

**PATENT ASSIGNMENT**

Electronic Version v1.1  
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	NUNC PRO TUNC ASSIGNMENT
EFFECTIVE DATE:	10/07/2005

**CONVEYING PARTY DATA**

Name	Execution Date
Zarlink Semiconductor Limited	07/14/2006

**RECEIVING PARTY DATA**

Name:	Intel Corporation
Street Address:	2200 Mission College Boulevard
City:	Santa Clara
State/Country:	CALIFORNIA
Postal Code:	95052

**PROPERTY NUMBERS Total: 8**

Property Type	Number
Patent Number:	6937670
Patent Number:	6714263
Patent Number:	6876843
Patent Number:	6727746
Patent Number:	6683509
Patent Number:	6879646
Patent Number:	6538501
Patent Number:	6781482

**CORRESPONDENCE DATA**

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**OP \$320.00 6937670**

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ATTORNEY DOCKET NUMBER: 534334-00014, ET AL.

NAME OF SUBMITTER: Theodore D. Lienesch

**Total Attachments: 9**

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## CONFIRMATORY PATENT ASSIGNMENT

This Confirmatory Patent Assignment Agreement, dated July 14, 2006, is made by Zarlink Semiconductor Limited, a corporation incorporated under the laws of England and Wales ("Assignor"), to Intel Corporation, a Delaware corporation ("Assignee").

### RECITALS

A. Assignor and Assignee and other parties have entered into an asset purchase agreement dated as of October 7, 2005, (the "Agreement"). All capitalized terms used herein but not otherwise defined shall have the meanings set forth in the Agreement.

B. Pursuant to the Agreement, Assignor has previously assigned to the Assignee all of Assignor's right, title and interest in and to the patents set forth on Exhibit A hereto (the "Patents").

### AGREEMENT

NOW, THEREFORE, in consideration of the foregoing premises, the mutual covenants and agreements contained in the Agreement and the covenants and agreements in this Assignment, Assignor hereby confirms as follows:

1. For good and valuable consideration, the receipt of which is hereby acknowledged, Assignor has, on October 7, 2005, pursuant to the terms of the Agreement, sold, transferred, conveyed, assigned and delivered to Assignee, with full title guarantee all of Assignor's right, title and interest in and to the Patents, including any foreign counterparts, divisions, continuations or reissues thereof, the same to be held by Assignee for Assignee's own use and enjoyment, and for the use and enjoyment of Assignee's successors, assigns and other legal representatives, as fully and entirely as the same would have been held and enjoyed by Assignor if this Assignment and sale had not been made; together with all claims for damages by reason of past infringements of the Patents, along with the right to sue for and collect such damages for the use and benefit of Assignee and its successors, assigns and other legal representatives.

2. Assignor hereby authorizes and requests the Assistant Commissioner of Patents of the United States, and any officer of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of intellectual property protection or applications as aforesaid, to issue the same to Assignee and its successors, assigns and other legal representatives in accordance with the terms of this instrument.

Zarlink Confirmatory Patent Assignment

MTL\_LAW #1824222 v. 2

PATENT  
REEL: 019235 FRAME: 0430

IN WITNESS WHEREOF, Assignor has executed this Assignment on the date first above written.

Assignor:

ZARLINK SEMICONDUCTOR LIMITED

By:  

Name: Scott Milligan Don McIntyre

Title: Director Director

[SIGNATURE PAGE TO ZARLINK CONFIRMATORY PATENT ASSIGNMENT]

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MTL\_LAW #1824222 v. 2

**PATENT**  
**REEL: 019235 FRAME: 0431**

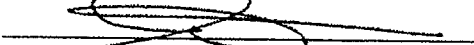
**Acknowledgment by Notary Public**

State of n/a

County of n/a

On this 14<sup>th</sup> day of July, 2006, before me, the undersigned Notary Public, personally appeared Don McInerney and Scott Milligan personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he or she executed the same.

Seal:

Signature: 

Name: Renato Pontello-Concino, Notary Public  
in and for the Province of Ontario, Canada

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MTL\_LAW #1824222 v. 2

**PATENT**  
**REEL: 019235 FRAME: 0432**

**EXHIBIT A  
TO CONFIRMATORY PATENT ASSIGNMENT**

Patent Application Title	Inventors	Country	Filed	Serial #	Patent #	Issue Date
Ultra linear transconductor	Nick Cowley Arshad Madni	UK	09/01/1999	9900344.4	2345600	30/07/2003
		USA	10/01/2000	09/479973	6278299	21/08/2001
IMPROVED ARCHITECTURE FOR ZERO IF TUNERS	Nick Cowley Mark Mudd	UK	04/06/1999	9912873.8	2350948	01/10/2003
Radio frequency amplifier	Arshad Madni Lance Trodd	US	05/07/2000	09/611720	6407632	18/06/2002
Improvements in or relating to FM demodulators	Nick Cowley	Canada	20/08/1986	516424	1254958	30/05/1989
Radiation prescalers	Nick Cowley	US	02/02/1987	19276	4862515	29/08/1989
FM receivers	Nick Cowley	US	29/05/1986	868908	4806872	21/02/1989
Radio receiver tuner circuit	Christopher Beale	UK	30/03/1988	8807604.7	2216354	16/09/1992
Tuner circuit including tuning voltage generator	Nick Cowley	UK	25/02/1986	8604652	2188502	08/11/1989
		US	24/02/1987	018216	4792989	20/12/1988
On-chip integrated oscillator circuits	Christopher Beale	UK	09/02/1989	8902870.8	2228154	21/04/1993
Improvements in or relating to FM demodulators	Nick Cowley	US	25/01/1989	301382	4953010	28/08/1990
Improvements in or relating to flip-flops	Nick Cowley Rod Lawton Thomas McClelland	UK	30/11/1987	8727953.5	2213008	29/01/1992
		US	21/11/1990	07/616843	5200650	06/04/1993
Frequency doubling oscillator and heterodyne circuit incorporating same	Nick Cowley Rod Lawton Thomas McClelland	UK	22/10/1985	8525985.1	2181914	20/09/1989
		US	13/08/1987	060708	4810976	07/03/1989
Drive circuit	Ian R MacDonald	US	02/11/1994	08/333264	5469093	21/11/1995
Integrated circuit oscillators	Rod Lawton	UK	11/11/1994	9422822.8	2284315	10/12/1997
		US	22/11/1994	08/343708	5469118	21/11/1995
Phase lock detector	Mark Mudd	UK	28/02/1995	95301297.8	0673121	14/01/1998
Amplifier circuit arrangements	Arshad Madni Nick Cowley Ian Watson	UK	09/12/1994	9524326.8	2295934	14/04/1999
		US	04/12/1995	08/566859	5684433	04/11/1997

Patent Application Title	Inventors	Country	Filed	Serial #	Patent #	Issue Date
Frequency synthesizer	Peter Saul	UK	01/05/1997	9708943.7	2324917	14/03/2001
		US	22/04/1998	09/084276	6060917	09/05/2000
Improvements in or relating to demodulator alignment correction in tuners	Nick Cowley	UK	09/12/1998	9826934.2	2344710	15/05/2002
		US	06/12/1999	09/454642	6567488	20/05/2003
Improved Architecture for Digital Cable Tuners	Nick Cowley	US	11/09/2000	09/658745	6901248	5/31/05
Digital Receiver	Nick Cowley Alison Payne Mark Dawkins	Europe - UK	08/09/2000	00307800.3	1085665	13/07/2005
New Architectural Arrangement for Digital Tuners	Nick Cowley Alison Payne Mark Dawkins	US	22/08/2001	09/935028	6937670	30/08/2005
Architectural arrangements for universal wired/wireless modem applications	Nick Cowley	UK	19/10/2001	0125125.5	2372162	21/07/2004
A Novel Method for Improving the Intermodulation Performance of Radio Receivers	Nick Cowley	US	22/08/2001	09/934610	6714263	30/03/2004
FEC AGC Architecture	Arshad Madni Mark Mudd	US	24/01/2002	10/056155	6876843	05/04/2005
		UK	08/01/2002	02250099.5	1231709	12/11/2003
Mixer with emitter follower driven LNA	Arshad Madni Franco Lauria Mark Mudd Lance Trodd Nick Cowley	US	22/08/2002	10/225790	6727746	27/04/2004
A Novel CMOS VCO Control	Richard Albon David Johnston	US	20/08/2002	10/223869	6683509	27/01/2004
Tuner Arrangement and Set Top Box	Nick Cowley Theodore Aaron	UK	25/11/2002	02102634.9	1317073	12/01/2005
		Germany	25/11/2002	02102634.9	1317073	12/01/2005
A Novel method for improving the intermodulation performance of radio receivers	Lance Trodd Franco Lauria	US	28/04/2003	10/424899	6791414	14/09/2004
A method for power and gain distribution optimization in digital terrestrial tuners	Nick Cowley Keith Jones	UK	28/02/2003	0304584.6	2398943	31/08/2005
Patent Title	Inventors	Country	Filed	Serial #	Patent #	Issue Date
QAM Demodulator Synchronisation Algorithm	Bernard Arambepola	US	13/03/2001	09/834693	6879646	12/04/2005

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Patent Title	Inventors	Country	Filed	Serial #	Patent #	Issue Date
Impulse Correction Arrangements for DTTSystems	Nick Cowley Allson Payne M Dawkin	UK	08/08/2001	01306712.9	1180851	22/10/2003
Method for optimising the analogue filter bandwidth in OFDM receiver	Bernard Arambepola Nick Cowley	UK	02/11/2002	0225598.2	2394847	07/09/2005
A Novel Implementation for a Digital Television Broadcast Receiver	Scot Cuthbertson Richard Crossley Malcolm Lomer	Germany	11/05/2004	20 2004 007 526.1	20 2004 007 526.1	22/07/2004
Patent Title	Inventors	Country	Filed	Serial #	Patent #	Issue Date
Class AB amplifier with improved phase margin	S Franck	US	19/09/1993	08/155584	5412344	02/05/1995
Variable transconductance amplifier	Arshad Madni	UK	10/06/1999	9913423.1	2334163	21/02/2001
		US	08/08/2000	09/590330	6304142	16/10/2001
Analogue to digital convertors	Ian Dedic	UK	02/06/1989	8912779.9	2219453	20/05/1992
Delta sigma modulator arrangements.	Ian Dedic Alexander Vogt	UK	04/08/1989	8917927.9	2222330	15/07/1992
		US	03/08/1989	389369	4994805	19/02/1991
Analogue to digital convertors	Ian Dedic Alexander Vogt	UK	12/09/1989	8920647.8	2223137	15/07/1992
Analogue to digital converter	Peter Saul	UK	30/01/1987	87901078.3	256076	28/03/1990
		US	01/01/1991	110763	4982193	01/01/1991
Analogue-to-digital convertors	Andrew Joy Thomas Leslie	UK	18/08/1988	8819638.1	2223369	18/11/1992
Digital phase locked loop	Bhajan Singh Vincent Considine	UK	02/03/1988	8804974	2215539	29/04/1992
		US	15/07/1991	729315	5193103	09/03/1993
Analogue to digital converter	David Mapleston	UK	03/02/1986	8602569.9	2186135	06/09/1989
		US	29/01/1987	921450	4774499	27/09/1988
Amplifier arrangements	Arshad Madni	UK	10/09/1993	9417493.5	2281832	27/08/1997
		US	25/08/1994	08/295620	5572165	05/11/1996
Overvoltage protection circuit	Mark Mudd Ross Addinall	UK	28/09/1994	94307100.1	651490	10/06/1998
		US	22/10/1996	08/324914	5568345	22/10/1996
Improvements in or related to analogue to digital convertors	Thomas Jackson	UK	21/02/1986	8604336	2171569	27/07/1988
		US	21/02/1986	925634	4736188	05/04/1988
Amplifiers	Arshad Madni	Europe	06/11/2000	00309862.1		
		US	02/11/2000	09/705499	6480066	12/11/2002

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Patent Title	Inventors	Country	Filed	Serial #	Patent #	Issue Date
Radio frequency amplifier and tuner	Arshad Madni	Europe	01/05/2001	1303999.5		
		US	10/05/2001	09/852600	6538501	25/03/2003
BES FEC LNA	Arshad Madni	UK	12/03/2002	205699.2	2369508	12/03/2002
		US	07/03/2003	10/383712	6747512	08/06/2004
Patent Title	Inventors	Country	Filed	Serial #	Patent #	Issue Date
Amplifier circuit arrangement	Slava Souetinov Peter Laws	US	06/03/2000	09/526832	6642787	04/11/2003
A frequency synthesiser	David A Johnson	UK	22/09/1989	892144.9	2233844	05/05/1993
Phase detector	Ian Fobbester David Clarke	UK	22/08/1989	8919089.6	2235839	16/06/1993
		US	10/08/1990	565065	5157341	20/10/1992
Mixer for direct conversion receiver	Peter Laws	UK	19/07/1991	9115618.2	2249679	30/03/1994
		US	06/08/1991	91/740992	5303417	12/04/1994
Charge pump circuit	Ian Fobbester Peter Good	UK	31/10/1990	9023671.2	2249443	08/06/1994
Improvements in true logarithmic amplifiers	Peter Chadwick	US	08/03/1991	07/666359	5159280	27/10/1992
Integrated circuit amplifier arrangements	Peter Laws	UK	12/01/1994	9400454.6	2275382	13/11/1996
		US	08/08/1995	191281	5440271	08/08/1995
Logarithmic detector	Ian Watson	UK	27/08/1993	9317848.1	2281425	29/10/1997
		US	23/08/1994	294550	5467093	14/11/1995
Modulators	peter Chadwick	UK	28/09/1993	9319954.5	2282284	21/01/1998
		US	24/08/1994	08/295017	5493257	20/02/1996
Automatic frequency control arrangement	David Mapleston	Japan	29/07/1994	196237/94	3493458	21/11/2003
		UK	06/08/1993	9316363.2	2280801	10/12/1997
		US	03/08/1994	08/285407	5530723	25/06/1996
Detectors	Marcus Granger-Jones	China	16/07/1994	94108397.7	ZL94108397.7	15/05/2002
		UK	16/07/1993	9314841.9	2280324	22/07/1998
		US	11/07/1994	08/272839	5612976	18/03/1997
Equalisation arrangement	Peter Chadwick	UK	16/07/1993	9314851.8	2280800	12/11/1997
		US	30/06/1994	08/269074	5557640	17/09/1996
Signal strength detector	Phil Moon	Canada	20/08/1984	461353	1243354	18/10/1988
Bias circuit	Phil Moon	US	05/02/1987	011098	4763018	09/08/1988
Bias current circuit, and cascade and ring circuits incorporating same	Phil Moon Simon Atkinson	US	05/02/1987	010930	4833344	23/05/1989

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Patent Title	Inventors	Country	Filed	Serial #	Patent #	Issue Date
Improvements in or relating to integrated circuits	Peter Laws	US	27/02/1987	019901	4806880	21/02/1989
Clock driven data sampling circuit	Peter Laws Graham Fletcher	UK	29/03/1988	8807402.6	2222751	26/08/1992
		US	10/07/1990	329718	4940948	10/07/1990
Broad band VCO control system for clock recovery	Peter Laws Graham Fletcher	UK	28/03/1988	8807320.0	2223136	14/10/1992
		US	28/03/1989	329719	4943788	24/07/1990
Manchester clock code and data recovery system.	Peter Laws	UK	11/02/1988	8803139.8	2202716	06/02/1991
		US	16/02/1988	156496	4853943	01/08/1989
Improved transconductors and voltage gain devices incorporating same	Simon Atkinson	UK	16/09/1986	8622394	2195211	10/01/1990
A phase shift arrangement	Paul Denny	US	16/09/1988	245154	4922127	01/05/1990
Electrical circuits	Simon Atkinson Frank Carr	UK	17/07/1987	8716884.5	2208340	22/01/1992
		US	17/05/1989	335087	4947141	07/08/1990
Transconductance floating resistor circuit	Peter Laws	UK	29/01/1994	9401718.3	2286090	11/11/1998
Direct conversion receivers	Rod Lawton	China	14/09/1994	94115885.3	94115885.3	24/09/1997
		UK	14/09/1993	9318981.9	2282030	24/09/1997
		US	08/09/1994	08/302510	5451899	19/09/1995
D.C. restoration circuit	Ian Fobbester	Japan	25/10/1994	284226/94	3500442	12/12/2003
		US	24/12/1996	324911	5587681	24/12/1996
Control arrangements for digital radio receivers	Ian Fobbester	UK	28/10/1994	9421403.8	2283871	02/09/1997
		US	18/10/1994	324910	5663989	02/09/1997
Voltage offset compensation circuit	Keith Jones	UK	21/02/1995	9503425.2	2298329	16/02/2000
		US	01/03/1996	604676	5812023	22/09/1998
Controllable filter arrangement	Colin Perry Marcus Granger-Jones	US	01/03/1996	08/604494	5760641	02/06/1998
Integrated circuit output buffer	David Wilcox	UK	06/12/1995	9524957.9	2308027	10/05/2000
		US	25/11/1996	08/755985	5982207	09/11/1999
Amplifier and loop filter arrangement for a PLL using a charge pump	David Clarke Ian Fobbester	UK	25/04/1996	9608622.8	2312578	05/07/2000
		US	31/03/1997	08/829719	5874862	23/02/1999
Low Noise Amplifier	Slava Souetlinov	UK	11/01/1997	9700487.3	2321150	11/12/2000
		US	07/01/1998	09/003909	5945880	31/08/1999

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Patent Title	Inventors	Country	Filed	Serial #	Patent #	Issue Date
Image Reject Mixer	Slava Souetinov Chan T K	UK	11/01/1997	9700485.7	2321352	04/04/2001
		US	07/01/1998	09/003906	6308058	23/10/2001
Low Voltage Mixer	Slava Souetinov	UK	11/01/1997	9700486.5	2321149	04/04/2001
		US	07/01/1998	09/003908	6211718	03/04/2001
4-level FSK demodulator	Bernard Duggan Christopher Shepherd Michael Pearce	China	08/10/1998	98120936.X	ZL98120936.X	01/10/2003
		UK	09/10/1997	9721362.3	2330261	20/06/2001
Image reject mixer arrangements	Slava Souetinov S Graham	UK	07/11/1997	9723486.8	2331193	11/07/2001
		US	04/11/1998	09/185838	6597899	22/07/2003
Low voltage amplifiers	Jeffrey Smith Colin Perry	Europe-UK	16/10/1998	98308484.9	917285	07/05/2003
		US	04/11/1998	09/185837	6043710	28/03/2000
Variable RF attenuator using shunt connected antiparallel pair of bipolar transistors	Slava Souetinov	UK	26/02/1998	9804165	2334838	27/11/2002
		US	26/02/1999	09/259166	6147568	14/11/2000
Image reject mixer	Slava Souetinov	UK	08/09/1998	9819428.5	2341502	22/01/2003
		US	03/09/1999	09/390616	6324388	27/11/2001
High Gain CMOS Mixer	Slava Souetinov	UK	05/07/2001	116475.5	2379814	29/10/2003
		US	07/03/2002	10/190879		
CMOS Controllable Attenuator	Slava Souetinov	UK	30/08/2001	121140.8	2379567	11/09/2003
		US	28/08/2002	10/229,906	6683511	27/01/2004
PLT with Modified Amplifiers/Detectors	Peter Chadwick	UK	10/10/2001	124332.8	2380880	19/02/2004
		US	09/10/2002	10/267905	6844788	18/01/2005
Frequency Doubler Circuit	Peter Laws	UK	03/08/2001	119014.9	2378593	19/09/2003
		US	24/07/2002	10/202477	6664824	16/12/2003
Integrated Circuit	Peter Laws	UK	19/12/2001	130270.2	2367428	19/12/2001
		US	18/12/2002	10/325254	6781482	24/08/2004
Patent Title	Inventors	Country	Filed	Serial #	Patent #	Issue Date
Video signal coding	Vincent Considine Amarjit Bhandal	UK	01/02/1988	8802149.8	2214751	17/06/1992
Digital colour subcarrier generator	Gareth Williams	UK	09/12/1994	9424839	2295935	12/05/1999
		USA	04/12/1995	08/566976	5815214	29/09/1998

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