyance:				
■ Assignment	□ Me	rger		
☐ Security Agreement	□ Cha	ange of Name		
☐ Other	and the state of t		_	
Willian Brian Jeffrey Robert	ence G. Clawson ew H. Dorson m L. Mitchell J. Nowicki y M. Bentley rt Davis fer W. Rumsey	August 29, 2000 August 29, 2000 August 29, 2000 August 29, 2000 August 29, 2000 September 13, 2000 September 27, 2000		
	g filed together with	a new application, the ex	xecution date of the applica	tion is:
	g filed together with	a new application, the ex		tion is:
If this document is being  A. Patent Application N	g filed together with	a new application, the ex May 2, 2000 Additional numbers atta	ached? □ Yes ■ No	
If this document is being	g filed together with  lo. 09/565,288 filed  earty to whom corres	a new application, the ex May 2, 2000 Additional numbers atta	ached? □ Yes ■ No	
If this document is being  A. Patent Application No.  5. Name and address of particular document should be marked.	g filed together with  lo. 09/565,288 filed  earty to whom corres	a new application, the ex May 2, 2000  Additional numbers attacks	ached? □ Yes ■ No 6. Total number of app	plications and patents involved:
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## **ASSIGNMENT**

Serial No. 09/565,288 Filed: May 2, 2000

IN CONSIDERATION of one dollar and other good and valuable considerations, the receipt of which is hereby acknowledged, the entire right, title and interest in the invention or improvements of the undersigned in "AUXILIARY REACTOR FOR A HYDROCARBON REFORMING SYSTEM" and in the application for Letters Patent of the United States therefor, executed by the undersigned on and in any reissue or extension of any Letters Patent that may be granted upon said application are hereby assigned by the undersigned to ARTHUR D. LITTLE, INC., a Massachusetts corporation, and the successors, legal representatives and assigns of ARTHUR D. LITTLE, INC. (hereinafter collectively called said Assignee), and the Commissioner of Patents is hereby authorized and requested by the undersigned to issue said Letters Patent to said Assignee.

FOR SAID CONSIDERATIONS it is hereby agreed by the undersigned, upon the request of said Assignee, to execute any necessary and proper oaths or affidavits relating to said application or required for the filing or prosecution of any divisional, continuation or continuation-in-part application thereof or for the filing or prosecution of any application for the reissue or extension of any Letters Patent that may be granted on said invention or improvements that said Assignee may deem necessary or expedient, and for the said consideration it is further agreed by the undersigned, upon the request of said Assignee, in the event of said application or any division thereof, or Letters Patent issued thereon, or any reissue or application for the reissue thereof, becoming involved in interference, to cooperate to the best of the ability of the undersigned with said Assignee in the matters of preparing and executing the preliminary statement and giving and producing evidence in support thereof, and further to perform, upon such request, any and all affirmative acts to obtain said Letters Patent and vest all rights therein hereby conveyed in the said Assignee as fully and entirely as the same would have been held and enjoyed by the undersigned if this Assignment and sale had not been made. And for the said considerations the entire right, title and interest in said invention or improvements, including all priority rights, and the right to claim priority rights and the privileges and benefits thereof, including those under the International Convention, and all other conventions, and the right to file applications for patent in said Assignee's own name for said invention or improvements in each and every country of the world are hereby Assigned and granted by the undersigned to said Assignee. It is further agreed by the undersigned, upon the request of said Assignee, to execute any and all documents that shall be required of the undersigned to be executed in connection with any and all applications for foreign letters patent therefor, including the prosecution thereof, and to execute any and all documents necessary to invest title in said foreign applications and patents in said Assignee.

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State of Maynchusetts )	MATTHEW H. DORSON
State of <u>Mayachusetts</u> ) ss. County of <u>Middleses</u> )	
in and for the state and county aforesaid, and foregoing Assignment for the purposes and	, 2000, Matthew H. Dorson appeared before me, a notary public acknowledged that he freely and voluntarily subscribed and executed the uses therein expressed.  Notary Public My Commission Expires AUG. 24, 2001
State of Minion Chinally )  Ss.  County of Milds	WILLIAM L. MITCHELL
On Quy 29 in and for the state and county aforesaid, and foregoing Assignment for the purposes and	, 2000, William L. Mitchell appeared before me, a notary public acknowledged that he freely and voluntarily subscribed and executed the uses therein expressed.  Notary Public My Commission Expires AUG. 24, 2001
State of <u>Maria clusts</u> ) ) ss. County of <u>Million</u> )	Brian J. NOWICKI
•	, 2000, Brian J. Nowicki appeared before me, a notary public acknowledged that he freely and voluntarily subscribed and executed the uses therein expressed.  Notary Public My Commission Expires AUG. 24, 2001
State of <u>Manufusets</u> ) ss. County of <u>Malley</u> )	JEFFEE M. BENTLEY
On	, 2000, Jeffrey M. Bentley appeared before me, a notary public acknowledged that he freely and voluntarily subscribed and executed the uses therein expressed  Notary Public My Commission Expires AUG. 24, 2001

		ROBERT DAVIS
State of County of	) ) ss.	
County of	)	
On	aforesaid, and acknow or the purposes and uses	, 2000, Robert Davis appeared before me, a notary public in and redged that he freely and voluntarily subscribed and executed the therein expressed.
		Notary Public
		JENNIFER W. RUMSEY
State of	) ss. )	
Onin and for the state and co foregoing Assignment for	ounty aforesaid, and ack	, 2000, Jennifer W. Rumsey appeared before me, a notary public nowledged that she freely and voluntarily subscribed and executed the therein expressed.
		Notary Public

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## **ASSIGNMENT**

Serial No. 09/565,288

Filed: May 2, 2000

IN CONSIDERATION of one dollar and other good and valuable considerations, the receipt of which is hereby acknowledged, the entire right, title and interest in the invention or improvements of the undersigned in "AUXILIARY REACTOR FOR A HYDROCARBON REFORMING SYSTEM" and in the application for Letters Patent of the United States therefor, executed by the undersigned on and in any reissue or extension of any Letters Patent that may be granted upon said application are hereby assigned by the undersigned to ARTHUR D. LITTLE, INC., a Massachusetts corporation, and the successors, legal representatives and assigns of ARTHUR D. LITTLE, INC. (hereinafter collectively called said Assignee), and the Commissioner of Patents is hereby authorized and requested by the undersigned to issue said Letters Patent to said Assignee.

FOR SAID CONSIDERATIONS it is hereby agreed by the undersigned, upon the request of said Assignee, to execute any necessary and proper oaths or affidavits relating to said application or required for the filing or prosecution of any divisional, continuation or continuation-in-part application thereof or for the filing or prosecution of any application for the reissue or extension of any Letters Patent that may be granted on said invention or improvements that said Assignee may deem necessary or expedient, and for the said consideration it is further agreed by the undersigned, upon the request of said Assignee, in the event of said application or any division thereof, or Letters Patent issued thereon, or any reissue or application for the reissue thereof, becoming involved in interference, to cooperate to the best of the ability of the undersigned with said Assignee in the matters of preparing and executing the preliminary statement and giving and producing evidence in support thereof, and further to perform, upon such request, any and all affirmative acts to obtain said Letters Patent and vest all rights therein hereby conveyed in the said Assignee as fully and entirely as the same would have been held and enjoyed by the undersigned if this Assignment and sale had not been made. And for the said considerations the entire right, title and interest in said invention or improvements, including all priority rights, and the right to claim priority rights and the privileges and benefits thereof, including those under the International Convention, and all other conventions, and the right to file applications for patent in said Assignee's own name for said invention or improvements in each and every country of the world are hereby Assigned and granted by the undersigned to said Assignee. It is further agreed by the undersigned, upon the request of said Assignee, to execute any and all documents that shall be required of the undersigned to be executed in connection with any and all applications for foreign letters patent therefor, including the prosecution thereof, and to execute any and all documents necessary to invest title in said foreign applications and patents in said Assignee.

	Malbar John
State of Massachusett	MAPTHEW H. DORSON
State of Mass achusetts )  County of Middleser )	/
County of Mchillesen )	
in and for the state and county aforesaid, and acknowledged to foregoing Assignment for the purposes and uses therein expenses.	ressed 1
• •	Notary Public My Commission Expires AUG. 24, 2001
.00	WILLIAM L. MITCHELL
State of Mrss. ches. )  County of Middless. )	
County of Millissy )	
On	
	Notary Public My Commission Expires AUG. 24, 2001
	Brian J. Nowicki
State of Masin climells ) ss.	
State of Marin charts ) (County of Millian )	
On	00, Brian J. Nowicki appeared before me, a notary public hat he freely and voluntarily subscribed and executed the ressed.  Notary Public My Commission Expires AUG. 24, 2001
State of Minach with	JEFFER M. BENTLEY
County of Walkley ) ss.	
On	

**PATENT** 

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			ROBERT DAVI	S =====	
State of		)			
		) ss.			
County of		)			
On	13th	September	, 2000, Robert Davis appe	eared before me, <del>a notary public in</del>	end
for the state and	l county afores	aid, and acknowledg	ed that he freely and volu	ntarily subscribed and executed	the
foregoing Assign	nment for the pu	urposes and uses there	ein expressed.		
			Notary Public		
			JENNIFER W. 1	RUMSEY	
State of		)			
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## *ASSIGNMENT*

Serial No. 09/565,288

Filed: May 2, 2000

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\_\_, 2000, Lawrence G. Clawson appeared before me, a notary public in and for the state and county aforesaid, and acknowledged that he freely and voluntarily subscribed and executed the foregoing Assignment for the purposes and uses therein expressed.

PATENT

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	Matthew con
State of Marcachusett.	MATTHEW H. DORSON
State of Physical Section (Section 1)	/
County of Mchillisen )	
in and for the state and county aforesaid, and acknowledged the	), Matthew H. Dorson appeared before me, a notary public
in and for the state and county aforesaid, and acknowledged th	at he freely and voluntarily subscribed and executed the
foregoing Assignment for the purposes and uses therein expre	- <b>/</b> //
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a. a.M. 1 TP \	BRÍAN J. NOWICKI
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State of Minnel vetts ) ss.	
County of Milliam )	
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		ROBERT DAVIS
State of	)	
County of	) ss. )	
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		Notary Public
		Jennie W Rung
State of Ingrea	)	JEMNIFEN W. RUMSE I
County of Marcogne	) ss.	•
On Sign and for the state and country	aforesaid and acknow	, 2000, Jennifer W. Rumsey appeared before me, a notary public owledged that she freely and voluntarily subscribed and executed the
foregoing Assignment for th	e purposes and uses the	

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**RECORDED: 08/22/2001**