Albert Shuldiner
Senior VP & General Counsel

April 13, 2005

Mr. Paul Feinberg
Mr. H. Donald Messer, Dr. Eng.
Co-Chairmen
IBOC Standards Development Working Group

Mr. Michael Bergman
Mr. Milford K. Smith
Co-Chairmen
DAB Subcommittee

National Radio Systems Committee
c/o National Association of Broadcasters
1771 N Street, N.W.
Washington, D.C. 20036

Gentlemen:

On behalf of iBiquity Digital Corporation, I am providing this letter in response to the ISDWG's request that iBiquity formalize its commitment to adhere to the NRSC's patent policy. Please note that my previous statements at ISDWG meetings on this topic should be considered informal discussions. This letter supersedes iBiquity's previous statements on this topic, and it should be viewed as iBiquity's formal commitment. This letter also serves as an update to my letter of September 15, 2003, which included a tentative list of transmission patents owned by iBiquity and relevant to an NRSC IBOC standard. Further, this letter supersedes my letters of February 24, 2004 and November 8, 2004 and previous statements at committee meetings concerning licensing of the HD Radio system software with or without the HDC codec.

The NRSC's procedures require adherence to the following patent policy:

> Requirements in NRSC standards that are known to call for use of a patented item or process may not be considered by formulating groups unless all of the relevant technical information covered by the patent or pending patent is known to the formulating group, and the responsible Chair and CEA and/or NAB Engineering staff have received a statement from the patent applicant or holder indicating compliance with the CEA intellectual property rights policy by stating one of the following:

> 1) a license shall be made available without charge to applicants desiring to use the patent for the purpose of implementing the standard(s), or
> 2) a license shall be made available to applicants under reasonable terms and conditions that are demonstrably free of any unfair discrimination.[1]

This letter is intended to detail iBiquity's commitments to the NRSC concerning licensing of iBiquity intellectual property All of these commitments are predicated on the NRSC's prior adoption of the IBOC standard designated NRSC-5. Throughout this letter, I make reference to various patents iBiquity owns or for which iBiquity holds certain rights. Please note that in numerous countries iBiquity holds foreign equivalents to the domestic patents discussed in this letter. To the extent a domestic patent is included in a particular commitment by iBiquity, that commitment also includes the foreign equivalent. Also, you should note that iBiquity owns or has rights to numerous pending patent applications in the United States and abroad for various aspects of the HD Radio™ system. Although iBiquity has not disclosed any information about these pending patent applications, iBiquity notes that to the extent a patent application is granted in the future and it would fall into one of the categories for which iBiquity has offered a commitment in this letter, iBiquity will extend that commitment to the patent when granted. Although iBiquity cannot accept an obligation to provide updates to this letter upon issuance of new patents, iBiquity agrees to extend its commitments to license patents on reasonable terms and conditions that are demonstrably free of any unfair discrimination to patent applications that fall into the categories discussed below.

1. Consistent with the NRSC patent policy, iBiquity commits to license on reasonable terms and conditions that are demonstrably free of any unfair discrimination all patents essential for someone skilled in the art to manufacture NRSC-5 compliant transmission devices. Attachment A contains a list of patents essential for manufacture of NRSC-5 compliant transmission devices. iBiquity holds the right to license or sublicense these patent. In order to address any concerns the NRSC may have about transmission patents iBiquity owns but that do not appear in Attachment A, iBiquity agrees to extend this commitment to any of the patents it owns or for which it holds rights to provide sublicenses if that patent is required for someone skilled in the art to develop transmission equipment that implements NRSC-5, even if that patent is not included in Attachment A.

2. iBiquity notes that although its receiver patents are not necessary to implement NRSC-5, it is and will continue to be iBiquity's practice to license its receiver patents on reasonable terms and conditions that are demonstrably free of any unfair discrimination.

[1] NRSC Procedures Manual, rev 1.1 (adopted Sept. 21, 2003) at § 7.2.5.1.

3. Attachment B contains a list of receiver patents that iBiquity owns or for which it holds rights to offer sublicenses. iBiquity will license on reasonable terms and conditions that are demonstrably free of any unfair discrimination any of these receiver patents that are essential for someone skilled in the art to manufacture a device capable of receiving a signal from NRSC-5 compliant transmission devices. Moreover, iBiquity will license independently from its other intellectual property and on reasonable terms and conditions that are demonstrably free of any unfair discrimination any of these essential patents. For any receiver patents that are not essential for someone skilled in the art to manufacture a device capable of receiving a signal from NRSC-5 compliant transmission devices, iBiquity reserves the right to license those patents on reasonable terms and conditions that are demonstrably free of any unfair discrimination but to require that they be used in conjunction with a broader license to manufacture iBiquity's HD Radio implementation.

4. iBiquity has committed to license on reasonable terms and conditions that are demonstrably free of any unfair discrimination the object code to the HD Radio system without the HDC codec for NRSC-5 compliant implementations. As iBiquity has explained to the ISDWG, any implementation of NRSC-5 that uses iBiquity's software without the HDC codec would not be considered an HD Radio implementation but would need to be compliant with NRSC-5.

5. iBiquity also has committed to license on reasonable terms and conditions that are demonstrably free of any unfair discrimination the object code to the HDC codec separately from the remainder of the HD Radio software implementation but subject to the requirement that it be used in independent IBOC implementations compliant with NRSC-5

On behalf of iBiquity and my colleagues at the company, I want to recognize the time and effort that you and the rest of the members of the ISDWG have devoted to the development of NRSC-5. We believe the HD Radio system offers broadcasters and listeners tremendous benefits, and NRSC-5 will help foster the implementation of digital broadcasting both in the United States and abroad. We look forward to continuing to work with you to finalize NRSC-5 and to ensure the successful transition to digital broadcasting for all AM and FM stations.

Please do not hesitate to contact me if you have any questions concerning this disclosure statement or any other aspect of NRSC-5.

Sincerely,

cc: John Marino (NAB)
David Layer (NAB)
Valerie Schulte (NAB)
David Wilson (CEA)
Megan Hayes (CEA)
John Kelly (CEA)

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Attachment A

iBiquity Digital Corporation
Transmission Patent Portfolio for NRSC-5

Pat. No.	Title
5278844	Method and Apparatus For Digital Audio Broadcasting and Reception
5315583	Method and Apparatus For Digital Audio Broadcasting and Reception
5465396	In-Band On-Channel Digital Broadcasting
5523726	Digital Quadraphase-Shift Keying Modulator
5588022	Method and Apparatus For AM Compatible Digital Broadcasting
5606576	Adaptive Mode Control System For AM Compatible Digital Broadcast
5757854	In-Band On-Channel Digital Broadcasting
5850415	In-Band On-Channel Digital Broadcasting
5903598	Method And System For Simultaneously Broadcasting And Receiving Digital And Analog Signals
5949813	Method And System For Simultaneously Broadcasting And Receiving Digital Ands Analog Signals
5956373	AM Compatible Digital Audio Broadcasting Signal Transmission Using Digitally Modulated Orthogonal Noise-Like Sequences
5956624	Method And System For Simultaneously Broadcasting And Receiving Digital And Analog Signals
6014407	Method And System For Simultaneously Broadcasting And Receiving Digital And Analog Signals
6108810	Digital Audio Broadcasting Method Using Puncturable Convolutional Code
6128350	Method And Apparatus For Reducing Peak To Average Power Ratio In Digital audio Broadcasting Systems
6148007	Method For Data Transmission In A Digital Audio Broadcasting System
6178317	System and Method for Mitigating Intermittent Interruptions in an Audio Radio Broadcast System
6292917	Unequal error protection for digital broadcasting using channel classification
6345377	Digital Audio Broadcasting Method Using Puncturable Convolutional Code
6353637	Multistream in-band on-channel systems
6366888	Technique for multi-rate coding of a signal containing information
6405338	Unequal error protection for perceptual audio coders
6430227	FM In-Band On-Channel Audio Broadcasting Method and System
6430401	Technique for effectively communicating multiple digital representations of a signal
6452977	Method and Apparatus for AM Compatible Digital Broadcasting
6510175	In-Band On-Channel Digital Broadcasting
6523147	Method and Apparatus for Forward Error Correction Coding for an AM In-Band On-Channel Digital Audio Broadcasting System
6549544	Method & Apparatus for Transmission & Reception of FM In-Band On-Channel Digital Audio Broadcasting
6556639	Method & Apparatus for Determining Transmission Mode & Synchronization for A Digital Audio Broadcasting Signal
6563880	Method and System for Simultaneously Broadcasting and Receiving Digital and Analog Signals
6639949	Method And Apparatus for Pulse Overlap Pre-Compensation In Digitally Modulated Signals

Attachment B

iBiquity Digital Corporation
Receiver (Non-Transmission) Patent Portfolio

Pat. No.	Title
5517535	Numerically Controlled Oscillator With Complex Exponential Outputs Using Recursion Technique
5559830	Joint Equalization System For AM Digital Receiver
5566214	Automatic Noise Normalization And Reacquisition Control For A QPSK Demodulator Tracking Loop
5579345	Carrier Tracking Loop For QPSK Demodulator
5633896	AM Compatible Digital Waveform Demodulation Using a Dual FFT
5646947	Mobile Telephone Single Channel Per Carrier Superframe Lock Subsystem
5703954	Method and Apparatus For Improving The Quality Of AM Compatible Digital Broadcast System Signals In The Presence Of Distortion
5745525	Method And Apparatus For Simultaneously Broadcasting And Receiving Digital And Analog Signals
5764706	AM Compatible Digital Waveform Frame Timing Recovery and Frame Synchronous Power Measurement
5809065	Method and Apparatus For Improving The Quality Of AM Compatible Digital Broadcast System Signals In The Presence Of Distortion
5828705	Carrier Acquisition Technique And Apparatus Having Automatic Flywheel/Tracking/Reacquisition Control And Extended Signal To Noise Ratio
5878089	Coherent Signal Detector For AM-Compatible Digital Audio Broadcast Waveform Recovery
6259893	Method And Apparatus For Reduction Of FM Interference For FM In-Band On-Channel Digital Audio Broadcasting System
6292511	Method For Equalization Of Complementary Carriers In An AM Compatible Digital Audio Broadcasting System
6295317	Method And Apparatus For Demodulating And Equalizing An AM Compatible Digital Audio Broadcast Signal
6317470	Adaptive Weighting For OFDM Soft Symbols Using Channel State Information Estimates
6400758	Method And Apparatus For Training Sequence Identification In An AM Compatible Digital Audio Broadcasting System
6480536	Method And Apparatus For Demodulating And Equalizing An AM Compatible Digital Audio Broadcast Signal
6487256	Method and Apparatus for AM Digital Broadcasting
6532258	Method for Estimating Signal-To-Noise Ratio of Digital Carriers in an AM Compatible Digital Audio Broadcasting System
6539063	System and Method For Recovering Symbol Timing Offset And Carrier Frequency Error In An OFDM Digital Audio Broadcast System
6570943	Method for Equalization of Complementary Carriers in an AM Compatible Digital Audio Broadcast System
6590944	Audio Blend Method and Apparatus for AM and FM In Band On Channel Digital Audio Broadcasting
6622008	Method And Apparatus For Reduction of FM Interference For FM In-Band On-Channel Digital Audio Broadcasting System
6671340	Method And Apparatus For Reduction of Interference in FM In-Band On-Channel Digital Audio Broadcasting Receivers