FORM PTO-1595 (Rev. 6-93,	10-16-2	001	ET U	U.S. DEPARTMENT OF COMMERCE	
ÖMB No. 0651-0011 (exp. 4/94)			_		d Trademark Office
Tab settings ⇔ ⇒ ♥ ▼ To the Honorable Commissioner of Pa		(B)E) B([] [EE]	▼ attached original	documente er	oony thoroof
Name of conveying party(ies):	1018746	95 2. Name and	address of receiving		copy mereor.
Peter Rothschild), (S)				
Lee Grodzins	OCT 0 5 2001 &	Name:	American	Science & En	gineering, Inc.
103		Internal Add	dress:		
Additional name(s) of conveying party(ies) attached?	No No				7,0
3. Nature of conveyance:					
Assignment	erger	Street Addr	ess: 829 Midd	lesex Turnpike)
Security Agreement Ch	ange of Name				7.784
Other	ango or reamo	City: Biller	ica	State: MA	ZIP: 01821
		Gity. Differ	Ica	State. TVIII	ZIP: <u>01621</u>
Execution Date: August 30, 2001		Additional name(s) & address(es) attached?	Yes	X No
4. Application number(s) or patent number(s)	:				
If this document is being filed together wi	ith a new application	, the execution o	date of the application	on is:	
A. Patent Application No.(s)		B. Pa	tent No.(s)		
09/912,229					
09/912,229					
	Additional numbers attac	l ched? ☐ Yes	X No		
	Additional numbers attac	siled?	Z No		
5. Name and address of party to whom co	0 Talal a mi				
concerning document should be mailed:	,	6. Total numb	er of applications ar	id patents invo	Ived:
Name: Samuel J. Petuchowski	7 Total fee (3	7 CED 2 41)	~ 40.00		
Internal Address: Brombeg & Sunstein LI	7. Total fee (37 CFR 3.41) \$ 40.00				
		X Enclose	ed		
, , , , , , , , , , , , , , , , , , , ,		☐ Authoriz	zed to be charged t	o deposit acco	unt

Street Address: 125 Summer Street		8. Deposit acc	ount number:		
City: Boston State: M.	A ZIP: 02110-1618	(Attach dup	licate copy of this pag	e if paying by d	eposit account)
	DO NOT (JSE THIS SPACE			······································
Statement and signature.		-			
To the best of my knowledge and belief, t	he foregoing informa	ation is true and	correct and any atta	ached copy is a	true copy of
the original document.	\mathcal{A}	lts/1	/ /.		
Samuel J. Petuchowski Name of Person Signing	-	Signature		Date	
Total numb	per of pages including cov		nts, and document:		
	cuments to be recorded with r Commissioner of Patents & Tr	ademarks, Box Assignm			
01 FC:581 40.00 OP	Washington, (Form P		n Form Cover Sheet - page	1 of 3)	

01 FC:581

(Form PTO--1595--Recordation Form Cover Sheet - page 1 of 3)

REEL: 012240 FRAME: 0523

ASSIGNMENT

ASSIGNOR: Peter Rothschild

Lee Grodzins

ASSIGNEE: American Science and Engineering, Inc.

829 Middlesex Turnpike Billerica, MA 01821 United States of America

<u>INVENTION</u>: Chopper Wheel with Two Axes of Rotation

<u>ATTY. DOCKET</u>: 1945/A23

SERIAL NO: 09/912,229

FILED: July 24, 2001

Assignor is the sole inventor (if only one inventor is listed above) or a joint inventor (if more than one inventor is listed above) of the above invention (the "Invention") described in a United States patent application (the "Application") bearing the above attorney docket number and having as a title the above name for the Invention. The Application has a Patent and Trademark Office filing date and serial number as indicated above, or if no filing date and serial number are shown, has a Declaration executed by Assignor contemporaneously with this Assignment.

For valuable consideration, receipt of which is acknowledged, each Assignor hereby assigns to Assignee (which term shall include Assignee's successors and assigns), all of Assignor's right, title and interest in the Invention, all improvements therein, the Application and all priority rights arising therefrom, and any patents, and any reissues and extensions thereof, which issue in any country upon any patent applications which correspond with any of the following: the Application, any divisional, continuation-in-whole, or substitute United States application which is based on the Application; or any continuation-in-part United States application (including divisions, continuations-in-whole or -in-part, and substitutions thereof or therefor) based in-part on any of the above described applications.

PATENT REEL: 012240 FRAME: 0524 Each Assignor further agrees that such Assignor and Assignor's heirs and legal representatives will, without further consideration, cooperate with Assignee in the prosecution of all of the above applications, execute, verify, acknowledge and deliver all such further papers, including applications for patents and for reissues and extensions therefor, and instruments of assignment and transfer thereof, and will communicate any facts known to Assignor relating to the Invention, to obtain or maintain or enforce patents for the Invention and improvements therein in any and all countries and to vest title thereto in Assignee. Each Assignor further agrees that such Assignor will, without further compensation to Assignor during the term of such Assignor's employment by Assignee and thereafter for reasonable compensation as determined by Assignee, perform such other acts as may be reasonably required when requested by Assignee, including attending depositions, preparing and executing declarations and affidavits and testifying as a witness, to obtain or maintain or enforce patents for the Invention and improvements therein in any and all countries and to vest title thereto in Assignee.

PATENT REEL: 012240 FRAME: 0525

Date:	8/30/01	Peter Rothschild, Assignor
COMMON	WEALTH OF MASSACH	USETTS)
COUNTY (OF MIDDLESEX) ss.)
Befo	ore me, a notary public in a	nd for said county and state, personally appeared Peter
Rothschild,	to me known to be the pers	son described in the foregoing instrument, who, being first
duly sworn,	acknowledged his signatur	e on the foregoing instrument in my presence and declared
the same to	be his free act and deed on	the date written above opposite his signature.
		Notary Public My Commission Expires: 9/13/07
(seal)		
Date:\$	V130101	Lee Grodzin, Assignor
COMMON	WEALTH OF MASSACH	USETTS)
) ss.
COUNTY C	OF MIDDLESEX)
Befo	ore me, a notary public in ar	nd for said county and state, personally appeared Lee
Grodzins, to	me known to be the person	n described in the foregoing instrument, who, being first
duly sworn,	acknowledged his signatur	e on the foregoing instrument in my presence and declared
the same to	be his free act and deed on	the date written above opposite his signature.
		Notary Public My Commission Expires: 9/13/07

IN WITNESS WHEREOF, each Assignor hereby executes this instrument on the date set

(seal)

01945/00001 164884.1

RECORDED: 10/05/2001

forth below.

PATENT REEL: 012240 FRAME: 0526