PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5462827

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	TERMINATION AND RELEASE OF SECURITY INTEREST IN PATENTS

CONVEYING PARTY DATA

Name	Execution Date
BANK OF AMERICA, N.A., AS ADMINISTRATIVE AGENT	04/04/2019

RECEIVING PARTY DATA

Name:	ARRIS GROUP, INC.	
Street Address:	101 TOURNAMENT DRIVE	
Internal Address:	ATTN LEGAL DOCKETING	
City:	HORSHAM	
State/Country:	PENNSYLVANIA	
Postal Code:	19044	
Name:	ARRIS ENTERPRISES, INC.	
Street Address:	101 TOURNAMENT DRIVE	
Internal Address:	ATTN LEGAL DOCKETING	
City:	HORSHAM	
State/Country:	PENNSYLVANIA	
Postal Code:	19044	
Name:	ARRIS SOLUTIONS, INC.	
Street Address:	101 TOURNAMENT DRIVE	
Internal Address:	ATTN LEGAL DOCKETING	
City:	HORSHAM	
State/Country:	PENNSYLVANIA	
Postal Code:	19044	
Name:	ARRIS KOREA, INC.	
Street Address:	101 TOURNAMENT DRIVE	
Internal Address:	ATTN LEGAL DOCKETING	
City:	HORSHAM	
State/Country:	PENNSYLVANIA	
Postal Code:	19044	
Name:	ARRIS HOLDINGS CORP. OF ILLINOIS, INC.	
Street Address:	101 TOURNAMENT DRIVE	
Internal Address:	ATTN LEGAL DOCKETING	
City:	HORSHAM	
	PATENT	

PATENT

State/Country:	PENNSYLVANIA	
Postal Code:	19044	
Name:	BIG BAND NETWORKS, INC.	
Street Address:	101 TOURNAMENT DRIVE	
Internal Address:	ATTN LEGAL DOCKETING	
City:	HORSHAM	
State/Country:	PENNSYLVANIA	
Postal Code:	19044	
Name:	TEXSCAN CORPORATION	
Street Address:	101 TOURNAMENT DRIVE	
Internal Address:	ATTN LEGAL DOCKETING	
City:	HORSHAM	
State/Country:	PENNSYLVANIA	
Postal Code:	19044	
Name:	POWER GUARD, INC.	
Street Address:	101 TOURNAMENT DRIVE	
Internal Address:	ATTN LEGAL DOCKETING	
City:	HORSHAM	
State/Country:	PENNSYLVANIA	
Postal Code:	19044	
Name:	4HOME, INC.	
Street Address:	101 TOURNAMENT DRIVE	
Internal Address:	ATTN LEGAL DOCKETING	
City:	HORSHAM	
State/Country:	PENNSYLVANIA	
Postal Code:	19044	
Name:	ACADIA AIC, INC.	
Street Address:	101 TOURNAMENT DRIVE	
Internal Address:	ATTN LEGAL DOCKETING	
City:	HORSHAM	
State/Country:	PENNSYLVANIA	
Postal Code:	19044	
Name:	AEROCAST, INC.	
Street Address:	101 TOURNAMENT DRIVE	
Internal Address:	ATTN LEGAL DOCKETING	
City:	HORSHAM	
State/Country:	PENNSYLVANIA	
Postal Code:	19044	
Name:	BROADBUS TECHNOLOGIES, INC.	
	PATENT	

Street Address:	101 TOURNAMENT DRIVE	
Internal Address:	ATTN LEGAL DOCKETING	
City:	HORSHAM	
State/Country:	PENNSYLVANIA	
Postal Code:	19044	
Name:	GENERAL INSTRUMENT CORPORATION	
Street Address:	101 TOURNAMENT DRIVE	
Internal Address:	ATTN LEGAL DOCKETING	
City:	HORSHAM	
State/Country:	PENNSYLVANIA	
Postal Code:	19044	
Name:	GENERAL INSTRUMENT AUTHORIZATION SERVICES, INC.	
Street Address:	101 TOURNAMENT DRIVE	
Internal Address:	ATTN LEGAL DOCKETING	
City:	HORSHAM	
State/Country:	PENNSYLVANIA	
Postal Code:	19044	
Name:	GENERAL INSTRUMENT INTERNATIONAL HOLDINGS, INC.	
Street Address:	101 TOURNAMENT DRIVE	
Internal Address:	ATTN LEGAL DOCKETING	
City:	HORSHAM	
State/Country:	PENNSYLVANIA	
Postal Code:	19044	
Name:	IMEDIA CORPORATION	
Street Address:	101 TOURNAMENT DRIVE	
Internal Address:	ATTN LEGAL DOCKETING	
City:	HORSHAM	
State/Country:	PENNSYLVANIA	
Postal Code:	19044	
Name:	JERROLD DC RADIO, INC.	
Street Address:	101 TOURNAMENT DRIVE	
Internal Address:	ATTN LEGAL DOCKETING	
City:	HORSHAM	
State/Country:	PENNSYLVANIA	
Postal Code:	19044	
Name:	LEAPSTONE SYSTEMS, INC.	
Street Address:	101 TOURNAMENT DRIVE	
Internal Address:	ATTN LEGAL DOCKETING	
City:	HORSHAM	
	PATENT	

State/Country:	PENNSYLVANIA	
Postal Code:	19044	
Name:	MODULUS VIDEO, INC.	
Street Address:	101 TOURNAMENT DRIVE	
Internal Address:	ATTN LEGAL DOCKETING	
City:	HORSHAM	
State/Country:	PENNSYLVANIA	
Postal Code:	19044	
Name:	MOTOROLA WIRELINE NETWORKS, INC.	
Street Address:	101 TOURNAMENT DRIVE	
Internal Address:	ATTN LEGAL DOCKETING	
City:	HORSHAM	
State/Country:	PENNSYLVANIA	
Postal Code:	19044	
Name:	NETOPIA, INC.	
Street Address:	101 TOURNAMENT DRIVE	
Internal Address:	ATTN LEGAL DOCKETING	
City:	HORSHAM	
State/Country:	PENNSYLVANIA	
Postal Code:	19044	
Name:	NEXTLEVEL SYSTEMS (PUERTO RICO), INC.	
Street Address:	101 TOURNAMENT DRIVE	
Internal Address:	ATTN LEGAL DOCKETING	
City:	HORSHAM	
State/Country:	PENNSYLVANIA	
Postal Code:	19044	
Name:	QUANTUM BRIDGE COMMUNICATIONS, INC.	
Street Address:	101 TOURNAMENT DRIVE	
Internal Address:	ATTN LEGAL DOCKETING	
City:	HORSHAM	
State/Country:	PENNSYLVANIA	
Postal Code:	19044	
Name:	SETJAM, INC.	
Street Address:	101 TOURNAMENT DRIVE	
Internal Address:	ATTN LEGAL DOCKETING	
City:	HORSHAM	
State/Country:	PENNSYLVANIA	
Postal Code:	19044	
Name:	SUNUP DESIGN SYSTEMS, INC.	
	PATENT	

Street Address:	101 TOURNAMENT DRIVE	
Internal Address:	ATTN LEGAL DOCKETING	
City:	HORSHAM	
State/Country:	PENNSYLVANIA	
Postal Code:	19044	
Name:	UCENTRIC SYSTEMS, INC.	
Street Address:	101 TOURNAMENT DRIVE	
Internal Address:	ATTN LEGAL DOCKETING	
City:	HORSHAM	
State/Country:	PENNSYLVANIA	
Postal Code:	19044	
Name:	GIC INTERNATIONAL HOLDCO LLC	
Street Address:	101 TOURNAMENT DRIVE	
Internal Address:	ATTN LEGAL DOCKETING	
City:	HORSHAM	
State/Country:	PENNSYLVANIA	
Postal Code:	19044	
Name:	GIC INTERNATIONAL CAPITAL LLC	
Street Address:	101 TOURNAMENT DRIVE	
Internal Address:	ATTN LEGAL DOCKETING	
City:	HORSHAM	
State/Country:	PENNSYLVANIA	
Postal Code:	19044	
Name:	CCE SOFTWARE LLC	
Street Address:	101 TOURNAMENT DRIVE	
Internal Address:	ATTN LEGAL DOCKETING	
City:	HORSHAM	
State/Country:	PENNSYLVANIA	
Postal Code:	19044	
Name:	THE GI REALTY TRUST 1996	
Street Address:	101 TOURNAMENT DRIVE	
Internal Address:	ATTN LEGAL DOCKETING	
City:	HORSHAM	
State/Country:	PENNSYLVANIA	
Postal Code:	19044	

PROPERTY NUMBERS Total: 1355

Property Type	Number
Patent Number:	5113523

PATENT -

Property Type	Number
Patent Number:	4729095
Patent Number:	4863393
Patent Number:	4863398
Patent Number:	5068630
Patent Number:	5092663
Patent Number:	5158155
Patent Number:	5150087
Patent Number:	5096444
Patent Number:	5421030
Patent Number:	5237295
Patent Number:	5179334
Patent Number:	5281933
Patent Number:	5189256
Patent Number:	5341415
Patent Number:	5425027
Patent Number:	5614813
Patent Number:	5594490
Patent Number:	5499046
Patent Number:	5424770
Patent Number:	5623595
Patent Number:	5642351
Patent Number:	5544164
Patent Number:	6033101
Patent Number:	5745276
Patent Number:	5826085
Patent Number:	5659539
Patent Number:	5734762
Patent Number:	5822018
Patent Number:	5841468
Patent Number:	6055278
Patent Number:	6055577
Patent Number:	5832078
Patent Number:	5655117
Patent Number:	6028860
Patent Number:	5909063
Patent Number:	5907422
Patent Number:	5844327
Patent Number:	6070172

Property Type	Number
Patent Number:	5805804
Patent Number:	5926479
Patent Number:	6009473
Patent Number:	5864682
Patent Number:	5909154
Patent Number:	6081533
Patent Number:	6307933
Patent Number:	6112226
Patent Number:	6138147
Patent Number:	6119154
Patent Number:	5878220
Patent Number:	6477197
Patent Number:	6230326
Patent Number:	5995393
Patent Number:	7058721
Patent Number:	6075972
Patent Number:	6484317
Patent Number:	6526471
Patent Number:	6304356
Patent Number:	5973489
Patent Number:	6836898
Patent Number:	6473858
Patent Number:	6526580
Patent Number:	6445474
Patent Number:	6574389
Patent Number:	6578070
Patent Number:	7573529
Patent Number:	6917614
Patent Number:	6356143
Patent Number:	6879634
Patent Number:	6826195
Patent Number:	6788169
Patent Number:	7155734
Patent Number:	7237251
Patent Number:	6571048
Patent Number:	7051111
Patent Number:	6868058
Patent Number:	6611526

Property Type	Number
Patent Number:	6853680
Patent Number:	6560678
Patent Number:	6434141
Patent Number:	6486644
Patent Number:	6757910
Patent Number:	7095746
Patent Number:	7451475
Patent Number:	7239607
Patent Number:	7061861
Patent Number:	6892391
Patent Number:	7512698
Patent Number:	6449249
Patent Number:	6662368
Patent Number:	6769132
Patent Number:	6633877
Patent Number:	6587012
Patent Number:	7047553
Patent Number:	6493200
Patent Number:	6489986
Patent Number:	6529233
Patent Number:	6909726
Patent Number:	6397388
Patent Number:	6944880
Patent Number:	7036138
Patent Number:	6732325
Patent Number:	7245817
Patent Number:	7200859
Patent Number:	7194754
Patent Number:	7313802
Patent Number:	7103905
Patent Number:	6813643
Patent Number:	8418214
Patent Number:	6630963
Patent Number:	6710815
Patent Number:	6842837
Patent Number:	6498754
Patent Number:	7340761
Patent Number:	7236204

Property Type	Number
Patent Number:	6636482
Patent Number:	6619864
Patent Number:	7068716
Patent Number:	7203952
Patent Number:	7162728
Patent Number:	7660328
Patent Number:	7103908
Patent Number:	6580319
Patent Number:	7187697
Patent Number:	6999477
Patent Number:	7076202
Patent Number:	7320134
Patent Number:	6559866
Patent Number:	6762773
Patent Number:	7302696
Patent Number:	6937619
Patent Number:	7058087
Patent Number:	7116717
Patent Number:	7386129
Patent Number:	7093277
Patent Number:	7434246
Patent Number:	7046805
Patent Number:	7146632
Patent Number:	6559894
Patent Number:	7266832
Patent Number:	6457978
Patent Number:	6941575
Patent Number:	7003795
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Patent Number:	7155067
Patent Number:	7181759
Patent Number:	6914936
Patent Number:	6813270
Patent Number:	7428023
Patent Number:	7006613
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Patent Number:	7017174

Property Type	Number
Patent Number:	7071968
Patent Number:	6993257
Patent Number:	7463737
Patent Number:	7036140
Patent Number:	7142230
Patent Number:	6873195
Patent Number:	7031301
Patent Number:	7120142
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Patent Number:	7167531
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Patent Number:	7382838
Patent Number:	7161994
Patent Number:	7073118
Patent Number:	7131054
Patent Number:	7069284
Patent Number:	7165264
Patent Number:	6944372
Patent Number:	7111320
Patent Number:	8375407
Patent Number:	6798457
Patent Number:	6943843
Patent Number:	7035355
Patent Number:	6938198
Patent Number:	6865555
Patent Number:	7161887
Patent Number:	6915528
Patent Number:	6754085
Patent Number:	6632008
Patent Number:	7208992
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Patent Number:	6674804
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Patent Number:	6959153
Patent Number:	7184433
Patent Number:	7360232
Patent Number:	7032177
Patent Number:	7243123

Property Type	Number
Patent Number:	7036090
Patent Number:	7036091
Patent Number:	7031259
Patent Number:	6947998
Patent Number:	7155675
Patent Number:	7058816
Patent Number:	7594246
Patent Number:	7197715
Patent Number:	7055104
Patent Number:	7735102
Patent Number:	6687432
Patent Number:	7159176
Patent Number:	7159177
Patent Number:	7107531
Patent Number:	7107532
Patent Number:	6801014
Patent Number:	7197234
Patent Number:	7116894
Patent Number:	6879641
Patent Number:	6859044
Patent Number:	7272144
Patent Number:	6861952
Patent Number:	6972787
Patent Number:	7237252
Patent Number:	7034927
Patent Number:	6727935
Patent Number:	7266835
Patent Number:	7787439
Patent Number:	6724791
Patent Number:	7277450
Patent Number:	7535888
Patent Number:	7533403
Patent Number:	7310355
Patent Number:	6749498
Patent Number:	7080394
Patent Number:	6882514
Patent Number:	7650569
Patent Number:	7218610

Patent Number: 8151293 Patent Number: 7350157 Patent Number: 7380260 Patent Number: 8141117 Patent Number: 7774815 Patent Number: 8245257 Patent Number: 7688803 Patent Number: 7263362 Patent Number: 7127182	
Patent Number: 7380260 Patent Number: 8141117 Patent Number: 7774815 Patent Number: 8245257 Patent Number: 7739718 Patent Number: 7688803 Patent Number: 7263362 Patent Number: 7127182	
Patent Number: 8141117 Patent Number: 7774815 Patent Number: 8245257 Patent Number: 7739718 Patent Number: 7688803 Patent Number: 7263362 Patent Number: 7127182	
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Patent Number: 7024185	
Patent Number: 6856185	
Patent Number: 6907158	
Patent Number: 6996836	
Patent Number: 7196840	
Patent Number: 7480378	
Patent Number: 8099680	
Patent Number: 7757253	
Patent Number: 7921440	
Patent Number: 7251255	
Patent Number: 8032016	
Patent Number: 6907159	
Patent Number: 7100011	
Patent Number: 6975713	
Patent Number: 6975717	
Patent Number: 6980638	
Patent Number: 7391808	
Patent Number: 7218915	
Patent Number: 7471639	
Patent Number: 7233660	
Patent Number: 7031435	
Patent Number: 8104065	
Patent Number: 8146123	
Patent Number: 7936818	
Patent Number: 7397822	
Patent Number: 7460523	
Patent Number: 7280479	
Patent Number: 7764863	

Patent Number: 8036250 Patent Number: 8185926 Patent Number: 8000475 Patent Number: 7031463 Patent Number: 7721317 Patent Number: 7480237 Patent Number: 7267568 Patent Number: 7200718 Patent Number: 7792023 Patent Number: 7474150 Patent Number: 7504176 Patent Number: 7504176 Patent Number: 7653932 Patent Number: 7480241 Patent Number: 7403374 Patent Number: 7606870 Patent Number: 7366239 Patent Number: 7860122 Patent Number: 8068516 Patent Number: 7403562 Patent Number: 7151782 Patent Number: 7885182 Patent Number: 7676720 Patent Number: 7653090 Patent Number: 7653740 Patent Number: 7653740 Patent Number: 7653740	Property Type	Number
Patent Number: 8000475 Patent Number: 7031463 Patent Number: 7721317 Patent Number: 7267568 Patent Number: 7200718 Patent Number: 7200718 Patent Number: 7474150 Patent Number: 7474150 Patent Number: 7504176 Patent Number: 7504176 Patent Number: 7653932 Patent Number: 7480241 Patent Number: 7403374 Patent Number: 7606870 Patent Number: 7366239 Patent Number: 7860122 Patent Number: 8068516 Patent Number: 8068516 Patent Number: 7403562 Patent Number: 7151782 Patent Number: 7885182 Patent Number: 7653090 Patent Number: 7676720 Patent Number: 7653740 Patent Number: 7403547 Patent Number: 7843894 Patent Number: 762438	Patent Number:	8036250
Patent Number: 7031463 Patent Number: 7721317 Patent Number: 7480237 Patent Number: 7267568 Patent Number: 7200718 Patent Number: 7792023 Patent Number: 7474150 Patent Number: 8245269 Patent Number: 7504176 Patent Number: 7653932 Patent Number: 7480241 Patent Number: 7403374 Patent Number: 7606870 Patent Number: 7366239 Patent Number: 7860122 Patent Number: 8068516 Patent Number: 8108896 Patent Number: 7151782 Patent Number: 7885182 Patent Number: 7653090 Patent Number: 7676720 Patent Number: 7653740 Patent Number: 7403547 Patent Number: 7403547 Patent Number: 7623740 Patent Number: 7639394 Patent Number: 7672438	Patent Number:	8185926
Patent Number: 7721317 Patent Number: 7480237 Patent Number: 7267568 Patent Number: 7200718 Patent Number: 7792023 Patent Number: 7474150 Patent Number: 8245269 Patent Number: 7504176 Patent Number: 7653932 Patent Number: 7480241 Patent Number: 7403374 Patent Number: 7606870 Patent Number: 7366239 Patent Number: 7860122 Patent Number: 8068516 Patent Number: 7403562 Patent Number: 7151782 Patent Number: 7885182 Patent Number: 7653090 Patent Number: 7653090 Patent Number: 773855 Patent Number: 7653740 Patent Number: 7403547 Patent Number: 7843894 Patent Number: 7672438 Patent Number: 7672438 Patent Number: 762438	Patent Number:	8000475
Patent Number: 7480237 Patent Number: 7267568 Patent Number: 7200718 Patent Number: 7792023 Patent Number: 7474150 Patent Number: 8245269 Patent Number: 7504176 Patent Number: 7653932 Patent Number: 7480241 Patent Number: 7606870 Patent Number: 7366239 Patent Number: 7860122 Patent Number: 8068516 Patent Number: 8108896 Patent Number: 7151782 Patent Number: 7885182 Patent Number: 7653090 Patent Number: 7676720 Patent Number: 7773855 Patent Number: 7653740 Patent Number: 7403547 Patent Number: 7403547 Patent Number: 7403547 Patent Number: 7663740 Patent Number: 7403547 Patent Number: 763438 Patent Number: 7672438	Patent Number:	7031463
Patent Number: 7267568 Patent Number: 7200718 Patent Number: 7792023 Patent Number: 7474150 Patent Number: 8245269 Patent Number: 7504176 Patent Number: 7653932 Patent Number: 7480241 Patent Number: 7606870 Patent Number: 7366239 Patent Number: 7860122 Patent Number: 7403562 Patent Number: 8108896 Patent Number: 7151782 Patent Number: 7885182 Patent Number: 7653090 Patent Number: 7676720 Patent Number: 7395321 Patent Number: 7653740 Patent Number: 7403547 Patent Number: 7843894 Patent Number: 7672438 Patent Number: 7672438 Patent Number: 763539	Patent Number:	7721317
Patent Number: 7200718 Patent Number: 7792023 Patent Number: 7474150 Patent Number: 8245269 Patent Number: 7504176 Patent Number: 7653932 Patent Number: 7480241 Patent Number: 7403374 Patent Number: 7606870 Patent Number: 7860122 Patent Number: 8068516 Patent Number: 8108896 Patent Number: 7151782 Patent Number: 7885182 Patent Number: 7974303 Patent Number: 7653090 Patent Number: 7676720 Patent Number: 7395321 Patent Number: 7653740 Patent Number: 7403547 Patent Number: 7843894 Patent Number: 7672438 Patent Number: 7672438 Patent Number: 766399 Patent Number: 7643553	Patent Number:	7480237
Patent Number: 7792023 Patent Number: 7474150 Patent Number: 8245269 Patent Number: 7504176 Patent Number: 7653932 Patent Number: 7480241 Patent Number: 7403374 Patent Number: 7606870 Patent Number: 7860122 Patent Number: 8068516 Patent Number: 7403562 Patent Number: 7151782 Patent Number: 7885182 Patent Number: 7974303 Patent Number: 7653090 Patent Number: 7676720 Patent Number: 7395321 Patent Number: 7653740 Patent Number: 7843894 Patent Number: 7843894 Patent Number: 762438 Patent Number: 762438 Patent Number: 762438 Patent Number: 7643553	Patent Number:	7267568
Patent Number: 7474150 Patent Number: 8245269 Patent Number: 7504176 Patent Number: 8121112 Patent Number: 7653932 Patent Number: 7480241 Patent Number: 7606870 Patent Number: 7366239 Patent Number: 8068516 Patent Number: 7403562 Patent Number: 8108896 Patent Number: 7151782 Patent Number: 7885182 Patent Number: 7653090 Patent Number: 7676720 Patent Number: 7395321 Patent Number: 7653740 Patent Number: 7403547 Patent Number: 7843894 Patent Number: 7843894 Patent Number: 7672438 Patent Number: 7663399 Patent Number: 7643553	Patent Number:	7200718
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Patent Number: 7504176 Patent Number: 8121112 Patent Number: 7653932 Patent Number: 7480241 Patent Number: 7606870 Patent Number: 7366239 Patent Number: 7860122 Patent Number: 8068516 Patent Number: 7403562 Patent Number: 7151782 Patent Number: 7885182 Patent Number: 7974303 Patent Number: 7653090 Patent Number: 7676720 Patent Number: 7395321 Patent Number: 7403547 Patent Number: 7403547 Patent Number: 7843894 Patent Number: 782438 Patent Number: 7672438 Patent Number: 7206399 Patent Number: 7643553	Patent Number:	7474150
Patent Number: 8121112 Patent Number: 7653932 Patent Number: 7480241 Patent Number: 7606870 Patent Number: 7366239 Patent Number: 806122 Patent Number: 8068516 Patent Number: 7403562 Patent Number: 7151782 Patent Number: 7885182 Patent Number: 7974303 Patent Number: 7653090 Patent Number: 7676720 Patent Number: 7395321 Patent Number: 7653740 Patent Number: 7403547 Patent Number: 7843894 Patent Number: 7672438 Patent Number: 7672438 Patent Number: 766399 Patent Number: 7643553	Patent Number:	8245269
Patent Number: 7653932 Patent Number: 7480241 Patent Number: 7403374 Patent Number: 7606870 Patent Number: 7366239 Patent Number: 8068516 Patent Number: 7403562 Patent Number: 8108896 Patent Number: 7151782 Patent Number: 7974303 Patent Number: 7653090 Patent Number: 7676720 Patent Number: 7395321 Patent Number: 7653740 Patent Number: 7403547 Patent Number: 7843894 Patent Number: 8249114 Patent Number: 7672438 Patent Number: 7672438 Patent Number: 760399 Patent Number: 7643553	Patent Number:	7504176
Patent Number: 7480241 Patent Number: 7403374 Patent Number: 7606870 Patent Number: 7366239 Patent Number: 8068516 Patent Number: 7403562 Patent Number: 8108896 Patent Number: 7151782 Patent Number: 7974303 Patent Number: 7653090 Patent Number: 7676720 Patent Number: 7395321 Patent Number: 7653740 Patent Number: 7403547 Patent Number: 7843894 Patent Number: 8249114 Patent Number: 7672438 Patent Number: 7672438 Patent Number: 7643553	Patent Number:	8121112
Patent Number: 7403374 Patent Number: 7606870 Patent Number: 7366239 Patent Number: 8068516 Patent Number: 7403562 Patent Number: 8108896 Patent Number: 7151782 Patent Number: 7885182 Patent Number: 7653090 Patent Number: 7676720 Patent Number: 7773855 Patent Number: 7653740 Patent Number: 7403547 Patent Number: 7843894 Patent Number: 8249114 Patent Number: 7672438 Patent Number: 766399 Patent Number: 7643553	Patent Number:	7653932
Patent Number: 7606870 Patent Number: 7366239 Patent Number: 7860122 Patent Number: 8068516 Patent Number: 7403562 Patent Number: 8108896 Patent Number: 7151782 Patent Number: 7974303 Patent Number: 7653090 Patent Number: 7676720 Patent Number: 7395321 Patent Number: 7653740 Patent Number: 7403547 Patent Number: 7843894 Patent Number: 8249114 Patent Number: 7672438 Patent Number: 7206399 Patent Number: 7643553	Patent Number:	7480241
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Application Number:	10615702
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Application Number:	11321404
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Property Type	Number
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Application Number:	11690217
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Property Type	Number
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Patent Number:	6570430
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Patent Number:	6549403
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Application Number:	13326574
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Application Number:	90005186
Application Number:	90005185
PCT Number:	US2012025590
Patent Number:	D537806

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NAME OF SUBMITTER:	JOHN SLAUGHTER
SIGNATURE:	/john slaughter/
DATE SIGNED:	04/08/2019

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TERMINATION AND RELEASE OF SECURITY INTEREST IN PATENTS

This **TERMINATION AND RELEASE OF SECURITY INTEREST IN PATENTS**, dated as of April 4, 2019 ("<u>Release</u>"), is made by Bank of America, N.A., as Administrative Agent ("<u>Administrative Agent</u>") in favor of the grantors listed on <u>Exhibit A</u> hereto (each a "<u>Grantor</u>", and collectively, the "Grantors").

WHEREAS, pursuant to that certain Guarantee and Collateral Agreement, dated as of April 17, 2013 (as amended, supplemented or otherwise modified from time to time, the "Collateral Agreement") and Grant of Security Interest in Patent Rights dated as of April 17, 2013 ("Patent Grant"), each by and among the Grantors and Administrative Agent, each Grantor granted to the Administrative Agent, for the ratable benefit of the Secured Parties, a security interest in such Grantor's Patents; and

WHEREAS, the Patent Grant was recorded at the United States Patent and Trademark Office ("<u>USPTO</u>") on May 28, 2013 at Reel 030498 Frame 0023.

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Administrative Agent, on behalf of the Secured Parties, and Grantor agree as follows:

- **SECTION 1**. <u>Defined Terms</u>. All capitalized terms used herein but not otherwise defined herein have the meanings given to them in the Collateral Agreement or Patent Grant, as applicable.
- **SECTION 2**. <u>Termination and Release</u>. Administrative Agent, on behalf of the Secured Parties, without representation, warranty, or recourse, hereby:
- (a) terminates, cancels, discharges, and releases the security interest in each Grantor's Patents, including, but not limited to, the foregoing listed on <u>Schedule A</u> attached hereto, granted pursuant to the Collateral Agreement or Patent Grant; and
 - (b) authorizes the recordation of this Release with the USPTO at Grantor's expense.
- **SECTION 3**. Choice of Law. This Release shall be governed by and construed in accordance with the laws of the State of New York.

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IN WITNESS WHEREOF, the Administrative Agent, on behalf of the Secured Parties, has caused this Termination and Release of Security Interest in Patents to be duly executed as of the date first set forth above.

Administrative Agent:

Bank of America, N.A., as Administrative Agent

Name:

Title:

Felicia Brinson

Assistant Vice President

Exhibit A

Grantors

ARRIS GROUP, INC., a Delaware corporation

ARRIS ENTERPRISES, INC., a Delaware corporation

ARRIS SOLUTIONS, INC., a Delaware corporation

ARRIS KOREA, INC., a Delaware corporation

ARRIS HOLDINGS CORP. OF ILLINOIS, INC., an Illinois corporation

BIG BAND NETWORKS, INC., a Delaware corporation

TEXSCAN CORPORATION, a Nevada corporation

POWER GUARD, INC., an Illinois corporation

4HOME, INC., a Delaware corporation

ACADIA AIC, INC., a Delaware corporation

AEROCAST, INC., a Delaware corporation

BROADBUS TECHNOLOGIES, INC., a Delaware corporation

GENERAL INSTRUMENT CORPORATION, a Delaware corporation

GENERAL INSTRUMENT AUTHORIZATION SERVICES, INC., a Delaware corporation

GENERAL INSTRUMENT INTERNATIONAL HOLDINGS, INC., a Delaware corporation

IMEDIA CORPORATION, a California corporation

JERROLD DC RADIO, INC., a Delaware corporation

LEAPSTONE SYSTEMS, INC., a Delaware corporation

MODULUS VIDEO, INC., a Delaware corporation

MOTOROLA WIRELINE NETWORKS, INC., a Delaware corporation

NETOPIA, INC., a Delaware corporation

NEXTLEVEL SYSTEMS (PUERTO RICO), INC., a Delaware corporation

QUANTUM BRIDGE COMMUNICATIONS, INC., a Delaware corporation

SETJAM, INC., a Delaware corporation

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SUNUP DESIGN SYSTEMS, INC., a Delaware corporation

UCENTRIC SYSTEMS, INC., a Delaware corporation

GIC INTERNATIONAL HOLDCO LLC, Delaware limited liability company

GIC INTERNATIONAL CAPITAL LLC, Delaware limited liability company

CCE SOFTWARE LLC, Delaware limited liability company

THE GI REALTY TRUST 1996, a Delaware statutory trust

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Schedule A

To Be Attached

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Schedule A

PATENTS

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	# **	Date			
		Date					
ARRIS	5,113,523	05/12/	06/731,170	05/06/	HIGH PERFORMANCE	US	Granted
Solutions, Inc.		1992		1985	COMPUTER SYSTEM		
ARRIS	4,729,095	03/01/	06/864,596	05/19/	BROADCAST	US	Granted
Solutions, Inc.		1988		1986	INSTRUCTION FOR USE		
					IN A HIGH		
					PERFORMANCE		
					COMPUTER SYSTEM		
ARRIS	4,863,393	09/05/	07/198,227	05/25/	MODULAR JACK	US	Granted
Solutions, Inc.		1989		1988	ASSEMBLY WITH		
					IMPROVED BRIDGING		
		001071		0.1.15.0.1	ARRANGEMENT		
ARRIS	4,863,398	09/05/	07/303,903	01/30/	UNIVERSAL ADAPTER	US	Granted
Solutions, Inc.		1989		1989	FOR OFFICE WALL		
ADDIG	5.060.620	11/07/	054450 550	02/14/	PANELS	T.G	G . 1
ARRIS	5,068,630	11/26/	07/450,759	02/14/	MULTIPLE COUPLER	US	Granted
Solutions, Inc.		1991		1989	DEVICE WITH RETURN		
A .	5.002.662	02/02/	07/52(075	05/01/	PATH	TIC	G . 1
Arris	5,092,663	03/03/ 1992	07/526,875	05/21/ 1990	APPARATUS AND	US	Granted
Enterprises,		1992		1990	METHOD FOR MAINTAINING SLACK		
Inc.					OF FIBER OPTIC CABLE		
					OR THE LIKE		
Arris	5,158,155	10/27/	07/595,553	10/11/	VENDORS'	US	Granted
Enterprises,	3,130,133	1992	011373,333	1990	STRUCTURAL		Granted
Inc.		1772		1770	COMPLEX		
Arris	5,150,087	09/22/	07/619,942	11/29/	Electrical Signal Filter and	US	Granted
Enterprises,	2,123,337	1992	07,013,3.2	1990	Method for Manufacture of		Oranica
Inc.					Electrical Signal Filter		
					Internal Circuit Board		
Arris	5,096,444	03/17/	07/637,162	01/03/	Flat F-Port Connector	US	Granted
Enterprises,		1992	,	1991			
Inc.							
Arris	5,421,030	05/30/	07/761,281	09/17/	COMMUNICATIONS	US	Granted
Enterprises,		1995		1991	SYSTEM AND METHOD		
Inc.					FOR BI-DIRECTIONAL		
					COMMUNICATIONS		
					BETWEEN AN		
					UPSTREAM CONTROL		
					FACILITY AND		
					DOWNSTREAM USER		
					TERMINALS		

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
Arris Enterprises, Inc.	5,237,295	Date 08/17/ 1993	07/779,938	10/21/ 1991	Printed Networks for Improving Electrical Isolation at High Frequencies	US	Granted
Arris Enterprises, Inc.	5,179,334	01/12/ 1993	07/780,734	10/18/ 1991	Power Passing Inductor Capable of Operation at Frequencies Higher Than 900 MHZ	US	Granted
ARRIS Solutions, Inc.	5,281,933	01/25/ 1994	07/784,285	10/29/ 1991	LINE POWER TAPPING DEVICE FOR CABLE TV DISTRIBUTION SYSTEM HAVING A MOVEABLE MODULE	US	Granted
ARRIS Solutions, Inc.	5,189,256	02/23/ 1993	07/793,205	01/30/ 1989	APPARATUS FOR COILING AND STORING CONDUCTORS IN A CIRCULAR SHAPE	US	Granted
Arris Enterprises, Inc.	5,341,415	08/23/ 1994	07/949,424	09/22/ 1992	Method and apparatus for sharing of common inhouse wiring to permit multiple telephone carriers to serve the same customer	US	Granted
Arris Enterprises, Inc.	5,425,027	06/13/ 1995	08/000,373	01/04/ 1993	WIDE AREA FIBER AND TV CABLE FAST PACKET CELL NETWORK	US	Granted
Arris Enterprises, Inc.	5,614,813	03/25/ 1997	08/229,895	04/18/ 1994	Unity Trapezoidal Wave RMS Regulator	US	Granted
ARRIS Solutions, Inc.	5,594,490	01/14/ 1997	08/247,834	05/23/ 1994	SYSTEM FOR DISTRIBUTING VIDEO/AUDIO FILES FROM CENTRAL LOCATION TO A PLURALITY OF CABLE HEADENDS	US	Granted
ARRIS Solutions, Inc.	5,499,046	03/12/ 1996	08/247,967	05/23/ 1994	CATV DISTRIBUTION SYSTEM WITH EACH CHANNEL HAVING ITS OWN REMOTE SCHEDULER	US	Granted

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
ARRIS Solutions, Inc.	5,424,770	Date 06/13/ 1995	08/305,312	09/15/ 1994	METHOD AND APPARATUS FOR AUTOMATIC INSERTION OF A TELEVISION SIGNAL	US	Granted
Alcatel	5,623,595	04/22/	08/312,509	09/26/	FROM A REMOTE SOURCE A METHOD AND	US	Granted
Telecom Limited and ARRIS Solutions, Inc.		1997		1994	APPARATUS FOR TRANSPARENT, REAL TIME RECONSTRUCTION OF CORRUPTED DATA IN A REDUNDANT ARRAY DATA STORAGE SYSTEM		
Arris Enterprises, Inc.	5,642,351	06/24/ 1997	08/328,583	10/17/ 1994	WIDE AREA FIBER AND TV CABLE FAST PACKET CELL NETWORK	US	Granted
Arris Enterprises, Inc.	5,544,164	08/06/ 1996	08/336,325	11/08/ 1994	METHOD AND CELL BASED WIDE AREA NETWORK ALTERNATIVE ACCESS TELEPHONE AND DATA SYSTEM	US	Granted
Arris Enterprises, Inc.	6,033,101	03/07/ 2000	08/350,801	12/07/ 1994	CABLE TELEVISION RADIO FREQUENCY AND AC POWER MULTITAP	US	Granted
Arris Enterprises, Inc.	5,745,276	04/28/ 1998	08/430,893	04/27/ 1995	UNIVERSAL OPTICAL SIGNAL RECEIVER	US	Granted
Alcatel Telecom Limited and ARRIS Solutions, Inc.	5826085	10/20/ 1998	08/501,272	07/12/ 1995	OBJECT ORIENTED COMPUTER INTERFACE SUPPORTING INTERACTIVE NETWORKED APPLICATIONS	US	Granted
Alcatel USA Sourcing, Inc. and ARRIS Solutions, Inc.	5659539	08/19/ 1997	08/502,480	07/14/ 1995	METHOD AND APPARATUS FOR FRAME ACCURATE ACCESS OF DIGITAL AUDIO-VISUAL INFORMATION	US	Granted

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant Date	#	Date			
Arris Enterprises, Inc.	5,734,762	03/31/ 1998	08/529,170	09/15/ 1995	OPTICAL ISOLATOR SYSTEM AND METHOD	US	Granted
Arris Enterprises, Inc.	5,822,018	10/13/ 1998	08/626,733	04/02/ 1996	METHOD AND APPARATUS FOR NORMALIZING SIGNAL LEVELS IN A SIGNAL PROCESSING SYSTEM	US	Granted
ARRIS Solutions, Inc.	5,841,468	11/24/ 1998	08/638,280	04/26/ 1996	SYSTEM AND METHOD FOR ROUTING DATA MESSAGES THROUGH A CABLE TRANSMISSION SYSTEM	US	Granted
Arris Enterprises, Inc.	6,055,278	04/25/ 2000	08/638,551	04/26/ 1996	LINEARIZATION CIRCUITS AND METHODS	US	Granted
Alcatel Telecom Limited and ARRIS Solutions, Inc.	6,055,577	04/25/2000	08/646,685	05/06/ 1996	SYSTEM FOR GRANTING BANDWIDTH FOR REAL TIME PROCESSES AND ASSIGNING BANDWIDTH FOR NON- REAL TIME PROCESSES WHILE BEING FORCED TO PERIODICALLY RE- ARBITRATE FOR NEW ASSIGNED BANDWIDTH	US	Granted
Arris Enterprises, Inc.	5,832,078	11/03/ 1998	08/695,311	08/09/ 1996	MULTIPLE JACK AND ENCLOSURE APPARATUS COMBINATION	US	Granted
Alcatel Telecom Limited and ARRIS Solutions, Inc.	5655117	08/05/ 1997	08/719,308	09/24/ 1996	METHOD AND APPARATUS FOR INDEXING MULTIMEDIA INFORMATION STREAMS	US	Granted
Arris Enterprises, Inc.	6,028,860	02/22/ 2000	08/731,958	10/23/ 1996	PRIORITIZED VIRTUAL CONNECTION TRANSMISSIONS IN A PACKET TO ATM CELL CABLE NETWORK	US	Granted

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant Date	#	Date			
ARRIS Solutions, Inc.	5,909,063	06/01/ 1999	08/774,766	12/30/ 1996	Switchable or automatically terminating connecting device and combination thereof	US	Granted
Arris Enterprises, Inc.	5,907,422	05/25/ 1999	08/779,204	01/06/ 1997	UNIVERSAL OPTICAL SIGNAL RECEIVER	US	Granted
Arris Enterprises, Inc.	5,844,327	12/01/ 1998	08/802,026	02/18/ 1997	APPARATUS AND METHOD FOR OPTIMIZING POWER DISTRIBUTED IN A BROADBAND SIGNAL SYSTEM	US	Granted
Alcatel Telecom Limited and ARRIS Solutions, Inc.	6,070,172	05/30/ 2000	08/813,811	03/06/ 1997	ON-LINE FREE SPACE DEFRAGMENTATION OF A CONTIGUOUS- FILE FILE SYSTEM	US	Granted
Arris Enterprises, Inc.	5,805,804	09/08/ 1998	08/816,207	03/12/ 1997	METHOD AND APPARATUS FOR SCALABLE, HIGH BANDWIDTH STORAGE RETRIEVAL AND TRANSPORTATION OF MULTIMEDIA DATA ON A NETWORK	US	Granted
Arris Enterprises, Inc.	5,926,479	07/20/ 1999	08/843,111	04/24/ 1997	MULTIPLE PROTOCOL PERSONAL COMMUNICATIONS NETWORK SYSTEM	US	Granted
Alcatel Telecom Limited and ARRIS Solutions, Inc.	6,009,473	12/28/ 1999	08/846,715	04/30/ 1997	USING CALLBACKS TO EFFECTIVELY MANAGE RESOURCES	US	Granted
Alcatel USA Sourcing, Inc. and ARRIS Solutions, Inc.	5,864,682	01/26/ 1999	08/859,860	05/21/ 1997	METHOD AND APPARATUS FOR FRAME ACCURATE ACCESS OF DIGITAL AUDIOVISUAL INFORMATION	US	Granted
Arris Enterprises, Inc.	5,909,154	06/01/ 1999	08/867,036	06/02/ 1997	BROADBAND SIGNAL TAP WITH CONTINUITY BRIDGE	US	Granted

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
A .	C 001 522	Date	00/001 0/2	06/05/	METHOD AND	LIC	G . 1
Arris	6,081,533	06/27/	08/881,942	06/25/	METHOD AND	US	Granted
Enterprises, Inc.		2000		1997	APPARATUS FOR AN APPLICATION		
inc.					INTERFACE MODULE		
					IN A SUBSCRIBER		
					TERMINAL UNIT		
Arris	6,307,933	10/23/	08/934,961	09/22/	APPARATUS FOR	US	Granted
Enterprises,	0,007,500	2001	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1997	PROVIDING A		
Inc.					PLURALITY OF		
					PROVIDERS OF		
					SUBSCRIBER SERVICE		
					SIGNALS WITH EASY		
					ACCESS TO AT LEAST		
					INE SUBSCRIBER		
					PREMISES LINE		
Alcatel USA	6,112,226	08/29/	08/956,261	10/22/	METHOD AND	US	Granted
Sourcing, Inc.		2000		1997	APPARATUS FOR		
and ARRIS					CONCURRENTLY		
Solutions, Inc.					ENCODING AND		
					TAGGING DIGITAL		
					INFORMATION FOR		
					ALLOWING NON-		
					SEQUENTIAL ACCESS DURING PLAYBACK		
Alcatel	6,138,147	10/24/	08/956,262	10/22/	METHOD AND	US	Granted
Telecom	0,136,147	2000	00/930,202	1997	APPARATUS FOR	03	Granted
Limited and		2000		1997	IMPLEMENTING		
ARRIS					SEAMLESS PLAYBACK		
Solutions, Inc.					OF CONTINUOUS		
					MEDIA FEEDS		
Alcatel	6,119,154	09/12/	08/956,263	10/22/	METHOD AND	US	Granted
Telecom		2000		1997	APPARATUS FOR NON-		
Limited and					SEQUENTIAL ACCESS		
ARRIS					TO AN IN-PROGRESS		
Solutions, Inc.					VIDEO FEED		
Alcatel	5,878,220	03/02/	08/964,422	11/04/	METHOD AND	US	Granted
Telecom		1999		1997	APPARATUS FOR		
Limited and					STORING AND		
ARRIS					TRANSFERRING DATA		
Solutions, Inc.	6 477 107	11/05/	00/100 250	06/20/	ON A NETWORK	LIC	C
Arris	6,477,197	11/05/	09/109,258	06/30/	METHOD AND	US	Granted
Enterprises,		2002		1998	APPARATUS FOR A		
Inc.					CABLE MODEM		
					UPSTREAM RF SWITCHING SYSTEM		
					SWITCHING STSTEM]	

Owner Grant # Date Arris 6,230,326 05/08/ 2001 09/126,557 1998 07/30/ Method and Apparatus for Initialization of a Cable Modem US	
Arris 6,230,326 05/08/ 2001 09/126,557 09/126,557 07/30/ 1998 Method and Apparatus for Initialization of a Cable US	
Enterprises, 2001 1998 Initialization of a Cable	Granted
	Oranieu
me.	
ARRIS 5,995,393 11/30/ 09/127,002 07/31/ LATCHING SHUTDOWN US	Granted
Solutions, Inc. 1999 1998 AND DELAYED	
RESTART OF DC	
POWER SUPPLY IN	
BROADBAND	
NETWORK	Cuantad
Alcatel	Granted
Limited and ON CHANGING	
ARRIS STREAMING	
Solutions, Inc. CONSTRAINTS	
Arris 6,075,972 06/13/ 09/130,842 08/07/ CATV NETWORK AND US	Granted
Enterprises, 2000 1998 CABLE MODEM	
Inc. SYSTEM HAVING A	
WIRELESS RETURN	
PATH APPLE (494.217 11/10/ 00/127.449 09/11/ METHOD FOR POLITING HIS	C
ARRIS 6,484,317 11/19/ 09/137,448 08/11/ METHOD FOR ROUTING US Solutions, Inc. 2002 1998 DATA MESSAGES	Granted
THROUGH A CABLE	
TRANSMISSION	
SYSTEM	
Arris 6,526,471 02/25/ 09/156,466 09/18/ Method and apparatus for a US	Granted
Enterprises, 2003 1998 high-speed memory	
Inc. subsystem	
ARRIS 6,304,356 10/16/ 09/179,285 10/27/ Optical transmitter for US	Granted
Solutions, Inc. 2001 1998 reducing impulse noise in a	
ARRIS 5,973,489 10/26/ 09/207,723 12/08/ Expanded input voltage US	Granted
Solutions, Inc. 1999 1998 range for switch-mode 03	Granicu
power supply in broadband	
network	
ARRIS 6836898 12/28/ 09/217,430 02/21/ Subscriber power module US	Granted
Solutions, Inc. 2004 1998 for CATV customer	
interface equipment	
Arris 6,473,858 10/29/ 09/293,079 04/16/ Method and apparatus for US	Granted
Enterprises, 2002 1999 broadcasting data with	
Inc. access control Arris 6,526,580 02/25/ 09/293,594 04/16/ A Broadband Data US	Granted
Enterprises, 0,526,580 02/25/ 09/295,594 04/16/ A Broadband Data US 05/295/ 05/2	Gramed
Inc.	
ARRIS 6,445,474 09/03/ 09/321,326 05/27/ Optical transmitter using US	Granted
Solutions, Inc. 2002 1999 multiple optical sources	

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
		Date					
ARRIS	6,574,389	06/03/	09/343,909	06/30/	Optical communication	US	Granted
Solutions, Inc.		2003		1999	with pre-compensation for		
					odd order distortion in		
					modulation and		
					transmission		
Alcatel	6,578,070	06/10/	09/352,630	07/13/	METHOD AND	US	Granted
Telecom		2003		1999	APPARATUS FOR		
Limited and					IMPLEMENTING		
ARRIS					SEAMLESS PLAYBACK		
Solutions, Inc.					OF CONTINUOUS		
·					MEDIA FEEDS		
Arris	7573529	08/11/	09/379,710	08/24/	SYSTEM AND METHOD	US	Granted
Enterprises,		2009	ĺ	1999	FOR PERFORMING		
Inc.					INTERLACED-TO-		
					PROGRESSIVE		
					CONVERSION USING		
					INTERFRAME MOTION		
					DATA		
Arris	6917614	07/12/	09/398,267	09/17/	MULTI-CHANNEL	US	Granted
Enterprises,	0517011	2005	02/320,207	1999	SUPPORT FOR VIRTUAL		Grantea
Inc.		2003		1,,,,	PRIVATE NETWORKS		
inc.					IN A PACKET TO ATM		
					CELL CABLE SYSTEM		
Arris	6,356,143	03/12/	09/430,922	11/01/	METHOD AND	US	Granted
Enterprises,	0,550,145	2002	071730,722	1999	APPARATUS FOR	03	Granted
Inc.		2002		1999	FILTERING RADIO		
me.					FREQUENCY SIGNALS		
ARRIS	6879634	04/12/	09/461,859	12/15/	METHOD AND SYSTEM	US	Granted
Solutions, Inc.	00/9034	2005	09/401,039	1999	FOR TRANSMITTING	US	Granieu
Solutions, Inc.		2003		1999	MEDIA STREAMS OVER		
					A VARIABLE		
					BANDWIDTH		
					NETWORK		
ARRIS	6826195	11/30/	09/474,039	12/28/	SYSTEM AND PROCESS	US	Granted
Solutions, Inc.	0020193	2004	09/4/4,039	1999	FOR HIGH-	US	Granted
Solutions, Inc.		200 4		1999	AVAILABILITY,		
					DIRECT, FLEXIBLE AND		
					-		
					SCALABLE SWITCHING		
					OF DATA PACKETS IN		
					BROADBAND NETWORKS		
ADDIC	(700 100	00/07/	00/474 205	12/20/		LIC	Canada 1
ARRIS	6,788,169	09/07/	09/474,295	12/29/	AMPLIFIER COMPOSITE	US	Granted
Solutions, Inc.		2004		1999	TRIPLE BEAT (CTB)		
					REDUCTION BY PHASE		
					FILTERING		

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
		Date					
Arris	7155734	12/26/	09/515,152	02/29/	Methods of operating a data	US	Granted
Enterprises,		2006		2000	broadcast service		
Inc.							
ARRIS	7237251	06/26/	09/517,818	03/02/	METHOD AND	US	Granted
Solutions, Inc.		2007		2000	APPARATUS FOR		
					USING DELAY TIME		
					DURING SWITCHING		
					EVENTS TO DISPLAY		
					PREVIOUSLY STORED		
					INFORMATION ELEMENTS		
Arris	6,571,048	05/27/	09/528,669	03/20/	UNIVERSAL SPLITTER	US	Granted
Enterprises,	0,371,046	2003	09/328,009	2000	FOR SPLITTING RIBBON	03	Granicu
Inc.		2003		2000	FIBER AND BUFFER		
me.					TUBES		
Arris	7051111	05/23/	09/558,077	04/25/	Multiple Source Pproxy	US	Granted
Enterprises,	, 301111	2006	05,000,077	2000	Managment System		
Inc.					3		
Arris	6868058	03/15/	09/558,826	04/26/	Multi-Node HFC Diverse	US	Granted
Enterprises,		2005		2000	Route Recovery Algorithm		
Inc.					Using Multi-Stage, Wide-		
					Node Marshal with Branch		
					Failure Detection		
ARRIS	6611526	08/26/	09/566,540	05/08/	SYSTEM HAVING A	US	Granted
Solutions, Inc.		2003		2000	MESHED BACKPLANE		
					AND PROCESS FOR		
					TRANSFERRING DATA		
ADDIC	6952699	02/00/	00/5/0/620	05/10/	THERETHROUGH	TIC	G . 1
ARRIS	6853680	02/08/	09/568,628	05/10/	SYSTEM AND PROCESS	US	Granted
Solutions, Inc.		2005		2000	FOR EMBEDDED CABLE		
					MODEM IN A CABLE MODEM TERMINATION		
					SYSTEM TO ENABLE		
					DIAGNOSTICS AND		
					MONITORING		
Arris	6560678	05/06/	09/571,791	05/16/	MAINTAINING	US	Granted
Enterprises,		2003		2000	INFORMATION	~~	
Inc.					VARIETY IN AN		
					INFORMATION		
					RECEIVING SYSTEM		
ARRIS	6434141	08/13/	09/579,551	05/26/	COMMUNICATION	US	Granted
Solutions, Inc.		2002		2000	MANAGEMENT		
					SYSTEM AND METHOD		

Registered Owner	Patent #	Issue/ Grant	Application #	Filing Date	Title	Jurisdiction	Status
Owner		Date	Ħ	Date			
Arris Enterprises, Inc.	6486644	11/26/ 2002	09/579,930	05/26/ 2000	METHOD AND ARCHITECTURE FOR LIMITING INPUT CURRENT TO A BROADBAND NETWORK POWER SUPPLY	US	Granted
ARRIS Solutions, Inc.	6,757,910	06/29/ 2004	09/590,933	06/08/ 2000	Adaptive filter for reducing ingress noise in CATV return signals	US	Granted
Arris Enterprises, Inc.	7,095,746	08/22/ 2006	09/594,216	06/14/2000	Method and apparatus for sub-network devices without direct layer-2 communication and coupled to a common forwarding agent interface to communicate through layer-3	US	Granted
ARRIS Solutions, Inc.	7451475	11/11/ 2008	09/595,624	06/16/ 2000	METHOD FOR DELIVERY OF NARROW-CAST DATA OVER DIGITAL BROADCAST CHANNELS	US	Granted
ARRIS Solutions, Inc.	7239607B1	07/03/ 2007	09/608,747	06/30/ 2000	GUARANTEED QUALITY OF SERVICE IN AN ASYNCHRONOUS METRO PACKET TRANSPORT RING	US	Granted
ARRIS Solutions, Inc.	7,061,861	06/13/ 2006	09/611,180	07/06/ 2000	METHOD AND SYSTEM FOR WEIGHTED FAIR FLOW CONTROL IN AN ASYNCHRONOUS METRO PACKET TRANSPORT RING NETWORK	US	Granted
Alcatel Telecom Limited and ARRIS Solutions, Inc.	6,892,391	05/10/ 2005	09/615,468	07/13/ 2000	Dynamic generation of video content for presentation by a media server	US	Granted
Alcatel Telecom Limited and ARRIS Solutions, Inc.	7512698	03/31/ 2009	09/653,039	09/01/ 2000	DYNAMIC QUALITY ADJUSTMENT BASED ON CHANGING STREAMING CONSTRAINTS	US	Granted

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant Date	#	Date			
Arris Enterprises, Inc.	6,449,249	09/10/ 2002	09/656,940	09/07/ 2000	Spare Circuit Switching	US	Granted
Arris Enterprises, Inc.	6,662,368	12/09/ 2003	09/659,193	09/11/ 2000	VARIABLE SPARE CIRCUIT GROUP SIZE AND QUANTITY HAVING MULTIPLE ACTIVE CIRCUITS	US	Granted
Arris Enterprises, Inc.	6,769,132	07/27/ 2004	09/660,120	09/12/ 2000	Signal splitter matrix for a cable modem termination system	US	Granted
Arris Enterprises, Inc.	6633877	10/14/2003	09/669,134	09/26/ 2000	METHOD AND APPARATUS FOR DELIVERY OF SELECTED ELECTRONIC WORKS AND FOR CONTROLLING RERPODUCTION OF THE SAME	US	Granted
Arris Enterprises, Inc.	6,587,012	07/01/2003	09/677,168	10/02/ 2000	AUTOMATIC SLOPE AND GAIN (ASG) DETECTOR TECHNIQUE INCLUDING A PILOT SIGNAL	US	Granted
Arris Enterprises, Inc.	7,047,553	05/16/ 2006	09/680,113	10/05/ 2000	Method and Apparatus for Decreasing Cable Installation Time and Cable Installation Faults	US	Granted
Arris Enterprises, Inc.	6,493,200	12/10/ 2002	09/684,131	10/10/ 2000	COAXIAL CABLE PROTECTION DEVICE	US	Granted
Arris Enterprises, Inc.	6489986	12/03/ 2002	09/698,297	10/27/ 2000	REMOTE CONTROL DEVICE FOR VIDEO AND AUDIO CAPTURE AND COMMUNICATION	US	Granted
Arris Enterprises, Inc.	6,529,233	03/04/ 2003	09/698,298	10/27/ 2000	SYSTEMS AND METHODS FOR REMOTE VIDEO AND AUDIO CAPTURE AND COMMUNICATION	US	Granted
ARRIS Solutions, Inc.	6909726	06/21/ 2005	09/699,236	10/27/ 2000	ADAPTIVE BANDWIDTH SYSTEM AND METHOD FOR BROADCAST DATA	US	Granted

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
		Date					
Arris	6,397,388	05/28/	09/707,072	11/06/	Systems and devices for	US	Granted
Enterprises,		2002		2000	audio capture and		
Inc.					communication during		
					television broadcasts		
Arris	6944880	09/13/	09/707,073	11/06/	METHODS FOR AUDIO	US	Granted
Enterprises,		2005		2000	CAPTURE AND		
Inc.					COMMUNICATION		
					DURING TELEVISION		
		0.115.21			BROADCASTS		
Arris	7036138	04/25/	09/709,004	11/08/	Method and Apparatus for	US	Granted
Enterprises,		2006		2000	Scheduling Broadcast		
Inc.	672222	051011	00/500 005	111001	Information	T.G	G 1
Arris	6732325	05/04/	09/709,005	11/08/	Error-Correction with	US	Granted
Enterprises,		2004		2000	Limited Working Storage		
Inc.	7245017	07/17/	00/717 450	11/20/		TIC	C . 1
Arris	7245817	07/17/	09/717,458	11/20/	MULTIMEDIA	US	Granted
Enterprises,		2007		2000	TRANSFER SYSTEM		
Inc. Arris	7200859	04/03/	00/701 556	11/22/	APPARATUS AND	US	Cuantad
	7200839	2007	09/721,556	2000	METHOD FOR	US	Granted
Enterprises, Inc.		2007		2000	INTELLIGENT		
mc.					MULTIMEDIA		
					COMPRESSION AND		
					DISTRIBUTION		
Arris	7194754	03/20/	09/728,844	12/01/	METHOD AND SYSTEM	US	Granted
Enterprises,	,151751	2007	057720,011	2000	TO DEFER		Granica
Inc.					TRANSACTIONS		
					CONDUCTED VIA		
					INTERACTIVE		
					TELEVISION		
Arris	7313802	12/25/	09/736,952	12/13/	METHOD AND SYSTEM	US	Granted
Enterprises,		2007		2000	TO PROVIDE DEALS		
Inc.					AND PROMOTIONS VIA		
					AN INTERACTIVE		
					VIDEO CASTING		
					SYSTEM		
Arris	7103905	09/05/	09/742,677	12/19/	SYSTEM AND METHOD	US	Granted
Enterprises,		2006		2000	TO PROVIDE MEDIA		
Inc.					PROGRAMS FOR		
					SYNTHETIC CHANNELS		
Arris	6813643	11/02/	09/755,517	01/05/	MULTIMEDIA SYSTEM	US	Granted
Enterprises,		2004		2001	WITH SELECTABLE		
Inc.`					PROTOCOL MODULE		
					INCLUDING MPEG		
					LOGIC SHAPING A		
					LOGIC SHARING A		
	1				SINGLE TUNER		

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant Date	#	Date			
ARRIS Solutions, Inc.	8,418,214	04/09/2013	09/759,935	01/12/ 2001	Method and apparatus for identifying a signal route for delivery of video-on-demand to a subscriber	US	Granted
Arris Enterprises, Inc.	6630963	10/07/ 2003	09/768,019	01/23/ 2001	terminal SYNCHRONIZING A VIDEO PROGRAM FROM A TELEVISION BROADCAST WITH A SECONDARY AUDIO PROGRAM	US	Granted
Arris Enterprises, Inc.	6710815	03/23/ 2004	09/778,994	02/07/ 2001	SYNCHRONIZING MULTIPLE SIGNALS RECEIVED THROUGH DIFFERENT TRANSMISSION MEDIUMS	US	Granted
Arris Enterprises, Inc.	6842837	01/11/ 2005	09/784,274	02/13/ 2001	METHOD AND APPARATUS FOR A BURST WRITE IN A SHARED BUS ARCHITECTURE	US	Granted
Arris Enterprises, Inc.	6,498,754	12/24/ 2002	09/784,828	02/15/ 2001	MEMORY ARRAY ORGANIZATION FOR STATIC ARRAYS	US	Granted
Arris Enterprises, Inc.	7340761	03/04/ 2008	09/789,175	02/20/ 2001	System and method for delivering radio programs and related schedule information	US	Granted
Arris Enterprises, Inc.	7236204	06/26/ 2007	09/792,019	02/20/ 2001	SYSTEM AND METHOD FOR RENDERING GRAPHICS AND VIDEO ON A DISPLAY	US	Granted
Arris Enterprises, Inc.	6,636,482	10/21/ 2003	09/802,179	03/08/ 2001	METHOD AND APPARATUS FOR CONTROLLING TRAFFIC LOADING OF DIFFERENT SERVICE LEVELS IN A CABLE DATA SYSTEM	US	Granted
ARRIS Solutions, Inc.	6619864	09/16/ 2003	09/808,222	03/15/ 2001	OPTICAL CHANNEL MONITOR WITH CONTINUOUS GAS CELL CALIBRATION	US	Granted

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant Date	#	Date			
ARRIS Solutions, Inc.	7068716	06/27/ 2006	09/810,154	03/15/ 2001	METHOD AND SYSTEM FOR COMPRESSING GROUPS OF BASIC MEDIA DATA UNITS	US	Granted
Arris Enterprises, Inc.	7203952	04/10/ 2007	09/820,331	03/27/ 2001	PASSIVE PROGRAM COMPLETION STATUS INDICATOR FOR AN ELECTRONIC PROGRAM GUIDE	US	Granted
Arris Enterprises, Inc.	7162728	01/09/2007	09/823,946	03/30/ 2001	System and Method to Provide Audio Enhancements and Preferences for Interactive Television	US	Granted
ARRIS Solutions, Inc.	7660328	02/09/2010	09/825,628	04/03/ 2001	METHOD AND SYSTEM FOR GENERATING, TRANSMITTING AND UTILIZING BIT RATE CONVERSION INFORMATION	US	Granted
Arris Enterprises, Inc.	7103908	09/05/ 2006	09/834,044	04/11/ 2001	METHOD AND SYSTEM TO SAVE CONTEXT FOR DEFERRED TRANSACTION VIA INTERACTIVE TELEVISION	US	Granted
ARRIS Solutions, Inc.	6,580,319	06/17/ 2003	09/838,687	04/19/ 2001	AMPLITUDE AND PHASE TRANSFER LINEARIZATION METHOD AND APPARATUS FOR A WIDEBAND AMPLIFIER	US	Granted
ARRIS Solutions, Inc.	7187697	03/06/ 2007	09/839,955	04/19/ 2001	METHOD AND SYSTEM FOR DELIVERING MPEG VIDEO OVER BURSTY COMMUNICATION CHANNELS	US	Granted
ARRIS Solutions, Inc.	6999477	02/14/ 2006	09/841,579	04/23/ 2001	METHOD AND SYSTEM FOR PROVIDING MULTIPLE SERVICES TO END-USERS	US	Granted
Arris Enterprises, Inc.	7076202	07/11/ 2006	09/851,528	05/08/ 2001	System and method for providing an electronic program guide of live and cached radio programs accessible to a mobile device	US	Granted

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
		Date					
Arris	7320134	01/15/	09/858,201	05/15/	SYSTEM AND METHOD	US	Granted
Enterprises,		2008		2001	FOR CABLE OPERATOR		
Inc.					CONTROL OVER		
					ENHANCED		
					PROGRAMMING		
Arris	6559866	05/06/	09/863,895	05/23/	SYSTEM AND METHOD	US	Granted
Enterprises,		2003		2001	FOR PROVIDING		
Inc.					FOREIGN LANGUAGE		
					SUPPORT FOR A		
					REMOTE CONTROL		
					DEVICE		
Arris	6762773	07/13/	09/863,896	05/23/	SYSTEM AND METHOD	US	Granted
Enterprises,		2004	,	2001	FOR PROVIDING A		
Inc.					CONTEXT-SENSITIVE		
					INSTRUCTIONAL USER		
					INTERFACE ICON IN AN		
					INTERACTIVE		
					TELEVISION SYSTEM		
Arris	7302696	11/27/	09/866,558	05/24/	SYSTEM AND METHOD	US	Granted
Enterprises,		2007	03,7000,000	2001	TO PROVIDE AN		
Inc.		2007		2001	INTERACTIVE COUPON		
me.					CHANNEL A VIDEO		
					CASTING NETWORK		
ARRIS	6937619	08/30/	09/870,056	05/29/	METHOD AND SYSTEM	US	Granted
Solutions, Inc.	0,3,01,	2005	057070,050	2001	FOR COMPARISON-		Grantea
bolddons, me.		2003		2001	BASED PRIORITIZED		
					BIT RATE CONVERSION		
ARRIS	7058087	06/06/	09/870,069	05/29/	METHOD AND SYSTEM	US	Granted
Solutions, Inc.	7030007	2006	02/070,002	2001	FOR PRIORITIZED BIT	05	Granted
bolutions, me.		2000		2001	RATE CONVERSION		
ARRIS	7116717	10/03/	09/870,708	05/29/	METHOD AND SYSTEM	US	Granted
Solutions, Inc.	/110/1/	2006	02/070,700	2001	FOR SCALABLE	05	Granted
Solutions, Inc.		2000		2001	REPRESENTATION,		
					STORAGE,		
					TRANSMISSION AND		
					RECONSTRUCTION OF		
					MEDIA STREAMS		
Arris	7386129	06/10/	09/871,415	05/30/	System and Method for	US	Granted
Enterprises,	7.300129	2008	07/071,713	2001	Multimedia Content		Tanted
Inc.		2000		2001	Simulcast		
Arris	7093277	08/15/	09/871,547	05/30/	SYSTEM AND METHOD	US	Granted
Enterprises,	1093211	2006	09/0/1,34/	2001	FOR IMPROVED MULTI-	0.5	Tanted
Inc.		2000		2001	STREAM MULTIMEDIA		
IIIC.					TRANSMISSION AND		
					PROCESSING		

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
	= 10.10.15	Date	22/2== 7/2	061001	2112211112	7.10	~
Arris	7434246	10/07/	09/877,549	06/08/	SYSTEMS AND	US	Granted
Enterprises,		2008		2001	METHODS FOR		
Inc.					AUTOMATIC DED SONAL IZING OF		
					PERSONALIZING OF CHANNEL FAVORITES		
					IN A SET TOP BOX		
Arris	7046805	05/16/	09/877,990	06/08/	SYSTEM AND METHOD	US	Granted
Enterprises,	7040803	2006	09/07/,990	2001	FOR EFFICIENTLY	US	Oranicu
Inc.		2000		2001	STORING AND		
me.					PROCESSING		
					MULTIMEDIA		
					CONTENT		
Arris	7146632	12/05/	09/878,139	06/08/	Interactive information	US	Granted
Enterprises,		2006	,	2001	aggregator for an		
Inc.					interactive television		
					system		
Arris	6559894	05/06/	09/879,662	06/11/	Block Adaptive	US	Granted
Enterprises,		2003		2001	Equalization Using Partial		
Inc.					Decision Feedback in		
					Digital Braodcast		
					Communications		
Arris	7266832	09/04/	09/883,098	06/14/	ADVERTISEMENT	US	Granted
Enterprises,		2007		2001	SWAPPING USING AN		
Inc.					AGGREGATOR FOR AN		
					INTERACTIVE		
•	6.457070	10/01/	00/002 717	06/10/	TELEVISION SYSTEM	TIC	G . 1
Arris	6457978	10/01/	09/883,716	06/18/	METHOD AND	US	Granted
Enterprises, Inc.		2002		2001	APPARATUS FOR ARRANGING CABLE		
mc.					CONNECTORS TO		
					ALLOW FOR EASIER		
					CABLE INSTALLATION		
Arris	6941575	09/06/	09/892,159	06/26/	WEBCAM-BASED	US	Granted
Enterprises,	0511373	2005	071072,137	2001	INTERFACE FOR		Oranica
Inc.		2002		2001	INITIATING TWO-WAY		
					VIDEO		
					COMMUNICATION AND		
					PROVIDING ACCESS TO		
					CACHED VIDEO		
Arris	7003795	02/21/	09/892,160	06/26/	WEBCAM-BASED	US	Granted
Enterprises,		2006		2001	INTERFACE FOR		
Inc.					INITIATING TWO-WAY		
					VIDEO		
					COMMUNICATION		
ARRIS	7,433,598	10/07/	09/896,547	06/29/	Uncooled laser generation	US	Granted
Solutions, Inc.		2008		2001	of narrowcast CATV signal		

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	# **	Date			
		Date					
Arris Enterprises, Inc.	7,002,914	02/21/ 2006	09/902,121	07/21/ 2001	CONGESTION CONTROL IN A NETWORK DEVICE HAVING A BUFFER CIRCUIT	US	Granted
Arris Enterprises, Inc.	7,155,067	12/26/ 2006	09/903,028	07/11/ 2001	Adaptive Edge Detection and Enhancement for Image Processing	US	Granted
ARRIS Solutions, Inc.	7181759	02/20/ 2007	09/903,980	07/11/2001	SYSTEM AND METHOD FOR PROVIDING INTERACTIVITY FOR END-USERS OVER DIGITAL BROADCAST CHANNELS	US	Granted
ARRIS Solutions, Inc.	6914936	07/05/ 2005	09/909,490	07/19/ 2001	METHOD FOR ALLOCATING MEDIA UNIT SEQUENCES AMONG A PLURALITY OF OUTPUT CHANNELS	US	Granted
ARRIS Solutions, Inc.	6813270	11/02/ 2004	09/911,930	07/23/ 2001	METHOD AND SYSTEM FOR GENERATING AND PROVIDING DELAYED MEDIA UNIT SEQUENCES TO END- USERS	US	Granted
Arris Enterprises, Inc.	7428023	09/23/ 2008	09/916,635	07/27/ 2001	REMOTE CONTROL DEVICE WITH INTEGRATED DISPLAY SCREEN FOR CONTROLLING A DIGITAL VIDEO RECORDER	US	Granted
Arris Enterprises, Inc.	7006613	02/28/ 2006	09/917,177	07/27/ 2001	SYSTEM AND METHOD FOR SCREENING INCOMING VIDEO COMMUNICATIONS WITHIN AN INTERACTIVE TELEVISION SYSTEM	US	Granted
Arris Enterprises, Inc.	7272657	09/18/ 2007	09/918,301	07/30/ 2001	SYSTEM AND METHOD FOR DISPLAYING VIDEO STREAMS RANKED BY USER- SPECIFIED CRITERIA	US	Granted

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant Date	#	Date			
Arris Enterprises, Inc.	7017174	03/21/ 2006	09/919,330	07/30/ 2001	Methods and Apparatus for Providing a Central Recorder in a Broadcast System	US	Granted
Arris Enterprises, Inc.	7071968	07/04/ 2006	09/923,820	08/06/ 2001	System and method for a software steerable web camera with multiple image subset capture	US	Granted
ARRIS Solutions, Inc.	6993257 B2	01/31/ 2006	09/929,339	08/15/2001	OPTICAL CHANNEL MONITOR UTILIZING MULTIPLE FABRY- PEROT FILTER PASS- BANDS	US	Granted
Arris Enterprises, Inc.	7463737	12/09/ 2008	09/930,784	08/15/ 2001	System and Method for Conditional Access Key Encryption	US	Granted
Arris Enterprises, Inc.	7,036,140	04/25/2006	09/933,323	08/20/ 2001	CAPACITY SCALING AND FUNCTIONAL ELEMENT REDISTRIBUTION WITHIN AN IN- BUILDING COAX CABLE INTERNET ACCESS SYSTEM	US	Granted
Arris Enterprises, Inc.	7142230	11/28/ 2006	09/935,195	08/22/ 2001	SYSTEM AND METHOD FOR SCREENING INCOMING AND OUTGOING VIDEO COMMUNICATIONS WITHIN AN INTERACTIVE TELEVISION SYSTEM	US	Granted
ARRIS Solutions, Inc.	6873195	03/29/ 2005	09/935,209	08/22/ 2001	COMPENSATING FOR DIFFERENCES BETWEEN CLOCK SIGNALS	US	Granted
ARRIS Solutions, Inc.	7031301	04/18/ 2006	09/938,338	08/23/ 2001	COMMUNICATION MANAGEMENT SYSTEM AND METHOD	US	Granted
ARRIS Solutions, Inc.	7120142	10/10/ 2006	09/938,352	08/23/ 2001	COMMUNICATION MANAGEMENT SYSTEM AND METHOD	US	Granted
ARRIS Solutions, Inc.	7113502	09/26/ 2006	09/938,445	08/23/ 2001	COMMUNICATION MANAGEMENT SYSTEM AND METHOD	US	Granted

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant Date	#	Date			
Arris Enterprises, Inc.	7167531	01/23/ 2007	09/954,777	09/17/ 2001	SYSTEM AND METHOD FOR SHARED DECODING USING A DATA REPLAY SCHEME	US	Granted
Arris Enterprises, Inc.	7251294	07/31/ 2007	09/954,915	09/17/ 2001	System and method for concurrently demodulating and decoding multiple data streams	US	Granted
Arris Enterprises, Inc.	7382838	06/03/ 2008	09/955,529	09/17/ 2001	FREQUENCY DRIFT COMPENSATION ACROSS MULTIPLE BROADBAND SIGNALS IN A DIGITAL RECEIVER SYSTEM	US	Granted
Arris Enterprises, Inc.	7161994	01/09/ 2007	09/955,537	09/17/ 2001	A SYSTEM AND METHOD FOR SHARED DECODING USING A DATA REPLAY SCHEME	US	Granted
Arris Enterprises, Inc.	7073118	07/04/ 2006	09/955,547	09/17/ 2001	Apparatus and Method for Saturating Decoder Values	US	Granted
Arris Enterprises, Inc.	7131054	10/31/ 2006	09/955,558	09/17/ 2001	Apparatus and method for efficient decoder normalization	US	Granted
Arris Enterprises, Inc.	7069284	06/27/ 2006	09/955,569	09/17/ 2001	Apparatus and method for correcting signal imbalances using complex multiplication	US	Granted
Arris Enterprises, Inc.	7165264	01/16/ 2007	09/956,754	09/19/ 2001	Client-Side Tool for Splitting or Truncating Text Strings for Interactive Television	US	Granted
ARRIS Solutions, Inc.	6944372	09/13/ 2005	09/957,022	09/21/ 2001	TUNABLE DISPERSION COMPENSATING BANDWIDTH DEVICE FOR FIBER OPTICS SYSTEM	US	Granted
Arris Enterprises, Inc.	7111320	09/19/ 2006	09/962,926	09/25/ 2001	System and method for personalized remote control of an interactive television system	US	Granted
Arris Enterprises, Inc.	8375407	02/12/ 2013	09/963,092	09/24/ 2001	System & apparatus for displaying substitute content	US	Granted

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
		Date					
Arris	6798457	09/28/	09/964,285	09/26/	CAMERA POSITIONING	US	Granted
Enterprises,		2004		2001	SYSTEM AND METHOD		
Inc.					FOR EYE-TO-EYE		
	60.420.42	00/12/	00/066 224	00/27/	COMMUNICATION	TIC	G . 1
Arris	6943843	09/13/	09/966,334	09/27/	CAMERA POSITIONING	US	Granted
Enterprises,		2005		2001	SYSTEM AND METHOD		
Inc.					FOR EYE-TO EYE COMMUNICATION		
Arris	7035355	04/25/	09/971,984	10/04/	Apparatus and Method for	US	Granted
Enterprises,	703333	2006	09/9/1,904	2001	Decode Arbitration in a	0.3	Granted
Inc.		2000		2001	Multi-Stream Multimedia		
inc.					System		
ARRIS	6,938,198	08/30/	09/972,007	10/05/	Method and apparatus for	US	Granted
Solutions, Inc.	0,730,170	2005	057572,007	2001	accelerating ethernet		Granica
Solutions, me.		2002		2001	checksums		
Arris	6865555	03/08/	09/990,098	11/21/	SYSTEM AND METHOD	US	Granted
Enterprises,		2005	ĺ	2001	FOR PROVIDING		
Inc.					CONDITIONAL ACCESS		
					TO DIGITAL CONTENT		
Arris	7161887	01/09/	09/991,088	11/13/	Method and Apparatus for	US	Granted
Enterprises,		2007		2001	Extracting Digital Data		
Inc.					from a Medium		
Arris	6915528	07/05/	09/993,350	11/14/	SYSTEM AND METHOD	US	Granted
Enterprises,		2005		2001	FOR MANAGING		
Inc.					TELEVISION		
					PROGRAMS WITHIN AN		
					ENTERTAINMENT		
ADDIC	(754005	06/22/	10/002 210	11/01/	SYSTEM	LIC	C . 1
ARRIS	6754085	06/22/ 2004	10/002,218	11/01/ 2001	Mounting circuit boards in	US	Granted
Solutions, Inc. ARRIS	6632008	10/14/	10/008,651	11/09/	housings LIGHT-PIPE	US	Granted
Solutions, Inc.	0032008	2003	10/008,031	2001	LIGHT-FIFE	03	Granieu
ARRIS	7,208,992	04/24/	10/010,615	11/08/	LOSSY LINEARIZERS	US	Granted
Solutions, Inc.	7,200,772	2007	10/010,013	2001	FOR ANALOG OPTICAL		Granted
Solutions, Inc.		2007		2001	TRANSMITTERS		
Arris	7320137	01/15/	10/010,736	12/06/	METHOD AND SYSTEM	US	Granted
Enterprises,	,620107	2008	10/010,/00	2001	FOR DISTRIBUTING		01111111
Inc.					PERSONALIZED		
					EDITIONS OF MEDIA		
					PROGRAMS USING		
					BOOKMARKS		
ARRIS	6674804	01/06/	10/011,341	11/12/	METHOD FOR	US	Granted
Solutions, Inc.		2004		2001	GENERATING A		
					MULTIPLEXED		
					SEQUENCE OF MEDIA		
					UNITS		

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant Date	#	Date			
ARRIS Solutions, Inc.	6738536	05/18/ 2004	10/022,360	12/20/ 2001	WAVELENGTH TUNABLE FILTER DEVICE FOR FIBER OPTIC SYSTEMS	US	Granted
ARRIS Solutions, Inc.	6959153 B2	10/25/ 2005	10/022,516	12/20/ 2001	DYNAMICALLY RECONFIGURABLE ADD/DROP MULTIPLEXER WITH LOW COHERENT CROSS-TALK FOR OPTICAL COMMUNICATION NETWORKS	US	Granted
ARRIS Solutions, Inc.	7184433	02/27/ 2007	10/033,488	12/27/ 2001	SYSTEM AND METHOD FOR PROVIDING MEDIA CONTENT TO END- USERS	US	Granted
Arris Enterprises, Inc.	7360232	04/15/ 2008	10/033,728	12/28/ 2001	System and Method to Subscribe to Channel URL Addresses and to Provide Non-Programming-Related URL Addresses in an Interactive Video Casting System	US	Granted
Arris Enterprises, Inc.	7032177	04/18/ 2006	10/034,200	12/27/ 2001	METHOD AND SYSTEM FOR DISTRIBUTING PERSONALIZED EDITIONS OF MEDIA PROGRAMS USING BOOKMARKS	US	Granted
Arris Enterprises, Inc.	7243123	07/10/ 2007	10/045,672	10/22/ 2001	VIDEO CALL ROUTING WITH PRESENCE DETERMINATION	US	Granted
Arris Enterprises, Inc.	7036090	04/25/ 2006	10/092,008	03/06/ 2002	CONCENTRIC POLYGONAL MENUS FOR A GRAPHICAL USER INTERFACE	US	Granted
Arris Enterprises, Inc.	7036091	04/25/ 2006	10/092,362	03/06/2002	CONCENTRIC CURVILINEAR MENUS FOR A GRAPHICAL USER INTERFACE	US	Granted
ARRIS Solutions, Inc.	7031259	04/18/ 2006	10/093,210	03/06/2002	METHOD AND SYSTEM FOR SCHEDULING A TRANSMISSION OF COMPRESSIBLE AND NON-COMPRESSIBLE PACKETS	US	Granted

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant Date	#	Date			
ARRIS Solutions, Inc.	6947998	09/20/ 2005	10/094,035	03/07/ 2002	Method and system for bandwidth allocation tracking in a packet data network	US	Granted
Arris Enterprises, Inc.	7155675	12/26/ 2006	10/097,195	03/12/ 2002	SYSTEM AND METHOD FOR FOCUSED NAVIGATION WITHIN A USER INTERFACE	US	Granted
Arris Enterprises, Inc.	7058816	06/06/ 2006	10/106,834	03/26/ 2002	APPARATUS AND METHOD FOR CONTENT ENTRY MANAGEMENT	US	Granted
Arris Enterprises, Inc.	7594246	09/22/ 2009	10/108,178	03/27/ 2002	SYSTEM AND METHOD FOR FOCUSED NAVIGATION WITHIN A USER INTERFACE	US	Granted
Arris Enterprises, Inc.	7197715	03/27/ 2007	10/112,666	03/29/ 2002	System and Method to Provide Customized Graphical User Interfaces Via an Interactive Video Casting Network	US	Granted
Arris Enterprises, Inc.	7055104	05/03/ 2006	10/113,820	03/29/ 2002	SYSTEM AND METHOD FOR FOCUSED NAVIGATION USING FILTERS	US	Granted
Arris Enterprises, Inc.	7735102	06/08/ 2010	10/113,889	03/29/2002	System and Method for Focused Navigation Within a User Interface	US	Granted
ARRIS Solutions, Inc.	6,687,432	02/03/ 2004	10/114,641	04/02/ 2002	Optical communication with pre-compensation for odd order distortion in modulation and transmission	US	Granted
Arris Enterprises, Inc.	7159176	01/02/ 2007	10/138,803	05/03/2002	SYSTEM AND METHOD FOR FOCUSED NAVIGATION WITHIN A USER INTERFACE	US	Granted
Arris Enterprises, Inc.	7159177	01/02/ 2007	10/138,804	05/03/ 2002	SYSTEM AND METHOD FOR FOCUSED NAVIGATION WITHIN A USER INTERFACE	US	Granted
Arris Enterprises, Inc.	7107531	09/12/ 2006	10/138,805	05/03/ 2002	SYSTEM AND METHOD FOR FOCUSED NAVIGATION WITHIN A USER INTERFACE	US	Granted

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
Arris Enterprises, Inc.	7107532	Date 09/12/ 2006	10/138,810	05/03/ 2002	SYSTEM AND METHOD FOR FOCUSED NAVIGATION WITHIN A USER INTERFACE	US	Granted
Arris Enterprises, Inc.	6,801,014	10/05/ 2004	10/141,045	05/08/ 2002	Battery equalizer using total string current	US	Granted
Arris Enterprises, Inc.	7197234	03/27/ 2007	10/155,720	05/24/ 2002	SYSTEM AND METHOD FOR PROCESSING SUBPICTURE DATA	US	Granted
Arris Enterprises, Inc.	7116894	10/03/ 2006	10/155,955	05/24/ 2002	System and method for digital multimedia stream conversion	US	Granted
ARRIS Solutions, Inc.	6879641	04/12/ 2005	10/170,770	06/13/ 2002	TRANSMIT PRE- EQUALIZATION IN A MODEM ENVIRONMENT	US	Granted
Arris Enterprises, Inc.	6859044	02/22/ 2005	10/171,029	06/12/ 2002	Method and architecture for fault protection on a broadband communications network power passing tap	US	Granted
Arris Enterprises, Inc.	7,272,144	09/18/ 2007	10/180,736	06/26/ 2002	Method and apparatus for queuing data flows	US	Granted
Arris Enterprises, Inc.	6861952	03/01/ 2005	10/184,023	06/26/ 2002	APPARATUS AND METHOD FOR UTILIZING SMOKE ALARMS AS NODES OF A HOME NETWORK	US	Granted
Arris Enterprises, Inc.	6972787	12/06/ 2005	10/186,244	06/28/ 2002	SYSTEM AND METHOD FOR TRACKING AN OBJECT WITH MULTIPLE CAMERAS	US	Granted
Arris Enterprises, Inc.	7237252	06/26/ 2007	10/186,286	06/27/ 2002	Method and Apparatus to Invoke a Shopping Ticker	US	Granted
Arris Enterprises, Inc.	7034927	04/25/ 2006	10/186,296	06/28/ 2002	SYSTEM AND METHOD FOR IDENTIFYING AN OBJECT USING INVISIBLE LIGHT	US	Granted
Arris Enterprises, Inc.	6,727,935	04/27/ 2004	10/186,299	06/28/ 2002	SYSTEM AND METHOD FOR SELECTIVELY OBSCURING A VIDEO SIGNAL	US	Granted

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
Arris Enterprises, Inc.	7266835	Date 09/04/ 2007	10/186,341	06/27/ 2002	Method and Apparatus for Secure Transactions in an Interactive Television Ticker	US	Granted
ARRIS Solutions, Inc.	7787439	08/31/ 2010	10/187,917	07/01/ 2002	METHOD AND SYSTEMS FOR PROVIDING ENHANCED TELEVISION SERVICES	US	Granted
ARRIS Solutions, Inc.	6,724,791	04/20/ 2004	10/188,944	07/02/ 2002	METHOD AND APPARATUS FOR CONTROLLING THE TEMPERATURE OF A LASER MODULE IN FIBER OPTIC TRANSMISSIONS	US	Granted
Arris Enterprises, Inc.	7,277,450	10/02/ 2007	10/194,338	07/12/ 2002	Scalable Method And Architecture For An Active Switch Defining A Network Edge Having Multiple Uplinks And Using Wavelength Division Multiplexing	US	Granted
ARRIS Solutions, Inc.	7535888	05/19/ 2009	10/209,349	07/30/ 2002	SYSTEM AND METHOD FOR PROVIDING IN- BAND TIMING INFORMATION TO DIGITAL HOME COMMUNICATION TERMINALS	US	Granted
Arris Enterprises, Inc.	7533403	05/12/ 2009	10/227,045	08/23/ 2002	Apparatus and Method for Distributing and Video Content Using Existing Network Wiring	US	Granted
Arris Enterprises, Inc.	7310355	12/18/ 2007	10/227,120	08/23/ 2002	Apparatus and Method for Powering a Network Device	US	Granted
Arris Enterprises, Inc.	6,749,498	06/15/ 2004	10/230,896	08/29/ 2002	Ventilated outdoor electronics enclosure	US	Granted
Arris Enterprises, Inc.	7080394	07/18/ 2006	10/230,964	08/29/ 2002	System and method for capturing video frames for focused navigation within a user interface	US	Granted

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
		Date					
Arris	6882514	04/19/	10/237,822	09/09/	Overcurrent and	US	Granted
Enterprises,		2005		2002	overvoltage protection		
Inc.					method and architecture for		
					a tip and ring subscriber		
A .	7650560	01/10/	10/251 266	00/20/	line interface circuit	TIC	C . 1
Arris	7650569	01/19/	10/251,366	09/20/ 2002	SYSTEM AND METHOD	US	Granted
Enterprises,		2010		2002	FOR FOCUSED NAVIGATION WITHIN A		
Inc.					USER INTERFACE		
Arris	7,218,610	05/15/	10/254,978	09/26/	Communication System	US	Granted
Enterprises,		2007	Í	2002	and Techniques for		
Inc.					Transmission from Source		
					to Destination		
Arris	8151293	04/03/	10/259,273	09/27/	System and method for	US	Granted
Enterprises,	B1	2012		2002	event-based automatic		
Inc.					tuning		
Arris	7350157	03/25/	10/260,208	09/30/	FILTERING BY	US	Granted
Enterprises,		2008		2002	BROADCAST OR		
Inc.					RECORDING QUALITY		
					WITHIN AN ELECTRONIC		
					PROGRAM GUIDE		
Arris	7380260	05/27/	10/260,700	09/30/	FOCUSED NAVIGATION	US	Granted
Enterprises,	7300200	2008	10/200,700	2002	INTERFACE FOR A PC		Granted
Inc.		2000		2002	MEDIA CENTER AND		
					EXTENSION DEVICE		
Arris	8141117	03/20/	10/261,071	09/30/	PC media center and	US	Granted
Enterprises,		2012		2002	extension device for		
Inc.					interfacing with a personal		
					video recorder through a		
					home network		
Arris	7774815	08/10/	10/261,075	09/30/	Context-Sensitive	US	Granted
Enterprises,		2010		2002	Interactive Television		
Inc.	8245257	00/14/	10/261 006	09/30/	Ticker	US	Crontad
Arris	8243237 B1	08/14/ 2012	10/261,096	2002	System and Method for Dynamic Electronic	US	Granted
Enterprises, Inc.	DI	2012		2002	Program Guide (EPG) Data		
mc.					Downloads		
Arris	7739718	06/15/	10/261,548	09/30/	SYSTEM AND METHOD	US	Granted
Enterprises,		2010		2002	FOR AUTOMATICALLY	- ~	
Inc.					SENSING THE STATE		
					OF A VIDEO DISPLAY		
					DEVICE		
Arris	7688803	03/30/	10/261,761	10/29/	System and method for	US	Granted
Enterprises,		2010		2002	coordinating between		
Inc.					multiple telephony channels		

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
Arris Enterprises, Inc.	7263362	Date 08/31/ 2007	10/262,269	09/30/ 2002	SYSTEM AND METHOD FOR DEPLOYING MULTI-FUNCTION ACCESS POINTS IN A DATA NETWORK	US	Granted
ARRIS Solutions, Inc.	7127182	10/24/ 2006	10/270,726	10/16/ 2002	EFFICIENT OPTICAL TRANSMISSION SYSTEM	US	Granted
Arris Enterprises, Inc.	7,024,185	04/04/ 2006	10/272,414	10/15/ 2002	METHOD AND SYSTEM FOR OPERATING A FIELD PROGRAMMABLE LINE CARD USING A COUNTRY CODED TEMPLATE	US	Granted
Arris Enterprises, Inc.	6856185	02/15/ 2005	10/278,688	10/23/ 2002	Simple RMS to DC Converter	US	Granted
ARRIS Solutions, Inc.	6907158 B2	06/14/ 2005	10/286,975	11/04/ 2002	CONFIGURABLE OPTICAL ADD/DROP MULTIPLEXER WITH PARTIAL OR COMPLETE WAVELENGTH DROP CAPABILITY	US	Granted
ARRIS Solutions, Inc.	6,996,836	02/07/ 2006	10/298,509	11/19/ 2002	SYSTEM AND METHOD FOR ROUTING DATA MESSAGES THROUGH A CABLE TRANSMISSION SYSTEM	US	Granted
ARRIS Solutions, Inc.	7,196,840	03/27/ 2007	10/303,050	11/25/ 2002	AMPLITUDE BALANCING FOR MULTILEVEL SIGNAL TRANSMISSION	US	Granted
Arris Enterprises, Inc.	7480378	01/20/ 2009	10/324,321	12/20/ 2002	METHOD AND SYSTEM FOR INCREASING SUBSCRIBER LINE INTERFACE CIRCUIT VOLTAGE DURING RINGING	US	Granted
Arris Enterprises, Inc.	8099680	01/17/ 2012	10/328,514	12/23/ 2002	Progressive Tuning to Multiple Cards	US	Granted

Registered Owner	Patent #	Issue/ Grant Date	Application #	Filing Date	Title	Jurisdiction	Status
Arris Enterprises, Inc.	7757253	07/13/ 2010	10/328,754	12/23/ 2002	SYSTEM AND METHOD FOR CAPTURING VIDEO CLIPS FOR FOCUSED NAVIGATION WITHIN A USER INTERFACE	US	Granted
Arris Enterprises, Inc.	7921440	04/05/ 2011	10/334,687	12/20/ 2002	Method and System For Managing Television Viewing Habits	US	Granted
Arris Enterprises, Inc.	7251255	07/31/ 2007	10/335,440	12/30/ 2002	SYSTEM AND METHOD FOR ALLOCATING RESOURCES ACROSS A PLURALITY OF DISTRIBUTED NODES	US	Granted
Arris Enterprises, Inc.	8,032,016	10/04/ 2011	10/365,619	02/13/ 2003	Agile block downconversion for the distribution of narrowcast services	US	Granted
ARRIS Solutions, Inc.	6907159 B1	06/14/ 2005	10/370,113	02/21/2003	CONFIGURABLE OPTICAL ADD/DROP MULTIPLEXER WITH ENHANCED ADD CHANNEL CAPACITY	US	Granted
Arris Enterprises, Inc.	7100011	08/29/ 2006	10/376,381	02/28/ 2003	METHOD AND SYSTEM FOR REDUCING STORAGE REQUIREMENTS FOR PROGRAM CODE IN A COMMUNICATION DEVICE	US	Granted
Arris Enterprises, Inc.	6975713	12/13/ 2005	10/388,605	03/13/ 2003	Providing Multiple Line Functionality Using Alternative Network Telephony	US	Granted
Arris Enterprises, Inc.	6975717	12/13/ 2005	10/388,767	03/13/2003	SELECTIVE PROCESSING OF CALLS USING ALTERNATIVE NETWORK TELEPHONY	US	Granted
Arris Enterprises, Inc.	6980638	12/27/ 2005	10/389,277	03/13/ 2003	FAILSAFE CONFIGURATION FOR ALTERNATIVE NETWORK TELEPHONY	US	Granted
Arris Enterprises, Inc.	7391808	06/24/ 2008	10/404,837	03/31/ 2003	System and Method for Upgrading Processing Capabilities of a Media Center	US	Granted

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
		Date					
Arris	7218915	05/15/	10/409,334	04/07/	Method and system for	US	Granted
Enterprises,		2007		2003	using an integrated		
Inc.					subscriber identity module		
		12/20/	10//21 222	0.112.21	in a network interface unit		
ARRIS	7471639	12/30/	10/421,257	04/22/	METHOD AND SYSTEM	US	Granted
Solutions, Inc.		2008		2003	FOR MODULATING		
		0.544.04	10//20 0 50	0.710.71	MEDIA PACKETS		
Arris	7,233,660	06/19/	10/430,860	05/05/	METHOD AND SYSTEM	US	Granted
Enterprises,		2007		2003	FOR EXTENDING		
Inc.					BACKUP BATTERY LIFE		
					IN PRIMARY LINE		
					CUSTOMER PREMISES		
A .	7.021.425	04/10/	10/4/2 55/	06/116/	EQUIPMENT	LIC	G . 1
Arris	7,031,435	04/18/	10/462,556	06/16/	Method and apparatus for	US	Granted
Enterprises,		2006		2003	simultaneous line-interface		
Inc.	0104065	01/04/	10/570 073	02/20/	wiring collision detection	TIC	G . 1
Arris	8104065	01/24/	10/578,872	02/28/	SYSTEM TO PROVIDE	US	Granted
Enterprises,		2012		2007	MARKERS TO AFFECT		
Inc.					RENDERING AND		
					NAVIGATION OF		
ADDIC	0146102	02/27/	10/570 007	05/10/	CONTENT ON DEMAND	TIC	G . 1
ARRIS	8146123	03/27/	10/579,097	05/18/	SYSTEM TO PROVIDE	US	Granted
Solutions, Inc.		2012		2007	SET TOP BOX CONFIGURATION FOR		
Arris	7.026.919	05/03/	10/600 520	07/01/	CONTENT ON DEMAND	US	Granted
	7,936,818	2011	10/609,539	2003	Efficient Compression and	US	Granted
Enterprises, Inc.		2011		2003	Transport of Video Over a Network		
ARRIS	7397822	07/08/	10/619,900	07/14/	METHOD AND SYSTEM	US	Granted
	1391622	2008	10/019,900	2003	FOR COMPENSATING	03	Granted
Solutions, Inc.		2008		2003	FOR COMPENSATING FOR TIMING		
					VIOLATIONS OF A		
					MULTIPLEX OF AT		
					LEAST TWO MEDIA		
					PACKET STREAMS		
Arris	7460523	12/02/	10/657,492	09/08/	Client-Server Architecture	US	Granted
Enterprises,	7400323	2008	10/037,472	2003	for the Delivery of		Granted
Inc.		2000		2003	Broadband Services		
ARRIS	7280479	10/09/	10/683,079	10/10/	STATE MACHINE FOR	US	Granted
Solutions, Inc.	, 200-77	2007	10/003,077	2003	PROVIDING DYNAMIC		Granica
Solutions, me.		2007		2003	QUALITY OF SERVICE		
					IN A CABLE NETWORK		
ARRIS	7764863	07/27/	10/685,958	10/14/	System and method for	US	Granted
Solutions, Inc.	B1	2010	10/000,750	2003	providing trick modes		Stantea
ARRIS	8036250	10/11/	10/693,509	10/24/	Method and Apparatus of	US	Granted
Solutions, Inc.	B1	2011	10/0/3,307	2003	Multiplexing Media		Granica
Solutions, inc.		2011		2003			
					Streams		

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
ARRIS Solutions, Inc.	8185926 B1	Date 05/22/ 2012	10/698,189	10/30/ 2003	SYSTEM AND METHOD FOR PROVIDING MEDIA STREAM RELATED APPLICATIONS	US	Granted
ARRIS Solutions, Inc.	8000475 B1	08/16/ 2011	10/746,616	12/23/ 2003	System and method for encrypting and modulating video streams	US	Granted
Arris Enterprises, Inc.	7,031,463	04/18/ 2006	10/778,527	02/13/ 2004	RESISTIVE FEED RAIL GENERATION IN A POWER SUPPLY	US	Granted
ARRIS Solutions, Inc.	7,721,317	05/18/ 2010	10/805,226	03/22/ 2004	COAXIAL COMMUNICATION ACTIVE TAP DEVICE AND DISTRIBUTION SYSTEM	US	Granted
Arris Enterprises, Inc.	7480237	01/20/ 2009	10/827,090	04/19/ 2004	Predictive upstream load balancing	US	Granted
ARRIS Solutions, Inc.	7267568	09/11/ 2007	10/828,722	04/21/ 2004	FLOATING CONNECTORS	US	Granted
ARRIS Solutions, Inc.	7200718 B2	04/03/ 2007	10/832,489	04/26/ 2004	CACHE MEMORY FOR A SCALABLE INFORMATION DISTRIBUTION SYSTEM	US	Granted
ARRIS Solutions, Inc.	7,792,023	09/07/ 2010	10/846,297	05/13/ 2004	Per-flow rate control for an asynchronous metro packet transport ring	US	Granted
ARRIS Solutions, Inc.	7474150	01/06/ 2009	10/847,866	05/19/ 2004	AMPLIFIER COMPOSITE TRIPLE BEAT (CTB) REDUCTION BY PHASE FILTERING	US	Granted
ARRIS Solutions, Inc.	8245269 B2	08/14/ 2012	10/877,856	06/25/ 2004	System and method for delivering video programs to a video distribution center	US	Granted
Arris Enterprises, Inc.	7504176	03/17/ 2009	10/889,560	07/12/ 2004	Capturing mechanism with a flexible tongue having guidetabs comprising hooks	US	Granted
Arris Enterprises, Inc.	8121112	02/21/ 2012	10/929,966	08/30/ 2004	Method and system for processing voice traffic from a multi-channel link into a VoIP network over a broadband network	US	Granted

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
A .	7.652.022	Date	10/020 100	00/20/	METHOD AND CACTEM	TIC	G . 1
Arris	7,653,932	01/26/ 2010	10/930,109	08/30/ 2004	METHOD AND SYSTEM FOR LAYER-3	US	Granted
Enterprises, Inc.		2010		2004	SUBSCRIBER LOGIN IN		
IIIC.					A CABLE DATA		
					NETWORK		
Arris	7480241	01/20/	10/933,065	09/02/	METHOD FOR	US	Granted
Enterprises,	7 100211	2009	10/23,003	2004	PROCESSOR		Grantea
Inc.		2007		200.	OVERLOAD CONTROL		
					IN A VOICE OVER		
					INTERNET PROTOCOL		
					CABLE MODEM		
					TERMINATION SYSTEM		
Arris	7,403,374	07/22/	11/031,773	01/07/	INTEGRATED	US	Granted
Enterprises,		2008		2005	ROTATABLE SUPPORT		
Inc.					FOR A		
					COMMUNICATIONS		
					DEVICE		
Arris	7606870	10/20/	11/041,844	01/24/	Method for displaying	US	Granted
Enterprises,		2009		2005	vendor name in a CMTS		
Inc.	72 6 6 2 2 0	0.4.12.0.1	11/015 551	04/26/	command line interface	***	
ARRIS	7366239	04/29/	11/045,671	01/26/	METHOD AND SYSTEM	US	Granted
Solutions, Inc.		2008		2005	FOR COMPRESSING		
					GROUPS OF BASIC		
Arris	7,860,122	12/28/	11/046,304	01/28/	MEDIA DATA UNITS Method and system for	US	Granted
Enterprises,	7,800,122	2010	11/040,304	2005	prioritizing initial	US	Granted
Inc.		2010		2003	maintenance of cable		
inc.					modems		
ARRIS	8068516	11/29/	11/055,507	02/09/	Method and system for	US	Granted
Solutions, Inc.	B1	2011	12.000,007	2005	exchanging media and data		
,					between multiple clients		
					and a central entity		
Arris	7,403,562	07/22/	11/074,661	03/09/	Model-Based Rate Control	US	Granted
Enterprises,		2008		2005	for Predictive Video		
Inc.					Encoder		
Arris	8108896	01/31/	11/106,388	04/13/	METHOD AND SYSTEM	US	Granted
Enterprises,		2012		2005	FOR PROVIDING		
Inc.					INTERACTIVE		
					SERVICES USING		
					VIDEO ON DEMAND		
ADDIC	7151700	10/10/	11/12/ 021	00/00/	INFRASTRUCTURE	LIC	G . 1
ARRIS	7151782	12/19/	11/126,021	08/09/	METHOD AND SYSTEM	US	Granted
Solutions, Inc.		2006		2005	FOR PROVIDING		
					MULTIPLE SERVICES TO END-USERS		
					TO END-USERS		

Registered Owner	Patent #	Issue/ Grant Date	Application #	Filing Date	Title	Jurisdiction	Status
Arris Enterprises, Inc.	7,885,182	02/08/ 2011	11/130,287	05/16/ 2005	Method for fast recovery from ring protection switches on DOCSIS networks	US	Granted
Arris Enterprises, Inc.	7,974,303 B2	07/05/ 2011	11/130,385	05/16/ 2005	Method and system for providing bandwidth request opportunities for high priority service flows	US	Granted
ARRIS Solutions, Inc.	7653090	01/26/ 2010	11/141,848	05/31/ 2005	METHOD, TRANSMITTER AND SYSTEM FOR PROVIDING VIDEO ON DEMAND SERVICES	US	Granted
ARRIS Solutions, Inc.	7676720	03/09/ 2010	11/141,849	05/31/ 2005	Method and System for Program Based Redundancy	US	Granted
Arris Enterprises, Inc.	7773855	08/10/ 2010	11/149,932	06/10/ 2005	METHOD AND APPARATUS FOR INSERTION OF ADVERTISEMENTS BETWEEN VIEWINGS OF RECORDED CONTENT, GAMES AND OTHER MEDIA TYPES	US	Granted
ARRIS Solutions, Inc.	7395321	07/01/ 2008	11/151,477	06/13/ 2005	METHOD AND SYSTEM FOR PRIORITIZED BIT RATE CONVERSION	US	Granted
ARRIS Solutions, Inc.	7653740	01/26/ 2010	11/180,720	07/14/ 2005	Method and system for bandwidth allocation tracking in a packet data network	US	Granted
Arris Enterprises, Inc.	7,403,547	07/22/ 2008	11/182,535	07/15/ 2005	METHOD AND SYSTEM FOR SYNCHRONIZING SEPARATED EDGE QAM DEVICES LOCATED REMOTELY FROM A CMTS	US	Granted
Arris Enterprises, Inc.	7843894	11/30/ 2010	11/183,304	07/15/ 2005	Method for fast reinstallation of deployed DOCSIS devices	US	Granted
ARRIS Solutions, Inc.	8249114 B2	08/21/ 2012	11/200,754	08/09/ 2005	Method and device for receiving and providing programs	US	Granted
Arris Enterprises, Inc.	7672438	03/02/ 2010	11/226,189	09/13/ 2005	PROVIDING MULTIPLE LINE FUNCTIONALITY USING ALTERNATIVE NETWORK TELEPHONY	US	Granted

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
Arris Enterprises, Inc.	7206399	Date 04/17/ 2007	11/230,850	09/19/ 2005	FAILSAFE CONFIGURATION FOR ALTERNATIVE NETWORK TELEPHONY	US	Granted
Arris Enterprises, Inc.	7643553	01/05/ 2010	11/260,451	10/27/ 2005	Optimal Rate Allocation for a Group of Channels	US	Granted
Arris Enterprises, Inc.	7,665,116	02/16/ 2010	11/260,707	10/27/ 2005	Network Architecture for Real Time Delivery of Video Over Lossy Networks from Remote Locations	US	Granted
ARRIS Solutions, Inc.	8081657 B2	12/20/ 2011	11/277,110	03/21/ 2006	METHOD AND DEVICE FOR PROVIDING VIDEO, DATA AND VOICE TO END USER DEVICES	US	Granted
Arris Enterprises, Inc.	7278002	10/02/ 2007	11/290,855	11/30/ 2005	METHOD AND SYSTEM FOR REDUCING STORAGE REQUIREMENTS FOR PROGRAM CODE IN A COMMUNICATION DEVICE	US	Granted
ARRIS Solutions, Inc.	8107526 B2	01/31/ 2012	11/326,779	01/06/ 2006	METHOD AND SYSTEM FOR SCALABLE REPRESENTATION, STORAGE, TRANSMISSION AND RECONSTRUCTION OF MEDIA STREAMS	US	Granted
ARRIS Solutions, Inc.	8238441 B2	08/07/ 2012	11/327,077	01/05/ 2006	Method and system for scalable representation, storage, transmission and reconstruction of media streams	US	Granted
Arris Enterprises, Inc.	7,804,824	09/28/ 2010	11/334,284	01/18/ 2006	METHOD AND SYSTEM FOR OPERATING A FIELD PROGRAMMABLE LINE CARD USING A COUNTRY CODED TEMPLATE	US	Granted
ARRIS Solutions, Inc.	7809264	10/05/ 2010	11/350,105	02/09/ 2006	Prescriptive and diagnostic system and method for combined RF/optical transmission management	US	Granted

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
A	7.701.057	Date	11/2/2 079	02/20/	Made Jan Jan Co	TIC	C - + 1
Arris	7,701,956	04/20/ 2010	11/363,978	02/28/ 2006	Method and system for	US	Granted
Enterprises, Inc.		2010		2000	using a transfer agent for translating a configuration		
inc.					file		
Arris	7,751,449	07/06/	11/395,587	03/30/	Method and system for	US	Granted
Enterprises,		2010		2006	simulation multimedia		
Inc.					packet loss and jitter		
Arris	8266424	09/11/	11/395,588	03/30/	Method and system for in-	US	Granted
Enterprises,	B2	2012		2006	field recovery of security		
Inc.					when a certificate authority		
	7502405	00/00/	11/205 500	02/20/	has been compromised	710	
Arris	7593495	09/22/ 2009	11/395,590	03/30/	METHOD FOR	US	Granted
Enterprises, Inc.		2009		2000	PERFORMING HIGH RESOLUTION PHASE		
me.					ALIGNMENT OF		
					MULTIPLE CLOCKS		
					USING LOW		
					RESOLUTION		
					CONVERTERS		
Arris	7574345	08/11/	11/396,099	03/30/	Method and system for	US	Granted
Enterprises,		2009		2006	simulating multiple cable		
Inc.		0.51001	11/100 (00	0.440.44	modems	7.0	
Arris	7546622	06/09/	11/409,623	04/24/	Method and Apparatus for	US	Granted
Enterprises,		2009		2006	Scheduling Broadcast		
Inc. Arris	7,440,523	10/21/	11/409,636	04/24/	Information Apparatus and Method for	US	Granted
Enterprises,	7,440,323	2008	11/409,030	2006	Decode Arbitration in a	03	Granted
Inc.		2000		2000	Multi-Stream Multimedia		
					System		
Arris	7593041	09/22/	11/428,525	07/03/	SYSTEM AND METHOD	US	Granted
Enterprises,		2009		2006	FOR A SOFTWARE		
Inc.					STEERABLE WEB		
					CAMERA WITH		
					MULTIPLE IMAGE		
	7407450	02/02/	11///2 02/	05/20/	SUBSET CAPTURE	710	6 1
Arris	7487459	02/03/	11/442,926	05/30/	SYSTEM AND METHOD	US	Granted
Enterprises, Inc.		2009		2006	FOR FOCUSED NAVIGATION USING		
inc.					OPTION TYPE FILTERS		
Arris	8117638	02/14/	11/464,776	08/15/	SYSTEM AND METHOD	US	Granted
Enterprises,		2012	11.101,770	2006	FOR IMPROVED MULTI-		
Inc.		_			STREAM MULTIMEDIA		
					TRANSMISSION AND		
					PROCESSING		

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Owner		Grant	#	Date			
		Date					
Arris	7574656	08/11/	11/519,521	09/12/	SYSTEM AND METHOD	US	Granted
Enterprises,		2009		2006	FOR FOCUSED		
Inc.					NAVIGATION WITHIN A		
					USER INTERFACE		
Arris	7,695,853	04/13/	11/529,187	09/28/	Frameless multi-size	US	Granted
Enterprises,		2010		2006	battery compartment with		
Inc.					passive capture mechanism		
Arris	7643260	01/05/	11/546,450	10/11/	SYSTEM FOR EMI	US	Granted
Enterprises,		2010		2006	FILTER SURGE		
Inc.					VOLTAGE CLAMPING		
Arris	7,990,951	08/02/	11/546,451	10/11/	Method and system for fast	US	Granted
Enterprises,	B2	2011		2006	channel change in a		
Inc.					communication device		
Arris	7518629	04/14/	11/564,188	11/28/	SYSTEM AND METHOD	US	Granted
Enterprises,		2009		2006	FOR SCREENING VIDEO		
Inc.					COMMUNICATIONS		
					WITHIN AN		
					INTERACTIVE		
					TELEVISION SYSTEM		
Arris	7,660,250	02/09/	11/594,304	11/08/	Method and system for	US	Granted
Enterprises,		2010		2006	regulating traffic in a		
Inc.					network device		
Arris	7,724,647	01/25/	11/594,590	11/08/	Method and System for	US	Granted
Enterprises,		2010		2006	Fast Channel Change in a		
Inc.					DOCSIS Set Top Gateway		
			11/600 501	12/00/	Device	****	
Arris	Allowed		11/608,701	12/08/	SYSTEM AND METHOD	US	Granted
Enterprises,				2006	FOR REVERSE		
Inc.					HIERARCHICAL		
					NAVIGATION WITHIN A		
ADDIC	7.044.015	11/20/	11/(10.001	10/10/	USER INTERFACE	TIC	C1
ARRIS	7,844,015		11/612,331	12/18/	METHOD FOR	US	Granted
Solutions, Inc.		2010		2006	CALIBRATING A		
					QUADRATURE MODULATOR AND A		
					MODULATION SYSTEM		
ARRIS	7817672	10/19/	11/617,637	12/28/	METHOD AND DEVICE	US	Granted
Solutions, Inc.	/01/0/2	2010	11/01/,03/	2006	FOR PROVIDING	03	Tailled
Solutions, Inc.		2010		2000	PROGRAMS TO		
					MULTIPLE END USER		
					DEVICES		
ARRIS	7,702,877	04/20/	11/646,184	12/27/	RAID STRIPE LAYOUT	US	Granted
Solutions, Inc.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2010	11/010,107	2006	SCHEME		Stanted
Arris	7466640	12/16/	11/651,383	01/09/	Method and Apparatus for	US	Granted
Enterprises,	, 100010	2008	11/001,000	2007	Extracting Digital Data		Siunica
Inc.					from a Medium		
1110.		I			I om a modiani	l	

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Owner		Grant Date	#	Date			
ARRIS	8218651	07/10/	11/680,172	02/28/	System and Method for	US	Granted
Solutions, Inc.	B1	2012	11/000,172	2007	Splicing	0.5	Granicu
Arris	8312488	11/13/	11/680,493	02/28/	Method and system for fast	US	Granted
Enterprises,	B2	2012	11/000,193	2007	channel change in a		Grantea
Inc.				2007	communication device		
Arris	8085804	12/27/	11/683,295	03/07/	SYSTEM AND METHOD	US	Granted
Enterprises,		2011	-	2007	FOR PROCESSING		
Inc.					MULTIPLE BROADCAST		
					MULTIMEDIA		
					STREAMS		
ARRIS	8184687	05/22/	11/692,934	03/29/	Combining unsynchronized	US	Granted
Solutions, Inc.	B1	2012		2007	MPEG streams into a		
					mosaic		
ARRIS	8175175	05/08/	11/692,939	03/29/	Video Rate Shaping and	US	Granted
Solutions, Inc.	B1	2012		2007	Broadband Wireless		
	0.1011.73	0.5.11.0.1		0.110.5.1	Technology		
Arris	8401152	03/19/	11/695,923	04/03/	METHOD AND SYSTEM	US	Granted
Enterprises,	B2	2013		2007	FOR PERFORMING		
Inc.					EMTA LOOP		
Arris	7.744.201	06/20/	11/706,816	02/12/	DIAGNOSTICS	US	C
	7,744,321	06/29/ 2010	11//06,816	02/13/ 2007	Insulated Fastener	US	Granted
Enterprises, Inc.		2010		2007			
ARRIS	7,346,738	03/18/	11/709,372	02/21/	CACHE MEMORY FOR	US	Granted
Solutions, Inc.	7,540,750	2008	11/702,372	2007	A SCALABLE		Granted
bolutions, me.		2000		2007	INFORMATION		
					DISTRIBUTION SYSTEM		
Arris	7,957,600	06/07/	11/737,632	05/08/	Methods and Systems for	US	Granted
Enterprises,		2011	•	2007	Rate-Distortion Optimized		
Inc.					Quantization of Transform		
					Blocks in Block Transform		
					Video Coding		
Arris	7,930,551	04/19/	11/748,953	05/15/	METHOD AND SYSTEM	US	Granted
Enterprises,		2011		2007	FOR REUSING AN MMH		
Inc.					FUNCTION TO		
					PERFORM A FAST		
					MMH-MAC		
	5016544	02/20/	11/756 511	05/21/	CALCULATION	TIG	G 1
Arris	7,916,744	03/29/	11/756,544	05/31/	Method and system for	US	Granted
Enterprises,		2011		2007	scanning for a downstream		
Inc.					channel in a		
Arris	8149859	04/03/	11/761,231	06/11/	communication network	US	Granted
Enterprises,	B2	2012	11//01,231	2007	Method for managing delivery of multicast traffic	0.5	Granted
Inc.	D2	2012		2007	to devices		
IIIC.					to devices		

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant Date	#	Date			
ARRIS Solutions, Inc.	7971215 B1	06/28/ 2011	11/774,601	07/08/ 2007	SYSTEM, METHOD AND COMPUTER READABLE MEDIUM FOR MANAGING MEDIA STREAMS	US	Granted
Arris Enterprises, Inc.	8332911 B2	12/11/ 2012	11/775,051	07/09/ 2007	Method and system for denying cable modem access to a broadband network	US	Granted
Arris Enterprises, Inc.	7,992,168 B2	08/02/ 2011	11/821,083	06/20/ 2007	Dynamic zoning for targeted ad insertion	US	Granted
Arris Enterprises, Inc.	8161516	04/17/ 2012	11/821,084	06/20/ 2007	Fraud detection in a cable television	US	Granted
Arris Enterprises, Inc.	8,073,951	12/06/ 2011	11/829,699	07/27/ 2007	SYSTEM AND METHOD FOR ALLOCATING RESOURCES ACROSS A PLURALITY OF DISTRIBUTED NODES	US	Granted
Arris Enterprises, Inc.	7,698,461	04/13/ 2010	11/839,115	08/15/ 2007	Method and apparatus for queuing data flows	US	Granted
Arris Enterprises, Inc.	8155002 B2	04/10/ 2012	11/859,574	09/21/ 2007	Method for automatically inflating the receive window size in tcp connections	US	Granted
Arris Enterprises, Inc.	7,953,144	05/31/ 2011	11/861,263	09/25/ 2007	METHOD AND SYSTEM FOR DETECTING IMPULSE NOISE IN A BROADBAND COMMUNICATION SYSTEM	US	Granted
Arris Enterprises, Inc.	8316135 B2	11/20/ 2012	11/937,442	11/08/ 2007	HIGHLY SCALABLE NETWORK ENVIRONMENT FOR MANAGING REMOTE DEVICES	US	Granted
Arris Enterprises, Inc.	7570127	08/04/ 2009	11/943,920	11/21/ 2007	Method and system for spur suppression in modulators	US	Granted
Arris Enterprises, Inc.	8223934 B2	07/17/ 2012	11/961,898	12/20/ 2007	Method of restricting use of a packetcable SIP or NCS E-MTA line to fax-only	US	Granted

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Owner		Grant Date	#	Date			
ARRIS Solutions, Inc.	8171166B1	05/01/ 2012	11/967,421	12/31/ 2007	METHOD AND A COMPUTER PROGRAM PRODUCT FOR MODIFYING OR GENERATING A MULTIPLE PROGRAM TRANSPORT STREAM	US	Granted
Arris Enterprises, Inc.	8166248	04/24/ 2012	12/001,837	12/12/ 2007	Caching of information according to popularity	US	Granted
Arris Enterprises, Inc.	8,064,777	11/22/ 2011	12/001,929	04/16/ 2008	FOUR QUADRANT LINEARIZER	US	Granted
Arris Enterprises, Inc.	8032650	10/04/ 2011	12/002,343	12/12/ 2007	Media stream distribution system	US	Granted
Arris Enterprises, Inc.	7,970,999 B2	06/28/ 2011	12/009,955	01/22/ 2008	Cache memory for a scalable information distribution system	US	Granted
Arris Enterprises, Inc.	8,023,274 B2	09/20/ 2011	12/033,732	02/19/ 2008	SYSTEM FOR INCREASING ISOLATION BOUNDARY WITHSTAND VOLTAGE	US	Granted
Arris Enterprises, Inc.	8,391,309	03/05/2013	12/034,609	02/20/ 2008	Method and system for using mnemonic symbols to provision channel attributes with an attribute mask	US	Granted
ARRIS Solutions, Inc.	7,831,729	11/09/ 2010	12/037,103	02/26/ 2008	DEVICE AND METHOD FOR MANAGING MULTIPLE VERSIONS OF A SINGLE PROGRAM TRANSPORT STREAM	US	Granted
Arris Enterprises, Inc.	7,894,349	02/22/ 2011	12/049,109	03/14/ 2008	METHOD AND SYSTEM FOR TESTING CUSTOMER PREMISE EQUIPMENT DEVICES	US	Granted
Arris Enterprises, Inc.	8036530	10/11/ 2011	12/052,701	03/20/ 2008	METHOD AND SYSTEM FOR TRANSPORTING DOCSIS COMMUNICATION SIGNALS OVER A PASSIVE OPTICAL NETWORK	US	Granted

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
Arris Enterprises, Inc.	7,873,077	Date 01/18/ 2011	12/141,789	06/18/ 2008	SYNCHRONIZING SEPARATED EDGE QAM DEVICES LOCATED REMOTELY FROM A CMTS	US	Granted
ARRIS Solutions, Inc.	8204221	06/19/ 2012	12/169,671	07/09/ 2008	MANIPULATING AND ENCRYPTING MEDIA PACKETS	US	Granted
Arris Enterprises, Inc.	8259457 B2	09/04/ 2012	12/193,630	08/18/ 2008	Formed shielding feature	US	Granted
ARRIS Solutions, Inc.	8386630	02/26 /2013	12/205,878	09/07/ 2008	Video-Aware P2P Streaming and Download with Support for Real-Time Content Alteration	US	Granted
Arris Enterprises, Inc.	8305928 B2	11/06/ 2012	12/206,689	09/08/ 2008	METHOD FOR SUPPORTING MULTIPLE DEVICES FROM A BROADBAND CONNECTION	US	Granted
Arris Enterprises, Inc.	7911543	03/22/ 2011	12/234,209	09/19/ 2008	REMOTE CONTROL DEVICE WITH INTEGRATED DISPLAY SCREEN FOR CONTROLLING A DIGITAL VIDEO RECORDER	US	Granted
ARRIS Solutions, Inc.	8355450	01/15/ 2013	12/248,892	10/09/ 2008	BUFFER DELAY REDUCTION	US	Granted
Arris Enterprises, Inc.	8136141	03/13/ 2012	12/258,661	10/27/ 2008	METHOD AND SYSTEM FOR ALLOCATING BANDWIDTH BASED ON TRANSMISSION POWER OF DEVICES TRANSMITTING OVER COMMUNICATION CHANNELS IN A NETWORK	US	Granted
Arris Enterprises, Inc.	8,379,660	02/19/ 2013	12/259,295	10/27/ 2008	METHOD AND SYSTEM FOR SELECTING FROM A PLURALITY OF CONFIGURATION PROFILE RECORDS FOR CHANNEL BONDING OPERATION	US	Granted

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Owner		Grant	#	Date			
		Date					
ARRIS	8301776	10/30/	12/272,773	11/17/	SWITCHED STREAM	US	Granted
Solutions, Inc.	B2	2012		2008	SERVER		
					ARCHITECTURE		
ARRIS	7986702	07/26/	12/323,486	11/26/	METHOD AND SYSTEM	US	Granted
Solutions, Inc.	B1	2011		2008	FOR STREAMING		
					MULTIMEDIA		
					TRANSMISSIONS		
ARRIS	8291103	10/16/	12/324,865	11/27/	CPE-RG Additional	US	Granted
Solutions, Inc.	B1	2012		2008	Functions for IPTV		
Arris	7752564	07/06/	12/356,486	01/20/	SYSTEM AND METHOD	US	Granted
Enterprises,		2010	·	2009	FOR FOCUSED		
Inc.					NAVIGATION USING		
					OPTION TYPE FILTERS		
Arris	8127179	02/28/	12/396,356	03/02/	Providing System Reset	US	Granted
Enterprises,		2012	Ź	2009	Information To Service		
Inc.					Provider		
ARRIS	8238431	08/07/	12/398,208	03/05/	METHOD AND SYSTEM	US	Granted
Solutions, Inc.	B2	2012		2009	FOR RATE REDUCTION		
,					OF VIDEO STREAMS		
ARRIS	7,999,631	08/16/	12/406,045	03/17/	Anti-Parallel Pi Pin	US	Granted
Solutions, Inc.	B2	2011		2009	Attenuator Structure with		
				2007	Improved CSO		
					Performance		
ARRIS	8145066	03/27/	12/406,094	03/17/	PREDISTORTION USING	US	Granted
Solutions, Inc.	B2	2012	12/ 100,00	2009	FPGA		Grantea
ARRIS	7,948,416	05/24/	12/406,101	03/17/	DIGITAL TO ANALOG	US	Granted
Solutions, Inc.	7,510,110	2011	12/100,101	2009	CONVERTER SPUR		Grantea
Solutions, me.		2011		2007	CANCELLATION		
ARRIS	8145068	03/27/	12/406,107	03/17/	DUAL USE OF TEST	US	Granted
Solutions, Inc.	B2	2012	12/400,107	2009	POINT POWER		Granted
Solutions, Inc.	D2	2012		2007	MONITOR		
Arris	8237767	08/07/	12/417,408	04/02/	SYSTEM AND METHOD	US	Granted
Enterprises,	B2	2012	12/41/,400	2009	FOR SCREENING VIDEO	0.5	Granteu
Inc.	D2	2012		2009	COMMUNICATIONS		
inc.					WITHIN AN		
					INTERACTIVE		
					TELEVISION SYSTEM		
Arris	8,386,643	02/26/	12/419,262	04/06/	AUTOMATED DOUBLE	US	Granted
Enterprises,	0,300,043	2013	141717,404	2009	FIRMWARE UPGRADE		Granted
Inc.		2013		2009	TIMIWAKE OF GRADE		
ARRIS	8260138	09/04/	12/420,049	04/07/	WAVELENGTH	US	Granted
Solutions, Inc.	0200138	2012	12/420,049			US	Granted
Solutions, Inc.		2012		2009	DISTRIBUTION FOR		
A ami o	9200640	10/20/	10/406 762	04/20/	OPTICAL TRANSPORT	LIC	Crosstal
Arris	8300640	10/30/	12/426,763	04/20/	MULTI-SERVICE PHY	US	Granted
Enterprises,	B2	2012		2009	BOX		
Inc.							

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Owner		Grant	#	Date			
		Date					
Arris	8281333	10/02/	12/430,871	04/27/	SMART CAROUSEL	US	Granted
Enterprises,	B2	2012		2009			
Inc.						-	
Arris	8,005,095	08/23/	12/432,518	04/29/	CARRIER ETHERNET	US	Granted
Enterprises,	B2	2011		2009	OVER DOCSIS		
Inc.	0007070	0=14=1	10/10/10/0	07/04/		7.70	
Arris	8225353	07/17/	12/434,369	05/01/	Method and Apparatus for	US	Granted
Enterprises,		2012		2009	Scheduling Broadcast		
Inc.	0221442	10/11/	10/460 144	05/20/	Information	TIC	C
Arris	8331442	12/11/	12/469,144	05/20/	Optimal Rate Allocation for	US	Granted
Enterprises,	B2	2012		2009	a Group of Channels		
Inc. Arris	8306058	11/06/	12/489,966	06/23/	Communication System	US	Granted
Enterprises,	B2	2012	12/409,900	2009	and Techniques for	03	Granted
Inc.	B Z	2012		2009	Transmission from Source		
inc.					to Destination		
Arris	7954125	05/31/	12/561,893	09/17/	SYSTEM AND METHOD	US	Granted
Enterprises,	7551125	2011	12/301,093	2009	FOR FOCUSED		Grantea
Inc.		2011		200)	NAVIGATION WITHIN A		
11121					USER INTERFACE		
Arris	8,396,065	03/12/	12/579,026	10/14/	Packet Reflection	US	Granted
Enterprises,		2013	,	2009	Identification in CPE		
Inc.					Devices		
ARRIS	8387105	02/26	12/652,080	01/05/	METHOD AND A	US	Granted
Solutions, Inc.		/2013		2010	SYSTEM FOR		
					TRANSMITTING VIDEO		
					STREAMS		
Arris	8218438	07/10/	12/702,434	02/09/	Regulating Traffic Flow in	US	Granted
Enterprises,	B1	2012		2010	a Network Device		
Inc.							
Arris	7,958,260	06/07/	12/719,917	03/09/	Method and apparatus for	US	Granted
Enterprises,		2011		2010	queuing data flows		
Inc.	0002005	10/20/	10/7/0 240	04/07/	Mal 1 1C 4 C	LIC	C . 1
Arris	8082005	12/20/	12/768,348	04/27/	Method and System for	US	Granted
Enterprises,		2011		2010	Using an Integrated Subscriber Identity Module		
Inc.					in a Network Interface Unit		
Arris	8242829	08/14/	12/822,725	06/24/	Multichannel Interpolator	US	Granted
Enterprises,	B1	2012	121022,123	2010	merpolator		Granicu
Inc.		2012		2010			
Arris	8250603	08/21/	12/853,420	08/10/	CONTEXT-SENSITIVE	US	Granted
Enterprises,	B1	2012	12,000,120	2010	INTERACTIVE		Stantoa
Inc.		-		0	TELEVISION TICKER		
Arris	8244251	08/14/	12/870,936	08/30/	Concurrent Call Handover	US	Granted
Enterprises,	B1	2012		2010			
Inc.							
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Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
Arris Enterprises,	Allowed	Date 02/19/ 2013	12/901,904	10/11/ 2010	Prioritized Channel Scanning	US	Granted
Arris Enterprises, Inc.	8385400	02/26 /2013	12/916,300	10/29/ 2010	ADAPTIVE EQUALIZATION IN THE PRESENCE OF BURST ERRORS	US	Granted
Arris Enterprises, Inc.	8300156 B2	10/30/ 2012	13/069,021	03/22/ 2011	Remote Control Device with Integrated Display Screen for Controlling a Digital Video Recorder	US	Granted
Arris Enterprises, Inc.	8,418,216	04/09/ 2013	13/118,482	05/30/ 2011	FORECASTING AND CABLE TELEVISION NETWORK - PLANNING OF NARROWCAST SERVICES	US	Granted
Arris Enterprises, Inc.	D464,643	10/22/ 2002	29/133,149	11/24/ 2000	Outdoor Communications Cabinet	US	Granted
Arris Enterprises, Inc.	D464,043	10/08/ 2002	29/133,162	11/24/ 2000	Indoor Communications Panel	US	Granted
Arris Enterprises, Inc.	D464,956	10/29/ 2002	29/133,163	11/24/ 2000	Outdoor Communications Panel	US	Granted
Arris Enterprises, Inc.	D465,215	11/05/ 2002	29/133,180	11/24/ 2000	Indoor Communications Cabinet	US	Granted
Arris Enterprises, Inc.	D462,339	09/03/ 2002	29/134,574	12/22/ 2000	REMOTE CONTROL	US	Granted
Arris Enterprises, Inc.	D462,340	09/03/ 2002	29/135,795	01/18/ 2001	REMOTE CONTROL	US	Granted
Arris Enterprises, Inc.	D463,444	06/24/ 2002	29/136,190	01/25/ 2001	USER INTERFACE DESIGN FOR A TELEVISION DISPLAY SCREEN	US	Granted
Arris Enterprises, Inc.	D469,104	01/21/ 2003	29/136,191	01/25/ 2001	USER INTERFACE FOR A TELEVISION DISPLAY SCREEN	US	Granted
Arris Enterprises, Inc.	D450,058	11/06/ 2001	29/136,192	01/25/ 2001	User interface for a television display screen	US	Granted
Arris Enterprises, Inc.	D453,768	02/19/ 2002	29/136,194	01/25/ 2001	User interface design for a television display screen	US	Granted

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Owner		Grant	#	Date		, T	
		Date					
Arris	D486,834	02/17/	29/136,195	01/25/	USER INTERFACE FOR	US	Granted
Enterprises,	·	2004		2001	A TELEVISION DISPLAY		
Inc.					SCREEN		
Arris	D453,936	02/26/	29/136,196	01/25/	User interface for a	US	Granted
Enterprises,		2002		2001	television display screen		
Inc.							
Arris	D450,324	11/13/	29/136,197	01/25/	User interface for a	US	Granted
Enterprises,		2001		2001	television display screen		
Inc.							
Arris	D490,086	05/18/	29/136,198	01/25/	USER INTERFACE	US	Granted
Enterprises,		2004		2001	DESIGN FOR A		
Inc.					TELEVISON DISPLAY		
					SCREEN		
Arris	D450,711	11/20/	29/136,199	01/25/	User interface for a	US	Granted
Enterprises,		2001		2001	television display screen		
Inc.	D452.767	02/10/	20/126 200	01/05/	TT '	TIC	G . 1
Arris	D453,767	02/19/	29/136,200	01/25/	User interface for a	US	Granted
Enterprises,		2002		2001	television display screen		
Inc. Arris	D478,595	08/19/	29/136,202	01/25/	USER INTERFACE	US	Granted
	D478,393	2003	29/136,202	2001	DESIGN FOR A	US	Granted
Enterprises, Inc.		2003		2001	TELEVISION DISPLAY		
IIIC.					SCREEN		
Arris	D468,274	01/07/	29/141,613	05/09/	REMOTE CONTROL	US	Granted
Enterprises,	2 100,27 1	2003	25/11.1,013	2001	REMOTE CONTINCE		Grantea
Inc.							
Arris	D462,333	09/03/	29/142,447	05/25/	REMOTE CONTROL	US	Granted
Enterprises,		2002	j	2001			
Inc.							
Arris	D480,733	10/14/	29/143,969	06/22/	USER INTERFACE FOR	US	Granted
Enterprises,		2003		2001	A TELEVISION DISPLAY		
Inc.					SCREEN		
Arris	D476,994	07/08/	29/143,970	06/22/	USER INTERFACE FOR	US	Granted
Enterprises,		2003		2001	A TELEVISION DISPLAY		
Inc.					SCREEN		
Arris	D465,227	11/05/	29/144,017	06/22/	USER INTERFACE FOR	US	Granted
Enterprises,		2002		2001	A TELEVISION DISPLAY		
Inc.					SCREEN		
Arris	D469,105	01/21/	29/144,018	06/22/	USER INTERFACE FOR	US	Granted
Enterprises,		2003		2001	A TELEVISION DISPLAY		
Inc.	D474 107	05/07/	20/149 625	00/24/	SCREEN LISER INTERPRACE	LIC	C 1
Arris	D474,197	05/06/	29/148,625	09/24/	USER INTERFACE	US	Granted
Enterprises,		2003		2001	DESIGN FOR A		
Inc.					TELEVISION DISPLAY SCREEN		
					SCREEN		

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Owner		Grant	#	Date			
		Date					
Arris Enterprises, Inc.	D475,718	06/10/ 2003	29/148,723	09/26/ 2001	USER INTERFACE DESIGN FOR A TELEVISION DISPLAY SCREEN	US	Granted
Arris Enterprises, Inc.	D478,912	08/26/ 2003	29/148,763	09/26/ 2001	USER INTERFACE DESIGN FOR A TELEVISION DISPLAY SCREEN	US	Granted
Arris Enterprises, Inc.	D470,152	02/11/ 2003	29/148,948	09/28/ 2001	USER INTERFACE FOR A TELEVISION DISPLAY SCREEN	US	Granted
Arris Enterprises, Inc.	D470,153	02/11/ 2003	29/148,955	09/27/ 2001	USER INTERFACE DESIGN FOR A TELEVISION DISPLAY SCREEN	US	Granted
Arris Enterprises, Inc.	D469,443	01/28/ 2003	29/151,137	11/01/ 2001	USER INTERFACE DESIGN FOR A TELEVISION DISPLAY SCREEN	US	Granted
Arris Enterprises, Inc.	D478,090	08/05/ 2003	29/161,708	06/03/ 2002	USER INTERFACE FOR A TELEVISION DISPLAY SCREEN	US	Granted
Arris Enterprises, Inc.	D496,665	09/28/ 2004	29/169,604	10/23/ 2002	USER INTERFACE DESIGN FOR A TELEVISION DISPLAY SCREEN	US	Granted
Arris Enterprises, Inc.	D494,186	08/10/ 2004	29/169,605	10/23/ 2002	USER INTERFACE DESIGN FOR A TELEVISION DISPLAY SCREEN	US	Granted
Arris Enterprises, Inc.	D493,165	07/20/ 2004	29/172,071	12/05/ 2002	CABLE MODEM	US	Granted
Arris Enterprises, Inc.	D489,678		29/175,893	02/12/ 2003	Battery Cartridge	US	Granted
Arris Enterprises, Inc.	D512,371	12/06/ 2005	29/186,209	07/11/ 2003	BATTERY CARTRIDGE	US	Granted
Arris Enterprises, Inc.	D510,721	10/18/ 2005	29/191,664	10/10/ 2003	BATTERY CARTRIDGE	US	Granted

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Owner		Grant Date	#	Date			
Arris	5,805,804	09/15/	90/008,536	03/22/	METHOD AND	US	Granted
Enterprises,	C1	2009	00000,550	2007	APPARATUS FOR		Granted
Inc. and		2009		2007	SCALABLE, HIGH		
Alcatel Lucent					BANDWIDTH STORAGE		
					RETRIEVAL AND		
					TRANSPORTATION OF		
					MULTIMEDIA DATA ON		
	0.44.00.40	0.440.24	12/010 022	04/20/	A NETWORK	****	
Arris	8412942	04/02/	12/018,033	01/22/	Method and system for	US	Granted
Enterprises,	B2	2013		2008	seamless SSID creation,		
Inc.					authentication and		
General	NA	NA	13/228084	09/08/	encryption SCROLLING DEVICE	US	Filed
Instrument		INA	13/220004	2011	COLLECTION ON AN	0.3	Tilcu
Corporation				2011	INTERFACE		
General	NA	NA	13/228103	09/08/	DISPLAY OF DEVICES	US	Filed
Instrument				2011	ON AN INTERFACE		
Corporation					BASED ON A		
					CONTEXTUAL EVENT		
General	NA	NA	13/228113	09/08/	DEVICE CLUSTERING	US	Filed
Instrument				2011	ON AN INTERFACE		
Corporation					BASED ON		
					CONTROLLABLE FEATURES		
General	NA	NA	13/277254	10/20/	USE OF DISCRETE	US	Filed
Instrument	1177	1171	13/2//234	2011	INPUT TO CONTROL		Tired
Corporation					CONTROLLABLE		
1					DEVICE		
General	NA	NA	13/277258	10/20/	DISPLAY OF	US	Filed
Instrument				2011	CONTROLLABLE		
Corporation					ATTRIBUTES FOR A		
					CONTROLLABLE ITEM		
4HomeMedia,	8271575	09/18/	12/047101	03/12/	BASED ON CONTEXT	US	Cuantad
Inc.	82/13/3	2012	12/047191	2008	INTERACTION AMONG ITEMS CONNECTED TO	US	Granted
IIIC.		2012		2008	A NETWORK		
General	NA	NA	13/597937	NA	INTERACTION AMONG	US	Filed
Instrument		• • • • • • • • • • • • • • • • • • •		• • • • • • • • • • • • • • • • • • •	ITEMS CONNECTED TO		
Corporation					A NETWORK		
4Home, Inc.	NA	NA	12/711026	02/23/	DYNAMIC RESOURCE	US	Filed
				2010	LOAD REDUCTION		
General	NA	NA	12/203701	09/03/	FAST CHANNEL	US	Filed
Instrument				2008	SWITCHING FOR		
Corporation					DIGITAL TV		

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Owner		Grant	#	Date			
General Instrument Corporation	NA	Date NA	12/722227	03/11/ 2010	METHOD AND SYSTEM FOR INHIBITING AUDIO-VIDEO SYNCHRONIZATION DELAY	US	Filed
General Instrument Corporation	8166499	04/24/ 2012	10/926706	08/26/ 2004	METHOD, APPARATUS AND SET-TOP DEVICE FOR TRANSMITTING CONTENT TO A RECEIVER	US	Granted
General Instrument Corporation	NA	NA	10/615702	07/09/ 2003	DVD CONVERSION FOR ON DEMAND	US	Filed
General Instrument Corporation	7289007	10/30/ 2007	10/757190	01/14/ 2004	TEMPERATURE COMPENSATED VARIABLE TILT EQUALIZER	US	Granted
General Instrument Corporation	D508898	08/30/ 2005	D199220	02/11/ 2004	SET-TOP ENCLOSURE	US	Granted
General Instrument Corporation	D514096	01/31/ 2006	D200220	02/25/ 2004	BROADBAND ROUTER ENCLOSURE AND BASE	US	Granted
General Instrument Corporation	D509824	09/20/ 2005	D210771	08/05/ 2004	ENCLOSURE FOR WIRELESS DEVICE	US	Granted
General Instrument Corporation	D518035	03/28/ 2006	D200528	03/04/ 2004	BASE FOR BROADBAND ROUTER ENCLOSURE	US	Granted
General Instrument Corporation	6980357	12/27/ 2005	10/779560	02/13/ 2004	OPTICAL AMPLIFIER APPARATUS AND METHOD	US	Granted
General Instrument Corporation	7119948	10/10/ 2006	11/249250	10/13/ 2005	OPTICAL AMPLIFIER APPARATUS AND METHOD	US	Granted
General Instrument Corporation	7911946	03/22/2011	10/991023	11/17/ 2004	METHOD AND APPARATUSES FOR USING PACKET DATA TO MANAGE A DATA STREAM IN A BROADBAND COMMUNICATION SYSTEM	US	Granted

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Owner		Grant Date	#	Date			
General Instrument Corporation	NA	NA	13/027934	NA	METHOD AND APPARATUS FOR ACHIEVING BROADBAND MATCHING OF NARROW-BAND RESONATOR FILTER IMPEDANCES TO LOADS AND SOURCES	US	Filed
General Instrument Corporation	D521991	05/30/ 2006	D204579	04/30/ 2004	PORTION OF A FRONT PANEL FOR AN ELECTRONIC DEVICE	US	Granted
General Instrument Corporation	NA	NA	10/836725	04/29/ 2004	DEVICE AND METHOD TO AUTOMATICALLY CONFIGURE PORT FORWARDING	US	Filed
General Instrument Corporation	5907552	05/25/ 1999	08/706573	09/05/ 1996	FTTC INTERFACE CIRCUITRY AS A PHYSICAL LAYER ENTITY	US	Granted
General Instrument Corporation	5982972	11/09/ 1999	08/920926	08/29/ 1997	LINE CARD FOR OPTICAL NETWORK UNIT MECHANICAL ENCLOSURE	US	Granted
General Instrument Corporation	6487262	11/26/ 2002	08/794791	02/04/ 1997	SYNCHRONIZATION AND DOWNCONVERSION IN TDM/TDMA SYSTEMS	US	Granted
General Instrument Corporation	D404018	01/12/ 1999	D071581	05/30/ 1997	HOUSING FOR ELECTRONIC COMPONENTS	US	Granted
General Instrument Corporation	D414496	09/28/ 1999	D079335	05/30/ 1997	HOUSING FOR ELECTRONIC COMPONENTS	US	Granted
General Instrument Corporation	D409582	05/11/ 1999	D079333	05/30/ 1997	MULTIPLE DWELLING UNIT COMMUNICATION ENCLOSURE	US	Granted
General Instrument Corporation	D414497	09/28/ 1999	D079340	05/30/ 1997	UNIVERSAL SERVICES ACCESS MULTIPLEXER ENCLOSURE	US	Granted
General Instrument Corporation	D418515	01/04/ 2000	D079334	05/30/ 1997	COMMUNICATION EQUIPMENT ENCLOSURE	US	Granted

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Owner		Grant	#	Date			
		Date					
General	6385253	05/07/	09/459755	12/10/	METHOD AND	US	Granted
Instrument		2002		1999	APPARATUS FOR		
Corporation					RELIABLE RECEPTION		
					OF VDSL SIGNALS		
General	6154020	11/28/	09/205639	12/03/	TEST CIRCUIT AND	US	Granted
Instrument		2000		1998	METHOD FOR		
Corporation					DETERMINING THE		
					OPERATING STATUS OF		
					A COAXIAL CABLE		
General	6700927	03/02/	09/521914	03/09/	METHOD FOR	US	Granted
Instrument		2004		2000	ESTABLISHING AND		
Corporation					ADAPTING		
					COMMUNICATION		
					LINK PARAMETERS IN		
					XDSL TRANSMISSION		
					SYSTEMS.		
General	7109831	09/19/	10/853316	05/25/	SYSTEM AND METHOD	US	Granted
Instrument		2006		2004	FOR A REMOVABLE		
Corporation					TUNER MODULE		
General	D509490	09/13/	D202468	03/31/	CONSUMER	US	Granted
Instrument		2005		2004	ELECTRONIC PRODUCT		
Corporation							
General	D512995	12/20/	D202805	04/05/	FRONT BEZEL FOR	US	Granted
Instrument		2005		2004	CONSUMER		
Corporation					ELECTRONIC PRODUCT		
General	7877064	01/25/	10/978602	11/01/	METHODS, APPARATUS	US	Granted
Instrument		2011		2004	AND SYSTEMS FOR		
Corporation					TERRESTRIAL		
					WIRELESS BROADCAST		
					OF DIGITAL DATA TO		
					STATIONARY		
					RECEIVERS		
General	7274409	09/25/	10/909504	08/02/	DYNAMICALLY	US	Granted
Instrument		2007		2004	CONTROLLED TUNER		
Corporation					AGC ATTACK POINT		
General	7512182	03/31/	10/929976	08/30/	METHOD AND	US	Granted
Instrument		2009		2004	APPARATUS FOR		
Corporation					PERFORMING MOTION		
					COMPENSATED		
					TEMPORAL FILTERING		
	04.606.51	0.44::	10/2007	001:-:	IN VIDEO ENCODING	7.0	-
General	8160161	04/17/	12/233315	09/18/	METHOD AND	US	Granted
Instrument		2012		2008	APPARATUS FOR		
Corporation					PERFORMING MOTION		
					COMPENSATED		
					TEMPORAL FILTERING		
					IN VIDEO ENCODING		

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
		Date					
General	D532414	11/21/	D220344	12/29/	WIRELESS VERTICAL	US	Granted
Instrument		2006		2004	ENCLOSURE		
Corporation							
General	D520500	05/09/	D220355	12/29/	WIRELESS ENCLOSURE	US	Granted
Instrument		2006		2004			
Corporation							
General	D511510	11/15/	29/210302	07/29/	CORDLESS TELEPHONE	US	Granted
Instrument		2005		2004	BASE		
Corporation							
General	D513411	01/03/	D210328	07/29/	CORDLESS TELEPHONE	US	Granted
Instrument	2010.11	2006	2210020	2004	BASE		
Corporation		2000		2001	Brisz		
General	D529476	10/03/	D220358	12/29/	CORDLESS PHONE	US	Granted
Instrument	D327170	2006	D220330	2004	HANDSET		Grantea
Corporation		2000		2004			
General	D514081	01/31/	D210246	07/29/	CORDLESS TELEPHONE	US	Granted
Instrument	D31 4 001	2006	D2102+0	2004	BASE	0.5	Granted
Corporation		2000		2004	D NSL		
General	D515529	02/21/	D210301	07/29/	CORDLESS TELEPHONE	US	Granted
Instrument	D313329	2006	D210301	2004	HANDSET	03	Granted
Corporation		2000		2004	HANDSEI		
General	D514544	02/07/	D210303	07/29/	CORDLESS TELEPHONE	US	Granted
Instrument	D314344	2006	D210303	2004	BASE	03	Granted
		2000		2004	DASE		
Corporation General	D535970	01/30/	D228868	04/29/	TELEPHONE BASE	US	Granted
Instrument	D333970	2007	D220000	2005	TELEPHONE BASE	03	Granted
		2007		2003			
Corporation General	7236504	06/26/	11/030860	01/07/	STRETCHED-PULSE	US	Granted
	7230304	2007	11/030600	2005	RAMAN FIBER LASERS	03	Granted
Instrument		2007		2003	AND METHODS OF		
Corporation					OPERATING THE SAME		
Canaval	7227477	06/05/	11/200022	11/20/		TIC	Crontad
General	7227477	2007	11/289923	11/30/ 2005	METHOD AND APPARATUS FOR	US	Granted
Instrument Corporation		2007		2003	PERFORMING SAMPLE		
Corporation					RATE CONVERSION		
General	7400866	07/15/	11/036467	01/14/	METHODS AND	US	Granted
Instrument	7400800	2008	11/030407	2005	APPARATUS FOR	US	Granteu
Corporation		2006		2003	CALIBRATING AND		
Corporation					CONTROLLING		
					OUTPUT POWER		
					LEVELS IN A		
					BROADBAND		
					COMMUNICATION		
					SYSTEM		
General	D524280	07/04/	D224510	03/03/	TELEPHONE HANDSET	US	Granted
Instrument	D32420U	2006	D224310	2005	TELEFTIONE HANDSET	03	Granteu
Corporation		2000		2003			
Corporation							

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Owner		Grant	#	Date			
		Date					
General	D530302	10/17/	D224515	03/03/	BASE FOR CORDLESS	US	Granted
Instrument		2006		2005	TELEPHONE WITH		
Corporation					ANSWERING DEVICE		
General	D525233	07/18/	D224501	03/03/	BASE FOR CORDLESS	US	Granted
Instrument		2006		2005	TELEPHONE WITH		
Corporation					ANSWERING DEVICE		
General	D524282	07/04/	D224551	03/03/	BASE FOR CORDLESS	US	Granted
Instrument		2006		2005	TELEPHONE WITH		4-2
Corporation					ANSWERING DEVICE		
General	D524789	07/11/	D224516	03/03/	BASE FOR CORDLESS	US	Granted
Instrument		2006		2005	TELEPHONE WITH		
Corporation					ANSWERING DEVICE		
General	D528979	09/26/	D224527	03/03/	BASE FOR CORDLESS	US	Granted
Instrument	2020777	2006	222.027	2005	TELEPHONE CHARGER		
Corporation		2000		2002			
General	D521927	05/30/	D224542	03/04/	BASE FOR CORDLESS	US	Granted
Instrument	5021727	2006	3221012	2005	TELEPHONE CHARGER		Grantea
Corporation		2000		2002			
General	D527719	09/05/	D224513	03/03/	TELEPHONE HANDSET	US	Granted
Instrument	15527719	2006	D22 1313	2005			Grantea
Corporation		2000		2005			
General	D524281	07/04/	D224518	03/03/	TELEPHONE HEADSET	US	Granted
Instrument	D32+201	2006	D224310	2005	TEEET HONE HEADSET		Granted
Corporation		2000		2005			
General	D532003	11/14/	D224517	03/03/	TELEPHONE HANDSET	US	Granted
Instrument	D332003	2006	D221317	2005	CLIP		Grantea
Corporation		2000		2005	CEII		
General	D524284	11/14/	D224512	03/03/	BASE FOR CORDLESS	US	Granted
Instrument	D 32 120 1	2006	D22 1312	2005	TELEPHONE		Grantea
Corporation		2000		2005	TEEE HOLE		
General	D524283	07/04/	D224511	03/03/	BASE FOR CORDLESS	US	Granted
Instrument	D32 1203	2006	D22 1311	2005	TELEPHONE		Grantea
Corporation		2000		2005	TEEE TOTAL		
General	D534938	01/09/	D224514	03/03/	CORDLESS CAMERA	US	Granted
Instrument	D 55 1750	2007	D22 131 1	2005	TELEPHONE		Grantea
Corporation		2007		2005	1222110112		
General			11/207843	08/19/	METHOD AND	US	Filed
Instrument			22.207013	2005	APPARATUS FOR WIDE		11100
Corporation				2000	DYNAMIC RANGE		
Corporation					REDUCTION		
General	D537806	03/06/	D245088	12/19/	CELL PHONE DOCKING	US	Granted
Instrument	255,500	2007	2212000	2005	MODULE MODULE		Stantea
Corporation		2007		2000			
General	D562813	02/26/	D245060	12/16/	ENCLOSURE FOR A	US	Granted
Instrument	2502015	2008	5215000	2005	WIRELESS DEVICE		Granica
Corporation		2000		2005			
Corporation						l .	l

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
		Date					
General	8340098	12/25/	11/295967	12/07/	METHOD AND	US	Granted
Instrument		2012		2005	APPARATUS FOR		
Corporation					DISTRIBUTING		
					COMPRESSED VIDEO		
					TO SUBSCRIBER		
					TERMINALS		
General	D542242	05/08/	D244259	12/07/	SET TOP BOX	US	Granted
Instrument		2007		2005			
Corporation							
General	D556705	12/04/	D244217	12/07/	SET TOP BOX	US	Granted
Instrument		2007		2005			
Corporation	5222244	06404	11/200212	00/40/	A TOP TO THE TANK AND THE	110	
General	7233344	06/19/	11/208312	08/19/	VIDEOPHONE HOUSING	US	Granted
Instrument		2007		2005	ASSEMBLY HAVING A		
Corporation					FOLDABLE DISPLAY SUPPORT		
General	D558165	12/25/	D244255	12/07/	COLLAPSIBLE	US	Granted
Instrument		2007		2005	VIDEOPHONE		
Corporation							
General	D536347	02/06/	D244261	12/07/	DIGITAL AUDIO	US	Granted
Instrument		2007		2005	PLAYER		
Corporation							
General	8345557	01/01/	11/171066	6/30/2	AUTOMATED	US	Granted
Instrument		2013		005	MONITORING OF A		
Corporation					NETWORK		
General	8116360	02/14/	11/240114	09/30/	METHOD AND	US	Granted
Instrument		2012		2005	APPARATUS FOR		
Corporation					PREVENTING LOSS OF		
					SERVICE FROM		
					HARDWARE FAILURE		
					IN A NETWORK		
General	7610034	10/27/	11/252509	10/18/	METHOD ANOD	US	Granted
Instrument		2009		2005	APPARATUS FOR		
Corporation					SELECTION OF DESIGN		
					PARAMETERS FOR		
					DOUBLE CONVERSION		
					TUNER TO PREVENT		
					RADIATED IMMUNITY DEGRADATION		
General	7668195	02/23/	11/152764	06/14/	METHOD AND	US	Granted
Instrument	/000193	2010	11/132/04	2005	APPARATUS FOR	US	Tailleu
Corporation		2010		2003	TRANSMITTING AND		
Corporation					RECEIVING DATA		
					OVER A SHARED		
					ACCESS CARRIER		
					NETWORK		
	l				TIDI II OILIX		

Registered Owner	Patent #	Issue/ Grant Date	Application #	Filing Date	Title	Jurisdiction	Status
General Instrument Corporation	7856222	12/21/ 2010	11/291725	12/01/ 2005	INTEGRATED BALUN AND COUPLER TRANSFORMER	US	Granted
General Instrument Corporation	NA	NA	11/316129	NA	METHOD AND APPARATUS FOR ENCODING A DATA STREAM FOR TRANSMISSION ACROSS BONDED CHANNELS	US	Filed
General Instrument Corporation	7697066	04/13/ 2010	11/287816	11/28/ 2005	METHOD AND APPARATUS FOR DETECTING DATA IN A VERTICAL BLANKING INTERVAL	US	Granted
General Instrument Corporation	7987504	07/26/ 2011	11/315858	12/22/ 2005	SYSTEM AND METHOD FOR ROUTING SIGNALS INTENDED FOR ONE DEVICE THROUGH ANOTHER DEVICE CONNECTED TO A SHARED ACCESS NETWORK	US	Granted
General Instrument Corporation	D535276	01/16/ 2007	D243893	12/01/ 2005	CORDLESS TELEPHONE HANDSET	US	Granted
General Instrument Corporation	D538774	03/20/ 2007	D243898	12/01/ 2005	CORDLESS TELEPHONE HANDSET	US	Granted
General Instrument Corporation	NA	NA	11/288797	11/29/ 2005	IP MULTICAST MANAGEMENT AND SERVICE PROVISION SYSTEM AND METHOD	US	Filed
General Instrument Corporation	NA	NA	11/321404	12/29/ 2005	METHOD AND APPARATUS FOR GLITCHLESS FAILOVER TO REDUNDANT VIDEO STREAM	US	Filed
General Instrument Corporation	D542784	05/15/ 2007	D244239	12/07/ 2005	VoIP CORDLESS TELEPHONE BASE	US	Granted
General Instrument Corporation	7904050	03/08/ 2011	11/302464	12/13/ 2005	MIXER APPARATUS HAVING SWITCHABLE LOCAL OSCILLATOR IPUTS	US	Granted

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General Instrument Corporation	NA	NA	12/342640	12/23/ 2008	METHOD AND APPARATUS FOR REPLACING A BLACKED OUT PROGRAM IN A SEAMLESS MANNER	US	Filed
General Instrument Corporation	8189683	05/29/ 2012	11/564076	11/28/ 2006	METHOD AND SYSTEM FOR PROVIDING SINGLE CYCLE CONTEXT WEIGHT UPDATE LEVERAGING CONTEXT ADDRESS LOOK AHEAD	US	Granted
General Instrument Corporation	D562303	02/19/ 2008	D250569	11/21/ 2006	PHONE BASE	US	Granted
General Instrument Corporation	NA	NA	11/316236	12/22/ 2005	METHOD AND APPARATUS FOR PROVIDING BROADCAST TRIGGER MESSAGES	US	Filed
General Instrument Corporation	NA	NA	11/764292	06/18/ 2007	METHOD AND APPARATUS FOR USE IN A DOWNLOADABLE CONDITIONAL ACCESS SYSTEM	US	Filed
General Instrument Corporation	D563941	03/11/ 2008	D280115	05/17/ 2007	CORDLESS PHONE	US	Granted
General Instrument Corporation	7211743	05/01/ 2007	11/302778	12/14/ 2005	APPARATUS FOR SUPPORTING PRINTED WIRING ASSEMBLIES IN A DEVICE HOUSING	US	Granted
General Instrument Corporation	8335256	12/18/ 2012	12/271443	11/14/ 2008	MOTION COMPENSATION IN VIDEO CODING	US	Granted
General Instrument Corporation	D549190	08/21/ 2007	D245961	12/30/ 2005	SET TOP BOX	US	Granted
General Instrument Corporation	D549191	08/21/ 2007	D245976	12/30/ 2005	SET TOP BOX	US	Granted
General Instrument Corporation	NA	NA	11/608028	12/07/ 2006	METHOD AND APPARATUS FOR DETERMINING MICRO- REFLECTIONS IN A NETWORK	US	Filed

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Owner		Grant	#	Date			
		Date					
General	NA	NA	11/610177	12/13/	METHOD AND	US	Filed
Instrument				2006	APPARATUS FOR		
Corporation					DETERMINING THE		
					DYNAMIC RANGE OF		
					AN OPTICAL LINK IN		
C 1	DT A	NT A	11/05/6662	10/14/	AN HFC NETWORK	TIG	T'1 1
General	NA	NA	11/956663	12/14/	METHOD AND	US	Filed
Instrument				2007	APPARATUS FOR		
Corporation					DETERMING A		
					TRANSPORT BIT RATE FOR A MULTIPROGRAM		
					TRANSPORT STREAM		
General	D546785	07/17/	29/254944	03/02/	SET TOP BOX	US	Granted
Instrument	D340703	2007	271234744	2006	SET TOT BOX	OS	Granted
Corporation		2007		2000			
General	D568303	05/06/	29/255157	03/03/	SET TOP BOX STAND	US	Granted
Instrument		2008		2006			
Corporation							
General	D561731	02/12/	29/250574	11/21/	PHONE BASE	US	Granted
Instrument		2008		2006			
Corporation							
General	D568310	05/06/	29/250571	11/21/	VOICE OVER INTERNET	US	Granted
Instrument		2008		2006	PROTOCOL BASE		
Corporation							
General	NA	NA	11/928440	10/30/	METHOD AND	US	Filed
Instrument				2007	APPARATUS FOR		
Corporation					SELECTING A CODING		
	7.550040	0.614.01	20/250505	11/20/	MODE	770	
General	D570819	06/10/	29/250705	11/28/	DOCKING MODULE	US	Granted
Instrument		2008		2006			
Corporation	(215274	04/10/	00/020000	02/16/	MACNITICALI M	TIC	C t - 1
General	6215374	04/10/	09/039988		MAGNETICALLY	US	Granted
Instrument Corporation		2001		1998	COUPLED RESONATORS FOR		
Corporation					ACHIEVING LOW COST		
					NARROW BAND PASS		
					FILTERS HAVING HIGH		
					SELECTIVITY, LOW		
					INSERTION LOSS AND		
					IMPROVED OUT-OF-		
					BAND REJECTION		

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
G 1	7070007	Date	00/400026	00/20/	NADDOW DAND DAGG	TIC	G . 1
General Instrument	7078987	07/18/ 2006	09/408826	09/29/ 1999	NARROW BAND-PASS TUNED RESONATOR	US	Granted
Corporation		2000		1999	FILTER TOPOLOGIES		
Corporation					HAVING HIGH		
					SELECTIVITY, LOW		
					INSERTION LOSS AND		
					IMPROVED OUT-OF-		
					BAND REJECTION		
					OVER EXTENDED		
					FREQUENCY RANGES		
General	7075389	07/11/	09/580504	05/25/	METHOD AND	US	Granted
Instrument		2006		2000	APPARATUS FOR		
Corporation					ACHIEVING		
					BROADBAND		
					MATCHING OF		
					NARROW-BAND		
					RESONATOR FILTER		
					IMPEDANCES TO		
G 1	6500220	06/17/	001665550	00/10/	LOADS AND SOURCES	TIG	G . 1
General	6580330	06/17/	09/665559	09/19/	INJECTION LOCKED	US	Granted
Instrument		2003		2000	OSCILLATOR		
Corporation					AUTOMATIC		
					FREQUENCY CENTERING METHOD		
					AND APPARATUS		
General	6724178	04/20/	09/464014	12/15/	MEASURING	US	Granted
Instrument		2004		1999	COMPOSITE		
Corporation					DISTORTION USING A		
•					COHERENT		
					MULTICARRIER		
					SIGNAL GENERATOR		
General	6847255	01/25/	09/872143	06/01/	ZERO IF COMPLEX	US	Granted
Instrument		2005		2001	QUADRATURE		
Corporation					FREQUENCY		
					DISCRIMINATOR AND		
	6000505	04/27/	44.00.1002	27.4	FM DEMODULATOR	7.70	
General	6982592	01/25/	11/004992	NA	ZERO IF COMPLEX	US	Granted
Instrument		2005			QUADRATURE		
Corporation					FREQUENCY DISCRIMINATION AND		
					DISCRIMINATOR AND		
					FM DEMODULATOR]

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Owner		Grant	#	Date			
General Instrument Corporation	7386286	Date 06/10/ 2008	11/220399	09/07/ 2005	HIGH FREQUENCY LOW NOISE PHASE- FREQUENCY DETECTOR AND PHASE NOISE REDUCTION METHOD AND	US	Granted
General Instrument Corporation	7005919	02/28/ 2006	10/518577	05/13/ 2005	APPARATUS EVEN ORDER DISTORTION ELIMINATION IN PUSH- PULL OR DIFFERENTIAL AMPLIFIERS AND CIRCUITS	US	Granted
General Instrument Corporation	7061317	06/13/ 2006	11/197318	08/05/ 2005	EVEN ORDER DISTORTION ELIMINATION IN PUSH- PULL OR DIFFERENTIAL AMPLIFIERS AND CIRCUITS	US	Granted
General Instrument Corporation	NA	NA	11/690217	03/23/ 2007	METHOD AND APPARATUS FOR CONFIGURING LOGICAL CHANNELS IN A NETWORK	US	Filed
General Instrument Corporation	8279764	10/02/ 2012	11/752039	05/22/ 2007	METHOD AND APPARATUS FOR SELECTING A NETWORK ELEMENT FOR TESTING A NETWORK	US	Granted
General Instrument Corporation	D562797	02/26/ 2008	29/250572	11/21/ 2006	PHONE BASE	US	Granted
General Instrument Corporation	8154656	04/10/ 2012	12/345128	12/29/ 2008	CAPTURE BUFFER CONTROL METHODOLOGY FOR CAPTION CARRIAGE SWITCH	US	Granted
General Instrument Corporation	NA	NA	11/562517	11/22/ 2006	METHOD AND APPARATUS FOR DETECTING FIELD ORDER IN INTERLACED MATERIAL	US	Filed

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		Date					
General Instrument Corporation	NA	NA	11/957750	12/17/ 2007	METHOD AND APPARATUS FOR SELECTING A CODING MODE	US	Filed
General Instrument Corporation	D549193	08/21/ 2007	29/250139	11/03/ 2006	ENCLOSURE FOR A SET-TOP BOX	US	Granted
General Instrument Corporation	8213499	07/03/ 2012	11/696566	04/04/ 2007	METHOD AND APPARATUS FOR CONTEXT ADDRESS GENERATION FOR MOTION VECTORS AND COEFFICIENTS	US	Granted
General Instrument Corporation	8387011	02/26/ 2013	11/831347	07/31/ 2007	METHOD AND APPARTUS FOR A DYNAMIC AND REAL- TIME CONFIGURABLE SOFTWARE ARCHITECTURE FOR MANUFACTURING PERSONALIZATION	US	Granted
General Instrument Corporation	NA	NA	11/959198	12/18/ 2007	ESTIMATING COMPLEXITY OF VIDEO FRAMES FOR ENCODING	US	Filed
General Instrument Corporation	NA	NA	11/621357	01/09/ 2007	BROADBAND LOW NOISE COMPLEX REGENERATIVE FREQUENCY DIVIDERS	US	Filed
General Instrument Corporation	8139720	03/20/ 2012	11/740693	04/26/ 2007	METHOD AND APPARATUS FOR PROVIDING A SOFT CLOCK RE-SYNC FOR SUBSCRIBER LINE INTERFACE CARDS	US	Granted
General Instrument Corporation	NA	NA	11/555341	11/01/ 2006	SMALL FORM PLUGGABLE ANALOG OPTICAL TRANSMITTER	US	Filed
General Instrument Corporation	D580406	11/11/ 2008	29/250706	11/28/ 2006	CORDLESS PHONE	US	Granted
General Instrument Corporation	8275817	09/25/ 2012	11/737384	04/19/ 2007	BROADBAND LOW NOISE COMPLEX FREQUENCY MULTIPLIERS	US	Granted

Registered Owner	Patent #	Issue/ Grant	Application #	Filing Date	Title	Jurisdiction	Status
Onici		Date	н	Dan			
General Instrument Corporation	NA	NA	11/940761	11/15/ 2007	METHOD AND APPARATUS FOR PERFORMING MOTION ESTIMATION	US	Filed
General Instrument Corporation	NA	NA	11/962914	12/21/ 2007	METHOD AND APPARATUS FOR SELECTING A CODING MODE FOR A BLOCK	US	Filed
General Instrument Corporation	8174337	05/08/ 2012	11/831136	07/31/ 2007	RADIO FREQUENCY SWITCH FOR USE IN SATELLITE RECEIVERS	US	Granted
General Instrument Corporation	NA	NA	11/963175	12/21/ 2007	RF/IP VIRTUAL CHANNEL MAPPING FOR A DIGITAL VIDEO RECEIVER	US	Filed
General Instrument Corporation	7495484	02/24/ 2009	11/830445	07/30/ 2007	PROGRAMMABLE FREQUENCY MULTIPLIER	US	Granted
General Instrument Corporation	NA	NA	11/613295	12/20/ 2006	ACTIVE LINK CABLE MESH	US	Filed
General Instrument Corporation	8369820	02/05/ 2013	11/850374	09/05/ 2007	FREQUENCY MULTIPLIER DEVICE	US	Granted
General Instrument Corporation	D562302	02/19/ 2008	29/275444	12/27/ 2006	PHONE BASE	US	Granted
General Instrument Corporation	D553116	10/16/ 2007	29/250704	11/28/ 2006	PHONE HANDSET	US	Granted
General Instrument Corporation	NA	NA	11/616951	12/28/ 2006	RETURN DATA PATH IN AN HFC NETWORK	US	Filed
General Instrument Corporation	NA	NA	11/612792	12/19/ 2006	ADMITTING A DATA FILE INTO A CHANNEL	US	Filed
General Instrument Corporation	NA	NA	12/346952	12/31/ 2008	ACQUIRING CABLE CHANNEL MAP INFORMATION IN A CABLE RECEIVER	US	Filed
General Instrument Corporation	NA	NA	12/342223	12/23/ 2008	REFERENCE PICTURE SELECTION FOR SUB- PIXEL MOTION ESTIMATION	US	Filed

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Owner		Grant	#	Date			
Caranal	NA	Date	11/0/2007	12/21/	EMADI II MC TDICK	US	Filed
General Instrument	NA NA	NA	11/962986	2007	ENABLILNG TRICK PLAYS DURING VBR	03	rnea
Corporation				2007	PLAYBACK OF A CBR		
Corporation					TRANSMITTED MEDIA		
					FILE		
General	7783197	08/24/	11/751997	05/22/	METHOD AND	US	Granted
Instrument		2010		2007	APPARATUS FOR		
Corporation					REDUCING CROSSTALK		
					IN A DWDM		
					TRANSMISSION		
					SYSTEM		
General	8391723	03/05/	12/482629	06/11/	RAMAN BACKPUMPED	US	Granted
Instrument		13		2009	NEAR-ZERO		
Corporation					DISPERSION CWDM		
C1	9406394	02/26/	11/0/12/20	09/21/	SYSTEM AND METHOD	TIC	C
General	8406284	03/26/	11/842660	08/21/2007	RECEIVER WITH	US	Granted
Instrument		13		2007	ADAPTIVE EQUALIZER		
Corporation General	D569377	05/20/	29/250941	12/06/	KEYBOARD	US	Granted
Instrument	D309377	2008	29/230941	2006	KEIBOARD	03	Granted
Corporation		2000		2000			
General	D568298	05/06/	29/250942	12/06/	REMOTE CONTROL	US	Granted
Instrument		2008		2006			
Corporation							
General	8406629	03/26/	11/942262	11/19/	ARCHITECTURE TO	US	Granted
Instrument		2013		2007	COMMUNICATE WITH		
Corporation					STANDARD HYBRID		
					FIBER COAXIAL RF		
					SIGNALS OVER A		
					PASSIVE OPTICAL		
			111501057	0.5/0.5/	NETWORK (HFC PON)		
General	NA	NA	11/681965		METHOD AND	US	Filed
Instrument				2007	APPARATUS FOR		
Corporation					PROVIDING A DIGITAL		
					RIGHTS MANAGEMENT ENGINE		
General	NA	NA	11/962845	12/21/	METHODS AND	US	Filed
Instrument	147	11/1	11/702073	2007	SYSTEM FOR		Tiled
Corporation				2007	PROCESSING TIME-		
2 or portation					BASED CONTENT		
Broadbus	5502601	03/26/	08/338899	11/14/	HIGH SPEED	US	Granted
Technologies,		1999		1994	RECORDED		
Inc.					INFORMATION		
					DUPLICATING		
					EQUIPMENT		

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Owner		Grant	#	Date			
		Date					
Broadbus	5900830	05/04/	08/446449	05/22/	SYSTEM FOR CUSTOM	US	Granted
Technologies,		1999		1995	RECORDING		
Inc.							
General	NA	NA	10/730365	NA	METHODS AND	US	Filed
Instrument					APPARATUS FOR TIME-		
Corporation					BASED CONTENT		
Broadbus	NA	NA	11/605514	11/28/	CONTENT	US	Filed
Technologies,				2006	DISTRIBUTION AND		
Inc.					SWITCHING AMONGST		
					DATA STREAMS		
Broadbus	NA	NA	11/258524	10/25/	METHODS AND	US	Filed
Technologies,				2005	SYSTEM TO OFFLOAD		
Inc.					DATA PROCESSING		
					TASKS		
General	7621780	11/24/	12/026835	02/06/	SHIELDING DEVICE	US	Granted
Instrument		2009		2008	AND METHOD FOR		
Corporation					ELECTRICAL		
					CONNECTORS		
General	NA	NA	11/859862	09/24/	METHOD AND	US	Filed
Instrument		1 (1 1	11,00,002	2007	APPARATUS FOR		
Corporation				2007	DELIVERING		
Corporation					ENCRYPTED ON-		
					DEMAND CONTENT		
					WITHOUT USE OF AN		
					APPLICATION DEFINED		
					PROTOCOL		
General	D559240	01/08/	29/278331	03/26/	FACE PLATE FOR A SET	US	Granted
Instrument		2008		2007	TOP BOX		
Corporation							
General	D559241	01/08/	29/278332	03/26/	FACE PLATE FOR A SET	US	Granted
Instrument		2008		2007	TOP BOX		
Corporation							
General	D572674	07/08/	29/278333	03/26/	SET TOP BOX	US	Granted
Instrument		2008		2007			
Corporation							
General	8265559	09/11/	12/022249	01/30/	METHOD AND	US	Granted
Instrument	020000	2012	12,0222.9	2008	APPARATUS FOR		Statited
Corporation		2012		2000	DETERMINING		
Corporation					MODULATION LEVELS		
					THAT ARE SUPPORTED		
					ON A CHANNEL		
General	8165209	04/24/	11/859813	09/24/	METHOD AND	US	Granted
Instrument	3103207	2012	11/05/015	2007	APPARATUS FOR		J. anteu
Corporation		2012		2007	PROVIDING A FAST		
Corporation					MOTION ESTIMATION		
					PROCESS		
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Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
General Instrument Corporation	NA	Date NA	11/954169	12/11/ 2007	UNIFYING USER INTERFACE FOR A SET- TOP BOX	US	Filed
General Instrument Corporation	8171527	05/01/ 2012	11/768523	06/26/ 2007	METHOD AND APPARATUS FOR SECURING UNLOCK PASSWORD GENERATION AND DISTRIBUTION	US	Granted
General Instrument Corporation	NA	NA	11/927975	10/30/ 2007	METHOD, DEVICE AND SYSTEM FOR DYNAMICALLY EMBEDDING WATERMARK INFORMATION INTO MULTIMEDIA CONTENT	US	Filed
General Instrument Corporation	NA	NA	11/960562	12/19/ 2007	METHOD AND APPARATUS FOR DEFERRING TRANSMISSION OF AN SDV PROGRAM TO CONSERVE NETWORK RESOURCES	US	Filed
General Instrument Corporation	NA	NA	11/960414	NA	METHOD AND APPARATUS FOR SCHEDULING A RECORDING OF AN UPCOMGIN SDV PROGRAM DELIVERABLE OVER A CONTENT DELIVERY SYSTEM	US	Filed
General Instrument Corporation	8254779	08/28/ 2012	11/836526	12/19/ 2007	FIELD-CONFIGURABLE OPTICAL NETWORK TERMINAL DEVICE	US	Granted
General Instrument Corporation	NA	NA	11/769012	06/27/ 2007	METHOD AND APPARATUS FOR DELIVERING PROGRAMMING CODE OBJECTS TO SET-TOP TERMINALS AND THE LIKE	US	Filed

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General Instrument Corporation	8214630	07/03/ 2012	12/391488	02/24/ 2009	APPARATUS AND METHOD FOR CONTROLLING ENABLEMENT OF JTAG INTERFACE	US	Granted
General Instrument Corporation	NA	NA	12/023399	01/31/2008	METHOD AND APPARATUS FOR EXPEDITING DELIVERY OF PROGRAMMING CONTENT OVER A BROADBAND NETWORK	US	Filed
General Instrument Corporation	NA	NA	11/843335	08/22/ 2007	METHOD AND APPARATUS FOR PROVIDING A SECURE TRICK PLAY	US	Filed
General Instrument Corporation	NA	NA	12/428625	04/23/ 2009	DIGITAL VIDEO RECORDER RECORDING AND RENDERING PROGRAMS FORMED FROM SPLICED SEGMENTS	US	Filed
General Instrument Corporation	8196165	06/05/ 2012	12/110422	04/28/ 2008	METHOD AND APPARATUS FOR DELIVERING EMERGENCY ALERT SYSTEM (EAS) MESSAGES OVER A SWITCHED DIGITAL VIDEO (SDV) SYSTEM	US	Granted
General Instrument Corporation	7693366	04/06/ 2010	12/142925	06/20/ 2008	ALIGNED NARROWBAND OPTICAL FILTERS HAVING FLAT PASSBANDS AND COMPRISING OFFSET CASCADED BRAODBAND OPTICAL FILTERS	US	Granted
General Instrument Corporation	8046015	10/25/ 2011	11/836942	08/10/ 2007	ADAPTIVE TUNING TO IMPROVE DEMODULATOR PERFORMANCE	US	Granted

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General Instrument Corporation	8401075	03/19/ 2013	12/346921	12/31/ 2008	HYBRID VIDEO ENCODER INCLUDING REAL-TIME AND OFF- LINE VIDEO ENCODERS	US	Granted
General Instrument Corporation	8326077	12/04/ 2012	12/262363	10/31/ 2008	METHOD AND APPARATUS FOR TRANSFORMING A NON-LINEAR LENS- DISTORTED IMAGE	US	Granted
General Instrument Corporation	NA	NA	13/667604	11/02/ 2012	METHOD AND APPARATUS FOR TRANSFORMING A NON-LINEAR LENS- DISTORTED IMAGE	US	Filed
General Instrument Corporation	NA	NA	11/960446	12/19/ 2007	METHOD AND SYSTEM FOR INTERLEAVING VIDEO AND DATA FOR TRANSMISSION OVER A NETWORK AT A SELECTED BIT RATE	US	Filed
General Instrument Corporation	NA	NA	11/963127	12/21/ 2007	METHOD AND APPARATUS FOR SECURE MANAGEMENT OF DEBUGGING PROCESSES WITHIN COMMUNICATION DEVICES	US	Filed
General Instrument Corporation	NA	NA	12/056721	03/27/ 2008	METHOD, APPARATUS AND SYSTEM FOR AUTHENTICATING A PROGRAMMABLE HARDWARE DEVICE AND FOR AUTHENTICATING COMMANDS RECEIVED IN THE PROGRAMMABLE HARDWARE DEVICE FROM A SECURE PROCESSOR	US	Filed
General Instrument Corporation	NA	NA	12/142180	06/19/ 2008	SECURE INTERCHIP TRANSPORT INTERFACE	US	Filed
General Instrument Corporation	8106837	01/31/ 2012	12/238520	09/26/ 2008	EQUIPMENT HOUSING WITH INTEGRAL ANTENNA	US	Granted

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
		Date					
General	NA	NA	11/943301	11/20/	METHOD AND	US	Filed
Instrument				2007	APPARATUS FOR		
Corporation					LIMITING ACCESS TO		
					PROGRAMMING IN A		
					SWITCHED DIGITAL		
~ .			111071075	12/12/	VIDEO SYSTEM		
General	NA	NA	11/954953	12/12/	SET TOP TERMINAL	US	Filed
Instrument				2007	PERFORMING SERVICE		
Corporation					GROUP NUMBER AUTO		
					DISCOVERY DURING		
					INITIALIZATION OR		
G 1	01.11.100	02/20/	111050566	10/10/	BOOT-UP PROCESS	710	G . 1
General	8141123	03/20/	11/959566	12/19/	METHOD AND	US	Granted
Instrument		2012		2007	APPARATUS FOR		
Corporation					RECORDING AND		
					RENDERING		
					PROGRAMS THAT		
					CROSS SDV FORCE		
C 1	0200017	02/10/	10/001004	01/20/	TUNE BOUNDARIES	TIC	C . 1
General	8380816	02/19/	12/021884	01/29/	SYSTEM AND METHOD	US	Granted
Instrument		2013		2008	FOR MANAGING AND		
Corporation					DISTRIBUTING		
					BUNDLED CODE		
General	NA	NA	12/344984	12/29/	OBJECTS METHOD AND	US	Filed
	NA	INA	12/344984	2008	METHOD AND APPARATUS FOR	US	riied
Instrument				2008	DETECTION OF CABLE		
Corporation					AND OFF-AIR SIGNALS		
					IN A DUAL OR HIGHER		
					TUNER SET-TOP		
					TERMINAL		
General	NA	NA	12/147831	06/27/	METHOD AND	US	Filed
Instrument	1412	11/7	12/17/031	2008	APPARATUS FOR	0.5	riica
Corporation				2008	PROVIDING LOW		
Corporation					RESOLUTION IMAGES		
					IN A BROADCAST		
					SYSTEM		
General	8340343	12/25/	12/262377	10/31/	ADAPTIVE VIDEO	US	Granted
Instrument	05 105 15	2012	12/2025//	2008	FINGERPRINTING		Stanted
Corporation		2012					
General	NA	NA	12/209174	09/11/	METHOD AND	US	Filed
Instrument	- 14 -	* * * *		2008	APPARATUS FOR		
Corporation					COMPLEXITY		
- 5-Poration					SCALABLE MOTION		
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Registered Owner	Patent #	Issue/ Grant	Application #	Filing Date	Title	Jurisdiction	Status
Owner		Date	u	Dan			
General Instrument Corporation	NA	NA	12/209173	09/11/ 2008	METHOD AND APPARATUS FOR FAST MOTION ESTIMATION	US	Filed
General Instrument Corporation	8179883	05/15/ 2012	12/140830	06/17/ 2008	APPARATUS, METHOD AND SYSTEM FOR MANAGING SESSION ENCAPSULATION INFORMATION WITHIN AN INTERNET PROTOCOL CONTENT BYPASS ARCHITECTURE	US	Granted
General Instrument Corporation	NA	NA	12/620960	11/18/ 2009	DETECTING FOREIGN VOLTAGE FAULTS IN TELEPHONE CUSTOMER PREMISE EQUIPMENT	US	Filed
General Instrument Corporation	NA	NA	12/250317	10/13/ 2008	MULTI-RATE ENCODER WITH GOP ALIGNMENT	US	Filed
General Instrument Corporation	NA	NA	12/183055	07/30/ 2008	PERSONAL VIDEO RECORDER	US	Filed
General Instrument Corporation	8139957	03/20/ 2012	12/145239	06/24/ 2008	HIGH SENSITIVITY OPTICAL RECEIVER EMPLOYING A HIGH GAIN AMPLIFIER AND AN EQUALIZING CIRCUIT	US	Granted
General Instrument Corporation	NA	NA	12/112569	04/30/2008	METHOD AND APPARATUS FOR CONTROLLING THE OPTICAL OUTPUT POWER FROM A BURST MODE LASER	US	Filed
General Instrument Corporation	8379727	02/19/ 2013	12/238538	NA	METHOD AND APPARATUS FOR SCALABLE MOTION ESTIMATION	US	Granted

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant Date	#	Date			
General Instrument Corporation	8155524	04/10/ 2012	12/138977	06/13/ 2008	IMPROVED METHOD AND APPARATUS FOR TRANSMITTING MULTIPLE CHANNELS IN A WAVELENGTH DIVISION MULTIPLEXED (WMD) OPTICAL COMMUNICATION SYSTEM WITH REDUCED RAMAN CROSSTALK AND	US	Granted
					NONLINEAR		
General Instrument Corporation	8155159	04/10/ 2012	12/138600	06/13/ 2008	DISTORTIONS METHOD AND APPARATUS FOR CALIBRATAING BURST MODE LASER TRANSMITTERS	US	Granted
General Instrument Corporation	NA	NA	12/039809	02/29/ 2008	METHOD AND SYSTEM FOR PROVIDING DIFFERENT FORMATS OF ENCODED CONTENT IN A SWITCHED DIGITAL VIDEO (SDV0 SYSTEM	US	Filed
General Instrument Corporation	NA	NA	12/112440	04/30/ 2008	METHOD TO REDUCE CONTOUR ARTIFACTS ON RECURSIVE TEMPORAL FILTERS	US	Filed
General Instrument Corporation	NA	NA	12/262465	10/31/ 2008	DIGITAL VIDEO RECORDER HAVING LIVE OFF DISK BUFFER RECEIVING MISSING PORTIONS OF BUFFERED EVENTS	US	Filed
General Instrument Corporation	8284828	10/09/ 2012	12/616337	11/11/ 2009	MONITORING INSTABILITY AND RESETTING AN EQUALIZER	US	Granted
General Instrument Corporation	NA	NA	12/500807	07/10/ 2009	DEMAND DRIVEN OPTIMIZATION AND BALANCING OF TRANSCODING RESOURCES	US	Filed

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
General Instrument Corporation	NA	Date NA	12/508699	07/24/ 2009	COMMUNICATIING DATA FROM A SOURCE DEVICE TO A	US	Filed
General	8407733	03/26/	12/339303	12/19/	TERMINAL METHOD AND	US	Granted
Instrument Corporation		2013		2008	APPARATUS FOR ESTABLISHING INDIVIDUALIZED SUBSCRIPTION PLANS IN A SWITCHED DIGITAL VIDEO SYSTEM		
General Instrument Corporation	NA	NA	12/339324	12/19/ 2008	A SET-TOP BOX FOR CONVERTING MEDIA SIGNALS BASED ON STORED OUTPUT SETTINGS	US	Filed
General Instrument Corporation	NA	NA	12/360334	01/27/ 2009	METHOD AND APPARATUS FOR DISTRIBUTING VIDEO PROGRAM MATERIAL	US	Filed
General Instrument Corporation	NA	NA	12/491455	06/25/ 2009	METHOD AND APPARATUS FOR ELIMINATING ENCODING DELAY WHEN A TELECINE SOURCE MATERIAL IS DETECTED	US	Filed
General Instrument Corporation	NA	NA	12/872931	08/31/ 2010	METHOD AND APPARATUS FOR MANAGING DELIVERY OF BITS TO A DECODER	US	Filed
General Instrument Corporation	8369415	02/05/ 2013	12/395056	02/27/ 2009	METHOD AND APPARATUS FOR DECODING AN ENHANCED VIDEO STREAM	US	Granted
General Instrument Corporation	NA	NA	13/088771	04/18/ 2011	METHOD FOR SIGNALING A FACSIMILE PASS THROUGH MODE OVER A VOIP VOICE SERVICE	US	Filed
General Instrument Corporation	NA	NA	12/578022	10/13/ 2009	DECODING APPARATUS FOR A SET-TOP BOX	US	Filed

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
		Date					
General	8370886	02/05/	12/634427	12/09/	RETURN FEED	US	Granted
Instrument		2013		2009	FORWARD		
Corporation							
General	D616398	05/25/	29/322293	07/31/	SET TOP BOX	US	Granted
Instrument		2010		2008			
Corporation							
General	NA	NA	12/561898	09/17/	TRANSITIONING	US	Filed
Instrument				2009	BETWEEN MULTIPLE		
Corporation					SERVICES IN AN MPEG		
					STREAM		
General	NA	NA	12/849565	08/03/	NET MANAGER AND	US	Filed
Instrument				2010	NET MODULE		
Corporation					GENERAL UPnP		
					EXTENSIONS FOR OCAP		
					HNEXT		
General	NA	NA	12/342635	12/23/	SYSTEM FOR	US	Filed
Instrument				2008	STACKING SIGNALS IN		
Corporation					AN EXPANDED		
					FREQUENCY RANGE		
General	8081674	12/20/	12/342733	12/23/	METHODS AND	US	Granted
Instrument		2011		2008	SYSTEM FOR		
Corporation					DETERMINING A		
					DOMINANT		
					IMPAIRMENT OF AN		
					IMPAIRED		
					COMMUNICATION		
					CHANNEL		
General	8340191	12/25/	12/567118	09/25/	TRANSCODER FROM	US	Granted
Instrument		2012		2009	FIRST MPEG STREAM		
Corporation					TO SECOND MPEG		
					STREAM		
General	NA	NA	12/964954	12/10/		US	Filed
Instrument				2010	BANDWIDTH		
Corporation					ALLOCATION SYSTEM,		
					APPARATUS AND		
		0.510.71			METHOD		
General	8195055	06/05/	12/650937	12/31/	HIGH DYNAMIC RANGE	US	Granted
Instrument		2012		2009	APD OPTICAL		
Corporation					RECEIVER FOR		
					ANALOG		
G 1	D.T.A	3.7.4	10/010001	00/27/	APPLICATIONS	TIC	T2'1 1
General	NA	NA	13/218004	08/25/	PROTOCOL RATE	US	Filed
Instrument				2011	FILTERING AT EDGE		
Corporation	27.4	3.7.4	10/60/1==	101111	DEVICE	TIG	
General	NA	NA	12/636177	12/11/	MPEG VIDEO	US	Filed
Instrument				2009	RESOLUTION		
Corporation					REDUCTION SYSTEM		

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant Date	#	Date			
General Instrument Corporation	NA	NA	12/476615	06/02/ 2009	BURST MODE LASER TRANSMITTER HAVING AN EXTREMELY FAST RESPONSE TIME WHEN TRIGGERED FROM A TOTALLY OFF STATE	US	Filed
General Instrument Corporation	NA	NA	12/645676	12/23/ 2009	RATE CONTROL FOR TWO PASS ENCODER	US	Filed
General Instrument Corporation	8340531	12/25/ 2012	12/641495	12/18/ 2009	METHOD AND APPARATUS FOR IMPROVED SBS SUPPRESSION IN OPTICAL FIBER COMMUNICATION SYSTEMS	US	Granted
General Instrument Corporation	NA	NA	12/606165	10/26/ 2009	INCREASED CABLE TELEVISION TAP BANDWIDTH UTILIZING EXISTING TAP HOUSINGS	US	Filed
General Instrument Corporation	NA	NA	12/964379	12/09/ 2010	SDV QUICK TUNE ALGORITHM	US	Filed
General Instrument Corporation	8422563	04/16/ 2013	12/624720	11/24/ 2009	SYSTEM FOR GENERATING CLOSED CAPTIONING COMPATIBLE WITH LEGACY AND NEWER SET-TOP BOXES	US	Granted
General Instrument Corporation	NA	NA	12/631539	12/04/ 2009	A METHOD TO SEAMLESSLY INSERT AUDIO CLIPS INTO A COMPRESSED BROADCAST AUDIO STREAM	US	Filed
General Instrument Corporation	NA	NA	12/950700	11/19/ 2010	SYSTEM AND METHOD FOR SECURE BI- DIRECTIONAL COMMUNICATION	US	Filed
General Instrument Corporation	NA	NA	12/560049	09/15/ 2009	SYSTEM AND METHOD FOR IPSec LINK CONFIGURATION	US	Filed

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant Date	#	Date			
General Instrument Corporation	NA	NA	12/631380	12/04/ 2009	GENERATION AND DETECTION OF PRIVATE METADATA IN AN ENCODED VIDEO TRANSPORT STREAM	US	Filed
General Instrument Corporation	NA	NA	12/822766	06/24/ 2010	LOCATION-BASED SERVICE GROUP DISCOVERY FOR SWITCHED DIGITAL VIDEO	US	Filed
General Instrument Corporation	NA	NA	13/207966	08/11/ 2011	METHOD AND APPARATUS FOR IMPROVING THROUGHPUT OF A MODEM	US	Filed
General Instrument Corporation	NA	NA	12/639376	12/16/ 2009	METHOD AND APPARATUS FOR TRANSFORMING A LENS DISTORTED IMAGE TO A PERSPECTIVE IMAGE IN A BAYER SPACE	US	Filed
General Instrument Corporation	NA	NA	12/620762	11/18/ 2009	AUDIO DATA BIT RATE DETECTOR	US	Filed
General Instrument Corporation	NA	NA	13/190427	07/25/ 2011	DEFERRED TRANSFER OF CONTENT TO OPTIMIZE BANDWIDTH USAGE	US	Filed
General Instrument Corporation	NA	NA	12/565185	09/23/ 2009	USING EQUALIZATION COEFFICIENTS OF END DEVICES IN A CABLE TELEVISION NETWORK TO DETERMINE AND DIAGNOSE IMPAIRMENTS IN UPSTREAM CHANNELS	US	Filed
General Instrument Corporation	NA	NA	12/862113	08/24/ 2010	STATUS MONITOR TRANSPONDER FOR AN OPTICAL NODE OF A NETWORK	US	Filed
General Instrument Corporation	NA	NA	12/761978	04/16/ 2010	CABLE FITTING TEST TOOL	US	Filed
General Instrument Corporation	NA	NA	12/512980	07/30/ 2009	SYSTEM AND METHOD FOR ANALYZING VIDEO STREAM	US	Filed

Registered Owner	Patent #	Issue/ Grant Date	Application #	Filing Date	Title	Jurisdiction	Status
General Instrument Corporation	NA	NA	12/468839	05/19/ 2009	PROVIDING ACCESS TO CONTENT FOR A DEVICE USING AN ENTITLEMENT CONTROL MESSAGE	US	Filed
General Instrument Corporation	NA	NA	12/632177	12/07/ 2009	SYSTEM AND METHOD FOR AV SYNCHRONIZATION OF ENCODER DATA	US	Filed
General Instrument Corporation	NA	NA	12/648755	12/29/ 2009	INTELLIGENT CACHING FOR OCSP SERVICE OPTIMIZATION	US	Filed
General Instrument Corporation	NA	NA	12/976642	12/22/ 2010	SYSTEM AND METHOD FOR REDUCING MUTUAL LEAKAGE BETWEEN DISTRIBUTED FEEDBACK LASAR ELECTRO-ABSORPTION MODULATOR IN TEGRATED ELECTRO- ABSORPTION LASER	US	Filed
General Instrument Corporation	NA	NA	12/645688	12/23/ 2009	TWO PASS ENCODER	US	Filed
General Instrument Corporation	8340140	12/25/ 2012	12/688514	01/15/ 2010	STATISTICAL MULTIPLEXING USING A PLURALITY OF ENCODERS	US	Granted
General Instrument Corporation	NA	NA	12/645702	12/23/ 2009	RATE CONTROL FOR TWO PASS ENCODER USING ADAPTIVE QUANTIZATION PARAMETERS	US	Filed
General Instrument Corporation	NA	NA	12/688529	01/15/ 2010	STATISTICAL MULTIPLEXING USING A PLURALITY OF TWO- PASS ENCODERS	US	Filed
General Instrument Corporation	NA	NA	12/569873	09/29/ 2009	PROVISIONING A SET- TOP BOX	US	Filed
General Instrument Corporation	NA	NA	13/350072	NA	REVOCATION LIST UPDATE FOR DEVICES	US	Filed

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
		Date					
General	NA	NA	12/761581	04/16/	SYSTEM FOR	US	Filed
Instrument				2010	REDUCING NOISE IN		
Corporation					VIDEO PROCESSING		
General	NA	NA	12/973458	12/20/	SVC-TO-AVC	US	Filed
Instrument				2010	REWRITER WITH OPEN-		
Corporation					LOOP STATISTAL		
					MULTPLEXER		
General	NA	NA	12/872909	08/31/	A METHOD AND	US	Filed
Instrument				2010	APPARATUS FOR		
Corporation					ENCODING		
General	NA	NA	13/221531	08/30/	METHOD AND	US	Filed
Instrument		1111	10,221001	2011	APPARATUS FOR		11100
Corporation				2011	UPDATING		
Corporation					EQUALIZATION		
					COEFFICIENTS OF		
					ADAPTIVE PRE-		
					EQUALIZERS		
General	NA	NA	12/963152	12/08/	SYSTEM AND METHOD	US	Filed
Instrument	1111	1111	12//03102	2010	FOR IP VIDEO		Thea
Corporation				2010	DELIVERY USING		
Corporation					DISTRIBUTED		
					FLEXIBLE CHANNEL		
					BONDING		
General	NA	NA	12/967748	12/14/	CARRIAGE SYSTEMS	US	Filed
Instrument	1171	1112	12/90//10	2010	ENCODING OR		Thea
Corporation				2010	DECODING JPEG 2000		
Corporation					VIDEO		
General	NA	NA	12/973257	12/20/	METHOD OF	US	Filed
Instrument	1177	1171	12/7/3237	2010	PROCESSING A		Tiled
Corporation				2010	SEQUENCE OF CODED		
Corporation					VIDEO FRAMES		
General	NA	NA	12/895104	09/30/	METHOD AND	US	Filed
Instrument	1171	1171	12/0/3101	2010	APPARATUS FOR		Tiled
Corporation				2010	MANAGING BIT RATE		
General	NA	NA	13/407081	NA	IDENTITY DATA	US	Filed
Instrument	_ `	* * * *	257.137001	* * * *	MANAGEMENT		- 1100
Corporation					SYSTEM FOR HIGH		
Corporation					VOLUME PRODUCTION		
					OF PRODUCT-SPECIFIC		
					IDENTITY DATA		
General	NA	NA	13/097901	04/29/	SYSTEM AND METHOD	US	Filed
Instrument	1111	1111	13/07/701	2011	FOR AVOIDING		11100
Corporation				2011	UPSTREAM		
Corporation					INTERFERENCE IN RF		
					OVER-GLASS		
					NETWORK		
					TIDI WORK		

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
G 1	3.7.4	Date	12/2/4024	3.7.4	ALIDIO CONTROL	TIG	E9 1
General	NA	NA	13/364934	NA	AUDIO CONTROL	US	Filed
Instrument					MODULE		
Corporation General	NA	NA	13/168422	NA	METHOD AND	US	Filed
Instrument	INA	INA	13/100422	INA	APPARATUS FOR	US	riied
Corporation					PROVIDING A REAL		
Corporation					TIME STREAMING		
					PROTOCOL SESSION		
General	NA	NA	12/874850	09/02/	DIGITAL	US	Filed
Instrument				2010	INFORMATION		
Corporation					STREAM		
					COMMUNICATION		
					SYSTEM AND METHOD		
General	NA	NA	12/956556	11/30/	RIGHTS METADATA	US	Filed
Instrument				2010	CACHING BY		
Corporation					SWITCHED DIGITAL		
C 1	NIA	NT A	12/100107	NT A	VIDEO MULTIPLEXERS	TIC	E'1 1
General Instrument	NA	NA	13/188107	NA	METHOD AND DEVICE FOR DAIGNOSING	US	Filed
Corporation					INTERFERENCE NOISE		
Corporation					PROBLEMS		
General	5966410	10/12/	08/678166	07/11/	METHOD AND SYSTEM	US	Granted
Instrument		1999		1996	FOR CLEANING A		
Corporation					FREQUENCY BAND		
General	5966636	10/12/	08/564837	11/29/	METHOD AND	US	Granted
Instrument		1999		1995	APPARATUS FOR		
Corporation					MULTI PLE ACCESS		
					OVER RANDOMIZED		
					SLO TS WITH		
					COLLISION DETECTION		
					IN A CABLE TELEPHONY SYSTEM		
General	D421598	03/14/	29/053350	04/08/	ELECTROOICS	US	Granted
Instrument	D+21370	2000	271033330	1996	ENCLOSURE	CS	Granted
Corporation		2000		1,,,,	2.1020.012		
General	8237769	08/07/	11/859012	09/21/	SYSTEM AND METHOD	US	Granted
Instrument		2012		2007	OF VIDEOTELEPHONY		
Corporation					WITH DETECTION OF A		
					VISUAL TOKEN IN THE		
					VIDEOTELEPHONY		
					IMAGE FOR		
					ELECTRONIC CONTROL		
					OF THE FIELD OF VIEW		

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
General Instrument Corporation	NA	Date NA	11/962853	12/21/ 2007	EFFICIENT MESSAGE REPRESENTATIONS FOR BELIEF PROPAGATION ALGORITHMS	US	Filed
General Instrument Corporation	8276181	09/25/ 2012	11/963012	12/21/ 2007	CONTENT DISTRIBUTION SYSTEM AND METHOD FOR OPTIMIZING MULTIPLEXED TRANSPORT CHANNELS	US	Granted
General Instrument Corporation	NA	NA	13/593874	12/21/ 2007	CONTENT DISTRIBUTION SYSTEM AND METHOD FOR OPTIMIZING MULTIPLEXED TRANSPORT CHANNELS	US	Filed
General Instrument Corporation	NA	NA	12/128103	05/28/ 2008	METHOD AND SYSTEM FOR OPTIMIZING NETWORK ACCESS CONTROL	US	Filed
General Instrument Corporation	NA	NA	12/140843	06/17/ 2008	APPARATUS, METHOD AND SYSTEM FOR MANAGING BYPASS ENCAPSULATION OF INTERNET CONTENT WITHIN A BYPASS ARCHITECTURE	US	Filed
General Instrument Corporation	8219551	07/10/ 2012	11/930462	10/31/ 2007	DECODING A HIERARCHICAL MULTILAYER DATA PACKAGE	US	Granted
General Instrument Corporation	NA	NA	13/493583	10/31/ 2007	DECODING A HIERARCHICAL MULTI- LAYER DATA PACKAGE	US	Filed
General Instrument Corporation	8140702	03/20/ 2012	12/647873	12/28/ 2009	SYSTEM AND METHOD OF MAXIMIZING UTILITY IN MEDIA DELIVERY NETWORK	US	Granted
General Instrument Corporation	NA	NA	12/705266	02/12/ 2010	REDUCING ALIASING IN A SPATIAL SCALABLE VIDEO CODING	US	Filed

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant Date	#	Date			
General Instrument Corporation	D610103	02/16/ 2010	29/322292	07/31/ 2008	SET TOP BOX	US	Granted
General Instrument Corporation	NA	NA	13/024321	02/09/ 2011	HDCP LINK INTEGRITY CHECKING WITH DETECTION OF ENHANCED LINK VERIFICATION SUPPORT	US	Filed
General Instrument Corporation	NA	NA	13/165031	06/21/ 2011	HDMI SOURCE/SINK INTEROPERABLE CONFIGURATION DETERMINATION PROCESS	US	Filed
General Instrument Corporation	NA	NA	13/293541	NA	TUNABLE RF RETURN PATH FILTER WITH AUTOMATIC CHANNEL PLAN DETECTION	US	Filed
General Instrument Corporation	NA	NA	13/342223	NA	MECHANISM TO DETERMINE SOURCE DEVICE SERVICE TIER BASED ON THE VERSION OF THE HDCP KEY	US	Filed
General Instrument Corporation	NA	NA	13/305958	NA	DIGITAL CONTENT CONSUMPTION DEVICE REGIONALIZATION	US	Filed
General Instrument Corporation	NA	NA	13/314136	12/07/ 2011	MULTIPLEX CONVERSION FOR A PASSIVE OPTICAL NETWORK	US	Filed
General Instrument Corporation	NA	NA	13/362529	NA	VIDEO CODING USING EYE TRACKING MAPS	US	Filed
General Instrument Corporation	NA	NA	13/315409	NA	ENCODING AND DECODING USING PERCEPTUAL REPRESENTATIONS	US	Filed
General Instrument Corporation	NA	NA	13/300101	NA	UPSTREAM CHANNEL BONDING PARTIAL SERVICE USING SPECTRUM MANAGEMENT	US	Filed
General Instrument Corporation	NA	NA	13/464449	05/04/ 2012	METHOD AND APPARATUS FOR HOME NETWORK DISCOVERY	US	Filed

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant Date	#	Date			
General Instrument Corporation	NA	NA	13/279562	NA	METHOD AND APPARATUS FOR EXCHANGING CONFIGURATION INFORMATION IN A WIRELESS LOCAL AREA NETWORK	US	Filed
General Instrument Corporation	NA	NA	13/308823	NA	SYSTEM AND METHOD FOR MEDIA CONTENT DELIVERY	US	Filed
General Instrument Corporation	NA	NA	13/324618	NA	DYNAMIC CHANNEL BONDING PARTIAL SERVICE TRIGGERING	US	Filed
General Instrument Corporation	NA	NA	13/562257	NA	METHOD AND APPARATUS FOR CHARACTERIZING IMPULSE NOISE AND OPTIMIZING DATA LINK EFFICIENCY	US	Filed
General Instrument Corporation	NA	NA	13/533309	NA	TIME-SYNCHRONIZING A PARALLEL FEED OF SECONDARY CONTENT WITH PRIMARY MEDIA CONTENT	US	Filed
General Instrument Corporation	NA	NA	13/562261	NA	METHOD OF CHARACTERIZING IMPAIRMENTS DETECTED BY EQUALIZATION ON A CHANNEL OF A NETWORK	US	Filed
General Instrument Corporation	NA	NA	13/457520	NA	INFORMATIONAL PROCESSING	US	Filed
General Instrument Corporation	NA	NA	61/654874	NA	SURGE PROTECTOR	US	Filed
General Instrument Corporation	NA	NA	13/457524	NA	INFORMATION PROCESSING	US	Filed
General Instrument Corporation	NA	NA	13/457526	NA	INFORMATION PROCESSING	US	Filed

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant Date	#	Date			
General Instrument Corporation	NA	NA	13/457534	NA	METHOD AND DEVICE FOR AUGMENTING USER-INPUT INFORMATION RELATED TO MEDIA CONTENT	US	Filed
General Instrument Corporation	NA	NA	13/453226	NA	IDENTITY VERIFICATION	US	Filed
General Instrument Corporation	NA	NA	13/353309	NA	FEATURE LICENSING FRAMEWORK FOR THIRD PARTY FEATURE CREDIT MANAGEMENT	US	Filed
General Instrument Corporation	NA	NA	13/625271	NA	METHODS AND APPARATUS FOR CONTROLLING A WIRELESS STATION	US	Filed
General Instrument Corporation	NA	NA	13/461329	NA	ENSURE UPSTREAM CHANNEL QUALITY QUALITY MEASUREMENT STABILITY IN AN UPSTREAM CHANNEL BONDING SYSTEM USING T4 TIMEOUT MULTIPLIER	US	Filed
General Instrument Corporation	NA	NA	13/572066	NA	POWER FOR AN HDMI SOURCE DEVICE	US	Filed
General Instrument Corporation	NA	NA	13/542696	NA	AUGMENTATION OF MULTIMEDIA CONSUMPTION	US	Filed
General Instrument Corporation	NA	NA	13/326574	NA	SUPPORTING MULTIPLE ATTENTION- BASED, USER- INTERACTION MODES	US	Filed
General Instrument Corporation	NA	NA	13/419576	NA	SENTIMENT MAPPING IN A MEDIA CONTENT ITEM	US	Filed
General Instrument Corporation	NA	NA	13/419597	NA	SENTIMENT MAPPING IN A MEDIA CONTENT ITEM	US	Filed

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#*	Date			
		Date					
General	NA	NA	61/588164	NA	MANUFACTURER	US	Filed
Instrument					REVENUE SHARING		
Corporation					WITH SUPPLIERS BY		
•					LECENSING FEATURES		
					TO CUSTOMERS		
General	NA	NA	13/485745	NA	POLICY ENFORCEMENT	US	Filed
Instrument					FOR MULTIPLE		
Corporation					DEVICES USING AN		
					AUDIENCE DEFINITION		
General	NA	NA	13/628161	NA	PROVIDING	US	Filed
Instrument					SECONDARY CONTENT		
Corporation					TO ACCOMPANY A		
					PRIMARY CONTENT		
					ITEM		
General	NA	NA	13/419615	NA	SENTIMENT MAPPING	US	Filed
Instrument					IN A MEDIA CONTENT		
Corporation					ITEM		
General	NA	NA	13/657624	NA	IMPROVED	US	Filed
Instrument					ALGORITHMS FOR		
Corporation					DETERMINING		
_					BITRATE FOR A		
					STATISTICAL		
					MULTIPLEXING		
					SYSTEM USING SCENE		
					CHANGE		
General	NA	NA	13/664373	NA	IMPROVED	US	Filed
Instrument					ALGORITHMS FOR		
Corporation					DETERMINING		
					BITRATE FOR A		
					STATISTICAL		
					MULTIPLEXING		
					SYSTEM TO ENSURE		
					STREAM ALIGNMENT		
					FROM ENCODERS TO		
					THE MULTIPLEXER		
General	NA	NA	29/426307	NA	MODEM	US	Filed
Instrument							
Corporation							
General	NA	NA	29/422006	NA	MEDIA DEVICE	US	Filed
Instrument							
Corporation							
General	NA	NA	13/587069	NA	LOCATION SPECIFIC	US	Filed
Instrument					VIDEO CONTENT		
Corporation					RETRIEVAL ENABLING		
					REGIONAL		
					BLACKOUTS TO BE		
					MAINTAINED		

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
General	NA	Date NA	29/420854	NA	MEDIA DEVICE	US	Filed
Instrument	1171	1171	271420054	1177	WEDIN DEVICE	0.5	Tiled
Corporation							
General	NA	NA	29/433394	NA	MODEM	US	Filed
Instrument							
Corporation	37.4	27.4	10/644011	27.4	ALITOMATIC	TIC	T2'1 1
General Instrument	NA	NA	13/644911	NA	AUTOMATIC INTEGRATION OF	US	Filed
Corporation					CONTROL DATA SET		
Corporation					FOR CONTROLLING		
					DEVICES		
General	NA	NA	61/719372	NA	METHOD FOR	US	Filed
Instrument					COMPUTING LATENCY		
Corporation General	NA	NA	61/718703	NA	IN PRIORITY QUEUES TIMING CORRECTION	US	Filed
Instrument	INA	INA	01//18/03	I NA	FOR A DOCSIS EDGE-	US	Filed
Corporation					QAM		
General	NA	NA	61/702203	NA	DYNAMIC	US	Filed
Instrument					CONFIGURABLE		
Corporation					ONLINE DATA UPDATE		
G 1	D.T.A.	D.T.A	(1/710022	D.T.A	SERVER (ODUS)	TIC	T'1 1
General Instrument	NA	NA	61/719923	NA	TECHNOLOGY METHOD HOOK IP	US	Filed
Corporation					CONCEPTS		
General	NA	NA	61/719928	NA	BUSINESS METHOD	US	Filed
Instrument					HOOK IP CONCEPTS		
Corporation			0015052	101111			
General	6483033	11/19/	09/686238	10/11/	CABLE MANAGEMENT	US	Granted
Instrument Corporation		2002		2000	APPARTUS AND METHOD		
General	6895594	05/17/	09/691624	10/18/	SWITCH MATRIX	US	Granted
Instrument		2005	03.03102	2000	PACKAGING FOR HIGH		
Corporation					AVAILABILITY		
General	5428629	06/27/	08/263902	06/20/	ERROR CHECK CODE	US	Granted
Instrument		1995		1994	RECOMPUTATION		
Corporation					METHOD TIME INDEPENDENT OF		
					MESSAGE LENGTH		
General	5428646	06/27/	07/996454	12/24/	DEVICE AND METHOD	US	Granted
Instrument		1995		1992	FOR FRAME		
Corporation					SYNCHRONIZATION IN		
					A MULTI- LEVEL		
					TRELLIS CODING SYSTEM		
					DIDIEM		<u> </u>

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
General	5535228	Date 07/09/	08/518128	08/22/	DEVICE AND METHOD	US	Granted
Instrument	3333226	1996	00/310120	1995	FOR ACHIEVING	US	Granted
Corporation		1770		1773	ROTATIONAL		
Corporation					INVARIANCE IN A		
					MULTI-LEVEL TRELLIS		
					CODING SYSTEM		
General	5515385	05/07/	08/209085	03/09/	DEVICE AND METHOD	US	Granted
Instrument		1996		1994	FOR LIMITING DELAY		
Corporation					BY SUBSTANTIAL		
					ELIMINATION OF		
					DUPLICATE SYNCH		
					RONOIUS DATA		
					FRAMES IN A		
					COMMUNICATION SYSTEM		
General	5467319	11/14/	08/418908	04/07/	CIRCUIT AND METHOD	US	Granted
Instrument	3407319	1995	00/410900	1995	OF INTERCON NECTING	US	Granieu
Corporation		1993		1993	A CONTENT		
Corporation					ADDRESSABLE		
					MEMORY		
General	5463389	10/31/	08/125904	09/24/	DATA COMPRESSION	US	Granted
Instrument		1995		1993	METHOD AND DEVICE		
Corporation					UTILIZING CHILDREN		
					ARRAYS		
General	5406281	04/11/	08/134789	10/12/	ENCODER/DECODER	US	Granted
Instrument		1995		1993	AND METHOD FOR		
Corporation					EFFICIENT STRING		
					HANDLING IN DATA COMPRESSION		
General	5446771	08/29/	08/185619	01/24/	ADAPTIVE COHERENT	US	Granted
Instrument	3440771	1995	06/163019	1994	SIGNAL DETECTION	03	Granicu
Corporation		1773		1777	METHOD AND		
Corporation					APPARATUS		
General	5473363	12/05/	08/280423	07/26/	SYSTEM METHOD AND	US	Granted
Instrument		1995		1994	MULTIPOINT C		
Corporation					ONTROL UNIT FOR		
					MULTIPOINT MUL		
					TIMEDIA		
					CONFERENCING		
General	5533049	07/02/	08/280919	07/27/	METHOD DIGITAL	US	Granted
Instrument		1996		1994	SIGNAL PROCESSI NG		
Corporation					MODULE AND SYSTEM		
					FOR EFFIC IENTLLY		
					SELECTING A PRE- EMPHAS IS FILTER		
					DURING LINE PROBING		
					DOMING LINE FRODING		

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
		Date					
General	5528632	06/18/	08/282186	07/28/	NON-COMPLEX DUAL-	US	Granted
Instrument		1996		1994	CORRELEATION PHASE		
Corporation					REVERSAL DETECTOR		
					AND ME THOD		
General	5790594	08/04/	08/508854	07/28/	A HIGH SPEED MODEM	US	Granted
Instrument		1998		1995	AND METHOD FOR		
Corporation					EXPEDITING TIMING		
					RECOVERY		
General	5651009	07/22/	08/433876	05/02/	HYBRID	US	Granted
Instrument		1997		1995	CONTENTION/POLLING		
Corporation					P ROTOCOL COLLISION		
					RESOLUTION U SING		
					DEPTH FIRST SEARCH		
					TECHNI QUES		
General	5615212	03/25/	08/526517	09/11/	METHOD, DEVICE AND	US	Granted
Instrument		1997		1995	ROUTER FOR		
Corporation					PROVIDING A		
					CONTENTION-BASED R		
					ESERVATION		
					MECHANISM WITHIN A		
					MINI-SLOTTED		
					DYNAMIC ENTERY &		
General	6169728	01/02/	08/929008	09/08/	APPARATUS AND	US	Granted
Instrument		2001		1997	METHOD FOR SPECT		
Corporation					RUM MANAGEMENT IN		
					A MULTIPOINT		
					COMMUNICATION		
					SYSTEM		
General	5805994	09/08/	08/624346	04/03/	APPARATUS AND	US	Granted
Instrument		1998		1996	METHOD FOR TRANS		
Corporation					MIT POWER CONTROL		
					IN A COMMUNI CATION		
					SYSTEM		
General	5870429	02/09/	08/664757	06/17/	APPARATUS, METHOD,	US	Granted
Instrument		1999		1996	AND SOFTWAR E		
Corporation					MODEM FOR UTILIZING		
					ENVELOPE DELAY		
					DISTORTION		
					CHARACTERIST ICS TO		
					DETERMINE A SYMBOL		
					RATE		
General	5960000	09/28/	08/866865	05/30/	SYSTEM, DEVICE, AND	US	Granted
Instrument		1999		1997	METHOD FOR		
Corporation					CONTENTION-BASED		
					RESERVATION IN A		
					SHARED MEDIUM		
					NETWORK		

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	# "	Date		_	
		Date					
General	6377552	04/23/	08/920464	08/29/	SYSTEM, DEVICE, AND	US	Granted
Instrument		2002		1997	METHOD FOR		
Corporation					EVALUATING		
					DYNAMIC RANGE IN A		
					COMUNICATION		
					SYSTEM		
General	6181752	01/30/	08/999416	12/29/	DEVICE AND METHOD	US	Granted
Instrument		2001		1997	FOR DETECTIN G PCM		
Corporation					UPSTRAM DIGITAL		
					IMPAIRME NTS IN A		
					COMMUNICATION		
General	6201842	03/13/	09/092786	06/05/	NETWORK DEVICE AND METHOD	US	Granted
Instrument	0201842	2001	09/092/80	1998	FOR DETECTIN G PCM	US	Granted
Corporation		2001		1990	UPSTRAM DIGITAL		
Corporation					IMPAIRME NTS IN A		
					COMMUNICATION		
					NETWORK		
General	6700875	03/02/	09/052224	03/31/	SYSTEM, DEVICE, AND	US	Granted
Instrument		2004		1998	METHOD FOR		
Corporation					SELECTING A		
1					CHANNEL IN A MULT		
					ICHANNEL		
					COMMUNICATION		
					NETWORK		
General	6201836	03/13/	09/234451	01/20/	METHOD AND	US	Granted
Instrument		2001		1999	APPARATUS FOR		
Corporation					COMBI NING A TRELLIS		
					CODING SCHEME W		
					ITH A PRE-COADING		
					SCHEME FOR D ATA		
General	6772388	08/03/	09/731095	12/06/	SIGNALS APPARATUS AND	US	Granted
Instrument	0772300	2004	09//31093	2000	METHOD FOR	US	Granted
Corporation		2004		2000	PROVIDING OPTIMAL		
Corporation					ADAPTIVE FORWARD		
					ERROR CORRECTION IN		
					DATA		
					COMMUNICATIONS		
General	6611795	08/26/	09/730986	12/06/	APPARATUS AND	US	Granted
Instrument		2003		2000	METHOD FOR		
Corporation					PROVIDING ADAPTIVE		
					FORWARD ERROR		
					CORRECTION		
					UTILIZING THE ERROR		
					VECTOR MAGNITUDE		
					METRIC		

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
General	7181760	Date 02/20/	09/625873	07/26/	HIGH AVAILABILITY	US	Granted
Instrument	/181/00	2007	09/023673	2000	MECHANISM IN A	0.3	Granted
Corporation		2007		2000	CABLE ENVIRONMENT		
General	5249294	09/28/	08/013246	02/03/	PREVENTION OF	US	Granted
Instrument	3249294	1993	06/013240	1993	DETERMINATION OF	03	Granted
Corporation		1993		1993	TIME OF EXECUTION		
Corporation					OF		
General	6188870	02/13/	08/726748	10/07/	PASSIVE	US	Granted
Instrument		2001		1996	INTERDICTION SYSTEM		
Corporation					FOR SCRAMBLING		
General	5606612	02/25/	08/279514	07/25/	METHOD AND	US	Granted
Instrument		1997		1994	APPARATUS FOR		
Corporation					TELEVISION SIGNAL		
					SCRAMBLING		
General	5650908	07/22/	08/654799	05/29/	SURGE ARRESTOR FOR	US	Granted
Instrument		1997		1996	RF DEVICES		
Corporation							
General	5638422	06/10/	07/821508	01/15/	PCN DEPLOYMENT VIA	US	Granted
Instrument	3036422	1997	07/821308	1992	CABLE TELEVISION	03	Granted
Corporation		1997		1992	CABLE TELEVISION		
General	5659883	08/19/	07/934766	08/24/	DIVERSE FREQUENCY	US	Granted
Instrument	3037663	1997	0//934/00	1992	REMOTE CONTROL	0.5	Granicu
Corporation		1997		1992	COMMUNICATION		
General	5497404	03/05/	07/910192	07/14/	TRANSMISSION ERROR	US	Granted
Instrument	347/404	1996	07/710172	1992	RECOVERY FOR		Granted
Corporation		1770		1//2	DIGITAL		
Corporation					COMMUNICATION		
General	5398237	03/14/	08/065578	05/26/	ACQUISITION AND	US	Granted
Instrument	00,020,	1995	00,0000.0	1993	TRACKING OF		oranica .
Corporation					INDEPENDENT		
r					QUADRATURE		
					MODULATED		
					BITSTREAMS		
General	5390346	02/14/	08/184572	01/21/	SMALL FREQUENCY	US	Granted
Instrument		1995		1994	STEPS UP OR DOWN		
Corporation					CONVERTER USING		
•					LARGE FREQUENCY		
					STEL SYNTHESIZERS		
General	5426701	06/20/	08/202786	02/28/	CABLE TELEVISION	US	Granted
Instrument		1995		1994	BOX WITH A SMART		
Corporation					CARD CONNECTOR		
General	5406228	04/11/	08/274011	07/12/	RING OSCILLATOR	US	Granted
Instrument		1995		1994	WITH FREQUENCY		
Corporation					CONTROL LOOP		

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Owner		Grant	#	Date			
		Date					
General	5638128	06/10/	08/335651	11/08/	PIXEL INTERPOLATION	US	Granted
Instrument		1997		1994	FILTERS FOR VIDEO		
Corporation					DECOMPRESSION		
					PROCESSOR		
General	6014547	01/11/	08/847697	04/28/	METHOD FOR	US	Granted
Instrument		2000		1997	ENHANCING THE		
Corporation					PERFORMANCE OF A		
					CATV SETTOP		
					TERMINAL		
General	5848200	12/08/	08/523395	08/31/	METHOD AND	US	Granted
Instrument		1998		1995	APPARATUS FOR		
Corporation					PERFOMRING TWO		
					DIMENSIONAL VIDEO		
					CONVOLVING		
General	5881362	03/19/	08/709456	09/05/	NOISE REDUCTION IN	US	Granted
Instrument		1999		1996	CABLE RETURN PATHS		
Corporation							
General	6321384	11/20/	09/074851	05/08/	NOISE REDUCTION IN	US	Granted
Instrument		2001		1998	CABLE RETURN PATHS		
Corporation							
General	5835844	11/10/	08/580633	12/29/	METHOD TO REDUCE	US	Granted
Instrument		1998		1995	GAIN VARIANCE AND		
Corporation					INGRESS IN THE		
					RETURN PATH OF A		
					CATV PLANT	-	
General	5870472	02/09/	08/745998	11/12/	DYNAMIC	US	Granted
Instrument		1999		1996	RELOCATION OF THE		
Corporation					SERVICE DATA		
					CHANNEL		
General	5724344	03/03/	08/626352	04/02/	AMPLIFIER USING A	US	Granted
Instrument		1998		1996	SINGLE FORWARD		
Corporation					PILOT SIGNAL TO		
					CONTROL FO RWARD		
					AND RETURN		
					AUTOMATIC SLOPE		
G 1	5505011	07/20/	00/62/045	04/02/	CIRCUITS THEREIN	TIC	G . 1
General	5787211	07/28/	08/624045	04/03/	NEW DESIGN FOR A	US	Granted
Instrument		1998		1996	RESONANTLY		
Corporation					ENHANCED		
					MODULATOR FOR		
					SUPPRESSION OF		
					STIMULATED		
					BRILLOUIN		
					SCATTERING (SBS) IN		
					HI		

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant Date	#	Date			
General Instrument Corporation	5767754	06/16/ 1998	08/789372	01/24/ 1997	BALANCED TO UNBALANCED TRANSMISSION LINE TRANSFORMER WITH IMPROVED AMPLITUDE RESPONSE	US	Granted
General Instrument Corporation	5937330	08/10/ 1999	08/801306	02/18/ 1997	SETTOP TERMINAL CONTROLLED RETURN PATH FILTER FOR MINIMIZING NOISE INGRESS ON BIDIRECTIONAL CABLE SYSTEMS	US	Granted
General Instrument Corporation	5828786	10/27/ 1998	08/162511	12/02/ 1993	ANALYZER AND METHODS FOR DETECTING AND PROCESSING VIDEO DATA TYPES IN A VIDEO DATA STREAM	US	Granted
General Instrument Corporation	5923784		08/619276	03/18/ 1996	ANALYZER AND METHODS FOR DETECTING AND PROCESSING VIDEO DATA TYPES IN A VIDEO DATA STREAM	US	Granted
General Instrument Corporation	6031927	02/29/ 2000	08/629304	04/08/ 1996	ANALYZER AND METHODS FOR DETECTING AND PROCESSING VIDEO DATA TYPES IN A VIDEO DATA STREAM	US	Granted
General Instrument Corporation	6041142	03/21/ 2000	08/630089	04/08/ 1996	ANALYZER AND METHODS FOR DETECTING AND PROCESSING VIDEO DATA TYPES IN A VIDEO DATA STREAM	US	Granted
General Instrument Corporation	6260193	07/10/ 2001	09/021006	02/09/ 1998	SYNCHRONIZATION OF DECODERS IN A BI- DIRECTIONAL CATV NETWORK	US	Granted
General Instrument Corporation	6072872	06/06/ 2000	09/014088	01/27/ 1998	DETERMINATION OF SCRAMBLING MODE OF A TELEVISION SIGNAL	US	Granted

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant Date	#	Date			
General Instrument Corporation	6133939	10/17/2000	09/228141	01/11/ 1999	CATV DIRECTIONAL COMPONENT WITH SIGNAL REVERSING CAPABILITY AND METHOD	US	Granted
General Instrument Corporation	7086078	08/01/ 2006	09/690057	10/16/ 2000	CATV DIRECTIONAL COMPONENT WITH SIGNAL REVERSING CAPABILITY AND METHOD	US	Granted
General Instrument Corporation	5914869	06/22/ 1999	08/929714	09/15/ 1997	AC/DC TRANSFORMERLESS VOLTAGE CONVERTER	US	Granted
General Instrument Corporation	5844615	12/01/ 1998	08/783432	01/16/ 1997	COMMUNICATION OF VBI DATA IN DIGITAL TELEVISION DATA STREAMS	US	Granted
General Instrument Corporation	6160587	12/12/ 2000	08/887046	07/02/ 1997	WAVEFORM GENERATOR FOR INSERTION OF DATA INTO DIGITAL TEL EVISION SIGNALS	US	Granted
General Instrument Corporation	6208737	03/27/ 2001	09/110864	07/07/ 1998	METHOD AND APPARATUS FOR TELEVISION SIGNAL SCRAMBLING USING THE REPLACEMENT OF SYNCHRONIZING AND COLOR SUBCARRIER SIGN	US	Granted
General Instrument Corporation	6597789	07/22/ 2003	09/213426	12/17/ 1998	VIDEO-AUDIO SCRAMBLING WITH SINGLE CONVERSION TUNERS	US	Granted
General Instrument Corporation	D420349	02/08/ 2000	29/080380	12/05/ 1997	SETTOP TELEVISION TERMINAL	US	Granted
General Instrument Corporation	6918135	07/12/ 2005	09/265774	03/10/ 1999	SESSION ORIENTED SETTOP COMMUNICATION USING DYNAMIC, SYNCHRONIZED ROUTING	US	Granted
General Instrument Corporation	D420338	02/08/ 2000	29/083809	02/18/ 1998	HIGH POWER INFRA- RED BLASTER	US	Granted

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Owner		Grant Date	#	Date			
General	6169584	01/02/	08/985438	12/05/	AUTOMATIC	US	Granted
Instrument		2001		1997	MODULATION		
Corporation					CONTROL OF SYNC		
					SUPPRESSED		
					TELEVSION S IGNALS		
General	6940561	09/06/	09/705406	11/03/	AUTOMATIC	US	Granted
Instrument		2005		2000	MODULATION AND RF		
Corporation					CARRIER LEVEL		
					CONTROL OF SYNC		
					SUPPRESSED		
					TELEVISIONSIGNALS		
General	6400767	06/04/	09/156484	09/18/	COMMUNICATION OF	US	Granted
Instrument		2002		1998	HBI DATA IN DIGITAL		
Corporation					TELEVISION DATA		
					STREAM S		
General	6483547	11/19/	09/034034	03/03/	TRANSMISSION	US	Granted
Instrument		2002		1998	SIGNAL ID FOR		
Corporation					ANALOG TELEVISION		
					BROADCASTS		
General	6295362	09/25/	09/009695	01/20/	DIRECT DIGITAL	US	Granted
Instrument		2001		1998	SYNTHESIS OF FM		
Corporation					SIGNALS		
General	6133790	10/17/	09/154770	09/17/	IN-LINE, UNBALANCED	US	Granted
Instrument		2000		1998	AMPLIFIER, PRE-		
Corporation					DISTORTION CIRCUIT		
General	6232836	05/15/	09/568743	05/11/	IN-LINE, UNBALANCED	US	Granted
Instrument		2001		2000	AMPLIFIER, PRE-		
Corporation					DISTORTION CIRCUIT		
General	6577177	06/10/	09/282958	04/01/	NON-LINEAR	US	Granted
Instrument		2003		1999	DISTORTION		
Corporation					GENERATOR		
General	6570430	05/27/	09/958010	01/29/	NON-LINEAR	US	Granted
Instrument		2003		2002	DISTORTION		
Corporation					GENERATOR FOR BOTH		
					SECOND AND THIRD		
					ORDER DISTORTION		
General	D407071	03/23/	29/084737	03/09/	4-IN-1 REMOTE	US	Granted
Instrument		1999		1998	CONTROL UNIT		
Corporation	700047 :	0.510.1:	00/0000=5	04/50/		****	
General	5909454	06/01/	09/008976	01/20/	INTERMEDIATE RATE	US	Granted
Instrument		1999		1998	APPLICATIONS OF		
Corporation					PUNCTURED		
					CONVOLUTIONAL C		
					ODES FOR 8PSK		
					TRELLIS MODULATION		
					OVER SATELLITE		
					CHANNELS		

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
General Instrument Corporation	6230391	Date 05/15/ 2001	09/138500	08/24/ 1998	INSULATOR INSERTION TOOL (ITT)	US	Granted
General Instrument Corporation	6963608	11/08/ 2005	09/806626	04/02/ 2001	METHOD AND APPARATUS FOR PROVIDING RATE CONTROL IN A VIDEO ENCODER	US	Granted
General Instrument Corporation	7039941	05/02/ 2006	09/182519	10/30/ 1998	LOW DISTORTION PASSTHROUGH CIRCUIT ARRANGEMNET FOR CABLE TELEVISION SET TOP CONVERTER TERMINALS	US	Granted
General Instrument Corporation	6433830	08/13/ 2002	09/332771	06/14/ 1999	OFF-AIR PHASE LOCK TECHNIQUE	US	Granted
General Instrument Corporation	6194653	02/27/ 2001	09/047293	03/24/ 1998	ENCLOSURE DESIGN HAVING AN INTEGRATED SYSTEM OF RETENTION, ELECTROMAGNETIC INTERFACE CONTAINMNET AND STRUCTURAL LOAD DISTRIBUTION	US	Granted
General Instrument Corporation	6594271	07/15/ 2003	09/356529	07/19/ 1999	IMPLEMENTATION OF OPPORTUNISTIC DATA ON A STATISTICAL MULTIPLEXING ENCODER	US	Granted
General Instrument Corporation	6239668	05/29/ 2001	09/291750	04/14/ 1999	RF TRANSFORMER WITH COMPENSATION TRANSMISSION LINE	US	Granted
General Instrument Corporation	D418518	01/04/ 2000	29/091197	07/23/ 1998	FRONT BEZEL DESIGN FOR A DIGITAL CABLE CONVERTER	US	Granted
General Instrument Corporation	7027461	04/11/ 2006	09/621894	07/20/ 2000	RESERVATION/RETRY MEDIA ACCESS CONTROL	US	Granted
General Instrument Corporation	6546557	04/08/ 2003	09/170852	10/13/ 1998	METHOD AND SYSTEM FOR ENHANCING DIGITAL VIDEO TRANSMISSION TO A SET-TOP BOX	US	Granted

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
		Date					
General	7043211	05/09/	09/857010	05/29/	UNIVERSAL	US	Granted
Instrument		2006		2001	MODULATOR		
Corporation							
General	D422993	04/18/	29/101250	03/01/	FRONT BEZEL FOR A	US	Granted
Instrument		2000		1999	DIGITAL CABLE		
Corporation					TERMINAL		
General	7391471	06/24/	09/787601	07/02/	APPARATUS AND	US	Granted
Instrument		2008		2001	METHOD FOR		
Corporation					MERGING VERTICAL		
G 1	(227700	10/04/	00/2101/0	10/00/	BLANKING INTERVALS	7.10	<u> </u>
General	6327709	12/04/	09/219140	12/22/	METHOD AND	US	Granted
Instrument		2001		1998	APPARATUS FOR		
Corporation					FILTERING INTERFERENCE AND		
					NONLINEAR		
					DISTORTIONS		
General	6587825	07/01/	09/551337	04/18/	AUDIO TRANSMISSION	US	Granted
Instrument	0367623	2003	09/331337	2000	METHOD FOR	03	Granted
Corporation		2003		2000	CHANNEL DOUBLING		
Corporation					SYSTEM		
General	6556250	04/29/	09/370928	08/10/	METHOD AND	US	Granted
Instrument	0330230	2003	07/3/0720	1999	APPARATUS FOR	05	Granted
Corporation		2003		1,,,,	PROVIDING A TIMING		
Corporation					SIGNAL WITH HIGH		
					FREQUENCY		
					ACCURACY IN VIDEO		
					EQUIPMENT FOR		
					SUPPORTING AN ON-		
					SCREEN DISPLAY IN		
					THE ABSENCE OF A		
					VIDEO SIGNAL		
General	6249634	09/06/	09/489624	03/31/	FIBER OPTIC CABLE	US	Granted
Instrument		1983		1981	COILING TRAY		
Corporation							
General	6400863	06/04/	09/588387	06/06/	TELEPHONY TEST	US	Granted
Instrument		2002		2000	POINT		
Corporation							
General	D426212	06/06/	29/105568	05/25/	BEZEL FOR SET-TOP	US	Granted
Instrument		2000		1999	TERMINAL		
Corporation			00/2				
General	6842435	01/11/	09/396605	09/15/	CONGESTION	US	Granted
Instrument		2005		1999	MONITORING AND		
Corporation					POWER CONTROL FOR		
					A COMMUNICATION		
					SYSTEM		

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
General	6567132	Date 05/20/	09/265814	03/10/	AN UPCONVERTER FOR	US	Granted
Instrument		2003		1999	A TELEVISION SIGNAL		
Corporation					HEADEND		
					DISTRIBUTION CENTER HANDLING ANALOG		
					AND DIGITAL SIGNALS		
					AND METHOD OF		
					MAKING AND USING		
Cananal	6515290	02/04/	00/265915	02/10/	THE SAME	US	Cuontad
General Instrument	6515380	02/04/2003	09/265815	03/10/ 1999	METHOD AND APPARATUS FOR	US	Granted
Corporation		2003		1777	SUPPRESSING		
•					ELECTROMAGNETIC		
					EMISSIONS FROM A		
					BUS INTERFACE WITH ELECTRONIC		
					EQUIPMENT		
General	6525436	02/25/	09/717984	11/21/	METHOD AND	US	Granted
Instrument		2003		2000	APPARATUS FOR		
Corporation					SUPPRESSING		
					ELECTROMAGNETIC EMISSIONS FROM A		
					BUS INTERFACE WITH		
					ELECTRONIC		
					EQUIPMENT		
General	6354461	03/12/2002	09/533455	03/23/ 2000	HAND-OPERABLE LATCH FOR	US	Granted
Instrument Corporation		2002		2000	ELECTRONICS		
Corporation					ENCLOSURE		
General	7116377	10/03/	10/107346	03/26/	GRAPHICS SUBSYSTEM	US	Granted
Instrument		2006		2002	BYPASS METHOD AND		
Corporation General	6816512	11/09/	09/752893	12/29/	APPARATUS ARRANGEMENT FOR	US	Granted
Instrument	0010312	2004	07/132073	2000	MANAGING MULTIPLE		Granted
Corporation					TELEPHONE LINES		
					TERMINATING AT A		
Canagal	6466094	10/15/	00/490625	01/24/	SINGLE LOCATION	LIC	Cuontad
General Instrument	6466084	10/15/ 2002	09/489625	01/24/ 2000	CIRCUIT FOR REDUCING THIRD	US	Granted
Corporation		2002		2000	ORDER		
					INTERMODULATION		
					DISTORTION FOR A		
					BROADBAND RF AMPLIFIER		
					AWII LII ILK	1	1

Registered Owner	Patent #	Issue/ Grant Date	Application #	Filing Date	Title	Jurisdiction	Status
General Instrument Corporation	6759897	07/06/ 2004	10/303611	11/25/ 2002	CIRCUIT FOR REDUCING THIRD ORDER INTERMODULATION DISTORTION FOR A BROADBAND RF AMPLIFIER	US	Granted
General Instrument Corporation	6807195	10/19/ 2004	09/671096	09/27/ 2000	SYNCHRONIZED ARRANGEMENT FOR PACKET CABLE TELEPHONY MODEM	US	Granted
General Instrument Corporation	6748050	06/08/ 2004	09/862268	05/22/ 2001	METHOD AND APPARATUS FOR PERFORMING EITHER TONE ANALYSIS ON A LOCAL LOOPED-BACK COMMUNICATIONS PATH OR UTILIZING A HYBRID REFLECTION BASED LOOPED-BACK TEST TO TEST INTEGRITY	US	Granted
General Instrument Corporation	6473593	10/29/ 2002	09/466888	12/20/ 1999	MULTIPLE CHANNEL UPCONVERTER HAVING ADJACENT CHANNEL OUTPUT AND METHOD OF IMPLEMENTING THE SAME	US	Granted
General Instrument Corporation	6687311	02/03/ 2004	09/504529	02/15/ 2000	A DIRECT QAM MODULATOR WITH DIGITAL FEEDBACK CONTROL AND CO MPLEX PRE- EQUALIZATION FOR PHASE AND AMPLITUDE DISTORTION	US	Granted
General Instrument Corporation	6711135	03/23/ 2004	09/511090	02/23/ 2000	HFC ACCESS NETWORK MANAGEMENT SYSTEM	US	Granted
General Instrument Corporation	6704288	03/09/ 2004	09/511087	02/23/ 2000	ARRANGEMENT FOR DISCOVERING THE TOPOLOGY OF AN HFC ACCESS NETWORK	US	Granted

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
		Date					
General	6728887	04/27/	09/511702	02/23/	HFC ACCESS NETWORK	US	Granted
Instrument		2004		2000	MANAGEMENT		
Corporation					SYSTEM		
General	6549403	04/15/	09/515708	02/29/	METHOD AND	US	Granted
Instrument		2003		2000	APPARATUS FOR		
Corporation					MANAGING THERMAL		
					ENERGY EMISSIONS OF		
					A REMOVABLE POINT-		
					OF-DEPLOYMENT		
					MODULE IN A CABLE-		
					READY TELEVISION		
		00/07:	40/005055	0=15.51	SET	7.70	
General	6771503	08/03/	10/205953	07/26/	METHOD AND	US	Granted
Instrument		2004		2002	APPARATUS FOR		
Corporation					MANAGING THERMAL		
					ENERGY EMISSIONS OF		
					A REMOVABLE		
					MODULE IN A SET-TOP		
General	D420522	03/06/	29/115508	12/14/	BOX	US	Cuantad
Instrument	D438532	2001	29/113308	1999	COMMUNICATION INTERFACE COVER	US	Granted
		2001		1999	INTERPACE COVER		
Corporation General	6892308	05/10/	09/668426	09/22/	INTERNET PROTOCOL	US	Granted
Instrument	0092300	2005	09/006420	2000	TELEPHONY SECURITY	0.5	Granicu
Corporation		2003		2000	ARCHITECTURE		
General	6934310	08/23/	10/317029	12/11/	RETURN PATH	US	Granted
Instrument	0754510	2005	10/31/02)	2002	TRANSMITTER HAVING	05	Granted
Corporation		2005		2002	A CLOSED LASER		
Corporation					CONTROL LOOP THAT		
					IS EMPLOYED IN A		
					HYBRID FIBER/COAX		
					TRANSMISSION		
					SYSTEM		
General	6362425	03/26/	09/618434	07/18/	GROUNDING	US	Granted
Instrument		2002		2000	STRUCTURE FOR USE		
Corporation					BETWEEN SURFACES		
					OF ALIGNED EQU		
					IPMENT HOUSING		
					ELEMENTS		
General	6707364	03/16/	09/868391	06/18/	REMOTE FEEDER	US	Granted
Instrument		2004		2001	REACTANCE COIL		
Corporation							

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
General Instrument Corporation	6711132	Date 03/23/ 2004	09/737307	12/15/ 2000	METHOD AND APPARATUS FOR REDUCING END-TO- END DELAY WHEN PROVIDING INTERNET	US	Granted
General Instrument Corporation	6748020	06/08/ 2004	09/696533	10/25/ 2000	TELEPHONY OVER A CATV CABLE NETWORK TRANSCODER- MULTIPLEXER (TRANSMUX) SOFTWARE ARCHITECTURE	US	Granted
General Instrument Corporation	6583986	06/24/ 2003	09/862844	05/21/ 2001	METHOD AND APPARATUS FOR MANAGING THERMAL ENERGY EMISSIONS	US	Granted
General Instrument Corporation	6731685	05/04/ 2004	09/665373	09/20/ 2000	A STATISTICAL REMULTIPLEXING ALGORITHM FOR STANDARD DEFINTI ON AND HIGH DEFINITION TELEVISION ENCODERS	US	Granted
General Instrument Corporation	6847656	01/25/ 2005	09/669517	09/25/ 2000	STATISTICAL REMULTIPLEXING WITH BANDWIDTH ALLOCATION AMONG DIFFERENT TRANSCODING CHANNELS	US	Granted
General Instrument Corporation	6735028	2004	09/941098	08/28/ 2001	METHOD AND APPARATUS FOR INCREASING DATA STORAGE CAPACITY VIA PHASE AND AMPLITUDE MODULATION	US	Granted
General Instrument Corporation	7606502	06/02/ 1992	11/612784	10/31/ 1990	SECOND ORDER PREDISTORTION CIRCUIT	US	Granted
General Instrument Corporation	7450609	11/11/ 2008	10/265080	10/04/ 2002	METHOD AND APPARATUS FOR STATISTICALLY MULTIPLEXING MULTIPLE GROUPS OF SERVICES	US	Granted

Registered Owner	Patent #	Issue/ Grant	Application #	Filing Date	Title	Jurisdiction	Status
		Date					
General	6847659	01/25/	09/800835	03/07/	METHODS AND	US	Granted
Instrument		2005		2001	APPARATUS FOR		
Corporation					RECONFIGURING		
					PROTOCOL DATA		
					WHEN REDUCING		
					MULTIPLEXED DATA		
					STREAMS		
General	7653089	01/26/	11/021768	12/23/	METHOD AND	US	Granted
Instrument		2010		2004	APPARATUS FOR		
Corporation					RECONFIGURING		
					PROTOCOL DATA		
					WHEN REDUCING		
					MULTIPLEXED DATA		
					STREAMS		
General	6827583	12/07/	09/952695	09/14/	ELECTRONIC	US	Granted
Instrument		2004		2001	CONNECTION SYSTEM		
Corporation							
General	6934138	08/23/	10/214838	08/08/	METHOD AND DEVICE	US	Granted
Instrument		2005		2002	FOR BONDING AC		
Corporation					UTILITIES AND HFC		
					ACCESS NETWORKS		
					FOR SURGE		
					MITIGATION		
General	8375415	02/12/	09/811702	03/19/	DYNAMIC UPSTREAM	US	Granted
Instrument		2013		2001	AMPLIFIER POWER		
Corporation					MANAGEMENT		
General	6956873	10/18/	09/861750	05/21/	ARRANGEMENT FOR	US	Granted
Instrument		2005		2001	DERIVING A LOCAL		
Corporation					CLOCK IN A PACKET		
					CABLE TELEPHONY		
					MODEM		
General	6650800	11/18/	09/811720	03/19/	TIME SLOT TUNABLE	US	Granted
Instrument		2003		2001	ALL-OPTICAL PACKET		
Corporation					DATA		
-		0010=1	20/01/2	0.5/1.0/	DEMULTIPLEXER		
General	6788839	09/07/	09/811749	03/19/	TIME SLOT TUNABLE	US	Granted
Instrument		2004		2001	ALL-OPTICAL PACKET		
Corporation					DATA ROUTING		
					SWITCH		
General	6671426	12/30/	09/811758	03/19/	MONOLITHIC	US	Granted
Instrument		2003		2001	INTEGRATED		
Corporation					TERAHERTZ OPTICAL		
					ASYMMETRIC		
		001511	00.40.00.00.00	0.440.77	DEMULTIPLEXER	****	
General	6456775	09/24/	09/826523	04/05/	OPTICAL FIBER	US	Granted
Instrument		2002		2001	ATTENTUATOR		
Corporation						1	

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant Date	#	Date			
General Instrument Corporation	7162733	01/09/2007	09/968824	10/02/ 2001	METHOD AND APPARATUS FOR AUTOMATIC SET-UP OF ELECTRONIC DEVICES	US	Granted
General Instrument Corporation	6985020	01/10/ 2006	10/191557	07/09/ 2002	INLINE PREDISTORTION FOR BOTH CSO AND CTB CORRECTION	US	Granted
General Instrument Corporation	NA	NA	10/219045	08/14/ 2002	METHODS AND APPARATUS FOR REDUCING TUNE-TIME DELAY IN A TELEVISION APPLIANCE WITH PERSONAL VERSATILE RECORDER CAPABILITIES	US	Filed
General Instrument Corporation	D463413	09/24/ 2002	29/141724	05/11/ 2001	FACEPLATE	US	Granted
General Instrument Corporation	6553159	04/22/ 2003	10/003766	10/29/ 2001	METHOD AND SYSTEM FOR CONTROLLING THE OUTPUT OF AN OPTICAL PUMP ENERGY SOURCE	US	Granted
General Instrument Corporation	6854657	02/15/2005	09/997122	11/28/ 2001	DUAL BATTERY CONFIGURATION AND METHOD OF USING SAME TO PROVIDE A LONG-TERM POWER SOLUTION IN A PROGRAMMABLE SMART CARD	US	Granted
General Instrument Corporation	6882360	04/19/ 2005	09/947423	09/05/ 2001	METHOD AND APPARATUS FOR DETERMINING A LEVEL OF A VIDEO SIGNAL	US	Granted
General Instrument Corporation	7126920	10/24/ 2006	09/924860	08/08/ 2001	PERFORMANCE OF LIFE TEST USING CMTS AS A PROXY	US	Granted
General Instrument Corporation	7082135	07/25/ 2006	10/067026	02/04/ 2002	EXTENDABLE SLOT ADDRESSING SYSTEM AND METHOD	US	Granted

Registered Owner	Patent #	Issue/ Grant Date	Application #	Filing Date	Title	Jurisdiction	Status
General Instrument Corporation	6647252	11/11/ 2003	10/051501	01/18/ 2002	AN ADAPTIVE THRESHOLD ALGORITHM FOR REAL-TIME WAVELET DE-NOISING APPLICATIONS	US	Granted
General Instrument Corporation	D470484	02/18/ 2003	29/147677	08/31/ 2001	FACEPLATE	US	Granted
General Instrument Corporation	D462951	09/17/ 2002	29/147612	08/31/ 2001	FACEPLATE	US	Granted
General Instrument Corporation	D473221	04/15/ 2003	29/150808	11/28/ 2001	COMMUNICATIONS GATEWAY ENCLOSURE	US	Granted
General Instrument Corporation	6648679	11/18/ 2003	10/093748	03/07/ 2002	METHOD AND APPARATUS FOR OPTICAL COMPONENT MOUNTING	US	Granted
General Instrument Corporation	6885500	08/26/ 2003	10/633779	01/31/ 2002	OPTICAL AMPLIFIER CONTROLLER HAVING ADJUSTABLE SLEW- RATE LIMITER	US	Granted
General Instrument Corporation	6865199	03/08/ 2005	10/207740	07/29/ 2002	INEXPENSIVE ANALOG LASER MODULE	US	Granted
General Instrument Corporation	6804301	10/12/ 2004	09/929983	08/15/ 2001	FIRST PASS ENCODING OF I AND P-FRAME COMPLEXITY FOR COMPRESSED DIGITAL VIDEO	US	Granted
General Instrument Corporation	7136092	11/14/ 2006	10/357583	02/03/ 2003	METHOD AND APPARATUS FOR TESTING VIDEO CHROMA QUANTIZATION	US	Granted
General Instrument Corporation	7072402	07/04/ 2006	10/145166	05/13/ 2002	METHOD AND APPARATUS FOR DYNAMICALLY ADJUSTING F-CODES FOR A DIGITAL PICTURE HEADER	US	Granted
General Instrument Corporation	6961376	11/01/ 2005	10/183196	06/25/ 2002	METHODS AND APPARATUS FOR RATE CONTROL DURING DUAL PASS ENCODING	US	Granted

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
C1	7001713	Date	10/748082	10/20/	THERMAL COOLER FOR	TIC	C - 4 1
General Instrument	7081712	07/25/ 2006	10/748082	12/30/ 2003	THERMAL COOLER FOR A LASER DIODE	US	Granted
Corporation		2000		2003	PACKAGE		
General	8068610	11/29/	10/301092	11/20/	METHOD AND SYSTEM	US	Granted
Instrument	0000010	2011	10/301072	2002	FOR PROVIDING		Granica
Corporation					SECURITY WITHIN		
					MULTIPLE SET-TOP		
					BOXES ASSIGNED FOR		
					A SINGLE CUSTOMER		
General	NA	NA	13/287576	11/02/	METHOD AND SYSTEM	US	Filed
Instrument				2011	FOR PROVIDING		
Corporation					SECURITY WITHIN MULTIPLE SET-TOP		
					BOXES ASSIGNED FOR		
					A SINGLE CUSTOMER		
General	D480727	10/14/	29/166087	08/21/	EXTERNAL SLEEVE	US	Granted
Instrument		2003		2002	DESIGN FOR		
Corporation					INTEGRATED CIRCUIT		
					CHIP CARD		
General	6934148	08/23/	10/414346	04/15/	ELECTRONIC CHASSIS	US	Granted
Instrument		2005		2003	AND HOUSING HAVING		
Corporation					AN INTEGRATED FORCED AIR COOLING		
					SYSTEM		
General	D479718	09/16/	29/162773	06/21/	FRONT PANEL FOR	US	Granted
Instrument		2003		2002	MODULAR		
Corporation					PROCESSING SYSTEM		
General	7463311	12/09/	10/238468	09/09/	METHOD AND SYSTEM	US	Granted
Instrument		2008		2002	FOR INCLUDING NON-		
Corporation					GRAPHIC DATA IN AN		
					ANALOG VIDEO		
					OUTPUT SIGNAL OF A SET-TOP BOX		
General	6906526	06/14/	10/389496	03/14/	NON-INTRUSIVE	US	Granted
Instrument	0,000,20	2005	10,000 100	2003	CABLE CONNECTION		Granica
Corporation					MONITORING FOR USE		
•					IN HFC NETWORKS		
General	7212502	05/01/	10/215080	08/08/	METHOD AND	US	Granted
Instrument		2007		2002	APPARATUS FOR		
Corporation					DYNAMICALLY		
					ADAPTING TELEPHONY		
					ANALOG LOSS BASED ON CHANNEL		
					CONTENT		
		<u> </u>			CONTLINI		

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
General Instrument Corporation	7039317	Date 05/02/ 2006	10/304595	11/25/ 2002	RECONFIGURABLE NODE FOR A HYBRID FIBER CABLE	US	Granted
General Instrument Corporation	D481019	10/21/ 2003	29/166917	09/05/ 2002	NETWORK FRONT BEZEL FOR CONSUMER ELECTRONIC PRODUCT	US	Granted
General Instrument Corporation	D492268		29/179236		FRONT BEZEL FOR CONSUMER ELECTRONIC PRODUCT	US	Granted
General Instrument Corporation	7788277	06/29/ 2004	10/626824	04/07/ 2003	METHODS AND APPARATUS FOR RAPID CAPTURE OF PROGRAM IDENTIFIER DATA IN A BROADBAND TRANSCODER MULTIPLEXER	US	Granted
General Instrument Corporation	D482695	11/25/ 2003	29/166848	09/05/ 2002	FRONT BEZEL FOR CONSUMER ELECTRONIC PRODUCT	US	Granted
General Instrument Corporation	7061140	06/13/ 2006	10/417390	04/16/ 2003	POWER SUPPLY, AND APPARATUS AND METHOD FOR OPERATING A POWER SUPPLY	US	Granted
General Instrument Corporation	D486820	02/17/ 2004	29/170533	11/07/ 2002	ENCLOSURE FOR AN ELECTRONIC DEVICE	US	Granted
General Instrument Corporation	8245251	08/14/ 2012	10/314106	12/06/ 2002	METHOD AND APPARATUS FOR PREDICTIVE TUNING IN DIGITAL CONTENT RECEIVERS	US	Granted
General Instrument Corporation	NA	NA	13/584816	08/13/ 2012	METHOD AND APPARATUS FOR PREDICTIVE TUNING IN DIGITAL CONTENT RECEIVERS	US	Filed
General Instrument Corporation	7716712	05/11/ 2010	10/465339	06/18/ 2003	NARROWBAND INTERFERENCE AND IDENTIFICATION AND DIGITAL PROCESSING FOR CABLE TELEVISION RETURN PATH PERFORMANCE ENHANCEMENT	US	Granted

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	# **	Date		-	
		Date					
General	7671778	03/02/	10/465326	06/18/	DIGITAL SIGNAL	US	Granted
Instrument		2010		2003	PROCESSING SCHEME		
Corporation					FOR HIGH		
					PERFORMANCE HFC		
					DIGITAL RETURN PATH		
					SYSTEM WITH		
					BANDWIDTH		
					CONSERVATION		
General	D486495	02/10/	29/171935	12/03/	PORTION OF A FRONT	US	Granted
Instrument		2004		2002	PANEL FOR AN		
Corporation					ELECTRONIC DEVICE		
General	6944362	09/13/	10/364825	02/11/	OPTICAL SWITCH	US	Granted
Instrument		2005		2003	HAVING AN		
Corporation					AUTORESTORATION		
					FEATURE FOR		
					SWITCHING FROM A		
					BACKUP OPTICAL		
					PATH TO A PRIMARY		
					OPTICAL PATH		-
General	7024110	04/04/	11/186467	07/21/	OPTICAL SWITCH	US	Granted
Instrument		2006		2005	HAVING AN		
Corporation					AUTORESTORATION		
					FEATURE FOR		
					SWITCHING FROM A		
					BACKUP OPTICAL		
					PATH TO A PRIMARY		
C 1	27.4	37.4	10/647064	00/22/	OPTICAL PATH	TIC	T2'1 1
General	NA	NA	10/647064	08/22/	INTERCHIP	US	Filed
Instrument				2003	TRANSPORT BUS COPY		
Corporation	7120400	11/01/	10/77/1200	00/07/	PROTECTION	TIC	G . 1
General	7139490	11/21/	10/774308	02/06/	ALL-OPTICAL	US	Granted
Instrument		2006		2004	WAVELENGTH		
Corporation	7274720	00/25/	10/441224	05/10/	CONVERTER CIRCUIT	TIC	Cuantad
General	7274739	09/25/	10/441334	05/19/	METHODS AND	US	Granted
Instrument		2007		2003	APPARATUS FOR		
Corporation					IMPROVING VIDEO		
					QUALITY IN		
					STATISTICAL		
General	7151875	12/19/	10/638972	08/11/	MULTIPLEXING METHOD AND	US	Granted
Instrument	/1310/3	2006	10/036972	2003	APPARATUS FOR	US	Granted
Corporation		2000		2003	BALANCING THE		
Corporation					POWER OF OPTICAL		
					CHANNELS		
					TRAVERSING AN		
					OPTICAL ADD DROP		
					MULTIPLEXER		
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Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
C1	T. T. A	Date	20/272722	RT A	TV DODTAL 2	TIC	EH. J
General Instrument	NA	NA	29/372722	NA	TV PORTAL 2	US	Filed
Corporation							
General	NA	NA	11/859445	09/21/	VIDEO QUALITY OF	US	Filed
Instrument				2007	SERVICE		
Corporation					MANAGEMENT AND		
					CONSTRAINED		
					FIDELITY CONSTANT		
					BIT RATE VIDEO		
					ENCODING SYSTEMS AND METHODS		
General	NA	NA	11/756353	05/31/	CONSTRAINED	US	Filed
Instrument				2007	FIDELITY CONTRANT		
Corporation					BIT RATE VIDEO		
					ENCODING SYSTEMS		
3.5.1.1	27.4	27.4	11/100720	0.441.04	AND METHODS	****	7711 1
Modulus	NA	NA	11/109538	04/18/	HIGH DEFINITION	US	Filed
Video, Inc.				2005	SCALABLE ARRAY ENCODING SYSTEM		
					AND METHOD		
Netopia, Inc.	NA	NA	11/281767	11/16/	TERMINATION CIRCUIT	US	Filed
• •				2005	FOR BROADBAND		
					SIGNAL LINES		
General	NA	NA	11/539495	10/06/	INTERACTIVE	US	Filed
Instrument				2006	BANDWIDTH MODELING AND NODE		
Corporation					ESTIMATION		
General	5654989	08/05/	08/552684	11/03/	METHOD AND	US	Granted
Instrument		1997		1995	APPARATUS FOR AN IM		
Corporation					PROVED SYMBOL		
		0.619.01	00.4020240	02/24/	TIMING TRACKING	7.70	
General	5917885	06/29/	08/829760	03/31/	METHOD AND SYSTEM	US	Granted
Instrument Corporation		1999		1997	FOR TESTING SUBSCRIBER CIRCUITS		
Corporation					AND WIRING IN A		
					CABLE		
					COMMUNICATION		
					SYST EM		
General	5737461	04/07/	08/644029	05/09/	METHODS AND FILTER	US	Granted
Instrument Corporation		1998		1996	FOR ISOLATI NG UPSTREAM INGRESS		
Corporation					NOISE IN A BI-		
					DIRECTIONAL CABLE		
					SYSTEM		

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
C1	5740710	Date	00/725042	10/22/	METHODS AND SUTED	TIC	C
	5742713	04/21/ 1998	08/735843	10/23/ 1996	METHODS AND FILTER FOR ISOLATI NG	US	Granted
Instrument		1998		1990	UPSTREAM INGRESS		
Corporation					NOISE IN A BI-		
					DIRECTIONAL CABLE		
					SYSTEM SYSTEM		
General	5818825	10/06/	08/564983	11/29/	METHOD AND	US	Granted
Instrument		1998		1995	APPARATUS FOR ASSIG		
Corporation					NING		
					COMMUNICATIONS		
					CHANNELS I N A		
					CABLE TELEPHONY		
					SYSTEM		
	6275468	08/14/	08/690607	07/31/	AUTOMATIC TIMING	US	Granted
Instrument		2001		1996	ADJUSTMENT FOR		
Corporation					DIVERSE ROUTING OF		
					HFC SYSTEMS		
	6707829	03/16/	09/473344	12/28/	ENHANCED	US	Granted
Instrument		2004		1999	AUTOMATIC TIMING		
Corporation					ADJUSTMENT FOR		
					ALTERNATE ROUTING OF HFC SYSTEMS		
General	D413578	09/07/	29/080261	12/05/	CABLE ACCESS UNIT	US	Granted
Instrument	D+13376	1999	27/000201	1997	HOUSING	OS	Granted
Corporation		1777		1777	IIOOSII (O		
	6215667	04/10/	09/460137	12/13/	MOUNTING SYSTEM	US	Granted
Instrument		2001		1999	AND METHOD		
Corporation							
General	D417223	11/30/	29/101438	03/04/	CABLE MODEM	US	Granted
Instrument		1999		1999	HOUSING		
Corporation							
General	D416562	11/16/	29/098478	12/30/		US	Granted
Instrument		1999		1998	MODEM		
Corporation							
	6389068	05/14/	09/571068	05/15/	SLICED BANDWIDTH	US	Granted
Instrument		2002		2000	DISTORTION		
Corporation	60.4755.4	10/24/	10/007453	10/00/	PREDICTION LEAST MEAN POWER	TIC	G . 1
	6947554	10/24/	10/007452	12/29/	LEAST MEAN POWER	US	Granted
Instrument		1989		1986	CONSUMPTION IN		
Corporation					TELECOMUNICATIONS		
					SYSTEMS		

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
		Date					
General	6512472	01/28/	10/047959	01/15/	METHOD AND	US	Granted
Instrument		2003		2002	APPARATUS FOR		
Corporation					OPTIMIZING DYNAMIC		
					RANGE OF A		
					WIDEBAND ANALOG-		
					TO-DIGITAL CONVERTER		
General	6839870	01/04/	10/394937	03/21/	ERROR-CORRECTING	US	Granted
Instrument	0639670	2005	10/394937	2003	CODE INTERLEAVER	03	Oranicu
Corporation		2003		2003	CODE INTERELA VER		
General	7206357	04/17/	10/701978	11/04/	SYSTEM AND METHOD	US	Granted
Instrument	7200337	2007	10//01//0	2003	FOR AN IMPROVED		Grantea
Corporation					QUADRATURE		
F					UPCONVERTER FOR I/Q		
					MODULATION USING		
					INTERMEDIATE		
					FREQUENCY CARRIERS		
General	7050515	05/23/	09/999060	11/15/	FRONT END	US	Granted
Instrument		2006		2001	AUTOMATIC GAIN		
Corporation					CONTROL CIRCUIT		
					USING A CONTROL		
					WORD GENERATOR		
General	7239678	07/03/	11/337120	01/19/	FRONT END	US	Granted
Instrument		2007		2006	AUTOMATIC GAIN		
Corporation					CONTROL CIRCUIT		
					USING A CONTROL		
General	5586068	12/17/	08/164016	12/08/	WORD GENERATOR ADAPTIVE	US	Granted
Instrument	3380008	1996	06/104010	1993	ELECTRONIC FILTER	0.5	Granted
Corporation		1990		1993	ELECTRONIC FILTER		
General	7590991	09/15/	10/684182	10/09/	METHOD AND	US	Granted
Instrument	,,,,,,,,,,	2009	10/00/1102	2003	APPARATUS FOR		Oranica
Corporation					DETERMINING		
1					CHANNEL TO WHICH A		
					TV OR VCR IS TUNED		
General	7751338	07/06/	10/729179	12/06/	ESTABLISHMENT OF	US	Granted
Instrument		2010		2003	MULTIPLE UPSTREAM		
Corporation					DOCSIS LOGICAL		
					CHANNELS BASED		
	10.70				UPON PERFORMANCE		
General	6859488	02/22/	10/255286	09/25/	DETECTION OF	US	Granted
Instrument		2005		2002	IMPULSE NOISE USING		
Corporation					UNUSED CODES IN		
Can anol	7572047	00/11/	10/902621	07/15/	CDMA SYSTEMS	LIC	Crosstal
General	7573947	08/11/ 2009	10/892631	07/15/ 2004	SIMPLIFIED NARROWBAND	US	Granted
Instrument Corporation		Z009		ZUU4	EXCISION		
Corporation					LACISION		İ

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
General Instrument Corporation	5627833	Date 05/06/ 1997	08/552991	11/03/ 1995	DIGITAL ADDED MAIN LINE SYSTEM WITH POWER-UP AND POWER-DOWN FEATURES	US	Granted
General Instrument Corporation	5627833	08/22/ 2000	90/005186	12/14/ 1998	DIGITAL ADDED MAIN LINE SYSTEM WITH POWER-UP AND POWER-DOWN FEATURES	US	Granted
General Instrument Corporation	5473613	12/14/ 1998	90/005185	08/29/ 2000	DIGITAL ADDED MAIN LINE SYSTEM	US	Granted
General Instrument Corporation	7113486	09/26/ 2006	10/428698	05/01/ 2003	METHOD AND APPARATUS FOR MEASURING QUALITY OF SERVICE PARAMETERS OF NETWORKS DELIVERING REAL TIME MPEG VIDEO	US	Granted
General Instrument Corporation	7145912	12/05/ 2006	09/535676	03/23/ 2000	DEMULTIPLEXING A STATISTICALLY MULTIPLEXED MPEG TRANSPORT STREAM INTO CBR SINGLE PROGRAM TRANSPORT STREAMS	US	Granted
General Instrument Corporation	5878057	03/02/ 1999	08/540145	10/06/ 1996	HIGHLY PARALLEL CYCLIC REDUNDANCY CODE GENERATOR	US	Granted
General Instrument Corporation	6744833	07/20/ 1999	09/357649	06/01/ 2004	DATA RESYNCHRONIZATION BETWEEN MODULES SHARING A COMMON CLOCK	US	Granted
General Instrument Corporation	8054880	11/08/ 2011	11/269428	11/07/ 2005	PARALLEL RATE CONTROL FOR DIGITAL VIDEO ENCODER WITH MULTI-PROCESSOR ARCHITECTURE AND PICTURE-BASED LOOK- AHEAD WINDOW	US	Granted

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
		Date					
General	NA	NA	13/253937	10/05/	PARALLEL RATE	US	Filed
Instrument				2011	CONTROL FOR DIGITAL		
Corporation					VIDEO ENCODER WITH		
					MULTI-PROCESSOR		
					ARCHITECTURE AND		
					PICTURE-BASED LOOK- AHEAD WINDOW		
General	7477692	01/13/	11/610173	12/13/	VIDEO ENCODING FOR	US	Granted
Instrument	14//092	2009	11/0101/3	2006	SEAMLESS SPLICING	03	Granted
Corporation		2007		2000	BETWEEN ENCODED		
Corporation					VIDEO STREAMS		
General	5367534	11/22/	08/078943	06/16/	SYNCHRONOUS FLOW	US	Granted
Instrument	330,331	1994	00/070513	1993	CONTROL METHOD		Granca
Corporation				1,,,,			
General	5490169	02/06/	08/078676	06/16/	DECISION FEEDBACK	US	Granted
Instrument		1996		1993	EQUALIZER METHOD		
Corporation					AND APPARATUS		
General	5663982	09/02/	08/600117	02/12/	MODEM POOL DATA	US	Granted
Instrument		1997		1996	RATE ADJUSTING		
Corporation					METHOD		
General	5631952	05/20/	08/324956	10/18/	APPARATUS AND	US	Granted
Instrument		1997		1994	METHOD FOR MODEM		
Corporation					WAKE-UP WITH		
					AUTOBAND FUNCTIO N		
General	5870428	02/09/	08/566755	12/04/	METHOD AND	US	Granted
Instrument		1999		1995	APPARATUS FOR PROVI		
Corporation					DING REMOTE LOOP		
					BACK TESTING IN A		
					DIGITAL DATA SYSTEM		
					HAVIN G MUTIPLE PROTOCOLS		
General	5809085	09/16/	08/496048	06/28/	APPARATUS AND	US	Granted
Instrument	3609063		00/490040		METHOD FOR DETEC	US	Oranicu
Corporation		1998		1995	TING AMPLITUDE		
Corporation					MODULATED SIGNA LS		
					IN THE PRESENCE OF		
					IMPULSE DISTORTIONS		
General	5654982	08/05/	08/496640	06/29/	APPARATUS AND	US	Granted
Instrument		1997		1995	METHOD FOR DETER		
Corporation		****			MINING CARRIER		
					FREQUENCY OFFSE T		
					AND TIMING		
					FREQUENCY OFFSET		
					FOR DATA		
					TRANSMISSION AND		
					RECE		

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
General Instrument	5715277	Date 02/03/ 1998	08/508853	07/28/ 1995	APPARATUS AND METHOD FOR DETER	US	Granted
Corporation				1773	MINING A SYMBOL RATE AND A CRR IER FREQUENCY FOR DATA TRANSMI SSION AND RECEPTION		
General Instrument Corporation	5636244	06/03/ 1997	08/507175	07/26/ 1995	METHOD AND APPARATUS FOR INITI ALIZING EQUALIZER COEFFICIENTS USING PERIODIC TRAINING SEQUE NCES	US	Granted
General Instrument Corporation	5625646	04/29/ 1997	08/494914	06/26/ 1995	METHOD DEVICE DSP AND MODEM FO R EFFICIENT ECHO CANCELER PHAS E ROLL TRACKING	US	Granted
General Instrument Corporation	5671251	09/23/ 1997	08/395332	02/28/ 1995	METHOD AND APPARTUS FOR A DATA COMMUNCATION DEVICE TO SELECT IVELY OPERATE AS AN ANALOG MOD EM AS A DIGITAL MODEM AND AS A	US	Granted
General Instrument Corporation	5844940	12/01/ 1998	08/496988	06/30/ 1995	METHOD AND APPARATUS FOR DETER MINING TRANSMIT POWER LEVELS F OR DATA TRANSMISSION AND RECEP TION	US	Granted
General Instrument Corporation	6108354	08/22/ 2000	08/885710	06/30/ 1997	SYSTEM, DEVICE AND METHOD FOR DETECTING AND CHARACTERIZING I MPAIRMENTS IN A COMMUNICATION NETWORK	US	Granted
Arris Enterprises, Inc.	NA	NA	09/963,136	09/24/ 2001	Method of substituting content during program breaks	US	Filed
ARRIS Solutions, Inc.	NA	NA	09/995,056	11/26/ 2001	NETWORK PERFORMANCE MONITORING	US	Filed

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
Arris Enterprises, Inc.	NA	Date NA	10/186,210	06/27/ 2002	System and method for enabling focused navigation using filtering and direct-tune buttons	US	Filed
Arris Enterprises, Inc.	NA	NA	10/259,200	09/27/ 2002	PC media center and extension device for a home entertainment system	US	Filed
Arris Enterprises, Inc.	NA	NA	10/261,114	09/30/ 2002	System and method for speculative tuning	US	Filed
Arris Enterprises, Inc.	NA	NA	10/335,536	12/31/ 2002	Method and apparatus for an external event ticker	US	Filed
Arris Enterprises, Inc.	NA	NA	10/423,501	04/25/ 2003	Method and system for adjusting bandwidth in a hybrid-fiber coaxial network using an intelligently controlled dynamic RF combiner	US	Filed
ARRIS Solutions, Inc.	NA	NA	10/639,006	08/11/ 2003	Optimal provisioning and management of bandwidth in a video-on-demand services architecture	US	Filed
ARRIS Solutions, Inc.	NA	NA	10/683,141	10/09/ 2003	Method and System for timing media stream modifications	US	Filed
Arris Enterprises, Inc.	NA	NA	10/706,421	11/12/ 2003	Method and system for provisioning specification subsets for standards-based communication network devices	US	Filed
Arris Enterprises, Inc.	NA	NA	10/914,728	08/09/ 2004	Method for remotely updating software for devices in a broadband network	US	Filed
Arris Enterprises, Inc.	NA	NA	11/097,580	04/01/ 2005	Method and Apparatus for Broadcasting Data	US	Filed
ARRIS Solutions, Inc.	NA	NA	11/380,363	04/26/ 2005	Method and Device for Receiving and Providing Programs	US	Filed
Arris Enterprises, Inc.	NA	NA	11/200,313	08/09/ 2005	Very high speed cable modem for increasing bandwidth	US	Filed
Arris Enterprises, Inc.	NA	NA	11/209,699	08/24/ 2005	Logical content ad insertion	US	Filed

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
ARRIS	NA	Date NA	11/217,346	09/02/	Ad insertion in switched	US	Filed
Solutions, Inc.	INA	INA	11/21/,340	2005	broadcast network	US	riied
ARRIS	NA	NA	11/237,846	09/29/	Apparatus, method, and	US	Filed
Solutions, Inc.		- 11-	11,207,010	2005	computer program product		11100
					for controlling laser		
					wavelength stability		
ARRIS	NA	NA	11/262,729	11/01/	Generating ad insertion	US	Filed
Solutions, Inc.				2005	metadata at program file		
Arris	NA	NA	11/337,752	01/23/	load time Method and system for	US	Filed
Enterprises,	INA	INA	11/337,732	2006	transforming video streams	0.5	Med
Inc.				2000	using a multi-channel flow-		
					bonded traffic stream		
Arris	NA	NA	11/348,887	02/07/	Method for securely	US	Filed
Enterprises,				2006	distributing configuration		
Inc.	2.7.4	7.7.4	11/27/200	001151	information to a device	7.70	7711 1
Arris	NA	NA	11/356,228	02/16/	Method and system for	US	Filed
Enterprises, Inc.				2006	adjusting line interface level to compensate for		
me.					induced loss		
Arris	NA	NA	11/460,525	07/27/	APPARATUS AND	US	Filed
Enterprises,			ŕ	2006	METHOD FOR		
Inc.					INTELLIGENT		
					MULTIMEDIA		
					COMPRESSION AND		
Arris	NA	NA	11/460,543	07/27/	DISTRIBUTION Methods and Systems for	US	Filed
Enterprises,	1171	1171	117400,543	2006	Signal Insertion		Tiled
Inc.				2000			
Arris	NA	NA	10/592,193	09/09/	Digital ad insertion for	US	Filed
Enterprises,				2006	video-on-demand		
Inc.	27.4	374	11/526 110	00/22/		****	T11 1
Arris	NA	NA	11/526,110	09/22/	System and method for	US	Filed
Enterprises, Inc.				2006	digital multimedia stream conversion		
Arris	NA	NA	11/546,455	10/11/	Method and system for	US	Filed
Enterprises,		1111	1170 10,100	2006	delivering video content		11100
Inc.					using internet protocol over		
					a coaxial cable		
ARRIS	NA	NA	11/549,909	10/16/	Method and Device for	US	Filed
Solutions, Inc.				2006	Providing Programs to		
Arris	NA	NA	11/588,056	10/26/	Multiple End User Devices Method for providing	US	Filed
Enterprises,	INA	INA	11/300,030	2006	quality of service to a SIP-	US	THEG
Inc.				2000	based device over a		
					communication network		

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
		Date					
Arris	NA	NA	11/608,719	12/08/	SYSTEM AND METHOD	US	Filed
Enterprises,				2006	FOR MAINTAINING		
Inc.					CONTEXT DURING		
					HIERARCHICAL		
					NAVIGATION WITHIN A		
					USER INTERFACE		
ARRIS	NA	NA	11/698,266	01/25/	Targeted ad insertion	US	Filed
Solutions, Inc.	374	3.7.4	111600 227	2007		110	T211 1
Arris	NA	NA	11/688,227	03/19/	Method and system for	US	Filed
Enterprises,				2007	increasing power savings in		
Inc.			11/601 5/0	02/25/	a DOCSIS device	710	T211 1
ARRIS			11/691,543	03/27/	System and method for	US	Filed
Solutions, Inc.	374	27.4	11/056 506	2007	providing content to a user	TIG	T211 1
Arris	NA	NA	11/756,576	05/31/	Method and system for	US	Filed
Enterprises,				2007	location determination in		
Inc.	NT A	NT A	11/757 500	05/21/	cable TV networks	TIC	E1. 1
Arris	NA	NA	11/756,590	05/31/	Method and system for	US	Filed
Enterprises,				2007	monitoring data flow in an		
Inc. ARRIS	NA	NA	11/774,604	07/08/	IP network device	US	Filed
Solutions, Inc.	INA 	INA	11///4,004	2007	System and method for wirelessly broadcasting	03	rnea
Solutions, Inc.				2007	advertisements		
Arris	NA	NA	11/835,848	08/08/	CONTACT LIST FOR A	US	Filed
Enterprises,		INA	11/055,040	2007	HYBRID	0.5	Tilcu
Inc.				2007	COMMUNICATOR/REM		
me.					OTE CONTROL		
ARRIS	NA	NA	11/897,246	08/28/	Automatic dual receiver in	US	Filed
Solutions, Inc.			22.02.,210	2007	a multi-wavelength fiber		
					optic system		
ARRIS	NA	NA	11/860,638	09/25/	System, Method and	US	Filed
Solutions, Inc.			,	2007	Computer Readable		
·					Medium for Providing		
					Visual Content to a User		
ARRIS	NA	NA	11/936,840	11/08/	Method, system and	US	Filed
Solutions, Inc.				2007	computer readable medium		
					for providing media stream		
					fragments		
ARRIS	NA	NA	11/936,835	11/08/	System, method and	US	Filed
Solutions, Inc.				2007	computer readable medium		
					for providing media stream		
					fragments		
ARRIS	NA	NA	11/999,761	12/06/	Extended range for CWDM	US	Filed
Solutions, Inc.			1210 - 1	2007	optical transport	***	
ARRIS	NA	NA	12/001,930	12/12/	Virtual networks in a	US	Filed
Solutions, Inc.				2007	communication system		
					architecture		

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Arris Enterprises, Inc.	NA	NA	11/961,880	12/20/ 2007	Method and system for identifying and removing stale connections on a user device	US	Filed
ARRIS Solutions, Inc.	NA	NA	12/005,986	12/28/ 2007	Source optimized dynamic trickplay	US	Filed
ARRIS Solutions, Inc.	NA	NA	11/967,443	12/31/ 2007	METHOD AND DEVICE FOR RECEIVING AND TRANSMITTING MEDIA STREAMS	US	Filed
ARRIS Solutions, Inc.	NA	NA	12/098,459	04/07/ 2008	System, method and computer readable medium for managing program switch requests	US	Filed
ARRIS Solutions, Inc.	NA	NA	12/098,461	04/07/ 2008	System and method for generating and providing a program viewing indicator	US	Filed
ARRIS Solutions, Inc.	NA	NA	12/098,463	04/07/ 2008	System, method and computer readable medium for managing fast channel change requests	US	Filed
Arris Enterprises, Inc.	NA	NA	12/082,498	04/11/ 2008	Extended layer two tunneling protocol applications and architectures	US	Filed
Arris Enterprises, Inc.	NA	NA	12/127,677	05/27/ 2008	SYSTEM AND METHOD FOR FOCUSED NAVIGATION IN A MEDIA CENTER/EXTENSION DEVICE ARCHITECTURE	US	Filed
Arris Enterprises, Inc.	NA	NA	12/189,626	08/11/ 2008	METHOD AND SYSTEM FOR MOVING DISTINCTIVE TRAFFIC FLOWS TO A DIFFERENT PRIORITY SERVICE FLOW	US	Filed
ARRIS Solutions, Inc.	NA	NA	12/248,865	10/09/ 2008	METHOD AND SYSTEM FOR PERFORMING SIP LOOPBACK IN COMMUNICATION DEVICES	US	Filed
ARRIS Solutions, Inc.	NA	NA	12/254,828	10/20/ 2008	Fair Bandwidth redistribution algorithm	US	Filed

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
		Date					
ARRIS			12/273,668	11/19/	System And Methods For	US	Filed
Solutions, Inc.			Í	2008	Controlling Upstream		
					Transmission		
ARRIS	NA	NA	10/579,214	11/24/	SYSTEM TO PROVIDE	US	Filed
Solutions, Inc.	1111	1111	10/3/9,211	2008	INDEX AND		Tilea
bolutions, inc.				2000	METADATA FOR		
					CONTENT ON DEMAND		
Arris	NA	NA	12/315,814	12/05/	System and Method for	US	Filed
	INA	INA	12/313,014	2008	Conditional Access Key	03	Tiled
Enterprises,				2006	· · · · · · · · · · · · · · · · · · ·		
Inc.	TA TA	NT A	10/005 446	10/15/	Encryption	TIC	T'1 1
ARRIS	NA	NA	12/335,446	12/15/	DIGITAL PROGRAM	US	Filed
Solutions, Inc.				2008	SPLICE VISUAL		
					QUALITY		
ARRIS	NA	NA	12/335,436	12/15/	FLOW CONTROL IN A	US	Filed
Solutions, Inc.				2008	NETWORK DEVICE		
ARRIS			12/348,006	01/01/	System and Method for	US	Filed
Solutions, Inc.				2009	Providing Media Stream		
					Related Applications		
ARRIS	NA	NA	12/356,193	01/20/	DYNAMIC QUALITY	US	Filed
Solutions, Inc.			Í	2009	ADJUSTMENT BASED		
and Alcatel					ON CHANGING		
USA Sourcing,					STREAMING		
Inc.					CONSTRAINTS		
ARRIS	NA	NA	12/371,356	02/13/	Abstract-optical receiver	US	Filed
Solutions, Inc.	11/21	11/1	12/3/1,330	2009	with automatic distortion		Tired
Solutions, Inc.				2007	cancellation		
Arris	NA	NA	12/396,154	03/02/	Preventing Overwrite Of	US	Filed
	INA	INA	12/390,134	2009	Nonessential Code During	03	Filed
Enterprises,				2009			
Inc.	N.T.A.	NT A	12/41/ 055	04/02/	Essential Code Update	TIC	T2'1 1
Arris	NA	NA	12/416,955	04/02/	CMTS PLANT	US	Filed
Enterprises,				2009	TOPOLOGY FAULT		
Inc.					MANAGEMENT		
Arris	NA	NA	12/426,754	04/20/	INTELLIGENT TRAFFIC	US	Filed
Enterprises,				2009	OPTIMIZER		
Inc.							
Arris	NA	NA	12/434,509	05/01/	Apparatus and Method for	US	Filed
Enterprises,				2009	Distributing and Video		
Inc.					Content Using Existing		
					Network Wiring		
Arris	NA	NA	12/513,572	05/05/	Methods and Systems for	US	Filed
Enterprises,				2009	Substituting Programs in		
Inc.					Multiple Program MPEG		
					Transport Streams		
Arris	NA	NA	12/472,005	05/26/	Transferring a	US	Filed
Enterprises,	- 12 -	- ,- -	12 2,000	2009	Communication Session		
Inc.				2007	Communication Dession		
1110.					l	l	

Registered Owner	Patent #	Issue/ Grant	Application #	Filing Date	Title	Jurisdiction	Status
Arris Enterprises, Inc.	NA	Date NA	12/993,511	05/29/ 2009	FAST INITIALIZATION OF MULTI-MODE DEVICES	US	Filed
Arris Enterprises, Inc.	NA	NA	12/492,095	06/25/ 2009	METHOD FOR SIMULTANEOUSLY MANAGING HIGH- SPEED DATA AND VIDEO STREAMS IN A SINGLE MAC PROCESSING ENVIRONMENT	US	Filed
ARRIS Solutions, Inc.	NA	NA	12/503,086	07/15/ 2009	METHOD, CABLE MODEM AND A DEVICE FOR PROVIDING VIDEO TO A CUSTOMER PREMISES EQUIPMENT	US	Filed
Arris Enterprises, Inc.	NA	NA	13/056,991	07/31/ 2009	Adaptive Power Control CATV System	US	Filed
ARRIS Solutions, Inc.	NA	NA	12/565,792	09/24/ 2009	METHOD AND SYSTEM FOR TRANSMITTING CONTENT	US	Filed
Arris Enterprises, Inc.	NA	NA	12/610,698	11/02/ 2009	Providing Variable Bit Rate Video Streaming on Capacity Bounded Networks	US	Filed
Arris Enterprises, Inc.	NA	NA	12/617,940	11/13/ 2009	Method for Collection of Exception Logs in a DOCSIS Cable Modem	US	Filed
Arris Enterprises, Inc.	NA	NA	12/441,563	11/16/ 2009	Methods and Systems for Transport Stream Time Base Correction	US	Filed
Arris Enterprises, Inc.	NA	NA	12/635,796	12/11/ 2009	Media Access Control Domain Descriptor Filtering	US	Filed
Arris Enterprises, Inc.	NA	NA	12/644,814	12/22/ 2009	Integrated Transcoding	US	Filed
Arris Enterprises, Inc.	NA	NA	12/649,318	12/29/ 2009	Method and System for layer-3 subscriber login in a cable data network	US	Filed
Arris Enterprises, Inc.	NA	NA	12/689,796	01/19/ 2010	SYSTEM AND METHOD FOR FOCUSED NAVIGATION WITHIN A USER INTERFACE	US	Filed

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
Arris Enterprises, Inc.	NA	Date NA	12/690,713	01/20/ 2010	Content Validation Techniques	US	Filed
Arris Enterprises, Inc.	NA	NA	12/698,594	02/02/ 2010	Channel Scanning using Energy Detection	US	Filed
Arris Enterprises, Inc.	NA	NA	12/708,072	02/18/ 2010	CMTS Scheduling for Mixed RFoG and HFC Networks	US	Filed
Arris Enterprises, Inc.	NA	NA	12/711,928	02/24/ 2010	ELECTRICAL ADD/DROP MULTIPLEXER WITH PASS THROUGH PORT	US	Filed
Arris Enterprises, Inc.	NA	NA	12/725,611	03/17/ 2010	Single fiber bidirectional communication system with Fiber Amplifiers	US	Filed
Arris Enterprises, Inc.	NA	NA	12/749,146	03/29/ 2010	System and Method for Coordinating between Multiple Telephony Channels	US	Filed
Arris Enterprises, Inc.	NA	NA	12/749,950	03/30/ 2010	Method for Detecting and Prevention Unintentional Pulse Dialing	US	Filed
Arris Enterprises, Inc.	NA	NA	12/749,979	03/30/ 2010	Method for Detecting and Prevention Unintentional Pulse Dialing	US	Filed
Arris Enterprises, Inc.	NA	NA	12/750,010	03/30/ 2010	Method for Detecting and Prevention Unintentional Pulse Dialing	US	Filed
ARRIS Solutions, Inc.	NA	NA	12/768,579	04/27/ 2010	Coaxial Communication Active Tap Device and Distribution System	US	Filed
Arris Enterprises, Inc.	NA	NA	12/794,854	06/07/ 2010	Latency Based Random Early Discard for Network Packets	US	Filed
Arris Enterprises, Inc.	NA	NA	12/794,819	06/07/ 2010	PROVIDING FLEXIBLE RF CHANNEL TO PORT MAPPINGS	US	Filed
Arris Enterprises, Inc.	NA	NA	12/815,670	06/15/ 2010	Duplicate Address Detection Proxy in Edge Devices	US	Filed
Arris Enterprises, Inc.	NA	NA	12/825,651	06/29/ 2010	Integrated RF Feeds in Edge Devices	US	Filed
Arris Enterprises, Inc.	NA	NA	12/830,475	07/06/ 2010	Decoupling Software Loads for Customer Premise Equipment	US	Filed

Registered Owner	Patent #	Issue/ Grant	Application #	Filing Date	Title	Jurisdiction	Status
Owner		Date	Ħ	Date			
Arris Enterprises, Inc.	NA	NA	12/830,535	07/06/ 2010	Improving Upstream Ranging in Communications Devices	US	Filed
Arris Enterprises, Inc.	NA	NA	12/857,929	08/17/ 2010	Reducing Four Wave Mixing Ingress	US	Filed
Arris Enterprises, Inc.	NA	NA	12/859,971	08/20/ 2010	Improved Communication Processing Complex	US	Filed
Arris Enterprises, Inc.	NA	NA	12/859,828	08/20/ 2010	Improved Channel Scanning	US	Filed
Arris Enterprises, Inc.	NA	NA	12/862,820	08/25/ 2010	Improved Downstream Signaling Architecture	US	Filed
Arris Enterprises, Inc.	NA	NA	12/868,045	08/25/ 2010	Use of Physical Location and Timing Delay in Fraud Detection	US	Filed
Arris Enterprises, Inc.	NA	NA	12/870,950	08/30/ 2010	Call Delivery in Converged Networks	US	Filed
Arris Enterprises, Inc.	NA	NA	12/891,022	09/27/ 2010	ADVERTISEMENT INSERTION FOR VIDEO	US	Filed
Arris Enterprises, Inc.	NA	NA	12/898,055	10/05/ 2010	Packet-Rate Policing and Admission Control with Optional Stress Throttling	US	Filed
Arris Enterprises, Inc.	NA	NA	12/900,253	10/07/ 2010	ESTIMATING SYSTEM AND TRAFFIC DATA IN A DOCSIS SYSTEM	US	Filed
Arris Enterprises, Inc.	NA	NA	12/901,741	10/11/ 2010	Identifying Packet Loss in Streaming Data	US	Filed
Arris Enterprises, Inc.	NA	NA	12/906,612	10/18/ 2010	Node Segmentation	US	Filed
Arris Enterprises, Inc.	NA	NA	12/908,343	10/20/ 2010	Reduced Latency Channel Switching for IPTV	US	Filed
Arris Enterprises, Inc.	NA	NA	12/911,484	10/25/ 2010	Power Saving for Internet- Telephony Broadband Devices	US	Filed
Arris Enterprises, Inc.	NA	NA	12/911,709	10/25/ 2010	Video Stream Cue Detection	US	Filed

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
Arris	NA	Date NA	12/912,574	10/26/	Method for Fast	US	Filed
Enterprises,	INA	INA	12/912,374	2010	Reinstallation of Deployed	0.5	rnea
Inc.				2010	Devices		
Arris	NA	NA	12/942,789	11/09/	Replaceable and	US	Filed
Enterprises,				2010	Recoverable Data Storage		
Inc.					with Monitoring System		
Arris	NA	NA	12/945,603	11/12/	INITIAL PHASE	US	Filed
Enterprises,				2010	ESTIMATOR TO		
Inc.					ACCELERATE CARRIER PHASE RECOVERY		
Arris	NA	NA	12/950,804	11/19/	AUTOMATIC BACKUP	US	Filed
Enterprises,		1177	12/930,001	2010	LICENSE TO AVOID		Tited
Inc.					SERVICE		
					INTERRUPTIONS IN		
					CONTINUOUS SERVICE,		
					HIGH RELIABILITY		
Arris	NA	NA	12/977,165	12/23/	SYSTEMS Improved Generation of	US	Filed
Enterprises,	INA	INA	12/9//,103	2010	Radio Frequency Outputs	03	rnea
Inc.				2010	Radio Frequency Suspais		
Arris	NA	NA	12/978,604	12/26/	Method and System for	US	Filed
Enterprises,				2010	Prioritizing Initial		
Inc.					Maintenance of Cable		
A .	TA A	NT A	12/070 100	10/07/	Modems	LIC	T'1 1
Arris Enterprises,	NA	NA	12/979,109	12/27/ 2010	FIELD SERVICE MANAGEMENT	US	Filed
Inc.				2010	SYSTEMS AND		
inc.					METHODS		
Arris	NA	NA	12/979,982	12/28/	MONITORING AND	US	Filed
Enterprises,				2010	MANAGING A HTTP		
Inc.					SESSION INDEPENDENT		
					OF CLIENT AND		
					SERVER CONFIGURATIONS		
Arris	NA	NA	13/006,544	01/14/	Load Balancing In A	US	Filed
Enterprises,		1111	15,000,511	2011	DOCSIS System Based On		Tilea
Inc.					Weighting Upstream And		
					Downstream Channel		
			121005	044:5:	Loading Conditions		
Arris	NA	NA	13/009,525	01/19/	LOCAL CACHE	US	Filed
Enterprises,				2011	PROVIDING FAST CHANNEL CHANGE		
Inc. Arris	NA	NA	13/018,464	02/01/	Using EQAM Video De-	US	Filed
Enterprises,	177	11/1	13/010,707	2011	Jitter Memory For		11100
Inc.					Processing M-CMTS DEPI		
					PSP Priority Queues		

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
		Date					
Arris Enterprises, Inc.	NA	NA	13/019,892	02/02/ 2011	Reduced Crosstalk in a Multi-Channel Conductive Body Connector	US	Filed
Arris Enterprises, Inc.	NA	NA	13/019,749	02/02/ 2011	Method and Apparatus for Demand-Based Cable Upstream Channel Assignment	US	Filed
Arris Enterprises, Inc.	NA	NA	13/021,478	02/04/ 2011	STATELESS ADMISSION CONTROL	US	Filed
Arris Enterprises, Inc.	NA	NA	13/030,573	02/18/ 2011	Service Group Aggregation	US	Filed
Arris Enterprises, Inc.	NA	NA	13/032,783	02/23/ 2011	IDENTIFYING CLONED DEVICES	US	Filed
Arris Enterprises, Inc.	NA	NA	13/035,463	02/25/ 2011	Optimizing Communications Bandwidth using Anticipatory Transmission	US	Filed
Arris Enterprises, Inc.	NA	NA	13/034,841	02/25/ 2011	Messaging over Packet Switched Networks	US	Filed
Arris Enterprises, Inc.	NA	NA	13/040,391	03/04/ 2011	Internet Protocol Video Quality of Service	US	Filed
Arris Enterprises, Inc.	NA	NA	13/044,321	03/09/ 2011	DUAL-MODE DOWNLOAD MANAGER	US	Filed
Arris Enterprises, Inc.	NA	NA	13/045,247	03/10/ 2011	Reducing IP Addresses in a Multimedia Terminal Adapter	US	Filed
Arris Enterprises, Inc.	NA	NA	13/046,746	03/13/ 2011	METHOD AND SYSTEM FOR SECURED COMMUNICATION IN A NON-CTMS ENVIRONMENT	US	Filed
Arris Enterprises, Inc.	NA	NA	13/069,481	03/23/ 2011	Interface Port Configuration To Reduce Connection Interference	US	Filed
Arris Enterprises, Inc.	NA	NA	13/077,583	03/31/ 2011	Fiber Node Discovery using Ranging Delay Data	US	Filed
Arris Enterprises, Inc.	NA	NA	13/077,558	03/31/ 2011	Impairment Discovery using Automatic Geographical Clustering	US	Filed

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
Arris Enterprises, Inc.	NA	Date NA	13/087,430	04/15/ 2011	Using a DFA Unit for Classification List Processing	US	Filed
Arris Enterprises, Inc.	NA	NA	13/087,451	04/15/ 2011	Capturing Data for Quality Monitoring	US	Filed
Arris Enterprises, Inc.	NA	NA	13/097,987	04/29/ 2011	Bias Point Control Circuit for Externally Modulated Transmitter	US	Filed
Arris Enterprises, Inc.	NA	NA	13/097,401	04/29/ 2011	Improved Load Balancing for Network Devices	US	Filed
Arris Enterprises, Inc.	NA	NA	13/099,693	05/03/ 2011	Efficient Compression and Transport of Video Over a Network	US	Filed
Arris Enterprises, Inc.	NA	NA	13/099,458	05/03/ 2011	Providing Multiple Loads with Enhanced Firmware Loading	US	Filed
Arris Enterprises, Inc.	NA	NA	13/109,360	05/17/ 2011	Improved Resilient Channel and Broadcast Modulation	US	Filed
Arris Enterprises, Inc.	NA	NA	13/112,131	05/20/ 2011	DATA STORAGE METHODS AND APPARATUSES FOR REDUCING THE NUMBER OF WRITES TO FLASH-BASED STORAGE	US	Filed
Arris Enterprises, Inc.	NA	NA	13/112,001	05/20/ 2011	Service Class ID for Multimedia Streams over IP Networks	US	Filed
Arris Enterprises, Inc.	NA	NA	13/113,431	05/23/ 2011	Obscuring Advertisements during Trick Mode Operation	US	Filed
Arris Enterprises, Inc.	NA	NA	13/117,619	05/27/ 2011	SELECTIVELY DISABLING OR ENABLING MULTIPLE TRANSMIT CHANNEL MODE OPERATIONS FOR CABLE MODEMS CAPABLE THEREOF	US	Filed
Arris Enterprises, Inc.	NA	NA	13/151,257	06/01/ 2011	Mitigating Noise and OBI in RFoG Networks	US	Filed
Arris Enterprises, Inc.	NA	NA	13/155,443	06/08/ 2011	Group of Pictures Size Adjustment	US	Filed

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
Arris Enterprises, Inc.	NA	Date NA	29/394,533	06/17/ 2011	Modem Enclosure	US	Filed
Arris Enterprises, Inc.	NA	NA	13/163,784	06/20/ 2011	Burst Efficient Fast Program Acquisition	US	Filed
Arris Enterprises, Inc.	NA	NA	13/164,798	06/21/ 2011	Multi-Level Flow Control	US	Filed
Arris Enterprises, Inc.	NA	NA	13/164,817	06/21/ 2011	Scheduling for Mixed RFOG and HFC Networks based on Transmission History	US	Filed
Arris Enterprises, Inc.	NA	NA	13/173,628	06/30/ 2011	Edge-QAM and M-CMTS Core Timing Lock	US	Filed
Arris Enterprises, Inc.	NA	NA	13/175,681	07/01/ 2011	OVERLAY SYSTEM WITH DIGITAL OPTICAL TRANSMITTER FOR DIGITIZED NARROWCAST SIGNALS	US	Filed
Arris Enterprises, Inc.	NA	NA	13/185,068	07/18/ 2011	Dual Use Light Source In An Electronic Device	US	Filed
Arris Enterprises, Inc.	NA	NA	13/187,564	07/21/ 2011	Power Saving for Broadband Communications Devices	US	Filed
Arris Enterprises, Inc.	NA	NA	13/191,774	07/27/ 2011	Dynamic Zoning for Targeted Ad Insertion	US	Filed
Arris Enterprises, Inc.	NA	NA	13/191,859	07/27/ 2011	Providing Secure Access into a Peripheral Device	US	Filed
Arris Enterprises, Inc.	NA	NA	13/194,560	07/29/ 2011	Method and System for Fast Channel Change in a Communication Device	US	Filed
Arris Enterprises, Inc.	NA	NA	13/204,450	08/05/ 2011	HIGH-DENSITY MULTI- CHANNEL QAM MODULATOR USING AN IDFT/IFFT AND POLYPHASE FILTER BANK	US	Filed
Arris Enterprises, Inc.	NA	NA	13/209,021	08/12/ 2011	Channel Assignment based on Subscribed Service Level	US	Filed

Registered Owner	Patent #	Issue/ Grant Date	Application #	Filing Date	Title	Jurisdiction	Status
Arris Enterprises, Inc.	NA	NA	13/209,549	08/15/ 2011	Detecting the Presence of Stimulated Brillouin Scattering in a Fiber of a Communication System	US	Filed
Arris Enterprises, Inc.	NA	NA	13/210,553	08/16/ 2011	VIDEO STREAMING USING ADAPTIVE TCP WINDOW SIZE	US	Filed
Arris Enterprises, Inc.	NA	NA	13/220,067	08/29/ 2011	Adaptive Multicasting	US	Filed
Arris Enterprises, Inc.	NA	NA	13/223,633	09/01/ 2011	Preserving Voltage On Telephone Line Over Hard Reset During Planned Outage	US	Filed
Arris Enterprises, Inc.	NA	NA	13/234,372	09/16/ 2011	Maintaining Viewer Activity Information Of A Recorded Program For Program Deletion Decisions	US	Filed
Arris Enterprises, Inc.	NA	NA	13/235,661	09/19/ 2011	DIGITIZER FOR USE IN AN OVERLAY SYSTEM WITH DIGITAL OPTICAL TRANSMITTER FOR DIGITIZED NARROWCAST SIGNALS	US	Filed
Arris Enterprises, Inc.	NA	NA	13/236,246	09/19/ 2011	Adaptively Delivering Services To Client Devices Over A Plurality Of Networking Technologies In A Home Network	US	Filed
Arris Enterprises, Inc.	NA	NA	13/237,290	09/20/ 2011	System For Increasing Isolation Boundary Withstand Voltage	US	Filed
Arris Enterprises, Inc.	NA	NA	13/252,275	10/04/ 2011	Media stream distribution system	US	Filed
Arris Enterprises, Inc.	NA	NA	13/252,678	10/04/ 2011	Agile Block Downconversion for the Distribution of Narrowcast Services	US	Filed
ARRIS Solutions, Inc.	NA	NA	13/270,877	10/11/ 2011	Method and Apparatus of Multiplexing Media Streams	US	Filed

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant Date	#	Date			
Arris Enterprises, Inc.	NA	NA	13/270,493	10/11/ 2011	Method and System for Transporting DOCSIS Communication Signals over a Passive Optical Network	US	Filed
Arris Enterprises, Inc.	NA	NA	13/270,398	10/11/ 2011	MANAGING BATTERY POWER USAGE OF A LOST MOBILE DEVICE TO EXTEND SEARCH TIME FOR THE LOST MOBILE DEVICE	US	Filed
Arris Enterprises, Inc.	NA	NA	13/270,624	10/11/ 2011	Legacy Equipment Adaptation In A Cable- Based System To Process Upstream Transmissions In An Expanded Frequency Spectrum	US	Filed
Arris Enterprises, Inc.	NA	NA	13/275,229	10/17/ 2011	Audio Normalization for Digital Video Broadcasts	US	Filed
Arris Enterprises, Inc.	NA	NA	13/283,030	10/27/ 2011	TERMINAL ADAPTER FOR ENABLING NON-IP- ENCAPSULATED VIDEOS TO BE RECEIVED AT SUBSCRIBER PREMISES FOR PLAYBACK ON AN IP DEVICES	US	Filed
Arris Enterprises, Inc.	NA	NA	13/283,699	10/28/ 2011	Improved Method and Apparatus for a Videophone	US	Filed
Arris Enterprises, Inc.	NA	NA	13/297,389	11/16/ 2011	CENTRAL CONTROLLER TO MANAGE NETWORK RESOURCES ACROSS A GROUP OF PLAYBACK DEVICES TO CONTROL STREAMING VIDEO QUALITY ACROSS THE GROUP OF PLAYBACK DEVICES	US	Filed
Arris Enterprises, Inc.	NA	NA	13/324,612	12/13/ 2011	Bandwidth Sharing and Statistical Multiplexing between Video and Data Streams	US	Filed

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
A	NT A	Date	12/221 152	12/20/	Mathadand Cretain for	TIC	Tit. J
Arris Enterprises,	NA	NA	13/331,153	12/20/ 2011	Method and System for Using an Integrated	US	Filed
Inc.				2011	Subscriber Identity Module		
me.					in a Network Interface Unit		
ARRIS	NA	NA	13/331,476	12/20/	Method and Device for	US	Filed
Solutions, Inc.			ĺ	2011	Providing Services to End		
					User Devices		
Arris	NA	NA	13/338,067	12/27/	System and Method for	US	Filed
Enterprises,				2011	Processing Multiple		
Inc.					Broadcast Multimedia		
Arris	NA	NA	13/351,955	01/17/	Streams System and Method of	US	Filed
Enterprises,	INA	INA	15/551,955	2012	Contextual Pre-Tuning	03	riied
Inc.				2012	Contextual Tre Tuning		
Arris	NA	NA	13/359,623	01/27/	Optical Transmitter with	US	Filed
Enterprises,			·	2012	Multiple Isolated Inputs		
Inc.					and Signal Combining		
					Network		
Arris	NA	NA	13/361,154	01/30/	Broadband Linearizer with	US	Filed
Enterprises,				2012	Combined Second and Third Order Generation		
Inc.					with Adjustable Tilt		
Arris	NA	NA	13/372,995	02/14/	Cooperative Transcoding	US	Filed
Enterprises,		1111	10,0,2,550	2012	To Multiple Streams		11100
Inc.					•		
Arris	NA	NA	13/397,386	02/15/	Specifying and Enforcing	US	Filed
Enterprises,				2012	IPv4 and IPv6 CPE Limits		
Inc.							
Arris	NA	NA	13/401,371	02/21/	Method and System for	US	Filed
Enterprises, Inc.				2012	Processing Voice Traffic from a Multi-Channel Link		
inc.					into a VoIP Network over a		
					Broadband Network		
Arris	NA	NA	13/405,437	02/27/	Adaptable DOCSIS eSAFE	US	Filed
Enterprises,				2012	Software/Firmware		
Inc.					Download System		
Arris	NA	NA	13/407,383	02/28/	Providing System Reset	US	Filed
Enterprises,				2012	Information to Service		
Inc.	NI A	NIA	12/410 209	02/12/	Provider Mathod and System for	LIC	Elled
Arris Enterprises,	NA	NA	13/419,208	03/13/2012	Method and System for Allocating Bandwidth	US	Filed
Inc.				2012	based on Transmission		
1110.					Power of Devices		
					Transmitting over		
					Communications Channels		
					in a Network		

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
ADDIG	3.7.4	Date	12/420 565	02/14/	0 11 10 0	110	E1 1
ARRIS Solutions, Inc.	NA	NA	13/420,565	03/14/2012	Switched Stream Server Architecture	US	Filed
Arris	NA	NA	13/422,537	03/16/	Sharing Resources in a	US	Filed
Enterprises, Inc.	INA	INA	13/422,337	2012	Local Serving Office	03	Tiled
Arris Enterprises, Inc.	NA	NA	13/433,520	03/29/ 2012	Displaying Dynamic Host Configuration Protocol (DHCP) Transaction States using a DHCP Relay Agent	US	Filed
Arris Enterprises, Inc.	NA	NA	13/433,493	03/29/ 2012	QoS for adaptable HTTP video	US	Filed
Arris Enterprises, Inc. expires 4/19/13	NA	NA	61/635,573	04/19/ 2012	Measuring the Quality of Experience Levels & Locating the Sources of Problems for Various Service Types in a Cable Distribution System	US	Filed
ARRIS Solutions, Inc.	NA	NA	13/451,566	04/20/ 2012	CLASSIFICATION OF HTTP MULTIMEDIA TRAFFIC PER SESSION	US	Filed
Arris Enterprises, Inc.	NA	NA	13/452,202	04/20/ 2012	OBI Detection and Avoidance in Broadband Devices	US	Filed
Arris Enterprises, Inc. expires 4/26/13	NA	NA	61/638,594	04/26/ 2012	Automatic Recover from Non-Functional Download	US	Filed
Arris Enterprises, Inc.	NA	NA	13/459,810	04/30/ 2012	Improved Adaptive Streaming Through the Use of Non-Local Information	US	Filed
ARRIS Solutions, Inc.	NA	NA	13/468,082	05/10/ 2012	Replacing Ads in HTTP- based Manifest Driven Video Transport	US	Filed
Arris Enterprises, Inc.	NA	NA	13/471,023	05/14/ 2012	Embedded Control Data in Communications Systems	US	Filed
Arris Enterprises, Inc.	NA	NA	13/476,494	05/21/ 2012	Controller to Manage Streaming Video of Playback Devices	US	Filed
ARRIS Solutions, Inc. expires 6/6/13	NA	NA	61/656,031	06/06/ 2012	Optimized Digital Cable Transmission Format	US	Filed
Arris Enterprises, Inc.	NA	NA	13/492,349	06/08/ 2012	Selectively Ordering Application of Provisioning from Multiple Sources for Network Equipment	US	Filed

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
		Date					
Arris	NA	NA	13/493,161	06/11/	Adjusting Transmission	US	Filed
Enterprises,				2012	Power in Customer Premise		
Inc.					Equipment		
Arris	NA	NA	13/495,526	06/13/	Load Sharing among	US	Filed
Enterprises,				2012	Loosely Coupled or		
Inc.					Independent Video Servers		
Arris	NA	NA	13/525,777	06/18/	Quickly Diagnose Service	US	Filed
Enterprises,				2012	and Component Related		
Inc.					Issues on a Cable Modem,		
					Multimedia Terminal		
					Adapter, or Gateway		
Arris	NA	NA	13/528,439	06/20/	Improved Forward Error	US	Filed
Enterprises,				2012	Correction for		
Inc.	77.	37.4	121521010	0.610.71	Communications Systems	****	7711
Arris	NA	NA	13/534,040	06/27/	Harnessing Idle Computing	US	Filed
Enterprises,				2012	Resources in Customer		
Inc.	D.T.A.	37.4	10/5/5/17/170	07/10/	Premise Equipment	TIC	T2'1 1
Arris	NA	NA	13/547,179	07/12/	Formed shielding feature	US	Filed
Enterprises,				2012			
Inc. Arris	NA	NA	13/550,712	07/17/	Mathad and Amounting for	US	Filed
Enterprises,	INA	INA	15/550,/12	2012	Method and Apparatus for Scheduling Broadcast	US	rnea
Inc.				2012	Information		
Arris	NA	NA	13/550,894	07/17/	Restricting Use of an	US	Filed
Enterprises,	1171	11/1	13/330,074	2012	Endpoint Line to Fax-Only	0.5	Tiled
Inc.				2012	Enapoint Line to Fux Only		
Arris	NA	NA	13/555,038	07/20/	SMART CAROUSEL	US	Filed
Enterprises,				2012			
Inc.							
Arris	NA	NA	13/558,650	07/26/	Structuring Dynamic	US	Filed
Enterprises,				2012	Advertisement Breaks in		
Inc.					Video Manifest Files		
Arris	NA	NA	13/558,943	07/26/	User-Directed Digital	US	Filed
Enterprises,				2012	Video Recorder Resolution		
Inc.					Selection		
Arris	NA	NA	13/566,438	08/03/	System and Method for	US	Filed
Enterprises,				2012	Dynamic Electronic		
Inc.					Program Guide Data		
ABBIG	77.4	274	10/565 555	00/02:	Downloads	7.10	F11 :
ARRIS	NA	NA	13/566,666	08/03/	Method and System for	US	Filed
Solutions, Inc.				2012	Scalable Representation,		
					Storage, Transmission and		
					Reconstruction of Media		
					Streams		

Registered Owner	Patent #	Issue/ Grant	Application	Filing	Title	Jurisdiction	Status
Owner		Date Date	#	Date			
Arris Enterprises, Inc. expires 8/10/13	NA	NA	61/681,959	08/10/ 2012	Aggregate Data Streams in Relational Database Systems	US	Filed
Arris Enterprises, Inc.	NA	NA	13/585,527	08/14/ 2012	Concurrent Call Handover	US	Filed
Arris Enterprises, Inc.	NA	NA	13/589,448	08/20/ 2012	Trickplay Control Using Finite State Automata	US	Filed
ARRIS Solutions, Inc.	NA	NA	13/591,015	08/21/ 2012	Method and Device for Receiving and Providing Programs	US	Filed
Arris Enterprises, Inc.	NA	NA	13/591,052	08/21/ 2012	Context-Sensitive Interactive Television Ticker	US	Filed
Arris Enterprises, Inc. expires 8/22/13	NA	NA	61/691,878	08/22/ 2012	Measuring the Quality of Experience Levels & Locating the Sources of Problems for Various Service Types in a Cable Distribution System	US	Filed
Arris Enterprises, Inc.	NA	NA	13/606,387	09/07/ 2012	Measuring Quality of Experience and Identifying Problem Sources for Various Service Types	US	Filed
Arris Enterprises, Inc.	NA	NA	13/609,319	09/11/ 2012	Method and system for infield recovery of security when a certificate authority has been compromised	US	Filed
Arris Enterprises, Inc.	NA	NA	13/614,952	09/13/ 2012	QOE Feedback based Intelligent Video Transport Stream Tuning	US	Filed
Arris Enterprises, Inc.	NA	NA	13/616,118	09/14/ 2012	Video Delivery over IP Packet Networks	US	Filed
Arris Enterprises, Inc.	NA	NA	13/631,404	09/28/ 2012	Handover of On-Hold Session between Fixed Packet Network and Cellular Network	US	Filed
Arris Enterprises, Inc. expires 9/29/13	NA	NA	61/707,903	09/29/ 2012	Video Playback and Live Television Roaming	US	Filed

Registered Owner	Patent #	Issue/ Grant Date	Application #	Filing Date	Title	Jurisdiction	Status
Arris Enterprises, Inc.	NA	NA	13/632,719	10/01/ 2012	Gateway-based Video Client-Proxy Sub-System for Managed Delivery of A/V Content using Fragmented Method in a Stateful System	US	Filed
Arris Enterprises, Inc.	NA	NA	13/645,966	10/05/ 2012	Consolidation of Time- Compressible Time-Offset Media Streams	US	Filed
Arris Enterprises, Inc.	NA	NA	13/646,194	10/05/ 2012	Dynamic Video Advertising using Auction-based Bidding	US	Filed
Arris Enterprises, Inc.	NA	NA	13/646,899	10/08/ 2012	Compression of Data Captures for Encrypted or Non-Interesting Content	US	
Arris Enterprises, Inc.	NA	NA	13/650,209	10/12/ 2012	Optimized QAM Transmission	US	Filed
ARRIS Solutions, Inc. expires 10/15/13	NA	NA	61/714,025	10/15/ 2012	Hybrid Network and Home Architecture for IPTV Ad Insertion	US	Filed
ARRIS Solutions, Inc.	NA	NA	13/653,050	10/16/ 2012	Method and System for Streamlining Multimedia Transmissions	US	Filed
Arris Enterprises, Inc.	NA	NA	13/664,154	10/30/ 2012	Remote Control Device with Integrated Display Screen for Controlling a Digital Video Recorder	US	Filed
Arris Enterprises, Inc.	NA	NA	13/669,050	11/05/ 2012	Alternative Set-top Gateway Source for DOCSIS 3.0	US	Filed
Arris Enterprises, Inc.	NA	NA	13/668,928	11/05/ 2012	Low-Latency Cost- Effective Upstream Scheduler	US	Filed
Arris Enterprises, Inc.	NA	NA	13/669,608	11/06/ 2012	Communication System and Techniques for Transmission from Source to Destination	US	Filed
Arris Enterprises, Inc.	NA	NA	61/727,947	11/19/ 2012	Power Saving Mode for MoCA 1.1 Clients	US	Filed
Arris Enterprises, Inc.	NA	NA	13/683,168	11/21/ 2012	AUTOMATED DOUBLE FIRMWARE UPGRADE	US	Filed

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
-		Date				-	
Arris	NA	NA	13/709,848	12/10/	Video Frame Alignment in	US	Filed
Enterprises,				2012	Adaptive Bitrate Streaming		
Inc.	D.T.A.	NT A	10/710 506	10/11/	No. 1 1 1 C . C	TIC	T2'1 1
Arris	NA	NA	13/710,526	12/11/ 2012	Method and System for	US	Filed
Enterprises, Inc.				2012	Denying Cable Modem Access to a Broadband		
me.					Network		
ARRIS	NA	NA	13/727,162	12/26/	Customer Premise	US	Filed
Solutions, Inc.	1171	1171	13/72/,102	2012	Equipment Fraud Detection		Tiled
ARRIS	NA	NA	13/728,550	12/27/	Detecting Sub-Node Plant	US	Filed
Solutions, Inc.			20.720,000	2012	Service Conditions Using		
,					Subscriber Addresses		
ARRIS	NA	NA	13/763,601	2/8/20	Managed Adaptive	US	Filed
Solutions, Inc.			·	13	Streaming		
Arris	NA	NA	13/770,024	2/19/2	Prioritized Channel	US	Filed
Enterprises,				013	Scanning		
Inc.					-		
Arris	NA	NA	13/770,380	2/19/2	Method and System for	US	Filed
Enterprises,				013	Selecting from a Plurality		
Inc.					of Configuration Profile		
					Records for Channel		
					Bonding Operation		
Arris	NA	NA	13/772,486	2/21/2	Low-Latency Quality of	US	Filed
Enterprises,				013	Service		
Inc.	27.4	D.T.A	12/22 (00	2/27/2	D	TIC	T2'1 1
Arris	NA	NA	13/777,689	2/26/2 013	Designing Integrated	US	Filed
Enterprises, Inc.				013	Circuits for High Thermal Reliability		
ARRIS	NA	NA	13/788,508	3/7/20	Location-Based Data	US	Filed
Solutions, Inc.		INA	13/700,300	13	Stream Composition	0.5	Tilcu
Arris	NA	NA	13/798,055	3/12/2	Packet Reflection	US	Filed
Enterprises,		1111	13/7/0,000	013	Identification in CPE		Tilea
Inc.				010	Devices		
ARRIS	NA	NA	13/804,745	3/14/2	Digitization and Transport	US	Filed
Solutions, Inc.				013	of Return Paths Employing		
					Different Frequency		
					Spectrums		
Arris	NA	NA	13/832,756	3/15/2	M-CMTS, Edge-QAM and	US	Filed
Enterprises,				013	Upstream Receiver Core		
Inc.					Timing Synchronization		
Arris	NA	NA	13/833,450	3/15/2	Re-Synchronization of	US	Filed
Enterprises,				013	Timing between		
Inc.	77.		10/0/2/2	011-71-	Communication Devices	7.70	7711
Arris	NA	NA	13/843,104	3/15/2	Identifying a Signal Route	US	Filed
Enterprises,				013	for Delivery of Video-on-		
Inc.					Demand to a Subscriber		
					Terminal		

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant Date	#	Date			
Arris Enterprises, Inc.	NA	NA	13/850,495	3/26/2 013	Cable Television Cloud Computing Services	US	Filed
Arris Enterprises, Inc.	NA	NA	13/854,902	4/1/20 13	Network-administered Conference Call Using SIP Messaging	US	Filed
Arris Enterprises, Inc.	NA	NA	13/854,906	4/1/20 13	Mobile Communication Device Using Android Framework to Facilitate Handover of On-Hold Session between Fixed Packet Network and Cellular Network	US	Filed
Arris Enterprises, Inc.	NA	NA	13/854,908	4/1/20 13	Enhanced Services Based Upon Information Associated with a Wireless Access Point	US	Filed
Arris Enterprises, Inc.	NA	NA	61/772,242	3/4/20 13	MoCA Setup and WiFi Pairing	US	Filed
ARRIS Solutions, Inc.	NA	NA	61/774,011	3/7/20 13	Optical Transmitter with AM and FM Modulation	US	Filed
Arris Enterprises, Inc.	NA	NA	61/774,061	3/7/20 13	An Extension to Materialized View Constructs in Relational Database Query Language	US	Filed
ARRIS Solutions, Inc.	NA	NA	61/774,397	3/7/20 13	A Method for Qualifying a Residence for WiFi Service	US	Filed
Arris Enterprises, Inc.	NA	NA	61/775,150	3/8/20 13	Improving Performance of Channel Changes using Dynamic Bonding Change	US	Filed
Arris Enterprises, Inc.	NA	NA	61/779,752	3/13/2 013	Detecting Plant Degradation using Peer- Comparison	US	Filed
Arris Enterprises, Inc.	NA	NA	61/781,223	3/14/2 013	Channel Tuning Performance Acceleration by Periodically Acquiring Channel Tuning Information	US	Filed
Arris Enterprises, Inc.	NA	NA	61/783,633	3/14/2 013	Impedance Balanced Differential Thermistor	US	Filed
ARRIS Solutions, Inc.	NA	NA	61/783,899	3/14/2 013	Optimizing Sliding Window View Constructs in Relational Database	US	Filed

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
		Date					
Arris	NA	NA	61/790,171	3/15/2	Parallel Low-Density Parity	US	Filed
Enterprises,				013	Check (LDPC)		
Inc.					Accumulation		
Arris	NA	NA	61/800,689	3/15/2	Hybrid Promotion Cache	US	Filed
Enterprises,				013	for Video Delivery Services		
Inc.							
General	NA	NA	13/662600	NA	SEAMLESS	US	Filed
Instrument					AUTHORIZED ACCESS		
Corporation					TO AN ELECTRONIC		
					DEVICE		
General	NA	NA	13/827668	NA	ADVERTISEMENT	US	Filed
Instrument					INSERTION		
Corporation							
General	NA	NA	13/793650	NA	INFERRING ATTRIBUTE	US	Filed
Instrument					AND ITEM		
Corporation					PREFERENCES		
General	NA	NA	13/794735	NA	SYSTEMS AND	US	Filed
Instrument					METHODS FOR		
Corporation					INTERACTIVE		
~ .		27.1	12/002107	274	BROADCAST CONTENT	770	
General	NA	NA	13/802185	NA	METHOD AND	US	Filed
Instrument					APPARATUS FOR		
Corporation					ENABLING DISCOVERY		
					AND		
					COMMUNICATIONS		
					BETWEEN UNRELATED BROWSER SESSIONS		
General	NA	NA	13/798391	NA	CONTEXT	US	Filed
Instrument	INA	NA	13/190391		DEMOGRAPHIC	03	Tilcu
Corporation					DETERMINATION		
Corporation					SYSTEM		
General	NA	NA	13/831096	NA	AUTOMATED	US	Filed
Instrument			20.00200		TRANSFER OF A		
Corporation					UNIQUE IDENTIFIER		
1					FOR A CONSUMER		
					ELECTRONICS DEVICE		
General	NA	NA	13/798367	NA	CONTEXT EMOTION	US	Filed
Instrument					DETERMINATION		
Corporation					SYSTEM		
General	NA	NA	29/448217	NA	GRAPHICAL USER	US	Filed
Instrument					INTERFACE FOR A		
Corporation					DISPLAY SCREEN		
General	NA	NA	13/741616	NA	DISPLAYING A	US	Filed
Instrument					STATISTICALLY		
Corporation					SIGNIFICANT		
					RELATION		

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
General Instrument Corporation	NA	Date NA	13/798337	NA	CONTEXT HEALTH DETERMINATION SYSTEM	US	Filed
General Instrument Corporation	NA	NA	61/590805	NA	New Level Parameter Updating Table in CABAC for HEVC	US	Inactive
General Instrument Corporation	NA	NA	61/730953	NA	THE MODIFICATIONS OF SYNTAX RELATED TO TRANSFORM SKIP FOR HEVC	US	Filed
General Instrument Corporation	NA	NA	61/794814	NA	DEVICES AND METHODS FOR MODIFICATIONS OF SYNTAX RELATED TO TRANSFORM SKIP FOR HIGH EFFICIENCY VIDEO CODING (HEVC)	US	Filed
General Instrument Corporation	NA	NA	13/830898	NA	DEVICES SYSTEMS AND METHODS FOR MANAGING AND ADJUSTING ADAPTIVE STREAMING TRAFFIC	US	Filed
General Instrument Corporation	NA	NA	13/777090	NA	RESPONDING TO A POSSIBLE PRIVACY LEAK	US	Filed
General Instrument Corporation	NA	NA	13/762942	NA	IDENTIFYING AND PREVENTING LEAKS OF SENSITIVE INFORMATION	US	Filed
General Instrument Corporation	NA	NA	13/794763	NA	TELESTRATION SYSTEM FOR COMMAND PROCESSING	US	Filed
General Instrument Corporation	NA	NA	13/802073	NA	ONLINE PERSONALIZATION UPDATE SYSTEM FOR EXTERNALLY ACQUIRED KEYS	US	Filed
General Instrument Corporation	NA	NA	13/841192	NA	REMOTE TRIGGER COMMAND TO RECALL COMPLEX NAVIGATION	US	Filed

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
General Instrument Corporation	NF	Date NF	NF	NF	System and method for associating a URI with an IR (or RF) command of a remote control device	US	combine d with and filed under CS3993 5
General Instrument Corporation	NA	NA	13/754101	NA	AUTHENTICATION USING A SUBSET OF A USER-KNOWN CODE SEQUENCE	US	Filed
General Instrument Corporation	NA	NA	13/830616	NA	PROVIDING USER CONTENT WITH STREAMED MEDIA CHUNKS	US	Filed
General Instrument Corporation	NA	NA	13/794753	NA	SIGNATURE MATCHING OF CORRUPTED AUDIO SIGNAL	US	Filed
General Instrument Corporation	NA	NA	13/837679	NA	METHOD AND APPARATUS FOR ADDING AND DISPLAYING AN INLINE REPLY WITHIN A VIDEO MESSAGE	US	Filed
General Instrument Corporation	NA	NA	13/760302	NA	METHOD OF OPERATING AN IP CLIENT	US	Filed
General Instrument Corporation	NF	NF	NF	NF	Method for digital rights management in a modal computing system	US	dispositi on changed to Not Pursue per attorney instructi ons on 3/1/201
General Instrument Corporation	NF	NF	NF	NF	Long term storage and Replay of the Social Media Associated with Classic TV Events	US	Dockete d

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant Date	#	Date			
General Instrument Corporation	NA	NA	61/802381	NA	PROCESSING OF USER- SPECIFIC SOCIAL MEDIA FOR TIME- SHIFTED MULTIMEDIA CONTENT	US	Filed
General Instrument Corporation	NA	NA	61/794638	NA	TIME SHIFT BUFFER SUPPORT FOR STREAMER	US	Filed
General Instrument Corporation	NF	NF	NF	NF	Encryption parameter signaling in a playlist	US	dispositi on changed to Not Pursue on 3/11/20 13
General Instrument Corporation	NF	NF	NF	NF	A method of secure creation ,protection and usage of Rights object using Software obfuscation tools like Cloakware for streaming sync and go and Video on Demand use cases of content	US	status changed to Trade Secret on 3/26
General Instrument Corporation	NA	NA	13/832191	NA	METHODS OF IMPLEMENTING TRICKPLAY	US	Filed
General Instrument Corporation	NA	NA	13/787771	NA	CONTROL DEVICE	US	Filed
General Instrument Corporation	NA	NA	13/830504	NA	PROCESSING PATH SIGNATURES FOR PROCESSING ELEMENTS IN ENCODED VIDEO	US	Filed
General Instrument Corporation	NA	NA	13/841569	NA	DEVICES AND METHODS FOR PROVIDING NAVIGATION IMAGES ASSOCIATED WITH ADAPTIVE BIT RATE VIDEO CONTENT	US	Filed

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant Date	#	Date			
General Instrument Corporation	NA	NA	13/723157	NA	SYSTEM APPAREL AND METHOD FOR IDENTIFYING PERFORMANCE OF WORKOUT ROUTINES	US	Filed
General Instrument Corporation	NA	NA	13/844373	NA	METHOD USING EQUALIZATION DATA TO DETERMINE DEFECTS IN A CABLE PLANT	US	Filed
General Instrument Corporation	NA	NA	13/844523	NA	METHOD FOR IDENTIFYING AND PRIORITIZING FAULT LOCATION IN A CABLE PLANT	US	Filed
General Instrument Corporation	NA	NA	13/844716	NA	METHOD FOR ESTIMATING CABLE PLANT TOPOLOGY	US	Filed
General Instrument Corporation	NF	NF	NF	NF	Estimation of network path and elements using geo data	US	NF
General Instrument Corporation	NA	NA	13/844727		METHOD FOR IDENTIFYING FAULT LOCATION IN NETWORK TRUNK	US	Filed
General Instrument Corporation	NA	NA	13/774489		EXTENDING BLACKOUT CONTROL	US	
General Instrument Corporation	NF	NF	NF	NF	Using Closed-Captioning textual search as an enhanced Parental Content Control	US	Dockete d
General Instrument Corporation (1/5 inventors)	NA	NA	13/842110		METHOD AND APPARATUS FOR EMBEDDING SECRET INFORMATION IN DIGITAL CERTIFICATES	US	Filed

Registered Owner	Patent #	Issue/ Grant Date	Application #	Filing Date	Title	Jurisdiction	Status
General Instrument Corporation	NA	NA	13/832262		METHOD AND APPARATUS FOR PROVIDING TRICK- PLAY CAPABILITY WHEN PRESENTING LINEAR CONTENT	US	Filed
General Instrument Corporation	NA	NA	29/448521		iP800 Design patent	US	Filed
General Instrument Corporation	NA	NA	29/448521		SET TOP BOX	US	Filed
General Instrument Corporation	NA	NA	61/800954		SYSTEM AND METHOD FOR OPTIMIZING STORAGE AND TRANSCODING COSTS IN NETWORK DVR	US	Filed
General Instrument Corporation	NA	NA	13/830558		DEVICES AND METHODS FOR DYNAMIC VIDEO PROCESSING	US	Filed
General Instrument Corporation	6553062		09/140716		APPARATUS AND METHOD FOR SELECTING DIFFERENT COMMUNICATION SPEEDS ON A DATA SIGNAL LINE	US	Granted
General Instrument Corporation	6381213		09/307258		METHOD AND APPARATUS FOR DETECTING COLLISIONS ON A NETWORK	US	Granted
General Instrument Corporation	6457175		09/189023		METHOD AND APPARATUS FOR INSTALLING A SOFTWARE UPGRADE WITHIN A MEMORY RESOURCE ASSOCIATED WITH A COMPUTER SYSTEM	US	Granted

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
		Date					-
General	6289015		09/156570		METHOD AND	US	Granted
Instrument					APPARATUS FOR THE		
Corporation					SECURE SWITCHING OF		
					A PACKET WITHIN A		
					COMMUNICATIONS		
					NETWORK		
General	5982741		09/156573		METHOD AND	US	Granted
Instrument					APPARATUS FOR		
Corporation					AUTOMATICALLY		
					REDUCING CROSS-		
					TALK BETWEEN WIRES		
					COUPLED TO A		
					COMMON NETWORK		
					DEVICE		
General	5,982,741		09/156,573		METHOD AND	US	Granted
Instrument					APPARATUS FOR		
Corporation					AUTOMATICALLY		
					REDUCING CROSS-		
					TALK BETWEEN WIRES		
					COUPLED TO A		
					COMMON NETWORK		
					DEVICE		
General	6073172		08/892301		INITIALIZING AND	US	Granted
Instrument					RECONFIGURING A		
Corporation					SECURE NETWORK		
					INTERFACE		
General	6230194		08/897214		INITIALIZING AND	US	Granted
Instrument					RECONFIGURING A		
Corporation					SECURE NETWORK		
					INTERFACE		
General	5379005		08/092721		FLAT CABLE TO FLAT	US	Granted
Instrument					PARALLEL WIRE		
Corporation					CABLE		
General	5467061		08/320606		FLAT CABLE TO FLAT	US	Granted
Instrument					PARALLEL WIRE		
Corporation					CABLE		
General	5450594		08/172489		ENHANCED COLLISION	US	Granted
Instrument					DETECTION FOR		
Corporation					ETHERNET NETWORK		
General	5696790		08/538847		METHOD AND	US	Granted
Instrument					APPARATUS FOR TIME		
Corporation					DEPENDENT DATA		
					TRANSMISSION		

Registered	Patent #	Issue/	Application	Filing	Title	Jurisdiction	Status
Owner		Grant	#	Date			
General Instrument Corporation	6246718	Date	09/199113		METHOD AND APPARATUS FOR ENCODING AND DECODING A BIT SEQUENCE FOR TRANSMISSION OVER	US	Granted
General Instrument Corporation	6879645		09/153811		POTS WIRING METHOD AND APPARATUS FOR DYNAMICALLY VARYING THE NOISE SENSITIVITY OF A RECEIVER	US	Granted
General Instrument Corporation	6735217		09/153635		METHOD AND APPARATUS FOR DETECTING A DATA SIGNAL ON A CARRIER MEDIUM	US	Granted
General Instrument Corporation	6879644		09/153810		METHOD AND APPARATUS FOR AUTOMATICALLY DETERMINING A PEAK VOLTAGE LEVEL FOR A DATA SIGNAL PROPAGATED ON A CARRIER MEDIUM	US	Granted
General Instrument Corporation	6292517		09/153305		METHOD AND APPARATUS FOR DETECTING A DATA SIGNAL ON A CARRIER MEDIUM	US	Granted
General Instrument Corporation	6771774		09/454251		FILTER ARRANGEMENT FOR SHAPING A PULSE PROPAGATED OVER POTS WIRING AND A METHOD OF MANUFACTURING THE SAME	US	Granted
Setjam, Inc.	NA	NA	13/540792		DATA PROCESSING	US	Filed
Setjam, Inc.	NA	NA	13/540754		DATA PROCESSING	US	Filed
Setjam, Inc.	NA	NA	13/540776		DATA PROCESSING	US	Filed

Registered Owner	Patent #	Issue/ Grant Date	Application #	Filing Date	Title	Jurisdiction	Status
Setjam, Inc.	NA	NA	13/397704		AGGREGATING AND NORMALIZING ENTERTAINMENT MEDIA	US	Filed
Setjam, Inc.	NA	NA	PCT/US12/ 25590		AGGREGATING AND NORMALIZING ENTERTAINMENT MEDIA	US	Filed

RECORDED: 04/08/2019