Before the
UNITED STATES COPYRIGHT ROYALTY JUDGES
Washington, D.C.

In the Matter of **MECHANICAL AND DIGITAL PHONORECORD DELIVERY RATE ADJUSTMENT PROCEEDING**	))))))))	**Docket No. 2006-3 CRB DPRA**

REBUTTAL TESTIMONY OF

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WRITTEN REBUTTAL TESTIMONY OF STEVEN S. WILDMAN

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I. Introduction and Summary

A. Background and Qualifications

My name is Steven S. Wildman. Since 1999, I have been the James H. Quello Professor of Telecommunication Studies at Michigan State University, where I also serve as the Co-Director for the Quello Center for Telecommunication Management and Law. I have also taught at Northwestern University and at the University of California, Los Angeles. For five years, from 1983-1988, I was a senior economist with Economists Incorporated, an economic consulting firm. I hold a PhD in Economics from Stanford University.

Along with numerous articles and book chapters, the majority of which focus on the economics of media industries, I have also authored or edited five books, all relating to economics and policy for communication industries or communication technologies and services. Examples of some of my publications include: *Rethinking Rights and Regulations: Institutional Responses to New Communication Technologies*, published in 2003 by the MIT Press (co-edited with Lorrie Faith Cranor); *Video Economics*, published in 1992 by Harvard University Press (with Bruce M. Owen); "Media and Multimedia: The Challenge for Policy and Economic Analysis," published in *Information, Economics, and Policy* (1998); and "Interactive Channels and the Challenge of Content Budgeting," forthcoming in the *International Journal of Media Management*. For the past three years I have served as co-editor for the *Journal of Media Economics*, and I am a member of the board of editors for the journal *Information, Economics, and Policy*. Since receiving my PhD, I have served as a consultant to numerous private parties and government agencies involved in legal and regulatory proceedings. For example, I have given testimony on behalf of the National Association of Broadcasters before the Copyright Royalty Tribunal and the Copyright Office, and I gave testimony before a Copyright Arbitration Royalty Panel as part of the first webcasting proceeding. A copy of my curriculum vitae is attached as Appendix A.

B. Overview of Testimony

I am providing this rebuttal testimony in response to the direct testimony of Professor William Landes, who made numerous claims about the benchmarks to which this Court should look in setting royalty rates under the statutory factors. As discussed below, I find that the benchmarks that he proposes are inapposite, and that there are better benchmarks for this Court to use in setting rates for mechanical licenses in the upcoming years.

C. Summary of Conclusions

1. For benchmarks used to set rates paid under compulsory licenses to be judged useful, they should satisfy three criteria for establishing comparability between the circumstances in which the benchmark rates were set and those that would obtain in the hypothetical market they are meant to approximate -- (1) similar competitive circumstances, (2) similarity for certain critical demand characteristics, and (3) similarity in the factors that economic bargaining theory says would affect negotiations over rates. Assessed under these standards, the three benchmarks used by Professor Landes to estimate a range of reasonable royalty rates fail miserably. It is not surprising, therefore, that his benchmarks produce a range (20-50% of the total content pool) that is so broad as to be close to meaningless.

a. The synchronization benchmark fails for several reasons. In terms of competitive circumstances, the synchronization market differs from a hypothetical market for mechanical rights because the leverage of the publishers is greater relative to the leverage of the record companies as a result of the ability of the copyright users to buy rights to a song and then re-record it, avoiding any payment for sound recording rights. In terms of consumer demand, music is put to an entirely different use when rights are licensed by movie and television producers for inclusion in a film, television show, or advertisement than when music is distributed in the form of a sound recording.

b. The Audio Home Recording Act does not, on its face, constitute any kind of market benchmark.

c. The ringtone/mastertone benchmark has problems just as severe as those precluding reliance on the synchronization benchmark. In terms of competitive circumstances, there are multiple differences between the setting in which the rates currently paid to publishers for mastertones were negotiated and the setting in which a hypothetical negotiation for other mechanical rights would take place:

- Mastertones were brand new products that were expected to last only a few years.

- The publishers knew that in licensing mastertones, they were authorizing creation of products that would substitute for other products (monophonic and polyphonic ringtones) for which they were already receiving 10% of retail from ringtone providers (and for which record companies were receiving nothing). This substitution effect, which would not exist in a market negotiation for other mechanical rights, would have caused the ultimate rates produced by the negotiations to be substantially higher.

- The rates negotiated for mastertones were part of a package deal in which the record companies apparently agreed to pay 20% of wholesale to the publishers in return for important concessions with regard to entirely separate products.

In terms of the nature of the consumer demand, mastertones and sound recordings (CDs and downloads) are different products that serve different purposes and are sold in very different retail markets. Moreover, mastertones are a small fraction of the market, especially when compared to sales of recorded music in the form of CDs and digital downloads.

In terms of factors affecting bargaining, the circumstances under which mastertone rates were set (with a compulsory license and already-set rates in place for all other mechanical rights) bears no resemblance to the circumstances of a hypothetical negotiation between a songwriter and a record company about payment for the right to create and exploit a sound recording. Given those differences, there is no reason to expect that a record company and a publisher/songwriter would negotiate the same split in these two settings.

2. Much better marketplace benchmarks were available to Professor Landes because there are data on voluntary deals for the very rights at issue. One can look at (1) the overall average effective mechanical rate, compared to what would be paid if all mechanicals were paid at the statutory rate, (2) what is paid for first uses of songs, which are not subject to the compulsory license, and (3) what is paid to songwriters who agree to rates that are not part of some broader agreement like those containing controlled-

composition clauses for singer-songwriters. All three lead to the conclusion that the market rate for mechanicals on CDs and digital downloads is between 5.25 and 7.8 cents per track, or about 7.25-10.08% of wholesale revenues. These market rates demonstrate that Professor Landes's benchmarks are flawed because they fail to reflect the actual market rates for mechanical licenses.

3. If one were to use the mastertone/ringtone benchmark as a basis for setting mechanical royalty rates even for mastertones, at a minimum, adjustments would be required. If one were then to try to use the mastertone/ringtone benchmark to set a rate for sales of recordings on CDs or as downloads, further adjustments would be required, reflecting the differences between the products, the relevant markets, the substitution effect that altered the negotiation of the mastertone rate, etc. There is no way to do this with any degree of precision. Moreover, even before making an adjustment, one would have to ask the question: how did the parties split the "surplus" in the mastertone market and how does that compare to the current division of the surplus in the CD and download market. Redoing Professor Landes's calculation in that corrected fashion leads to the conclusion that the mechanical rate for sales of recorded music (CDs and downloads) should be reduced to $.077 per track, even before it is further adjusted downward.

It is my understanding that the RIAA is proposing a rate for CDs and downloads of 9% of wholesale (the equivalent of 6.5 cents per track given current prices). Based on my review of the voluntary deals that have been negotiated for mechanical rights, I believe this proposal to be reasonable and well justified.

4. Using the same methodology in reverse, I have attempted to calculate a reasonable royalty for mastertones, with the caveat that such a calculation does not fully

reflect the benefits record companies received from licensing mastertones as part of the NDMAs or the lost opportunity costs to music publishers from licensing mastertones. The result of this analysis leads to a rate for ringtones that is more than 14% of wholesale revenue, but less than 20%.

5. My best estimate of a rate for the incidental copies made in delivering interactive streaming is between 1.1 and 1.6% of the wholesale revenues for interactive streaming. I base this on some agreements provided by the publishers in discovery in which the parties to the agreements faced a similar problem of how to value mechanical rights for services that were primarily performance-based.

II. Bargaining and the determination of payments to suppliers of inputs for recorded media

Section 801(b) of the Copyright Act specifies the four objectives that the Court must advance in the setting of rates for the compulsory licenses that govern access to the various types of recorded music products at issue in this proceeding. Those objectives are:

> (A) To maximize the availability of creative works to the public.
>
> (B) To afford the copyright owner a fair return for his or her creative work and the copyright user a fair income under existing economic conditions.
>
> (C) To reflect the relative roles of the copyright owner and the copyright user in the product made available to the public with respect to relative creative contribution, technological contribution, capital investment, cost, risk, and contribution to the opening of new markets for creative expression and media for their communication.
>
> (D) To minimize any disruptive impact on the structure of the industries involved and on generally prevailing industry practices.

17 U.S.C. § 801(b)(1). As the Copyright Royalty Judges have noted in their prior decisions concerning these factors, benchmarks can provide a starting point for analysis of the factors. With respect to the range of appropriate benchmarks, the Judges have indicated that the range of potential benchmarks under the § 801(b) factors may be somewhat broader than those permissible under a pure willing buyer-willing seller standard, but in any event "potential benchmarks are confined to a zone of reasonableness that excludes clearly noncomparable marketplace situations."[1]

Professor William Landes has offered three sets of prices that he terms "benchmarks" in support of rates proposed collectively by the National Music Publishers' Association, Inc., The Songwriters Guild of America, and The Nashville Songwriters Association, arguing that "the best economic evidence is obtained from voluntary agreements."[2] While I agree with the general principle articulated by Professor Landes that marketplace agreements can make useful benchmarks, one cannot rely on just *any* voluntary, negotiated agreements as benchmarks.[3] To be economically justified, a benchmark must satisfy a set of analytically sound criteria for determining when a rate established through voluntary negotiations might be judged a good proxy for a competitive rate for the right in question -- in this case the mechanical right for the use of a musical work in a sound recording. Moreover, even when a benchmark can provide guidance for setting a statutory rate, it will often be necessary to adjust that benchmark to account for differences between the benchmark market and the market for which the

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[1] Determination of Rates and Terms for Preexisting Subscription Services and Satellite Digital Audio Radio Services, 73 Fed. Reg. 4080, 4088 (Jan. 24, 2008).
[2] CO Trial Ex. 22 (Landes WDT), at 23.
[3] Moreover, one of the benchmarks on which Professor Landes relies -- the Audio Home Recording Act -- is not an agreement at all, but a statute.

Court is setting rates -- just as this Court did in its webcasting decision and its SDARS decision.[4]

With respect to the comparability of benchmarks and the hypothetical market prices they are supposed to approximate, Professor Landes identified no criteria as having guided his search for reasonable benchmarks, which may account for the fact that when expressed as a percent of content costs, the upper end of his range of proposed reasonable rates (50%) is 30 percentage points greater than the lower end of the range (20%). This spread of 30 percentage points makes the range of reasonableness that he identifies span *more than $1 billion* in mechanical royalty payments each year. That range by itself is substantially more than twice the total amount of mechanical royalties paid in the United States in any given year to date.[5]

It is hard to imagine that all prices drawn from a comparably broad range of prices for a common consumer good would be viewed as acceptably close approximations to a competitive price by a competent rate-setting authority. Would we

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[4] Digital Performance Right in Sound Recordings and Ephemeral Recordings 72 Fed. Reg. 24084, 24092 (May 1, 2007) (approving the adjustment of Pelcovits's benchmark in the Webcasting decision); Determination of Rates and Terms for Preexisting Subscription Services and Satellite Digital Audio Radio Services, 73 Fed. Reg. 4080, 4093 (Jan. 24, 2008) (approving the adjustment of Ordover's benchmark in the SDARS decision).

[5] Although it is not possible to do an exact calculation of the range of payments represented by Professor Landes's 20-50% range of reasonableness, one can get an approximate sense of the magnitude involved. Claire Enders estimated that total mechanical payments in the U.S. were about $560 million in 2005. RIAA Trial Ex. 27 (Claire Enders March 2007 report, Table 31). I will treat that figure as representing mechanicals paid only on CDs and other physical products -- which is a reasonable if inexact assumption for 2005 given that digital sales were just beginning at that point. Professor Landes reports that if actual mechanical payments for CDs in 2005 were increased by 47%, they would have constituted 18% of the content pool as he defines it for CDs. CO Trial Ex. 22 (Landes WDT) at 33. That implies that his range of reasonableness for CDs in 2005 spanned from $914.67 million (20% of the content pool) to $2.287 billion (50% of the content pool).

accept both $2 and $5 as plausible benchmarks for the price a competitive market would set for a half-gallon of milk? Or consider a low-end, compact economy car from one of the major auto companies. Would we accept $15,000 and $37,500 as plausible lower and upper bounds for prices that would be both fair to consumers and provide reasonable compensation to auto manufacturers and dealers? If the lower price is the true competitive price, the higher price would be excessive in the extreme. If the true competitive price is near the higher of the two prices, a compulsory price near the lower bound could not sustain production. The notion that any rate within such an extremely broad range might reasonably approximate a market-defined rate lacks facial credibility and reflects the fact that Professor Landes's selection of proposed benchmarks was not guided by reference to a set of criteria that would ensure reasonable comparability.

Application of three general criteria would help ensure that a benchmark rate selected to help determine the rate for a compulsory mechanical license will be selected based on reasonable standards of comparability. *First*, competitive circumstances, such as the existence of substitute products and strategic considerations that influence price, should be the same or similar in the benchmark market and in the hypothetical market for the right covered by the compulsory license. *Second*, critical aspects of the demand for the consumer good in the benchmark market should be the same or similar to those aspects of consumer demand for the product at issue in the hypothetical market for the right covered by the compulsory license. An example of a critical aspect of demand is the accuracy with which demand for the good or service dependent on the compulsory license can be forecast. The more accurate the forecasts, the less risky are the investments required to produce it. *Third*, factors that economic bargaining theory predicts will delimit the feasible range for voluntarily negotiated rates should be similar in the market in which a benchmark is set and in the market that hypothetically would set the rate for a mechanical license. Such factors include the magnitude of costs incurred by each party, each party's contribution to the market value of the jointly created product, and the amount each party might earn from alternative uses of the input it controls.

The music publishers and songwriters have proposed that for 2008 the statutory mechanical rate for tracks on physical phonorecords be the greater of 12.5 cents or 2.4 cents per minute, depending on the length of the recording, and that for permanent downloads the rate be calculated as the greater of 15 cents or 2.9 cents per minute, with both rates indexed to reflect changes in the CPI thereafter. One would anticipate that as the transition to digital distribution proceeds, adoption of the rate proposal of the music publishers would result in mechanical royalty payments constituting a rapidly increasing percentage of revenues from sales of phonorecords. This is true for three reasons: 1) the higher rate on digital downloads than physical products, which will have increasing effects as download sales grow relative to physical sales; 2) the provision in the Copyright Act that trumps the discounted rates specified in controlled composition clauses for most digital products; and 3) the application of the CPI. Assuming a CPI of 4.0% per year (which was the CPI-U from February 2007 to February 2008)[6], by the end of this rate period (approximately five years), the mechanical royalty rate would be 17.5 cents on digital downloads.[7] Given that prices have been flat for digital products such as

[6] U.S. Bureau of Labor Statistics, *Consumer Price Movements* (Feb. 2008), available at http://www.bls.gov/cpi/cpid0802.pdf.
[7] This does not include the additional increase the music publishers request for "pass-through" licensing which would apply to virtually all download licensing today and would raise the price even more.

downloads, by 2012, the rate would be 25% of the wholesale price of a digital download -- or more than 3 times the mechanical rate in the United Kingdom or Japan as a fraction of wholesale revenue.[8] For digital albums, assuming 13 tracks and a wholesale price of $7.00, the rate would result in mechanical royalties being 32.5% of the wholesale price by 2012. As Dr. Teece has shown, prior to 2005, mechanical royalties in the United States were, as an effective matter and taking into account the operation of controlled composition clauses, less than 10% of wholesale revenue.[9] Thus, copyright owners are proposing a truly massive increase.

Professor Landes's three benchmark rates are: (1) License fees paid to publishers and record companies for synchronization rights (often referred to as "master use rights" in the case of sound recordings), which reportedly are typically of equal size, so publishers collect 50 percent of total payments; (2) the legislative assignment of one-third of statutory royalties collected on digital recording devices and media to musical work copyright owners with the remaining two-thirds paid to record companies and artists as specified by the Audio Home Recording Act of 1992 (the "AHRA"); and (3) negotiated agreements for ringtones and mastertones that assign to publishers a minimum of 20 percent of the wholesale price.[10] As discussed below, each of these benchmarks is fatally flawed.

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[8] *See* RIAA Trial Ex. 53 (Taylor WDT), at 17-19.
[9] RIAA Trial Ex. 64 (Teece WDT), at 31.
[10] In this testimony, I use the term "ringtone" to refer only to so-called "monophonic" and "polyphonic" ringtones. I use the term "mastertone" to refer to similar products incorporating a clip from a commercial sound recording. I understand that others may use the term "ringtone" to refer to all of the foregoing products, and that RIAA does so in its rate request.

A. The Synchronization Market

Applying the three criteria introduced above for assessing the comparability of a proposed benchmark rate and the hypothetical market price it is supposed to approximate, it is clear that prices paid music publishers and record companies for music synchronization rights provide no useful guidance as to what rate should be set for a compulsory mechanical license.

1. Competitive circumstances and strategic considerations

Professor Landes made no effort to compare the competitive circumstances under which prices for synchronization rights are negotiated with those that would characterize a market for a mechanical license for CDs and digital downloads. Nor did he try to identify strategic or financial considerations that might influence negotiated rates but differ between the two markets.

In this regard, the most important difference between the two markets is that in the synchronization market music publishers have relatively more leverage than record companies because there are good substitutes for prior recordings for use in film or television, whereas in the mechanicals market, record companies have relatively more leverage because compositions are substitutable.[11] For example, in the synchronization market, motion picture and television producers have the option of paying only for the rights to a musical composition and then hiring studio musicians (and in some cases even the recording artists who made a song popular) to record the song rather than paying for the right to use the original recording. This fallback option gives publishers bargaining leverage record companies do not have in their negotiations with producers of television

[11] *See* Pascucci WRT.

programs and motion pictures. As a consequence, their share of total payments for synchronization rights is larger than it would be without this go-it-alone option.[12] Because publishers have no comparable fallback option to increase their bargaining power in negotiations with record companies over mechanical rights, a synchronization payments benchmark would be biased in favor of excessive payments to publishers. This bias is increased by the fact that in negotiations over mechanical rights, record companies and artists often perceive different songs and songwriters to be good substitutes for one another and use this fact to negotiate better rates than would otherwise be possible. This observation is substantiated in testimony given by songwriters in this proceeding.[13]

2. Nature of demand for consumer products dependent on the rights in question

The demands for factors of production are derived from the demands for the products they are used to produce. Differences in the demands for the final goods may thus give rise to differences in the demands for the factors. In this regard, it is worth noting that while the demands for sound recordings delivered in the forms of CDs, digital downloads, and various alternatives including streaming are demands for stand-alone consumer products and services, sound recordings are themselves merely inputs into the creation of motion pictures and television programs. So the synchronization demand for recordings is a demand for an input that it is combined with other inputs (acting,

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[12] Professor Landes testified that the leverage of publishers in the synchronization market is similarly undercut (1) by competition from other songs and (2) by the possibility that a producer of a film, television show or commercial might hire a songwriter to create a new song as a work for hire. 2/11/08 Tr. 2457:9-2458:3 (Landes). But the former possibility does not eliminate the need to pay for rights to some copyrighted song and thus does not equate with the ability of producers to avoid paying for rights to *any* sound recording whatsoever. Moreover, for a producer looking to use a familiar song, the option of hiring someone to write a new one is not likely to be an adequate substitute.

[13] *See, e.g.*, 1/30/08 Tr. 829:20-830:13 (Shaw); 1/29/08 Tr. 211:12-212:4 (Carnes).

directing, video recording, etc.) in the production of a consumer product (a film or television program), which itself is consumed in a very different manner than sound recordings purchased for listening.

Furthermore, in contrast with the consumer demand for a new recording, the demand for a recording in the synchronization market is driven in part by its prior sales performance (which cannot exist for a new recording) in the market for recordings sold to consumers, along with its compatibility with other artistic elements of a film or program. Synchronization demands for recordings are obviously very different from consumer demands for recordings, and there is no reason to expect that the demands for the compositions and recorded performances that are combined in a sound recording would be at all comparable in these two markets.

3. Bargaining considerations

A fuller introduction to economic bargaining theory is provided in my more detailed analysis of Professor Landes's proposed ringtones benchmark below, but one obvious lesson of that analysis can be directly applied here. For CDs and digital downloads, the shares record companies and publishers receive from the revenue available to be split between them are necessarily influenced by costs each incurs as a consequence of a decision to join their inputs -- *i.e.*, a musical composition supplied by the publisher and the time and resources involved in recording, producing, promoting, and distributing the resulting recording contributed by the record company. Each party must at least recover its costs for a negotiated bargain to make economic sense. As recording companies incur the overwhelming bulk of these costs, this necessarily skews the division of revenue in their favor.

If it were possible to predict revenues to be derived from synchronization royalties for a given sound recording, one would expect that a record company and a music publisher would bargain, at the outset, over the division of such royalties, taking into account all costs and all revenues therefore. Given that synchronization royalties are earned by a narrow range of songs on an episodic basis, the negotiation for synchronization royalties occurs at a point in time when the original production and marketing costs have already been incurred (if not recovered). As a result, given all of the above bargaining dynamics and the circumstances of the negotiation, one would expect the available revenue to be divided much more evenly in the market for synchronization rights than in the market for a mechanical license to produce sound recordings

B. The Audio Home Recording Act

Inclusion of the split mandated by the Audio Home Recording Act in this list of proposed benchmarks, in the testimony of an economist who so clearly advocates for market-set rates, is curious to say the least. The Act's one-third/two-thirds split was mandated by Congress. Nowhere in his testimony does Professor Landes explain why in this case the outcome of congressional deliberations might be accepted as a proxy for the outcome of market deliberations, or even discuss whether Congress thought it was approximating a market outcome in specifying this division of the royalty fund. Thus, I find the AHRA of absolutely no use in this proceeding.

C. Professor Landes's Ringtone/Mastertone Benchmark

Professor Landes's primary benchmark appears to be the rates for monophonic or polyphonic ringtones and mastertones set in a variety of agreements that he cites. In this section I examine the negotiated rate paid to publishers for ringtones and mastertones in terms of their compliance with the three criteria for selecting a benchmark set out above.

1. Competitive circumstances and strategic considerations

Professor Landes made no effort to compare the competitive circumstances under which agreements covering ringtones and mastertones were negotiated with those that would characterize a free market for all mechanical licenses. Nor did he try to identify strategic or financial considerations that might influence negotiated rates. Consideration of these questions leads to the conclusion that the ringtone/mastertone benchmark is not very informative regarding the central issues in this proceeding.

First, the market for phonorecords has existed for decades. It is true that currently this market is transitioning from physical recordings to recordings delivered by a variety of digital means, but physical recordings still dominate industry sales and profits. And although physical recordings and digital downloads are delivered by different means, at their core they provide the same benefit to consumers -- the ability to listen to recorded music in a variety of settings.

By contrast, ringtones are a relatively recent phenomenon, and mastertones are more recent yet. The sales histories for both are extremely short and we are only now learning the full extent to which ringtones and mastertones are viewed as substitutes for one another by consumers. Recent sales statistics suggest that sales and revenues for mastertones, which have been supplanting ringtones, may have already peaked and begun to decline, and new technology that will allow cell phone users to create their own mastertones on their computers could substantially accelerate that decline. The music publishers themselves, through BMI, have stated publicly that revenue from mastertones and ringtones has declined over the last two years and is projected to continue to decline as the "novelty phase wears off."[14] Retail prices for mastertones have also begun to decline.[15]

The short histories of these services and their uncertain futures make them poor candidates for a benchmark. For example, as Mr. Wilcox testified, at the time Sony-BMG entered into the New Digital Media Agreements ("NDMAs"), it believed mastertones to be a short-term and uncertain market -- in part because it thought they might be a fad and in part because technology may soon allow users to create their own mastertones.[16]

Second, the ringtone/mastertone market differs from the market for CDs and digital downloads in that ringtones preceded mastertones in the marketplace and require only the musical composition for commercial exploitation. In ringtones, publishers had a fallback substitute product that did not require them to reach a profit-sharing arrangement with record companies. As will be explained in more detail in a discussion of the economics of bargaining below, because they could always withhold permission to use the copyrighted compositions required to make mastertones and continue to receive revenues from ringtones, publishers would rationally have refused to sign an agreement that did not promise to provide as much revenue or more than they were already earning

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[14] RIAA Ex. 101-RP (BMI Press Release, March 27, 2008). *See also* RIAA Ex. 102-RR (Jupiter Research, US Ringtone Market Forecast, 2006-2011) (projecting flat then declining revenues from ringtones and mastertones); 2/20/08 Tr. 3960: 11-13 (Wilcox); RIAA Ex. 103-RR (The Harry Fox Agency, Market Trends in Ringtones, June 13, 2005). This internal HFA presentation produced by the Copyright Owners in discovery suggests that growth in the U.S. ringtone market has slowed and will be in decline by 2008.

[15] RIAA Ex. 102-RR (Jupiter Research, US Ringtone Market Forecast, 2006-2011); RIAA Ex. 101-RP (BMI Press Release, March 27, 2008) (discussing growth of lower cost substitutes).

[16] *See* 2/20/08 Tr. 3958:10-3959:11, 3959:21-3960:8 (Wilcox).

on ringtones.[17] For publishers, signing an agreement for mastertones came with an additional cost -- the opportunity cost of revenue lost on sales of mono and polyphonic ringtones displaced by mastertones. As recent data show, mastertones are driving mono and polyphonic ringtones from the market[18] -- something the publishers apparently were aware of at the time they signed agreements for mastertones.[19]

Thus, in licensing mastertones, they would have taken this substitution effect into account and demanded a higher price to compensate them not just for the market value of the rights at issue but also for the loss of other revenue (effectively an additional cost). In this sense, ringtones are more similar to synchronization rights than other markets. In the synchronization market, the leverage of the recording companies is eroded because it is possible for movie and television producers just to buy rights to a song and rerecord it themselves. Similarly, when compensation for rights to mastertones was being negotiated, the leverage of recording companies was eroded by the existence of a competing product -- ringtones -- that did not require anyone to buy rights to a sound recording.[20]

Quantifying this opportunity cost and its ultimate impact on the mastertone rate is difficult, but there should be little doubt that its impact was significant. As market data

[17] I understand that the Copyright Office has subsequently concluded that use of compositions in mastertones is subject to Section 115. However, publishers resisted that view strongly both when the first mastertone licenses were negotiated and today. Thus, publishers could at least make a credible threat of refusing to license mastertone rights.
[18] RIAA Ex. 102-RR (Jupiter Research, US Ringtone Forecast, 2006-2011) (showing the growth of mastertones at the expense of mono and polyphonic ringtones); *see also* 2/14/08 Tr. 3515:8-11 (Rosen).
[19] RIAA Ex. 103-RR (The Harry Fox Agency, Market Trends in Ringtones, June 13, 2005).
[20] Indeed, were there a fully free market, one would expect that the level of the rates to which Professor Landes points might eventually begin to decline as consumers ceased to see mono and polyphonic ringtones as plausible alternatives to mastertones.

show, mastertones have largely displaced mono and polyphonic ringtones in the marketplace.[21] Publishers currently receive 10% of the retail price on a typical $2.50 mastertone - or $.25. In most instances they also received about 10% of the retail price of a mono and polyphonic ringtone. If the usual price of such a ringtone was $2.00, the royalty would thus have been $.20. Assuming (solely for this example) that each mastertone substitutes for a purchase of a mono or polyphonic ringtone, the opportunity cost using these numbers is $.20 per ringtone -- 80% of the royalties being paid to music publishers for mastertones. To be sure, a complete analysis of the impact of this opportunity cost on the rate negotiated for mastertones would be much more complex, involving potential growth in the marketplace, the cross-elasticity of demand between the two products, and the possibility that unit sales increased due to the introduction of mastertones, but there can be little doubt that the rate publishers were able to negotiate for mastertones was increased, and probably substantially, by the credible threat to refuse to license mastertone rights and continue to earn profits instead by selling ringtones only.

Publishers would have no such leverage-enhancing option (no analogous opportunity cost) in the hypothetical market for mechanical rights related to CDs and digital downloads, a factor that by itself makes the mastertone rates a biased benchmark. In fact, testimony by songwriters clearly establishes that the availability of songs from other writers increases record companies' bargaining power in this market, which makes ringtones/mastertones a doubly biased standard for comparison.[22]

Third, the NDMAs on which Professor Landes primarily relies were package deals. As both the publishers and the record companies appear to acknowledge, each side

[21] RIAA Ex. 102-RR (Jupiter Research, US Ringtone Forecast, 2006-2011).
[22] 1/30/08 Tr. 829:16-830:13 (Shaw); 1/29/08 Tr. 207:5 (Carnes).

made concessions in exchange for certain benefits when negotiating these agreements. For record companies these benefits included a blanket license that reduced their administrative costs significantly, rights to exploit multi-session products like DualDisc and DVD-A, rights to license and sell music videos, and rights to sell locked content products. In exchange, the music publishers apparently received, among other things, higher mastertone rates than they otherwise would have received. Mr. Wilcox testified that the record companies accepted and music publishers traded concessions on other matters for higher mastertone rates.[23] This interpretation of the nature of the NDMA negotiations is consistent with music publishers' internal documents.[24]

Obviously the negotiations over the NDMAs reflected a complex variety of strategic considerations, and the agreements are umbrellas reflecting these considerations in addition to the value of the intellectual property rights involved. When a number of rights and other considerations are covered in a single contract, one cannot assume that the rates identified with different rights and considerations by the contract are the same as the rates that markets would set for these rights and considerations if they were sold individually.[25] Indeed, the agreements themselves state that their terms and conditions are wholly interdependent and cannot be separated -- as Professor Landes attempts to do here.[26]

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[23] 2/20/08 Tr. 3955:7-3958:4 (Wilcox).

[24] RIAA Ex. 103-RR (The Harry Fox Agency, Market Trends in Ringtones, June 13, 2005) ("All encompassing new media arrangements may trade less advantageous royalty arrangements for emerging media in exchange for favorable Ringtone arrangement.").

[25] 2/11/08 Tr. 2311:4-12 (Landes) (testifying that "it's a basic principle of economics" that if an agreement is a package deal then "it may be difficult to figure out what the terms are for each of the separate components").

[26] *See, e.g.*, Exhibits 219-221 to CO Trial Ex. 3 (NDMAs between EMI Music Publishing and SONY BMG, Universal Music Group, and Warner Music Group, each of which

2. Nature of demand for consumer products dependent on the rights in question

The demands for factors of production are derived from the demands for the products they are used to produce, and this may vary with the nature of the demands for the final goods. Therefore, in a benchmark analysis deriving the market value of a factor of production used for one consumer product from the negotiated value of that factor when used for a different consumer product, it is important that demands for the two consumer goods not differ in ways that would lead to differences in the demands for the factors. This concern further undermines Professor Landes's ringtone/mastertone benchmark.

First, a demand factor differentiating ringtones and mastertones from CDs and digital downloads is that the demand for specific ringtones and mastertones is to a large extent determined by the market performance of the corresponding phonorecords. Although a ringtone is sometimes released before the CD or digital downloads are available, in terms of creation, they obviously follow CDs and downloads in order of production. From the music publishers' perspective, this means that revenues from mastertones do not exist unless and until the record company actually makes a full-length sound recording.

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contains the following clause: "Consideration Interdependent. The terms and conditions set forth herein with respect to different products and services are interdependent, and each party's accession to terms, conditions and rates in any one section is in consideration of the other party's accession to the terms, conditions and rates set forth in the remaining sections, in their entirety.").

Moreover, only a small number of sound recordings are actually marketed in any significant way as mastertones,[27] and the sales of individual mastertones are strongly correlated with the popularity of the sound recordings from which they are taken. For example, Mr. Faxon testified that "[t]he marketplace for song -- for ringtones is a focused one on songs that have wide appeal."[28] This testimony is substantiated by Billboard Magazine's Hot Ringtones Year End charts, which depict the Top 40 selling ringtones from a year. From 2005-2007, the vast majority of the ringtones listed in the Top 40 were recently released popular singles. The key point is that there is an antecedent event (the sales performance of a sound recording) that makes consumer demand for most ringtones and mastertones much more predictable than for the sound recordings from which they are taken.

In addition, the dramatic differences in the way the two products are priced shows that the consumer demands for ringtones and sound recordings purchased for listening are of a qualitatively different character. Consumers generally pay $2.50 for a 30-second clip of a sound recording to use as a mastertone, while they pay $.99 for a full-length download of the sound recording. This suggests that consumers view these products very differently and that the character of the markets for these products may be quite different. It is for good reason that mastertones are referred to as "personalization" products, a term not applied to CDs and digital downloads. A ringtone is heard by anyone in the vicinity when a cell phone user receives a call and thus can be used to make a very public statement about the cell phone's owner. Listening to recorded music, by contrast, is typically for one's own entertainment purposes. In this sense, ringtone/mastertone rights

[27] *See* RIAA Trial Ex. 63 (Rosen WDT), at 6.
[28] *See* 1/30/08 Tr. 610:13-15 (Faxon).

are similar to synchronization rights in that they support a type of music consumption that is very different from that typically associated with CDs and digital downloads.

Because Professor Landes makes no effort to address these differences in demand, his analysis fails in exactly the same manner as the Court explained Dr. Woodbury's did in the SDARS case. In that proceeding, Dr. Woodbury recommended as a benchmark the rates paid for licenses to sound recordings by music services that could be purchased in conjunction with a cable television service that consumers purchased for the primary purpose of watching television, not listening to music.[29] The Court contrasted that service with the SDARS service which was used specifically for listening to music.[30] The Court explained that "the consumer products from which demand is derived for music inputs are clearly not comparable in these two markets" and "the ultimate uses of the Music Choice programming and SDARS music programming exhibit substantial difference so as to make them poor comparators."[31] This lack of comparability led the Court to conclude that the benchmark proffered by Dr. Woodbury was outside the "'zone of reasonableness' for consideration in th[e] proceeding."[32] The same is true here, where Professor Landes is attempting to take the demand for a sound recording snippet that is not used for listening and derive from it the rates that should be charged for sound recordings that people purchase to listen to.

In considering the agreements that Professor Landes discusses in his testimony, it should also be noted that most are for mono and polyphonic ringtones that do not involve

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[29] Determination of Rates and Terms for Preexisting Subscription Services and Satellite Digital Audio Radio Services, 73 Fed. Reg. 4080, 4088 (Jan. 24, 2008).
[30] *Id.* at 4089.
[31] *Id.*
[32] *Id.*

any sound recording at all. Thus, to the extent that a critical issue in this proceeding is the division of the revenues to be earned from the exploitation of sound recordings between music publishers and record companies, those agreements tell us very little.

3. Bargaining considerations

In addition to the differences discussed above, basic bargaining theory provides additional reasons why Professor Landes's ringtones analysis is flawed. To facilitate discussion of factors influencing bargaining outcomes, I first need to introduce concepts that economists employ to analyze and predict the outcomes of bargaining over remuneration between parties like those who would negotiate mechanical rates in a hypothetical free market setting.

The basic framework is straightforward. Assume record companies and songwriters supply essential inputs required to produce a sound recording.[33] For any given sound recording, the record company and the songwriter will bargain over the division of prospective revenues generated by the sound recording produced jointly with their inputs, where the songwriter's input is a musical composition and the inputs of the recording company are the time and resources committed to producing the recording, the talents and reputation of the recording artists, the resources committed to marketing the recording, and the activities associated with manufacturing and distributing the recording. In this hypothetical market, these negotiations take place before the recording is produced. To determine the range within which the division of the recording's revenues between the two parties would fall in a hypothetical negotiation, we need to

[33] The fact that a record company may also be representing the interest of a recording artist and a publisher may be representing a songwriter in these negotiations does not alter the fundamental economics.

know: (1) the magnitude of the costs incurred by the suppliers' of both inputs that are attributable to their decision to create a recording from a song, (2) the revenue the recording is expected to generate, and (3) for each input supplier the amount it might earn (net of cost) by committing its input(s) to another recording (or other use) *instead*[34] of the recording in question.

For example, suppose the recording is expected to generate revenue of 200, that the input(s) supplied by the record company cost 150, that the cost of the input supplied by the songwriter is 10, and that neither party has another use for its input(s) that generates a greater return. Then expected revenue exceeds total cost by 40. At a minimum each party will insist on a share of expected revenue that covers the cost of supplying its input. So at a minimum the record company will be paid 150 and the songwriter 10. Actual payments will depend on how the surplus of 40 is divided between them, which ultimately is a function of their relative bargaining strengths. Standard bargaining theory predicts that if bargaining strengths are equal, as would be the case if realization of the surplus of 40 was equally dependent on the supply of each of the two inputs, surplus will be divided equally between the two input suppliers. In that case the record company would retain 170 from the revenue of 200, and the songwriter would collect 30.

[34] "Instead" is italicized to highlight a critical difference between the composition contributed to a recording by a songwriter and the various resources committed by an artist and record company. A composition is a non-rival good that can be recorded by innumerable artists. Therefore giving one record company permission to record it does not preclude allowing other artists to record it as well. There is an opportunity foregone when it is licensed to one recording company only to the extent that this reduces the amount another recording company might pay to be able to record it. On the other hand, all the inputs to producing a recording supplied by artists and record companies, whether time, tangible goods, or consumable services, are rival goods in the sense that using them to record one composition precludes using them to record another composition.

One party gains bargaining power over the other and a greater share of total revenue to the extent it has alternative uses for its inputs that allow it to realize payments in excess of its costs. To see how outside options can increase an input supplier's bargaining power and its share of total revenue, suppose that the record company has an alternative use for its inputs that would generate a profit of 20, while the songwriter's situation remains the same. In economic jargon, the 20 is the record company's opportunity cost of producing the recording, *i.e.*, the value of the opportunity given up. Then the record company would insist on a minimum of 170, and the net surplus to be realized from producing the recording in question rather than committing to the alternative use for its inputs would be 20, and it is the 20 that would be split between the record company and the songwriter. Assuming equal bargaining power, payments to the record company and the songwriter would now be 180 and 20, rather than 170 and 30. As a general matter, increasing one party's opportunity cost (in the form of profitable outside options) will increase its bargaining power and its share of revenues. The most obvious outside options for record companies are songs written by other songwriters. Testimony by songwriters in this proceeding provides ample evidence that competition among songwriters exerts substantial downward pressure on freely negotiated prices paid by recording companies for mechanical rights.[35]

Having introduced the basic bargaining framework, we can now modify the example to reflect the fact that for the recording industry an initial investment in a sound recording generates revenues through multiple distribution channels. Assume that the parties are bargaining to divide the revenues generated by selling a sound recording *and* a

[35] 1/30/08 Tr. 829:16-830:13 (Shaw); 1/29/08 Tr. 207:5 (Carnes).

mastertone made from that recording. To keep things simple, assume that opportunity costs for both parties are zero, bargaining power is equal, the sound recording is expected to generate 20 in mastertone sales, and the cost of producing, promoting, and distributing a mastertone is zero. Then, applying our bargaining model, there would be 220 in revenue to be divided, and one would expect a total payment of 180 to the record company for the recording and the mastertone and 40 to the songwriter (150 to cover the record company's costs, 10 to cover the songwriter's costs, and the remaining 60 split equally between the songwriter and record company), with this split determined through bargaining prior to producing the recording.[36]

In my view, this hypothetical is what one should have in mind in determining mechanical royalties rates for CDs, downloads, mastertones, and other forms of distribution in this proceeding. The outcome of the bargaining would be a set of rates for CDs, downloads, etc. that, taken together (because the rates can differ for different products based on the surplus that each product generates, predictions as to or uncertainty about the future market for different products, and a host of other reasons), allocate the total surplus of all revenue streams expected to be produced based on the parties' production costs, opportunity costs, and bargaining power.[37] And that bargaining power would reflect whatever leverage each party has based on its ability to withhold its input from all the forms of distribution of the recording at the same time.

[36] Below I will apply these concepts of bargaining to demonstrate why -- even if one would accept the rate set in the NDMAs to reflect fair market value for sound recordings -- that rate would need to be adjusted prior to using it as a benchmark.
[37] In the hypothetical negotiation described, one would also consider revenues to be earned from other revenue streams, such as the substantial performance revenues that are earned by music publishers, in determining how to divide the surplus.

The important point for present purposes is that this hypothetical bargaining process bears no resemblance to the setting in which the current ringtone and mastertone agreements were negotiated. When the publishers and the record companies sat down to negotiate the NDMAs, rights to produce recordings and distribute them as CDs and downloads simply were not at issue. Those other rights were and continue to be subject to an entirely separate set of negotiations and to the statutory rates set in this proceeding. In addition, many thousands of recordings that might later be made into mastertones were already produced and being sold in the marketplace as CDs and downloads.

It follows that the split of mastertone revenues between publishers and record companies negotiated in the NDMAs may bear no resemblance to the shares of overall surplus that would be determined by hypothetical negotiations over the division of aggregate revenues. In fact we would expect the shares of surplus determined by bargaining over mastertone rights in the NDMAs to differ systematically from the shares that would be determined by upfront negotiations over all surplus because the substantial costs of producing, promoting and distributing recordings would influence bargaining over total surplus across all uses of sound recordings, but were largely irrelevant to the bargaining over the division of surplus in the NDMAs. It would therefore be inappropriate to assume, as Professor Landes does, that the observed split of mastertone surplus can be taken as a proxy for the split of surplus that would be determined by unconstrained negotiations over mechanical rights.

Finally, it should be noted that ringtones and mastertones make up only a small and apparently declining portion of the revenues from the exploitation of sound recordings and musical works. As explained in the testimony of Bruce Benson, mastertones make up only 5% of record company revenue, and evidence in the marketplace suggests that ringtone revenue will continue to decline.[38] This being the case, extra scrutiny should be applied to a proposal to use ringtone and mastertone rates as a benchmark for setting a compulsory license for mechanical rights because errors in constructing such a benchmark would create inefficiencies in what is by far the larger part of the market.

III. Better Benchmarks

Professor Landes's choice of benchmarks is surprising given that he had at his disposal a large volume of data concerning the exact rights at issue -- mechanical licenses for purchased music in the form of CDs and downloads. In many cases, these licenses involve rights not subject to the compulsory license (first uses of musical compositions, which are freely negotiated) and rights to create the same products that are the central issue in this proceeding (rights to create copies of sound recordings to be purchased by consumers for their listening pleasure). Moreover, these rights apply to music that, once recorded, has a reasonable prospect of generating additional revenues for songwriters and publishers from performance royalties and sales in ancillary markets such as those for synchronization rights and mastertones. The market rates for these rights suggest that Professor Landes's benchmarks do not accurately reflect the market for mechanical licenses.

[38] Benson WRT at Fig. 3 & pp. 21-22.

A. The Market for Voluntary Mechanical Licenses

1. Characteristics of the Market

As witnesses for both record companies and music publishers have explained, essentially no one uses the compulsory license process -- licenses for mechanical royalties for sales of sound recordings are negotiated in the market on a voluntary basis. Ms. Finkelstein of SONY BMG explained how the compulsory license process is essentially never used -- out of the tens of thousands of licenses that SONY BMG has, only 2 are compulsory licenses -- the rest are voluntary.

The question then becomes what lessons one can learn about the rate that would be set in a free market from the pattern of rates set in these voluntary deals. That, in turn, depends on how one assesses the degree of transaction costs in the market. Professor Landes claims that transaction costs are sufficiently small that they do not deter record companies and music publishers from entering into voluntary agreements.[39] That assumption is essential to his conclusion that it is significant that most of the voluntary deals are at the statutory rate and (according to Landes) the amount of discounting below that rate is going down. He concludes from these premises that the market rate is actually above the current statutory rate.

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[39] The fact that they enter into voluntary agreements is not itself evidence that transaction costs are low. It simply means that the transaction costs of voluntary agreements are lower than those associated with using the compulsory license, and there is testimony in evidence that the administrative burdens of the compulsory license are enormous. RIAA Trial Ex. 70 (Wilcox WDT), at 29-30; 2/14/08 Tr. 3325:8-3328:3 (Finkelstein, A.); 2/5/08 Tr. 1398:21-1401:2 (Israelite) (explaining that under Section 115's compulsory license scheme, "the user was supposed to be taking up most of the administrative burden and costs" and "that's a burden that we've now undertaken" at HFA). There is also evidence in the record that transaction costs are high. 2/14/08 Tr. 3334:15-3335:6 (Finkelstein, A.). The fact that some contracts are negotiated does not rule out the possibility that many other potential transactions never take place due to high transaction costs.

I view the matter quite differently. In fact, the pattern of licensing suggests strongly that the current statutory rate is well above the rate that would prevail in a free market. To be sure, there are many voluntary mechanical licenses at the statutory rate.[40] But the primary reason for that phenomenon almost certainly is the fact that licenses at the statutory rate are generally available without significant transaction costs, primarily through streamlined, and sometimes automated, licensing procedures offered by HFA and individual publishers.[41] By contrast, licensing at rates other than the statutory rate requires negotiation between the record company and one or more publishers and/or songwriters. Given the amount of money at stake, on average, in these negotiations, one would expect transaction costs to be a significant factor pushing deals toward the statutory rate.[42] In fact, within limits, any rate this Court might set would likely become a commonly used contractual rate precisely because of the costs of negotiating a customized rate, even though the number of recording contracts would almost certainly fall if the statutory rate was increased.

It is therefore unsurprising that licenses that diverge from the statutory rate, when they occur, arise primarily in the context of new uses of sound recordings where there is already an existing negotiation (with a singer-songwriter or co-writers or in the context of

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[40] Harry Fox is authorized by music publishers to license at the statutory rate, but discounts from the rate must be subject to individualized negotiation, often with multiple music publishers for a single musical composition. RIAA Trial Ex. 29 (HFA DPD License); 2/14/08 Tr. 3334:15-3335:6 (Finkelstein, A.); 2/11/08 Tr. 2534:2-8 (Landes).

[41] Written Rebuttal Testimony of Andrea Finkelstein, p. 27-28.

[42] It is not difficult to see how transaction costs could swamp other costs in this area. Imagine for example, a record company seeking to make an album with 10 songs, each represented by a different publisher, that it hopes will sell 10,000 units. At 9.1 cents per song, the mechanical royalty for the album would be $9,100. Negotiating a one cent reduction from the statutory rate for each sound recording would result in a savings of $1,000 -- not trivial, to be sure, but it may be less than the cost of the time and talent involved in negotiating with 10 publishers for the rights to those 10 songs.

the first use of a song which is not subject to the compulsory license) within which the incremental cost of negotiating over the rate would be considerably lower.[43] But if one looks at those negotiated licenses, what is significant is that they always involve discounts below the statutory rate. That tells me that the market rate is lower than the statutory rate, not higher as Dr. Landes claims. If indeed the market rate were higher, given the prohibitively high cost of using the compulsory license process, the statutory rate would not remain a cap. One would expect to see music publishers demand more than the statutory rate, secure in the knowledge that at least up to a point the record company would not respond by invoking the compulsory license. One would also expect to see deals for first uses of compositions, which are not subject to the compulsory license, at rates above the statutory rate. As the testimony has shown, this does not occur in the marketplace. That suggests the rate that would prevail in a hypothetical free market is not above the current statutory rate.

To the contrary, the deals that diverge from the statutory rate all reduce the rate. Frequently, these concessions come in the form of controlled composition clauses in agreements with singer-songwriters, but not always. Another example is the fact that the music publishers regularly license record clubs at 75% of the current statutory rate.[44] Yet another example, discussed in the testimony of the songwriters already presented here, is those deals in which songwriters regularly agree to less than the statutory rate when they co-write with an artist who has agreed to reduced rates in a controlled composition clause.

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[43] Written Rebuttal Testimony of Andrea Finkelstein, p. 27-28.
[44] 2/5/08 Tr. 1667:3-1668:2 (Peer); Finkelstein WRT at 2-3; RIAA Ex. 104-RP (HFA Press Release, "HFA and BMG Columbia House Reach Historic Licensing Arrangement, April 5, 2006).

This last category of deals, agreed to by individual songwriters, is of particular significance. One cannot make the argument, as the publishers suggest, that such decisions are a result of complicated trade-offs in a recording agreement. These co-writers agree to mechanical royalties for CDs and downloads (and do not receive anything else from the record company in exchange) to write songs with full understanding that they will be paid significantly less than the statutory rate. They claim that they are "forced" to do it, but the reality is that this is the market outcome. Songwriters are routinely willing to license for less than the current statutory rate because they need to do that if they want their songs to be recorded. That is a true market for mechanical royalties for musical works. And these lower mechanical rates appear to be sufficient to generate significant revenues for music publishers, *see* Santisi WRT, and to ensure the continued creation of new musical compositions.

For all these reasons, I conclude that the market rate for mechanical rights is below the current statutory rate and, as discussed in the next section, the current voluntary deals point the way to where the rate should be set going forward. This conclusion is not modified by Professor Landes's suggestion that effective rates for mechanical royalties are converging to the statutory rate. To begin with, it appears that Professor Landes exaggerated this effect through the exclusion of relevant data.[45] Moreover, while there may be some degree of convergence going on in the marketplace,[46] that likely reflects at least in part the impact of the 1995 statute trumping reduced rates under controlled composition clauses for most downloads. In any event, as the testimony provided by Ms. McLaughlin, Dr. Teece, and Professor Landes all show,

[45] *See* Alfaro WRT.
[46] *See* RIAA Trial Ex. 64 (Teece WDT), at 30-31.

the overall effective rate for mechanical licenses remains far below the current statutory rate. In the market for mechanical licenses for physical products where negotiated discounts are not preempted by law, record companies pay much less than the statutory rate. The only conclusion that can be drawn is that the fair market value of those rights is less (likely much less) than 9.1 cents per mechanical license.

2. Data on Mechanical Licensing

To prepare this report I sought and obtained data from the major record companies concerning mechanical licensing and royalty rates for CDs, which remain the record companies' primary source of income. Because of the operation of the 1995 Act, there is little negotiation on digital uses of sound recordings because the Act trumps controlled composition clauses and compels record companies to pay the full statutory rate, even if they can negotiate with singer-songwriters to pay less. Thus, negotiated prices related to physical sales are much better indicators of true market prices than prices paid on digital sales.

From the record companies, I was able to obtain different data sets concerning mechanical royalty rates from SONY BMG, Warner Music Group, and Universal Music Group.[47] From SONY BMG and WMG, I obtained data concerning the mechanical royalties negotiated and paid on their third quarter of FY 2006 releases, including data on which releases involved agreements by singer-songwriters to receive reduced royalties, which releases involved co-writers who had agreed to write songs for reduced rates, and which individual tracks were first uses (and thus not subject to the compulsory license). It is my understanding that it often takes some time for record companies and music

[47] I sought, but was unable to obtain, data from EMI in sufficient time to incorporate it into this report.

publishers to settle on the shares owed to different participants for mechanical royalties and thus that 2006 data is likely to be more complete than 2007 data.[48] From UMG, I was able to obtain data on 2006 and 2007 releases, including an identification of first uses for a sample of the releases. The UMG data did not, however, permit the same kind of analysis as the other data because UMG does not separately break out situations in which co-writers agreed to write songs at reduced rates, and thus the data were less useful. The SONY BMG, WMG, and UMG data all provided information on the rates negotiated as well as the "free goods" adjustments frequently negotiated by record companies that have the effect of lowering the overall rate.[49]

In addition, I also attempted to use data from portions of some of the music publishers' own data bases, which were produced in discovery. Because I did not have complete information about the structure of those databases or entries therein, it was only possible to draw certain tentative conclusions.

As discussed below, the data on mechanical royalties allowed construction of a number of useful measures of the current marketplace for mechanical licenses, including the average effective rate actually negotiated and paid in the marketplace for licenses in different circumstances, the average effective rate actually negotiated and paid for first use licenses which are not subject to the compulsory license, and the rates actually negotiated and paid to co-writers who agree to write songs to be used for the first time

[48] Although 2005 data may be more complete than 2006 data, the mechanical rate in 2005 was lower (8.5 cents) and I thought it preferable to present a more current picture.
[49] In general, free goods provisions set a specific percentage of physical sales as "free," e.g., 15% free goods, and thereby have the effect of lowering the effective rate by a commensurate percentage.

(and thus are not subject to the compulsory license). Each of these data points provides useful information for this Court.

B. The Effective Rate

The data demonstrate that, on average, record companies negotiate mechanical royalty rates far below the statutory rate. My review of the mechanical rate data obtained from the various companies confirms that there is significant discounting below the statutory rate.

A review of the SONY BMG data shows that, when one excludes public domain works and long songs, SONY BMG negotiates, on average, a rate of [[redacted]] for mechanical royalties on physical products. The data are summarized in the following table. In addition to a mean, I used a regression analysis to examine the influence of contract characteristics on negotiated rates.

SONY BMG DATA	AVERAGE EFFECTIVE RATE
Mean Analysis	[[redacted]]
Regression Analysis	[[redacted]]

A review of the WMG data provides much the same result, as summarized in the following table:

WMG DATA	AVERAGE EFFECTIVE RATE
Mean Analysis	[redacted]
Regression Analysis	[redacted]

UMG's data for its 2006 and 2007 releases show rates that are higher, but still well below the 9.1 cent rate under the compulsory license. As this data set provided less detail about agreement types than the other data sets, there was no reason to do a regression analysis.

UMG DATA	AVERAGE EFFECTIVE RATE
Mean Analysis	[redacted]

Finally, as noted above, I did have access to databases of certain music publishers. Although certain assumptions needed to be made based on the data that I received (which therefore permit me to make only tentative conclusions), the UMPG and BMG music publishing data suggest that the actual average effective rates in the marketplace are similar to those revealed by the record company databases. Again, there was no reason to perform regression analyses on these data sets because they lacked critical information about differences among agreements and because I had less confidence in the quality of the data.

MUSIC PUBLISHER DATA	AVERAGE EFFECTIVE RATE -- BMG	AVERAGE EFFECTIVE RATE -- UMPG
Mean Analysis	7.42 cents	[[redacted]]

What is actually paid in the market for mechanical rates is highly relevant. To be sure, one can argue that controlled compositions have an impact on the rates paid and that controlled composition clauses are part of a bundled agreement with multiple complex provisions, just like the NDMAs. But the actual rates paid in this market should not be so easily dismissed for several reasons.

First, the royalties paid to singer-songwriters or producer-songwriters who had agreed to reduced rates in controlled composition clauses are not some tiny fraction of the market. As the music publisher witnesses admit, between 75 and 90 percent of their songwriters are singer-songwriters or producer-songwriters.[50]

Second, what is actually paid in the market demonstrates that even at "low" rates about which songwriters complain, there is no shortage of songs and there are tens of thousands of songwriters.[51] Thus, the current effective rate, which is well below the current statutory rate, does not appear to be causing a shortage of songs. To the extent that the Court needs to consider the rates that are necessary to persuade songwriters to continue creating songs and to persuade record companies to continue to make new

[50] CO Trial Ex. 24 (Firth WDT), at ¶ 38 (testifying that only 10 percent of BMG Music Publishing's songwriters are pure songwriters); CO Trial Ex. 13 (Peer WDT), at ¶ 23 (testifying that only 10 percent of Peer's songwriters are pure songwriters); CO Trial Ex. 8 (Robinson WDT), at ¶ 38 (testifying that almost 65% of Famous's songwriters are singer-songwriters and 25% are producer-songwriters); 1/29/08 Tr. 499:5-8 (Faxon) (estimating that 75% of EMI Music Publishing's songwriters are singer-songwriters).
[51] *See* Slottje WRT at 22-26.

sound recordings available -- which appears to the province of the first statutory factor -- the rate that songwriters are actually getting paid currently would seem to encourage creation.

Third, as the songwriters themselves have testified and as the data demonstrates, songwriters are routinely willing to license their songs at well below the statutory rate.[52] *This is the outcome of market negotiations.* In the circumstances discussed by songwriters in their testimony and in the ordinary circumstances of songwriters who agree to co-write with singer-songwriters who had agreed to reduced rates through a controlled composition clause, the songwriter agrees to write new material knowing that he or she will get far less than the current statutory rate. This is at a moment in time where the songwriter has leverage to completely withhold his or her services and the compulsory license does not apply. Once again, that is a reflection of a market that values songs at well below the current statutory rate.

Notably, music publishers also appear routinely to sign singer-songwriters to publishing deals even where those singer-songwriters have agreed to controlled composition clauses. By agreeing to sign singer-songwriters at these lower rates, music publishers are clearly demonstrating that they believe they will make a profit at those mechanical royalty rates.

Fourth, to the extent that some of the data reflect royalty rates agreed to as part of a recording agreement that contains a controlled composition clause, it is worth noting that the trade-off in a recording agreement is quite different from the trade-offs in the NDMAs. In the NDMAs, music publishers and record companies may have been trading

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[52] 1/30/08 Tr. 829:16-830:13 (Shaw); 1/29/08 Tr. 207:5 (Carnes).

off the royalty rate on one product for royalty rates on other products. In contrast, recording agreements reflect understandings reached between singer-songwriters and record companies as to how each party will be compensated for their contributions to the production and commercialization of a single primary product -- one or more sound recordings. Such understandings are common to most business agreements to create or produce a product of economic value. To the extent that rates for mechanical rights emerge from a review of many such agreements, they should be interpreted as standard market rates paid singer-songwriters when record companies also make industry-standard contributions to the recording, production, and promotion of the associated sound recordings.

Finally, one could draw the conclusion, based on the record companies' use of controlled composition clauses, that the Court could just set the rate where it is or increase it and leave it to the market that has operated to date to keep the rates down to a lower level. But that appears to be nothing more than the "bargaining room theory" that I understand to have been rejected previously by the Copyright Royalty Tribunal.[53] More important, setting aside whether that is consistent with the statutory factors, the impact of the 1995 Act means that the impact of controlled composition clauses will continue to decline with the transition to digital distribution. The market that has operated to date to moderate the impact of rising mechanical rates will cease to do so, and absent a downward adjustment in this proceeding, record companies will be paying much more in

[53] *See* Adjustment of Royalty Payable Under Compulsory License for Making and Distributing Phonorecords, 46 Fed. Reg. 10466, 10478 (Feb. 3, 1981) ("A rate that is deliberately fixed above the level that the market can bear -- so that a lower rate can be negotiated in the marketplace -- cannot be 'reasonable'. Such a rate would yield more than the 'fair return' to copyright owners mandated by the statute.").

mechanical royalties than they were before -- with far less ability to negotiate rates below the current statutory rate. Thus, the rate that this Court is setting is increasingly important because Congress has sharply limited the ability of the market to correct any error if the rate is set too high.

C. First Uses

As discussed above, the first use of a sound recording is not subject to the compulsory license. Songwriters are free to license at whatever rate that they want. And evidence suggests that, at least from the perspective of consumers, first uses tend to generate the most successful sound recordings. One can see the value of first uses by looking at the Billboard charts. A review of the Billboard top 100 for the last 3 years indicated that fewer than five of the top 100 songs were cover versions rather than first uses.[54] These data confirm that new songs are what sell best in today's marketplace for music.

Despite the obvious value of many first uses and the absence of compulsory licenses for first uses, first uses are licensed at 9.1 cents or significantly lower. I have summarized the data below in the following table:

AVERAGE EFFECTIVE FIRST USE RATES	SONY BMG	WMG	UMG
Mean Analysis	[[redacted]]	[[redacted]]	[[redacted]]
Regression Analysis	[[redacted]]	[[redacted]]	[[redacted]]

[54] *See* RIAA Ex. 119-RR, RIAA Ex. 120-RR, and RIAA Ex. 122-RR (Billboard Top 100 Songs Year-End Charts, 2005-2007).

Absent any compulsion, this is what songwriters and publishers are willing to license their works for in the marketplace.

D. Rates Received by Co-writers for First Uses

As discussed above, record companies enter into agreements with singer-songwriters that include controlled composition clauses. As various songwriters have testified in this case, however, pure songwriters also enter into agreements with artists or with singer-songwriters by which they agree to rates lower than the compulsory license rate.[55] These agreements typically are negotiated when singer-songwriters who have agreed to reduced rates through controlled composition clauses ask their co-writers to accept discounted "controlled" rates as well. Such agreements appear to be relatively common in the marketplace, and the SONY BMG and WMG datasets that I received permit one to examine the rates that co-writers receive.

Using SONY BMG's and WMG's data, I examined the rates paid for first uses of sound recordings to co-writers who had agreed to controlled rates and all individuals not subject to a controlled composition clause at all. These data show that the mean effective rate for such instances is [[redacted]] per track. I was also able to do a similar analysis with the WMG data (WMG tracks outside producers and co-writers who agree to controlled rates), which shows rates of [[redacted]] per track. Regression estimates were somewhat less than a penny higher. The UMG data did not permit such an analysis because it does not break out writers who have agreed to controlled rates from singer-songwriters who have agreed to controlled rates. The music publisher databases similarly do not permit this type of analysis.

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[55] *See, e.g.*, RIAA Ex. 108-RR - RIAA Ex. 118-RR, RIAA Ex. 121-RR, RIAA Ex.135-RR (Co-Writer Agreements).

AVERAGE EFFECTIVE FIRST USE RATES FOR NON CONTROLLED AND CO-WRITER TRACKS	SONY BMG	WMG
Mean Analysis	[redacted]	[redacted]
Regression Analysis	[redacted]	[redacted]

E. Conclusion

Using data from agreements with songwriters supplied to me by three of the major recording companies, I was able to construct three measures for market-negotiated rates for mechanical rights: (1) the average effective rate for mechanical royalties for SONY BMG, WMG, and UMG; (2) the average effective rate for first use mechanical licenses for SONY BMG, WMG, and UMG; and (3) the average effective rate for SONY BMG and WMG for first use mechanical licenses with people other than singer-songwriters who have agreed to discounted rates in a controlled composition clause. After rounding to the nearest twentieth of a cent, the estimates for the various average effective rates ranged from a low of 5.25 cents to a high of 7.8 cents. Mean effective rates calculated for two sets of agreements supplied by publishers were also within this range.

IV. Adjusting Professor Landes's Ringtone/Mastertone Benchmark

That the mechanical royalty rate for mastertones established through negotiations between the record companies and music publishers represents the outcome of a very idiosyncratic set of circumstances should be clear from the discussion in § II.C.I. The outcome of those discussions does not provide a reliable basis to set a statutory rate even for mastertones themselves, much less for other sound recording formats. At a minimum, if the Court were to use mastertone rates as a benchmark for other mechanical royalty rates (and I do not recommend that the Court do so), very substantial adjustments would have to be made.

A. Using Professor Landes's Ringtone/Mastertone Benchmark for Mastertones Themselves

In order to set a statutory mechanical rate for mastertones, the Court would have to somehow adjust the negotiated rate in at least two ways. First, the NDMAs that are the basis on which Professor Landes puts forth the mastertone benchmark are the result of a bargain for rights and royalty rates for many different products -- a bargain that would not have occurred but for the exchange of consideration on many different fronts. The agreements themselves make this clear by specifying that the consideration is interdependent, which means that one cannot pull one piece out of the bargain and hold it up as a benchmark, as Professor Landes has nonetheless done.[56] In order to set a rate for mechanical licenses for mastertones based on the NDMAs, the Court would have to adjust the rate in the NDMAs down to reflect the other benefits that the record companies received, along with, perhaps, any other benefits the publishers received in return.

Second, the NDMAs provide a blanket license for mastertones, which is a significant benefit to the record companies because it avoids the complexities and

[56] *See, e.g.*, Exhibits 219-221 to CO Trial Ex. 3 (NDMAs between EMI Music Publishing and SONY BMG, Universal Music Group, and Warner Music Group, each of which contains the following clause: "**Consideration Interdependent**. The terms and conditions set forth herein with respect to different products and services are interdependent, and each party's accession to terms, conditions and rates in any one section is in consideration of the other party's accession to the terms, conditions and rates set forth in the remaining sections, in their entirety.").

administrative burden of individual license negotiations. In contrast, the compulsory license is a burdensome, song-by-song licensing process with the burdens falling primarily on the record companies.[57] Getting a blanket license is a significant benefit to the record companies because it means that they can operate in the market quickly and without administrative burden. If the Court were to accept Professor Landes's claim that mastertone agreements are the proper benchmark for setting rates here, it would have to adjust down to address this factor as well.

B. CDs and Downloads

It is even more problematic to use the mastertone rate as a basis to set mechanical rates for CDs and digital downloads. Assuming that the adjustments discussed above could be made, further adjustments would be necessary to account for the differences between the mastertones market and the market for the consumption of music through the purchase of CDs and downloads. Among other things, the consumer use of and demand for mastertones differs from CDs and downloads, as reflected in the prices paid by consumers, and the opportunity costs for the music publishers with respect to mastertones differs markedly from their opportunity costs with respect to CDs and downloads.

If any use were to be made of the ringtone and mastertone agreements as a basis to set a mechanical royalty rate for CDs and digital downloads, these differences would have to be quantified, and the benchmark would have to be adjusted in order to calculate a rate for the target market of CDs and downloads. It is all but impossible to make these adjustments with any real level of confidence. In particular, it seems clear that in the mastertone market the music publishers would have required a higher royalty rate to

[57] RIAA Trial Ex. 70 (Wilcox WDT), at 29-30; 2/14/08 Tr. 3325:8-3328:3 (Finkelstein, A.); 2/5/08 Tr. 1398:21-1401:2 (Israelite).

compensate them for the opportunity cost of losing sales of monophonic and polyphonic ringtones, but we have no way to know how much higher. All we can reasonably say is that applying the mastertone mechanical rate to the market for CDs and downloads would require some lowering of the rate. We cannot say by how much because we have no data allowing us to quantify the opportunity cost to the music publishers in the mastertone market.

That said, we can at least look at how the music publishers and the record companies divided the surplus created by the sale of mastertones, and what that tells us about how in a hypothetical negotiation the music publishers and record companies might divide the surplus in the CD and download markets.

Professor Landes testified that the music publishers bargained for 20% of the surplus (which he refers to as the "content pool") in the mastertone market. Although Professor Landes does not clearly explain his reasoning, it appears to be his view that the surplus available to be divided between the parties in that market was equivalent to the wholesale revenues paid to the record companies. He did not subtract any costs from the wholesale revenues in order to calculate the "content pool" or surplus, apparently because he believed that all costs of creating the sound recording were sunk and there were no incremental costs required to sell the sound recording as a ringtone. Professor Landes's implicit assumption that all sound recording costs were sunk, and that the surplus equaled wholesale revenues for digital distribution, may be accurate in the ringtones market, given the history of the ringtones negotiations. As I observed above, the negotiations over the mechanical rate for mastertones occurred after many sound recordings had been created, and the mastertone agreements generally presuppose the existence of sound recordings. But the assumption Professor Landes made for the mastertone market does not apply to the market for CDs and downloads. This Court is setting the mechanical royalty rate that will be paid for the next five years, until 2012. During that time period, the record companies will be creating huge numbers of new sound recordings, and will be investing the money to market and distribute those sound recordings. Therefore, in order to calculate the surplus for the purposes of rate-setting here, the costs of producing sound recordings must be considered. Indeed, the Court made precisely this point in its Webcasting Determination:

> According to Dr. Jaffe . . . 'there is no incremental cost imposed on either the musical work or sound recording by virtue of making the underlying intellectual property available for digital performance.' (Footnote and citation omitted). As a matter of theory, Dr. Jaffe's proposed benchmark analysis ignores the long-established pattern of investment in the recording industry. Thus, not only are there some initial sunk investments, but there is a requirement of repeated substantial outlays year after year or, in other words, the repeated "sinking" of funds. If sellers are faced with the prospect of not recovering such sunk costs, then the incentive to produce such sound recordings is diminished.
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> **************************
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> Furthermore, recording companies will necessarily make future investment decisions based on their best estimates of the revenue sources available to them in the future from all sources including revenue streams derived from the non-interactive webcasting of sound recordings.[58]

Therefore, as this Court held, when the parties negotiate a license fee, they will consider their costs of creating future sound recordings and musical works, because they are bargaining over the surplus for music that has not yet been created. The surplus that they are dividing in the CD and download market therefore equals the wholesale prices less the costs of production. Consequently, if the music publishers bargained for 20% of

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[58] Digital Performance Right in Sound Recordings and Ephemeral Recordings, 72 Fed. Reg. 24094 (May 1, 2007) (footnote and citations omitted).

the surplus in the ringtones benchmark (as Professor Landes claims) and one wanted to use the that rate as a benchmark for setting mechanical royalties for CDs and digital downloads, the mechanical royalty should be calculated in the CD and download markets by first subtracting the costs of production from wholesale revenues, and then multiplying by 20%.

As noted above, I believe that Professor Landes' approach is incorrect for a host of reasons, but if one were to attempt to use his approach, one would need to do so using the correct costs. In order to perform this calculation, we must first decide which costs are appropriately deducted from revenues in order to determine the surplus. That the costs of producing, promoting, and distributing sound recordings should be deducted is clear because they are obvious consequences of a decision to make a recording. The biggest question pertains to overhead costs because they traditionally are thought of as not varying with output. However, the costs that record companies classify as overhead are in fact largely, if not completely, variable and responsive to the volume of record sales and the number of recordings produced. Thus, from 1999 to the present, we have seen the record companies engaging in significant restructurings that have reduced overhead expenses (among others) in response to declining revenues. Although total revenues for the major record companies have declined by approximately 17% during that time, their overhead expenses as a percentage of total revenue have remained within a fairly narrow band between 20% and 23.2%.[59] They have been able to adjust overhead costs because the record company overhead consists primarily of expenses for human resources, which can be readily reduced. Therefore I would expect the record

[59] Benson WRT at Figure 1.

companies to consider most if not all of their costs when they bargain over the surplus created by the sale of downloads and CDs. These costs therefore should also be counted when calculating surplus.

Using data supplied by FTI in the testimony of Bruce Benson, and data produced by the music publishers in discovery, we can approximate the surplus for CDs. According to FTI,[60] with respect to physical formats the record companies earn a profit of 2.5 cents per track. In other words, 2.5 cents represents the record company surplus left after all expenses are paid. In addition to this profit, I include in the surplus the amounts paid to the recordings artists (16.1 cents/track) and the mechanical royalty that is split between the music publisher and the songwriter (on average, 7.5 cents). Thus, the amount to be divided between the record companies and artists, on the one hand, and the music publishers and songwriters on the other hand, is 26.1 cents. This does not take into account the expenses of the music publishers, however. Based on my review of the testimony of Terri Santisi, and the data on music publisher costs included in that testimony, it appears that the music publisher costs (exclusive of the amounts paid to the songwriters) equals approximately 1 cent for every track on which a mechanical royalty is paid.[61] Deducting for the publisher costs, therefore, the available surplus is 25.1

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[60] Benson WRT at Figure 4h.

[61] The mechanical royalties earned by EMI Music Publishing in the 2006/07 fiscal year constituted [[redacted]] of its total revenue. The total mechanical royalties earned by EMI MP in 2006/07 equaled [[redacted]], and its total costs (including overhead), exclusive of mechanical royalty payments to the songwriters, equaled [[redacted]]. If we allocate [[redacted]] of the total costs to the mechanical royalties, then EMI MP incurred costs of [[redacted]] to earn mechanical royalties of [[redacted]]. As a percentage, costs allocable to mechanical royalties equaled [[redacted]] of those royalty revenues. According to the FTI analysis, the effective mechanical royalty rate per track is [[redacted]], and [[redacted]] of that amount -- or [[redacted]] -- represents the EMI MP costs allocable to each mechanical

cents per track for CDs and other physical products. Based on Professor Landes's opinion that the music publishers receive 20% of the surplus in the mastertone market, the same division of the surplus in the CD and download markets would yield an apportionment of the surplus to the publishers of 5 cents. The mechanical royalty thus would equal 6 cents (the publisher/songwriter portion of the surplus, plus the publisher costs).

There is another way to approach this analysis, and that is to assume -- contrary to Professor Landes -- that when the music publishers and record companies bargained over a mechanical royalty rate for mastertones, they took into account their respective costs when they considered what surplus was available to be split. Again using the data supplied by FTI,[62] the profit to the record companies from each mastertone sale is 38.9 cents. Adding to that the artist royalty, (27.5 cents/mastertone) and the mechanical royalty (24.6 cents), minus the publisher costs (1 cent/mastertone) yields a surplus of 90 cents. The music publishers bargained for a mechanical royalty of 24.6 cents per mastertone, and therefore, after subtracting their 1¢ cost, obtained 26.2% of the surplus (23.6 ÷ 90). If we assume that the music publishers would obtain the same percentage of the surplus in the download and CD markets, the resulting portion of the surplus paid to the publishers and songwriters is 6.6 cents (i.e., the surplus of 25.1 cents per track that I calculated for the physical product markets, times the 26.2% of the surplus bargained for in the mastertones market), and the resulting mechanical royalty is 7.6 cents.

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royalty payment. For purposes of this analysis, I have estimated the publisher cost per mechanical at 1 cent.

[62] Benson WRT at Figure 4f.

The same calculations can be made for permanent digital downloads. For digital downloads (combining digital albums and digital singles), the record companies earn a profit of 4.4 cents per track.[63] The recordings artists receive 14.5 cents/track, and the mechanical royalty is 9.1 cents. Deducting the publisher costs of 1 cent leaves a surplus of 27 cents. The mechanical royalty, using the same split of the surplus calculated for the mastertone market, is 8.1 cents (27 cents times 26.2% plus 1 cent).

Finally, blending the implied mechanical rate for physical products (7.6 cents) and permanent digital downloads (8.1 cents) weighted by the number of units of each sold in 2006 yields a mechanical rate of 7.7 cents.[64]

Again, however, these adjustments do not account for the fact that the negotiated mechanical rate for mastertones also reflected the higher opportunity costs for music publishers in the mastertones market compared to other markets. I would expect that an actual negotiation would result in mechanical royalty rates for CDs and downloads lower than those I hypothesize above.

C. Estimating Mastertone Rates from CD and Download Rates

This same surplus analysis can be used to at least approximate an appropriate rate for mastertones. Essentially it involves doing the calculations discussed above in reverse, starting with a mechanical royalty that more reasonably reflects the true market value of mechanical licenses for CDs.

Once again using data supplied by FTI, there is a surplus of approximately $.26 on the sale of an individual track, which is then divided between record companies,

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[63] Benson WRT at Figure 10.

[64] Mr. Benson shows that, in 2006, a total of 5.4 billion songs were sold in the form of CDs and just over 700 million songs were sold in form of digital albums and digital singles. Benson WRT at Fig. 4.

recording artists, and music publishers. As I discussed above, market data supports a royalty rate of between 5.25 and 7.8 cents per track for CDs and digital downloads. Assuming music publishers bargain for 6 cents for mechanical royalties and subtracting 1 cent for their cost, they receive approximately 19.2% of the surplus (5/26).

If one assumes that music publishers would receive the same percentage of the surplus in the market for mastertones, where surplus is a larger fraction of revenue, one can calculate a possible rate for mastertones. Again using data discussed above from FTI, in the mastertone market, the surplus available is 90 cents. If music publishers were to receive 19.2% of that surplus, they would be entitled to 18.2 cents (19.2% x 90 cents + 1 cent), or 14.5% of the wholesale price to cover the music publishers' costs, assuming a wholesale price of $1.25. As discussed above, however, this would not account for the higher opportunity costs that music publishers face in the marketplace for mastertones. Based on this data, one would expect that the rate would be somewhat less than the 20% of wholesale in the NDMAs (which do not account for the other concessions that publishers made in those agreements) and more than the 14.5% of wholesale calculated here (which does not account for the lost opportunity cost).

V. On-demand Streaming and Incidental DPDs

A. Background

I understand that the Copyright Royalty Judges are to determine royalty rates that "distinguish between (i) digital phonorecord deliveries where the reproduction or distribution of a phonorecord is incidental to the transmission which constitutes the digital phonorecord delivery, and (ii) digital phonorecord deliveries in general." 17

U.S.C. § 115(c)(3)(C), (D). The former are frequently referred to as "incidental DPDs" and the latter as "general DPDs."

At the outset, I note that I am neither a technologist, nor a lawyer. I understand that the Court will consider legal and technical questions about what an incidental DPD is and when they exist. I am not the person to answer such questions, but below I attempt to provide one basis on which the Court could consider setting a rate for incidental DPDs, assuming my understanding of them, derived from certain documents and discussions with counsel, is correct.

I understand that Congress has provided the following guidance concerning what is an incidental DPD:

> The Committee recognizes that there are likely to be different types of digital transmission systems that could result in the making of a digital phonorecord delivery. In the case of some of these transmission systems, delivering a phonorecord to a transmission recipient could be incidental to the purpose of a transmission. For example, if a transmission system was designed to allow transmission recipients to hear sound recordings substantially at the time of transmission, but the sound recording was transmitted in a high-speed burst of data and stored in a computer memory for prompt playback (such storage being technically the making of a phonorecord), and the transmission recipient could not retain the phonorecord for playback on subsequent occasions (or for any other purpose), delivering the phonorecord to the transmission recipient would be incidental to the transmission.[65]

I further understand that RIAA and NMPA have agreed as follows:

> [U]nder current law the process of making On-Demand Streams through Covered Services (from the making of server reproductions to the transmission and local storage of the stream), viewed in its entirety, involves the making

[65] S. Rep. No. 104-128, at 39 (1995).

> and distribution of a DPD, and further agree that such process in its entirety (i.e., inclusive of any server reproductions and any temporary or cached reproductions through to the transmission recipient of the On-Demand Stream) is subject to the compulsory licensing provisions of Section 115 of the Copyright Act. The Parties further agree that under current law the process of making streams that would qualify for a statutory license under Section 114(d)(2) of the Copyright Act does not involve the making or distribution of a DPD, and thus does not require a mechanical license.[66]

That agreement further defines certain terms used in the provision quoted above.

Specifically, an "On-Demand Stream" is defined as:

> an on-demand, real-time digital transmission of a sound recording of a single musical work to allow a user to listen to a particular sound recording chosen by the user at a time chosen by the user, using streaming technology, which may include but is not limited to Real Audio or Windows Media Audio, that is configured by the provider of the Covered Service in a manner designed so that such transmission will not result in a substantially complete reproduction of a sound recording being made on a local storage device (*e.g.*, the hard drive of the user's computer or a portable device) so that such reproduction is available for listening other than at substantially the time of the transmission.[67]

A "Covered Service" is defined as:

> a service that offers (but the offerings of which are not necessarily limited to) On-Demand Streams and/or Limited Downloads of sound recordings of musical works from servers located within the United States (including the territories and possessions thereof), where the basic charge to users for the service is a recurring subscription fee (in contrast to the basic charge being a per-download, per-play or per-song fee), including any use of such a service on a limited basis without charge to users in order to promote the subscription service.[68]

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[66] Agreement between RIAA, NMPA and HFA dated as of Oct. 5, 2001, § 8.1(a).
[67] *Id.* § 1.2.
[68] *Id.* § 1.1. A "Covered Service" is more generically called a "subscription service," and I use those terms interchangeably.

Given this background, I assume for purposes of this discussion that an incidental DPD refers to a particular kind of transmission system in which a copy is delivered only for the purpose of contemporaneous one-time listening -- the primary example of which is the making of on-demand streams as part of a subscription service such as Rhapsody. Therefore, I assume for purposes of this section of my report that an On-Demand Stream through a subscription service involves the creation of incidental DPDs.[69]

B. Difficulties in Setting a Rate

There are multiple difficulties with setting a rate for making temporary copies of sound recordings as part of the transmission/performance of sound recordings.

First, one would expect that, in a true marketplace, all the rights held by a single party that must be used in conjunction with each other, whether reproduction or performance, would be licensed together as a bundle. That is what occurs when record companies license on-demand streams. That is not true here, however, where the set of rights that should be sold as a bundle for subscription services is instead separated, and the Court is setting rates for only a portion of those rights that ordinarily would not be separated.

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[69] I understand that there are other services providing on-demand streams using advertising-supported models. *See* Imeem Strikes Deal with Universal Music Group (Dec. 10, 2007), *available at* http://www.imeem.com/press/38/imeem_strikes_deal_with_universal_music_group/. I understand, however, that these are a tiny fraction of the overall subscription market, which is already a tiny fraction of the overall market for listening to recorded music. According to shipment data collected for RIAA, in 2006, subscription services generated retail sales of about $206 million. Those sales include both limited downloads and On-Demand Streams, and are in contrast to $857 million for permanent downloads and $9,053 million for physical products.

Second, because each of these rights is individually and separately necessary to the provision of the service, it would make no sense to set the mechanical royalty rate for Interactive Streams without taking into account the performance royalty payable to songwriters and music publishers on the Interactive Streams. Professor Landes makes this mistake when he finds that the Copyright Owners' proposed royalty rates for Interactive Streams are reasonable by considering only mechanical royalty payments and not the performance royalties that are payable to the same Copyright Owners for the same activities.[70] This is so because the market value of each right separately is equal to the value of both together. He should have asked how close performance royalties come to exhausting the market value of the two rights. The mechanical payment should be no more than the difference between their total market value and the performance royalty, which could be zero if the performance royalty equals market value.

This Court, however, does not set the rates for performances of musical works and it is difficult to determine what those rates actually are. As I understand it, those rates remain under dispute to a great extent in an ongoing proceeding before the rate court that oversees rates to be paid to the performing rights societies, ASCAP and BMI. As a first step, I look at what the overall royalties reasonably could be and attempt to estimate the share that would be paid for an incidental DPD.

C. Estimating the Total Royalty

As noted above, I believe that 9% of wholesale revenue falls within a range of reasonableness for a mechanical rate for sales of CDs and downloads. If one applies that rate to the royalty rates applicable under record companies' agreements for the use of

[70] *See* CO Trial Ex. 22 (Landes WDT), at ¶¶ 86-87.

sound recordings by subscription services, which Ms. Enders has identified in the case of the Napster service as between 43.5-53% of the subscription services' revenue,[71] one finds that music publishers should receive a total rate (inclusive of both performance and mechanical royalties) of approximately 4.3-5.2% of the services' (retail) revenues. It is worth noting that this is close to, though slightly less than, the rates that the performance rights societies ask for in their published rate cards (but which are currently being litigated). Those rates, as described in my appendix, are approximately 5.75% of retail revenues.

From this one might conclude that publishers and songwriters are approximately fully compensated for Interactive Streams by performance royalties. Moreover, as Professor Landes testified, "[[redacted]]."[72] This makes sense. I can think of no apparent reason why the total compensation paid to a rightsholder (or set of rightsholders) for the Interactive Streams made by a subscription service, as a percentage of revenue, should be [[redacted]] than the total compensation paid by the same service to the same rightsholder(s) for limited downloads made through the service. If the mechanical royalty for Interactive Streams is not less than the mechanical royalty for limited downloads by the 5-6% of retail revenues that I estimate to be payable to performing rights organizations, writers and publishers will, in the aggregate, be paid more for Interactive Streams than for limited downloads -- a result that does not make much sense given the manner in which these products are sold together.

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[71] *See* CO Trial Ex. 10 (Enders WDT), at 53 (Table 10-F). I understand that the record companies' agreements with other services contemplate royalty rates within a similar range.

[72] CO Trial Ex. 22 (Landes WDT), at ¶ 87.

D. HFA Background Music Service Benchmark

As discussed above, because of the other aspects of subscription services that are licensed through general DPDs or performances, one would expect that the rate for incidental DPDs would be quite low - perhaps zero. The benchmarks discussed above (or even Professor Landes's benchmarks) are of no use in setting the rate for such a product because all involve circumstances where no performance royalty is payable. The question one would like to test empirically is how the market addresses the specific circumstance of payment for reproduction and/or distribution rights incidental to an otherwise licensed performance of a musical work.

Toward that end, I asked counsel to provide me copies of agreements obtained in discovery in which music publishers or their licensing agents granted licenses for reproduction and distribution rights incidental to the delivery of otherwise licensed performances.

Among the agreements I received in response to my request, the most cohesive and seemingly relevant set is a series of agreements entered into by HFA for reproduction and distribution rights incidental to background music services.[73] I received copies of

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[73] Counsel also called to my attention agreements entered into by four providers of digital jukeboxes with various music publishers. *See, e.g.*, CO09012319-CO09012322; CO09012353-CO09012355; CO09012347-CO09012352; CO01005148-CO01005180; CO09012015-CO09012020. In each case it appears that the use at issue is delivery of a phonorecord for long-term local use, more analogous to the delivery of permanent downloads than On-Demand Streams. These agreements vary considerably. Many include both performance and reproduction/distribution rights, which make them less comparable to the circumstances of this proceeding. Many also have advances and/or cents rates for server fixations and plays, which vary significantly among the agreements and make it impossible with data at my disposal to consider whether the economic circumstances of those services are comparable to the circumstances of subscription services making On-Demand Streams. Thus, I did not deem them to be useful as benchmarks.

two such agreements entered into by HFA, as well as an HFA "Background Music Agreement Summary – As of 3-20-07" summarizing key terms of the two agreements I received and 11 others. Thus I have information from HFA concerning 13 agreements, dating back to January 1, 1991, which I describe below.

1. Bus Radio

The most recent agreement, dated as of December 20, 2006, is a Background Music Service Licensing Agreement between Bus Radio, Inc. and HFA.[74] That agreement involves a service in which musical works are reproduced on a central server, transmitted to local storage (on school buses), and played in accordance with pre-established playlists. The royalty payable under Section 2.1 of the agreement is [[redacted]] of the aggregate royalty amounts paid by Licensee (or that should have been paid by Licensee) to U.S. performance rights societies (i.e., ASCAP, BMI and SESAC, collectively 'PROs') prorated for HFA Licensed Plays . . . and HFA Participating Publisher-Principals shares of such Licensed Plays . . . ."

The nature of the reproduction and distribution activity licensed under this agreement seems analogous to Interactive Streams through subscription services. In each case, copies are made on central servers, transmitted to local storage and played. There are, however, some differences. It appears that the local copies made under this agreement can be played multiple times (not just once). However, songs can be played only as part of playlists. And the subscriber to Bus Radio's service is a business (the operator of a school bus), not a consumer user. Nonetheless, the contribution of reproduction and distribution rights to the operation and market value of Bus Radio's

[74] RIAA Ex. 105-RR (CO 01012169 - CO 01012191).

service seems sufficiently comparable that this benchmark deserves serious consideration.

2. PlayNetwork

The other agreement, dated as of October 2000, is a Background Music License between PlayNetwork, Inc. and HFA.[75] The royalty payable under Section 7 of the agreement is the equivalent of what is provided in the Bus Radio agreement – 12% of the gross fees paid to ASCAP, BMI and SESAC, subject to pro ration for use of licensed compositions.

The precise nature of the service covered by this agreement is not clear from its face. However, PlayNetwork's website states that its

> playback systems offer flexible playback and on-site control. CD-ROM, Broadband, and Internet delivery options provide the greatest amount of control and flexibility to manage when, where, and how music and messaging should be delivered and played at each location.

http://www.playnetwork.com/servicesoverview/musicandmessaging.asp. It thus appears that, in addition to a CD-ROM delivery option, musical works licensed under the agreement are reproduced on servers, transmitted to local playback systems, and played under circumstances giving the user significant control. The nature of the reproduction and distribution activity licensed under this agreement again seems analogous to Interactive Streams through subscription services, although it appears that the local copies made under this agreement probably can be played multiple times (not just once). Again, the contribution of reproduction and distribution rights to the operation and market value of the service is sufficiently comparable that this benchmark deserves serious consideration.

[75] RIAA Ex. 106-RR (CO 01002884 -CO 01002890).

3. Summary of Other Agreements

HFA's summary of background music agreements is entitled "Background Music Agreement Summary – As of 3-20-07."[76] The summary has scant information about the relevant agreements, services and royalties payable. However, to the extent one can tell from this summary, it appears that the payment models break down into three categories–

- The largest number (six agreements, including the two agreements described above) provide for a royalty that is [[redacted]] of the performance royalty. (The licensee under one of the four agreements in this category that I do not have is apparently a predecessor of PlayNetwork.)
- The next most numerous category of agreements (four, three of them with Muzak) provide for a payment described as "1% of Licensed portion of Licensee's Royalties." It is not entirely clear to me what is meant by this description. It may be referring to 1% of the licensee's revenues, prorated for the musical works licensed, which is consistent with the view that the royalty rate for incidental reproductions should be low. However, this interpretation of the summary is not sufficiently obvious that I would be comfortable relying on that as a benchmark.
- The remainder (three agreements, two of them with the same company) have varying royalty provisions each incorporating a payment of $1-[[redacted]] per server fixation plus an additional royalty component. I do not think these are appropriate benchmarks because of their small number and widely varying

[76] RIAA Ex. 107-RR (CO 01000031 - CO 01000032).

terms, and their fixed dollar rates could not be applied to the economics of different services without a greater understanding of factors such as the relative sizes of the repertoire and customer base and the applicable subscription fees.

4. Conclusions

Thirteen agreements, only two of which I can examine in detail, is a small sample. However, it is notable that almost half of the agreements, and agreements covering more than half of what are identifiable to me as distinct licensees, have the same royalty rate - 12% of the performance royalty. This appears to be a royalty rate structure that was used by HFA (and thus widely endorsed by publishers) throughout the last decade, and thus to be fairly well established in the marketplace. By contrast, the other agreements are more widely varying and in some cases have a rate that cannot be discerned clearly. In these agreements I find confirmation that the market addresses the specific circumstance of payment for reproduction and/or distribution rights incidental to an otherwise licensed performance of a musical work by setting a low royalty. And while the license terms represented in the marketplace vary, the dominant royalty rate for reproduction/distribution licensing for this analogous category of services appears to be 12% of the performance royalty.

Converting this benchmark to a percentage of the all-in wholesale price used as the royalty base in RIAA's rate request requires a series of calculations:

- Applying the HFA background music service benchmark to my estimate of the performance royalty payable by digital music subscription services indicates that the mechanical royalty rate for Interactive Streams should probably be less than 0.6-0.7% of a service's (retail) revenues attributable to streaming.

- As noted above, the leading subscription services pay 43.5-53% of their revenues to record companies for the use of sound recordings. Dividing the range of 0.6-0.7% of a service's (retail) revenues by the range of 43.5-53% of their revenues paid to record companies for the use of sound recordings implies that less than 1.1%-1.6% of the amount paid to record companies for the use of sound recording should probably be paid as a mechanical royalty rate for Interactive Streams.
- To convert the percentages in that range to percentages of hypothetical wholesale revenues, they need to be divided by the combined mechanical and sound recording payment (e.g., 1.1% / 101.1%). With rounding, that also yields a range of 1.1%-1.6%.

I thus conclude that an appropriate mechanical royalty rate for Interactive Streams would probably be less than 1.1%-1.6% of the hypothetical all-in wholesale revenues that would be received by a record company if it licensed a service under both mechanical rights and sound recording rights.

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

Date: April 3, 2008

Steven S. Wildman

APPENDIX A

STEVEN S. WILDMAN
Curriculum Vitae

CONTACT INFORMATION

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EDUCATION

Ph.D., STANFORD UNIVERSITY, Economics, 1980.

M.A., STANFORD UNIVERSITY, Economics, 1977.

B.A., WABASH COLLEGE, Economics, 1971.

PRESENT POSITIONS

MICHIGAN STATE UNIVERSITY, Department of Telecommunication, Information Studies, and Media, James H. Quello Professor of Telecommunication Studies.

MICHIGAN STATE UNIVERSITY, Quello Center for Telecommunication Management & Law. Co-Director

ACADEMIC AND PROFESSIONAL EXPERIENCE

Northwestern University, Department of Communication Studies, 1988-1999.
Associate Professor

Northwestern University, Program in Telecommunications Science, Management & Policy, 1990-1999. Director

ECONOMISTS INCORPORATED, 1983 - 1988.
Senior Economist

UNIVERSITY OF CALIFORNIA, Los Angeles, Department of Economics, 1979 - 1983.
Assistant Professor

RAND CORPORATION, 1981 - 1983.
Consultant

FELLOWSHIPS AND AWARDS

Van Zelst Research Professor of Communication, Northwestern University, 1996-1997

McGannon Award for Social and Ethical Relevance in Communication Policy Research for 1992.

Ameritech Research Fellow, Northwestern University, 1990 - 1991.

Ameritech Research Professorship, Northwestern University, 1989 - 1990.

National Science Foundation Fellowship, 1974 - 1977

PUBLICATIONS

Books

International Trade in Films and Television Programs, with Stephen E. Siwek, Ballinger, 1988.[1]

Video Economics, with Bruce M. Owen, Harvard University Press, 1992.[2]

Electronic Services Networks: A Business and Public Policy Challenge, co-edited with Margaret E. Guerin-Calvert, Praeger Publishers, 1991.[2]

Making Universal Service Policy: Enhancing the Process Through Multidisciplinary Evaluation, co-edited with Barbara A. Cherry and Alan H. Hammond, IV, Lawrence Erlbaum, Publishers, 1999.[2]

Broadband: Bringing Home the Bits, member of NRC committee authoring report, National Research Council, 2002.

Rethinking Rights and Regulations: Institutional Responses to New Communications Technologies, co-edited with Lorrie F. Cranor, MIT Press, 2003.

Edited Journal Special Issues

SPECIAL ISSUE ON TELECOMMUNICATIONS POLICY, *Industrial and Corporate Change*, vol. 4, 1995. Co-edited with David J. Teece.[1]

SPECIAL ISSUE ON MEDIA AND MULTIMEDIA, *Information Economics and Policy*, vol. 10, no. 2. 1998.

SPECIAL SECTION ON THE ECONOMIC DIMENSIONS OF ADVERTISING MEDIA AUDIENCES, *The Journal of Advertising*, vol. 35, no. 2, 2006, Senior editor with Hairong Lee and Philip M. Napoli.

Journal Articles

"Interactive Channels and the Challenge of Content Budgeting," forthcoming in *International Journal of Media Management.*

"Communication and Economics: Two Imperial Disciplines and Too Little Collaboration," forthcoming in *Journal of Communication.*

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[1] Senior author.

[2] Equal joint author.

"Economic Research on Asian Media Markets and Industries: A Critical Reflection," with W. W. Fu, forthcoming in *Asian Journal of Communication.*

"Looking Backwards and Looking Forwards in Contemplating the Next Rewrite of the Communications Act," with J. M. Bauer, *Federal Communications Law Journal*, vol. 58(3) (2006), 415-438.[2]

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"A Deeper Look at the Economics of Advertiser Support for Television: The Implications of Consumption-Differentiated Viewers and Ad Addressability," with E. Kim, *Journal of Media Economics*, Vol. 19(1) (2006), 55-79.[2]

"Modeling the Efficiency Properties of Spectrum Governance Regimes," with J. M. Bauer and C. Y. Ting, *INFO*, Vol 8(2) (2006), 83-96..[1]

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"An Integrated Framework for Assessing Broadband Policy Options," with J. M. Bauer and J. Kim, *Michigan State Law Review*, Vol. 2005, No. 1 (Spring 2005)[2]

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"The State of Telecom: Realities, Regulation, Restructuring," with J. M. Bauer, and P. Vesperini, *Michigan State University-DCL Law Review*, Vol. 2003. No. 3. (Fall 2003)[2]

"Rethinking Access: Introduction to the Symposium Theme and Framework," with Johannes M. Bauer, *Law Review of the Michigan State University Detroit College of Law*, vol. 2002, No. 3 (Fall 2002).[2]

"Preventing Flawed Communication Policies by Addressing Constitutional Principles," with Barbara A. Cherry, *Law Review of the Michigan State University Detroit College of Law*, vol. 2000, No. 1 (Spring 2000).[2]

"An Institutional Perspective on Regulatory Regimes and Investment Decisions by Telecommunications Providers," with Barbara A. Cherry, *Telecommunications and Broadcasting Networks under EC Law: The Protection Afforded to Consumers and Undertakings in the Information Society*, Series of Publications by the Academy of European Law Trier, Vol. 27 (2000).[2]

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"Economic Theories of Tying and Foreclosure Applied—and Not Applied—in *Microsoft*," with Debra J. Aron, *Antitrust*, vol. 14, no. 1 (1999), pp. 48-52.[2]

"Media and Multimedia: The Challenge for Policy and Economic Analysis," in *Information Economics and Policy*, Vol. No. 1 (1998).

"Interconnection Pricing, Stranded Costs, and the Optimal Regulatory Contract", in *Industrial and Corporate Change*, vol. 6, no 4 (1997).

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[3] Second author

"Introduction: Policy and Strategy for Rapidly Changing Telecommunications Markets," with David Teece, *Industrial and Corporate Change*, vol. 5, no. 4 (1996).[1]

"The Pricing of Customer Access in Telecommunications," with Debra J. Aron, *Industrial and Corporate Change*, vol. 5, no. 4 (1996).[2]

"Network Programming and Off-Network Syndication Profits: Strategic Links and Implications for Television Policy," with Karla Robinson, *Journal of Media Economics*, Vol. 8, No. 2 (1995).[1]

"Trade Liberalization and Policy for Media Industries," *Canadian Journal of Communication*, Vol. 20 (1995).

"Network Competition and the Provision of Universal Service," with John C. Panzar, *Industrial and Corporate Change*, Vol. 4, No. 4 (1995): 711-719.[2]

"Funding the Public Telecommunications Infrastructure," with Bruce Egan, *Telematics and Informatics*, Fall 1994.[2]

"Toward a New Analytical Framework for Media Policy: Reconciling Economic and Non-Economic Perspectives," with R. Entman, *Journal of Communication*, Winter 1992.[2] Reprinted in part in *Taking Sides: Clashing Views on Controversial Issues in Mass Media and Society*, A. Alexander and J. Hanson (eds.), The Duskin Publishing Group, Inc., 1993.

"Selecting Advanced Television Standards for the United States: Implications for Trade in Programs and Motion Pictures," *Journal of Broadcasting and Electronic Media*, Spring 1991.

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"A Note on Measuring Surplus Attributable to Differentiated Products," *Journal of Industrial Economics*, September 1984.

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Contributing author, *Telecom Antitrust Handbook*, American Bar Association, 2005. (Note: While the written contribution was about chapter length, contributing authors are listed but not identified with specific text in this publication.)

"Paradigms and Analytical Frameworks in Modern Economics and Media Economics," in A. Albarran, S. Chan-Olmsted & M. Wirth, *Handbook of Media Management and Economics*, Lawrence Earlbaum Associates, Publishers, 2006. (Note: This book was given a 2006 copyright, but has been available since mid-Fall 2005.)

"Conditional Expectations Communication and the Impact of Biotechnology," in S. Braman (ed.), *Biotechnology and Communication: The Meta-Technologies of Information*, Lawrence Earlbaum Associates, Publishers, 2004.

"Broadband Deployment: Toward a More Fully Integrated Policy Perspective", with Johannes M. Bauer and Junghyun Kim, in A. Shampine (ed.), *Down to the Wire: Studies in the Diffusion and Regulation of Telecommunications Technologies*, Nova Science Press, 2003.[2]

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"Program Competition and Diversity in the New Video Industry," with Bruce M. Owen, in *Video Media Competition: Regulation, Economics, and Technology*, Eli M. Noam (ed.), Columbia University Press, 1985.[1]

Papers in Published Conference Proceedings

"Government Policy and the Comparative Merits of Alternative Governance Regimes for Wireless Services," with C. Y. Ting and J. M. Bauer. In *Conference Record: 2005 1st IEEE International Symposium on New Frontiers in Dynamic Spectrum Access Networks*, 8-11 November 2005, Baltimore, MD, pp. 401-419.

"Program Competition and Advertising Strategies in the Age of Digital Television," in The Future of Digital Television: Market, Audience, and Policy, proceedings of the KISDI-KSJCS International Conference of same title, held Nov. 29, 2001 in Seoul, Korea, pp. 29-45.

"Communication Technology and Productivity: The Role of Education," *Annual Review of Communication*, National Engineering Consortium, Vol. XXXXVII (1993-94).

"Controlling Occupational Radiation: Alternatives to Regulation," with L.A. Sagan and R. Squitieri, presented at the International Symposium on Occupational Radiation Exposure in Nuclear Fuel Cycle Facilities, Los Angeles, CA, June 18-22. Published in proceedings of same conference.[2]

"Economic Issues in Mass Communication Industries," with J. N. Rosse, J. N. Dertouzos and M. Robinson, presented at the FTC Symposium on Media Concentration, Washington, D.C., December 14-15, 1978. Published in the proceedings of same conference.[4]

"Vertical Integration in Broadcasting: A Study of Network Owned-and-Operated TV Stations," S.I.E. No. 97, Department of Economics, Stanford University, also published in the Proceedings of the FTC Symposium on Media Concentration, Washington, D.C., December 14-15, 1978.

Other Publications and Working Papers

Review of *The Telecommunications Act of 1996: The "Costs" of Managed Competition*, by Dale E. Lehman and Dennis Weisman, *Journal of Economic Literature* (December 2002), vol. 40(4), pp. 1272-1273.

Review of *Much Ado About Culture: North American Trade Disputes*, by K. Acheson and C. Maule, *Journal of Economic Literature* (September 2001), vol. 39(3), pp. 938-940.

"AOL-Time Warner Merger Will Redefine Business: Deal Gives AOL Access to Homes," Lansing State Journal, Feb. 6, 2000, p. 11A.

"A Framework for Managing Telecommunications Deregulation while Meeting Universal Service Goals," with Barbara A. Cherry. Presented at the Twenty-Third Annual Telecommunications Policy Research Conference, Solomons, Maryland, October 2, 1995.

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[4] Joint author credited as a "with."

"Monopolistic Competition with Two-Part Tariffs," with Nicholas Economedes, August 1995.[2]

Review of *Television in Europe*, by Eli Noam, *Journal of Economic Literature*, December 1993.

"Competition in the Local Exchange: Appropriate Policies to Maintain Universal Service in Rural Areas," with John C. Panzar, September 1993.

Review of *The World Television Industry: An Economic Analysis*, by Peter Dunnett, *Journal of Communication*, Winter 1992.

"An Empirical Study of Broadcast Competition to Cable," with James N. Dertouzos, July 1990.[2]

"A Model of Supply and Demand for Information in a Competitive Market," October 1989.

"ATV Standards and Trade in Recorded Video Entertainment," paper presented at the Sixteenth Annual Telecommunications Policy Research Conference, October 30-November 1, 1988, Airlie, VA, revised April 1989.

"Competition, Regulation and Sources of Market Power in the Radio Industry," with Duncan J. Cameron, May 1982, revised October 1989.[1]

"Program Choice in a Broadband Environment," with Nancy Y. Lee, Working Paper, Center for Telecommunications and Information Studies, Columbia University, May 1989.[1]

"Trade in Films and Television Programming," with Stephen E. Siwek, presented at Trade in Services and Uruguay Round Negotiations, London, England, July 8, 1987, and Geneva, Switzerland, July 18, 1987.[1]

Review of *Oligopoly Theory*, by James Friedman, *Journal of Economic Literature*, March 1985.

"Recruiter Incentives: Effects on Performance," Rand Cooperation Working Draft, April 1983.

"Anticipated Preemption and the Determination of Initial Structure in a Growing Market," UCLA Working Paper No. 267, September 1982.

"A Spatial Model of Entry Deterrence," S.I.E. No. 103, Department of Economics, Stanford University, November 1978, revised December 1980.

"Advertising, Consumer Learning and Competitive Strategies," Dissertation filed January 1980. Also published as S.I.E. paper No. 110 by Department of Economics, Stanford University, December 1979.

"A Study of Economic Issues in the Recording Industry," with James N. Dertouzos.[2] Study commissioned by the National Association of Broadcasters.

OTHER PROFESSIONAL ACTIVITIES

Co-convener, conference on telecommunications free trade zones, Northwestern University, March 30, 1992. Sponsored by the Annenberg Washington Program of Northwestern University and the Illinois Commerce Commission.

Convener, half-day conference on electronic services networks at Northwestern University, April 9, 1990.

Co-convener, day-long Washington, D.C. conference on electronic services networks sponsored by the Annenberg Washington Program, February 23, 1990.

Member, Editorial Board, *Journal of Media Economics*.

Member of Organizing Committee for the Nineteenth and Twentieth Annual Telecommunications Policy Research Conference, Solomon Island, MD.

Member, Executive Committee, Consortium for Research in Telecommunications.

Organizer, 1996 Conference on Telecommunications Policy and Strategy of the Consortium for Research in Telecommunications Policy, Evanston, IL, May 10,11, 1996

Co-organizer, Telecommunication Policy and Law Symposium: "Preventing Flawed Communication Policies by addressing Constitutional Principles", Washington, D.C., April 18, 2000.

Member, National Research Council Broadband Last Mile Committee, 1999-2001.

Vice-Chair, TPRC Board of Directors, 2004-Present

Co-Editor, *Journal of Media Economics*, Fall 2004-present.

Member of Board of Directors, International Telecommunications Education and Research Association, Fall 2005-present.

REFEREEING AND REVIEWING

American Economic Review, referee
Communication Law and Policy, referee
Communication Research, referee
Communication Theory, referee
Journal of Economics and Business, referee
Information, Economics and Policy, referee
Information Systems Research, referee
International Journal of the Economics of Business, referee
International Journal of Industrial Organization, referee
International Journal on Media Management, Associated Reviewer and referee,
Journal of Broadcasting and Electronic Media, referee
Journal of Communication, book reviewer
Journal of Information, Economics and Policy, referee
Journal of International Economics, referee
Journal of Economic Literature, book reviewer
Journal of Industrial Economics, referee
Journal of Media Economics, editorial board, referee
National Science Foundation, proposal reviewer
The Rand Journal of Economics, referee

Appendix B

Estimate of Applicable Performance Royalties

In taking into account the applicable performance royalties when setting mechanical royalty rates for Interactive Streaming, a threshold question is quantifying the performance royalties. RIAA has had access to little data to quantify the performance royalty payable on Interactive Streams. Moreover, I understand that a proceeding involving America Online, RealNetworks and Yahoo! is currently pending in ASCAP Rate Court to set the performance royalty payable to ASCAP for, among other things, Interactive Streams. Until that proceeding is resolved, I understand that the performance royalty that ultimately will be payable on Interactive Streams cannot be known with certainty. However, the range of that royalty will presumably be bounded on the low end by the performance royalties proposed by the services that are parties to that proceeding and on the high end by the performance royalties unilaterally requested by performing rights organizations for interactive uses.

With respect to the services' rate proposal in the ASCAP proceeding, I understand that the services have proposed a royalty rate of 2.5% of subscription revenues plus direct sponsorship or advertising revenues for audio on-demand streaming. In support of this they cite as a benchmark the rate they apparently pay to BMI, another performing rights organization, of 2.5%.

With respect to the unilateral rate requests of the performing rights organizations, ASCAP and BMI both post on their websites forms of license agreement covering internet-based interactive uses. ASCAP offers various payment plans, but the principal rates seem to be 3% of site/service revenue, 4.95% of revenue attributable to music sessions, and 6.5% of revenue attributable to ASCAP music. *ASCAP Experimental License Agreement for Interactive Sites & Services – Release 2.0*, Rate Schedules A, B & C. BMI also offers various payment plans, with the principal rates seemingly 1.75% of gross revenue and 2.5% of music revenue (which is consistent with the benchmark cited by the services in the ASCAP proceeding). *BMI Web Site Music Performance Agreement (Internet-07)*, at § 4.

These payment plans potentially cover a range of services with different types of music and non-music offerings, and give services a range of ways to structure their royalty arrangements. It would appear that a subscription digital music service prepared to pay a royalty based on all its revenues (which might consist solely of music revenues) could pay ASCAP and BMI a combined royalty of 4.75% of revenue (i.e., 3% of ASCAP plus 1.75% of BMI). Based on the ASCAP Rate Court filings, however, it looks like the more probable lower end of the range of a combined ASCAP/BMI royalty is 5% of revenue attributable to the music service. The high end of the range is harder to ascertain because of differences in the calculation of ASCAP and BMI royalties:

- Based on ASCAP's option to pay ASCAP 6.5% of revenue attributable to ASCAP music, one might infer that it ranges up to about 6.5% of total music revenues.

- If one assumes that a service uses equal numbers of ASCAP and BMI compositions, and pays BMI 2.5% of total music revenues and ASCAP 6.5% of the half of revenues allocable to ASCAP music, the service's combined royalty payment would be 5.75% of total music revenues.

There is a third, much smaller, performing rights organization called SESAC. The *SESAC Internet License Agreement* available on its website provides for license fees calculated based on aggregate tuning hours and the number of different types of service offerings made available by a licensee. As a result, SESAC performance royalties may vary from service to service as a percentage of the licensee's revenues, and I do not have data to be able to compute an average percentage corresponding to those sought by ASCAP and BMI. However, because its repertoire is very small, its rates have historically corresponded to a fraction of the percentage of the licensee's revenues paid to ASCAP and BMI. Assuming that SESAC's performance rights market share is no more than about 5%, the SESAC royalty might amount to about 0.25% of revenues, it appears likely that when royalty rates are finally determined, subscription services making On-Demand Streams will pay in total about 5-6% of their revenues to performing rights organizations.

RIAA Ex. 101-RP

RIAA Ex. 101-RP

March 27, 2008

BMI Announces its Mobile Music Market Projections for 2008

Ringbacktones Lead Growth in Mobile Music Space; Ringtone Use Declines

Download this document in Word format.

NEW YORK, March 27, 2008 – Broadcast Music, Inc. (BMI), the leading U.S. performing right organization, today released its annual mobile music market projections for 2008 and figures for 2007. BMI licenses the public performing right for the musical works of its more than 375,000 songwriters, composers and music publishers.

BMI projects that ringback tones will surpass $210 million in U.S. retail sales during calendar year 2008, up 50% from BMI's 2007 market estimate of $140 million. A ringback tone is a musical work that is performed to the caller when they place a call to a participating mobile subscriber.

BMI also predicted that the U.S. ringtone market will continue to decline in 2008, generating approximately $510 million in retail sales for the calendar year. This represents a $40 million or 7% reduction from calendar year 2007, marking the second consecutive year that the U.S. ringtone market has waned. BMI pegged the 2007 market at $550 million (U.S.) in retail sales, down $50 million from the prior year. The company estimates the ringtone domain experienced sales of $600 million in calendar year 2006; $500 million in 2005; $245 million in 2004 and $68 million in 2003, respectively.

BMI's conclusions are based on comprehensive data derived from the buying behavior of more than 200 million of the current 220 million United States mobile subscribers.

"The market for ringback tones has grown stronger than we originally forecasted last year," said Richard Conlon, Vice President, New Media & Strategic Development, BMI. "Its growth, coupled with the positive gains that streaming mobile media have made in 2008 alone, supports our bullish point of view on the growth of the mobile entertainment business. We see gains in mobile audio and mobile television style services in the coming years as well. As we forecasted last year, the ringtone market continues to decline as the novelty phase wears off and lower-priced substitutional products come to market."

BMI tracks titles and revenues associated with ringback tone services, streaming audio, streaming audio visual and ringback tone services. The company's database of earnings and titles is believed to be the most comprehensive in the industry. BMI uses the data that it collects to distribute public performance royalties on a pro-rated basis to its affiliated songwriters, composers and music publishers.

BMI is an American performing right organization that represents more than 375,000 songwriters, composers and publishers in all genres of music. With a repertoire of more than 6.5 million musical works from around the world, the company operates on a non-profit-making basis, collecting license fees from businesses that use music, which it then distributes as royalties to the musical creators and copyright owners it represents.

###

BMI is an American performing right organization that represents more than 375,000 songwriters, composers and music publishers in all genres of music.

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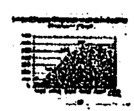

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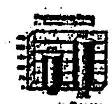

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BMI represents more than 375,000 songwriters, composers, and publishers with more than 6.5 million works.

RIAA Ex. 103-RR

Market Trends in Ringtones

June 13, 2005

The Harry Fox Agency

Introduction

The Ringtone market continues to be cited by the popular press as a panacea for the music industry's financial malaise.

Foreign markets may (or may not) be a bellwether for the U.S. market.

All encompassing new media arrangements may trade less advantageous royalty arrangements for emerging media in exchange for favorable Ringtone arrangements.

Setting the Ringtones market in this context, we reviewed:

- Cellphone Penetration (U.S. and Worldwide)
- Cellphone Data & Ringtone Capabilities
- Ringtone Market Size (U.S. and Worldwide)
- Market Segmentation
- Pricing Trends
- Ringtone Market as compared to both the Digital Music Marketplace and Overall Music Market

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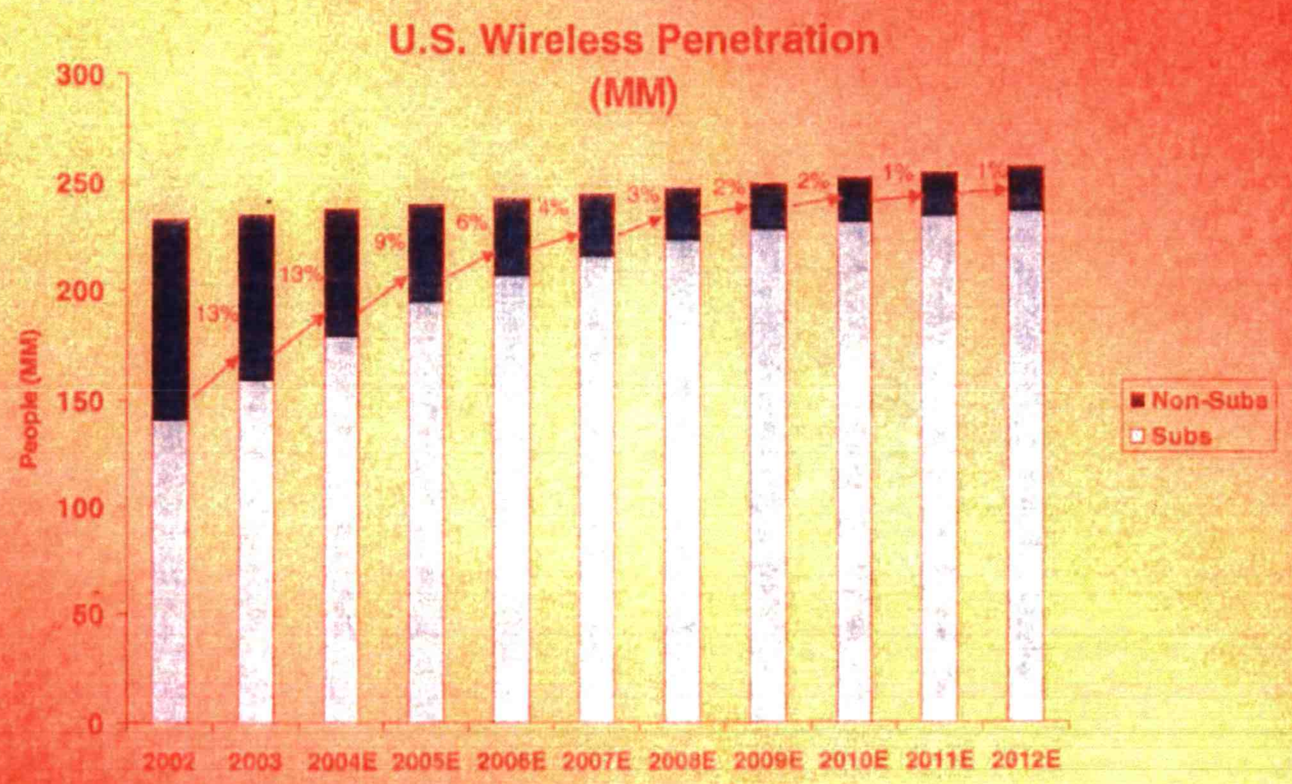
U.S. Cellphone Installed Base Largely in Place

Cellphone Penetration



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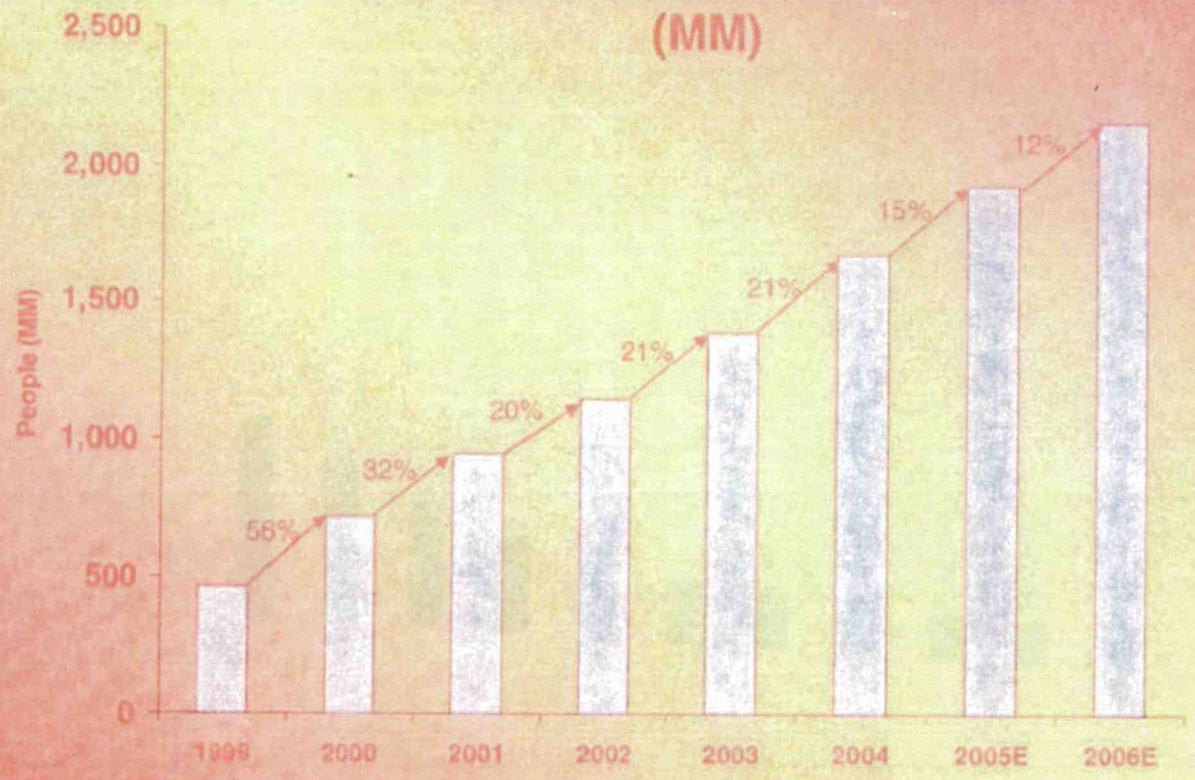
Worldwide Subscriber Growth Is Leveling

Cellphone Penetration

Worldwide Wireless Subscribers (MM)



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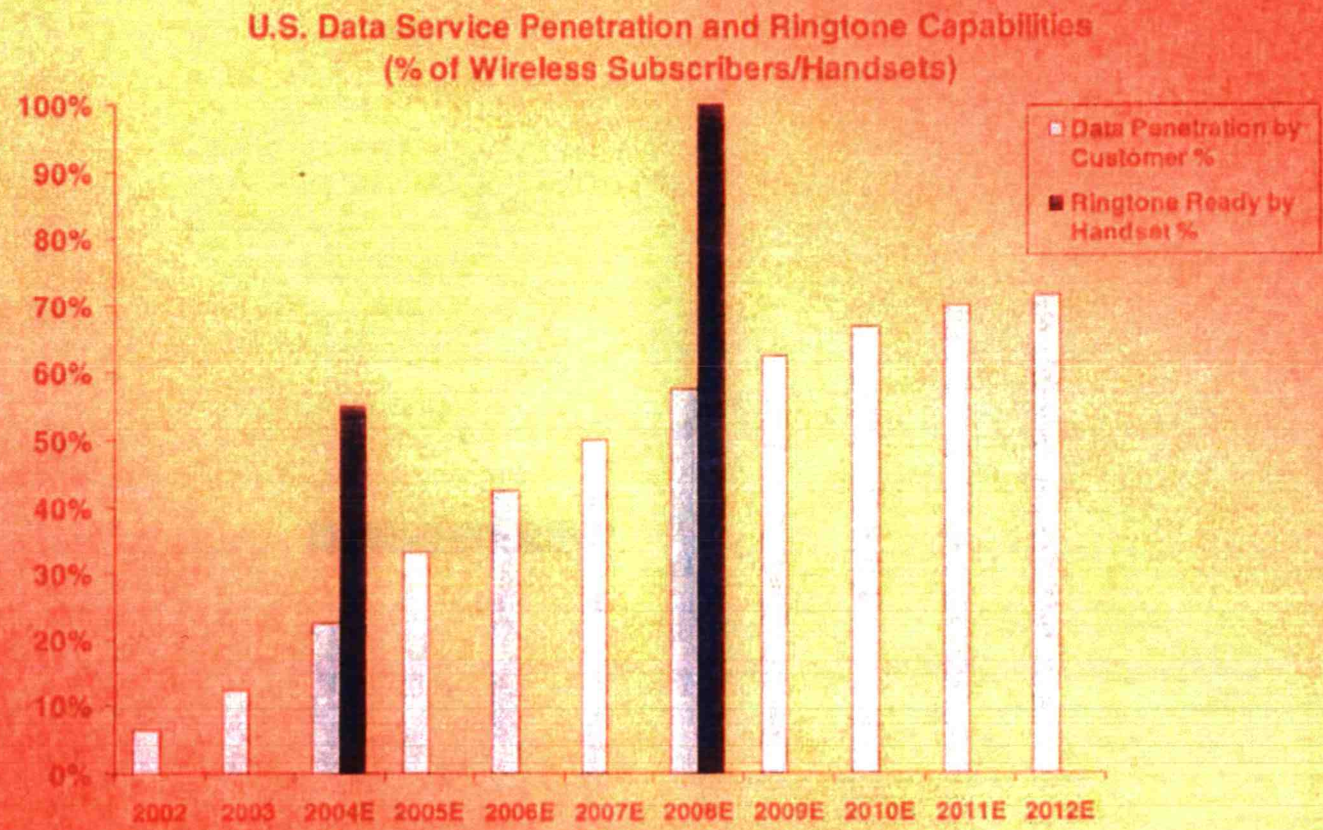
100% of Cell Phones Will Be Ringtone Ready By 2008

Cellphone Data & Ringtone Capabilities



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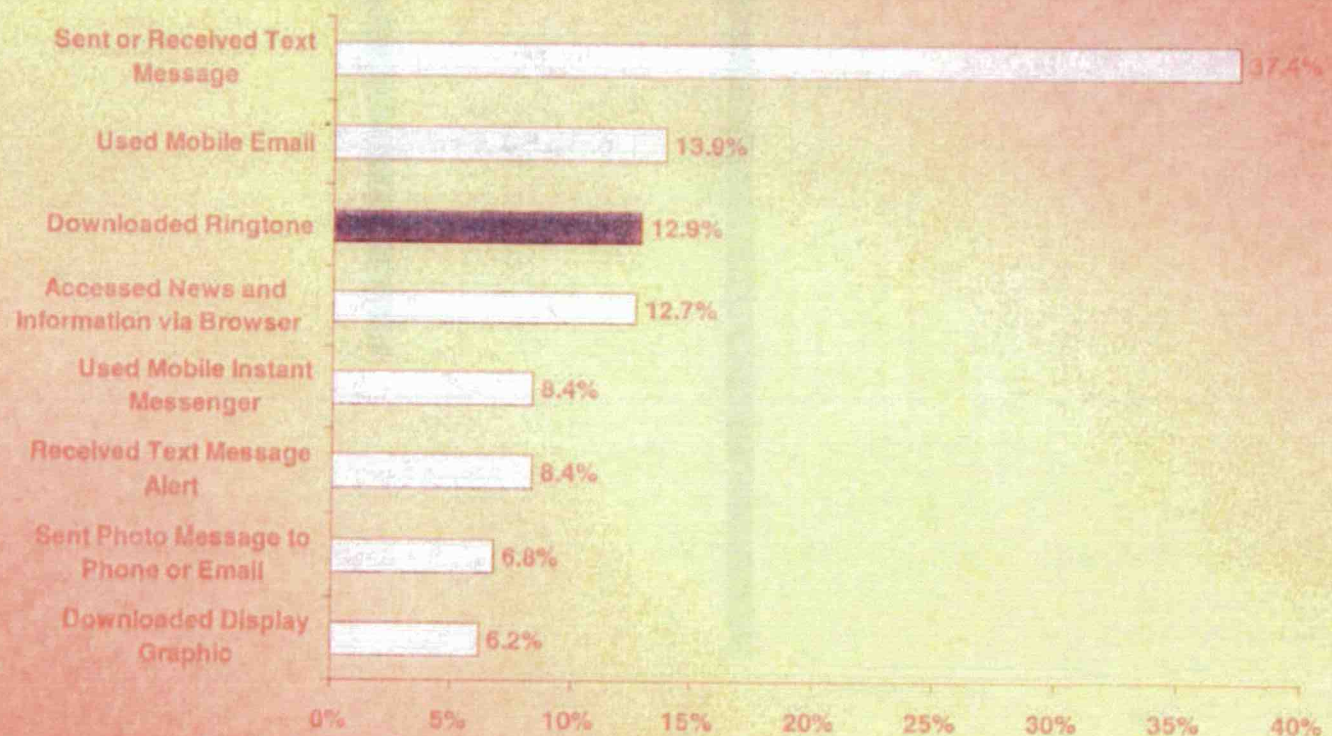
CO 01015594

Messaging Services Adoption Currently Exceeds Ringtones Acquisition

Cellphone Data & Ringtone Capabilities

% of U.S. Mobile Subs Using Data Services



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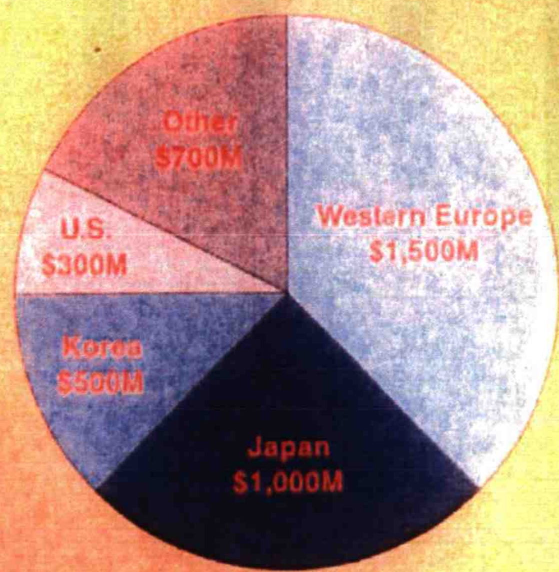
Global Ringtone Market Proportionally Larger Than U.S. Market

2004 Worldwide Ringtone Revenue ($MM)



Country	Population	%of US Population
US	293,700,000	
Japan	127,400,000	43%
Korea	48,400,000	16%

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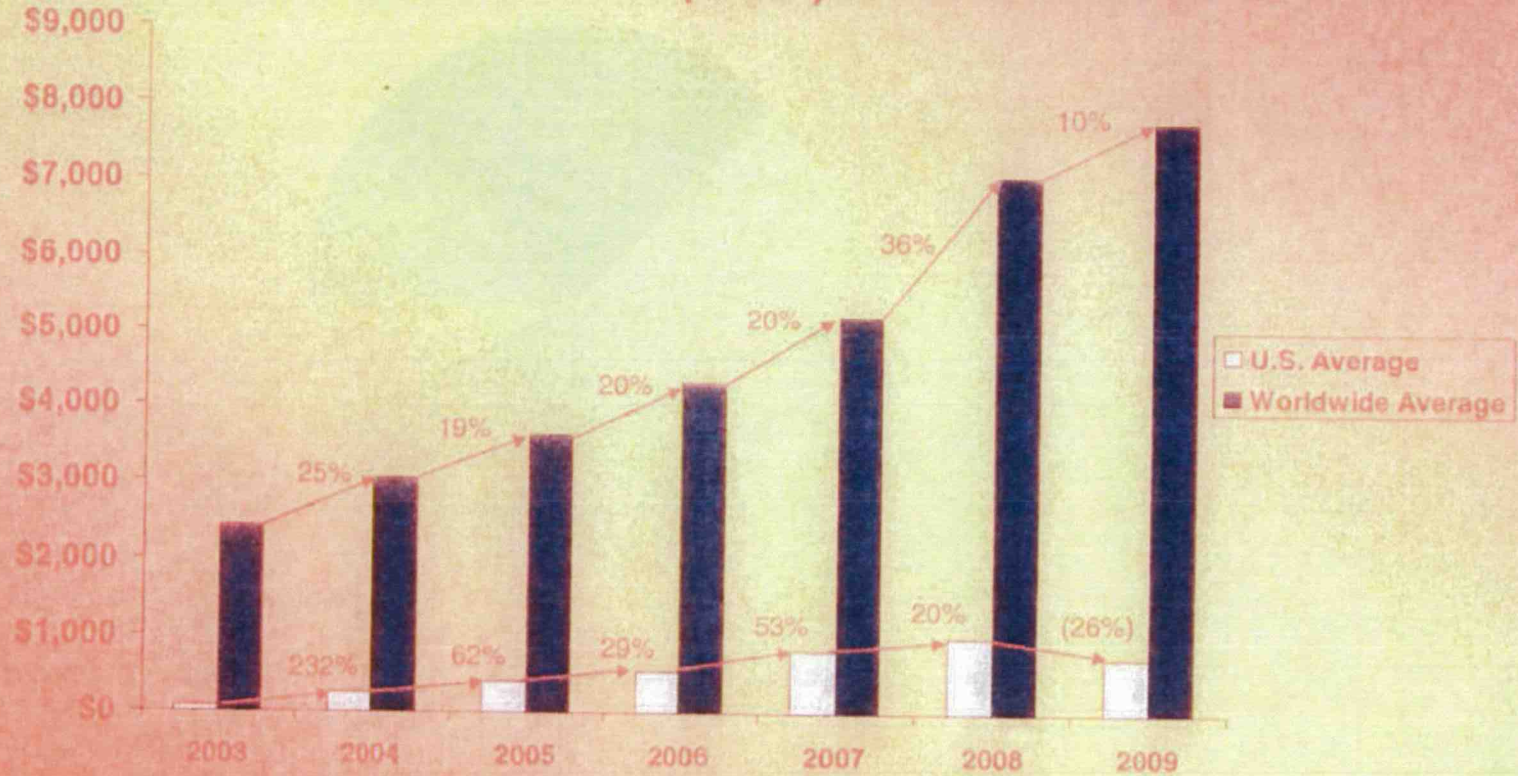
U.S. vs. Worldwide Ringtone Markets

Ringtone Market Size

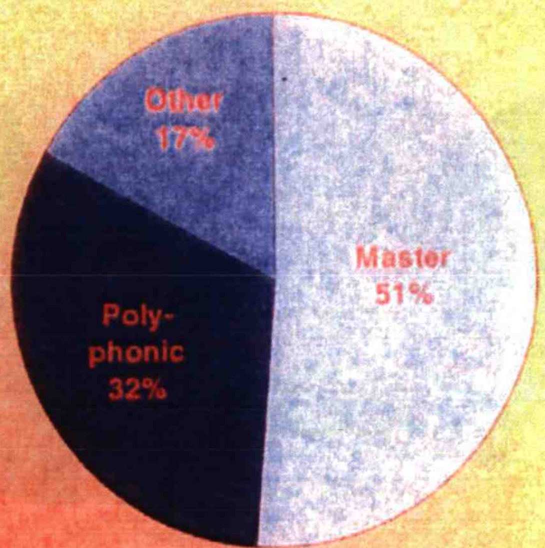
Ringtone Market Projections ($MM)



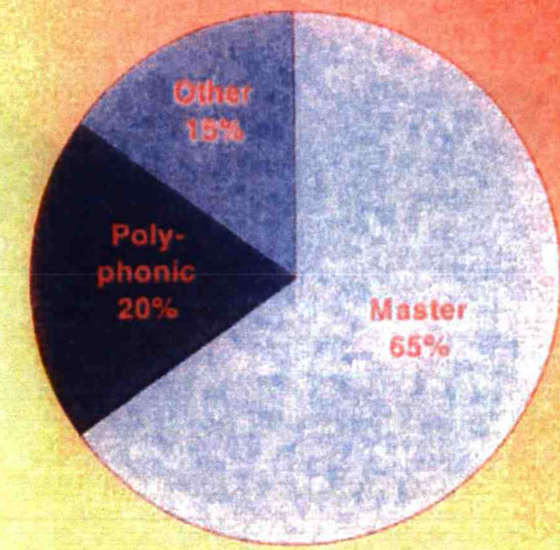
Master Tracks Expected to Gain Market Share in U.S.

Market Segmentation

2005 U.S. Ringtones



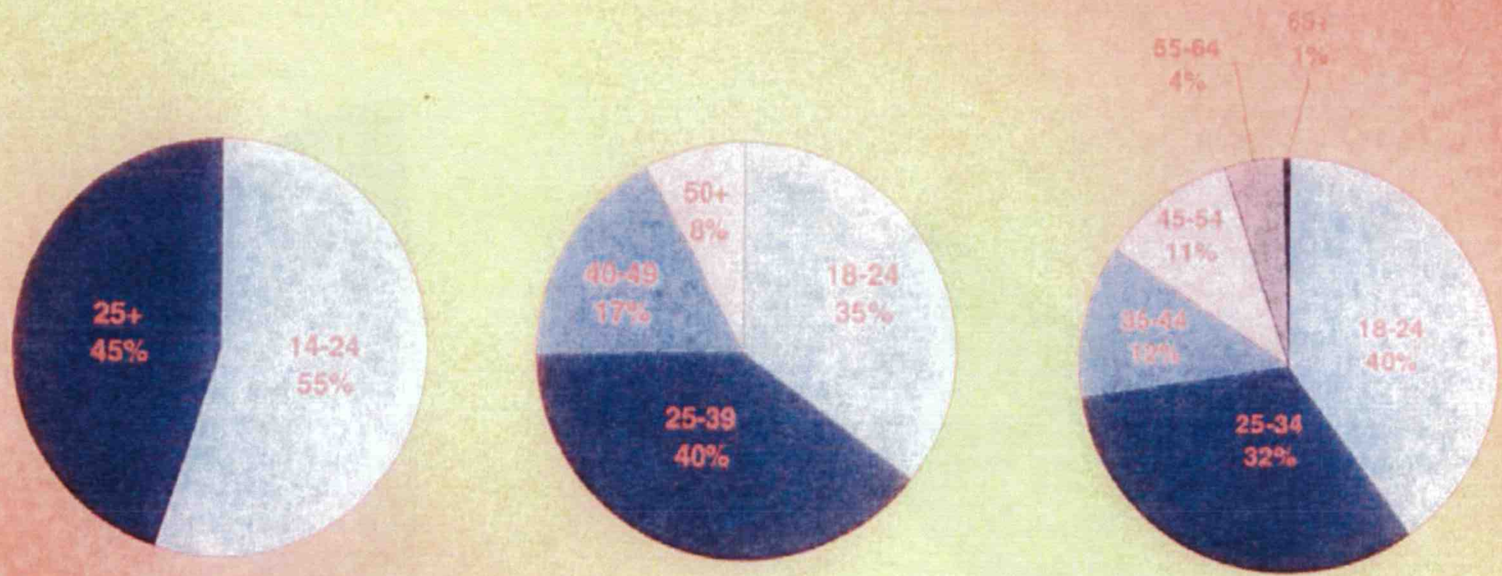
2008 U.S. Ringtones



Ringtone Usage May Be Skewed Towards Younger Customers

Market Segmentation

Ringtone Market By Age Group



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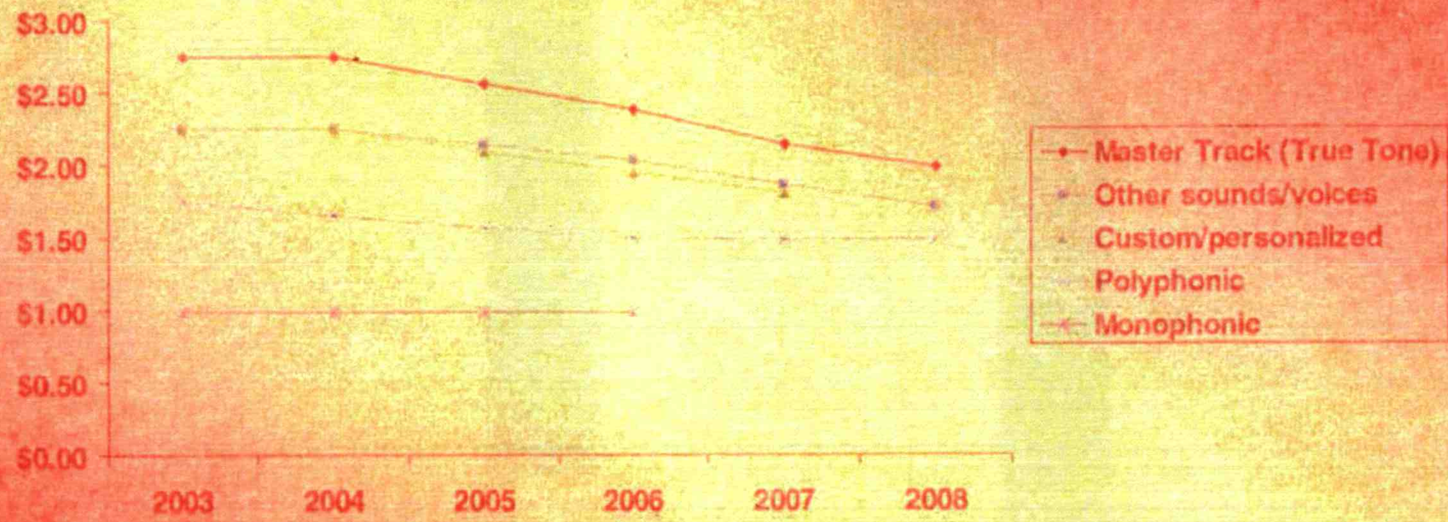
Ringtone Prices Expected to Fall

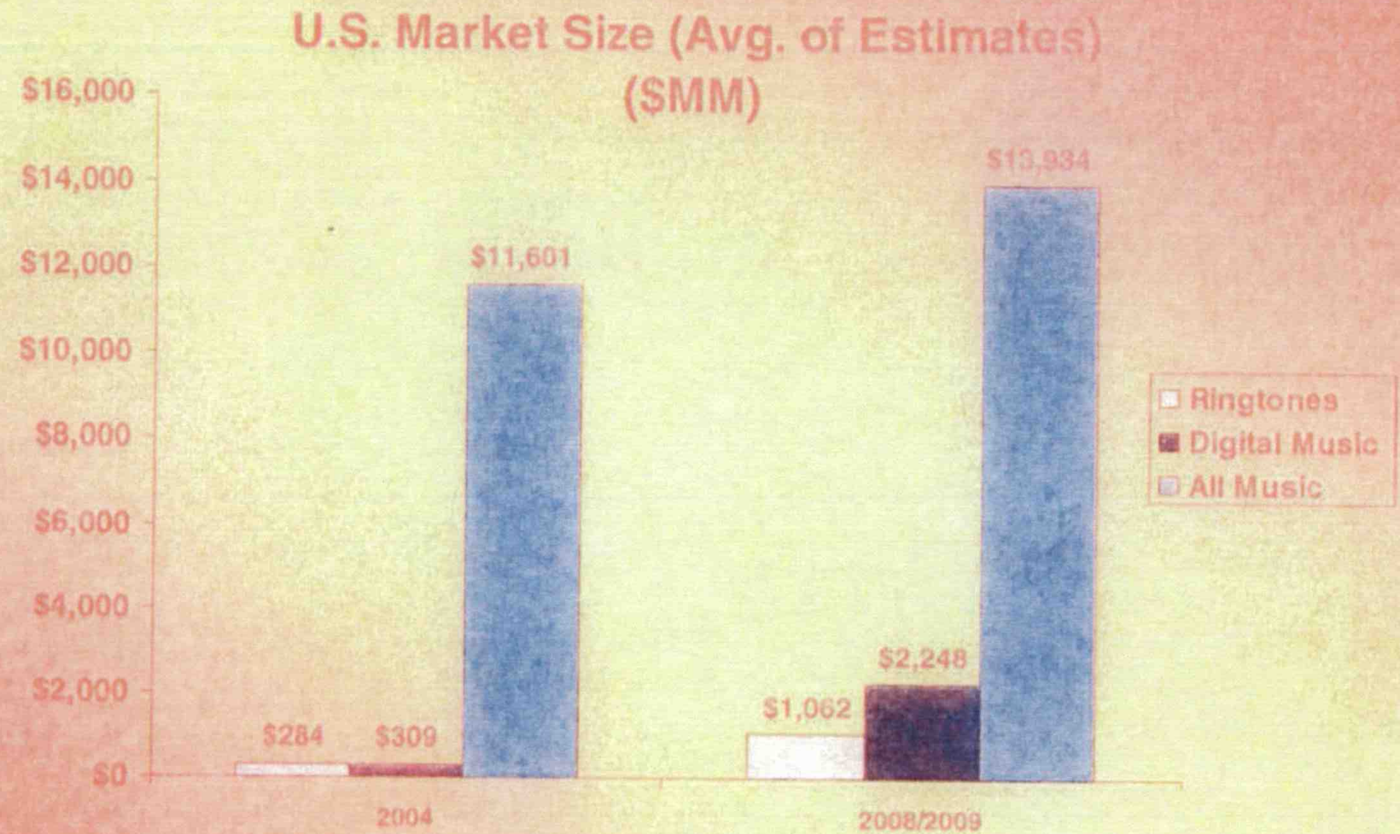
Average Cost Per Ringtone ($)



- Current Infospace prices: $1 for Monophonic, $2.50 for Master Tracks
- RBC Equity research believes prices will fall to $1 for Master Tracks
- Juniper expects European prices to fall by 50% and U.S. prices to fall by 33% in the next 5 years

U.S. Ringtones Still Small % of Music Market

Comparison of Ringtone, Digital Music and Overall Music Markets



Some General Observations

- Worldwide market is 8-10x the size of the U.S. market
- Infrastructure is ready for Ringtones but is also ready for more robust cell-based experiences. For example, recent research (issued by iSuppli) suggests that 73% of cellphones will have USB ports by 2008. This development is likely to facilitate the storage of homemade ringtones as well as DPDs.
- Pricing and revenue models still in flux
- Customer adoption and ability to maintain prices will determine the size of the Ringtone market
- Increasing RT revs combined with increasing adoption, when combined with price reductions over time, could produce a leading indicator of the decline in relative value of musical works.
- The physical product market place appears more likely to evaporate like a glacier than the previously predicted glass of water in the desert

End Notes

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1) U.S. Wireless Penetration: Source: CSFB Equity Research, January 12, 2005
2) Legend: Non-Subs: Includes all potential (but not current) cell phone subscribers. This includes: U.S. Population less Current Subscribers and less People Unlikely to Be a Customer (children under 10, adults over 85 and people below poverty line)
3) Total U.S. population as of 7/1/04: 293,655,404 as per Table 8: Annual Estimates of the Population for the United States, Regions, and Divisions: April 1, 2000 to July 1, 2004 (NST-EST2004-08); Source: Population Division, U.S. Census Bureau; Release Date: January 28, 2004

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1) Worldwide Wireless Subscribers: Source: Piper Jaffray Equity Research, February 2005

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1) Data Penetration: % of wireless voice customers purchasing data services. Source: CSFB, January 2005
2) Ringtone Ready: % of wireless handsets with ringtone capabilities. Source: Jupiter Research, January 2005
3) Note that RT data is a subset of data services. Thus, 100% will be ready but only 50% of customers will avail themselves of the service according to these commentators.

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1) Source: M:Metrics, Inc. Survey of U.S. mobile subscribers, quarter ending January 31, 2005, (sample size = 35,381). Data for photo messaging, ringtones and graphics downloads for two months ending January 31, 2005, (sample size = 23,209).
2) Note that messaging results in limited or no incremental user cost and is 3X as popular as Ringtones according to this data.

RIAA Ex. 104-RP

RIAA Ex. 104-RP

hfa

HFA and BMG Columbia House Reach Historic Licensing Arrangement

April 5, 2006 – The Harry Fox Agency, Inc. (HFA), the premier U.S. mechanical licensing organization, and BMG Columbia House, Inc., the largest direct-to-customer distributor of music and movies in the U.S, announced today that they have reached a historic licensing arrangement regarding mechanical rights for record clubs.

"We are very pleased to have reached this arrangement with BMG Columbia House which will ensure that compositions administered by the Harry Fox Agency will be formally licensed at an agreed-upon rate," said Gary Churgin, President and CEO, HFA. "This arrangement upholds the rights of our music publishers, while acknowledging the economics of the record club model."

"The Harry Fox Agency has always been a great ally and working partner. Our new agreement builds on that relationship. We appreciate the efforts of senior management at HFA to conclude this arrangement, " said Clif Knight, Executive VP, Business and Legal Affairs, BMG Columbia House.

HFA represents over 28,000 music publishers, and offers nearly 1.5 million songs for mechanical licensing in the U.S. Music publishers affiliated with HFA will have the option of making their catalogs available to BMG Columbia House for licensing at 75% of the statutory rate. This agreement will remain in effect for four years, with automatic annual extensions. BMG Columbia House will use HFA's suite of online licensing tools for their licensing activity. The current statutory rate is 9.1¢ for compositions five minutes or less in duration, per copy and 1.75¢ per minute, rounded up, for compositions over five minutes; the 75% rate is 6.825¢ and 1.3125¢, respectively. As with HFA's standard mechanical license terms, royalties will be reported to HFA 45 days after the close of a calendar quarter.

These license terms for HFA publishers will supersede any licensing terms to which the parties agree in the settlement of the class action suit know as the Ory case. The settlement has been approved preliminarily by the court. HFA is not a party in that suit, but had objected to the initial settlement terms. These issues have been addressed in the revised settlement agreement between the plaintiffs and BMG Columbia House.

About HFA
Established in 1927 by the National Music Publishers' Association, HFA represents over 28,000 U.S. music publishers for their mechanical licensing needs, issuing licenses and collecting and distributing royalties. HFA also provides collection and monitoring services to its U.S. publisher clients for music distributed and sold in over 75 territories around the world. For more information about HFA, or to become an affiliate publisher or a licensee, see www.harryfox.com

About BMG Columbia House, Inc.
BMG Columbia House, Inc. is the world's largest direct-to-customer distributor of music and movies. BMG Music Service is the leading direct-to-customer distributor of CDs and offers over 14,000 titles provided by the four major music groups and over 100 independent record labels to members. Columbia House is the largest direct marketer of DVDs in the United States and Canada with over 9500 titles from which to choose provided by most of the major motion picture studios. BMG Columbia House reaches millions music and movie fans via club catalogues and websites (www.bmgmusic.com and www.columbiahouse.com).

HFA Contact:	*BMG Columbia House Contact:*
Laurie Jakobsen	Paula Batson
212-834-0133	212-930-4531
ljakobsen@harryfox.com	paula.batson@bmgch.com

RIAA Ex. 105-RR

RIAA Ex. 105-RR

ORIGINAL
NUMBER 1 OF
3 COUNTERPARTS

BACKGROUND MUSIC SERVICE LICENSING AGREEMENT

This agreement ("**Agreement**") is entered into as of December 20, 2006 ("**Effective Date**") by and between Bus Radio, Inc. ("**Licensee**"), a Delaware corporation with an office at 160 Gould Street, Suite 201, Needham, MA 02494, and The Harry Fox Agency, Inc. ("**HFA**"), a New York corporation with an office at 711 Third Avenue, New York, NY 10017.

WHEREAS, Licensee owns and operates a service pursuant to which copyrighted musical compositions ("**Musical Works**") are digitally reproduced on a central computer server or servers, which Musical Works are subsequently transmitted via cellular Internet technology from such central servers and downloaded to proprietary digital storage devices located in school-contracted student transportation vehicles ("**STVs**") in order that the Musical Works are available to be played back in such STVs as background music in accordance with pre-established playlists ("**Service**"); and

WHEREAS, in order to operate the Service, Licensee seeks licenses to reproduce and distribute Musical Works that are owned and/or controlled by publisher-principals affiliated with HFA ("**Publisher-Principals**"); and

WHEREAS, HFA is prepared to issue such licenses to the extent it is authorized to do so by such Publisher-Principals;

NOW, THEREFORE, in consideration of the promises contained in this Agreement and for other good and valuable consideration, the adequacy and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. Licensing

1.1. Pursuant to the terms of this Agreement, and as more particularly described herein, upon receipt of appropriate license requests ("**License Requests**") from Licensee, HFA shall, to the extent authorized by particular Publisher-Principals, issue on behalf of such Publisher-Principals nonexclusive licenses ("**Licenses**") to reproduce and distribute Musical Works owned and/or controlled by such Publisher-Principals ("**Licensed Works**") for use on Licensee's Service in accordance with the terms of this Agreement. The license authority contemplated hereunder and granted pursuant to any License issued hereunder shall include and is limited to: (a) the digital reproduction of the Licensed Works on a central computer server or servers owned and operated by Licensee and located in the United States (including its territories and possessions and the Commonwealth of Puerto Rico (collectively, the "**United States**")) ("**Servers**"), solely for use in connection with the Service ("**Server Fixations**"); (b) the digital transmission of the Licensed Works from such Servers for digital storage on secure proprietary devices meeting the requirements of Section 5 below that are custom manufactured on behalf of Licensee in accordance with the specifications set forth in Exhibit C and placed by Licensee as part of its Service in STVs located in the United States ("**Local Units**"), solely for use in connection with the Service; and

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(c) the reproduction of the Licensed Works on such Local Units, solely for use in connection with the Service, and without any further reproduction or distribution from any individual Local Unit to another Local Unit or any other device ("**Local Unit Deliveries**"). For the avoidance of doubt, the license authority under any License issued hereunder is limited to and granted solely with respect to (x) a particular individual sound recording of the Licensed Work; and (y) the share of the copyright owned or controlled by the individual Participating Publisher-Principal(s) on whose behalf the License is issued by HFA.

1.2. The authority of HFA to issue Licenses for any individual Musical Work on behalf of any one or more Publisher-Principals is subject to the approval of the relevant Publisher-Principal(s). Before commencing to issue licenses hereunder, HFA shall for a period of time (the "**Opt-Out Period**") offer to its Publisher-Principals the opportunity to decline to make their Musical Works available for licensing under this Agreement by notifying HFA of their desire to opt out of this Agreement. Notwithstanding the decision not to opt out by any individual Publisher-Principal, thereby rendering such Publisher-Principal a "**Participating Publisher-Principal**," if such Participating Publisher-Principal at any time requests that HFA not issue Licenses on its behalf (either with respect to a particular Musical Work or in general), HFA will honor that request; provided, however, that any Licenses validly issued by HFA prior to the receipt of such a request shall remain in effect until the Term (as defined below) of this Agreement expires.

1.3. Following execution of this Agreement and conclusion of the Opt-Out Period, Licensee may begin submitting License Requests in electronic form in accordance with the format specified in Exhibit A (as such format may be modified from time to time by HFA upon reasonable notice to Licensee) ("**Request Format**"), which License Requests shall be duly processed by HFA. Without limitation, Licensee shall include in each License Request to the extent required by the Request Format (a) the title of the Musical Work for which a License is being requested; (b) the writer(s) of the Musical Work; (c) the publisher(s) of the Musical Work; (d) the name of the record company that produced the sound recording embodying the Musical Work; (e) the name of the artist performing such sound recording; (f) the ISRC number for such sound recording (if available); (g) the total playing time of such sound recording, expressed in minutes and seconds; (h) the title of an album for which such sound recording has been previously licensed; and (i) such other information as may be required by HFA's Request Format.

1.4. HFA shall from time to time provide to Licensee an electronic file specifying the Licenses issued under this Agreement (each such report, a "**Confirmation Report**"). To aid Licensee in the calculation of royalties, with respect to each License, such Confirmation Report shall reflect, *inter alia*, the total of the percentage ownership share(s) of the Participating Publisher-Principal(s) on whose behalf the License has been issued (such total, the "**HFA-Represented Share**").

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1.5. For the avoidance of doubt, and without limitation, the Licenses granted hereunder do not extend to or cover: (a) any right of public performance; (b) any copyrights or other rights in sound recordings; (c) any rights to synchronize Musical Works with visual images resulting in audiovisual works; (d) any print, display or karaoke rights; (e) any adaptation (derivative work) rights; (f) any rights to alter the fundamental character of a Musical Work, including but not limited to by excerpting or fragmenting the work; (g) any merchandising rights; (h) any use of a Musical Work (whether or not embodied in a sound recording) for a marketing campaign, product tie-in, game or contest or otherwise to advertise, promote or cross-promote any product or service (other than the legal purchase of an authorized permanent download, or other legal product configuration embodying such Musical Work); or (i) any use of the title of a Musical Work, or the name or likeness of any writer, publisher or artist associated with a Musical Work, except for the promotional purposes described in clause (h) of this Section 1.5 and Section 1.8 and for the identification purposes as described in Section 1.8 and Section 4 of this Agreement.

1.6. The license authority contemplated by this Agreement and granted pursuant to any License issued hereunder is limited to Licensee and may not be sublicensed, assigned or otherwise transferred by Licensee except to the extent expressly permitted hereunder.

1.7. Consistent with the terms and conditions of this Agreement, Licensee represents, warrants and covenants that to the extent a customer of Licensee to which Licensee provides the Service at any time during a quarterly reporting period (each such customer a "**Service User**") has an ability to control the musical content that is played back through the Service: (a) such control shall be limited to the ability to select among playlists that have been previously determined by Licensee ("**Pre-Established Playlists**"), which Pre-Established Playlists shall each consist of different sound recordings representing a variety of songwriters, albums and recording artists; (b) the Service Users will not be permitted to alter or override the Pre-Established Playlists; and (c) the Service Users will not be permitted to arrange for the playback of particular sound recordings of Musical Works on an individual song, artist or album basis.

1.8. Consistent with the terms and conditions of this Agreement, Licensee represents, warrants, and covenants that to the extent any messaging, advertising or other material other than sound recordings of Licensed Works (collectively, "**Messaging Content**") is inserted into the Service, such Messaging Content will only be incorporated such that (a) the Messaging Content is not accompanied by or presented "over" the playback of any Licensed Work(s); (b) the Messaging Content is presented without reference to and completely independent of any particular Licensed Work(s), and without any suggestion of a relationship between the Licensed Work(s) and the Messaging Content, except as expressly permitted in clauses (x) and (y) of this Subsection 1.8; and (c) the playback of any particular Licensed Work is not interrupted or terminated by the Messaging Content. Nothing herein shall be deemed to limit Licensee's ability to (x) identify a particular upcoming or just-played song, sound recording, album, recording artist, label, publisher and/or songwriter(s) for such sound recording, or (y) promote the legal purchase of an authorized permanent download, or other legal product configuration embodying such Musical Work.

1.9. In the event that Licensee causes Messaging Content to be played-back in a manner perceptible to listeners from an audio file that is completely distinct from the Musical Work, but the Messaging Content and Musical work can be heard simultaneously, Licensee, consistent with the terms and conditions of this Agreement, represents, warrants, and covenants that the simultaneous playback of the Messaging Content and Musical Work does not and will not create a "derivative work," as such term is defined in Section 101 of the Copyright Act of the U.S. If the procedure described in this Section 1.9 will not and does not create a derivative work, then, notwithstanding Section 1.8, Licensee shall not be in breach of this Agreement.

2. Reporting and Payment of Royalties

2.1. In consideration of the Licenses granted to Licensee hereunder, each calendar quarter Licensee shall pay to HFA on behalf of the Participating Publisher-Principals a royalty fee equal to [redacted] of the aggregate royalty amounts paid by Licensee (or that should have been paid by Licensee) to U.S. performance rights societies (i.e., ASCAP, BMI and SESAC, collectively "**PROs**") prorated for HFA Licensed Plays (as defined below) and HFA Participating Publisher-Principals shares of such Licensed Plays as per the calculation variables described below.

2.2. Within forty-five (45) days after the end of each calendar quarter during the Term (as defined below), Licensee shall pay to HFA, on behalf of the Participating Publisher-Principals, the royalties due for such calendar quarter as set forth in Section 2.2 hereto and in accordance with the other provisions of this Section 2. With each such payment, Licensee shall include a detailed statement of royalties payable to HFA hereunder in electronic form ("**Statements**") in accordance with the forms set forth in Exhibit B and Exhibit B1 (hereby incorporated herein by reference), as such forms may be modified from time to time by HFA upon reasonable notice to Licensee (the "**Reporting Format**"), including, without limitation:

2.2.1. the aggregate royalty amounts paid by Licensee (or that should have been paid by Licensee) to the PROs in connection with the operation of the Service (the "**PROs Royalty Pool**");

2.2.2. the PROs Royalty Pool multiplied by [redacted] the "Gross Royalty");

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2.2.3. the total number of plays of all Musical Works embodied in sound recordings across the Service (including both Licensed Works and non-Licensed Works) (collectively, the "**Total Plays**");

2.2.4. the total number of plays of all Licensed Works across the Service (each such play, a "**Licensed Play**");

2.2.5. the "**HFA Factor**" (determined by dividing the Licensed Plays by the Total Plays);

2.2.6. the prorated Licensed Play royalty pool (determined by multiplying the Gross Royalty by the HFA Factor) (the "**Licensed Play Royalty Pool**");

2.2.7. the quarterly effective royalty rate (determined by dividing the Licensed Play Royalty Pool by the number of Licensed Plays);

2.2.8. the total royalty amount being paid to HFA on behalf of the Participating Publisher-Principals derived by allocating the quarterly effective royalty rate over shares and usages of Licensed Plays; and

2.2.9. for each of those Licensed Plays, the HFA license number, the number of Licensed Plays across the Service, and any other information required by HFA as set forth in Exhibit B and Exhibit B1, for example, without limitation, the number of Server Fixations and the number of Local Unit Deliveries.

2.3. Interest on late payments by Licensee hereunder shall accrue at a rate equal to the lesser of (a) prime plus two percent (2%) and (b) the highest rate permitted by applicable law, calculated from the date the applicable payment was due to be paid hereunder to the date of HFA's receipt of payment in full.

2.4. Licensee shall be solely responsible for paying any share of royalties due to the relevant owners of any applicable copyrights or other rights with respect to any Licensed Works and/or Musical Works not represented by HFA under this Agreement, and for obtaining any additional license authority that may be required from such non-represented third parties.

2.5. HFA expressly reserves the right to apportion and/or distribute royalties in its sole discretion and in accordance with its policies and customary practices.

3. **Term.** The term of this Agreement shall commence as of the Effective Date and expire on December 31, 2008 (the "**Term**"). If Licensee wishes to extend this Agreement for an additional period, it shall notify HFA of such desire not later than a date six (6) months prior to the end of the Term. Such notification shall include proposed terms for any such extension. Any extension shall be subject to the approval of individual Publisher-Principals as described in Subsection 1.2, and HFA reserves the right to propose changes to administrative and other aspects of the Agreement as it deems appropriate.

4. Intentionally omitted.

5. **Security**

5.1. In connection with the use of any Licensed Work, Licensee shall implement and maintain copy protection and digital rights management technology and systems, including software and/or hardware functional limitations (collectively, "**Security Systems**") with respect to all aspects of the Service, including without limitation its Servers and operating systems, that (a) are designed to prevent unauthorized reproduction and distribution of the Licensed Work; (b) are sufficient to track and enforce the use limitations contemplated by this Agreement; and (c) meet or exceed current industry standards as they exist from time to time for the licensed delivery of music via digital transmission and its reproduction on devices including, without limitation, proprietary units for digital storage of music such as the Local Units employed by Licensee. Without limitation, Licensee's Security Systems shall include those measures set forth in Exhibit C. (In the event of a conflict between the requirements of this Section 5 and those of Exhibit C, the higher security standard shall prevail.) Licensee hereby represents warrants and covenants that the exclusive method for a Service User to access and operate the Service is through a Local Unit located in an STV owned or operated by such Service User.

5.2. In the event it becomes aware of a breach of Licensee's Security Systems ("**Security Breach**"), whether through its own monitoring efforts, upon being advised by another party (including HFA) or otherwise, Licensee shall use its commercially reasonable efforts to resolve the Security Breach and restore the full integrity of its Security Systems as quickly as possible. If a solution to the Security Breach is not immediately available (i.e., cannot be implemented within twenty-four (24) hours from the time Licensee becomes aware of the Security Breach), Licensee shall (a) promptly notify HFA of the Security Breach in writing (unless Licensee learned of the breach from HFA); and (b) cease all further digital transmission and/or reproduction of Licensed Works to the extent such activities are or could possibly be affected by the Security Breach, pending full resolution of the Security Breach, unless otherwise agreed by HFA. In such a case, Licensee (x) shall keep HFA reasonably apprised of the status of its efforts to resolve the Security Breach; and (y) shall not resume the activities that were suspended pursuant to this Subsection 5.2 until the full integrity of its Security Systems has been restored.

5.3. To the extent Licensee employs third-party technology in order to operate, Licensee shall use its commercially reasonable efforts to maintain and upgrade such technology by (a) diligently monitoring any third-party notifications of bug-fixes, security holes and functionality improvements; and (b) obtaining any available upgrades and bug-fixes, and installing, testing and distributing such upgrades and bug-fixes as necessary so as to maintain the integrity of its Security Systems.

5.4. Licensee shall use its commercially reasonable efforts to prevent any unauthorized digital transmissions and reproductions of Musical Works by operators and users of the Service and/or in any facility, on any device (including but not limited to Local Units) or by any person under the supervision and/or control of Licensee.

6. **Royalty and Security Compliance**

6.1. Notwithstanding, without limiting and in addition to the general right pursuant to industry custom and practice of HFA and/or any Participating Publisher-Principal to examine the books and records of Licensee in connection with Licensee's use of the Licensed Works, HFA shall be entitled, upon thirty (30) days' prior written notice to Licensee, to conduct, at the expense of HFA, an examination of solely those books, records, operations and Security Systems of Licensee directly related to the activities of Licensee in connection with the operation of the Service (**"Royalty and Security Examination"**) to determine whether Licensee is in compliance with its reporting, payment and security obligations under this Agreement. HFA shall not seek to initiate a Royalty and Security Examination more than once every twelve (12) months or more than three (3) years following the termination or expiration of this Agreement. After HFA conducts a Royalty and Security Examination hereunder in respect of a given period and any issues arising from such Royalty and Security Examination are fully and finally settled by the parties, such period shall not be reexamined by HFA, except to the extent that a Royalty and Security Examination of another period raises issues relating to the previously settled period or in the case of demonstrable fraudulent conduct on the part of Licensee in connection with the previously settled period.

6.2. During the course of a Royalty and Security Examination, upon request by HFA or an examiner acting on its behalf, Licensee shall within five (5) business days (a) provide access to any information that may be called for by such request, including without limitation any (i) books, records, files, logs, reports, compilations, usage data and other documentation, whether in paper or electronic form, that were or could be used or required to generate or verify Licensee's Statements and/or that reflect or summarize Licensees' Statements; (ii) financial information, including books, records, ledgers, reports, and other documentation, reflecting cash receipts and general revenue accounts to the extent such information relates directly or indirectly to the activities licensed under this Agreement; and (iii) files, logs, reports, compilations, testing and monitoring data and other documentation related to and/or reflecting the operation and integrity of Licensee's Security Systems (such information, along with the information described in the items (a)(i) and (a)(ii) of this Subsection 6.2, collectively referred to as **"Documentation"**); and (b) through the assistance of personnel who are familiar with the technical and operational aspects of Licensee's computer, hardware, software, Security Systems (collectively, **"Operational Systems"**) who are to be made available by Licensee, provide real-time and/or historical access to such Operational Systems, as requested, sufficient to permit HFA or its examiner(s) to conduct meaningful tests and analysis to verify that (i) the Operational Systems are properly and accurately tracking and reporting the use of the Licensed Works, and royalties payable therefor, as contemplated by the terms of this Agreement; and (ii) the Operational Systems are in compliance with the security requirements set forth in Section 5 of this Agreement. Licensee shall provide the information, systems access and personnel required by this Section 6.2 free of charge and, unless otherwise agreed by HFA or its examiner(s), at Licensee's place of business. At the request of Licensee, prior to commencing the Royalty and Security Examination, any outside examiner acting on behalf of HFA shall execute a Nondisclosure Agreement substantially in the form of Exhibit D hereto.

6.3. During the course of and/or following completion of the Royalty and Security Examination, upon request by HFA or an examiner acting on its behalf, Licensee shall make available, at reasonably convenient times during normal business hours, company personnel at an appropriate level of seniority and/or technical ability to discuss and/or resolve particular issues and findings arising out of such examination.

6.4. Licensee shall maintain any and all Documentation that reasonably might be expected to be relevant to HFA's conduct of a Royalty and Security Examination for a period of at least three (3) years following the expiration or termination of this Agreement, unless there is a Royalty and Security Examination in progress or not fully resolved as of the expiration of such period, in which case the Documentation shall be maintained until the Royalty and Security Examination is fully resolved to the satisfaction of HFA.

6.5. If a royalty examination reveals a nonpayment or underpayment of royalties due to HFA, the amounts determined to be owing shall be subject to interest payable at the rate of prime plus two percent (2%) calculated from the date the royalties were due to be paid under the applicable reporting period to the date of ultimate payment to HFA.

7. **Termination/Default**

7.1. All license authority pursuant to Licenses issued hereunder shall terminate upon the expiration or termination of this Agreement (unless such Licenses are renewed pursuant to a renewal of this Agreement as contemplated under Section 3, in which case the terms of renewal shall apply as appropriate), and any further transmission, reproduction and/or playback of any Licensed Work after the expiration of this Agreement shall be prohibited and actionable as an act of infringement under, and fully subject to the remedies provided by, the Copyright Act. Notwithstanding the foregoing, provided that the Agreement has not been terminated due to Licensee's breach or default, any Server Fixations existing on Servers and/or Local Unit Deliveries existing on Local Units as of the expiration of the Agreement may remain on such Servers and Local Units; provided, however, that such existing Server Fixations (in addition to the Local Unit Deliveries) may not be further reproduced, distributed or played after the expiration of the Agreement.

7.2. Notwithstanding, without limiting and in addition to any other remedy that may be available at law or in equity and/or under this Agreement, Licensee understands and agrees that: (a) in the event Licensee fails to account to HFA and pay royalties provided for in Section 2, HFA may provide written notice to Licensee that, unless the default is fully remedied within thirty (30) days from the date of the notice, this Agreement and any Licenses issued hereunder will be automatically terminated, and that such termination will render the transmission and/or reproduction or both, of any Licensed Work for which royalties have not been fully paid actionable as an act of infringement under Section 501 of the Copyright Act, and fully subject to the remedies provided by Sections 502 through 506 and 509 the Copyright Act; (b) in the event Licensee is in material breach or default of any of its obligations under this Agreement, HFA may provide written notice to Licensee that, unless the default is fully remedied within thirty (30) days from the date of the notice, this Agreement and any Licenses issued hereunder will be automatically terminated, and that such termination will render the further transmission and/or reproduction, or both, of any Licensed Work actionable as an act of infringement under Section 501 of the Copyright Act, and fully subject to the remedies provided by Sections 502 through 506 and 509 of the Copyright Act. Licensee further understands and agrees that in the case of infringement, irreparable harm may be presumed, and HFA and/or any affected Publisher-Principal(s) shall be entitled as appropriate to seek injunctive relief, in addition to any other remedy that may be available at law or in equity and/or under this Agreement. For the avoidance of doubt, and without limitation, Licensee's breach of any of the obligations and/or limitations imposed by Subsections 1.5, 1.6, 1.7 and 1.8 and Sections 2, 5 and 6 of this Agreement shall be considered a material breach of, and default under, this Agreement.

7.3. To the extent permitted by applicable law, and without limitation, the occurrence of any of the following events shall also be considered a material breach of and default under this Agreement: (a) Licensee's dissolution and/or the liquidation of all of Licensee's assets; (b) the filing of a petition in bankruptcy or insolvency or for an arrangement or reorganization by, for or against Licensee; (c) the appointment of a receiver or trustee for all or a portion of Licensee's assets; (d) Licensee's assignment of assets for the benefit of creditors; and (e) Licensee's insolvency. Upon the occurrence of any of the events described in items (a) through (e) of this Section 7.3, notwithstanding, without limiting and in addition to any other remedy that may be available at law or in equity and/or under this Agreement, this Agreement and all license authority pursuant to any Licenses granted hereunder shall terminate automatically without the requirement of any further action on the part of HFA or the Participating Publisher-Principals.

7.4. Notwithstanding, without limiting and in addition to any other remedy that may be available at law or in equity and/or under this Agreement, including without limitation the remedies set forth in Section 7.2, the breach of any of the provisions set forth in Sections 1.7 and 1.8 and Sections 5 and 6 shall entitle HFA and/or any relevant Publisher-Principal to specific performance of such provision and/or to terminate, effective immediately upon the giving of notice, the license authority pursuant to any License granted hereunder.

7.5. Notwithstanding the expiration or termination of this Agreement, Sections 2, 4, 5 and 6, 7, 8, and 9 shall to the extent applicable survive and continue to bind the parties and their legal representatives and successors.

8. **Proprietary and Confidential Information**

8.1. HFA shall have no obligation to perform its obligations hereunder unless and until Licensee enters into the Data Access and Use Agreement, attached hereto and incorporated herein as Exhibit E (the "**Data Access and Use Agreement**"), governing the nondisclosure and use of HFA Confidential Information (as defined in the Data Access and Use Agreement) by Licensee.

8.2. To the extent Licensee seeks to have a third-party individual or entity obtain access to HFA Confidential Information for purposes of obtaining and administering Licenses and otherwise fulfilling its obligations under this Agreement (each, a "**Third-Party Administrator**"), Licensee must obtain HFA's prior consent of each such Third-Party Administrator (such consent not to be unreasonably withheld). Upon HFA's consent to Licensee's use of such Third-Party Administrator, HFA will require that such Third-Party Administrator enter into a data access and use agreement with HFA substantially in the form of the Data Access and Use Agreement, prior to allowing such Third-Party Administrator access to any HFA Confidential Information.

8.3. HFA agrees to restrict circulation of Confidential Information (as defined below) to those employees, directors and their advisors, officers, HFA's advisors, and/or Publisher-Principals (collectively, "**HFA Recipients**") who may require access to Confidential Information; and when HFA informs such HFA Recipients of matters concerning this Agreement and the Exhibits thereto, such HFA Recipients shall be given instructions to hold in confidence all Confidential Information made available to them and to use the Confidential Information only for purposes contemplated by this Agreement or otherwise in furtherance of HFA's interests. Disclosure of Confidential Information to news outlets or the public is strictly prohibited. "**Confidential Information**" shall, for the purposes of this Section 8.3, mean any and all information and material Licensee discloses to HFA (whether in writing, or in oral, graphic, electronic, or any other form) that Licensee indicates verbally (in the case of oral disclosures) or in writing (in the case of all other disclosures) that the information disclosed is confidential to Licensee as it relates to Licensee's business, its products, services, business strategies, capabilities, and/or business affairs.

9. **Miscellaneous**

9.1. **Administrative Fee.** In addition to the royalties payable hereunder, within five (5) business days following execution of this Agreement, Licensee shall pay to

HFA a one-time administrative fee of [redacted] in consideration of HFA's administrative expenses in connection with the publisher opt-out and licensing processes contemplated hereunder. Notwithstanding the foregoing, HFA reserves its right to assess additional administrative fees in connection with future agreements between the parties.

9.2. **Notices.** All notices hereunder shall be in writing and shall be deemed effective (a) if provided by hand delivery, upon delivery; (b) if provided by overnight courier in time for and specifying next day delivery, one (1) business day following the date sent; and (c) if provided by registered or certified mail, return receipt requested, five (5) business days following the date mailed. Courtesy copies of documents may be faxed; however, such copies shall have no legal force or binding effect. Notices shall be sent to the following addresses:

If to HFA:

To the address set forth above. Attn: General Counsel. Fax: 646.487.6798.

If to Licensee:

To the address set forth above. Attn: Lynda Shulman. Fax: 781.444.2391.

with a courtesy copy to:

Robert A. Rosenbloum
GREENBERG TRAURIG, LLP
3290 Northside Parkway, Suite 400
Atlanta, GA 30327
Fax: 678.553.2212

9.3. **Publicity.** Neither party shall issue any press release or other publicity document concerning this Agreement without the prior written consent of the other party.

9.4. **Assignment.** This Agreement is binding on the parties and their respective executors, administrators, legal representatives and successors. Neither party may assign this Agreement without the written consent of the other party.

9.5. **Entire Agreement; Amendment.** This Agreement represents the entire understanding of the parties with respect to the subject matter hereof, supersedes all prior and contemporaneous agreements and understandings of the parties with respect to the subject matter hereof, and may not be altered or amended except in a written instrument executed by both parties.

9.6. **Governing Law; Jurisdiction.** This Agreement shall be governed by and construed in accordance with federal law and/or the laws of the State of New York other than such laws, rules, regulations and case law that would result in the application of the laws of a jurisdiction other than the State of New York. With respect to any action or proceeding arising out of this Agreement, the parties (a) agree that the sole and exclusive venue for such action or proceeding shall be in a court of appropriate jurisdiction located in New York County, New York; (b) agree to the appropriateness of, and waive any objection concerning, the propriety and/or convenience of, proceeding in such venue; and (c) consent to the personal jurisdiction of such court

9.7. **Severability; Waiver.** If a court should determine that any part of this Agreement is invalid or unenforceable, the remainder of this Agreement shall remain in full force and effect. Performance of any obligation required of a party hereunder may be waived only by a written waiver signed by a duly authorized officer of the other party, which waiver shall be effective only with respect to the specific obligation described therein.

9.8. **Headings.** The titles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement.

9.9. **Assistance of Counsel.** Each party hereto acknowledges that it has been represented by its own independent counsel, who has reviewed this Agreement and discussed the terms herein with his or her respective client prior to execution.

9.10. **Counterparts.** This Agreement may be executed in multiple counterparts and delivery of an executed counterpart may be made by facsimile, each such counterpart to be considered and accepted as an original, and all such counterparts together to constitute a single Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the Effective Date:

BUS RADIO, INC.

By: Michael Yanoff
Title: CEO

THE HARRY FOX AGENCY, INC.

By: Michael Simon
Title: SVP of Business Affairs General Counsel and CSO

C001012180

EXHIBIT A

hfa **Bulk Digital Licensing Layout - Background Music - Bus Radio**

Acceptable Data Format: Tab Delimited Text

HFA Layout

	Description	Type	Length	Decimal	Input Option
1	Agreement Code	A	3		M
2	Manufacturer Number	A	5		M
3	Transaction Date	N	8	0	M
4	Manufacturer Request Number	N	8	0	M
5	Label Name	A	15		M
6	ISRC Code	A	15		O
7	Playing Time - Minutes (for matching purposes only)	N	3	0	M
8	Playing Time - Seconds (for matching purposes only)	N	2	0	M
9	Artist	A	200		M
10	Song Title	A	200		M
11	A/K/A Song Title	A	200		O
12	ISWC Code	A	11		O
13	HFA Song Code	A	6		O
14	Song Writer(s)	A	200		M
15	Publisher Name	A	60		M
16	HFA Publisher Number	A	8		Output
17	Exact Per Publisher Share	N	7	4	Input (optional)/Output
18	Catalog Number	A	15		O
19	Album Title	A	200		M
20	UPC Code	A	16		O
21	Configuration Code(s)	A	2		M
22	License Type	A	1		M
23	Server Fixation Date	N	0	0	M
24	Rate Code	A	1		M
25	Rate in Cents	N	12	7	C*
26	Rate in Percentage of Statutory	N	5	2	C*
27	Rate in Percentage of Minimum Statutory	N	5	2	C*
28	HFA License Number	N	10		Output
29	HFA License Status Code #1	A	2		Input/Output
30	HFA Flag for Amended Publisher Data	A	1		Output
31	Publisher Status	A	1		Output
32	Total HFA Represented Share	N	7	4	Output
33	HFA License Status Code #2	A	2		Output
34	HFA License Status Code #3	A	2		Output
35	HFA License Status Code #4	A	2		Output
36	HFA License Status Code #5	A	2		Output
37	User Defined	A	150		Input/Output

KEY:

Type: A = Alphanumeric Field; N = Numeric Field

Length: The maximum number of characters.

Decimal: number of characters after decimal (for numeric fields only).

Input Option: M= Mandatory; O = Optional; C = Conditional

C* = If rate code in Field 24 is other than S or J, one of the rate code fields from 25-27 must be populated.

Note: All input/output fields should be left blank upon initial license submission, EXCEPT for Field 29 which should be populated with the letter R only if the record is an amended resubmission

EXHIBIT A - continued

hfa License Field Explanations - Background Music - Bus Radio

	Field	Type: [illegible]	Explanation	Example
1	Agreement Code	M	Specific agreement code assigned by HFA	[illegible]
2	Manufacturer Number	M	Account number assigned by HFA to licensee	[illegible]
3	Transaction Date	M	Date [illegible] license request submitted to HFA	Format: YYYYMMDD Example: [illegible] Data Entered: [illegible]
4	Manufacturer Request Number	M	Unique identifying number (numerical only) assigned by Licensee for each work for which a license is requested	[illegible]
5	Label Name	M	The name of the record label that produces the applicable recording	[illegible]
6	ISRC Code	O	International Standard Recording Code. ISRC code assigned to the recording by the record label.	[illegible]
7	Playing Time - Minutes	M	The number of minutes in the duration of the applicable recording (for matching purposes only)	Duration = 5 minutes and 32 seconds Data entered: [illegible]
8	Playing Time - Seconds	M	The number of seconds over the last full minute in the duration of the applicable recording (for matching purposes only)	Duration = 5 minutes and 32 seconds Data entered: [illegible]
9	Artist	M	The name of the artist performing the applicable recording.	[illegible]
10	Song title	M	Title of work for which a License is requested	Yesterday
11	Alternate Song Title	O	Other names by which the work is known	[illegible]
12	ISWC Code	O	International Standard Musical Work Code. Code assigned to works by the network of ISO/ISWC Local or Regional agencies	ISWC: T-[illegible] Data Entered: [illegible]
13	HFA Song Code	O	Identifier assigned by HFA to identify a work uniquely	Example: [illegible]
14	Songwriter(s)	M	Name of the composer(s) of the work.	Format: [illegible] Example: [illegible]
15	Publisher Name	M	Name of publisher owning a share of the work. Additional publishers should be listed on separate lines using the same manufacturer's request number assigned to the work.	[illegible]
16	HFA Publisher Number	Output	Identifier assigned by HFA to identify a publisher uniquely.	P[illegible]
17	Estimated Publisher Share	Input (optional)/Output	Percent of song ownership by a specific publisher.	Example: [illegible] Data Entered: [illegible]
18	Catalog Number	O	The catalog number of a prior physical product that has been previously licensed.	[illegible]
19	Album Title	M	The title of a prior physical product that has been previously licensed.	[illegible]
20	UPC Code	O	The UPC code of a prior physical product that has been previously licensed.	[illegible]
21	Configuration Code	M	Code designating configuration type(s) requested. FX = Initial Server Fixation LD = Local Delivery Unit [illegible] IMPORTANT: Each configuration code must be reported on a separate line using the same manufacturer's request number assigned to the work. All other field content must be duplicated.	[illegible]
22	License Type	M	Classification of license type requested	[illegible] = Digital
23	Server Fixation Date	M	The date the applicable recording was or is expected to be fixed to the server for distribution.	Format: YYYYMMDD Example: [illegible] Data Entered: [illegible]

EXHIBIT A - continued

hfa License Field Explanations - Background Music - Bus Radio

	Field	Type [illegible]	Explanation	Example
24	Rate Code	N	Code designating type of rate applicable. For this agreement, use J	J
25	Rate in Cents	C*	Rate indicated as a penny rate.	
26	Rate in Percentage of Statutory	C*	Rate in Percentage of Statutory	
27	Rate in Percentage of Minimum Statutory	C*	Rate in Percentage of Minimum Statutory	
28	HFA License Number	Output	Number assigned by HFA for each license	1819120001
29	HFA License Status Code #1	Input/Output	Input: Use only to designate amended record - use code R in field Output: Code designating reason why request was not licensable as submitted. Numerous options available, with options being added/revised as necessary	Input: R - indicates the record has been amended and is being resubmitted. Output: 40 = MISSING MANDATORY FIELD - MANUFACTURER REQUEST NUMBER
30	HFA Flag for Amended Publisher Data	Output	Indicates that publisher information submitted by licensee differs on HFA database (for HFA represented publishers only)	Y = Flagged so that requestor can note that HFA publisher information differs from that submitted
31	Publisher Status	Output	Publisher Status	blank = Participating HFA publisher N = Non-HFA Publisher D
32	Total HFA Represented Share	Output	Total % of work represented by HFA	Example: 66.667% Data Entered: 066.6670
33	HFA License Status Code #2	Output	Code designating reason why request was not licensable as submitted. Numerous options available, with options being added/revised as necessary.	40 = MISSING MANDATORY FIELD - MANUFACTURER REQUEST NUMBER
34	HFA License Status Code #3	Output	Code designating reason why request was not licensable as submitted. Numerous options available, with options being added/revised as necessary.	40 = MISSING MANDATORY FIELD - MANUFACTURER REQUEST NUMBER
35	HFA License Status Code #4	Output	Code designating reason why request was not licensable as submitted. Numerous options available, with options being added/revised as necessary.	40 = MISSING MANDATORY FIELD - MANUFACTURER REQUEST NUMBER
36	HFA License Status Code #5	Output	Code designating reason why request was not licensable as submitted. Numerous options available, with options being added/revised as necessary.	40 = MISSING MANDATORY FIELD - MANUFACTURER REQUEST NUMBER
37	User Defined	Input/Output	This field is reserved for and defined by each record company. HFA will send back the information in the output file.	

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Exhibit B

hfa. **Usage and Royalty Reporting Layout - Bus Radio**

STEP 1: Provide an Excel worksheet with the following calculation variables:

A) Aggregate Royalty Amount Paid to PROs ("PROs Royalty Pool")
B) 12% of PROs Royalty Pool ("Gross Royalty")
C) Number of Plays of all Musical Works ("Total Plays")
D) Number of Plays of HFA licensed works ("Licensed Plays")
E) Licensed Plays divided by Total Plays ("HFA Factor")
F) Gross Royalties multiplied by HFA Factor ("Licensed Play Royalty Pool")
G) Licensed Play Royalty Pool divided by Licensed Plays ("Quarterly Effective Royalty Rate")
Make Step 2 calculations below before proceeding to line H
H) Total Royalties For Submission to HFA - based on Step 2 below

STEP 2: Use the below template and report usage by each license configuration.
Note: Server Fixations (FX) and Local Delivery Units (LD) do not have rates associated with them
Royalties to be allocated based on the Quarterly Effective Royalty Rate and usage and shares of Licensed Plays (LL)

File Header - Control Portion for File Transfer

FILE HEADER (Control Portion for File Transfer)

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Line Count	Mandatory	12	0	Number	# of lines of data in file	3214

FILE BODY

	Field Name	Field Requirement	Field Length	Decimal Places	Field Format	Field Description/Legend	Example
1	Manufacturer Number	Mandatory	6		Text	Account number assigned by HFA to Licensee	[illegible]
2	Transaction Date	Mandatory	8	0	Number	Date electronic royalty report submitted to HFA. Format: YYYYMMDD	[illegible]
3	Royalty Reporting Period	Mandatory	6		Text	Length of period in number of months (first 2 digits), ending month (middle 2 digits), year (last 2 digits)	[illegible] (i.e., quarterly reporting period, ending on the month of 2007.)
4	HFA License Number	Mandatory	12		Text	HFA License Number	[illegible]
5	HFA Song Code	Optional	6		Text	HFA Song Code, optional if HFA License Number provided	W01265
6	ISRC	Conditional	15		Text	International Standard Recording Code. Either the ISRC Code or the UPC Code must be submitted.	[illegible]
7	UPC	Conditional	16		Text	UPC Code. Either the ISRC Code or the UPC Code must be submitted.	[illegible]
8	Configuration Code	Mandatory	2		Text	Code designating the specific configuration being reported. FX = Initial Server Fixation LD = Local Delivery Unit LL = Licensed Play IMPORTANT NOTE: Each configuration must be reported as a separate line.	LL
9	HFA Song Title	Mandatory	30		Text	Title of work being licensed	HAPPY DAY
10	HFA Publisher Name	Mandatory	35			Name of HFA publisher as appears on license	[illegible] Publishing
11	HFA Publisher Ownership Split	Mandatory	7	4		Percentage of song controlled by publisher in field #10.	[illegible]
12	Total Units for Period	Mandatory	8	0	Number	Total units for Configuration Usage	4
13	Rate Code	Mandatory	1		Text	Special code indicating royalty rate structure.	J
14	Royalty Rate (quarterly effective)	Mandatory	11	2	Number	Calculated effective quarterly royalty rate.	[illegible]
15	HFA Publisher Royalty Share	Mandatory	11	2	Number	Amount [illegible] to HFA publisher.	[illegible]
16	Agreement Code	Mandatory	3		Text	Specific agreement code assigned by HFA.	[illegible]
17	Third Party Sales Channel	Optional	30		Text	Third-party through which distribution was made.	

NOTE: Publisher Name and Publisher Split fields are repeating groups

C001012184

ARCHITECTURE OF BUSRADIO
ASSET MANAGEMENT

Brief describing the handling of assets on each BusRadio

13 November 2006

Contents

Contents 1
Introduction 1
Asset playback 1
  Scheduling of assets 1
  Playback of on board assets 2
Contact 3

Introduction

The underlying goal of the BusRadio system is to have the accurate and efficient reproduction of all assets during playback. Every asset, once delivered to each BusRadio from the BusRadio server, is played back in its entirety and is scheduled by the BusRadio, Inc. music director.

Asset playback

Every BusRadio on the network maintains a local store of all the assets that the server pushed to it. In fact, the server knows precisely which assets are on which BusRadio, and can not only push an asset to the box, but can ask a box to delete an asset if so desired. Each asset is stored on a compact flash card in the BusRadio, and in a way that can be accessed by the BusRadio software.

Each asset pushed to the BusRadio is a exact copy of the original assets content, but simply re-encoded for optimized transport over the BusRadio system. For example, an original 15 second promotional asset is still a 15 second promotional asset once transmitted to the bus – however, that asset will be encoded in a different format to make it more friendly for transmission.

SCHEDULING OF ASSETS

A "show" on BusRadio is scheduled through the use of a "playlist script" – this playlist script informs the BusRadio device when to start playing each asset. For example, it may say that at the beginning of the show to play asset number 22, and to cross fade that with asset number 23 starting seventeen seconds into the show. The identity of each asset is distinct, but to the listener of BusRadio, the two assets would blend together to sound as though 22 and 23 were playing over each other[1].

The purpose of this is because each asset for a show is cached aboard the BusRadio, and that asset may be used in more than one show in the day. Another system may simply "copy" and "re-render" the show in place, but that is highly inefficient when it comes to computational and storage resources -- the BusRadio system is near optimal when evaluated on those metrics.

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[1] Asset 23 may be the DJ talking over the end of asset 22 which could be a song.

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PLAYBACK OF ON-BOARD ASSETS

When a BusRadio runs a playlist, what it is actually doing is decoding each asset it its raw audio data and place that into a ten second buffer. The ten second buffer comes into play so that if another asset overlaps or cross fades into this asset, the BusRadio can have time to properly mix the two audio signals together so that the content of each asset can be clearly heard without modification or loss of sound.

Exhibit D
Examiner NDA

[DATE]

[ADDRESSEE]
[LICENSEE]
[ADDRESS]
[ADDRESS]

Re: Royalty Examination of LICENSEE (EXAM PERIOD)

To Whom It May Concern:

We have been requested by The Harry Fox Agency, Inc. ("HFA") to examine, commencing on DATE, the books and records of LICENSEE for the period EXAM PERIOD in connection with LICENSEE'S royalty reports and payments to HFA-affiliated publishers.

We agree that, except as authorized in writing by LICENSEE, we will not disclose to anyone other than HFA, its officers and employees, legal counsel, HFA's directors and their advisors, and Participating Publisher-Principals, any information that we obtain from our examination of LICENSEE's books and records; provided, however, that we may disclose such information in the context of a legal action or proceeding, and further provided that it is understood that HFA and its affiliated publishers may disclose such information as they deem appropriate

Sincerely,

[AUTHORIZED EXAMINER]
on behalf of
[EXAMINER'S FIRM]

Data Access and Use Agreement

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This Data Access and Use Agreement ("**Agreement**") is entered into as of December [redacted], 2006 by and between The Harry Fox Agency, Inc., a New York corporation, having its principal place of business at 711 Third Avenue, New York, New York ("**HFA**") and Bus Radio, Inc., a Delaware corporation, with an office at 160 Gould Street, Suite 201, Needham, MA 02494 ("**Recipient**").

WHEREAS, Recipient (also referred to at times herein as "**Licensee**") and HFA have entered, or expect to enter, into that certain license agreement, dated as of December [redacted] 2006 (the "**License Agreement**"), pursuant to which HFA has granted, or will grant, limited rights to certain copyrighted musical compositions (each, a "**Musical Work**") in connection with the operation of Licensee's digital music service; and

WHEREAS, Recipient seeks to access and use certain HFA Confidential Information (defined in Section 1 below) as necessary to obtain and administer the licenses issued under the License Agreement (each, a "**License**"), and as otherwise may be necessary to comply with Licensee's obligations under the License Agreement (collectively, the "**Purpose**"), and HFA has agreed to allow Recipient such limited access to and use of the HFA Confidential Information solely as necessary to accomplish the Purpose;

NOW THEREFORE, in consideration of the premises of and the mutual promises, covenants and agreements contained in this Agreement, HFA and Recipient agree as follows:

1. HFA Confidential Information.

"**HFA Confidential Information**" means any and all information and material disclosed by HFA to Recipient or obtained by Recipient from HFA (whether in writing, or in oral, graphic electronic or any other form) that is proprietary and/or is intended by HFA to remain confidential relating to HFA's business and its databases, products, services, business strategies, capabilities or business affairs, including without limitation, all data and information related to the Musical Works and ownership thereof and/or HFA's publisher-principals.

2. Non-Disclosure and Limited Use.

Recipient covenants (a) to hold all HFA Confidential Information in strict confidence, (b) that it shall disclose (or permit access to) the HFA Confidential Information solely to (or by) its employees, if any, who need to know or access such HFA Confidential Information to accomplish the Purpose, and who are bound by nondisclosure and use restrictions and obligations comparable to and at least as restrictive to those set forth herein, and (c) that it shall not disclose to any third party, including any agent, contractor, consultant or other party, or permit any such party to access, the HFA Confidential Information, unless and until such party has entered into a written agreement with HFA in form and substance of this Agreement governing the nondisclosure and use of the HFA Confidential Information. Recipient further covenants that it shall (y) use HFA Confidential Information solely as necessary to accomplish the Purpose, and (z) not extract, aggregate, derive or copy any HFA Confidential Information, whether by bulk transfer or through individual data query and response, for use or incorporation in any database, unless the sole purpose of such use or incorporation is to accomplish the Purpose. Recipient agrees to notify HFA immediately upon obtaining any information regarding unauthorized disclosure or access to the HFA Confidential Information.

Notwithstanding the disclosure and use restrictions in this Section 2, Recipient may disclose HFA Confidential Information (i) that is independently derived or acquired from a party not subject to a duty of confidentiality to HFA, or (ii) to the extent required to respond to the request of a court of competent jurisdiction, provided that upon receiving any such request and to the extent that it may do so without violating any law, Recipient prior to such disclosure advises HFA of such request in order that HFA may take such action as it deems appropriate to protect the HFA Confidential Information. During the Term (defined in Section 5 below) and for a period of three (3) years following the termination or expiration of this Agreement, Recipient agrees to permit HFA to inspect, on a semi-annual basis, during regular business hours and upon reasonable prior notice, the point or points at which the HFA Confidential Information is (or was) used in Recipient's facilities, if any, and to furnish whatever assistance is reasonably necessary to permit HFA to determine whether Recipient, including its employees, agents, subcontractors, independent contractors, consultants or other parties, if any, are in compliance with this Agreement.

3. Ownership.

Recipient acknowledges and agrees that all right, title and interest in and to the HFA Confidential Information (including all copies, extracts and portions thereof) is and shall remain the sole property of HFA. Recipient does not acquire (by license or otherwise, whether express or implied) any intellectual property rights or other rights under this Agreement or any disclosure or access hereunder, except the limited right to use such HFA Confidential Information in strict accordance with the express provisions of this Agreement. All rights relating to the HFA Confidential Information that are not expressly granted hereunder to Recipient are reserved and retained by HFA.

4. No Warranty; Limitation of Liability.

EXCEPT AS OTHERWISE MAY BE EXPRESSLY SET FORTH IN THE LICENSE AGREEMENT WITH RESPECT TO LICENSEE, HFA MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED, WITH RESPECT TO THE HFA CONFIDENTIAL INFORMATION OR ANY USE THEREOF, AND THE HFA CONFIDENTIAL INFORMATION IS PROVIDED ON AN "AS IS" BASIS. EXCEPT AS OTHERWISE MAY BE EXPRESSLY SET FORTH IN THE LICENSE AGREEMENT WITH RESPECT TO LICENSEE, HFA HEREBY EXPRESSLY DISCLAIMS ALL SUCH WARRANTIES, INCLUDING, BUT NOT LIMITED TO, CORRECTNESS, COMPLETENESS, CURRENTNESS, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE HFA CONFIDENTIAL INFORMATION OR OF THE MEDIA ON WHICH THE DATA IS PROVIDED AND SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF OR CAUSED, IN WHOLE OR IN PART, BY HFA'S NEGLIGENT ACTS OR OMISSIONS IN PROCURING, COMPILING, COLLECTING, INTERPRETING, REPORTING, COMMUNICATING OR DELIVERING THE HFA CONFIDENTIAL INFORMATION OR IN OTHERWISE PERFORMING ITS OBLIGATIONS UNDER THIS AGREEMENT, EVEN IF HFA HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH LOSS OR DAMAGE.

5. Term; Termination.

This Agreement will continue for the term of the License Agreement (including any agreed extensions thereof) (the "Term"), unless otherwise terminated by HFA in accordance herewith. HFA may terminate this Agreement at any time upon written notice. Upon termination of this Agreement, HFA shall have no further obligations to disclose to Recipient or permit Recipient to access any HFA Confidential Information, but each party's rights and obligations shall otherwise survive the termination or expiration of this Agreement.

6. Purging of HFA Confidential Information.

Promptly following any expiration or termination of this Agreement, Recipient shall purge and destroy any and all records and copies of HFA Confidential Information from any Recipient databases and other systems under Recipient's direct or indirect control, and any other media on which any HFA Confidential Information may have been provided, together with all copies thereof, whether in printed or machine readable form; provided, however, that Recipient may retain any records and copies of HFA Confidential Information solely to the extent and for the period necessary to permit Licensee to fulfill any further obligations under the License Agreement, including without limitation, Licensee's accounting and royalty and security compliance obligations under Sections 2 and 6 of the License Agreement, after which period such records and copies shall be purged and destroyed as described in this Section 6. Notwithstanding the foregoing, Recipient is not required to purge and destroy any HFA Confidential Information to the extent such HFA Confidential

Information was independently derived or acquired from a party not subject to a duty of confidentiality to HFA.

7. Assistance of Counsel.

Each party hereto acknowledges that it has been afforded the opportunity to be represented by its own independent counsel for purposes of reviewing this Agreement and discussing its terms prior to execution.

8. Specific Performance.

Recipient acknowledges that a breach of Recipient's obligations in Sections 2 and 6 of this Agreement may result in irreparable harm, the extent of which it would be difficult to ascertain, and therefore agrees that HFA shall be entitled to seek immediate injunctive relief to enforce any such obligation in addition to any other legal remedy to which HFA might be entitled.

9. Assignment

Neither party shall assign, delegate or otherwise transfer, or dispose of, whether voluntarily or involuntarily, by operation of law or otherwise, any of its rights or obligations hereunder without the prior written consent of the other party, not to be unreasonably withheld or delayed; *provided that* either party may, without the prior written consent of the other party, assign, sell, transfer, delegate or otherwise dispose of its rights and obligations under this Agreement, as a whole, to (a) an affiliate solely in connection with a corporate restructuring or reorganization (b) if required to do so under applicable laws, rules and regulations or (c) via a Change of Control (except to a Prohibited Entity). "Change of Control" means (a) the consummation of a merger or consolidation, or sale or other disposition of substantially all of the assets of a party or (b) the acquisition by any individual, entity or group (within the meaning of Sections 13(d)(3) or 14(d)(2) of the Securities Exchange Act of 1933, as amended) of beneficial ownership (within the meaning of Rule 13d-3 promulgated under such Act) of more than fifty percent (50%) of either (i) the then-outstanding shares of common stock of such party or (ii) the combined voting power of the then-outstanding voting securities of such party entitled to vote generally in the election of directors. "Prohibited Entity" shall mean a proposed assignee where (v) the proposed assignee does not agree in writing to be bound by all of the terms and conditions of this Agreement and to assume all of the assigning party's obligations and liabilities hereunder, (w) the proposed assignee is less well capitalized as of the time of the proposed assignment than is Licensee or is insolvent (or would otherwise meet the termination criteria set forth in Section 5 above); (x) the proposed assignee is involved with a business that is morally reprehensible (*e.g.*, pornography), (y) the proposed assignee is a material infringer (this term relates to the restriction on sublicensee *vis a vis* past infringement history), or (z) such proposed assignee's business competes with that of the other party. Any purported assignment, sale, transfer, delegation or other disposition by a party, except as expressly permitted hereunder, shall be null and void.

10. Miscellaneous.

This Agreement (combined with the License Agreement, if the Recipient is the Licensee) constitutes the entire agreement between the parties concerning the subject matter hereof and supersedes all prior or contemporaneous representations, discussions, proposals, negotiations, conditions, communications and agreements, whether oral or written, between the parties relating to the subject matter hereof. No amendment, modification or waiver of any provision of this Agreement shall be effective unless in writing and signed by duly authorized signatories of both parties. The waiver by either party of a breach of or a default under any provision of this Agreement shall not be construed as a waiver of any subsequent breach of or default under the same or any other provision of this Agreement, nor shall any delay or omission on the part of either party to exercise or avail itself of any right or remedy that it has or may have hereunder operate as a waiver of any right or remedy. This Agreement shall be governed by and construed in accordance with the laws of the State of

New York, without reference to its conflicts of laws provisions. This Agreement and the rights and obligations hereunder may not be assigned or delegated by Recipient, in whole or part, whether voluntarily, by operation of law, change of control or otherwise, without the prior written consent of HFA. Subject to the foregoing, this Agreement shall be binding upon and inure to the benefit of the parties and their respective successors and permitted assigns. In the event that any of the provisions of this Agreement shall be held by a court or other tribunal of competent jurisdiction to be invalid or unenforceable, the remaining portions hereof shall remain in full force and effect and such provision shall be enforced to the maximum extent possible so as to effect the intent of the parties and shall be reformed to the extent necessary to make such provision valid and enforceable. The parties are independent contractors, and neither party shall have any authority of any kind to bind the other party in any respect whatsoever.

The parties have executed this Data Access and Use Agreement as of the date first above written:

THE HARRY FOX AGENCY, INC.	BUS RADIO, INC.
By:	By:
Name: Michael Simon	Name:
Title: SVP of Business Affairs, General Counsel and CSO	Title: CEO

RIAA Ex. 106-RR

RIAA Ex. 106-RR

Background Music License

Agreement made as of the 1st day of October, 2000 between PlayNetwork, Inc. (formerly known Stelix Music Company) 8727 148th Ave., N.E. Redmond, WA 98052 (Licensee) and THE HARRY FOX AGENCY, INC., 711 Third Avenue, New York, New York 10017 ("Agent") as follows:

Licensee and Agent do hereby agree that the "Background Music License" Agreement between them dated October 1, 1997 is extended for a term of three (3) years from the date hereof, until September 30, 2003. The Agreement, as hereby amended, is in all other respects ratified and confirmed.

Edward P. Murphy
Edward P. Murphy
o/b/o The Harry Fox Agency, Inc.

Adam Brotman
o/b/o PlayNetwork, Inc.

CO01002884

Agreement made as of October 1, 1997 by and between Stelix Music Company, 215 8th Avenue North, Seattle, Washington 98109 (hereinafter referred to as the "LICENSEE") and THE HARRY FOX AGENCY, INC. of 711 Third Avenue, New York, New York 10017 (hereinafter referred to as "AGENT").

WITNESSETH:

Whereas, AGENT is the licensing and collecting agent for numerous music publisher-principals (hereinafter individually and collectively referred to as "Publishers") who own or control the rights hereinafter licensed in their respective musical compositions;

Whereas, LICENSEE is engaged in the business of producing background and foreground music services (providing subscribers with copyrighted musical works embodied in sound) and furnishing such services (hereinafter collectively referred to as "Music Services") to its customers;

Whereas, LICENSEE, in order to record the musical compositions owned by the Publishers and to reproduce and distribute the recordings, is required under copyright law to obtain a license from the Publishers and accordingly desires to obtain such a license from the Publishers for the use of their respective musical compositions; and

Whereas, AGENT has been authorized and instructed by its principals, the Publishers, to issue a license to LICENSEE;

NOW, THEREFORE, it is agreed as follows:

1. This agreement is being entered into by AGENT as the authorized agent, acting for and on behalf of its principals, the Publishers.

2. For the purpose hereof the Publishers shall be and be deemed those Publishers listed in "THE HARRY FOX MUSIC PUBLISHERS DIRECTORY" as it is from time to time amended and supplemented, excluding therefrom however, those Publishers who are the subject of notices from the LICENSEE to AGENT excluding such publishers from the operation of this Agreement. The right to exclude Publishers from the operation of this Agreement (hereby reserved) may be exercised from time to time by AGENT pursuant to instructions from, and acting on behalf of, such Publishers so

excluded, provided that any such exclusion shall not apply to any compositions licensed and recorded under this agreement prior to the date of the delivery of the notice to LICENSEE relating to their exclusion.

3. The term of this Agreement shall be for a period of three years commencing as of October 1, 1997 and terminating September 30, 2000 (hereinafter referred to as the "Term").

4. The territory within which the rights hereinafter licensed may be exercised by LICENSEE is limited to the United States of America, its territories and possessions including Puerto Rico (hereinafter referred to as "Territory").

5. For the purpose hereof, the following non-exclusive rights are hereby granted to LICENSEE by the publisher with respect to the "Licensed Compositions" (as such term is hereinafter defined) during the Term and for use within the Territory.

a) The rights to mechanically reproduce (i.e. to make recordings of the Licensed Composition or to reproduce existing recordings pursuant to valid master recording rights licenses from the respective owner or controller of such rights), in whole or in part for the purposes of using such recordings in and only in connection with Music Services furnished by LICENSEE to its customers.

b) The right to make and use copies of such recordings in connection with LICENSEE's Music Services only and the right to make and furnish copies of such recordings to its customers for use in connection with Music Services only.

c) The rights herein granted to record and make copies of recordings hereunder embodying performances of the licensed compositions shall include recordings of wire, tape, discs, or any other devices now or hereafter known, but are limited to audio devices only not accompanied by the recording of visual images.

d) Neither the title nor lyrics of the Licensed Compositions shall be changed, substituted for, added to, or translated without the written consent of its respective Publishers.

e) The public performance of the Licensed Compositions, as embodied in the recordings by LICENSEE, is expressly conditioned upon such performers hereof having valid performing rights licenses from the respective Publishers, the American Society of Composers, Authors and Publishers (ASCAP), Broadcast Music, Inc. (BMI) or SESAC.

f) In addition to the foregoing non-exclusive rights granted to LICENSEE by the Publishers, LICENSEE shall have the right to transcribe previously recorded vocal/instrumental recordings embodying the Licensed Compositions, in whole or in part, for the purpose of using such previously recorded recordings in and only in connection with Music Services, provided that LICENSEE theretofore obtains the requisite licenses from the record companies or other parties which own or control the vocal/instrumental recordings.

g) The right granted herein to LICENSEE to furnish Music Services to customers shall not include the right to digitally transmit such services via satellite or other electronic methods of digital transmission, provided however, in the event that AGENT, on behalf of any Publisher grants license authority to a third party for the use of such Publisher's Licensed Compositions for any such prohibited use, AGENT shall enter into good faith discussions with LICENSEE concerning the obtaining of license authority for such use.

6. For the purposes hereof, "Licensed Compositions" shall be and be deemed to mean those musical compositions with respect to which:

a) The rights hereunder licensed are owned or controlled by the Publisher, and

b) AGENT has not indicated a restriction on such use by the respective Publishers, the right to restrict such use hereby being reserved by and on behalf of the Publishers.

7. In consideration of the license hereby granted, LICENSEE agrees to pay AGENT for and on behalf of its principals, the Publishers, for the use of all the Licensed Compositions used by LICENSEE hereunder during the Term, sums determined as follows:

a) A sum equal to twelve percent (12%) of those gross fees, royalties or other considerations payable to ASCAP pursuant to the ASCAP background and foreground license and

b) A sum equal to twelve percent (12%) of those gross fees, royalties or other considerations payable to BMI pursuant to the BMI background and foreground license and payable to SESAC pursuant to the SESAC background and foreground license.

c) LICENSEE shall pay AGENT 45 days following the end of each calendar quarter during the TERM the sums determined by subparagraph (a) and (b) of this paragraph 7. Such sums shall be payable on a pro-rated basis calculated by dividing the number of uses of Licensed Compositions by the number of LICENSEE's uses of all copyrighted musical compositions in its Music Services in the Territory during the applicable accounting period. The final amount of such sums shall be known in the aggregate as the "electrical transcription fee."

d) In each instance of payment on account of the electrical transcription fee hereunder, LICENSEE shall render a statement to AGENT showing in detail the calculations thereof pursuant to the provisions of this paragraph 7.

e) In connection with its use of the Licensed Compositions hereunder, LICENSEE shall furnish to AGENT copies of programs which shall identify those compositions recorded and supplied to its customers by Publishers grouped in alphabetical order, listing each respective Licensed Composition alphabetically in connection to the copyright proprietor, and shall show the dates of such first use and be accompanied by the applicable payments hereunder. AGENT shall have the right by its authorized representatives to inspect, copy, and make abstracts of the books and records of LICENSEE during reasonable business hours to verify the accuracy of LICENSEE statements and payments hereunder.

8. The license hereunder is limited to its express terms and all the rights in the Licensed Compositions not expressly licensed hereunder are hereby expressly reserved by and for the Publishers.

9. This license is non-assignable by LICENSEE except to a wholly owned subsidiary, parent or entity which purchased all or substantially all of the LICENSEE's assets or the capital stock of the LICENSEE or its parent corporation, provided, however, that in no event shall LICENSEE be relieved of its obligations hereunder without the express written consent of AGENT.

10. In the event that LICENSEE shall fail to make any payment or comply with any other provision required to be performed by LICENSEE in this Agreement, AGENT shall, without prejudice to any other right of the AGENT or its publisher-principals under this Agreement, have the right to revoke this Agreement and the rights herein granted by written notice thereof sent to LICENSEE by certified mail. In the event that LICENSEE does not cure such failure within fifteen (15) days from the mailing of such notice, LICENSEE shall be and be deemed to be a willful infringer of copyright with respect to the Licensed Compositions as to which it has not paid the amounts due hereunder or with respect to which it has otherwise failed to comply with its obligations under this Agreement.

11. This Agreement and the license of rights hereunder shall automatically terminate upon the filing by LICENSEE of a petition in bankruptcy, or insolvency, or after any adjudication that LICENSEE is bankrupt or insolvent, which adjudication is not vacated within 60 days, or upon the filing by LICENSEE of any petition or answer seeking reorganization, readjustment, or arrangement of LICENSEE's business under federal or state law relating to bankruptcy, or insolvency, or upon the appointment or a receiver for any of the property of LICENSEE, or upon the making by LICENSEE of any assignment for the benefit of creditors or upon the institution of any proceedings for the liquidation of LICENSEE's business for the termination of its corporate charter. Termination and/or expiration of this Agreement shall be without prejudice for moneys due to or to become due to AGENT and without prejudice to any other right of AGENT or the PUBLISHER under this agreement. Termination shall not affect the license of any Licensed Composition for which the fee has been paid.

12. Nothing herein contained shall constitute a waiver or release of any right, claim, or cause of action which AGENT or the Publisher may have at law or in equity against LICENSEE with respect to any act or omission on the part of LICENSEE not expressly licensed hereunder, all being hereby reserved.

13. This Agreement sets forth the entire understanding of the parties with respect to the subject matter hereof, may not be altered or amended except in a signed written instrument, and shall be governed and construed by and under the laws of the State of New York.

IN WITNESS THEREOF, the parties hereto have caused this Agreement to be executed as of the 1st day of October, 1997.

STELIX MUSIC COMPANY
(LICENSEE)

By: ____________________
ADAM BROTMAN, President

THE HARRY FOX AGENCY, Inc.
(AGENT)

By: ____________________

RIAA Ex. 107-RR

RIAA Ex. 107-RR

THE HARRY FOX AGENCY - BACKGROUND MUSIC AGREEMENT SUMMAR

Date	Licensee	HFA M#	Agreement Type	HFA Agreement Code (for processing)	Publisher Option (if applicable)	Publisher Option Period Open	Publisher Option Period Close	License Configuration
1/1/91	Muzak	M56215	Background Music	n/a	n/a	n/a	n/a	n/a
1/1/95	Muzak	M56215	Background Music Renewal	n/a	n/a	n/a	n/a	n/a
10/1/97	Stellx Music Company	AT669C	Background Music	n/a	n/a	n/a	n/a	n/a
2/1/98	Pace Communications	AT631F	In-Flight Music	n/a	n/a	n/a	n/a	n/a
1/1/99	AEI Music	M13775	Foreground Music	n/a	n/a	n/a	n/a	n/a
10/1/00	PlayNetwork (Formally Stellx)	AT643M	Background Music	n/a	n/a	n/a	n/a	n/a
1/1/01	Rockwell Collins	AT649L	In-Flight Music	n/a	n/a	n/a	n/a	n/a
11/1/01	SoundTrack Marketing	AT668E	In-Flight Music	n/a	n/a	n/a	n/a	n/a
1/1/02	Muzak	M56215	Background Music Renewal	n/a	n/a	n/a	n/a	n/a
12/9/03	TruSonic	M1563C	Digital Background Music	BKG	Opt out	02/02/04	03/05/04	1. Server Fixation (FX) 2. Local Unit Delivery (LD)
11/8/05	Private Label Radio, a division of Disc Marketing, LLC.	M1650T	Digital Background Music	PLR	Opt out	03/14/06	04/17/06	1. Server Fixation (FX) 2. Local Delivery Unit (LD)
1/1/2008 (retroactive)	TruSonic (Deal Renewal Terms)	M1563C	Digital Background Music	TRU	Opt In	05/15/08	08/09/08	1. Server Fixation (FX) 2. Local Unit Delivery (LD)
12/20/2008 NOTE: EXECUTED BUT IMPLEMENTATION ON HOLD	Bus Radio	M16919	Digital Background Music	BUS	Opt Out	Pending	Pending	1. Server Fixation (FX) 2. Local Delivery Unit (LD)

Y - AS OF 3-20-07 **FOR INTERNAL USE ONLY**

Royalty Structure	HFA Rate Code	Advance *(Please see Finance for details for RIAA and like deals)*	Publisher Commission Rate	Deal Expiration Date
1% of Licensed portion of Licensee's Royalties	n/a	n/a	Regular commission rate during that agreement period	12/31/94. Please see below 1/1/95 entry for New Deal Terms.
1% of Licensed portion of Licensee's Royalties	n/a	n/a	Regular commission rate during that agreement period	12/31/98. Please see below 1/1/02 entry for New Deal Terms.
12% of gross fees, royalties of other considerations payable to ASCAP, BMI, and SESAC	n/a	n/a	Regular commission rate during that agreement period	9/30/00
12% of gross fees, royalties of other considerations payable to ASCAP, BMI, and SESAC	n/a	n/a	Regular commission rate during that agreement period	2/28/03
1% of Licensed portion of Licensee's Royalties	n/a	n/a	Regular commission rate during that agreement period	Automatically renews every year unless terminated
12% of gross fees, royalties of other considerations payable to ASCAP, BMI, and SESAC	n/a	n/a	Regular commission rate during that agreement period	10/20/2003; Renewal discussions underway
12% of gross fees, royalties of other considerations payable to ASCAP, BMI, and SESAC	n/a	n/a	Regular commission rate during that agreement period	12/31/03
12% of gross fees, royalties of other considerations payable to ASCAP, BMI, and SESAC	n/a	n/a	Regular commission rate during that agreement period	12/31/2006; Renewal/Termination discussions underway
[redacted] of Licensed portion of Licensee's Royalties	n/a	n/a	Regular commission rate during that agreement period	12/31/02; Renewal discussions underway
$5 per server fixation Stat per local delivery unit	N	n/a	Regular commission rate during that agreement period	12/31/05. Please see below 1/1/06 entry for New Deal Terms.
$1 per server fixation; Plus an Effective Quarterly Royalty Rate calculated as the greater of a). 15% of Net Music Revenue or b). a Minimum Revenue Pool of $4.50 per Service User	J	n/a	Regular commission rate during that agreement period	12/31/07
[redacted] per server fixation Stat per local delivery unit	J	n/a	Regular commission rate during that agreement period	12/31/08
[redacted] of the aggregate royalty amounts paid by Bus Radio (or that should have been paid by Bus Radio) to U.S. performance rights societies (i.e., ASCAP, BMI and SESAC, collectively "PROs")	J	$0	Regular commission rate during that agreement period	12/31/08

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Charts

2005 YEAR END CHARTS

Hot 100 Songs
Issue Date: 11/26/2005

#	Title	Artist	Labels
1	WE BELONG TOGETHER	Mariah Carey	Island/IDJMG
2	HOLLABACK GIRL	Gwen Stefani	Interscope
3	LET ME LOVE YOU	Mario	3rd Street/J/RMG
4	SINCE U BEEN GONE	Kelly Clarkson	RCA/RMG
5	1, 2 STEP	Ciara Featuring Missy Elliott	Sho'nuff/MusicLine/ LaFace/Zomba
6	GOLD DIGGER	Kanye West Featuring Jamie Foxx	Roc-A-Fella/Def Jam/ IDJMG
7	BOULEVARD OF BROKEN DREAMS	Green Day	Reprise
8	CANDY SHOP	50 Cent Featuring Olivia	Shady/Aftermath/ Interscope
9	DON'T CHA	The Pussycat Dolls Featuring Busta Rhymes	A&M/Interscope
10	BEHIND THESE HAZEL EYES	Kelly Clarkson	RCA/RMG
11	DISCO INFERNO	50 Cent	Shady/Aftermath/ Interscope
12	YOU AND ME	Lifehouse	Geffen
13	DON'T PHUNK WITH MY HEART	The Black Eyed Peas	A&M/Interscope

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14 LOSE CONTROL	Missy Elliott Featuring Ciara & Fat Man Scoop	The Gold Mind/Atlantic
15 SHAKE IT OFF	Mariah Carey	Island/IDJMG
16 MR. BRIGHTSIDE	The Killers	Island/IDJMG
17 JUST A LIL BIT	50 Cent	Shady/Aftermath/Interscope
18 PON DE REPLAY	Rihanna	SRP/Def Jam/IDJMG
19 HOW WE DO	The Game Featuring 50 Cent	Aftermath/G-Unit/Interscope
20 BEVERLY HILLS	Weezer	Geffen
21 OH	Ciara Featuring Ludacris	Sho'nuff/MusicLine/LaFace/Zomba
22 LONELY NO MORE	Rob Thomas	Melisma/Atlantic
23 DROP IT LIKE IT'S HOT	Snoop Dogg Featuring Pharrell	Doggystyle/Geffen
24 HATE IT OR LOVE IT	The Game Featuring 50 Cent	Aftermath/G-Unit/Interscope
25 LOVERS & FRIENDS	Lil Jon & The East Side Boyz Featuring Usher & Ludacris	BME/TVT
26 SOLDIER	Destiny's Child Featuring T.I. & Lil Wayne	Columbia
27 BREAKAWAY	Kelly Clarkson	Walt Disney/Hollywood
28 SWITCH	Will Smith	Overbrook/Interscope
29 LET ME HOLD YOU	Bow Wow Featuring Omarion	Columbia
30 LIKE YOU	Bow Wow Featuring Ciara	Columbia
31 RICH GIRL	Gwen Stefani Featuring Eve	Interscope
32 MY HUMPS	The Black Eyed Peas	A&M/Interscope
33 OBSESSION (NO ES AMOR)	Frankie J Featuring Baby Bash	Columbia
34 CAUGHT UP	Usher	LaFace/Zomba
35 LISTEN TO YOUR HEART	D.H.T.	Robbins
36 SCARS	Papa Roach	El Tonal/Geffen
37 FEEL GOOD INC	Gorillaz	Parlophone/Virgin
38 LET ME GO	3 Doors Down	Republic/Universal/UMRG
39 HOLIDAY	Green Day	Reprise

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40	.R, WE'RE GOIN' DOWN	Fall Out Boy	Fueled By Ramen/Island/ IDJMG
41	GRIND WITH ME	Pretty Ricky	Atlantic
42	RUN IT!	Chris Brown	Jive/Zomba
43	PHOTOGRAPH	Nickelback	Roadrunner/IDJMG
44	LONELY	Akon	SRC/Universal/UMRG
45	COLLIDE	Howie Day	Epic
46	WAKE ME UP WHEN SEPTEMBER ENDS	Green Day	Reprise
47	SLOW DOWN	Bobby Valentino	DTP/Def Jam/IDJMG
48	OVER AND OVER	Nelly Featuring Tim McGraw	Derrty/Fo' Reel/Curb/ UMRG
49	SOME CUT	Trillville Featuring Cutty	BME/Warner Bros.
50	GET IT POPPIN'	Fat Joe Featuring Nelly	Terror Squad/Atlantic
51	PLAY	David Banner	SRC/Universal/UMRG
52	SOUL SURVIVOR	Young Jeezy Featuring Akon	Corporate Thugz/Def Jam/IDJMG
53	PIMPIN' ALL OVER THE WORLD	Ludacris Featuring Bobby Valentino	DTP/Def Jam South/ IDJMG
54	MY BOO	Usher And Alicia Keys	LaFace/Zomba
55	SUGAR (GIMME SOME)	Trick Daddy Featuring Ludacris, Lil' Kim & Cee-Lo	Slip-N-Slide/Atlantic
56	KARMA	Alicia Keys	J/RMG
57	SPEED OF SOUND	Coldplay	Capitol
58	I DON'T WANT TO BE	Gavin DeGraw	J/RMG
59	MOCKINGBIRD	Eminem	Shady/Aftermath/ Interscope
60	LA TORTURA	Shakira Featuring Alejandro Sanz	Epic/Sony BMG Norte
61	SHE WILL BE LOVED	Maroon5	Octone/J/RMG
62	BABY I'M BACK	Baby Bash Featuring Akon	Latium/Universal/UMRG
63	WAIT (THE WHISPER SONG)	Ying Yang Twins	ColliPark/TVT
64	INCOMPLETE	Backstreet Boys	Jive/Zomba
65	BRING EM OUT	T.I.	Grand Hustle/Atlantic
66	CATER 2 U	Destiny's Child	Columbia
67	1 THING	Amerie	Columbia

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Who will sell the most music on mobile phones in the next three years?

- Mobile Operators (Verizon, AT&T)
- Device Vendors (Nokia, Sony/ Ericsson)
- Third-party Services (Jamster, Thumbplay)

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- Sanctuary Reshapes U.S. Records Unit
- Sirius, XM Merger Approved By DOJ
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Billboard Publicity Wire

68 OF YOU	Foo Fighters	Roswell/RCA/RMG
69 IT'S LIKE THAT	Mariah Carey	Island/IDJMG
70 GOIN' CRAZY	Natalie	Latium/Universal/UMRG
71 INSIDE YOUR HEAVEN	Carrie Underwood	Arista/RMG
72 BECAUSE OF YOU	Kelly Clarkson	RCA/RMG
73 TRUTH IS	Fantasia	J/RMG
74 YOUR BODY	Pretty Ricky	Atlantic
75 BEAUTIFUL SOUL	Jesse McCartney	Hollywood
76 COOL	Gwen Stefani	Interscope
77 GET BACK	Ludacris	DTP/Def Jam South/ IDJMG
78 OUTTA CONTROL (REMIX)	50 Cent Featuring Mobb Deep	Shady/Aftermath/ Interscope
79 U DON'T KNOW ME	T.I.	Grand Hustle/Atlantic
80 THESE WORDS	Natasha Bedingfield	Epic
81 DON'T LIE	The Black Eyed Peas	A&M/Interscope
82 GET RIGHT	Jennifer Lopez	Epic
83 DAUGHTERS	John Mayer	Aware/Columbia
84 AS GOOD AS I ONCE WAS	Toby Keith	DreamWorks (Nashville)
85 GIRLFIGHT	Brooke Valentine Featuring Lil Jon & Big Boi	Subliminal/Virgin
86 LOSE MY BREATH	Destiny's Child	Columbia
87 ORDINARY PEOPLE	John Legend	G.O.O.D./Columbia
88 WE BE BURNIN'	Sean Paul	VP/Atlantic
89 JUST THE GIRL	The Click Five	Lava
90 TRUE	Ryan Cabrera	E.V.L.A./Atlantic
91 O	Omarion	T.U.G./Epic
92 BACK THEN	Mike Jones	Swishahouse/Asylum/ Warner Bros.
93 NUMB/ENCORE	Jay-Z/Linkin Park	Roc-A-Fella/Def Jam/ Warner Bros.
94 WONDERFUL	Ja Rule Featuring R. Kelly & Ashanti	The Inc./Def Jam/IDJMG
95 I'M SPRUNG	T-Pain	Konvict Muzik/Jive/ Zomba
96 CHARIOT	Gavin DeGraw	J/RMG
97 U ALREADY KNOW	112 Featuring Foxy Brown	Def Soul/IDJMG

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98	M. ..SSIPPI GIRL	Faith Hill	Warner Bros. (Nashville)/ WRN
99	NUMBER ONE SPOT	Ludacris	DTP/Def Jam South/ IDJMG
100	GIVE ME THAT	Webbie Featuring Bun B	Trill/Asylum/Atlantic

RIAA Ex. 120-RR

RIAA Ex. 120-RR

Hot 100 Songs
Issue Date: 2006

#	Title	Artist	Labels
1	BAD DAY	Daniel Powter	Warner Bros.
2	TEMPERATURE	Sean Paul	VP/Atlantic
3	PROMISCUOUS	Nelly Furtado Featuring Timbaland	Mosley/Geffen
4	YOU'RE BEAUTIFUL	James Blunt	Custard/Atlantic
5	HIPS DON'T LIE	Shakira Featuring Wyclef Jean	Epic
6	UNWRITTEN	Natasha Bedingfield	Epic
7	CRAZY	Gnarls Barkley	Downtown/Atlantic/Lava
8	RIDIN'	Chamillionaire Featuring Krayzie Bone	Universal Motown
9	SEXYBACK	Justin Timberlake	Jive/Zomba
10	CHECK ON IT	Beyonce Featuring Slim Thug	Columbia
11	BE WITHOUT YOU	Mary J. Blige	Geffen
12	GRILLZ	Nelly Featuring Paul Wall, Ali & Gipp	Derrty/Fo' Reel/Universal Motown
13	OVER MY HEAD (CABLE CAR)	The Fray	Epic
14	ME & U	Cassie	NextSelection/Bad Boy/Atlantic

15	BUTTONS	The Pussycat Dolls Featuring Snoop Dogg	A&M/Interscope
16	RUN IT!	Chris Brown	Jive/Zomba
17	SO SICK	Ne-Yo	Def Jam/Island Def Jam Music Group
18	IT'S GOIN' DOWN	Yung Joc	Block/Bad Boy South/ Atlantic
19	SOS	Rihanna	SRP/Def Jam/Island Def Jam Music Group
20	I WRITE SINS NOT TRAGEDIES	Panic! At The Disco	Decaydance/Fueled By Ramen/Atlantic/ Lava
21	MOVE ALONG	The All-American Rejects	Doghouse/Interscope
22	LONDON BRIDGE	Fergie	will.i.am/A&M/ Interscope
23	DANI CALIFORNIA	Red Hot Chili Peppers	Warner Bros.
24	SNAP YO FINGERS	Lil Jon Featuring E-40 & Sean Paul Of The YoungBloodZ	BME/TVT
25	LEAN WIT IT, ROCK WIT IT	Dem Franchize Boyz Featuring Lil Peanut & Charlay	So So Def/Virgin
26	WHAT HURTS THE MOST	Rascal Flatts	Lyric Street
27	HOW TO SAVE A LIFE	The Fray	Epic
28	UNFAITHFUL	Rihanna	SRP/Def Jam/Island Def Jam Music Group
29	CHASING CARS	Snow Patrol	Polydor/A&M/ Interscope
30	LIPS OF AN ANGEL	Hinder	Universal Republic
31	EVERYTIME WE TOUCH	Cascada	Robbins
32	AIN'T NO OTHER MAN	Christina Aguilera	RCA/RCA Music Group
33	DANCE, DANCE	Fall Out Boy	Fueled By Ramen/ Island/Island Def Jam Music Group
34	GOLD DIGGER	Kanye West Featuring Jamie Foxx	Roc-A-Fella/Def Jam/ Island Def Jam Music Group
35	MONEY MAKER	Ludacris Featuring Pharrell	DTP/Def Jam/Island Def Jam Music Group

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36	MS. NEW BOOTY	Bubba Sparxxx Featuring Ying Yang Twins & Mr. ColliPark	New South/Purple Ribbon/Virgin
37	(WHEN YOU GONNA) GIVE IT UP TO ME	Sean Paul Featuring Keyshia Cole	VP/Atlantic
38	PHOTOGRAPH	Nickelback	Roadrunner/Island Def Jam Music Group
39	BECAUSE OF YOU	Kelly Clarkson	RCA/RCA Music Group
40	STICKWITU	The Pussycat Dolls	A&M/Interscope
41	I'M N LUV (WIT A STRIPPER)	T-Pain Featuring Mike Jones	Konvict/Jive/Zomba
42	MY HUMPS	The Black Eyed Peas	A&M/Interscope
43	WHERE'D YOU GO	Fort Minor Featuring Holly Brook	Machine Shop/Warner Bros.
44	YO (EXCUSE ME MISS)	Chris Brown	Jive/Zomba
45	WALK AWAY	Kelly Clarkson	RCA/RCA Music Group
46	LAFFY TAFFY	D4L	DeeMoney/Asylum/Atlantic
47	WHAT YOU KNOW	T.I.	Grand Hustle/Atlantic
48	DIRTY LITTLE SECRET	The All-American Rejects	Doghouse/Interscope
49	SAVIN' ME	Nickelback	Roadrunner/Island Def Jam Music Group
50	DON'T FORGET ABOUT US	Mariah Carey	Island/Island Def Jam Music Group
51	SEXY LOVE	Ne-Yo	Def Jam/Island Def Jam Music Group
52	U AND DAT	E-40 Featuring T-Pain & Kandi Girl	Sick Wid' It/BME/Reprise
53	FAR AWAY	Nickelback	Roadrunner/Island Def Jam Music Group
54	WHAT'S LEFT OF ME	Nick Lachey	Jive/Zomba
55	SO WHAT	Field Mob Featuring Ciara	DTP/Geffen
56	DO IT TO IT	Cherish Featuring Sean Paul Of The YoungBloodZ	Sho'Nuff/Capitol
57	BLACK HORSE & THE CHERRY TREE	KT Tunstall	Relentless/Virgin
58	THERE IT GO! (THE WHISTLE SONG)	Juelz Santana	Diplomats/Def Jam/Island Def Jam Music Group

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Billboard Publicity Wire

59	S. JLDER LEAN	Young Dro Featuring T.I.	Grand Hustle/Atlantic
60	UNPREDICTABLE	Jamie Foxx Featuring Ludacris	J/RCA Music Group
61	MY LOVE	Justin Timberlake Featuring T.I.	Jive/Zomba
62	SHAKE THAT	Eminem Featuring Nate Dogg	Shady/Aftermath/ Interscope
63	PULLIN' ME BACK	Chingy Featuring Tyrese	Slot-A-Lot/Capitol
64	BOSSY	Kelis Featuring Too $hort	Jive/Zomba
65	CHAIN HANG LOW	Jibbs	Beasta/Geffen
66	SMACK THAT	Akon Featuring Eminem	SRC/Up Front/Konvict/ Universal Motown
67	ONE WISH	Ray J	Knockout/Sanctuary
68	SUGAR, WE'RE GOIN' DOWN	Fall Out Boy	Fueled By Ramen/ Island/Island Def Jam Music Group
69	GIMME THAT	Chris Brown Featuring Lil' Wayne	Jive/Zomba
70	I KNOW YOU SEE IT	Yung Joc Featuring Brandy 'Ms. B.' Hambrick	Block/Bad Boy South/ Atlantic
71	WHO SAYS YOU CAN'T GO HOME	Bon Jovi	Island/Island Def Jam Music Group
72	TOO LITTLE TOO LATE	JoJo	Da Family/ Blackground/Universal Motown
73	TOUCH IT	Busta Rhymes	Aftermath/Interscope
74	ROMPE	Daddy Yankee	El Cartel/Interscope
75	DEJA VU	Beyonce Featuring Jay-Z	Columbia
76	LIFE IS A HIGHWAY	Rascal Flatts	Walt Disney/Lyric Street
77	CALL ME WHEN YOU'RE SOBER	Evanescence	Wind-up
78	JESUS, TAKE THE WHEEL	Carrie Underwood	Arista/Arista Nashville
79	SHOW STOPPER	Danity Kane	Bad Boy/Atlantic
80	GET UP	Ciara Featuring Chamillionaire	LaFace/Jive/Zomba
81	WE BE BURNIN'	Sean Paul	VP/Atlantic
82	HATE ME	Blue October	Universal Motown

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83	ND ME	Lifehouse	Geffen
84	BEEP	The Pussycat Dolls Featuring will.i.am	A&M/Interscope
85	I THINK THEY LIKE ME	Dem Franchize Boyz Featuring Jermaine Dupri, Da Brat & Bow Wow	So So Def/Virgin
86	SAY GOODBYE	Chris Brown	Jive/Zomba
87	WAITING ON THE WORLD TO CHANGE	John Mayer	Aware/Columbia
88	SOUL SURVIVOR	Young Jeezy Featuring Akon	Corporate Thugz/Def Jam/Island Def Jam Music Group
89	PUMP IT	The Black Eyed Peas	A&M/Interscope
90	WHEN I'M GONE	Eminem	Shady/Aftermath/ Interscope
91	HUNG UP	Madonna	Warner Bros.
92	STAY FLY	Three 6 Mafia Featuring Young Buck & Eightball & MJG	Hypnotize Minds/ Columbia
93	LOVE	Keyshia Cole	A&M/Interscope
94	WHEN YOU'RE MAD	Ne-Yo	Def Jam/Island Def Jam Music Group
95	WHY YOU WANNA	T.I.	Grand Hustle/Atlantic
96	STUPID GIRLS	Pink	LaFace/Zomba
97	FEEL GOOD INC	Gorillaz	Parlophone/Virgin
98	I'M SPRUNG	T-Pain	Konvict/Jive/Zomba
99	DO I MAKE YOU PROUD	Taylor Hicks	Arista/RCA Music Group
100	FOR YOU I WILL (CONFIDENCE)	Teddy Geiger	Cred./Columbia

RIAA Ex. 122-RR

Hot 100 Songs
Issue Date: 2007

#	Title	Artist	Labels
1	IRREPLACEABLE	Beyonce	Columbia
2	UMBRELLA	Rihanna Featuring Jay-Z	SRP/Def Jam/IDJMG
3	THE SWEET ESCAPE	Gwen Stefani Featuring Akon	Interscope
4	BIG GIRLS DON'T CRY	Fergie	will.i.am/A&M/Interscope
5	BUY U A DRANK (SHAWTY SNAPPIN')	T-Pain Featuring Yung Joc	Konvict/Nappy Boy/Jive/Zomba
6	BEFORE HE CHEATS	Carrie Underwood	Arista/Arista Nashville/RMG
7	HEY THERE DELILAH	Plain White T's	Fearless/Hollywood
8	I WANNA LOVE YOU	Akon Featuring Snoop Dogg	Konvict/Upfront/SRC/Universal Motown
9	SAY IT RIGHT	Nelly Furtado	Mosley/Geffen
10	GLAMOROUS	Fergie Featuring Ludacris	will.i.am/A&M/Interscope
11	DON'T MATTER	Akon	Konvict/Upfront/SRC/Universal Motown
12	GIRLFRIEND	Avril Lavigne	RCA/RMG
13	MAKES ME WONDER	Maroon 5	A&M/Octone/Interscope

RIAA Ex. 122-RR

14	F. .Y LIKE A ROCKSTAR	Shop Boyz	OnDeck/Universal Republic
15	SMACK THAT	Akon Featuring Eminem	Konvict/Upfront/SRC/ Universal Motown
16	THIS IS WHY I'M HOT	Mims	Capitol
17	IT'S NOT OVER	Daughtry	RCA/RMG
18	THE WAY I ARE	Timbaland Featuring Keri Hilson	Mosley/Blackground/ Interscope
19	FERGALICIOUS	Fergie	will.i.am/A&M/ Interscope
20	CRANK THAT (SOULJA BOY)	Soulja Boy Tell'em	ColliPark/Interscope
21	GIVE IT TO ME	Timbaland Featuring Nelly Furtado & Justin Timberlake	Mosley/Blackground/ Interscope
22	WHAT GOES AROUND... COMES AROUND	Justin Timberlake	Jive/Zomba
23	CUPID'S CHOKEHOLD/ BREAKFAST IN AMERICA	Gym Class Heroes Featuring Patrick Stump	Decaydance/Fueled By Ramen/Atlantic/ Lava
24	HOW TO SAVE A LIFE	The Fray	Epic
25	HOME	Daughtry	RCA/RMG
26	MY LOVE	Justin Timberlake Featuring T.I.	Jive/Zomba
27	STRONGER	Kanye West	Roc-A-Fella/Def Jam/ IDJMG
28	WE FLY HIGH	Jim Jones	Koch
29	U + UR HAND	Pink	LaFace/Zomba
30	WALK IT OUT	Unk	Big Oomp/Koch
31	BEAUTIFUL GIRLS	Sean Kingston	Beluga Heights/Epic/ Koch
32	THIS AIN'T A SCENE, IT'S AN ARMS RACE	Fall Out Boy	Fueled By Ramen/ Island/IDJMG
33	BARTENDER	T-Pain Featuring Akon	Konvict/Nappy Boy/ Jive/Zomba
34	POP, LOCK & DROP IT	Huey	HiTz Committee/Jive/ Zomba
35	RUNAWAY LOVE	Ludacris Featuring Mary J. Blige	DTP/Def Jam/IDJMG
36	ROCKSTAR	Nickelback	Roadrunner/Atlantic/ Lava
37	THNKS FR TH MMRS	Fall Out Boy	Fueled By Ramen/ Island/IDJMG

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38	I'VE DONE	Linkin Park	Warner Bros.
39	SUMMER LOVE	Justin Timberlake	Jive/Zomba
40	YOU	Lloyd Featuring Lil' Wayne	The Inc./Universal Motown
41	WAIT FOR YOU	Elliott Yamin	Hickory/RED
42	LAST NIGHT	Diddy Featuring Keyshia Cole	Bad Boy/Atlantic
43	MAKE IT RAIN	Fat Joe Featuring Lil Wayne	Terror Squad/ Imperial/Virgin
44	MAKE ME BETTER	Fabolous Featuring Ne-Yo	Desert Storm/Def Jam/IDJMG
45	ICE BOX	Omarion	T.U.G./Columbia
46	LIPS OF AN ANGEL	Hinder	Universal Republic
47	WAITING ON THE WORLD TO CHANGE	John Mayer	Aware/Columbia
48	LOST WITHOUT U	Robin Thicke	Star Trak/Interscope
49	I'M A FLIRT	R. Kelly Or Bow Wow (Featuring T.I. & T-Pain)	Columbia/Jive/Zomba
50	IF EVERYONE CARED	Nickelback	Roadrunner/Atlantic/ Lava
51	GET IT SHAWTY	Lloyd	The Inc./Universal Motown
52	FACE DOWN	The Red Jumpsuit Apparatus	Virgin
53	THE WAY I LIVE	Baby Boy Da Prince Featuring Lil Boosie	Universal Republic
54	SHORTIE LIKE MINE	Bow Wow Featuring Chris Brown & Johnta Austin	Columbia
55	IT ENDS TONIGHT	The All-American Rejects	Doghouse/Interscope
56	A BAY BAY	Hurricane Chris	Polo Grounds/J/RMG
57	BECAUSE OF YOU	Ne-Yo	Def Jam/IDJMG
58	I TRIED	Bone Thugs-N-Harmony Featuring Akon	Full Surface/ Interscope
59	WELCOME TO THE BLACK PARADE	My Chemical Romance	Reprise
60	SHAWTY	Plies Featuring T-Pain	Slip-N-Slide/Atlantic
61	CHASING CARS	Snow Patrol	Polydor/A&M/ Interscope

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62	L JTIFUL LIAR	Beyonce & Shakira	Music World/ Columbia
63	SEXYBACK	Justin Timberlake	Jive/Zomba
64	KEEP HOLDING ON	Avril Lavigne	Fox/RCA/RMG
65	LET IT GO	Keyshia Cole Featuring Missy Elliott & Lil Kim	Imani/Geffen
66	APOLOGIZE	Timbaland Featuring OneRepublic	Mosley/Blackground/ Interscope
67	BUBBLY	Colbie Caillat	Universal Republic
68	LIKE A BOY	Ciara	LaFace/Zomba
69	WHO KNEW	Pink	LaFace/Zomba
70	NEVER AGAIN	Kelly Clarkson	RCA/RMG
71	PROMISE	Ciara	LaFace/Zomba
72	BED	J. Holiday	Music Line/Capitol
73	THROW SOME D'S	Rich Boy Featuring Polow Da Don	Zone 4/Interscope
74	REHAB	Amy Winehouse	Universal Republic
75	BIG THINGS POPPIN' (DO IT)	T.I.	Grand Hustle/Atlantic
76	NO ONE	Alicia Keys	MBK/J/RMG
77	THE GREAT ESCAPE	Boys Like Girls	Columbia
78	2 STEP	Unk	Big Oomp/Koch
79	WALK AWAY (REMEMBER ME)	Paula DeAnda Featuring The DEY	Arista/RMG
80	GO GETTA	Young Jeezy Featuring R. Kelly	Corporate Thugz/Def Jam/IDJMG
81	HERE (IN YOUR ARMS)	Hellogoodbye	Drive-thru/Sanctuary/ RED
82	ON THE HOTLINE	Pretty Ricky	BlueStar/Atlantic
83	WIND IT UP	Gwen Stefani	Interscope
84	CYCLONE	Baby Bash Featuring T-Pain	Arista/RMG
85	BREAK IT OFF	Rihanna & Sean Paul	SRP/Def Jam/IDJMG
86	FIRST TIME	Lifehouse	Geffen
87	AYO TECHNOLOGY	50 Cent Featuring Justin Timberlake & Timbaland	Shady/Aftermath/ Interscope
88	OUTTA MY SYSTEM	Bow Wow Featuring T-Pain & Johnta Austin	Columbia
89	TEARDROPS ON MY GUITAR	Taylor Swift	Big Machine

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91	SNOW ((HEY OH))	Red Hot Chili Peppers	Warner Bros.
92	MONEY MAKER	Ludacris Featuring Pharrell	DTP/Def Jam/IDJMG
93	KISS KISS	Chris Brown Featuring T-Pain	Jive/Zomba
94	FAR AWAY	Nickelback	Roadrunner/IDJMG
95	ROCK YO HIPS	Crime Mob Featuring Lil Scrappy	Crunk/BME/Reprise
96	LOVESTONED	Justin Timberlake	Jive/Zomba
97	BETTER THAN ME	Hinder	Universal Republic
98	PARALYZER	Finger Eleven	Wind-up
99	THAT'S THAT	Snoop Dogg Featuring R. Kelly	Doggystyle/Geffen
100	SAME GIRL	R. Kelly Duet With Usher	Jive/Zomba