

EXHIBIT G

UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF NEW YORK

ARISTA RECORDS LLC; ATLANTIC
RECORDING CORPORATION; BMG
MUSIC; CAPITOL RECORDS, LLC;
CAROLINE RECORDS, INC.; ELEKTRA
ENTERTAINMENT GROUP, INC.;
INTERSCOPE RECORDS; LAFACE
RECORDS LLC; MAVERICK RECORDING
COMPANY; SONY BMG MUSIC
ENTERTAINMENT; UMG RECORDINGS,
INC.; VIRGIN RECORDS AMERICA, INC.;
WARNER BROS. RECORDS INC.; and
ZOMBA RECORDING LLC,

Plaintiffs,

v.

USENET.COM, INC.; SIERRA CORPORATE
DESIGN, INC.; and GERALD REYNOLDS,

Defendants.

No. 07-CIV-8822 (HB)

ECF Case

DECLARATION OF DR. RICHARD WATERMAN

I. INTRODUCTION.

1. I am an Adjunct Associate Professor of Statistics at The Wharton School at the University of Pennsylvania, and the President and Co-Founder of Analytic Business Services, Inc., a consultancy focused on providing expert advice and opinions in the field of statistical analysis. I received my Ph.D. in Statistics from the Pennsylvania State University in 1993. I have substantial experience designing and reviewing sampling protocols for various large organizations, such as the United States Postal Service, for whom I designed and analyzed a

national multi-stage sample for the estimation of operational characteristics. I have designed sampling protocols involving other filesharing technologies, specifically BitTorrent and Gnutella. I also have substantial experience in designing sampling protocols in the private sector, and have developed market research studies for numerous large corporate clients, which typically involve issues related to sampling. Further details of my professional history, including a list of publications I have authored during the last ten years, can be found on the resume attached hereto as Exhibit 1. Within the last four years, I have served as an expert witness in *Columbia Pictures Industries, Inc. et al. v. Gary Fung*, No. 06-CV-5578, pending in the United States District Court for the Central District of California, and in *Arista Records LLC et al. v. Lime Group LLC et al.*, No. 06 CV 5936, pending in the United States District Court for the Southern District of New York. I have personal knowledge of the following facts and, if called and sworn as a witness, could competently testify thereto.

2. I have been retained by the Plaintiffs, through Jenner & Block LLP, to provide expert analysis and opinions in the matter of *Arista Records LLC et al. v. Usenet.com, Inc. et al.*, No. 07-CIV-8822, pending in the United States District Court for the Southern District of New York. I am being compensated for my work in connection with this engagement at the rate of \$450 per hour of testimony and \$350 per hour for all other activities.

3. I have been asked to develop a protocol for drawing a statistically reliable sample for a study to determine the authorization status of content files being offered for download on certain identified music newsgroups that were available on Usenet.com (hereafter, the "Music Newsgroups"). The sampling protocols, estimation techniques, and margin of error calculation used in my work can all be found in the standard reference by William G. Cochran, Sampling

Techniques (3rd ed. 1977). The instructions for the protocol I developed are attached hereto as Exhibit 2, and the list of Music Newsgroups is attached as Exhibit A thereto.

4. The documents that I have specifically reviewed or considered in forming the opinions expressed herein are listed in Exhibit 3. In general, in reaching my opinions and conclusions, I relied upon my specialized knowledge, education, and experience as applied to the facts and data discussed below, as well as my review of publicly available information listed on Exhibit 3, my review of the Giganews service using a publicly available Usenet client, and the work and conclusions of Mr. Brad Newberg and his team (as discussed below). I may supplement my analysis and opinions if new information becomes available in conjunction with my ongoing research on the issues involved in this case. I may develop charts or other visual aids to illustrate my testimony.

II. SUMMARY OF CONCLUSIONS.

5. I estimate that 94.17% of the content files available for download from the identified Music Newsgroups on Usenet.com are not authorized for free distribution on Usenet.com. The identity or authorization status of 3.94% of the available files is unknowable.

III. DESCRIPTION OF PROTOCOL.

6. I designed a study to create a scientifically reliable and unbiased sample of files from the population of interest, in order to determine the authorization status of content files being offered for download on the Usenet.com Music Newsgroups.

7. The database for sample selection was created as follows. As it was my understanding that the music newsgroups of interest had been disabled on Usenet.com, the Giganews service was used as an alternative for purposes of this protocol. All available message headers in the Music Newsgroups were downloaded from Giganews.com to create a "Message

Database.”¹ A second database (the “Searched Database”) was then created using common identifying header information to identify sets of associated messages that comprise a larger file: for each set of associated messages identified as part of a larger file, the common header information was included in the Searched Database, and for each message not identified as part of a larger file, the individual header information was included in the Searched Database. I refer to the files and messages represented in the Searched Database as “Searched Files.”

8. The random selection was done as follows. Each Searched File was assigned a unique number between 1 and the total number of Searched Files in the Searched Database. The total number of Searched Files was 5,024,680. I then generated a list of a random permutation of numbers between 1 and 5,024,680. Those numbers were used in a sequential manner to select Searched Files from the Searched Database with the corresponding assigned numerical value. This selection method ensured that each Searched File in the Searched Database was equally likely to be chosen.

9. Searched Files were downloaded from the Searched Database in the order given by the random permutation. In downloading the Searched Files, my protocol here distinguishes between “Data Files” and “Text Files.” A Data File is defined as any file or message that contains binary encoded content. A Text File is any file or message that does not contain binary encoded content. The sample for review consisted of the first 1,800 Data Files selected and successfully downloaded. (A file was given six hours to complete downloading before the download was terminated. Also, the protocol includes a provision for identification and exclusion of suspected child pornography, but no such child pornography was identified.) If a

¹ My conclusions are based on the understanding that the Music Newsgroups that were analyzed in this study were also available on Usenet.com, and that the same binary encoded content available in the Music Newsgroups on Giganews would be available in those Music Newsgroups on Usenet.com.

file was unable to be opened or played after reasonable efforts, or contained no sound or recognizable output when opened or played, it was classified as "Junk / Damaged Unintelligible," and replaced in the sample by the next Data File selected using the random permutation until 1,800 Data Files were selected.

10. The instructions for this protocol are attached as Exhibit 2. In my professional opinion, the procedures used in this study are based on standard and universally accepted statistical methods, and provide a random sample from which we can reliably estimate the incidence of copyright infringement of content files available for download from the identified Music Newsgroups on Usenet.com.

IV. RESULTS AND CONCLUSIONS.

11. I relied upon the classifications of Mr. Brad Newberg and his team, including the classification of "Junk / Damaged Unintelligible" files discussed above. Mr. Newberg's declaration is attached hereto as Exhibit 4. Mr. Newberg and his team's analysis showed that of the 1,800 content files analyzed, 603 were confirmed to be infringing by their Record Company owner;² 1092 were determined to be highly likely infringing; and 34 were determined to be highly likely or confirmed noninfringing. Mr. Newberg and his team also reported that the status of 71 content files could not be determined either because the file could not be identified or its authorization status could not be determined.

12. Overall, 33.5% (603 files) of the available content files were confirmed to be infringing by the Record Company owners, and 60.67%% (1092 files) of the available content files were determined to be highly likely infringing, for a total of 94.17% (1,695 files) that were confirmed or highly likely infringing. 1.89% (34 files) of the available content files were

² The "Record Companies" are EMI Music North America, Sony BMG Music Entertainment, Universal Music Group, and Warner Music Group Corp.

determined to be highly likely or confirmed noninfringing. The identity or authorization status of 3.94% (71 files) of the available content files could not be determined.

13. Based on the number of files in the sample confirmed by their Record Company owners as infringing and the number of files determined to highly likely infringing, I estimate that 94.17% of the content files made available on the specified Music Newsgroups on Usenet.com are either not authorized or highly likely not authorized for free distribution on Usenet.com. In addition, I estimate that 1.72% of the available content files are authorized or highly likely to be authorized for free distribution on Usenet.com. The identity or authorization status of 3.94% of the available files is unknowable. The margin of error for the infringement estimate is +/- 1.1% at 95% confidence. This represents a very high level of reliability and precision. As a further corroboration of the reliability of this study, I note that this study's estimate of infringing content is remarkably similar to that obtained in comparable studies in which I have been involved in the design and analysis.

I declare under penalty of perjury that the foregoing is true and correct.

February ^{19th} 2009



Dr. Richard Waterman