Form PTO-1595 RECORDATION F	ORM COVER SHEET U.S. DEPARTMENT OF COMMERCE
(Rev. 10/02)	NTS ONLY U.S. Patent and Trademark Office
CINE NO. 0001-0027 (0xp. 0100/2000)	NI 2 ONE 1
Tab settings ➡ ➡ ➡ ▼ ▼ ▼ ▼ ▼ ▼ ▼ ▼ ▼ ▼ ▼ ▼ ▼ ▼ ▼ ▼	arks: Please record the attached original documents or copy thereof.
Name of conveying party(ies):	Name and address of receiving party(ies)
Universal Lighting Technologies, Inc.	Name: Fleet Capital Corporation, As Agent
	Internal Address:
Additional name(s) of conveying party(les) attached? Yes	No
3. Nature of conveyance;	
Assignment Merger	
Security Agreement Change of Nam	Street Address: 300 Galleria Pkwy., Suite 800
Other	
	City: Atlanta State: GA Zip: 30339
Execution Date: 10/21/04	Additional name(s) & address(es) attached? Yes V
4. Application number(s) or patent number(s):	
If this document is being filed together with a new a	application, the execution date of the application is:
A. Patent Application No.(s)	
Please see Exhibit A attached	Please see Exhibit A attached
Addittonal numbe	ers attriched? Yes No
5. Name and address of party to whom correspondent	nce 6. Total number of applications and patents involved: 34
сопсетпіпд document should be mailed: Name: Heather F. Skinner, Paralegal	7. Total fee (37 CFR 3.41)\$ 1360.00
	<u></u>
Parker, Hudson, Rainer & Dobbs Internal Address:	Enclosed
	Authorized to be charged to deposit account
705 7	8. Deposit account number:
Street Address: 285 Peachtree Center Avenue	
1500 Marquis Two Tower	
City: Atlanta State: GAZip: 30303	
	<u> </u>
	USE THIS SPACE
9. Signature.	
Harrison J. Roberts, Esq.	11/10/04
Name of Person Signing	Signature Date
Total number of pages including of	cover sheet, attachments, and documents: 28

Mail documents to be recorded with required cover sheet information to: Commissioner of Patents & Trademarks, Box Assignments Washington, D.C. 20231

EXHIBIT A (Continued from item 4B) United States Patents

PATENT NUMBER

5,396,155

5,440,475

5,461,287

5,493,180

5,493,181

5,500,576

5,539,281

5,936,357

5,925,990

5,973,455

5,982,113

6,023,132

6,091,199

6,111,365

6,137,239

6,177,769

6,274,987

6,281,641

6,291,944

6,333,605

6,437,250

6,437,520

6,720,741

- l - PATENT

REEL: 015361 FRAME: 0360

EXHIBIT A (Continued from item 4B)

United States Patent Applications

APPLICATION NUMBERS

10/187,304

10/629,389

10/631,672

10/688,507

10/726,018

60/526,638

60/526,639

60/526,640

60/526,641

60/526,723

60/540,187

AMENDED AND RESTATED PATENT SECURITY AGREEMENT

This PATENT SECURITY AGREEMENT (this "Agreement") is made this Agreement" day of October, 2004, between FLEET CAPITAL CORPORATION, a Rhode Island corporation having an office at 300 Galleria Parkway, N.W., Suite 800, Atlanta, Georgia 30339, in its capacity as collateral and administrative agent for the Lenders (as hereinafter defined) (together with its successors and assigns in such capacity, "Agent"), and UNIVERSAL LIGHTING TECHNOLOGIES, INC., a Delaware corporation having its principal place of business at 26 Century Boulevard, Nashville, Tennessee (the "Company").

Recitals:

The Company and one or more of its affiliates ("Borrowers") have obtained loans and other financial accommodations from certain financial institutions (collectively, "Lenders") party from time to time to that certain Loan and Security Agreement, dated June 15, 2001, among Borrowers, Agent and Lenders (as at any time amended, the "Original Loan Agreement"). As security for the Obligations under (and as defined in) the Original Loan Agreement, the Company executed and delivered to Agent, for the benefit of itself and the Lenders, a certain Patent Security Agreement, dated June 15, 2001 (the "Original Patent Security Agreement"), which was recorded in the United States Patent and Trademark Office on June 28, 2001, at Reel/Frame number 012177/0912.

Borrowers have requested that Agent and Lenders agree to amend and restate the terms of the Original Loan Agreement pursuant to a certain Amended and Restated Loan Agreement, dated the date hereof, among Borrowers, Agent and Lenders (the Original Loan Agreement, as so amended and restated, and as at any time further amended, restated, modified or extended, being referred to herein as the "Loan Agreement").

Agent and Lenders are willing to make loans and to provide other financial accommodations to Borrowers from time to time pursuant to the terms of the Loan Agreement, provided that the Company executes this Agreement to amend and restate the Original Patent Security Agreement.

NOW, THEREFORE, for Ten Dollars (\$10.00) in hand paid and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Company hereby agrees with Agent as follows:

- 1. Capitalized terms used herein (including those used in the Recitals hereto), unless otherwise defined, shall have the meanings ascribed to them in the Loan Agreement.
- 2. To secure the prompt payment and performance of the Obligations, the Company hereby ratifies and reaffirms the grant of a security interest to Agent, for the benefit of Agent and Lenders, pursuant to the Original Patent Security Agreement, and hereby grants and regrants, assigns and pledges to Agent, for its benefit and the pro rata benefit of Lenders and the other Secured Parties, a continuing security interest in and Lien upon all of the following property of the Company, whether now existing or hereafter created or acquired (the "Patent Collateral"):

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- (a) the entire right, title and interest of the Company in and to all patent applications and patents (including, without limitation, those listed in Exhibit A attached hereto (as the same may be amended from time to time)), and the inventions and improvements therein disclosed, and all re-issues, divisions, continuations, renewals, extensions and continuations-in-part thereof, including, without limitation, the right to sue for past, present and future infringements, all of the Company's rights corresponding thereto throughout the world, together with any good will of the business connected with an symbolized by any such patents and any and all past, present or future rights and interests pursuant to any and all past, present and future licensing agreements in favor of the Company, or to which the Company is a party, pertaining to any of the foregoing, owned or used by third parties in the past, present or future (all of the foregoing being herein collectively referred to as the "Patents"); and
- (b) All products and proceeds of the foregoing (such as, by way of example and without limitation, all income, royalties, damages and payments now and hereafter due and/or payable under and with respect to any of the foregoing, including, without limitation, payments under all licenses entered into in connection therewith and damages and payments for past or future infringements thereof).
- 3. The Company covenants with and warrants to Agent that:
- (a) The Patents are subsisting and have not been adjudged invalid or unenforceable, in whole or in part;
- (b) The Company is now and shall continue to be the sole and exclusive owner of the entire and unencumbered right, title and interest in and to each of the Patents, free and clear of any Liens other than Permitted Liens;
- (c) The Company has the unqualified right to enter into this Agreement and perform its terms and, to the extent it doesn't reasonably necessary, has entered and will enter into written agreements with each of its present and future employees, agents and consultants which will enable it to comply with the covenants herein contained; and
- (d) The Company has used, and will continue to use for the duration of this Agreement, proper statutory notice in connection with its use of the Patents and has made, and will continue to make, all appropriate filings with the United States Patent and Trademark Office to maintain the Patents in existence, including, without limitation, filing all necessary documents with the United States Patent and Trademark Office for each Patent to maintain it without loss of protection therefor.
- 4. Until all of the Obligations have been satisfied in full and the Loan Agreement has been terminated, the Company shall not enter into any license agreement relating to any of the Patents with any Person except non-exclusive licenses to customers of the Company in the regular and ordinary course of the Company's business as presently conducted and for reasonable and customary compensation and non-exclusive licenses to third parties in connection with cross licensing arrangements, and shall not become a party to any agreement with any Person that is

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inconsistent with the Company's obligations under this Agreement and the Company further agrees that it will not take any action, and will use commercially reasonable efforts not to permit any action to be taken by others, including, without limitation, licensees, or fail to take any action, which would in any respect affect the validity or enforcement of the rights transferred to the Agent under this Agreement or the rights associated with the Patents.

- 5. If, before the Obligations shall have been satisfied in full, the Company shall obtain rights to any new patentable inventions, or become entitled to the benefit of any patent application or patent for any reissue, division, continuation, renewal, extension or continuation-in-part of any Patent or any improvement on any Patent, the provisions of paragraph 2 shall automatically apply thereto (which shall be deemed to be and treated as "Patent Collateral" within the meaning of this Agreement) and the Company shall give to Agent prompt notice thereof in writing.
- 6. The Company irrevocably authorizes and empowers Agent (x) to modify this Agreement by amending Exhibit A to include any future patents and patent applications within the definition of Patents under paragraph 2 or paragraph 5 hereof and (y) to file, in addition to and not in substitution for this Agreement, a duplicate original of this Agreement containing an amended Schedule A thereto, reflecting any such future patents and patent applications.
- 7. The Company hereby grants to Agent, and its employees and agents (and any Lender or Lenders and their respective employees and agents), the right upon prior notice to the Company, and subject only to any obligations of confident ality to which the Company, its employees and agents are then subject with respect thereto, to visit the Company's plants and facilities at which any patented inventions are located or which manufacture, inspect or store products made under any of the Patents and to inspect the products and quality control records relating thereto and to examine the Company's books, records (and make copies thereof) and operations relating thereto, at reasonable times during regular business hours.
- At any time an Event of Default exists, Agent shall have, in addition to all other rights and remedies given it by this Agreement, all rights and remedies under Applicable Law and all rights and remedies of a secured party under the UCC. Without limiting the generality of the foregoing, Agent may immediately, for its benefit and the pro rata benefit of Lenders, without demand of performance and without other notice (except as described in the next sentence, if required by Applicable Law) or demand whatsoever to the Company, each of which the Company hereby expressly waives, and without advertisement (except as otherwise provided by Applicable Law), collect directly any payments due the Company in respect of the Patent Collateral, or sell at public or private sale or otherwise realize upon the whole or from time to time any of the Patent Collateral, or any interest which the Company may have therein. The Company hereby agrees that seven (7) days notice to the Company of any public or private sale or other disposition of any of the Patent Collateral shall be reasonable notice; provided, however, that no notice shall be required hereunder if not otherwise required by Applicable Law. At any such sale or disposition, Agent may, to the extent permitted by Applicable Law, purchase the whole or any part of the Patent Collateral sold, free from any right of redemption on the part of the Company, which right the Company hereby waives and releases. After deducting from the proceeds of such sale or other disposition of the Patent Collateral all costs and expenses incurred by Agent in enforcing its rights hereunder (including, without limitation, all attorneys' fees), Agent shall apply the remainder of such proceeds

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to the payment of the Obligations, in such order or manner as may be authorized or required by the Loan Agreement. Any remainder of the proceeds after payment in full of the Obligations shall be paid over to the Company. If any deficiency shall arise, the Company and each guaranter of the Obligations shall remain jointly and severally liable to Agent and Lenders therefor.

- 9. The Company hereby makes, constitutes and appoints Agent, and any officer or agent of Agent as Agent may select, as the Company's true and lawful attorney-in-fact, with full power to do any or all of the following if an Event of Default shall occur and be continuing: to endorse the Company's name on all applications, documents, papers and instruments necessary for Agent to continue the maintenance of or to use the Patents, or to grant or issue any exclusive or nonexclusive license under the Patents to any other Person, or to assign, pledge, convey or otherwise transfer title in or dispose of any Patent Collateral to any other Person. The Company hereby ratifies all that such attorney shall lawfully do or cause to be done by virtue hereof. This power of attorney, being coupled with an interest, shall be irrevocable until all of the Obligations shall have been satisfied in full and the Loan Agreement shall have been terminated.
- 10. At such time as all of the Obligations shall have been satisfied finally and in full and the Loan Agreement shall have been terminated, Agent shall execute and deliver to the Company, without representation, warranty or recourse and at the Company's expense, all releases and other instruments necessary to terminate Agent's security interest in the Patent Collateral, subject to any disposition thereof which may have been made by Agent pursuant to the terms of this Agreement, or any of the other Loan Documents.
- 11. Any and all fees, costs and expenses, of whatever kind or nature, (including, without limitation, reasonable attorneys' fees and legal expenses) incurred by Agent or any Lender in connection with the preparation of this Agreement and any other documents relating hereto and the consummation of this transaction, the filing or recording of any documents (including, without limitation, all taxes in connection therewith) with the United States Patent and Trademark Office or in other public offices, the payment or discharge of any taxes, counsel fees, maintenance fees or Liens, or otherwise, in protecting, maintaining and preserving any Patent Collateral or in defending or prosecuting any actions or proceedings arising out of or related to any Patent Collateral, shall be borne and paid by the Company (it being the intent of the Company and Agent that the Company shall be responsible for the payment of all sums, fees, costs and expenses, including, without limitation, all maintenance fees payable with respect to the Patents) or, if paid by Agent in its sole discretion, shall be reimbursed by the Company to Agent on demand by Agent and until so paid shall be added to the principal amount of the Obligations and shall bear interest at the highest per annum rate in effect from time to time under the Credit Agreement.
- 12. The Company shall use all reasonable efforts to detect any infringers of the Patents and shall notify the Agent in writing of infringements detected. The Company shall have the duty through counsel reasonably acceptable to Agent, to prosecute diligently any patent application for a Patent pending as of the date of this Agreement or thereafter until the Obligations shall have been paid in full and the Loan Agreement terminated, to make application on unpatented but patentable inventions (subject to Company's reasonable discretion in Ordinary Course of Business, or, during the existence of an Event of Default or a Default, promptly upon Agent's request), to file and prosecute opposition and cancellation proceedings, to file and prosecute lawsuits to protect the

376514-3 - 4 -

Patents and to do any and all acts which are deemed necessary or desirable by Agent to preserve and maintain all rights in patent applications for the Patents. Any expenses incurred in connection with such an application or proceedings shall be borne by the Company. The Company shall not abandon any pending patent application or patent, without the prior written consent of Agent.

- 13. Notwithstanding anything to the contrary contained in paragraph 12 hereof Agent shall have the right, but shall in no way be obligated, to bring suit in its own name to enforce the Patents and any license hereunder, or to defend any suit or counterclaim in its own name to protect any Patents or license hereunder, in either of which events the Company shall at the request of Agent do any and all lawful acts (including bringing suit) and execute any and all proper documents required by Agent in aid of such enforcement or defense and the Company shall promptly, upon demand, reimburse and indemnify Agent for all costs and expenses incurred by Agent in the exercise of its rights under this paragraph 13.
- 14. If the Company fails to comply with any of its obligations hereunder, then to the extent permitted by Applicable Law, Agent may do so in the Company's name or in Agent's name, in Agent's sole discretion, but at the Company's expense, and the Company agrees to reimburse Agent in full for all expenses, including, without limitation, reasonable attorneys' fees, incurred by Agent in prosecuting, defending or maintaining the Patents or Agent's interest therein pursuant to this Agreement.
- 15. No course of dealing between the Company and Agent, nor any failure to exercise, nor any delay in exercising, on the part of Agent, any right, power or privilege hereunder or under any of the other Loan Documents shall operate as a waiver thereof; nor shall any single or partial exercise of any right, power or privilege hereunder or thereunder preclude any other or future exercise thereof or the exercise of any other right, power or privilege.
- 16. All of Agent's rights and remedies with respect to the Patent Collateral, whether established by this Agreement or any of the other Loan Documents, or by any other agreements or by Applicable Law, shall be cumulative and may be exercised singularly or concurrently. The Company hereby agrees that the use by the Agent of the Patents as authorized hereunder in connection with the exercise of its remedies under the Loan Agreement and the other Loan Documents shall be coextensive with the Company's rights under the Patents and with respect thereto and without any liability for royalties or other related charges from the Agent or the Lenders to the Company.
- 17. The provisions of this Agreement are severable, and if any clause or provision shall be held invalid and unenforceable, in whole or in part, in any jurisdiction, the same shall be deemed severed herefrom and shall not in any manner affect such clause or provisions in any other jurisdiction, or any other clause or provision of this Agreement in any jurisdiction.
- 18. This Agreement, together with the other Loan Documents, constitutes and expresses the entire understanding of the parties hereto with respect to the subject matter hereof, and supercedes all prior agreements and understandings, inducements or conditions, whether express or implied, oral or written. This Agreement is subject to modification only by writing signed by the parties, except as provided in paragraph 6 hereof

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- 19. The benefits and burdens of this Agreement shall inure to the benefit of and be binding upon the successors and assigns of Agent and upon the successors and permitted assigns of the Company. The Company shall not assign its rights or delegate its rights or assign its duties bereunder without the prior written consent of Agent.
 - The Company hereby waives notice of Agent's acceptance hereof.
- 21. This Agreement amends and restates the Original Patent Security Agreement and is not intended to be or operate as a novation or an accord and satisfaction of the Original Patent Security Agreement or the obligations evidenced or secured thereby or provided for thereunder.
- This Agreement is intended to take effect as a sealed instrument and shall be construed and enforced and the rights and duties of the parties shall be governed by in all respects in accordance with the internal laws (as opposed to conflicts of law provisions, provided that issues with respect to Article 9 of the Uniform Commercial Code may give effect to applicable choice or conflict of law rules set forth in Article 9 the Uniform Commercial Code) and decisions of the State of Georgia.
- 23. To the fullest extent permitted by Applicable Law, the Company and Agent each waives the right to trial by jury in any action, suit, proceeding or counterclaim of any kind arising out of or related to this Agreement or the Patent Collateral.

[Remainder of page intentionally left blank.]

376514-3 - 6 -

IN WITNESS WHEREOF, the parties hereto have executed this Agreement under seal on the day and year first written above.

ATTEST:

Brian E. Ramsay Secretary
Safrey Belvendt

[CORPORATE SEAL]

Witness

UNIVERSAL LIGHTING

TECHNOLOGIES, INC. ("Company")

Patrick A. Sullivan, Chief Executive

Officer

Accepted:

FLEET CAPITAL CORPORATION, as

Agent ("Agent")

By:______Name:_____

Title:

IN WITNESS WHEREOF, the parties hereto have executed this Agreement under seal on the day and year first written above.

ATTEST:	UNIVERSAL LIGHTING TECHNOLOGIES, INC. ("Company")
	Ву:
Jeffrey Behrendt, Secretary	Patrick A. Sullivan, President and
[CORPORATE SEAL]	Chief Executive Officer
Witness	

Accepted:

FLEET CAPITAL CORPORATION, as

Agent ("Agent")

БУ:____ Х'он

Name: Title:

Vice President

STATE OF IN §	
COUNTY OF PAVIOLES \$	
the of UNIVERSAL LIC	GHTING TECHNOLOGIES, INC., to me known to be ne foregoing instrument, and acknowledged to me that he consideration therein expressed, in the capacity therein poration.
GIVEN UNDER MY HAND AND	SEAL OF OFFICE on this day of October, 2004. Notary Public My Commission Expires: 05/39/05
	[NOTARIAL SEAL]
STATE OF	
a of FLEET CAPIT whose name is subscribed to the foregoing	AL CORPORATION, known to me to be the person instrument, and acknowledged to me that he executed the erein expressed, in the capacity therein stated, and as the
GIVEN UNDER MY HAND AND	SEAL OF OFFICE on this day of October, 2004.
	Notary Public My Commission Expires:
	[NOTARIAL SEAL]

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-8-

Amended and Restated Patent Security Agreement

STATE OF	§ s		
COUNTY OF	§ §		
the o known to be the person whose name that he executed the same for therein stated, and as the act and	of UNIVEI ame is subs or the purpo I deed of sa	scribed to the foregoing instructionses and consideration therein aid corporation.	OLOGIES, INC., to me nent, and acknowledged to expressed, in the capacity
GIVEN UNDER MY HA	ND AND :	SEAL OF OFFICE on this	_ day of October, 2004.
		Notary Public My Commission Expires:	
		[NOCARIAL SEAL]	
STATE OF <u>Sevegia</u> COUNTY OF <u>COBB</u>	<i>\$\tau_{\tau_{\tau}}\$</i>		
BEFORE ME, the undersign a Vice Me iden of FLEE whose name is subscribed to the same for the purposes and consider and deed of said corporation	T CAPITA foregoing it leration the	instrument, and acknowledged	on to me to be the person to me that he executed the
GIVEN UNDER MY HAI	ND AND S	SEAL OF OFFICE on this 2/ Notary Public My Commission Expires:	day of October, 2004.
		[NOT'ARIAL SEAL]	_

EXHIBIT A

Exhibit A

Patents and Patent Applications of Universal Lighting Technologies, Inc.

Issue Date Status	File international/utility applications 12/3/04	File international/utility applications 12/3/04	File international/utility applications 12/3/04	File international/utility applications 12/3/04	File international/utility applications 12/3/04	File international/utility applications 1/29/05
Filing Date IssueNo	,03	703	,03	£03	03	25
	39 12/3/03	12/3/03	12/3/03	12303	1273/03	1/29/04
AppSerNo	for 60/526,639 t	ıt Start 60/526,641	roller 60/526,638	60/526,723 e Lamp	60/526,640	or 60/540,187 nd
Description	titons Adaptive Preheal and Strike for Microcontroller Based Ballast	High Efficiency 4-lamp Instant Start Ballast	High Input Voltage Microcontroller Based Instant Start Ballast	IC Based Low Cost Reliable Electronic Ballast with Multiple Striking Attempts and End of Lamp Life Protection	Low Loss Power Supply Management for Ballast with Microcontroller	Methods of Striation Control for Current Fed, Parallel Resonant Inverters
IP Type Country	Provisional Patent Applications U.S. Ad	U.S.	L.S.	r.s.	U.S.	s. S

#515762 V2 \15917\D03

IP Type	Country	Description	AppSerNo	Filing Date IssueNo		Issue Date	Status	
Cullity Pater	Utility Patents and Applications	tions						
	Canada	Electronic Ballast Having End Of Lamp Life, Overheating, And Shut Down Protections, And Recognition And Multiple Striking Capabilities	2,456,386	1/29/04			File Assignment 1/29/05	
	Canada	Electronic Ballast with Frequency Management	2,338,507	7/20/99			Annuly due 7/20/05	
	Canada	Lamp Protective, Electronic Ballast	2,214,226	9/28/97 2,214,226	,214,226	8/6/02	Annuity Due 3/29/05	
	Canada	LED Drive For Generating Constant Light Output	2,456,391	1/29/04			File Assignment 1/29/05	
	Canada	Lighting-Bobbin wilh Strain Relief	515,368	8/6/86 1	8/6/86 1,257,669	7/18/89	Issued-expires 7/18/06	
	Canada	Lighting-Fluorescent Ballast Assembly	512,028	6/20/86 1,259,679	,259,679	9/19/89	Issued-expires 9/19/06	
	Canada	Lighting-Isolated Constant Wattage Lamp Ballast	2,151,305	4/8/95			Pay annuity 6/8/05	

Status	Annuity Due 12/15/04	File Assignment 1/29/05	File Assignment 1/29/05	Annuity Due 5/12/05	Annuity Due 7/20/05	Annuity Due 12/15/04	Issued-annuity due 2/18/05	Issued-verified receipt of annuity payment 10/30/02
Issue Date S							4/7/95	6/16/97
IssueNo	12/15/98	1,29,104	1/29/04	5/12/99	7/20/98	12/15/98	2/18/92 92 01817	4/10/95 185,014
Filing Date	2,315,107	2,456,389	2,456,392	99921922.3	99935790.8	98963193.2	92 01817	951747
Description AppSerNo	Microprocessor Controlled Electronic Ballast	Software Controlled Electronic Dimming Ballast	Transient Detection Of End Of Lamp Life Condition Apparatus And Method	Efectronic Ballast with Filament Cut-Out	Electronic Ballast With Frequency Management	Microprocessor Controlled Efectronic Ballast	Lighting-Fluorescent Lamp Power Gonfroi	Electrical Connector with Improved 9 Centering of Mating Terminal Pins for a FlvorLighting Ballast
IP DipeCountry	Canada	Canada	Canada	Europe	Europe	Europe	France	Mexico

64	File POA and assignment by 8/4/04	File POA and assignment by 8/4/04	issue fee paid	File POA and assignment by 8/4/04	File POA and assignment by 8/4/04	lssued-maintenance fee due 4/24/07	issued-maintenance fee due 12/20/06	Issued-maintenance fee due 8/20/07
Status	File P. 8/4/04	File PO 8/4/04	enss	File PC 8/4/04	File PC 8/4/04	Issued- 4/24/07	issued-m 12/20/06	Issued- 8/20/07
Issue Date						10/24/95	8/20/02	2/20/96
IssueNo				_	_	222694 5,461,287	4/12/01 6,437,250	5/8/95 5,493,181
Filing Date IssueNo	3/12/04	3/12/04	6/19/00	3/12/04	3/12/04	2/25/94	4/12/01	5/8/95
AppSerNo	P.A/a/2004/0023 57	P <i>A/ał</i> 2004/0023 58	2000/006056	PA/a/2004/0023 59	PA/a/2004/0023 60	202,053	832,805	436,789
Description	Electronic Ballast Having End Of Lamp Life, Overheating, And Shul Down Protections, And Recognition And Multiple Striking Capabilities	LED Drive For Generating Constant Light Output	Microprocessor Controlled Efectronic Ballast	Software Controlled Electronic Dimming Ballast	Transient Detection Of End Of Lamp Life Condition Apparatus And Meticui	Booster Driven Inverter Ballast Employing the Output from the Inverter to Trigger the Booster	Cable Reel Structure	Capacitive Lamp Out Detector
Country	Mexico	Mexico	Mexico	Mexico	Mexico	U.S.	U.S.	U.S.
ІР Туре								

Status	issued-maintenance fee due 7/23/08	issued-maintenance fee due 8/8/07	Pending	Issued-maintenance fee due 10/13/07	issued-maintenance fee due 5/9/07	Issued-maintenance fee due 2/10/07	Pay maintenance fee 2/20/06	Issued-maintenance fee due 4/26/07
Issue Date	1/23/01	2/8/00		4/13/04	11/9/99	8/10/99	8/20/02	10/29/99
IssueNo	11/22/99 6,177,769	10/12/98 6,023,132	93	2/1/02 6,720,741	6/20/97 5,982,113	7724/98 5,936,357	7/11/00 6,437,520	5/15/98 5,973,455
Filing Date IssueNo	11/22/8	10/12/9	10/17/03	2/1/0	6/20/4	7724/8	7/11/6	5/15/
AppSerNo	447,333	170,144	10/688,507	10/066,059	879,181	122,231	09/613,919	079,844
Description	Electric Ballast with Selective Power Dissipation	Electronic Ballast Deriving Auxiliary Power from Lamp Output	Electronic Ballast Having End of Lamp Life, Overhealing, and Shul Down Protections, and Relamping and Multiple Striking Capabilities	Electronic Ballast Having Open Circuil in Outpul	Electronic Ballast Producing Voltage Having Trapezoidal Envelope for instant Larups	Electronic Ballast that Manages Switching Frequencies for Extrinsic Purposes	Electronic Ballast with Cross-Coupled Outputs	Electronic Ballast With Filament Cut-Out
Country	U.S.	œ.	U.S.	U.S.	ფ. ე	S; O	U.S.	U.S.
IP Type								

<i>Status</i> Issued-maintenance fee due 2/8/07	issued-maintenance fee due 4/24/08	Issued-maintenance fee due 1/23/08	Issued-maintenance fee due 2/29/08	issued-maintenance fee due 1/18/08	lssued-maintenance fee due 8/20/07	Pending	issued-maintenance fee due 6/25/05
Issue Date 8/8/95	10/24/00	7/23/96	8/29/00	7/18/00	2/20/96		12/25/01
Filing Dafe IssueNo 11/8/93 5,440,475	8/11/99 6,137,239	1/23/95 5,539,281	9/13/99 6,111,365	7/30/97 6,091,199	3/31/95 5,493,180	7/29/03	11/2/99 6,333,505
AppSerNo 148,295	372,201	376,774	394,865	903,311	416,022	10/629,389	431,822
<i>Description</i> Electronic Ballast with Low Harmonic Distortion	Electronic Ballast with Selective Load Confrol	Externally Dimmable Electronic Ballast	Fast Starting, Surge Limited, Electronic Ballas	Heal Spreader for Electronic Ballast	Lamp Protective, Electronic Ballast	LED Drive for Generating Constant Light Output	Light Modulating Electronic Ballast
Country U.S.	U.S.	U.S.	U.S.	Ľ.s.	U.S.	U.S.	α; Ω
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	lssued-maintenance fee due 10/11/05	s 4/15/06	s 3/12/05	Issued-maintenance fee due 11/1/04	mance fee du	s 11/15/05	nance fee du	nance fee du
Status	Issued-mainte 10/11/06	issued-expires 4/15/06	Issued-expires 3/12/05	Issued-mainte 11/1/04	Issued-maintenance fee due 9/20/04	Issued-expires 11/15/05	issued-maintenance fee due 8/29/07	Issued-maintenance fee due 7r22/05
Issue Date	4/11/95	2716/88	1/13/87	5/1/01	3/20/01	12/29/87	2/29/00	7122/97
IssueNo	9/2 8 /93 5,405,271	4/15/86 4,724,602	3/12/85 4,636,763	5/19/00 6,225,757 B1	5/17/99 6,204,602	11/15/85 4,716,343	6,031,340	5/3/96 5,650,925
Filing Date IssueNo	9/28/93	4/15/86	3/12/85	5/19/00	5/17/99	11/15/85	7/31/98	56/2/36
AppSerNo	08/128,591	838,467	710,982	09/574,902	09/312,973	798,265	09/127,200	08/642,785
Description	Lighting-Apparatus & Method for Improving Assembly of Leadless Ballasts into Fluorescent Luminaries	Lighting-Aulo Transformer	Lighting-Bobbin with Strain Relief	Lighting-Combination MH/HPS Ballast	Lighting-Compact Fluorescent Lamp with an Air Gap for Thermal Isolation	Lighting-Constant Illumination Electronic Balfast	Lighting-Device & Method for Capacitive Bi-Level Switching of High Intensity Discharge Lighting	Lighting-Dìode Clamping Arrangement for Use in Electronic Ballasts
Country	U.S.	U.S.	U.S.	U.S.	U.S.	U.S.	U.S.	S. S.
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tas	lssued-maintenance fee due 2/28/05	Patent Expires 3/31/08	issued-maintenance fee due 7/30/2007	Issued-maintenance fee due 8/4/06	Issued-maintenance fee due 9/27/06	Patent expires 12/2/06	Expires 10/20/07	Issued-expires 2/20/10
Issue Date Status	8/28/01 Isst 2/2/	2/28/89 Pat	1/30/96 lsst 7/30	8/4/98 Issued 8/4/06	9/27/94 Issu 9/27	10/4/88 Pate	3/14/89 Exp	2/20/90 Issu
Filing Date IssueNo	5/1/00 6,281,641	3/31/88 4,808,959	4/8/94 5,488,258	10/30/97 5,788,527	1/19/93 5,350,292	12/2/86 4,775,337	10/20/87 4,812,601	9/18/87 4,902,938
AppSerNo	09/562,158	175,951	224,811	08/960,711	006,313	936,809	111,044	089,580
Description	Lighting-Electonic Ballast for One or More Lamps	Lighting-Electric Coil with Tap Transferring to End-Layered Position	Lighting-Electrical Connector with Improved Centering of Mating Terminal Pins, for a Fluorescent-Lighting Ballast	Lighting-Electrical Connector With Improved Safety Latching For A Fluorescent-Lighting Ballast	Lighting-Electrical Half Connector With Conlact-Centering Vanes	Lighting-Electrical Lead with Integral Terminal	Lighting-Efectrical Terminal	Lighting-Electronic Ballast with High
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Status	Expires 6/21/10	Expires 11/16/07	Expires 12/19/2006	Issued-maintenance fee due 10/20/04	issued-maintenance fee due 3/27/06	Issued-maintenance fee due 11/9/05	Issued-maintenance fee due 4/31/07	Issued-maintenance fee due
Issue Date 3	7/21/92	8/23/88	8/11/87	4/20/93	9/27/94	11/9/93	10/31/95	10/6/98
Filing Date IssueNo	6/21/90 5,132,595	11/16/87 4,766,406	12/19/86 4,686,427	2/19/91 5,204,587	5/14/93 5,350,316	4,4,91 5,260,678	7/27/93 5,463,522	9/21/95 5,817,975
AppSerNo	541,609	122,577	945,223	657,114	009,645	669'089	08/098,471	08/531,585
Description	Lighting-Filament Switch for a Lamp Ballast	Lighting-Fluorescent Balfast Assembly	Lighting-Fluorescent Lamp Dimming Switch	Lighting-Fluorescent Lamp Power Control	Lighting-Fluorescent-Lamp Leadless Ballast with Improved Connector	Lighting-Fluorescent-Lamp Leadless Ballast With Improved Connector	Lightling-Housing for Thermal Protector	Lighting-Housing with Integral Mounting Bracket
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	lssued-maintenance fee due 3/4/10	Issued-maintenance fee due 3/20/06	Issued-maintenance fee due 9/24/05	Issued-maintenance fee due 9/5/07	Issued-maintenance fee due 12/3/04	issued-maintenance fee due 4/22/2008	Issued-maintenance fee due 11/6/04	Issued-maintenance fee due 12/13/07
Status	Issued-mainte 3/4/10	Issued-mainte 3/20/06	Issued-mainte 9/24/05	Issued-mainte 9/5/07	Issued-mainte 12/3/04	Issued-mainte 4/22/2008	Issued-mainte 11/6/04	Issued-mainte 12/13/07
Issue Date	3,724,98	9/20/94	3724/98	3/5/96	6/3/97	10/22/96	5/6/97	6/13/00
IssueNo	2/24/95 5,731,567	3 5,349,508	3 5,731,666	6/9/94 5,497,052	5 5,635,799	5 5,568,041	5,625,939	10/8/98 6,074,263
Filing Date IssueNo	2/24/9	7/7/83	36/8/6	6/9/94	5,10,96	2/9/95	3/2/95	10/8/98
AppSerNo	08/395,499	088,557	08/613,217	257,346	08/644,209	08/385,906	08/397,574	09/168,722
Description	Lighting-Hybrid Sequence Start Ballast	Lighting-Integral Housing for Ballasts and Fluorescent Lamps	Lighting-Integrated-Magnetic Filter Having a Lossy Shunt	Lighting-Isolated Constant Wattage Lamp Ballast	Lighting-Lamp Protection Circuit for Electronic Ballasts	Lighting-Low Cost Power Factor Correction	Lighting-Method for Assembling an Inductive Device	Lighting-Methods of Manufacturing Ballasts and Starter Assemblies Used in Gas Discharge Lamps
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Status	Issued-maintenance fee due 4/6/06	Issued-maintenance fee due 6/10/08	Issued-maintenance fee due 9/25/04	Issued-maintenance fee due 2/14/09	Issued-maintenance fee due 9/2/06	Issued-maintenance fee due 9/20/04	Issued-maintenance fee due 5/17/06	Issued-maintenance fee due 1077/09
Issue Date	10/6/98	12/1 0/96	3/25/97	8/14/01	3/2/99	3/20/01	11/17/98	417198
Filing Date IssueNo	11/19/96 5,818,181	9/15/94 5,583,398	2/14/94 5,614,810	5/8/96 6,274,987 B1	11/1/96 5,877,592	2719/00 6,204,613	5/3/96 5,838,181	12/22/95 5,735,703
AppSerNo	08/752,646	08/306,499	08/194,916	08/646,470	08/742,355	09/507,425	08/642,562	08/576,222
Description	Lighting-Neon Lamp Isolation Transformer for Mid-Point Commoned Neon Lamps	Lighting-Power Factor Correcting Flyback Arrangement Having a Resonant Capacitor Element Connected Across The Switching	Lighting-Power Factor Correction Circuit	Lighting-Power Sensing Shutdown	Lighting-Programmed-Start Parallel-Resonant Electronic Ballast	Lighting-Protected Dimming Confrol Inlerface For An Electronic Ballast	Lighting-Pulse-Width Modulator Circuit For Use in Low-Cost Power Factor Correction Circuit	Lighting-Recessed Bushing Style Luminous Tube Transformer Featuring Versatile Mounting Configuration
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IP Type	Country	Description	AppSerNo	Filing Date IssueNo	Issue Date	Status
	S.U	Lighting-Retention Clip for a Thermal Protection Sensor	194,744	5/17/88 4,924,350	5/8/30	Issued-expires 5/17/08
	U.S.	Lighling-Safety Control Circuit for Detecting the Removal of Lamps from a Ballast and Reducing the Through-Lamp Leakage Currents	09/070,885	4/30/98 6,051,940	4/18/00	issued-maintenance fee due 10/18/07
	U.S.	Lighting-Safety Protector for Non-Isolated Ballasts	08/539,826	10/6/95 5,642,019	6/24/97	tssued-maintenance fee due 12/2/04
	U.S.	Lighting-Secondary Ground Fault Protected Luminous Tube Transformer for Mid-Point Connected Luminous Tubes	08/715,873	9/19/86 5,751,523	5/12/98	Issued-maintenance fee due 11/12/05
	s. S	Lighting-Shunt Holding Means For Ballasts	331,517	3/31/89 4,952,899	8/28/90	lssued-patent expires 6/26/09
	U.S.	Lighting-Shunt Retaining Clip in a Ballasi	449,702	12/11/89 4,937,547	6/26/90	Issued-palent expires 6/26/09
	U.S.	Lighting-Simplified Ballast Assembly	08/226,714	4/12/94 5,510,762	4/23/96	Issued-maintenance fee due 10/23/07
	i.s.	Lighting-Speed-up Circuit for Switched Power Transistor	06/798,264	11/15/85 4,667,281	5/19/87	Issued-expires 11/15/2005

Status	lssued-maintenance fee due 6/10/08	issued-maintenance fee due 3/28/07	Issued-maintenance fee due 3/18/05	Issued-maintenance fee due 5/3/06	Issued-maintenance fee due 11/12/05	Expires 4/28/08	Issued-maintenance fee due 9/19/07	Issued-maintenance fee due 6/20/05
Issue Date	12/10/96	9/28/99	9/18/01	11/3/98	5/12/98	84/1/8	3/18/96	7/20/99
Filing Date IssueNo	1/31/94 5,583,402	8/7/97 5,959,408	5/5/00 6,291,944	1/11/96 5,831,395	7/7/95 5,751,118	4/26/88 4,853,667	4/15/94 5,500,576	12/19/97 5,925,990
AppSerNo	08/190,746	08/908,393	09/566,252	08/585,399	08/499,771	187,369	227,953	995,278
Description	Lighting-Symmetry Control Circuit and Method	Lighling-Symmetry Control Circuit for Pre-Heating in Electronic Ballasts	Lighting-System & Method for Limiting Through-Lamp Ground Fautt Curents in Non-Isolated Electronic Ballasts	Lighting-Three Way Fluorescent Adapter	Łighling-Universal Input Dimmer	Lighting-Wire Bobbin for Inductive Devices	Low Height Ballast for Fluorescent Lamps	Microprocessor Controlled Electronic Ballast
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Status	Pay issue fee 10/29/04	issued-maintenance fee due 9/7/06	File international applications by 12/2/64	File missing parts 8/14/04
Issue Date		3/7/95		
Filing Date IssueNo	7/1/02	6/28/94 5,396,155	12/2/03	7/31/03
AppSerNo Filin	10/187,304	266,746	10/726,018	10/631,672
Description	Secondary Ground Fault Protected Neon Transformer	Self-dimming Electronic Ballast	Software Controlled Dimming Ballast	Transient Detection of End of Lamp Life Condition Apparatus and Method
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Non-Exclusive Licensing Agreement between Lutron Electronics Corporation, Inc. and Universal Lighting Technologies Inc., dated 2/4/04

PATENT REEL: 015361 FRAME; 0386.30