505113451 09/26/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5160212

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
LSI CORPORATION	11/14/2014

RECEIVING PARTY DATA

Name:	INTEL CORPORATION
Street Address:	2200 MISSION COLLEGE BLVD.
City:	SANTA CLARA
State/Country:	CALIFORNIA
Postal Code:	95054

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14742041

CORRESPONDENCE DATA

Fax Number:

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Email: stebo@btlaw.com

Correspondent Name: BARNES & THORNBURG LLP Address Line 1: 11 S. MERIDIAN STREET

Address Line 4: INDIANAPOLIS, INDIANA 46204

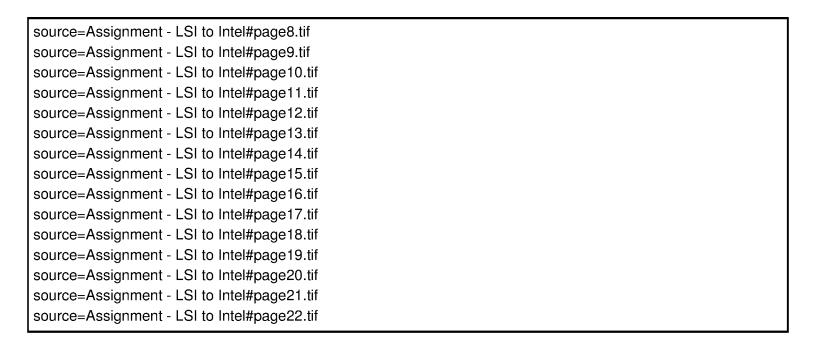
ATTORNEY DOCKET NUMBER:	P79434D/45631-238456
NAME OF SUBMITTER:	GLEN M. KELLETT
SIGNATURE:	/GLEN M. KELLETT/
DATE SIGNED:	09/26/2018

Total Attachments: 22

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PATENT REEL: 047155 FRAME: 0303

505113451



PATENT ASSIGNMENT

This Patent Assignment (this "Assignment"), is made and entered into as of November 18, 2014 ("Effective Date"), by and between LSI CORPORATION, a Delaware corporation ("Assignor") and INTEL CORPORATION, a Delaware corporation ("Assignee").

Whereas, Assignor and Assignee have entered into that certain Asset Purchase Agreement, dated as of August 13, 2014 (the "Asset Purchase Agreement"), pursuant to which Assignor has agreed to irrevocably sell, transfer, assign, convey and deliver to Assignee or its designees, and Assignee has agreed to irrevocably purchase, acquire and accept from Assignor, all right, title and interest in, to and under the Purchased Assets (as defined in the Asset Purchase Agreement), including the Assigned Patents (as set forth below).

Whereas, the term "Patents" means patents or patent applications worldwide of any kind or nature (including industrial designs, utility models that are subject to statutory protection, inventor's certificates, and any applications and registrations therefor), including any renewals, reissues, reexaminations, extensions, continuations, continuations-in-part, divisions and substitutions relating to any patents and patent applications, as well as all related counterparts to any patents and patent applications and any inventions claimed or covered thereby, wheresoever issued or pending anywhere in the world;

Now Therefore, for good and valuable consideration paid by Assignee to Assignor, the receipt and sufficiency of which is hereby acknowledged, Assignor does hereby transfer, assign, and convey to Assignee, and Assignee hereby accepts such transfer, assignment, and conveyance of, all right, title, and interest throughout the world, that may exist today and in the future, in, to and under all of the following (collectively, the "**Assigned Patents**"):

- (a) the Patents set forth on <u>Schedule 1</u> attached hereto and incorporated herein by this reference ("**Listed Patents**");
 - (b) all Patents issuing on any applications included in the Listed Patents;
- (c) all Patents claiming or entitled to claim priority, directly or indirectly, to any of the Patents covered by any of the foregoing, and all Patents to which any of the Patents covered by any of the foregoing claims or is entitled to claim priority, directly or indirectly;
- (d) all divisionals, continuations, continuations-in-part, and foreign counterpart applications related to any of the foregoing;
- (e) all reissues, reexaminations, extensions, divisions, renewals, substitutions, confirmations, registrations, revalidations, revisions, and additions of or to any of the foregoing;
- (f) all Patents, including foreign counterpart Patents, issuing on any Patents covered by any of the foregoing;
- (g) all remedies, claims, causes of action and enforcement rights of any kind, whether known or unknown, under, pursuant to, arising from, or related to any of the above, including all rights to bring actions for past, current or future infringement, misappropriation or other violation thereof and to seek, settle, collect and/or retain, as applicable, injunctive relief, damages, costs, proceeds and other remedies in connection with any such actions, and
- (h) all benefits, privileges, powers and rights related to any of the above, including all rights to (i) royalties, income and other payments due thereunder, (ii) apply for, file, register,

maintain, extend and renew in any or all countries of the world intellectual property rights of any kind under, pursuant to, arising from, or related to any of the above, and (iii) transfer and grant licenses, releases, and other rights with respect to any of the above.

In addition, if any Listed Patent is subject to a terminal disclaimer under 37 C.F.R. § 1.321, then all Patents subject to the terminal disclaimer are also Assigned Patents, whether or not they are otherwise covered by the above, except for the Patents listed on <u>Schedule 2</u>.

Assignor shall execute and deliver any instruments, and otherwise reasonably cooperate with Assignee, as may be reasonably necessary or desirable for effecting and recording the transfer, assignment, and conveyance to, and to fully vest in, Assignee and its successors and assigns all Assigned Patents, including the execution, acknowledgment and recordation of any instruments with respect to any jurisdiction.

Assignor hereby authorizes and requests the Commissioner of Patents and Trademarks and any other patent office to issue and register any and all Patents pertaining to any of the items assigned hereunder in the name of Assignee.

The assignments and rights pursuant hereto will inure to the benefit of Assignee and its successors, assigns and other legal representatives and is binding upon Assignor and its successors, assigns and other legal representatives.

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In Witness Whereof, Assignor and Assignee have caused this Patent Assignment to be duly executed by an authorized officer on this 14th day of November 2014

LSI ¢OMPORATION

Name: Hock E. Tan

Title: Chief Executive officer

<u>ACKNOWLEDGMENT</u>

STATE OF PENNSYLVANUA)

SS

COUNTY OF LEHIGH)

On November 14, 2014 before me, the undersigned, personally appeared Hock E. Tan, Chief Executive Officer of LSI Corporation

personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her capacity, and that by his/her signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

COMMONWEALTH OF PENNSYLVANIA

Notariai Seai
Joanne M. Pukszyn, Notary Public
Hanover Twp., Lehigh County
My Commission Expires Jan. 20, 2018

(signature and office of individual taking acknowledgment)

INTEL CORPORATION

By: // / Name: Marty M. Linne
Title: Assistant Secretary

ACKNOWLEDGMENT

STATE OF)						
COUNTY OF	:SS:)						
On		before	me,	the	undersigned.	personally	appeared
personally known to me whose name is subscribe the same in his/her capa the person upon behalf of	ed to the within acity, and that	n instrume by his/her dividual ac	nt and r sign sted, c	l ackr ature xecu	nowledged to not not the instrument ted the instrument.	ne that he/sh nent, the ind tent.	e executed ividual, or
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CALIFORNIA ALL-PURPOSE ACKNOWLEDGEMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State o	f California					
County	of Santa Clara	SS.				
On	November 17, 2014	, before me, J. Shen, notary public,				
(Tables) in internation	Date					
Personally appeared		Marty Linne				
		Name(s) of Signer(s)				

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct

WITNESS my hand and official seal.

Signature of Notary Public

$\underline{\textbf{SCHEDULE 1 TO PATENT ASSIGNMENT}}$

LISTED PATENTS

sf-3434833

5

Country	Application Number	Filing Date	Patent Number	Status	Next Action Required
AU	8837998	10/8/98		Abandoned	N/A
CA	2248915	9/28/98		Abandoned	N/A
CN	98119799X	10/9/98		Abandoned	N/A
FR	983080854	10/5/98		Abandoned	N/A
DE	983080854	10/5/98		Abandoned	N/A
JP	2871531998	10/9/98		Abandoned	N/A
US	08947538	10/11/97	6263443	Issued	
US	10417013	4/16/03	RE40923	Issued	N/A
US	09585476	6/1/00	6717960	Issued	3rd annuity due 10/6/2015
US	09648996	8/28/00	7145908	Issued	3rd annuity due 6/5/2018
US	11393172	3/30/06	7689821	Issued	2nd annuity due 9/30/2017
US	10029703	12/21/01	7043544	Issued	3rd annuity due 11/9/2017
US	11237274	9/28/05	7275117	Issued	2nd annuity due 3/25/2015
US	09798454	3/2/01	7000034	Issued	3rd annuity due 8/14/2017
US	09798472	3/2/01	6850516	Issued	3rd annuity due 8/1/2016
US	10082776	2/25/02	7366884	Issued	2nd annuity due 10/29/2015
US	10993627	11/19/04	7149211	Issued	3rd annuity due 6/12/2018
US	08939746	9/29/97	6272144	Issued	
US	12027683	2/7/08	8191067	Issued	1st annuity due 11/29/2015
US	10081308	2/20/02	7353513	Issued	2nd annuity due 10/1/2015
US	10620045	7/15/03	7822589	Issued	2nd annuity due 4/26/2018
US	11412762	4/27/06	7930691	Issued	1st annuity due 10/19/2014
FR	022582373	11/29/02		Abandoned	N/A
DE	022582373	11/29/02		Abandoned	N/A
GB	022582373	11/29/02		Abandoned	N/A
JP	2002367651	12/19/02	4163499	Issued	
KR	20020081687	12/20/02	10-0941569	Issued	
TW	091135163	12/4/02	I254529	Issued	
US	10029679	12/21/01	8782287	Issued	1st annuity due 1/16/2018
US	11343698	1/31/06	8572349	Issued	1st annuity due 4/29/2017
US	11361820	2/24/06	7512828	Issued	2nd annuity due 10/1/2016
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JP	2002093461	3/29/02	4524734	Issued	
US	09821893	3/30/01	6918026	Issued	3rd annuity due

FR	
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US 12331807 12/10/08 7792132 Issued 2nd annuity due 3/7/2018	
FR 022581029 11/25/02 Abandoned N/A	
DE 022581029 11/25/02 Abandoned N/A	
GB 022581029 11/25/02 Abandoned N/A	
US 10029680 12/21/01 6754795 Issued 3rd annuity due 12/22/2015	
US 11226507 9/13/05 7599364 Issued 2nd annuity due 4/16/2017	
US 11539768 10/9/06 7948882 Issued 1st annuity due 11/24/2014	
US 09432976 11/3/99 6654345 Issued 3rd annuity due 5/25/2015	
US 09587149 6/2/00 6904045 Issued 3rd annuity due 12/7/2016	
US 09599250 6/22/00 7027457 Issued 3rd annuity due 10/11/2017	
US 09873524 6/4/01 6937561 Issued 3rd annuity due	
2/28/2017	

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US	08751045	11/15/96	5905711	Issued	
US	09182884	10/30/98	6396843	Issued	
US	10630961	7/30/03	7590056	Issued	2nd annuity due
					3/15/2017
US	10675718	9/30/03	7489640	Issued	2nd annuity due
					8/10/2016
US	10620044	7/15/03	8254267	Issued	1st annuity due
					2/28/2016
US	11140297	5/27/05	7742506	Issued	2nd annuity due
TIC	11020071	0/1/6/07	7740402	T 1	12/22/2017
US	11839971	8/16/07	7742493	Issued	2nd annuity due 12/22/2017
US	11935533	11/6/07	8179807	Issued	1st annuity due
03	11933333	11/0/07	01/900/	Issued	11/15/2015
US	12394270	2/27/09	8270289	Issued	1st annuity due
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US	12494449	6/30/09	8249063	Issued	1st annuity due
					2/21/2016
EP	072510522	3/14/07		Pending	
US	11442507	5/26/06	8130777	Issued	1st annuity due 9/6/2015
CA	2186918	10/1/96	2186918	Lapsed	
FR	963069695	9/25/96		Abandoned	N/A
DE	963069695	9/25/96		Abandoned	N/A
GB	963069695	9/25/96		Abandoned	N/A
JP	08254386	9/26/96	3088306	Issued	
KR	9643348	10/1/96		Abandoned	N/A
SE	96034053	9/18/96		Abandoned	N/A
US	08537568	10/2/95	5790072	Issued	
US	10689090	10/20/03	7542425	Issued	2nd annuity due
US	10420156	4/22/03	7489710	Issued	12/2/2016 2nd annuity due
03	10420130	4/22/03	7469710	Issueu	8/10/2016
US	10420153	4/22/03	7801934	Issued	2nd annuity due
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US	11466858	8/24/06	7675913	Issued	2nd annuity due
					9/9/2017
FR	952021509	8/7/95	0701342	Lapsed	
DE	P44295952	8/20/94	4429595.2	Lapsed	
DE	952021509	8/7/95	0701342	Lapsed	
GB	952021509	8/7/95	0701342	Lapsed	
JP	95212174	8/21/95		Abandoned	N/A
US	08513316	8/10/95	5671227	Issued	
US	11095769	3/31/05	7623539	Issued	2nd annuity due
7.70	11005551	2/21/27	01.50001		5/24/2017
US	11095774	3/31/05	8169891	Issued	1st annuity due
TIC	11476270	(120,10)	750(147	T1	11/1/2015
US	11476279	6/28/06	7596147	Issued	2nd annuity due 3/29/2017
US	11367747	3/3/06	8081665	Issued	1st annuity due
03	1150//4/	3/3/00	0001003	158ueu	6/20/2015
US	12539689	8/12/09	8059526	Issued	1st annuity due
	12337007	0/12/07	0037320	155404	5/15/2015
US	10131577	4/24/02	7177279	Issued	3rd annuity due
~~	1	1	1	20000	

					8/13/2018
US	11193799	7/29/05	7633962	Issued	2nd annuity due
U3	11193799	1129103	7033902	Issued	6/15/2017
US	11326047	1/5/06	7924857	Issued	1st annuity due
US	11320047	173700	1924031	Issued	10/12/2014
US	11459035	7/21/06	7971247	Issued	1st annuity due
O3	11437033	1721700	17/1247	Issued	12/28/2014
US	10744567	12/23/03	7159061	Issued	3rd annuity due
OS	10744307	12/23/03	7137001	133400	7/2/2018
US	10768764	1/30/04	7411972	Issued	2nd annuity due
OS	10700701	1730701	7111972	133404	2/12/2016
US	10722933	11/26/03	7477636	Issued	2nd annuity due
	10.22,00	11,20,00	, , , , , , ,	155444	7/13/2016
US	10903953	7/30/04	7808991	Issued	2nd annuity due
		1,72 -7, -7			4/8/2018
JP	2005344950	11/30/05	4754951	Issued	
US	10999703	11/30/04	8509258	Issued	1st annuity due
					9/13/2017
GB	02279511	11/29/02	2383509	Issued	
JP	2002367649	12/19/02		Abandoned	N/A
KR	1020020082071	12/21/02	10-938767	Issued	
TW	91134657	11/28/02		Abandoned	N/A
US	10037165	12/21/01	7313089	Issued	2nd annuity due
					6/25/2015
GB	02279545	11/29/02		Abandoned	N/A
JP	2002369547	12/20/02	4504615	Issued	
KR	1020020081848	12/20/02	10-939649	Issued	
TW	91134656	11/28/02		Abandoned	N/A
US	10037163	12/21/01	6801991	Issued	3rd annuity due
					4/5/2016
US	11412917	4/27/06	7801164	Issued	2nd annuity due
					3/21/2018
US	10085771	2/28/02	7215675	Issued	2nd annuity due
					11/8/2014
US	11299645	12/12/05	7912069	Issued	1st annuity due
					9/22/2014
US	09798112	3/2/01	7116680	Issued	3rd annuity due
					4/3/2018
US	09822655	3/30/01	7009979	Issued	3rd annuity due
					9/7/2017
US	10085219	2/28/02	7443793	Issued	2nd annuity due
					4/28/2016
US	10085223	2/28/02	7224681	Issued	2nd annuity due
					11/29/2014
US	10085222	2/28/02	7245624	Issued	2nd annuity due
					1/17/2015
EP	077570430	2/15/07	#40 TO T	Pending	
JP	2009526768	2/15/07	5185936	Issued	
KR	20097003987	2/15/07		Pending	
KR	20137025683	9/27/13		Pending	27/1
WO	PCTUS07062201	2/15/07		Expired	N/A
US	11468917	8/31/06	0.462=0:	Pending	Awaiting next action
US	10620258	7/15/03	8433784	Issued	1st annuity due
					10/30/2016

US	10723150	11/26/03	8181258	Issued	1st annuity due
03	10723130	11/20/03	0101230	Issued	11/15/2015
US	11263300	10/31/05	8031706	Issued	1st annuity due 4/4/2015
US	09919221	7/31/01	7346048	Issued	2nd annuity due
					9/18/2015
US	12014162	1/15/08	7633936	Issued	2nd annuity due
					6/15/2017
US	12609150	10/30/09	8451827	Issued	1st annuity due
					11/28/2016
US	10277238	10/21/02	7630409	Issued	2nd annuity due
TIC	007(1520	1/1/6/01	7201041	T 1	6/18/2017
US	09761538	1/16/01	7301941	Issued	2nd annuity due
US	09761172	1/16/01	6870838	Issued	5/27/2015 3rd annuity due
08	09/011/2	1/10/01	06/0636	Issued	9/22/2016
US	09761539	1/16/01	7260092	Issued	2nd annuity due
03	07/01337	1/10/01	7200072	133404	2/21/2015
US	10114398	4/1/02	7154887	Issued	3rd annuity due
					6/26/2018
US	10370037	2/19/03	7346049	Issued	2nd annuity due
					9/18/2015
US	10339796	1/9/03	7292594	Issued	2nd annuity due
					5/6/2015
US	10325700	12/18/02	7292580	Issued	2nd annuity due
					5/6/2015
US	10325701	12/18/02	7408959	Issued	2nd annuity due
TIC	10241546	1 /12 /02	7240207	T 1	2/5/2016
US	10341546	1/13/03	7349387	Issued	2nd annuity due 9/25/2015
US	11113617	4/25/05	7839885	Issued	2nd annuity due
03	11113017	4/23/03	7639663	188000	7/23/2018
JP	2006120758	4/25/06	4996127	Issued	772372010
US	10403419	3/28/03	7430652	Issued	2nd annuity due
		1,-1,1			3/30/2016
US	12135809	6/9/08	7925863	Issued	1st annuity due
					10/12/2014
US	12112988	4/30/08	7899904	Issued	2nd annuity due
					9/4/2018
US	13016983	1/29/11	8190738	Issued	1st annuity due
	10110000	1.12.0.10.0	0176017		11/29/2015
US	12113083	4/30/08	8156247	Issued	1st annuity due
US	12167165	7/2/08	8219508	Issued	10/10/2015
08	1210/103	112108	8219308	Issued	1st annuity due 1/10/2016
US	12113055	4/30/08	7788206	Issued	2nd annuity due
03	12113033	7/30/00	7766200	Issued	3/3/2018
CN	2009102082560	10/23/09	101873253	Issued	
EP	091752808	11/6/09		Pending	
JP	2010000313	1/5/10	5537956	Issued	
KR	1020090112679	11/20/09		Pending	
TW	098134398	10/9/09	I390913	Issued	
US	12430438	4/27/09	8352669	Issued	1st annuity due 7/8/16
US	12975823	12/22/10	8505013	Issued	1st annuity due 2/6/2017
US	12861852	8/24/10		Pending	Awaiting next action

US	12854315	8/11/10	8396985	Issued	1st annuity due 9/12/2016
US	12976045	12/22/10		Allowed	Pay issue fee – 10/3/2014
US	12963895	12/9/10	8499137	Issued	1st annuity due 1/30/2017
US	13046726	3/12/11	8537832	Issued	1st annuity due 3/17/2017
US	12974477	12/21/10		Pending	Awaiting next action
US	12980489	12/29/10	8438641	Issued	1st annuity due 11/7/2016
US	12976228	12/22/10		Pending	Awaiting next action
US	13046717	3/12/11	8539199	Issued	1st annuity due 3/17/2017
US	13046719	3/12/11	8321385	Issued	1st annuity due 5/27/2016
US	12975880	12/22/10	8514874	Issued	1st annuity due 2/20/2017
US	12971742	12/17/10		Pending	Awaiting next action
US	13097213	4/29/11	8359466	Issued	1st annuity due 7/22/16
US	12782379	5/18/10		Pending	Awaiting next action
US	12782393	5/18/10	8255644	Issued	1st annuity due 2/28/2016
US	12782411	5/18/10	8407707	Issued	1st annuity due 9/26/2016
US	13232422	9/14/11		Allowed	Awaiting next action
US	13251091	9/30/11	8565250	Issued	1st annuity due 4/22/2017
US	13250927	9/30/11	8619787	Issued	1st annuity due 7/1/2017
US	13250932	9/30/11	8576862	Issued	1st annuity due 5/5/2017
US	13250898	9/30/11		Allowed	Pay issue fee – 10/3/2014
US	13250910	9/30/11		Allowed	Pay issue fee – 9/20/2014
US	13250865	9/30/11		Allowed	Pay issue fee – 9/23/2014
US	13250837	9/30/11	8638805	Issued	1st annuity due 7/28/2017
US	13251035	9/30/11	8547878	Issued	1st annuity due 4/1/2017
US	13250883	9/30/11	8615013	Issued	1st annuity due 6/24/2017
US	13250891	9/30/11		Pending	Awaiting next action
US	13250938	9/30/11		Allowed	Pay issue fee – 10/2/2014
US	13316145	12/9/11		Pending	Awaiting next action
US	13192187	7/27/11		Pending	Response to OA – 9/3/2014
US	13250948	9/30/11	8837501	Allowed	Pay issue fee – 8/22/2014
US	13192104	7/27/11		Pending	Response to OA – 9/16/2014
US	13165852	6/22/11		Abandoned	N/A
US	13189822	7/25/11		Pending	Awaiting next action
US	13192140	7/27/11		Pending	Awaiting next action

US	13359690	1/27/12	8677075	Issued	1st annuity due 9/18/2017
US	13310961	12/5/11		Pending	Awaiting next action
US	13480623	5/25/12	8705531	Issued	1st annuity due 10/22/2017
US	13568365	8/7/12		Pending	Response to OA – 10/2/2014
US	13705822	12/5/12		Pending	Awaiting next action
US	13274726	10/17/11	8683221	Issued	1st annuity due
	13271720	10/1//11	0003221	155404	9/25/2017
US	13463169	5/3/12		Pending	Awaiting next action
US	13474114	5/17/12		Pending	
US	13403468	2/23/12	8515965	Issued	1st annuity due 2/20/2017
US	13944311	7/17/13		Pending	Awaiting next action
US	13405053	2/24/12	8761204	Issued	1st annuity due 12/24/2017
US	13336160	12/23/11	8711882	Issued	1st annuity due 10/29/2017
US	13250954	9/30/11	8843682	Allowed	Pay issue fee – 10/31/2014
US	13687719	11/28/12		Allowed	Pay issue fee – 10/7/2014
US	13687772	11/28/12		Allowed	Pay issue fee – 10/3/2014
US	13687911	11/28/12		Pending	Awaiting next action
US	13687958	11/28/12		Pending	Awaiting next action
US	13687865	11/28/12		Pending	Awaiting next action
US	13687971	11/28/12		Pending	Awaiting next action
US	13646342	10/11/12		Pending	Response to OA – 9/17/2014
US	13646315	10/11/12		Pending	Awaiting next action
US	13659122	10/24/12		Pending	Awaiting next action
US	13656562	10/19/12		Pending	Awaiting next action
US	13669528	11/6/12		Pending	Awaiting next action
US	13551002	7/17/12		Pending	Response to OA – 8/7/2014
US	13746080	1/21/13		Pending	Awaiting next action
US	13756849	2/1/13		Pending	Awaiting next action
US	13746104	1/21/13		Pending	Awaiting next action
US	13737163	1/9/13		Pending	Awaiting next action
US	13795579	3/12/13		Pending	Awaiting next action
US	09156432	9/18/98	6304553	Issued	
US	12565453	9/23/09	8271847	Issued	1st annuity due 3/18/2016
US	13591892	8/22/12	8745461	Issued	1st annuity due 12/3/2017
US	11239273	9/29/05	7624333	Issued	2nd annuity due 5/24/2017
US	11395769	3/31/06	7801144	Issued	2nd annuity due 3/21/2018
US	09821898	3/30/01	7250797	Issued	2nd annuity due 1/31/2015
US	11773344	7/3/07	7724855	Issued	2nd annuity due

					11/27/2017
US	11461181	7/31/06	7724723	Issued	2nd annuity due 11/25/2017
US	08510643	8/3/95	5802287	Expired	N/A
US	08903588	7/31/97	6331988	Issued	
US	10723160	11/26/03	7644085	Issued	2nd annuity due 7/15/2017
FR	999662596	12/14/99	1142242	Issued	
DE	999662596	12/14/99	69936734.4	Issued	
GB	999662596	12/14/99	1142242	Issued	
JP	2000588934	12/14/99	3745229	Issued	
WO	PCTUS9929746	12/14/99		Expired	N/A
US	09460165	12/13/99	6675327	Issued	3rd annuity due 7/6/2015
US	10285069	10/31/02	8780898	Issued	1st annuity due 1/16/2018
US	11382942	5/12/06	7817629	Issued	2nd annuity due 4/19/2018
US	09427961	10/27/99	6895016	Issued	3rd annuity due 11/17/2016
US	09405205	9/24/99	7042895	Issued	3rd annuity due 11/9/2017
US	08612373	3/7/96	5726985	Issued	
US	09036966	3/9/98		Abandoned	N/A
US	09036966	3/9/98	6373846	Issued	
US	08611327	3/8/96	5621773	Issued	
US	08710207	9/13/96	5831980	Issued	
US	08714005	9/13/96	5959993	Issued	
US	09345169	6/30/99		Abandoned	N/A
US	08867249	6/2/97	6075788	Issued	
US	09464267	12/17/99	6839352	Issued	3rd annuity due 7/4/2016
EP	983042383	5/28/98		Abandoned	N/A
US	09885777	6/20/01	7027499	Issued	3rd annuity due 10/11/2017
FR	973010150	2/18/97		Abandoned	N/A
DE	973010150	2/18/97		Abandoned	N/A
GB	973010150	2/18/97		Abandoned	N/A
JP	9037558	2/21/97		Abandoned	N/A
US	08607730	2/27/96	6201807	Issued	
CA	2161359	10/25/95	2161359	Lapsed	
FR	953085354	11/28/95		Abandoned	N/A
DE	953085354	11/28/95		Abandoned	N/A
GB	953085354	11/28/95		Abandoned	N/A
IT	953085354	11/28/95		Abandoned	N/A
JP	07344735	12/7/95	3115813	Issued	
ES	953085354	11/28/95		Abandoned	N/A
US	08350926	12/7/94	5513174	Issued	
US	09471806	12/23/99	6980592	Issued	3rd annuity due 6/27/2017
US	12346296	12/30/08	7940808	Issued	1st annuity due 11/10/14
FR	999652696	12/14/99	1142241	Issued	
DE	999652696	12/14/99	69937201.1	Issued	
GB	999652696	12/14/99	1142241	Issued	

JP	2000588935	12/14/99	3707537	Issued	
WO	PCTUS9929751	12/14/99		Expired	N/A
US	09459848	12/13/99	6678842	Issued	3rd annuity due 7/13/2015
FR	999652662	12/14/99	1142240	Issued	
DE	999652662	12/14/99	69938398.6	Issued	
GB	999652662	12/14/99	1142240	Issued	
JP	2000588933	12/14/99	3707536	Issued	
WO	PCTUS9929744	12/14/99		Expired	N/A
US	09459831	12/13/99	6909727	Issued	3rd annuity due 12/21/2016
US	09459439	12/13/99	6775302	Issued	3rd annuity due 2/10/2016
US	10899078	7/27/04	7486703	Issued	2nd annuity due 8/3/2016
CN	2007800227827	4/24/07	101473611	Issued	
EP	077611788	4/24/07	2067320	Completed	N/A
FR	077611788	4/24/07	2067320	Issued	
DE	077611788	4/24/07	602007016109.6	Issued	
GB	077611788	4/24/07	2067320	Issued	
JP	2009530483	4/24/07	4970543	Issued	
KR	20097006191	4/24/07	10-1301784	Issued	
WO	PCTUS0767281	4/24/07		Completed	N/A
US	11536191	9/28/06	7580426	Issued	2nd annuity due 2/25/2017
US	11839002	8/15/07	7743196	Issued	2nd annuity due 12/22/2017
GB	06246615	12/11/06	2437561	Issued	
JP	2007118018	4/27/07	4856580	Issued	
KR	20070041541	4/27/07	10-1303507	Issued	
US	11412915	4/27/06	7802245	Issued	2nd annuity due 3/21/2018
JP	2009513342	2/23/07	5197583	Issued	
KR	1020087029139	2/23/07	10-1329263	Issued	
WO	PCTUS07062639	2/23/07		Expired	N/A
GB	08193013	2/23/07	2450068	Issued	
US	11443393	5/30/06		Pending	Awaiting next action
US	09798130	3/2/01	6687803	Issued	3rd annuity due 8/3/2015
US	09791139	2/22/01	6810424	Issued	3rd annuity due 4/26/2016
US	10269928	10/11/02	7586909	Issued	2nd annuity due 3/8/2017
US	10270264	10/11/02	7319695	Issued	2nd annuity due 7/15/2015
US	10358678	2/5/03	7426185	Issued	2nd annuity due 3/16/2016
US	11738561	4/23/07	7480246	Issued	2nd annuity due 7/20/2016
US	12120533	5/14/08	7983287	Issued	1st annuity due 1/19/2015
US	10675717	9/30/03	7127547	Issued	3rd annuity due 4/24/2018
US	10675716	9/30/03	7290071	Issued	2nd annuity due

					4/30/2015
US	10895764	7/21/04	7391733	Issued	2nd annuity due 12/24/2015
US	12467228	May 15, 2009	8095700	Issued	
US	10037164	Dec 21, 2001	7159219	Issued	
US	10122997	Apr 12, 2002	7085794	Issued	
FR	3255916.3	Sep 22, 2003	1401129	Abandoned	
DE	3255916.3	Sep 22, 2003	1401129	Issued	
GB	3255916.3	Sep 22, 2003	1401129	Issued	
JP	2003-328142	Sep 19, 2003	4351508	Issued	
US	10378096	Feb 28, 2003	7257329	Issued	
US	60412870	Sep 23, 2002		Expired	
US	11359201	Feb 22, 2006	7328227	Issued	
US	11859437	Sep 21, 2007	8015226	Issued	
US	12187701	Aug 7, 2008	7808329	Issued	
US	13617229	Sep 14, 2012	8515376	Issued	
US	13968939	Aug 16, 2013	8811927	Issued	
US	12365444	Feb 4, 2009	8290462	Issued	
US	12324926	Nov 28, 2008	5255102	Pending	
US	12324927	Nov 28, 2008		Pending	
US	12324931	Nov 28, 2008		Pending	
US	12324934	Nov 28, 2008		Pending	
US	12362899	Jan 30, 2009		Pending	
US	12362879	Jan 30, 2009		Pending	1
US	12362874	Jan 30, 2009		Pending	
US	9188625	Nov 9, 1998	6584159	Issued	
CA	2284232	Sep 28, 1999	030+137	Abandoned	
CN	99123681	Nov 8, 1999		Abandoned	1
EP	99308675	Nov 2, 1999		Abandoned	1
US	9206519	Dec 7, 1998	6202075	Issued	1
GB	227953.7	Nov 29, 2002	2386716	Issued	1
JP	2002-364518	Dec 17, 2002	2300710	Abandoned	1
KR	10-2002-0081619	Dec 20, 2002		Abandoned	1
TW	91134655	Nov 28, 2002		Abandoned	
US	10037040	Dec 21, 2001	7246102	Issued	
US	12428494	Apr 23, 2009	8311354	Issued	
US	9364411	Jul 30, 1999	6771695	Issued	
US	10438109	May 14, 2003	7949723	Issued	
US	8906818	Aug 6, 1997	6128370	Issued	
US	8959888	Oct 29, 1997	5953695	Issued	
EP	7757048.9	Feb 15, 2007	3733073	Pending	
JP	2009-548230	Feb 15, 2007	4841674	Issued	
KR	2009-7016031	Jul 30, 2009	10-1284963	Issued	
WO	PCT/US07/062210	Feb 15, 2007	10-1204903	Expired	
US	11669559	Jan 31, 2007	7729387	Issued	
US	11762808	Jun 14, 2007	7848242	Issued	
US	60904835	Mar 2, 2007	/070272	Expired	
US	12074043	Feb 29, 2008	7787374	Issued	
US	12074043	Feb 29, 2008	7773505	Issued	
US	60904646	Mar 2, 2007	1113303	Expired	
US	60904652	Mar 2, 2007		Expired	
US	12074155	Feb 29, 2008	7778171	Issued	
US	60904728	Mar 2, 2007	///01/1	Expired	
US	12074154	Feb 29, 2008	7778167	Issued	
US	12074134	1 100 29, 2006	1//010/	122nga	1

US	12082348	Apr 10, 2008	8094686	Issued
US	11536177	Sep 28, 2006	8487947	Issued
US	11098300	Apr 4, 2005	7206880	Issued
US	11468838	Aug 31, 2006	8738977	Issued
US	9821892	Mar 30, 2001	6925514	Issued
GB	227956	Nov 29, 2002	2383493	Issued
JP	2002-369110	Dec 20, 2002	4331471	Issued
KR	10-2002-0082079	Dec 21, 2002	10-0904156	Issued
TW	91134658	Nov 28, 2002	1286426	Issued
US	10037067	Dec 21, 2001	8688853	Issued
US	10074841	Feb 13, 2002	7079486	Issued
US	8877909	Jun 18, 1997	6035048	Issued
US	9154991	Sep 17, 1998	6442275	Issued
US	9952292	Sep 14, 2001	7035397	Issued
US	12399622	Mar 6, 2009	8171269	Issued
US	12245437	Oct 3, 2008	8661179	Issued
US	11409438	Apr 21, 2006	8214868	Issued
EP	7250531.6	Feb 9, 2007	1853017	Completed
DE	7250531.6	Feb 9, 2007	1853017	Issued
GB	7250531.6	Feb 9, 2007	1853017	Issued
JP	2007-120704	May 1, 2007	5208445	Issued
KR	2007-0042542	May 2, 2007	10-1384910	Issued
US	11415831	May 1, 2006	7769038	Issued
EP	7250442.6	Feb 2, 2007	7709036	Pending
JP	2007-120703	May 1, 2007	5164425	Issued
KR	2007-0042539	•	10-1303390	Issued
US	11415546	May 2, 2007 May 1, 2006	8228920	Issued
JP	2001-337986	Nov 2, 2001	3880836	Issued
US	10001654	Oct 31, 2001	7075936	Issued
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US	10609781	Jun 30, 2003	7873506	Issued
GB	228198.8	Dec 3, 2003	2386718	Issued
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US	10026350	Dec 21, 2001	6668313	Issued
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US	12246812	Oct 7, 2008	8160242	Issued
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US	9968476	Sep 28, 2001	7006627	Issued
US	10637953	Sep 28, 2001 Aug 7, 2003	7283591	Issued
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		Jun 5, 2006		
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US	12530269	Sep 8, 2009	8515055	Issued
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CN	201010240706.7	Jul 30, 2009	101989908	Issued
EP	10170642.2	Jul 23, 2010	101909900	Pending
JP	2010-171249	Jul 30, 2010		Pending
KR		· · · · · · · · · · · · · · · · · · ·		· ·
	2010-0073956	Jul 30, 2010		Pending
TW	99122756	Jul 9, 2010	0552014	Pending
US	12533568	Jul 31, 2009	8553814	Issued
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DE EP	100159540	Dec 22, 2010	602010016388.1	
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JP	2011-000880	Jan 6, 2011	5123403	Issued
KR	10-2011-0000364	Jan 4, 2011	10-1194596	Issued
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US	13701369	Apr 17, 2013		Pending
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EP	12843512	Oct 26, 2012		Pending
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WO	PCT/US2012/062186	Oct 26, 2012		Pending
WO	PCT/US2012/062191	Oct 26, 2012		Pending
∨	1 01, 002012,002171	000 20, 2012	1	

WO	PCT/US2012/062195	Oct 26, 2012		Pending
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US	13681328	Nov 21, 2012		Pending
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CN	2014100855546	Mar 10, 2014		
EP	14157543.1	Mar 10, 2014 Mar 3, 2014		Pending
JP	2014-014347			Pending
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TW	10-2014-0027972	Mar 10, 2014 Feb 14, 2014		Pending Panding
US	103104999 61775928	Mar 11, 2013		Pending
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US	14136203	Dec 20, 2013		Pending
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US	9549753	Apr 14, 2000	6526429	Issued
US	10903954	Jul 30, 2004	7680124	Issued
US	10998686	Nov 29, 2004	7352752	Issued
US	11142562	May 31, 2005	7480821	Issued
GB	0228197	Dec 3, 2002	2384408	Issued
JP	2002-364523	Dec 17, 2002		Unknown
KR	10-2002-0081742	Dec 20, 2002		Abandoned
TW	91134652	Nov 28, 2002		Unknown
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US	12187692	Aug 7, 2008	7944830	Issued
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IN	967MAS99	9/30/1999		Abandoned	N/A
JP	2014539055	10/26/2012		Pending	
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KR	20147014148	10/26/2012		Pending	
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US	60014264	3/28/1996		Expired	N/A
US	60064082	11/3/1997		Expired	N/A
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US	60112379	12/14/1998		Expired	N/A
US	60137542	6/4/1999		Expired	N/A
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US	60208755	6/2/2000		Expired	N/A
US	60285930	4/24/2001		Expired	N/A
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US	60472176	5/21/2003		Expired	N/A
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US	61732129	11/30/2012		Expired	N/A
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US	61774646	3/8/2013		Expired	N/A
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SCHEDULE 2 TO PATENT ASSIGNMENT

DISCLOSED PATENTS

Listed Patent US5905711 is subject to a terminal disclaimer over patents not owned by Assignor

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