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	FORM COVER SHEET NTS ONLY Docket No.: 1086.2017-001
To the Director of the U.S. Patent and Trademark Office	e. Please record the attached original documents or copy thereof
1. Name of conveying party(ies)	2. Name and address of receiving party(ies)
(1) QINGSHENG ZHENG (2) MAGIEL I. HARMSE (3) KENT RASMUSSEN (4) BLAINE MCINTYRE	Name: ASPEN TECHNOLOGY, INC. Internal Address
Additional name(s) of conveying party(ies) attached? [] Yes [X] No	
3. Nature of conveyance:	Street Address. 10 CANAL PARK.
[X] Assignment [] Merger	
[] Security Agreement [] Change of Name	City. CAMBRIDGE State MA ZIP: 02141
[] Other	
Execution Date: (1) 6/24/04, (2) 7/8/04, (3) 4/26/04, (4) 3/31/04	Additional name(s) & address(cs) uttached? [] Yes [X] No
4 Application number(s) or patent number(s). A. Patent Application No.(s) 10/804,828 Additional numbers	B. Patent No.(\$) s attached? [] Yes [X] No
 Name and address of party to whom correspondence concerning document should be mailed: 	6. Total number of applications and patents involved [1]
Name: Mary Lou Wakimura, Esq.	7. Total Fee (37 C.F.R. 3 41)\$ 40.00
Internal Address	[] Enclosed
Hamilton, Brook, Smith & Reynolds, P.C.	[X] Authorized to charge any deficiencies or credit any overpayment to deposit account number 08-0380
Street Address: 530 Virginia Road, P.O. Box 9133	[X] Authorization to charge deposit account number 08-0380
City: Concord State: MA ZIP 01742-9133	Attach a copy of this page if paying by deposit account and filing via mail. Do not attach a copy of this page if paying by deposit account and filing via facsimile
DO NO	T USE THIS SPACE
8. Statement and signature. To the best of my knowledge and belief, the foregoing informat document.	ion is true and correct and any uttached copy is a true copy of the original
Troy T. Svihl, Esq.	way 20, 44
Name of Person Signing	Signature Date
Total number of pages including c	over sheet, attachments, and document: [6]

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<u>Joint</u>

ASSIGNMENT

WHEREAS, we, Qingsheng Zheng, Magiel J. Harmse, Kent Rasmussen, and Blaine McIntyre, have invented a certain improvement in Methods and Articles for Detecting, Verifying, and Repairing Collinearity in a Model or Subsets of a Model described in an application for Patent,

[]	the specification of which is being executed on even date herewith and is about to be filed in the United States Patent Office (use for utility (37 CFR § 1.53(b)) and design filings only);
[]	is about to be filed in the United States Patent Office as a Provisional Application
[X]	the specification of which is United States Application No. 10/804,828, filed March 19, 2004;
[]	the specification of which is a Patent Cooperation Treaty Application, International Application No. [], which designates the United States of America;
[]	which was patented under United States Patent No. [].

WHEREAS, Aspen Technology, Inc. (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the State of Delaware, and having a usual place of business at 10 Canal Park, Cambridge, Massachusetts 02141 desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with the entire right, title and interest in and to said application and such Letters Patent as may issue on said invention; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein;

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AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of any future applications including substitution, reissue, divisional or continuation applications, and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request each Patent Office and the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said invention to said ASSIGNEE, its successors, assigns, and legal representatives.

	Inventor	(e====		-2	-	Date	6/24104
	***		Qingsh	eng Zheng	, -	_	
	Address		1311 C	Cedar Terrace Court			
			Sugar l	Land, Texas 77479, 1	U.S. <u>A.</u>		
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		HOUSTUN	TX 7	7677			
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		- -	Magiel J. Hai	rmse			-3
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Address				<u>.</u>			
	Inventor _	_			Da	ılc	
		"	Kent Rasmus	zen .			
	Address _		1305 Anacapa	Street	-		
	_		Santa Barbara,				

Witness				 -			
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Address							
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Docket No. 1086.2017-001

	Inventor	Date
		Magiel J. Harmse
	Address	3 Walnut Drive
		Great Shelford, Cambridge, CB2 5SL, United Kingdom
Witness		
Address		
Watanaa		
Address	***************************************	
	Inventor	
		Kent Rasmussen 3012 Swede Hill Ro #201
	Address	1305 Anacapa Street
	//	Santa Barbara, California 93101, U.S.A. CLINTON WA 9823
Witness	411	(JAy (THOMAS)
Address	3/46 Report	Care
•	Curren WA	
Witness	KennetoK	Schubut (Renate & Schubert)
Address	50:2 Swed	e Lad +201
		4 98236

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Docket No. 1086.2017-001

	Inventor		
		Blaine McIntyre	
	Address	707 8th Avenue SW, Suite 800 137 WEST TERRACE CR.	nas
		707 8th Avenue SW, Suite 800 137 WEST TERRACE CR. Calgary, Alberta TZP 1115, Canada CXCHRANE, AB.	A 31 '04
Witness	Rik	Hamis CAN.	
	204	woodford Close Sw	
		a., AB T2w 6E1	
Witness Address	M.	7. RoLhul 9163 Edgebrook Dr. NN ang. AB TSA SMB.	

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