RECEIVED

APR 2 6 2002

GENERAL COUNSEL OF COPYRIGHT

Before the UNITED STATES COPYRIGHT OFFICE LIBRARY OF CONGRESS Washington, D.C.

DOCKET RM 200211 COMMENT NO.

In the Matter of:

NOTICE AND RECORDKEEPING FOR USE OF SOUND RECORDINGS UNDER STATUTORY LICENSE

Docket No. RM 2002-1A

REPLY COMMENTS OF THE RECORDING INDUSTRY ASSOCIATION OF AMERICA, INC.

Volume 2 of 4 (Exhibits)

Cary H. Sherman Steven M. Marks Gary R. Greenstein Linda R. Bocchi Susan C. Munsat RECORDING INDUSTRY ASSOCIATION OF AMERICA, INC. 1330 Connecticut Avenue, N.W., Suite 300 Washington, D.C. 20036

voice: 202.775.0101 fax: 202.775.7253

Of Counsel:

Robert Alan Garrett Jule Sigall ARNOLD & PORTER 555 Twelfth Street, N.W. Washington, D.C. 20036 voice: 202.942.5000

fax: 202.942.5000

Steve Englund ARNOLD & PORTER 1600 Tysons Boulevard, Suite 900 McLean, VA 22102 voice: 703.720.7000 fax:

703.720.7399

April 26, 2002

EXHIBITS

Multicast Tracking Technologies
Christine Falsetti, Technically Speaking - IP Multicast
and E-Learning: Tools for the Expanding Campus, at
http://www.cisco.com/warp/public/784/packet/
jul00/techspeak.html
Cisco IOS Multicast Technologies Data Sheet, at
http://www.cisco.com/warp/public/cc/pd/iosw/tech/xcst_ds.pdf
Cisco IOS Release 12.2(8)T – IGMP Version 3 – Explici
Tracking of Hosts, Groups, and Channels, at
http://www.cisco.com/univercd/cc/td/doc/product/software/
los122/122newft/122t/122t8/ft_xtrk.pdf
Tony Rybczynski, Propagating IP Multicast, at
nttp://www.nortelnetworks.com/solutions/financial/collateral/
tebuu_multicast.pdf
Some Very Useful Tools for Monitoring Different
Aspects of Multicast, at
http://www.nortelnetworks.com/solutions/financial/ collateral/feb00_multicast.pdf
Declarations
Declaration of Peter M. Mullen, Senior Director, Label
Relations and Operations for Sony Music Digital Services

Declaration of Gretchen Anderson, Head of Production
at Interscope Geffen A&M Records, a division of UMG
Recordings, Inc.
Declaration of Suzanne Berg, Senior Vice President of
Promotion at the Verve Music Group, a division of UMG
Recordings, Inc.
Declaration of John Dalton, Vice President of Marketing
at Universal Classics Group
Declaration of Dan Hubbert, Senior Vice President of
National Promotion for Capitol Records
Declaration of Bruce Iglauer, President of Alligator
Records
Declaration of Gerry Kuster, Vice President, Production
at Zomba Recording Corporation
Declaration of Heather McBee, Manager/New Media at
RCA Label Group RLG/Nashville, a unit of BMG Music
Declaration of Marina Scarlata, Vice President of
Production at MCA Records
Declaration of Rick Wietsma, Executive Vice President
and Co-Chief Operating Officer of WEA Inc.
Declaration of Bill Macky, Vice President, National

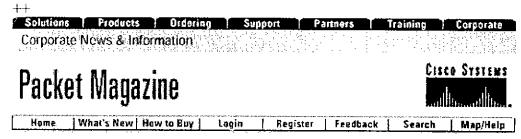
Tab 12	Declaration of Leslie Jose Zigel, Vice President, Business & Legal Affairs of BMG US Latin
Tab 13	
	Declaration of David Graupner, President and CEO of TM Century, Inc.
Exhibit C	Images of Nikka Costa "Everybody Got Their Something"
	Sampler
Exhibit D	Images of Aerosmith "Fly Away From Home"
Exhibit E	Images of Promotional Materials
Exhibit F	Images of The Grand Skeem "Baby Got Back"
Exhibit G	Images of Jade Anderson "Sugarhigh"
Exhibit H	List of Four ISRC Readers Currently Available
Exhibit I	Descriptions of Certain Automated Systems Including Those
	Mentioned By Services Filing Comments In Rulemaking
Exhibit J	Diagrams
Tab I	Diagram From Written Direct Testimony of Jonathan
	Zittrain Expert Testimony on Behalf of Broadcasters and
	Webcasters in Volume I (Public Version) (Tab B, Tab 2)
	of the Direct Case filing of the services in Docket No.
	2000-9 CARP DTRA 1 & 2 (Apr. 11, 2001)
Tab 2	Diagram of Simulcasting
Tab 3	Diagram of Internet-Only Webcasting
Exhibit K	Declaration of Wayne Beekman, Principal and Co-Founder of
	Information Concepts Inc.
Exhibit L	Letter from Glenn S. Fisher, CTO, Websound Inc. to Barrie
	Kessler, Chief Operating Officer, SoundExchange (Apr. 22,
	2002)
Exhibit M	Letter from Glenn A. Bloom, Director, Sales, Reliacast to
	Barrie Kessler, Chief Operating Officer, SoundExchange
	(Apr. 18, 2002)
Exhibit N	WHRB Playlist from March and April 2002
Exhibit O	Radio & Records Hot AC Playlists (Mar. 8, 2002)
Exhibit P	Examples Of Instances Where Artist Name and Sound
	Recording Title Insufficient For Royalty Distribution
	Purposes
Exhibit Q	Examples Where Band Members Have Changed And Need
	Album Identification For Distribution Purposes
Exhibit R	Printouts from AMG All Music Guide Providing Credits for
F 1 1 1 6	Band "Black Sabbath"
Exhibit S	Band Membership
Tab 1	Grateful Dead Band Members – Studio Albums
Tab 2	Grateful Dead Band Members – Live Albums
Tab 3	Grateful Dead Discography – Studio Albums
Tab 4	Grateful Dead Discography – Live Albums
Tab 5	Fleetwood Mac Band Members
<i>Tab 6</i>	Fleetwood Mac Discography

Exhibit T	Multiple Artists With Shared Or Substantially Similar Names
Exhibit U	Compilation Album Examples
Tab 1	Track Label (P)-Line Omitted
Tab 2	Track Label (P)-Line Included
Exhibit V	Labels With Same Or Substantially Similar Names
Exhibit W	Various Sub-Genres Available On Spinner
Exhibit X	RIAA's Revised, Proposed Regulations
Exhibit Y	Compare of RIAA's Exhibit W to RIAA Comments, Exhibit
	A (Apr. 5, 2002)

A

1

.



PACKET

THIRD QUARTER 2000

▼ SECTIONS -- ARCHIVE

Technically Speaking
IP Multicast and E-Learning: Tools for the Expanding
Campus

By Christine Falsetti

Corporate training as we used to know it is a thing of the past, thanks to new network technologies like IP Multicast. For corporations and learning institutions, *how* information is presented and *who* is viewing that information are both expanding. Using IP Multicast as an e-learning tool enables companies to provide time-critical information to a high number of viewers in the most efficient manner.

For example, imagine that you're networking a panel discussion in Chicago for potential viewers in New York City, London, and Munich. Let's say your company's goal is to turn the panel discussion into a lecture and then broadcast it using IP Multicast technology. Viewers in different cities tune in using their desktop computers and instantly access the presentation. Because of the TV-like quality, viewers tend to be excited and more focused than they might be in a conference room setting. And because the presentation is sent over the network as one stream, it uses bandwidth more efficiently.

Now imagine that some of your potential viewers for this session are in Sydney and Hong Kong. The live panel discussion takes place long before their work days begin. If these viewers miss the real-time presentation, they can watch a video that's broadcast at a later time. The live presentation can be recorded and played back as a scheduled multicast or on demand. With IP Multicast and IP/TV® technology, you have the ability to record the video streams to a file. Using the recorded file, you can

then build a video file that includes URL information, slides, and video and audio content. The file can then be broadcast to viewers at a scheduled time in a style very similar to normal TV broadcasts.

Reporting and Tracking

Reporting and tracking capabilities are inherent in IP Multicast technology. Used by all Cisco clients, the Real-time Transport Control Protocol (RTCP) reporting mechanism captures important tracking data, including which streams are viewed and when, who is viewing, and how many streams are viewed throughout the day, as well as reporting the server's allocated bandwidth. This information is essential for gathering statistics in compliance reporting (ISO, for example) and for departmental billing purposes.

From One to Many

Unicast, or point-to-point connection (transmission of one megabit per second), is the traditional method of transferring information or video-on-demand. Currently being used by various corporations and throughout the Internet, this method has obvious disadvantages. For example, if you wanted to send a video stream to 100 viewers using unicast technology, your network configuration would require 100 point-to-point connections using 1 Mbps each. If you were sending to 2000 viewers, your network would require 2000 point-to-point connections also using 1 Mbps per connection (equivalent to 2 Gbps), and so forth. With IP Multicast, or point-to-multipoint, the same 2000 users would be able to tune into the stream, but the transmission would use only 1 Mbps of the total network bandwidth.

This economy translates to a more effective overall use of the network's infrastructure. The number of viewers able to tune into the IP Multicast video stream is unlimited. IP Multicast enables connection to more people with less total bandwidth usage, and with much higher quality than the unicast method allows.

What's in Store?

Currently, only portions of the Internet are multicastenabled. Those areas that are not multicast-enabled are left out, putting potential presenters and viewers at a disadvantage. In the future, Cisco expects to mix videoconferencing and video streaming for a more interactive presentation between presenter and viewer, wherein questions and answers will be relayed in real time. The next phase of the Internet, referred to as the New World Internet, will provide improved transport capabilities and native IP Multicast support, allowing multicast presentations to reach any user who wants to participate. In conjunction with multicast technology, elearning has, to say the least, a well-timed future.



Christine Falsetti is Manager of Systems Marketing for the Cisco IOS® Technologies Division (ITD). Recognized in the Internet community for her work in the development of large-scale networking systems, Falsetti currently focuses on driving multicast and QoS solutions to market. Prior to her arrival at Cisco, Falsetti was the Project Manager for the NASA Research and Education Network and led NASA's involvement in the Next-Generation Internet

Program. To reach her, e-mail falsetti@cisco.com

Back to Third Quarter 2000 Table of Contents

Reader Feedback: Tell us what you think.



Download a PDF of the articles in "Sections" (1.83 MB)

Home | What's New | How to Buy | Login | Register | Feedback | Search | Map/Help

All contents copyright © 1992--2000 Cisco Systems, Inc. Important Notices and Privacy Statement.

2

•

.



Cisco IOS Multicast Technologies

In the new Internet economy, most businesses are finding it efficient and essential to deploy customer care, e-learning, e-commerce, and supply-chain management applications over their data networks. Companies are investing in these and other network-enabled applications to attain and keep a competitive edge in an increasingly fast-paced economy.

Cisco IOS[®] software is the foundation networking software that allows customers to deliver Cisco IP Network Services on a flexible infrastructure that is scalable, reliable, and secure. It provides industry-leading, standards-based technologies proven in use across the broadest and largest networks in operation today.

Among the many capabilities of Cisco IOS software are its IP Multicast technologies, which enable massively scalable distribution of data, voice, and video streams efficiently to hundreds, thousands, even millions of users. Cisco IOS Multicast enables corporate communications, video conferencing, e-learning, Internet broadcast, Hoot & Holler, and streaming media applications.

Multicast Architectures

Multicast deployments require three elements: the application, the network infrastructure, and client devices. Cisco IOS Multicast technologies reside in the network infrastructure in Cisco routers and switches. Unlike first-generation video broadcast applications that require a separate stream for each viewer, Cisco IOS Multicast is highly scalable. Multicast comprises a single content stream that is replicated by the network at branch points closest to viewers. This uses bandwidth

much more efficiently, and also greatly decreases load on content servers, reaching more users at a lower cost per user.

Cisco IOS Multicast supports standardscompliant applications for two types of distribution architectures:

- Point-to-multipoint—a single multicast stream that is replicated at "branch points" in a switched network to reach multiple viewers. This is useful for unidirectional, live broadcasts such as corporate communications or media events. It is also useful for content distribution from a central server to collocated servers, or software distribution from a data center to multiple end station PCs or servers (Figure 1). In certain cases the data flow may also be bi-directional, such as multiple distance-learning connections to a single classroom.
- Multipoint-to-multipoint—a bidirectional hub-and-spoke architecture in which a multipoint controller unit (MCU) receives and redirects signals from each member of a multicast conference. This is useful for videoconferences where all participants collaborate, or for online gaming services (Figure 2).



Benefits of IP Multicast

Cisco IOS Multicast technologies make it easier for enterprises and service providers to leverage their network resources for massively scalable content distribution applications. Cisco IOS Multicast enables customers to:

• Efficiently deploy and scale distributed group applications across the Internet

- Create a ubiquitous, enterprise-wide content distribution model
- Solve traffic congestion problems
- Allow service providers to deploy value-added streaming services that leverage their existing infrastructure.

Figure 1 Point-to-Multipoint Multicast Architecture

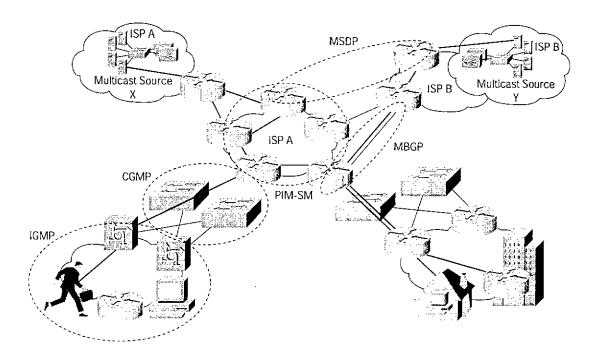
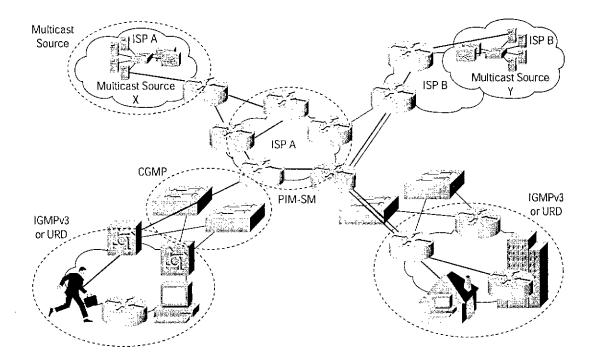




Figure 2 Multipoint-to-Multipoint Multicast Architecture



Cisco IOS Multicast Features

Feature	Description
Cisco Group Management Protocol (CGMP)	 Cisco developed protocol that allows Layer 2 switches to leverage Internet Group Management Protocol (IGMP) information on Cisco routers to make Layer 2 forwarding decisions Provides management of group membership on switched Ethernet LANs Allows switches to forward multicast traffic to only those ports that are interested in the traffic Used in low-end or older Catalyst[®] series switches that do not support IGMP Fully interoperable with IGMP Snooping
Internet Group Management Protocol (IGMP)	 Used by IP routers and their immediately connected IPv4 hosts to communicate multicast group membership states to neighboring multicast routers Version 3 of IGMP adds support for "source filtering," the ability for a system to report interest in receiving packets only from specific source addresses, or from all but specific source addresses sent to a particular multicast address
Internet Group Management Protocol (IGMP) Snooping	 Requires the LAN switch to examine, or "snoop," some Layer 3 information in the IGMP packet sent from the host to the router Used in higher-end, hardware-enabled platforms
Multiprotocol Border Gateway Protocol (MBGP)	 Multicast extensions to the BGP unicast inter-domain protocol Adds capabilities to BGP to enable multicast routing policy throughout the Internet and connect multicast topologies within and between BGP autonomous systems Carries IP multicast routes. MBGP carries two sets of routes, one set for unicast routing and one set for multicast routing Routes associated with multicast routing are used by Protocol Independent Multicast (PIM) to make multicast packet forwarding decisions at the interdomain borders

Feature	Description
Multicast Source Discovery Protocol (MSDP)	 Allows multiple PIM sparse-mode domains to share information about active sources Rendezvous points run MSDP over Transmission Control Protocol (TCP) to discover multicast sources in other domains Announces sources sending to a group Interacts with MBGP for interdomain operation Supports Anycast rendezvous point (RP) for load sharing and redundancy
Pragmatic General Multicast (PGM)	 Reliable multicast transport protocol for applications that require ordered, duplicate-free, multicast data delivery from multiple sources to multiple receivers Guarantees that a receiver in a multicast group either receives all data packets from transmissions and retransmissions, or can detect unrecoverable data packet loss Intended as a solution for multicast applications with basic reliability requirements
Protocol Independent Multicast v2 (PIMv2)	 Provides intradomain multicast forwarding for all underlying unicast routing protocols Independent from any underlying unicast protocol such as OSPF or BGP Supports explicit join (sparse mode), flood-and-prune (dense mode), or hybrid sparse-dense modes Sparse Mode: Relies upon an explicit joining method before attempting to send multicast data to receivers of a multicast group Dense Mode: Actively attempts to send multicast data to all potential receivers (flooding) and relies upon their self-pruning (removal from group) to achieve desired distribution
Universal Resource Locator Rendezvous Directory (URD)	 Directly provides the network with information about the specific source of a content stream Enables the network to quickly establish the most direct distribution path from the source to the receiver, thus significantly reducing the time and effort required in receiving the streaming media Allows an application to identify the source of the content stream

For More Information

For more information about Cisco IOS Multicast, visit http://www.cisco.com/go/ipmulticast or http://www.cisco.com/go/ios. Or contact your Cisco account manager or global service manager.



Corporate Headquarters Cisco Systems, Inc. 170 West Tasman Drive San Jose, CA 95134-1706 USA. www.cisco.com

Tel: 408 526-4000 800 553-NETS (6387) Fax: 408 526-4100

European Headquarters Cisco Systems Europe 11, Rue Camille Desmoulins 92782 Issy Les Moulineaux Cedex 9 France

www.cisco.com Tel: 33 1 58 04 60 00 Fax: 33 1 58 04 61 00 Americas Headquarters Cisco Systems, Inc. 170 West Tasman Drive San Jose, CA 95134-1706 USA

www.cisco.com Tel: 408 526-7660 Fax: 408 527-0883

Asia Pacific Headquarters Cisco Systems Australia, Pty., Ltd Level 17, 99 Walker Street North Sydney NSW 2059 Australia www.cisco.com Tel: +61 2 8448 7100

Fax: +61 2 9957 4350

Cisco Systems has more than 190 offices in the following countries. Addresses, phone numbers, and fax numbers are listed on the Cisco.com Web site at www.cisco.com/go/offices.

Argentina • Australia • Austria • Belgium • Brazil • Canada • Chile • China • Colombia • Costa Rica • Croatia • Czech Republic • Denmark • Dubai, UAE Finland • France • Germany • Greece • Hong Kong • Hungary • India • Indonesia • Ireland • Israel • Italy • Japan • Korea • Luxembourg • Malaysia Mexico • The Netherlands • New Zealand • Norway • Peru • Philippines • Poland • Portugal • Puerto Rico • Romania • Russia • Saudi Arabia • Singapore Slovakia • Slovenia • South Africa • Spain • Sweden • Switzerland • Taiwan • Thailand • Turkey • Ukraine • United Kingdom • United States • Venezuela

Copyright © 2000, Cisco Systems, Inc. All rights reserved. Printed in the USA. Catalyst, Cisco, Cisco Cystems, and the Cisco Systems logo are registered trademarks of Cisco Systems, Inc. or its affiliates in the U.S. and certain other countries. All other trademarks mentioned in this document are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (900SR)

IGMP Version 3—Explicit Tracking of Hosts, Groups, and Channels

Feature History

Release	Modification
12.0(19)S	This feature was introduced.
12.2(8)T	This feature was integrated into Cisco IOS Release 12.2(8)T.

politication of the section of the first of

This document describes the IGMP Version 3—Explicit Tracking of Hosts, Groups, and Channels feature in Cisco IOS Release 12.2(8)T and includes the following sections:

- · Feature Overview, page 1
- · Supported Platforms, page 3
- Supported Standards, MIBs, and RFCs, page 4
- · Configuration Tasks, page 4
- · Configuration Examples, page 5
- · Command Reference, page 5

Feature Overview

The Internet Group Management Protocol (IGMP) is used by IP hosts to report their multicast group memberships to neighboring multicast routers. IGMP is available in versions 1, 2, and 3. IGMP Version 3 (IGMPv3) is supported in Cisco IOS Release 12.0(15)S, 12.1(5)T, 12.1(8)E, and later releases.

The IGMP Version 3—Explicit Tracking of Hosts, Groups, and Channels feature enables a multicast router to explicitly track the membership of all multicast hosts in a particular multiaccess network. This enhancement to the Cisco IOS implementation of IGMPv3 enables the router to track each individual host that is joined to a particular group or channel. The main benefits of this feature are that it provides minimal leave latencies, faster channel changing, and improved diagnostics capabilities for IGMP.

For more information on IGMPv3 and related features such as Source Specific Multicast (SSM), refer to the Cisco IOS IP Configuration Guide, Release 12.2.

Benefits

Minimal Leave Latencies

The main benefit of the IGMP Version 3—Explicit Tracking of Hosts, Groups, and Channels feature is to allow minimal leave latencies when a host leaves a multicast group or channel. A router configured with IGMPv3 and explicit tracking can immediately stop forwarding traffic if the last host to request to receive traffic from the router indicates that it no longer wants to receive traffic. The leave latency is thus bound only by the packet transmission latencies in the multiaccess network and the processing time in the router.

In IGMP Version 2, when a router receives an IGMP leave message from a host, it must first send an IGMP group-specific query to learn if other hosts on the same multiaccess network are still requesting to receive traffic. If after a specific time (in Cisco IOS software, the default value is approximately 3 seconds) no host replies to the query, the router will then stop forwarding the traffic. This query process is required because, in IGMP Version 1 and 2, IGMP membership reports are suppressed if the same report has already been sent by another host in the network. Therefore, it is impossible for the router to reliably know how many hosts on a multiaccess network are requesting to receive traffic.

Faster Channel Changing

In networks where bandwidth is constrained between multicast routers and hosts (like in xDSL deployments), the bandwidth between routers and hosts is typically large enough to only sustain, in general, x multicast streams to be received in parallel. In these deployments, each host will typically join to only one multicast stream and the overall number of allowed hosts will be limited to x. The effective leave latency in these environments defines the channel change time of the receiver application—a single host cannot receive the new multicast stream before forwarding of the old stream has stopped. If an application tries to change the channel faster than the leave latency, the application will overload the bandwidth of the access network, resulting in a temporary degradation of traffic flow for all hosts. The IGMP Version 3—Explicit Tracking of Hosts, Groups, and Channels feature allows for minimal leave latencies, and thus allows for fast channel changing capabilities.

Improved Diagnostics Capabilities

The IGMP Version 3—Explicit Tracking of Hosts, Groups, and Channels feature allows network administrators to easily determine which multicast hosts are joined to which multicast groups or channels.

Restrictions

No MIB Support

There is no Simple Network Management Protocol (SNMP) MlB to track the IGMP membership of individual hosts. The MIBs supported by Cisco IOS software reflect only the aggregate membership of a particular interface on a router.

No Minimal Leave Latency for Groups with Legacy Hosts

If one or more hosts that supports only IGMP Version 1 or Version 2 are present on a network, the leave latencies for the multicast groups to which those hosts are joined will revert to the leave latencies of the IGMP version of the hosts—approximately 3 seconds for IGMP Version 2 and up to 180 seconds for IGMP Version 1. This condition affects only the multicast groups to which those legacy hosts are actually joined at any given point in time. In addition, the membership reports for these multicast groups sent by IGMPv3 hosts may revert to IGMP Version 1 or Version 2 membership reports, thus disabling explicit tracking of those host memberships.

No Explicit Tracking Support for IGMP v3lite and URD

Explicit tracking of IGMP Version 3 lite (IGMP v3lite) or URL Rendezvous Directory (URD) channel membership reports is not supported in Release 12.0(19)S or earlier releases. In these releases, the leave latency for multicast groups sending traffic to hosts using IGMP v3lite or URD will be determined by the leave latency of the version of IGMP configured on the hosts (for IGMPv3, the leave latency is typically 3 seconds when explicit tracking is not configured).

Related Documents

- Cisco IOS IP Configuration Guide, Release 12.2
- Cisco IOS IP Command Reference, Volume 3 of 3: Multicast, Release 12.2
- IGMP Version 3, Cisco IOS Release 12.1(5)T feature documentation
- Specific Multicast with IGMPv3, IGMP v3lite, and URD, Cisco IOS Release 12.1(5)T feature documentation

Supported Platforms

This feature runs on all platforms that support Cisco IOS Release 12.2(8)T and later releases.

Determining Platform Support Through Cisco Feature Navigator

Cisco IOS software is packaged in feature sets that support specific platforms. To get updated information regarding platform support for this feature, access Cisco Feature Navigator. Cisco Feature Navigator dynamically updates the list of supported platforms as new platform support is added for the feature.

Cisco Feature Navigator is a web-based tool that enables you to quickly determine which Cisco IOS software images support a specific set of features and which features are supported in a specific Cisco IOS image. You can search by feature or release. Under the release section, you can compare releases side by side to display both the features unique to each software release and the features in common.

To access Cisco Feature Navigator, you must have an account on Cisco.com. If you have forgotten or lost your account information, send a blank e-mail to cco-locksmith@cisco.com. An automatic check will verify that your e-mail address is registered with Cisco.com. If the check is successful, account details with a new random password will be e-mailed to you. Qualified users can establish an account on Cisco.com by following the directions at http://www.cisco.com/register.

Cisco Feature Navigator is updated regularly when major Cisco IOS software releases and technology releases occur. For the most current information, go to the Cisco Feature Navigator home page at the following URL:

http://www.cisco.com/go/fn

Supported Standards, MIBs, and RFCs

Standards

No new or modified standards are supported by this feature.

MIBs

No new or modified MIBs are supported by this feature.

To obtain lists of supported MIBs by platform and Cisco IOS release, and to download MIB modules, go to the Cisco MIB website on Cisco.com at the following URL:

http://www.cisco.com/public/sw-center/netmgmt/cmtk/mibs.shtml

RFCs

No new or modified RFCs are supported by this feature.

Configuration Tasks

See the following sections for configuration tasks for this feature. Each task in the list is identified as either required or optional.

- Enabling Explicit Tracking (required)
- Verifying Explicit Tracking (optional)

Enabling Explicit Tracking

To enable explicit tracking on an interface, use the following commands in interface configuration mode:

	Command	Purpose
Step 1	Router (config-if)# ip igmp version 3	Enables IGMP Version 3 on the interface. Version 2 is the default.
Step 2	Router (config-if)# ip igmp explicit-tracking	Enables explicit tracking on the interface.

Verifying Explicit Tracking

To verify configuration of explicit tracking, use the following show commands in EXEC mode:

- · To verify that explicit tracking is enabled on an interface, use the show ip igmp interface command.
- To display IGMP membership information for multicast groups and (S, G) channels, use the show
 ip igmp membership command.



The display output of the **show ip igmp groups** command is not affected by the explicit tracking feature. When explicit tracking is enabled, this output will still display the aggregate membership information of an interface.

Configuration Examples

The following example shows a basic configuration for enabling IP multicast with SSM, IGMPv3, and explicit tracking:

```
ip multicast routing
interface ethernet 0
description access network to desktop systems
ip address 10.1.0.1 255.255.255.0
ip pim sparse-dense-mode
ip mroute-cache
ip igmp version 3
ip igmp explicit-tracking
ip igmp v3lite
ip urd
interface ethernet 1
description backbone interface !No hosts connected
ip address 10.10.0.1 255.255.255.0
ip pim sparse-dense-mode
ip mroute-cache
ip pim ssm default
```

Command Reference

This section documents new commands. All other commands used with this feature are documented in the Cisco IOS Release 12.2 command reference publications.

- ip igmp explicit-tracking
- · show ip igmp membership

ip igmp explicit-tracking

To enable explicit tracking of hosts, groups, and channels for IGMP Version 3 (IGMPv3), use the ip igmp explicit-tracking command in interface configuration mode. To disable this feature, use the no form of this command.

ip igmp explicit-tracking

no ip igmp explicit-tracking

Syntax Description

This command has no arguments or keywords.

Defaults

Disabled

Command Modes

Interface configuration

Command History

Release	Modification
12.0(19)S	This command was introduced.
12.2(8)T	This command was integrated into Cisco IOS Release 12.2(8)T.

Usage Guidelines

This command can be configured on an interface only if IGMPv3 is first configured on the same interface. To configure IGMPv3, use the ip igmp version 3 command in interface configuration mode.

When explicit tracking is enabled on a router, the router can individually track the Internet Group Management Protocol (IGMP) membership state of all reporting hosts. This feature allows the router to achieve minimal leave latencies when hosts leave a multicast group or channel. To monitor IGMP membership of hosts, use the show ip igmp membership command in EXEC mode.

When explicit tracking is enabled, the router uses more memory than if explicit tracking is disabled because the router must store the membership state of all hosts on the interface.

Examples

The following example shows a basic configuration for enabling IP multicast with Source Specific Multicast (SSM), IGMPv3, and explicit tracking:

ip multicast routing

interface ethernet 0

description access network to desktop systems

ip address 10.1.0.1 255.255.255.0

ip pim sparse-dense-mode

ip mroute-cache

ip igmp version 3

ip igmp explicit-tracking

ip igmp v3lite

ip urd

interface ethernet 1
 description backbone interface !No hosts connected
 ip address 10.10.0.1 255.255.255.0
 ip pim sparse-dense-mode
 ip mroute-cache

ip pim ssm default

Related Commands

Command	Description
ip igmp version	Configures the version of IGMP that the router uses.
show ip igmp membership	Displays the IGMP membership information for multicast groups and (S, G) channels.

show ip igmp membership

To display Internet Group Management Protocol (IGMP) membership information for multicast groups and (S, G) channels, use the show ip igmp membership command in EXEC mode.

show ip igmp membership [group-address | group-name] [tracked] [all]

Syntax Description

group-address	(Optional) Specifies the IP address of the multicast group for which to display IGMP membership information.
group-name	(Optional) Specifies the name of the multicast group, as defined in the Domain Name System (DNS) hosts table, for which to display IGMP membership information.
tracked	(Optional) Displays the multicast groups with the explicit tracking feature enabled.
all	(Optional) Displays the detailed information about the multicast groups with and without the explicit tracking feature enabled.

Command Modes

EXEC

Command History

Release	Modification
12.0(19)S	This command was introduced.
12.2(8)T	This command was integrated into Cisco IOS Release 12.2(8)T.

Usage Guidelines

Unlike the show ip igmp groups command, this command allows you to display detailed information about multicast channels and explicit tracking.

Examples

The following is sample output from the show ip igmp membership command. Each entry in the output shows the aggregate membership information (indicated by the A flag) for a particular multicast group or channel from the IGMP cache. If the entry is prepended with a forward slash ("/") flag, the entry is a filtering entry that is blocking the data forwarding of the multicast group or channel.

Router> show ip igmp membership

```
Flags:A - aggregate, T - tracked
      L - Local, S - static, V - virtual, R - Reported through v3
       I - v3lite, D - Urd, M - SSM (S,G) channel
       1,2,3 - The version of IGMP, the group is in
Channel/Group-Flags:
       / - Filtering entry (Exclude mode (S,G), Include mode (*,G))
Reporter:
       <ip-address> - last reporter if group is not explicitly tracked
                   - <n> reporter in include mode, <m> reporter in exclude
 Channel/Group
                               Reporter
                                                       Exp. Flags Interface
                                               Uptime
 *,224.0,1.40
                               10.10.0.1
                                               00:01:34 02:41 2LA Et2/0
 *,239.1.1.1
                                               00:00:10 stop 3AT
```

The following is sample output from the show ip igmp membership command with the multicast group address 239.1.1.1 and the tracked keyword specified:

Router> show ip igmp membership 239.1.1.1 tracked

```
Flags: A - aggregate, T - tracked
      L - Local, S - static, V - virtual, R - Reported through v3
      I - v3lite, D - Urd, M - SSM (S,G) channel
      1,2,3 - The version of IGMP, the group is in
Channel/Group-Flags:
      / - Filtering entry (Exclude mode (S,G), Include mode (*,G))
Reporter:
      <ip-address> - last reporter if group is not explicitly tracked
      <n>/<m> - <n> reporter in include mode, <m> reporter in exclude
Channel/Group
                              Reporter
                                             Uptime Exp. Flags Interface
*,239.1.1.1
                                             00:00:11 stop 3AT
                              2/0
                                                                  Et2/0
10.30.0.100,239.1.1.1
                              10.10.0.10
                                             00:00:11 02:48 RT
                                                                  Et2/0
10.30.0.101,239.1.1.1
                             10.10.0.20
                                             00:00:03 02:56 RT
                                                                  Et2/0
10.30.0.101,239.1.1.1
                             10.10.0.10
                                            00:00:11 02:48 RT
                                                                  Et2/0
10.30.0.102,239.1.1.1
                             10.10.0.20
                                             00:00:03 02:56 RT
                                                                  Et2/0
```

Table 1 describes the significant fields shown in the displays.

Table 1 show ip igmp membership Field Descriptions

Field	Description
Channel/Group	(S, G) channel or multicast group filtering entry.
Reporter	Displays information about the hosts reporting membership with the (S, G) channel or multicast group entry.
Uptime	The Uptime timer is how long (in weeks, days, and seconds) the entry has been known.
Exp.	The Exp. timer is how long (in minutes and seconds) until the entry expires.
Flags	Provides information about the entry.
A - aggregate	Indicates that the aggregate information for the (S, G) channel or multicast group is being displayed.
T - tracked	Indicates that the multicast group is configured with the explicit tracking feature.
L - Local	Indicates that the router itself is interested in receiving the traffic for this multicast group or channel. In order for the application to receive this traffic, the packets are sent to the process level of the router. When the ip igmp join-group command is configured for a multicast group, the L flag is set.
S - static	Indicates that the multicast group or channel is forwarded on the interface. When the ip igmp static-group command is configured on the interface, the S flag is set.
V - vîrtual	Indicates that service such as Hoot and Holler is running on the router requesting the traffic for the multicast group or channel. These services can process IP multicast traffic in the fast switching path. The L flag will not be set by these applications.

Table 1 show ip igmp membership Field Descriptions (continued)

Field	Description						
R - Reported through v3	Indicates that an IGMP Version 3 (IGMPv3) report was received for this entry.						
I - v3lite	Indicates that an IGMP Version 3 lite (IGMP v3lite) report was received for this entry.						
D - Urd	Indicates that a URL Rendezvous Directory (URD) report was received for this entry.						
M - SSM (S, G) channel	Indicates that the multicast group address is in the Source Specific Multicast (SSM) range.						
1,2,3 - The version of IGMP	The version of IGMP that the multicast group is running.						
1							
Interface	Interface type and number.						

Related Commands

Command	Description					
ip igmp explicit-tracking	Enables explicit tracking of hosts, groups, and channels for IGMP Version 3.					
ip igmp version	Configures the version of IGMP that the router uses.					
show ip igmp groups	Displays the multicast groups with receivers that are directly connected to the router and that were learned through IGMP.					

4

•

by Tony Rybczynski

Propagating IP Multicast

Nortel Networks Solutions for Financial Service Providers

Three key industry thrusts are driving the financial services industry towards highly scalable, high performance real-time infrastructure software and networking. These are (i) decimalization and the resultant huge volume increases in data per transaction; (ii) 'T + 1' shortening settlement intervals from 3 days to 1 day; and (iii) and after hours trading. Customer requirements are for real-time and secure communication, reliability and scalability not just within the confines of the exchange floor but also across the WAN/Internet. Nortel Networks' partnership with Talarian is targeting this opportunity by combining Nortel Networks high performance open IP unicast and multicast routing capabilities (e.g. running on Passport and Accelar) with Talarian's industry leading SmartSockets real-time infrastructure software. A key technology behind this initiative is the development of reliable multicast protocols such as Talarian's Reliable Multicast Transport Protocol.

Radio broadcasting, global concerts, and special events over the Net are obvious examples of how the Internet is accommodating all-to-many distribution of audio and video streams. While conspicuous — and increasingly popular (at least 3,000 radio stations have already started broadcasting over the Net) — these examples offer the merest hint of the possibilities ahead, the potential for information sharing and dissemination that may be realized once the techniques of one-to-many distribution are refined.

Force Yields to Finesse

At present, one-to-many distribution is usually accomplished by brute force, that is, by networking techniques that replicate information at its source and transmit the information to each receiver. IT managers are wary of these types of applications, fearing that they'll prove disruptive — to an intranet, for example — because of the potentially huge demands that they can place on network and server resources.

The potential for such disruption may be lessened or even eliminated by something called IP multicast, a means of efficiently implementing one-to-many communications. IP multicast avoids the processing overheads associated with replication at the source and the bandwidth overheads of repeatedly sending the same information to different destinations.

An analogy helps here. Like broadcast TV or radio, IP multicast establishes a number of channels available across the





IP network to which users can "tune in." In radio and TV, the signal is there whether you're listening or not. This is also true for any packet sent on a LAN, which is a broadcast medium by its very nature.

With IP multicast, however, mechanisms are defined such that the network replicates the content as close to the listeners as possible. In this way, IP multicast avoids wasting bandwidth in those parts of the network that lack listeners. Let's look at how IP multicast is accomplished, and then explore some of the applications enabled through IP multicast.

The Technology Behind Multicast

Multicasting provides mechanisms to conserve network resources and minimize server processing overheads by using intermediate nodes (for example, routers and routing switches) to replicate data at the most efficient downstream point(s) in the network. These mechanisms rely on two protocol building blocks:

- A protocol that end stations use to join one or more multicast groups. This protocol serves, in essence, as a tuning dial for end users, who may signal their preferred channel.
- A protocol for establishing the optimal replication points in the network given the location of the sending server and the listening clients.

Before discussing the protocols in more detail, we need to establish a few basic concepts. "Multicast groups" define one or more transmitters and a set of listening receivers. The construction of a multicast group begins with the deployment of source video, audio, financial, or various multimedia servers that will stream data into the network.

Another concept is the "multicast address." Such an address is assigned to the application for the duration of the multicast session. Receivers signal to their local multicast-capable router their desire to join or leave a multicast group. Alternatively, the router can poll the receivers to see if they are still listening. When there are no receivers in a region of the network, multicast packets will no longer be sent there.

These concepts are easy to understand, but how does the network establish the optimal replication points given the location of the sending server and the listening clients? At this point, we need to introduce a more challenging concept, the "delivery tree."

To establish optimal replication points, routers communicate with each other via a network-layer multicast routing protocol that enables the construction of a multicast delivery tree. The delivery tree is essentially a set of paths calculated so those multicast packets are delivered only to those network regions that require them.

Source-Rooted Trees

The dominant form of multicast delivery relies on source-rooted trees. Each source within a group has its own tree that connects it to all the receiving members of its group. If a group has five sources, it will have five distinct delivery trees.

The source-rooted tree takes the direct, or shortest, path from the source to its receivers. Different routing metrics can be used to compute the shortest path (hops, delay, cost, etc.). Typically, the shortest path entails the fewest of hops between a source and its receivers.

First-Generation Protocols: The first generation of widely used multicast protocols was based on least-hop routing algorithms, specifically, the algorithms used by the Routing Internet Protocol (RIP). When a source sends its first multicast packet to the group, routers broadcast the initial multicast packet to

all interfaces except the one that leads back to the source via the shortest path. This allows multicast frames to reach all potential receivers.

During the flooding process, a multicast packet may be addressed to a group that does not reside on any of the interfaces on a particular router, with the result that prune messages are sent back towards the source. These messages indicate that multicast packets should not be forwarded down this branch of the tree. Trees may grow and shrink as receivers tune in and out.

One advantage of this approach is that it places modest processing demands on routers. Another is that it can be tunneled over a non-multicast IP network, this being very attractive in the Internet as a means to kick-start IP multicast networking.

Second-Generation Protocols: As the IP multicast market matures, a second-generation multicast protocol has emerged. The new protocol overcomes the limited convergence performance and scalability of first-generation systems. It does so by eliminating the need to periodically flood multicast traffic throughout the network. This protocol builds on the Open Shortest Path First (OSPF) routing protocol that is the widely deployed successor of RIP.

OSPF uses efficient link-state algorithms: instead of periodically exchanging the number of hops to every router in the network, OSPF only requires changes in the network to be exchanged. When a new group member joins a multicast group, a special group membership message is propagated to all other routers within a routing area, which add this information to their link-state databases.

In this way, routers converge to create a detailed map of the multicast topology. This sophisticated link-state approach allows the multicast distribution system to adapt rapidly as group membership and network resources change. If a physical network link goes down, the

change is propagated to each router's database. The result is an immediate change in the multicast route calculation. This approach can make use of flexible path calculation metrics for source-rooted path tree construction, going beyond simple hop count.

Shared Trees

While the above approaches use sourcerooted trees, an alternative, using what
are called shared trees, has been developed
for applications that involve sparsely
populated multicast groups with lowgrade network connections. An example
of such a group is a video conference or
video broadcast that connects users in
many dispersed locations that lack highbandwidth connections to the corporate
backbone. Shared trees create multicast
forwarding paths that rely on a central
router that serves as a rendezvous point
between multicast sources and destinations.

A shared tree has the potential to lessen demand on routers and network bandwidth during tree construction. Although the shared tree avoids wholesale flooding, it subjects multicast traffic to a static, non-optimized set of paths that all pass through the rendezvous point router — a potential bottleneck and single point of failure. To reduce the inefficiencies of the shared tree, receivers or routers have the option to switch to a source-rooted shortest path tree once the source starts multicasting.

Generic Router Assist

In certain application environments (for example, in financial networks), a protocol is required for ensuring lossless, ordered, and duplicate-free multicasting of critical data. Such tasks are ill served by TCP. This protocol works very well in a point-to-point environment, but not in a multicast environment.

More suitable protocols, including several reliable multicast Layer 4 protocols, have been developed. One example is Starburst's Multicast File Transfer Protocol. Another possibility, one allowing independent evolution of the end-toend Layer 4 protocol, shows promise. This protocol, called Generic Router Assist, is designed to provide more effective recovery from loss.

Generic Router Assist uses a negative acknowledgement-based mechanism such that once a receiver determines that data has been lost, it attempts to recover the data from sources close to the receiver. It goes back to the source only as a last resort. For example, data may be recovered from a router that may have cached the data or from another receiver that may volunteer to retransmit the data.

The Business of Multicast

Multicast-capable network backbones are an essential component of emerging multimedia, information distribution, and real-time computing applications. Key drivers in the enterprise market include: distribution of inventory, pricing, and stock market data; telemedicine; employee training; corporate communications; new push applications; and the general area of multimedia collaboration.

Multicast collaboration can increase the effectiveness of distributed workgroups by allowing joint viewing and editing of common documents. Such documents may include audio, image, and video components. Multicast collaboration can also enable rich multimedia interaction between corporate users, customers, suppliers, and partners over the Web. Online conferences, discussion groups, virtual white board sessions, and shared Web applications can be used to strengthen ties between a company and its customers.

In addition, IP multicast-enabled dynamic information distribution systems will deliver more effective Web replication and caching, remote server synchronization, and desktop software distribution. By

providing efficient ways of getting lots of information to lots of users, multicastbased applications can give enterprises a powerful competitive advantage.

To further illustrate application enablement through multicasting technologies, consider opportunities for:

- Specialized training allowing expert coaches and instructors to train athletes, performers, and artists in subtle motor skills even though teacher and pupil may be separated by thousands of miles.
- Real-time 3D modeling uniting groups of dispersed engineers and scientists, who may view highly detailed graphical simulations of dynamic scientific and engineering processes without leaving their desks.
- Editing of video footage and highresolution animation — linking artists and creative workers in virtual production studios far from major media centers.
- Networked games allowing players to compete with each other in real-time over the Net.

Choosing a Multicast Strategy

To respond to business needs for multicasting applications, IT managers will have to assemble adequate IP networking infrastructures. One thing IT managers can do is implement policyenabled QoS and access control mechanisms. Such measures will help manage the unpredictable demands that may assail a network. However, a strategy to deploy an effective infrastructure involves more than just turning on a software feature.

For example, IT managers will have to tend to architectural issues. Specifically, routers that are based on a central processing architecture experience a significant drop in throughput when required to replicate multicast packets. High-performance multicast demands distributed routing switch architectures that can support multiple multicast groups and the required replication function.

On top of this, real-world considerations drive the need for multicast migration tools. More generally, management tools are required to allow introduction of multicast in an orderly fashion.

Specifically, implementing sophisticated

The Language of Multicast

IGMP (Internet Group Membership

Protocol): universally used by end stations
to join a multicast group

DVMRP (Distance Vector Multicast Routing Protocol): a first generation protocol using source-rooted trees and built on least hop routing algorithms

MOSPF (Multicast Open Shortest Path First or MOSPF): a second generation protocol using source-rooted trees and built on more sophisticated link state routing algorithms:

PIM-SM (Protocol Independent Multicast-Sparse Mode): a multicast protocol using source-rooted trees and designed for low-density applications

PIM-DM (Protocol Independent Multicast-Dense Mode): another derivative of PIM that will likely find limited application, given that, while less processor intensive, it is a poorly performing derivative of DVRMR filtering techniques may allow IT managers to stage the rollout of multicast capabilities across an enterprise IP network.

In addition, IT managers might familiarize themselves with multicast table management capabilities, accessing debugging tools capable of tracing multicast operation as part of problem resolution. Another possibility: multicast network tools enabling the visualization of multicast trees for engineering and management purposes. Taken together, tools such as these may facilitate multicast deployment in the enterprise.

Multicast Forecast

IP multicast standards have been developed by the IETF. High-performance multicast networking products are there and working in, for example, stock exchanges around the world. The migration and management tools are there. And the applications are emerging, enabling new forms of information sharing and dissemination.



Tony Rybczynski is Director of Strategic Marketing and Technologies in Nortel Networks Enterprise Solutions. He has over 28 years experience in the application of packet network technology, and is now in a business unit that focuses on business solutions for financial services providers. He writes a monthly 'Inside Networking' column in Communications Solutions magazine.

Reprinted from Communications Solutions $^{\omega}$ magazine, volume 1, dated February 2000, published by Technology Marketing Corporation, One Technology Plaza, Norwalk, CT 06854 USA. Copyright $^{\omega}$ 2000 Technology Marketing Corporation, all rights reserved. For information about annual subscriptions, call 800-243-6002 or 203-852-6800 or visit the publication's Web site at www.tmcnet.com.

NETWORKS*

http://www.nortelnetworks.com

*Nortel Networks, the Nortel Networks logo, the Globernark, and How the World Shates Ideas, Unified Networks, and Passport are trademarks of Nortel Networks Corporation. All other trademarks are the property of their owners. © 2000 Nortel Networks. All rights reserved. Information in this document is subject to change without notice. Nortel Networks assumes no responsibility for any errors that may appear in this document. Printed in USA.

5

.





The following table lists various tools available for monitoring the multicast. The characteristics of the tools have been grouped into four major categories (listed in the first row of the table header).

	Source for data collection			Type of Monitoring		Scope of monitoring and analysis					Utility of the Output		
	Router/ NW/ SNMP	1 3	i	Traffic & Route	Session	Session		Subnet		Time		Text	Files GUI
Tool			Tools			Single	Multiple	Intra.	Inter	Online	Historic		
1.5. (1.1. (1.1.) 1.5. (1.1.)		A particular Passes Date Stationard Supplement	X	X	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				X	X	The section of the se		X
<u>Mantra</u>	X		And the second section of the section of t	X	X	X	X	X	Χ	X	X		XX
<u>Mhealth</u>		X	X	X	X	Χ			X	X	X	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	XX
<u>Mlisten</u>		X			X		X		X	Χ	X		XX
<u>Mrinfo</u>	X			X				Χ		X		X	
<u>Mtrace</u>	X			X		X			Χ	X		X	
<u>MultiMON</u>	X	X		X			X	X		X	X		**************************************
<u>RM</u>	X		Χ	X					X	X	X		X

RTPmon	X	X X	X
<u>SDR-</u> <u>Monitor</u>	X	X	x x x
<u>SM</u> X	X	X X X X	X

MantaRay

URL: http://www.caida.org/outreach/pspers/1999/manta/

Contact: Brad Huffaker (bhuffake@caida.org)

Caption: MBone Visualization

Summary: This tool gives and online graphical display of the geographical placement of the MBone infrastructure and detailed views of the topologies of these placements. Another tool useful for the visualization of MBone topology and other networking data is Office, also developed by Bradley Huffaker.

Mechanism: mtrace + mrinfo

Comment: Avail: free

Mantra

URL: http://imi.ucsb.edu/mentra/

Contact: Prashant Rajvaidya (prash@cs.ucsb.edu) and Kevin Almeroth (almeroth@cs.ucsb.edu)

Caption: Monitor and Analysis of Traffic in Multicast Routers.

Summary: Mantra is a tool for monitoring the multicast traffic at the router level. The main tasks of Mantra include collecting data from the routers, processing and analyzing the collected data, generating online reports and logging the processed data as well as the analysis results. The results are presented online, through web pages, in the form of interactive graphs and HTML tables.

Mechanism: Information from the router-tables.

Comment: Avail: results

MHealth

URL: http://imj.ucsb.edu/mhealth/

Contact: David Makofske (davidm@cs.ucsb.edu) and Kevin Almeroth (almeroth@cs.ucsb.edu)

Caption: A Real-Time Multicast Tree Visualization and Monitoring Tool

Summary: A graphical, near real-time multicast monitoring tool. MHealth is able to discover and display the full network tree distribution and delivery quality for a group. MHealth also provides data logging functionality for the purpose of isolating and analyzing network faults. Logs can be analyzed to provide information such as receiver lists over time, route histories and changes, and the location, duration, and frequency of loss.

Mechanism: RTCP-Data + mtrace

Comment: Avail: free

Mlisten

URL: http://www.cc.gatech.edu/computing/selecomm/mbone/

Contact: Kevin Almeroth (almeroth@cs.ucsb.edu)

Caption: MBone Collection Tool

Summary: A tool for the collection and processing of MBone membership information. The tool can be used to generate information about (1) join and leave statistics, (2) connection time characteristics, and (3) multicast tree size and characteristics.

Mechanism: Information from Session Announcements + RTCP-data

Comment: Avail: free

Mrinfo

URL: ftp://ftp.oarc.xerox.com/pub/net-research/ipmuft/

Contact: Bill Fenner

Caption: Display configuration info from a multicast router.

Summary: Mrinfo uses the ASK_NEIGHBORS IGMP message to the specified multicast router. The results include version number of the router being queried and a list of the neighboring multicast routers along with the additional information related to them such as metrics, thresholds, and flags.

Mechanism: IGMP message.

Comment: Avail: free

Mtrace

URL: fig://fip.pare.xerox.com/pub/net-research/ipmulti/

Contact: Bill Fenner

Caption: Multicast traceroute

Summary: Returns a snapshot of the set of links used to connect a particular source with a particular destination. Additional information that can be obtained includes loss rates along the links, number of multicast packets flowing across each hop per second for that particular address. A trace query is passed hop-by-hop along the reverse path from the receiver to the source, collecting hop addresses, packet counts, and routing error conditions along the path, and then the response is returned to the requestor. Currently the most effective means of debugging mbone routing problems.

Mechanism: Tracing feature in multicast routers and extension to IGMP messages

Comment: The results are not guaranteed all the time and are not 100% reliable. However, currently it is the most effective means of debugging mbone routing problems.

Avail: free

MultiMON

URL: http://www.morel.org.ga/mbone/i/bu/til/4CHI/

Contact: J.L.Robinson (john.robinson@crc.ca) and J.A.Stewart (john.stewart@crc.ca)

Caption: Multicast Network Monitor

Summary: MultiMON is a monitor that collects, organises and displays all the IP multicast traffic that is detected at the location of the MultiMON Server. While MultiMON is a general purpose muticast monitoring tool, it is intended in particular to monitor multicast traffic on local network segments and should assist a network administrator in managing the traffic on an Intranet. Multimon is built on a client/server basis which allows the data collectors (Servers) to be distant from the GUI front end displays (Clients).

Mechanism: TCPdump

Comment: Avail: free

RM

URL: http://gonei.cs.ucla.edu/~masseyd/Route/

Contact: Bill Fenner and Daniel Massey (masseyd@cs.ucla.edu)

Caption: Route Monitor

Summary: Multicast Routing Monitor (RM) focuses mainly on monitoring the stability of various multicast routes in the existing topology of multicast. This tool collects data at the network layer by recording the DVMRP route updates issued by the local multicast routers. The results generated by Multicast Routing Monitor are in the form of regularly and frequently updated reports, listing some of the most unstable routes and describing plausible reasons for their instability.

Mechanism: Listen for Route Updates Comment:

Comment: Avail: free

RTPmon

URL: fig://mm-ftp.cs.berkelev.edu/oub/ripmon/

Contact: Andrew Swan (aswan@cs.berkeley.edu) and David Bacher (drbacher@cs.berkeley.edu)

Caption: RTCP Monitor

Summary: Rtpmon can be used to monitor the control information exchanged between applications that implement RTP, Real-Time Transport Protocol. Feedback from receivers, including the loss rate and jitter, are displayed in a table that can be sorted in various ways to help isolate and diagnose multicast distribution problems.

Mechanism. RTCP-Data

Comment: Avail: free

SDR-Monitor

URL: http://fimi.ucsb.edu/sdr-monitor/

Contact: Kamil Sarac (ksarac@cs.ucsb.edu) and Kevin Almeroth (almeroth@cs.ucsb.edu)

Caption: Sdr Global Session Monitoring Effort

Summary: An effort to track, manage, and present information about the availability of world-wide sdr sessions. A collection of web pages has been put together, updated several times every hour, where an aggerageted view of sdr-cache entries sent by participants from around the world is displayed.

Mechanism: Information from the sdr-cache.

Comment: Avail: results

SM

URL: http://carmen.cselt.it/lomc/sm/

Contact: Domenico Lento (domenico lento@cselt.it)

Caption: MBone Session Monitor

Summary: Session-Monitor (SM) is a tool for listing all the SDR sessions currently visible to the host running the tool. Also

displays various SDP, User and Traffic Statistics graphically.

Mechanism: Information from Session Announcements + RTCP-data

Comment: Avail: free

Comments and Suggestions: Speastrateaide.org>

Last Modified: 12/18/2001 18:32:06; This Page: http://www.caida.org/tools/measurement/Mantra/other-tools/other-tools.html

B

1

.

Before the UNITED STATES COPYRIGHT OFFICE LIBRARY OF CONGRESS Washington, D.C.

In the Matter of:		
NOTICE AND RECORDKEEPING FOR USE OF SOUND RECORDINGS UNDER STATUTORY LICENSE)	Docket No. RM 2002-1A
)	

DECLARATION OF PETER M. MULLEN

I, PETER M. MULLEN, declare:

1. I am the Senior Director, Label Relations and Operations for Sony Music Digital Services. In this capacity, I am responsible for overseeing from an operational standpoint, among other things, all distributions of sound recordings in electronic, non-physical formats for all Sony Music Entertainment Inc. ("Sony") labels in the U.S., whether for promotional purposes or for other business purposes. I am also involved in shaping and enforcing internal policies regarding, among other things, the online distribution and use of Sony's recorded music and related digital assets. Given my responsibilities, I am generally familiar with Sony's practices and policies for all Sony labels in the U.S. with respect to the distribution of sound recordings to terrestrial radio stations in physical record as well as non-physical (i.e., electronic) formats, and have personal knowledge of all of the following facts.

Distribution of Promotional Product

2. I understand that certain parties to the above-referenced rulemaking have alleged that promotional product provided by record labels to terrestrial radio stations (and various digital audio transmission services) lacks certain data that is necessary to ensure proper distribution of statutory performance and ephemeral copy royalties. The purpose of this declaration is to describe for the Copyright Office the various kinds of

promotional product Sony provides to terrestrial radio stations, and the types of data typically provided with each kind of promotional product. In particular, this statement describes Sony's usual practice of promptly providing a CD PRO (which is described in greater detail in paragraph 3(b) below) to any terrestrial radio station that receives a sound recording in a newer, less traditional form of distribution, such as by electronic delivery (i.e., a non-physical, digital file containing an encoded copy of the sound recording, such as a digital file encoded in the MP3 codec, that is sent to the intended recipient via electronic mail), or by means of a CD-R (which is described in greater detail in paragraph 3(a) below).

- 3. Generally speaking, there are three categories of physical record promotional product, each of which is described below.
 - (a) <u>CD-Rs</u>. First, there are the CD-Rs that are mentioned above. A CD-R is a "write once" compact disc that is "burned" or replicated individually by Sony personnel utilizing either a personal computer and a peripheral device attached to or built into that computer called a "CD burner", or a small stand-alone compact disc recording electronics device. This type of compact disc is different than a compact disc that is replicated at a commercial manufacturing facility, which is the case with respect to both CD PROs (described more fully in Paragraph 3(b) below) and "retail albums" (described more fully in Paragraph 3(c) below). CD-Rs usually contain up to five different sound recordings. In those cases where a CD-R contains different sound recordings, those sound recordings consist of multiple alternative mixes, remixes and edits of the same performance or rendition of a musical composition that are tailored to fit the programming needs of a particular type of station. Moreover, CD-Rs can also consist of just one sound recording, which might be a single mix, a remix or edit of a performance or a rendition of a musical composition that is tailored to fit the programming needs of a particular type of station. In virtually all cases, sound recordings distributed

for promotional purposes in the CD-R format include the following data elements: the name of the featured recording artist, the title of the sound recording, the name of the record label that is marketing it, the applicable (P)-line and the duration.

- (b) <u>CD PROs</u>. Second, there are CD singles that are replicated at commercial CD manufacturing facilities in very limited quantities for promotional distribution only. These CD singles usually contain up to five different sound recordings, and more often than not, they contain multiple alternative mixes, remixes and edits of the same performance or renditions of a musical composition that are tailored to fit the programming needs of a particular type of radio station. These CD singles are packaged together with some form of artwork and label copy (which is described in greater detail below). Since these CD singles are generally referred to in the trade as "CD PROs", for convenience, I will use that term when referring to them herein. Virtually all CD PROs distributed by Sony include the following data elements: the name of the featured recording artist; the title of the sound recording; the name of the record label that is marketing it; the applicable (P)-line; the duration; the title of the commercially available album that the CD PRO is being distributed to promote; and sometimes the year of its release. In most cases, the CD PROs distributed by Sony include the ISRC code. Because CD PROs are expressly not intended for sale or resale, they are defaced by marking the external packaging elements with a stamp bearing the words "Promotional Only - - Not For Sale", or similar words to that effect. CD PROs generally do not include the same catalog number assigned to the retail album or corresponding commercially available single; rather, they generally include a unique catalog number assigned to the particular CD PRO. CD PROs may or may not include a UPC code, depending on the release.
- (c) <u>Retail Albums</u>. Third, there are copies of the same full-length albums (with the same internal and external packaging elements, including a visible UPC

code) that are manufactured by Sony for commercial distribution through normal retail channels, except that they are defaced in some way (e.g., by punching a hole through the UPC bar code (but not the number) that appears on the back cover album artwork or by marking the external packaging elements with a stamp bearing the words "Promotional Only - - Not For Sale", or similar words to that effect) to prevent the CDs from being sold to consumers, returned by consumers to Sony's retail accounts for refunds and/or returned by Sony's retail accounts to Sony for credits. For convenience, I will refer to these full-length albums as "retail albums" when referring to them herein.

- 4. Sony regularly provides promotional product in CD PRO form to some, but not all, terrestrial radio stations. Sony does not currently provide promotional product to any Internet radio stations operating solely as such, in either physical or non-physical (i.e., electronic delivery) form. As noted above, promotional product is not sent to all terrestrial radio stations with which Sony maintains a relationship. Rather, Sony uses various criteria (such as, for example, the type of station/service, the format, the audience demographics, and the market size) to select particular radio stations to receive promotional product.
- 5. Occasionally and only in a few very limited circumstances, Sony distributes sound recordings in non-physical (i.e., electronic delivery) form for promotional purposes, such as a digital file encoded in the MP3 codec that is sent to the intended recipient via electronic mail. To date, the only radio stations that have received this form of promotional distribution are terrestrial radio stations and, each of those terrestrial radio stations received this form of promotional distribution only under highly experimental, exigent circumstances, such as where an emergency arises by virtue of an individual radio station not receiving a previously shipped CD PRO containing a sound recording that is critical to their immediate broadcasting needs.

6. To underscore the emergency or temporary nature of any audio files that Sony distributes in non-physical (i.e., electronic delivery) form, each such file is earmarked for a particular intended recipient (as opposed to being part of a mass mailing), and is accompanied by clear written instructions that require that recipient to destroy the electronic copy immediately upon receipt of the physical record containing that sound recording. More specifically, all of Sony's promotional electronic music distributions to terrestrial radio stations are accompanied by the following notice:

Important Sony Legal Notice Regarding the Use Of MP3 Files:

Due to the logistical impracticalities of delivering, by close of business today, a hard copy of the new track by [LABEL] recording artist [ARTIST] entitled [TRACK TITLE] (the "Track"), we are attaching to this e-mail a digitally encoded file of the Track, which you may use on an interim basis, for the sole purpose of performing the Track on your terrestrial radio station until such time as the hard copy arrives at your offices. Upon receipt of the hard copy of the Track, we understand that you will promptly delete the digital file in its entirety from your computer hard drive or such other storage medium employed by you. As you can well understand, no copying, transmitting or re-distributions of the file, or performances of the Track in a manner other than as described above are permitted.

- 7. In virtually all cases, sound recordings that are electronically distributed by Sony are contemporaneously accompanied by the following data elements: the name of the featured recording artist, the title of the sound recording title, the applicable (P)-line, the duration and the release year. Moreover, it is Sony's policy to follow-up such distribution with a subsequent distribution of a CD PRO containing that sound recording and, as described more fully in Paragraph 9, with a copy of the full retail album.
- 8. Sound recordings distributed for promotional purposes in the CD-R format have only been distributed to terrestrial radio stations where there is a need to service a sound recording in a physical record format before there is adequate time to replicate CD PROs at a commercial CD manufacturing facility. In most instances where a sound recording is first distributed to terrestrial radio stations on a CD-R, Sony follows-up with

a subsequent distribution of a CD PRO containing that sound recording and, as described more fully in Paragraph 9, a promotional copy of the retail album containing the sound recording that the prior CD-R distribution was intended to promote.

- 9. Where a sound recording is first distributed to terrestrial radio stations in a non-physical (i.e., electronic) format, or a physical record format such as a CD-R and/or CD PRO, or some combination of these formats it is Sony's policy to follow-up with a subsequent distribution of a promotional copy of the retail album containing the sound recording that the prior distribution was intended to promote.
- 10. Sony distributes promotional product to terrestrial radio stations solely to facilitate their terrestrial broadcasts. Such distribution does not constitute and may not be construed as either: (i) in general, any form of waiver of any requirements, limitations or eligibility criteria otherwise governing the use of that promotional product to the extent such promotional product is also used in connection with facilitating digital audio transmissions of the sound recordings contained in that promotional product, whether by operation of statute (and any regulations promulgated under that statute) or by operation of a direct voluntary license agreement with Sony, or (ii) in particular, any form of waiver of Sony's right to collect public performance or ephemeral copy royalties for the digital audio transmission of the sound recordings included in such product.
- 11. I have attached to this declaration examples of Sony's promotional releases in each of the formats described above.

Relationship with Clear Channel

12. In addition to the above, I wish to correct certain factual inaccuracies that were contained in the unsworn statement submitted by Brian Parsons of Clear Channel Communications (the "Parsons Statement") as an attachment to the Joint Comments of Radio Broadcasters (see Exhibit B). Paragraph 10 of the Parsons Statement reads as follows:

- 10. Clear Channel is currently in an experimental project with one record label, Sony, at Sony's request. This project allows Sony to upload digital music into Clear Channel's music library directly via a file transfer protocol based exchange or similar web protocol. After uploading the song, Sony will send us an e-mail telling us the filename, as well as the title of the song and the artist who performed it. Beyond title and artist, we receive no other information from Sony except our own knowledge that that [sic] Sony sent the file.
- 13. Contrary to Mr. Parsons' assertion, Sony is not currently involved in any sort of ongoing, experimental project with Clear Channel. Rather, during February and March, 2002, Sony engaged in a limited number of very general conversations (by way of conference call) with Clear Channel and Prophet Systems, a division of Clear Channel that develops and produces software and hardware for its proprietary broadcast automation systems, in order to explore the possibility of formatting future electronic deliveries of sound recordings in a manner that would be directly compatible with those systems, solely for purposes of facilitating the public performance of Sony sound recordings by means of terrestrial radio broadcast by Clear Channel-owned terrestrial radio stations (without taking into account any non-terrestrial digital transmissions or non-terrestrial digital retransmissions of any kind). To date, the relationship with Clear Channel has not progressed beyond those general, conceptual conversations, and Sony has not yet made any digital deliveries of Sony sound recordings to either Clear Channel or Prophet Systems for the purpose of uploading, incorporating or "ingesting" Sony sound recordings into Clear Channel's central music library or the Prophet Systems broadcast automation system. It is also worth noting that Mr. Parsons did not participate in any of these conference calls with Sony.
- 14. It is my understanding, based on my discussions with Clear Channel, that the Prophet Systems broadcast automation system is not currently capable of easily

uploading, incorporating or "ingesting" music files that are delivered to it in digital, non-physical form, regardless of the file format that is utilized for an electronic delivery, as the system can only accommodate adding music files by either "ripping" or recording from physical records in the CD configuration at this time. Thus, Sony could not "upload digital music into Clear Channel's central music library directly via a file transfer protocol based exchange or similar web protocol", as the Parsons Statement alleges, even if, for the sake of argument, Sony wanted to do so at this time.

15. One of the topics discussed with Prophet Systems was Sony's desire to include all meta data mandated by the final notice and recordkeeping regulations as part of any electronic file transfer system developed by the two companies. Sony anticipates that for Sony to participate in the "experimental project" that Mr. Parsons refers to, a necessary part of any technical specification that Sony might agree to must include the delivery and incorporation of that meta data into the system at the same time that the corresponding sound recording is incorporated.

16. Contrary to Mr. Parson's assertions, to date, the only electronic delivery of sound recordings that Sony has made to Clear Channel has involved isolated instances where Sony has e-mailed individual music files to individual Clear Channel radio stations – not to Clear Channel's central music library – under the kinds of emergency conditions described in Paragraph 5 above. To the best of my knowledge, in each such instance, the recipient Clear Channel radio stations subsequently received a physical record containing the sound recording that was initially distributed via e-mail, in the form of a CD PRO containing that sound recording and/or a promotional copy of the retail album containing the sound recording that the prior distribution was intended to promote.

I declare under penalty of perjury that the foregoing is true and correct. Executed this April 23, 2002 at New York, New York.

PETER M. MULLEN

Exhibit B, Tab 1

B-1 Attachment 1a

Promotional Product Digital File Encoded In MP3 Codec For Intended Recipient Via Electronic Mail



Adrienne Lalla

03/14/2002 05:19 PM



To:

ddog@waaf.com (bcc: Pete Mullen)

Subject:

Korn "Here To Stay" Digital Servicing

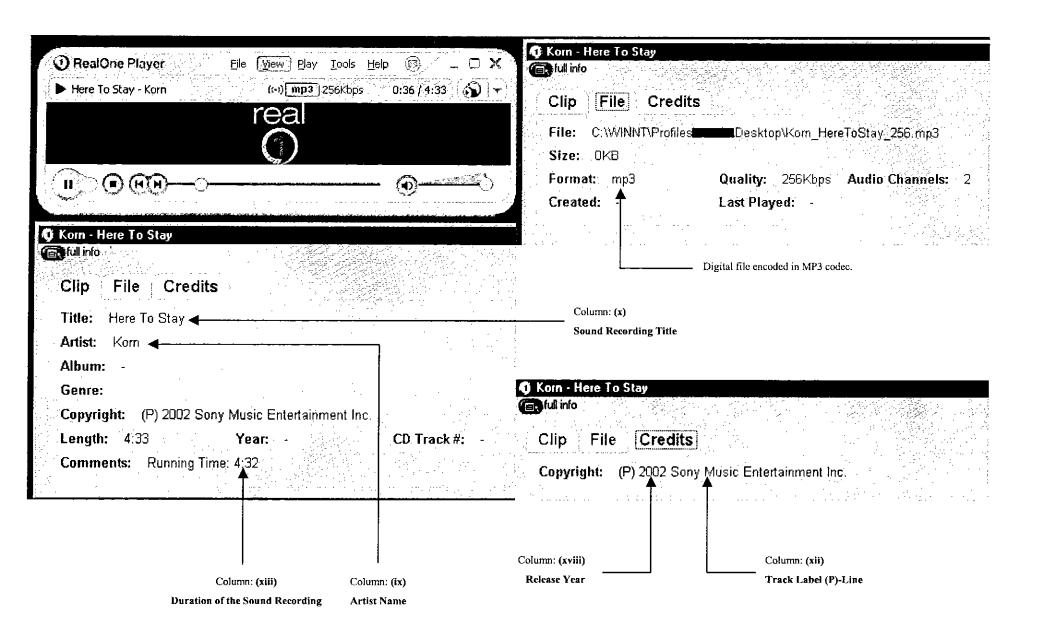
Enclosed is an MP3 file as a protection copy of Korn's "Here To Stay" single. Do not play without speaking first to Dave Demerjian, Cheryl Valentine or Michael Papale. Should you have any technical questions regarding this file, please respond to this e-mail or call me at 212-833-5913.

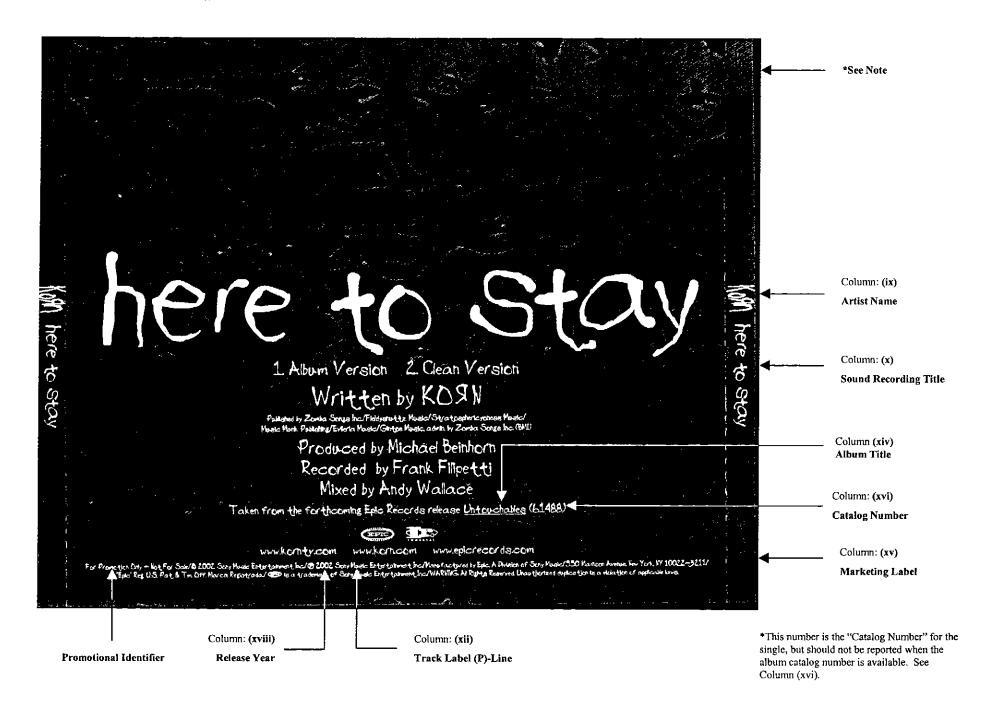


Korn_HereToStay_256.mp3

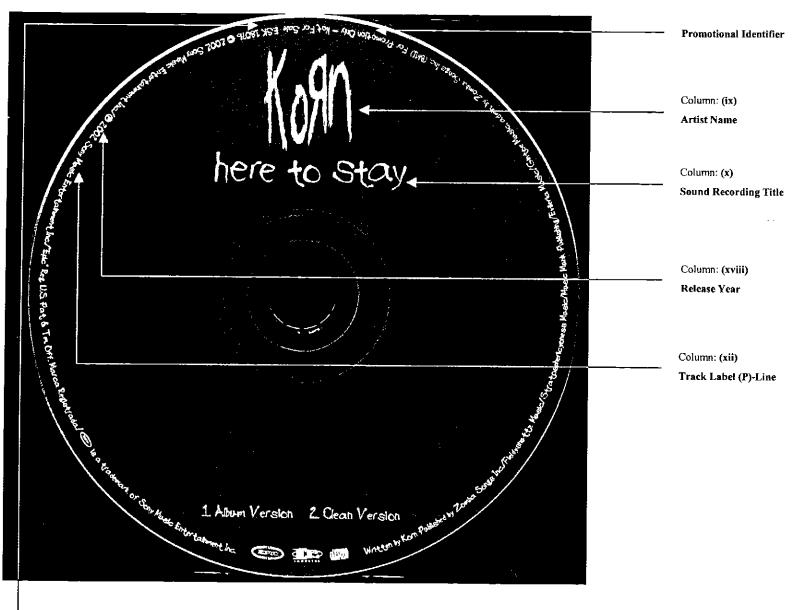
Due to the logistical impracticalities of delivering, by close of business today, a hard copy of the new track by Epic/Immortal recording artist Korn entitled "Here To Stay" (the "Track"), we are attaching to this e-mail a digitally encoded file of the Track, which you may use on an interim basis, for the sole purpose of performing the Track on your terrestrial radio station until such time as the hard copy arrives at your offices. Upon receipt of the hard copy of the Track, we understand that you will promptly delete the digital file in its entirety from your computer hard drive or such other storage medium employed by you. As you can well understand, no copying, transmitting or re-distributions of the file, or performances of the Track in a manner other than as described above are permitted.

Promotional Product Digital File Encoded In MP3 Codec



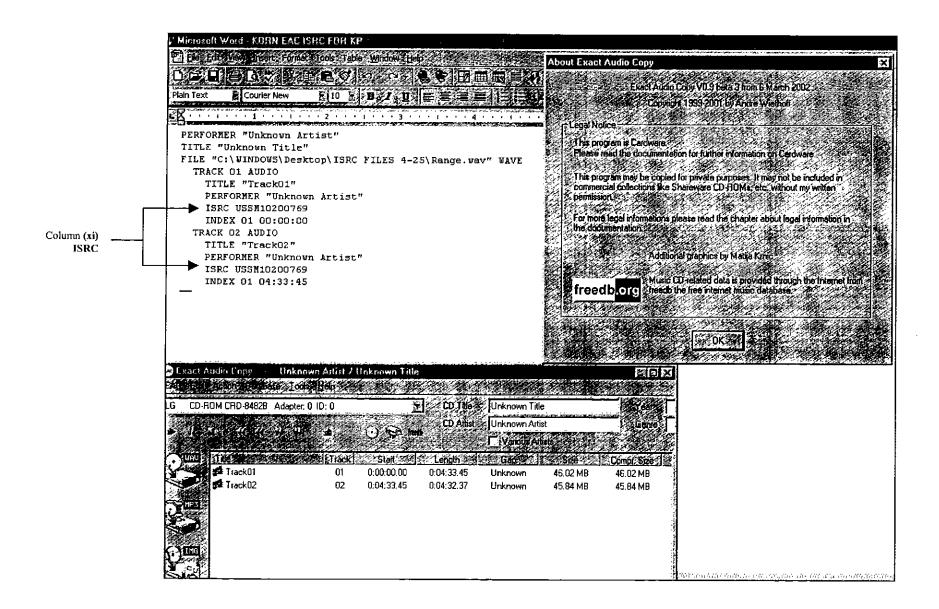


*See Note

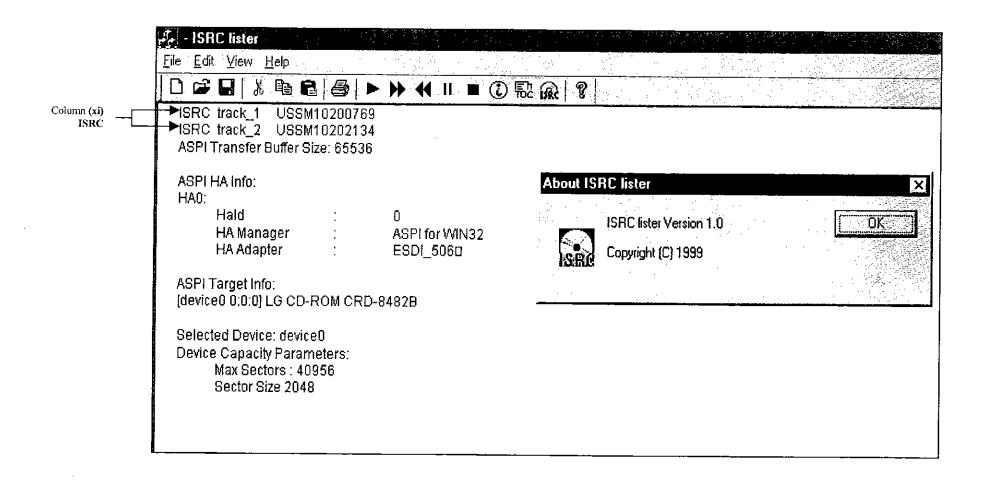


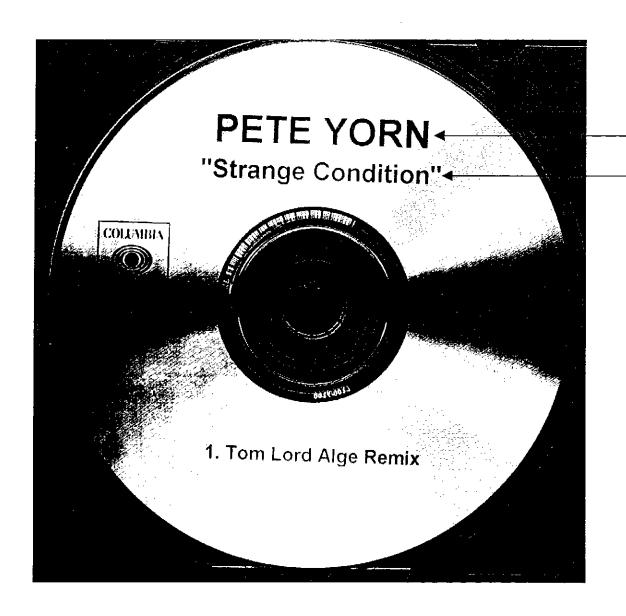
^{*}This number is the "Catalog Number" for the single, but should not be reported when the album catalog number is available. See Column (xvi).

Exact Audio Copy (EAC) ISRC Reader Software Printout For Korn's Here To Stay



International Federation of the Phonographic Industry (IFPI) ISRC Reader Software Printout For Korn's Here To Stay



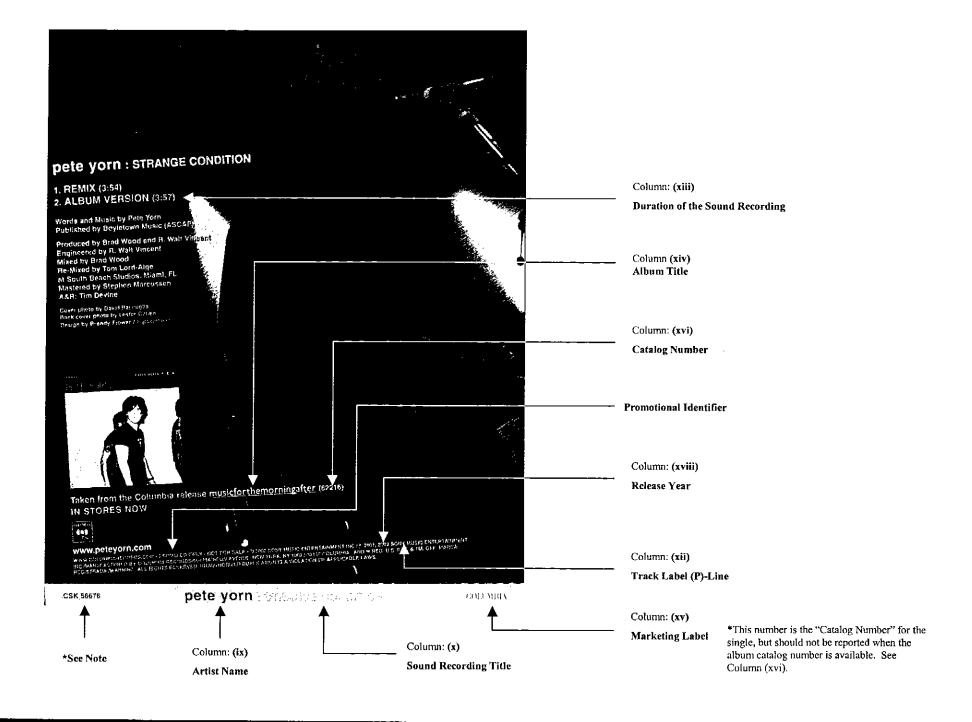


Column: (ix)

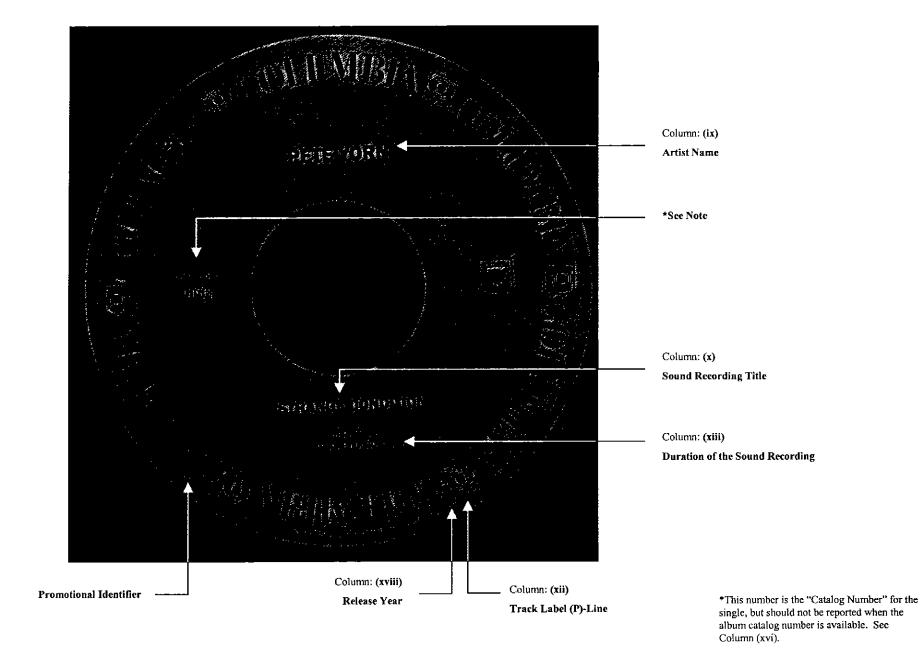
Artist Name

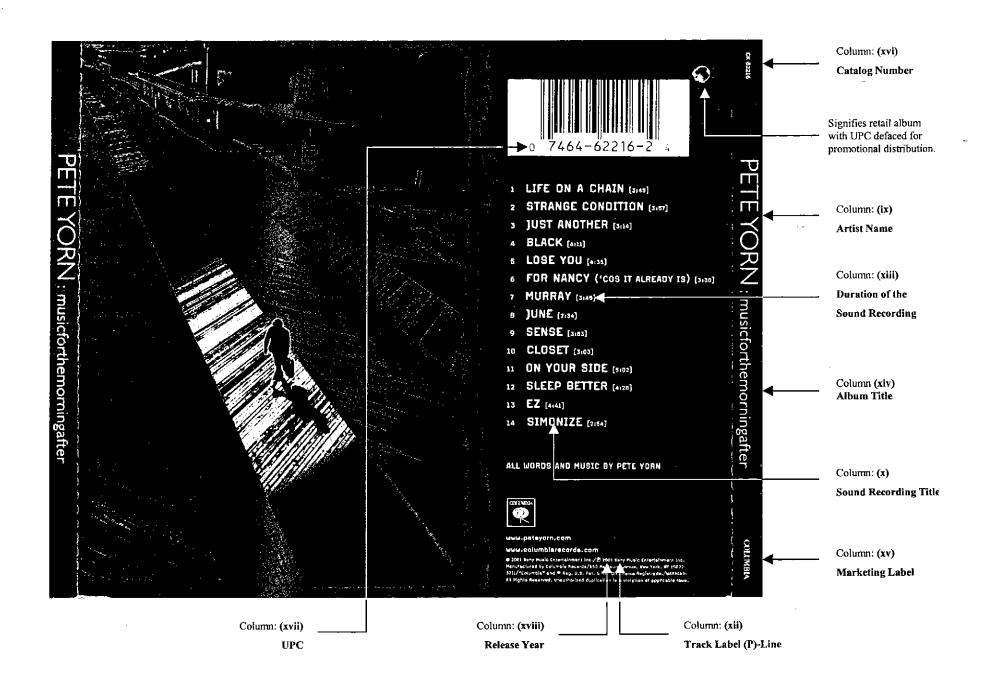
Column: (x)

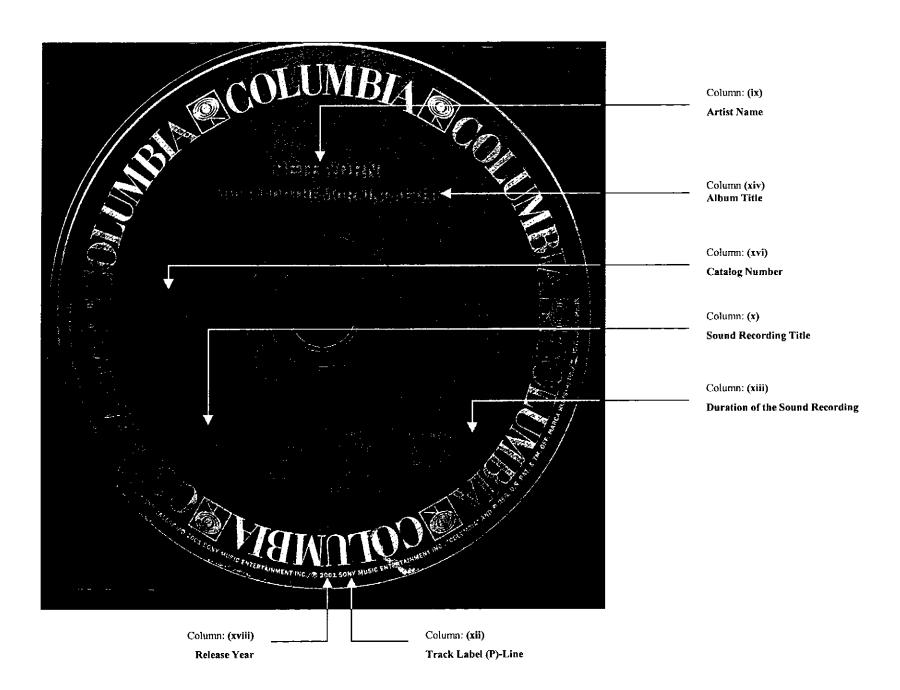
Sound Recording Title



CD PRO Single B-1 Attachment 4b







Before the UNITED STATES COPYRIGHT OFFICE LIBRARY OF CONGRESS Washington, D.C.

	
In the Matter of:)
NOTICE AND RECORDKEEPING FOR USE OF SOUND RECORDINGS UNDER) Docket No. RM 2002-1A
STATUTORY LICENSE) _.
	_)

DECLARATION OF GRETCHEN ANDERSON

I, Gretchen Anderson, declare

- 1. I am the Head of Production at Interscope Geffen A&M Records, a division of UMG Recordings, Inc ("IGA"). In this capacity, I am responsible for the manufacturing of all music product (both commercial and promotional.) I am generally familiar with IGA's promotional practices and have personal knowledge of all of the following facts.
- 2. I understand that certain parties to the above-referenced rulemaking have alleged that promotional product provided by record labels to terrestrial radio stations and various digital audio transmission services lacks certain data that is necessary to ensure proper distribution of statutory performance royalties. The purpose of this statement is to describe for the Copyright Office the various kinds of promotional product the IGA provides and the types of data typically provided with each kind of promotional product. In particular, this statement describes IGA's practice of following up newer forms of distribution (e.g., CD-Rs and MP3 files) with fully labeled versions of the same recordings.
- 3. IGA regularly provides promotional product to terrestrial radio stations. IGA also provides promotional product to a limited number of so-called digital audio services, but such product is generally limited to CD singles accompanied by artwork and label

copy (known in the trade as a "CD-PRO"). Promotional product is not sent to all radio stations and services with which IGA maintains a relationship. Rather, IGA uses various criteria (e.g., station/service format, audience demographics, market size) to select particular radio stations and/or other services to receive each individual promotional single.

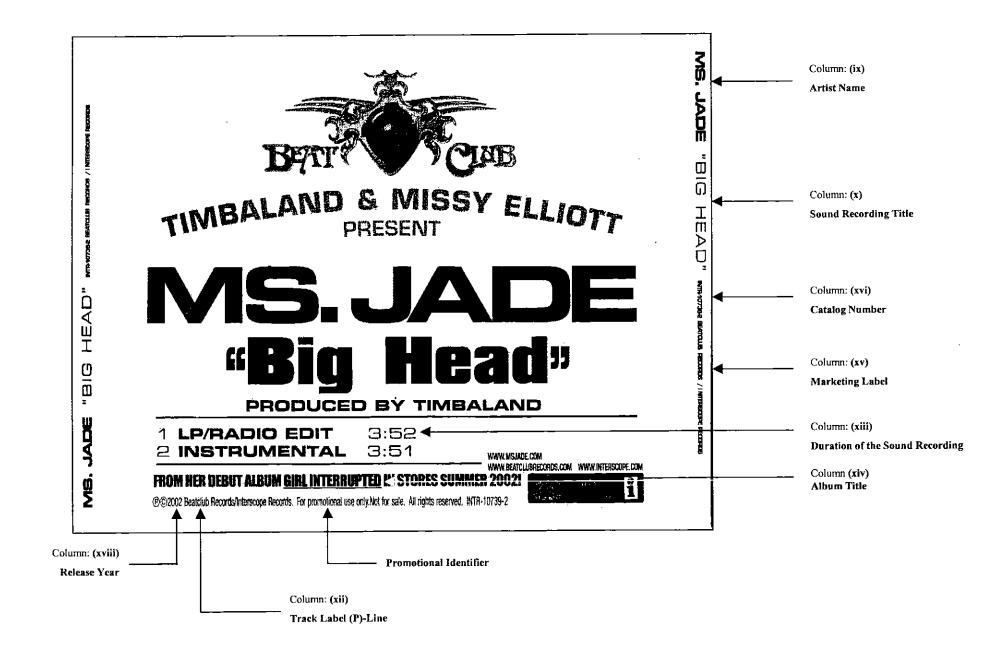
- 4. In most cases, IGA distributes its promotional product in the form of a CD-PRO. Virtually all CD-PROs distributed by IGA include the following data elements: featured recording artist; sound recording title; marketing label; track label (P)-line; duration, retail album title and release year (even if the release year is not included in the label copy, in most cases it can be deduced from the date the CD-PRO is received). Approximately zero percent (0%) of the CD-PROs distributed by IGA include the ISRC code on the packaging but 95% of the CD-PROs distributed have the ISRC code imbedded in the CD PRO. Because CD-PROs are not intended for retail sale, they virtually always do not include the same catalog number assigned to the retail album, although they do virtually always include a unique catalog number assigned to the particular single; CD-PROs do not include a UPC code.
- 5. In many cases, IGA follows up a distribution of a CD-PRO single with a subsequent distribution of the actual retail album. Such albums are typically distributed 6-8 weeks after the CD-PRO and are usually identical in all respects to those sold in retail stores, including a visible UPC code, except that they are defaced in some way (e.g., by punching a hole in the jewel case) to prevent the CDs from being sold or returned to retail and wholesale locations.
- 6. IGA virtually never distributes promotional product in electronic form (e.g., MP3 files distributed via e-mail) to terrestrial radio stations <u>only</u>. However, such distributions are reserved either for emergency situations (e.g., where an individual radio station did not receive the CD-PRO that was previously shipped to it).

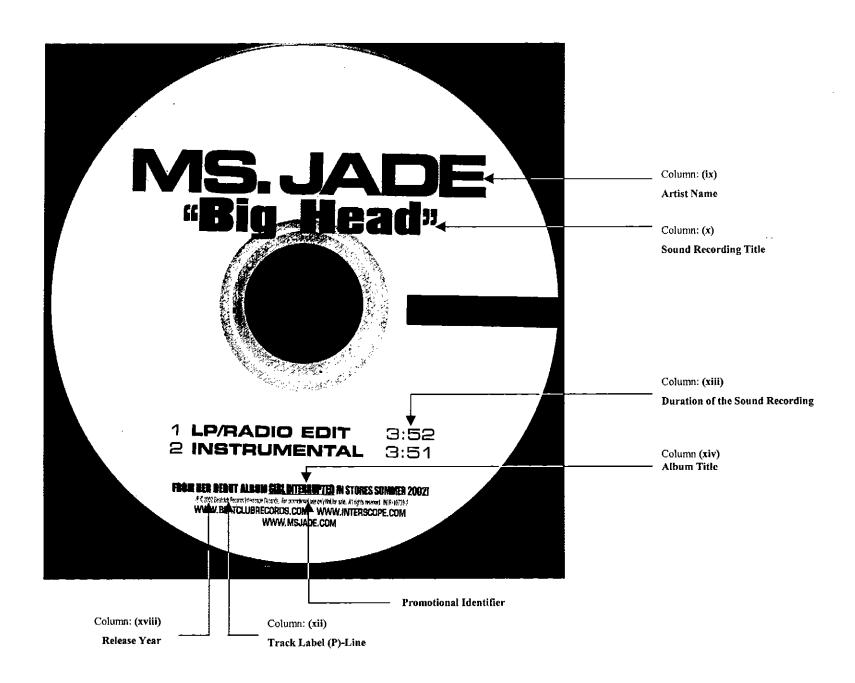
- 7. In virtually all cases, recordings that are electronically distributed include the name of the recording artist, sound recording title, marketing label, duration and release year. Moreover, in virtually all instances where IGA distributes promotional product in electronic form, IGA follows up such distribution with a subsequent distribution of a CD-PRO version of the single and, sometimes, with a copy of the full retail album. The CD-PRO is usually delivered to the recipient within one (1) day following delivery of the electronic version of the recording.
- 8. IGA occasionally distributes promotional product in CD-R format but only to terrestrial radio stations. This is virtually always done in order to get a single into the hands of station personnel faster than would be possible using a CD-PRO, which must be sent to an outside plant to be manufactured just like an ordinary retail CD. In many cases, CD-Rs include the name of the recording artist, sound recording title, marketing label and duration. In virtually all instances where a single is first distributed on a CD-R, IGA follows up within 1week with a CD-PRO version of that single and, sometimes, with a copy of the full retail album.
- 9. IGA distributes promotional product to terrestrial radio stations and the services mentioned above with the full intention that it will receive public performance royalties from each such recipient of its promotional product for any digital audio transmissions of the sound recordings made by the recipient. Merely because IGA provides a free benefit to radio stations or other services does not mean that it foregoes its right to be paid for the exploitation of its sound recordings.
- 10. Although IGA provides radio stations and other services with promotional product, it has no control over which recordings the station or service actually plays. Therefore, in order to be paid for the public performance of its sound recordings by digital audio transmission, the station or service must identify with specificity the particular sound recordings they perform.

11. I have attached to this declaration the following examples of IGA's promotional releases: one or more CD-PROs; and one or more retail albums defaced for promotional distribution.

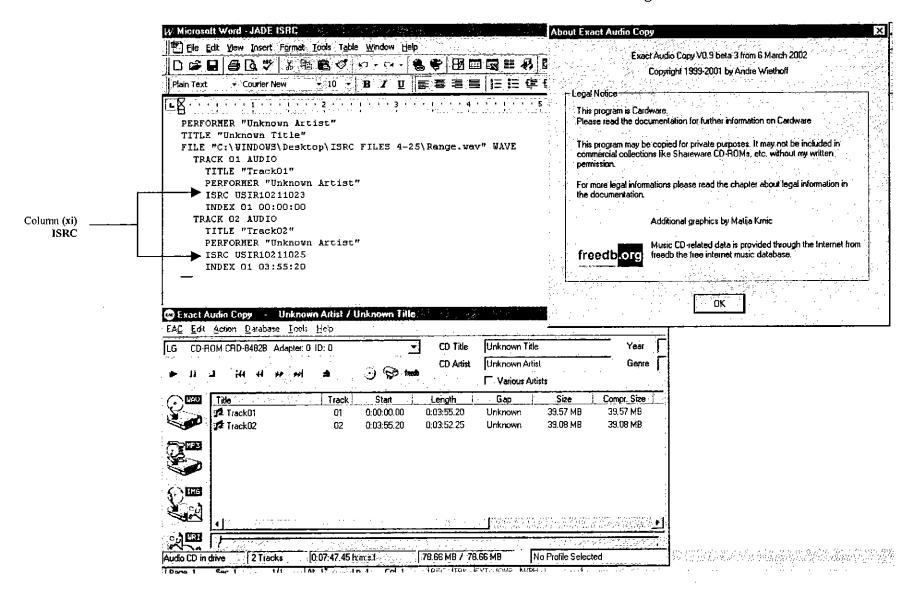
I declare under penalty of perjury that the foregoing is true and correct. Executed this April 22, 2002 at 10:00 am Santa Monica, California.

One token Anderson

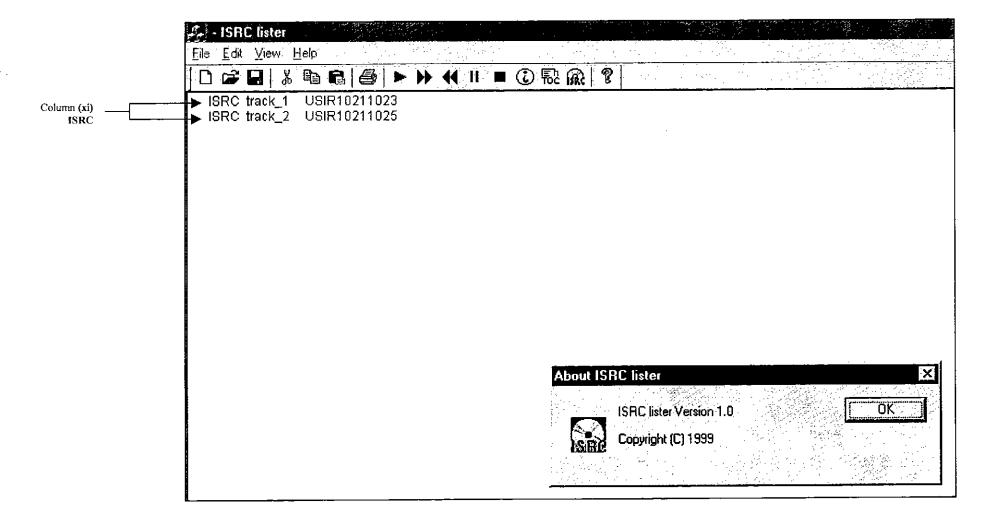


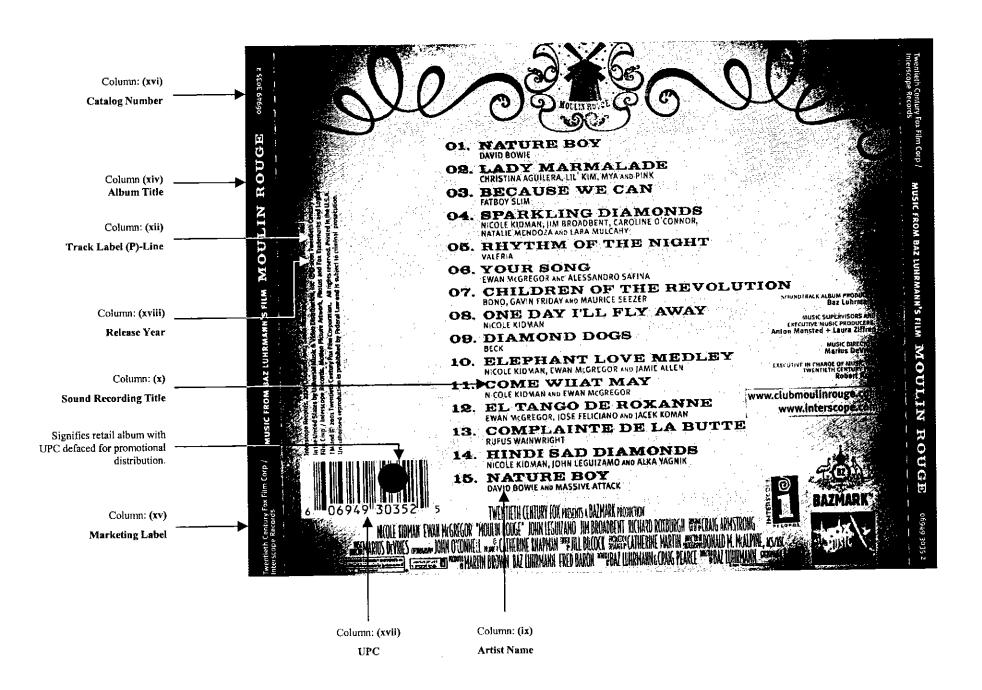


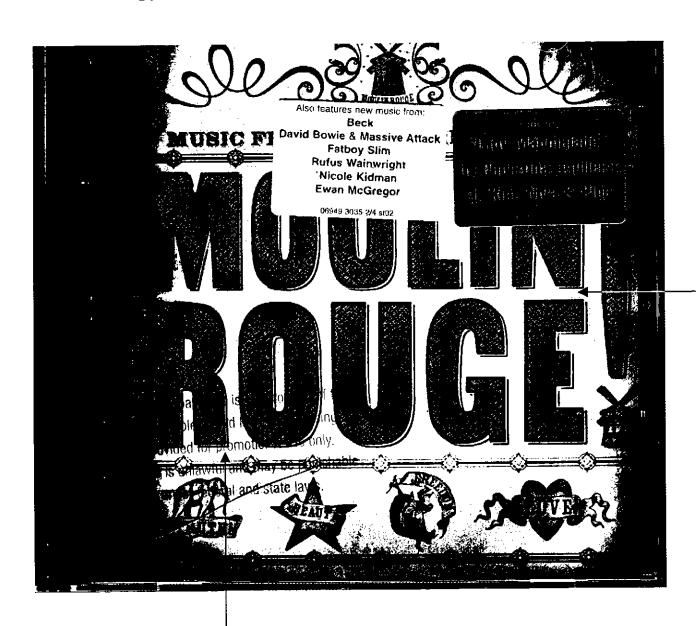
Exact Audio Copy (EAC) ISRC Reader Software Printout For Ms. Jade's Big Head



International Federation of the Phonographic Industry (IFPI) ISRC Reader Software Printout For Ms. Jade's Big Head

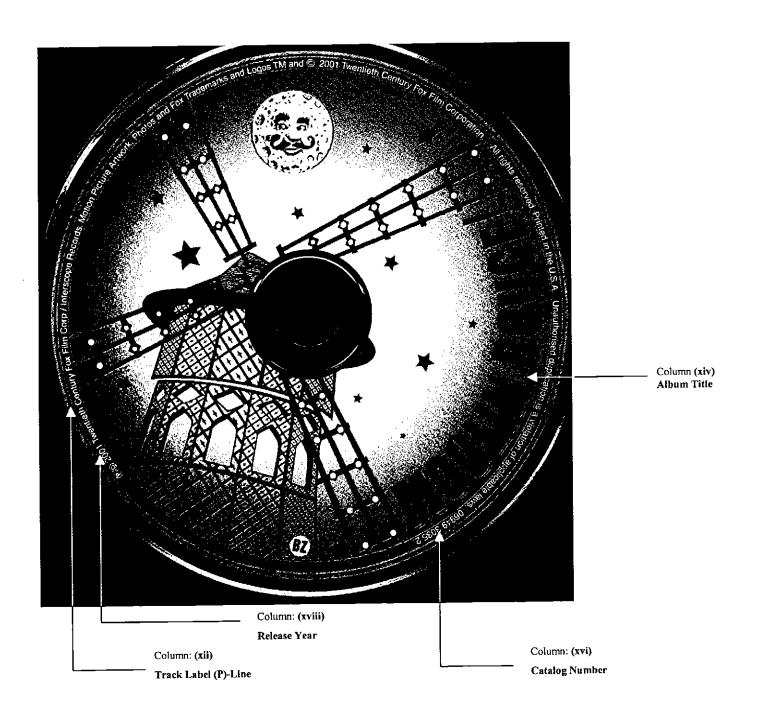






Column (xiv) Album Title

Promotional Identifier



Before the UNITED STATES COPYRIGHT OFFICE LIBRARY OF CONGRESS Washington, D.C.

In the Matter of:		
NOTICE AND RECORDKEEPING FOR USE OF SOUND RECORDINGS UNDER STATUTORY LICENSE)))	Docket No. RM 2002-1A
)	

DECLARATION OF SUZANNE BERG

I, SUZANNE BERG, declare

- 1. I am the Senior Vice President of Promotion at the Verve Music Group, a Division of UMG Recordings, Inc. In this capacity, I am responsible for radio and other types of promotion. I am generally familiar with Verve's promotional practices and have personal knowledge of all of the following facts.
- 2. I understand that certain parties to the above-referenced rulemaking have alleged that promotional product provided by record labels to terrestrial radio stations and various digital audio transmission services lacks certain data that is necessary to ensure proper distribution of statutory performance royalties. The purpose of this statement is to describe for the Copyright Office the various kinds of promotional product Verve provides and the types of data typically provided with each kind of promotional product. In particular, this statement describes Verve's practice of following up newer forms of distribution (e.g., CD-Rs and MP3 files) with fully labeled versions of the same recordings.
- 3. Verve regularly provides promotional product to terrestrial radio stations. Verve also provides promotional product to a limited number of so-called digital audio services, but such product is sometimes limited to CD singles accompanied by artwork

and label copy (known in the trade as a "CD-PRO"). Promotional product is not sent to all radio stations and services with which Verve maintains a relationship. Rather, Verve uses various criteria (e.g., station/service format, audience demographics, market size) to select particular radio stations and/or other services to receive each individual promotional single.

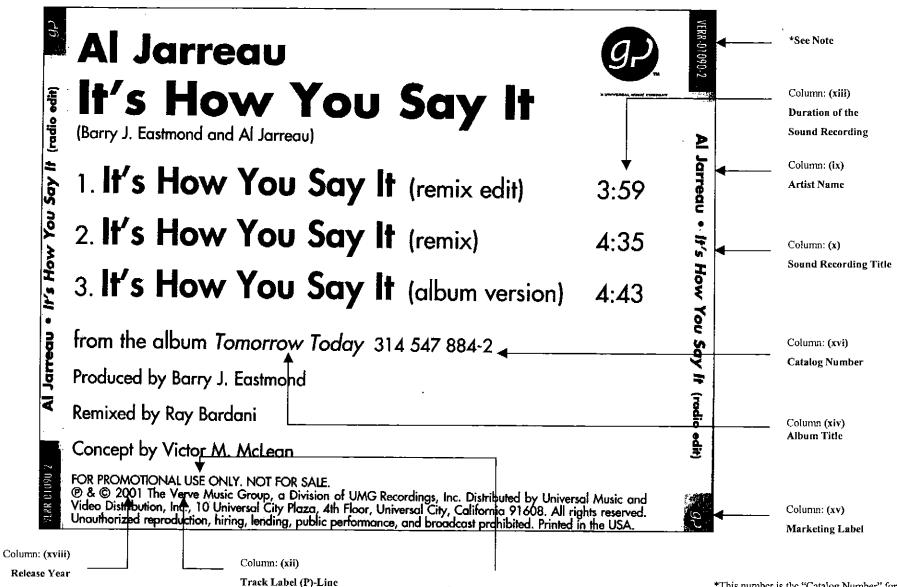
- 4. In some cases, Verve distributes its promotional product in the form of a CD-PRO. Virtually all CD-PROs distributed by Verve include the following data elements: featured recording artist; sound recording title; marketing label; track label (P)-line; duration, retail album title and release year (even if the release year is not included in the label copy, in most cases it can be deduced from the date the CD-PRO is received). More than eighty percent (80%) of the CD-PROs distributed by Verve include the ISRC code. Because CD-PROs are not intended for retail sale, they generally do not include the same catalog number assigned to the retail album, although they do generally include a unique catalog number assigned to the particular single; CD-PROs may or may not include a UPC code.
- 5. In many cases, Verve follows up a distribution of a CD-PRO single with a subsequent distribution of the actual retail album. Such albums are typically distributed a number of weeks after the CD-PRO and are virtually always identical in all respects to those sold in retail stores, including a visible UPC code, except that they are defaced in some way (e.g., by punching a hole in the jewel case) to prevent the CDs from being sold or returned to retail or wholesale locations.
- 6. Verve does not currently distribute any promotional product in electronic form (e.g., MP3 files distributed via e-mail).
 - 7. Verve does not currently distribute any promotional product in CD-R format.
- 8. Verve distributes promotional product to terrestrial radio stations and the services mentioned above with the full intention that it will receive public performance royalties from each such recipient of its promotional product for any digital audio

transmissions of the sound recordings made by the recipient. Merely because Verve provides a free benefit to radio stations or other services does not mean that it foregoes its right to be paid for the exploitation of its sound recordings.

- 9. Although Verve provides radio stations and other services with promotional product, it has no control over which recordings the station or service actually plays. Therefore, in order to be paid for the public performance of its sound recordings by digital audio transmission, the station or service must identify with specificity the particular sound recordings they perform.
- 10. I have attached to this declaration the following examples of Verve's promotional releases: one or more CD-PROs and one or more retail albums defaced for promotional distribution.

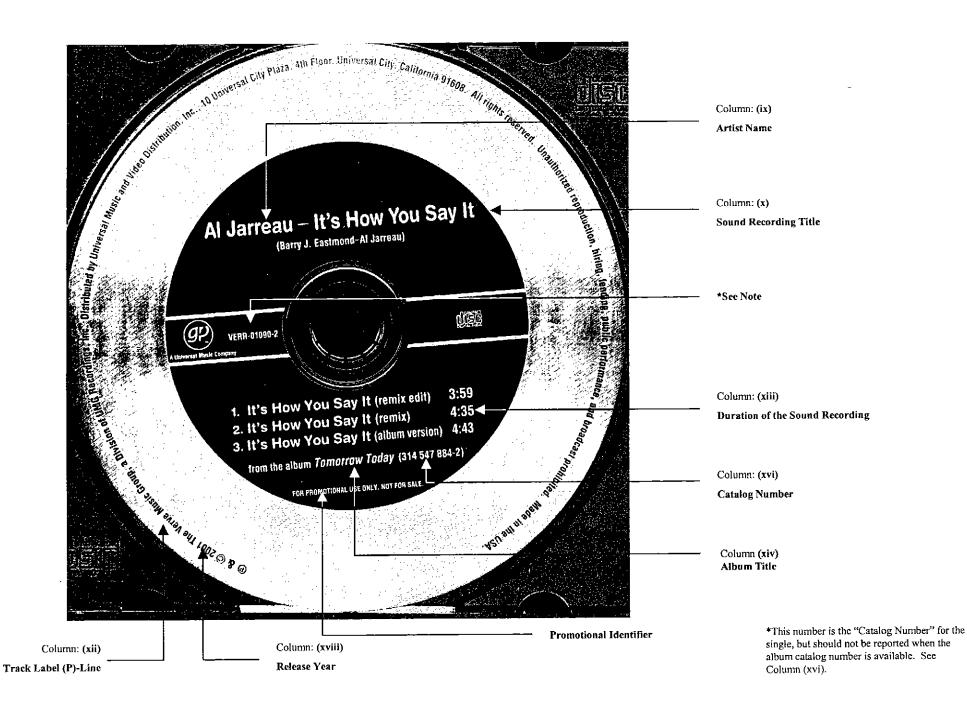
I declare under penalty of perjury that the foregoing is true and correct. Executed this April 19, 2002 at New York, New York.

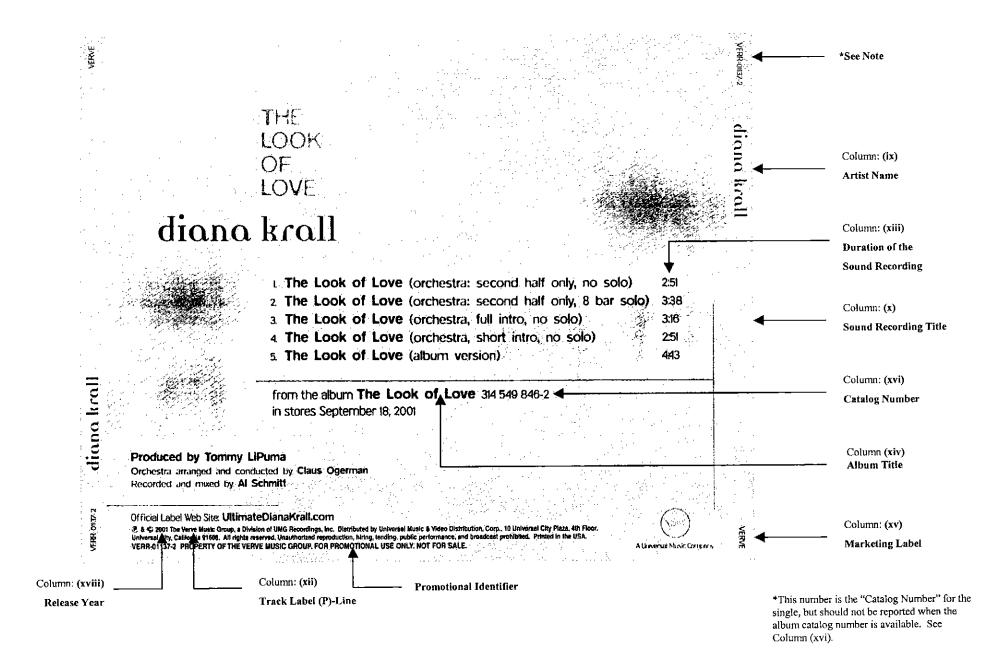
SUZANNE BER

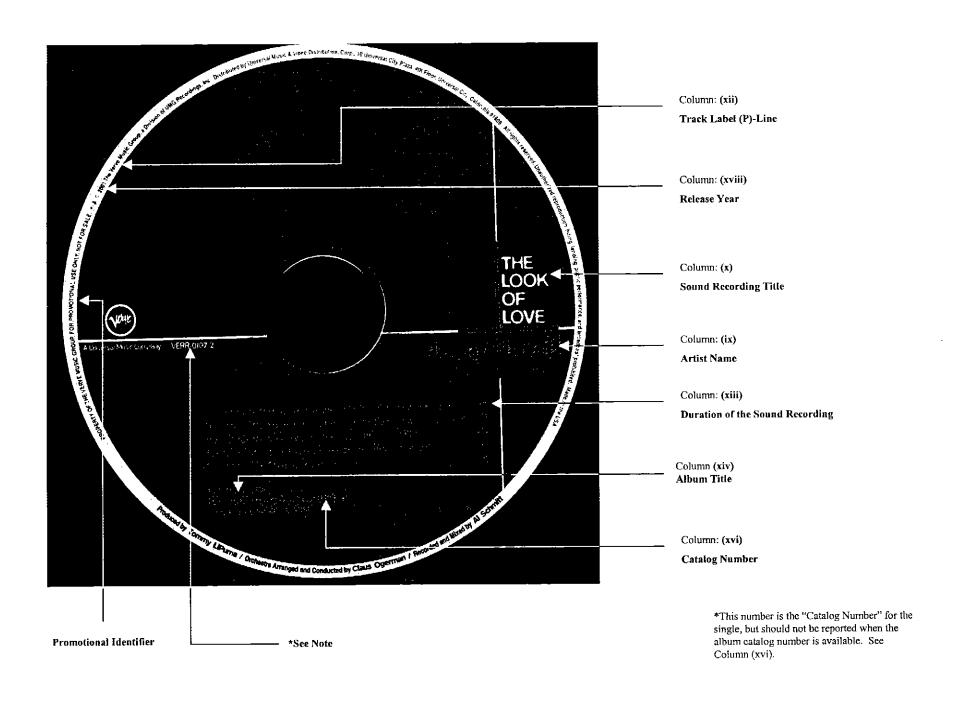


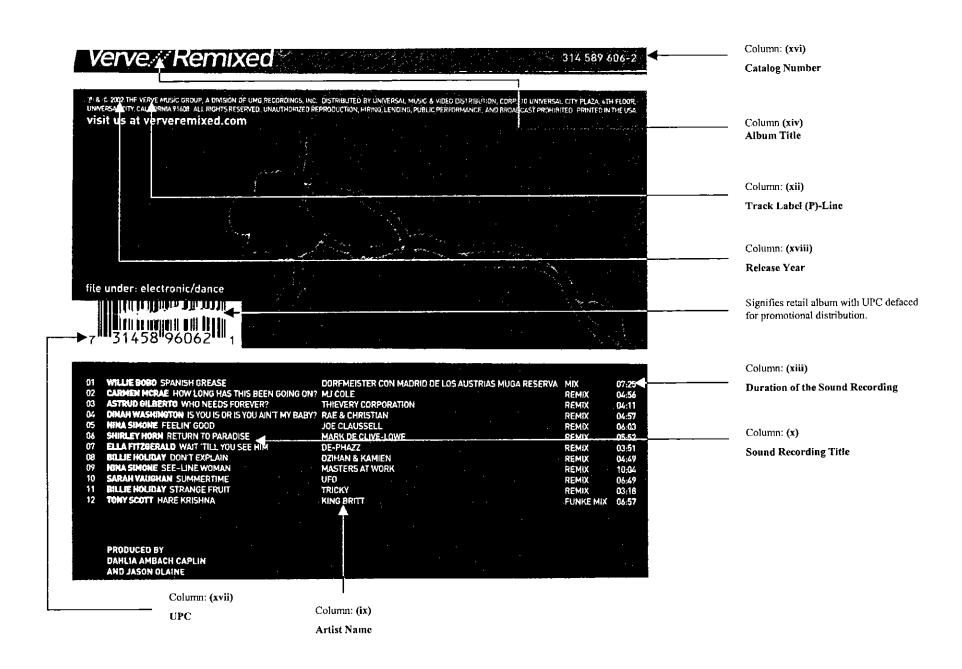
Promotional Identifier

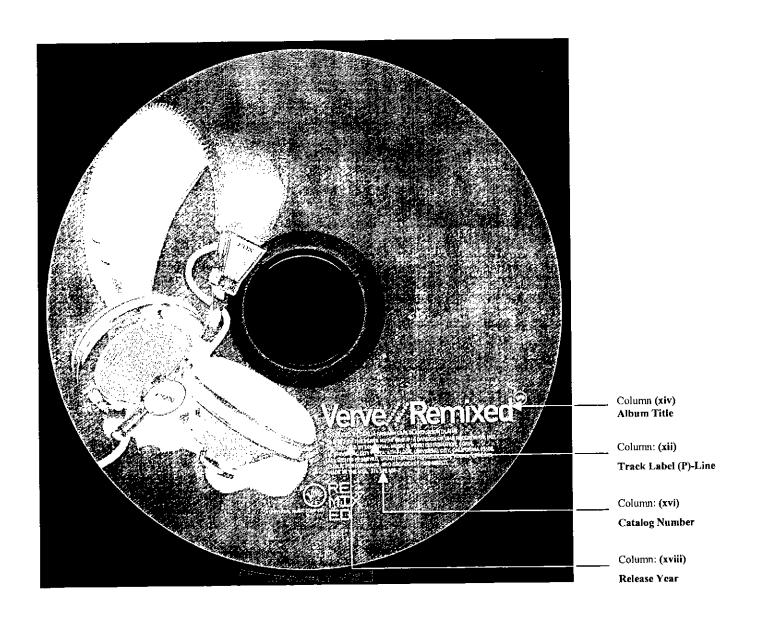
*This number is the "Catalog Number" for the single, but should not be reported when the album catalog number is available. See Column (xvi).











Before the UNITED STATES COPYRIGHT OFFICE LIBRARY OF CONGRESS Washington, D.C.

In the Matter of:		
NOTICE AND RECORDKEEPING FOR USE OF SOUND RECORDINGS UNDER)	Docket No. RM 2002-1A
STATUTORY LICENSE)	

DECLARATION OF JOHN DALTON

I, JOHN DALTON, declare

- 1. I am the Vice President of Marketing at Universal Classics Group, a division of UMG Recordings, Inc. In this capacity, I am responsible for the marketing of albums released by Universal Classics Group. I am generally familiar with Universal Classics Group's promotional practices and have personal knowledge of all of the following facts.
- 2. I understand that certain parties to the above-referenced rulemaking have alleged that promotional product provided by record labels to terrestrial radio stations and various digital audio transmission services lacks certain data that is necessary to ensure proper distribution of statutory performance royalties. The purpose of this statement is to describe for the Copyright Office the various kinds of promotional product the Universal Classics Group provides and the types of data typically provided with each kind of promotional product. In particular, this statement describes Universal Classics Group's practice of following up newer forms of distribution (e.g., CD-Rs and MP3 files) with fully labeled versions of the same recordings.
- 3. Universal Classics Group occasionally provides promotional product to terrestrial radio stations. Universal Classics Group also sometimes provides

promotional product to a limited number of so-called digital audio services, but such product is virtually always limited to the actual retail album, identical in all respects to those sold in retail stores, including a visible UPC code, except that they are defaced in some way (e.g., by punching a hole in the jewel case) to prevent the CDs from being sold or returned to retail or wholesale locations. Promotional product is not sent to all radio stations and services with which Universal Classics Group maintains a relationship. Rather, Universal Classics Group uses various criteria (e.g., station/service format, audience demographics, market size) to select particular radio stations and/or other services to receive each individual promotional single.

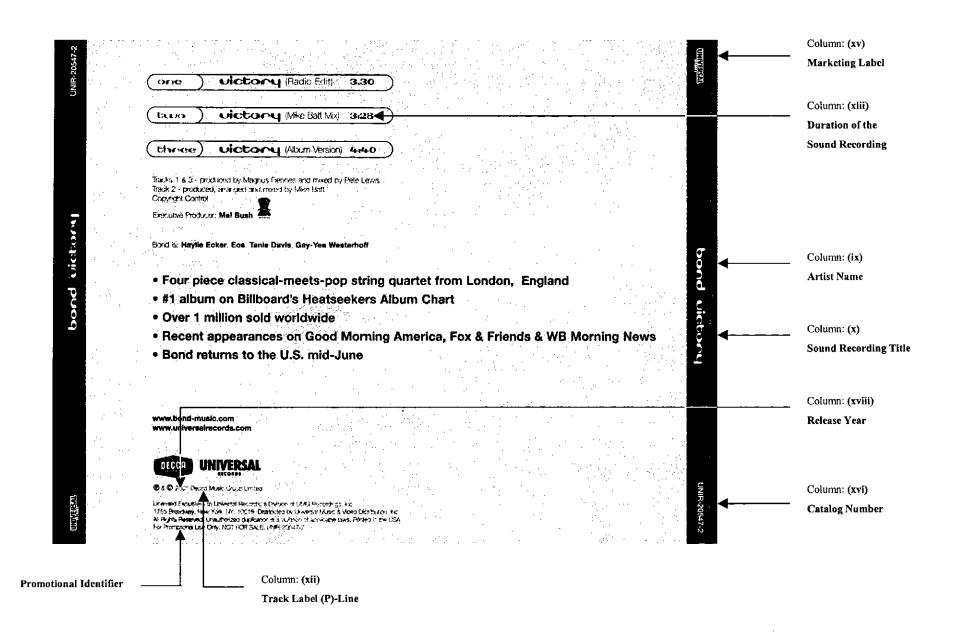
- 4. In most cases, Universal Classics Group distributes its promotional product in the form of a copy of the actual retail album as stated in paragraph 3 above. In some cases, Universal Classics Group distributes its promotional product in the form of a CD single accompanied by artwork and label copy (known in the trade as a "CD-PRO"). Most of CD-PROs distributed by Universal Classics Group include the following data elements: featured recording artist; sound recording title; marketing label; track label (P)-line; duration, retail album title and release year (even if the release year is not included in the label copy, in most cases it can be deduced from the date the CD-PRO is received). Approximately Ninety percent 90% of the CD-PROs distributed by Universal Classics Group include the ISRC code. Because CD-PROs are not intended for retail sale, they virtually always do not include the same catalog number assigned to the retail album, although they do virtually always include a unique catalog number assigned to the particular single; CD-PROs may or may not include a UPC code.
- 5. In virtually all cases, Universal Classics Group follows up a distribution of a CD-PRO single with a subsequent distribution of a copy of the full retail album. Such albums are typically distributed two to four weeks after the CD-PRO.
- 6. Universal Classics Group does not currently distribute any promotional product in electronic form (e.g., MP3 files distributed via e-mail).

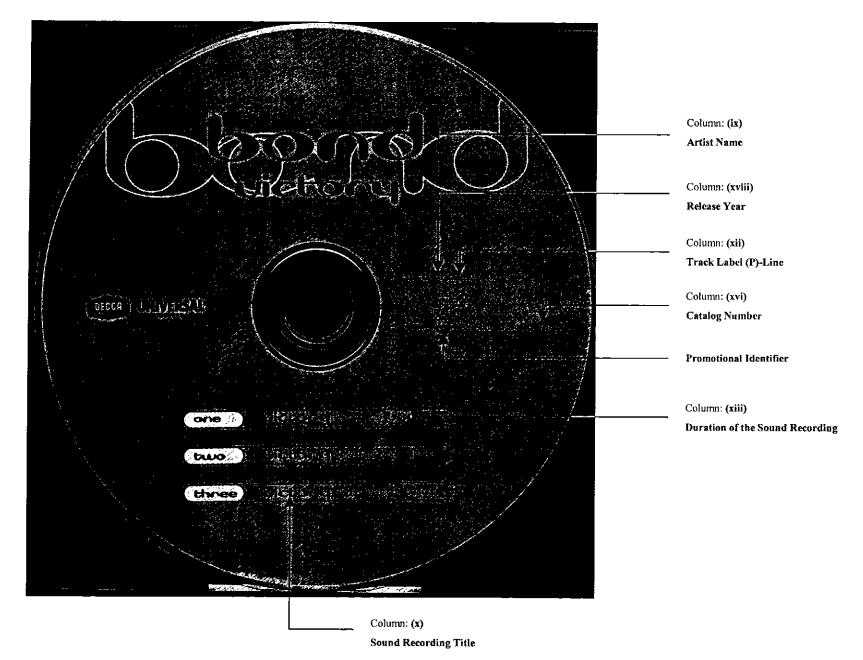
- 7. Universal Classics Group occasionally distributes promotional product in CD-R format but only to terrestrial radio stations. This is sometimes done in order to get a single into the hands of station personnel faster than would be possible using a CD-PRO, which must be sent to an outside plant to be manufactured just like an ordinary retail CD. In the majority of cases, CD-Rs include the name of the recording artist, sound recording title, marketing label, track label (P)-line, duration and release year. In virtually all instances where a single is first distributed on a CD-R, Universal Classics Group follows up with a copy of the full retail album.
- 8. Universal Classics Group distributes promotional product to terrestrial radio stations and the services mentioned above with the full intention that it will receive public performance royalties from each such recipient of its promotional product for any digital audio transmissions of the sound recordings made by the recipient. Merely because Universal Classics Group provides a free benefit to radio stations or other services does not mean that it foregoes its right to be paid for the exploitation of its sound recordings.
- 9. Although Universal Classics Group provides radio stations and other services with promotional product, it has no control over which recordings the station or service actually plays. Therefore, in order to be paid for the public performance of its sound recordings by digital audio transmission, the station or service must identify with specificity the particular sound recordings they perform.

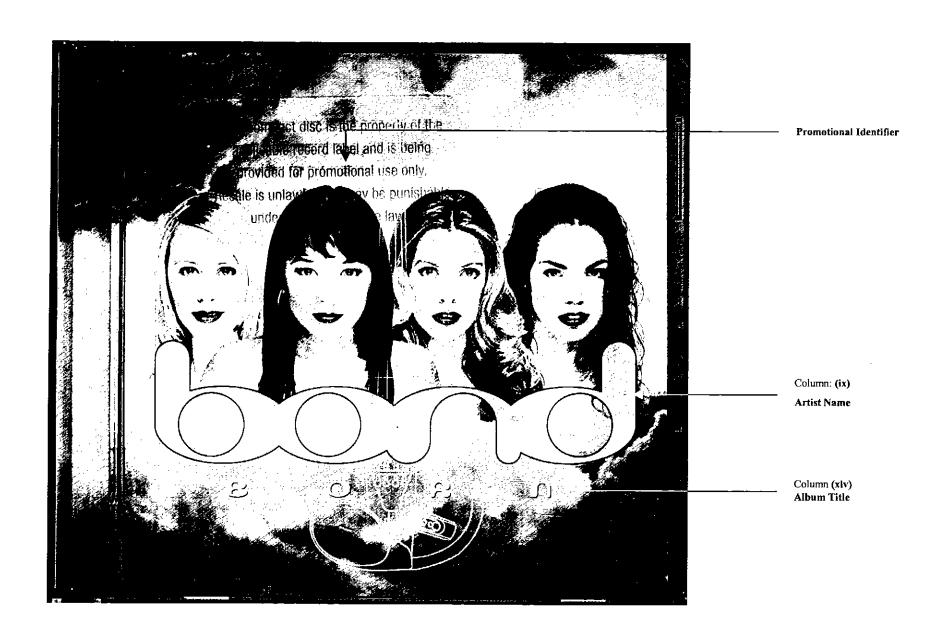
10. I have attached to this declaration the following examples of Universal Classics Group's promotional releases: one CD-PRO; and one retail album defaced for promotional distribution.

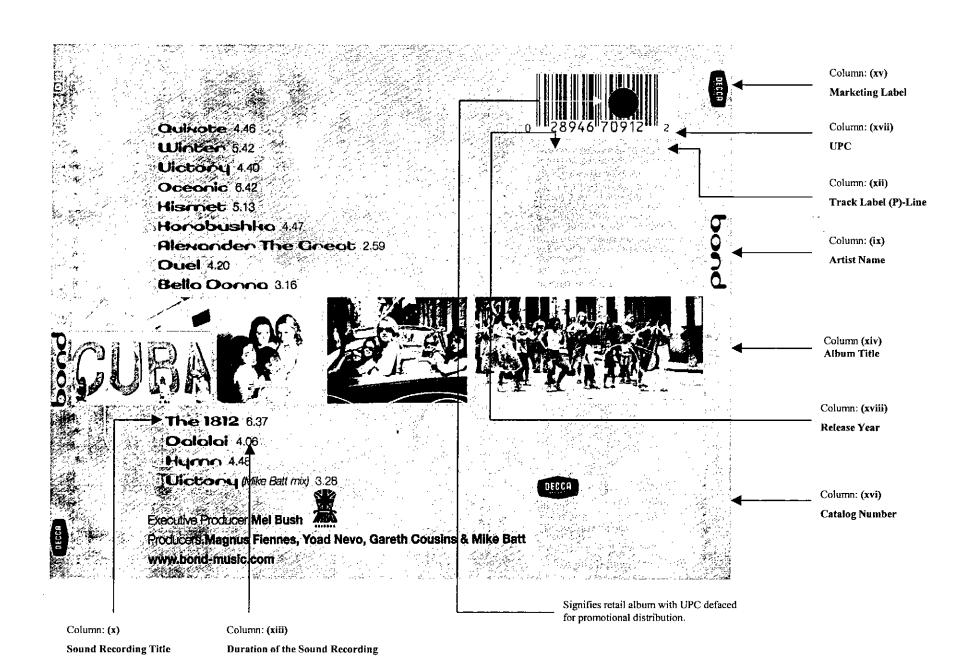
I declare under penalty of perjury that the foregoing is true and correct. Executed this April 32, 2002 at Example 4. New York, New York.

John Dalton



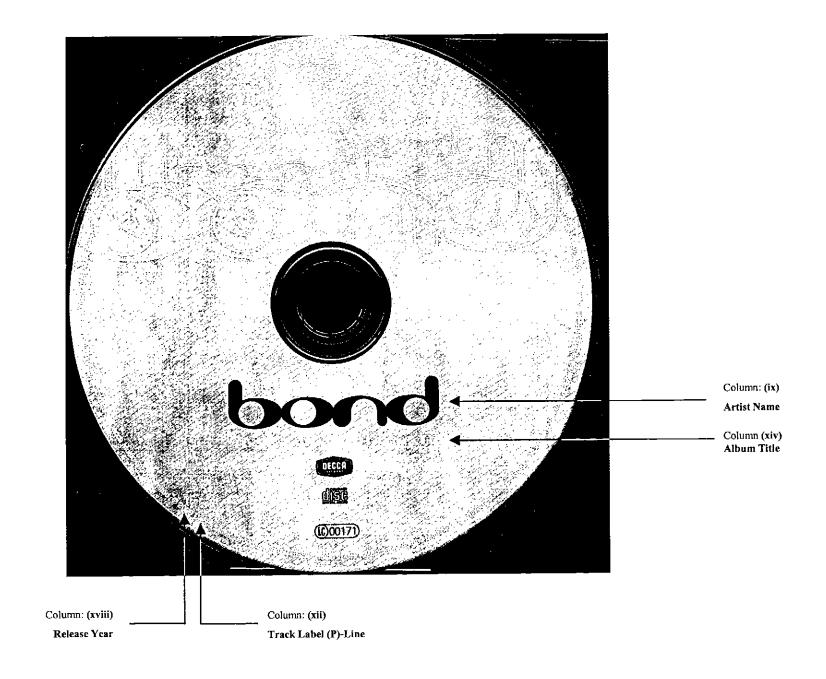




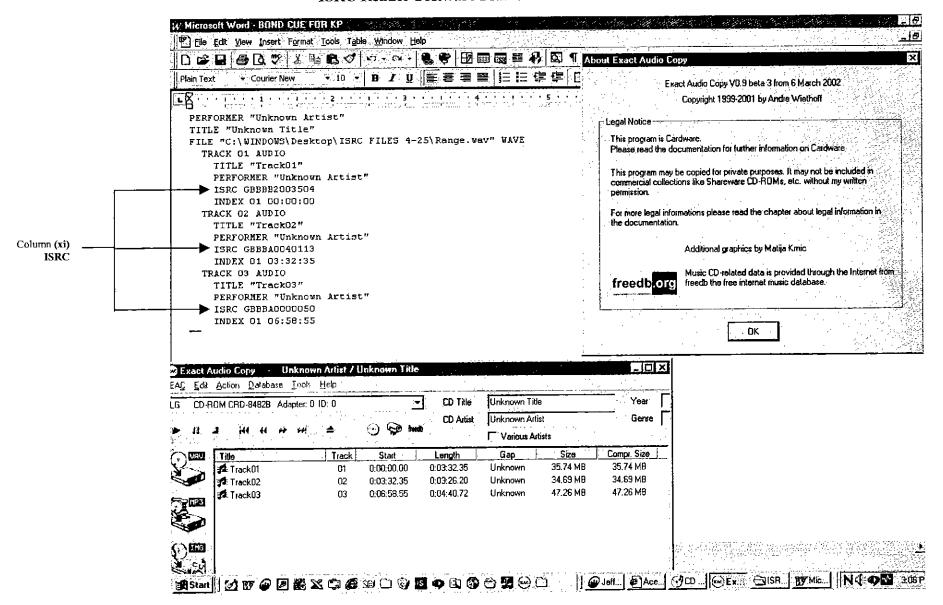


Promotional Retail Album

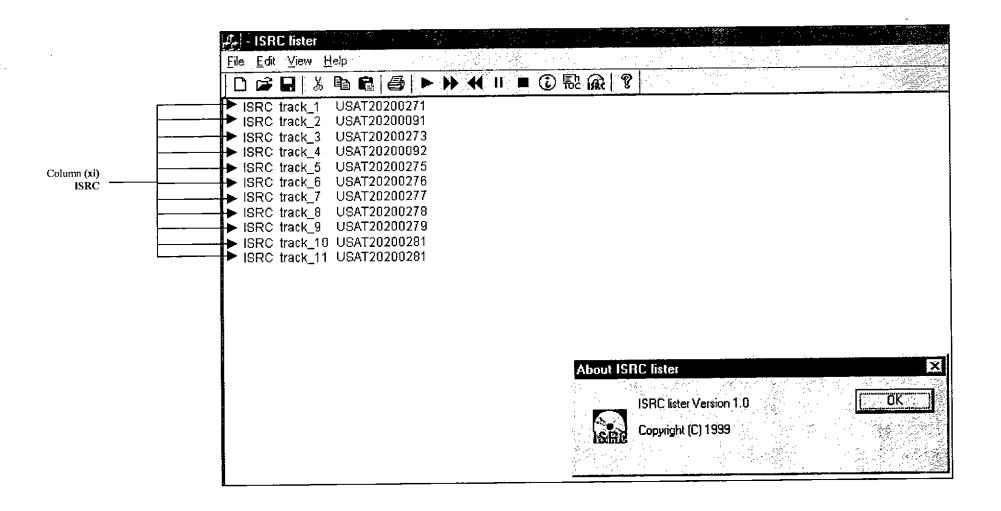
B-4 Attachment 2c



Exact Audio Copy (EAC) ISRC Reader Software Printout For Bond's Born



International Federation of the Phonographic Industry (IFPI) ISRC Reader Software Printout For Bond's Born



Before the UNITED STATES COPYRIGHT OFFICE LIBRARY OF CONGRESS Washington, D.C.

;) .
In the Matter of:)
)
NOTICE AND RECORDKEEPING F	OR) Docket No. RM 2002-1A
USE OF SOUND RECORDINGS UNI	DER)
STATUTORY LICENSE)
)

DECLARATION OF DAN HUBBERT

I, DAN HUBBERT, declare

- 1. I am the Senior Vice President of National Promotion for Capitol Records. In this capacity, I am responsible for overseeing the radio promotion of all Capitol Records Artists in all radio formats. I am generally familiar with Capitol Records's promotional practices and have personal knowledge of all of the following facts.
- 2. I understand that certain parties to the above-referenced rulemaking have alleged that promotional product provided by record labels to terrestrial radio stations and various digital audio transmission services lacks certain data that is necessary to ensure proper distribution of statutory performance royalties. The purpose of this statement is to describe for the Copyright Office the various kinds of promotional product that Capitol Records provides and the types of data typically provided with each kind of promotional product.
- 3. Capitol Records Promotion Department regularly provides promotional product to terrestrial radio stations. Capitol Records Promotion Department also provides promotional product to a limited number of so-called digital audio services, but such product is generally limited to CD singles accompanied by artwork and label copy (known in the trade as a "CD-PRO"). Promotional product is not sent to all radio

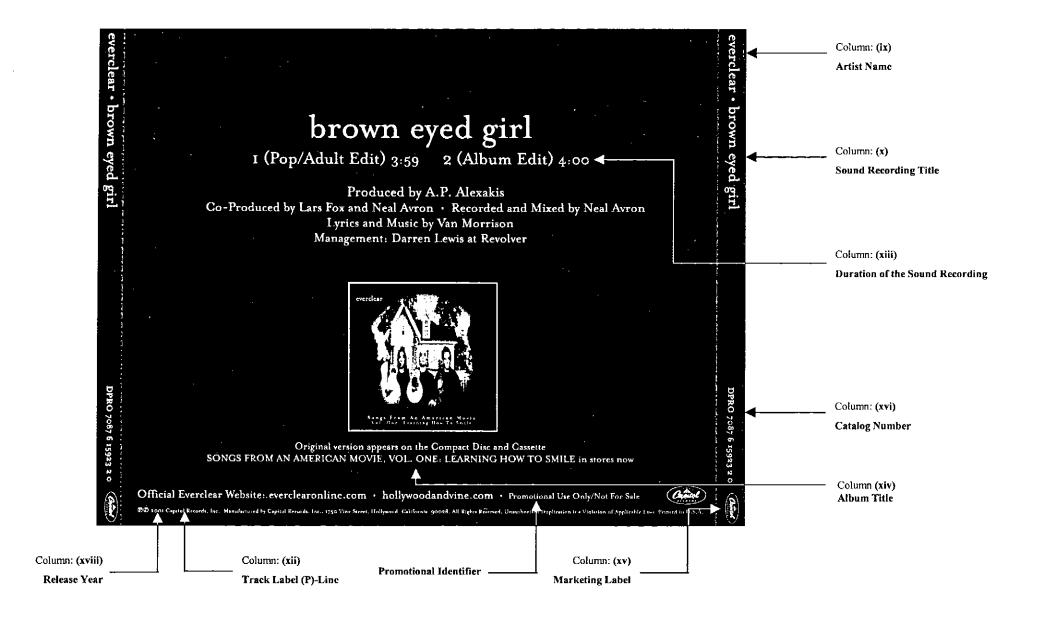
stations and services with which Capitol Records Promotion Department maintains a relationship. Rather, Capitol Records Promotion Department uses various criteria (e.g., station/service format, audience demographics, market size) to select particular radio stations and/or other services to receive each individual promotional single.

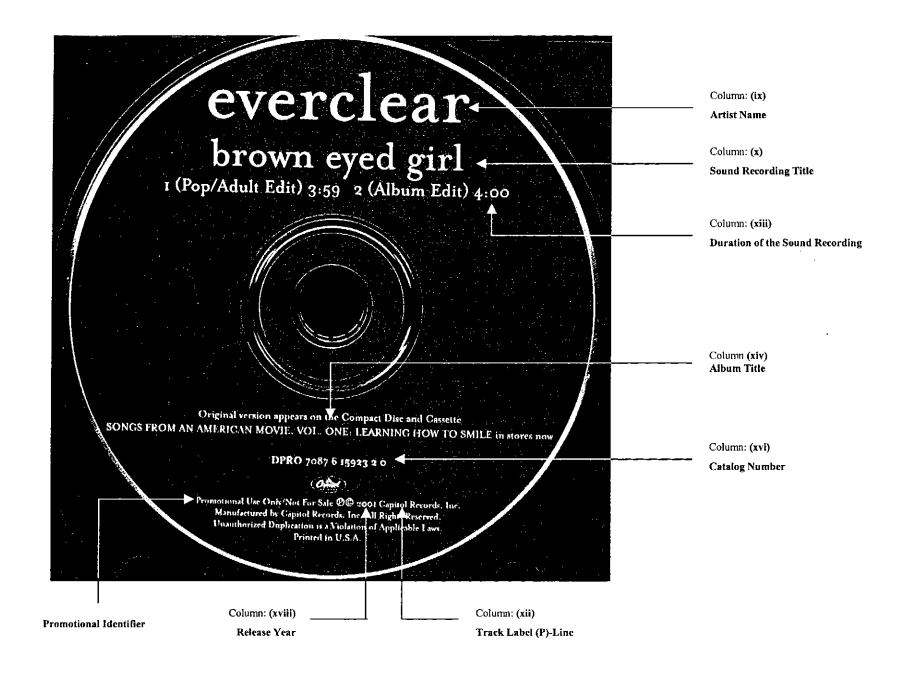
- 4. In almost all cases, Capitol Records Promotion Department distributes its promotional product in the form of a CD-PRO. Virtually all CD-PROs distributed by Capitol Records Promotional Department include the following data elements: featured recording artist; sound recording title; marketing label; track label (P)-line; and duration.
- 5. In many cases, Capitol Records Promotion Department follows up a distribution of a CD-PRO single with a subsequent distribution of the actual retail album. Such albums are typically distributed several weeks after the CD-PRO and are generally identical in all respects to those sold in retail stores, except that they are defaced in some way (e.g., by punching a hole in the jewel case) to prevent the CDs from being sold or returned to retail or wholesale locations.
- 6. Capitol Records Promotion Department does not currently distribute any promotional product in electronic form (e.g., MP3 files distributed via e-mail).
- 7. Capitol Records Promotion Department rarely distributes any promotional product in CD-R format. On the occasion that a CD-R is sent to a certain radio station, this is done in order to get the single into the hands of station personnel faster than would be possible using a CD-PRO, which must be sent to an outside plant to be manufactured just like an ordinary retail CD. CD-Rs are also sent when one or more radio stations request a "remix" of a single already distributed in CD-PRO. In all such cases, CD-Rs include the name of the recording artist, sound recording title, and marketing label. In virtually all instances where a single is first distributed on a CD-R, Capitol Records Promotion Department follows up with a CD-PRO version of that single and, in many cases, with a copy of the full retail album.

8. I have attached to this declaration the following examples of Capitol Records's promotional releases: one or more CD-PROs and one or more retail albums defaced for promotional distribution.

I declare under penalty of perjury that the foregoing is true and correct. Executed this April 22, 2002 in Hollywood, California.

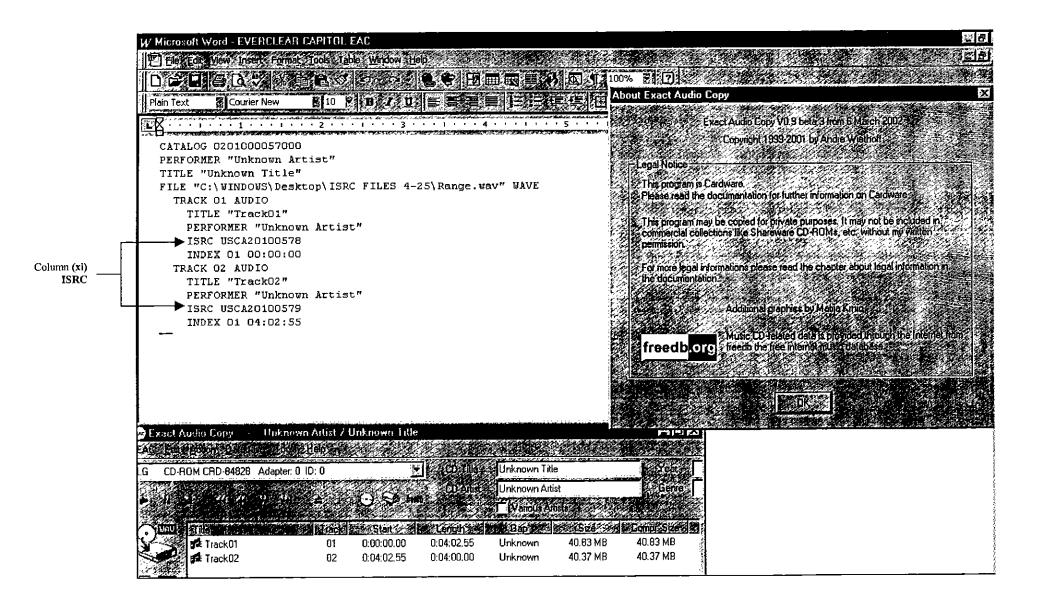
DAN HUBBERT





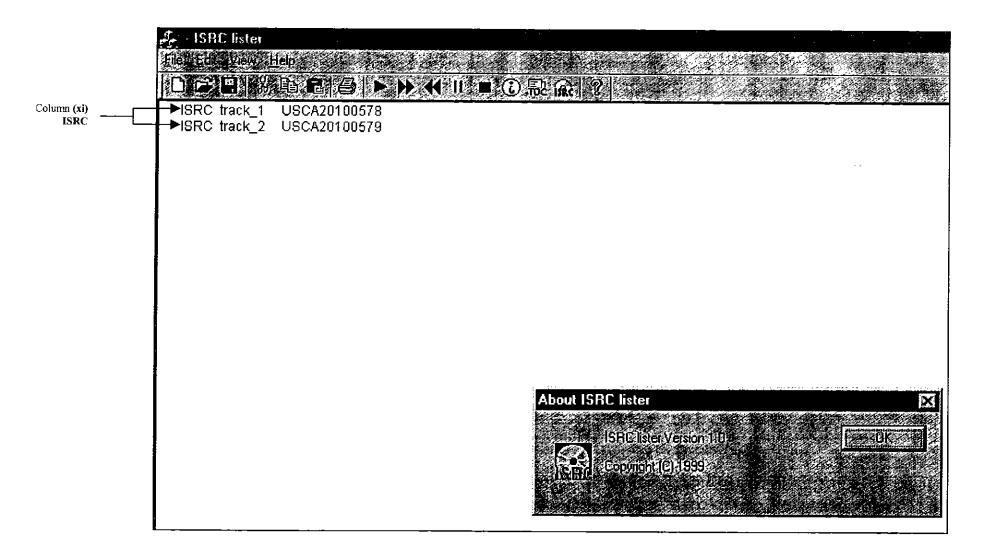
B-5 Attachment 1c

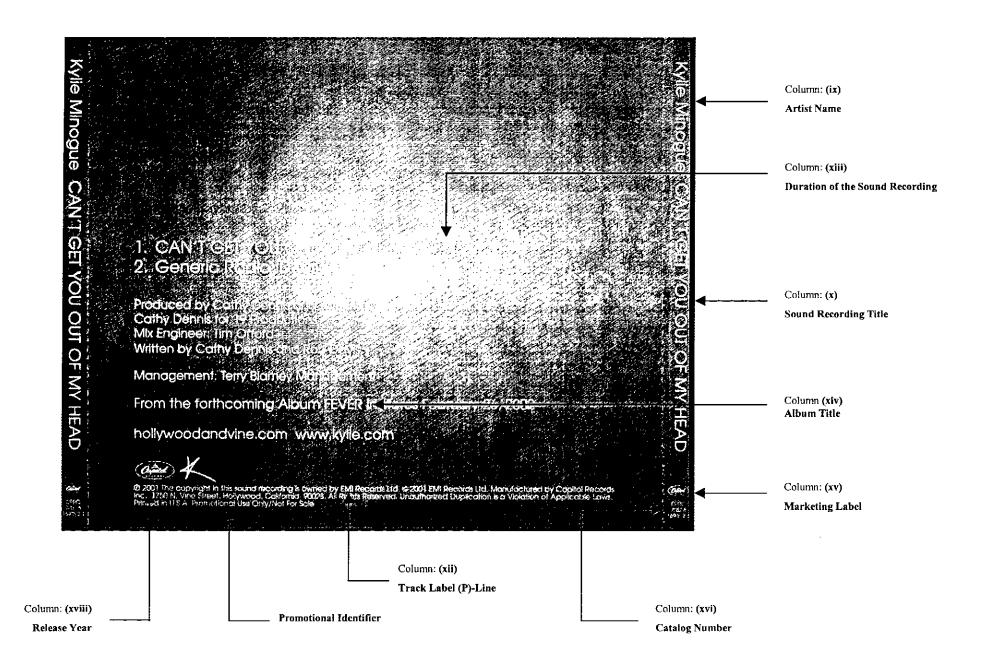
Exact Audio Copy (EAC) ISRC Reader Software Printout For Everclear's Brown Eyed Girl

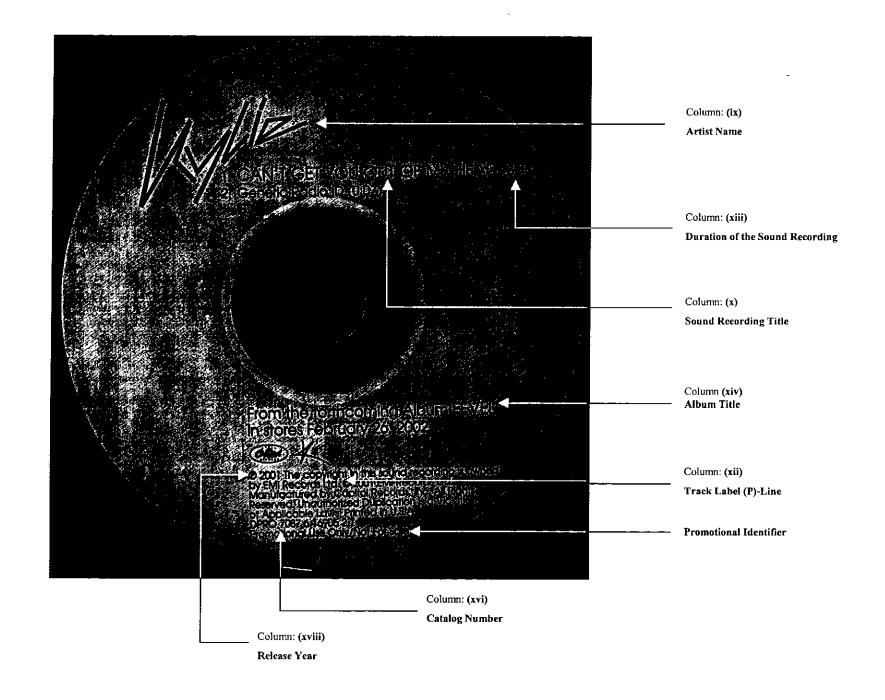


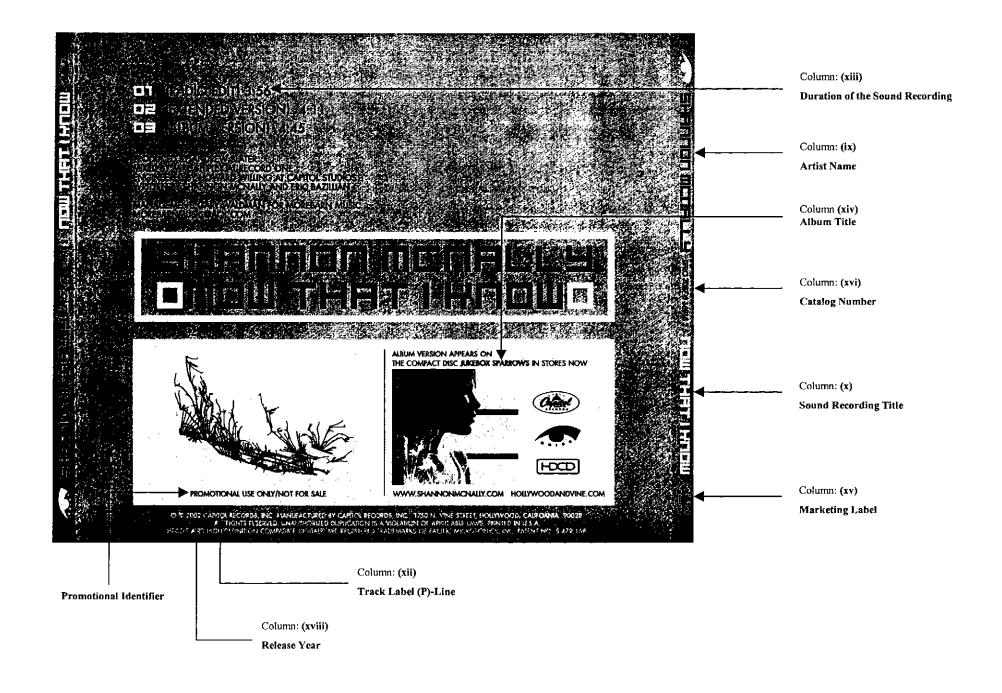
B-5 Attachment 1d

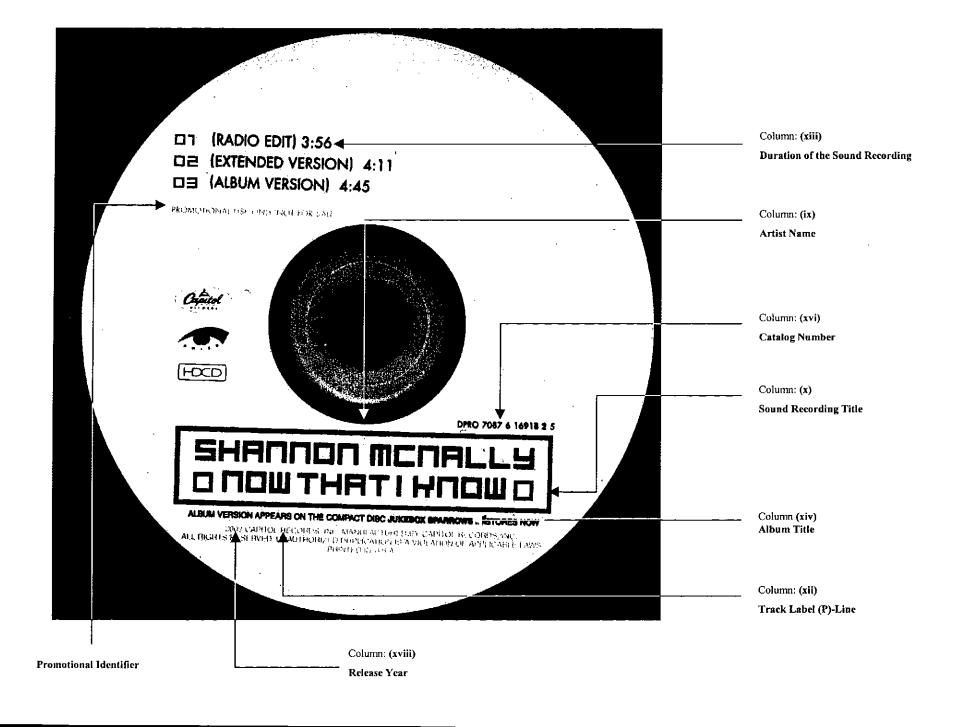
International Federation of the Phonographic Industry (IFPI) ISRC Reader Software Printout For Everclear's Brown Eyed Girl











"As I turn to you and I say
Thank goodness for the good souls
That make life better
As I turn to you and I say
If it wasn't for the good souls
Life would not matter"

Promotional Identifier



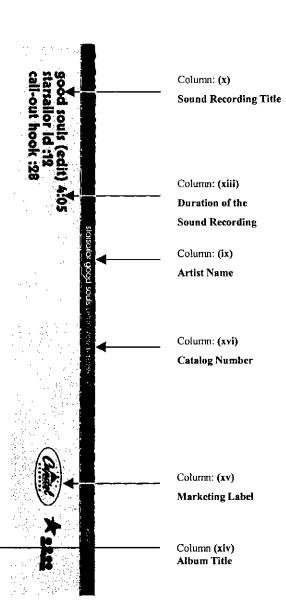
Produced and Mixed by Steve Osborne for 140dB Written by Starsailor
Original version appears on the forthcoming Compact Disc LOVE IS HERE instructional Version appears on the forthcoming Compact Disc LOVE IS HERE instructional Version appears on the forthcoming Compact Disc LOVE IS HERE instructional Versional Vers

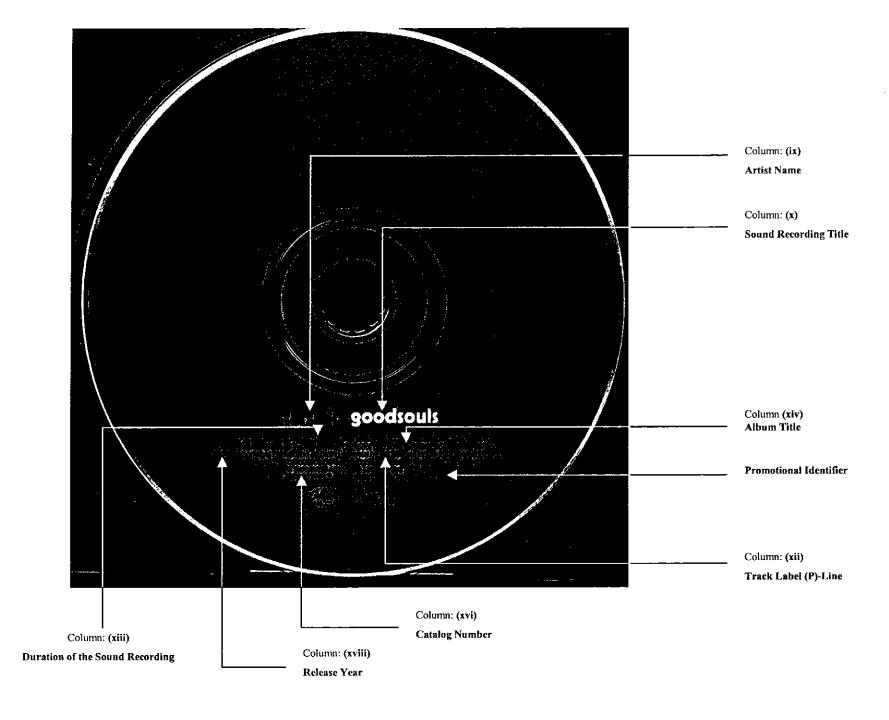
Column: (xviii)

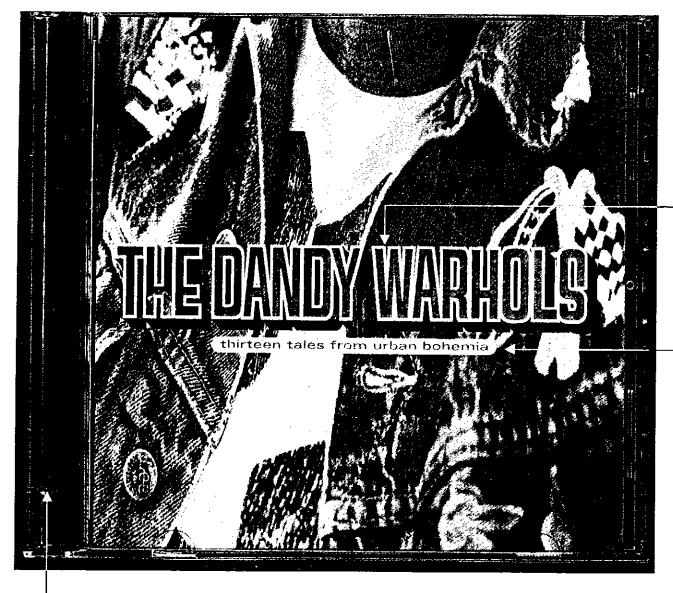
Release Year

Column: (xii)

Track Label (P)-Line





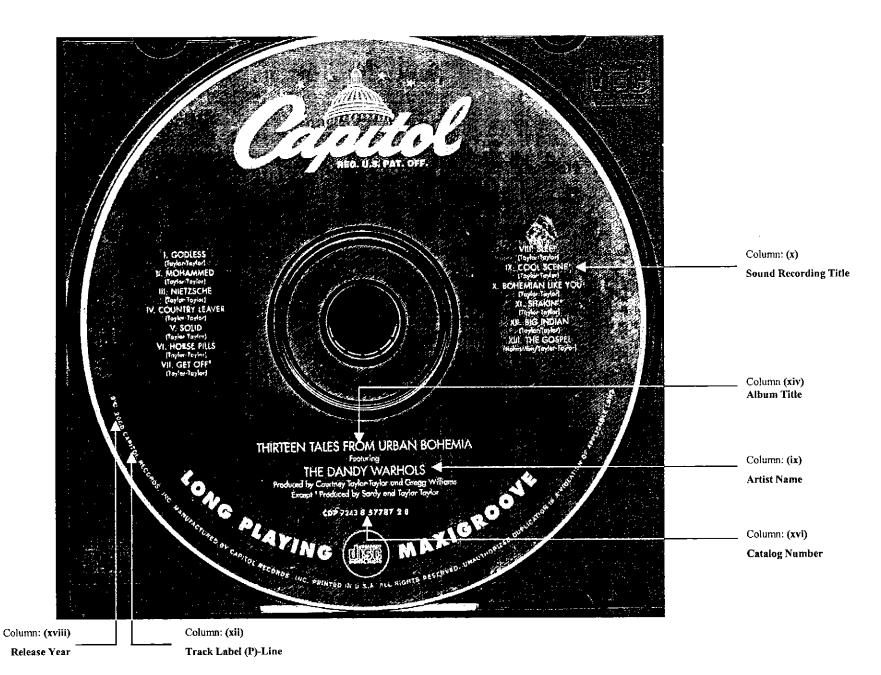


Column: (ix)
Artist Name

Column (xiv) Album Title

Jewel case/label copy on retail album are defaced for promotional distribution.





Before the UNITED STATES COPYRIGHT OFFICE LIBRARY OF CONGRESS Washington, D.C.

In the Matter of:		
NOTICE AND RECORDKEEPING FOR USE OF SOUND RECORDINGS UNDER STATUTORY LICENSE)	Docket No. RM 2002-1A

DECLARATION OF BRUCE IGLAUER

I, BRUCE IGLAUER, declare

- 1. I am the President of Alligator Records. In this capacity, I am responsible for supervision of all employee activities, including promotional. I am generally familiar with Alligator Records' promotional practices and have personal knowledge of all of the following facts.
- 2. I understand that certain parties to the above-referenced rulemaking have alleged that promotional product provided by record labels to terrestrial radio stations and various digital audio transmission services lacks certain data that is necessary to ensure proper distribution of statutory performance royalties. The purpose of this statement is to describe for the Copyright Office the various kinds of promotional product Alligator Records provides and the types of data typically provided with each kind of promotional product. In particular, this statement describes Alligator Records' practice of following up newer forms of distribution (e.g., CD-Rs and MP3 files) with fully labeled versions of the same recordings.
- 3. Alligator Records regularly provides promotional product to terrestrial radio stations. Alligator Records also provides promotional product to a limited number of so-called digital audio services. In virtually all cases, such product takes the form of an

ordinary retail album that has been defaced in some way (e.g., by punching a hole in the jewel case) to prevent the CDs from being sold or returned to retail or wholesale locations.

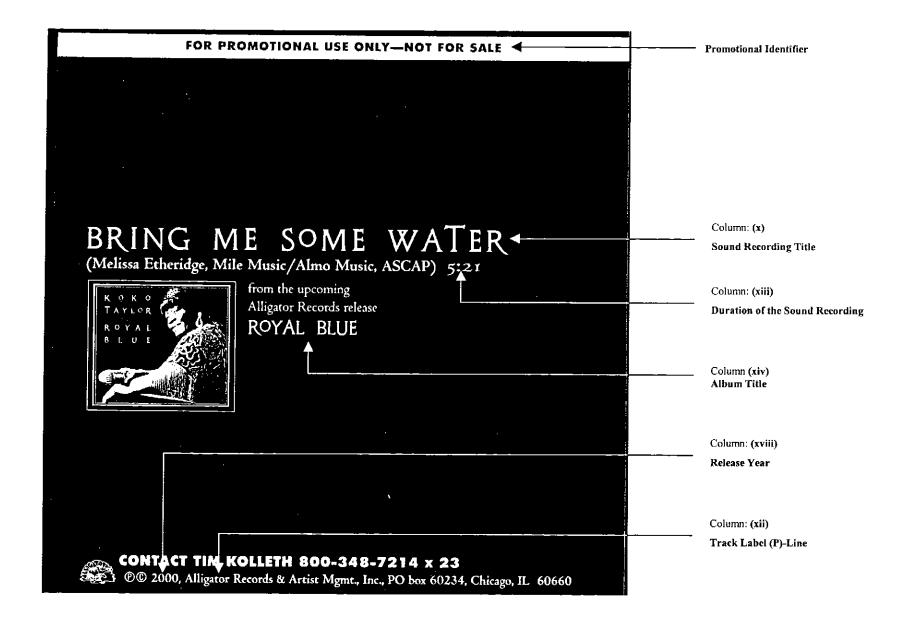
- 4. In some cases, Alligator Records distributes its promotional product in the form of a CD-PRO (i.e., a CD single accompanied by artwork and label copy). The majority of CD-PROs distributed by Alligator Records include the following data elements: featured recording artist; sound recording title; marketing label; track label (P)-line; duration; retail album title; and release year (even if the release year is not included in the label copy, in most cases it can be deduced from the date the CD-PRO is received). Approximately 100% of the CD-PROs distributed by Alligator Records include the ISRC code. Because CD-PROs are not intended for retail sale, they virtually always do not include the same catalog number assigned to the retail album, although they do usually include a unique catalog number assigned to the particular single; CD-PROs may or may not include a UPC code.
- 5. In virtually all cases, Alligator Records follows up a distribution of a CD-PRO single with a subsequent distribution of the actual retail album. Such albums are typically distributed two weeks after the CD-PRO and are virtually always identical in all respects to those sold in retail stores, including a visible UPC code, except that they are defaced in some way (e.g., by punching a hole in the jewel case) to prevent the CDs from being sold or returned to retail or wholesale locations.
- 6. Alligator Records does not currently distribute any promotional product in electronic form (e.g., MP3 files distributed via e-mail).
- 7. Alligator Records distributes promotional product to terrestrial radio stations and the services mentioned above with the full intention that it will receive public performance royalties from each such recipient of its promotional product for any digital audio transmissions of the sound recordings made by the recipient. Merely because

Alligator Records provides a free benefit to radio stations or other services does not mean that it foregoes its right to be paid for the exploitation of its sound recordings.

- 7. Although Alligator Records provides radio stations and other services with promotional product, it has no control over which recordings the station or service actually plays. Therefore, in order to be paid for the public performance of its sound recordings by digital audio transmission, the station or service must identify with specificity the particular sound recordings they perform.
- 8. I have attached to this declaration the following examples of Alligator Records' promotional releases: one or more CD-PROs; and one or more retail albums defaced for promotional distribution.
- 9. Alligator Records occasionally distributes promotional product in CD-R format but only to terrestrial radio stations. This is virtually always done in order to get a single into the hands of station personnel faster than would be possible using a CD-PRO, which must be sent to an outside plant to be manufactured just like an ordinary retail CD. In most cases, CD-Rs include the name of the recording artist, sound recording title, marketing label, track label (P)-line, duration and release year. In virtually all instances where a single is first distributed on a CD-R, Alligator Records follows up within two weeks with a copy of the full retail album.

I declare under penalty of perjury that the foregoing is true and correct. Executed this April 22, 2002 at Chicago, Illinois.

BRUCE IGLAUER



KOKO TAYLOR-

BRING MESOMEWATER

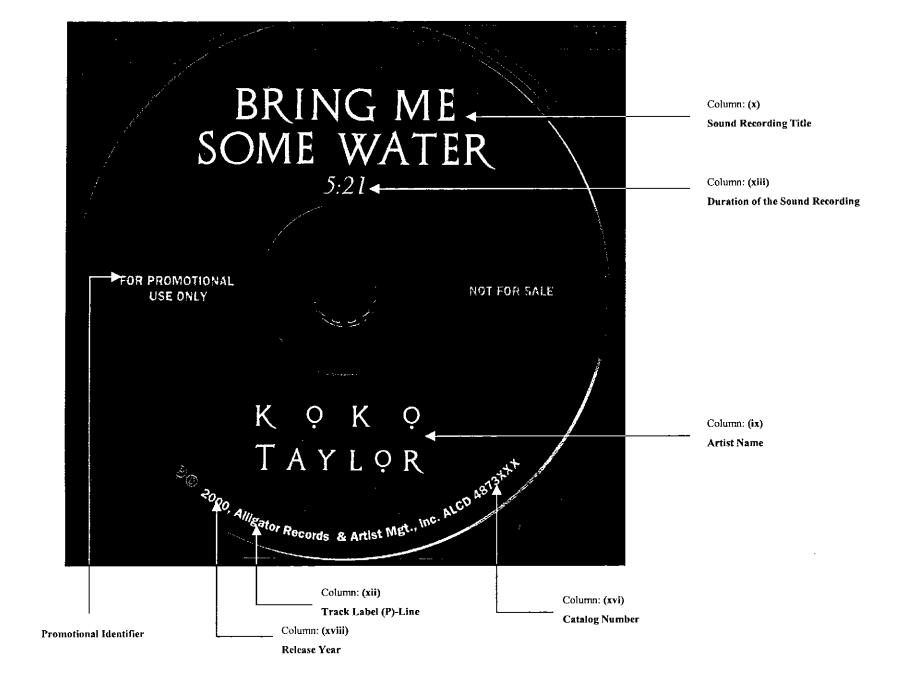
WITH:

KENNY WAYNE SHEPHERD, Lead Guitar
CRISS JOHNSON, Rhythm Guitar
DOLPHA FOWLER, JR., Organ
KENNY HAMPTON, Bass
KRISS T. JOHNSON, JR., Drums
Add Date: June 6

Column: (ix)
Artist Name

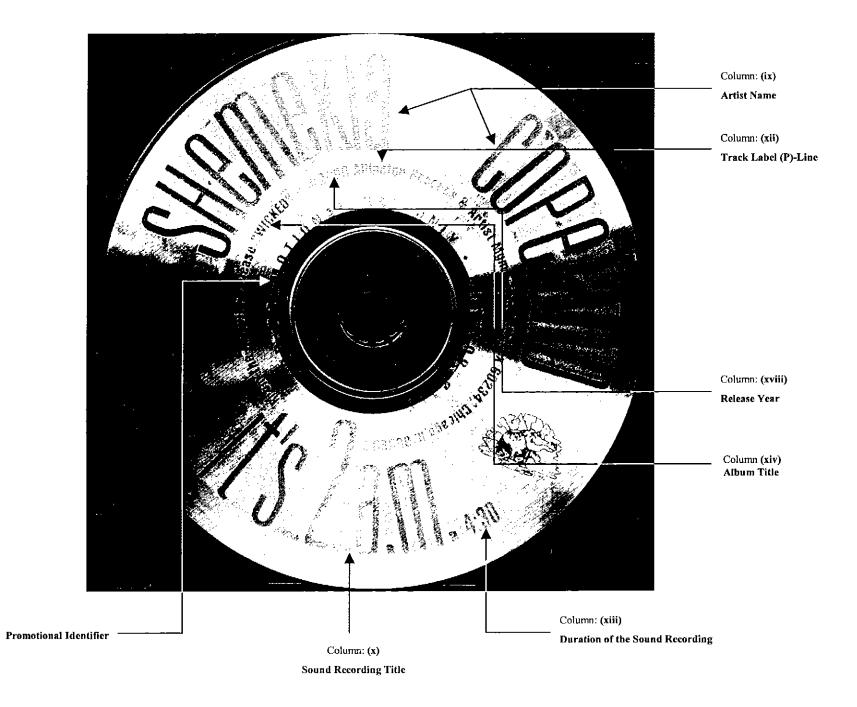
Column: (x)

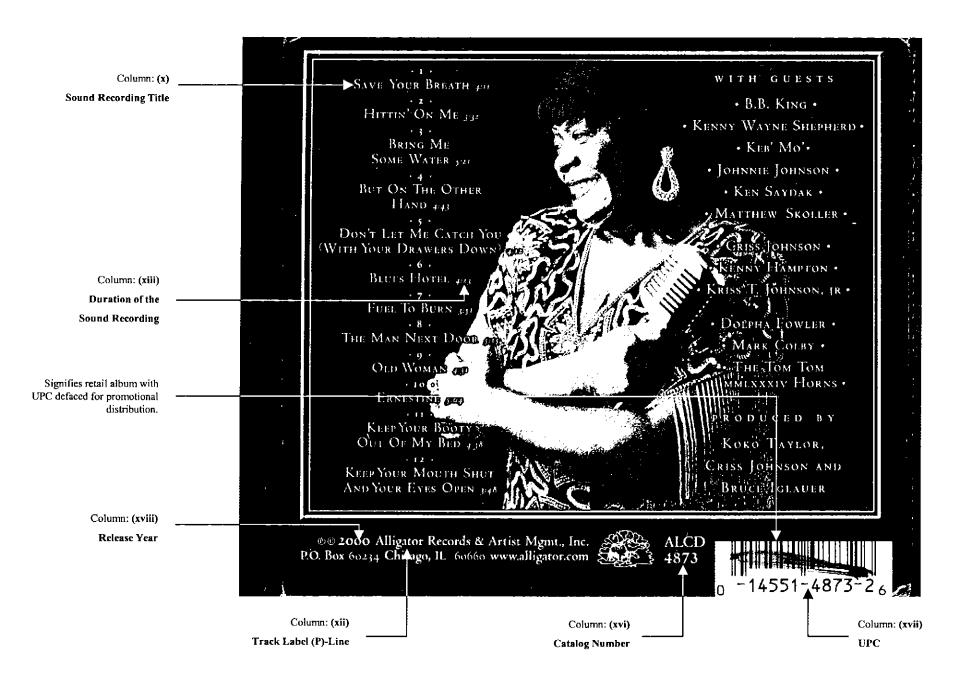
Sound Recording Title

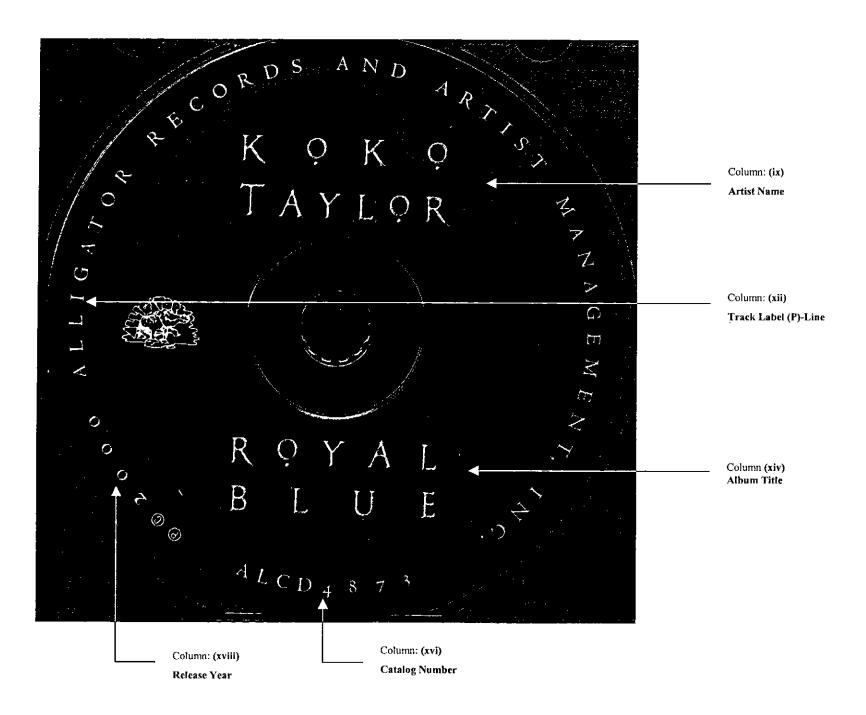


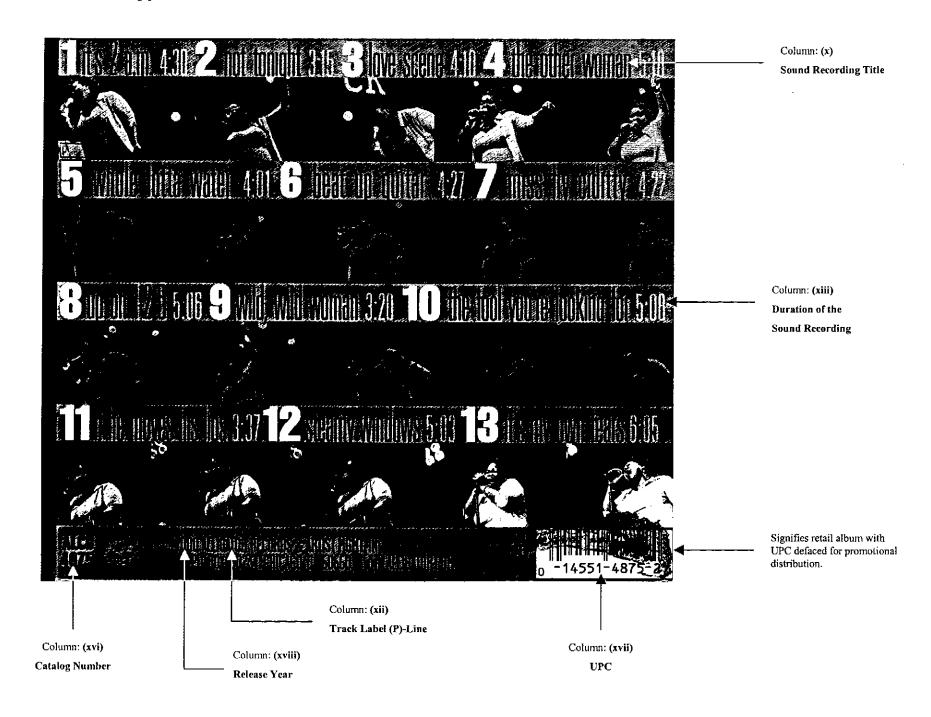


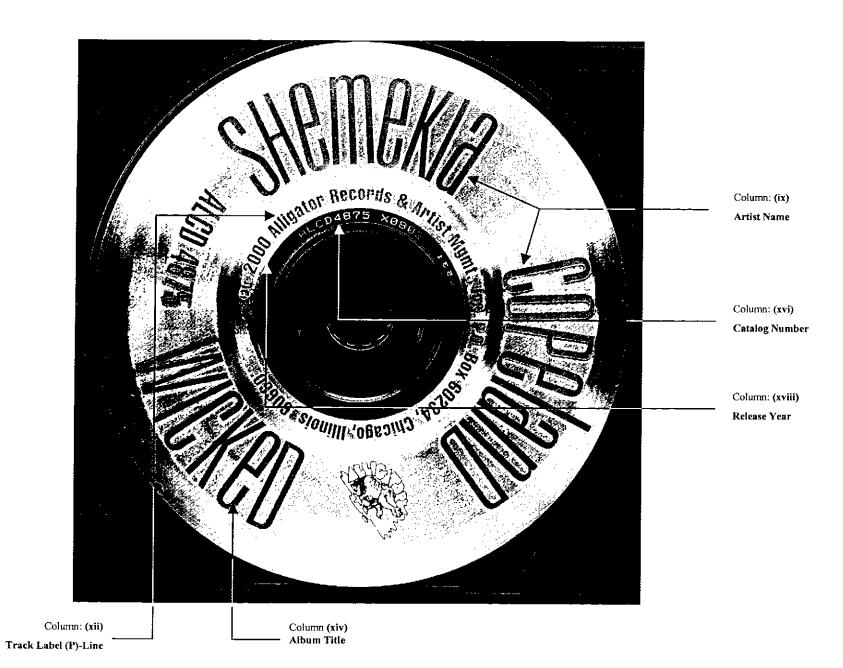
Promotional Identifier











Before the UNITED STATES COPYRIGHT OFFICE LIBRARY OF CONGRESS Washington, D.C.

In 1	ne Matter of:
	·

NOTICE AND RECORDKEEPING FOR USE OF SOUND RECORDINGS UNDER STATUTORY LICENSE

Docket No. RM 2002-1A

DECLARATION OF GERRY KUSTER

I, GERRY KUSTER, declare

- 1. I am the Vice President, Production at Zomba Recording Corporation ("Zomba"). In this capacity, I am responsible for manufacture and distribution. I am generally familiar with Zomba's promotional practices and have personal knowledge of all of the following facts.
- 2. I understand that certain parties to the above-referenced rulemaking have alleged that promotional product provided by record labels to terrestrial radio stations and various digital audio transmission services lacks certain data that is necessary to ensure proper distribution of statutory performance royalties. The purpose of this statement is to describe for the Copyright Office the various kinds of promotional product Zomba provides and the types of data typically provided with each kind of promotional product. In particular, this statement describes Zomba's practice of following up newer forms of distribution (e.g., CD-Rs) with fully labeled versions of the same recordings.
- 3. Zomba regularly distributes promotional product to terrestrial radio stations. Such product is virtually always limited to CD singles accompanied by artwork and label copy (known in the trade as a "CD-PRO"). Zomba uses various criteria (e.g.,

station/service format, audience demographics, market size) to select particular radio stations and/or other services to receive each individual promotional single.

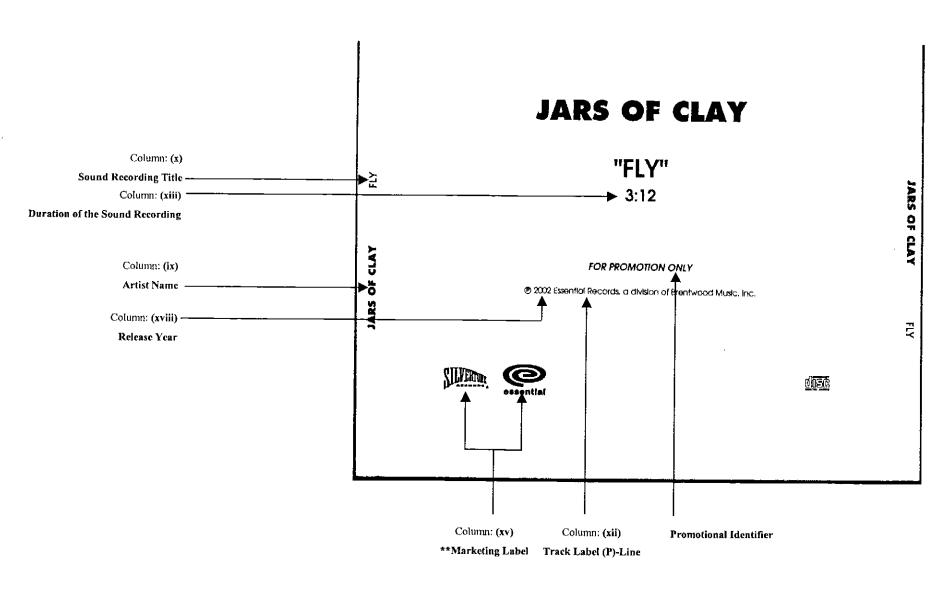
- 4. In virtually all cases, Zomba distributes its promotional product in the form of a CD-PRO. Virtually all CD-PROs distributed by Zomba include the following data elements: featured recording artist; sound recording title; marketing label; track label (P)-line; duration, retail album title and release year (even if the release year is not included in the label copy, in most cases it can be deduced from the date the CD-PRO is received). Approximately one hundred percent (100%) of the CD-PROs distributed by Zomba include the ISRC code. Because CD-PROs are not intended for retail sale, they never include the same catalog number assigned to the retail album, although they do always include a unique catalog number assigned to the particular single; CD-PROs do not include a UPC code.
- 5. In virtually all cases, Zomba follows up the provision of a CD-PRO single with a subsequent provision of the actual retail album. Such albums are typically distributed six to eight (6-8) weeks after the CD-PRO and are generally identical in all respects to those sold in retail stores, including a visible UPC code, except that they are defaced in some way (e.g., by punching a hole in the jewel case) to prevent the CDs from being sold or returned to retail or wholesale locations.
- 6. I understand from the Zomba Promotion department that Zomba does not currently distribute any promotional product in electronic form (e.g., MP3 files distributed via e-mail). However, I understand from the Zomba New Media department and Zomba Business Affairs that Zomba does sometimes distribute a limited amount of content electronically to be used for marketing purposes by specific web sites (e.g., the Nickelodeon web site, www.nick.com) pursuant to a written license agreement between Zomba and such web sites (having nothing to do with radio services).
- 7. Zomba occasionally distributes promotional product in CD-R format but only to terrestrial radio stations. This is usually done in order to get a single into the hands of

station personnel faster than would be possible using a CD-PRO, which must be sent to an outside plant to be manufactured just like an ordinary retail CD. CD-Rs are also usually sent when one or more radio stations request a "remix" of a single already distributed in CD-PRO. In most cases, CD-Rs include the name of the recording artist, sound recording title, marketing label, track label (P)-line, duration and release year. In many instances where a single is first distributed on a CD-R, Zomba follows up within two (2) weeks with a CD-PRO version of that single and, frequently, with a copy of the full retail album.

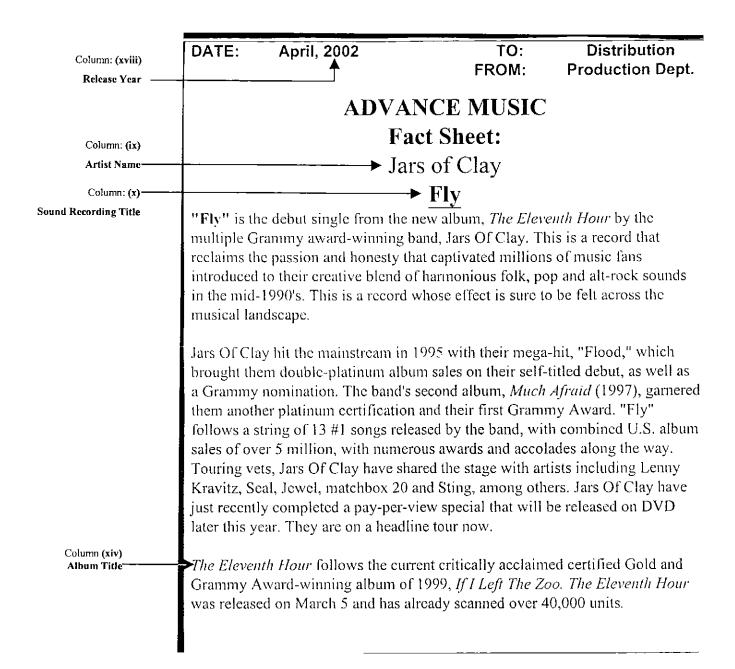
- 8. Zomba distributes promotional product to terrestrial radio stations and the services mentioned above with the full intention that it will receive public performance royalties from each such recipient of its promotional product for any digital audio transmissions of the sound recordings made by the recipient. Merely because Zomba provides a free benefit to radio stations or other services does not mean that it foregoes its right to be paid for the exploitation of its sound recordings.
- 9. Although Zomba provides radio stations and other services with promotional product, it has no control over which recordings the station or service actually plays. Therefore, in order to be paid for the public performance of its sound recordings by digital audio transmission, the station or service must identify with specificity the particular sound recordings they perform.
- 10. I have attached to this declaration the following examples of Zomba's promotional releases: one or more CD-Rs; one or more CD-PROs; and one or more retail albums defaced for promotional distribution.

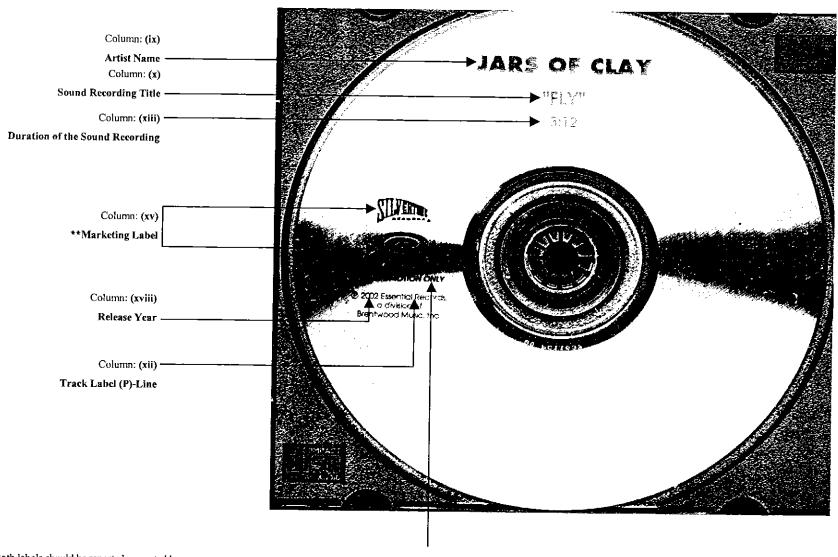
I declare under penalty of perjury that the foregoing is true and correct. Executed this April 19, 2002 at New York, New York.

GERRY KUSTER



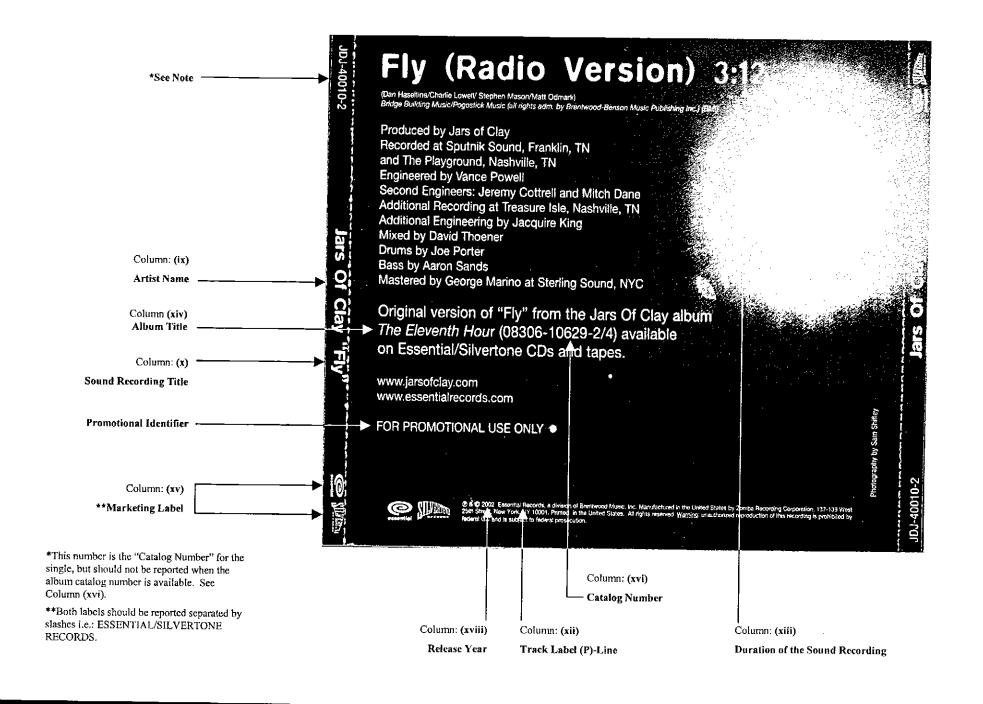
**Both labels should be reported separated by slashes i.e.: SILVERTONE RECORDS/ESSENTIAL.

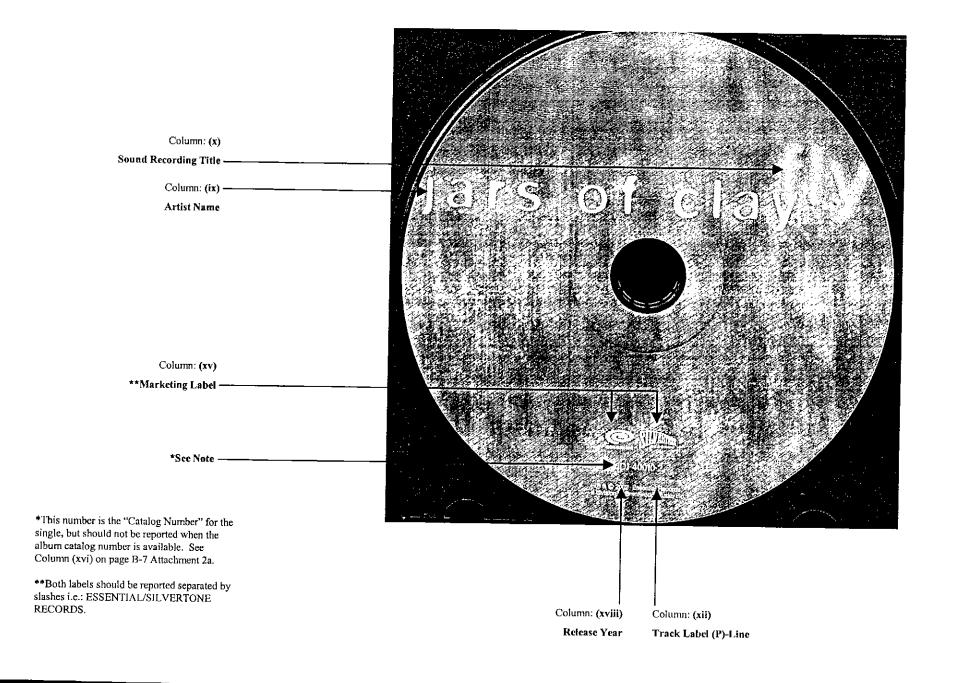


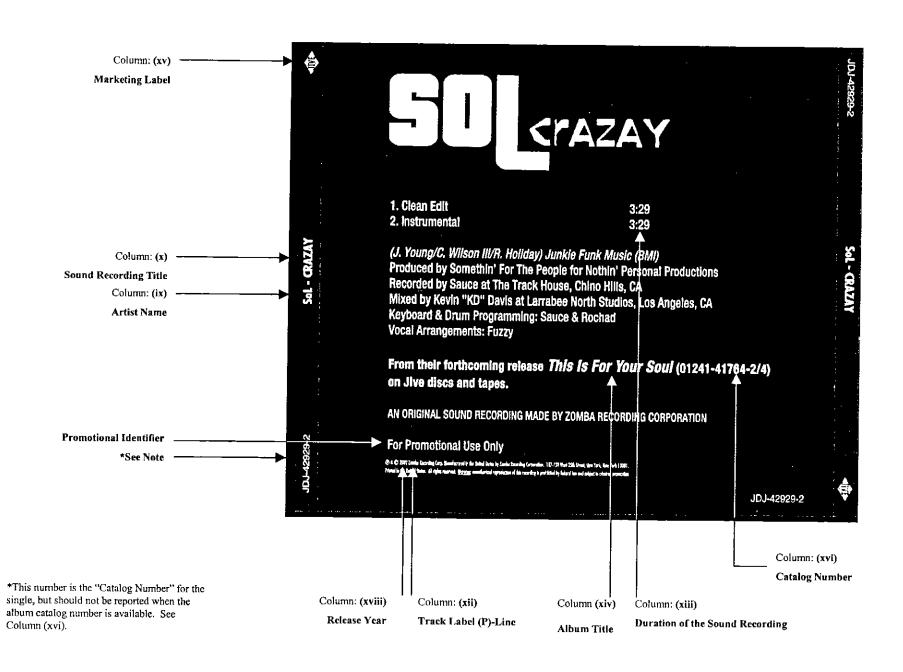


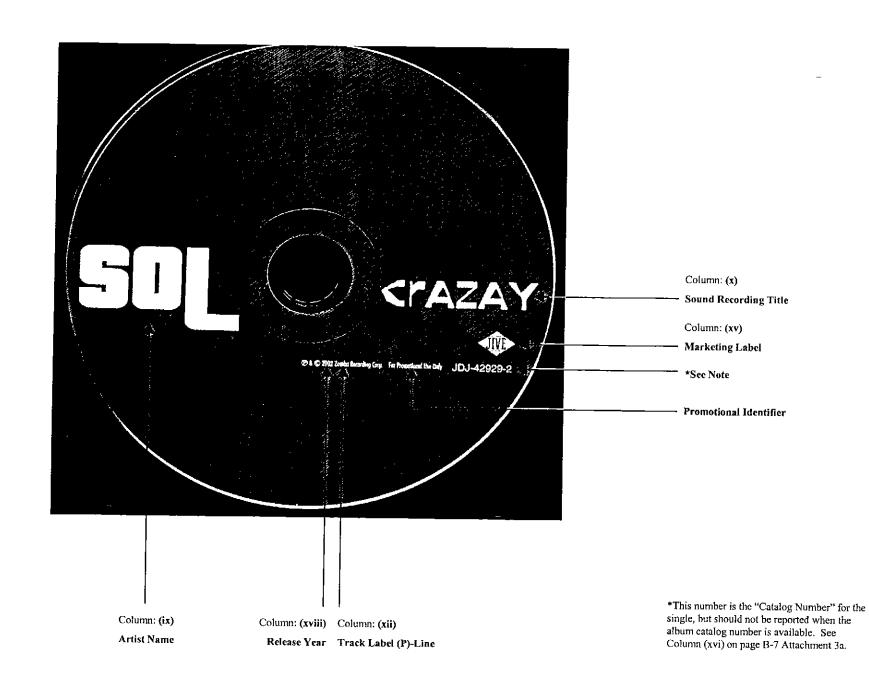
**Both labels should be reported separated by slashes i.e.: SILVERTONE RECORDS/ESSENTIAL.

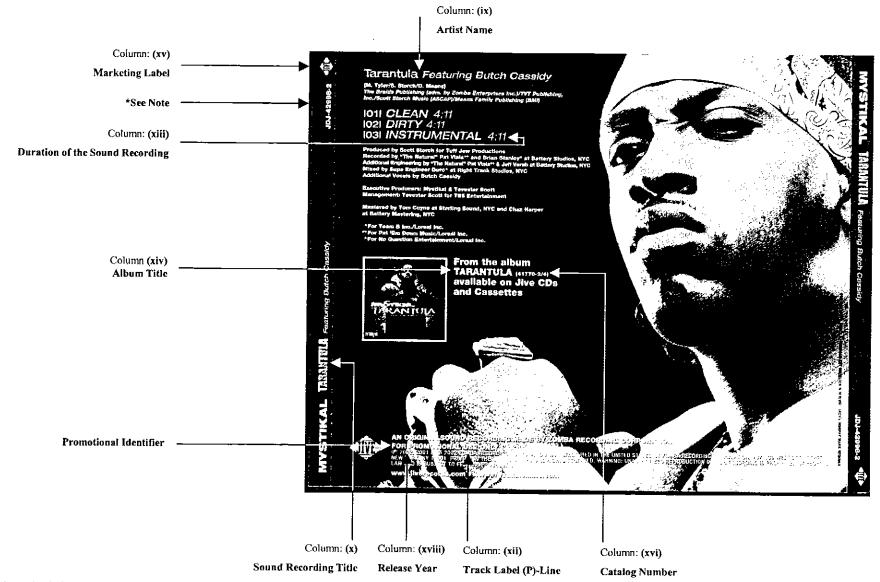
Promotional Identifier



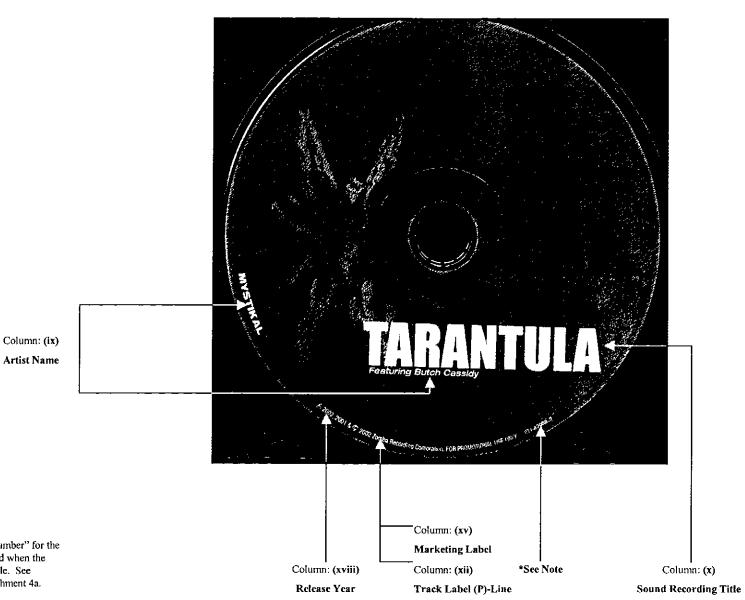






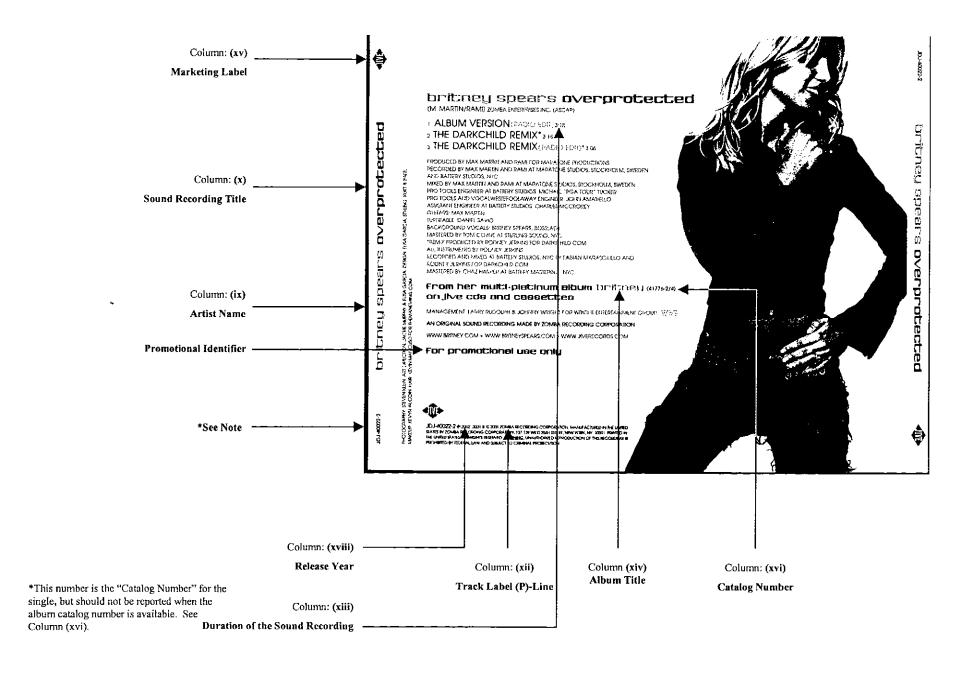


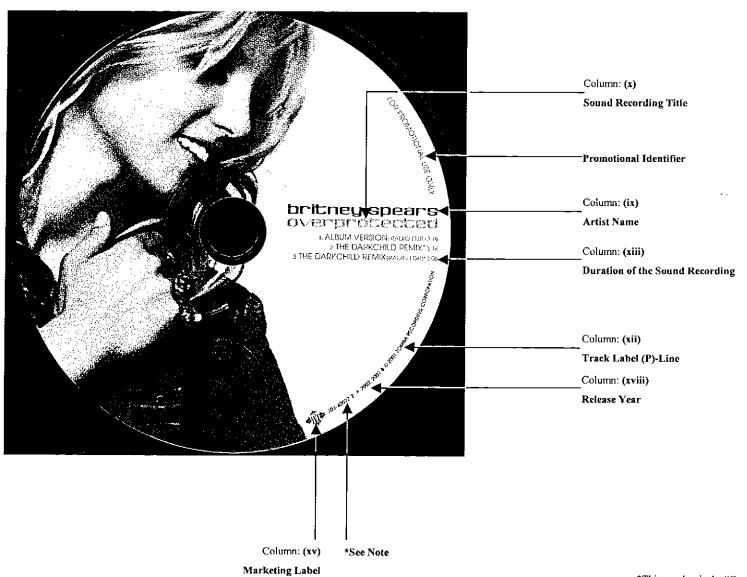
^{*}This number is the "Catalog Number" for the single, but should not be reported when the album catalog number is available. See Column (xvi).



Artist Name

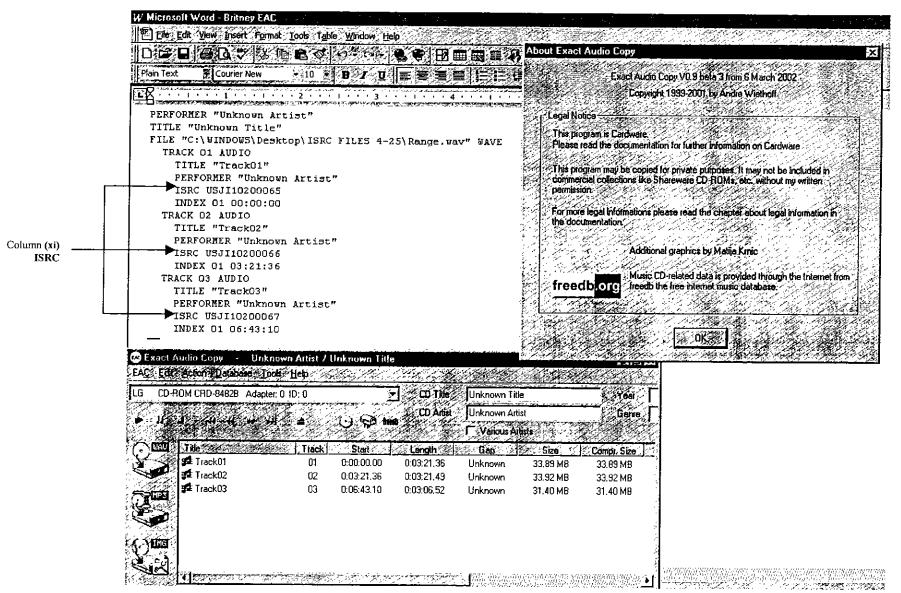
*This number is the "Catalog Number" for the single, but should not be reported when the album catalog number is available. See Column (xvi) on page B-7 Attachment 4a.



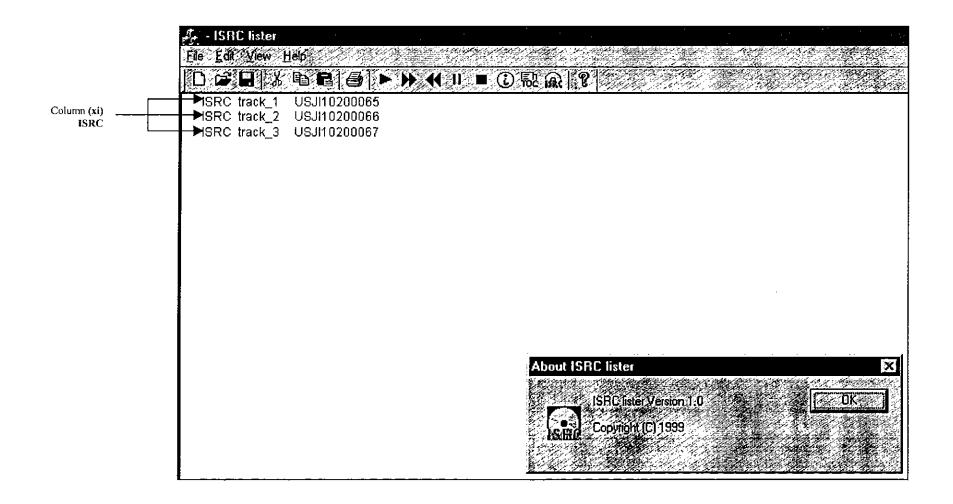


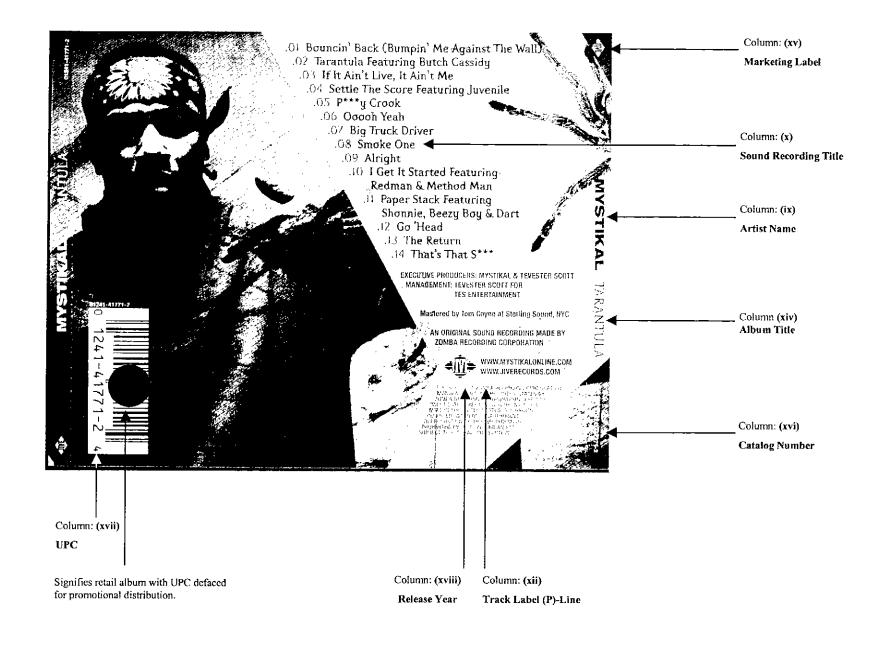
^{*}This number is the "Catalog Number" for the single, but should not be reported when the album catalog number is available. See Column (xvi) on page B-7 Attachment 5a.

Exact Audio Copy (EAC) ISRC Reader Software Printout For Britney Spear's Over Protected



International Federation of the Phonographic Industry (IFPI) ISRC Reader Software Printout For Britney Spear's Over Protected





Before the UNITED STATES COPYRIGHT OFFICE LIBRARY OF CONGRESS Washington, D.C.

In the Matter of:))
NOTICE AND RECORDKEEPING FOR USE OF SOUND RECORDINGS UNDER STATUTORY LICENSE) Docket No. RM 2002-1A)

DECLARATION OF HEATHER MCBEE

I, Heather McBee, declare

- 1. I am the Manager/ New Media at RCA Label Group RLG/Nashville, a unit of BMG Music ("RLG"). In this capacity, I am responsible for internet marketing and the company's technology education. I am generally familiar with RLG's promotional practices and have personal knowledge of all of the following facts.
- 2. I understand that certain parties to the above-referenced rulemaking have alleged that promotional product provided by record labels to terrestrial radio stations and various digital audio transmission services lacks certain data that is necessary to ensure proper distribution of statutory performance royalties. The purpose of this statement is to describe for the Copyright Office the various kinds of promotional product RLG provides and the types of data typically provided with each kind of promotional product. In particular, this statement describes RLG's practice of following up newer forms of distribution (e.g., CD-Rs and MP3 files) with fully labeled versions of the same recordings.
- 3. RLG regularly provides promotional product to terrestrial radio stations. RLG also provides promotional product to a limited number of so-called digital audio services, but such product is virtually always limited to CD singles accompanied by artwork and

label copy (known in the trade as a "CD-PRO"). Promotional product is not sent to all radio stations and services with which RLG maintains a relationship. Rather, RLG uses various criteria (e.g., station/service format, audience demographics, market size) to select particular radio stations and/or other services to receive each individual promotional single.

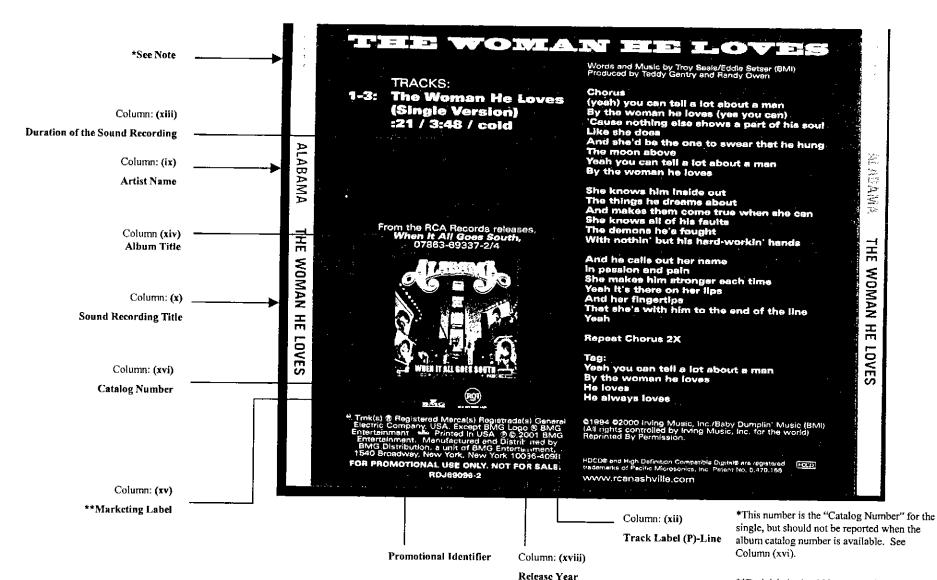
- 4. In virtually all cases, RLG distributes its promotional product in the form of a CD-PRO. Virtually all CD-PROs distributed by RLG include the following data elements: featured recording artist; sound recording title; marketing label; track label; (P)-line; duration; retail album title; and release year (even if the release year is not included in the label copy, in most cases it can be deduced from the date the CD-PRO is received). Approximately 100 percent (100%) of the CD-PROs distributed by RLG include the ISRC code embedded in the music. Because CD-PROs are not intended for retail sale, they virtually always do not include the same catalog number assigned to the retail album, although they do virtually always include a unique catalog number assigned to the particular single; CD-PROs do not include a UPC code.
- 5. In most cases, RLG follows up a distribution of a CD-PRO single with a subsequent distribution of the actual retail album 4-5 months after servicing the first single. Such albums are typically distributed and are virtually always identical in all respects to those sold in retail stores, including a visible UPC code, except that they are defaced in some way (e.g., by punching a hole in the jewel case) to prevent the CDs from being sold or returned to retail or wholesale locations.
- 6. RLG occasionally distributes promotional product in electronic form (e.g., MP3 files distributed via e-mail) to terrestrial radio stations <u>only</u>. However, such distributions are reserved either for emergency situations (e.g., where an individual radio station did not receive the CD-PRO that was previously shipped to it) or, on rare occasions, for situations where RLG wishes to provide preview copies of a particular single to a handful (i.e., less than fifty) of radio stations in important markets.

- 7. In virtually all instances where RLG distributes promotional product in electronic form, RLG follows up such distribution with a subsequent distribution of a CD-PRO version of the single and, usually, with a copy of the full retail album. The CD-PRO is usually delivered to the recipient within 2 weeks following delivery of the electronic version of the recording.
- 8. RLG occasionally distributes promotional product in CD-R format but only to terrestrial radio stations. This is virtually always done in order to get a single into the hands of station personnel faster than would be possible using a CD-PRO, which must be sent to an outside plant to be manufactured just like an ordinary retail CD. CD-Rs are also virtually always sent when one or more radio stations request a "remix" of a single already distributed in CD-PRO. In virtually all cases, CD-Rs include the name of the recording artist, sound recording title, marketing label, and label logo. In virtually all instances where a single is first distributed on a CD-R, RLG follows up within 2 weeks with a CD-PRO version of that single and, in most cases, with a copy of the full retail album.
- 9. RLG distributes promotional product to terrestrial radio stations and the services mentioned above with the full intention that it will receive public performance royalties from each such recipient of its promotional product for any digital audio transmissions of the sound recordings made by the recipient. Merely because RLG provides a benefit to radio stations or other services does not mean that it foregoes its right to be paid for the exploitation of its sound recordings.
- 10. Although RLG provides radio stations and other services with promotional product, it has no control over which recordings the station or service actually plays. Therefore, in order to be paid for the public performance of its sound recordings by digital audio transmission, the station or service must identify with specificity the particular sound recordings they perform.

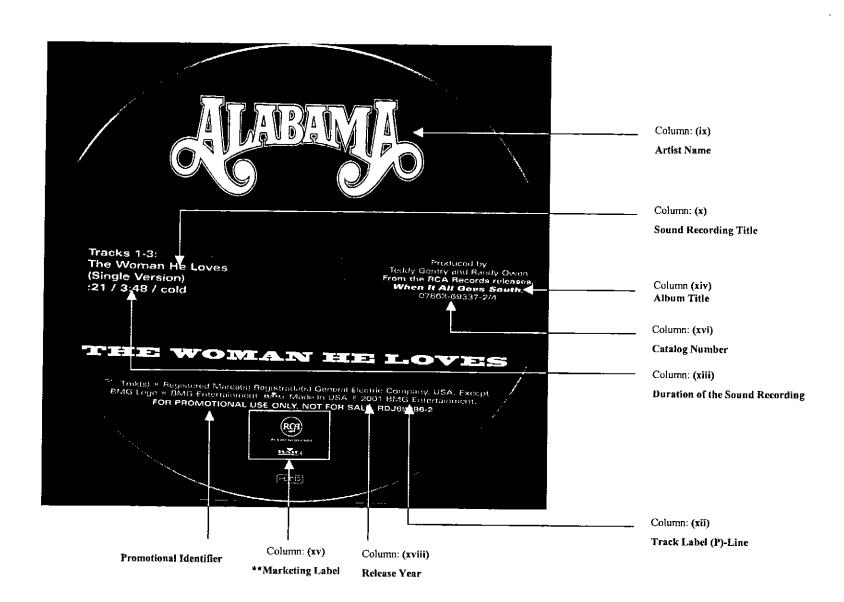
11. I have attached to this declaration the following examples of RLG's promotional releases: one or more CD-PROs; and one or more promotional compilations distributed by CDX.

I declare under penalty of perjury that the foregoing is true and correct. Executed this April 22, 2002 at Nashville, Tennessee.

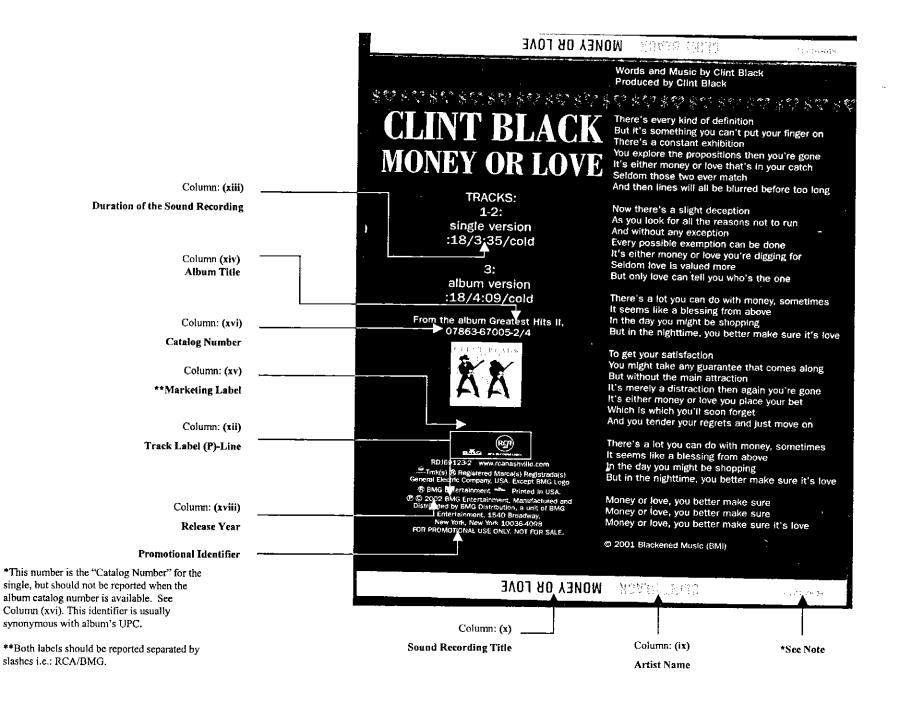
HEATHER MCBEE



**Both labels should be reported separated by slashes i.e.: BMG/RCA.

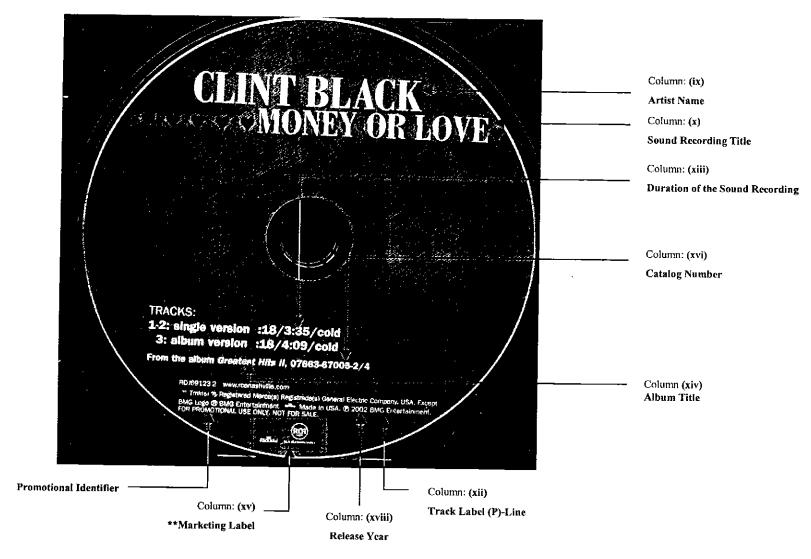


^{**}Both labels should be reported separated by slashes i.e.: RCA/BMG.

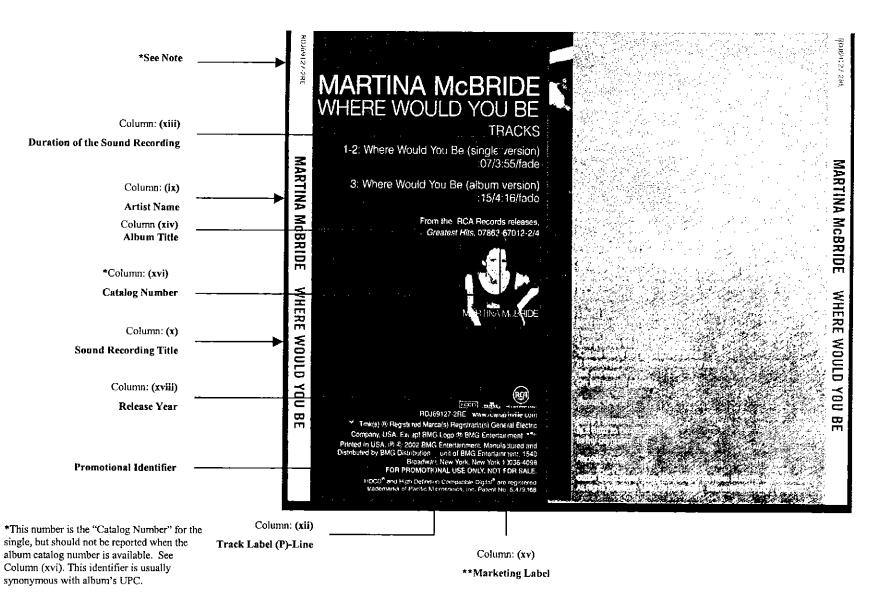


CD PRO Single

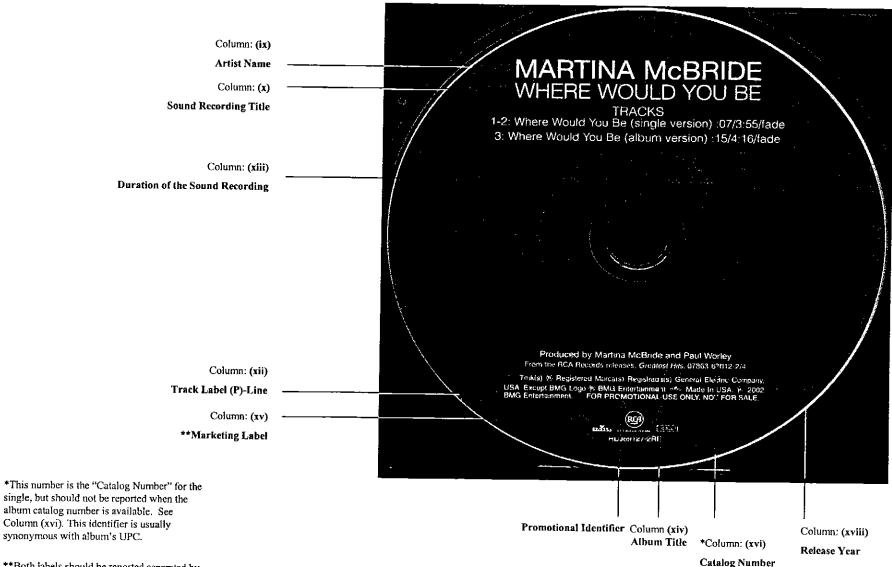
B-8 Attachment 2b



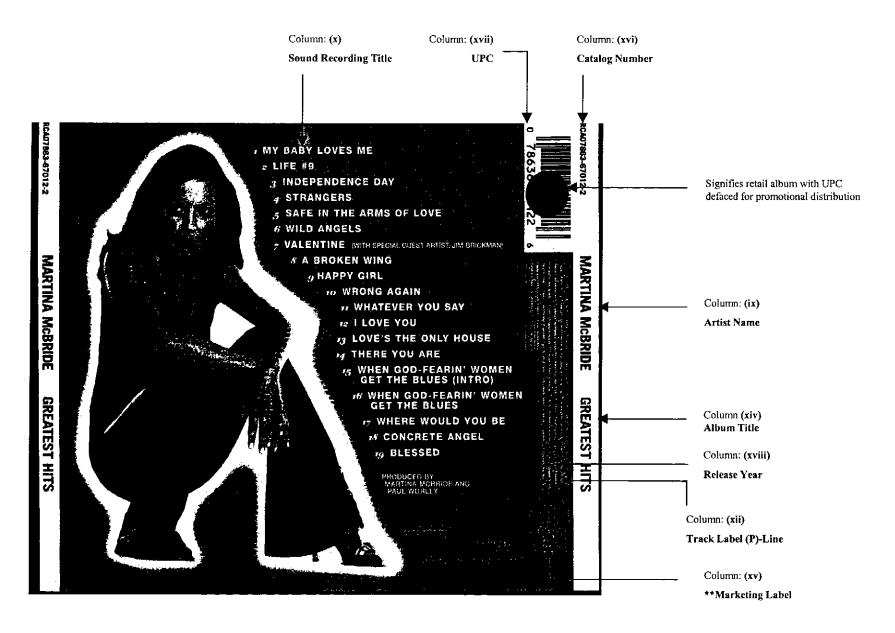
^{**}Both labels should be reported separated by slashes i.e.: RCA/BMG.



**Both labels should be reported separated by slashes i.e.: RCA/BMG.



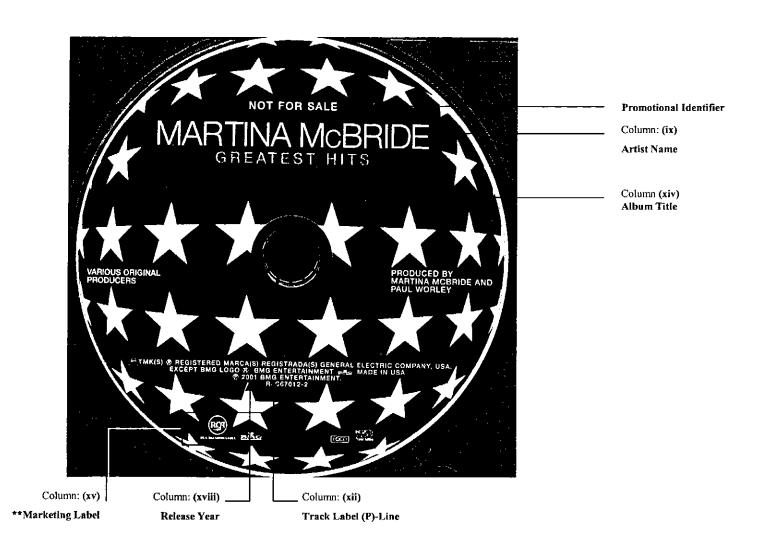
^{**}Both labels should be reported separated by slashes i.e.: RCA/BMG.



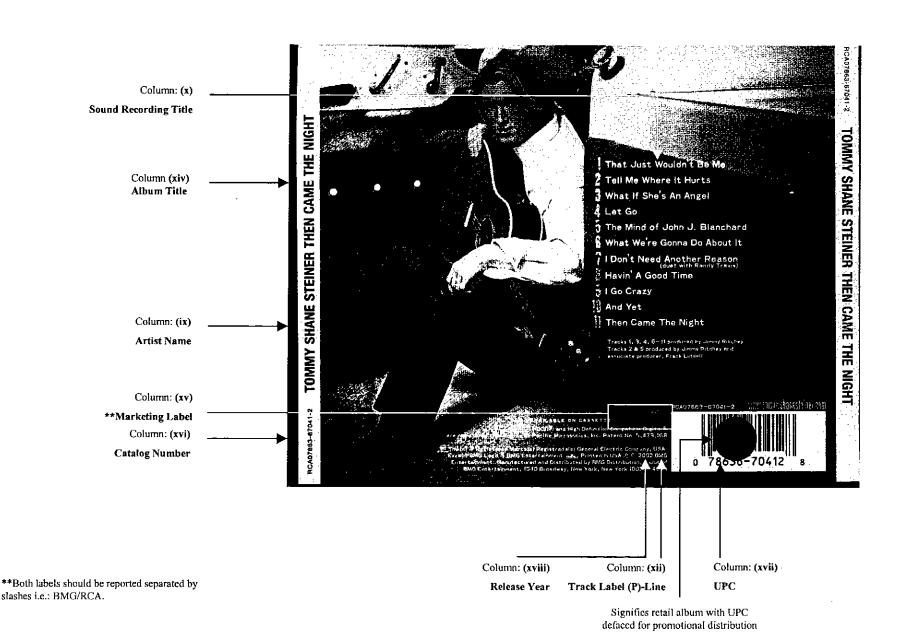
^{**}Both labels should be reported separated by slashes i.e.: RCA/BMG.

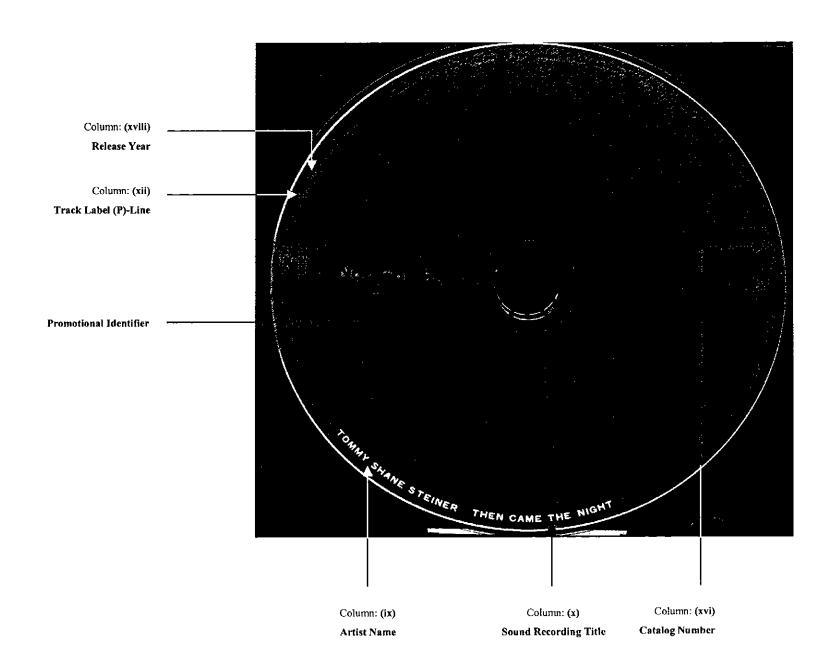
Promotional Retail Album

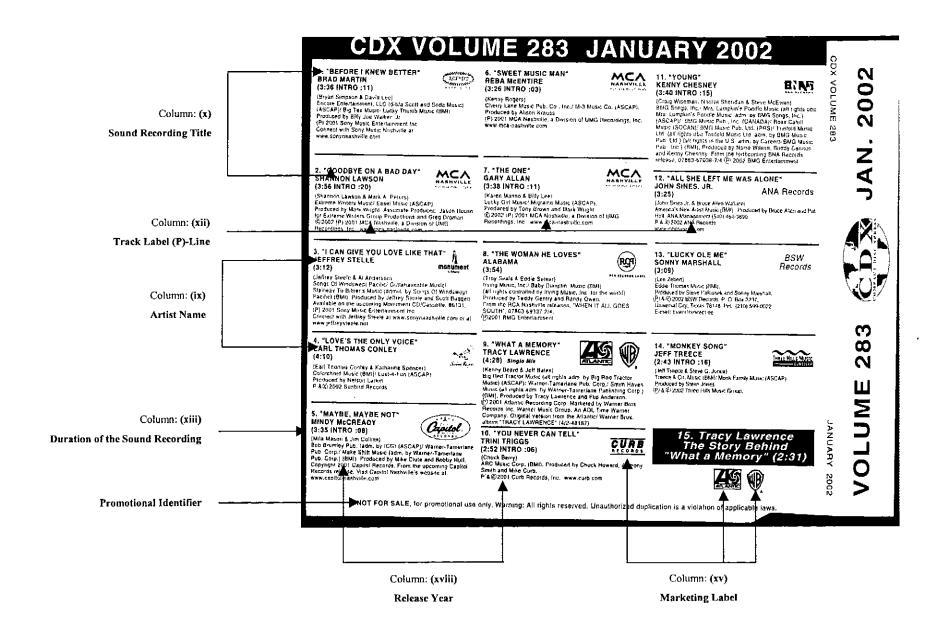
B-8 Attachment 4b



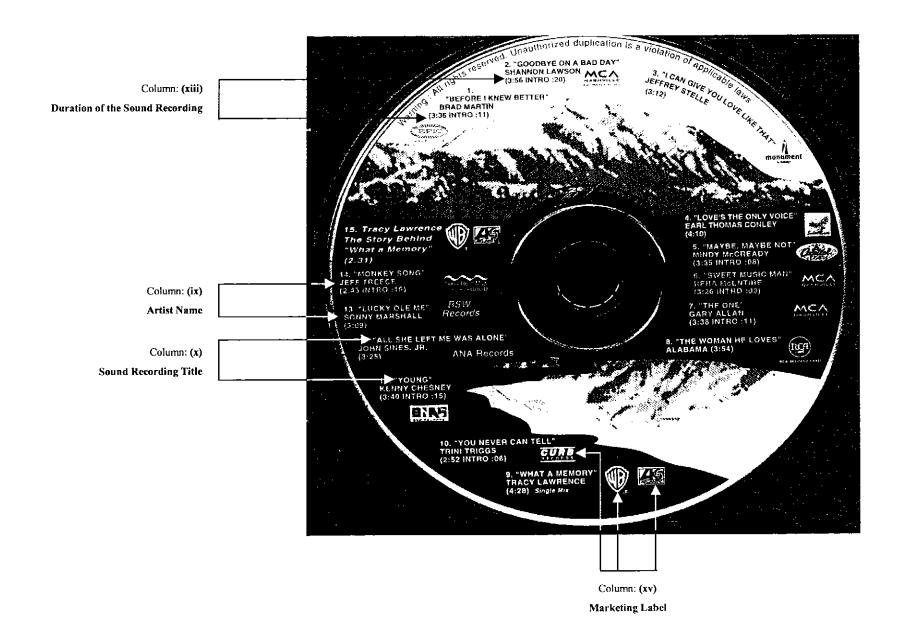
**Both labels should be reported separated by slashes i.e.: BMG/RCA.

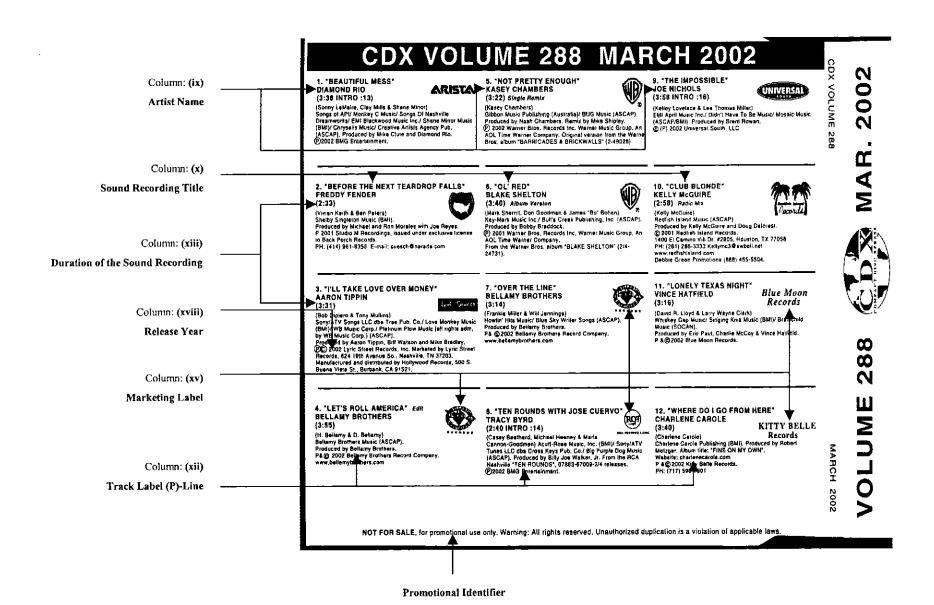




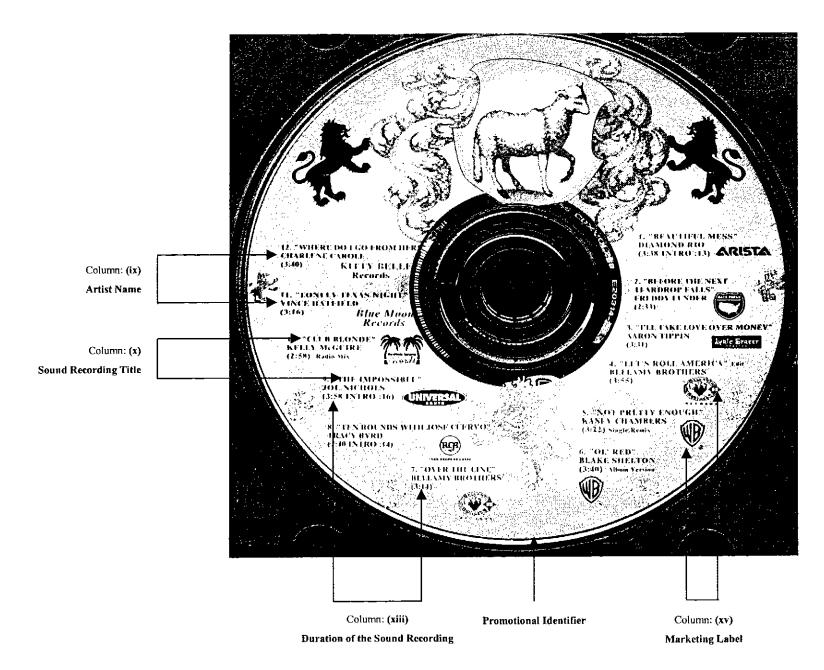


B-8 Attachment 6b



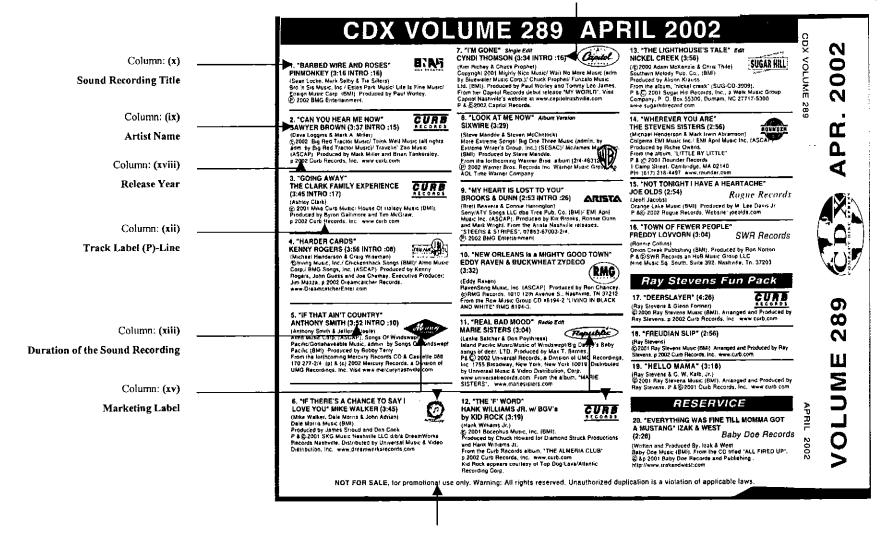


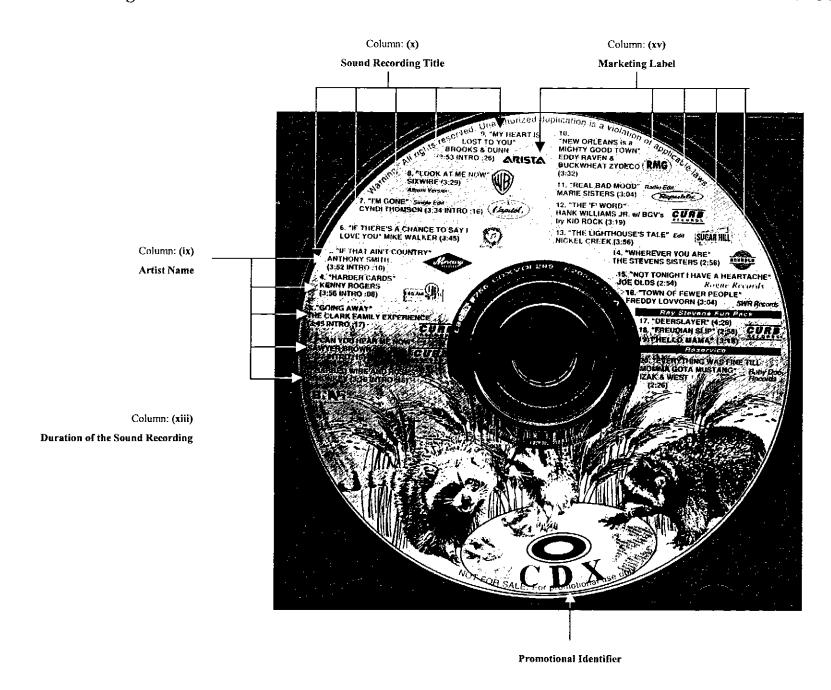
B-8 Attachment 7b

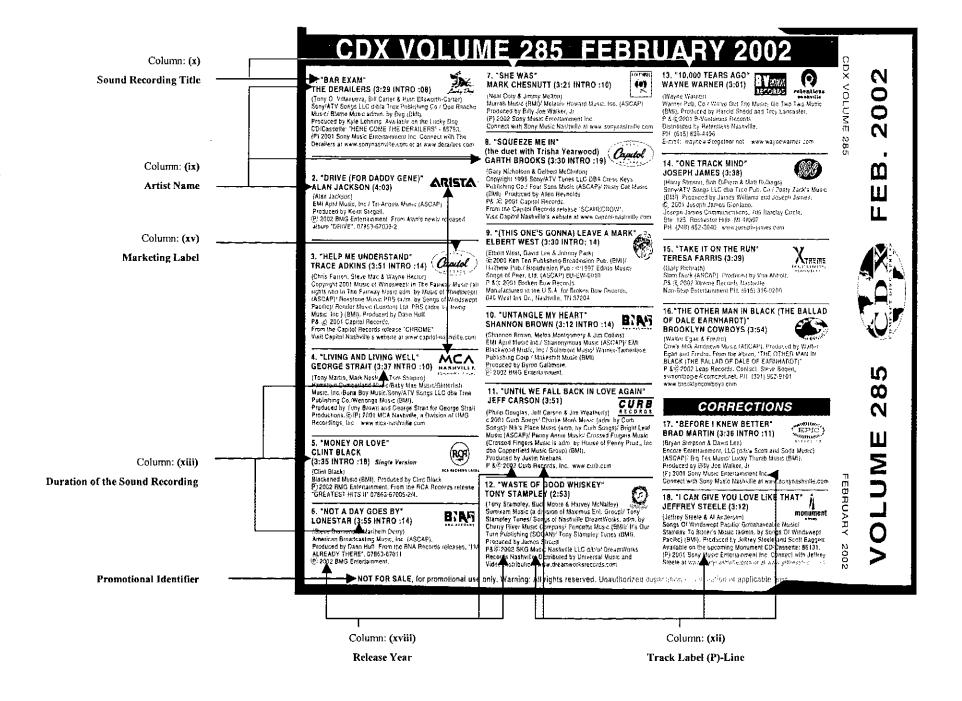


Column: (xiii)

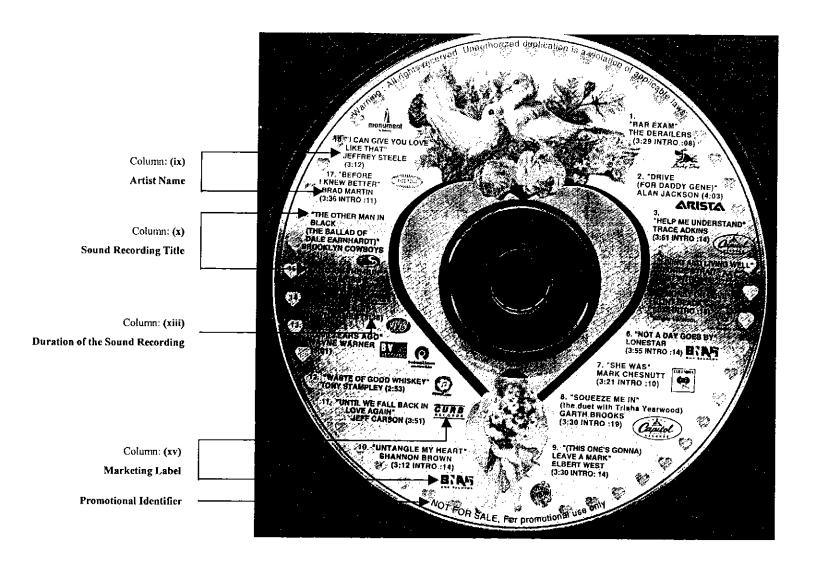
Duration of the Sound Recording







B-8 Attachment 9b



Before the UNITED STATES COPYRIGHT OFFICE LIBRARY OF CONGRESS Washington, D.C.

In the Matter of:	ý	
NOTICE AND RECORDKEEPING FOR)	Docket No. RM 2002-1A
USE OF SOUND RECORDINGS UNDER)	200
STATUTORY LICENSE)	
)	

DECLARATION OF MARINA SCARLATA

I, MARINA SCARLATA, declare

- 1. I am the Vice President of Production at MCA Records. In this capacity, I am responsible for all promotional manufacturing and distribution for MCA Records. I am generally familiar with MCA Records promotional practices and have personal knowledge of all of the following facts.
- 2. I understand that certain parties to the above-referenced rulemaking have alleged that promotional product provided by record labels to terrestrial radio stations and various digital audio transmission services lacks certain data that is necessary to ensure proper distribution of statutory performance royalties. The purpose of this statement is to describe for the Copyright Office the various kinds of promotional product the MCA Records provides and the types of data typically provided with each kind of promotional product. In particular, this statement describes MCA Records practice of following up newer forms of distribution (e.g., CD-Rs and MP3 files) with fully labeled versions of the same recordings.
- 3. MCA Records regularly provides promotional product to terrestrial radio stations. MCA Records also provides promotional product to a limited number of socalled digital audio services, but such product is sometimes limited to CD singles

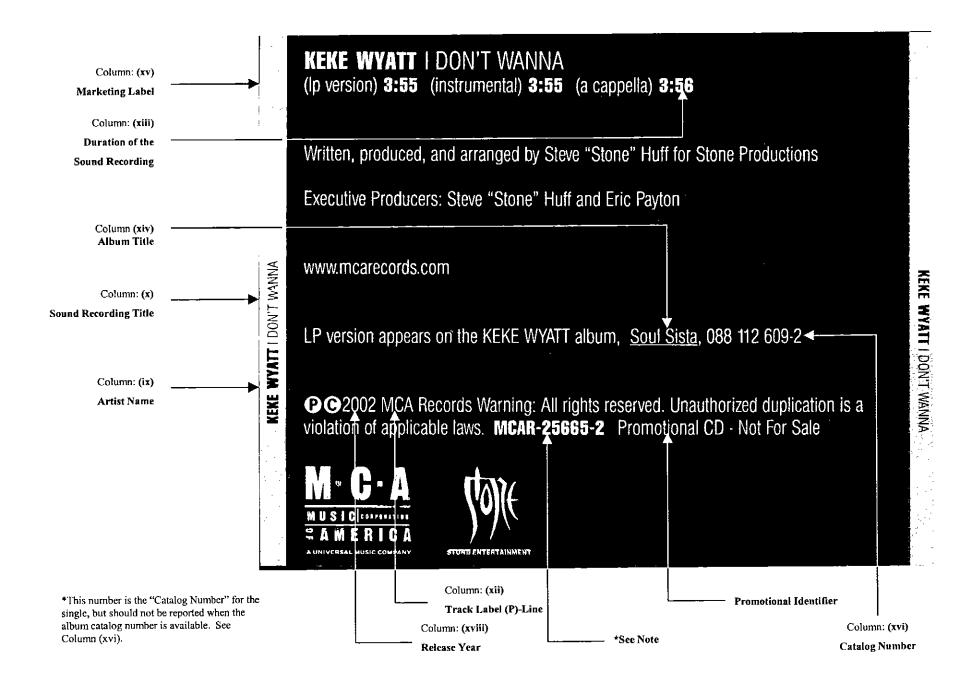
accompanied by artwork and label copy (known in the trade as a "CD-PRO"). Promotional product is not sent to all radio stations and services with which MCA Records maintains a relationship. Rather, MCA Records uses various criteria (e.g., station/service format, audience demographics, market size) to select particular radio stations and/or other services to receive each individual promotional single.

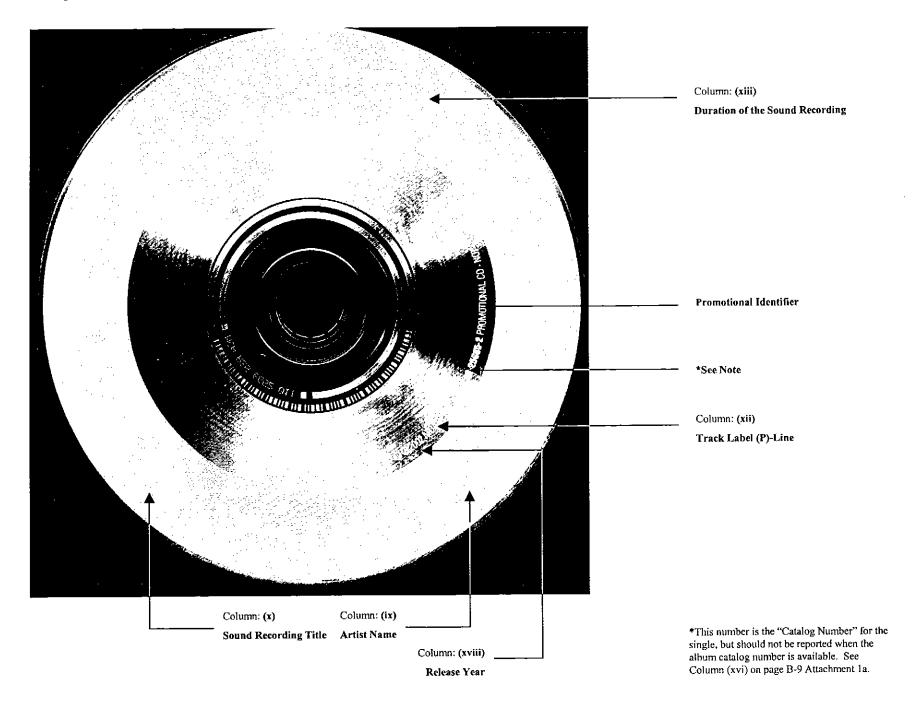
- 4. In the majority of cases, MCA Records distributes its promotional product in the form of a CD-PRO. Virtually all CD-PROs distributed by MCA Records include the following data elements: featured recording artist; sound recording title; marketing label; track label (P)-line; duration, retail album title and release year (even if the release year is not included in the label copy, in most cases it can be deduced from the date the CD-PRO is received). Approximately ninety percent (90%) of the CD-PROs distributed by MCA Records include the ISRC code. Because CD-PROs are not intended for retail sale, they virtually always do not include the same catalog number assigned to the retail album, although they do virtually always include a unique catalog number assigned to the particular single; CD-PROs may or may not include a UPC code.
- 5. In virtually all cases, MCA Records follows up a distribution of a CD-PRO single with a subsequent distribution of the actual retail album. Such albums are typically distributed eight (8) weeks after the CD-PRO and are virtually always identical in all respects to those sold in retail stores, including a visible UPC code, except that they are defaced in some way (e.g., by punching a hole in the jewel case) to prevent the CDs from being sold or returned to retail [or wholesale] locations.
- 6. MCA Records rarely distributes promotional product in electronic form (e.g., MP3 files distributed via e-mail) to terrestrial radio stations only. However, such distributions are reserved either for emergency situations (e.g., where an individual radio station did not receive the CD-PRO that was previously shipped to it) or, on rare occasions, for situations where MCA Records wishes to provide preview copies of a particular single to a handful (i.e., less than fifty) of radio stations in important markets.

- 7. In many cases, recordings that are electronically distributed include the name of the recording artist, sound recording title, duration and release year. Moreover, in the majority of instances where MCA Records distributes promotional product in electronic form, MCA Records follows up such distribution with a subsequent distribution of a CD-PRO version of the single and, usually, with a copy of the full retail album. The CD-PRO is usually delivered to the recipient within five (5) days following delivery of the electronic version of the recording.
- 8. MCA Records occasionally distributes promotional product in CD-R format but only to terrestrial radio stations. This is sometimes done in order to get a single into the hands of station personnel faster than would be possible using a CD-PRO, which must be sent to an outside plant to be manufactured just like an ordinary retail CD. CD-Rs are also frequently sent when one or more radio stations request a "remix" of a single already distributed in CD-PRO. In some cases, CD-Rs include the name of the recording artist, sound recording title, duration and release year. In many instances where a single is first distributed on a CD-R, MCA Records follows up within two (2) weeks with a CD-PRO version of that single and, frequently, with a copy of the full retail album.
- 9. MCA Records distributes promotional product to terrestrial radio stations and the services mentioned above with the full intention that it will receive public performance royalties from each such recipient of its promotional product for any digital audio transmissions of the sound recordings made by the recipient. Merely because MCA Records provides a free benefit to radio stations or other services does not mean that it foregoes its right to be paid for the exploitation of its sound recordings.
- 10. Although MCA Records provides radio stations and other services with promotional product, it has no control over which recordings the station or service actually plays. Therefore, in order to be paid for the public performance of its sound recordings by digital audio transmission, the station or service must identify with specificity the particular sound recordings they perform.

11. I have attached to this decl promotional releases: one CD-PRO.	aration the following example of MCA Records
I declare under penalty of perje	ury that the foregoing is true and correct. Executed
this April <u>/ 8</u> 2002 at	Los Angeles, California.
	MARINA SCARLATA.

.





Before the UNITED STATES COPYRIGHT OFFICE LIBRARY OF CONGRESS Washington, D.C.

)	
In the Matter of:)	
)	
NOTICE AND RECORDKEEPING FOR)	Docket No. RM 2002-1A
USE OF SOUND RECORDINGS UNDER)	
STATUTORY LICENSE)	
)	

DECLARATION OF RICK WIETSMA

I, Rick Wietsma, declare

- 1. I am the Executive Vice President and Co-Chief Operating Officer of WEA Inc. In this capacity, I am responsible for the management of the manufacturing and packaging of Warner Music Group recordings, including promotional recordings. I am generally familiar with the promotional practices of Atlantic Recording Corporation, Elektra Entertainment Group, and Warner Bros. Records Inc. (together, the "WMG Labels") and have personal knowledge of all of the following facts.
- 2. I understand that certain parties to the above-referenced rulemaking have alleged that promotional product provided by record labels to terrestrial radio stations and various digital audio transmission services lacks certain data that is necessary to ensure proper distribution of statutory performance royalties. The purpose of this statement is to describe for the Copyright Office the various kinds of promotional product the WMG Labels provide and the types of data typically provided with each kind of promotional product.
- 3. The WMG Labels regularly provide promotional product to terrestrial radio stations. The WMG Labels also provide promotional product to a limited number of so-called digital audio services, but such product is generally limited to CD singles

accompanied by artwork and label copy (known in the trade as a "CD-PRO").

Promotional product is not sent to all radio stations and services with which the WMG Labels maintain a relationship. Rather, the WMG Labels use various criteria (e.g., station/service format, audience demographics, market size) to select particular radio stations and/or other services to receive each individual promotional single.

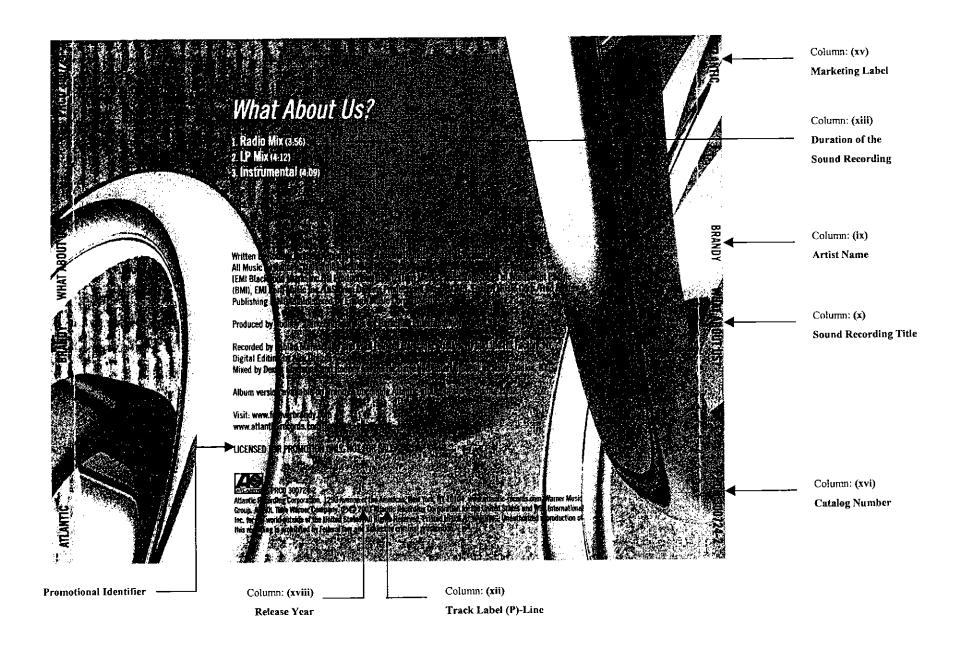
- 4. In the majority of cases, the WMG Labels distribute promotional product in the form of CD-PROs. Most CD-PROs distributed by the WMG Labels include the following data elements: featured recording artist; sound recording title; marketing label; track label (P)-line; duration; retail album title; and release year (even if the release year is not included in the label copy, in most cases it can be deduced from the date the CD-PRO is received). Approximately one hundred percent (100%) of the CD-PROs distributed by the WMG Labels include the ISRC code. Because CD-PROs are not intended for retail sale, they virtually always do not include the same catalog number assigned to the retail album, although they do virtually always include a unique catalog number assigned to the particular single; CD-PROs may or may not include a UPC code.
- 5. In the majority of cases, the WMG Labels follow up a distribution of a CD-PRO single with a subsequent distribution of the actual retail album. Such albums are typically distributed within one month after the CD-PRO and are usually identical in all respects to those sold in retail stores, including a visible UPC code, except that they are defaced in some way (e.g., by punching a hole in the jewel case) to prevent the CDs from being sold or returned to retail or wholesale locations.
- 6. The WMG Labels do not currently distribute any promotional product in electronic form (e.g., MP3 files distributed via e-mail).
- 7. The WMG Labels do not currently distribute any material number of promotional products in CD-R format.
- 8. The WMG Labels distribute promotional product to terrestrial radio stations and the services mentioned above with the full intention that it will receive public

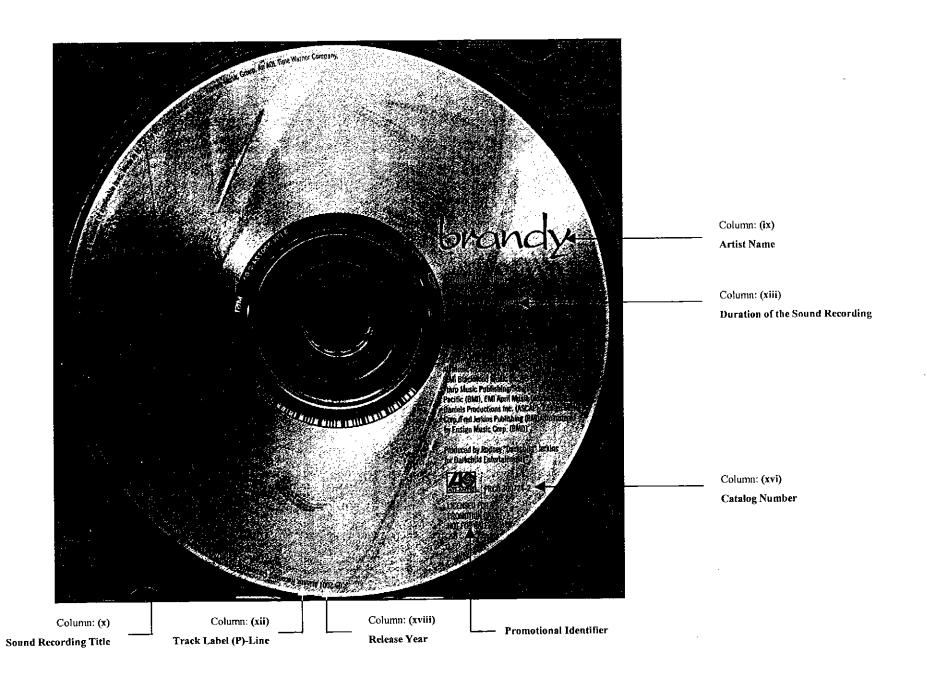
performance royalties from each such recipient of its promotional product for any digital audio transmissions of the sound recordings made by the recipient. Merely because the WMG Labels provide a benefit to radio stations or other services does not mean that they forego their right to be paid for the exploitation of its sound recordings.

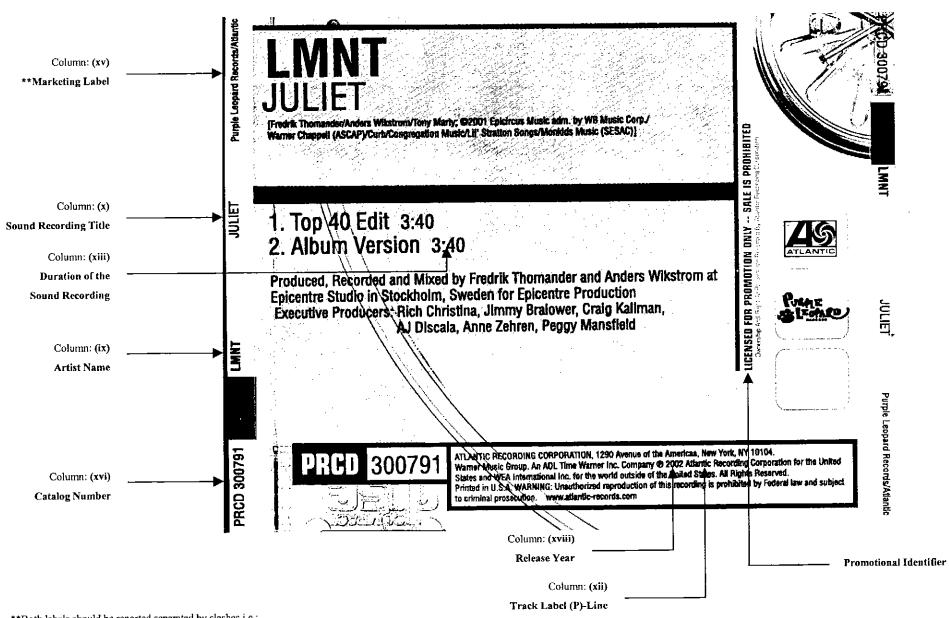
- 9. Although the WMG Labels provide radio stations and other services with promotional product, they have no control over which recordings the station or service actually plays. Therefore, in order to be paid for the public performance of their sound recordings by digital audio transmission, the station or service must identify with specificity the particular sound recordings they perform.
- 10. I have attached to this declaration the following examples of the WMG Labels' promotional releases: three CD-PROs; and three retail albums defaced for promotional distribution.

I declare under penalty of perjury that the foregoing is true and correct. Executed this April 22, 2002 at New York, New York.

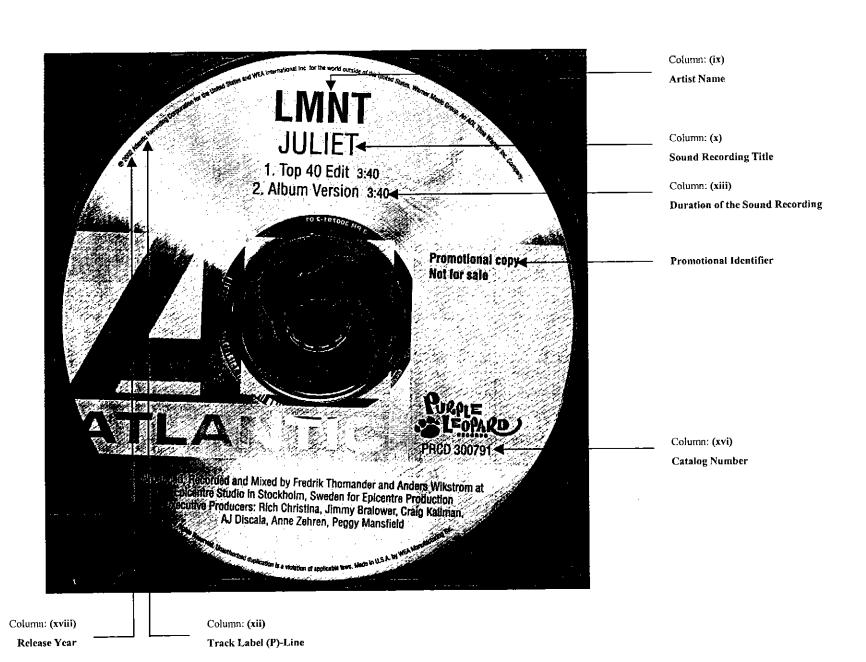
Rick Wietsma

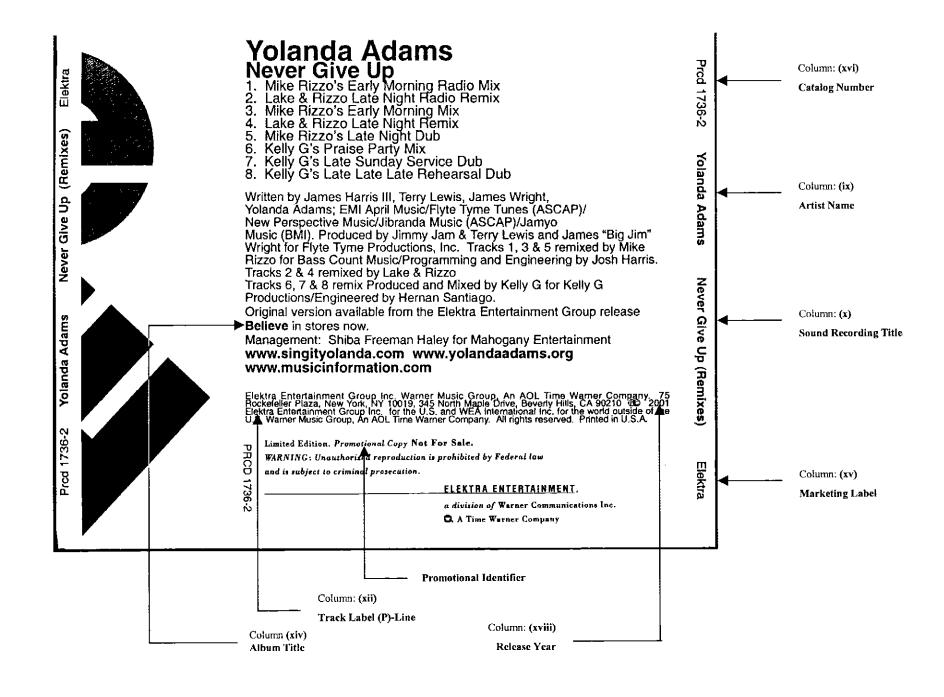


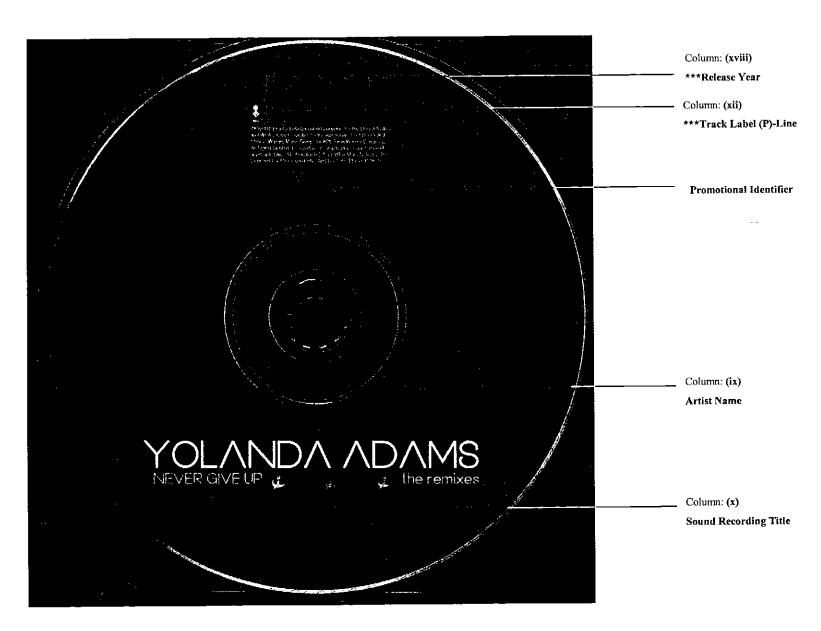




^{**}Both labels should be reported separated by slashes i.e.: PURPLE LEOPARD RECORDS/ATLANTIC.

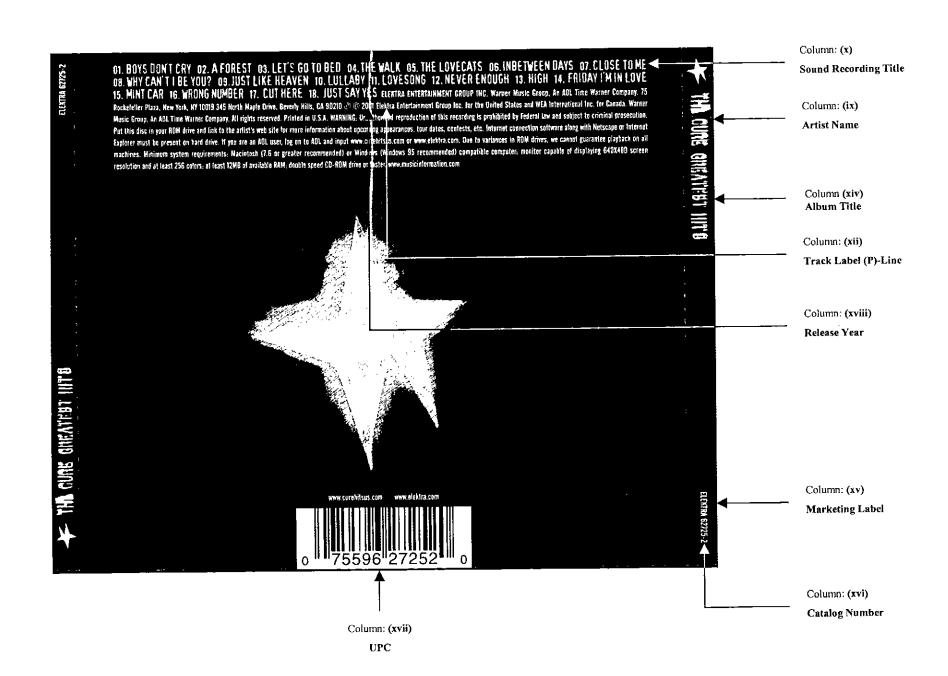


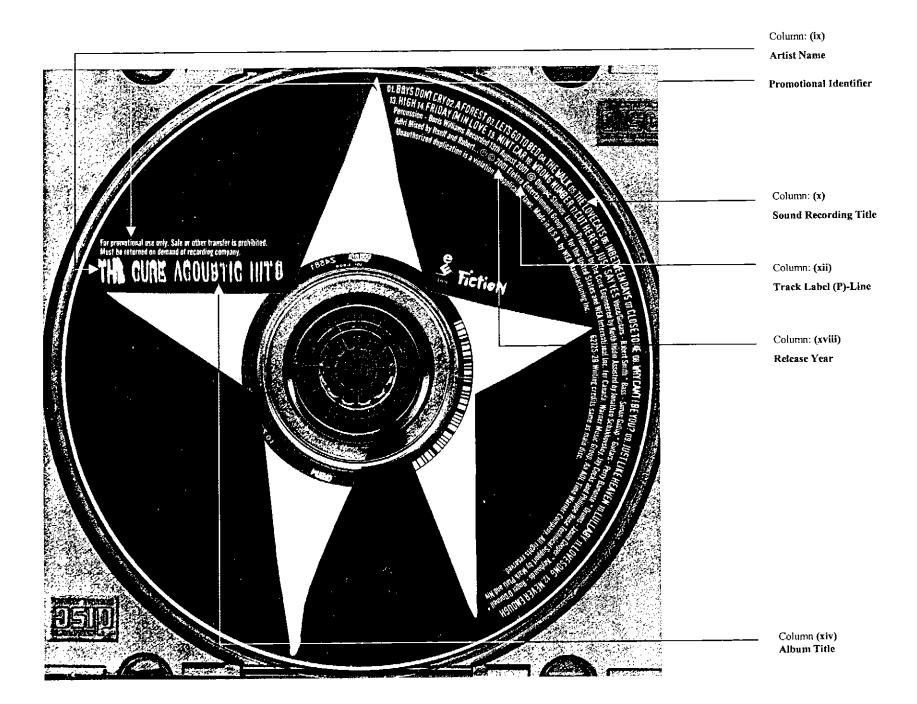


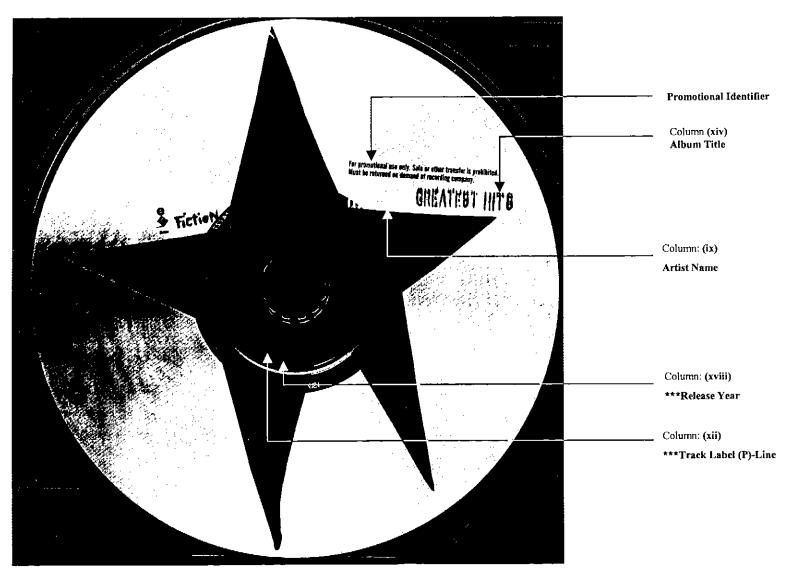


^{***}Legible on physical product but does not reproduce with clarity on copy.





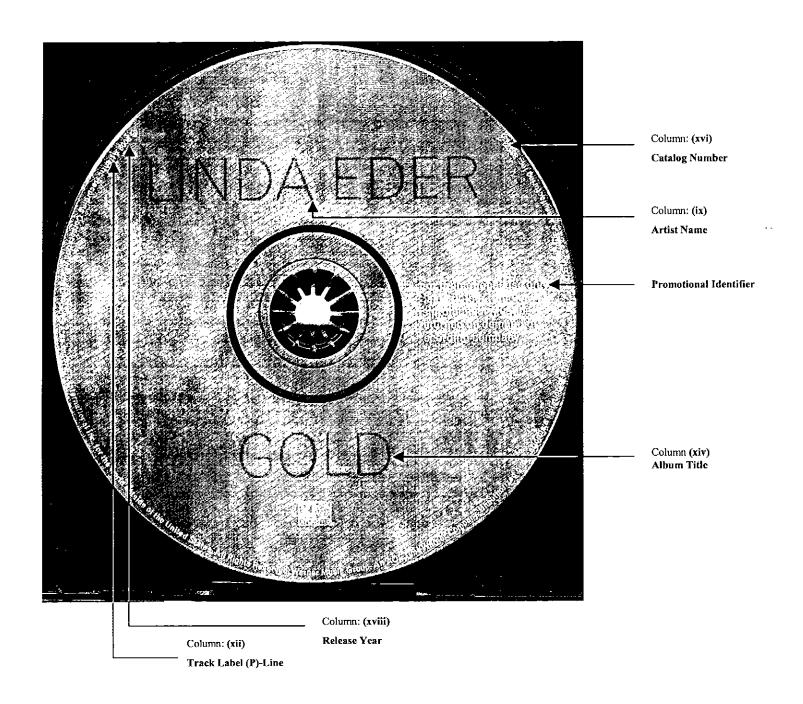


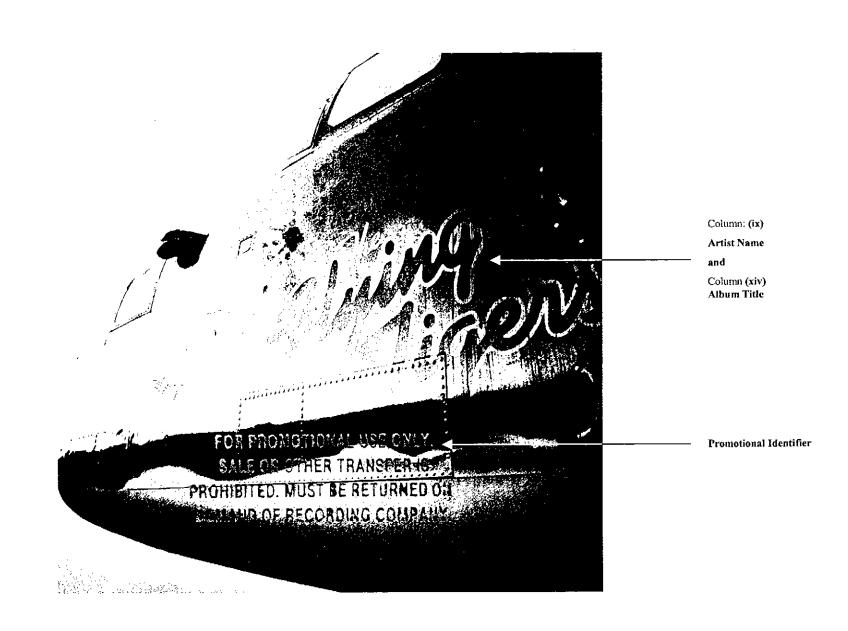


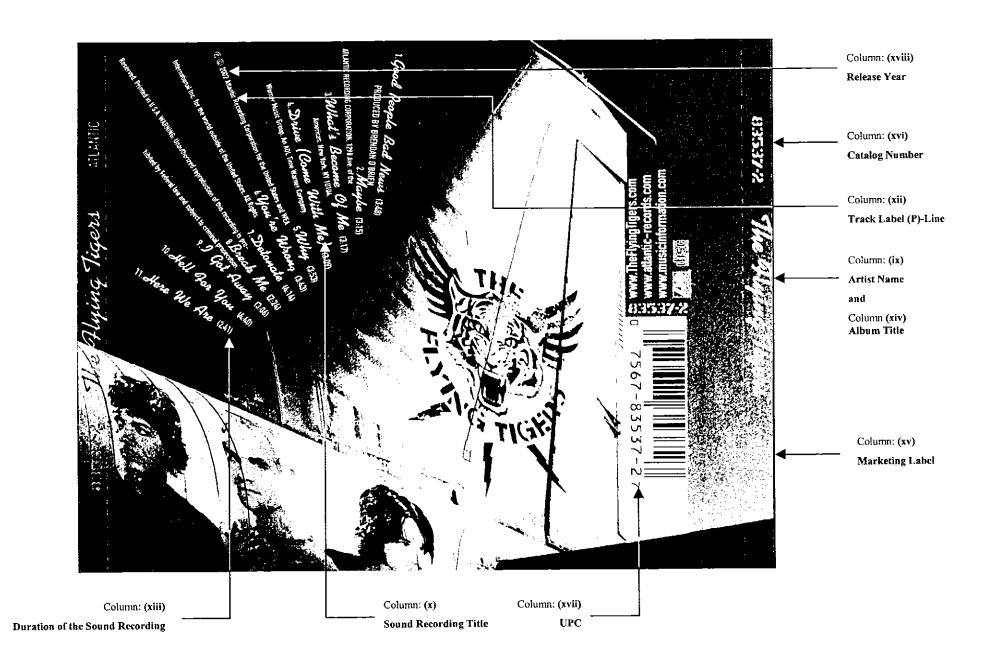
^{***}Legible on physical product but does not reproduce with clarity on copy.

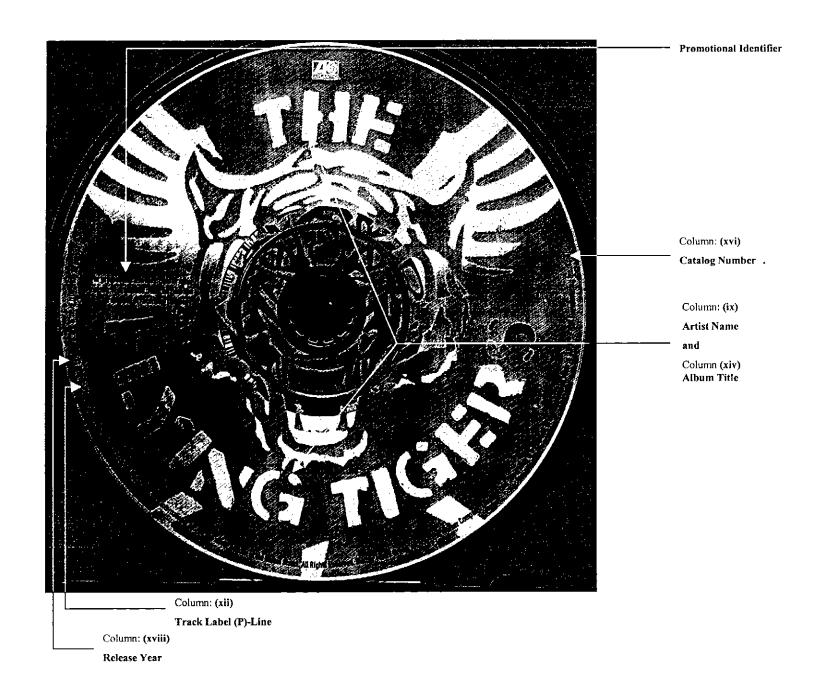


Promotional Retail Album B-10 Attachment 5b

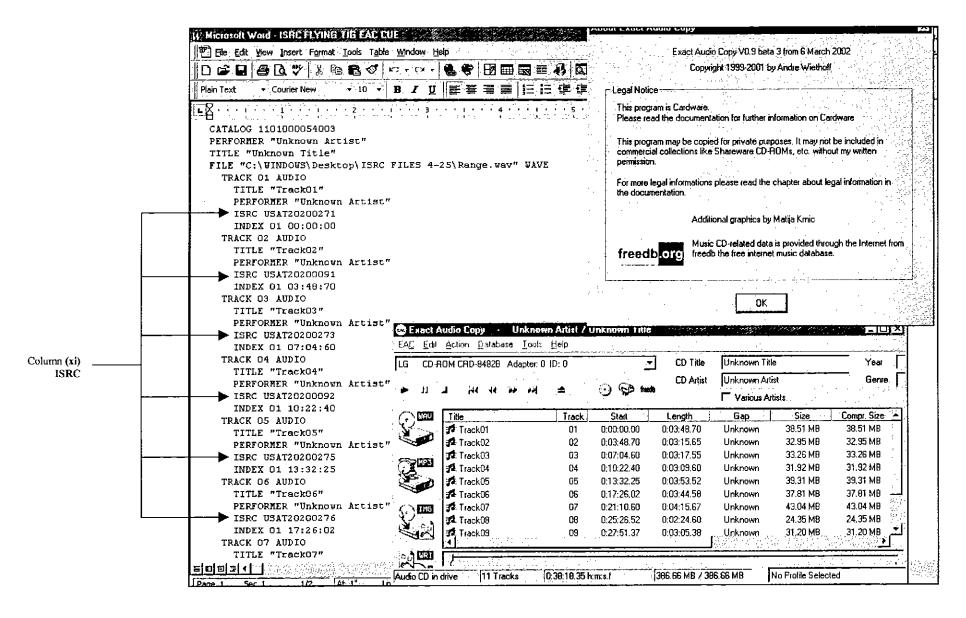






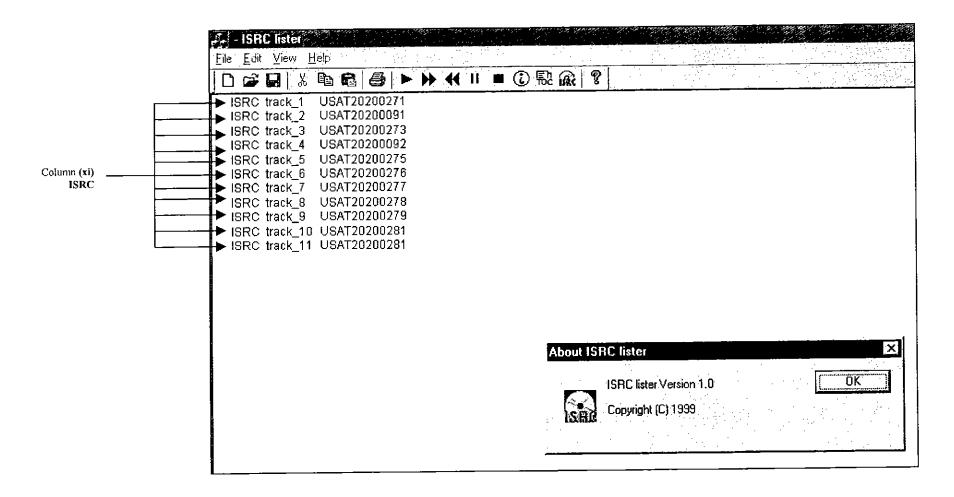


Exact Audio Copy (EAC) ISRC Reader Software Printout For The Flying Tiger's Self-Titled Album



B-10 Attachment 6e

International Federation of the Phonographic Industry (IFPI) ISRC Reader Software Printout For The Flying Tiger's Self-Titled Album



Before the UNITED STATES COPYRIGHT OFFICE LIBRARY OF CONGRESS Washington, D.C.

)	
In the Matter of:)	
)	
NOTICE AND RECORDKEEPING FOR)	Docket No. RM 2002-1A
USE OF SOUND RECORDINGS UNDER)	
STATUTORY LICENSE)	
)	

DECLARATION OF BILL MACKY

I, Bill Macky, declare

- 1. I am the Vice President, National Promotion at MCA Nashville. In this capacity, I am responsible for all national radio promotion in for MCA Nashville. I am generally familiar with MCA Nashville's promotional practices and have personal knowledge of all of the following facts.
- 2. I understand that certain parties to the above-referenced rulemaking have alleged that promotional product provided by record labels to terrestrial radio stations and various digital audio transmission services lacks certain data that is necessary to ensure proper distribution of statutory performance royalties. The purpose of this statement is to describe for the Copyright Office the various kinds of promotional product that MCA Nashville provides and the types of data typically provided with each kind of promotional product. In particular, this statement describes MCA Nashville's practice of following up newer forms of distribution (e.g., CD-Rs) with fully labeled versions of the same recordings.
- 3. MCA Nashville regularly provides promotional product to terrestrial radio stations. MCA Nashville also provides promotional product to a limited number of so-called digital audio services, but such product is virtually always limited to CD singles

accompanied by label copy (known in the trade as a "CD-PRO"). Promotional product is sent to a majority of all radio stations and services with which MCA Nashville maintains a relationship. Additionally, MCA Nashville uses a service called CDX, which compiles a monthly or bi-monthly CD-Pro embodying promotional singles from numerous record companies. CDX in turn services the majority of all radio stations in the "country" format. The Master sent by MCA Nashville to CDX always includes an ISRC code and the following data elements: featured recording artist, sound recording title, marketing label and track duration.

- 4. In virtually all cases, MCA Nashville distributes its promotional product in the form of a CD-PRO. Virtually all CD-PROs distributed by MCA Nashville include the following data elements: featured recording artist; sound recording title; marketing label; track label (P)-line; duration, retail album title and release year (even if the release year is not included in the label copy, in most cases it can be deduced from the date the CD-PRO is received). Approximately one hundred percent (100%) of the CD-PROs distributed by MCA Nashville include the ISRC code. Because CD-PROs are not intended for retail sale, they virtually never include the same catalog number assigned to the retail album, although they do virtually always include a unique catalog number assigned to the particular single; CD-PROs do not include a UPC code.
- 5. In many cases, MCA Nashville follows up a distribution of a CD-PRO single with a subsequent distribution of the actual retail album. Such albums are typically distributed the same week as the actual United States retail street date of the retail album, and are virtually always identical in all respects to those sold in retail stores, including a visible UPC code, except that they are defaced in some way (e.g., by punching a hole in the jewel case) to prevent the CDs from being sold or returned to retail locations.

 MCA Nashville virtually never distributes promotional product in electronic form, but on rare occasions may distribute a promotional single through a B2B closed circuit service to terrestrial radio stations only. However, such distributions are reserved for emergency

situations (e.g., in order to get a single into the hands of station personnel faster than would be possible using a CD-PRO, which must be sent out to an outside plant to be manufactured just like an ordinary retail CD).

- 6. In virtually all cases, recordings that are electronically distributed include the name of the recording artist, sound recording title, marketing label, track label (P)-line, duration and release year. Moreover, in virtually all instances where MCA Nashville distributes promotional product in electronic form, MCA Nashville follows up such distribution with a subsequent distribution of a CD-PRO version of the single and, sometimes, with a copy of the full retail album. The CD-PRO is usually delivered to the recipient within one (1) week following delivery of the electronic version of the recording.
- 7. MCA Nashville occasionally distributes promotional product in CD-R format but only to terrestrial radio stations. CD-Rs are virtually always sent when one or more radio stations request a "remix" of a single already distributed in CD-PRO. Most CD-Rs include the name of the recording artist, sound recording title, marketing label, duration (most of the time) and release year.
- 8. MCA Nashville distributes promotional product to terrestrial radio stations and the services mentioned above with the full intention that it will receive public performance royalties from each such recipient of its promotional product for any digital audio transmissions of the sound recordings made by the recipient. Merely because MCA Nashville provides a free benefit to radio stations or other services does not mean that it foregoes its right to be paid for the exploitation of its sound recordings.
- 9. Although MCA Nashville provides radio stations and other services with promotional product, it has no control over which recordings the station or service actually plays. Therefore, in order to be paid for the public performance of its sound recordings by digital audio transmission, the station or service must identify with specificity the particular sound recordings they perform.

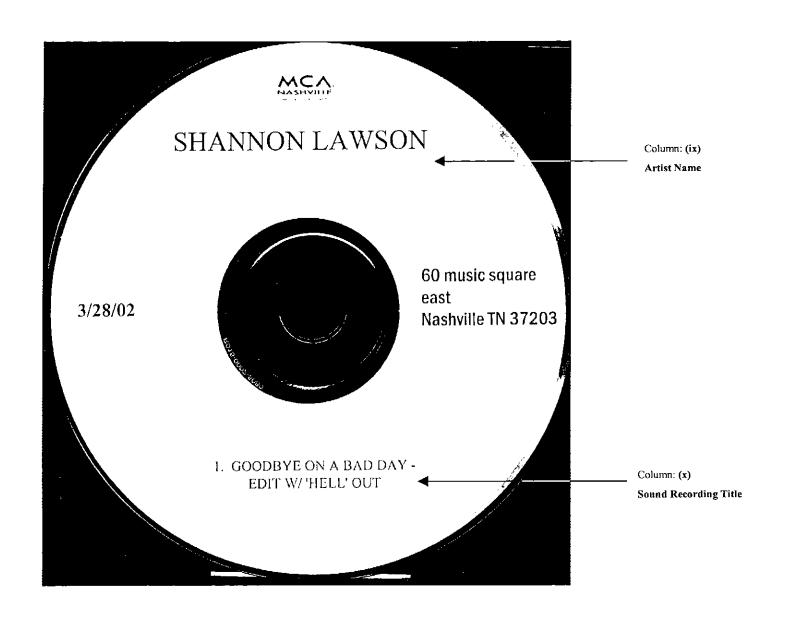
10. I have attached to this declaration the following examples of MCA

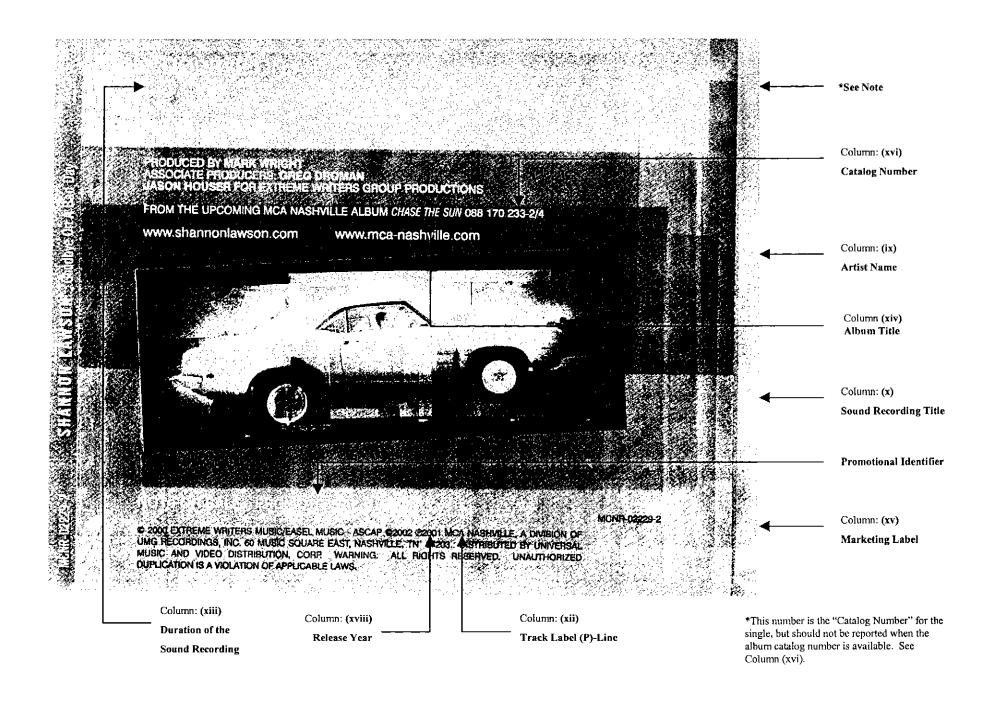
Nashville's promotional releases: one or more CD-Rs; one or more CD-PROs; and one or
more retail albums defaced for promotional distribution.

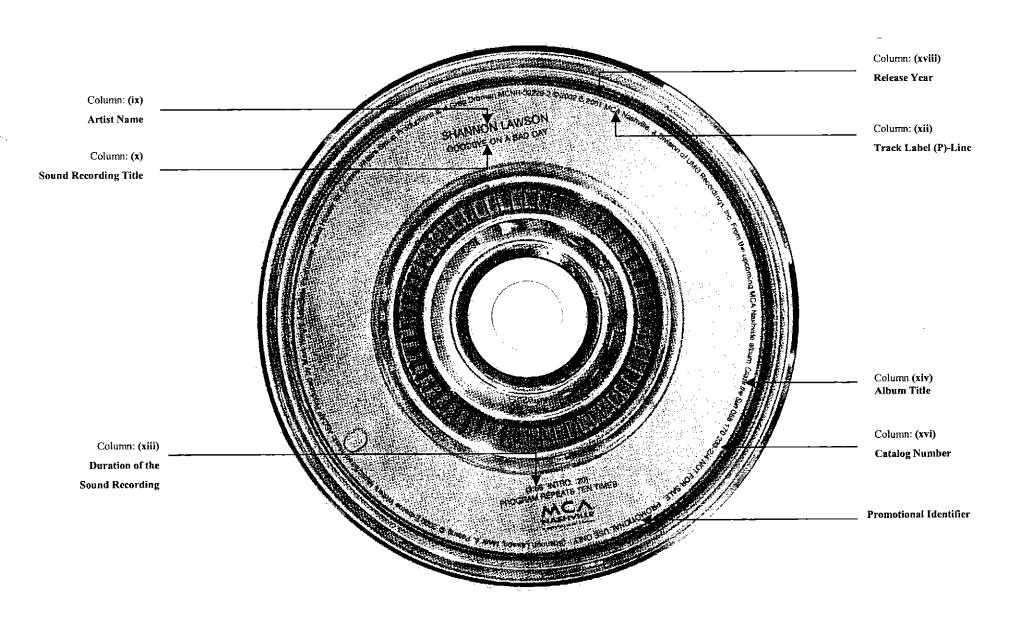
I declare under penalty of perjury that the foregoing is true and correct. Executed this April 22, 2002 at Nashville, Tennessee.

Bill Macky

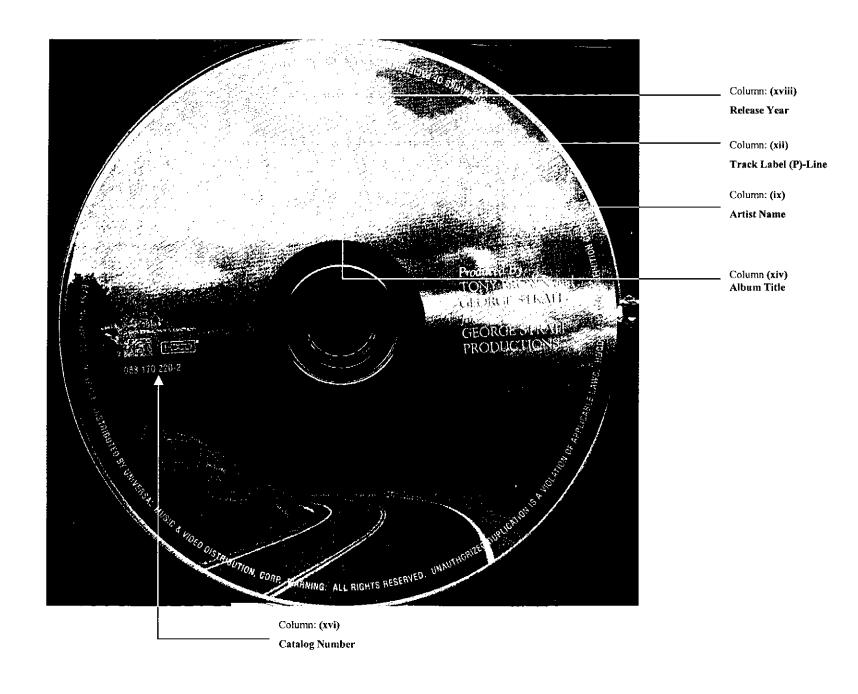
Bill Macky











Before the UNITED STATES COPYRIGHT OFFICE LIBRARY OF CONGRESS Washington, D.C.

In the Matter of:)	
NOTICE AND RECORDKEEPING FOR)	Docket No. RM 2002-1A
USE OF SOUND RECORDINGS UNDER)	Ducket No. Rivi 2002-1A
STATUTORY LICENSE	j	
)	

DECLARATION OF LESLIE JOSE ZIGEL

I, Leslie Jose Zigel, declare

- 1. I am the Vice President, Business & Legal Affairs, BMG U.S. Latin. In this capacity, I am responsible for oversight of all legal aspects of the record label including, but not limited to, negotiating and drafting all contracts, overseeing litigation matters, overseeing royalty and licensing matters. In addition, I am actively involved in devising promotion and marketing strategies for the major artists of BMG U.S. Latin. I am generally familiar with BMG U.S. Latin's promotional practices and have personal knowledge of all of the following facts.
- 2. I understand that certain parties to the above-referenced rulemaking have alleged that promotional product provided by record labels to terrestrial radio stations and various digital audio transmission services lacks certain data that is necessary to ensure proper distribution of statutory performance royalties. The purpose of this declaration is to describe for the Copyright Office the various kinds of promotional product the BMG U.S. Latin label provides and the types of data typically provided with each kind of promotional product. In particular, this statement describes BMG U.S. Latin's practice of following up newer forms of distribution (e.g., CD-Rs) with fully labeled versions of the same recordings.

- 3. BMG U.S. Latin regularly provides promotional product to terrestrial radio stations. BMG U.S. Latin also provides promotional product to a limited number of so-called digital audio services. Promotional product is not sent to all radio stations and services with which BMG U.S. Latin maintains a relationship. Rather, BMG U.S. Latin uses various criteria (e.g., station/service format, audience demographics, market size) to select particular radio stations and/or other services to receive each individual promotional single.
- 4. In virtually all cases, BMG U.S. Latin distributes its promotional product in the form of a CD single accompanied by artwork and label copy (known in the trade as a "CD-PRO"). Virtually all CD-PROs distributed by BMG U.S. LATIN include the following data elements: featured recording artist; sound recording title; marketing label; track label (P)-line; duration, retail album title and release year (even if the release year is not included in the label copy, in most cases it can be deduced from the date the CD-PRO is received). Approximately eighty-five percent (85%) of the CD-PROs distributed by BMG U.S. LATIN include the ISRC code. Because CD-PROs are not intended for retail sale, they rarely include the same catalog number assigned to the retail album, although they do virtually always include a unique catalog number assigned to the particular single; CD-PROs almost never include a UPC code.
- 5. In virtually all cases, BMG U.S. LATIN follows up a distribution of a CD-PRO single with a subsequent distribution of the actual retail album. Such albums are typically distributed six to eight weeks after the CD-PRO and are virtually always identical in all respects to those sold in retail stores, including a visible UPC code, except that they are defaced in some way (e.g., by punching a hole in the jewel case) to prevent the CDs from being sold or returned to retail or wholesale locations.
- 6. BMG U.S. LATIN does not currently distribute any promotional product in electronic form (e.g., MP3 files distributed via e-mail).

- 7. BMG U.S. LATIN occasionally distributes promotional product in CD-R format but only to terrestrial radio stations. This is virtually always done in order to get a single into the hands of station personnel faster than would be possible using a CD-PRO, which must be sent to an outside plant to be manufactured just like an ordinary retail CD. CD-Rs are also frequently sent when one or more radio stations request a "remix" of a single already distributed in CD-PRO. In virtually all cases, CD-Rs include the name of the recording artist, sound recording title, marketing label, duration and release year. In virtually all instances where a single is first distributed on a CD-R, BMG U.S. LATIN follows up within 2 weeks with a CD-PRO version of that single.
- 8. BMG U.S. LATIN distributes promotional product to terrestrial radio stations and the services mentioned above with the full intention that it will receive public performance royalties from each such recipient of its promotional product for any digital audio transmissions of the sound recordings made by the recipient. Merely because BMG U.S. LATIN provides a promotional benefit to radio stations or other services does not mean that it foregoes its right to be paid for the exploitation of its sound recordings.
- 9. Although BMG U.S. LATIN provides radio stations and other services with promotional product, it has no control over which recordings the station or service actually plays. Therefore, in order to be paid for the public performance of its sound recordings by digital audio transmission, the station or service must identify with specificity the particular sound recordings they perform.
- 10. I have attached to this declaration the following examples of BMG U.S. Latin's promotional releases: one or more CD-PROs; and one or more retail albums defaced for promotional distribution.

I declare under penalty of perjury that the foregoing is true and correct. Executed this April 24th, 2002 at Coral Gables, Florida.

Leslie Jose Zigel

FOR PROMOTIONAL USE ONLY

NOT FOR SALE

From the album

Sel. 7432187883-2

www.eliemusica.com

www.sopracontrariar.com.br

(C) & (P) 2001 BMG BRASIL LTDA

Distributed and manufactured in the

United States by BMG Distribution, a unit

of BMG Entertainment, 1540 Broadway,

New York, New York 10036. The BMG

logo is a trademark of BMG Music. Uther

Trademark(s) Registered (Marca(s) Registrada(s) as follows: (R) General

Electric Co., USA, Printed in the USA, All

duplication is a violation of applicable

Unauthorized

Alexandre Pires

U THE LEADING

3239-2RLDJ 🚤

rights reserved.

Usted se me Hevó la vida 4:32◀

(Esterano / Dunate Pavedal BRBM00100214 World Dave Music/ Sony ATV Publishing / PSG Ltd. (Pl. 2001-6MS Brasil

Produced by Rey-Near for Estelano Productions Group

USTEO SE ME LLEVO LA VIDA
Y EL ALMA ENTERA
Y SE HA GLAVADO AQUI
EN MIS HUESOS EL DOLOR.
CON ESTA ANGUSTIA Y ESTA PENA
USTEO, NO SABE, QUE SE SIENTE PERDER.
NO GADE QUE SE SIENTE CAER Y CAER.
EN UN ABISMO PROFUNDO Y SILI FE.

USTED SE ME LLEVO LA VIDA Y AQJI ME TIENE

COMO UNA ROLA QUE EL OCEANO GOLPEA QUE AHI ESTA, PERO NO SIENTE USTED, NO SADE LO IMPORTANTIL QUE FUE NO SADE QUE SU AUSENCIA FUE UN TRAGO DE HIEL

QUE SE HA QUEGABO CLAVADA EN MI PIEL

USTED NO SABE LO QUE ES EL AMOR
Y EL MIEDO QUE CAUSA LA DESOLACION
USTED NO SABE QUE DANO (LAUS)
COMO HA DESTROZADO A ESTE CORAZON
QUE TAN SOLO PALPIFABA
CON EL SONIDO DE SU YOZ
CON EL SONIDO DE SU YOZ

USTED SE ME LLEVO LA VIDA TODAS MIS GANAS Y ME HA DEJADO CONGELADA LA RAZON

Y VIVA LA DESESPITIANZA USTED, NO SABE QUE SE SIENTE PERDER NO SABE QUE SU ADIOS RIE MORIFIME DE SED QUE DESGARRO EN ESTE CUERPO SU SER USTEO NO SABE LO QUE ES EL AMOR Y EL MILDO QUE CAUSA LA DESOLACION USTED NO SABE QUE DAÑO CAUSO COMO HA DESTROZADO A ESTE CORAZON QUE TAN SOLO PALPHABA CON EL SONIDO DE SU VOZ CON EL SONIDO DE SU VOZ

USTED NO SABE DE VERGAD COMO SE AMA
USTED NO SABE COMO HE SUFFIDO YO
USTED ES FRIA Y SU MALDAD MC DICLA EL ALMA
USTED LLENO MI VIDA TODA DE DOLDR

PORQUE NO SABE LO QUE ES EL AMOR UL EL MIEGO QUE CAUSA LA DESOLACION USRIO NO SABE QUE DANO CAUSO COMO HA DESTROZADO A ESTE CORAZON

DSTED NO SABE LO QUE LA EL AMOR NI EL MIEDO QUE CAUSA LA DESTILACIÓN USTED NO SABE QUE DANO CAUSO COMO HA DESTROZADO A ESTE CONAZON

USTED NO SABE LO QUE ES EL AMOR HI EL IMEDO QUE DAUSA LA DESOLACION USTED NO SABE QUE DANO CAUSO COMO HA DESTROZADO A ESTE CORAZON Column: (xiii)

Duration of the Sound Recording

Column: (x)

Sound Recording Title

Promotional Identifier

Column (xiv)
Album Title

Column: (xvi)

Catalog Number

Column: (xv)

**Marketing Label

*See Note

Column: (xviii)

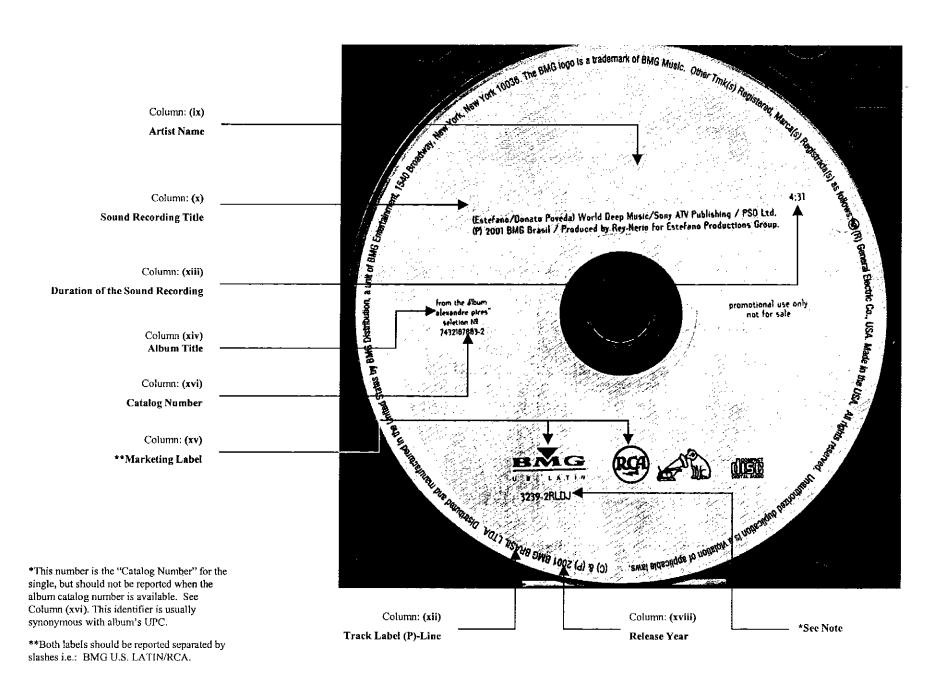
Release Year

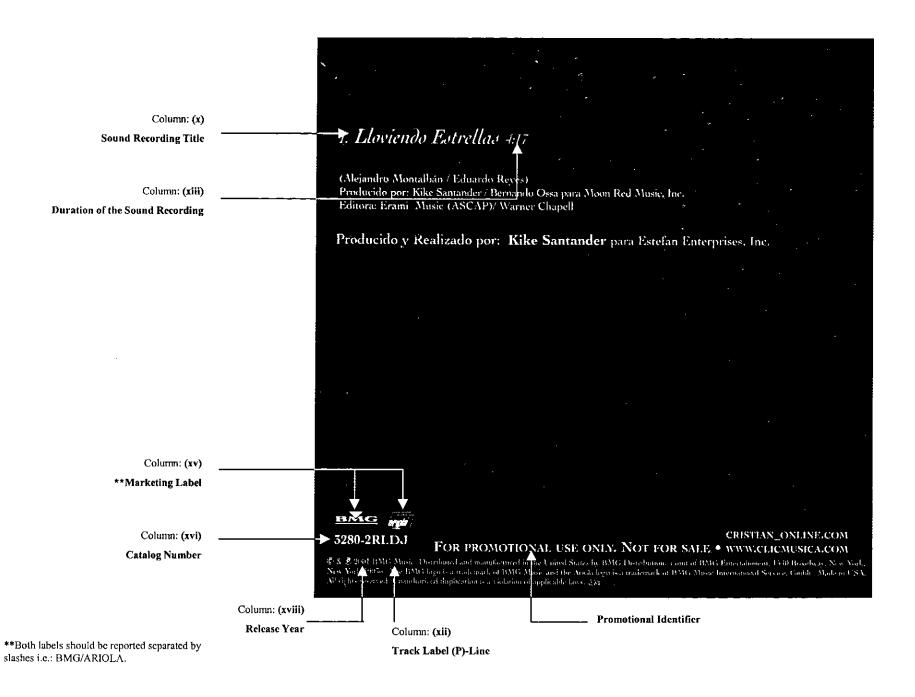
Column: (xii)

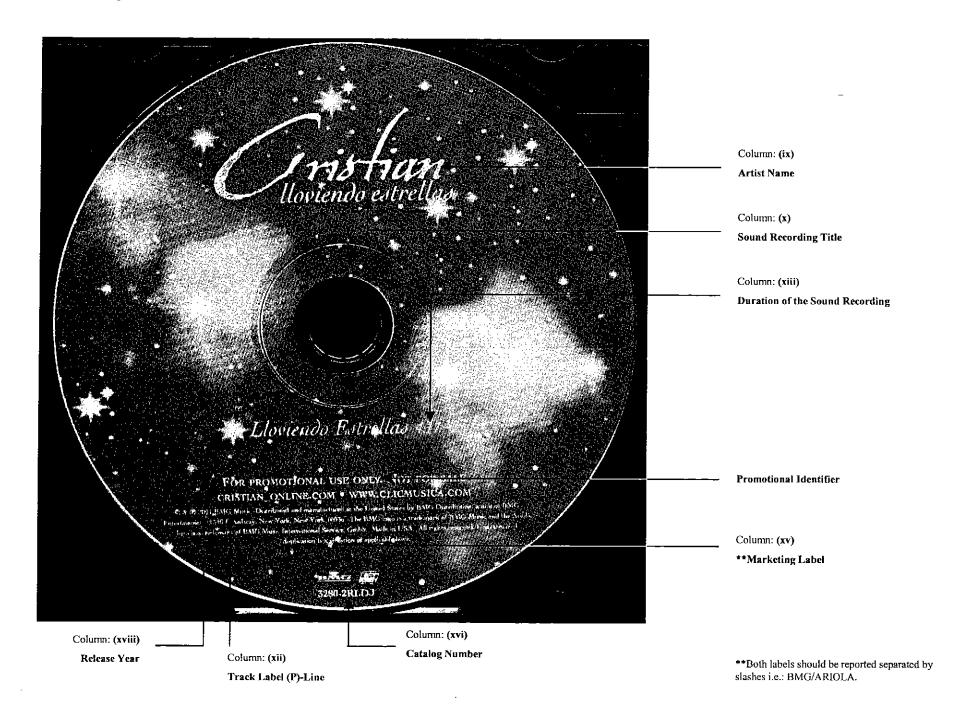
Track Label (P)-Line

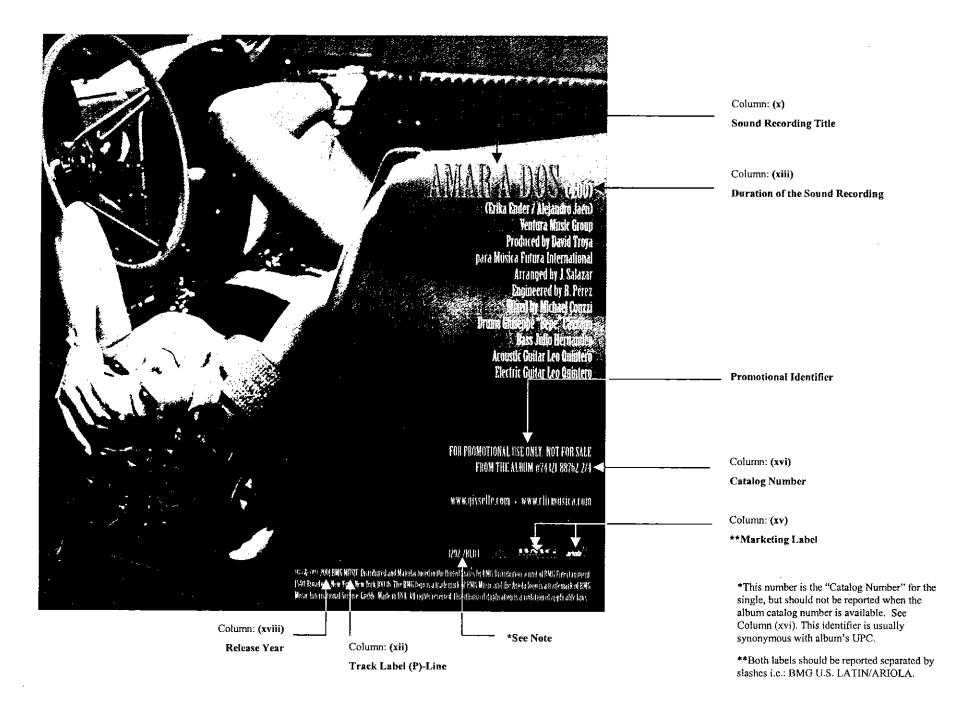
*This number is the "Catalog Number" for the single, but should not be reported when the album catalog number is available. See Column (xvi). This identifier is usually synonymous with album's UPC.

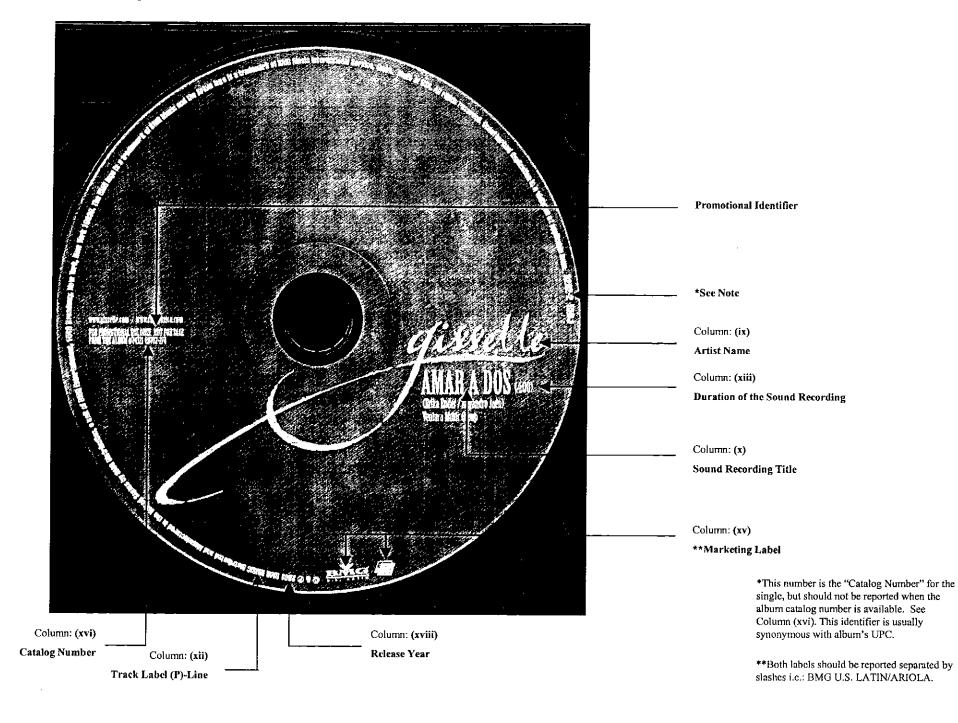
**Both labels should be reported separated by slashes i.e.; BMG U.S. LATIN/RCA.

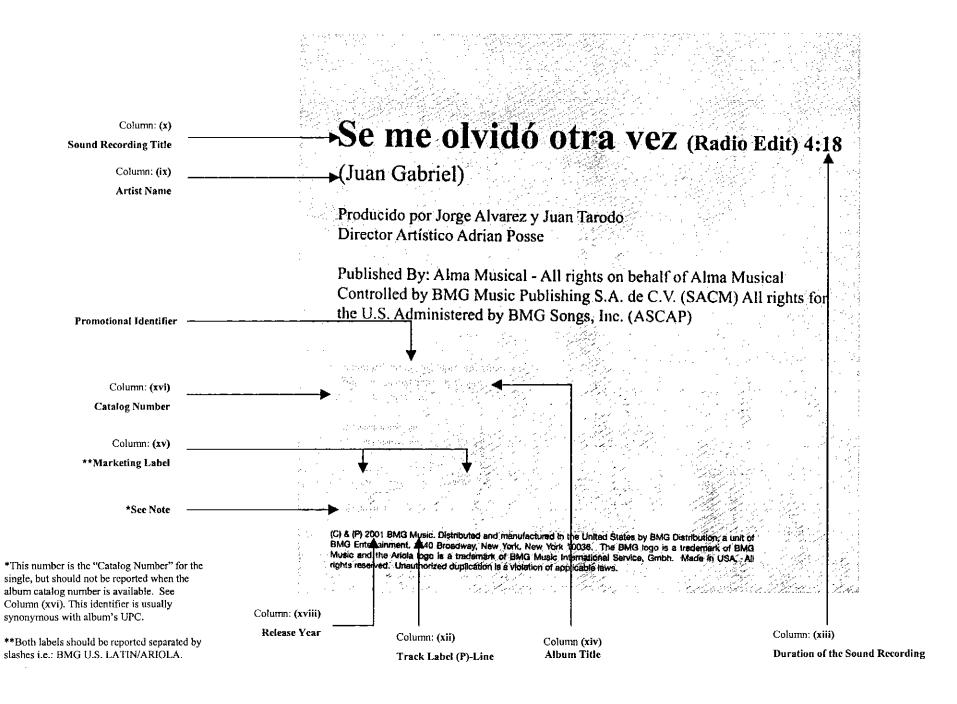




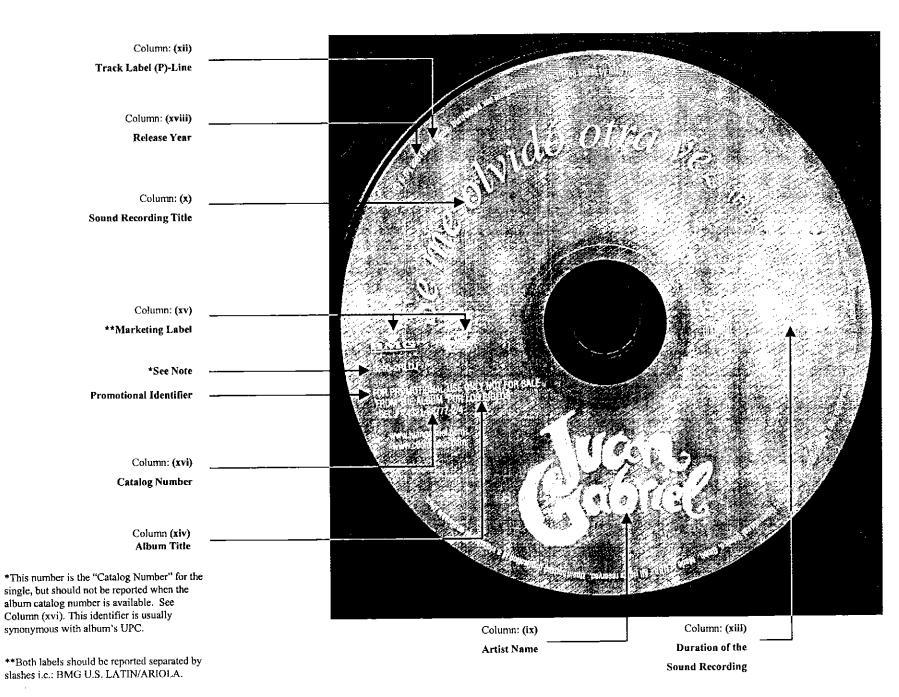




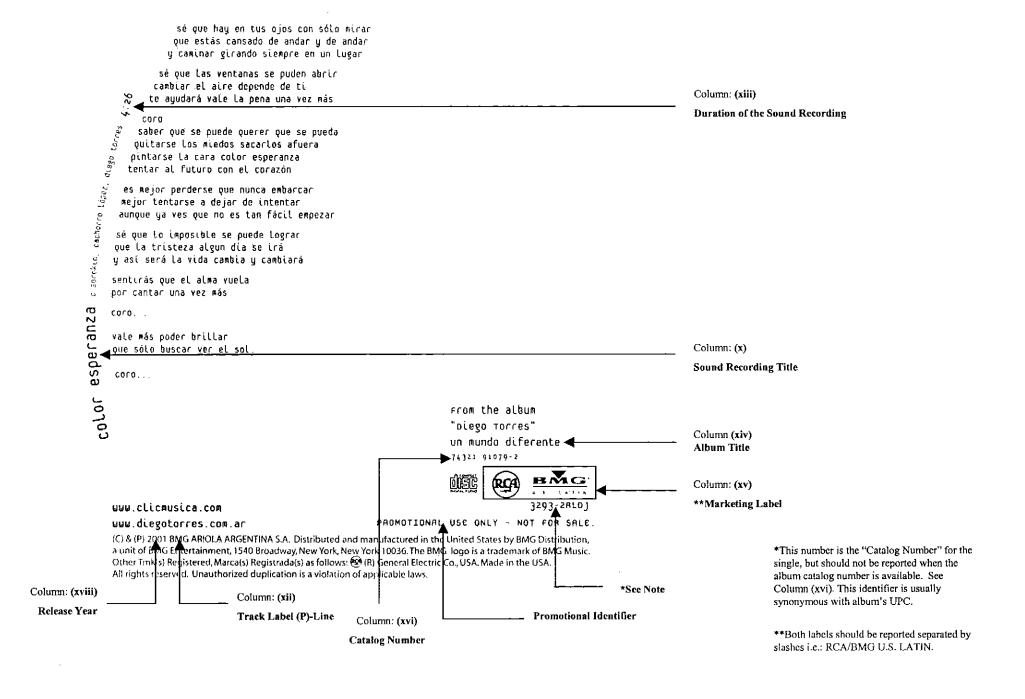


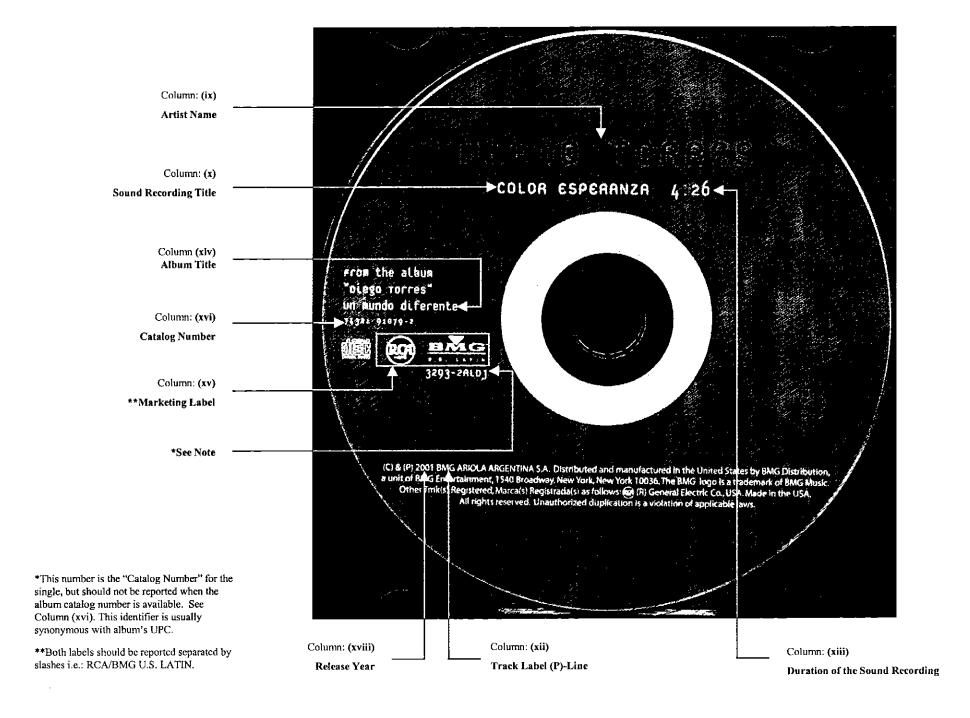


CD PRO Single

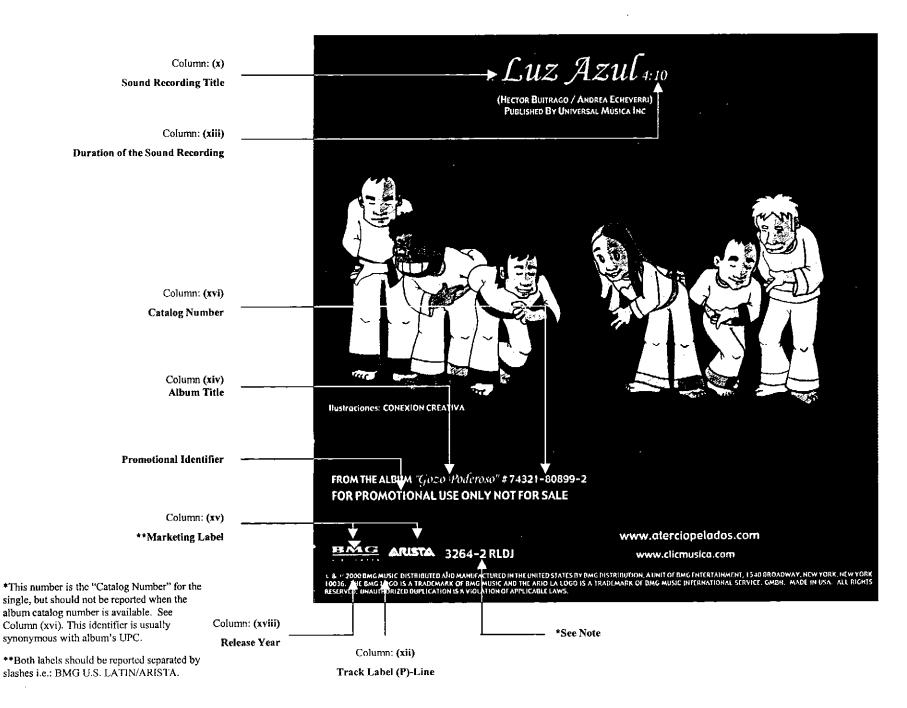


Promotional Label Copy CD PRO

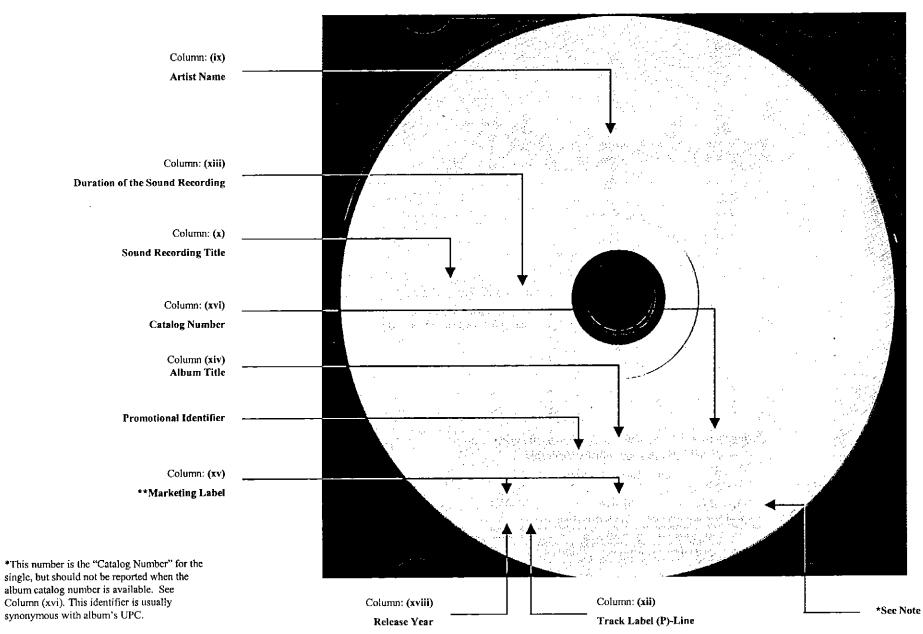




Promotional Label Copy CD PRO



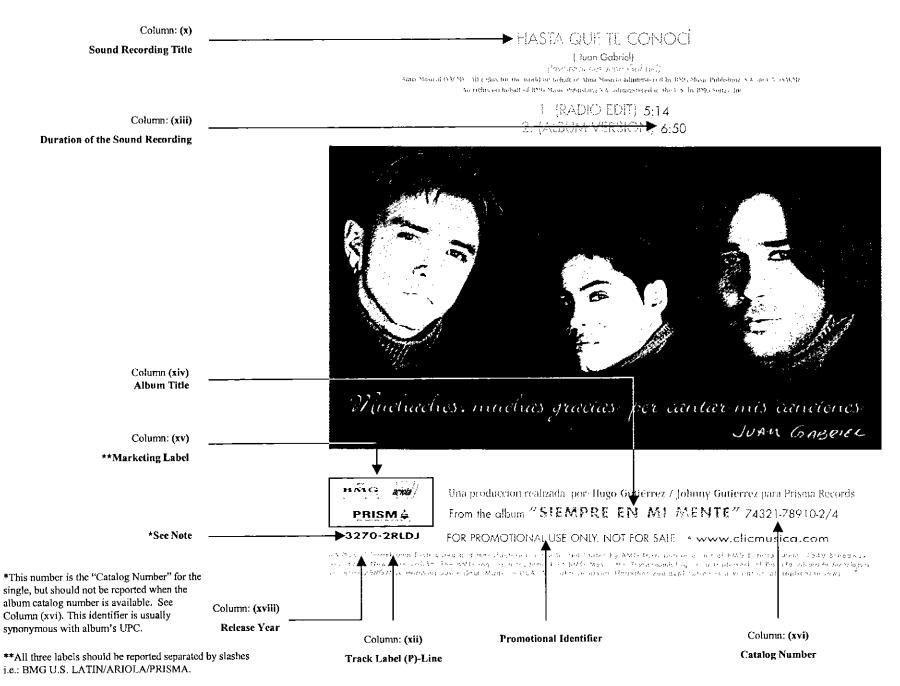
CD PRO Single

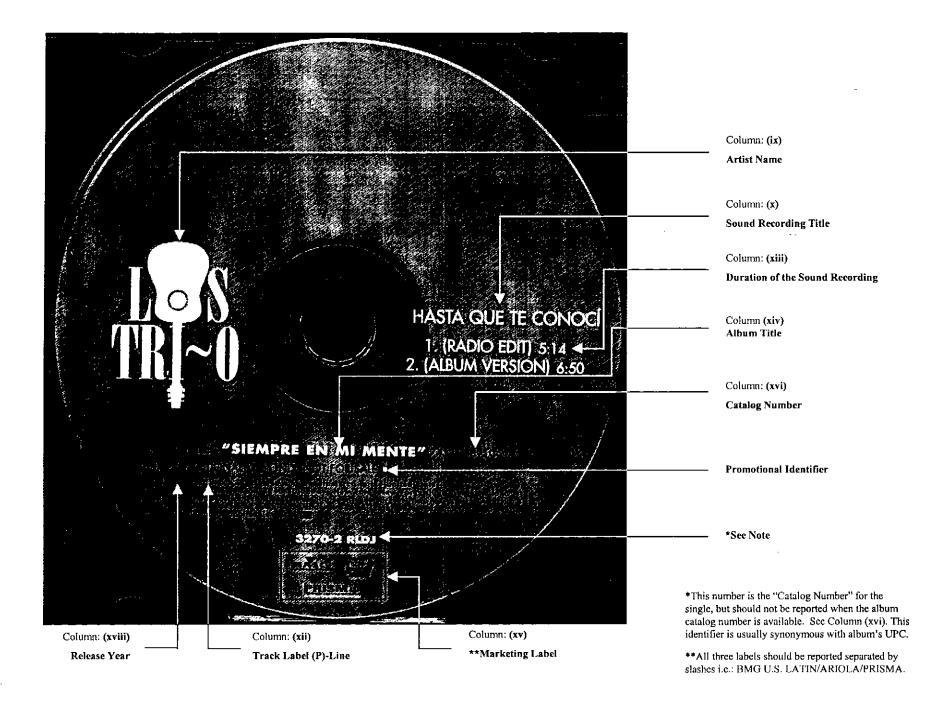


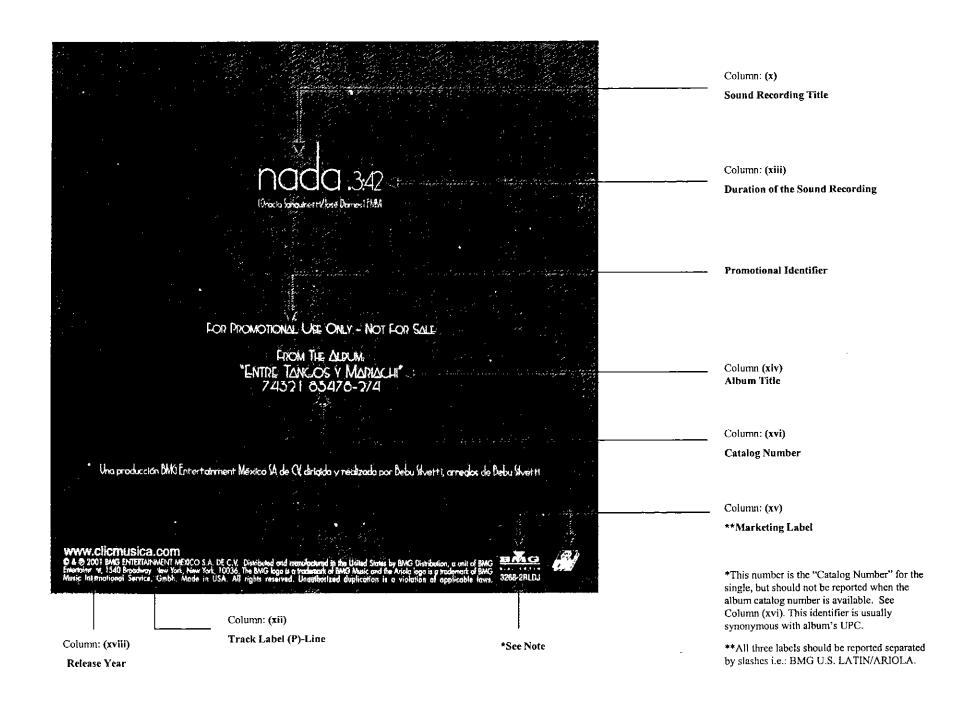
^{**}Both labels should be reported separated by slashes i.e.: BMG U.S. LATIN/ARISTA.

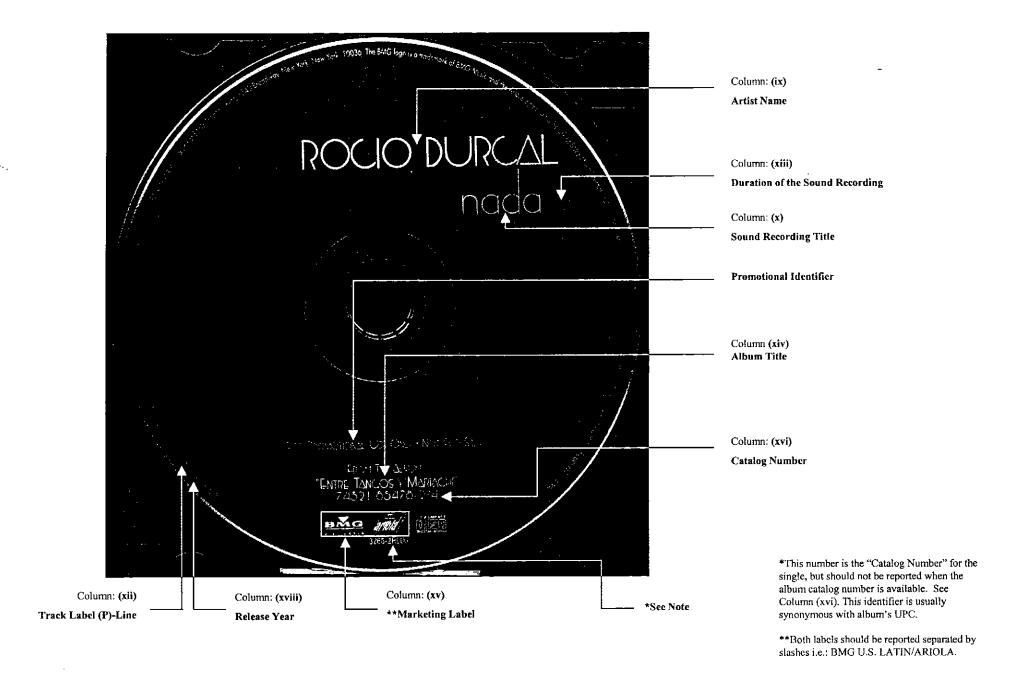
B-12 Attachment 7a

Promotional Label Copy CD PRO

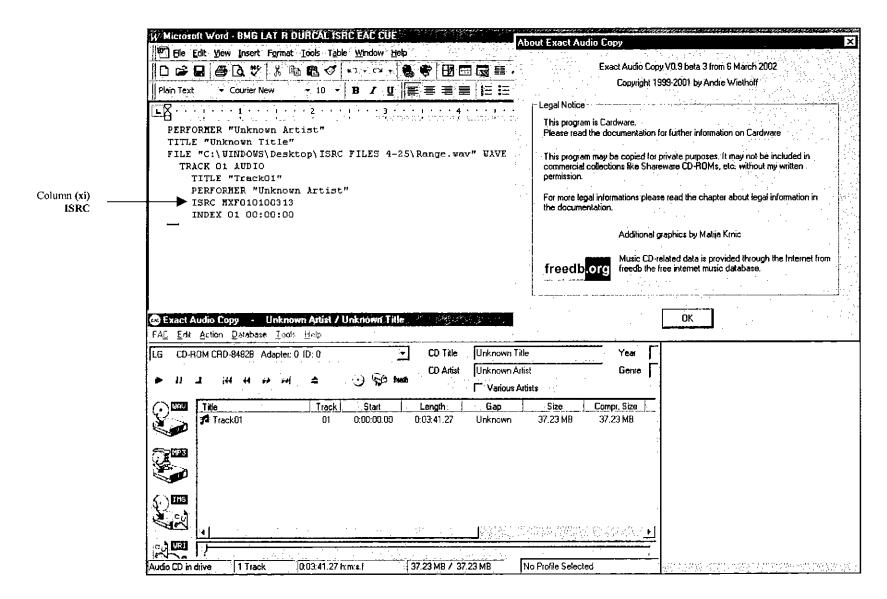




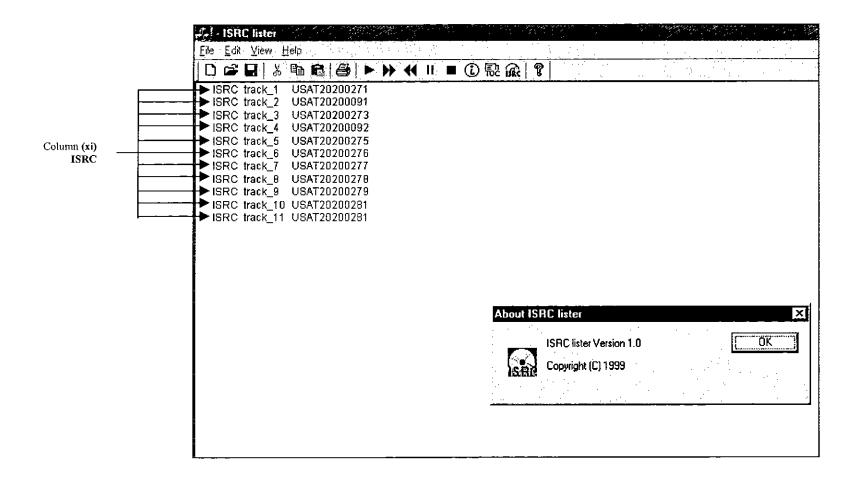




Exact Audio Copy (EAC) ISRC Reader Software Printout For Rocio Durcal's Nada



International Federation of the Phonographic Industry (IFPI) ISRC Reader Software Printout For Rocio Durcal's Nada



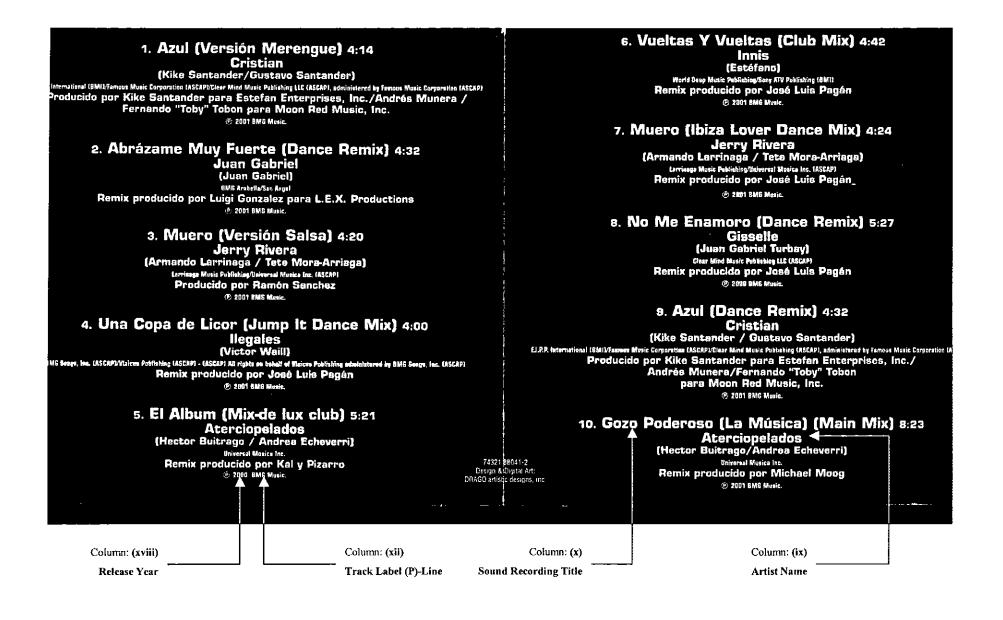


Column: (x)

Column: (ix)

Sound Recording Title

Artist Name





Before the UNITED STATES COPYRIGHT OFFICE LIBRARY OF CONGRESS Washington, D.C.

Tn	the	Matter	οf·	
TIL	шс	IVIALLEI	UL.	

NOTICE AND RECORDKEEPING FOR USE OF SOUND RECORDINGS UNDER STATUTORY LICENSE

Docket No. RM 2002-1A

DECLARATION OF DAVID GRAUPNER

I, DAVID GRAUPNER, declare:

- 1. I am the President and CEO of TM Century, Inc. ("TM Century"). In this capacity, I am responsible for overseeing all company operations. I am generally familiar with TM Century's music database, including our current effort to update and expand the database, and have personal knowledge of all of the following facts.
- 2. TM Century is a leading creator and provider of sound recording compilation products for the radio industry. We have approximately 5,000 clients in the U.S., which include thousands of individual radio stations, major radio networks (e.g., ABC, CBS), syndicated radio programs (e.g., Casey Kasem's American Top 40, Rick Dees' Countdown), Sirius Satellite Radio, and Muzak, which also provides audio channel programming to The Dish Network. Additionally, TM Century provides programming source material to various webcasters. It is our best estimate that the company enjoys about a seventy percent (70%) market share in the weekly new music service market.
- 3. TM Century offers two primary services, HitDisc and GoldDisc. HitDisc is a weekly music service that automatically delivers to subscribers a new CD each week that contains the latest releases in a particular radio format (e.g., top 40, country, adult alternative). The HitDisc service includes new releases from over 100 U.S. record labels.

GoldDisc is a music library service that includes a vast array of earlier releases and is available in a variety of different radio formats.

- 4. Subscribers to both the HitDisc and GoldDisc services receive ongoing access to TM Century's extensive, music database and TM Century's SongSearch tool, which allows subscribers to instantly access information about any song ever released on one of TM Century products.
- 5. TM Century's music database is a fully downloadable database that permits subscribers to directly import data into their own database. Although the TM Century database does not currently include all of the information that has been requested by copyright owners and performers in the pending notice and recordkeeping proceeding, TM Century is currently in the process of expanding the number of fields included in its database. More importantly, TM Century is committed to promptly modifying its expanded database once the Copyright Office issues final notice and recordkeeping regulations such that the database includes all of the data fields required by the new regulations. TM Century is further committed to working with all of the labels from whom it obtains new releases to obtain the data necessary to populate its expanded database.
- 6. TM Century also anticipates that it will shortly begin including the ISRC code in all new discs mastered and distributed by it.

I declare under penalty of perjury that the foregoing is true and correct. Executed this April 23, 2002 at Dallas, Texas.

DAVID GRAUPNER