Form PTO-1595 (Rev. 03/01)	RECORDATION FOR		
OMB No. 0651-0027 (exp. 5/31/2002)		TS ONLY	U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office
Tab settings ⇒ ⇒ ⇒ ▼	V V	- _	
To the Honorable Commission	er of Patents and Trademarks	Please record the attached a	briginal documents or copy thereof.
		2 Name and address	or copy thereof.
Nancy M. Rey and (see attached s	heet)		of receiving party(ies)
			nologies Corporation
		Internal Address: _	
Additional name(s) of conveying party(ies) attached? 🚰 Yes 🚰 No		·
3. Nature of conveyance:		j ·	
Assignment	🖵 Merger		
Security Agreement	Change of Name	Street Address: O	ne Financial Plaza
🔄 Other		_	
Execution Doto: May 19, 2000		City: Hartford	State: <u>CT</u> Zip: 06103
Execution Date: May 12, 2000 and		Additional name(s) & add	ress(es) attached? 🛄 Yes 🖾 No
4. Application number(s) or patent	number(s):		
If this document is being filed to A. Patent Application No. (a)	gether with a new applic	ation, the execution date	e of the application is:
A. Patent Application No.(s) 09/824,419 filed April 2, 2001		B. Patent No.(s)	
,-··· - , -···	ļ		
5 Nome	Additional numbers atta	ched? 🎑 Yes 🙆 No	
Name and address of party to w concerning document should be	hom correspondence mailed: -	Total number of applic	ations and patents involved:
Name: McCormick, Paulding & Hub	er LLP	7. Total fee (37 CFR 3.4	1)\$40.00
Internal Address: <u>CityPlace II</u>		Enclosed	· · · · · · · · · · · · · · · · · · ·
	~=·		
	·······················	Authorized to be	charged to deposit account
(3309P-0115-1)	[<u> </u>	
Street Address: 185 Asylum Street		Deposit account numb	per:
			13-0235
City: <u>Hartford</u> State: <u>CT</u>	Zip: <u>_06103-3402</u>	(Attach duplicate copy of this	page if paying by deposit account)
	DO NOT USE T		
Statement and signature.			
To the best of my knowledge and i is a true copy of the original docum	Selief, the foregoing info	rmation is true and corre	ect and any attached copy
Marina F. Cunningham (Reg. 38,419)	/ VUIA	is in 1	
Name of Person Signing		Signature	_01/12/2004 Date
Total numbe	r of pages including cover she	set, attenments, and docume	56
man gool	Commissioner of Patents & Trade Washington, D.C	ired cover sheet information to: marks, Box Assignments	

Attachment to Form PTO-1595

U.S. Patent Application Serial No. 09/824,419

Continuation of:

Box 1 - Name of Conveying Parties

Box 3 - Execution Date

Robin Mihekun Miller Thomas G. Tillman Robert M. Rukus David D. Pearson Kenneth C. Dreitlein Zaffir A. Chaudhry Thomas A. Wynosky John L. Kettle Constantino V. Loffredo James R. Dunphy

May 12, 2000 May 17, 2000 May 11, 2000 May 15, 2000 May 15, 2000 May 12, 2000

;_)

1

ASSIGNMENT

THIS INSTRUMENT OF ASSIGNMENT WITNESSETH THAT:

·.)

WHEREAS, we, Nancy M. Rey, Robin M. Miller, Thomas G. Tillman, Robert M. Rukus, John L. Kettle, James R. Dunphy, Zaffir A. Chaudhry, David D. Pearson, Kenneth C. Dreitlein, Constantino V. Loffredo and Thomas A. Wynosky

residents of:

57 Blue Hills Trail, Glastonbury, CT 06033; 108 Burbank Road, Ellington, CT 06029; 64 Highland Street, West Hartford, CT 06119; 205 Vernon Avenue, Apartment 232, Vernon, CT 06066; 3 Bruce Drive, Vernon, CT 06066; 21 Hickory Drive, South Glastonbury, CT 06073; 16 Midrocks Road, Ridgefield, CT 06877; 10 Berwyn Road, West Hartford, CT 06107; 16 Ashley Court, Glastonbury, CT 06033; 169 Forest Drive, Newington, CT 06111 and 39 Fence Creek Drive, Madison, CT 06443, respectively, have invented improvements in

A VARIABLE AREA NOZZLE FOR GAS TURBINE ENGINES DRIVEN BY SHAPE MEMORY ALLOY ACTUATORS

for which we have executed on even date herewith an application for Letters Patent of the United States, and

WHEREAS	United Technologies Corporation
a corporation of the	State of Delaware
having a place of business at	1 Financial Plaza
0 1	Hartford, CT 06103
	USA

is desirous of acquiring an interest in said invention, said application and the Letters Patent to be issued therefor;

NOW, THEREFORE, to all whom it may concern, be it known that for and in consideration of the sum of ONE DOLLAR to each in hand paid and other good and valuable consideration, the receipt whereof is hereby acknowledged, we have sold, assigned and set over, and do hereby sell, assign and set over to said corporation, its successors or assigns, the entire right, title and interest to and in said invention in the United States and in all foreign countries, said United States application for Letters Patent therefor and the Letters Patent when issued; and we do hereby authorize and request the Commissioner of Patents and Trademarks to issue the Letters Patent based upon said application to said corporation as the assignees of our entire right, title and interest to and in the same, for the sole use and behoof of said corporation, its successors or assigns.

And we also hereby covenant and agree to sign all proper papers including divisional and other applications for patents and assignments thereof in the United States and application for patents and assignments in all foreign

JAN-12-2004		McCORMICK/PAULDING/HUBER		58
		2		
may in the it	idgment of the	I rightful oaths and to take a said corporation be necessar of the foregoing to be at the	ry for securing thereto full	
	IN TESTIMO	NY WHEREOF, I have hereu	nto set my hand this	
	_day of	, 2000.		•
		Nancy M. Rey		
STATE OF))ss:		
COUNTY O	ŀF)		
	On this	day of	, 2000, before	
the same pe	rson described	ally came Nancy M. Rey to m in and who executed the for ecuted the same.	e known and known to be egoing instrument, and duly	
		Notary Public		
		ivolary i done		
			[SEAL]	
			·	
	IN TESTIMO	NY WHEREOF, I have here	unto set my hand this	
	day of	, 2000.		
		Robin M. Mill	er	
STATE OF)		
	JF)ss:		
COUNTIC	91 '	,		
				Л
COUNTY ()F)	PATENT	
			REEL: 014253 FRAME: 000	4



JAN-12-2004	15:41	McCORMICK/PAULDING/H	JBER	860 527 0464	P.08/58
		• -	з.)		
		4			
	IN TESTIMO	ONY WHEREOF, I have	hereunto set my	v hand this	
	day of	,2	2000.		
		Robert M	I. Rukus		-
STATE OF)			
COUNTY C)F)ss:)			
	On this	day of		, 2000, before	
		ally came Robert M. Ru			
_		l in and who executed the cuted the same.	he foregoing inst	rument, and duly	
acknowledg	eu mai ne exe	cuteo the same:			
		Notary P	ublic		

[SEAL]

IN TESTIMONY WHEREOF, I have hereunto set my hand this

_____ day of _____, 2000.

John L. Kettle

STATE OF

COUNTY OF

))ss:)

()

5

On this ______ day of ______, 2000, before me, the subscriber, personally came John L. Kettle to me known and known to be the same person described in and who executed the foregoing instrument, and duly acknowledged that he executed the same.

Notary Public

[SEAL]

IN TESTIMONY WHEREOF, I have hereunto set my hand this

____ day of _____ 2000.

James R. Dunphy

STATE OF

COUNTY OF

On this ______ day of ______, 2000, before me, the subscriber, personally came James R. Dunphy to me known and known to be the same person described in and who executed the foregoing instrument, and duly acknowledged that he executed the same.

)ss:

Notary Public

[SEAL]

IN TESTIMONY WHEREOF, I have hereunto set my hand this

STATE OF Connecticut COUNTY OF Faiifield }ss: hdgeheld" 17 day of May ____, 2000.

On this ______ day of _______, 2000, before me, the subscriber, personally came Zaffir A. Chaudhry to me known and known to be the same person described in and who executed the foregoing instrument, and duly acknowledged that he executed the same.

NOTINE PUBLIC MY COMMERCIA SCIENCE JEL. S1. 2002 [SEAL]

IN TESTIMONY WHEREOF, I have hereunto set my hand this

_____day of ______, 2000.

David D. Pearson

STATE OF

))ss:)

COUNTY OF

JAN-12-2004	15:42	McCORMICK/PAULDING/HU	3ER	860 527 0464	P.11∕58
	()	• •	()		
		7			
	On this	day of		, 2000, before	
me, the su	bscriber, perso	onally came David D. Pea	rson to me know	n and known to	
be the sam	e person desc	ribed in and who execute	d the foregoing i	<u>listi dificiti, and</u>	
duly ackno	owledged that	he executed the same.			T
		Notary I	ublic		
				[SEAL]	
	της τεςτη	MONY WHEREOF, I hav	e hereunto set m	y hand this	
	day of		2000.		
		Kennet	h C. Dreitlein		
STATE C)F)			
COUNT)ss:)			
COUNT	I OF	, ,			
	On this	day of		, 2000, before	
me the	wheeriber net	rsonally came Kenneth C.	Dreitlein to me	known and know	n
to be the	same person	described in and who exe	cuted the forego	oing instrument, a	nd
dulv ack	nowledged th	at he executed the same.			
	_				

Notary Public

[SEAL]

JAN-12-2004	15:42	McCORMICK/PAULDING/HUBER	860 527 0464	P.12/58
	(\Box)	• • • • • • • • • • • • • • • • • • • •		
		8		
	IN TESTIM	ONY WHEREOF, I have hereunto set n	ny hand this	
	day of	, 2000.		
		Constantino V. Loffred	lo	
STATE OI))ss:		
COUNTY)		
the second to	ibscriber, perso	day of onally came Constantino V. Loffredo to erson described in and who executed the knowledged that he executed the same	he foregoing	
		Notary Public		
			[SEAL]	
	IN TESTI	MONY WHEREOF, I have hereunto se	t my hand this	
	day of	, 2000.		
		Thomas A. Wynosky	7	
STATE	OF))ss:		
COUN	ry of)		

()

9

On this ______ day of ______, 2000, before me, the subscriber, personally came Thomas A. Wynosky to me known and known to be the same person described in and who executed the foregoing instrument, and duly acknowledged that he executed the same.

Notary Public

[SEAL]

;)

1

ASSIGNMENT

THIS INSTRUMENT OF ASSIGNMENT WITNESSETH THAT:

WHEREAS, we, Nancy M. Rey, Robin M. Miller, Thomas G. Tillman, Robert M. Rukus, John L. Kettle, James R. Dunphy, Zaffir A. Chaudhry, David D. Pearson, Kenneth C. Dreitlein, Constantino V. Loffredo and Thomas A. Wynosky

residents of:

57 Blue Hills Trail, Glastonbury, CT 06033; 108 Burbank Road, Ellington, CT 06029; 64 Highland Street, West Hartford, CT 06119; 205 Vernon Avenue, Apartment 232, Vernon, CT 06066; 3 Bruce Drive, Vernon, CT 06066; 21 Hickory Drive, South Glastonbury, CT 06073; 16 Midrocks Road, Ridgefield, CT 06877; 10 Berwyn Road, West Hartford, CT 06107; 16 Ashley Court, Glastonbury, CT 06033; 169 Forest Drive, Newington, CT 06111 and 39 Fence Creek Drive, Madison, CT 06443, respectively, have invented improvements in

A VARIABLE AREA NOZZLE FOR GAS TURBINE ENGINES DRIVEN BY SHAPE MEMORY ALLOY ACTUATORS

for which we have executed on even date herewith an application for Letters Patent of the United States, and

WHEREAS a corporation of the having a place of business at	United Technologies Corporation State of Delaware 1 Financial Plaza Hartford, CT 06103 USA
--	--

is desirous of acquiring an interest in said invention, said application and the Letters Patent to be issued therefor;

NOW, THEREFORE, to all whom it may concern, be it known that for and in consideration of the sum of ONE DOLLAR to each in hand paid and other good and valuable consideration, the receipt whereof is hereby acknowledged, we have sold, assigned and set over, and do hereby sell, assign and set over to said corporation, its successors or assigns, the entire right, title and interest to and in said invention in the United States and in all foreign countries, said United States application for Letters Patent therefor and the Letters Patent when issued; and we do hereby authorize and request the Commissioner of Patents and Trademarks to issue the Letters Patent based upon said application to said corporation as the assignees of our entire right, title and interest to and in the same, for the sole use and behoof of said corporation, its successors or assigns.

And we also hereby covenant and agree to sign all proper papers including divisional and other applications for patents and assignments thereof in the United States and application for patents and assignments in all foreign)

2

countries, and to execute all rightful oaths and to take any other proper action that may in the judgment of the said corporation be necessary for securing thereto full rights to said invention, all of the foregoing to be at the expense of said corporation.

IN TESTIMONY WHEREOF, I have hereunto set my hand this

12_	day of	May_	, 2000.	
		0	Nancy M. Rey	Zeur_

STATE OF Connecticut	iss: East startyoul
COUNTY OF Hartond) 0 0

On this ______ day of ______ / 1 (Guy ______, 2000, before ______, 2000, before _______, 2000, before ______, 2000, befo On this _____ day of ____ the same person described in and who executed the foregoing instrument, and duly acknowledged that she executed the same.

Notary Public

ANA R. RIVERA NOTARY PUBLIC MY COMMISSION EXPIRES NOV. 30, 2003

[SEAL]

IN TESTIMONY WHEREOF, I have hereunto set my hand this

12th day of May	, 2000.
U	an Mphilen Miller
	Robin M. Miller Mihekun
STATE OF Connecticut	ss: Cast Hack ord
COUNTY OF Hartford) 0 0

2000, before day of me, the subscriber, personally came Robin M. Miller to me known and known to be the same person described in and who executed the foregoing instrument, and duly acknowledged that he executed the same. Notary Public NOTARY PUBLIC NY COMMISSION EXPIRES NOV. 30, 2003 [SEAL] IN TESTIMONY WHEREOF, I have hereunto set my hand this May day of _____ 2000. Thomas G. Tillman STATE OF Connecticut COUNTY OF Startzord)ss: East Hartzord

On this 13^{+-} day of 2000, before me, the subscriber, personally came Thomas G. Tillman to me known and known to be the same person described in and who executed the foregoing instrument, and duly acknowledged that he executed the same.

ANA R. RIVERA NOTARY PUBLIC [SEAL]

IN TESTIMONY WHEREOF, I have hereunto set my hand this

12_ day of _____ at M / we keep

COUNTY OF Followed Ss: East Hactzon

()

On this $\frac{2}{2}$ day of May 2000, before me, the subscriber, personally came Robert M. Rukus to me known and known to be the same person described in and who executed the foregoing instrument, and duly acknowledged that he executed the same.

Una K. Viveres

ANA R. RIVERA RY PUBLI IC 90.2003

[SEAL]

IN TESTIMONY WHEREOF, I have hereunto set my hand this

_day of ______ , 2000.

John L. Kettle

STATE OF

)ss:

COUNTY OF

JAN-12-2004 15:44 McCORMICK/PAULDING/HUBER 860 527 0464 P.18/58 5 On this ______ day of ______, 2000, before me, the subscriber, personally came John L. Kettle to me known and known to be the same person described in and who executed the foregoing instrument, and duly acknowledged that he executed the same. Notary Public [SEAL] IN TESTIMONY WHEREOF, I have hereunto set my hand this _ day of ______, 2000. James R. Dunphy STATE OF)ss: COUNTY OF _____, 2000, before On this _____ day of _____ me, the subscriber, personally came James R. Dunphy to me known and known to be the same person described in and who executed the foregoing instrument, and duly acknowledged that he executed the same. Notary Public [SEAL]

AN-12-2004	15:44	McCORMICK/PAULDING/HUBER	860 527 0464 P.19/58
	()	C, C,	
		6	
	IN TESTIN	10NY WHEREOF, I have hereunto s	set my hand this
<u>.</u>	day of	, 2000.	
		Zaffir A. Chaudhry	
STATE O))ss:)	
ho the sa	ubscriber, per me person des	day of sonally came Zaffir A. Chaudhry to scribed in and who executed the fore at he executed the same.	THE MIOWIT and Ideo
		Notary Public	
			[SEAL]

IN TESTIMONY WHEREOF, I have hereunto set my hand this <u>IR</u> <u>day of May</u> 2000. <u>Pawid Rear set</u> David D. Pearson STATE OF Connecticut COUNTY OF Harford Ss: Cast Harford

а **)**

2

7

On this $\frac{1}{2}$ day of $\frac{1}{2}$ ___, 2000, before me, the subscriber, personally came David D. Pearson to me known and known to be the same person described in and who executed the foregoing instrument, and duly acknowledged that he executed the same.

Una R. Rica Notary Public

)

[SEAL]

IN TESTIMONY WHEREOF, I have hereunto set my hand this

12th di	ay of May	, 2000.	
		Kenneth C. Drei	Wellen
STATE OF COUNTY OF	Connecticut Hartzord))ss: East }	Hartzord
me, the subscri to be the same	on this <u>}</u> day ber, personally came K person described in an edged that he executed	Cenneth C. Dreitleif Id who executed th	to me known and known e foregoing instrument, and

a R Kines

Notary Public

ARA R. RIVERA [SEAL] NOTARY PUBLIC MY COMMISSION EXPIRES NOV. 30, 2003

JAN-12-2004	15:44	McCORMICK/PAULDING/HUBER	860 527 0464 P.21⁄58
	÷)	()	
		8	
	IN TESTIM	IONY WHEREOF, I have hereunto	set my hand this
	day of	, 2000.	
		Constantino V. Lof	fredo
STATE OF))ss:)	
known to l	bscriber, perso be the same pe	day of onally came Constantino V. Loffred erson described in and who execute knowledged that he executed the sa	o to me known and d the foregoing
		Notary Public	
			[SEAL]
	IN TESTIN	MONY WHEREOF, I have hereunto	set my hand this
	day of	, 2000.	
		Thomas A. Wynos	sky
STATE O	F))ss:	
COUNTY	OF	5	

On this ______ day of ______, 2000, before me, the subscriber, personally came Thomas A. Wynosky to me known and known to be the same person described in and who executed the foregoing instrument, and duly acknowledged that he executed the same.

Notary Public

:)

[SEAL]

<u>ASSIGNMENT</u>

THIS INSTRUMENT OF ASSIGNMENT WITNESSETH THAT:

WHEREAS, we, Nancy M. Rey, Robin M. Miller, Thomas G. Tillman, Robert M. Rukus, John L. Kettle, James R. Dunphy, Zaffir A. Chaudhry, David D. Pearson, Kenneth C. Dreitlein, Constantino V. Loffredo and Thomas A. Wynosky

residents of:

57 Blue Hills Trail, Glastonbury, CT 06033; 108 Burbank Road, Ellington, CT 06029; 64 Highland Street, West Hartford, CT 06119; 205 Vernon Avenue, Apartment 232, Vernon, CT 06066; 3 Bruce Drive, Vernon, CT 06066; 21 Hickory Drive, South Glastonbury, CT 06073; 16 Midrocks Road, Ridgefield, CT 06877; 10 Berwyn Road, West Hartford, CT 06107; 16 Ashley Court, Glastonbury, CT 06033; 169 Forest Drive, Newington, CT 06111 and 39 Fence Creek Drive, Madison, CT 06443, respectively, have invented improvements in

A VARIABLE AREA NOZZLE FOR GAS TURBINE ENGINES DRIVEN BY SHAPE MEMORY ALLOY ACTUATORS

for which we have executed on even date herewith an application for Letters Patent of the United States, and

WHEREAS	United Technologies Corporation
a corporation of the	State of Delaware
having a place of business at	1 Financial Plaza
	Hartford, CT 06103
	USA

is desirous of acquiring an interest in said invention, said application and the Letters Patent to be issued therefor;

NOW, THEREFORE, to all whom it may concern, be it known that for and in consideration of the sum of ONE DOLLAR to each in hand paid and other good and valuable consideration, the receipt whereof is hereby acknowledged, we have sold, assigned and set over, and do hereby sell, assign and set over to said corporation, its successors or assigns, the entire right, title and interest to and in said invention in the United States and in all foreign countries, said United States application for Letters Patent therefor and the Letters Patent when issued; and we do hereby authorize and request the Commissioner of Patents and Trademarks to issue the Letters Patent based upon said application to said corporation as the assignees of our entire right, title and interest to and in the same, for the sole use and behoof of said corporation, its successors or assigns.

And we also hereby covenant and agree to sign all proper papers including divisional and other applications for patents and assignments thereof in the United States and application for patents and assignments in all foreign

JAN-12-2004	15:45	McCORMICK/PAULDING/HUBER	860 527 0464 P.24/58
	Ć,	(\cdot)	
		2	
mov in the	judament of th	all rightful oaths and to take any oth he said corporation be necessary for Ill of the foregoing to be at the exper	securing thereto full
	IN TESTIM	ONY WHEREOF, I have hereunto se	et my hand this
	day of		
		Nancy M. Rey	
STATE OF))ss:	
COUNTY	OF)	
	On this	day of	, 2000, before
acknowled	ged that she e	ed in and who executed the foregoin executed the same. Notary Public	
			[SEAL]
		IONY WHEREOF, I have hereunto s	set my hand this
	day of		
		Robin M. Miller	
STATE O	5)	
COUNTY	OF)ss:)	



JAN-12-2004	15:45	McCORMICK/PAULDING/HUBER	860 527 0464 P.26⁄58
	\bigcirc		
		4	
	IN TESTIM	ONY WHEREOF, I have hereunto set n	ny hand this
	day of	, 2000.	
			······
		Robert M. Rukus	
STATE OF))ss:	
COUNTY	J F)	
	On this	day of	, 2000, before
the same p	erson describe	onally came Robert M. Rukus to me kno ed in and who executed the foregoing ir recuted the same.	strument, and duly
		Notary Public	· · · · · · · ·
			[SEAL]
· .	IN TESTIM	IONY WHEREOF, I have hereunto set r	ny hand this
	day of	, 2000.	
		John L. Kettle	
STATE OF	3)	
COUNTY)ss:)	

AN-12-2004	15:45	McCORMICK/PAULDING/HUBER	860 527 0464	P.27/58
	(⁻)		(
		5		
		day of		
			ne known and known to be the	
-		n and who executed the foreg	oing instrument, and duly	
acknowled	geo mai ne ez	ecuted the same.		
		Notary Public	c	
			[SEAL]	
	IN TESTIM	IONY WHEREOF, I have here	eunto set my hand this	
	day of	, 2000.		
		James R. Dun	iphy	
STATE OF)		
COUNTY)F)ss:)		
ÇÜÜNIIN	51	/		
	On this	day of	, 2000, before	
me, the sub	scriber, perso	onally came James R. Dunphy	to me known and known to be	
			regoing instrument, and duly	
acknowled	ged that he ex	ecuted the same.	: · ·	
		Notary Publi	c	
		- -		
			ICCAT 1	

[SEAL]

JAN-12-2004	15:45	McCORMICK/PAULDING/HUBER	860 527 0464 P.28/58
	\bigcirc	· · · · · · · · · · · · · · · · · · ·	
		6	
	IN TESTIM	ONY WHEREOF, I have hereunto se	t my hand this
	day of		
		Zaffir A. Chaudhry	······································
		<u>`</u>	
STATE OF). DF))ss:)	
	On this	day of	, 2000, before
be the same	e person descr	nally came Zaffir A. Chaudhry to me ibed in and who executed the forego he executed the same.	
		Notary Public	<u> </u>
			[SEAL]
	IN TESTIM	ONY WHEREOF, I have hereunto se	t my hand this
	day of	, 2000.	
		David D. Pearson	
STATE OF)	
COUNTY	OF)ss:)	

On this ______ day of ______, 2000, before me, the subscriber, personally came David D. Pearson to me known and known to be the same person described in and who executed the foregoing instrument, and duly acknowledged that he executed the same.

Notary Public

[SEAL]

IN TESTIMONY WHEREOF, I have hereunto set my hand this

_____ day of _____, 2000.

Kenneth C. Dreitlein

STATE OF

COUNTY OF

On this ______ day of ______, 2000, before me, the subscriber, personally came Kenneth C. Dreitlein to me known and known to be the same person described in and who executed the foregoing instrument, and duly acknowledged that he executed the same.

)ss:

Notary Public

[SEAL]

JAN-12-2004 1	5:46	McCORMICK/PAULDING/HUBE	R	860 527 0464	P.30∕58
	()	· ·	;)		
		8			
	IN TESTIMO	ONY WHEREOF, I have h	ereunto set my h	and this	
	day of		90.		
		Constantin	o V. Loffredo		
STATE OF))ss:			
COUNTY OF	ſ)			
me, the subsc known to be t	riber, persor the same per	day of hally came Constantino V. son described in and who nowledged that he execute	Loffredo to me l executed the for	known and	
		Notary Pu	blic		
				[SEAL]	

IN TESTIMONY WHEREOF, I have hereunto set my hand this

i/_ day ofMay	2000 A. Mynesky Thomas A. Wynosky
STATE OF WNEETICUT)ss: MADISON
COUNTY OF NEW HAVEN	
	*,

.

×.

On this ______ day of _______ 2000, before me, the subscriber, personally came Thomas A. Wynosky to me known and known to be the same person described in and who executed the foregoing instrument, and duly acknowledged that he executed the same. ______

unsi

Notary Public PHEBE W. MONSER NOTARY PUBLIC MY COMPRESSION EXPIRES MAY 31, 2001 [SEAL]

<u>ASSIGNMENT</u>

THIS INSTRUMENT OF ASSIGNMENT WITNESSETH THAT:

WHEREAS, we, Nancy M. Rey, Robin M. Miller, Thomas G. Tillman, Robert M. Rukus, John L. Kettle, James R. Dunphy, Zaffir A. Chaudhry, David D. Pearson, Kenneth C. Dreitlein, Constantino V. Loffredo and Thomas A. Wynosky

residents of:

57 Blue Hills Trail, Glastonbury, CT 06033; 108 Burbank Road, Ellington, CT 06029; 64 Highland Street, West Hartford, CT 06119; 205 Vernon Avenue, Apartment 232, Vernon, CT 06066; 3 Bruce Drive, Vernon, CT 06066; 21 Hickory Drive, South Glastonbury, CT 06073; 16 Midrocks Road, Ridgefield, CT 06877; 10 Berwyn Road, West Hartford, CT 06107; 16 Ashley Court, Glastonbury, CT 06033; 169 Forest Drive, Newington, CT 06111 and 39 Fence Creek Drive, Madison, CT 06443, respectively, have invented improvements in

A VARIABLE AREA NOZZLE FOR GAS TURBINE ENGINES DRIVEN BY SHAPE MEMORY ALLOY ACTUATORS

for which we have executed on even date herewith an application for Letters Patent of the United States, and

WHEREAS	United Technologies Corporation
a corporation of the	State of Delaware
having a place of business at	1 Financial Plaza
	Hartford, CT 06103
	USA

is desirous of acquiring an interest in said invention, said application and the Letters Patent to be issued therefor;

NOW, THEREFORE, to all whom it may concern, be it known that for and in consideration of the sum of ONE DOLLAR to each in hand paid and other good and valuable consideration, the receipt whereof is hereby acknowledged, we have sold, assigned and set over, and do hereby sell, assign and set over to said corporation, its successors or assigns, the entire right, title and interest to and in said invention in the United States and in all foreign countries, said United States application for Letters Patent therefor and the Letters Patent when issued; and we do hereby authorize and request the Commissioner of Patents and Trademarks to issue the Letters Patent based upon said application to said corporation as the assignees of our entire right, title and interest to and in the same, for the sole use and behoof of said corporation, its successors or assigns.

And we also hereby covenant and agree to sign all proper papers including divisional and other applications for patents and assignments thereof in the United States and application for patents and assignments in all foreign

	2		
may in the it	nd to execute all rightful oat adgment of the said corpora a invention, all of the forego	tion be necessary for :	securing thereto full
	IN TESTIMONY WHERE	DF, I have hereunto se	et my hand this
- <u>.</u>	_day of	, 2000.	•
		Nancy M. Rey	
STATE OF	ÞF))ss:)	
the same pe	On this day of scriber, personally came Nar rson described in and who e red that she executed the sar	ncy M. Rey to me kno executed the foregoing	wn and known to be
			[SEAL]
	IN TESTIMONY WHERE	OF, I have hereunto se	et my hand this
	day of	, 2000.	
		Robin M. Miller	
STATE OF COUNTY C)F))ss:)	
			PATENT REEL: 014253 FRAME: 0031

860 527 0464 P.33/58

•

(),

JAN-12-2004 15:46 McCORMICK/PAULDING/HUBER

• •

 \bigcirc

JAN-12-2004	15:47	McCORMICK/PAULDING/HUBER	860 527 0464	P.34/58
	\bigcirc	· 、	÷)	
		3		
the same p	erson describ	day of onally came Robin M. Miller t ed in and who executed the fo cecuted the same.	, 2000, before o me known and known to b pregoing instrument, and dul	e y
		Notary Publi	ic	
			[SEAL]	
		IONY WHEREOF, I have her	·	
		Thomas G. T	illman	
STATE OF COUNTY))ss:)		
be the sam	bscriber, perso e person desc	day of mally came Thomas G. Tillma ribed in and who executed the he executed the same.	an to me known and known t	0
		Notary Publi		

[SEAL]

JAN-12-2004	15:47	McCORMICK/PAULDING/HUBER	860 527 0464	P.35∕58
	(• • • • • • • • • • • • • • • • • • • •		
		4		
	IN TESTIM	ONY WHEREOF, I have hereunto s	et my hand this	
	day of	, 2000.		
		Robert M. Rukus		
STATE OF))ss:		
COUNTY	OF	>		

On this ______ day of ______, 2000, before me, the subscriber, personally came Robert M. Rukus to me known and known to be the same person described in and who executed the foregoing instrument, and duly acknowledged that he executed the same.

Notary Public

[SEAL]

IN TESTIMONY WHEREOF, I have hereunto set my hand this

<u>157</u> #	day of <u>MAY</u>	2000.	Kettle
STATE OF	Commilient	3ss: Vernon	
COUNTY OF	Dollard)ss: Vernon	

()

(1)

•

	5		
On this $/5$	day of	May	, 2000, before
me, the subscriber, personally c	ame John L.	Kettle to me known a	and known to be the
same person described in and w	ho executed	d the foregoing instru	ment, and duly
acknowledged that he executed	the same.		
		0 · V	1
	NL	Bernice K.	Defon
	INC		
	N	BERNICS K. DIXON NOTABY PUBLIC IN MANASSION EXPIRES AUG. \$1, 3002	[SEAL]
IN TESTIMONY		I have hereunto set m 2000.	ny hand this
	Ja	mes R. Dunphy	
STATE OF)		
COUNTY OF)s:)	5:	
On this	day of		, 2000, before
me, the subscriber, personally of the same person described in a acknowledged that he executed	came James nd who exe	R. Dunphy to me kno	own and known to be
	N	otary Public	

[SEAL]

IN TESTIMONY WHEREOF, I have hereunto set my hand this

_____ day of ______ 2000.

Zaffir A. Chaudhry

}

STATE OF

COUNTY OF

On this ______ day of ______ 2000, before me, the subscriber, personally came Zaffir A. Chaudhry to me known and known to be the same person described in and who executed the foregoing instrument, and duly acknowledged that he executed the same.

)ss:

Notary Public

[SEAL]

IN TESTIMONY WHEREOF, I have hereunto set my hand this

_____ day of ______, 2000.

David D. Pearson

STATE OF

COUNTY OF

))ss:)

)

7

On this ______ day of ______, 2000, before me, the subscriber, personally came David D. Pearson to me known and known to be the same person described in and who executed the foregoing instrument, and duly acknowledged that he executed the same.

Notary Public

[SEAL]

IN TESTIMONY WHEREOF, I have hereunto set my hand this

__ day of ______, 2000.

Kenneth C. Dreitlein

STATE OF

COUNTY OF

On this ______ day of ______, 2000, before me, the subscriber, personally came Kenneth C. Dreitlein to me known and known to be the same person described in and who executed the foregoing instrument, and duly acknowledged that he executed the same.

)ss:

Notary Public

[SEAL]
AN-12-2004	15:47	McCORMICK/PAULDING/HUBER	860 527 0464	P.39⁄58
	$\langle \cdot \rangle$	$() \qquad \cdot \qquad \cdot \qquad \cdot \qquad \cdot \qquad \cdot \qquad \cdot \qquad \cdot \qquad \cdot \qquad \cdot \qquad$		
		8		
	IN TESTI	MONY WHEREOF, I have hereunto s	et my hand this	
	day of			
		Constantino V. Lof	fredo	
STATE O))ss:)		
me, the s	On this _ ubscriber, pe	day of rsonally came Constantino V. Loffred person described in and who execute acknowledged that he executed the sa	ed the foregoing	
		Notary Public		
			[SEAL]	
		TIMONY WHEREOF, I have hereunt	o set my hand this	
		Thomas A. Wynd	osky	

))ss:)

.

STATE OF

COUNTY OF

PATENT REEL: 014253 FRAME: 0037

.

(

9

On this ______ day of ______, 2000, before me, the subscriber, personally came Thomas A. Wynosky to me known and known to be the same person described in and who executed the foregoing instrument, and duly acknowledged that he executed the same.

Notary Public

٩.

[SEAL]

1

<u>ASSIGNMENT</u>

THIS INSTRUMENT OF ASSIGNMENT WITNESSETH THAT:

.)

WHEREAS, we, Nancy M. Rey, Robin M. Miller, Thomas G. Tillman, Robert M. Rukus, John L. Kettle, James R. Dunphy, Zaffir A. Chaudhry, David D. Pearson, Kenneth C. Dreitlein, Constantino V. Loffredo and Thomas A. Wynosky

residents of:

57 Blue Hills Trail, Glastonbury, CT 06033; 108 Burbank Road, Ellington, CT 06029; 64 Highland Street, West Hartford, CT 06119; 205 Vernon Avenue, Apartment 232, Vernon, CT 06066; 3 Bruce Drive, Vernon, CT 06066; 21 Hickory Drive, South Glastonbury, CT 06073; 16 Midrocks Road, Ridgefield, CT 06877; 10 Berwyn Road, West Hartford, CT 06107; 16 Ashley Court, Glastonbury, CT 06033; 169 Forest Drive, Newington, CT 06111 and 39 Fence Creek Drive, Madison, CT 06443, respectively, have invented improvements in

A VARIABLE AREA NOZZLE FOR GAS TURBINE ENGINES DRIVEN BY SHAPE MEMORY ALLOY ACTUATORS

for which we have executed on even date herewith an application for Letters Patent of the United States, and

WHEREAS a corporation of the having a place of business at	United Technologies Corporation State of Delaware 1 Financial Plaza Hartford, CT 06103
	USA

is desirous of acquiring an interest in said invention, said application and the Letters Patent to be issued therefor;

NOW, THEREFORE, to all whom it may concern, be it known that for and in consideration of the sum of ONE DOLLAR to each in hand paid and other good and valuable consideration, the receipt whereof is hereby acknowledged, we have sold, assigned and set over, and do hereby sell, assign and set over to said corporation, its successors or assigns, the entire right, title and interest to and in said invention in the United States and in all foreign countries, said United States application for Letters Patent therefor and the Letters Patent when issued; and we do hereby authorize and request the Commissioner of Patents and Trademarks to issue the Letters Patent based upon said application to said corporation as the assignees of our entire right, title and interest to and in the same, for the sole use and behoof of said corporation, its successors or assigns.

And we also hereby covenant and agree to sign all proper papers including divisional and other applications for patents and assignments thereof in the United States and application for patents and assignments in all foreign

	\bigcirc	,		()	
		2			
1 11 1 1 1	. J amb of the c	nid corporat	tion be necessa	arv for secu	roper action that ring thereto full said corporation.
	IN TESTIMON	IY WHEREC)F, I have here	unto set my	hand this
	_day of		, 2000.		
			Nancy M. Rey	57	
			Nancy M. Rej	,	
STATE OF))ss:		
COUNTY C)F))		
	On this	day o	of		, 2000, before
the same pe	scriber, personal	lly came Nar in and who e	ncy M. Rey to executed the fo	me known a	ind known to be trument, and duly
			Notary Publi	c	
					[SEAL]
	IN TESTIMO	NY WHERE	OF, I have her	eunto set m	y hand this
	day of	<u>.</u>	, 2000		
			Robin M. M	iller	
STATE OF)		
COUNTY	OF)ss:)		
				REE	PATENT L: 014253 FRAME: 0040

860 527 0464 P.42/58

٠

JAN-12-2004 15:48 McCORMICK/PAULDING/HUBER

JAN-12-2004	15:48	McCORMICK/PAULDIN			860 527 0464	P.43/58
	\bigcirc	• •				
		3				
		day of mally came Robin M ed in and who execu secuted the same.	I. Miller to the fore	me known a egoing instru	, 2000, before nd known to be iment, and duly	
		No	tary Public	-		
					[SEAL]	
		MONY WHEREOF,		unto set my	hand this	
		TI	nomas G. Ti	illman	_	
STATE	OF))s	s:			
COUNT	TY OF)				
be the s	subscriber, per ame person de	day of rsonally came Thom scribed in and who nat he executed the s	as G. Tuim executed th	an to me kiu	JWII and KIGO	to
		ī	Notary Pub	lic		-

[SEAL]

.

()

4

IN TESTIMONY WHEREOF, I have hereunto set my hand this

)

:

day of	, 2000.	
	Robert M. Rukus	
STATE OF COUNTY OF))ss:)	
	day of	, 2000, before he known and known to be

me, the subscriber, personally came Robert M. Kukus to me known and known to be the same person described in and who executed the foregoing instrument, and duly acknowledged that he executed the same.

Notary Public

[SEAL]

IN TESTIMONY WHEREOF, I have hereunto set my hand this

_____day of _______ 2000.

John L. Kettle

STATE OF

))ss:

COUNTY OF

On this ______ day of ______, 2000, before me, the subscriber, personally came John L. Kettle to me known and known to be the same person described in and who executed the foregoing instrument, and duly acknowledged that he executed the same.

Notary Public

[SEAL]

P.45/58

IN TESTIMONY WHEREOF, I have hereunto set my hand this ______day of ______, 2000. James R. Dunphy STATE OF _______ COUNTY OF ________)ss: On this ______day of ______, 2000, before

me, the subscriber, personally came James R. Dunphy to me known and known to be the same person described in and who executed the foregoing instrument, and duly acknowledged that he executed the same.

Notary Public

[SEAL]

6

IN TESTIMONY WHEREOF, I have hereunto set my hand this

____ day of _____, 2000.

()

Zaffir A. Chaudhry

STATE OF

COUNTY OF

On this ______ day of ______, 2000, before me, the subscriber, personally came Zaffir A. Chaudhry to me known and known to be the same person described in and who executed the foregoing instrument, and duly acknowledged that he executed the same.

)ss:

Notary Public

[SEAL]

IN TESTIMONY WHEREOF, I have hereunto set my hand this

_____ day of ______ 2000.

David D. Pearson

STATE OF

))ss:)

)

7

On this ______ day of ______, 2000, before me, the subscriber, personally came David D. Pearson to me known and known to be the same person described in and who executed the foregoing instrument, and duly acknowledged that he executed the same.

Notary Public

)

[SEAL]

IN TESTIMONY WHEREOF, I have hereunto set my hand this

_____ day of ______, 2000.

Kenneth C. Dreitlein

STATE OF

COUNTY OF

On this ______ day of ______, 2000, before me, the subscriber, personally came Kenneth C. Dreitlein to me known and known to be the same person described in and who executed the foregoing instrument, and duly acknowledged that he executed the same.

)ss:

Notary Public

[SEAL]

i)

8

IN TESTIMONY WHEREOF, I have hereunto set my hand this

····)

15th day of MAY	, 2000.	
	Constantino V. Joffres Constantino V. Loffredo	<u>lr</u>
STATE OF CT COUNTY OF Houtford))ss:)	
On this <u>15</u> day of me, the subscriber, personally came Co- known to be the same person described instrument, and duly acknowledged the ANN-MARIE FORS-KATZER NOTARY. PUBLIC MY COMMISSION EXPIRES JAN. 31, 2004	nstantino V. Loffredo to me 1 in and who executed the f	_ 2000, before known and pregoing / / / / / / / / / / / / / / / / / / /

IN TESTIMONY WHEREOF, I have hereunto set my hand this

_____day of ______, 2000.

Thomas A. Wynosky

STATE OF

))ss:)

COUNTY OF

()

9

On this ______ day of ______, 2000, before me, the subscriber, personally came Thomas A. Wynosky to me known and known to be the same person described in and who executed the foregoing instrument, and duly acknowledged that he executed the same.

Notary Public

)

ì

[SEAL]

()

1

<u>ASSIGNMENT</u>

THIS INSTRUMENT OF ASSIGNMENT WITNESSETH THAT:

WHEREAS, we, Nancy M. Rey, Robin M. Miller, Thomas G. Tillman, Robert M. Rukus, John L. Kettle, James R. Dunphy, Zaffir A. Chaudhry, David D. Pearson, Kenneth C. Dreitlein, Constantino V. Loffredo and Thomas A. Wynosky

residents of:

57 Blue Hills Trail, Glastonbury, CT 06033; 108 Burbank Road, Ellington, CT 06029; 64 Highland Street, West Hartford, CT 06119; 205 Vernon Avenue, Apartment 232, Vernon, CT 06066; 3 Bruce Drive, Vernon, CT 06066; 21 Hickory Drive, South Glastonbury, CT 06073; 16 Midrocks Road, Ridgefield, CT 06877; 10 Berwyn Road, West Hartford, CT 06107; 16 Ashley Court, Glastonbury, CT 06033; 169 Forest Drive, Newington, CT 06111 and 39 Fence Creek Drive, Madison, CT 06443, respectively, have invented improvements in

A VARIABLE AREA NOZZLE FOR GAS TURBINE ENGINES DRIVEN BY SHAPE MEMORY ALLOY ACTUATORS

for which we have executed on even date herewith an application for Letters Patent of the United States, and

WHEREAS a corporation of the having a place of business at	United Technologies Corporation State of Delaware 1 Financial Plaza Hartford, CT 06103 USA
--	--

is desirous of acquiring an interest in said invention, said application and the Letters Patent to be issued therefor;

NOW, THEREFORE, to all whom it may concern, be it known that for and in consideration of the sum of ONE DOLLAR to each in hand paid and other good and valuable consideration, the receipt whereof is hereby acknowledged, we have sold, assigned and set over, and do hereby sell, assign and set over to said corporation, its successors or assigns, the entire right, title and interest to and in said invention in the United States and in all foreign countries, said United States application for Letters Patent therefor and the Letters Patent when issued; and we do hereby authorize and request the Commissioner of Patents and Trademarks to issue the Letters Patent based upon said application to said corporation as the assignees of our entire right, title and interest to and in the same, for the sole use and behoof of said corporation, its successors or assigns.

And we also hereby covenant and agree to sign all proper papers including divisional and other applications for patents and assignments thereof in the United States and application for patents and assignments in all foreign 2

countries, and to execute all rightful oaths and to take any other proper action that may in the judgment of the said corporation be necessary for securing thereto full rights to said invention, all of the foregoing to be at the expense of said corporation.

IN TESTIMONY WHEREOF, I have hereunto set my hand this

day of	, 2000.	
	Nancy M. Rey	· · · · · · · · · · · · · · · · · · ·
STATE OF COUNTY OF))ss:)	
	day of ally came Nancy M. Rey to me l in and who executed the foreg ecuted the same.	known and known to be
	Notary Public	[SEAL]

IN TESTIMONY WHEREOF, I have hereunto set my hand this

. **)**ss:

_____day of _______ 2000.

Robin M. Miller

STATE OF

JAN-12-2004	15:50	McCORMICK/PAULI	DING/HUBER		860 527 0464	P.52/58
	()			÷)		
		3				
					0000 1- 6- 40	
	On this	day of mally came Robin ed in and who ex	M Miller to	o me known a	_ 2000, before and known to be	
	<u>307601 083010</u>	nally came Robi ed in and who ex recuted the same		regoing instr	ument, and duly	y
			Notary Publi	c		
					[SEAL]	
		MONY WHEREC			hand this	
			Thomas G.	Tillman		
STATE	OF))ss:			
COUNT	TY OF)			
be the s	subscriber, per ame person de	day o rsonally came Th scribed in and w nat he executed th	omas G. Tillr ho executed (nan to me kn	own and known	to
			Notary Pul	blic		-
					[SEAL]	

AN-12-2004	15:50	McCORMICK/PAULDING/HU	JBER	860 527 0464	P.53⁄58
	No. 1	4			
	IN TESTIN	IONY WHEREOF, I hav	ve hereunto set n	ny hand this	
	day of		, 2000.		
		Robert	M. Rukus	_ _	
STATE O)F))ss:			
COUNT	Y OF)			
the same	subscriber, per person descr	day of sonally came Robert M. ibed in and who execute executed the same.	d the foregoing		be ly
		Nota	ry Public		
				[SEAL]	
	IN TES	TIMONY WHEREOF, I I	nave hereunto se	t my hand this	
	day of		, 2000.		·
		Johr	n L. Kettle		
STATI	E OF))ss:)			

COUNTY OF

•

;)

5

On this ______ day of ______, 2000, before me, the subscriber, personally came John L. Kettle to me known and known to be the same person described in and who executed the foregoing instrument, and duly acknowledged that he executed the same.

Notary Public

į -)

[SEAL]

IN TESTIMONY WHEREOF, I have hereunto set my hand this

1 <u>2</u> day of	MAY		2000.	
· · ·		Jamés I	R. Dunphy	-
STATE OF))ss:		
COUNTY OF)		
On this me, the subscriber, per the same person descri acknowledged that he	ibed in and who	omes R. D o executed	unphy to me know	, 2000, before wn and known to be strument, and duly
		SUSA	Y Public AN P. O'NEIL ARY PUBLIC HON EXPIRES JUNE 30, 2001	Seil

AN-12-2004		McCORMICK/PAULDING/HUBER		860 527 0464	P.55∕58
	()		÷)		
		6			
	IN TESTIN	MONY WHEREOF, I have he	reunto set :	my hand this	
	day of	, 200	0.		
		Zaffir A. Cl	haudhry		
STATE C)F))ss:			
COUNT	Y OF)			
	On this _	day of sonally came Zaffir A. Chau	dhry to me	, 2000, before known and known	to
ma the	aubscriber, per	sonally came Lann A. Chuu			

me, the subscriber, personally came Zaffir A. Chaudhry to me known and known to be the same person described in and who executed the foregoing instrument, and duly acknowledged that he executed the same.

Notary Public

[SEAL]

IN TESTIMONY WHEREOF, I have hereunto set my hand this

_____day of ______, 2000.

David D. Pearson

STATE OF

COUNTY OF

))ss:)

'AN-12-2004	15:50	McCORMICK/PAULDING/HUBER	(`)	860 527 0464	P.56/58
he the sat	ubscriber, pers me person des	7 day of onally came David D. Pearso cribed in and who executed th it he executed the same.	n to me ku	OWIT differ into	
Notary Public					
				[SEAL]	
	IN TEST	IMONY WHEREOF, I have h	ereunto se	t my hand this	

_____ day of ______ 2000.

Kenneth C. Dreitlein

STATE OF

COUNTY OF

On this ______ day of ______, 2000, before me, the subscriber, personally came Kenneth C. Dreitlein to me known and known to be the same person described in and who executed the foregoing instrument, and duly acknowledged that he executed the same.

))ss:)

Notary Public

[SEAL]

()

8

IN TESTIMONY WHEREOF, I have hereunto set my hand this

_____day of ________ 2000.

Constantino V. Loffredo

,)

STATE OF

COUNTY OF

On this ______ day of ______, 2000, before me, the subscriber, personally came Constantino V. Loffredo to me known and known to be the same person described in and who executed the foregoing instrument, and duly acknowledged that he executed the same.

)ss:

Notary Public

[SEAL]

IN TESTIMONY WHEREOF, I have hereunto set my hand this

_____ day of ______, 2000.

Thomas A. Wynosky

STATE OF

COUNTY OF

PATENT REEL: 014253 FRAME: 0055

))ss:) ()

9

On this ______ day of ______ 2000, before me, the subscriber, personally came Thomas A. Wynosky to me known and known to be the same person described in and who executed the foregoing instrument, and duly acknowledged that he executed the same.

Notary Public

)

[SEAL]