FORM PTO-16 Expires 06/30/99 OMB 0651-0027	·			U.S. Department of Commerce Patent and Trademark Office PATENT
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TO: The Commis	sioner of Patents and Trademark	s: Please record the a Conveyance Typ		ent(s) or copy(ies).
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Conveying Pa	erty(ies)		names of conveying parties	= = = = = = = = = = = = = = = = = = = =
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Name (line 2)	1 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	**************************************		Execution Date
Second Party Name (line 1)	Ellwanger, Richard E.			Month Day Year  05061999
Name (line 2)				
Receiving Par	rty	M	ark if additional names of re	• •
Name (line 1)	Asten, Inc.			If document to be recorded is an assignment and the
Name (line 2)				receiving party is not domiciled in the United States, an appointment
Address (line 1)	4399 Corporate Road			of a domestic representative is attached (Designation must be a
Address (line 2)	P.O. Box 118001			separate document from Assignment.)
Address (line 3)	Charleston	SC State/Country	29423- Zip Co	
Domestic Rep	presentative Name and Ad	ddress Enter fo	or the first Receiving Party	only.
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## Page 2

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OMB 0651-0027	PAIENI
Correspondent Name and Address  Area Code and Telephone Number	(215) 568-6400
Name Anthony S. Volpe, Esquire	
Address (line 1) VOLPE and KOENIG, P.C.	
Address (line 2) 400 One Penn Center	
Address (line 3) 1617 John F. Kennedy Blvd.	
Address (line 4) Philadelphia, PA 19103	
Pages Enter the total number of pages of the attached conveyance document including any attachments.	# 12
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Patent Application Number(s) Patent N	
09/307,078	
If this document is being filed together with a <u>new</u> Patent Application, enter the date the patent application v signed by the first named executing inventor.	was <u>Month Day Year</u>
Patent Cooperation Treaty (PCT)	
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only if a U.S. Application Number PCT PCT PCT PCT PCT	PCT
Number of Properties	
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Fee Amount for Properties Listed (37 CFR 3.41): \$	\$40.00
Method of Payment: Enclosed 🗶 Deposit Account 🗌 🔾	Our Order # <u>1191</u>
Deposit Account (Enter for payment by deposit account or if additional fees can be charged to the account.)	
Deposit Account Number: #	22-0493
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Statement and Signature	
To the best of my knowledge and belief, the foregoing information is true and	correct and anv
attached copy is a true copy of the original document. Charges to deposit ac	
indicated herein.	1 -
Anthony S. Volpe, Esquire	Jacky 30 1999
Name of Person Signing Signature	Date
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## RECORDATION FORM COVER SHEET CONTINUATION PATENTS ONLY

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Enter additional C	•	walk ii additio	rai names of conveying p	arties attached	Execution Date Month Day Year
Name (line 1)	Mikhael, Michael G.				05061999
Name (line 2)					Execution Date Month Day Year
Name (line 1)	Decker, Wolfgang				05061999
Name (line 2)					Execution Date Month Day Year
Name (line 1)	Johnson, C. Barry				05061999
Name (line 2)					
Receiving Par	ty(ies)		lark if additional names o	f receiving partic	es attached
_	eceiving Party(ies)	·		g parin	
Name (line 1)					If document to be recorded is an assignment and the receiving party is not
Name (line 2)					domiciled in the United States, an appointment
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Address (line 2)					Assignment.)
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Name (line 1)					If document to be recorded is an assignment and the
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Address (line 1)					domestic representative is attached. (Designation must be a separate document from
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Address (line 3)	City		State/Country	Zip C	ode
	umber(s) or Patent Nu		Mark if additional nu		
	Patent Application Number or ti		OO NOT ENTER BOTH nu		· · ·
Pa	tent Application Number(	s)		Patent Numb	per(s)

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## RECORDATION FORM COVER SHEET CONTINUATION PATENTS ONLY

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Conveying Pa	rty(ies) Mark if additional names of conveying parties attached	
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	Shipley, Gale	05061999
Name (line 2)		
realite (inte 2)		Execution Date Month Day Year
Name (line 1)	D'Brien, Timothy D.	05061999
Name (line 2)		Execution Date
Name (line 1)		Month Day Year
Name (line 2)		
Receiving Par	ty(ies) Mark if additional names of receiving partie	s attached
Enter additional R	eceiving Party(ies)	_
Name (line 1)		If document to be recorded is an assignment and the
Name (line 2)		receiving party is not domiciled in the United States, an appointment
Address (line 1)		of a domestic representative is attached. (Designation must be a separate document from
Address (line 2)		Assignment.)
Address (line 3)	City State/Country Zip Cod	e
Name (line 1)		If document to be recorded is an assignment and the receiving party is not
Name (line 2)		domiciled in the United States, an appointment of a domestic representative is
Address (line 1)		attached. (Designation must be a separate document from Assignment.)
Address (line 2)		
Address (line 3)	City State/Country Zip C	ode
Application N	umber(s) or Patent Number(s) Mark if additional numbers attached	
Enter either the	Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the sa	me property).
Pa	tent Application Number(s) Patent Numb	7,01(3)

## **ASSIGNMENT**

WHEREAS, Angelo Yializis, a citizen of the United States of America, residing at 10960 North Stallard Place, Tucson, AZ 85737; Dr. Richard E. Ellwanger, a citizen of the United States of America, residing at 1801 North Saguaro Place, Tucson, AZ 85745; Dr. Michael G. Mikhael, a citizen of Egypt, residing at 3349 North Manor Drive, Tucson, AZ 85750; Dr. Wolfgang Decker, a citizen of Germany, residing at 9563 North Crestowne Drive, Tucson, AZ 85742; C. Barry Johnson, a citizen of the United States of America, residing at 1186 Waterfront Drive, Mt. Pleasant, SC 29464; Gale Shipley, a citizen of the United States of American, residing at 9 Planters Row Drive, Mauldin, SC 29662; and Timothy D. O'Brien, a citizen of the United States of America, residing at 104 Delaney Circle, Summerville, SC 29485 (hereafter jointly and severally referred to as the undersigned), are the inventors of STRUCTURES AND COMPONENTS THEREOF HAVING A DESIRED SURFACE CHARACTERISTIC TOGETHER WITH METHODS AND APPARATUSES FOR PRODUCING THE SAME

AND, WHEREAS, Asten Inc., a Delaware corporation, having its principal place of business at 4399 Corporate Road, P.O. Box 118001, Charleston, SC 29423-8001 (hereafter referred to as the assignee), is desirous of acquiring the entire right, title and interest in said invention, all applications for and all letters patent issued on said invention.

NOW, THEREFORE, in consideration of One Dollar (\$1.00), receipt of which is acknowledged by the undersigned, and other good and valuable consideration, the undersigned, intending to be legally bound, do hereby sell, assign and transfer to the assignee and assignee's assigns, successors and legal representatives the entire right, title and interest in said invention together with all patent applications thereon, including, but not limited to, the application for United States Letters Patent as entitled above and identified by attorney docket number ADF-2.49.1 which the undersigned executed concurrently herewith, the right to claim priority under statute, regulation, treaty or the Paris Convention and in all letters patent, including all reissues or reexaminations thereof, throughout the world.

It is agreed that the undersigned shall be legally bound, upon request of the assignee, to supply all information and evidence relating to the making and practice of said invention, to testify in any legal proceeding relating thereto, to execute all instruments proper to patent the invention

Page 1 of 8

ADF-2.49.1

The undersigned warrants that the rights and property herein conveyed are free and clear of any encumbrance.

Witness my hand and Notarial seal the day and year immediately above written.

Notary Pi

My Commission Expires:

My Commission Expires June 29, 1999

The undersigned warrants that the rights and property herein conveyed are free and clear of any encumbrance.

EXECUTED under seal on this b day of May Witness: Dr. Richard E. Ellwanger County of \_ On this 6 day of May, 1999 before me personally appeared has a Clubage, to me known to be one of the persons described in and who executed the foregoing instrument, and acknowledged that Me executed the same knowingly and willingly and for the purposes therein contained. Witness my hand and Notarial seal the day and year immediately above written.

My Commission Expires:

My Commission Expires June 29, 1999

The undersigned warrants that the rights and property herein conveyed are free and clear of any encumbrance. EXECUTED under seal on this 6 day of Witness: Dr. Michael G. Mikhael County of May, 1999 before me personally appeared all Millel to me known to be one of the persons described in and who executed the foregoing instrument, and acknowledged that \_\_\_\_\_executed the same knowingly and willingly and for the purposes therein contained. Witness my hand and Notarial seal the day and year immediately above written. My Commission Expires: My Commission Expires June 29, 1999

The undersigned warrants that the rights and property herein conveyed are free and clear of any encumbrance.

EXECUTED under seal on this b day of May, 1999 at Luck on.
Witness!  Mancle of Campley (L.S.)
Dr. Wolfgang Decker
State of
County of Penca
On this 6 day of, 1999 before me personally appeared wilf gang below, to me known to be one of the persons described in and who executed the foregoing instrument, and acknowledged that executed the same knowingly and
willingly and for the purposes therein contained.

Witness my hand and Notarial seal the day and year immediately above written.

Notary Public Donka

My Commission Expires:

My Commission Expires June 29, 1999

The undersigned warrants that the rights and property herein conveyed are free and clear of any encumbrance. EXECUTED under seal on this \_\_\_\_ day of \_\_\_\_\_, 1999 at \_\_\_\_\_. Witness: C. Barry Johnson (L.S.) State of South Carolina County of \_\_\_\_\_ Colleden On this  $b^{4k}$  day of  $\underline{\mathcal{M}}$  and  $\underline{\mathcal{M}}$  and  $\underline{\mathcal{M}}$  appeared, 1999 before me personally appeared C. Barry Johnson, to me known to be one of the persons described in and who executed the foregoing instrument, and acknowledged that he executed the same knowingly and willingly and for the purposes therein contained. Witness my hand and Notarial seal the day and year immediately above written. My Commission Expires: may 26,2004

The undersigned warrants that the rights and property herein conveyed are free and clear of any encumbrance.

EXECUTED under seal on this 6 day of May, 1999 at Chaton.

Witness:

Gale Shipley

State of Ss.

County of Aavens

On this 6 day of May, 1999 before me personally appeared Hale Shipley, to me known to be one of the persons described in and who

Witness my hand and Notarial seal the day and year immediately above written.

executed the foregoing instrument, and acknowledged that the executed the same knowingly and

Notary Public

My Commission Expires:

8-18-04

willingly and for the purposes therein contained.

The undersigned warrants that the rights and property herein conveyed are free and clear of any encumbrance.

EXECUTED under seal on this 6th day of May, 1999 at Pak Mai
Witness:  Turthy DO Bru (L.S.)  Timothy D. O'Brien
State of North Carolina
County of Dorchester
On this 6th day of May, 1999 before me personally appeared
On this 6th day of May, 1999 before me personally appeared Irnothy O. O'Brien, to me known to be one of the persons described in and who
executed the foregoing instrument, and acknowledged that he executed the same knowingly and
willingly and for the purposes therein contained.
Witness my hand and Notarial seal the day and year immediately above written.
Drival Pasano 5-6-99
Notary Public
My Commission Expires My Commission Expires April 16, 2008

RECORDED: 08/02/1999