

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Inventor: Hair	§	Attorney Docket No.:
United States Patent No.: 5,191,573	§	104677-5005-802
Formerly Application No.: 586,391	§	Customer No. 28120
Issue Date: March 2, 1993	§	
Filing Date: September 18, 1990	§	Petitioner: Apple Inc.
Former Group Art Unit: 2313	§	
Former Examiner: Hoa Nguyen	§	

For: Method for Transmitting a Desired Digital Video or Audio Signal

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

**PETITION FOR COVERED BUSINESS METHOD PATENT REVIEW OF  
UNITED STATES PATENT NO. 5,191,573 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, 2, 4, and 5 of U.S. Patent No. 5,191,573 (“the ’573 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, 2, 4 and 5 as unpatentable under 35 U.S.C. §§ 102 and 103.<sup>1</sup>

---

<sup>1</sup> As discussed in Section I, *infra*, Petitioner has concurrently filed a Petition seeking covered business method review of the '573 Patent requesting judgment against these same claims under § 101 for claiming patent-ineligible subject matter and § 112 for failure to satisfy the written description requirement. Petitioner has additionally filed Petitions seeking covered business method reviews of the related '440 Patent requesting judgment against claims in that patent under § 101 for claiming patent-ineligible subject matter and for obviousness-type double patenting 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.

## TABLE OF CONTENTS

I.	INTRODUCTION.....	1
II.	OVERVIEW OF FIELD OF THE CLAIMED INVENTION .....	4
III.	PETITIONER HAS STANDING .....	9
	A.    The '573 Patent Is a Covered Business Method Patent.....	9
	B.    Petitioner Is a Real Party In Interest Sued for and Charged With Infringement.....	15
IV.	OVERVIEW OF SPECIFIC GROUNDS FOR WHICH IT IS MORE LIKELY THAN NOT THAT THE CHALLENGED CLAIMS (1, 2, 4, and 5) OF THE '573 PATENT ARE UNPATENTABLE .....	16
V.	BACKGROUND INFORMATION FOR THE '573 PATENT .....	16
	A.    The '573 Patent and Its Prosecution History .....	17
	B.    Reexamination of the '573 Patent .....	23
VI.	DETAILED EXPLANATION OF REASONS FOR RELIEF REQUESTED, SHOWING IT IS MORE LIKELY THAN NOT THAT AT LEAST ONE OF THE CHALLENGED CLAIMS IS UNPATENTABLE .....	27
	A.    Claim Construction.....	28
	B.    The Challenged Claims Are Invalid Under § 102 and/or § 103.....	32
	1.    The Challenged Claims Are Anticipated By the CompuSonics System and are Invalid Under § 102.....	32
	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.....	54
VII.	CONCLUSION.....	72

<b>EXHIBIT LIST</b>	
Exhibit 1101	United States Patent No. 5,191,573
Exhibit 1102	United States Patent No. 5,191,573 File History
Exhibit 1103	Application No. 90/007,402 (573 Patent Reexamination)
Exhibit 1104	Deposition Transcript of Arthur Hair, dated Dec. 11, 2012, SightSound Techs., LLC v. Apple Inc., No. 11-1292 (W.D. Pa.)
Exhibit 1105	Deposition of Scott Sander, dated Dec. 18-19, 2012, SightSound Techs., LLC v. Apple Inc., No. 11-1292 (W.D. Pa.)
Exhibit 1106	“Joint Telerecording Push: CompuSonics, AT&T Link,” <i>Billboard</i> (Oct. 5, 1985)
Exhibit 1107	David Needle, “From the News Desk: Audio/digital interface for the IBM PC?,” <i>InfoWorld</i> , vol. 6, no. 23, p. 9, June 4, 1984
Exhibit 1108	Larry Israelite, “Home Computing: Scenarios for Success,” <i>Billboard</i> , Dec. 15, 1984
Exhibit 1109	International Patent Application WO85/02310, filed on November 14, 1984, and published on May 23, 1985 (“Softnet”)
Exhibit 1110	United States Patent No. 3,718,906 filed on June 1, 1971, issued on February 27, 1973 (“Lightner”)
Exhibit 1111	United States Patent No. 3,990,710 filed on March 1, 197, issued on November 9, 1976 (“Hughes”)
Exhibit 1112	Image titled, “CompuSonics Digital Audio Telecommunication System”
Exhibit 1113	7/16/84 CompuSonics Letter from David Schwartz to Shareholders
Exhibit 1114	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 1115	10/10/85 CompuSonics Letter from David Schwartz to Shareholders
Exhibit 1116	CompuSonics Video Application Notes – CSX Digital Signal Processing (1986)
Exhibit 1117	Image titled, “CompuSonics Digital Audio Software Production/Distribution”

<b>EXHIBIT LIST</b>	
Exhibit 1118	United States Patent No. 4,682,248 filed on September 17, 1985, issued on July 21, 1987 (“Schwartz Patent”)
Exhibit 1119	“The Search for the Digital Recorder,” <i>Fortune Magazine</i> (Nov. 12, 1984)
Exhibit 1120	Excerpts of Lecture at Stanford by D. Schwartz and J. Stautner, 1987 (video)
Exhibit 1121	Bryan Bell, “Synth-Bank: The Ultimate Patch Library,” <i>Electronic Musician</i> (Sept. 1986)
Exhibit 1122	2/22/86 Agreement between Synth-Bank and Artist
Exhibit 1123	3/17/87 United States Patent & Trademark Office Notice of Acceptance and Renewal, Serial No. 73/568543
Exhibit 1124	“SynthBank Bulletin Board,” <i>Keyboard Magazine</i> (March 1987)
Exhibit 1125	“Inside Macintosh,” Volumes I, II, and III, Addison-Wesley Publishing Company, Inc. (1985)
Exhibit 1126	Craig Partridge, “The Technical Development of Internet Email,” BBN Technologies
Exhibit 1127	United States Patent 5,966,440 File History
Exhibit 1128	United States Patent No. 4,124,773 filed on November 26, 1976, issued on November 7, 1978 (“Elkins”)
Exhibit 1129	United States Patent No. 4,667,088 filed on November 1, 1982, issued on May 19, 1987 (“Kramer et al.”)
Exhibit 1130	United States Patent No. 4,528,643 filed on January 10, 1983, issued on July 9, 1985 (“Freeny”)
Exhibit 1131	Photo of CompuSonics equipment
Exhibit 1132	Declaration of Dr. John P.J. Kelly In Support of Petition for Covered Business Method Patent Review
Exhibit 1133	Declaration of David Schwartz In Support of Petition for Covered Business Method Patent Review
Exhibit 1134	11/19/12 Special Master’s Report and Recommendation on Claim Construction (D.I. 142), <i>SightSound Techs., LLC v. Apple Inc.</i> , No. 11-1292 (W.D. Pa.)

<b>EXHIBIT LIST</b>	
Exhibit 1135	2/13/13 Order re Claim Construction (D.I. 175), <i>SightSound Techs., LLC v. Apple Inc.</i> , No. 11-1292 (W.D. Pa.)
Exhibit 1136	United States Patent No. 5,675,734 File History
Exhibit 1137	Excerpt from <i>Chambers Science and Technology Dictionary</i> (1988)
Exhibit 1138	Excerpt from <i>Webster's II New Riverside University Dictionary</i> (1988)
Exhibit 1139	Declaration of Dr. John P.J. Kelly, dated Sept. 7, 2012
Exhibit 1140	<i>New Telerecording Method for Audio</i> , Broadcast Management/Engineering, pp. 14-15, Oct. 1985
Exhibit 1141	4/20/01 Markman Hearing Transcript, <i>SightSound.com Inc., v. N2K, Inc., et al.</i> , No. 98-118 (W.D. Pa.)
Exhibit 1142	Plaintiff SightSound Techs., LLC's Expert Report of Dr. J. Douglas Tygar Regarding Infringement, dated April 22, 2013
Exhibit 1143	Declaration of Flora D. Elias-Mique In Support of Petition for Covered Business Method Patent Review
Exhibit 1144	Declaration of Ching-Lee Fukuda In Support of Petition for Covered Business Method Patent Review
Exhibit 1145	Declaration of Roberto J. Gonzalez In Support of Petition for Covered Business Method Patent Review
Exhibit 1146	Declaration of Megan F. Raymond In Support of Petition for Covered Business Method Patent Review

## I. INTRODUCTION

The challenged claims of the '573 Patent—method claims 1, 2, 4, and 5—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 four rudimentary steps—(A) the buyer transferring money electronically to the seller of the desired digital audio signal, (B) connecting a memory of the seller's device (having the desired signal) with a memory of the buyer's device, (C) transmitting the desired audio signal from the seller's memory to the buyer's memory, and (D) storing it there:

1. A method for transmitting a desired digital audio signal stored on a first memory of a first party to a second memory of a second party comprising the steps of:

[A] transferring money electronically via a telecommunication line to the first party at a location remote from the second memory and controlling use of the first memory from the second party financially distinct from the first party, said second party controlling use and in possession of the second memory;

[B] connecting electronically via a telecommunications line the first memory with the second memory such that the desired digital audio signal can pass therebetween;

[C] transmitting the desired digital audio signal from the first memory with a transmitter in control and possession of the first party to a receiver having the second memory at a location determined by the second party, said receiver in possession and control of the second party; and

[D] storing the digital signal in the second memory.<sup>2</sup>

Ex. 1101. Storing data, including audio and video data, at a remote server was well known. Downloading data over telephone lines from a remote server to a local computer was well-known. Storing data at a local computer was well-known. And the electronic sale of merchandise, including digital 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,” a “telecommunications line,” and a “transmitter” and “receiver.” And the patent itself concedes these 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”) and telecommunication lines (“Telephone Lines”) are “already commercially available.”

Ex. 1101 at 4:16-21. Further, there is no description in the specification of the “transmitter” or “receiver.” Indeed, during reexamination Applicant confirmed that no particular “receiver” is required by the claims, arguing that Napster had copied the claimed invention simply by enabling a computer through which music could be received. *See* Ex. 1103 (8/18/05 Response at 7-10; 12/27/05 Response at 22-25).<sup>3</sup>

---

<sup>2</sup> Claim 2 simply adds the “steps of searching the first memory for the desired digital audio signal; and selecting the desired digital audio signal from the first memory.” And claims 4 and 5 parallel claims 1 and 2, respectively, but recite “digital video signals” rather than “digital audio signals.”

<sup>3</sup> Applicant further admitted that receivers were known in the art and that the claims are not limited to any particular receiver design, stating during prosecution that “the applicant’s method in no manner necessitates the need for a receiver which is



And Applicant further admitted during prosecution that prior art of record at the time—Lightner and Hughes—included both receivers and transmitters. Ex. 1102 (9/14/90 Amendment at 6; 12/09/91 Amendment at 9).<sup>4</sup> Thus, as the intrinsic record reflects, Claim 1 recites nothing more than a method for electronically selling digital audio between a seller and buyer, using conventional, commercially available hardware.<sup>5</sup>

Indeed, each and every element of the challenged claims of the '573 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.<sup>6</sup>

---

controlled by the controller of the transmitter. Any suitable recording apparatus controlled and in possession of the second party can be used to record the incoming digital signals. Accordingly, the second party's own stereo system can be coupled to the incoming signals for recording. In this manner, the second party is not limited to a predesigned receiver of the first party controlling the transmitter. . ." Ex. 1102 (12/09/91 Amendment 10-11).

<sup>4</sup> The claims also "do not specify quality, size, or bandwidth required for the video signals." Ex. 1103 (09/04/09 Board decision at 22).

<sup>5</sup> 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. 1104 at 49:3-52:2. SightSound CEO, Scott Sander, has similarly admitted that Applicant did not invent computers, computer networks, the Internet, telephone lines, or telecommunications lines. Ex. 1105 at 42:12-44:5.

<sup>6</sup> Petitioner is also demonstrating, in pending litigation with SightSound, that the challenged claims are invalid for numerous additional reasons.

## 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 '573 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 '573 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. 1132 (Kelly Decl. ¶¶ 19-24). Electronic sale of digital products, including digital audio and video, was also well known. *See* Ex. 1132 (Kelly Decl. ¶¶ 26-27)

For example, as an October 5, 1985 *Billboard* article reported, CompuSonics and AT&T announced a partnership to create an “electronic record store,” and conducted related press demonstrations. *See* Ex. 1106 at 3. As that article recognized,

the “electronic record store” concept was well-known: “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 id.* CompuSonics had developed digital recorder/players that could store and play digital data transmitted over telephone lines, and also 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 digital 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. 1107 at 1.

A few months later, 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 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. 1108 at 4. 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 '573 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. 1132 (Kelly Decl. ¶¶ 28-31). Indeed, as discussed below, during the reexamination of the '573 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. 1103

(10/26/05 Office Action at 3).<sup>7</sup> 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. *Id.* 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 ’573 Patent—selling and transmitting digital audio and video over telephone lines (which the ’573 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. 1109. 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.

---

<sup>7</sup> All emphases added unless otherwise noted.

Other elements of the '573 Patent claims, such as the transmitter and receiver, were similarly known in the art. For example, prior art cited during prosecution of the '573 Patent, including U.S. Patent Nos. 3,718,906 (“Lightner”) and 3,990,710 (“Hughes”) discloses transmitters and receivers. Exs. 1110 & 1111. During prosecution, Applicant himself referred to “the ‘receiver’” of Lightner,<sup>8</sup> and to “Hughes’ receiver” and “the transmitter” in Hughes.<sup>9</sup>

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 '573 Patent. Long before the '573 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 '573 Patent Is a Covered Business Method Patent**

The '573 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 '573 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

---

<sup>8</sup> Ex. 1102 (09/14/90 Amendment at 6).

<sup>9</sup> *Id.* (12/09/91 Amendment at 9).

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,” Ex. 1101 at 2:10-12, and explains that “[t]he method comprises the step of transferring money via a telecommunications line to the first party from the second party.” *Id.* at 5:33-35.<sup>10</sup> The inventor has elsewhere described his supposed invention simply as “the electronic sale of digital video and digital audio recordings via telecommunications.” Ex. 1104 at 33:1-11. And another SightSound’s CEO 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. 1105 at 36:23-37:5.<sup>11</sup> SightSound’s own expert has similarly described the ’573 Patent in litigation as

---

<sup>10</sup> While the specification also speaks vaguely of manipulation of digital music (sorting, selection, etc.) and protection from unauthorized copying (*e.g.*, Ex. 1101 at 2:17-24), these functions do not appear in any of the challenged claims, and in any event were not inventive.

<sup>11</sup> Indeed, SightSound has taken the same view in seeking to enforce the ’573 Patent in litigation, with its own experts stating that the ’573 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. 1142 ¶ 22. *See also id.* ¶ 24.



pertaining to “selling or purchasing digital audio or video via telecommunications lines.” Ex. 1142 ¶ 22.<sup>12</sup>

While the claims at issue reference certain conventional components, the ’573 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” of the ’573 Patent is novel and unobvious. Claim 1 is exemplary:

1. A method for transmitting a desired digital audio signal stored on a first memory of a first party to a second memory of a second party comprising the steps of:

[A] transferring money electronically via a telecommunication line to the first party at a location remote from the second memory and controlling use of the first memory from the second party financially distinct from the first party, said second party controlling use and in possession of the second memory;

[B] connecting electronically via a telecommunications line the first memory with the second memory such that the desired digital audio signal can pass therebetween;

---

<sup>12</sup> SightSound’s expert similarly stated that the patent is directed to “sale and distribution of digital audio and video files” and that Claim 1 “is a method claim pertaining to the electronic sale and transmission of digital audio signals—which are digital representations of sound waves.” Ex. 1142 ¶¶ 24 & 70.

[C] transmitting the desired digital audio signal from the first memory with a transmitter in control and possession of the first party to a receiver having the second memory at a location determined by the second party, said receiver in possession and control of the second party; and

[D] storing the digital signal in the second memory.

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,” a “telecommunications line,” and a “transmitter” and “receiver.” And the patent itself concedes these 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”) and telecommunication lines (“Telephone Lines”) are “already commercially available.”<sup>13</sup>

---

<sup>13</sup> SightSound’s CEO has similarly admitted that the Applicant did not invent computers, computer networks, the Internet, telephone lines, or telecommunications lines. Ex. 1105 at 42:12-44:5.

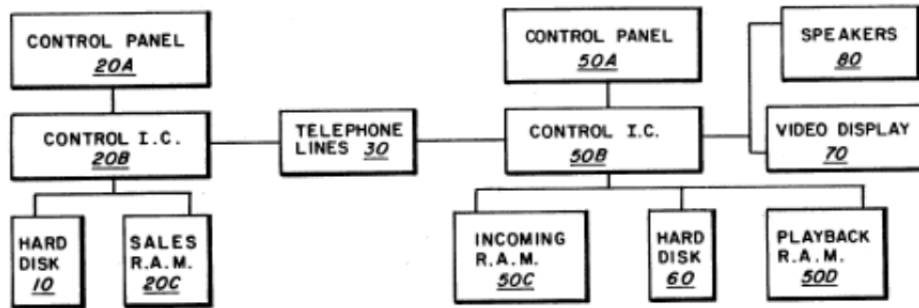
Ex. 1101 at 4:16-21. Further, there is no description in the specification of the “transmitter” or “receiver.” Indeed, during reexamination Applicant himself confirmed that no particular “receiver” is required by the claims, arguing that Napster had copied the claimed invention simply by enabling a computer through which music could be received. *See* Ex. 1103 (8/18/05 Response at 7-10; 12/27/05 Response at 22-25).<sup>14</sup> And Applicant further admitted during prosecution that the prior art of record at the time—Lightner and Hughes—included both receivers and transmitters. *See* Section II, *supra*.<sup>15</sup> 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.

The generic level at which this hardware is disclosed is further illustrated in the patent’s Figure 1 (Ex. 1101):

---

<sup>14</sup> Applicant further admitted that receivers were known in the art and that the claims are not limited to any particular receiver design, stating during prosecution that “the applicant’s method in no manner necessitates the need for a receiver which is controlled by the controller of the transmitter. Any suitable recording apparatus controlled and in possession of the second party can be used to record the incoming digital signals. Accordingly, the second party’s own stereo system can be coupled to the incoming signals for recording. In this manner, the second party is not limited to a predesigned receiver of the first party controlling the transmitter . . .” Ex. 1102 (12/09/91 Amendment at 10-11).

<sup>15</sup> The claims also “do not specify quality, size, or bandwidth required for the video signals” Ex. 1103 (9/04/09 Decision On Appeal at 22).



**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 ’573 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. 1136 (12/30/93 Hair Declaration at 2 & 5). *See also* Ex. 1109 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. 1104 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. 1101 at 1:53-56 (“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.”), 2:63-64 (“Digital Audio Music is software”).<sup>16</sup>

In sum, the supposed invention of the ’573 Patent—as claimed, argued and prosecuted—concerns nothing more than the non-technical idea of selling music over a connection between a seller and a buyer.

### **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 ’573 Patent against Petitioner.<sup>17</sup>

---

<sup>16</sup> SightSound’s own expert in litigation has similarly described digital audio signals simply as “digital representations of sound waves.” Ex. 1142 ¶ 70.

<sup>17</sup> The ’573 Patent was previously the subject of an *ex parte* reexamination proceeding under Application No. 90/007,402 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.).

**IV. OVERVIEW OF SPECIFIC GROUNDS FOR WHICH IT IS MORE LIKELY THAN NOT THAT THE CHALLENGED CLAIMS (1, 2, 4, AND 5) OF THE '573 PATENT ARE UNPATENTABLE**

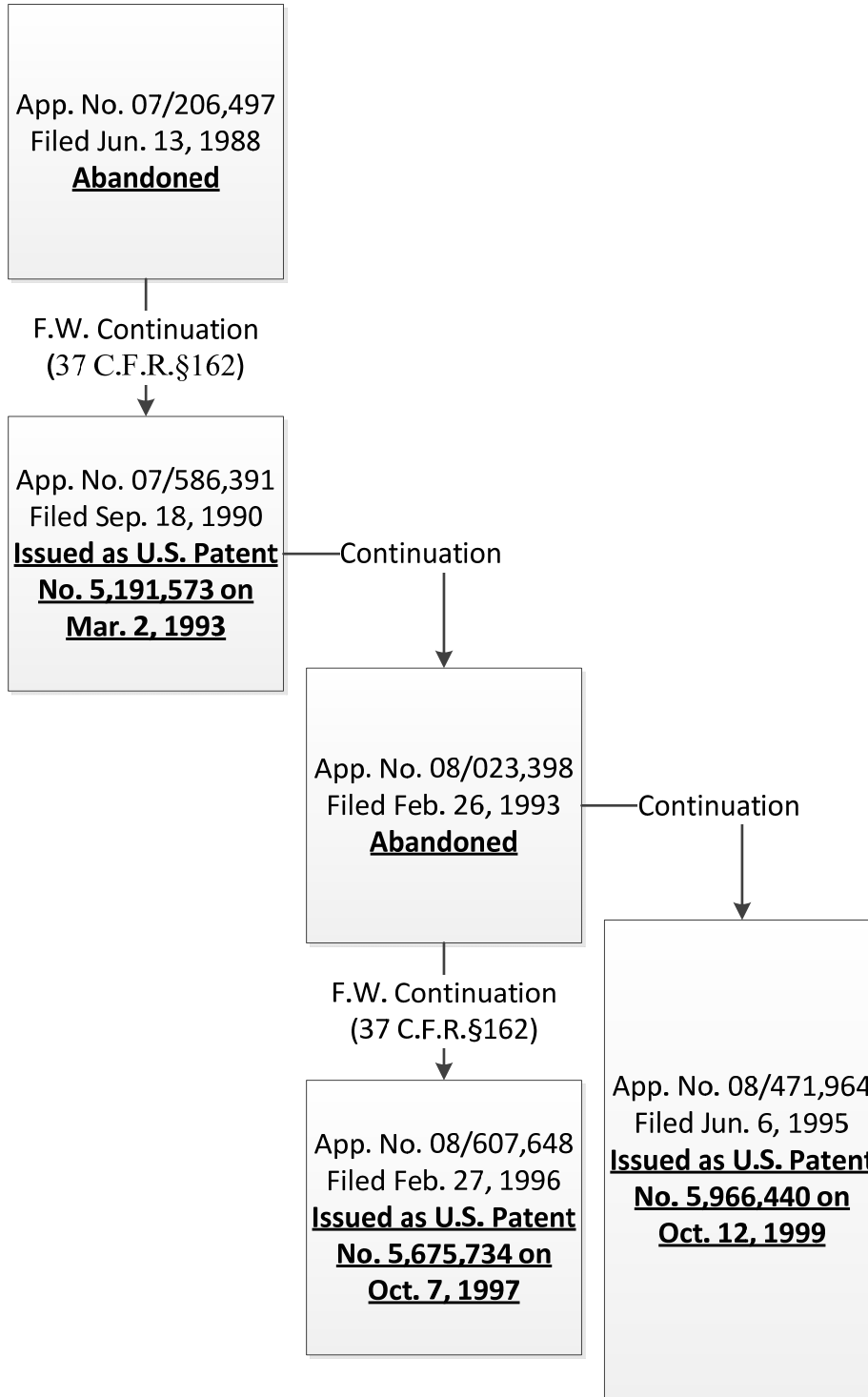
Pursuant to § 42.208 (and § 42.300), Petitioner asserts that at least one—and, indeed, every one—of the challenged claims of the '573 Patent is unpatentable as invalid under the requirements of §§ 102 and 103. Sections VI.B.1 and VI.B.2, respectively, list each ground upon which it is more likely than not that the challenged claims are unpatentable under §§ 102 and 103, and render a detailed explanation therefor.

**V. BACKGROUND INFORMATION FOR THE '573 PATENT**

The specific bases for invalidity presented in this petition—based either on the CompuSonic system or the Synth-Bank article—each include evidence that was not previously cited to or considered by the Examiner during prosecution or reexamination of the '573 Patent, as well as material that was cited but never discussed. Moreover, the arguments Applicant made to overcome the prior art of record during prosecution and reexamination cannot be made with respect to the CompuSonic system and Synth-Bank references presented in this 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 '573 Patent do not relate to any “technological” invention.

**A. The '573 Patent and Its Prosecution History**

The '573 Patent is the first of three patents issuing from a chain of applications claiming priority to an application (No. 07/206,497) filed June 13, 1988.



Prosecution of the '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 in a software configuration allowing for repeated future playback.<sup>18</sup> 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.<sup>19</sup>

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. 1102 (08/20/90 Amendment Under Rule 116 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.1102 (08/20/90 Amendment Under Rule 116 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.

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

---

<sup>18</sup> Ex. 1102 (06/13/88 Specification at 1-6).

<sup>19</sup> Ex. 1102 (11/30/89 Office Action at 2-3; 05/14/90 Office Action at 2-4; 09/09/91 Office Action 09/9/91 at 2-3; 02/24/92 Office Action dated at 7-8).

innovation. For instance, Applicant described his invention as “a method for transmitting a desired digital audio music signal or video signal stored on a first memory to a second memory.” Ex. 1102 (02/26/90 Amendment 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.’” Ex. 1102 (02/26/90 Amendment 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.” Ex. 1102 (02/26/90 Amendment 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.” Ex. 1102 (02/26/90 Amendment 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. Ex. 1102 (08/20/90 Amendment at 6-8).

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.

1102 (12/09/91 Amendment 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.” Ex. 1102 (12/09/91 Amendment at 9). Additionally, Applicant argued that Hughes does not teach or suggest “said receiver in possession and control of second party.” Ex. 1102 (12/09/91 Amendment at 11).

Examiner responded by objecting to the specification and rejecting all pending claims under 35 U.S.C. §§ 112 ¶ 1, 112 ¶ 2, and 103. In conjunction with its reply, Applicant filed a declaration by the inventor.<sup>20</sup> The declaration and accompanying arguments presented in the reply asserted that the objected-to phrases and steps were inherent in the phrase “electronic sales” in the original application.<sup>21</sup> 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

---

<sup>20</sup> Ex. 1102 (05/05/92 Hair Decl. at 2-3).

<sup>21</sup> The declaration stated, *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 that “[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. 1102 (05/05/92 Hair Decl at 2-3).

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. 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 location chosen by the second party. Applicant argued that these limitations were also not shown by Lightner.<sup>22</sup>

When Examiner eventually allowed the claims, his explanation confirmed that allowance 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.”<sup>23</sup> Examiner ultimately issued a Notice of Allowability on October 19, 1992, and the ’573 Patent issued on March 2, 1993,<sup>24</sup> all without mention of the CompuSonics system and Synth-Bank references, which clearly describe two separately-located parties.

---

<sup>22</sup> Ex. 1102 (06/22/92 Amendment at 17-20). 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. 1109.

<sup>23</sup> Ex. 1102 (09/21/92 Office Action at 2).

<sup>24</sup> Ex. 1102 (10/19/92 Notice of Allowability at 1).

## **B. Reexamination of the '573 Patent**

Petitioner Napster, Inc. requested *ex parte* reexamination of the '573 Patent on January 31, 2005.<sup>25</sup> 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.<sup>26</sup> 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. 1103 (08/19/05 Response at 1-10). Patentee argued, for example, that “Freeny was teaching a vending machine” in which “the first party is in possession and control of the second memory.” Ex. 1103 (08/19/05 Response at 6).

---

<sup>25</sup> Ex. 1103 (01/31/05 Request for *Ex Parte* Reexamination at 1).

<sup>26</sup> Ex. 1103 (03/18/15 Order at 2); Ex 1103 (06/21/05 Office Action at 2).

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." Ex. 1103 (08/19/05 Response 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. Ex. 1103 (08/19/05 Response 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. 1103 (10/26/05 Office Action 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." Ex. 1103 (10/26/05 Office Action 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. 1103 (10/26/05

Non-Final Office Action at 3). Examiner eventually issued a Final Office Action on March 20, 2006, 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 of the prior rejections, raised the issue of the '573 Patent's entitlement to the '497 Application's priority date, and entered a new Non-Final Office Action. In the response to the new Non-Final Office Action, 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. 1103 (11/29/06 Response 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." Ex. 1103 (11/29/06 Response 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.<sup>27</sup>

---

<sup>27</sup> 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 not 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.

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

On September 4, 2009, the Board of Patent Appeals and Interferences reversed Examiner’s rejections.<sup>28</sup> The Board ruled 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. 1103 (09/04/09 Decision on Appeal at 25-28).

Shortly after the Board issued its decision, the ’573 Patent expired. As a result, Applicant’s new claims and proposed amendment could not be maintained.<sup>29</sup> 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 on the basis of obviousness type double patenting. *Id.* at 4-22.

In response to the office action, 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

---

<sup>28</sup> Ex. 1103 (09/04/09 Decision on Appeal at 28-29).

<sup>29</sup> *See* Ex. 1103 (03/25/10 Office Action at 2).



tapes.<sup>30</sup> 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 claims and specification.” *Id.* at 3. Patentee similarly argued that the references used for the § 103 rejections do not teach “storing the 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.<sup>31</sup> 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 (emphasis in original). On this basis, an *Ex Parte* Reexamination Certificate for the ’573 Patent, confirming the original claims, issued on November 30, 2010.

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

---

<sup>30</sup> Ex. 1103 (05/25/10 Response at 2-3).

<sup>31</sup> Ex. 1103 (08/16/10 Notice of Intent at 1).

and the governing law, rules and precedent is provided below. Section VI.A lists and explains the bases for Petitioner's relevant claim constructions for the challenged claims. 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**

Because the '573 Patent has expired, for purposes of this review Petitioner construes the claim language pursuant to the principles set forth in *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316 (Fed. Cir. 2005). In concurrent proceedings in the United States District Court for the Western District of Pennsylvania, *SightSound Techs. v.*

*Apple Inc.*, No. 11-cv-1292 (W.D. Pa.), a claim construction order has been entered (Ex. 1135), adopting in its entirety the report and recommendations of the Special Master appointed for claim construction in those proceedings (Ex. 1134). For purposes of this review, Petitioner proposes that the Court's claim constructions be adopted, except as noted below.<sup>32</sup> 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 consistent with the specification of the '573 Patent. Petitioner expressly reserves the right to argue in litigation a different claim construction for any term in the '573 Patent, as appropriate to that proceeding.

***“first party”***—'573 Patent, Claims 1, 2, 4, 5. For review purposes this term is construed to mean, consistent with the claim construction order entered by the Western District of Pennsylvania, “a first entity, whether a corporation or a real person.” *See* Ex. 1134 at 19. *See also* Ex. 1101 at Abstract, 3:3-19, 5:29-45; Ex. 1102 (08/21/90 Amendment at 4-5 (describing “Applicant’s invention”)).

---

<sup>32</sup> 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”**—’573 Patent, Claims 1, 2, 4, 5. For review purposes this term is construed to mean, consistent with the claim construction order entered by the Western District of Pennsylvania, “a second entity, whether a corporation or a real person.” *See* Ex. 1134 at 19. *See also* Ex. 1101 at Abstract at 3:3-19, 5:29-45; Ex. 1102 (08/21/90 Amendment at 4-5 (describing “Applicant’s invention”)).

**“telecommunication[s] lines”**—’573 Patent, Claims 1, 2, 4, 5. For review purposes this term is construed to mean, consistent with the claim construction order entered by the Western District of Pennsylvania, “an electronic medium for communicating between computers.” *See* Ex. 1134 at 23. Further, and as discussed in Section VI.C, *infra*, it is understood that the term “telecommunication[s] lines” is broader than and inclusive of the term “telephone lines,” which appeared in the originally-filed specification and claims of the ’573 Patent. Ex. 1134 at 23-24; Ex. 1141 (04/20/01 Markman Tr.) at 33:18-19 (SightSound’s counsel: “Telecommunications lines in this context has to mean something more than just telephone lines.”), 34:8-9 (SightSound’s counsel: “A telecommunications line has to be broader than telephone lines”). The June 13, 1988 application to which the ’573 Patent claims priority disclosed only “telephone lines.” Ex. 1102 (06/13/88 Specification at 1-6). During prosecution of the application for the ’573 Patent, the applicant amended the specification and the claims with the term “telecommunications link,” which was rejected by Examiner as indefinite under 35

U.S.C. § 112 ¶ 2 as “not well connected in the system.” Ex. 1102 (02/24/92 Office Action at 2-6). After “telecommunications link” was rejected, the applicant amended again with the term “telecommunication[s] lines.” *Id.* (12/11/91 Amendment at 5; 06/25/92 Amendment at 6, 15).

**“electronically”**—’573 Patent, Claims 1, 2, 4, 5. 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.”<sup>33</sup> *See* Ex. 1137 at 294 (“Pertaining to devices or systems which depend on the flow of electrons”); Ex. 1138 at 423 (“Of or relating to electrons”); Ex. 1139 ¶¶ 29-33.

**“connecting electronically”**—’573 Patent, Claims 1, 2, 4, 5. For review purposes this term is construed to mean, consistent with the claim construction order entered by the Western District of Pennsylvania, “connecting through devices or systems which depend on the flow of electrons.” *See* Ex. 1134 at 27.

**“transferring money electronically”**—’573 Patent, Claims 1, 2, 4, 5. For review purposes this term is construed to mean, consistent with the claim construction order entered by the Western District of Pennsylvania, “providing payment electronically.” *See* Ex. 1134 at 28-29; Ex. 1102 (05/05/92 Hair Decl. at 2 (“One skilled in the art would know that an electronic sale inherently assumes a

---

<sup>33</sup> 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. 1034 at 27.

transferring of money [...] coupled with a transferring of a service or product.”); 06/23/92 Amendment 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]”**—’573 Patent, Claims 1, 2, 4, 5. For review purposes this term is construed to mean, consistent with the claim construction order entered by the Western District of Pennsylvania, digital representations of sound waves. *See* Ex. 1134 at 30.

## **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.<sup>34</sup> 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 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 '573 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. 1107 at 1. As described below, CompuSonics used the term "telerecording" to refer to its DSP players' download of digital data from a remote source to a local disk.<sup>35</sup> CompuSonics recognized that once audio or video was in digital form, it could be distributed just like any other digital data,

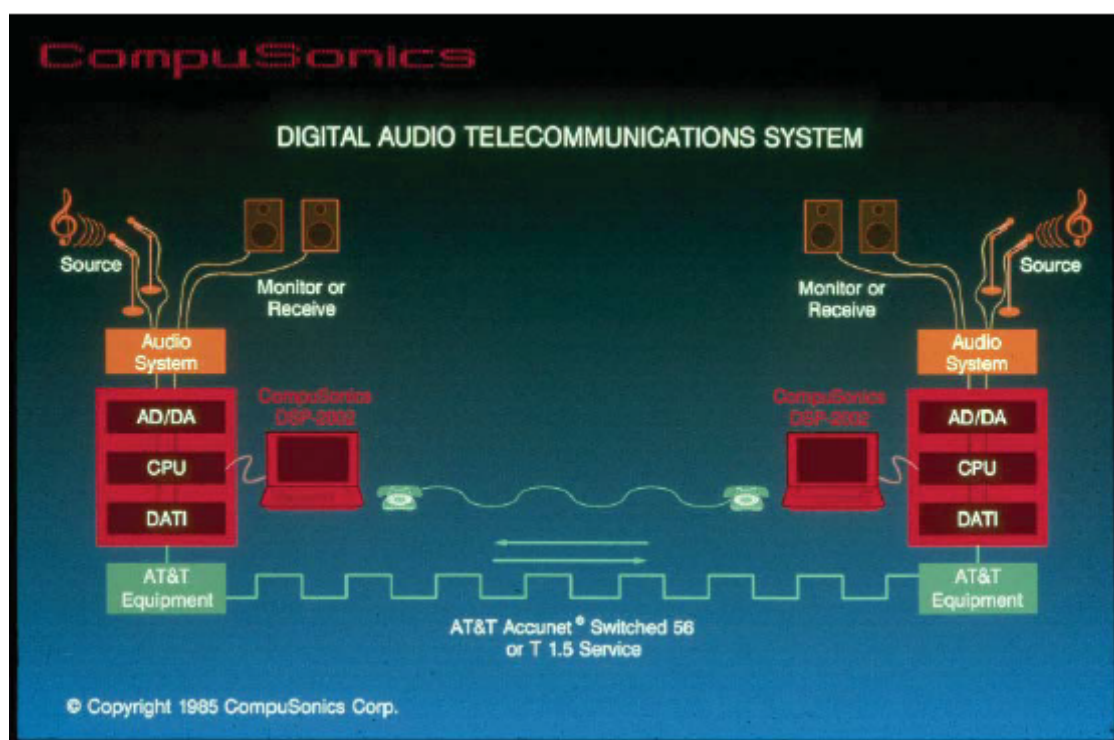
---

<sup>34</sup> The CompuSonics sister corporations are referred to here as "Compusonics."

<sup>35</sup> *See, e.g.*, Ex. 1133 (Schwartz Decl. ¶ 4).

including directly to record stores and consumers over telephone, T1, and cable lines. CompuSonic also described using telerecording as a means of distributing digital music for sale.

The diagram below illustrates CompuSonic's telerecording technology. This example involves transmission of digital audio over either telephone lines or T1 lines between two CompuSonic DSP recorder/players (Ex. 1112):



As early as 1984, CompuSonic 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. 1113 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 it offered:

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. 1114 at 11.

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

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. 1106 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 *id.*

Five days after that article appeared in *Billboard*, 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. 1115 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:

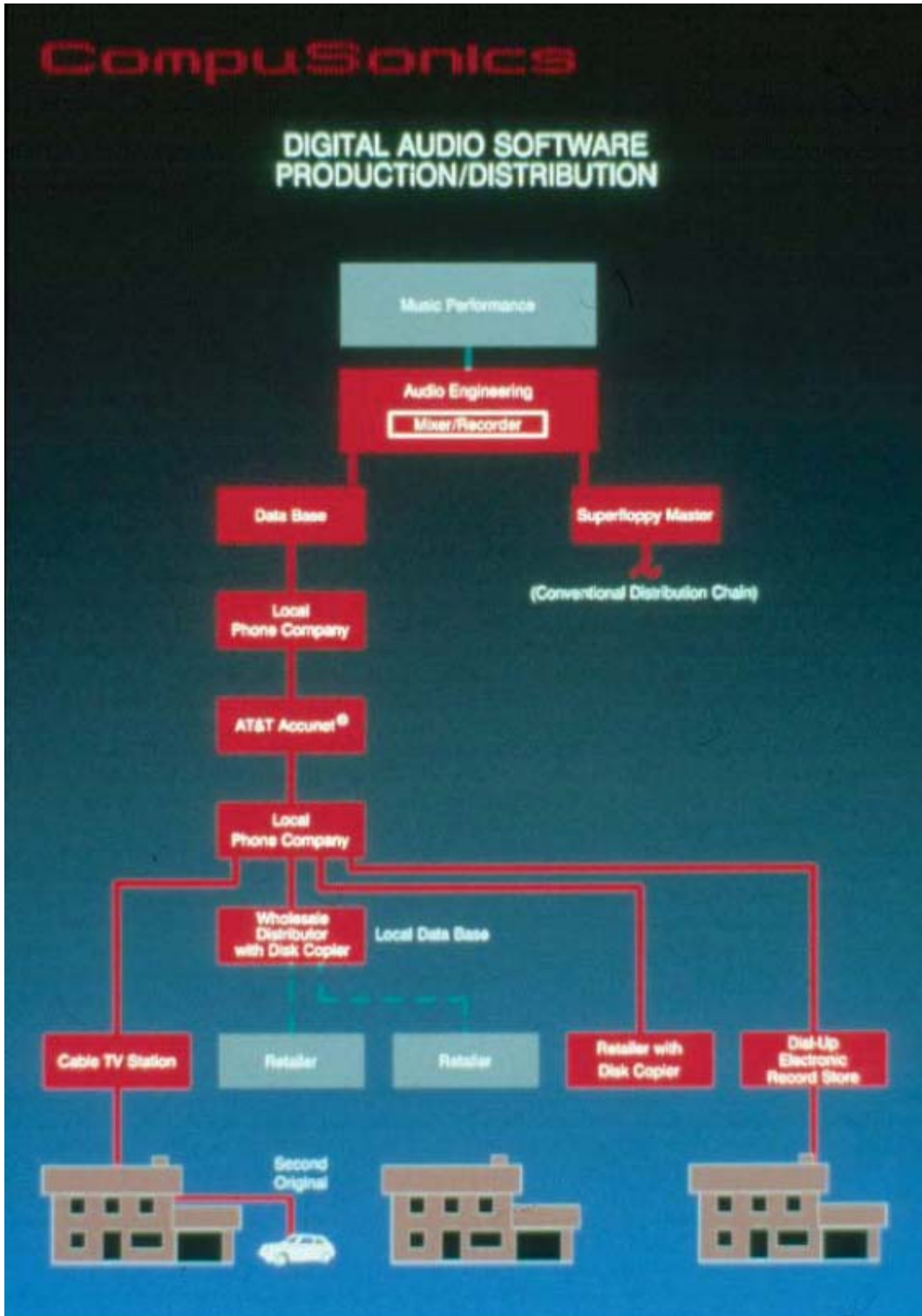
Music television has become a key component of the entertainment industry. Presently, music television serves primarily as a means of promoting sales of records, cassettes, and compact discs. A small but increasingly significant number of consumers are also purchasing music videos in videotape format. 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. 1116 at 2-3. In a 1987 lecture at Stanford University, David Schwartz presented the technology of the CompuSonics system, including telerecording. Mr. Schwartz presented a slide detailing digital audio distribution and “dial-up electronic record store” enabled by CompuSonics’ recorder/players (Ex. 1117):



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 Winchester, 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. 1120, Parts 6-10 (1987 Stanford Lecture by D. Schwartz and J. Stautner). *See also*

Ex. 1132 (Kelly Decl. ¶¶ 32-40).

The CompuSonics system anticipated the challenged claims of the '573 Patent, as further detailed below:

Claim 1	The CompuSonics System
1. A method for	The CompuSonics system anticipates claim 1 of the '573 Patent



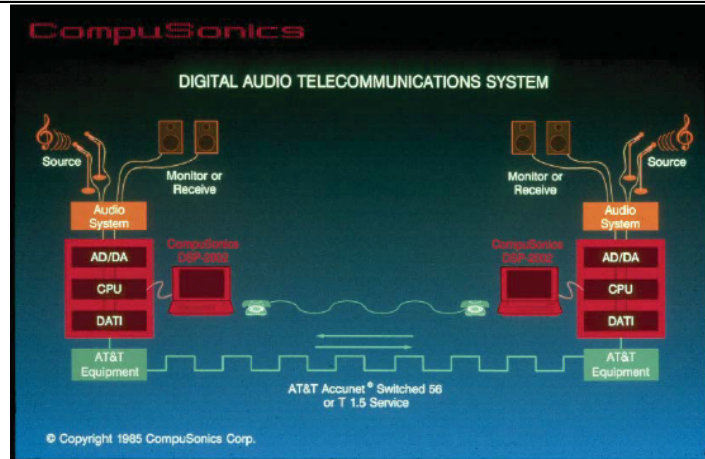
Claim 1	The CompuSonics System
<p>transmitting a desired digital audio signal stored on a first memory of a first party to a second memory of a second party comprising the steps of</p>	<p>as detailed below.</p> <p>The CompuSonics system discloses a method for transmitting desired digital audio data from a first party first memory to a second party second memory. <i>See</i> Ex. 1133 (Schwartz Decl. ¶¶ 4-6, 10); Exs. 1106, 1113. The first party is the music seller (for example, a record company, a record store or other music distributor). The second party is the buyer.</p> <p>As described above, a buyer would download purchased digital audio from a seller’s database 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. <i>See, e.g.</i>, Ex. 1113 at 1 (“In the not too distant future consumers will be able to purchase digital recordings of their favorite artists <b><i>directly from the production studio’s dial-up data base and record them on blank SuperFloppies in a DSP-1000.</i></b>”); Ex. 1106 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.”).</p> <p>A seller’s database would necessarily, and thus inherently, be stored on a memory device. <i>See, e.g.</i>, Ex. 1132 (Kelly Decl. App’x C at Cl. 1).</p> <p><i>See also</i> Ex. 1132 (Kelly Decl. App’x C at Cl. 1).</p>
<p>transferring money electronically via a telecommunication line to the first party, at a location remote from the second memory and controlling use of the first memory, from the second party financially distinct from the</p>	<p>The CompuSonics system discloses this step. <i>See</i> Ex. 1133 (Schwartz Decl. ¶¶ 4-6, 10, 12, 15); Exs. 1106, 1113, 1115, 1120.</p> <p>The CompuSonics system disclosed electronic sales of digital audio and digital video from a seller to a buyer through telecommunication lines. <i>See, e.g.</i>, Ex. 1113 at 1 (“In the not too distant future <b><i>consumers will be able to purchase digital recordings of their favorite artists directly from the production studio’s dial-up data base</i></b> and record them on blank SuperFloppies in a DSP-1000.”); Ex. 1106 at 3 (Telerecording would “allow music software dealers to receive an album master via a digital transmission from the record</p>

Claim 1	The CompuSonics System
<p>first party, said second party controlling use and in possession of the second memory;</p>	<p>company,” and “[t]he retailers would then be able, in turn to <b>digitally transmit the music to consumers who would use credit cards to charge their purchases over the phone lines.</b>”); Ex. 1115 at 1 (“AT&amp;T’s commitment to telerecording may hasten the arrival of that day, in the not too distant future, when <b>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.</b>”).</p> <p>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. <i>See, e.g.</i>, Ex. 1115 at 1 (“all-electronic purchases, transfers and digital recording of high fidelity audio from any music dealer’s DSP-2000 <b>to the DSP-1000 in your living room</b>”).</p> <p>Further, because money is being transferred to effectuate a sale, it is inherent that the first party is financially distinct from the second party</p> <p>“<b>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.</b> 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 Winchester, depending on how many of those you want to spin up. Then that database can talk to any local database . . . . <b>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.</b> That is talking through a local phone connection through this AT&amp;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</p>

Claim 1	The CompuSonics System
	<p>this, <i>or direct through a dial-up electronic record store direct to your home</i>, 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.</p> <p>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. <b><i>All they need's a credit card number, and a taste for music.</i></b> 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&amp;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. 1120, Parts 7-10 (1987 Stanford Lecture by D. Schwartz and J. Stautner).</p> <p><i>See also</i> Ex. 1132 (Kelly Decl. App'x C at Cl. 1).</p>
<p>connecting electronically via a telecommunications line the first memory with the second memory such that the desired digital audio signal can pass therebetween;</p>	<p>The CompuSonics system discloses this step. <i>See</i> Ex. 1133 (Schwartz Decl. ¶¶ 4-5, 9, 12, 15); Exs. 1112, 1114, 1117, 1120.</p> <p>For example, the below diagram (see also larger version above) illustrates a connection via either telephone lines or T1 lines between two CompuSonics DSP recorder/players such that the desired digital audio signal can pass therebetween (Ex. 1112):</p>

Claim 1

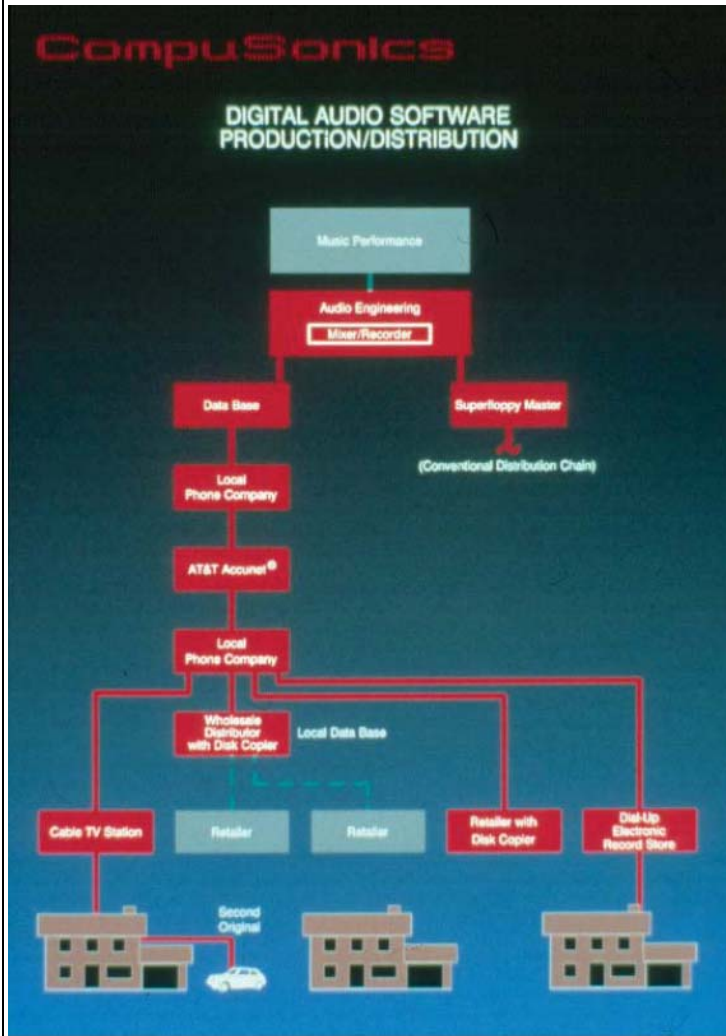
The CompuSonics System



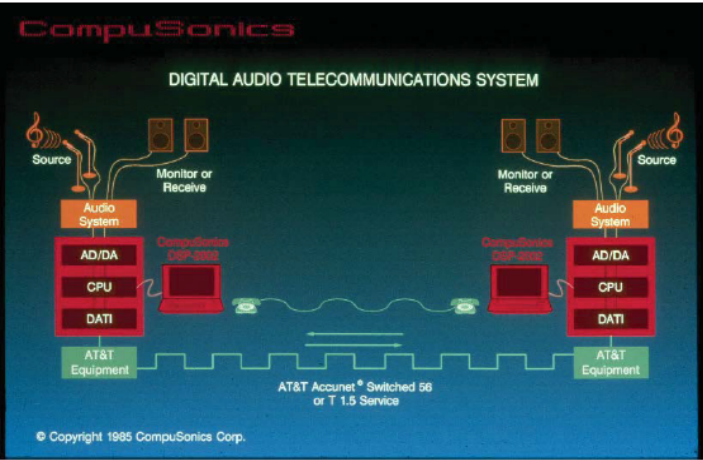
The above example shows CompuSonics' communication device called the Digital Audio Transceiver Interface (DATI) for connecting two computers. *See also, e.g.,* Ex. 1114 at 2 (“A high speed digital interface for the transmission and reception of digital audio signals over AT&T’s Accunet was designed and 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.”), at 3 (“This paper will 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 (see also 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. 1117):

**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 Winchester, 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*

Claim 1	The CompuSonics System
	<p>phone connection through this AT&amp;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.” Ex. 1120, Parts 7-10 (1987 Stanford Lecture by D. Schwartz and J. Stautner).</p> <p><i>See also</i> Ex. 1132 (Kelly Decl. App’x C at Cl. 1).</p>
<p>transmitting the desired digital audio signal from the first memory with a transmitter in control and possession of the first party to a receiver having the second memory at a location determined by the second party, said receiver in possession and control of the second party; and</p>	<p>The CompuSonics system discloses this step. <i>See</i> Ex. 1133 (Schwartz Decl. ¶¶ 4-6, 9-10, 12, 15); Exs. 1106, 1113, 1115, 1120.</p> <p>For example, the below diagram (see also larger version above) illustrates transmitting the desired digital audio signal (Ex. 1112):</p>  <p>The diagram, titled "CompuSonics DIGITAL AUDIO TELECOMMUNICATIONS SYSTEM", illustrates a two-way communication setup. On the left, a "Source" (represented by a musical note icon) is connected to an "Audio System" (orange box), which is further connected to a "Monitor or Receive" (orange box). This "Monitor or Receive" is connected to a "CompuSonics DSP-2202" unit (red box). The DSP unit contains three stacked components: "AD/DA", "CPU", and "DAT". Below the DSP unit is "AT&amp;T Equipment" (green box). On the right, the same setup is mirrored: "AT&amp;T Equipment" connects to a "CompuSonics DSP-2202" unit, which connects to an "Audio System" and then to a "Source". The two DSP units are connected to each other via a central line labeled "AT&amp;T Accunet® Switched 56 or T 1.5 Service". A copyright notice at the bottom reads "© Copyright 1985 CompuSonics Corp."</p> <p>The first party (seller) is in control and possession of the transmitter (for example, because the seller controls whether to transmit the desired digital audio signal to a buyer). The second party (buyer) chooses the location of the second memory (for example, the home) and has possession and control of the receiver (for example, to download and store music). <i>See, e.g.,</i> Ex. 1113 at 1 (“In the not too distant future <i>consumers will be</i></p>

Claim 1	The CompuSonics System
	<p><i>able</i> to purchase digital recordings of their favorite artists directly from the production studio’s dial-up data base and <b>record them on blank SuperFloppies in a DSP-1000.”</b>); Ex. 1106 at 3 (“At a recent press demonstration hosted by AT&amp;T at its headquarters here, <b>CompuSonics made use of AT&amp;T’s land-based telephone data transmission system to digitally transmit and receive music between Chicago and New York.”</b>) (“<b>The retailers would then be able, in turn to digitally transmit the music to consumers</b> who would use credit cards to charge their purchases over the phone lines.”); Ex. 1115 at 1 (“all-electronic purchases, <b>transfers</b> and digital recording of high fidelity audio <b>from any music dealer’s DSP-2000 to the DSP-1000 in your living room</b>”).</p> <p><i>See also, e.g.</i>, Ex. 1120, Parts 9-10 (1987 Stanford Lecture by D. Schwartz and J. Stautner) (“All of the technology that makes this possible has been proven by many people, ourselves among them. We’ve worked with AT&amp;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.”).</p> <p><i>See also</i> Ex. 1132 (Kelly Decl. App’x C at Cl. 1).</p>
<p>storing the digital signal in the second memory.</p>	<p>The CompuSonics system discloses this step. <i>See</i> Ex. 1133 (Schwartz Decl. ¶¶ 4-5, 10, 12, 15); Exs. 1113, 1115, 1120.</p> <p>The buyer’s digital recorder/player contains a memory for storing the downloaded digital signal. The CompuSonics system employed floppy disks and WORM disks for this purpose. <i>See, e.g.</i>, Ex. 1113 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 <b>record them on blank SuperFloppies in a DSP-1000.”</b>); Ex. 1115 at 1 (“AT&amp;T’s commitment to telerecording may hasten the arrival of that day, in the not too distant future, when <b>the technology will filter down to the consumer level, allowing</b></p>

Claim 1	The CompuSonics System
	<p><i>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.</i>").</p> <p><i>See also, e.g., Ex. 1120, Parts 8-9 (1987 Stanford Lecture by D. Schwartz and J. Stautner) ("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&amp;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 <b>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.</b> 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." <b>Download it to the disk.</b> And then get the bill thirty days later or whatever.").</i></p> <p><i>See also Ex. 1132 (Kelly Decl. App'x C at Cl. 1).</i></p>

Claim 2	The CompuSonics System
2. A method as described in claim 1 including after the transferring step, the steps of	<p>The CompuSonics system anticipates claim 2 of the '573 Patent as detailed below.</p> <p>The CompuSonics system discloses the method of claim 1 as described in the analysis of claim 1.</p> <p><i>See also Ex. 1132 (Kelly Decl. App'x C at Cl. 2).</i></p>
searching the first memory for the desired digital audio signal; and	<p>The CompuSonics system discloses this step. <i>See Ex. 1133 (Schwartz Decl. ¶¶ 4-5, 10, 13); Exs. 1113, 1116.</i></p> <p>A person of ordinary skill in the art would understand that the</p>



Claim 2	The CompuSonics System
	<p>CompuSonics system must necessarily (and thus inherently) search the memory of the music seller’s memory for the desired musical selection in order to download it to the consumer’s digital recorder/player. <i>See also, e.g.</i>, Ex. 1113 at 1 (“In the not too distant future consumers will be able to purchase digital recordings of their <b>favorite</b> artists directly from the production studio’s dial-up data base and record them on blank SuperFloppies in a DSP-1000.”); Ex. 1116 (CompuSonics Video Application Notes (1986)) at 2-3 (“The distributor enables the video database computer to access the <b>consumer’s selection</b> 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.”).</p> <p><i>See also</i> Ex. 1132 (Kelly Decl. App’x C at Cl. 2).</p>
<p>selecting the desired digital audio signal from the first memory.</p>	<p>The CompuSonics system discloses this step. <i>See See</i> Ex. 1133 (Schwartz Decl. ¶¶ 4-5, 10, 13); Exs. 1113, 1116.</p> <p>A person of ordinary skill in the art would understand that the CompuSonics system must necessarily (and thus inherently) select the buyer’s desired musical selection from the memory of the seller’s system in order transmit it for download to the buyer’s digital recorder/player. <i>See also, e.g.</i>, Ex. 1113 at 1 (“In the not too distant future consumers will be able to purchase digital recordings of their <b>favorite</b> artists directly from the production studio’s dial-up data base and record them on blank SuperFloppies in a DSP-1000.”); Ex. 1116 at pg.2-3(“The distributor enables the video database computer to access the <b>consumer’s selection</b> 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.”).</p> <p><i>See also</i> Ex. 1132 (Kelly Decl. App’x C at Cl. 2).</p>

Claim 4	The CompuSonics System
<p>4. A method for transmitting a desired digital video signal stored on a first memory of a first party to a second memory of a second party comprising the steps of:</p>	<p>The CompuSonics system anticipates claim 4 of the '573 Patent as detailed below.</p> <p><i>See</i> discussion in connection with claim 1.</p> <p>The CompuSonics system is disclosed to be used in the electronic sale and distribution of digital video. <i>See</i> Ex. 1133 (Schwartz Decl. ¶¶ 4-5, 13); Ex. 1116. <i>See also, e.g.,</i> Ex. 1116 (CompuSonics Video Application Notes (1986) at 2-3) (“<b>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.</b> The proposed music video distribution chain has three principle components that depend on CSX technology: <b>a video database computer, a broadcast digital encoder, and a home disk-based digital video decoder/recorder.</b> A consumer enjoying music television who chooses to purchase his own digital copy calls the distributor with his request. <b>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.</b> 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. <b>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.”).</b></p>

<b>Claim 4</b>	<b>The CompuSonics System</b>
	<i>See also</i> Ex. 1132 (Kelly Decl. App'x C at Cl. 4).
transferring money electronically via a telecommunications line to the 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, said second party in control and in possession of the second memory;	The CompuSonics system discloses this step.  <i>See</i> discussion in connection with claim 1 and the preamble of claim 4.  <i>See also</i> Ex. Ex. 1132 (Kelly Decl. App'x C at Cl. 4).
connecting electronically via a telecommunications line the first memory with the second memory such that the desired digital video signal can pass therebetween;	The CompuSonics system discloses this step.  <i>See</i> discussion in connection with claim 1 and the preamble of claim 4.  <i>See also</i> Ex. 1132 (Kelly Decl. App'x C at Cl. 4).
transmitting the desired digital video signal from the first memory with a transmitter in control and possession of the first party to a receiver having the second memory at a location determined by the second party, said receiver in possession and control of the second party; and	The CompuSonics system discloses this step.  <i>See</i> discussion in connection with claim 1 and the preamble of claim 4.  <i>See also</i> Ex. 1132 (Kelly Decl. App'x C at Cl. 4).
storing the digital signal in the second memory.	The CompuSonics system discloses this step.  <i>See</i> discussion in connection with claim 1 and the preamble of claim 4.  <i>See also</i> Ex. 1132 (Kelly Decl. App'x C at Cl. 4).

<b>Claim 5</b>	<b>The CompuSonics System</b>
5. A method as described in claim 4 including after the transferring	The CompuSonics system anticipates claim 5 of the '573 Patent.

Claim 5	The CompuSonics System
money step, the step of	The CompuSonics system discloses the method of claim 4 as described in the analysis of claim 4.  <i>See also</i> Ex. 1132 (Kelly Decl. App'x C at Cl. 5).
searching the first memory for the desired digital signal and	The CompuSonics system discloses this step.  <i>See</i> discussion in connection with claim 2.  <i>See also</i> Ex. 1132 (Kelly Decl. App'x C at Cl. 5).
selecting the desired digital signal from the first memory.	The CompuSonics system discloses this step.  <i>See</i> discussion in connection with claim 2.  <i>See also</i> Ex. 1132 (Kelly Decl. App'x C at Cl. 5).

**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. 1121 at 2 ("Synth-Bank article"), 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 '573 Patent, and thus is prior art satisfying AIA § 18(a)(1)(C).

As the Synth-Bank article disclosed, the price of commercial sound files in the database depended on the type of file (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 id.* at 2. Synth-Bank allowed users to "dial up Synth-Bank and download an acceptable sound within minutes." *See Ex. 1121 (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.*

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 Ex. 1121 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 Ex. 1121 (Synth-Bank article at 2).* In addition, a February 1986 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<sup>36</sup>—*i.e.*, that it was to be used to sell digital music to networked remote computers. *See Ex. 1122 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-*

---

<sup>36</sup> *See, e.g., Telemac Cellular Corp. v. Topp Telecom, Inc.*, 247 F.3d 1316, 1327-30 (Fed. Cir. 2001); MPEP § 2131.01.

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 synthesized and digitized sounds and music.” *See* Ex. 1123 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-Bank™**  
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 Boua	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 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. For more information please contact Bryan Bell, online, or in the Los Angeles area, Bill Hartman (213) 876-8609.

---

12000 SW PARKWAY PORTLAND, OREGON 97225

See Ex. 1123 at 17-19 (stamped received by the U.S.P.T.O. on 11/14/1985).<sup>37</sup>

<sup>37</sup> See 37 C.F.R. § 2.27 Pending trademark application index; access to applications. (“(a) An index of pending applications including the name and address of the applicant, a reproduction or description of the mark, the goods or services with which the mark is used, the class number, the dates of use, and the serial number and filing date of the application will be available for public inspection as soon as practicable after filing. ... (d) Except as provided in paragraph (e) of this section, the official records of applications and all proceedings relating thereto are available for public inspection and copies of the documents may be furnished upon payment of the fee required by § 2.6.”).



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. 1123 at 28 (signed Aug. 9, 1986) (“Bell Declaration”). The Trademark Registration, Synth-Bank advertisement, and Bell Declaration are all documents that were public more than a year before any possible effective filing date for the ’573 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 downloading Synth-Bank sounds.” *See* Ex. 1124 at 1 (“Synth-Bank Bulletin Board”). Synth-Bank 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

Declaration, and/or Synth-Bank Bulletin Board,<sup>38</sup> at minimum renders obvious each of the challenged claims of the '573 Patent.

Claim 1	Synth-Bank
<p>1. A method for transmitting a desired digital audio signal stored on a first memory of a first party to a second memory of a second party comprising the steps of</p>	<p>As detailed below, the Synth-Bank article at minimum renders claim 1 of the '573 Patent obvious (i) alone (including with inherent features confirmed by the Royalty Agreement), (ii) in combination with the Synth-Bank Trademark Registration, or (iii) in combination with the Synth-Bank advertisement.</p> <p>The Synth-bank article discloses the recited preamble, (i) alone, (ii) in combination with the Synth-Bank Trademark Registration, or (iii) in combination with the Synth-Bank advertisement.</p> <p>The Synth-Bank article discloses a method for transmitting desired digital audio signal from a first party to a second party. <i>See, e.g.,</i> Ex. 1121 (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.”).</p> <p>In order to be available to users as disclosed in Synth-Bank, files would necessarily (and thus inherently) be stored in a first</p>

<sup>38</sup> See Ex. 1132 (Kelly Decl. ¶¶ 41-46).

Claim 1	Synth-Bank
	<p>memory, and users would necessarily (and thus inherently) download files to a second memory. <i>See, e.g.</i>, Ex. 1132 (Kelly Decl. App’x D at Cl. 1).</p> <p>To the extent it is argued any further disclosure of digital audio signals stored in a first party’s (seller’s) memory is required, the Trademark Registration confirms that digital audio was made available by Synth-Bank for download from its databases by users (second parties). <i>See, e.g.</i>, Ex. 1123 at 16 (Synth-Bank mark was first used in commerce on October 1, 1985 in connection with “[p]roviding computerized access to databases containing synthesized 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.</p> <p>Moreover, to the extent it is argued any further disclosure of transmitting a desired digital audio signal stored on a seller’s memory to a buyer’s memory is required, the Synth-Bank advertisement discloses such electronic transmission by modem. <i>See, e.g.</i>, Ex. 1123 at 17-19) (stamped received by the U.S.P.T.O. on 11/14/1985) (“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 Trademark Registration.</p> <p><i>See also</i> Ex. 1132 (Kelly Decl. App’x D at Cl. 1).</p>
transferring money electronically via a telecommunication line to the first party, at a location remote from the second memory and controlling use of the first memory, from the	<p>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.</p> <p>The Synth-Bank article discloses electronic sale (including the transfer of money) over telecommunication lines. <i>See, e.g.</i>, Ex. 1121 at 2 (“Synth-Bank is . . . <b><i>an on-line shopping service where users can purchase specific sound files</i></b> created by popular artists and programmers, and a third area dedicated to</p>

Claim 1	Synth-Bank
<p>second party financially distinct from the first party, said second party controlling use and in possession of the second memory;</p>	<p>sampling keyboards. . . . Being part of PAN allows for electronic mail between members, conferencing, databases, and <i>the shopping area (to purchase sound patches)</i>. For a limited time only, <i>Synth-Bank membership will be available for \$50. This includes a PAN membership (a \$150 value)</i> to qualified professionals. There will be no Synth-Bank charges (other than normal <i>PAN connect charges</i>) 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 <i>priced roughly at a dollar per sound</i> (i.e. 32 DX7 sounds for \$30). The sampling keyboard files will be stored in Sound Designer format and will be <i>based on a sliding scale from \$15 to \$30</i>. High end synths such as the Fairlight and Synclavier will have sounds stored in their own format and <i>cost anywhere from \$30 to \$150 (for lengthier samples)</i>.”).</p> <p>Moreover, the Synth-Bank Royalty Agreement further confirms transferring money in connection with electronic sales as an inherent feature of the Synth-Bank article’s system. <i>See, e.g., Ex. 1122 at 4</i> (“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.); <i>at 2</i> (“‘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).”).</p> <p>Because money is being transferred to effectuate a sale, the SynthBank article necessarily (and thus inherently) discloses that the first party receiving the money (the seller) is financially distinct from the second party paying the money (the buyer), as the disclosed transfer would otherwise be meaningless.</p> <p>Further, during prosecution, applicant argued “[o]ne skilled in the art would know that an <u>electronic sale inherently assumes a transferring of money by providing an account number or a credit or debit card number</u> which then allows for access to or a <u>transferring of a</u></p>

Claim 1	Synth-Bank
	<p>service or <u>product through telecommunication lines</u>. One skilled in the art would know that an electronic sale inherently assumes a <u>charging of a fee to an account</u> which then allows for access to or a <u>transferring of a product or service through telecommunications lines.</u>”).  <i>See, e.g.,</i> Ex. 1102 (05/05/92 Hair Decl. at 2 &amp; 5.)</p> <p>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, <i>inter alia</i>, the Synth-Bank article’s explicit disclosure of an “<b><i>on-line shopping service</i></b>” operating over telecommunications lines, and the well-known ready availability of credit card and similar mechanisms to facilitate remote on-line payment.</p> <p>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. <i>See, e.g.,</i> Ex. 1123 at 16 (Synth-Bank mark was first used in commerce on October 1, 1985 in connection with “[p]roviding computerized access to databases containing synthesized 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.</p> <p><i>See also</i> Ex. 1132 (Kelly Decl. App’x D at Cl. 1).</p>
<p>connecting electronically via a telecommunication s line the first memory with the second memory such that the desired digital audio signal can</p>	<p>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.</p> <p>A person of ordinary skill would have understood that the Synth-Bank article’s description of on-line shopping for audio files and downloading with a modem disclosed connecting the seller’s (Synth’Bank’s) and the buyer’s memories electronically via</p>

Claim 1	Synth-Bank
<p>pass therebetween;</p>	<p>telecommunication lines so that the desired digital audio signal can pass therebetween. <i>See, e.g.</i>, Ex. 1121 at 2 (“Synth-Bank is . . . <b><i>an on-line shopping service where users can purchase specific sound files</i></b> created by popular artists and programmers, and a third area dedicated to sampling keyboards. . . . Being part of PAN <b><i>allows for electronic mail between members, conferencing, databases, and the shopping area (to purchase sound patches)</i></b>). 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 <b><i>downloading of the public domain sound files</i></b>.”). <i>See also</i> further discussion of memories below.</p> <p>Moreover, the Synth-Bank Royalty Agreement confirms as inherent that Synth-Bank was configured to electronically sell audio files comprising electronic data over telecommunication lines for access by end users. <i>See</i> Ex. 1122 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 (“<b><i>“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)</i></b>.”).</p> <p>To the extent it is argued any further disclosure is required of connecting electronically such that the desired digital audio signal can pass via telecommunication lines, 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. <i>See, e.g.</i>, Ex. 1123 at 17-19 (stamped received by the U.S.P.T.O. on 11/14/85) (“The future is here! Now you can have access to major recording artists’, public domain and sound effect libraries 24 hours a day. <b><i>By using a personal computer, modem and midi interface you can download sounds and sequences over conventional electronic mail networks</i></b>.”). One of ordinary skill would have understood that this advertisement disclosed connecting</p>

Claim 1	Synth-Bank
	<p>electronically via telecommunication lines so that the desired digital audio signal can pass therebetween. The Synth-Bank article thus at minimum discloses this limitation (and renders this claim obvious) in combination with this advertisement.</p> <p><i>See also</i> Ex. 1132 (Kelly Decl. App’x D at Cl. 1).</p>
<p>transmitting the desired digital audio signal from the first memory with a transmitter in control and possession of the first party to a receiver having the second memory at a location determined by the second party, said receiver in possession and control of the second party; and</p>	<p>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.</p> <p>The Synth-Bank article discloses a first party (Synth-Bank) in control and possession of the transmitter, and a second party (buyer) who chooses the location of the second memory (for example, a home computer) and has possession and control of the receiver (for example, to download and store music on a home computer). <i>See, e.g.</i>, Ex. 1121 at 2 (“Synth-Bank is . . . <b><i>an on-line shopping service where users can purchase specific sound files</i></b> created by popular artists and programmers, and a third area dedicated to sampling keyboards. . . . Being part of PAN <b><i>allows for electronic mail between members, conferencing, databases, and the shopping area (to purchase sound patches)</i></b>). 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 <b><i>downloading of the public domain sound files.</i></b>”).</p> <p>Moreover, the Royalty Agreement further confirms as inherent Synth-Bank’s configuration to transmit audio files over telecommunication lines. <i>See</i> Ex. 1122 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 (“<b><i>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</i></b></p>

Claim 1	Synth-Bank
	<p><i>computer system(s).”).</i></p> <p>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. <i>See, e.g.,</i> Ex. 1123 at 17-19 (stamped received by the U.S.P.T.O. on 11/14/85) (“The future is here! Now you can have access to major recording artists’, public domain and sound effect libraries 24 hours a day. <b><i>By using a personal computer, modem and midi interface you can download sounds and sequences over conventional electronic mail networks.</i></b>”). The Synth-Bank article thus at minimum discloses this limitation (and renders this claim obvious) in combination with this advertisement.</p> <p><i>See also</i> Ex. 1132 (Kelly Decl. App’x D at Cl. 1).</p>
<p>storing the digital signal in the second memory.</p>	<p>The Synth-Bank article discloses this step, (i) alone, or (ii) in combination with the Synth-Bank advertisement.</p> <p>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 (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. <i>See, e.g.,</i> Ex. 1121 at 2; (“Synth-Bank is . . . <b><i>an on-line shopping service where users can purchase specific sound files</i></b> 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 <b><i>the shopping area (to purchase sound patches)</i></b>). 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 <b><i>downloading of the public domain sound files.</i></b>”).</p> <p>Files available to users would, as explicitly or at minimum</p>



Claim 1	Synth-Bank
	<p>inherently disclosed (<i>see</i> discussion of “digital audio signal stored on a first memory of a first party” above) be stored in a first memory, and users would at minimum necessarily (and thus inherently) download files to a second memory. <i>See, e.g.</i>, Ex. 1132 (Kelly Decl. App’x D at Cl. 1).</p> <p>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.</p> <p>To the extent it is argued any further disclosure of storing the digital audio in the second memory is required, the Synth-Bank advertisement further discloses download of sounds from sound libraries using a personal computer and modem. <i>See, e.g.</i>, Ex. 1123 at 17-19 (stamped received by the U.S.P.T.O. on 11/14/1985) (“The future is here! Now you can have access to major recording artists’, public domain and sound effect libraries 24 hours a day. <b><i>By using a personal computer, modem and midi interface you can download sounds and sequences</i></b> over conventional electronic mail networks.”). One of ordinary skill would know that downloaded sounds would necessarily be stored in a second memory (for example, within a personal computer as disclosed in the advertisement). <i>See, e.g.</i>, Ex. 1132 (Kelly Decl. ¶ 45, 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.</p> <p><i>See also</i> Ex. 1132 (Kelly Decl. App’x D at Cl. 1).</p>

Claim 2	Synth-Bank
2. A method as described in claim 1 including after the transferring step, the steps of	<p>As detailed below, the Synth-Bank article renders claim 2 of the ’573 Patent obvious (i) alone (including with inherent features confirmed by the Royalty Agreement), (ii) in combination with the Synth-Bank Trademark Registration, or (iii) in combination with the Synth-Bank advertisement.</p> <p>The Synth-Bank article anticipates or at minimum renders obvious</p>

Claim 2	Synth-Bank
	<p>the method of claim 1 ((i) alone, (ii) in combination with the Synth-Bank Trademark Registration, or (iii) in combination with the Synth-Bank advertisement) as described above in the analysis of claim 1.</p> <p><i>See also</i> Ex. 1132 (Kelly Decl. App’x D at Cl. 2).</p>
<p>searching the first memory for the desired digital audio signal; and</p>	<p>The Synth-Bank article discloses this step, (i) alone, (ii) in combination with the Trademark Registration, or (iii) in combination with the Synth-Bank advertisement.</p> <p>A person of ordinary skill in the art would understand that a user must necessarily (and thus inherently) search Synth-Bank’s memory for a desired digital audio signal, and Synth-Bank must necessarily search its memory for the desired musical selection in order to transmit it for download by a user as discussed in connection with claim 1.</p> <p>To the extent it is argued any further disclosure of searching the first memory for the desired digital audio signal is required, the Trademark Registration confirms that the seller’s memory stores in databases the signals the user can access. <i>See, e.g.</i>, Ex. 1123 at 16 (Synth-Bank mark was first used in commerce on October 1, 1985 in connection with “[p]roviding computerized access to databases containing synthesized 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.</p> <p>Moreover, to the extent it is argued any further disclosure of searching for the desired digital audio signal is required, the Synth-Bank advertisement discloses download of sounds from libraries of multiple available sounds. <i>See, e.g.</i>, Ex. 1123 at 17-19 (stamped received by the U.S.P.T.O. on 11/14/1985) (“The future is here! Now you can have access to <b>major recording artists’, public domain and sound effect libraries</b> 24 hours a day. <b>By using a personal computer, modem and midi interface you can download sounds and sequences over conventional electronic mail networks.</b>”). The Synth-Bank article thus at</p>

Claim 2	Synth-Bank
	<p>minimum discloses this limitation (and renders this claim obvious) in combination with this advertisement.</p> <p><i>See also</i> Ex. 1132 (Kelly Decl. App’x D at Cl. 2).</p>
<p>selecting the desired digital audio signal from the first memory.</p>	<p>The Synth-Bank article discloses this step, (i) alone, (ii) in combination with the Trademark Registration, or (iii) in combination with the Synth-Bank advertisement.</p> <p>A person of ordinary skill in the art would understand that a user must necessarily select from Synth-Bank’s memory for a desired digital audio signal, and Synth-Bank must necessarily select the user’s desired musical selection from its memory in order to transmit it for download by a user as discussed in connection with claim 1.</p> <p><i>See</i> discussion in connection with “searching the first memory for the desired digital audio signal” immediately above.</p> <p><i>See also</i> Ex. 1132 (Kelly Decl. App’x D at Cl. 2).</p>

Claim 4	Synth-Bank
<p>4. A method for transmitting a desired digital video signal stored on a first memory of a first party to a second memory of a second party comprising the steps of:</p>	<p>As detailed below, the Synth-Bank article (including with inherent features confirmed by Synth-Bank Royalty Agreement) at minimum renders claim 4 of the ’573 Patent obvious (i) in combination with Synth-Bank Bulletin Board, or in further combination with (iii) the Synth-Bank Trademark Registration, or (iv) the Synth-Bank advertisement.</p> <p><i>See</i> discussion in connection with claim 1.</p> <p>It would at minimum have been obvious to sell digital video signals through Synth-Bank, given that digital video is just another type of digital data.</p> <p>To the extent it is argued that any further disclosure of transmission of signals other than digital audio is required, Synth-Bank Bulletin Board discloses that Synth-Bank could be used to</p>

Claim 4	Synth-Bank
	<p>transmit other types of digital data, such as software. <i>See, e.g.</i>, Ex. 1121 at 2 (“And of course, manufacturers can use Synth-Bank to distribute their latest sound files and software updates to qualified users.”); <i>see also</i> Ex. 1124 at 1 (“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 at minimum discloses this limitation (and renders this claim obvious) in combination with Synth-Bank Bulletin Board.</p> <p><i>See also</i> Ex. 1132 (Kelly Decl. App’x D at Cl. 4).</p>
<p>transferring money electronically via a telecommunication line to the 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, said second party in control and in possession of the second memory;</p>	<p>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 Trademark Registration.</p> <p><i>See</i> discussion in connection with claim 1 and the preamble of claim 4.</p> <p><i>See also</i> Ex. 1132 (Kelly Decl. App’x D at Cl. 4).</p>
<p>connecting electronically via a telecommunication line the first memory with the second memory</p>	<p>The Synth-Bank article (including with inherent features confirmed by Synth-Bank Royalty Agreement) renders this step obvious (i) in combination with Synth-Bank Bulletin Board, or (ii) in further combination with the Synth-Bank advertisement.</p> <p><i>See</i> discussion in connection with claim 1 and the preamble of</p>

<b>Claim 4</b>	<b>Synth-Bank</b>
such that the desired digital video signal can pass therebetween;	claim 4.  <i>See also</i> Ex. 1132 (Kelly Decl. App’x D at Cl. 4).
transmitting the desired digital video signal from the first memory with a transmitter in control and possession of the first party to a receiver having the second memory at a location determined by the second party, said receiver in possession and control of the second party; and	The Synth-Bank article (including with inherent features confirmed by Synth-Bank Royalty Agreement) renders this step obvious (i) in combination with Synth-Bank Bulletin Board, or (ii) in further combination with the Synth-Bank advertisement.  <i>See</i> discussion in connection with claim 1 and the preamble of claim 4.  <i>See also</i> Ex. 1132 (Kelly Decl. App’x D at Cl. 4).
storing the digital signal in the second memory.	The Synth-Bank article discloses this step, (i) alone, or (ii) in combination with the Synth-Bank advertisement.  <i>See</i> discussion in connection with claim 1 and the preamble of claim 4.  <i>See also</i> Ex. 1132 (Kelly Decl. App’x D at Cl. 4).

<b>Claim 5 of the ’573 Patent</b>	<b>Synth-Bank</b>
5. A method as described in claim 4 including after the transferring money step, the step of	As detailed below, the Synth-Bank article (including with inherent features confirmed by Synth-Bank Royalty Agreement) at minimum renders the ’573 Patent obvious (i) in combination with Synth-Bank Bulletin Board, or in further combination with (iii) the Synth-Bank Trademark Registration, or (iv) the Synth-Bank advertisement.

Claim 5 of the '573 Patent	Synth-Bank
	<p>The Synth-Bank article (including with inherent features confirmed by Synth-Bank Royalty Agreement) at minimum renders claim 4 obvious (i) in combination with Synth-Bank Bulletin Board, or in further combination with (iii) the Synth-Bank Trademark Registration, or (iv) the Synth-Bank advertisement, as described above in connection with claim 4.</p> <p><i>See also</i> Ex. 1132 (Kelly Decl. App'x D at Cl. 5).</p>
<p>searching the first memory for the desired digital signal and</p>	<p>The Synth-Bank article discloses this step, (i) alone, (ii) in combination with the Trademark Registration, or (iii) in combination with the Synth-Bank advertisement.</p> <p><i>See</i> discussion in connection with claim 2.</p> <p><i>See also</i> Ex. 1132 (Kelly Decl. App'x D at Cl. 5).</p>
<p>selecting the desired digital signal from the first memory.</p>	<p>The Synth-Bank article discloses this step, (i) alone, (ii) in combination with the Trademark Registration, or (iii) in combination with the Synth-Bank advertisement.</p> <p><i>See</i> discussion in connection with claim 2.</p> <p><i>See also</i> Ex. 1132 (Kelly Decl. App'x D at Cl. 5).</p>

## VII. CONCLUSION

For at least the reasons set forth above, Petitioner requests institution of a covered business method patent review of the '573 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, 2, 4, and 5 of the '573 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 with §§ 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. 104677-5005-802.

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.: 5,191,573	§	104677-5005-802
Formerly Application No.: 586,391	§	Customer No. 28120
Issue Date: March 2, 1993	§	
Filing Date: September 18, 1990	§	Petitioner: Apple Inc.
Former Group Art Unit: 2313	§	
Former Examiner: Hoa Nguyen	§	

For: Method for Transmitting a Desired Digital Video or Audio Signal

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. 5,191,573 Pursuant to 35 U.S.C. § 321, 37 C.F.R. § 42.304 and accompanying exhibits:

<b>EXHIBIT LIST</b>	
Exhibit 1101	United States Patent No. 5,191,573
Exhibit 1102	United States Patent No. 5,191,573 File History
Exhibit 1103	Application No. 90/007,402 (573 Patent Reexamination)
Exhibit 1104	Deposition Transcript of Arthur Hair, dated Dec. 11, 2012, SightSound Techs., LLC v. Apple Inc., No. 11-1292 (W.D. Pa.)

<b>EXHIBIT LIST</b>	
Exhibit 1105	Deposition of Scott Sander, dated Dec. 18-19, 2012, SightSound Techs., LLC v. Apple Inc., No. 11-1292 (W.D. Pa.)
Exhibit 1106	“Joint Telerecording Push: CompuSonics, AT&T Link,” <i>Billboard</i> (Oct. 5, 1985)
Exhibit 1107	David Needle, “From the News Desk: Audio/digital interface for the IBM PC?,” <i>InfoWorld</i> , vol. 6, no. 23, p. 9, June 4, 1984
Exhibit 1108	Larry Israelite, “Home Computing: Scenarios for Success,” <i>Billboard</i> , Dec. 15, 1984
Exhibit 1109	International Patent Application WO85/02310, filed on November 14, 1984, and published on May 23, 1985 (“Softnet”)
Exhibit 1110	United States Patent No. 3,718,906 filed on June 1, 1971, issued on February 27, 1973 (“Lightner”)
Exhibit 1111	United States Patent No. 3,990,710 filed on March 1, 1977, issued on November 9, 1976 (“Hughes”)
Exhibit 1112	Image titled, “CompuSonics Digital Audio Telecommunication System”
Exhibit 1113	7/16/84 CompuSonics Letter from David Schwartz to Shareholders
Exhibit 1114	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 1115	10/10/85 CompuSonics Letter from David Schwartz to Shareholders
Exhibit 1116	CompuSonics Video Application Notes – CSX Digital Signal Processing (1986)
Exhibit 1117	Image titled, “CompuSonics Digital Audio Software Production/Distribution”
Exhibit 1118	United States Patent No. 4,682,248 filed on September 17, 1985, issued on July 21, 1987 (“Schwartz Patent”)
Exhibit 1119	“The Search for the Digital Recorder,” <i>Fortune Magazine</i> (Nov. 12, 1984)
Exhibit 1120	Excerpts of Lecture at Stanford by D. Schwartz and J. Stautner, 1987 (video)
Exhibit 1121	Bryan Bell, “Synth-Bank: The Ultimate Patch Library,” <i>Electronic</i>

<b>EXHIBIT LIST</b>	
	<i>Musician</i> (Sept. 1986)
Exhibit 1122	2/22/86 Agreement between Synth-Bank and Artist
Exhibit 1123	3/17/87 United States Patent & Trademark Office Notice of Acceptance and Renewal, Serial No. 73/568543
Exhibit 1124	“SynthBank Bulletin Board,” <i>Keyboard Magazine</i> (March 1987)
Exhibit 1125	“Inside Macintosh,” Volumes I, II, and III, Addison-Wesley Publishing Company, Inc. (1985)
Exhibit 1126	Craig Partridge, “The Technical Development of Internet Email,” BBN Technologies
Exhibit 1127	United States Patent 5,966,440 File History
Exhibit 1128	United States Patent No. 4,124,773 filed on November 26, 1976, issued on November 7, 1978 (“Elkins”)
Exhibit 1129	United States Patent No. 4,667,088 filed on November 1, 1982, issued on May 19, 1987 (“Kramer et al.”)
Exhibit 1130	United States Patent No. 4,528,643 filed on January 10, 1983, issued on July 9, 1985 (“Freeny”)
Exhibit 1131	Photo of CompuSonics equipment
Exhibit 1132	Declaration of Dr. John P.J. Kelly In Support of Petition for Covered Business Method Patent Review
Exhibit 1133	Declaration of David Schwartz In Support of Petition for Covered Business Method Patent Review
Exhibit 1134	11/19/12 Special Master’s Report and Recommendation on Claim Construction (D.I. 142), <i>SightSound Techs., LLC v. Apple Inc.</i> , No. 11-1292 (W.D. Pa.)
Exhibit 1135	2/13/13 Order re Claim Construction (D.I. 175), <i>SightSound Techs., LLC v. Apple Inc.</i> , No. 11-1292 (W.D. Pa.)
Exhibit 1136	United States Patent No. 5,675,734 File History
Exhibit 1137	Excerpt from <i>Chambers Science and Technology Dictionary</i> (1988)
Exhibit 1138	Excerpt from <i>Webster’s II New Riverside University Dictionary</i> (1988)
Exhibit 1139	Declaration of Dr. John P.J. Kelly, dated Sept. 7, 2012

<b>EXHIBIT LIST</b>	
Exhibit 1140	<i>New Telerecording Method for Audio</i> , Broadcast Management/Engineering, pp. 14-15, Oct. 1985
Exhibit 1141	4/20/01 Markman Hearing Transcript, <i>SightSound.com Inc., v. N2K, Inc., et al.</i> , No. 98-118 (W.D. Pa.)
Exhibit 1142	Plaintiff SightSound Techs., LLC's Expert Report of Dr. J. Douglas Tygar Regarding Infringement, dated April 22, 2013
Exhibit 1143	Declaration of Flora D. Elias-Mique In Support of Petition for Covered Business Method Patent Review
Exhibit 1144	Declaration of Ching-Lee Fukuda In Support of Petition for Covered Business Method Patent Review
Exhibit 1145	Declaration of Roberto J. Gonzalez In Support of Petition for Covered Business Method Patent Review
Exhibit 1146	Declaration of Megan F. Raymond 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 643 463 214 US)

Drinker Biddle & Reath  
Attn: Intellectual Property Group  
One Logan Square, Suite 2000  
Philadelphia, PA 19103-6996  
(Label No. EM 643 46 3259 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