

09-28-2001



Form PTO-1595 (Rev. 03/01)

RECC

U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office

OMB No. 0651-0027 (exp. 5/31/2002)

101858588

Tab settings

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

1. Name of conveying party(ies): LUCENT DIGITAL RADIO, INC. USA DIGITAL RADIO, INC.

2. Name and address of receiving party(ies) Name: iBiquity Digital Corporation Internal Address:

Additional name(s) of conveying party(ies) attached? Yes No

3. Nature of conveyance: Assignment Merger Security Agreement Change of Name Other Document previously recorded at Reel 011658 Frame 0769 contained an error in serial no. 09/339,636. Doc. re-recorded to correct error\* Execution Date: August 21, 2001

Street Address: 8865 Stanford Boulevard Suite 202 City: Columbia State: MD Zip: 21045 Additional name(s) & address(es) attached? Yes No

4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) 09/339,363 B. Patent No.(s)

5. Name and address of party to whom correspondence concerning document should be mailed: Name: Robert P. Lenart Internal Address: Pietragallo, Bosick and Gordon Street Address: One Oxford Centre 38th Floor City: Pittsburgh State: PA Zip: 15219

6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 3.41): \$ 40.00 Enclosed Authorized to be charged to deposit account 8. Deposit account number: 50-0859 (Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

9. Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Robert P. Lenart Name of Person Signing Signature Date March 26, 2001

Total number of pages including cover sheet, attachments, and documents: 20

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

04-11-2001



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3-28-01

RECORDATION FORM COVER SHEET  
PATENTS ONLY

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

Submission Type

New

Resubmission (Non-Recordation)  
Document ID#

Correction of PTO Error  
Reel #  Frame #

Corrective Document  
Reel #  Frame #

Conveyance Type

Assignment     Security Agreement

License     Change of Name 811-28

Merger     Other

**U.S. Government**  
(For Use ONLY by U.S. Government Agencies)

Departmental File     Secret File

Conveying Party(ies)

Mark if additional names of conveying parties attached

Name (line 1)	LUCENT DIGITAL RADIO INC.	Execution Date	Month	Day	Year
			08	21	2000

Name (line 2)					
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Second Party

Name (line 1)	USA DIGITAL RADIO, INC.	Execution Date	Month	Day	Year
			08	21	2000
Name (line 2)					

Receiving Party

Mark if additional names of receiving parties attached

If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 1)	iBIQUITY DIGITAL CORPORATION
Name (line 2)	
Address (line 1)	8865 STANFORD BOULEVARD
Address (line 2)	SUITE 202
Address (line 3)	COLUMBIA
	MARYLAND/US
	21045

City                          State/Country                          Zip Code

Domestic Representative Name and Address

Enter for the first Receiving Party only.

Name

Address (line 1)

Address (line 2)

Address (line 3)

Address (line 4)

2240E

Und Ref:  
10/2001 GTON11 0000103820

FOR OFFICE USE ONLY

CHECK Refund Total: \$200.00

Public burden reporting for this collection of information is estimated to average approximately 30 minutes per Cover Sheet to be recorded, including time for reviewing the document and gathering the data needed to complete the Cover Sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Chief Information Officer, Washington, D.C. 20231 and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Paperwork Reduction Project (0651-0027), Washington, D.C. 20503. See OMB Information Collection Budget Package 0651-0027, Patent and Trademark Assignment Practice. DO NOT SEND REQUESTS TO RECORD ASSIGNMENT DOCUMENTS TO THIS ADDRESS.

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

**Correspondent Name and Address**      **Area Code and Telephone Number**

Name

Address (line 1)

Address (line 2)

Address (line 3)

Address (line 4)

**Pages**      Enter the total number of pages of the attached conveyance document including any attachments.      #

**Application Number(s) or Patent Number(s)**       Mark if additional numbers attached  
Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)			Patent Number(s)		
<input type="text" value="09/169,738"/>	<input type="text" value="09/595,369"/>	<input type="text" value="09/049,210"/>	<input type="text" value="6,128,334"/>	<input type="text" value="5,859,876"/>	<input type="text" value="5,703,954"/>
<input type="text" value="09/438,822"/>	<input type="text" value="09/252,959"/>	<input type="text" value="09/261,468"/>	<input type="text" value="5,898,732"/>	<input type="text" value="5,559,830"/>	<input type="text" value="5,588,022"/>
<input type="text" value="09/438,148"/>	<input type="text" value="09/153,636"/>	<input type="text" value="09/049,217"/>	<input type="text" value="5,606,576"/>	<input type="text" value="5,809,065"/>	<input type="text" value="5,404,375"/>

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

**Patent Cooperation Treaty (PCT)**

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

PCT	<input type="text"/>	PCT	<input type="text"/>	PCT	<input type="text"/>
PCT	<input type="text"/>	PCT	<input type="text"/>	PCT	<input type="text"/>

**Number of Properties**      Enter the total number of properties involved.      #

**Fee Amount**      Fee Amount for Properties Listed (37 CFR 3.41): \$

Method of Payment:      Enclosed       Deposit Account

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

Deposit Account Number:      #

Authorization to charge additional fees:      Yes       No

**Statement and Signature**

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Charges to deposit account are authorized, as indicated herein.

Bonnie Lanzel      *Bonnie Lanzel*      March 26, 2001

Name of Person Signing      Signature      Date

# RECORDATION FORM COVER SHEET CONTINUATION PATENTS ONLY

## Conveying Party(ies)

Mark if additional names of conveying parties attached

Enter additional Conveying Parties

Execution Date  
Month Day Year

Name (line 1)

Name (line 2)

Execution Date  
Month Day Year

Name (line 1)

Name (line 2)

Execution Date  
Month Day Year

Name (line 1)

Name (line 2)

## Receiving Party(ies)

Mark if additional names of receiving parties attached

Enter additional Receiving Party(ies)

Name (line 1)

If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3)  City  State/Country  Zip Code

Name (line 1)

If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3)  City  State/Country  Zip Code

## Application Number(s) or Patent Number(s)

Mark if additional numbers attached

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

### Patent Application Number(s)

09/153,637

09/208,107

09/207,894

09/192,555

09/339,636

09/382,716

09/339,362

09/339,745

### Patent Number(s)

5,517,529

5,579,345

5,878,089

5,523,726

5,684,835

5,930,687

5,517,535

5,646,947

5,956,373

5,768,323

5,566,214

5,315,583

5,598,441

5,828,705

5,278,826

RECORDATION FORM COVER SHEET  
CONTINUATION  
PATENTS ONLY

Conveying Party(ies)

Mark if additional names of conveying parties attached

Enter additional Conveying Parties

Execution Date  
Month Day Year

Name (line 1) [input]

[input]

Name (line 2) [input]

Execution Date  
Month Day Year

Name (line 1) [input]

[input]

Name (line 2) [input]

Execution Date  
Month Day Year

Name (line 1) [input]

[input]

Name (line 2) [input]

Receiving Party(ies)

Mark if additional names of receiving parties attached

Enter additional Receiving Party(ies)

Name (line 1) [input]

If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 2) [input]

Address (line 1) [input]

Address (line 2) [input]

Address (line 3) [input] [input] [input]

City

State/Country

Zip Code

Name (line 1) [input]

If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 2) [input]

Address (line 1) [input]

Address (line 2) [input]

Address (line 3) [input] [input] [input]

City

State/Country

Zip Code

Application Number(s) or Patent Number(s)

Mark if additional numbers attached

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

Patent Application Number(s)

[input]	[input]	[input]
[input]	[input]	[input]
[input]	[input]	[input]
[input]	[input]	[input]
[input]	[input]	[input]

Patent Number(s)

5,278,844	5,757,854	5,949,813
5,764,706	5,956,624	6,128,350
5,633,896	5,745,525	6,178,317
5,465,396	5,903,598	6,108,810
5,850,415	6,014,407	6,148,007

State of Delaware  
Office of the Secretary of State

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PAGE 1

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF MERGER, WHICH MERGES:

"LUCENT DIGITAL RADIO, INC.", A DELAWARE CORPORATION,  
WITH AND INTO "USA DIGITAL RADIO, INC." UNDER THE NAME OF  
"IBIQUITY DIGITAL CORPORATION", A CORPORATION ORGANIZED AND  
EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, AS RECEIVED  
AND FILED IN THIS OFFICE THE TWENTY-FIRST DAY OF AUGUST, A.D.  
2000, AT 3 O'CLOCK P.M.



*Edward J. Freel*

Edward J. Freel, Secretary of State

2960685 8100M

001464727

AUTHENTICATION: 0675093

DATE: 09-14-00

PATENT

REEL: 012197 FRAME: 0501

**CERTIFICATE OF MERGER  
OF  
LUCENT DIGITAL RADIO, INC.  
INTO  
USA DIGITAL RADIO, INC.**

The undersigned corporation, USA Digital Radio, Inc., organized and existing under and by virtue of the General Corporation Law of the State of Delaware, by its duly authorized officer, DOES HEREBY CERTIFY:

1. The name and state of incorporation of each of the constituent corporations of the merger (the "Merger") is as follows:

<u>Name</u>	<u>State of Incorporation</u>
Lucent Digital Radio, Inc.	Delaware
USA Digital Radio, Inc.	Delaware

2. An Agreement and Plan of Merger, dated as of July 12, 2000, by and between Lucent Digital Radio, Inc. and USA Digital Radio, Inc. (the "Merger Agreement") has been approved, adopted, certified, executed and acknowledged by each of the constituent corporations in accordance with Section 251 of the General Corporation Law of the State of Delaware.

3. The name of the surviving corporation following the merger (the "Surviving Corporation") is USA Digital Radio, Inc., a Delaware corporation.

4. The certificate of incorporation of the Surviving Corporation is hereby amended to replace Article First and Article Fifth as set forth below:

FIRST: The name of the corporation is iBiquity Digital Corporation.

FIFTH: The aggregate number of shares which the corporation shall have authority to issue is 50,000,000 shares of Common Stock, par value \$0.01 per share, and 15,000,000 shares of Preferred Stock, par value \$0.01 per share.

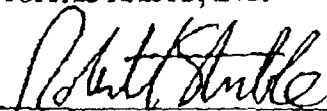
5. The executed Merger Agreement is on file at the principal place of business of the Surviving Corporation, located at 8865 Stanford Boulevard, Suite 202, Columbia, Maryland 21045.

6. A copy of the Merger Agreement will be furnished by the Surviving Corporation, on request and without cost, to any stockholder of any constituent corporation.

7. This Certificate of Merger shall be effective as of August 21, 2000.

IN WITNESS WHEREOF, the undersigned has caused this Certificate of Merger to be executed as of the 21 day of August, 2000.

USA DIGITAL RADIO, INC.

By:   
Robert J. Struble  
President and Chief Executive Officer



**IBIQUITY DIGITAL  
PENDING U.S. PATENT APPLICATIONS**

Our Ref.	Inventor	Serial No.	Filing Date
Client Code	Title	Patent No.	Issue Date
Client Ref.	Country		
TT 850	Hunsinger et al.	09/169,738	10/08/1998
284012	IN-BAND ON-CHANNEL DIGITAL BROADCASTING		**/**/****
015382-000850	UNITED STATES		
USADR 99-004	Kroeger et al.	09/438,822	11/11/1999
284012	METHOD & APPARATUS FOR FORWARD ERROR		**/**/****
UDR	CORRECTION CODING FOR AN AM IN-BAND ON-CHANNEL DIGITAL AUDIO BROADCASTING SYSTEM		
	UNITED STATES		
USADR 99-007	Kroeger et al.	09/438,148	11/10/1999
284012	METHOD & APPARATUS FOR TRANSMISSION & RECEPTION OF FM IN-BAND ON-CHANNEL DIGITAL AUDIO BROADCASTING		**/**/****
	UNITED STATES		
USADR 99-009	Kroeger et al.	09/595,369	06/15/2000
284012	METHOD & APP. FOR REDUCTION OF INTERFER- ENCE IN FM IN-BAND ON-CHANNEL DIGITAL AUDIO BROADCASTING RECEIVERS		**/**/****
	UNITED STATES		
WWS 97-004	Peyla et al.	09/252,959	02/18/1999
284012	SYSTEM & METHOD FOR RECOVERING SYMBOL TIMING OFFSET & CARRIER FREQUENCY etc.		**/**/****
UDR	UNITED STATES		
WWS 97-006	Kroeger et al.	09/153,636	09/15/1998
284012	ADAPTIVE WEIGHTING METHOD FOR ORTHOGONAL FREQUENCY DIV. MULTIPLEXED SYMBOLS etc.		**/**/****
UDR	UNITED STATES		
WWS 97-008	Kroeger et al.	09/049,210	03/27/1998
284012	IN-BAND ON-CHANNEL DIGITAL AUDIO BROADCASTING METHOD & SYSTEM		**/**/****
UDR	UNITED STATES		
WWS 97-009	Kroeger	09/261,468	02/24/1999
284012	AUDIO BLEND METHOD AND APPARATUS FOR AM & FM IN BAND ON CHANNEL DIGITAL AUDIO BROADCASTING		**/**/****
UDR	UNITED STATES		

Our Ref.	Inventor	Serial No.	Filing Date
Client Code	Title	Patent No.	Issue Date
Client Ref.	Country		
WWS 98-001 284012 UDR	METHOD & APPARATUS FOR AM DIGITAL BROADCASTING UNITED STATES	09/049,217	03/27/1998 **/**/****
WWS 98-003X 284012 UDR	METHOD & APPARATUS FOR AM COMPATIBLE DIGITAL BROADCASTING UNITED STATES	09/153,637	09/15/1998 **/**/****
WWS 98-009X 284012 UDR	Goldston et al. METHOD FOR EQUALIZATION OF COMPLEMENTARY CARRIERS IN AN AM SYSTEM UNITED STATES	09/207,894	10/02/1998 **/**/****
WWS 98-010X 284012 UDR	Goldston et al. METHOD & APP. FOR DETERMINING TRANSMISSION MODE & SYNCH. FOR DIGITAL AUDIO BROADCASTING SIGNAL UNITED STATES	09/339,363	06/24/1999 **/**/****
WWS 98-011X 284012 UDR	Goldston et al. METHOD FOR ESTIMATING SIGNAL-TO-NOISE RATIO OF DIGITAL CARRIERS IN AM COMPATIBLE DIGITAL AUDIO BROADCASTING SYSTEM UNITED STATES	09/339,362	06/24/1999 **/**/****
WWS 98-012X 284012 UDR	Goldston et al. METHOD & APPARATUS FOR TRAINING SEQUENCE ID. IN AM COMPATIBLE DIGITAL AUDIO BROADCASTING SYSTEM UNITED STATES	09/339,745	06/24/1999 **/**/****
WWS 98-013X 284012 UDR	Hartup et al. METHOD & APPARATUS FOR DEMODULATING & EQUALIZING AN AM COMPATIBLE DIGITAL AUDIO BROADCAST SIGNAL UNITED STATES	09/208,107	10/02/1998 **/**/****
WWS 98-014 284012 UDR	Kroeger et al. METHOD & APPARATUS FOR REDUCTION OF FM INTERFERENCE etc. UNITED STATES	09/192,555	11/03/1998 **/**/****
WWS 98-015 284012 UDR	Kroeger et al. METHOD & APP. FOR TRANSMISSION & RECEPTION OF COMPRESSED AUDIO FRAMES etc. UNITED STATES	09/382,716	08/24/1999 **/**/****

**IBIQUITY DIGITAL  
ISSUED U.S. PATENTS**

Our Ref. Client Code Client Ref.	Inventor Title Country	Serial No. Patent No.	Filing Date Issue Date
57,659 284012 UDR	Dapper et al RECEIVER ADDRESSABLE AM COMPATIBLE DIGITAL BROADCAST SYSTEM UNITED STATES	08/803,714 6,128,334	02/21/1997 10/03/2000
57,660 284012 UDR	Dapper et al. DATA SERVICE CHANNEL PROVISION FOR AN AM COMPATIBLE BROADCAST SYSTEM UNITED STATES	08/602,553 5,898,732	02/20/1996 04/27/1999
57,661 284012 57,661	Dapper et al. ADAPTIVE MODE CONTROL SYSTEM FOR AM COMPATIBLE DIGITAL BROADCAST UNITED STATES	08/376,987 5,606,576	01/23/1995 02/25/1997
57,662C 284012 UDR	Dapper et al. METHOD & APPARATUS FOR IMPROVING AM COMPATIBLE BROADCAST ANALOG FIDELITY UNITED STATES	08/671,252 5,859,876	06/27/1996 01/12/1999
57,663 284012 UDR	Dapper et al. EQUALIZATION SYSTEM FOR AM COMPATIBLE DIGITAL RECEIVER UNITED STATES	08/376,986 5,559,830	01/23/1995 09/24/1996
57,664 284012 UDR	Dapper et al. METHOD & APPARATUS FOR IMPROVING QUALITY OF AM COMPATIBLE DIGITAL BROADCAST etc. UNITED STATES	08/603,768 5,809,065	02/20/1996 09/15/1998
57,665 284012 UDR	Dapper et al. METHOD AND APPARATUS FOR IMPROVING THE QUALITY OF AM COMPATIBLE DIGITAL BROADCAST SYSTEM SIGNALS IN THE PRESENCE OF DISTORTION UNITED STATES	08/604,199 5,703,954	02/20/1996 12/30/1997
57,669 284012 UDR	Dapper et al. METHOD AND APPARATUS FOR AM COMPATIBLE DIGITAL BROADCASTING UNITED STATES	08/206,368 5,588,022	03/07/1994 12/24/1996

Our Ref. Client Code Client Ref.	Inventor Title Country	Serial No. Patent No.	Filing Date Issue Date
57,734 284012	Kroeger et al. PROCESS & APPARATUS FOR SATELLITE DATA COMMUNICATION UNITED STATES	08/110,265 5,404,375	08/23/1993 04/04/1995
57,825 284012 UDR	Stehlik UHF/L-BAND MONOLITHIC DIRECT DIGITAL RECEIVER UNITED STATES	08/138,905 5,517,529	10/18/1993 05/14/1996
58,182 284012 UDR	Kroeger et al. DIGITAL QUADRIPHASE-SHIFT KEYING MODULATOR UNITED STATES	08/322,833 5,523,726	10/13/1994 06/04/1996
58,185 284012 UDR	Kroeger et al. NUMERICALLY CONTROLLED OSCILLATOR WITH COMPLEX EXPONENTIAL OUTPUTS etc. UNITED STATES	08/322,845 5,517,535	10/13/1994 05/14/1996
58,186 284012 UDR	Kroeger et al. SYMBOL SYNCHRONIZER USING MODIFIED EARLY-PUNCTUAL-LATE GATE UNITED STATES	08/322,854 5,768,323	10/13/1994 06/16/1998
58,188 284012 UDR	Kroeger et al. CARRIER ACQUISITION TECHNIQUE FOR MOBILE RADIO QPSK DEMODULATOR UNITED STATES	08/322,840 5,598,441	10/13/1994 01/28/1997
58,189 284012	Kroeger et al. CARRIER TRACKING LOOP FOR QPSK DEMODULATOR UNITED STATES	08/322,847 5,579,345	10/13/1994 11/26/1996
58,190 284012	Kroeger et al. LOCALLY COHERENT QPSK DETECTION WITH DECODING etc. UNITED STATES	08/322,846 5,684,835	11/13/1994 11/04/1997
58,529 284012	Cooper et al. MOBILE TELEPHONE SINGLE CHANNEL SUPERFRAME LOCK etc. UNITED STATES	08/411,048 5,646,947	03/27/1995 07/08/1997

Our Ref. Client Code Client Ref.	Inventor Title Country	Serial No. Patent No.	Filing Date Issue Date
58,530 284012	Kroeger et al. AUTO. NOISE NORMALIZATION & REACQUISITION CONTROL etc. UNITED STATES	08/491,667 5,566,214	06/19/1995 10/15/1996
58,559 284012 UDR	Kroeger et al. CARRIER TRACKING TECHNIQUE & APPARATUS W/AUTO. FLYWHEEL etc. UNITED STATES	08/593,154 5,828,705	02/01/1996 10/27/1998
58,636 284012 UDR	Dapper COHERENT SIGNAL DETECTOR FOR AM- COMPATIBLE DIGITAL RECOVERY UNITED STATES	08/803,699 5,878,089	02/21/1997 03/02/1999
58,643 284012 UDR	Dapper APPARATUS & METHOD FOR GENERATING AM- COMPATIBLE DIGITAL WAVEFORM UNITED STATES	08/724,606 5,930,687	09/30/1996 07/27/1999
58,917 284012 UDR	Goldston et al. AM COMPATIBLE DIGITAL AUDIO BROADCASTING SIGNAL etc. UNITED STATES	08/749,098 5,956,373	11/14/1996 09/21/1999
TT 100 284012 015382-000100	Murphy et al. METHOD & APPARATUS FOR DIGITAL AUDIO BROADCASTING & RECEPTION UNITED STATES	07/684,529 5,315,583	01/11/1991 05/24/1994
TT 200 284012 015382-000200	Murphy et al. METHOD & APPARATUS FOR DIGITAL AUDIO BROADCASTING & RECEPTION UNITED STATES	07/683,945 5,278,826	04/11/1991 01/11/1994
TT 300 284012 015382-000300	Murphy et al. METHOD & APPARATUS FOR DIGITAL AUDIO BROADCASTING & RECEPTION UNITED STATES	07/683,918 5,278,844	04/11/1991 01/11/1994
TT 610 284012 015382-000610	Carlin et al. AM COMPATIBLE DIGITAL WAVEFORM FRAME TIMING RECOVERY etc. UNITED STATES	08/636,044 5,764,706	04/22/1996 06/09/1998

Our Ref. Client Code Client Ref.	Inventor Title Country	Serial No. Patent No.	Filing Date Issue Date
TT 710 284012 015382-000710	Carlin et al. AM COMPATIBLE DIGITRL WAVEFORM DEMODULA TION USING DUAL FFT UNITED STATES	08/604,276 5,633,896	02/21/1996 05/27/1997
TT 800 284012 015382-000800	Hunsinger et al. IN-BAND ON-CHANNEL DIGITAL BROADCASTING UNITED STATES	08/003,189 5,465,396	01/12/1993 11/07/1995
TT 810 284012 015382-000810	Hunsinger et al. IN-BAND ON-CHANNEL DIGITAL BROADCASTING UNITED STATES	08/454,032 5,850,415	05/30/1995 12/15/1998
TT 840 284012 015382-000840	Hunsinger et al. IN-BAND ON-CHANNEL DIGITAL BROADCASTING UNITED STATES	08/453,318 5,757,854	05/30/1995 05/26/1998
TT 900 284012 015382-000900	Hunsinger et al. SIMULTANEOUSLY BROADCASTING & RECEIVING DIGITAL & ANALOG SIGNALS UNITED STATES	08/274,140 5,956,624	07/12/1994 09/21/1999
TT 910 284012 015382-000910	Hunsinger et al. SIMULTANEOUSLY BROADCASTING & RECEIVING DIGITAL & ANALOG SIGNALS UNITED STATES	08/485,599 5,745,525	06/07/1995 04/28/1998
TT 911 284012 015382-000911	SIMULTANEOUSLY BROADCASTING & RECEIVING DIGITAL & ANALOG SIGNALS UNITED STATES	08/914,355 5,903,598	08/19/1997 05/11/1999
TT 912 284012 015382-000912	Hunsinger et al. METHOD & SYSTEM FOR SIMULTANEOUSLY BROADCASTING AND RECEIVING DIGITAL & ANALOG SIGNALS UNITED STATES	08/914,456 6,014,407	08/19/1997 01/11/2000
TT 913 284012 015382-000913	Hunsinger et al. SIMULTANEOUSLY BROADCASTING & RECEIVING DIGITAL & ANALOG SIGNALS UNITED STATES	08/914,356 5,949,813	08/19/1997 09/07/1999

Our Ref. Client Code Client Ref.	Inventor Title Country	Serial No. Patent No.	Filing Date Issue Date
USADR 99-001 284012 UDR	Shastri et al. METHOD & APP. FOR REDUCING PEAK TO AVERAGE POWER RATIO IN DIGITAL BROADCASTING SYSTEMS UNITED STATES	09/379,780 6,128,350	08/24/1999 10/03/2000
WWS 96-011 284012 MR2403-2	Kroeger et al. SYSTEM & METHOD FOR MITIGATING INTERMITTENT INTERRUPTIONS etc. UNITED STATES	08/947,902 6,178,317	10/09/1997 01/23/2001
WWS 97-001 284012 UDR	Kroeger et al. DIGITAL AUDIO BROADCASTING METHOD USING PUNCTURABLE CONVOLUTIONAL CODE UNITED STATES	09/049,140 6,108,810	03/27/1998 08/22/2000
WWS 97-005 284012	Kroeger METHOD FOR DATA TRANSMISSION IN DIGITAL AUDIO BROADCASTING SYSTEM UNITED STATES	09/049,216 6,148,007	03/27/1998 11/14/2000

NUMBER OF PATENTS LISTED ON THIS REPORT: 39

PAGE #: 5