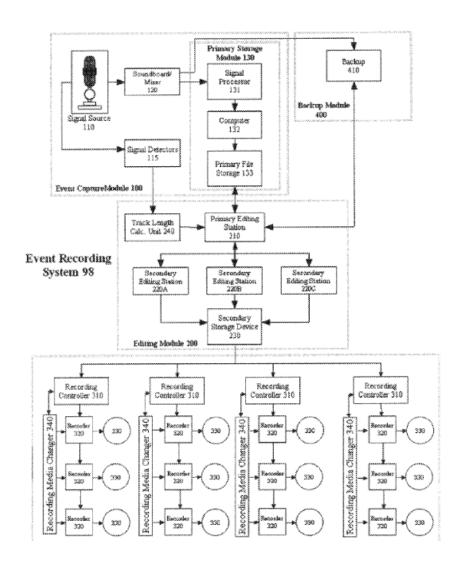
The Clear Channel Patent on Live Recording U.S. Patent No. 6,614,729

Latest Date That Material Can Qualify for Prior Art: September 26, 2000

UPDATE (11/16/05): See special note re: Telex EDAT System at the end of this document.

I. General Description of the Invention

The Clear Channel patent claims to cover the general concept of recording live events (e.g., concerts) and simultaneously burning them to optical media (e.g., CDs) so that within 15 minutes after the event ends, fans can buy a copy of the show on their way out of the venue. It does so by recording the audio and/or video of the event, splitting it up into various digital recording tracks, and then using multiple disc burners to make many copies at the same time.



More specifically, the language of the Clear Channel patent describes the invention as an event recording system that captures, edits, and records concerts and other kinds of audio and visual events such as speeches, plays, and other "performances" -- and possibly even applies to other kinds of activities or data (e.g., time-lapse photos of animals in a zoo, collections of laboratory data, etc.) -- that can be turned into a signal and processed digitally. Some of the claims focus on editing the signal while the event is occurring. The examples provided focus on capturing (by saving to a storage medium) live audio or video event signals that are converted into digital signals, editing the digital signals into separate tracks, and then simultaneously recording each track to a plurality of storage media (e.g. CD-Rs). By using multiple recording devices, the system can make multiple copies of the performance simultaneously. The primary stated advantage of the claimed invention is to be able to create and make available multiple edited audio or video copies of a performance a few minutes after the performance ends.

II. The Claims At Issue

The Clear Channel patent has one independent claim (1) and four "dependent" claims (2-5) that add additional features or elements.

Claim 1 broadly covers a system for recording events to make multiple digital copies. The system uses some method of capturing a signal from an event, converting the signal into one or more digital tracks, and simultaneously saving each of those tracks to multiple storage media, e.g. Compact Discs. The claim does not require the system to store the event signal temporarily (such as on a computer hard drive or computer memory) or even conversion of the event signal to digital form prior to splitting it into tracks and saving the tracks.

Claim 2. The same system as in Claim 1, except that two or more editing stations are available to allow simultaneous editing of different parts of the event signal while the event is occurring.

Claim 3. The same system as in Claim 2, except that the method of capturing the event signal includes a soundboard with a mixer capable of capturing and mixing one or more source signals and some method of storing the mixed signal (such as on a computer or other storage device) before it is edited into the digital tracks that are simultaneously recorded. Although the examples in the patent contemplate that the mixed signal is converted to a digital signal before storage, the claim does not require such conversion before storage.

Claim 4. The same system as in Claim 1, except that a storage device makes a back-up copy of the captured event signal.

Claim 5. The same system as in Claim 4, except that it also contains a soundboard capable of combining one or more signals from the event and a method of storing the event signal (such as on a computer or other storage device).

III. Description of the Prior Art Needed to Bust This Patent

The Clear Channel patent is based on an early application called a "provisional" that was filed on September 26, 2000. Thus, EFF needs to locate prior art that was publicly available before that date. Prior art can be in the form of a published patent, a printed publication (e.g. web page, newsgroup post, public presentation, magazine article, technical paper), or a product manual or literature related to a product or its sale.

In order to bust the Clear Channel patent, we must find prior art that covers all the elements of at least the broadest claim of the five claims in the patent (Claim 1) and ideally covers all of them. Technically, we need to bust every single claim in the patent in order to invalidate the entire patent; however, invalidating any claim helps narrow the patent and make it less formidable.

"Killer" prior art will describe all of the required elements of each numbered claim, put together in the manner contemplated by the patent. The best form of "killer" prior art would focus on the same kinds of examples that are described in the patent (e.g., audio or video recordings of live concerts or other similar performances, capturing the signal by converting it into a digital signal and saving it on a computer hard drive, etc.). This is because the claims will be sure to apply to such previously described inventions, no matter how narrowly the Patent Office may interpret the meaning of the claims. But even if all of the required elements were not described in a patent, printed publication, or other document, prior art may be used to bust a patent if it describes some of the elements and can be combined with other pieces of prior art that describe the other elements. For example, a prior art publication that described converting digital audio files into tracks and simultaneously recording the tracks onto a plurality of media might be combined with another publication that described converting a concert performance into a digital audio file.

Below is a claim-by-claim description of the prior art we are looking for:

Claim 1

Prior art to bust Claim 1 must contain:

[a] some means to "capture" a signal from an event. Killer art would describe a means to convert the sounds and/or images of a live performance event into a stored digital file (e.g., an audio or visual component input attached to some kind of analog-to-digital converter and storage medium); AND

[b] some means of editing the "captured" file and converting it into one or more digital tracks. Killer art would describe a means to take the saved digital data and edit it into multiple digital tracks that include time records or other markers (e.g., using a software program to designate by track where one song in the stored digital file of a concert ends and the next begins); AND

[c] some means of recording (e.g., using a series of CD burners or of digital recorders) the individual tracks onto multiple copies of tangible media (e.g., a CD-R, digital audio or videotape, a DVD, computer tapes, etc.).

Claim 2

Claim 2 contains all of the elements of Claim 1, plus one additional element. Thus, prior art to bust Claim 2 must contain:

Elements [a], [b], and [c] listed above in Claim 1; AND

[d] an additional editing station (element b) that allows simultaneous editing of different parts of the event signal to create different tracks while the event is occurring. This might be useful for editing two tracks at the same time to ensure identical sound quality or volume or for speeding up the editing process so they can be recorded to media more quickly. Killer prior art would, e.g., describe retrieving different songs from a stored digital recording of a concert before it concludes, and editing the different portions on different equipment to be able to record the different songs on different CDs for a two-volume set.

Claim 3

Claim 3 contains all of the elements of Claim 2, plus two additional elements. Thus, prior art to bust Claim 3 must contain:

Elements [a], [b], [c], and [d] listed above in Claim 2; AND

[e] something that functions like a soundboard with a mixer that can handle multiple signal sources and is part of the "capture" mechanism of element [a]; PLUS

[f] some kind of storage device for the captured sound file. Killer prior art would describe multiple inputs such as microphones, a soundboard that mixes the signals into a single analog signal, an analog-to-digital processor that converts the output signal from the soundboard into a digital signal, and a computer hard drive that saves the digital signal as a digital file.

Claim 4

Claim 4 contains all of the elements of Claim 1, plus one additional element. Thus, prior art to bust Claim 4 must contain:

Elements [a], [b], and [c] listed above in Claim 1; AND

[g] a backup system for saving the captured event signal. Killer prior art would describe a redundant storage system for a saved digital event file of the captured event signal, where the system is capable of restoring the event file and providing the digital signal to the editing module in case the original file is corrupted or lost (e.g., the system could simply record a second copy of the file onto a hard drive and then restore the file from that hard drive if the first file is unavailable).

Claim 5

Claim 5 contains all of the elements of Claim 4, plus two additional elements. Thus, prior art to bust Claim 5 must contain:

Elements [a], [b], [c], and [g] listed above in Claim 4; AND

[e] something that functions like a soundboard with a mixer that can handle multiple signal sources and is part of the "capture" mechanism of element [a]; PLUS

[f] some kind of storage device for the captured sound file. Killer prior art would describe multiple inputs such as microphones, a soundboard that mixes the signals into a single analog signal, an analog-to-digital processor that converts the output signal from the soundboard into a digital signal, and a computer hard drive (or series of drives) that saves the digital signal as a digital file in two locations on different partitions (or on different drives).

Where to send information on prior art: priorart at eff dot org or http://www.eff.org/patent/wanted/prior.php?p=clearchannel

Update: We have recently come across a system that looks promising as prior art: The **Telex Communications, Inc. EDAT/CDP2001 digital mixing and CD duplication system**. If you have any information or documentation on this system prior to September 26, 1999, please send it to us at the address above. Telex Communications, Inc. is based out of Minneapolis, MN.