IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor: Hair	§	Attorney Docket No.:
United States Patent No.: 5,966,440	§	104677-5005-804
Formerly Application No.: 08/471,964	§	Customer No. 28120
Issue Date: October 12, 1999	§	
Filing Date: June 6, 1995	§	Petitioner: Apple Inc.
Former Group Art Unit: 2785	§	
Former Examiner: Hoa T. Nguyen	§	

For: System and Method for Transmitting Desired Digital Video or Digital Audio Signals

MAIL STOP PATENT BOARD
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PETITION FOR COVERED BUSINESS METHOD PATENT REVIEW OF UNITED STATES PATENT NO. 5,966,440 PURSUANT TO 35 U.S.C. § 321, 37 C.F.R. § 42.304

Pursuant to 35 U.S.C. § 321 and 37 C.F.R. § 42.304, the undersigned, on behalf of and acting in a representative capacity for petitioner, Apple Inc. ("Petitioner" and the real party in interest), hereby petitions for review under the transitional program for covered business method patents of claims 1, 64, and 95 of U.S. Patent No. 5,966,440 ("the '440 Patent"), issued to Arthur R. Hair and currently assigned to SightSound LLC ("SightSound," also referred to as "Applicant," "Patent Owner," or "Patentee"). Petitioner hereby asserts that it is more likely than not that at least one of the challenged claims is unpatentable for the reasons set forth herein and

respectfully requests review of, and judgment against, claims 1, 64, and 95 as unpatentable under 35 U.S.C. §§ 102 and 103.[1]

[1] As discussed in Section I, *infra*, Petitioner has concurrently filed a Petition seeking covered business method review of the '440 Patent requesting judgment against these same claims under § 101 for claiming patent-ineligible subject matter and for obviousness-type double patenting. Petitioner has additionally filed Petitions seeking covered business method reviews of the '573 Patent requesting judgment against claims in that patent under §§ 101 and 112 in one Petition, and under §§ 102 and 103 in a second concurrent Petition. Petitioner notes that the Director, pursuant to Rule 325(c), may determine at the proper time that merger of these proceedings, or at minimum coordination of proceedings involving the same patent, is appropriate.

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I. INTRODUCTION

The challenged claims of the '440 Patent—method claims 1, 64 and 95—merely recite steps well-known in the art of selling digital data, including audio and video. The patent's independent Claim 1, for example, recites the rudimentary steps of (A) forming a connection between the buyer's device and seller's device; (B) selling and charging electronically for the desired digital video or audio signal; (C, D, F) transferring the desired signal from the seller's device to the buyer's device (not a tape or CD); and (E) playing the signal through speakers:

> **1.** A method for transferring desired digital video or digital audio signals comprising the steps of:
>
> [A] forming a connection through telecommunications lines between a first memory of a first party and a second memory of a second party control unit of a second party, said first memory having said desired digital video or digital audio signals;
>
> [B] selling electronically by the first party to the second party through telecommunications lines, the desired digital video or digital audio signals in the first memory, the second party is at a second party location and the step of selling electronically includes the step of charging a fee via telecommunications lines by the first party to the second party at a first party location remote from the second party location, the second party has an account and the step of charging a fee includes the step of charging the account of the second party; and
>
> [C] transferring the desired digital video or digital audio signals from the first memory of the first party to the second memory of the second party

> control unit of the second party through telecommunications lines while the second party control unit with the second memory is in possession and control of the second party;
>
> [D] storing the desired digital video or digital audio signals in a non-volatile storage portion the second memory;
>
> [E] and playing through speakers of the second party control unit the digital video or digital audio signals stored in the second memory, said speakers of the second party control unit connected with the second memory of the second party control unit;
>
> [F] wherein the non-volatile storage portion is not a tape or CD.[2]

Ex. 1301. Storing data, including audio and video data, at a remote server was well known. Downloading data over phone lines from a remote server to a local computer and storing it there was well-known. And the electronic sale of merchandise, including digital data, and then using that data was also well-known.

Indeed, as its language makes clear, Claim 1 involves no "technology" at all other than "a first memory" and "a second memory of a second party control unit," "telecommunications lines," and "speakers." And the patent itself concedes these

[2] Claims 64 and 95 are similar. Ex. 1301. Claim 64 also recites a "first memory" and "a second memory," as well as "telecommunications lines," and "speakers," and as in claim 1, the control unit is mentioned only in the context of a "second memory of a second party control unit" and "speakers of the second party control unit . . ." Claim 95 also requires "telecommunications lines," a "first memory," a "second memory," a "second party hard disk" (*i.e.*, part of the second memory). Again, "control unit" is mentioned only in the context of playing the unit "at a desired second party location" and in the context of a "second party hard disk with the second party control unit."

were all well known and entirely commonplace at the time, stating, for example, that the first and second parties' memories ("agent's Hard Disk" and "user's Hard Disk"), telecommunication lines ("Telephone Lines"), and speakers ("Stereo Speakers") are "already commercially available." Ex. 1301 at 4:33-38. Further, the "control unit" mentioned in the claims as associated with the conventional "second" memory is described as a functional feature that can be implemented with a general purpose computer: the patent provides no disclosure of specific algorithms, and expressly states that the specification's description of such a "unit" does not indicate any particular requirements—it "is not restrictive with respect to the exact number of components and/or its actual design." Ex. 1301 at 4:65-67; *See* Ex. 1336 at 19-20. Indeed, during prosecution of the '440 Patent Applicant himself equated the control unit in the claims to a generic computer, arguing that Napster and N2K copied the claimed invention when they enabled a generic computer (equated by Applicant to the second control unit) to access a website and purchase digital audio signals. Ex. 1302 (01/08/98 Decl. at 2-3). Thus, as the intrinsic record reflects, Claim 1 recites nothing more than a method for electronically selling digital audio or video between a seller and buyer, using conventional, commercially available hardware and a general purpose computer with no specific algorithm.[3]

[3] Sole named inventor Hair has admitted that he did not invent electronic sale, electronic transmission of digital audio signals, electronic transmission of digital video signals, or electronic transmission of computer programs for electronic sale. *See* Ex.

Indeed, each and every element of the challenged claims of the '440 Patent has been disclosed in the prior art, either by individual references or systems, or by those references or systems in combination. Accordingly, each of the challenged claims is invalid under 35 U.S.C. §§ 102 and 103.[4]

II. OVERVIEW OF FIELD OF THE CLAIMED INVENTION

The concept of selling and transmitting digital audio and video over telephone lines was well known long before the '440 Patent's claimed June 13, 1988 priority date. The pervasive and basic concept of selling and transmitting digital audio and video over telephone lines was touted in a range of books and periodicals, presentations and lectures long before the '440 Patent's claimed June 13, 1988 priority date. As is detailed below in Section VI.B., this concept also was the subject of prior commercialization efforts by, among others, a company called CompuSonics.

Computer scientists, engineers, and users have long recognized the advantages of connecting computers together so that they can share information. Since most homes had telephone lines, the telephone system was a popular method of connecting a home computer to a remote computer. Computer users have accessed remotely-stored data in a wide variety of ways, such as email, Bulletin Board Systems (BBSs), and online services. *See* Ex. 1334 (Kelly Decl.) at ¶¶ 19-24, 26-27. Electronic sale of

1307 at 49:3-52:2. SightSound's CEO similarly admitted that Applicant did not invent computers, computer networks, the Internet, telephone lines, or telecommunications lines. Ex. 1308 at 42:12-44:5.

[4] In litigation, Petitioner is also demonstrating invalidity for numerous other reasons.

digital products, including digital audio and video, was also well known.

For example, as *Billboard* reported on October 5, 1985, CompuSonics and AT&T announced a partnership to create an "electronic record store," and conducted related press demonstrations. *See* Ex. 1309 at 3. As that article recognized, the "electronic record store" concept was well-known: "David Schwartz, the president of CompuSonics, is a strong proponent of the 'electronic record store' concept, an idea that has been bandied about for some time, but which Schwartz says is now poised to 'become a reality.'" *See id.* CompuSonics had developed digital recorder/players that could store and play digital data transmitted over telephone lines, and offered robust editing features that could be used to manipulate digital audio regardless of its origin.

One key underpinning to the prevalence of this idea was the nature of digital audio and video. These forms of digital data are just that—data in digital form—and it was both obvious and widely discussed in the art that they could be transmitted, including as part of electronic sales, just like any other digital data. For example, in May 1984 *InfoWorld* reported that CompuSonics was "looking at potential electronic distribution of music whereby you would be able to ***download music*** onto your PC ***in the same manner as other digital information.*** The CompuSonic system has a built-in communications device

that receives information via an existing phone line." *See* Ex. 1310 at 1.[5]

A December 1984 *Billboard* article similarly described various scenarios for selling and distributing music over telephone and cable lines. As the article outlined, such a recording/playback device like CompuSonics' would provide for sale and distribution of digital audio over telephone and cable lines:

> ***One medium that is currently used for shipping digital data over long distances is telephone lines.*** Unfortunately, the speed at which data can be shipped over existing phone lines is relatively slow (1,200 single pieces of information per second), and the error rate is relatively high. This makes shipment of large amounts of data via this medium somewhat difficult. In the very near future, however, a service will be available that will allow the shipment of 144,000 pieces of information per second over telephone lines with an extremely low error rate. The expectation is twelve cities will have access to this service by early 1985.
>
> A second means of shipping digital data to the home is over cable television lines. With current cable technology, it should be possible to ship enough data to equal a 45-minute LP in less than 15 minutes.
>
> What does shipment of data have to do with a digital recording/playback device? The answer is simple. Assume that the cost of the DSP-1000 (currently projected to be around $1,200 when it is introduced) drops at the same rate as other computer-based electronic devices. It will cost $200 to $300 in a few years. Then assume that there are low-cost, high-speed techniques for shipping digital data into the home. Making these assumptions, ***in the not-too-distant future***

[5] All emphases added unless otherwise noted.

> ***consumers will be able to buy music at home, over telephone lines or through cable television hookups, and play it back through an audio device resembling a microcomputer***.

See Ex. 1311 at 44. That article further explained that these same scenarios would likewise be available for other forms of digital data, such as digital video (*id.*):

> First, although the scenarios presented above relate only to music, the same data-transmission techniques will be available for *all* digital data. Thus, as other forms of entertainment (e.g., video) are digitized, they, too, will become candidates for these scenarios. Very simply, ***music (and other home entertainment options) will become just another type of computer software***.

The bandwidth constraints described—constraints that the '440 Patent did nothing to overcome, but that would later be alleviated by technological advances—impacted all digital data, but hit digital audio and digital video particularly hard, given the relatively large size of those files and the correspondingly greater requirements for memory, storage, and transmission. *See* Ex. 1334 (Kelly Decl.) at ¶¶ 28-31. Indeed, as discussed below, during the reexamination of the '440 Patent Examiner recognized that improvements in technology had alleviated some of these constraints, and noted "[t]he existence and profitability of [allegedly embodying systems] are due to the advances in recent technology and not [Patentee's] claimed invention." Ex. 1303 (10/26/05 OA at 3). In addition, as Examiner recognized, Applicant admitted

that record industry reluctance to license its wares for digital distribution via electronic sales was an additional issue that had frustrated commercialization. Ex. 1303 (10/26/05 OA at 2-3).

Although the companies seeking to commercialize the well-known concept of an "electronic record store" were concerned with bandwidth and related constraints, as well as obtaining permission to sell content—all issues not addressed in or alleviated by the claims of the '440 Patent—selling and transmitting digital audio and video over telephone lines (which the '440 Patent Applicant *did* attempt to claim as his own invention) was indisputably well-known. Also well known was the sale of other digital products over telephone lines. For example, WO85/02310 ("Softnet"), published May 23, 1985, discloses the sale of digital products—in particular, software—over telephone lines. *See* Ex. 1312. Softnet describes allowing a user to connect his or her computer, via a modem and telephone lines, to a host computer. *Id.* at 12. The user can then use a menu to select a software package for purchase. *Id.* After the host computer performs a credit card authorization, the purchased software package is transmitted to the user's computer for storage to a disk. *Id.* The user's computer can then execute the purchased software from the disk. *Id.* at 14.

Other elements of the '440 Patent claims, such as a speaker, were similarly known in the art, as the specification itself concedes. *See*, *e.g.*, Ex. 1301 at 4:33-38 ("Stereo Speakers" are "already commercially available").

Thus, as these examples illustrate, the prior art was rife with awareness and discussion of the same supposed "invention" now memorialized in the challenged claims of the '440 Patent. Long before the '440 Patent's first purported priority date, disclosures abounded of the very same abstract notion that Applicant later sought to claim as his exclusive property. As outlined in more detail below, the challenged claims are therefore invalid under §§ 102 and 103.

III. PETITIONER HAS STANDING

A. The '440 Patent Is a Covered Business Method Patent

The '440 Patent is a "covered business method patent" under § 18(d)(1) of the Leahy-Smith America Invents Act, Pub. L. 112-29 ("AIA") and § 42.301. As discussed above, the '440 Patent is directed to activities that are financial in nature—the electronic sale of digital music or video. *See* AIA § 18(d)(1); 37 C.F.R. § 42.301(a). *See also* 77 Fed. Reg. 48,734, 48,735 (Aug. 14, 2012) ("[T]he definition of covered business method patent was drafted to encompass patents 'claiming activities that are financial in nature, incidental to a financial activity or complementary to a financial activity.'") (citation omitted). The patent states, for example, that "it is an objective . . . to provide a new and improved methodology/system to electronically sell and distribute Digital Audio Music or digital video," Ex. 1301 at 2:22-25, and explains that "[t]he method comprises the steps of transferring money via telecommunications lines to the first party from the second party or electronically selling to

the second party by the first party." *Id.* at 5:46-49.[6,7] A SightSound executive similarly described the invention as nothing more than "a method for selling a desired digital audio or digital video signal over networks versus the old way of distributing hard media on trucks through stores." Ex. 1308 at 36:23-37:5.[8]

While the claims at issue reference certain conventional components, the '440 Patent is not a "technological invention" because it does not claim "subject matter as a whole [that] recites a technological feature that is novel and unobvious over the prior art[] and solves a technical problem using a technical solution." § 42.301(b). First, no "technological feature" is novel and unobvious. Claim 1 is exemplary:

> **1.** A method for transferring desired digital video or digital audio signals comprising the steps of:
>
> [A] forming a connection through telecommunications lines between a

[6] While the specification also speaks vaguely of manipulation of digital music (sorting, selection, etc.) and protection from unauthorized copying (*e.g.*, Ex. 1301 at 2:30-37), these do not appear in any challenged claim, and in any event were not inventive.

[7] Applicant confirmed again during prosecution that "[t]he present invention is related to a system and associated method for the electronic sales and distribution of digital audio or video signals, and more particularly, to a system and method which a user may purchase and receive digital audio or video signal from any location which the user has access to telecommunications lines." Ex. 1302 (06/09/98 Appeal Brief at 33). The inventor has elsewhere described his supposed invention simply as "the electronic sale of digital video and digital audio recordings via telecommunications" or "digital video and digital audio download recordings via telecommunications." Ex. 1307at 33:1-11.

[8] Indeed, SightSound has taken the same view in seeking to enforce the '440 Patent in litigation, with its own experts stating that the '440 Patent "generally relate[s] to the field of electronic sale and distribution of digital audio or digital video. More specifically, the patented technology pertains to selling or purchasing digital audio or video via telecommunications lines." Ex. 1343 ¶¶ 22 & 24.

first memory of a first party and a second memory of a second party control unit of a second party, said first memory having said desired digital video or digital audio signals;

[B] selling electronically by the first party to the second party through telecommunications lines, the desired digital video or digital audio signals in the first memory, the second party is at a second party location and the step of selling electronically includes the step of charging a fee via telecommunications lines by the first party to the second party at a first party location remote from the second party location, the second party has an account and the step of charging a fee includes the step of charging the account of the second party; and

[C] transferring the desired digital video or digital audio signals from the first memory of the first party to the second memory of the second party control unit of the second party through telecommunications lines while the second party control unit with the second memory is in possession and control of the second party;

[D] storing the desired digital video or digital audio signals in a non-volatile storage portion the second memory;

[E] and playing through speakers of the second party control unit the digital video or digital audio signals stored in the second memory, said speakers of the second party control unit connected with the second memory of the second party control unit;

[F] wherein the non-volatile storage portion is not a tape or CD.

The PTO has confirmed that "[m]ere recitation of known technologies, such as computer hardware, communication or computer networks, software, memory,

computer-readable storage medium, scanners, display devices or databases, or specialized machines, such as an ATM or point of sale device," or "[r]eciting the use of known prior art technology to accomplish a process or method, even if that process or method is novel and non-obvious" will "not typically render a patent a technological invention." *See, e.g.*, 77 Fed. Reg. 48,756 48,764 (Aug. 14, 2012).

Indeed, as its language makes clear, Claim 1 involves no "technology" at all other than "a first memory" and "a second memory of a second party control unit," "telecommunications lines," and "speakers." And the patent itself concedes these were all well known and entirely commonplace at the time, stating that the first and second parties' memories ("agent's Hard Disk" and "user's Hard Disk"), telecommunication lines ("Telephone Lines") and speakers ("Stereo Speakers") are "already commercially available."[9] Ex. 1301 at 4:33-38. Further, the "control unit" mentioned in the claims as associated with the conventional "second" memory is described as a functional feature that can be implemented with a general purpose computer: the patent provides no disclosure of specific algorithms, and expressly states that the specification's description of such a "unit" does not indicate any particular requirements—it "is not restrictive with respect to the exact number of components and/or its actual design." Ex. 1301 at 4:65-67; *see* Ex. 1336 at 19-20.

[9] SightSound's CEO has admitted that Applicant did not invent computers, computer networks, the Internet, telephone lines, or telecommunications lines. Ex. 1308 at 42:12-44:5.

Indeed, during prosecution of the '440 Patent Applicant himself equated the control unit in the claims to a generic computer, arguing that Napster and N2K copied the claimed invention when they enabled a generic computer (equated by Applicant to the second control unit) to access a website and purchase digital audio signals. Ex. 1302 (1/08/98 Decl. at 2-3). Thus, as the intrinsic record reflects, Claim 1 recites nothing more than a method for electronically selling digital audio or video between a seller and buyer, using conventional, commercially available hardware and a general purpose computer with no specific algorithm. The generic level at which this hardware is disclosed is further illustrated in the patent's Figure 1 (Ex. 1301):

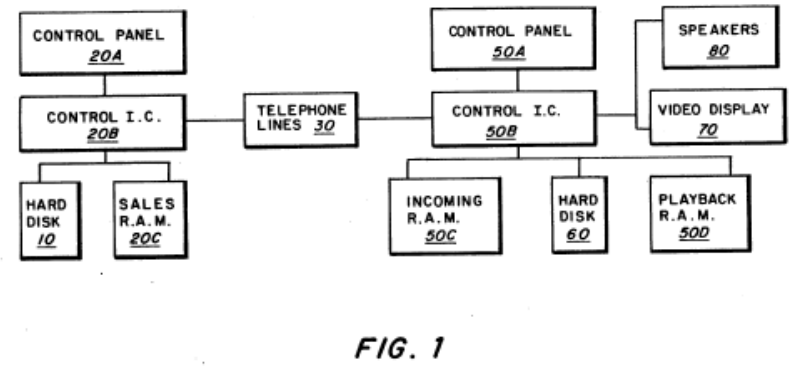


FIG. 1

The subject matter as a whole also solves no "technical problem" because there was no technical problem to begin with: those of ordinary skill certainly already knew how to sell digital products over telephone lines. Applicant conceded that one of ordinary skill would have understood, at the '440 Patent's claimed priority date, that "electronic sales" involved transferring a digital product through telephone lines (along with charging a fee and transferring funds electronically–which were "well

known practices"). For instance, during prosecution of a related patent, Applicant stated that "[o]ne skilled in the art would know that an electronic sale inherently assumes a transferring of money by providing an account number or a credit or debit card number which then allows for access to or a transferring of a service or product through telecommunication lines. One skilled in the art would know that an electronic sale inherently assumes a charging of a fee to an account which then allows for access to or a transferring of a product or service through telecommunications lines."). *See, e.g.*, Ex. 1338 (12/30/93 Hair Decl. at 2 & 5. *See also* Ex. 1312 at 11-12. Furthermore, the inventor himself has admitted that he did *not* invent electronic sales, or the electronic transmission of digital video or audio signals. Ex. 1307 at 49:3-52:2. And the specification further concedes that music was known at the time to be an example of a digital product. *See, e.g.*, Ex. 1301 at 1:58-61 ("Digital Audio Music is simply music converted into a very basic computer language known as binary. A series of commands known as zeros or ones encode the music for future playback."), 3:6-7 ("Digital Audio Music is software").[10]

In sum, the supposed invention of the '440 Patent—as claimed, argued and prosecuted—concerns nothing more than non-technical idea of selling music over a connection between a seller and a buyer.

[10] SightSound's own expert in litigation has similarly described digital audio signals simply as "digital representations of sound waves." Ex. 1343 at ¶ 70.

B. Petitioner Is a Real Party In Interest Sued for and Charged With Infringement

SightSound's complaint in Case No. 2:11-cv-01292, *SightSound Technologies LLC v. Apple Inc.*, pending in the U.S. District Court for the Western District of Pennsylvania, asserts the '440 Patent against Petitioner.[11]

IV. OVERVIEW OF SPECIFIC GROUNDS FOR WHICH IT IS MORE LIKELY THAN NOT THAT THE CHALLENGED CLAIMS (1, 64, AND 95) OF THE '440 PATENT ARE UNPATENTABLE

Pursuant to § 42.208 (and § 42.300), Petitioner asserts that at least one—and, indeed, every one—of the '440 Patent's challenged claimsis unpatentable as invalid under the requirements of §§ 102 and 103. Sections VI.B.1 and VI.B.2, respectively, list each ground upon which it is more likely than not that the challenged claims are unpatentable under §§ 102 and 103, and render a detailed explanation therefor.

V. BACKGROUND INFORMATION FOR THE '440 PATENT

The specific bases for invalidity presented in this Petition—based either on the CompuSonics system or the Synth-Bank article—each include evidence that was not previously cited to or considered by Examiner during prosecution or reexamination of the '440 Patent, as well as material that was cited but never discussed. Moreover, the arguments Applicant made to overcome the prior art then of record cannot be made with respect to the CompuSonics system and Synth-Bank references presented in this

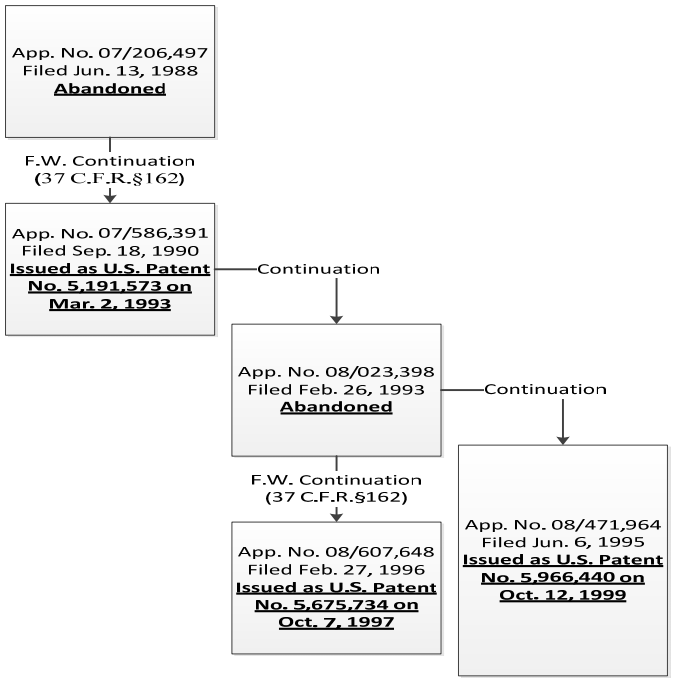
[11] The '440 Patent was previously the subject of an *ex parte* reexamination proceeding under Application No. 90/007,407, and two prior litigations: *SightSound.com Inc. v. N2K, Inc.*, No. 2:98-cv-00118-DWA (W.D. Pa.) and *SightSound Techs., LLC v. Roxio, Inc.*, No. 2:04-cv-01549-DWA (W.D. Pa).

Petition. Indeed, the purported distinctions argued by Applicant during prosecution and reexamination to overcome the prior art then of record simply underscore that the claims of the '440 Patent do not relate to any "technological" invention.

A. The '440 Patent and Its Prosecution History

1. The '440 Patent Family

The '440 Patent is the third of three patents issuing from a chain of applications claiming priority to an application (No. 07/206,497) filed June 13, 1988.



2. File History of the Parent '573 Patent

Prosecution of the parent '573 Patent commenced June 13, 1988. The originally-filed claims were directed to electronically transferring binary "Digital Audio Music" via telephone lines from a seller's hard disk to the hard disk of a user to allow

future playback.[12] As discussed in more detail below, throughout prosecution Examiner repeatedly rejected the pending claims as obvious or anticipated in light of two prior art references, Lightner and Hughes.[13]

In response to Examiner's § 102 rejections, Applicant amended its claims. As described in this Petition, however, the limitations that were added during prosecution to overcome the prior art of record are all disclosed in the CompuSonics system and Synth-Bank references. For example, Applicant amended certain pending claims to specify that the "second party [is] financially distinct from the first party." Ex. 1305 (08/20/90 Amend. at 2-3). Applicant also amended its claims to recite that the second memory is "in possession and control of the second party" and "at a location determined by the second party," while a transmitter is "in control and possession of the first party." Ex. 1305 (08/20/90 Amend. at 2-3). But these limitations that Applicant argued were missing from the then-cited prior art are all found in each of CompuSonics and Synth-Bank. *See* Section VI.B.1-2.

In these and other examples, Applicant repeatedly sought to distinguish the prior art of record on the basis of non-technical distinctions relating to who has control of hardware and where that hardware is located—not to any technological innovation. For instance, Applicant described his invention as "a method for

[12] Ex. 1305 (06/13/88 Spec. at 1-6).
[13] *Id.* (01/30/89 OA at 2-3; 05/14/90 OA at 2-4; 09/09/91 OA at 2-3; 02/24/92 OA at 7-8).

transmitting a desired digital audio music signal or video signal stored on a first memory to a second memory." Ex. 1305 (02/26/90 Amend. at 5). Applicant also argued that "Lightner does not teach or suggest 'transmitting the digital signal from the first memory to the second memory' with the 'second party controlling use of the second memory.'" *Id.* at 7. Instead, Applicant asserted, in Lightner "the party controlling the master recording is 'controlling use of the second memory' up until transmission," and "the second memory is in the possession of the vending machine." *Id.* at 6. Additionally, Applicant argued that "Lightner teaches and suggests that the vending machine is at a location determined by the 'first party,'" whereas certain added claims required the second memory to be "at a location determined by the second party." *Id.* at 7. Applicant also argued that neither Lightner nor Hughes discloses a receiver in the control and possession of the second party and at a location determined by the second party, because in both Lightner and Hughes, the receiver is in the possession of the first party. *Id.* at 7-8.

Examiner followed his § 102 rejections with rejections of the pending claims under § 103. In response, Applicant amended both the specification and claims to introduce the terms "telecommunications link" and "telecommunications line." Ex. 1305 (12/09/91 Amend. at 2, 3, 5, 6). Applicant argued that Hughes fails to show "transferring money (or fee) to a first party at a location remote from the second memory and controlling use of the first memory from a second party financially

distinct from the first party," which Applicant characterized as "critical to the operation of the applicant's invention," since in Hughes money is instead stored locally at Hughes' recording machine. *Id.* at 9). Additionally, Applicant argued that Hughes does not teach or suggest "said receiver in possession and control of second party." *Id.* at 11).

Examiner responded by objecting to the specification and rejecting all pending claims under 35 U.S.C. §§ 112 ¶¶ 1-2, and 103. In reply, Applicant filed a declaration by the inventor. Ex. 1305 (05/05/92 Hair Decl. at 2-3). The declaration and accompanying arguments asserted that the objected-to phrases and steps were inherent in the phrase "electronic sales" in the original application.[14] As before, Applicant also argued that the amended claims were patentable because Hughes failed to suggest "transferring money electronically via a telecommunications line to the first party from the second party," since Hughes performs the sale in the same location as the recording machine and allows the user to physically insert coins into the machine.[15] Unlike the recording machines in Hughes, Applicant asserted that the claimed receiver is in the possession and control of the second party and can be at a

[14] The declaration said, *inter alia*, that "[o]ne skilled in the art would know that an electronic sale inherently assumes a transferring of money by providing a credit or debit card number (since that is the only way for electronic sales to occur) coupled with a transferring of a service or product," and "[t]he use of transferring money across telecommunication connections, such as by telephoning the agent who has the hard disc over the phone lines, for obtaining data on the hard disc is well known to one skilled in the art to be part of electronic sales." Ex. 1305 (05/05/92 Hair Decl. at 2-3).
[15] Ex. 1305 (06/22/92 Amend. at 17-19)

location chosen by the second party. Applicant also argued these limitations were also not shown by Lightner.[16]

When Examiner eventually allowed the claims, his explanation confirmed that this was not based on any technical innovation in the claims, but simply a view that the prior art then of record did not teach two separately-located parties – *i.e.*, a transmitter that was "in control and possession of the first party," or a receiver "in possession and control of the second party" and with a second memory "at a location determined by the second party." Ex. 1305 (09/21/92 OA at 2). Examiner issued a Notice of Allowability on October 19, 1992, and the '573 Patent issued March 2, 1993, all without mention of the CompuSonics system and Synth-Bank references, which clearly describe two separately-located parties. *Id.* (10/19/92 Notice at 1).

3. File History of the '440 Patent

The application resulting in the '440 Patent was filed on June 6, 1995. During prosecution, Examiner issued a series of §§ 112 ¶ 1, 102, and 103 rejections. Ex. 1302 (01/04/96 OA at 2-4; 10/09/96 OA at 2-3; 07/10/97 OA at 2-3). The history of the '440 Patent reexamination underscores Applicant's and the PTO's recognition that the distinctions between the prior art of record and the claims at issue were non-technical. Regarding § 112 ¶ 1, Examiner stated the patent lacked proper written description and

[16] Ex. 1305 (06/22/92 Amend. at 19-20). However, art cited but not discussed during reexamination, such as Softnet, confirms that transferring money electronically via telecommunication lines was actually well known in the art. *See* Ex. 1312.

"[t]he specification fails to make clear what the problems in the prior art that the present invention intends to overcome."[17] To overcome the rejection, Applicant added the following to the specification: "Thus, as is apparent from the above discussion, the inflexible form in which the songs are purchased by an end user, and the distribution channels of the songs, requires the end user to go to a location to purchase the songs, and not necessarily be able to purchase only the songs desired to be heard, in a sequence the end user would like to hear them. This is not limited to just songs, but also includes, for example, videos." Ex. 1302 (07/03/96 Amend. at 2).

Examiner's §§ 102 and 103 rejections centered on three prior art patents—Lightner, Ogaki, and Freeny.[18] As in the prosecution of the '573 Patent, Applicant described the distinctions between the prior art of record and the pending claims as relating to who has control of hardware and where that hardware is located.[19] For instance, Applicant argued that the receiver and second memory disclosed in Lightner is not in possession of control of a second party, as recited by the claims.[20] Applicant also conceded that electronically paying for video and audio was known, as was the fact that such payment would begin the transfer of those signals. *Id.* at 42-43.

[17] Ex. 1302 (01/04/96 OA at 2).
[18] *See id.* (01/04/96 OA at 2-4; 10/09/96 OA at 2-3; 07/10/97 OA at 2-3).
[19] *Id.* (07/03/96 Amend. at 41-60).
[20] *Id.* (07/03/96 Amend. at 45-46) ("[T]he second party is not in possession or control over the vending machine in Lightner and thus is not in possession and control of the receiver, or the second memory until after transfer of the video or audio signal is complete and it has been ejected from the vending machine.").

Applicant argued, however, that "the limitation of Claim 1 of the step of 'transferring the desired digital video or audio signals from the first memory of the first party to the second memory of the second party through telecommunications lines while the second memory is in possession and control of the second party' is not taught or suggested by Lightner. The blank tape cassettes taught by Lightner do not come into the 'possession and control of the second party' until after the transfer of the desired video or audio signal from the first memory of the first party to the second memory has been completed whereupon it is ejected from the vending machine." *Id.* at 41-42. Applicant further argued that, "from the teachings that the transfer of the desired audio or video signal from the first memory to the second memory occurs only after the insertion of currency or a valid credit card into the vending machine occurs, the second memory is not in possession or control of the second party but is in possession and control of the first party." *Id.* at 43. Applicant additionally argued that Lightner and Ogaki do not disclose: (1) transferring a desired digital video or audio signal from the first memory to the second memory while the second memory or receiver "is in possession and control of the second party"; (2) a second party control unit "in possession and control of the second party"; or (3) that the second party control unit or receiver is placed "by the second party at a desired location determined by the second party." *Id.* at 46, 53. Applicant also asserted that the software programs disclosed as digital products sold in the Ogaki patent were not

equivalent to the claimed digital video or audio signals, as recited by the claims, arguing (inexplicably) that Ogaki "does not teach or suggest the transmission of any type of signals in 'digital' form." *Id.* at 50.

Applicant distinguished Freeny by asserting, *inter alia*, that in the claimed invention "the purchaser plays the information in the same machine which receives the information. That key distinction and limitation of applicant's claimed invention distinguishes over Freeny, Jr." *Id.* at 58.[21] Applicant further argued that "[t]his material distinction also manifests applicant's claimed invention as a totally different approach to obtaining digital audio or digital video signals because as the prior art clearly represents, the prior art only taught to provide the information up to a point, that is, sale of the information, which the producer had to come and get, and then the purchaser would go off to another location to listen or play the digital video or digital audio information. Applicant's claimed invention combines the transfer function with the playing function so a user does not have to go off somewhere else and play the information." *Id.* at 58-59.[22] In his final rejection, Examiner stated it would be obvious to modify the system of the Freeny patent to also play back the received

[21] Examiner later rejected all claims because it would have been obvious to modify Freeny to play the received information, stating "one of ordinary skill in the art would obviously be able to recognize that a system [that] can record information such as that of Freeny et al can also play said information." Ex. 1302 (07/10/97 Final Rej. at 3).
[22] However, references cited but not discussed during the reexamination of the '573, '734, and '440 Patents, such as Walter and Elkins, actually confirm that downloading and playing digital audio/video using a single device was known.

information because "one of ordinary skill in the art would obviously be able to recognize that a system [that] can record information such as that of Freeny et al can also play said information." Ex. 1302 (07/10/97 Final Rej. at 3). But these limitations that Applicant argued were missing from the then-cited prior art are all found in each of CompuSonics and Synth-Bank.

Freeny was the subject of Examiner's final rejection and Applicant's appeal to the Board.[23] In attempting to overcome Examiner's final rejection under § 103, Applicant argued, *inter alia*, that he "d[id] not claim he was the first to invent the capability to playing digital audio signals, such as with a stereo, or digital video signals, but applicant did invent an integrated system that can play digital audio signals or digital video signals at a second party control unit which received such signals through communication lines, such as telephone or cable lines or power lines, from the first memory. There is nothing like it in the applied art of record, as explained more fully below." Ex. 1302 (01/09/98 Amend at 5-6). However, as detailed below, the CompuSonics system and the Synth-Bank article anticipate and render obvious the idea that Applicant claims to have invented.

The arguments in Applicant's appeal largely emphasized the non-technical distinctions between Freeny and the pending claims.[24] Applicant argued that Freeny fails

[23] *Id.* (07/10/97 OA at 2-3; 06/09/98 Appeal Br. at 36-62).
[24] *E.g., id.* (06/09/98 Br. at 62) ("Freeny does not teach or suggest for the second party to place the second party control unit at a second party location determined by

to teach "'transferring the desired digital video or digital audio signals from the first memory of the first party to the second memory of the second party control unit of the second party through telecommunications lines while the second party control unit with the second memory is in possession and control of the second party,'" because "Freeny already has stored the preselected or predetermined information which is in an encoded format in the master file unit of the IMM" (Information Manufacturing Machines). Ex. 1302 (06/09/98 Appeal Br. at 44-45). Applicant argued, *e.g.*, that Freeny's "material object," unlike the claimed second memory, is not "'in the possession and control of the second party while [the] transfer of the audio or video signals occur[s].'" *Id.* at 46). Applicant further argued that Freeny fails to teach or suggest limitations that require a "'sales random access memory chip,'" because Freeny does not transfer purchased signals via telecommunication lines, and limitations that require a "second party hard disk," because Freeny only teaches material objects that "must all be separable and operable away from the IMM." *Id.* at 60-61 (citations omitted)). Finally, Applicant argued that Freeny also does not teach "'said second party control unit placed by the second party at a second party location determined by the second party which is remote from said first party control unit.'" *Id.* at 62). All of these limitations are taught by CompuSonics system and the Synth-Bank references.

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the second party.").

After Applicant appealed, Examiner—*sua sponte*, and without explanation—issued a Notice of Allowance,[25] and the '440 Patent issued on October 12, 1999.

B. Reexamination History of the '440 Patent and Related Patents

1. Reexamination of the Parent '573 Patent

Petitioner Napster, Inc. requested *ex parte* reexamination of the '573 Patent on January 31, 2005.[26] The PTO granted the request, finding it raised substantial new questions of patentability as to whether issued claims 1-6 of the '573 Patent were obvious under 35 U.S.C. § 103.[27] During reexamination of the '573 Patent, Examiner issued various different rejections, including rejections under §§ 102, 103, 112, and 120. The history of the reexamination of the '573 Patent underscores the PTO's recognition that the distinctions drawn between the prior art of record and the claims as issued were non-technical. Moreover, because these limitations—asserted to be absent from the prior art before the Office during reexamination—are all disclosed by CompuSonics and Synth-Bank, this reexamination history further reveals the invalidity of all of the challenged claims.

During reexamination, Examiner repeatedly rejected the '573 Patent claims under § 103. The Patentee asserted various distinctions between the issued claims and the prior art, but did not amend its claims in response to the first office action. Ex. 1306 (08/19/05 Resp. at 1-10). Patentee argued, for example, that "Freeny was

[25] *Id.* (09/15/98 Notice at 1).
[26] Ex. 1306 (01/31/05 Request for *Ex Parte* Reexamination at 1).
[27] Ex. 1306 (03/18/05 Order at 2); Ex. 1306 (06/21/05 OA at 2).

teaching a vending machine" in which "the first party is in possession and control of the second memory." Ex. 1306 *Id.* at 6.

In attempting to overcome Examiner's § 103 rejections, Patentee also argued that secondary considerations of non-obviousness were present. Patentee stated, for instance, that "there was a long-felt need for a simple system for electronically distributing audio" and that "none of the prior art systems ever survived as a consumer-oriented mass-market distribution system for digital music distribution." *Id.* at 7 (citing Tygar rebuttal report at 80). Patentee also argued that "the success of Apple Computer Company with its download business, ITunes [sic]" supported the non-obviousness of the patent. *Id.* at 9. Examiner was not persuaded, stating, for instance, that the patentee "***has not provided proof that the claimed features were responsible for the commercial success of the mentioned distribution systems***," and that "[m]erely showing that there was commercial success of an article which embodied the invention" would not suffice. Ex. 1306 (10/26/05 OA at 2). Examiner also noted that the inventor acknowledged that SightSound "***attempted to implement the claimed invention but ultimately failed*** because the RIAA and MPAA would not license their music and movies for distribution on their system." *Id.* at 2. Additionally, Examiner stated that Patentee's secondary considerations were not persuasive because "[t]he existence and profitability of the systems mentioned by [Patentee] are ***due to the advances in recent technology and not [Patentee's]***

claimed invention." Ex. 1306 (10/26/05 OA at 3). Examiner eventually issued a Final Office Action, which included §§ 102 and 103 rejections, as well as § 112 ¶ 1 rejections based on a lack of enablement and written description. A new Examiner then vacated this Final Office Action, but adopted certain prior rejections, raised the issue of entitlement to the '497 Application's priority date, and entered a new Non-Final Office Action. In the response, Patentee amended the claims to specify that the digital signal is stored to "a non-volatile storage portion of the second memory" that "is not a tape or CD." Ex. 1306 (11/29/06 Resp. at 2). With respect to the pending §§ 102 and 103 rejections, Patentee argued that the prior art of record failed to disclose storing the desired digital video or audio signal in a non-volatile storage portion of the second memory that is not a CD or tape, since each store received audio or video on a CD or "a tangible object, such as a cassette tape or video disk." *Id.* at 33. The CompuSonics system and Synth-Bank references raised by this Petition, however, show that storing audio or video on a non-volatile memory that is not a CD or tape was well-known long before the claimed priority date of the '573 Patent.[28]

Patentee subsequently filed an appeal addressing issues including §§ 102, 103, 112, and 120. With respect to the §§ 102 and 103 rejections, Patentee argued, *inter*

[28] This Petition and accompanying declarations and exhibits describe the CompuSonics system. Some materials related to CompuSonics were filed in an 08/19/05 IDS during reexamination, but were never mentioned or cited by Examiner. Similarly, the Synth-Bank article was printed alongside an article included in that IDS, but was never cited to the Office during reexamination.

alia, that U.S. Patent No. 4,949,187 ("Cohen"), upon which Examiner had relied, was not prior art and that the remaining rejections were based on improper combinations.

The Board of Patent Appeals and Interferences reversed Examiner's rejections, ruling that Cohen was not prior art; that Examiner committed error in finding a motivation to combine two of the § 103 references; and that the remaining § 103 combination "does not teach or suggest storing the digital signal in a non-volatile portion of the second memory that is not a tape or CD, where the second memory is controlled by and in the possession of the second party." Ex. 1306 (09/04/09 Decision on Appeal at 25-29). The '573 Patent expired shortly thereafter, and, as a result, Applicant's new claims and proposed amendment could not be maintained.[29] Examiner issued a new Office Action on March 25, 2010, reopening prosecution and rejecting all claims under 35 U.S.C. §§ 102 and 103 and for ODP. *Id.* at 4-22.

In response, Patentee argued that since the '573 Patent expired and the broadest reasonable construction standard no longer applied, "second memory" had to be construed as excluding removable media such as CDs or cassette tapes.[30] Patentee argued that Examiner's § 102 rejection was based on prior art that did not teach storing the digital signal in the second memory because "cassette tapes and CDs are not 'second memories' according to the specification." *Id.* at 3. Patentee similarly argued that the references used for the § 103 rejections do not teach "storing the

[29] Ex. 1306 (03/25/10 OA at 2).
[30] Ex. 1306 (05/25/10 Resp. at 2-3).

digital signal in the second memory" because the storage media disclosed in the art are a different type than required by "second memory" in the claims. *Id.* at 4-5.

Examiner accepted Patentee's arguments and issued a Notice of Intent to Issue *Ex Parte* Reexamination Certificate on August 16, 2010.[31] The notice stated, *inter alia*, that—once Patentee's construction of the term "second memory" is accepted—"the original claims have essentially the same scope as the amended, original claims did when they were reviewed by the Board of Patent Appeals and Interferences." *Id.* at 4. On this basis, an *Ex Parte* Reexamination Certificate for the '573 Patent, confirming the original claims, issued on November 30, 2010.

2. Reexamination of the '440 Patent

Petitioner Napster, Inc. also filed a request for *ex parte* reexamination of the '440 Patent on January 31, 2005 (Ex. 1303).[32] Napster's request argued that claims 1-63 were invalid as anticipated or obvious, and based on obviousness-type double patenting ("ODP") in light the '573 Patent and/or the '734 Patent. *Id.* at 79-125.

During reexamination, Examiner repeatedly rejected the claims under §§ 102, 103, and 112, ¶ 1 (written description and enablement), as well as obviousness-type double patenting.[33] Examiner also repeatedly raised the issue of the priority date under § 120,[34] and made a single § 112 ¶ 2 indefiniteness rejection.[35]

[31] Ex. 1306 (08/16/10 Notice of Intent at 1).
[32] Ex. 1303 (01/31/05 Request at 1).
[33] Ex. 1303 (06/21/05 OA at 2-21; 10/26/05 OA at 7-40; 03/27/06 OA at 16-53;

In order to overcome Examiner's §§ 102 and 103 rejections,[36] Patentee added the following limitations: (1) "the second party is at a second party location and the step of selling electronically includes the step of charging a fee via telecommunications lines via by the first part to the second party at a fist party location remote from the second party location, the second party has an account and the step or charging a fee includes the step of charging the account of the second party; (2) "storing the desired digital video or digital audio signals in a non-volatile storage portion [of] the second memory"; and (3) "wherein the non-volatile storage portion is not a tape or CD."[37] These limitations are explicitly found in the CompuSonics system and Synth-Bank reference. *See* Section VI.

In response to Examiner's §§ 102 and 103 rejections, Applicant argued, for instance, that "[t]here is no suggestion in Freeny [U.S. Patent No. 4,528,643] or Akashi [Japanese Patent No. 62-284496]] that transmission of audio or video information from a remote location can be triggered by providing credit card account information at the point of sale." Ex. 1303 (02/06/2006 Resp. at 22). Many of Applicant's other attempts to overcome Examiner's prior art rejections focused on the fact that Examiner relied on art that did not qualify as prior art based on the

09/29/06 OA at 13-42; 03/17/07 OA at 15-42).
[34] Ex. 1303 (09/29/06 OA at 2-12; 03/17/07 OA at 2-15).
[35] Ex. 1303 (03/17/07 OA dated at 24).
[36] Ex. 1303 (10/26/05 OA at 7-40; 03/27/06 OA at 16-53; 09/29/06 OA at 13-42).
[37] Claims 64 and 95 were added during the reexamination. Ex. 1303 (02/06/06 Amend. (adding claim 64); 11/29/06 Amend. (adding claim 111, issued as 95).

alleged June 13, 1988 priority date of the '440 Patent.[38] Examiner relied on the June 6, 1995 filing date of the '440 Patent itself as the effective filing date, arguing, for instance, that a significant amount of unsupported new text was added to the specification and claims after the claimed 1988 priority date. *See, e.g., id.* (09/29/06 OA at 12; 03/07/07 Final Rejection at 2-63.)

In attempting to overcome Examiner's § 103 rejections, Patentee also argued that secondary considerations of non-obviousness were present. Patentee stated, for instance, that "[t]he Hair claimed invention offers the advantages of allowing consumers to use their home computers to purchase, download, and play back the desired digital audio music using a single device. *Id.* (07/21/05 Amend. at 57). Patentee also pointed to iTunes, arguing, for instance, that "[i]t should also be noted that it is common knowledge of the success of Apple Computer Company with its download business, ITunes [sic] . . . A printout of the web page of ITunes [sic] of Apple Computer showing over 500 million downloads is included . . ." *Id.* at 59. iTunes, Patentee argued, was an example of "recognition by the music industry of the advantages of electronic sales of digital audio." *Id.* at 58. Examiner rejected these arguments, explaining, *inter alia*, that "Applicant has not provided proof that the claimed features were responsible for the commercial success of the mentioned

[38] Ex. 1303 (07/21/05 Resp. at 28; 12/27/05 Resp. at 37-38; 02/06/06 Resp. at 18-19; 11/15/06 Interview Form at 2; 11/29/06 Resp. at 31-44, 61-63; 12/01/06 Applicant Statement at 1-3; 05/17/07 Resp. at 3-26).

distribution systems (i.e. Itunes) [sic]." *Id.* (10/26/2005 Rejection at 2)[39] Further, "[t]he existence and profitability of the systems mentioned by Applicant are due to the advances in recent technology and not Applicant's claimed invention. If the latter was responsible for success, then it stands to reason that the existence of a profitable system would have occurred earlier since Applicant's first application directed to the claimed subject matter was filed in June of 1988. At the time of Apple's ITunes [sic] launch, personal computer storage capacities were significantly larger [and] audio file compression was advanced to the point where a file could be compressed to a third of the size . . . . Add to that the proliferation of broadband Internet . . . and what you have is the ability to store a significantly larger amount of music because of file size and storage capacity, and the ability to acquire this music much faster." *Id.* at 3-4.

Examiner made multiple ODP rejections throughout the reexamination, stating that the pending claims were unpatentable over the claims of the '734 and '573 Patents.[40] For example, Examiner rejected the claims for ODP over the claims of the '573 Patent since "[t]he only difference between the claims is the recitation of a

[39] Examiner also stated "[c]ommercial success may have been attributable to extensive advertising and position as a market leader before the introduction of the patented product . . . Apple has not only been a market leader in computer technology for over two decades but became a market leader in the digital music realm after their IPod release in October 2001. Therefore, Applicant cannot attribute the commercial success of Apple's ITunes system to the alleged use of their claimed invention when Apple was already a market leader before the system was launched." *Id.* at 4.

[40] Ex. 1303 (10/26/05 OA at 4-7; 03/27/06 OA at 13-16; 09/29/06 OA at 42-44; 03/17/07 OA at 42-44).

'second party control unit,"' which Examiner found would have been obvious in light of the specification of the '573 Patent.[41] In his final rejection, for instance, Examiner stated with respect to the '573 Patent that "[a]lthough the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 of the '573 Patent recites a method for transmitting a digital audio signals stored on a first memory of a first party to a second memory of a second party." Ex. 1303 (03/17/07 OA at 44); *see also id.* at 43. Applicant repeatedly argued that consideration of obviousness-type double patenting was inappropriate in reexamination.[42]

Applicant ultimately appealed Examiner's final rejections involving obviousness-type double patenting as well as §§ 103, 112 ¶ 1, and 120. Ex. 1303 (07/30/07 Request at 23-25). Patentee argued, *inter alia*, that the '440 Patent was entitled to a June 13, 1988 priority date, asserting that "the reexamination statutes do not empower the Office to examine claims for issues of effective priority date in the absence of a continuation-in-part in the original examination history," and that Examiner was thus not permitted to reexamine its priority date. *Id.*; 01/30/08 Amend. Br. at 21-24, 34-37). As a result, Patentee argued, U.S. Patent No. 5,132,992 ("Yurt") was not prior art. The Board ruled the '440 claims were entitled to at least the benefit of the '391 Application, filed on September 18, 1990. Ex. 1303 (08/14/09

[41] Ex. 1303 (10/26/05 OA at 4-6).
[42] Ex. 1303 (12/27/05 Resp. at 27-30; 11/29/06 Resp. at 66-68; 05/17/07 Resp. at 25; 05/17/07 Resp. at 25).

BPAI Decision at 17). "Yurt issued form an application filed January 7, 1991, and cannot be considered prior art to the instant claim . . . We find, therefore, that all of the prior art rejections are improper . . ." *Id.* at 17-18.

On appeal, Applicant also asserted that the '573 and '734 Patents were currently the subject of copending reexaminations and that "since the final form in which claims may emerge from the . . . reexaminations is not known, Examiner cannot properly based a double-patenting rejection on the claims of the '573 or '734 Patent as they existed prior to the reexamination proceedings." Ex. 1303 (01/30/08 Amend. Br. At 80). The Board agreed with Patentee's argument and reversed the obviousness-type double patenting rejection on this procedural basis. *Id.* (08/14/09 Decision on Appeal at 18-19). Examiner issued a Notice of Intent to Issue *Ex Parte* Reexamination Certificate on March 2, 2010. *Id.* (03/02/10 Notice at 1).

VI. DETAILED EXPLANATION OF REASONS FOR RELIEF REQUESTED, SHOWING IT IS MORE LIKELY THAN NOT THAT AT LEAST ONE CHALLENGED CLAIM IS UNPATENTABLE

Pursuant to §§ 42.22 and 42.304(b), a full statement of the reasons for the relief requested, including a detailed explanation of the evidence, including material facts, and the governing law, rules and precedent is provided below. Section VI.A lists and explains the bases for Petitioner's relevant claim constructions. Sections VI.B.1 and VI.B.2 provide a detailed explanation for each ground for which it is more likely than not that each challenged claim is invalid under §§ 102 and 103. A claim is anticipated

if "each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros., Inc. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987); *see also* MPEP § 2131. A claim is obvious in view of the prior art if "the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art." § 103(a); *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 420 (2007) ("[A] person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle . . . A person of ordinary skill is also a person of ordinary creativity, not an automaton."); *see also* MPEP §§ 2141, 2143.

A. Claim Construction

Pursuant to § 42.300(b), and solely for purposes of this review, Petitioner construes the claim language such that claim terms are given their broadest reasonable interpretation. In concurrent proceedings in the United States District Court for the Western District of Pennsylvania, *SightSound Technologies v. Apple Inc.*, No. 11-cv-1292 (W.D. Pa.), a claim construction order has been entered (Ex. 1337), adopting in its entirety the report and recommendations of the Special Master appointed for claim construction in those proceedings (Ex. 1336). For purposes of this review, Petitioner

proposes that the Court's claim constructions be adopted, except as noted below.[43] For terms not specifically listed and construed below, and in the absence, to date, of detailed arguments from SightSound indicating a need for construction or a disagreement regarding the meaning of those claim terms, Petitioner interprets them for purposes of this review in accordance with their plain and ordinary meaning under the required broadest reasonable interpretation consistent with the specification of the '440 Patent. Because the standard for claim construction at the PTO is different than that used in U.S. District Court litigation, *see In re Am. Acad. of Sci. Tech Ctr.,* 367 F.3d 1359, 1364, 1369 (Fed. Cir. 2004); MPEP § 2111, Petitioner expressly reserves the right to argue in litigation a different claim construction for any term in the '440 Patent, as appropriate to that proceeding.

- *"first party"*—Claims 1, 64, 95. For review purposes this term is construed to mean, consistent with the claim construction order entered by the Western District of Pennsylvania ("Claim Construction Order"), a first entity, whether a corporation or a real person. *See* Ex. 1336 at 19. *See also* Ex. 1301 at Abstract, 3:14-33, 5:43-62, 6:20-48, 7:57-8:18; Ex. 1305 (8/21/90 Amend. at 4-5 (describing "Applicant's invention")).

[43] In the concurrent proceedings, for several claim terms Petitioner advanced different constructions than those adopted by the Court. Although Petitioner expressly reserves the right to appeal the Court's claim constructions, Petitioner suggests that the differences between the constructions adopted by the Court and those advanced by Petitioner do not materially impact the arguments presented herein.

● *"second party"*—Claims 1, 64, 95. For review purposes this term is construed to mean, consistent with the Claim Construction Order, a second entity, whether a corporation or a real person. *See* Ex. 1336 at 19. *See also* Ex. 1304 at Abstract, 3:3-19, 5:29-45; Ex. 1301 at Abstract, 3:14-33, 5:43-62, 6:20-48, 7:57-8:18; Ex. 1305 (08/21/90 Amend. at 4-5 (describing "Applicant's invention")).

● *"second party control unit"*—Claims 1, 64, 95. For review purposes this term is construed to mean, consistent with the Claim Construction Order, a control unit of the second party. *See* Ex. 1336 at 19-20; Ex. 1301 at 4:3 ("**50** Control Unit of the user"), 4:16-17 ("user's or second party's Control Unit **50**"), 4:17 ("[t]he user's Control Unit"); Ex. 1338 (12/30/93 Amend. at 39 (arguing that the second memory disclosed by Lightner is not a second party memory—*i.e.*, a memory of the second party)). Further, for review purposes a "control unit" is construed to include a general purpose computer. Ex. 1302 (01/08/98 Decl. at 2-3).

● *"second party hard disk"*—Claims 64, 95. For review purposes this term is construed to mean, consistent with the Claim Construction Order, a hard disk of the second party. *See* Ex. 1336 at 19-20 & 19 n.15. *See also* Ex. 1301 at 4:8 ("**60** Hard Disk of the user"), 4:36-37 ("the user's hard disk **60**"), 5:2 ("the user's hard disk **60**"); Ex. 1338 (12/30/93 Amend. at 39 (arguing that the second memory disclosed by Lightner is not a second party memory—*i.e.*, a memory of the second party)).

● *"telecommunication[s] lines"*—Claims 1, 64, 95. For review purposes this term is

construed to mean, consistent with the Claim Construction Order, an electronic medium for communicating between computers. *See* Ex. 1336 at 20-23.

● *"electronically"*—Claims 1, 64, 95. For review purposes this term is construed to mean, consistent with its plain meaning to those of skill in the art, through the flow of electrons.[44] *See* Ex. 1339 at 3 ("Pertaining to devices or systems which depend on the flow of electrons"); Ex. 1340 at 6 ("Of or relating to electrons"); Ex. 1341 ¶¶ 29-33.

● *"connecting electronically"*—Claim 95. For review purposes this term is construed to mean, consistent with the Claim Construction Order, connecting through devices or systems which depend on the flow of electrons. *See* Ex. 1336 at 27.

● *"transferring electronically"*—Claim 95. For review purposes this term is construed to mean, consistent with the Claim Construction Order, transferring through devices or systems which depend on the flow of electrons. *See* Ex. 1336 at 28.

● *"charging a fee"*—Claims 1, 64, 95. For review purposes this term is construed to mean, consistent with the Claim Construction Order, requesting payment electronically. *See* Ex. 1336 at 29; Ex. 1301 at 8:31-35 ("Preferably, the means or mechanism for the first party to charge a fee includes means or a mechanism for transferring money electronically via telecommunications lines to the first party at a location remote from the second memory at the second location."); Ex. 1306 (5/17/07 Tygar

[44] In concurrent proceedings, the U.S. District Court for the Western District of Pennsylvania has construed the related term "electronic" to mean "pertaining to devices or systems which depend on the flow of electrons." Ex. 1336 at 27.

Decl. ¶ 9) ("where a fee is charged . . . money is transferred").[45]

● *"selling electronically"*—Claims 1, 64. For review purposes this term is construed to mean, consistent with the Claim Construction Order, providing a product or service electronically in exchange for providing payment electronically. *See* Ex. 1336 at 29; Ex. 1305 (05/05/92 Decl. at 2 ("One skilled in the art would know that an electronic sale inherently assumes a transferring of money […] coupled with a transferring of a service or product."); *id.* (06/23/92 Amend. at 11-13) ("The term 'electronically transferring of money' though not literally cited, is nonetheless equivalent in scope and function to the description of the invention as originally filed with respect to electronic sales. . . . Electronic sales via telephone lines inherently assumes a transferring of money. Any 'sale' by definition assumes a transference of money for a desired commodity, in this instance, digital audio or video signals. In a similar argument, 'electronic sales' over 'telephone lines 30' are terms which encompass the well known process of 'providing a credit card number' over a telephone line and 'telephoning' to make the connection.").

● *"digital audio signal[s]"*—Claims 1, 64, 95. For review purposes this term is construed to mean, consistent with the Claim Construction Order, digital representations of

[45] *See also* Ex. 1338 (12/30/93 Hair Decl. at 2-3) ("The use of transferring money across telecommunication connections, such as by telephoning over the phone lines the agent who has a first party's hard disk, or charging a fee to a purchaser or 'second party' preferably at a location remote from a purchaser or 'second party', for obtaining data on the first party's hard disk through telecommunications lines is well known to one skilled in the art to be part of electronic sales.").

sound waves. *See* Ex. 1336 at 30.

● *"hard disk"*—Claims 64, 95. For review purposes this term is construed to mean, consistent with the Claim Construction Order, a permanent, rigid, magnetic storage device. *See* Ex. 1336 at 33; Ex. 1301 at 2:44-48 ("The high speed transfer of Digital Audio Music as prescribed by this invention is stored onto one piece of hardware, a hard disk, thus eliminating the need to unnecessarily handle records, tapes, or compact discs on a regular basis."); Ex. 1303 (11/29/06 Resp. at 33-34 ("A hard disk is a form of non-volatile storage . . . . Examples of non-volatile storage include computer hard disks.")).

B. The Challenged Claims Are Invalid Under § 102 and/or § 103

1. The Challenged Claims Are Anticipated By the CompuSonics System and Are Invalid Under § 102

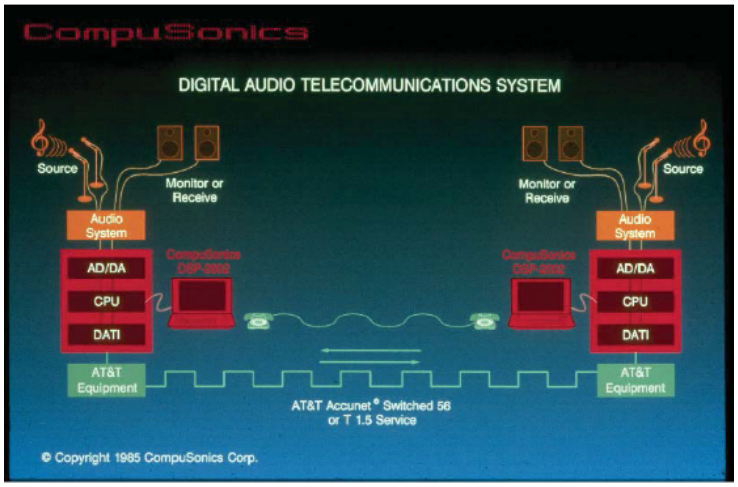
CompuSonics Corp. developed recorder/players for digital audio that could store and play digital audio transmitted over telephone lines, and also offered robust editing features that could be used to manipulate digital audio regardless of its origin. CompuSonics Video Corp.[46] commercialized CompuSonics' recorder/player for digital video. CompuSonics publicly demonstrated its recorder/players, patented its underlying technology, and promoted the use of its recorder/player system for facilitating the sale and distribution of digital audio and video over telephone, T1, and cable lines. The technology and concepts embodied in CompuSonics' publicly

[46] The CompuSonics sister corporations are referred to here as "Compusonics."

disclosed system are referred to in this Petition as the "CompuSonics system," and are confirmed by the Declaration of CompuSonics' Founder and President, David Schwartz, and the Exhibits identified in that Declaration as publicly disclosing features of the system. Because the CompuSonics system relied upon herein was publicly disclosed before any possible effective filing date for the '440 Patent, it is prior art satisfying AIA § 18(a)(1)(C).

A key aspect of the CompuSonics system was the transfer of digital data, including digital audio and digital video, over telephone, T1, and cable lines. For example, CompuSonics' recorder/players for digital audio, called DSPs, included built-in communication devices for use with a telephone line, and saved received digital audio to floppy disk. *See, e.g.*, Ex. 1310 at 1. CompuSonics used the term "telerecording" to refer to its DSP players' download of digital data from a remote source to a local disk.[47] CompuSonics recognized that once audio or video was in digital form, it could be distributed like any other digital data, including directly to record stores and consumers over telephone, T1, and cable lines. CompuSonics also described using telerecording to distribute digital music for sale. This diagram illustrates CompuSonics' telerecording technology, with an example of digital audio transmission over either telephone lines or T1 lines between two CompuSonics DSP recorder/players (Ex. 1315):

[47] Ex. 1335 (Schwartz Decl.) at ¶ 4.



As early as 1984, CompuSonics described what its telerecording technology meant for the future of digital audio sales:

> Testing of the Telerecording system with CMI Labs began last week. If the system continues to meet its specs, the first AT&T Bell Lab test in New Jersey will happen late this month. A successful test of the digital transmission of high fidelity music over telephone lines will be followed by a joint press conference of CompuSonics, CMI Labs, and AT&T, heralding the dawn of a new era in the music industry. In the not too distant future ***consumers will be able to purchase digital recordings of their favorite artists directly from the production studio's dial-up data base and record them on blank SuperFloppies in a DSP-1000***.

See Ex. 1316 at 1.

In a paper presented at the 76th Convention of the Audio Engineering Society (AES) in October 1984, CompuSonics employee Hyun Heinz Sohn similarly explained this application of the CompuSonics system, as well as several benefits:

> The author and his colleagues at Compusonics Corporation see great potential for ***expanding the music market through digital technology***. Imagine that a large database of the latest music chart successes exist only a phone call away. Video music services which broadcast over cable networks can simultaneously release [a] new album and have it ready for immediate sale without first having filled the distribution pipeline. ***In fact, a trend of selling the music, not the media, would have been set. This would reduce expensive inventory and shipping costs and at the same time assure a supply of recording that can meet any demand. Record stores can have direct connections to the music databases and become, in a sense, the record manufacturer, paying royalties to the recording company for each copy sold.*** Since each copy of a recording can be accounted for by the computers that run the databases, the piracy problem may also be reduced.

See Ex. 1317 at 11.

In 1985, CompuSonics publicly demonstrated its technology with the transfer of digital audio over AT&T's Accunet between two of its DSP-2002 recorder/players in Chicago and New York. An October 5, 1985 *Billboard* article reported on this press demonstration and the AT&T/CompuSonics partnership:

> CompuSonics Corp., the Denver-based manufacturer of digital audio equipment, has entered into a one-year agreement with AT&T to jointly promote the telecommunications giant's Accunet Switched 56 data transmission service and CompuSonics digital telerecording system. . . . At a recent press demonstration hosted by AT&T at its headquarters

> here, CompuSonics made use of AT&T's land-based telephone data transmission system to digitally transmit and receive music between Chicago and New York . . . . ***David Schwartz, president of CompuSonics, is a strong proponent of the "electronic record store" concept, an idea that has been bandied about for some time, but which Schwartz says is now poised to "become a reality."***

See Ex. 1309 at 3. As the article further explained, this telerecording system was designed to "allow music software dealers to receive an album master via a digital transmission from the record company," and "[t]he retailers would then be able, in turn to digitally transmit the music to consumers who would use credit cards to charge their purchases over the phone lines." *See* Ex. 1309 at 3.

Five days after the *Billboard* article, Mr. Schwartz, in a letter to CompuSonics shareholders, reported on AT&T's agreement and commitment to telerecording:

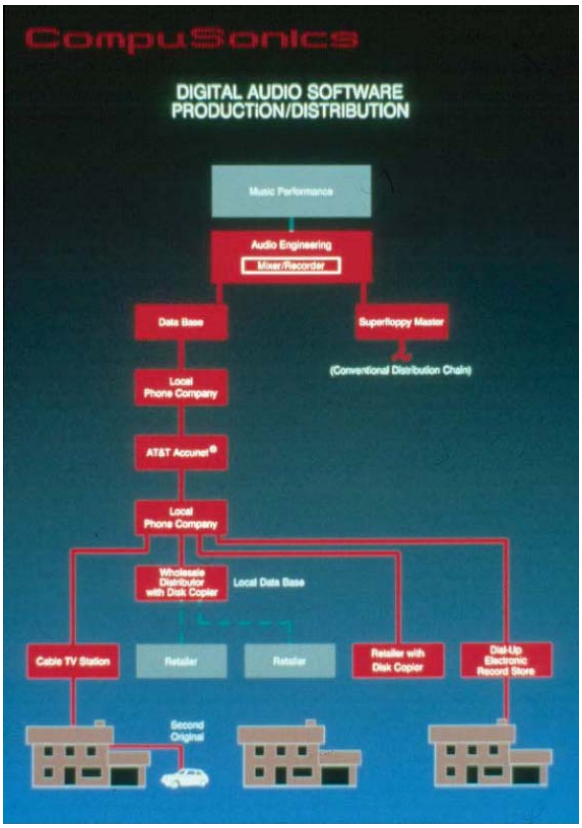
> We have signed the Memorandum of Understanding for Co-Marketing with AT&T Communications. This is the direct result of a series of successful telerecording tests and demonstrations which culminated in August with New York City to Chicago and back digital audio communications between two CompuSonics DSP-2002s with AT&T ACCUNET Switched 56 service providing the channel. . . . ***AT&T's commitment to telerecording may hasten the arrival of that day, in the not too distant future, when the technology will filter down to the consumer level, allowing all-electronic purchases, transfers and digital recording of high fidelity audio from any music dealer's DSP-2000 to the DSP-1000 in your living room.***

See Ex. 1318 at 1. CompuSonics' telerecording (and the electronic sales it made possible) was not limited to digital audio. At this same time, CompuSonics Video Corp. was working to commercialize application of the CompuSonics system with digital video. Using the example of music videos, CompuSonics Video Corp. documentation explained:

> Music television has become a key component of the entertainment industry. Presently, music television serves primarily as a means of promoting sales of records, cassettes, and compact discs. A small but increasingly significant number of consumers are also purchasing music videos in videotape format. Although the video may be recorded off the air or cable using a VCR. the resulting video and audio fidelity of the copy is poor. ***Digital music video distribution offers customers two significant benefits: high fidelity digital audio and video and convenient purchasing via electronic distribution directly to the home.***
>
> The proposed music video distribution chain has three principle components that depend on CSX technology: a video database computer, a broadcast digital encoder, and a home disk-based digital video decoder/recorder. ***A consumer enjoying music television who chooses to purchase his own digital copy calls the distributor with his request. The distributor enables the video database computer to access the consumer's selection and transfer the video/audio data to the broadcast digital encoder. This encoder modulates the data onto a cable television subcarrier or other transmission***

> ***format. The home decoder/recorder receives the digital video/audio data over the cable link and copies it to disk.***
>
> At a CSX data rate of about 1 megabit per second, up to ten digital video/audio signals may be broadcast simultaneously over a single cable television channel. ***A home digital decoder/recorder using currently available 400 megabyte write-once optical disks would capture and store about one hour of CSX format digital music video material permanently.***

See Ex. 1319 at 2-3. In a 1987 lecture at Stanford University, Mr. Schwartz presented telerecording and other CompuSonics system technology, including a slide detailing digital audio distribution and "dial-up electronic record store" enabled by CompuSonics' recorder/players (Ex. 1320):



Why did we have AT&T Accunet on that other slide and what are we doing with the parallel port besides copying digital data? The parallel port is configured to support this AT&T Accunet system . . . . Again, it was a question of we had to pick something to hang our hat on as a transmission standard. Obviously, if you have a computer you want to transmit data to other places or buy data. Imagine, ***buying records over telephone lines***. Or ***dialing up and buying records from your cable tv station where they're going to be sent down coaxial cable***. What this shows is that you can use digital equipment, our equipment, to master—our 2002, our big machine—to master records, and make large databases, either on optical disks or Winchesters, depending on how many of those you want to spin up. Then that database can talk to any local database . . . . So here's your record company, so to speak. Your record company becomes an electronic thing with a bunch of data files spun up somewhere. That is talking through a local phone connection through this AT&T Accunet system around the country, to another local phone company, where it either can go to a retailer with a disk copier, you can go out and buy a disk, which is kind of the trivial use of this, or ***direct through a dial-up electronic record store direct to your home***, and dub it through the parallel port. Or, to a cable tv station, and they send it down the coaxial cable, which is very attractive because of the bandwidth of the coax cable. And the fact that the cable operators make a buck, you know, in this business too. Picture it. They're going to show MTV. And you see something you like on MTV and you want to have it now. You could pick up the phone, call up the cable tv

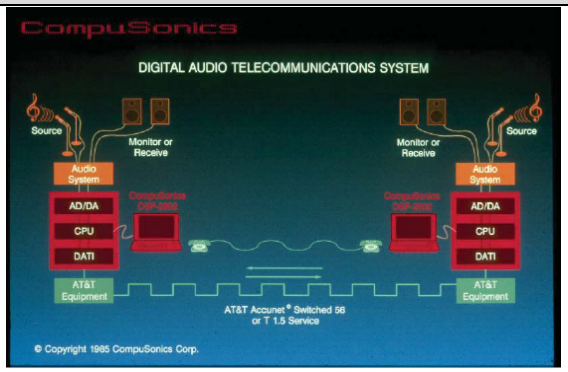
> company, say, "I'll buy it. Add it to my bill." Download it to the disk. And then get the bill thirty days later or whatever.
>
> We think it has real potential for impulse sales to teenagers. [Laughter.] Especially, well, I'm thinking of younger kids who a lot of the MTV appeals too, when their parents are out to dinner. All they need's a credit card number, and a taste for music. So some of these machines may end up with locks on them someday. But we, I don't know when this is going to happen. All of the technology that makes this possible has been proven by many people, ourselves among them. We've worked with AT&T. We've sent audio data from New York City to Chicago and Chicago to New York City. It sounds as good when it left as when it gets here, obviously. We've demoed it. Other companies have demoed these kinds of systems. When you'll be able to do this in your home, I don't know. But we did put the port on the computer and we do support it in the software.

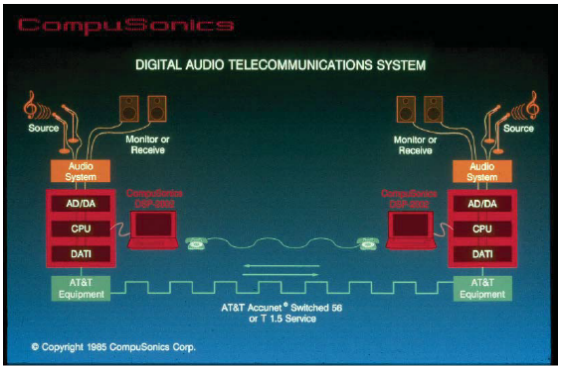
Ex. 1321, Parts 6-10 (1987 Stanford Lecture by D. Schwartz and J. Stautner). *See also* Ex. 1334 (Kelly Decl.) at ¶¶ 32-40.

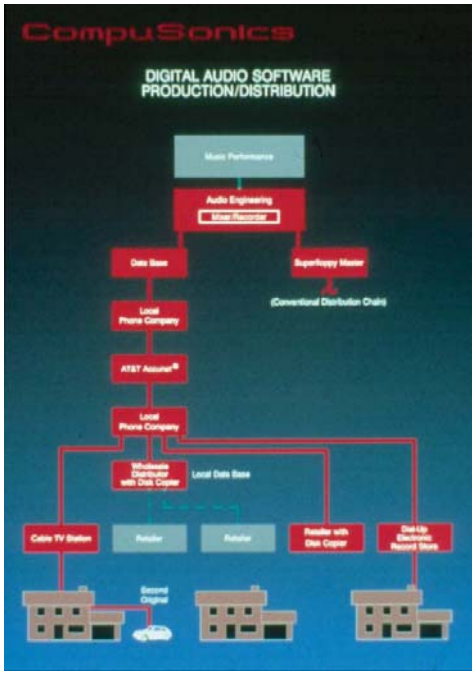
The CompuSonics system anticipated the asserted claims, as detailed below.

(a) Claim 1

Claim 1	The CompuSonics System
1. A method for transferring desired digital video or digital audio signals	The CompuSonics system anticipates claim 1 of the '440 Patent as detailed below. The CompuSonics system discloses a method for transferring desired digital video or digital audio signals. *See* Ex. 1335 (Schwartz Decl.) at ¶¶4-6, 12-13, 15; Exs. 1309, 1318, 1319, 1321. For example, the below diagram (larger version above) illustrates transferring the desired digital audio signal (Ex. 1315):

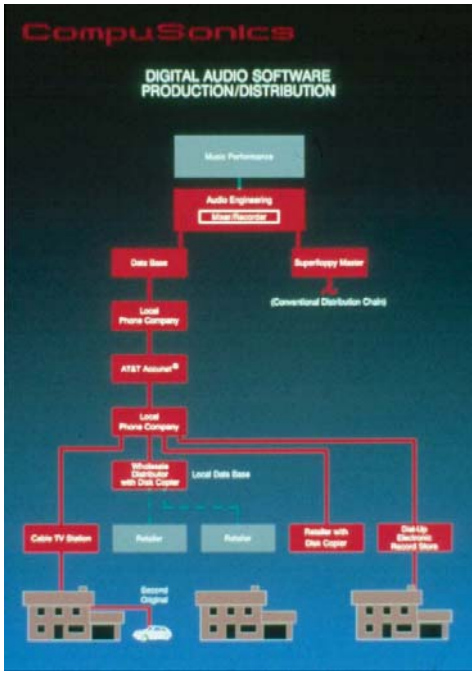
Claim 1	The CompuSonics System
comprising the steps of:	 *See, e.g.*, Ex. 1309 at 3 ("At a recent press demonstration . . . ***CompuSonics made use of AT&T's land-based telephone data transmission system to digitally transmit and receive music between Chicago and New York***.") ("***The retailers would then be able, in turn to digitally transmit the music to consumers*** who would use credit cards to charge their purchases over the phone lines."); Ex. 1318 at 1 ("***all-electronic purchases, transfers and digital recording of high fidelity audio from any music dealer's DSP-2000 to the DSP-1000 in your living room***"). *See also, e.g.*, Ex. 1321, Parts 9-10 ("All of the technology that makes this possible has been proven by many people, ourselves among them. ***We've worked with AT&T. We've sent audio data from New York City to Chicago and Chicago to New York City.*** It sounds as good when it left as when it gets here, obviously. We've demoed it. Other companies have demoed these kinds of systems. When you'll be able to do this in your home, I don't know. But we did put the port on the computer and we do support it in the software."). The CompuSonics system was likewise disclosed to be used in the electronic sale and distribution of digital video, including transfer of digital video. *See, e.g.*, Ex. 1319 at 2-3 ("***Digital music video distribution offers customers two significant benefits: high fidelity digital audio and video and convenient purchasing via electronic distribution directly to the home.*** The proposed music video distribution chain has three principle components that depend on CSX technology: a video database computer, a broadcast digital encoder, and a home disk-based digital video decoder/recorder. A consumer enjoying music television who chooses to purchase his own digital copy calls the distributor with his request. The distributor enables the video database

Claim 1	The CompuSonics System
	computer to access the consumer's selection and ***transfer the video/audio data to the broadcast digital encoder. This encoder modulates the data onto a cable television subcarrier or other transmission format. The home decoder/recorder receives the digital video/audio data over the cable link and copies it to disk. At a CSX data rate of about 1 megabit per second, up to ten digital video/audio signals may be broadcast simultaneously over a single cable television channel.*** A home digital decoder/recorder using currently available 400 megabyte write-once optical disks would capture and store about one hour of CSX format digital music video material permanently."). *See also* Ex. 1334 (Kelly Decl. App'x. C at Cl. 1).
forming a connection through telecommunications lines between a first memory of a first party and a second memory of a second party control unit of a second party, said first memory having said desired digital video or digital audio signals;	The CompuSonics system discloses this step. *See* Ex. 1335 (Schwartz Decl.) at ¶¶4-6, 12-15; Exs. 1309, 1315-1321. For example, the below diagram (larger version above) illustrates a connection via either telephone lines or T1 lines between two CompuSonics DSP recorder/players (Ex. 1315):  The above example shows CompuSonics' communication device called the Digital Audio Transceiver Interface (DATI) for connecting two computers through telecommunications lines. *See also, e.g.*, Ex. 1317 at 2 ("A high speed digital interface for the transmission and reception of digital audio signals over AT&T's Accunet was designed and implemented to operate in a MultiBus based microcomputer. This interface will transmit and receive digital data at 56,000 bits per second. Such a capability will ***allow the distribution of records in digital format from central databases which can be accessed by conventional telephone over the Accunet***."), 3 ("This paper will

Claim 1	The CompuSonics System
	describe the design and implementation of such a ***link, the Digital Audio Transceiver Interface (DATI), which enables two Intel MultiBus based microcomputers to exchange audio signals over the Accunet***."). As another example, the below diagram (larger version above) illustrates digital audio distribution, including a digital audio database connected to a dial-up electronic record store and a buyer's location/home via telephone lines (Ex. 1320):  The first party is the music seller (for example, a record company, a record store or other music distributor). A seller's database would necessarily, and thus inherently, be stored on a memory device. *See, e.g.*, Ex. 1334 (Kelly Decl. App'x. C at Cl. 1). The second party is the buyer. The second party control unit disclosed here is the CompuSonics recorder/player. A buyer would download purchased digital audio from a seller's database over telecommunication lines onto, for example, a floppy disk in a CompuSonics recorder/player. The recorder/players included memory in the form of a disk drive for a floppy disk to storing digital audio data. *See, e.g.*, Ex. 1316 at 1 ("In the not too distant future consumers will be able to

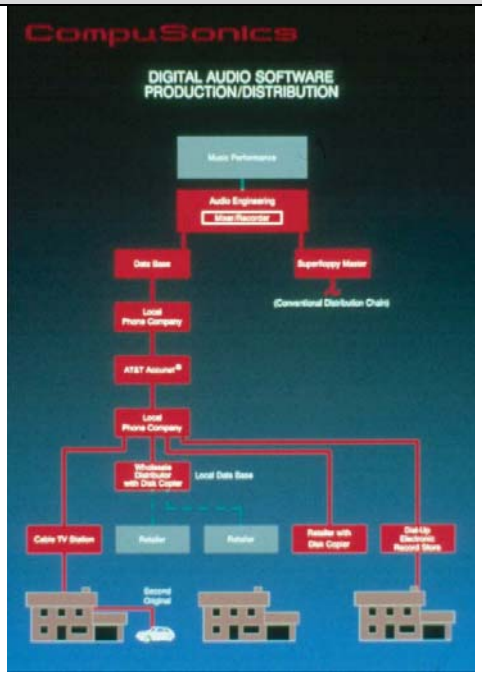
Claim 1	The CompuSonics System
	purchase digital recordings of their favorite artists ***directly from the production studio's dial-up data base and record them on blank SuperFloppies in a DSP-1000***."; Ex. 1309 at 3 ("The retailers would then be able, in turn, to digitally transmit the music to consumers who would use credit cards to charge their purchases over the phone lines."); Ex. 1318 at 1 ("AT&T's commitment to telerecording may hasten the arrival of that day, in the not too distant future, when ***the technology will filter down to the consumer level, allowing all-electronic purchases, transfers and digital recording of high fidelity audio from any music dealer's DSP-2000 to the DSP-1000 in your living room.***"; Ex. 1321, Parts 6-10 ("***Obviously, if you have a computer you want to transmit data to other places or buy data. Imagine, buying records over telephone lines. Or dialing up and buying records from your cable tv station where they're going to be sent down coaxial cable.*** What this shows is that you can use digital equipment, our equipment, to master—our 2002, our big machine—to master records, and make large databases, either on optical disks or Winchesters, depending on how many of those you want to spin up. Then that database can talk to any local database . . . . ***So here's your record company, so to speak. Your record company becomes an electronic thing with a bunch of data files spun up somewhere.*** That is talking through a local phone connection through this AT&T Accunet system around the country, to another local phone company, where it either can go to a retailer with a disk copier, you can go out and buy a disk, which is kind of the trivial use of this, ***or direct through a dial-up electronic record store direct to your home,*** and dub it through the parallel port. Or, to a cable tv station, and they send it down the coaxial cable, which is very attractive because of the bandwidth of the coax cable. And the fact that the cable operators make a buck, you know, in this business too. Picture it. They're going to show MTV. And you see something you like on MTV and you want to have it now. You could pick up the phone, call up the cable tv company, say, "I'll buy it. Add it to my bill." Download it to the disk. And then get the bill thirty days later or whatever. We think it has real potential for impulse sales to teenagers. [Laughter.] Especially, well, I'm thinking of younger kids who a lot of the MTV appeals too, when their parents are out to dinner. ***All they need's a credit card number, and a taste for music.*** So some of these machines may end up with

Claim 1	The CompuSonics System
	locks on them someday. But we, I don't know when this is going to happen. All of the technology that makes this possible has been proven by many people, ourselves among them. We've worked with AT&T. We've sent audio data from New York City to Chicago and Chicago to New York City. It sounds as good when it left as when it gets here, obviously. We've demoed it. Other companies have demoed these kinds of systems. When you'll be able to do this in your home, I don't know. But we did put the port on the computer and we do support it in the software."). *See also* Ex. 1334 (Kelly Decl. App'x. C at Cl. 1).
selling electronically by the first party to the second party through telecommunications lines, the desired digital video or digital audio signals in the first memory, the second party is at a second party location and	The CompuSonics system discloses this step. *See* Ex. 1335 (Schwartz Decl.) at ¶¶4-6, 10, 12, 14-15; Exs. 1309, 1316, 1318, 1320-1321. The CompuSonics system disclosed electronic sales of digital audio and digital video from a seller to a buyer through telecommunication lines. *See, e.g.*, Ex. 1316 at 1("In the not too distant future ***consumers will be able to purchase digital recordings of their favorite artists directly from the production studio's dial-up data base*** and record them on blank SuperFloppies in a DSP-1000."); Ex. 1309 at 3 (Telerecording would "allow music software dealers to receive an album master via a digital transmission from the record company," and "***[t]he retailers would then be able, in turn to digitally transmit the music to consumers who would use credit cards to charge their purchases over the phone lines.***"); Ex. 1318 at 1 ("AT&T's commitment to telerecording may hasten the arrival of that day, in the not too distant future, when ***the technology will filter down to the consumer level, allowing all-electronic purchases, transfers and digital recording of high fidelity audio from any music dealer's DSP-2000 to the DSP-1000 in your living room.***"). The buyer's recorder/player is in the possession and control of the buyer. For example, the buyer's recorder/player can be located in the buyer's home. *See, e.g.*, Ex. 1318 at 1 ("all-electronic purchases, transfers and digital recording of high fidelity audio from any music dealer's DSP-2000 ***to the DSP-1000 in your living room***"). As another example, the below diagram (larger version above) illustrates digital audio distribution, including a digital audio database connected to a dial-up electronic record store and a buyer's location/home via

Claim 1	The CompuSonics System
	telephone lines (Ex. 1320):  "***Obviously, if you have a computer you want to transmit data to other places or buy data. Imagine, buying records over telephone lines. Or dialing up and buying records from your cable tv station where they're going to be sent down coaxial cable.*** What this shows is that you can use digital equipment, our equipment, to master—our 2002, our big machine—to master records, and make large databases, either on optical disks or Winchesters, depending on how many of those you want to spin up. Then that database can talk to any local database . . . . ***So here's your record company, so to speak. Your record company becomes an electronic thing with a bunch of data files spun up somewhere.*** That is talking through a local phone connection through this AT&T Accunet system around the country, to another local phone company, where it either can go to a retailer with a disk copier, you can go out and buy a disk, which is kind of the trivial use of this, ***or direct through a dial-up electronic record store direct to your home,*** and dub it through the parallel port. Or, to a cable tv station, and they send it down the coaxial cable, which is very attractive because of the bandwidth of the coax cable. And the fact that the cable operators make a buck, you know, in this business too. Picture it. They're going to show MTV. And you see something you like on MTV and you want to have it now. You could pick up the

Claim 1	The CompuSonics System
	phone, call up the cable tv company, say, "I'll buy it. Add it to my bill." Download it to the disk. And then get the bill thirty days later or whatever. We think it has real potential for impulse sales to teenagers. [Laughter.] Especially, well, I'm thinking of younger kids who a lot of the MTV appeals too, when their parents are out to dinner. ***All they need's a credit card number, and a taste for music.*** So some of these machines may end up with locks on them someday. But we, I don't know when this is going to happen. All of the technology that makes this possible has been proven by many people, ourselves among them. We've worked with AT&T. We've sent audio data from New York City to Chicago and Chicago to New York City. It sounds as good when it left as when it gets here, obviously. We've demoed it. Other companies have demoed these kinds of systems. When you'll be able to do this in your home, I don't know. But we did put the port on the computer and we do support it in the software." Ex. 1321, Parts 6-10 . *See also* Ex. 1334 (Kelly Decl. App'x. C at Cl. 1).
the step of selling electronically includes the step of charging a fee via telecommunications lines by the first party to the second party at a first party location remote from the second party location, the second party has an account and	The CompuSonics system discloses this step. *See* Ex. 1335 (Schwartz Decl.) at ¶¶4-6, 14-15; Exs. 1309, 1320-1321. As another example, the below diagram (larger version above) illustrates a digital audio database connected to a dial-up electronic record store and a buyer's location/home (remote from the seller's location) via telephone lines (Ex. 1320).

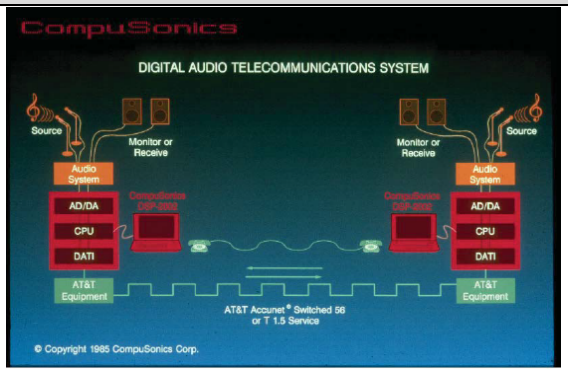
Claim 1	The CompuSonics System



"***Obviously, if you have a computer you want to transmit data to other places or buy data. Imagine, buying records over telephone lines. Or dialing up and buying records from your cable tv station where they're going to be sent down coaxial cable.*** What this shows is that you can use digital equipment, our equipment, to master—our 2002, our big machine—to master records, and make large databases, either on optical disks or Winchesters, depending on how many of those you want to spin up. Then that database can talk to any local database . . . . ***So here's your record company, so to speak. Your record company becomes an electronic thing with a bunch of data files spun up somewhere.*** That is talking through a local phone connection through this AT&T Accunet system around the country, to another local phone company, where it either can go to a retailer with a disk copier, you can go out and buy a disk, which is kind of the trivial use of this, ***or direct through a dial-up electronic record store direct to your home,*** and dub it through the parallel port. Or, to a cable tv station, and they send it down the coaxial cable, which is very attractive because of the bandwidth of the coax cable. And the fact that the cable operators make a buck, you know, in this business too. ***Picture it. They're going to show MTV. And you see something you like on MTV and you want to have it now. You could pick up the phone, call up the cable tv company, say, "I'll buy it. Add it to***

Claim 1	The CompuSonics System
	my bill." Download it to the disk. And then get the bill thirty days later or whatever. We think it has real potential for impulse sales to teenagers. [Laughter.] Especially, well, I'm thinking of younger kids who a lot of the MTV appeals too, when their parents are out to dinner. ***All they need's a credit card number, and a taste for music.*** So some of these machines may end up with locks on them someday. But we, I don't know when this is going to happen. All of the technology that makes this possible has been proven by many people, ourselves among them. We've worked with AT&T. We've sent audio data from New York City to Chicago and Chicago to New York City. It sounds as good when it left as when it gets here, obviously. We've demoed it. Other companies have demoed these kinds of systems. When you'll be able to do this in your home, I don't know. But we did put the port on the computer and we do support it in the software." Ex. 1321, Parts 6-10. *See also*, e.g.*,* Ex. 1309 at 3 (Telerecording would "allow music software dealers to receive an album master via a digital transmission from the record company," and "***[t]he retailers would then be able, in turn, to digitally transmit the music to consumers who would use credit cards to charge their purchases over the phone lines.***") *See also* Ex. 1334 (Kelly Decl. App'x. C at Cl. 1).
the step of charging a fee includes the step of charging the account of the second party; and	The CompuSonics system discloses this step. *See* Ex. 1335 (Schwartz Decl.) at ¶¶4-6, 15; Exs. 1309, 1321. The CompuSonics system disclosed, for example, charging a credit card (which is necessarily and thus inherently associated with a credit card account having a line of credit) and a customer cable account. *See,* e.g., "***Obviously, if you have a computer you want to transmit data to other places or buy data. Imagine, buying records over telephone lines. Or dialing up and buying records from your cable tv station where they're going to be sent down coaxial cable.*** What this shows is that you can use digital equipment, our equipment, to master—our 2002, our big machine—to master records, and make large databases, either on optical disks or Winchesters, depending on how many of those you want to spin up. Then that database can talk to any local database . . . . ***So here's your record company, so to speak. Your record company becomes an electronic thing with a bunch of data files spun up somewhere.*** That is talking through a local phone connection through this AT&T Accunet system around the country, to another local phone company, where it either can go to a retailer with a disk copier, you can

Claim 1	The CompuSonics System
	go out and buy a disk, which is kind of the trivial use of this, ***or direct through a dial-up electronic record store direct to your home,*** and dub it through the parallel port. Or, to a cable tv station, and they send it down the coaxial cable, which is very attractive because of the bandwidth of the coax cable. And the fact that the cable operators make a buck, you know, in this business too. ***Picture it. They're going to show MTV. And you see something you like on MTV and you want to have it now. You could pick up the phone, call up the cable tv company, say, "I'll buy it. Add it to my bill." Download it to the disk. And then get the bill thirty days later or whatever.*** We think it has real potential for impulse sales to teenagers. [Laughter.] Especially, well, I'm thinking of younger kids who a lot of the MTV appeals too, when their parents are out to dinner. ***All they need's a credit card number, and a taste for music.*** So some of these machines may end up with locks on them someday. But we, I don't know when this is going to happen. All of the technology that makes this possible has been proven by many people, ourselves among them. We've worked with AT&T. We've sent audio data from New York City to Chicago and Chicago to New York City. It sounds as good when it left as when it gets here, obviously. We've demoed it. Other companies have demoed these kinds of systems. When you'll be able to do this in your home, I don't know. But we did put the port on the computer and we do support it in the software." Ex. 1321, Parts 6-10. *See also*, e.g., Ex. 1309 at 3 (Telerecording would "allow music software dealers to receive an album master via a digital transmission from the record company," and "***[t]he retailers would then be able, in turn to digitally transmit the music to consumers who would use credit cards to charge their purchases over the phone lines.***"). *See also* Ex. 1334 (Kelly Decl. App'x. C at Cl. 1).
transferring the desired digital video or digital audio signals from the first memory of	The CompuSonics system discloses this step. *See* Ex. 1335 (Schwartz Decl.) at ¶¶4-6, 9, 12-13; Exs. 1309, 1315, 1318-1319. For example, the below diagram (see also larger version above) illustrates transferring the desired digital audio signal through telephone or T1 lines between the first memory of the first party to the second memory of the second party control unit of the second party (Ex. 1315):

Claim 1	The CompuSonics System
the first party to the second memory of the second party control unit of the second party through telecommunications lines while the second party control unit with the second memory is in possession and control of the second party;	 *See, e.g.*, Ex. 1309 at 3 ("At a recent press demonstration . . . ***CompuSonics made use of AT&T's land-based telephone data transmission system to digitally transmit and receive music between Chicago and New York***.") ("***The retailers would then be able, in turn to digitally transmit the music to consumers*** who would use credit cards to charge their purchases over the phone lines."). The second party control unit is in the possession and control of the second party. For example, it may be located in the second party's home. *See, e.g.*, Ex. 1318 at 1 ("***all-electronic purchases, transfers and digital recording of high fidelity audio from any music dealer's DSP-2000 to the DSP-1000 in your living room***"). The CompuSonics system likewise disclosed this step for digital video. *See, e.g.*, Ex. 1319 at 2-3 ("***Digital music video distribution offers customers two significant benefits: high fidelity digital audio and video and convenient purchasing via electronic distribution directly to the home.*** The proposed music video distribution chain has three principle components that depend on CSX technology: ***a video database computer, a broadcast digital encoder, and a home disk-based digital video decoder/recorder.*** A consumer enjoying music television who chooses to purchase his own digital copy calls the distributor with his request. The distributor enables the video database computer to ***access the consumer's selection and transfer the video/audio data to the broadcast digital encoder. This encoder modulates the data onto a cable television subcarrier or other transmission format. The home decoder/recorder receives the digital video/audio data over the cable link and copies it to disk. At a CSX data rate of about 1 megabit per second, up to ten digital video/audio signals may be broadcast simultaneously over a***

Claim 1	The CompuSonics System
	single cable television channel. A home digital decoder/recorder using currently available 400 megabyte write-once optical disks would capture and store about one hour of CSX format digital music video material permanently."). *See also* Ex. 1334 (Kelly Decl. App'x. C at Cl. 1).
storing the desired digital video or digital audio signals in a non-volatile storage portion the second memory; and	The CompuSonics system discloses this step. *See* Ex. 1335 (Schwartz Decl.) at ¶¶4-5, 10, 12-13, 15-17; Exs. 1316, 1318-1319, 1321, 1323-24. The buyer's digital recorder/player contains a memory for storing the downloaded digital video or digital audio signal. The CompuSonics system disclosed using floppy disks, WORM disks, and hard drives for this purpose. All are non-volatile storage. *See, e.g.*, Ex. 1316 at 1 ("In the not too distant future consumers will be able to purchase digital recordings of their favorite artists directly from the production studio's dial-up data base and ***record them on blank SuperFloppies in a DSP-1000***."; Ex. 1318 at 1 ("AT&T's commitment to telerecording may hasten the arrival of that day, in the not too distant future, when ***the technology will filter down to the consumer level, allowing all-electronic purchases, transfers and digital recording of high fidelity audio from any music dealer's DSP-2000 to the DSP-1000 in your living room.***"; Ex. 1319 at 2-3 ("***Digital music video distribution offers customers two significant benefits: high fidelity digital audio and video and convenient purchasing via electronic distribution directly to the home.*** The proposed music video distribution chain has three principle components that depend on CSX technology: ***a video database computer, a broadcast digital encoder, and a home disk-based digital video decoder/recorder.*** A consumer enjoying music television who chooses to purchase his own digital copy calls the distributor with his request. The distributor enables the video database computer to ***access the consumer's selection and transfer the video/audio data to the broadcast digital encoder. This encoder modulates the data onto a cable television subcarrier or other transmission format. The home decoder/recorder receives the digital video/audio data over the cable link and copies it to disk. At a CSX data rate of about 1 megabit per second, up to ten digital video/audio signals may be broadcast simultaneously over a single cable television channel. A home digital decoder/recorder using currently available 400 megabyte write-once optical disks would capture and store about one hour***

Claim 1	The CompuSonics System
	of CSX format digital music video material permanently."); Ex. 1323 at 14:31-40 ("The digital recording and playback system of the present invention ***for both audio and video recording and playback utilizes a data storage medium as previously described such as flexible or rigid magnetic disk, magneto-optical disks or optical disks***."); Ex. 1324 ("The Search for the Digital Recorder," *Fortune,* Nov. 12, 1984) at 1("CompuSonics, based in Denver, has invented a digital machine that ***records music on ordinary magnetic disks***."). *See also, e.g.*, Ex. 1321, Parts 6-10 ("So here's your record company, so to speak. Your record company becomes an electronic thing with a bunch of data files spun up somewhere. That is talking through a local phone connection through this AT&T Accunet system around the country, to another local phone company, where it either can go to a retailer with a disk copier, you can go out and buy a disk, which is kind of the trivial use of this, or ***direct through a dial-up electronic record store direct to your home, and dub it through the parallel port. Or, to a cable tv station, and they send it down the coaxial cable, which is very attractive because of the bandwidth of the coax cable.*** And the fact that the cable operators make a buck, you know, in this business too. Picture it. They're going to show MTV. And you see something you like on MTV and you want to have it now. You could pick up the phone, call up the cable tv company, say, "I'll buy it. Add it to my bill." ***Download it to the disk.*** And then get the bill thirty days later or whatever."). *See also* Ex. 1334 (Kelly Decl. App'x. C at Cl. 1).
playing through speakers of the second party control unit the digital video or digital audio signals stored in the second memory, said speak-	The CompuSonics system discloses this step. *See* Ex. 1335 (Schwartz Decl.) at ¶¶4-5, 15-16; Exs. 1321, 1323. The CompuSonics recorder/players were designed to play stored signals, and the CompuSonics system necessarily required (and thus inherently disclosed) speakers to do so. For example, during the 1987 Stanford lecture, David Schwartz used a CompuSonics recorder/player to play a digital audio signal. *See, e.g.*, Ex. 1321, Part 11. *See also, e.g.*, Ex. 1323 at 1:19-22 ("On playback the electrical signal is amplified and used to drive loudspeakers which convert the electrical signal to sound waves by the mechanical motion of an electromagnet and speaker cone."). The "digital video or digital audio signals" are "stored in the second memory" as discussed above in the "storing . . ." step. *See also* Ex. 1334 (Kelly Decl. App'x. C at Cl. 1).

Claim 1	The CompuSonics System
ers of the second party control unit connected with the second memory of the second party control unit;	
wherein the non-volatile storage portion is not a tape or CD.	The CompuSonics system discloses this step. *See* Ex. 1335 (Schwartz Decl.) at ¶¶4-5 . The buyer's digital recorder/player contains a memory for storing the downloaded digital video or digital audio signal. The CompuSonics system disclosed using floppy disks, WORM disks, and hard drives for this purpose, as discussed above in the "storing . . ." step. All are non-volatile storage. None is a tape or CD. *See also* Ex. 1334 (Kelly Decl. App'x. C at Cl. 1).

(b) Claims 64 and 95

The limitations of Claims 64 and 95 parallel those of claim 1,[48] and any added limitations (*e.g.*, storing in a hard disk) are disclosed by the CompuSonics system, in combination with the references cited above, as described in connection with claim 1.

[48] In particular, Claims 64 and 95 add limitations concerning a hard disk, which are disclosed as described in connection with claim 1's "storing . . . in a non-volatile storage portion" limitation. Claim 95's other differently-worded limitations are also disclosed as described in connection with claim 1 limitations, as follows—95:Preamble (1: Preamble; "forming a connection…"); 95:"placing a second party control unit…"(1:"selling electronically . . ."; "the step of selling electronically includes…"; "storing . . . in a non-volatile storage portion…"); 95: "charging a fee…"(1:"selling electronically…"; "the step of selling electronically includes…"; "forming a connection…"; "the step of charging a fee includes…"); 95: "connecting electronically…"(1:"forming a connection…"); 95: "transferring electronically…"(1: "transferring the desired …"; "selling electronically…"; "the step of selling electronically includes…"; "storing . . . in a non-volatile storage portion…");

2. The Challenged Claims Are At Minimum Rendered Obvious by Synth-Bank, Standing Alone or In Light of Additional References, and Are Invalid Under § 103

Bryan Bell's 1986 article, Ex. 1322 ("Synth-Bank article") at 2, discloses a software database of public domain and commercial sound files for members, created by the author, including files available for on-line purchase and download:

> Synth-Bank is a software database that includes a public domain library featuring the latest sound files from major keyboard manufacturers, ***an on-line shopping service where users can purchase specific sound files created by popular artists and programmers***, and a third area dedicated to sampling keyboards. This area consists of sounds and sound effects oriented toward production houses and film scoring applications. . . .
>
> Being part of PAN allows for electronic mail between members, conferencing, databases, and the shopping area (to purchase sound patches). For a limited time only, Synth-Bank membership will be available for $50. This includes a PAN membership (a $150 value) to qualified professionals. There will be no Synth-Bank charges (other than normal PAN connect charges) for the downloading of the public domain sound files.

The Synth-Bank article was published more than a year before any possible effective filing date for the '440 Patent, and thus is prior art satisfying AIA § 18(a)(1)(C).

95:"storing the digital…"(1: "storing…in a non-volatile storage portion…");
95:"playing the digital…"(1:"playing through speakers…"). *See* Ex. 1334 (Kelly Decl. App'x C at Cls. 1, 64, 95).

As the Synth-Bank article disclosed, the price of commercial sound files in the database depended on the type of file type (patch file vs. sample), format, length, and similar factors:

> The sound files for the non-sampling keyboards will be stored in Opcode's Patch Librarian format and will be priced roughly at a dollar per sound (i.e. 32 DX7 sounds for $30). The sampling keyboard files will be stored in Sound Designer format and will be based on a sliding scale from $15 to $30. High end synths such as the Fairlight and Synclavier will have sounds stored in their own format and cost anywhere from $30 to $150 (for lengthier samples)."

See Ex. 1322 at 2. Synth-Bank allowed users to "dial up Synth-Bank and download an acceptable sound within minutes." *See id.* at 2. Synth-Bank could also be used to distribute digital data other than audio data, such as software updates: "And of course, manufacturers can use Synth-Bank to distribute their latest sound files and software updates to qualified users." *See id.* at 2.

The "single most exciting aspect" of this technology to Mr. Bell was "that telcom opens up the entire global community as a single resource—crossing economic, political, and racial barriers. Before you had to know someone in order to hear their work. Now, via telcom, you can get the best from Australia, Europe, Japan, and North America—all with a local phone call!" *See id.* at 2. Mr. Bell also saw transfer of data over telecommunication lines as key to archiving: "It is a hassle to bring all of your backup files on the road with you at all times; it's easier to download

your backup files from a host system anywhere in the world—24 hours a day." *See id.* at 2. In addition, a February 1986 a royalty agreement entered into between Bryan Bell and an artist to make that artist's work available for download on Synth-Bank at a 50% royalty rate, further confirms inherent features of the system disclosed in the later Synth-Bank article[49]—*i.e.,* that it was to be used to sell digital music to networked remote computers. *See* Ex. 1325 at 1-10 ("Synth-Bank Royalty Agreement"); *see, e.g.*, *id.* at 4 ("During the term of this agreement, SYNTH-BANK shall pay Artist a royalty of Fifty percent (50%) on SYNTH-BANK's Gross Receipts directly relating to the Sounds derived from On-Line Systems.); at 2 ("'On-Line System' means any remote computer facility at which electronic data embodying the Sounds are stored for access by End Users, typically via telecommunications and computer system(s).").

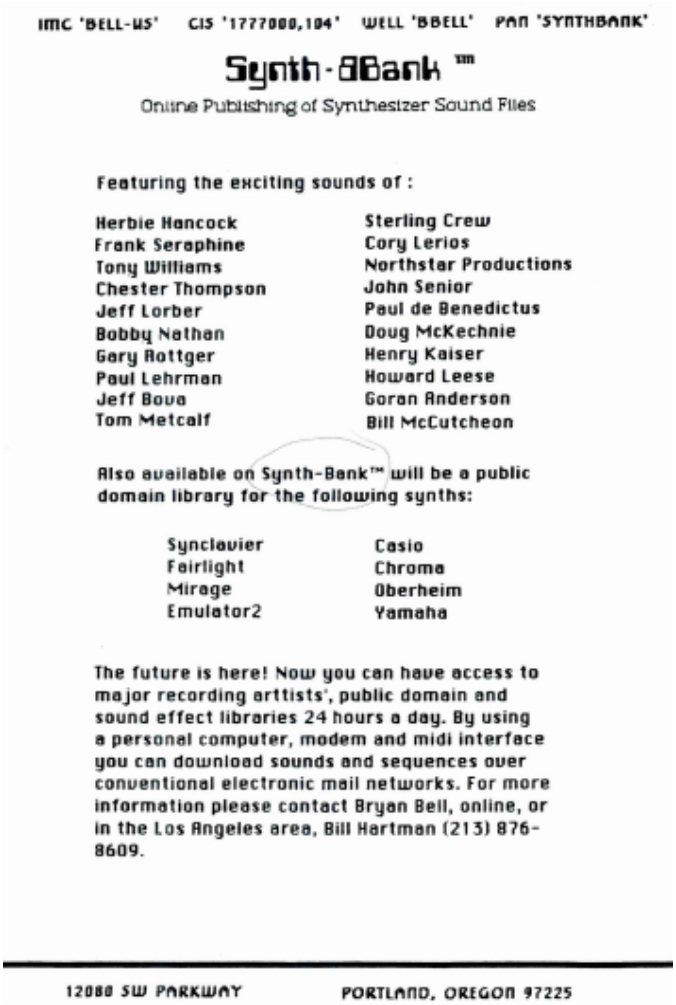
As detailed below, the Synth Bank article at minimum renders obvious the challenged claims, either standing alone or in light of other documents expressly described as related to Synth-Bank. One of ordinary skill would certainly have been motivated to combine these references and would have found it more than obvious to do so, because each relates to the same system: Synth-Bank.

For example, the U.S.P.T.O. Trademark File History for the Synth-Bank mark indicates that the mark was first used in commerce on October 1, 1985 in connection with "[p]roviding computerized access to databases containing synthetized and

[49] *See, e.g., Telemac Cellular Corp. v. Topp Telecom, Inc.*, 247 F.3d 1316, 1327-30 (Fed. Cir. 2001); MPEP § 2131.01.

digitized sounds and music." *See* Ex. 1326 at 16 ("Trademark Registration"). These files also included a Synth-Bank advertisement listing artists whose sounds were featured for download and explaining:

> The future is here! Now you can have access to major recording artists', public domain and sound effect libraries 24 hours a day. By using a personal computer, modem and midi interface you can download sounds and sequences over conventional electronic mail networks.



IMC 'BELL-US' CIS '1777000,104' WELL 'BBELL' PAN 'SYNTHBANK'

Synth-BBank ™

Online Publishing of Synthesizer Sound Files

Featuring the exciting sounds of :

Herbie Hancock	Sterling Crew
Frank Seraphine	Cory Lerios
Tony Williams	Northstar Productions
Chester Thompson	John Senior
Jeff Lorber	Paul de Benedictus
Bobby Nathan	Doug McKechnie
Gary Rottger	Henry Kaiser
Paul Lehrman	Howard Leese
Jeff Bova	Goran Anderson
Tom Metcalf	Bill McCutcheon

Also available on Synth-Bank™ will be a public domain library for the following synths:

Synclavier	Casio
Fairlight	Chroma
Mirage	Oberheim
Emulator2	Yamaha

The future is here! Now you can have access to major recording arttists', public domain and sound effect libraries 24 hours a day. By using a personal computer, modem and midi interface you can download sounds and sequences over conventional electronic mail networks. For more information please contact Bryan Bell, online, or in the Los Angeles area, Bill Hartman (213) 876-8609.

12080 SW PARKWAY PORTLAND, OREGON 97225

See Ex. 1326 at pgs. 17-18 (stamped received by the U.S.P.T.O. on 11/14/85)[50] ("Synth-Bank advertisement"). Further, Mr. Bell submitted a declaration in this public file stating that "he is the applicant; that the enclosed specimens evidencing trademark use were in use and in use in commerce at least as early as November 14, 1985; that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true." *See* Ex. 1326 at 28 ("Bell Declaration"). The Trademark Registration, Synth-Bank advertisement, and Bell Declaration were all public more than a year before any possible effective filing date for the '440 Patent, and thus each is prior art satisfying AIA § 18(a)(1)(C).

Further confirmation of the wide range of digital data transferred over Synth-Bank can be found in a March 1987 *Keyboard* magazine article, which noted that Synth-Bank also served "as an on-line dealer for software useful in up- and down-loading SynthBank sounds." *See* Ex. 1327 at 1 ("SynthBank Bulletin Board"). SynthBank Bulletin Board was published more than a year before any possible effective filing date for the '573 Patent, and is thus prior art satisfying AIA § 18(a)(1)(C).

As detailed below, the Synth-Bank article, alone (including with inherent features shown by Synth-Bank Royalty Agreement) or in combination with one or more of the Synth-Bank Trademark Registration, Synth-Bank advertisement, Bell

[50] *See* 37 C.F.R. § 2.27 Pending trademark application index; access to applications.

Declaration, and/or Synth-Bank Bulletin Board at minimum renders obvious each of the challenged claims of the '440 Patent. *See also* Kelly Decl. ¶¶ 41-46.

(a) Claim 1

Claim 1	Synth-Bank
1. A method for transferring desired digital video or digital audio signals comprising the steps of:	As detailed below, the Synth-Bank article at minimum renders claim 1 obvious (i) alone (including with inherent features confirmed by the Royalty Agreement), (ii) in combination with the Synth-Bank Trademark Registration, (iii) in combination with the Synth-Bank advertisement, or (iv) in combination with Synth-Bank Bulletin Board. The Synth-bank article discloses the recited preamble, (i) alone, (ii) in combination with the Synth-Bank Trademark Registration, (iii) in combination with the Synth-Bank advertisement, or (iv) in combination with Synth-Bank Bulletin Board. The Synth-Bank article discloses a method for transferring desired digital audio signals. *See, e.g.*, Ex. 1322 at 2 ("Synth-Bank is a software database that includes a public domain library featuring the latest sound files from major keyboard manufacturers, an on-line shopping service where users can purchase specific sound files created by popular artists and programmers, and a third area dedicated to sampling keyboards. . . . Being part of PAN allows for electronic mail between members, conferencing, databases, and the shopping area (to purchase sound patches). For a limited time only, Synth-Bank membership will be available for $50. This includes a PAN membership (a $150 value) to qualified professionals. There will be no Synth-Bank charges (other than normal PAN connect charges) for the downloading of the public domain sound files.") ("[Users] can dial up Synth-Bank and download an acceptable sound within minutes.") ("It is a hassle to bring all of your backup files on the road with you at all times; it's easier to download your backup files from a host system anywhere in the world—24 hours a day."). To the extent it is argued any further disclosure of digital audio signals is required, the Trademark Registration confirms that digital audio was available for download on Synth-Bank. *See, e.g.*, Ex. 1326 at 16 (Synth-Bank mark was first used in commerce on October 1,

Claim 1	Synth-Bank
	1985 in connection with "[p]roviding computerized access to databases containing synthetized and digitized sounds and music"). The Synth-Bank article thus at minimum discloses this limitation (and renders this claim obvious) in combination with the Trademark Registration. To the extent it is argued any further disclosure of transferrable digital signals is required, it is provided by the Synth-Bank advertisement's disclosure of signals available for download. *See, e.g.*, Ex. 1326 at 17-19 ("Now you can have access to major recording artists', public domain and sound effect libraries 24 hours a day. By using a personal computer, modem and midi interface you can download sounds and sequences over conventional electronic mail networks."). The Synth-Bank article thus at minimum discloses this limitation (and renders this claim obvious) in combination with the Synth-Bank advertisement. To the extent it is argued that any further disclosure of transfer of signals other than digital audio is required, Synth-Bank Bulletin Board discloses that Synth-Bank could be used to transmit other types of digital data, such as software. *See, e.g.*, Ex. 1327 ("In addition, Synth-bank serves as an on-line dealer for software useful in up- and down-loading SynthBank sounds, including Opcode, Digidesign, Mark of the Unicorn, Texture, Key Clique, and Ensoniq librarians and voicing programs."). Thus, because one of ordinary skill would recognize that digital video could be transmitted using Synth-Bank like any other digital data, the Synth-Bank article (*see, e.g.*, Ex. 1322 at 2 ("And of course, manufacturers can use Synth-Bank to distribute their latest sound files and software updates to qualified users.")) at minimum discloses the digital video aspects of this limitation (and renders this claim obvious) in combination with Synth-Bank Bulletin Board. *See also* Ex. 1334 (Kelly Decl. App'x. D at Cl. 1).
forming a connection through telecommunications lines	The Synth-Bank article discloses this step, (i) alone (including with inherent features confirmed by Synth-Bank Royalty Agreement), or (ii) in combination with the Synth-Bank advertisement A person of ordinary skill would have understood that the Synth-Bank's article's description of on-line shopping for audio files and

Claim 1	Synth-Bank
between a first memory of a first party and a second memory of a second party control unit of a second party, said first memory having said desired digital video or digital audio signals;	downloading with a modem disclosed—either expressly or at minimum necessarily, and thus inherently—forming a connection through telecommunication lines between a first memory of a first party and a second memory of a second party control unit of a second party, said first memory having said desired digital video or digital audio signals. *See, e.g.*, Ex. 1322 at 2 ("Synth-Bank is . . . ***an on-line shopping service where users can purchase specific sound files*** created by popular artists and programmers, and a third area dedicated to sampling keyboards. . . . Being part of PAN ***allows for electronic mail between members, conferencing, databases, and the shopping area (to purchase sound patches)***. For a limited time only, Synth-Bank membership will be available for $50. This includes a PAN membership (a $150 value) to qualified profess-sionals. There will be no Synth-Bank charges (other than normal PAN connect charges) for the ***downloading of the public domain sound files***."). Moreover, the Royalty Agreement further confirms as inherent that Synth-Bank was configured to electronically sell audio files over telecommunication lines. *See* Ex. 1325 at 1-10, 4 ("During the term of this agreement, SYNTH-BANK shall pay Artist a royalty of Fifty percent (50%) on SYNTH-BANK's Gross Receipts directly relating to the Sounds derived from On-Line Systems.), 2 ("'***On-Line System' means any remote computer facility at which electronic data embodying the Sounds are stored for access by End Users, typically via telecommunications and computer system(s).***"). To the extent it is argued that any further disclosure is required of "forming a connection . . .," the Synth-Bank advertisement discloses use of a personal computer and modem over conventional networks to access sound libraries, including sounds from major recording artists. *See, e.g.*, Ex. 1326 at 17-19 ("The future is here! Now you can have access to major recording artists', public domain and sound effect libraries 24 hours a day. ***By using a personal computer, modem and midi interface you can download sounds and sequences over conventional electronic mail networks***."). The Synth-Bank article thus at minimum discloses this limitation (and renders this claim obvious) in combination with the Synth-Bank

Claim 1	Synth-Bank
	advertisement. *See also* Ex. 1334 (Kelly Decl. App'x. D at Cl. 1).
selling electronically by the first party to the second party through telecommunications lines, the desired digital video or digital audio signals in the first memory, the second party is at a second party location and	The Synth-Bank article discloses this step, (i) alone (including with inherent features confirmed by the Royalty Agreement), or (ii) in combination with the Synth-Bank advertisement. A person of ordinary skill would have understood that the Synth-Bank's article's description of on-line shopping for sounds and downloading with a modem disclosed selling electronically by the first party to the second party through telecommunications lines, the desired digital audio signals in the first memory. The second party (buyer) is at a second party location (for example, a home computer). *See, e.g.*, Ex. 1322 at 2 ("Synth-Bank is . . . ***an on-line shopping service where users can purchase specific sound files*** created by popular artists and programmers, and a third area dedicated to sampling keyboards. . . . Being part of PAN ***allows for electronic mail between members, conferencing, databases, and the shopping area (to purchase sound patches)***. For a limited time only, Synth-Bank membership will be available for $50. This includes a PAN membership (a $150 value) to qualified professionals. There will be no Synth-Bank charges (other than normal PAN connect charges) for the ***downloading of the public domain sound files***."). Moreover, the Royalty Agreement further confirms making an artist's work available for download on Synth-Bank and transferring money in connection with electronic sales as an inherent feature of the Synth-Bank article's system. *See, e.g.*, Ex. 1325 at 1-10, 4 ("During the term of this agreement, SYNTH-BANK shall pay Artist a royalty of Fifty percent (50%) on SYNTH-BANK's Gross Receipts directly relating to the Sounds derived from On-Line Systems.), 2 ("'On-Line System' means any remote computer facility at which electronic data embodying the Sounds are stored for access by End Users, typically via telecommunications and computer system(s)."). Further, during prosecution, applicant argued "[o]ne skilled in the art would know that an electronic sale inherently assumes a transferring of money by providing an account number or a credit or debit card number which then allows for access to or a transferring of a service or product through telecommunication lines. One skilled in the art

Claim 1	Synth-Bank
	would know that an electronic sale inherently assumes a charging of a fee to an account which then allows for access to or a transferring of a product or service through telecommunications lines."). *See, e.g.*, Ex. 1102 (5/05/92 Hair Decl. at 2 & 5). To the extent it is argued any further disclosure of electronic sales is required, the Synth-Bank advertisement promotes to consumers the download of sounds from sound libraries using a personal computer and modem, further confirming that Synth-Bank was used to electronically sell audio files over telecommunication lines. *See, e.g.*, Ex. 1326 at 17-19 ("The future is here! Now you can have access to major recording artists', public domain and sound effect libraries 24 hours a day. ***By using a personal computer, modem and midi interface you can download sounds and sequences over conventional electronic mail networks***."). The Synth-Bank article thus at minimum discloses this limitation (and renders this claim obvious) in combination with the Synth-Bank advertisement. *See also* Ex. 1334 (Kelly Decl. App'x. D at Cl. 1).
the step of selling electronically includes the step of charging a fee via telecommunications lines by the first party to the second party at a first party location remote from the second party location, the second party has an account and	The Synth-Bank article discloses this step or at minimum renders it obvious, (i) alone (including with inherent features confirmed by the Royalty Agreement), or (ii) in combination with the Synth-Bank Trademark Registration. The Synth-Bank article discloses electronic sale (including the transfer of money) over telecommunication lines. *See, e.g.*, Ex. 1322 at 2 ("Synth-Bank is . . . ***an on-line shopping service where users can purchase specific sound files*** created by popular artists and programmers, and a third area dedicated to sampling keyboards. . . . Being part of PAN allows for electronic mail between members, conferencing, databases, and ***the shopping area (to purchase sound patches)***. For a limited time only, ***Synth-Bank membership will be available for $50. This includes a PAN membership (a $150 value)*** to qualified professionals. There will be no Synth-Bank charges (other than normal ***PAN connect charges***) for the downloading of the public domain sound files.") ("The sound files for the non-sampling keyboards will be stored in Opcode's Patch Librarian format and will be ***priced roughly at a dollar per sound*** (i.e. 32 DX7 sounds for $30). The sampling keyboard files will be

Claim 1	Synth-Bank
	stored in Sound Designer format and will be ***based on a sliding scale from $15 to $30.*** High end synths such as the Fairlight and Synclavier will have sounds stored in their own format and ***cost anywhere from $30 to $150 (for lengthier samples)***."). Moreover, the Royalty Agreement further confirms transferring money in connection with electronic sales as an inherent feature of the Synth-Bank article's system. *See, e.g.*, Ex. 1325 at 1-10, 4 ("During the term of this agreement, SYNTH-BANK shall pay Artist a royalty of Fifty percent (50%) on SYNTH-BANK's Gross Receipts directly relating to the Sounds derived from On-Line Systems.), 2 ("'On-Line System' means any remote computer facility at which electronic data embodying the Sounds are stored for access by End Users, typically via telecommunications and computer system(s)."). To the extent it is argued any further disclosure is required of transferring money electronically via a telecommunication line, this would at minimum have been obvious to a person of ordinary skill in light of the Synth-Bank article, particularly in connection with, *inter alia*, the Synth-Bank article's explicit disclosure of an "***on-line shopping service***" operating over telecommunications lines, and the well-known ready availability of credit card and similar mechanisms to facilitate remote on-line payment. To the extent it is argued any further disclosure of electronic sales is required, the Trademark Registration confirms that the Synth-Bank mark was used in commerce to provide access to customers. *See, e.g.*, Ex. 1326 at 4 (mark was first used in commerce on October 1, 1985 in connection with "[p]roviding computerized access to databases containing synthetized and digitized sounds and music"). The Synth-Bank article thus at minimum discloses this limitation (and renders this claim obvious) in combination with the Trademark Registration. *See also* Ex. 1334 (Kelly Decl. App'x. D at Cl. 1).
the step of charging a fee includes the step of	The Synth-Bank article discloses this step. One of ordinary skill would have understood from the Synth-Bank article that there were several methods available to charge a fee to effectuate payment for sounds, including charging Synth-Bank

Claim 1	Synth-Bank
charging the account of the second party; and	member's credit card (which necessarily and thus inherently is an account of the cardholder) or Synth-Bank account. *See, e.g.*, Ex. 1322 at 2 ("Synth-Bank is . . . ***an on-line shopping service where users can purchase specific sound files*** created by popular artists and programmers, and a third area dedicated to sampling keyboards. . . . Being part of PAN allows for electronic mail between members, conferencing, databases, and ***the shopping area (to purchase sound patches)***. For a limited time only, ***Synth-Bank membership will be available for $50. This includes a PAN membership (a $150 value)*** to qualified professionals. There will be no Synth-Bank charges (other than normal ***PAN connect charges***) for the downloading of the public domain sound files.") ("The sound files for the non-sampling keyboards will be stored in Opcode's Patch Librarian format and will be ***priced roughly at a dollar per sound*** (i.e. 32 DX7 sounds for $30). The sampling keyboard files will be stored in Sound Designer format and will be ***based on a sliding scale from $15 to $30.*** High end synths such as the Fairlight and Synclavier will have sounds stored in their own format and ***cost anywhere from $30 to $150 (for lengthier samples)***."). *See also* Ex. 1334 (Kelly Decl. App'x. D at Cl. 1).
transferring the desired digital video or digital audio signals from the first memory of the first party to the second memory of the second party control unit of the second party through telecommunications lines while the second party	The Synth-Bank article discloses this step, (i) alone (including with inherent features confirmed by Synth-Bank Royalty Agreement), or (ii) in combination with the Synth-Bank advertisement. One of ordinary skill would have understood the Synth-Bank article's description of on-line shopping for sounds and downloading with a modem to be a disclosure of transferring the desired digital audio signals from the first memory of the first party to the second memory of the second party control unit of the second party (buyer) through telecommunications lines. The second party (buyer) is in possession and control of the second party control unit with the second memory (for example, using a home computer to download and store music). *See, e.g.*, Ex. 1322 at 2 ("Synth-Bank is . . . ***an on-line shopping service where users can purchase specific sound files*** created by popular artists and programmers, and a third area dedicated to sampling keyboards. . . . Being part of PAN ***allows for electronic mail between members, conferencing, databases, and the shopping area (to purchase sound patches)***. For a limited time only, Synth-Bank membership will be available for $50. This includes

Claim 1	Synth-Bank
control unit with the second memory is in possession and control of the second party;	a PAN membership (a $150 value) to qualified professionals. There will be no Synth-Bank charges (other than normal PAN connect charges) for the ***downloading of the public domain sound files***.") Moreover, the Royalty Agreement further confirms as inherent Synth-Bank's configuration to transmit audio files over telecommunication lines. *See* Ex. 1325 at 1-10, 4 ("During the term of this agreement, SYNTH-BANK shall pay Artist a royalty of Fifty percent (50%) on SYNTH-BANK's Gross Receipts directly relating to the Sounds derived from On-Line Systems.), 2 ("'***On-Line System' means any remote computer facility at which electronic data embodying the Sounds are stored for access by End Users, typically via telecommunications and computer system(s).***"). To the extent it is argued any further disclosure of transmitting the desired digital audio signal is required, the Synth-Bank advertisement discloses download of sounds from sound libraries using a personal computer and modem. *See, e.g.*, Ex. 1326 at 17-19 ("The future is here! Now you can have access to major recording artists', public domain and sound effect libraries 24 hours a day. ***By using a personal computer, modem and midi interface you can download sounds and sequences over conventional electronic mail networks***."). The Synth-Bank article thus at minimum discloses this limitation and renders this claim obvious) in combination with this advertisement. *See also* Ex. 1334 (Kelly Decl. App'x. D at Cl. 1).
storing the desired digital video or digital audio signals in a non-volatile storage portion the second memory; and	The Synth-Bank article discloses this step, (i) alone, or (ii) in combination with the Synth-Bank advertisement. The Synth-Bank article discloses downloading purchased sounds. One of ordinary skill would have recognized the Synth-Bank article's disclosure of purchasing and downloading a sound as explicitly or at minimum inherently disclosing the buyer (a second party) storing that sound in a memory of the second party as a necessary part of downloading, and so that it could be used upon purchase. *See, e.g.*, Ex. 1322 at 2 ("Synth-Bank is . . . ***an on-line shopping service where users can purchase specific sound files*** created by popular artists and programmers, and a third area dedicated to sampling keyboards. . . . Being part of PAN allows for electronic mail between

Claim 1	Synth-Bank
	members, conferencing, databases, and ***the shopping area (to purchase sound patches)***. For a limited time only, Synth-Bank membership will be available for $50. This includes a PAN membership (a $150 value) to qualified professionals. There will be no Synth-Bank charges (other than normal PAN connect charges) for the ***downloading of the public domain sound files***."). Files available to users would, as explicitly or at minimum inherently disclosed (*see supra* discussion of "digital audio signal stored on a first memory of a first party") be stored in a first memory, and users would at minimum necessarily (and thus inherently) download files to a second memory. *See, e.g.*, Ex. 1334 (Kelly Decl. App'x. D at Cl. 1). In the alternative, storage of purchased signals in memory would at minimum have been obvious to a person of ordinary skill without the need for resort to additional disclosures. To the extent it is argued any further disclosure of storing the desired digital signals in the second memory is required, the Synth-Bank advertisement further discloses download of sounds from sound libraries using a personal computer and modem. *See, e.g.*, Ex. 1326 at 17-19 ("The future is here! Now you can have access to major recording artists', public domain and sound effect libraries 24 hours a day. ***By using a personal computer, modem and midi interface you can download sounds and sequences*** over conventional electronic mail networks."). One of ordinary skill would know that, after sale, downloaded sounds would necessarily be stored in a second memory (for example, within a personal computer as disclosed in the advertisement). *See, e.g.*, Ex. 1334 (Kelly Decl. App'x. D at Cl. 1). The Synth-Bank article thus at minimum discloses this limitation (and renders this claim obvious) in combination with this advertisement. *See also* Ex. 1334 (Kelly Decl. App'x. D at Cl. 1).
playing through speakers of the second party	The Synth-Bank article at minimum renders obvious this step, (i) alone, or (ii) in combination with the Synth-Bank advertisement. One of ordinary skill would have found it obvious from the Synth-Bank article's disclosure of a user's purchase and download of audio

Claim 1	Synth-Bank
control unit the digital video or digital audio signals stored in the second memory, said speakers of the second party control unit connected with the second memory of the second party control unit;	files that the purchased sounds stored in the second memory—for example, memory in a home computer—could be played through speakers of that computer, which would be connected with the memory holding that data in order to effectuate playback. To the extent it is argued any further disclosure of is required, the Synth-Bank advertisement further discloses download of sounds from sound libraries to a personal computer. *See, e.g.*, Ex. 1326 at 17-19 ("The future is here! Now you can have access to major recording artists', public domain and sound effect libraries 24 hours a day. ***By using a personal computer, modem and midi interface you can download sounds and sequences*** over conventional electronic mail networks."). One of ordinary skill would know that, after sale, downloaded sounds would necessarily be stored in a second memory (for example, within a personal computer as disclosed in the advertisement). *See, e.g.*, Ex. 1334 (Kelly Decl. App'x. D at Cl. 1). The Synth-Bank article thus at minimum discloses this limitation (and renders this claim obvious) in combination with this advertisement. *See also* Ex. 1334 (Kelly Decl. App'x. D at Cl. 1).
wherein the non-volatile storage portion is not a tape or CD.	The Synth-Bank article renders obvious this step. One of ordinary skill would have understood that the second memory could include such non-volatile storage options as hard drives, floppy disks, and WORM disks (which are not a tape or CD).

(b) Claims 64 and 95

The limitations of Claims 64 and 95 parallel those of claim 1,[51] and any added limitations (*e.g.*, storing in a hard disk) are disclosed by the Synth-Bank article, in combination with the references cited above, as described in connection with claim.

VII. CONCLUSION

For at least the reasons above, Petitioner requests institution of a covered

[51] *See supra* note 59; *see also* Kelly Decl. App'x D (Cls. 1, 64, 95).

business method patent review of the '440 Patent because this Petition would, if unrebutted, demonstrate that it is more likely than not that at least one of the claims challenged in this Petition is unpatentable. It is therefore respectfully requested that this Petition be granted and claims 1, 64, and 95 of the '440 Patent be judged invalid. If there are any questions, counsel for the Petitioner may be contacted at the telephone number below. Please direct all correspondence to the lead and back-up counsel for Petitioner designated below at the service address as specified below.

Pursuant to §§ 40.304 and 40.302(b), Petitioner, Petitioner's real party in interest, and Petitioner's privies are not estopped from challenging the claims on the grounds identified in this Petition. As identified in the attached Certificate of Service and in accordance §§ 1.33(c), 42.205, and 42.300, a copy of the present Request, in its entirety, is being served on the patent owner at the correspondence address of record for the subject patent as reflected in the publicly-available records of the United States Patent and Trademark Office as designated in the Office's Patent Application Information Retrieval system.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this proceeding by this firm) to our Deposit Account No. 18-1945, under Order No. 104677-5005-804.

Respectfully submitted,

ROPES & GRAY LLP

By /J. Steven Baughman/
J. Steven Baughman, Lead Counsel
Registration No. 47,414
steven.baughman@ropesgray.com
Ching-Lee Fukuda, Back-up Counsel
Registration No. 44,334
ching-lee.fukuda@ropesgray.com
ROPES & GRAY LLP
Prudential Tower
800 Boylston Street
Boston, Massachusetts 02199-3600
(202) 508-4606 (Telephone)
(617) 235-9492 (Fax)
Attorneys/Agents For Petitioner

May 6, 2013

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor: Hair	§	Attorney Docket No.:
United States Patent No.: 5,966,440	§	104677-5005-804
Formerly Application No.: 08/471,964	§	Customer No. 28120
Issue Date: October 12, 1999	§	
Filing Date: June 6, 1995	§	Petitioner: Apple Inc.
Former Group Art Unit: 2785	§	
Former Examiner: Hoa T. Nguyen	§	

For: System and Method for Transmitting Desired Digital Video or Digital Audio Signals

MAIL STOP PATENT BOARD
Patent Trial and Appeal Board
United States Patent and Trademark Office
Post Office Box 1450
Alexandria, Virginia 22313-1450

CERTIFICATE OF SERVICE

It is certified that a copy of the following documents has been served in its entirety on the patent owner as provided in 37 CFR § 42.205:

1. Petition For Covered Business Method Patent Review of United States Patent No. 5,966,440 Pursuant to 35 U.S.C. § 321, 37 C.F.R. § 42.304 and accompanying exhibits:

EXHIBITS	
Exhibit 1301	United States Patent 5,966,440
Exhibit 1302	United States Patent 5,966,440 File History
Exhibit 1303	Application No. 90/007,407 ('440 Patent Reexamination)
Exhibit 1304	United States Patent No. 5,191,573

EXHIBITS	
Exhibit 1305	United States Patent No. 5,191,573 File History
Exhibit 1306	Application No. 90/007,402 ('573 Patent Reexamination)
Exhibit 1307	Deposition Transcript of Arthur Hair, dated Dec. 11, 2012 SightSound Techs., LLC v. Apple Inc., No. 11-1292 (W.D. Pa.)
Exhibit 1308	Deposition of Scott Sander, dated Dec. 18-19, 2012 SightSound Techs., LLC v. Apple Inc., No. 11-1292 (W.D. Pa.)
Exhibit 1309	"Joint Telerecording Push: CompuSonics, AT&T Link," *Billboard* (Oct. 5, 1985)
Exhibit 1310	David Needle, "From the News Desk: Audio/digital interface for the IBM PC?," *InfoWorld*, vol. 6, no. 23, p. 9, June 4, 1984
Exhibit 1311	Larry Israelite, "Home Computing: Scenarios for Success," *Billboard*, Dec. 15, 1984
Exhibit 1312	International Patent Application WO85/02310, filed on November 14,1984, and published on May 23,1985 ("Softnet")
Exhibit 1313	United States Patent No. 3,718,906 filed on June 1, 1971, issued on February 27,1973 ("Lightner")
Exhibit 1314	United States Patent No. 3,990,710 filed on March 1, 1971, issued on November 9, 1976 ("Hughes")
Exhibit 1315	Image titled, "CompuSonics Digital Audio Telecommunication System"
Exhibit 1316	7/16/84 CompuSonics Letter from David Schwartz to Shareholders
Exhibit 1317	Hyun Heinz Sohn, "A High Speed Telecommunications Interface for Digital Audio Transmission and Reception," presented at the 76th AES Convention, October 8-11, 1984
Exhibit 1318	10/10/85 CompuSonics Letter from David Schwartz to Shareholders
Exhibit 1319	CompuSonics Video Application Notes – CSX Digital Signal Processing (1986)
Exhibit 1320	Image titled, "CompuSonics Digital Audio Software Production/ Distribution"
Exhibit 1321	Excerpts of Lecture at Stanford by D. Schwartz and J. Stautner, 1987 (video)

EXHIBITS	
Exhibit 1322	Bryan Bell, "Synth-Bank: The Ultimate Patch Library," *Electronic Musician* (Sept. 1986)
Exhibit 1323	United States Patent No. 4,682,248 filed on September 17, 1985, issued on July 21, 1987 ("Schwartz Patent")
Exhibit 1324	"The Search for the Digital Recorder,"*Fortune*, Nov. 12, 1984
Exhibit 1325	2/22/1986 Agreement between Synth-Bank and Artist
Exhibit 1326	3/17/1987 United States Patent & Trademark Office Notice of Acceptance and Renewal, Serial No. 73/568543
Exhibit 1327	"SynthBank Bulletin Board," *Keyboard Magazine* (March 1987)
Exhibit 1328	"Inside Macintosh," Volumes I, II, and III, Addison-Wesley Publishing Company, Inc. (1985)
Exhibit 1329	Craig Partridge, "The Technical Development of Internet Email," BBN Technologies
Exhibit 1330	United States Patent No. 4,124,773 filed on November 26, 1976, issued on November 7, 1978 ("Elkins")
Exhibit 1331	United States Patent No. 4,667,088 filed on November 1, 1982, issued on May 19, 1987 ("Kramer et al.")
Exhibit 1332	United States Patent No. 4,528,643 filed on January 10, 1983, issued on July 9, 1985 ("Freeny")
Exhibit 1333	Photo of CompuSonic equipment
Exhibit 1334	Declaration of Dr. J. Kelly In Support of Petition for Covered Business Method Patent Review
Exhibit 1335	Declaration of David Schwartz In Support of Petition for Covered Business Method Patent Review
Exhibit 1336	11/19/12 Special Master's Report and Recommendation on Claim Construction (D.I. 142) *SightSound Techs., LLC v. Apple Inc.* No. 11-1292 (W.D. Pa)
Exhibit 1337	2/13/13 Order re Claim Construction (D.I. 175), *SightSound Techs., LLC v. Apple Inc.*, No. 11-1292 (W.D. Pa.)
Exhibit 1338	United States Patent No. 5,675,734 File History
Exhibit 1339	Excerpt from *Chambers Science and Technology Dictionary* (1988)

EXHIBITS	
Exhibit 1340	Excerpt from *Webster's II New Riverside University Dictionary* (1988)
Exhibit 1341	Declaration of Dr. John P.J. Kelly, dated Sept. 7, 2012
Exhibit 1342	*New Telerecording Method for Audio*, Broadcast Management/Engineering, pp. 14-15, Oct. 1985
Exhibit 1343	Excerpt of Plaintiff SightSound Techs., LLC's Expert Report of Dr. J. Douglas Tygar Regarding Infringement, dated April 22, 2013
Exhibit 1344	Declaration of Flora D. Elias-Mique In Support of Petition for Covered Business Method Patent Review
Exhibit 1345	Declaration of Roberto J. Gonzalez In Support of Petition for Covered Business Method Patent Review
Exhibit 1346	Declaration of Megan F. Raymond In Support of Petition for Covered Business Method Patent Review
Exhibit 1347	Declaration of Ching-Lee Fukuda In Support of Petition for Covered Business Method Patent Review

The copy has been served on May 6, 2013 by causing the aforementioned documents to be deposited in the United States Postal Service as Express Mail postage pre-paid in an envelope addressed to:

Ansel M Schwartz
Attorney At Law
One Sterling Plaza
201 North Craig St., Suite 304
Pittsburgh, PA 15213
(Label No. EM 643 463 231 US)

Drinker Biddle & Reath
Attn: Intellectual Property Group
One Logan Square, Suite 2000
Philadelphia, PA 19103-6996
(Label No. EM 643 46 3276 US)

Respectfully submitted,

ROPES & GRAY LLP

By /J. Steven Baughman/
J. Steven Baughman
Registration No. 47,414
Customer No. 28120
Prudential Tower
800 Boylston Street
Boston, Massachusetts 02199-3600
(202) 508-4606
(617) 235-9492 (Fax)
Attorneys/Agents For Petitioner