

UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK

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In re SONY BMG CD TECHNOLOGIES LITIGATION	:	Civil Action No. 1:05-CV-09575-NRB
	:	
	:	<u>CLASS ACTION</u>
	:	
This Document Relates To:	:	DECLARATION OF ARAM SINNREICH IN
	:	SUPPORT OF THE RICCIUTI CLASS
ALL ACTIONS.	:	REPRESENTATIVES' MOTION FOR AN
	:	AWARD OF ATTORNEYS' FEES AND
	x	REIMBURSEMENT OF EXPENSES

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# EXHIBIT A

# Aram A. Sinnreich

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**Key Skills** Music, Media and Technology Research/Analysis. Writing. Public Speaking. Strategic Business Evaluation. Project Management. Business Development.

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## Professional Experience

**Radar Research, LLC** **June 2005 - Present**  
**Co-Founder and Managing Partner**

- Custom research and consulting for media and technology clients including Sony Pictures, The Online Publishers Association and The Norman Lear Center
- Maintained high press visibility as a music and media expert, with regular appearances in *The Wall Street Journal*, NPR, *Rolling Stone*, *Newsweek*, *LA Times*, and other top-tier media outlets
- Spoke at industry conferences and events, such as Music 2.0 and OMMA Hollywood
- Appeared as an expert witness in lawsuits including the Sony/BMG rootkit suit

**USC Annenberg School for Communication** **August 2002 - Present**  
**Doctoral Fellow and Lecturer**

- Designed and taught upper-level undergraduate courses, including “Music as Communication”
- Produced prize-winning research on music, technology, subcultures and social networks
- Presented at major academic conferences, such as International Communication Association
- Published academic research on music and media in books and journals
- Recipient of prestigious Provost’s Fellowship

**Sinnreich Media Research** **August 2002 - May 2005**  
**Founder and President**

- Custom research and consulting for clients including RealNetworks and Grokster
- Maintained high press visibility as a music and media expert, with regular appearances in *Billboard*, *Variety*, *Rolling Stone*, ABC, and other top-tier media outlets
- Appeared as an expert witness in lawsuits including the Grokster Supreme Court P2P case

**Jupiter Research** **February 1997 - July 2002**  
**Senior Analyst**

- Produced syndicated research on media and technology and provided custom strategic consulting for senior executives at nearly every major entertainment, software and Web company
- Launched and managed Music and Regulation/Policy research divisions
- Maintained high press visibility as a music and media expert, with regular appearances in top-tier television, print and radio news outlets including CBS (with Bryant Gumbel), ABC (with Peter Jennings), CNN, MTV, *The Wall Street Journal*, *The New York Times*, and *Billboard*.
- Organized, keynoted and/or spoke at dozens of industry conferences and events, including Plug.In, Billboard Summits, SXSW, NARM, CMJ, and Midem.

## Academic Publications

Sinnreich, A. (under review). Mash it up!: Hearing a new musical form as an aesthetic resistance movement. In *Television and New Media*.

Sinnreich, A. & Monge, P. M. (under review). The Role of Enforced Structural Holes in Independent Radio Promotion. In *The Journal of Broadcasting & Electronic Media*.

Sinnreich, A. & Gluck, M. (2006). Music and fashion: the balancing act between creativity and control. In *Ready to Share: Fashion and the Ownership of Creativity*. Los Angeles: Norman Lear Center Press.

Sinnreich, A. (2005). All that jazz was: remembering the mainstream avant-garde. *American Quarterly*, 57(2)

## Academic Conferences

Sinnreich, A. (2005). Conference co-organizer and featured presenter. Annenberg Center Social Software in the Academy Workshop. Los Angeles, 2005.

Sinnreich, A., Chib, A., & Gilbert, J. (2005). Modeling information equality: A real world approach. INSNA Sunbelt Social Networks Conference, Redondo Beach, 2005.

Sinnreich, A. (2004). Mash it up!: Hearing a new musical form as an aesthetic resistance movement. National Communication Association, Chicago, 2004. Award Winner: Top Paper

Sinnreich, A., Chib, A., & Gilbert, J. (2004). Modeling information equality: Social and media latency effects on information diffusion. National Communication Association, Chicago, 2004.

Sinnreich, A. & Monge, P. M. (2004). The role of enforced structural holes in independent radio promotion. International Communication Association, New Orleans, 2004.

Sinnreich, A., Chib, A., & Gilbert, J. (2004). Modeling information equality: Social and media latency effects on information diffusion. Telecommunications Policy and Research Conference, Virginia, 2004. Award Winner: Top Paper

Sinnreich, A. (2003). An institution worth preserving: The battle over Barbershop and the Black public sphere. Global Fusion Conference, Austin, 2003. Award Winner (Student Paper Competition)

Sinnreich, A. (2003). Featured workshop panelist: "Indies in the digital age". UCLA EGSO Conference on The Music Industry. Los Angeles, 2003

## Education

### University of Southern California Annenberg School for Communication

- PhD in Communication, 2007 (anticipated)
- MA in Communication, 2005

### Columbia University School of Journalism

- MS in Journalism, 2000

### Wesleyan University

- BA in English and Music, 1994

## Other Experience

### Journalist

Over the last decade, I have written freelance journalism, including features, business analysis, music reviews and restaurant reviews for a variety of publications. These include *The New York Times*, *Billboard*, *Time Out New York*, *American Quarterly*, and World Radio.

### Musician/Composer

My interest in music springs from my own deep involvement with it. Over the years, I have served as bassist, guitarist, vocalist and/or composer for artists and groups including seminal ska-punk band Agent 99 (Shanachie Records), dancehall reggae queen Ari-Up (former lead singer of The Slits), NYC neo-soul band Brave New Girl, jazz quartet MK4, and LA dub-and-bass band Dubistry. Songs I have composed have appeared on numerous compilations and soundtracks, including episodes of MTV's *Daria* and *Life as You Know It*, the winning entry in the 2005 Audi film festival.

## Awards and Honors

- Voted one of *InformationWeek*'s top fifteen "Innovators and Influencers" and profiled alongside the CEOs of Accenture, Handspring and JetBlue.
- Voted one of the "50 Most Important People in Streaming," *Streaming Magazine*.
- Voted one of the "15 Digital Music Industry Leaders," *Digital Music Weekly*.
- Numerous "best research" awards at major academic conferences

1. I am an expert in the areas of music and technology, retained by the Rucciuti class representatives. I am the Managing Partner of Radar Research, LLC and a Lecturer and Doctoral Fellow at USC Annenberg. Attached hereto as Exhibit A is a true and correct copy of my résumé. I have personal knowledge of the matters stated herein, and if called upon, I could and would competently testify thereto.

2. I have reviewed the Settlement Agreement entered into between the plaintiffs and defendant on December 28, 2005. I have estimated the maximum value of the various provisions of the Settlement Agreement as follows:

- XCP Exchange Program: Ranging from \$58.62 million to \$76.5 million, depending on which settlement option class members choose.
- MediaMax 3.0 Compensation: \$16.65 million.
- MediaMax 5.0 Compensation: \$35.83 million.
- EULA Waivers: \$82 million (maximum potential value); \$19.68 million (probable real-world value).
- Second Amendment: \$36.07 million (contingent on alternative compensation).
- Injunctive Relief: \$684 million (assuming cessation of all copy protection during relief period); \$136.8 million (assuming Sony BMG replaces enjoined copy protection technologies with alternative technologies).

3. The copy-protected discs under dispute in this case offer users a significantly degraded experience compared to unprotected CDs. Aside from the security risks and technical flaws discussed by other witnesses, and aside from the legal constraints introduced by the EULAs (discussed briefly below), the copy-protection technology introduces features that intentionally limit the functionality of the discs for the average user. Both XCP and MediaMax technologies require that users listening to the discs on a PC use the proprietary software included on the discs for playback, rather than their own choice of software. Besides simply restricting choice, this

potentially undermines sound quality, limits integration with users' preexisting libraries of owned music, and removes features commonly associated with most popular music playback software.

4. The copy protection software also limits the number of copies of a CD that can be burned (typically to three), and applies the same constraints and limitations to the copies as to the originals. The copies themselves may not be copied. Additionally, the copy protection software does not allow digital versions of songs to be "ripped" to users' computers in any format other than DRM-protected Windows Media Audio formats. These digital files are then bound to the PCs where they were ripped (they cannot be transferred to another computer owned by the same user), and are not interoperable with any music management software or portable music device that doesn't support Windows DRM (including the leading product in the category, Apple's iPod). As I will discuss in greater detail below, the resulting delta in functionality between a regular CD and a copy-protected CD represents a significant portion of the overall perceived value of the product to consumers.

**A. XCP Exchange Program**

5. Defendant Sony BMG is required to offer all persons possessing an XCP CD the opportunity to exchange such CD for an identical CD without XCP technology, and to download unprotected MP3 versions of the songs on the CD. The differential in value between the purchased CDs and the exchange offer can be estimated by considering the differences in feature set, sound quality and scope of content afforded by each. Research demonstrates that most consumers prefer CDs to commercial digital music precisely because the lack of DRM allows more flexible use and because CDs offer higher sound quality. Digital music is typically purchased when consumers would like to pick and choose individual songs rather than purchasing an album, or when the music is unavailable in physical formats. As all class members purchased CDs, it is safe to assume that they expected high sound quality, as well as freedom from the constraints of DRM.

6. Research also shows that roughly 20 percent of music listeners currently “rip” digital versions of songs from their CDs, usually in MP3 format. These MP3s are then reassembled into play lists for home listening, transferred onto portable MP3 players, and/or burned onto new “compilation CDs.” We may use this figure as a proxy, estimating that roughly 20 percent of the perceived value of CDs can be ascribed to their potential for ripping and reconfiguration. This calculation doesn’t necessarily imply that the 20 percent of music listeners who rip their CDs each ascribe 100 percent of the value of those CDs to digital uses, or that the remaining 80 percent who don’t rip their CDs ascribe zero value to such uses. Clearly, even those who rip their CDs may also use them in more traditional ways (*e.g.*, in their CD-based car stereos and home theater systems). Similarly, many – perhaps even most – of those who do not rip their CDs see some value in digital music, and either fulfill those needs in other ways (*e.g.*, peer-to-peer file sharing or online radio), or will begin ripping their songs once they have a higher degree of accessibility or a higher comfort level with new technologies. It is difficult to assign a fixed value to these attitudes among the consumer base – hence the need for a numerical proxy. One useful way to show the relationship between the proxy and the real situation is via the following equation: If the 20 percent of music consumers who rip their CDs each ascribe only half of a CD’s value to its potential digital music uses, and the remaining 80 percent who do not rip their CDs each ascribe only one-eighth of a CD’s value to its potential digital music uses, then we may still presume that, on average, 20 percent of the overall value of CDs can be ascribed to their digital music capabilities.

7. Assuming a conservative \$12.00 retail price for CDs, this would mean that \$2.40 of a CD’s retail value is contingent on its lack of copy protection. We may also ascribe additional value to the availability of MP3s for free download, based on the labor saved by consumers who would otherwise have to rip the CDs themselves. I estimate this small but significant boon as equal to 5



percent of the CD's retail value, or \$0.60. Thus, XCP class members who exchange their XCP CDs for unprotected CDs and free MP3 downloads are recouping \$3.00 per unit in differential value. With a total of 3 million XCP discs covered by this suit, this means the exchange has a maximum value to class members of \$9 million.

8. Sony BMG is required to use "commercially reasonable efforts" to insure that class members who bought XCP CDs may exchange them "in any condition." This suggests additional value for class members whose CDs have become broken or non-functional since purchase. It is currently standard practice in the record industry to include a clause in recording contracts assessing a 10-15 percent "breakage fee" against royalties owed. In essence, the CD manufacturers themselves are assuming that 10-15 percent of units will break en route to retailers, before sales to consumers ever take place. Given this assessment, it is natural to assume that at least as many units would become broken or inoperable in the period following purchase, during exchange eligibility. This period is both longer in duration than the period between manufacture and sale, and more dangerous to the CD, which is removed from its case and used on a regular basis. Conservatively estimating that 10 percent of XCP CDs (300,000 in total) became unplayable or inoperable during the period between purchase and exchange, and assuming a retail value of \$12.00 per CD, this amounts to a maximum of \$3.6 million in additional value recouped by class members.

9. Sony BMG is required to offer XCP CD class members the option to return CDs directly to Sony BMG by U.S. mail, at no cost to the senders. Conservatively assuming that a CD in jewel case and mailing envelope weighs less than four ounces, this suggests deferred postage costs of \$1.11 per unit shipped. Thus, this offer has a maximum potential value of \$3.3 million to class members.

10. Settlement class members who exchanged XCP CDs are entitled to two alternative incentives from Sony BMG. The first incentive offers class members a cash payment of \$7.50 and a promotional code enabling them to download one album listed in Exhibit C from a choice of digital music retailers. The second incentive offers class members a promotional code enabling them to download three albums on the same terms. Sony BMG also pledges to make “commercially reasonable efforts” to ensure that iTunes, the most popular digital music seller, is one of the three choices available to class members.

11. I picked six albums listed on Exhibit C at random and checked their pricing and digital download availability at iTunes, at Sony Connect, and at WalMart.com. Of the six, only four were available at iTunes, and only five were available at WalMart.com. The average price of the albums that were available was \$10.09. Given the spotty availability of these titles at preferred retailers, the dearth of new releases and other high-demand items on the list of downloadable albums, and the overall narrow range of choices offered on the list (despite the broad range of genres represented), I estimate that the value of an album download to class members is two-thirds of the average retail price, or \$6.73. This means that if all XCP class members choose the first incentive, its total value would be  $(\$7.50 + \$6.73) * 3 \text{ million} = \$42.69 \text{ million}$ . And if all XCP class members choose the second incentive, its total value would be  $(\$6.73 * 3) * 3 \text{ million} = \$60.57 \text{ million}$ .

#### **B. MediaMax 3.0 Compensation**

12. Sony BMG is required to offer each class member who purchased a CD encoded with MediaMax 3.0 an opportunity to download non-content protected MP3 versions of the music contained on said CD. As I mentioned above, I estimate 20 percent of the retail value of a CD to be contingent on its absence of DRM. However, as I have also mentioned, consumers perceive a difference in the sound quality between CDs and MP3s. Although research shows that between 20 and 30 percent of consumers indicate that sound quality is a priority for them, the overwhelming

success of MP3 as a format, and its near universal adoption among digital music users, indicate that, for most consumers, the difference in sound quality is not significant enough to outweigh the format's obvious benefits. Therefore, I estimate that the differential between MP3 and CD sound quality accounts for roughly 5 percent of the retail value of a CD. Thus, the MediaMax compensation program, which sacrifices CD sound quality for the flexibility of DRM-free digital files, has a value for consumers amounting to 15 percent of the retail value of a CD. Assuming a \$12.00 average retail price, this means \$1.80 per unit compensated. Given that 9.2 million MediaMax 3.0 CDs are covered by this lawsuit, the maximum value of this clause to class members is \$16.65 million.

**C. MediaMax 5.0 Compensation**

13. Sony BMG is required to offer each class member who purchased a CD encoded with MediaMax 5.0 an opportunity to download an MP3 version of each song on the CD, as well as a promotional code allowing class members to download one of the albums listed on Exhibit C from one of the digital music retailers I referred to in paragraph 10. Based on my analysis in paragraph 12, I estimate the first part of this clause to be worth \$1.80 per unit to class members. Based on my analysis in paragraph 11, I estimate the second part of this clause to be worth \$6.73 per unit to class members. Given that 4.2 million MediaMax 5.0 CDs are covered by this lawsuit, I estimate the maximum value of this clause to class members is \$35.83 million.

**D. EULA Waivers**

14. Sony BMG is required to waive certain elements of the XCP and MediaMax license agreements – specifically those that prevent users from circumventing copy protection, uninstalling copy protection software, legally copying the content of the CDs, and/or re-selling the CDs. The used-CD market has grown dramatically in recent years, as major retailers including Amazon, eBay, TransWorld, Tower and Newbury Comics have incorporated used CDs into their business models.

If we estimate that each of the XCP and MediaMax CDs could be re-sold by class members for \$5 apiece (my research indicates that this number is conservative), this suggests that the EULA waivers offer class members a maximum potential value of \$82 million. However, a real-world estimate would have to take into account the fact that most class members would not have re-sold their CDs. Given that the size of the used CD market is estimated to be 10 percent of the total US music business, we can safely assume that the real-world value of re-sold CDs by class members is approximately 10 percent of the retail value of all the CDs covered by the suit, or \$19.68 million.

**E. Second Amendment**

15. Sony BMG is required, per the second amendment to the Settlement Agreement, to offer alternative compensation to class members if it is not able to provide compensation per the terms discussed above. Specifically, Sony BMG must offer all XCP disc owners and up to 6,000 MediaMax disc owners either \$15.00 or an alternative benefit equal to or greater than the retail value of the copy-protected discs. Although this term may never be necessary to exercise, it does provide a critical extra degree of security for class members. If all 3,006,000 eligible class members were offered alternative compensation (conservatively assuming an average CD retail price of \$12.00), the maximum value of this term would equal \$36.07 million.

**F. Injunctive Relief**

16. In August, 2005, Thomas Hesse, president of Sony BMG's digital group, announced that Sony BMG planned to include copy protection on all CDs sold in the U.S. by March, 2006. However, pursuant to this Settlement, Sony BMG pledges not to manufacture or distribute any more CDs with either XCP or MediaMax 3.0 or 5.0 software for two years. If this term results in the postponed rollout of encrypted CDs by two years, then we may assess a projected benefit to consumers based on the delta between the value of a DRM-encrypted and a non-DRM-encrypted CD, assessed above (in paragraph 7) at \$2.40 per unit. Prior to this action, if we conservatively

estimate that, barring injunctive relief, Sony BMG would only have copy-protected half of its U.S. discs in calendar year 2006, and all of its U.S. discs in calendar year 2007, and we estimate that Sony BMG will sell approximately 190 million discs in the U.S. in each of those years (as it did in 2004), then the total value of injunctive relief to music consumers amounts to \$684 million over the course of the two year relief period.

17. However, it is possible that Sony BMG has not ceased to use copy-protection altogether pursuant to the Settlement, and has only shifted its manufacturing practices toward the use of other copy-protection technologies (such as Macrovision's SafeAudio, Midbar's Cactus Data Shield, or Sony's own key2audio). Even if this is the case, the injunctive relief clause has likely slowed the rollout of copy-protected CDs into the market, due to the technological and organizational difficulties associated with the changes in manufacturing technique. If we conservatively estimate that Sony BMG will produce merely 80 percent as many copy protected CDs over the next two years as it had initially planned, the introduction of an additional 57 million unencrypted discs into the market represents \$136.8 million in additional value to music consumers.

I declare under penalty of perjury under the laws of the State of New York that the foregoing is true and correct. Executed this 5th day of April, 2006, at South Pasadena, California.

  
ARAM SINNREICH

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