

11-06-2001



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U.S. Department of Commerce  
Patent and Trademark Office  
PATENT

IT

11-1-01

TO: The Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies).

**Submission Type**

New

Resubmission (Non-Recordation)  
Document ID #

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**Conveyance Type**

Assignment  Security Agreement

License  Change of Name

Merger  Other

**U.S. Government**  
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Departmental File  Secret File

RE

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Mark if additional names of conveying parties attached

Name (line 1)

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Month Day Year

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Name (line 1)

Execution Date  
Month Day Year

Name (line 2)

**Receiving Party**

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Name (line 1)

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

**Correspondent Name and Address**

Area Code and Telephone Number

202 424-7500

Name Edward A. Pennington

Address (line 1) Swidler Berlin Shereff Friedman, LLP

Address (line 2) 3000 K Street, N.W.

Address (line 3) Suite 300

Address (line 4) Washington, D.C. 20007-5116

**Pages**

Enter the total number of pages of the attached conveyance document including any attachments

# 24

**Application Number(s) or Patent Number(s)**

Mark if additional numbers attached.

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

**Patent Application Number(s)**

**Patent Number(s)**

06/393,012

06/643,902

07/246,136

4,208,079

4,725,986

4,797,804

07/544,140

08/141,505

09/384,429

4,879,675

4,852,060

4,996,670

08/884,675

09/625,641

09/512,671

5,117,129

5,234,851

5,307,466

If this document is being filed together with a new Patent Application, enter the date the patent application was signed by the first named executing inventor.

Month Day Year

**Patent Cooperation Treaty (PCT)**

Enter PCT application number only if a U.S. Application Number as not been assigned.

PCT

PCT

PCT

PCT

PCT

PCT

**Number of Properties**

Enter the total number of properties involved.

# 97

**Fee Amount**

Fee Amount for Properties Listed (37 CFR 3.41):

\$ 40.00

Method of Payment:

Enclosed

Deposit Account

Deposit Account

Enter for payment by deposit account or if additional fees can be charged to the account.)

Deposit Account Number:

# 19-5127, Order #19944.0001

Authorization to charge additional fees:

Yes

No

**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. Charges to deposit account are authorized, as indicated herein.

Robert C. Bertin, Reg. 41,488



November 1, 2001

Name of Person Signing

Signature

Date

07-30-2001

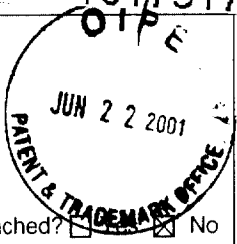
Tab settings



101791706

Attached original documents or copy thereof.

1. Name of conveying party(ies): LOCKHEED MARTIN CORPORATION 6801 Rockledge Drive Bethesda, Maryland 20817 (U-2201) Additional name of conveying party(ies) attached? No



2. Name and address of receiving party(ies) Name: BAE SYSTEMS INFORMATION AND Internal Address: ELECTRONIC SYSTEMS INTEGRATION, INC. Street Address: 9300 Wellington Road City: Manassas State: VA Zip: 20110-4122 Additional Name(s) & address(es) attached? No

3. Nature of conveyance: [X] Assignment [ ] Merger [ ] Security Agreement [ ] Change of Name [ ] Other Execution Date: November 27, 2000

4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution data of the application is: A. Patent Application No.(s) Attached List of 37 Issued Patents B. Patent No.(s) Attached List of 49 Pending Applications Additional numbers attached? Yes

6. Total number of applications and patents involved: 86 7. Total fee (37 CFR 3.41) \$ 3,440.00 [ ] Enclosed [X] Authorized to be charged to deposit account 8. Deposit account number: 12-2141 BAE SYSTEMS (Attach duplicate copy of this page if paying by deposit account)

5. Name and address of party to whom correspondence concerning this document should be mailed: 26694 PATENT TRADEMARK OFFICE Name: VENABLE Address: P.O. Box 34385 City: Washington State: D.C. Zip: 20043-9998

DO NOT USE THIS SPACE

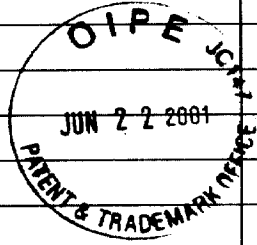
9. Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. RALPH P. ALBRECHT Name of Person Signing Signature Date June 22, 2001 Total number of pages including cover sheet, attachments, and documents: 28

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

VENABLE ATTORNEYS AT LAW 07/27/2001 JJALLAH2 00000015 122141 4208079 01 FC:581 3440.00 CH

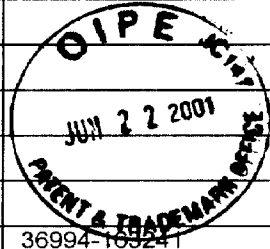
## ISSUED PATENTS - (Total 37)

	<u>CASE NO.</u>	<u>ATTORNEY DOCKET NO.</u>	<u>PATENT NO.</u>	<u>ISSUED DATE</u>
1	FE-00003		4,208,079	17-Jun-80
2	FE-00007		4,725,986	16-Feb-88
3	FE-00009		4,797,804	10-Jan-89
4	FE-00010		4,879,675	07-Nov-89
5	FE-00012		4,852,060	25-Jul-89
6	FE-00017		4,996,670	26-Feb-91
7	FE-00021		5,117,129	26-May-92
8	FE-00029		5,234,851	10-Aug-93
9	FE-00031		5,307,466	26-Apr-94
10	FE-00035		5,365,469	15-Nov-1994
11	FE-00041		5,527,724	18-Jun-1996
12	FE-00042		5,314,841	24-May-1994
13	FE-00052		5,644,286	01-Jul-1997
14	FE-00060		5,360,752	01-Nov-1994
15	FE-00069		5,448,572	05-Sep-1995
16	FE-00070		5,358,879	25-Oct-1994
17	FE-00071		5,457,591	10-Oct-1995
18	FE-00072		5,504,703	02-Apr-1996
19	FE-00073		5,504,793	02-Apr-1996
20	FE-00074		5,525,923	11-Jun-1996
21	FE-00090		5,598,041	28-Jan-1997
22	FE-00101	36996-163317	5,915,082 6,065,135	22-Jun-1999 16-May-2000
23	FE-00107		5,793,836	11-Aug-98
24	FE-00113		5,858,817	12-Jan-99
25	FE-00114		5,796,274	18-Aug-98
26	FE-00115		5,807,649	15-Sep-98
27	FE-00121		5,901,148	04-May-99
28	FE-00122	36994-163227	6,034,399	07-Mar-00
29	FE-00124		D414,486	28-Sep-99
30	FE-00126		5,970,095	19-Oct-99
31	FE-00131	36994-163234 36994-163258	5,867,479 6,091,704	02-Feb-99 18-Jul-00
32	FE-00165	36996-163342	6,111,780	29-Aug-00
33	FE-00172		5,756,234	26-May-98
34	FE-00233	36994-163247	6,052,606	18-Apr-2000
35	FE-00291		6,127,879	03-Oct-2000



# PENDING APPLICATIONS – (Total 49)

	<u>CASE NO.</u>	<u>ATTORNEY DOCKET NO.</u>	<u>APPLICATION NO.</u>	<u>ISSUED DATE</u>
1	FE-00006		393,012 – Secret	28-Jun-1982
2	FE-00016		246,136 - Secret	13-Sep-1988
3	FE-00020		544,140 - Secret	13-Jun-1990
4	FE-00057		141,505	26-Oct-1993
5	FE-00124-1		384,429	27-Aug-1999
6	FE-00130	36994-163241	08/884,675 – Now as: Patent No. 6,188,874	27-Jun-1997
7	FE-00131 (FE-00131.2)	36994-165441	09/625,641	25-Jul-2000
8	FE-00170		512,671	30-Jun-2000
9	FE-00185	36996-163289	09/007,980	16-Jan-1998
10	FE-00221	36994-163257	09/570,050	12-May-2000
11	FE-00258	36994-163244	08/987,016	09-Dec-1997
12	FE-00275		566,178	05-May-2000
13	FE-00276	36762-162147	09/570,064	12-May-2000
14	FE-00277		320,227	26-May-1999
15	FE-00278		320,207	26-May-1999
16	FE-00295		491,230	25-Jan-2000
17	FE-00300	36996-163297	09/502,062	10-Feb-2000
18	FE-00320	36762-162136	09/480,454	11-Jan-2000
19	FE-00321		441,941	17-Nov-1999
20	FE-00352	36996-163322	09/559,661	28-Apr-2000
21	FE-00354	36966-163323	09/559,660	28-Apr-2000
22	FE-00371		307,126	07-May-1999
23	FE-00372		321,565	28-May-1999
24	FE-00375		449,723	24-Nov-1999
25	FE-00385		563,197	02-May-2000
26	FE-00387		598,681	21-Jun-2000
27	FE-00397		591,958	12-Jun-2000
28	FE-00398		60/178,247	21-Jan-2000
29	FE-00414		553,595	20-Apr-2000
30	FE-00422		591,731	12-Jun-2000
31	FE-00426		60/163,757	05-Nov-1999
32	FE-00431		624,247	24-Jul-2000
33	FE-00432	36996-163338	09/559,659	28-Apr-2000
34	FE-00434		597,229	20-Jun-2000
35	FE-00439		590,805	09-Jun-2000



# PENDING APPLICATIONS – (Total 49)

	<u>CASE NO.</u>	<u>ATTORNEY DOCKET NO.</u>	<u>APPLICATION NO.</u>	<u>ISSUED DATE</u>
36	FE-00443		590,806	09-Jun-2000
37	FE-00444		590,809	09-Jun-2000
38	FE-00450		60/224,649	11-Aug-2000
39	FE-00456		630,216	01-Aug-2000
40	FE-00458		651,156	30-Aug-2000
41	FE-00462	36762-162139	60/200,348	28-Apr-2000
42	FE-00464		667,040	21-Sep-2000
43	FE-00469		636,125	10-Aug-2000
44	FE-00481		60/224,648	11-Aug-2000
45	FE-00483	36762-162143	60/181,512	11-Feb-2000
46	FE-00486		60/201,122	02-May-2000
47	FE-00492		60/203,895	12-May-2000
48	FE-00498		60/209,665	06-Jun-2000
49	FE-00522		60/220,700	25-Jul-2000

**NOV. 27, 2000 PATENT AND PATENT APPLICATION CONVEYANCE  
- ANNEX TO RECORDATION FORM COVER SHEET -**

**FROM: LOCKHEED MARTIN CORPORATION**

**TO: BAE SYSTEMS INFORMATION AND ELECTRONIC  
SYSTEMS INTEGRATION, INC.**

**ADDITIONAL PATENT NUMBERS FOR RECORDING**

5,365,469	5,527,724	5,314,841	5,644,286
5,360,752	5,448,572	5,358,879	5,457,591
5,504,703	5,504,793	5,525,923	5,598,041
5,915,082	6,065,135	5,793,836	5,858,817
5,796,274	5,807,649	5,901,148	6,034,399
D414,486	5,970,095	5,867,479	6,091,704
6,111,780	5,756,234	6,052,606	6,127,879

**ADDITIONAL PATENT APPLICATION NUMBERS FOR RECORDING**

09/007,980	09/570,050	08/987,016	09/566,178
09/570,064	09/320,227	09/320,207	09/491,230
09/502,062	09/480,454	09/441,941	09/559,661
09/559,660	09/307,126	09/321,565	09/449,723
09/563,197	09/598,681	09/591,958	09/553,595
09/591,731	09/589,732	09/624,247	09/559,659
09/597,229	09/590,805	09/592,403	09/590,806
09/590,809	09/630,216	09/651,156	09/667,040
09/636,125	09/441,942	09/651,155	
60/142,035	60/178,247	60/163,757	60/146,895
60/224,649	60/200,348	60/224,650	60/207,913
60/176,606	60/224,648	60/181,512	60/201,122
60/203,895	60/220,700	60/139,897	60/120,328

## PATENT ASSIGNMENT

THIS PATENT ASSIGNMENT is made and entered into as of the 27th day of November 2000, between Lockheed Martin Corporation, a Maryland corporation ("Assignor"), and BAE SYSTEMS INFORMATION AND ELECTRONIC SYSTEMS INTEGRATION INC. (formerly known as BAE SYSTEMS Sanders Inc.), a Delaware corporation ("Assignee").

### W I T N E S S E T H:

WHEREAS, Assignor is the owner of the entire right, title and interest in and to all of the patents and patent applications set forth on Schedule A annexed hereto and made a part hereof and has the unrestricted right to sell, assign and transfer such patents and patent applications; and

WHEREAS, pursuant to the terms of a Transaction Agreement, dated as of July 13, 2000, by and among Assignor, Assignee and BAE SYSTEMS North America Inc., a Delaware corporation, Assignor has agreed, among other things, to transfer to Assignee said patents and patent applications;


NOW, THEREFORE, in consideration of the sum of ten (\$10.00) dollars and other good and valuable consideration paid by Assignee to Assignor, the receipt and sufficiency of which is hereby acknowledged, Assignor hereby sells, assigns, transfers and sets over to Assignee, its successors and permitted assigns, Assignor's entire right, title and interest in and to the patents and patent applications set forth on Schedule A hereto, including (without limitation) all divisions, reissues, substitutions, continuations and extensions thereof, all priority rights under the International Convention for the Protection of Industrial Property for every member country (and any other international convention or treaty), any and all Letters Patent and reissues and extensions of Letters Patent granted thereon and any and all rights corresponding to any of the foregoing throughout the world and any and all accounts, contract rights, warranties, litigation claims and rights, including the right to sue for and collect upon all claims for profits and damages as a result of past infringement, if any, and other general intangibles of Assignor related to any of the foregoing, in each case whether now existing or hereafter acquired or created, whether owned, leased or licensed beneficially or of record and whether owned, leased or licensed individually, jointly or otherwise, together with the products and proceeds thereof (including license royalties and the proceeds of infringement suits), all payments and other distributions with respect thereto and any divisions, reissues, substitutions, continuations and extensions of any and all of the foregoing (all of the foregoing herein collectively referred to as the "Patents").

Assignor further agrees that it shall on the date hereof and from time to time thereafter, at the request of Assignee, perform or cause to be performed such acts and execute, acknowledge and deliver at the request of Assignee, such documents as may reasonably be required to evidence or effectuate the sale, conveyance, assignment, transfer and delivery to Assignee of the Patents or for the performance by Assignor of any of its obligations hereunder.

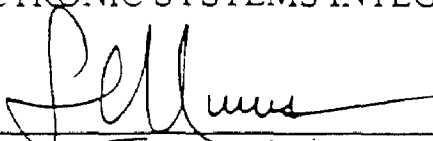


IN WITNESS WHEREOF, Assignor has executed this Patent Assignment as of the date above written.

LOCKHEED MARTIN CORPORATION

By:   
Name: Warren W. Lanning  
Title: Director, Business Ventures

BAE SYSTEMS INFORMATION AND  
ELECTRONIC SYSTEMS INTEGRATION INC.

By:   
Name: Eric D. Murray  
Title: Vice President

DISTRICT OF COLUMBIA ss.:

On the 27<sup>th</sup> day of November, 2000, before me personally came Warren W. Lanning, to me known (or satisfactorily proven), who being by me duly sworn, did depose and say that he is the Director, Business Ventures of Lockheed Martin Corporation, the corporation described in, and which executed the foregoing instrument, and that he was fully authorized to execute this Patent Assignment on behalf of said corporation.

Lisa A. Young  
Notary Public

My Commission Expires \_\_\_\_\_

DISTRICT OF COLUMBIA ss.:

On the 27<sup>th</sup> day of November, 2000, before me personally came Earl P. Munns, to me known (or satisfactorily proven), who being by me duly sworn, did depose and say that he is the Vice President and Secretary of BAE SYSTEMS Information and Electronic Systems Integration Inc., the corporation described in, and which executed the foregoing instrument, and that he was fully authorized to execute this Patent Assignment on behalf of said corporation.

Lisa A. Young  
Notary Public

My Commission Expires \_\_\_\_\_

SCHEDULE A

A-1

PATENT  
REEL: 012287 FRAME: 0790

# LM Space Electronics & Communications

CaseNumber	Title	Country	Status	File Date	AppdNumb	Issue Date	PatNumber
FE-00003	High Density Integrated Circuit	US	Expired	24-Jan-1979	5946	17-Jun-1980	4,208,079
FE-00006	Process for Increasing the Immunity of IC to Ionizing Radiation	JP	Abandone	20-Dec-1979	164876/79	20-Jan-1984	1185552
FE-00007	FET Read Only Memory Cell With Work Line Augmented Precharging Of Bit Lines	US	Secret	28-Jun-1982	393,012		
		JP	Abandone	15-May-1984	095787/84	10-Nov-1988	1464935
		GB	Granted	24-Jul-1984	84108711.7	27-Sep-1989	0135699
		FR	Granted	24-Jul-1984	84108711.7	27-Sep-1989	0135699
		AT	Granted	24-Jul-1984	084108711.7	27-Sep-1989	0135699
		US	Granted	20-Sep-1983	534,035	16-Feb-1988	4,725,986
		DE	Granted	24-Jul-1984	084108711.7	27-Sep-1989	0135699
		EP	Granted	24-Jul-1984	84108711.7	27-Sep-1989	0135699

FE-00008 Improved Local Oxide Isolation Process

US Secret 06-Jul-1984 643,902

Tuesday, November 21, 2000

Page 1 of 20

CaseNumber Title Country Status File Date Appl/Numb Issue Date PatNumber

FE-00009 High Density, High Performance, Single Event Upset Immune Data US Granted 09-Mar-1987 23,426 10-Jan-1989 4,797,804  
FR Granted 22-Jan-1988 88100947.6 13-Jan-1993 281,741  
JP Granted 20-Jan-1988 008597/88 07-Oct-1994 1878682  
EP Granted 22-Jan-1988 88100947.6 13-Jan-1993 281,741  
GB Granted 22-Jan-1988 88100947.6 13-Jan-1993 281,741  
DE Granted 22-Jan-1988 88100947.6 13-Jan-1993 3877381308

FE-00010 Parity Generator Circuit And Method EP Pending 23-Jan-1989 89101069.6

US Granted 17-Feb-1988 156,626 07-Nov-1989 4,879,675  
JP Lapsed 18-Nov-1988 290385/88 14-Oct-1992 1703279

FE-00012 Soft Error Resistant CMOS Data Cells US Granted 31-Mar-1988 176,052 25-Jul-1989 4,852,060  
GB Lapsed 23-Dec-1988 88121619.6 10-Jun-1992 335,008  
JP Pending 20-Feb-1989 38541/89

DE Lapsed 23-Dec-1988 88121619.6 10-Jun-1992 3871945208  
FR Lapsed 23-Dec-1988 88121619.6 10-Jun-1992 355,008

FE-00016 Process for Increasing the Immunity of IC's to Ionizing Radiation US Secret 13-Sep-1988 246,136

Tuesday, November 21, 2000

Page 2 of 20

CaseNumber Title	Country	Status	File Date	App/Numb	Issue Date	PatNumber
FE-00017 Zero Standby Power, Radiation Hardened, Memory Redundancy Circuit	EP	Granted	03-May-1990	90108357.6	21-Aug-1996	419,760
	DE	Granted	03-May-1990	90108357.6	21-Aug-1996	69028169.2
	JP	Granted	07-Sep-1990	236022/90	17-Dec-1999	3015084
	US	Granted	28-Sep-1989	414,889	26-Feb-1991	4,996,670
	GB	Granted	03-May-1990	90108357.6	21-Aug-1996	419,760
	FR	Granted	03-May-1990	90108357.6	21-Aug-1996	419,760
	WO	Pending	09-Sep-1990	236022/90		

FE-00020 A Method for improving gate oxide reliability of SOI in Mesa Type Transistors.

US Secret 13-Jun-1990 544,140

FE-00021 CMOS Off Chip Driver for Fault Tolerant Cold Sparing

EP	Granted	08-Oct-1991	91117104.9	28-Feb-1996	481,329
JP	Granted	11-Oct-1991	290475/91	08-Aug-1996	2549221
DE	Granted	08-Oct-1991	91117104.9	28-Feb-1996	69117420.2
FR	Granted	08-Oct-1991	91117104.9	28-Feb-1996	481,329
US	Granted	16-Oct-1990	598,300	26-May-1992	5,117,129
GB	Granted	08-Oct-1991	91117104.9	28-Feb-1996	481,329

FE-00022 Method of Forming A frontside Contact to the Silicon Substrate of a SOI Wafer

JP Granted 28-Mar-1994 057624/94 02-Dec-1996 2589952

FE-00029 Small Cell Low Contact Assistance Rugged Power Field Effect Devices And Method Of Fabrication

US Granted 03-Feb-1992 829,667 10-Aug-1993 5,234,851

Tuesday, November 21, 2000

Page 3 of 20

CaseNumber Title	Country	Status	File Date	Appl/Numb	Issue Date	PatNumber
FE-00031 <i>Distributed Programmable Priority Arbitration</i>	JP	Granted	01-Mar-1993	39810/93	27-Jun-1996	2531918
	US	Granted	30-Apr-1992	876,239	26-Apr-1994	5,307,466
FE-00035 <i>Fast Fourier Transform Using Balanced Coefficients</i>	JP	Granted	22-Oct-1991	301336/91	13-Jun-1997	2662124
	EP	Pending	13-Jun-1991	91109688.1		
	US	Granted	13-Jan-1993	004,217	15-Nov-1994	5,365,469
FE-00040 <i>An Electrostatic Discharge Protect Diode For Silicon-On-Insulator Technology</i>	JP	Granted	28-Mar-1994	6-57668/94	09-May-1997	2647339
	DE	Granted	17-Feb-1994	94102415.0	21-Apr-1999	0622850
	FR	Granted	17-Feb-1994	94102415.0	21-Apr-1999	0622850
	EP	Granted	17-Feb-1994	94102415.0	21-Apr-1999	0622850
	GB	Granted	17-Feb-1994	94102415.0	21-Apr-1999	0622850
	US	Abandoned	30-Apr-1993	056,042		
FE-00041 <i>Method To Prevent Latch-Up And Improve Breakdown Voltage In SOI Mosfets</i>	EP	Pending	17-Feb-1994	94102414.3		
	US	Granted	12-Sep-1994	304,639	18-Jun-1996	5,527,724

CaseNumber Title	Country	Status	File Date	ApplNumb	Issue Date	PatNumber
FE-00042 A Method Of Forming A Frontside Contact To the Silicon Substrate Of A SOI Wafer	US	Granted	30-Apr-1993	054,992	24-May-1994	5,314,841
	DE	Pending	17-Feb-1994	94102416.8		
	EP	Pending	17-Feb-1994	94102416.8		
	JP	Granted	18-Apr-1994	078654/94	26-Feb-1999	2891321
	GB	Pending	17-Feb-1994	94102416.8		
	FR	Pending	17-Feb-1994	94102416.8		
FE-00052 Power Bus Digital Communication System	US	Granted	04-Oct-1993	131,346	01-Jul-1997	5,644,286
FE-00057 Single Even Upset Hardening Of Commercial VLSI Technology Without Circuit Redesign	US	Pending	26-Oct-1993	141,505		
	JP	Abandone	19-Oct-1994	6-253600		
	EP	Pending	30-Aug-1994	94113502.2		
FE-00060 Method To Radiation Harden The Buried Oxide In Silicon-On-Insulator Structures	US	Granted	28-Oct-1993	142,030	01-Nov-1994	5,360,752
	EP	Granted	14-Oct-1994	94116233.1	22-Dec-1999	652591A1
FE-00069 Spare Signal Line Switching Method and Apparatus	US	Granted	14-Mar-1994	212,372	05-Sep-1995	5,448,572
	JP	Granted	26-Jun-1992	168028/92	21-Nov-1996	2113094

Tuesday, November 21, 2000

Page 5 of 20



CaseNumber Title	Country	Status	File Date	AppNumb	Issue Date	PatNumber
FE-00070 Gate Overlapped Lightly Doped Drain For Buried Channel Devices	GB	Granted	26-May-1994	94108054.1	29-Nov-1995	0684640
	US	Granted	30-Apr-1993	054,994	25-Oct-1994	5,358,879
	FR	Granted	26-May-1994	94108054.1	29-Nov-1995	684640
	JP	Granted	04-Jun-1994	6-127422	19-Sep-1997	2698046
	DE	Granted	26-May-1994	94108054.1	29-Nov-1995	0684640
	EP	Granted	26-May-1994	94108054.1	10-Nov-1999	0684640
FE-00071 Current Overload Protection Circuit						
	US	Granted	12-Jan-1995	371,718	10-Oct-1995	5,457,591
FE-00072 Single Event Upset Hardened CMOS Latch Circuit						
	US	Granted	01-Feb-1995	382,112	02-Apr-1996	5,504,703
FE-00073 Magnification Correction For I-X Proximity X-Ray Lithography						
	US	Granted	17-Feb-1995	389,993	02-Apr-1996	5,504,793
FE-00074 Single Event Upset Immune Register With Fast Write Access						
	US	Granted	21-Feb-1995	391,798	11-Jun-1996	5,525,923

Tuesday, November 21, 2000

Page 6 of 20

CaseNumber Title	Country	Status	File Date	App/Num	Issue Date	PatNumber
FE-00075 Checkpoint Retry Mechanism	US	Abandone	23-Aug-1988	235,345	27-Mar-1990	4,912,707
	JP	Abandone	11-Aug-1989	0207115	07-Apr-1995	1922412
	GB	Abandone	08-Jun-1989	89110329.3	13-Aug-1995	0355286
	DE	Abandone	08-Jun-1989	89110329.3	13-Aug-1995	0355286
	FR	Abandone	08-Jun-1989	89110329.3	13-Aug-1995	0355286
	EP	Abandone	08-Jun-1989	89110329.3	13-Aug-1995	0355286
FE-00090 Efficient Dual Source Fault Tolerant Power Controller	US	Granted	16-Nov-1995	559,584	28-Jan-1997	5,598,041
FE-00091 A Scaleable, Radiation Hardened Shallow Trench Isolation	US	Abandone	01-Jul-1999	60/142,035		
	US	Pending	30-Jun-2000			
FE-00092 Apparatus And Method For Cooling Standard Electronic Modules	US	Abandone	19-Jan-1996	588,804		
FE-00101 Error Detection and Fault Isolation For Lockstep Processor Systems	US	Granted	07-Jun-1996	660,640	22-Jun-1999	5,915,082
	US	Granted	04-Jun-1999	325,641	16-May-2000	6,065,135
FE-00107 X-Ray Mask Pellicle	US	Granted	06-Sep-1996	716,657	11-Aug-1998	5,793,836

CaseNumber Title	Country	Status	File Date	Appl/Numb	Issue Date	PatNumber
FE-00113 Process To Personalize Master Slice Wafer And Fabricate High Density VLSI Components With A Single Masking Step	US	Granted	10-Oct-1996	728,880	12-Jan-1999	5,858,817
FE-00114 Fault Tolerant MOSFET Driver						
FE-00115 Lithographic Patterning Method And Mask Set Therefor With Light Field Trim Mask	US	Granted	16-Oct-1996	733,080	18-Aug-1998	5,796,274
FE-00121 Ring Domains For Bandwidth Sharing	US	Granted	31-Oct-1996	740,598	15-Sep-1998	5,807,649
FE-00122 Electrostatic Discharge Protection For Silicon-On-Insulation	US	Granted	06-Mar-1997	812,184	04-May-1999	5,901,148
FE-00124 Dual Mode Telephone Handset Satellite Telephone Handset -	US	Granted	06-Mar-1997	812,183	07-Mar-2000	6,034,399
FE-00124-1 Satellite Telephone Handset	US	Granted	27-Mar-1997	29069642	28-Sep-1999	D414,486
FE-00126 Secure Data Transmission on A TDM Isochronous Network	US	Pending	27-Aug-1999	384,429		
	US	Granted	14-Apr-1997	837,165	19-Oct-1999	5,970,095

Tuesday, November 21, 2000

f

Page 8 of 20

CaseNumber Title	Country	Status	File Date	Appl/Numb	Issue Date	PatNumber
FE-00130 Improved Control Telemetry Signal Communication System For Geostationary Satellites	US	Pending	27-Jun-1997	884,675		
	US	Pending	23-Dec-1999	804,675		
FE-00131 Digital Multi-Channel Demultiplexer/Multiplexer (MCD/M) Architecture	US	Pending	25-Jul-2000	625,641		
	US	Granted	27-Jun-1997	804,650	02-Feb-1999	5,867,479
	US	Granted	01-Feb-1999	241,313	18-Jul-2000	6,091,704
FE-00144 Dual Mode Collision Avoidance System	US	Abandone				
FE-00165 Radiation Hardened Six Transistor Random Access Memory and Memory Device	US	Abandone	04-Jun-1998	090,946		
	US	Granted	05-Jun-1999	325,645	29-Aug-2000	6,111,780
	WO	Pending	04-Jun-1999	US99/12442		
FE-00170 Enhanced TRENCH Isolation (STI) Method for Fabricating Radiation-Tolerant Integrated Circuit Devices.	US	Pending	30-Jun-2000	512,671		
FE-00172 High Accuracy Fabrication Of X-Ray Masks With Optical And E-Beam Lithography	US	Granted	04-Jun-1996	663,826	26-May-1998	5,756,234
FE-00185 Integrated Circuit Package and Method Increasing Density Of I/O Leads	US	Pending	16-Jan-1998	007,980		

Tuesday, November 21, 2000

FE-00221 Distributed Determination of Explicit Rate in an ATM Communication System

US Expired 03-Jun-1999 60/137,595  
 US Expired 19-Oct-1999 60/160,302  
 US Pending 12-May-2000 570,050

FE-00228 Elimination of Narrow Device Width Effects In Complementary Metal Oxide Semiconductor (CMOS) Devices

US Unfiled

FE-00233 Reversible Keypad And Display For A Telephone Handset

US Granted 12-Dec-1997 989,463 18-Apr-2000 6,052,606

FE-00239 Recessed Gate Process For Silicon-On-Insulator Devices

US Abandone 04-Nov-1997 964,022

FE-00258 Shallow Isolation Trench Forming Process For Silicon-on-Insulator Technology

US Pending 09-Dec-1997 987,016

FE-00275 Cold Spare and Voltage Interoperable Off-Chip Driver and Associated Methods

US Pending 05-May-2000 566,178  
 US Expired 02-Jun-1999 60/137,174

FE-00276 Self Equalized Low Power Precharge Sense AMP For High Speed Memory

US Pending 12-May-2000 570,064  
 US Expired 10-Feb-2000 60/181,559  
 US Expired 01-Jun-1999 60/137,224

CaseNumber Title	Country	Status	File Date	ApplNumb	Issue Date	PatNumber
FE-00277 <i>A Memory Device Having Reduced Power Requirements And Associated Methods</i>	US	Pending	26-May-1999	320,227		
FE-00278 <i>A Memory Device Having A Chip Select Speedup Feature and Associated Methods</i>	US	Pending	26-May-1999	320,207		
FE-00279 <i>Single Event Upset Hardened CMOS Latch Circuit With Fast Write Time</i>	US	Abandone	07-Oct-1998	168,430		
FE-00291 <i>Multi-Channel Overvoltage Protection Circuit</i>	US	Granted	26-Feb-1998	030,902	03-Oct-2000	6,127,879
FE-00295 <i>Method For Fabricating Resistors Within Semiconductor Integrated Circuit Devices</i>	US	Pending	25-Jan-2000	491,230		
FE-00300 <i>In Situ Proximity Gap Monitor For Lithography</i>	US	Expired	01-Feb-1999	60/110,049		
FE-00319 <i>Enhanced Local Oxidation of Silicon (LOCOS) Method for Fabricating Radiation-Tolerant Integrated Circuit Devices</i>	US	Expired	24-Sep-1999	60/155,571		
	US	Unified				

CaseNumber Title Country Status File Date ApplNumb Issue Date PatNumber

FE-00320 Enhanced Single Event Upset Immune Latch Circuit

US Pending 11-Jan-2000 480,454  
WO Pending 11-Jan-2000 US00/00557  
US Expired 28-Jul-1999 60/145,939

FE-00321 Method and Apparatus for Hardening A Static Random Access Memory Cell From Single Event Upsets

US Pending 17-Nov-1999 441,941  
DE Pending 17-Nov-1999 US99/27302  
GB Pending 17-Nov-1999 US99/27302  
FR Pending 17-Nov-1999 US99/27302  
EP Pending 17-Nov-1999 US99/27302  
US Abandone 28-May-1999 60/136,480

FE-00324 Method For Improving Radiation Tolerance of Semiconductor Integrated Circuit Devices

US Pending 22-Jun-2000  
US Expired 22-Jun-1999 60/139,897

FE-00352 Method and Apparatus for a SEU Tolerant Clock Splitter

US Expired 30-Apr-1999 60/131,926  
US Pending 28-Apr-2000 559,661

FE-00354 Method and Apparatus for A Scannable Hybrid Flip Flop

US Pending 28-Apr-2000 559,660  
WO Pending 28-Apr-2000 US00/11348  
US Expired 30-Apr-1999 60/132,121

Tuesday, November 21, 2000

Page 12 of 20

CaseNumber Title Country Status File Date ApplNumb Issue Date PatNumber

FE-00371 Pattern Density Tailoring For Etching of Advanced Lithographic Masks

US Pending 07-May-1999 307,126

FE-00372 Method and Apparatus For Evaluating A Known Good Die Using Both Wire Bond and Flip-Chip Interconnects

US Pending 28-May-1999 321,565

FE-00375 Single-Event Upset Hardened Reconfiguration Bi-Stable CMOS Latch

WO Pending 20-Jan-2000 US00/01356

US Pending 24-Nov-1999 449,723

US Abandone 23-Dec-1999 60/171,589

FE-00385 Method and Apparatus for a Voltage Responsive RESET for EEPROM

US Pending 02-May-2000 563,197

US Expired 02-Jun-1999 60/137,739

FE-00387 Low-Power CMOS Device and Logic Gates/Circuits Therewith

WO Pending 22-Jun-2000 US00/11887

US Expired 09-Nov-1999 60/164,343

US Expired 23-Jun-1999 60/140,361

US Pending 21-Jun-2000 598,681

Tuesday, November 21, 2000

Page 13 of 20



CaseNumber Title	Country	Status	File Date	App/Numb	Issue Date	PatNumber
FE-00391						
Single Event Upset (SEU) Hardened Static Random Access Memory Cell						
FE-00397	US	Expired	28-May-1999	60/136,479		
Circuit and Method For Limiting Inrush Current Through A Mosfet	US	Pending	17-Nov-1999	441,942		
Circuit and Method For Limiting Inrush Current Through A Transistor/102	US	Pending	30-Aug-2000	651,155		
	EP	Pending	17-Nov-1999	US99/27301		
FE-00398	US	Expired	30-Dec-1999	60/174,059		
Integrated Resistor Having Aligned Body and Contact and Method for Forming The Same	WO	Unfiled				
	US	Pending	12-Jun-2000	591,958		
FE-00406	US	Provision	21-Jan-2000	60/178,247		
Storage Unit Subassembly Insertion/Extraction Tool						
FE-00410	US	Expired	17-Feb-1999	60/120,328		
Computer Device Having Multiple Linked Parallel Busses and Associated Method						
FE-00414	US	Pending	14-Sep-2000			
Self-Restoring Single Event Upset (SEU) Hardened Multiport Memory Cell	US	Expired	28-May-1999	60/136,478		
	WO	Pending	15-May-2000	US00/13095		
	US	Pending	20-Apr-2000	553,595		

Tuesday, November 21, 2000

Page 14 of 20

CaseNumber Title Country Status File Date Appl/Numb Issue Date PatNumber

FE-00422 System and Method of Providing a Spread Spectrum Pulse Width Modulator Clock

US Expired 18-Oct-1999 60/159,974  
WO Pending 12-Jun-2000 US00/28748  
US Pending 12-Jun-2000 591,731

FE-00424 Multiplexor Having A Single Event Upset (SEU) Immune Data Keeper Circuit

US Pending 08-Jun-2000 589,732

FE-00426 Oscillator and Method For Generating A Frequency Within A Stable Frequency Range

US Provision 05-Nov-1999 60/163,757

FE-00431 Method For Testing Known Good Die

US Pending 24-Jul-2000 624,247  
US Expired 25-Oct-1999 60/161,418

FE-00432 Method and Apparatus for a Single Event Upset (SEU) Tolerant Clock Splitter

US Expired 30-Apr-1999 60/131,925  
WO Pending 28-Apr-2000 US00/11349  
US Pending 28-Apr-2000 559,659

FE-00434 Tool Suite for the Rapid Development of Advanced Standard Cell Libraries

US Pending 20-Jun-2000 597,229

FE-00436 A Process For Removing A Silicon-Containing Material Through Use Of A Byproduct Generated During Formation Of A Diffusion Barrier Layer

US Unfiled

Tuesday, November 21, 2000

Page 15 of 20

FE-00439 Increasing The Susceptibility Of Integrated Circuits To Ionizing Radiation

US	Expired	11-Jun-1999	60/138,718
US	Pending	09-Jun-2000	590,805

FE-00442 Semiconductor Circuit Having Increased Susceptibility To Ionizing Radiation

US	Pending	09-Jun-2000	592,4-3
US	Expired	11-Jun-1999	60/138,720

FE-00443 Semiconductor Device And Circuit Having Low Tolerance To Ionizing Radiation

US	Pending	09-Jun-2000	590,806
US	Expired	11-Jun-1999	60/138,721

FE-00444 Apparatus And Method For Manufacturing A Semiconductor Circuit

US	Pending	09-Jun-2000	590,809
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FE-00449 Method to Harden Shallow Trench Isolation Against Total Ionizing Dose Radiation

US	Pending	31-Jul-2000	
US	Expired	02-Aug-1999	60/146,895

FE-00450 A New Radiation-Hardened Technique For Preventing Latches From Single Event Upsets

US	Provlited	11-Aug-2000	60/224,649
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FE-00451 Radiation Hardened High Speed Differential Driver

US	Expired	20-Jul-1999	60/144,731
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CaseNumber Title Country Status File Date ApplNumb Issue Date PatNumber

FE-00453 Radiation Hardened High Speed Differential Receiver

US Expired 20-Jul-1999 60/144,625

FE-00456 Radiation Hardened Silicon-On-Insulator (SOI) Transistor Having A Body Contact

US Pending 01-Aug-2000 630,216

US Expired 23-Dec-1999 60/171,560

FE-00458 Circuit For Filtering Single Event Effect (SEE) Induced Glitches

US Pending 30-Aug-2000 651,156

US Expired 07-Sep-1999 60/152,348

WO Pending 06-Sep-2000 US00/24421

FE-00462 Method and Apparatus Radiation Hardened Clock Splitter

US Provision 28-Apr-2000 60/200,348

FE-00464 Single Event Upset Immune Oscillator Circuit

US Pending 21-Sep-2000 667,040

FE-00469 Redundant Oscillator and Method For Generating A Regulated Signal

US Pending 10-Aug-2000 636,125

FE-00470 Controlled Hermetic Solder Sealing For Large Perimeter Components

US Abandoned 20-Jan-2000 60/177,234

US Expired 18-Jan-2000 60/176,574

Tuesday, November 21, 2000

Page 17 of 20

<i>CaseNumber Title</i>	<i>Country</i>	<i>Status</i>	<i>File Date</i>	<i>ApplNumb</i>	<i>Issue Date</i>	<i>PatNumber</i>
<i>FE-00471 Integrated Circuits Containing Transistors Operable With Two Power Supply Voltages</i>	US	Unfiled				
	US	Proffiled	11-Aug-2000	60/224,650		
<i>FE-00475 Voltage Step-Up Output Buffer With Low Stress</i>	US	Expired	30-May-2000	60/207,913		
<i>FE-00476 Structured Login After Satellite Service Interruption</i>	US	Expired	18-Jan-2000	60/176,606		
<i>FE-00480 Self-Oscillating Switching Regulator</i>	US	Pending	03-Oct-2000			
<i>FE-00481 A Radiation Tolerant Storage Array Sense Latch</i>	US	Proffiled	11-Aug-2000	60/224,648		
<i>FE-00483 Polyphase-DFT Sub-band Definition Filtering Architecture</i>	US	Provision	11-Feb-2000	60/181,512		
<i>FE-00486 Use of Chalcogenide For Programming Fuses In RAM's or Other Devices</i>	US	Provision	02-May-2000	60/201,122		
<i>FE-00489 Direct Chip Attach Micro-CGA</i>	US	Unfiled				

Tuesday, November 21, 2000

Page 18 of 20

<i>CaseNumber Title</i>	<i>Country</i>	<i>Status</i>	<i>File Date</i>	<i>ApplNumb</i>	<i>Issue Date</i>	<i>PatNumber</i>
<i>FE-00491 Rad Hard Ring Oscillator</i>	US	Unfiled				
<i>FE-00492 Single Event Upset Immune Logic Family</i>	US	Provision	12-May-2000	60/203,895		
<i>FE-00498 A Sense Amp Scheme Hardened for Dynamic Single Event Upsets</i>	US	Unfiled				
<i>FE-00503 Remote Pictures</i>	US	Provision	06-Jun-2000	60/209,665		
<i>FE-00505 Reduced Stress Interface Column Grid Array</i>	US	Unfiled				
<i>FE-00508 Remote Sonar Buoys</i>	US	Unfiled				
<i>FE-00512 Method For Advanced Fill Pattern Creation</i>	US	Unfiled				
<i>FE-00513 Power Conservation Circuit Using The "Seebeck" Effect</i>	US	Unfiled				

Tuesday, November 21, 2000

Page 19 of 20

**CaseNumber Title**      **Country**      **Status**      **File Date**      **ApplNumb**      **Issue Date**      **PatNumber**

FE-00515      *Method Of Forming and Applications of Micropipes and Chalcoenide Waveguides*

FE-00516      *Fault Isolation Test Methodology*      US      Unfiled

FE-00521      *Novel High-Density High-Performance CMOS SRAM Cell Design*      US      Unfiled

FE-00522      *Novel CMOS SRAM Cell Design with Prescribed Power-On Data State*      US      Unfiled  
 US      Pending      25-Jul-2000      60/220,700

FE-00527      *Solder Column Attach*      Open

FE-00527      *On-Chip High Speed Termination*      Open

FE-00528      *An Institute Radiation Action of Integrated Circuits*      Open

FE-00539      *Visitor Information System (VIS)*      Open

FE-00540      *Small Area Sidewall Rapier Contact For Chalcoenide Memory Device*      Open

FE-00542      *EGA to CGA Conversion Process*      Open

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Tuesday, November 21, 2000

Page 20 of 20