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To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies): Litton Systems, Inc. (DE Corporation) Additional name(s) of conveying party(ies) attached? [] Yes [X] No

2. Name and address of receiving party(ies): Name: L-3 Communications Corporation Internal Address: Chris Cambria Street Address: 600 Third Avenue City: New York State: NY ZIP: 10016 Additional name(s) & addresses attached? [] Yes [X] No

3. Nature of conveyance: [X] Assignment [] Merger [] Security Agreement [] Change of Name [] Other Execution Date: October 25, 2002

4. Application number(s) or patents number(s): If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) B. Patent No.(s) See Attached Continuation of Item Four See Attached Continuation of Item Four Additional number(s) attached? [] Yes [X] No

5. Name and address of party to whom correspondence concerning document should be mailed: Name: Noah Leibowitz, Esq. Internal Address: Simpson Thacher & Bartlett Street Address: 425 Lexington Avenue City: New York State: NY ZIP: 10017

6. Total number of applications and patents involved: 131 7. Total fee (37 CFR 3.41): \$5,240.00 [] Enclosed [X] Authorized to be charged to deposit account credit card 8. Deposit account number: (Attached duplicate copy of this page if paying by deposit account)

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9. Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Noah Leibowitz, Esq. Name of Person Signing Signature Date 12/13/02

Total number of pages including cover sheet, attachments, and documents: 10

12/17/2002 TDIAZ1 00000021-05726310 5240.00 DP 01 FC:0021

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

PATENT REEL: 013532 FRAME: 0180

CONTINUATION OF ITEM FOUR FROM RECORDATION COVER SHEET**4. Application number(s) or patent number(s):**

Intl. App. No.	Intl. App. No.	Intl. App. No.	Intl. App. No.
PCT/US02/06052	PCT/US99/25239	PCT/US99/25840	PCT/US94/12461
PCT/US00/10042	PCT/US99/27126	PCT/US00/13445	PCT/US96/04874
PCT/US01/16761	PCT/US99/16291	PCT/US01/08957	PCT/US02/14988
PCT/US01/24499	PCT/US99/24492	PCT/US01/05130	PCT/US00/20472

App. No.	App. No.	App. No.	App. No.
05/726,310	09/921,529	09/580,178	09/293,171
08/421,371	09/853,282	09/442,227	10/216,249
09/974,126	09/853,276	09/364,988	10/158,975
09/974,125	09/839,207	09/364,953	10/091,433
09/968,018	09/797,434	09/364,378	60/186,562

Patent No.	Patent No.	Patent No.	Patent No.
4,531,104	4,951,380	5,402,032	5,495,145
4,562,380	4,975,656	5,412,281	5,501,390
4,583,021	5,038,076	5,418,427	5,504,393
4,593,230	5,045,814	5,420,478	5,515,011
4,695,766	5,130,601	5,422,542	5,534,747
4,700,109	5,216,327	5,433,640	5,534,750
4,737,680	5,227,781	5,436,525	5,537,084
4,745,324	5,327,094	5,449,972	5,545,947
4,794,303	5,332,945	5,461,283	5,545,949
4,800,322	5,332,947	5,469,022	5,550,430
4,814,720	5,332,948	5,469,023	5,569,980
4,831,335	5,387,884	5,469,024	5,600,207
4,851,736	5,389,854	5,477,106	5,604,402
4,931,694	5,391,963	5,483,074	5,621,270
4,931,695	5,391,998	5,483,123	5,623,183

Patent No.	Patent No.	Patent No.	Patent No.
5,650,751	5,932,972	6,236,713	6,388,379
5,680,012	5,936,330	6,246,183	6,417,622
5,744,910	5,990,622	6,259,207	6,420,822
5,754,262	5,994,661	6,262,536	6,429,589
5,834,898	6,042,241	6,320,315	6,433,492
5,845,189	6,127,779	6,326,730	6,462,474
5,874,806	6,133,786	6,329,753	D400,181
5,894,199	6,172,725	6,380,803	RE34,863
5,907,222	6,191,651	6,384,537	

ASSIGNMENT OF PATENTS

THIS ASSIGNMENT (this "Assignment") is dated October 25 2002 ("Effective Date"), by Litton Systems, Inc., a Delaware corporation ("Assignor"), to L-3 Communications Corporation, a Delaware corporation ("Assignee"). Capitalized terms not otherwise defined herein shall have the meanings ascribed to them in that certain Asset Purchase Agreement dated as of September 11, 2002 (the "Asset Purchase Agreement") by and between Assignee and Assignor.

WHEREAS, pursuant to the Asset Purchase Agreement Assignor desires to assign to Assignee all of Assignor's right, title and interest in and to the Patents;

NOW, THEREFORE, for good and valuable consideration (including that recited in the Asset Purchase Agreement), the receipt and adequacy of which are hereby acknowledged, subject to the terms and conditions set forth in the Asset Purchase Agreement, Assignor does hereby assign, transfer and convey to Assignee, all of Assignor's right, title and interest in and to the following:


1. The Patents owned, used or held by Seller for use exclusively or primarily in the Business, other than any Patents which constitute an Excluded Asset, including without limitation the Patents listed on the attached Schedule A;
2. Any and all other rights, priorities and privileges of Assignor provided under the laws of the United States and relevant nations, or any multinational law, compact, treaty, protocol, convention or organization, with respect to the foregoing Patents ("Related Rights");
3. Any and all rights to sue at law or in equity for any infringement, impairment or other unauthorized use or conduct in derogation of the Patents and Related Rights occurring after the Effective Date, including the right to receive all proceeds and damages therefrom; and
4. Any and all rights to obtain renewals, reissues, continuations, continuations-in-part, re-examinations, divisions, extensions or other legal protections pertaining to the Patents and Related Rights.

Governing Law. This Assignment and any disputes hereunder shall be governed by and construed in accordance with the internal laws of the State of Delaware without giving effect to any choice or conflict of law provision or rule (whether of the State of Delaware or any other jurisdiction) that would cause the application of laws of any jurisdiction other than those of the State of Delaware.

Execution by Facsimile. This Assignment may be executed via facsimile, which shall be considered an original instrument.

IN WITNESS WHEREOF, the undersigned have caused this Assignment of Patents to be duly executed and delivered as of the date first above written.

LITTON SYSTEMS, INC.

By: 
Name: Joe Runkles
Title: Attorney-in-Fact

SCHEDULE A

TITLE	PATENT/APPLICATION NUMBER
Tilt Angle Electron Gun	4,562,380
Traveling Wave Tube And Its Method Of Construction	4,695,766
Waveguide Structures And Methods Of Manufacture For Traveling Wave Tubes	4,951,380
Slow Wave Delay Line Structure Having Support Rods Coated By A Dielectric Material To Prevent Rod Changing	5,038,076
Helical Waveguide To Rectangular Waveguide Coupler	4,851,736
Magnetron Coaxial Adaptor	5,216,327
Low Torque Magnetron Tuner	5,449,972
Low Noise Crossed-Field Amplifier	4,814,720
High Gain Miniature Crossed-Field Amplifier	4,831,335
Enhanced Secondary Electron Emitter	4,975,656
Improved Crossed-Field Amplifier	4,700,109
Broadband High Impedence Circuits For Injection Locked Magnetrons	5,045,814
Broadband High Impedence Circuits For Injection Locked Magnetrons	RE34,863
Quick Warm-Up Cathode Heater For High Average Power Magnetrons	5,130,601
Internally Cooled Forward Wave CFA Anode Vane	5,418,427
34 Vane Anode Circuit	5,483,123
Method For Improving Spectrum Quality Of Low Power Pulsed Anode Magnetrons	5,422,542
Method For Improving Spectrum Quality Of Low Power Pulsed Anode Magnetrons	5,433,640
Method For Improving Spectrum Quality Of Low Power Pulsed Anode Magnetrons	5,537,084
Magnetron/Dual Mode Modulator Locked Loop	5,515,011
A Cathode For Reduced Noise Cross-Field Amplifier	5,412,281
Thermionic Cathode Placement In A Closing Switch	5,477,106
Impedance Matching Flanges	5,387,884
Magnetron Output Transition	5,461,283
Single Ceramic Hydrogen Thyatron	5,550,430
Magnetron With Tapered Anode Vane Tips	5,680,012
Multiple Anode Structure	5,545,947

TITLE	PATENT/APPLICATION NUMBER
Pseudo-Spring Loading Mechanism	5,495,145
Non-Concentric Matrix Support For Crossed Field Amplifier	5,569,980
Preferential Water-Cooled Vane Crossed-Field Amplifier	5,600,207
Passive Jitter Reduction In Crossed-Field Amplifiers	5,874,806
Tuning Of Crossed-Field Magnetrons With A Tertiary Field	5,894,199
Thermo-Quiescent Reservoir System For A Gaseous-Discharge Device	5,994,661
Apparatus For Preventing Filament Shorting In A Magnetron Cathode	5,936,330
Oil Cooled Multi-Stage Depressed Collector	6,429,589
Double Loop Output System For Magnetron	6,384,537
M-Type Microwave Device	6,329,753
Magnetron	6,388,379
Process For Stabilizing A Microchannel Plate	5,845,189
Dual Mode Electron Gun	4,593,230
Electron Gun With Improved Cathode & Shadow Grid Configuration	4,583,021
Coupled Cavity Circuit With Increased Frequency Of The IRS	4,931,694
High Performance Extended Interaction Output Circuit	4,931,695
Pierce Gun Including Grading Electrode	5,332,945
Mosfet Switch Matrix	5,227,781
Jitter Suppression In Crossed-Field Amplifier By Use Of Field Emitter	5,327,094
Loss Button Frequency Control	5,391,963
Collector Ion Expeller	5,389,854
X-Z Geometry Periodic Permanent Magnet Focusing System	5,332,948
Integral Polepiece RF Amplification Tube For Millimeter Wave Frequencies	5,332,947
Integral Polepiece RF Amplification Tube For Millimeter Wave Frequencies	5,534,750
Highly Depressed, High Thermal Capacity, Conduction Cooled Collector	5,436,525
Brazing Mismatched Thermal Materials	5,402,032
Brazing Mismatched Thermal Materials	5,501,390
Axisymmetric Electron Collector With Off-Axis Beam	4,794,303

TITLE	PATENT/APPLICATION NUMBER
Injection	
Broadband Klystron Cavity Arrangement	4,800,322
A High-Reliability Switch Tube Concept For Aegis	4,745,324
Depressed Collector	5,420,478
Periodic Permanent Magnet Focusing Means For Electron Beams	5,744,910
Linear Amplifier Having Discrete Resonant Circuit Elements	5,650,751
Linear Amplifier Having Discrete Resonant Circuit Elements	6,380,803
Extended Interaction Output Circuit Using Modified Disk Loaded Waveguide	5,469,022
Modulator For Efficiency Generating Short High Voltage Repetitive Pulses	5,391,998
A Combination Tuner And Second Harmonic Suppressor	5,504,393
Harmonic Gyro-TWT Circuit	5,604,402
Stacked Ceramic Electron Gun Assembly	5,534,747
A Leaky Wall Filter For Use In The Suppression Of The 2 Mode In An Extended Interaction Klystron	5,469,024
Capacitive Stub For Enhancing Efficiency And Bandwidth In A Klystron	5,469,023
Tube Input Circuit	5,545,949
Flood Beam Electron Gun	5,483,074
Improved Electron Window Foil Support Design	5,621,270
Electron Beam Diverging Focus Electrode	5,623,183
A High Power Current Regulating Switch Tube	5,834,898
Electron Gun For A Multiple Beam Klystron	5,932,972
X-Ray Tube Providing Variable Imaging Spot Size	6,236,713
Low-Power Wide-Band Klystrons	6,326,730
Waveguide Series Resonant Cavity For Enhancing Efficiency And Bandwidth In A Klystron	6,259,207
Grid Support Structure For An Electron Beam Device	5,990,622
Ceramic Electron Collector Assembly Having Metal Sleeve For High Temperature Operation	6,320,315
Low Impedance Grid-Anode Interaction Region For An Inductive Output Amplifier	6,133,786
Inductive Output Amplifier Output Cavity Structure	6,191,651
High Voltage Standoff, Current Regulating, Hollow	6,127,779

TITLE	PATENT/APPLICATION NUMBER
Electron Beam Switch Tube	
Broadband, Inverted Slot Mode, Coupled Cavity Circuit	6,417,622
Thermionic Electron Emitter Based Upon The Triple-Junction Effect	6,420,822
Grooved Multi-Stage Depressed Collector For Secondary Electron Suppression	6,462,474
Crowbar Circuit For Linear Beam Device Having Multi-Stage Depressed Collector	6,262,536
Enhance Mu-Grid Concept	4,737,680
Ceramic Rod Tuning Of Coaxial Magnetron	4,531,104
High Efficiency Backlighting System For Rear Illumination Of Electronic Display Devices	5,907,222
Daylight Readable Liquid Crystal Display	5,754,262
Daylight Readable Liquid Crystal Display	6,172,725
Magnetically Shielded Electroless Light Source	6,433,492
Backlight With Integral Illumination Source	6,042,241
Dimmable Electroless Light Source	6,246,183
Programmable Integrated Communications Terminal	D400,181
Temperature Compensated Gun	09/839,207
Microwave System Used For Heating Silicon Carbide Filter In Diesel Engine Exhaust System	09/968,018
Oil Cooled Multi-Stage Depressed Collector	09/293,171
Field Emitter For Microwave Devices And The Method Of Its Production	09/580,178
Field Emitter For Microwave Devices And The Method Of Its Production	10/216,249
Multi-Stage Cavity Cyclotron Resonance Accelerators	09/797,434
Multi-Stage Cavity Cyclotron Resonance Accelerators	60/186,562
Multi-Stage Cavity Cyclotron Resonance Accelerators	09/921,529
Inductive Output Tube With Multi-Stage Depressed Collector Having Improved Efficiency	10/158,975
Process For Stabilizing A Microchannel Plate	05/726,310
High Power Density Multistage Depressed Collector	10/091,433
Daylight Readable Crystal Display	08/421,371
LCD Lighting System Using A Hybrid Backlight Reflector	09/853,282
Sunlight Readable Display With Reduced Ambient Specular Reflection	09/853,276

TITLE	PATENT/APPLICATION NUMBER
Infrared Touch Panel With Improved Sunlight Rejection	09/364,953
Touch Panel With Improved Optical Performance	09/364,988
Resistive Touch Panel Using Removable, Tensioned Top Layer	09/442,227
Liquid Crystal Display Device Using An Electrodeless Lamp	09/364,378
Dimmable Ballast For Electrodeless Fluorescent Lamps	09/974,126
Low Profile Backlight Optimized For Liquid Crystal Displays	09/974,125
Temperature Compensated Gun	PCT/US02/06052
Oil Cooled Multi-Stage Depressed Collector	PCT/US00/10042
Field Emitter For Microwave Devices And The Method Of Its Production	PCT/US01/16761
Multi-Stage Cavity Cyclotron Resonance Accelerator	PCT/US01/24499
X-Ray Tube Providing Variable Imaging Spot Size	PCT/US99/25239
Low-Power Wide-Band Klystrons	PCT/US99/27126
Waveguide Series Resonant Cavity For Enhancing Efficiency And Bandwidth In A Klystron	PCT/US99/16291
Ceramic Electron Collector Assembly Having Metal Sleeve For High Temperature Operation	PCT/US99/24492
High Voltage Standoff, Current Regulating, Hollow Electron Beam Switch Tube	PCT/US99/25840
Broadband, Inverted Slot Mode, Couple Cavity Circuit	PCT/US00/13445
Grooved Multi-Stage Depressed Collector For Secondary Electron Suppression	PCT/US01/08957
Crowbar Circuit For Linear Beam Device Having Multi-Stage Depressed Collector	PCT/US01/05130
High Efficiency Backlighting System For Rear Illumination Of Electronic Display Devices	PCT/US94/12461
Daylight Readable Liquid Crystal Display	PCT/US96/04874
LCD Lighting System Using A Hybrid Backlight Reflector	PCT/US02/14988
Liquid Crystal Display Device Using An Electrodeless Lamp	PCT/US00/20472