

PATENT ASSIGNMENT

Electronic Version v1.1

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
Numerical Technologies, Inc.	12/16/2009
RECEIVING PARTY DATA	
Name:	Synopsys Merger Holdings LLC
Street Address:	700 E. Middlefield Road
City:	Mountain View
State/Country:	CALIFORNIA
Postal Code:	94043
PROPERTY NUMBERS Total: 1	
Property Type	Number
Patent Number:	6453457
CORRESPONDENCE DATA	
Fax Number:	(650)712-0263
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>	
Phone:	6507120340
Email:	npannoni@hmbay.com
Correspondent Name:	Haynes Beffel & Wolfeld LLP, Kenta Suzue
Address Line 1:	PO Box 366, 637 Main Street
Address Line 4:	Half Moon Bay, CALIFORNIA 94019
ATTORNEY DOCKET NUMBER:	SYNP 0111-0
NAME OF SUBMITTER:	Nicole Pannoni
Total Attachments: 10 source=00194066#page1.tif source=00194066#page2.tif source=00194066#page3.tif source=00194066#page4.tif source=00194066#page5.tif	

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REEL: 023691 FRAME: 0163

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CONFIRMATION OF ASSIGNMENT

Whereas, a BILL OF SALE AND ASSIGNMENT TRANSFERRING ALL ASSETS TO SYNOPSYS MERGER HOLDINGS, LLC (attached as Appendix A and hereinafter "Bill of Sale") was signed on December 20, 2004 by both Numerical Technologies, Inc. (hereinafter "Assignor"), a corporation organized under the laws of Delaware, having a business address at 700 E. Middlefield Road, Mountain View, CA 94043; and Synopsys Merger Holdings LLC (hereinafter "Assignee"), a Delaware limited liability company, having a business address at 700 E. Middlefield Road, Mountain View, CA 94043.

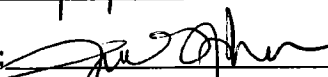
Whereas the Bill of Sale did not itemize "all the properties and assets" subject to the Bill of Sale.

NOW, THEREFORE, the Assignor confirms the assignment and transfer of "all properties and assets" of Assignor to Assignee by the Bill of Sale, and further includes an itemized list of patents and patent applications (attached as Appendix B) included in the properties and assets assigned by the Bill of Sale on December 20, 2004.

Assignor confirms that, effective as of December 20, 2004, Assignor sold, assigned, transferred and conveyed unto said Assignee the entire right, title and interest (a) in and to the United States patents and patent applications listed in Appendix B and the inventions disclosed therein (all collectively hereinafter termed "said Intellectual Property"); (b) in and to all rights to apply for foreign patents based upon said Intellectual Property pursuant to the International Convention for the Protection of Industrial Property or otherwise; (c) in and to any and all applications filed and any and all patents granted on said Intellectual Property in the United States or any foreign country (including rights to all past and future damages arising from infringement of these patents), including each and every application filed and each and every patent granted on any application which is a divisional, substitution, continuation, or continuation-in-part of any of said applications; and (d) in and to each and every reissue or extension of any of said patents.

IN WITNESS WHEREOF, Assignor has executed this instrument as of the dates written below.

Date: 12/16/09

Signed: 

Name: Julie Stephenson

Title: Receiver for Numerical Technologies, Inc.

Company: Numerical Technologies, Inc.

APPENDIX A

{00193752.DOC }

**Bill of Sale and Assignment Transferring
All Assets to Synopsys Merger Holdings, LLC.**

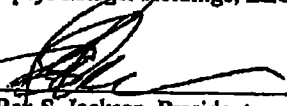
BILL OF SALE AND ASSIGNMENT, dated December ~~20~~ 2004
From Numerical Technologies, Inc., a Delaware corporation (hereinafter the "Seller")
to Synopsys Merger Holdings LLC, a Delaware limited liability company
(hereinafter the "Purchaser")

THIS BILL OF SALE AND ASSIGNMENT WITNESSETH that for such good and sufficient consideration, the receipt of which is hereby acknowledged, Seller hereby assigns and transfers to Purchaser as of the close of business on the date hereof all the properties and assts of Seller, both real and personal, tangible and intangible, of every kind and nature, and wheresoever located.

IN WITNESS WHEREOF, the parties hereto have caused this Bill of Sale and Assignment to be signed in their respective corporate names by one of their respective Presidents on the day and year first above written.

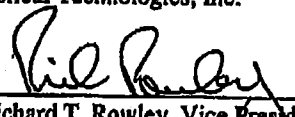
PURCHASER:

Synopsys Merger Holdings, LLC

By: 
Rex S. Jackson, President

SELLER:

Numerical Technologies, Inc.

By: 
Richard T. Rowley, Vice President

APPENDIX B

{00193792.DOC }

Assigned Patents and Patent Applications:

Docket #	Serial #	Filing Date	Patent No.	Issue Date
0701CIP1	08/931,921	9/17/1997	5,858,580	1/12/1999
0701CON1	09/229,455	1/12/1999	6,228,539	5/8/2001
0701CON2	09/617,613	7/17/2000	6,258,493	7/10/2001
0701CON3	09/732,407	12/7/2000	6,420,074	7/16/2002
0701CON4	09/839,672	4/20/2001	6,436,590	8/20/2002
0701DIV1	10/154,858	5/24/2002	6,566,023	5/20/2003
0701DIV1-CON1	10/341,290	1/13/2003	6,818,385	11/16/2004
0701DIV1-CON2	10/843,974	5/12/2004		
0701P	60/025,972	9/18/1996		
0701PCT	PCT/US97/16631	9/18/1997		
0701PCT-EP	EP 97941699.7	9/18/1997	0927381 (GB)	8/18/2004
0701PCT-AU	EP 97941699.7	9/18/1997	0927381 (AU)	8/18/2004
0701PCT-BE	EP 97941699.7	9/18/1997	0927381 (BE)	8/18/2004
0701PCT-CH	EP 97941699.7	9/18/1997	0927381 (CH)	8/18/2004
0701PCT-DE	EP 97941699.7	9/18/1997	69730355.7 (DE)	8/18/2004
0701PCT-DK	EP 97941699.7	9/18/1997	0927381 (DK)	8/18/2004
0701PCT-ES	EP 97941699.7	9/18/1997	0927381 (ES)	8/18/2004
0701PCT-FR	EP 97941699.7	9/18/1997	0927381 (FR)	8/18/2004
0701PCT-GR	EP 97941699.7	9/18/1997	0927381 (GR)	8/18/2004
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0701PCT-LI	EP 97941699.7	9/18/1997	0927381 (LI)	8/18/2004
0701PCT-LU	EP 97941699.7	9/18/1997	0927381 (LU)	8/18/2004
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0701PCT-NL	EP 97941699.7	9/18/1997	0927381 (NL)	8/18/2004
0701PCT-PT	EP 97941699.7	9/18/1997	0927381 (PT)	8/18/2004
0701PCT-SE	EP 97941699.7	9/18/1997	0927381 (SE)	8/18/2004
0701PCT-FI	EP 97941699.7	9/18/1997	0927381 (FI)	8/18/2004
0702	08/051,076	4/21/1993		
0702CON1	08/340,811	11/17/1994	5,527,645	6/18/1996
0703CIP1	09/544,798	4/7/2000	6,578,188	6/10/2003
0703CIP1-DIV1	10/372,066	2/20/2003		
0703CIP2	09/906,920	7/16/2001		
0703CIP3	10/618,816	7/11/2003		
0703CIP3-CN	2004-10028456.5	2/20/2004		
0703CIP3-TW	93102874	2/6/2004		
0703CON1	09/130,996	8/7/1998	6,757,645	6/29/2004

Docket #	Serial #	Filing Date	Patent No.	Issue Date
0703CON2	09/153,783	9/16/1998	6,470,489	10/22/2002
0703CON3	10/878,847	6/28/2004		
0703P	60/059,306	9/17/1997		
0703PCT1	PCT/US98/19510	9/17/1998		
0703PCT1-EP	EP 98951922.8	9/17/1998		
0703PCT1-JP	JP 2000-512112	9/17/1998		
0703PCT1-KR	KR 7002873/2000	9/17/1998		
0703PCT2	PCT/US98/16742	8/11/1998		
0703PCT2-EP	EP 98939366.5	8/11/1998		
0703PCT2-JP	JP 2000-512171	8/11/1998		
0703PCT2-KR	KR 7002870/2000	8/11/1998		
0703TW1	TW 87115624	9/16/1998	TW 123356	4/6/2001
0703TW2	87115494	9/17/1998	117366	11/10/2000
0704CON1	09/154,415	9/16/1998	6,370,679	4/9/2002
0704CON2	09/154,397	9/16/1998	6,453,452	9/17/2002
0704CON3	10/173,198	6/18/2002		
0704P	60/069,549	12/12/1997		
0704PCT1	PCT/US98/19439	9/17/1998		
0704PCT1-EP	98947104	9/17/1998		
0704PCT1-JP	JP 2000-512111	9/17/1998		
0704PCT1-KR	7002872/2000	9/17/1998		
0704PCT2	PCT/US98/19438	9/17/1998		
0704PCT2-EP	98947103.2	9/17/1998		
0704PCT2-JP	JP 2000-512110	9/17/1998		
0704PCT2-KR	7002869/2000	9/17/1998		
0705	09/632,080	8/2/2000	6,523,162	2/18/2003
0705DIV1	10/194,703	7/12/2002		
0706CIP1	10/068,513	2/6/2002	6,733,929	5/11/2004
0706CIP1CON1	10/818,727	4/6/2004		
0706CIP2	10/235,458	9/5/2002	6,811,935	11/2/2004
0706CIP3	10/244,226	9/16/2002	6,777,141	8/17/2004
0706CIP3CON1	10/920,027	8/17/2004		
0706CON1	09/669,359	9/26/2000	6,503,666	1/7/2003
0706CON2	09/669,368	9/26/2000	6,524,752	2/25/2003
0706CON2-DIV1	10/224,064	8/20/2002	6,610,449	8/26/2003
0706CON3	09/669,367	9/26/2000	6,541,165	4/1/2003
0706P	60/215,938	7/5/2000		
0706PCT	PCT/US00/42284	11/28/2000		
0706PCT-CN	819729.6	11/28/2000		
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0706PCT-JP	2002-508143	9/28/2000		
0707	09/514,551	2/28/2000	6,584,609	6/24/2003
0707DIV1	10/327,454	12/20/2002		
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0707PCT-JP	JP 2001-563954	8/28/2002		
0708	09/823,380	3/29/2001	6,584,610	6/24/2003
0708CIP1	10/012,069	12/5/2001		
0708CON1	10/377,341	2/27/2003		
0709	09/823,146	3/29/2001	6,622,288	9/16/2003
0710	09/675,582	9/29/2000	6,539,321 B1	3/25/2003
0711	09/675,197	9/29/2000	6,792,590	9/14/2004

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0711DIV1	10/855,673	5/26/2004		
0712	09/676,375	9/29/2000	6,625,801	9/23/2003
0712DIV1	10/346,903	1/17/2003		
0713	09/676,356	9/29/2000	6,453,457	9/17/2002
0713CON1	10/099,279	3/15/2002	6,777,138	8/17/2004
0714	09/728,885	12/1/2000	6,663,856	12/16/2003
0714DIV1	10/688,559	10/16/2003		
0715	60/226,457	8/17/2000		
0716	09/676,400	9/29/2000	6,557,162	4/29/2003
0716DIV1	10/369,713	2/19/2003		
0716PCT	PCT/US00/35653	12/29/2000		
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0716PCT-KR	7004536/2003	3/28/2003		
0717	09/814,025	3/20/2001		
0718	09/814,023	3/20/2001		
0718PCT	PCT/US02/06491	2/28/2002		
0718PCT-CN	2806995.1	10/17/2003		
0718PCT-JP	2002-574111	2/28/2002		
0718PCT-KR	7012260/2003	2/28/2002		
0719	09/746,369	12/20/2000	6,653,026	11/25/2003
0719DIV1	10/656,933	9/9/2003		
0719PCT	PCT/US01/47687	11/30/2001		
0719PCT-CN	1820942.4	6/20/2003		
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0719PCT-JP	2002-551649	11/30/2001		
0720	09/816,619	3/23/2001	6,635,393	10/21/2003
0721	09/752,809	12/27/2000		
0721PCT	PCT/US01/50851	12/26/2001		
0721PCT-DB	10197112.5	6/27/2003		
0722P	60/243,524	10/25/2000		
0723	09/810,823	3/16/2001	6,551,750	4/22/2003
0723PCT	PCT/US02/05844	2/26/2002		
0723PCT-CN	2806546.8	10/17/2003		
0723PCT-EP	2736492.6	2/26/2002		
0723PCT-KR	7012112/2003	9/16/2003		
0725	09/843,498	4/25/2001	6,566,019	5/20/2003
0726	09/872,620	5/31/2001	6,553,560	4/22/2003
0726CON1	10/313,325	12/6/2002		
0726PCT	PCT/US02/04119	2/11/2002		
0726PCT-BP	2709485.3	2/11/2002		
0726PCT-JP	2002-579888	10/2/2003		
0726TW	91103328	2/25/2002	173147	7/2/2003
0727	09/917,581	7/27/2001	6,664,009	12/16/2003
0729PCT	PCT/US01/07413	3/8/2001		
0729PCT-BP	1914759.4	3/8/2001		
0729PCT-JP	2002-572505	9/8/2001		
0729PCT-US	10/240,006	9/26/2002		
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0733	09/876,306	6/6/2001	6,569,583	5/27/2003
0734	09/952,896	9/11/2001	6,735,752	5/11/2004
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0738P	60/307,640	7/24/2001		
0739	09/945,012	8/31/2001	6,684,382	1/27/2004
0740	09/843,487	4/25/2001	6,573,010	6/3/2003
0741	09/905,420	7/13/2001	6,523,165	2/18/2003
0741CIP1	10/272,104	10/15/2002		
0742	09/876,307	6/6/2001	6,593,038	7/15/2003
0743	09/917,526	7/26/2001	6,560,766	5/6/2003
0743CIP1	10/323,565	12/17/2002	6,721,928	4/13/2004
0744P	60/281,325	4/3/2001		
0745	09/941,453	8/28/2001		
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0745TW	91115025	7/5/2002	184498	8/21/2003
0746P	60/288,738	5/4/2001		
0747CON1	09/932,239	8/17/2001		
0747CON1-PCT	PCT/US02/18306	6/7/2002		
0747CON1-PCT-CN	2811546.5	6/7/2002		
0747CON1-PCT-EP	2737445.3	6/7/2002		
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0747CON2	09/972,428	10/5/2001		
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0747CON3	10/082,697	2/25/2002	6,721,938	4/13/2004
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0747CON4	10/085,759	2/28/2002	6,787,271	9/7/2004
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0747CON4-PCT-CN	2811551.1	6/7/2002		
0747CON4-PCT-EP	02778939.5	6/7/2002		
0747CON4-PCT-JP	2003-504166	6/7/2002		
0747CON4DIV1	10/799,073	3/12/2004		
0747CON4DIV2	10/809,650	3/25/2004		
0747CON4DIV3	10/938,653	9/10/2004		
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0747CON5	09/996,973	11/15/2001	6,681,379	1/20/2004
0747CON6	10/165,550	6/7/2002		
0747CON7	10/165,557	6/7/2002		
0747CON8	10/340,377	1/10/2003		
0747CON9	10/834,623	4/29/2004		
0747P	60/296,788	6/8/2001		
0747P1	60/304,142	7/10/2001		
0747P2	60/325,689	9/28/2001		
0747P3	60/381,048	5/15/2002		
0748	09/953,119	9/10/2001	6,738,958	5/18/2004
0749	10/003,358	11/14/2001		
0750	09/974,507	10/9/2001	6,670,082	12/30/2003
0750DIV1	10/685,751	10/14/2003		

Docket #	Serial #	Filing Date	Patent No.	Issue Date
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0752	10/025,414	12/18/2001		
0753	10/033,054	12/26/2001		
0754	09/960,669	9/21/2001		
0755	10/029,041	12/20/2001	6,753,115	6/22/2004
0756	10/016,837	12/12/2001	6,763,514	7/13/2004
0756DIV1	10/810,250	3/26/2004		
0757	10/040,055	12/31/2001		
0758	10/094,487	3/8/2002	6,605,481	8/12/2003
0759	10/005,615	11/7/2001		
0760P	60/330,272	10/17/2001		
0761	10/116,660	4/3/2002	6,704,921	3/9/2004
0762	10/117,838	4/8/2002	6,795,168	9/21/2004
0763	10/116,286	4/4/2002		
0764	10/033,511	12/26/2001	6,658,640	12/2/2003
0765	10/074,751	2/13/2002		
0769	10/116,661	4/3/2002		
0770	10/098,714	3/15/2002		
0771	10/098,713	3/15/2002	6,795,955	9/21/2004
0772CONI	10/295,160	11/14/2002		
0772CONI-PCT	PCT/US03/05486	2/25/2003		
0772CONI-PCT-CN	03804271.1	2/25/2003		
0772CONI-PCT-EP	3719318.2	2/25/2003		
0772CONI-PCT-JP	2003-571796	2/25/2003		
0772CONI-PCT-KR	7013264/2004	2/25/2003		
0772P	60/359,909	2/26/2002		
0773CONI	10/295,575	11/14/2002		
0773CONI-PCT	PCT/US03/06041	2/27/2003		
0773CONI-PCT-CN	3805394.2	2/27/2003		
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0773CONI-PCT-JP	2003-577058	2/27/2003		
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0773P	60/363,674	3/11/2002		
0774	10/137,828	5/1/2002		
0775	10/146,274	5/15/2002		
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0777	10/116,914	4/5/2002	6,745,372	6/1/2004
0778P	60/362,007	3/4/2002		
0779	10/208,891	7/29/2002		
0780	10/171,066	6/11/2002	6,785,879	8/31/2004
0780DIV1	10/844,987	5/12/2004		
0782P	60/370,035	4/4/2002		
0784	10/253,204	9/23/2002	6,807,663	10/19/2004
0786	10/189,900	7/3/2002	6,687,895	2/3/2004
0787	10/232,130	8/30/2002	6,792,592	9/14/2004
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0790	10/254,702	9/25/2002		
0791	10/237,883	9/9/2002	6,813,759	11/2/2004
0794	10/277,250	10/21/2002	6,808,850	10/26/2004
0795	10/294,253	11/14/2002	6,797,441	9/28/2004
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0800	10/301,225	11/21/2002		
0800CN	0310116169.5	11/17/2003		
0800TW	92122024	8/11/2003		
0802	10/354,382	1/30/2003		
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0805P	60/413,507	9/25/2002		
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0810	10/244,451	9/16/2002	6,821,689	11/23/2004
0810CN	3149796.9	8/5/2003		
0810DE	10333248	7/22/2003		
0810JP	2003-323774	9/16/2003		
0810TW	92115774	6/10/2003		
0812	10/313,706	12/6/2002		
0813	10/335,513	12/30/2002		
0816	10/316,280	12/10/2002		
0819	10/327,446	12/20/2002		
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0827	10/364,260	2/11/2003		
0829	10/405,228	4/1/2003		
0831	10/426,583	4/29/2003		
0835P	60/457,489	3/24/2003		
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0844	10/412,172	4/10/2003		
0848	10/774,342	2/5/2004		
0849	10/785,254	2/23/2004		
0849P	60/451,235	2/28/2003		
0849PCT	PCT/US04/06141	2/27/2004		