IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor: Hair	S	Attorney Docket No.:
United States Patent No.: 5,191,573	S	104677-5005-801
Formerly Application No.: 586,391	S	Customer No. 28120
Issue Date: March 2, 1993	S	
Filing Date: September 18, 1990	S	Petitioner: Apple Inc.
Former Group Art Unit: 2313	S	
Former Examiner: Hoa Nguyen	S	

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

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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 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. §§ 101 and 112.1

¹ As discussed in Section I, *infra*, Petitioner has concurrently filed Petitions seeking covered business method review of the '573 Patent requesting judgment against these same claims under §§ 102 and 103. 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 or other coordination of these proceedings, including at minimum coordination of proceedings involving the same patent, is appropriate.

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Exhibit 1006	United States Patent No. 5,966,440 File History	
Exhibit 1007	David Needle, "From the News Desk: Audio/digital interface for the IBM PC?," InfoWorld, vol. 6, no. 23, p. 9, June 4, 1984	
Exhibit 1008	Excerpt from, Larry Israelite, "Home Computing Scenarios for Success," Billboard Magazine Charts the Future (Dec. 1984)	
Exhibit 1009	Excerpt from, Steve Dupler, "Compusonics, AT&T Link," Billboard Newspaper, vol. 97 no. 40 (Oct. 5, 1985)	
Exhibit 1010	10/10/1985 CompuSonics Letter from David Schwartz to Shareholders	
Exhibit 1011	International Patent Application WO85/02310, filed on Nov. 14, 1984, and published on May 23, 1985 ("Softnet")	
Exhibit 1012	United States Patent No. 3,718,906, filed on June 1, 1971, and issued on Feb. 27, 1973 ("Lightner")	
Exhibit 1013	United States Patent No. 3,990,710, filed on Mar. 1, 1971, and published on Nov. 9, 1976 ("Hughes")	
Exhibit 1014	2/13/13 Order re Claim Construction (D.I. 175), SightSound Techs., LLC v. Apple Inc., No. 11-1292 (W.D. Pa.)	
Exhibit 1015	11/19/12 Special Master's Report and Recommendation on Claim Construction (D.I. 142), SightSound Techs., LLC v. Apple Inc., No. 11-1292 (W.D. Pa.)	
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Exhibit 1017	Excerpt from Webster's II New Riverside University Dictionary	

EXHIBIT LIST		
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Exhibit 1018	Deposition Transcript of Douglas Tygar, dated Oct. 8, 2012 SightSound Techs., LLC v. Apple Inc., No. 11-1292 (W.D. Pa.)	
Exhibit 1019	Jennifer Sullivan, "The Battle Over Online Music," Wired.com (Jan. 29, 1999), available at http://www.wired.com/techbiz/media/news/1999/01/17609	
Exhibit 1020	Declaration of Dr. John P.J. Kelly, dated Sept. 7, 2012	
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Exhibit 1022	Responsive Declaration of J.D. Tygar, dated Sept. 28, 2012	
Exhibit 1023	Excerpt from Benjamin Krepack and Rod Firestone, Start Me Up! the music biz meets the personal computer, pages 126-127 (Mediac Press May 1986)	
Exhibit 1024	Plaintiff SightSound Techs., LLC's Expert Report of Dr. J. Douglas Tygar Regarding Infringement, dated April 22, 2013	
Exhibit 1025	Expert Report of Mark M. Gleason, CPA/ABV/CFF, CVA, CLP, dated April 22, 2013	
Exhibit 1026	7/16/84 CompuSonics Letter from David Schwartz to Shareholders	
Exhibit 1027	Deposition Transcript of Arthur Hair, dated Dec. 11, 2012, SightSound Techs., LLC v. Apple Inc., No. 11-1292 (W.D. Pa.)	
Exhibit 1028	Deposition Transcript of Scott Sander, dated Dec. 18, 2012, SightSound Techs., LLC v. Apple Inc., No. 11-1292 (W.D. Pa.)	
Exhibit 1029	Excerpt from Chambers Science and Technology Dictionary (1988)	
Exhibit 1030	Don Crabb, "A Beginner's Guide to the Ins and Outs of Appletalk LANs," InfoWorld (April 10, 1989)	
Exhibit 1031	"Inside Macintosh," Volumes I, II, and III, Addison-Wesley Publishing Company, Inc. (1985)	
Exhibit 1032	Craig Partridge, "The Technical Development of Internet Email," BBN Technologies	
Exhibit 1033	Excerpt from PC Magazine, Vol. 11 No. 9 (May 12, 1992)	

EXHIBIT LIST	
Exhibit 1034	United States Patent No. 4,124,773 filed on November 26, 1976, issued on November 7,1978 ("Elkins")
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Exhibit 1037	Photo of CompuSonics equipment
Exhibit 1038	Excerpts from Dr. Sidnie Feit, "Wide Area High Speed Networks," Macmillan Technical Publishing USA (1999)
Exhibit 1039	"The Ethernet- A Local Area Network Data Link Layer and Physical Layer Specifications V 2.0," AA-K759B-TK (November, 1982)
Exhibit 1040	"Apple IIGS Owner's Guide," Apple Computer, Inc. (1988)
Exhibit 1041	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 1042	Excerpts of Lecture at Stanford by D. Schwartz and J. Stautner, 1987 (video)
Exhibit 1043	Second Declaration of Dr. John P.J. Kelly, dated 9/28/12
Exhibit 1044	United States Patent No. 4,682,248 filed on September 17, 1985, issued on July 21, 1987 ("Schwartz Patent")
Exhibit 1045	Excerpt of Plaintiff Sightsound Technologies, LLC's Expert Report of John Snell dated April 22, 2013
Exhibit 1046	Declaration of Flora D. Elias-Mique In Support of Petition for Covered Business Method Patent Review
Exhibit 1047	Declaration of David Schwartz In Support of Petition for Covered Business Method Patent Review
Exhibit 1048	Declaration of Roberto J. Gonzalez In Support of Petition for Covered Business Method Patent Review
Exhibit 1049	Declaration of Megan F. Raymond In Support of Petition for Covered Business Method Patent Review
Exhibit 1050	Declaration of Ching-Lee Fukuda In Support of Petition for Covered Business Method Patent Review

EXHIBIT LIST	
	Declaration of Dr. John P.J. Kelly In Support of Petition for Covered Business Method Patent Review

I. INTRODUCTION

The four challenged claims of the '573 Patent—all method claims—represent nothing more than an attempt to patent a well-known and unpatentable abstract idea: selling digital music electronically in a series of rudimentary steps between a buyer and seller. The patent's independent Claim 1, for example, recites (A) <u>transferring money</u> electronically to the seller (who has a desired digital audio signal), (B) <u>connecting</u> the seller's memory with the buyer's memory, (C) <u>transmitting</u> the desired audio signal from the seller's memory to the buyer's memory, and (D) <u>storing</u> 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.²

Ex. 1001. It is hard to imagine a more basic description of selling music electronically. Moreover, it is clear that broad control over this abstract principle is precisely what was intended in these claims: in a 1999 article in Wired Magazine, Patent Owner's chief executive asserted that SightSound has "two US patents[3] that control the sale of downloadable music." Ex. 1019 (emphasis added). And in litigation to enforce this patent, SightSound's own expert asserted that "there was no way to purchase digital music for download over telecommunications lines, including the Internet that would not infringe the Patents-in-Suit." Ex. 1025 ¶ 193. This is also precisely the sort of preemption of a basic concept that is prohibited by 35 U.S.C. § 101—a prohibition that cannot be avoided by claiming the abstract idea with multiple steps or by claiming performance by a general purpose computer. E.g., Gottschalk v. Benson, 409 U.S. 63, 64, 71-72 (1972) (claim for converting binary-coded

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² 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."

³ In addition to the '573 Patent, SightSound is the assignee of two patents claiming priority to the '573's application—a child patent, U.S. Pat. No. 5,675,734, which had issued when SightSound claimed it controlled the sale of downloadable music with "two" patents, and a grand-child patent, U.S. Pat. No. 5,966,440, which issued later (and which Petitioner is challenging in separate petitions). Exs. 1004 & 1005.

decimals to binary through seven separate steps including storing, shifting, and adding was invalid for claiming an unpatentable abstract idea); *DealerTrack, Inc. v. Huber*, 674 F.3d 1315, 1333 (Fed. Cir. 2012).

The four challenged claims of the '573 Patent all recite nothing more than the abstract idea of selling music electronically, combined at most with conventional, routine hardware that applicant Arthur Hair ("Applicant") himself admitted was already known and available ("a first memory," "a second memory," a "telecommunications line," and a "transmitter" and "receiver"), and this hardware appears in the claims only to perform rudimentary, extra-solution activities—storing and transmitting electronic signals. See generally Ex. 1051 ¶¶ 43-57, 59. The patent (with its short five-column specification) never describes, let alone claims, anything special about this storage or transmission, and these cannot and do not lend patentability to the unpatentable abstract idea Applicant has claimed. And even if the claims at issue required a computer—they do not—the mere performance of otherwise abstract methods by a general purpose computer cannot render the claims patentable. Accordingly, each of the challenged claims is invalid under 35 U.S.C. § 101.

The claims at issue are also all invalid for a second, independent reason addressed in this Petition:⁴ the broad category of "telecommunication[s] lines" recited in every one of the challenged claims was not disclosed by the Applicant in the originally-filed application leading to the '573 Patent. Instead, the original application disclosed only "telephone lines"—conceded by the Patent Owner (and found by the District Court presiding over the litigation between Patent Owner and Petitioner) to be narrower in scope. "Telecommunication[s] lines" never appeared in the claims or the specification of the original application leading to the '573 Patent, and references to this broader category were added to both the specification and claims years later in prosecution. Because 35 U.S.C. § 112 ¶ 1 requires that an Applicant convey with reasonable clarity to those skilled in the art that the Applicant was in possession of the claimed invention as of the filing date, each of the challenged claims is invalid for violation of § 112.⁵

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⁴ As noted earlier, *supra* n.1, Petitioner is also demonstrating in a contemporaneous Petition that these claims are invalid as anticipated and obvious under 35 U.S.C. §§ 102 and 103. Petitioner is also demonstrating, in pending litigation with SightSound, that the challenged claims are invalid for numerous additional reasons.

⁵ See 35 U.S.C. § 321(b) (2013) ("A petitioner in a post-grant review may request to cancel as unpatentable 1 or more claims of a patent on any ground that could be raised under paragraph (2) or (3) of section 282(b) (relating to invalidity of the patent or any claim)"); 35 U.S.C. § 282(b)(3)(a) (2013) (grounds include "any requirement of section 112, except . . . failure to disclose the best mode . . .").

II. OVERVIEW OF FIELD OF THE CLAIMED INVENTION

Applicant's failure in the '573 Patent to claim anything but an abstract idea, accompanied by at most routine, well-known, commercially available hardware such as memory, telephone lines, and a general purpose computer, is underscored by the repeated appearance of that same idea (with the same generic hardware) throughout the prior art leading to his so-called invention.⁶ The idea of selling and distributing digital audio and video over telephone lines was well known long before the '573 Patent's claimed June 13, 1988 priority date—and, as noted above and detailed below in Section V, the '573 Patent's Applicant disclosed no new technology for doing so. The commonplace notion of selling and transmitting digital audio over phone lines from a seller to a buyer's remote computer system—the sum and substance of what the '573 Patent Applicant would later seek to claim as his sole property—was discussed, for example, in a May 1986 book, Start Me Up! The music biz meets the personal computer: "We may see a dial-up service for home computers that we could use to select the titles we want. The songs would be downloaded as digital information into our home entertainment systems that could play them back in perfect fidelity." See Ex. 1023 at 5.

⁶ While Petitioner is separately addressing the anticipation and obviousness of these claims, Petitioner includes this information here to provide context for its demonstration in this proceeding that the challenged claims of this covered business method patent are invalid under § 101.

⁷ See Ex. 1023.

Indeed, this idea was well known far earlier. A May 1984 *InfoWorld* piece, for example, reported that CompuSonics was also considering commercializing this same concept, "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. 1007 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, and again discussed commercialization of the idea, including introduction of a "digital audio recording/playback system" that could be used to record digital data sent into the home. As the article outlined, such a device 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 that twelve cities will have access to this service by early 1985. A second means of shipping digital data to the home is over cable

⁸ See Ex. 1008 at 4.

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 id. That article further explained these same scenarios would be available for other forms of digital data, such as digital video:

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.

See id. Similarly, an October 5, 1985 Billboard article reported a proposed partnership between companies to sell and transmit digital audio to create an "electronic record store," as well as a press demonstration, in which "CompuSonics made use of AT&T's land-based telephone data transmission system to digitally transmit and receive music between Chicago and New York." Ex. 1009 at 3.

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As the article recognized, the "electronic record store" concept was well-known: "David Schwartz, the president of CompuSonics, is a strong proponent of the 'electronic record store' concept, an idea that has been bandied about for some time, but which Schwartz says is now poised to 'become a reality." This would "allow music software dealers to receive an album master via a digital transmission from the record company," and "[t]he retailers would then be able, in turn to digitally transmit the music to consumers who would use credit cards to charge their purchases over the phone lines." The consumer digital audio recorder/player would record the purchased music onto disk. As Mr. Schwartz explained in 1984 and 1985 letters to CompuSonics shareholders:

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.[11]

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

⁹ See id.

¹⁰ See id.

¹¹ See Ex. 1026.

recording of high fidelity audio from any music dealer's DSP-2000 to the DSP-1000 in your living room.[12]

Moreover, the sale of digital products in general over telephone lines was also known in the art. For instance, WO85/02310, published May 23, 1985, discloses the sale of digital products—and in particular, software—over telephone lines. Ex. 1011. Softnet describes allowing a user to connect his or her computer, via a modem and telephone lines, to a host computer. *Id.* at 11-12. 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 13-14.

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. 1012 & 1013. Applicant himself acknowledged this when he argued distinctions based on who controlled the receiver and where the receiver was located—referring to "the 'receiver" of Lightner, ¹³ and to "Hughes' receiver" and "the transmitter" in Hughes. ¹⁴

Thus, a range of companies was well aware of (and, indeed, was publicly

¹² See Ex. 1010.

¹³ Ex. 1002 (9/14/90 Preliminary Amendment at 6).

¹⁴ *Id.* (12/09/91 Amendment at 9. (emphasis added)).

discussing strategies for commercializing) the same supposed "invention" now memorialized in the challenged claims of the '573 Patent. The prior art—long before the '573 Patent's first purported priority date—was full of disclosures of the very same abstract notion that Applicant later sought to claim as his exclusive property, as well as disclosures of the very same conventional hardware Applicant would later recite in the challenged claims. Although a full discussion of the invalidity of the challenged claims under §§ 102 and 103 is reserved for the separate Petition filed concurrently herewith, these prior art teachings certainly bar any claim by the Patent Owner that the challenged claims of the '573 Patent recite anything other than an abstract idea with, at most, the addition of routine and conventional hardware, or that the challenged claims recite anything remotely resembling a "technological invention."

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 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. 1001 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. ¹⁵ The inventor has elsewhere described his supposed invention simply as "the electronic sale of digital video and digital audio recordings via telecommunications." Ex. 1027 at. 33:1-11. And 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. 1028 at 36:23-37:5. ¹⁶ SightSound's own expert has similarly described the '573 Patent in litigation as pertaining to "selling or purchasing digital audio or video via telecommunications lines." Ex 1024 ¶ 22. ¹⁷

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¹⁵ While the specification also speaks vaguely of manipulation of digital music (sorting, selection, etc.) and protection from unauthorized copying (e.g., Ex. 1001 at 2:17-24), these functions do not appear in any of the challenged claims, and in any event were not inventive.

¹⁶ 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. 1024 ¶ 22. See also id. ¶ 24.

¹⁷ 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." *Id.* ¶¶ 24 & 70.

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) (emphasis added). 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;
- [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." Ex. 1001 at 4:16-21; Ex. 1051 ¶ 43. *See also* 43-57, 59. 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. Ex. 1003 (8/18/05 Resp. at 7-10; 12/27/05

¹⁸ SightSound's CEO has similarly admitted that the Applicant did not invent computers, computer networks, the Internet, telephone lines, or telecommunications lines. Ex. 1028 at 42:12-44:5.

Resp. at 22-25).¹⁹ 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*.²⁰ 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.²¹

The generic level at which this hardware is disclosed is further illustrated in the patent's Figure 1 (Ex. 1001):

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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. 1002 (12/09/91 Amendment at 10-11 (emphasis added)).

²⁰ The claims also "do not specify quality, size, or bandwidth required for the video signals" Ex. 1003 (9/24/09 Decision On Appeal at 22).

²¹ A SightSound executive, Scott Sander, admitted that the Applicant did not invent computers, computer networks, the Internet, telephone lines, or telecommunications lines. Ex. 1028 at 42:12-44:5.

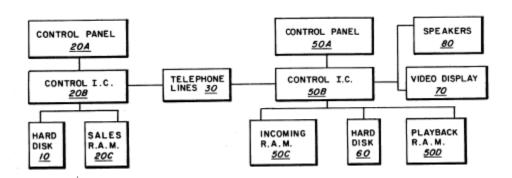


FIG. 1

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, 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 (since that is the only way for electronic sales to occur) coupled with a transferring of a service of product." See, e.g., Ex. 1002 (5/05/92 Hair Declaration at 2). See also Ex. 1011 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. 1027 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. 1001 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").²²

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.²³

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 invalid under 35 U.S.C. §§ 101 and 112. Sections VI.B and VI.C, respectively, list each ground upon

²² SightSound's own expert in litigation has similarly described digital audio signals simply as "digital representations of sound waves." Ex. 1024 ¶ 70.

²³ 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).

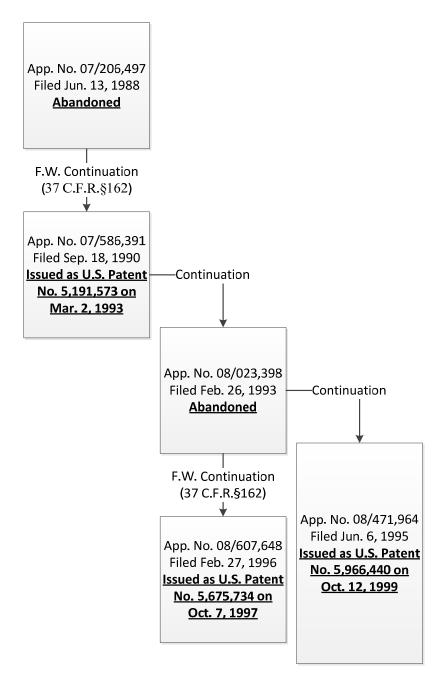
which it is more likely than not that the challenged claims are unpatentable, and render a detailed explanation therefor.

V. BACKGROUND INFORMATION FOR THE '573 PATENT

The two specific bases for invalidity presented in this petition—the invalidity of the challenged claims under § 112 ¶ 1 for lacking proper written description support in light of the addition of "telecommunications lines" to the specification and claims during prosecution, and their invalidity under § 101 as patent-ineligible subject matter—were never explicitly considered during prosecution of the '573 Patent and never substantively determined during reexamination. However, the distinctions made between the prior art of record and the pending claims under §§ 102 and 103 during prosecution further emphasize that the claims do not cover any technological invention, and add nothing patentable to the abstract concept of the electronic sale and transfer of digital music and video between buyer and seller. Further, Examiner repeatedly noted during prosecution and reexamination that a substantial amount of new matter was added during prosecution of the '573 Patent.

A. File History of the '573 Patent

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. Ex. 1001 & 1004.



Prosecution of the '573 Patent commenced June 13, 1988. The application as filed made no reference to the "telecommunication lines" that would eventually be added to the specification and every claim years later. Ex. 1002 (6/13/88 Specification at 1-6). The originally-filed claims were directed, instead, to

electronically transferring binary "Digital Audio Music" via <u>telephone</u> lines from a seller's hard disk to the hard disk of a user to allow future playback.²⁴

During prosecution (including both the original '497 Application and the continuation '391 application noted above), Applicant amended its claims to overcome obviousness rejections by arguing a variety of non-technical distinctions between the pending claims and the prior art of record.²⁵ Applicant described the distinctions as relating to who has control of hardware and where that hardware is located—not to any technological innovation.

Examiner repeatedly rejected the pending claims as obvious or anticipated in light of two prior art references, Lightner and Hughes. ²⁶ To overcome the obviousness rejections, Applicant argued, *e.g.*, that its claims differ from Lightner because Lightner does not teach that the second party is controlling the second memory, that the second memory is in possession and control of the second party, or that the receiver is "in possession and control of the second party." Similarly, with

²⁴ *Id.* (6/13/88 Specification at 1-6).

²⁵ See, e.g., id. (2/26/90 Amendment at 2-3; 8/21/90 Amendment at 2-3; 9/14/90 Preliminary Amendment at 2-3; 12/09/91 Amendment at 4-6).

²⁶ *Id.* (12/22/88 Office Action at 2-3; 5/14/90 Office Action at 2-4; 9/09/91 Office Action at 2-3; 2/24/92 Office Action at 7-8).

²⁷ Specifically, Applicant asserted, for instance, that "[t]here is no teaching or suggestion in Lightner of the 'second memory' to which the digital signal is transmitted to be 'in control and in possession' by the 'second party'. Furthermore, there is no teaching or suggestion in Lightner for the 'receiver' having the second memory being 'in possession and in control of the second party' and 'at a location

respect to Hughes, Applicant argued that the receiver in the claims is not in possession of the second party or at a location determined by the second party, and that the receiver is owned by the owner of the transmitter.²⁸ Applicant also argued that Hughes uses coins and does not teach transferring money to a remote location, but Examiner disagreed, noting that Hughes does, in fact, disclose that the location to which money is transferred is remote.²⁹

Substantial amounts of new material were added during prosecution of the '573 Patent, without proper written description support in the original application. On December 9, 1991, for example, Applicant amended the specification to introduce, for the first time, the terms "telecommunications line" and "telecommunications link," and simultaneously amended the claims to introduce the term

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determined by the second party." *Id.* (8/21/90 Amendment at 2-3; 9/14/90 Preliminary Amendment at 6).

²⁸ Applicant argued, for instance, that "[t]here is simply no teaching or suggestion within Hughes of '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', as disclosed in applicant's newly amended Claims 11 and 15. Further, there is no teaching or suggestion within Hughes wherein 'said receiver in possession and control of second party' as disclosed in applicant's newly amended Claims 11 and 15. Hughes' receiver, although located in the user's home is taught to be owned by the owner of the transmitter and is thus 'in possession' of the owner." *Id.* (12/09/91 Amendment at 9).

²⁹ *Id.* (12/09/91 Amendment at 4-6); *see also id.* (6/22/92 Amendment at 5-9; 2/24/92 Office Action at 7-8).

"telecommunications link," which similarly had never appeared in the original '497 application.³⁰

Examiner responded to Applicant's December 9, 1991 amendment by objecting to the specification and rejecting all pending claims under 35 U.S.C. § 112 ¶ 1.³¹ In particular, Examiner indicated that the step of "transferring money," the phrase "second party financially distinct from the first party," the phrase "said receiver in possession . . . of the second party," and the step of telephoning and providing a credit card had no basis in the original specification. *Id.* at 5-6. Examiner also objected to the pages inserted into the specification under 35 U.S.C. § 112 ¶ 1, and rejected as indefinite, under 35 U.S.C. § 112 ¶ 2, claims reciting "at a location remote from the second memory" and "telecommunication link." *Id.* at 6. In particular, Examiner stated that "the 'telecommunication link' is not well connected in the system." *Id.*

In reply, Applicant amended the claims to recite "telecommunications line" instead of "telecommunications link" and argued that the § 112 ¶ 1 rejection was improper because "electronic sales' over 'telephone lines 30' are terms which encompass the <u>well known</u> process of 'providing a credit card number' over telephone line . . ."³² Applicant also simultaneously filed a declaration by the inventor

³⁰ *Id.* (12/09/91 Amendment at 6).

³¹ Ex. 1002 (2/24/92 Office Action at 5-6).

³² Ex. 1002 (6/22/92 Amendment at 5-9, 13. (emphasis added)).

to overcome Examiner's rejection of the amended claims and various newly-added parts of the specification (including such terms as "transferring money," the "second party financially distinct from the first party," "said receiver in possession . . . of the second party," and the step of telephoning and providing a credit card). ³³ 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. ³⁴ Finally, Applicant argued that the amended claims were patentable because the prior art failed to teach or suggest "transferring money electronically via a telecommunications line to the first party from the second party." ³⁵

When Examiner eventually allowed the claims, his explanation confirmed this was not based on any technical innovation in the claims, but simply a view that the prior art then of record did not teach two separately-located parties, *i.e.*, a transmitter that was "in control and possession of the first party," or a receiver "in possession and control of the second party" and with a second memory "at a location determined

³³ *Id.* (5/05/92 Hair Decl. at 2-3).

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." *Id.* (5/05/92 Hair Decl. at 2-3).

³⁵ *Id.* (6/22/92 Amendment at 17). 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, e.g.*, Ex 1011 at 11-12.

by the second party." *Id.* (9/21/92 OA at 2). Examiner ultimately issued a Notice of Allowability on October 19, 1992, and the '573 Patent issued on March 2, 1993. *Id.* (10/19/92 Notice at 1).

B. Reexamination of the '573 Patent

Petitioner Napster, Inc. requested *ex parte* reexamination of the '573 Patent on January 31, 2005.³⁶ 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. § 103.³⁷ The history of the reexamination of the '573 Patent further underscores that the asserted distinctions between the prior art then of record and the '573 Patent claims are non-technical.

The history of the reexamination of the '573 Patent underscores the PTO's recognition that substantial amounts of new matter were added to the patent during prosecution and that, while § 112 issues were considered, they were never substantively resolved.

During the first several years of the reexamination, the '573 Patent claims were amended in response to repeated rejections under §§ 102 and 103, and various new claims were added.³⁸ Examiner also determined that the issued claims were not entitled to the priority date of the parent application under § 120, and rejected various

 $^{^{36}}$ Ex. 1003 (1/31/05 Request For Ex Parte Reexamination at 1).

³⁷ *Id.* (3/15/05 Order Granting / Denying Request For *Ex Parte* Reexamination at 2; 6/21/05 Office Action at 2).

³⁸ *Id.* (11/29/06 Response at 2-5; 12/27/05 Response at 4-14).

newly-added claims under § 112 ¶ 1 as lacking written description and enablement.³⁹ In attempting to overcome the § 103 rejections, Patentee argued secondary indicia of non-obviousness rather than technical distinctions,⁴⁰ implicitly revealing Patentee's recognition that the '573 Patent claims do not provide any technological solution for a technological problem, and that the ordinary hardware components in the claims are in no way novel. Patentee argued, for example, that "Napster is commercially successful and has copied the claimed invention" simply by enabling an ordinary computer through which music could be received. *Id.* at 24.

During reexamination, the Examiner repeatedly noted that new matter was added to the '573 Patent during prosecution. In a final rejection, Examiner explained, for instance, that the claims lacked written description and enablement under § 112 ¶ 1.41 Examiner stated that the "[e]xtensive [n]ew [t]ext" is "[n]ot [f]ound in the [w]ritten [d]escription of the Parent Application as [o]riginally [f]iled." *Id.* at 18. This text included the addition of "telecommunications lines," although Examiner focused his § 112 ¶ 1 rejections on other aspects of the added language. Examiner also rejected the claims under §§ 102 and 103. *Id.* at 25-37.

On September 4, 2009, the Board reversed Examiner's § 112 ¶ 1 rejection as based on an improper comparison to the material in the parent application, rather

³⁹ *Id.* (9/29/06 Office Action at 2).

⁴⁰ *Id.* (8/18/05 Response at 7-10; 12/27/05 Response at 22-25).

⁴¹ Ex. 1003 (3/17/07 Office Action at 17-25).

than to the child application itself. *Id.* at 19-20.⁴² The Board stated that "the process of determining whether a claim for the benefit of an earlier filing date under 35 U.S.C. § 120 is proper and supported is separate from the process of determining whether the claims are enabled by and have written description support in the application in which they are presented." The Board further noted that "claims should be analyzed to determine whether they lack written description support or enablement with respect to the originally filed application in which they are presented." Id. at 18. Thus, because Examiner never considered whether § 112 ¶ 1 rejections would have been proper if they were made based on a proper comparison to the material in the present application, the Board did not consider the issue. The Board also pointed out that the "claims do not specify quality, size, or bandwidth required for the video signals, and assuming the same to show inadequacy of disclosure is improper." Id at 22. Additionally, the Board reversed the \(\)\(\)\(102, 103, and 120 rejections. The Board reversed Examiner's § 120 rejections because "the original Examiner in the application for the instant patent considered whether the added text were new matter [as compared to the parent application] and subsequently concluded they were not . . ." Id. at 25. Certain of the §§ 102 and 103 rejections were reversed on the basis that the art relied upon was not prior art or that the Board did not find a motivation to

⁴² The Board further noted that the "claims do not specify quality, size, or bandwidth required for the video signals, and assuming the same to show inadequacy of disclosure is improper." *Id* at 22.

combine the § 103 references. *Id.* at 25-27. The remaining objections were reversed on the basis that the art considered by Examiner "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." *Id.* at 27-28 (emphasis added).

Shortly after the Board issued its decision, the '573 Patent expired. As a result, Patentee's new claims and proposed amendment could not be maintained in reexamination. 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 tapes. *Id.* (5/25/10 Resp. at 2-3). 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. With respect to the double patenting

⁴³ *Id.* (3/28/10 Office Action at 2).

rejection, Patentee argued that, because "the later issued patent expired before the patent undergoing re-examination," there was no improper timewise extension. *Id.* at 5.

Examiner accepted Patentee's arguments and issued a Notice of Intent to Issue Ex Parte Reexamination Certificate on August 16, 2010.⁴⁴ 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, 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. Section VI. B provide a detailed explanation for each ground for which it is more likely than not that each challenged claim is invalid under § 101. Section VI.C provides a detailed explanation for each ground for which it is more likely than not

⁴⁴ *Id.* (8/16/10 Notice of Intent to Issue *Ex Parte* Reexamination Certificate at 1).

that each challenged claim is invalid under § 112.

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. 1014), adopting in its entirety the report and recommendations of the Special Master appointed for claim construction in those proceedings (Ex. 1015). For purposes of this review, Petitioner proposes that the Court's claim constructions be adopted, except as noted below.⁴⁵ 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.

⁴⁵ 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.

"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. 1015 at 19. See also Ex. 1001 at Abstract, 3:3-19, 5:29-45; Ex. 1002 (8/21/90 Amendment at 4-5 (describing "Applicant's invention")).

"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. 1015 at 19. See also Ex. 1001 at Abstract, 3:3-19, 5:29-45; Ex. 1002 (8/21/90 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. 1015 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. 1015 at 23-24; Ex. 1016 (4/20/01)Markman Tr.) 33:18-19 (SightSound's at 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. 1002 (6/13/88 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. 1002 (2/24/92 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; 6/25/92 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. See Ex. 1029 at 294 ("Pertaining to devices or systems which depend on the flow of electrons"); Ex. 1017 at 423 ("Of or relating to electrons"); Ex. 1020 ¶¶ 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. 1015 at 27.

⁴⁶ 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. 1015 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. 1015 at 28-29; Ex. 1002 (5/05/92 Hair Decl. at 2 ("One skilled in the art would know that an electronic sale inherently assumes a transferring of money [...] coupled with a transferring of a service or product."); 6/23/92 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. 1015 at 30.

B. The Challenged Claims Are Invalid Under § 101

1. The Challenged Claims Are Directed To An Abstract Idea With No Inventive Concept

All of SightSound's challenged claims are invalid as unpatentable under 35 U.S.C. § 101 because they are directed to an abstract idea. *Bilski v. Kappos*, 130 S. Ct. 3218, 3225 (2010); *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289 (2012); *Gottschalk*, 409 U.S. at 67. *See also* Ex. 1051 ¶¶ 59-62. In particular, the challenged claims of the '440 Patent represent nothing more than an attempt to patent an unpatentable abstract idea: selling digital music electronically in a series of rudimentary steps between a buyer and seller. The steps in the patent's independent Claim 1, for example, require (A) transferring money electronically to the seller (who has a desired digital audio signal), (B) connecting the seller's memory with the buyer's memory, (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.

Claim 1, like the remaining challenged claims of the '573 Patent, ⁴⁷ claims only an abstract idea with nothing more than "well-understood, routine, conventional activity" added. *See, e.g., Mayo*, 132 S. Ct. at 1294. *See also Bilski*, 130 S. Ct. at 3231 ("*Flook* established that limiting an abstract idea to one field of use or adding token postsolution components did not make the concept patentable."); *Gottschalk*, 409 U.S. 63 (method claim involving "storing [in a] shift register" is an unpatentable abstract claim); *Parker v. Flook*, 437 U.S. 584, 590, 595 (1978); *In re Schrader*, 22 F.3d 290, 294 (Fed. Cir. 1994) (holding a simple recordation step in the middle of the claimed process incapable of imparting patent-eligibility under § 101); *In re Grams*, 888 F.2d 835, 839-40 (Fed. Cir. 1989) (holding a pre-solution step of gathering data incapable

⁴⁷ 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." Claims 4 and 5 are similar to claims 1 and 2, respectively, except that the claims recite "digital video signals" rather than "digital audio signals." Ex. 1001.

of imparting patent-eligibility under § 101); Bancorp Servs., L.L.C. v. Sun Life Assur. Co. of Canada, 771 F. Supp. 2d 1054, 1065 (E.D. Mo. 2011) ("[s]toring, retrieving, and providing data . . . are inconsequential data gathering and insignificant post solution activity.") (internal citation omitted), aff'd, 687 F.3d 1266 (Fed. Cir. 2012). A claim involving an abstract idea must contain "other elements or a combination of elements, sometimes referred to as an 'inventive concept," that is "sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [abstract idea] itself." See Mayo, 132 S. Ct. at 1294.

As discussed above in Section II, III.A. and V, however, the tangible aspects mentioned in the challenged claims of the '573 Patent add nothing to lend patentability to this abstract idea, because they were well understood and conventional as of the claimed priority date in 1988. *See generally* Ex. 1051 ¶¶42-62. The "first memory" and "second memory of a second party control unit," and "telecommunications lines," were all "already commercially available," and transmitters and receivers were also well known. Ex. 1001 at 4:16-21; Ex. 1002 (9/14/90 Preliminary Amendment at 6; 12/09/91 Amendment at 9); Ex. 1006 (1/08/98 Declaration at 2-3). *See also* Ex. 1051 ¶¶ 43, 58-61. *See generally id.* ¶¶ 44-57.

Because the claims at issue are all method claims that add nothing beyond routine, conventional activities to the unpatentable abstract idea they recite, they are invalid under § 101. See Mayo, 132 S. Ct. at 1294. See also Ex. 1051 ¶ 62.

2. The Challenged Claims Are Directed to An Abstract Idea that Preempts the Field of Electronic Sale of Digital Music

In addition, the claims at issue are "preemptive of a fundamental concept or idea that would foreclose innovation in [an] area." DealerTrack, 674 F.3d at 1333; see Ex. 1051 ¶ 63-64. Each claimed step is inherent in the sale of digital goods over telecommunications lines (here, digital music and audio). See also, e.g., id. ¶¶ 52-53. For instance, Claim 1's steps here—(A) transferring money electronically to the seller (who has a desired digital audio signal), (B) connecting the seller's memory with the buyer's memory, (C) transmitting the desired audio signal from the seller's memory to the buyer's memory, and (D) storing it there—are all necessarily performed to implement the claimed abstract idea. See Gottschalk, 409 U.S. at 64, 71-72. Here, even according to SightSound, the claimed method preempts the field of selling digital music. SightSound's chief executive asserted that it has "two US patents that control the sale of downloadable music." Ex. 1005 (emphasis added). 48 The inventor similarly described his invention in the '440, '573, and '734 Patents as "the electronic sale" of "digital video and digital audio recordings via telecommunications. And I would add to that the - I would say digital video and digital audio download recordings via telecommunications." Ex. 1027 at. 33:1-11. And Another SightSound executive described the invention simply "as a method for selling a desired digital

⁴⁸ At the time, SightSound had only two patents that related to the sale of downloadable music – the '573 and '734 Patents. *See* Ex. 1001 & 1004.

audio or digital video signal over networks." Ex. 1028 36:23-37:5 (contrasting "the old way of distributing hard media on trucks through stores"). Indeed, even in litigation Patentee's hired experts have continued to make clear that Patentee views the '440 Patent as preempting any use of the idea of "the ability to sell this [digital audio and video] content digitally." Ex. 1025 ¶ 26. That same expert stated that "I understand from Mr. Snell [one of SightSound's technical experts] that [as of 2003] there was no way to purchase digital music for download over telecommunications lines, including the Internet that would not infringe the Patents-in-Suit." Id. ¶ 193.⁴⁹ Further, "SightSound expected that anyone who wanted to purchase digital audio or video signals would need to purchase it from SightSound or from an entity that licensed SightSound's patents." Id. ¶ 72. Thus, SightSound cannot contest that claim 1, and the remaining claims at issue, preempt the concept of selling downloadable digital music, which renders them unpatentable. See Bilski, 130 S. Ct. at 3255 ("[T]00 much patent protection can impede rather than 'promote the Progress of . . . useful

⁴⁹ See Ex. 1025 ¶ 32 ("Based on my discussions with Mr. Snell, one of SightSound's technical experts, I understand that the claims of the Patents-in-Suit cover the sale of digital audio and video signals via communications lines, including the Internet."); see also id. ¶ 30 ("I understand from counsel that fundamental aspects of the sale of digital audio and video signals over telecommunications lines, including the Internet, is covered by the Patents-In-Suit."); id. ¶¶ 126, 128 (Although SightSound states that an alternative could be "digital streaming," SightSound argues that the streaming model would not have been "an effective alternative to obtaining a license for the Family of Patents." In addition, SightSound argues that because the consumer never owns the content in a streaming model, there is no "electronic sale" of digital audio or video signals. Thus, SightSound itself claims that its patents preempt the field of electronic sale of music and videos over telecommunications lines.).

Arts.") (internal citation omitted); *Mayo*, 132 S. Ct. at 1294 ("[*Benson*] warn[s] us against upholding patents that claim processes that too broadly preempt the use of a natural law" (citing *Gottschalk*, 409 U.S. at 71-72)); *Diamond v. Diehr*, 450 U.S. 175, 187 (1981); *Gottschalk*, 409 U.S. at 64 & 71-72; *In re Bilski*, 545 F.3d. 943, 952-54 (Fed. Cir. 2008).

Benson is analogous. In Benson, the claims at issue covered a method for converting binary-coded decimal numerals into pure binary numerals and were invalid because they covered "any use of the claimed method in a general-purpose digital computer of any type." Benson, 409 U.S. at 64. And the claims in Benson were invalid for claiming abstract ideas despite their recitation of multiple specific steps (indeed, far more detailed steps than the rudimentary "forming a connection," "selling electronically," "transferring" and "playing" steps of the '440 Patent), involving, in claim 8, a "reentrant shift register." As the Supreme Court noted in its Appendix (409 U.S. at 73-74), claim 8 from the patent at issue in Benson reads:

'The method of converting signals from binary coded decimal form into binary which comprises the steps of

- '(1) storing the binary coded decimal signals in a reentrant shift register,
- '(2) shifting the signals to the right by at least three places, until there is a binary '1' in the second position of said register,

- '(3) masking out said binary '1' in said second position of said register,
- '(4) adding a binary '1' to the first position of said register,
- '(5) shifting the signals to the left by two positions,
- '(6) adding a '1' to said first position, and
- '(7) shifting the signals to the right by at least three positions in preparation for a succeeding binary '1' in the second position of said register."'

Similarly, *Flook*, 437 U.S. 584, held claims directed to a method of updating alarm limits, an otherwise abstract formula, unpatentable even though the claimed methods were limited to use in the petrochemical and oil-refining industries. These holdings comport with the well-established principle that claims directed towards abstract ideas are not patent eligible even if they "limit an abstract idea to one field of use . . ." *DealerTrack*, 674 F.3d at 1334; *see also Diebr*, 450 U.S. at 191-192. Likewise, the '573 Patent claims, also directed to an abstract concept, are still invalid under § 101 even though the claimed methods are limited to use for the sale of digital music or video.

Also instructive is *Bancorp Servs.*, 687 F.3d 1266. In *Bancorp*, the asserted system claims were construed to require one or more computers. The dependent method claims were also construed to require a computer. *Id.* at 1274. The computer-readable medium claims required "high density removable storage means" such as "a

compact disc." *Id.* at 1274. The court analyzed the claims by setting aside "insignificant computer-based limitations" and looking at what additional features remained in the claims. *Id.* at 1279. The remaining abstract idea in the claims—the "abstract idea of managing a stable value protected life insurance policy by performing calculations and manipulating the results"—was found to "impermissibly 'preempt[]' the mathematical concept of managing a stable value life insurance policy." *Id.* at 1280.

In determining patentability under § 101, the "claims must be considered as a whole." *Diehr*, 450 U.S. at 188. Here, each of the challenged claims is invalid because, once the "insignificant computer-based limitations" are set aside, each claim—taken as a whole—is directed only to the unpatentable abstract idea of selling digital music or video electronically, with nothing more that could render this unpatentable idea patent-eligible. *See* Ex. 1051 ¶ 64.

3. The Internet and General Purpose Computer Features in the Challenged Claims Do Not Render Them Patentable

The few references in the challenged claims to features that can be implemented with the Internet and a general purpose computer do not lend patent-eligibility to the claimed abstract idea. *See* Ex. 1051 ¶ 78.

For example, like the claims rejected as unpatentable by the Federal Circuit in *CyberSource*, the presence of telecommunications lines over which financial transactions take place (like the credit card transactions over the Internet in

CyberSource) or features of a general purpose computer (such as Cybersource's "computer readable medium containing program instructions for detecting fraud in a credit card transaction between a consumer and a merchant over the Internet, wherein execution of the program instructions by one or more processors of a computer system causes the one or more processors to carry out" various claimed steps) cannot lend patentability to the abstract idea of the challenged '573 Patent claims. See, e.g., CyberSource Corp. v. Retail Decisions, Inc., 654 F.3d 1366, 1367-70, 1373-77 (Fed. Cir. 2011) (reasoning that "[t]he Internet is merely described as the source of the data," and noting that in various decisions rejecting claims as unpatentable it was not the case that "claims could have avoided invalidity under § 101 by merely requiring a computer to perform the method, or by reciting a computer readable medium containing program instructions for performing the method"). 50

In addition, while the '573 Patent claims refer to components that can be found in a general purpose computer, the claims do not require any specific computer or any specific manner in which the computer performs the method. For example, a general purpose computer could be used for the required "memories," "transmitter," and "receiver." This is confirmed by the fact that the specification discloses no specific algorithm for how digital signals are transmitted or how electronic sale is performed:

⁵⁰ The claims at issue fail to include any requirements with respect to Internet usage. The Board pointed out during reexamination of the '573 patent that the "claims do not specify quality, size, or bandwidth required for the video signals." Ex. 1003 (9/24/09 Board Decision On Appeal at 22).

A reading of the specification and claims of the ['573 patent] reveals a dearth of information as to *how* the claimed functions [*e.g.*, means for transferring money electronically and means for connecting electronically] are performed. Instead, merely the claimed functions themselves and the results of practicing those functions are disclosed. No algorithms describing how the claimed functions would be performed by special purpose computers programmed to perform those algorithms are disclosed.

Ex. 1015 at 39. See also Ex. 1051 ¶¶ 66, 67, 69-71, 73.

Performance of the steps of the '573 Patent claims by a general purpose computer cannot render the abstract idea patentable. The claims recite no specific programmed operation for such a computer. A computer, absent any recited programming to perform a claimed function, is only a non-patentable "general purpose computer." *In re Alappat*, 33 F.3d 1526, 1545 (Fed. Cir. 1994) (*en banc*). *See also Ex Parte Hunleth*, No. 2009-5621, 2010 WL 460143, at *4 (B.P.A.I. Nov. 20, 2010) ("[L]imiting the claim to computer-readable media does not add any practical limitation to the scope of the claim" thus "the claim is directed to performing the steps in the abstract."). *See* Ex. 1051 ¶¶ 69-71, 73.

Similarly, the Federal Circuit has rejected a claimed method essentially covering an algorithm even though one of the steps required that the method be performed with a "programmed computer." *Grams*, 888 F.2d at 841. *See also DealerTrack*, 674 F.3d at 1333 (computer did not "play a significant part in permitting the claimed

method to be performed" because it could "be programmed to perform very different tasks in very different ways."); Fort Props., Inc. v. Am. Master Lease LLC, 671 F.3d 1317, 1323 (Fed. Cir. 2012) ("the basic character of a process claim drawn to an abstract idea is not changed by claiming only its performance by computers.... [T]he computer limitation is simply insignificant post-solution activity").

The claims here are similar to those held unpatentable in *Dealertrack*. The claims in *Dealertrack* were "directed to a computer-aided method and system, respectively, for processing credit applications over electronic networks." *DealerTrack*, 674 F.3d at 1317. The Federal Circuit described the prior art and the invention as follows:

Prior to Dealertrack's invention, car dealers, in seeking car loans on behalf of their customers, would apply to funding sources (i.e. banks) by: filling out application forms particular to each bank; faxing or transmitting the application to the respective banks; waiting for bank personnel to enter the application information into their internal computer systems; and eventually receiving responses from each bank. Dealertrack proposed to automate the process through the use of a 'central processor,' which receives credit application data from dealers, processes the data to conform to the individual application forms of different banks, forwards the completed applications to banks selected by the dealer, receives answers from the banks, and forwards those answers back to the dealer.

Id. The claims were construed by the district court as requiring a central processor that performed every step of the method. DealerTrack, Inc. v. Huber and RouteOne LLC, No. 2:06-cv-02335-AG-FMO, slip. op. at 16-31 (C.D. Cal. Sept. 27, 2008) And, despite having claims reciting numerous steps involving hardware⁵¹—again, steps far more numerous and detailed than the challenged claims of the '440 Patent—the claims in DealerTrack were found to claim patent-ineligible abstract ideas. Similarly, here the claimed invention purports to allow consumers to buy and transmit digital

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⁵¹ DealerTrack's Claim 1, for example, recites (674 F.3d at 1331 (alterations original)):

[&]quot;1. A computer aided method of managing a credit application, the method comprising the steps of:

[[]A] receiving credit application data from a remote application entry and display device;

[[]B] selectively forwarding the credit application data to remote funding source terminal devices;

[[]C] forwarding funding decision data from at least one of the remote funding

source terminal devices to the remote application entry and display device; [D] wherein the selectively forwarding the credit application data step further comprises:

[[]D1] sending at least a portion of a credit application to more than one of said remote funding sources substantially at the same time; [D2] sending at least a portion of a credit application to more than one of said remote funding sources sequentially until a finding [sic, funding] source returns a positive funding decision;

[[]D3] sending at least a portion of a credit application to a first one of said remote funding sources, and then, after a predetermined time, sending to at least one other remote funding source, until one of the finding [sic, funding] sources returns a positive funding decision or until all funding sources have been exhausted; or,

[[]D4] sending the credit application from a first remote funding source to a second remote finding [sic, funding] source if the first funding source declines to approve the credit application."

music and video over telecommunications lines, rather than by receiving the music or video in the mail or going to a store to buy it. Like the claims in *Dealertrack*, here the steps can be performed using a general purpose computer. The purported invention merely seeks to send data electronically rather than by mail or foot. However, the concept of reducing time to do something, like the claims in *Dealertrack*, is not patentable. As one of SightSound's experts admits, "[i]n short the claimed invention provides a new metho of selling and distributing music over telecommunications lines, that reduces the time between music creation, music marketing and music sale." Ex. 1046 ¶ 32. The claims here thus claim unpatentable subject matter for the same reasons held in *Dealertrack*.

Moreover, as noted above, such extra-solution activity does not render an otherwise unpatentable claim patentable. *See, e.g., Bilski,* 130 S. Ct. at 3231 ("*Flook* established that limiting an abstract idea to one field of use or adding token postsolution components did not make the concept patentable."); *Flook,* 437 U.S. 584, 590 & 595; *In re Schrader,* 22 F.3d 290, 292 (Fed. Cir. 1994) ("entering said bids in said record" is a simple recordation step in the middle of the claimed process incapable of imparting patent-eligibility under § 101); *Grams,* 888 F.2d at 839-40 (holding that a pre-solution step of gathering data-measuring the values of certain parameters was incapable of imparting patent-eligibility under § 101); *Bancorp,* 771 F. Supp. 2d at 1065 (stating that "[s]toring, retrieving, and providing data . . . are inconsequential data

gathering and insignificant post solution activity" and holding claim requiring "storing the policy unit value" to be unpatentable), *aff'd*, 687 F.3d 1266; *Ex Parte Cherkas*, No. 2009-011287, 2010 WL 4219765, *3 (B.P.A.I. Oct. 25, 2010) (steps of "storing for the user . . . accessing the tax profile... and providing the user . . ." "are inconsequential data gathering and insignificant post solution activity.").

For these reasons, the few references in the challenged claims to telecommunications lines and features that can be implemented with a general purpose computer do not lend patent-eligibility to the claimed abstract idea.

4. The Challenged Claims Do Not Satisfy the Machine or Transformation Test

Finally, the unpatentability of the challenged claims is further underscored by the "machine or transformation" test, which can provide "an important and useful clue" about the patentability of a claim under § 101. *Bilski*, 130 S. Ct. at 3226. The challenged claims fail this test because they are not "tied to a <u>particular</u> machine or apparatus" and do not "transform[] a particular article into a different state or thing." *Id.* at 3224 (emphasis added). ⁵² *See* Ex. 1051 ¶¶ 65-73.

⁵² The Board, since *Bilski*, has repeatedly applied the "machine or transformation" test in considering whether claims are directed towards unpatentable abstract ideas. The Board has stated, in making § 101 determinations, that it will "first apply the machine-or-transformation test, which the [Supreme] Court has stated is a useful clue in determining whether a claim is a process under § 101." *Ex parte Hunleth*, 2010 WL 4601413, at *3-4 (rejecting claims including those reciting "computer readable medium," under § 101 because "the claim is directed to performing the steps in the abstract"); *see also Ex Parte Banatwala*, No. 2009-6785, 2010 WL 4250877, at * 3

As discussed above in Section III.A, the hardware mentioned in Claims 1, 2, 4, and 5 was "already commercially available" and is not limited to any particular design or implementation. No specific machine is required.⁵³ Indeed, the patent does not disclose any specific algorithms. Ex. 1001 at 4:48-51; CC R&R ("No algorithms describing how the claimed functions would be performed by special purpose computers programmed to perform those algorithms are disclosed."). See Ex. 1051 ¶¶ 69-71, 73.A computer programmed in some unspecified manner is a non-patentable general purpose computer. See Dealertrack, 674 F.3d at 1332. Thus, the general purpose computer that may be used to practice the claims of the '573 Patent does not render an otherwise unpatentable claim patentable.

⁽B.P.A.I. Oct. 18, 2010) (rejecting claims reciting a "computing platform" or "computer platform" under § 101 because they suggest "at best a nominal use of a general purpose computer" and there "is not an expressed recitation to a particular machine."); *Ex Parte Moore*, No. 2009-5163, 2010 WL 3903327, at *8-9 (B.P.A.I. Sept. 28, 2010) (rejecting claims reciting a "network" under section 1-1 because a "nominal recitation of a general purpose computer is not an express recitation to a particular machine.").

⁵³ The challenged claims are also easily distinguished from those in *SiRF Technology, Inc. v. Int'l Trade Comm'n*, 601 F.3d 1319 (Fed. Cir. 2010). That case involved a GPS receiver, a special purpose device containing a specific chip that, when incorporated into the GPS receiver, allows the GPS receiver to detect signals from satellites and to compute precise positions on Earth. *Id.* at 1322. In holding that the patented claims were tied to a particular machine, the Federal Circuit relied on the fact that "the methods at issue could not be performed without the use of a GPS receiver" and that the GPS receiver played "a significant part in permitting the claimed method to be performed." *Id.* at 1331-32. If anything, *SiRF* underscores that, in the computer context, only special purpose devices can satisfy the "particular machine" prong of the "machine or transformation" test.

Further, the '573 Patent does not transform an article into a different state or thing. See Ex. 1051 ¶¶ 74-77. Neither the money nor the digital video or audio signals transmitted in the claimed method are "transformed" in the process. See id. ¶¶ 75-76 .The asserted claims simply describe a buyer sending purchase information to the seller, and the seller moving digital video or audio signals data from its memory to the memory of the buyer's device. The claims are unlike those in Diehr, for example, which were directed to "a method of operating a rubber-molding press for precision molded compounds with the aid of a digital computer." In Diehr, the claims were patentable because they transformed something into a different state or thing. 450 U.S. at 181 n.5, 184. Here, the claims at issue involve no transformation—digital audio or video is merely transmitted from one memory to another and stored, and electronic payment is made by one entity to another. See Ex. 1051 ¶¶ 75-76. For these reasons, the claims at issue do not satisfy either prong of the "machine or transformation" test, providing further confirmation that the abstract idea claimed by the '440 Patent is unpatentable. See Ex. 1051 ¶ 77.

C. The Challenged Claims are Invalid Under § 112

The following discussion provides in detail Petitioner's reasons why each challenged claim is invalid for lack of adequate written description. § 112 requires that a patent convey with reasonable clarity to those skilled in the art that, as of the filing date, Applicant was in possession of the claimed invention. 35 U.S.C. § 112 ¶ 1;

MPEP § 2163.02; Ariad Pharms, Inc. v. Eli Lilly and Co., 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc). "[T]he written description requirement prevents an applicant from claiming subject matter that was not adequately described in the specification as filed. New or amended claims which introduce elements or limitations which are not supported by the as-filed disclosure violate the written description requirement." MPEP § 2163(I)(B).

"To comply with the written description requirement of 35 U.S.C. 112, para. 1, or to be entitled to an earlier priority date or filing date under 35 U.S.C. 119, 120, or 365(c), each claim limitation must be expressly, implicitly, or inherently supported in the originally filed disclosure. When an explicit limitation in a claim 'is not present in the written description whose benefit is sought it must be shown that a person of ordinary skill would have understood, at the time the patent application was filed, that the description requires that limitation.' Hyatt v. Boone, 146 F.3d 1348, 1353, 47 USPQ2d 1128, 1131 (Fed. Cir. 1998)." MPEP 2163 (II)(A)(3)(b). See also Tronzo v. Biomet, Inc., 156 F.3d 1154, 1158-59 (Fed. Cir. 1998) (claims to generic cup shape were not entitled to filing date of parent application which disclosed "conical cup" in view of the disclosure of the parent application stating the advantages and importance of the conical shape). "One shows that one is in possession of the invention by describing the invention, with all its claimed limitations, not that which makes it obvious." Lockwood v. Am. Airlines, Inc., 107 F.3d 1565, 1572 (Fed. Cir. 1997)

(emphasis in original) (citing Vas-Cath Inc. v. Mahurkar, 935 F.2d 1555, 1563-64 (Fed. Cir. 1991) ("[T]he applicant must also convey to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention. The invention is, for purposes of the 'written description' inquiry, whatever is now claimed." (emphasis in original))). See also id. ("The question is not whether a claimed invention is an obvious variant of that which is disclosed in the specification. Rather, a prior application itself must describe an invention, and do so in sufficient detail that one skilled in the art can clearly conclude that the inventor invented the claimed invention as of the filing date sought."); Anascape, Ltd. v. Nintendo of Am., Inc., 601 F.3d 1333, 1340 (Fed. Cir. 2010) ("[T]he description in the '525 specification is not reasonably read as describing a larger invention, of which the single input was only a preferred embodiment. Whether or not the inventor could have described the '525 invention more broadly, [i]t is not sufficient for purposes of the written description requirement of § 112 that the disclosure, when combined with the knowledge in the art, would lead one to speculate as to modifications that the inventor might have envisioned, but failed to disclose." (citations and internal quotation marks omitted)); ICU Med., Inc. v. Alaris Med. Sys., Inc., 558 F.3d 1368, 1378 (Fed. Cir. 2009) (affirming invalidity for lack of written description of claims to genus, when only a species was disclosed in the specification).

Each of claims 1, 2, 4, and 5 of the '573 Patent requires use of a "telecommunication[s] line." Ex. 1001, independent Claim 1 (reciting "transferring money electronically via a telecommunication line" and "connecting electronically via a telecommunications line"); id., independent Claim 4 (same). The originally-filed '497 application that ultimately led to the '573 Patent, however, did not disclose the use of this broad category of transmission means. Ex. 1002 (6/16/88 Specification at 2-4). See Ex. 1051 ¶ 80... Rather, the '497 application disclosed only a far narrower subset of "telecommunication[s] lines": "telephone lines." Ex. 1002 (6/16/88 Specification at 2-4). See Ex. 1051 ¶ 80 It was not until years later, on December 11, 1991, that Applicant attempted to amend and broaden not only his claims, but also his specification, to replace "telephone lines" with "telecommunication link" to "connect[] . . . the first memory with the second memory." Id. (12/11/91 Examiner rejected the claim as indefinite because "the Amendment at 5). 'telecommunication link' is not well connected in the system." Id. (2/24/92 Office Action at 6). To overcome this rejection, Applicant amended the phrase to its present form of "telecommunications line." Id. (6/25/98 Amendment at 6, 15). This amendment constituted the impermissible addition of new matter, lacking written description support in the originally-filed specification.

There is no question that "telecommunication[s] lines," as claimed, is broader than "telephone lines," as originally described. See Ex. 1051 ¶¶ 82-94. Indeed,

SightSound and its retained technical expert have stated as much in litigation. Ex. 1016 at 32:25-33:2 (". . . telecommunications lines can be broader than the disclosed embodiment of telephone lines.") (emphasis added), 33:18-19 ("Telecommunications lines in this context has to mean something more than just telephone lines."), 34:8-9 ("A telecommunications line has to be broader than telephone lines"); Ex. 1018 at 26 ("Q. Do you agree that telecommunications lines is broader in scope than telephone lines? A. Yes.")(emphasis added); See Ex. 1051 ¶ 88. And the Court in the pending district court proceedings has agreed: "Sightsound clearly intended for the terms to have different meanings, otherwise there would have been no need for Sightsound to add 'telecommunications lines' during the prosecution of the Patents." Ex. 1015 at 23.

The later but related '734 and '440 Patents, claiming priority to the application leading to the '573 Patent, similarly underscore the difference in scope between these terms. Specifically, the specifications of the '734 and '440 Patents state that "[t]he telecommunications lines are preferably telephone lines," making absolutely clear there are other types of "telecommunications lines" beyond this preferred example. Ex. 1004 at 7:52-53; Ex. 1005 at 7:55-56. And a number of dependent claims in the '734 and '440 Patents explicitly state that "the telecommunications lines include telephone lines." Ex. 1004 '734 Patent claims. 10, 12, 15, 17, 20, 27, 29 (emphasis added); Ex. 1005 '440 Patent claims. 26, 33, 85, 92. As noted by SightSound in the

N2K litigation, if "telecommunications lines" and "telephone lines" had the same meaning, these dependent claims would be redundant, which is contrary to law. Ex. 1016 (4/20/01 Markman Tr.) at 33:14-16 ("If telecommunications lines were meant and only meant to be telephone lines, this claim would be redundant."). *See Phillips*, 415 F.3dat 1324 ("[A]n independent claim should be given broader scope than a dependent claim to avoid rendering the dependent claim redundant.").

As construed for purposes of review, consistent with the claim construction order of the Western District of Pennsylvania in concurrent proceedings, "telecommunication[s] lines"—"an electronic medium for communications between computers"—is meaningfully broader than "telephone lines," which is understood to be limited to "an electronic medium for telephonic communications." Ex. 1015 at 23-24. As construed, "telecommunication[s] lines" would have encompassed in 1988 (and 1991) such electronic media as, for example, LocalTalk (the original medium for Apple's AppleTalk protocol) and various physical-layer implementations of the Ethernet standard, in addition to "telephone lines." Ex. 1051 ¶¶ 89-93; Ex. 1018 at 26 ("Q. What are some forms of telecommunications lines other than telephone lines? A. Ethernet."). See also Ex. 1024 ¶ 336 ("[T]he Court has construed 'telecommunications lines' to mean 'an electronic medium for communicating between computers,' and it is my opinion that this definition includes the Internet.").

Indeed, SightSound, through its expert in the pending district court proceedings, has asserted that the difference between "telecommunication[s] lines" and "telephone lines" is really quite great: "In 1988, one of reasonable skill in the art would have understood 'telecommunications lines' to include telephone lines, fiberoptic cable, wireless networking, and several other mediums of electronic communication (such as cellular telephones and microwave transmissions)." Ex. 1021 ¶ 19. *See also* Ex. 1022 ¶ 11. SightSound's expert continues: "In 1988, the term 'telephone lines' would indicate to one skilled in the art just one of many forms of telecommunications line." Ex. 1021 ¶ 20 (emphasis added).

Accordingly, because the originally-filed specification disclosed only a single species of telecommunications lines—"telephone lines"—the originally-filed specification fails to provide the written description support necessary to establish that the Inventor was in possession of the full scope of the genus "telecommunication[s] lines," as later recited in every challenged claim. Every challenged claim of the '573 Patent is, therefore, invalid. *See TurboCare Div. of Demag Delaval Turbomachinery Corp. v. GE*, 264 F.3d 1111, 1118 (Fed. Cir. 2001) (affirming district court's ruling of invalidity for failure to satisfy the written description requirement because support for claim was added after the application's filing date); *Only the First, Ltd. v. Seiko Epson Corp.*, 2010 U.S. Dist. LEXIS 103988, 27-28 (N.D. Ill. Sept. 29, 2010) (stating "When [a patent] applicant adds a claim or otherwise amends

his specification after the original filing date . . . the new claims or other added material must find support in the original specification' in order to 'satisfy the written description requirement of section 112, paragraph 1.' TurboCare Div. of Demag Delaval Turbomachinery Corp. v. General Elec. Co., 264 F.3d 1111, 1118 (Fed. Cir. 2001)" and concluding that "[t]here is simply no disclosure in the [original] specification of the 'peak reflectance percentage' method . . . Consequently, the 'peak reflectance percentage' method constitutes new matter, and claims 7 and 9 are invalid for an inadequate written description."); Block Fin. Corp. v. Lending Tree, LLC, 2009 U.S. Dist. LEXIS 82729 (W.D. Mo. Sept. 10, 2009) ("The inquiries under sections 132 and 112 are virtually the same and usually turn on a single question: whether the amendment broadened the initial disclosure. . . . The February 2002 amendment added new matter to the pending application . . . As those claims are not supported by the original application, they must be declared invalid."); Boyle v. Molson Coors Brewing Co., 2007 U.S. Dist. LEXIS 67296 (D.N.J. Sept. 11, 2007) ("any detailed explanation of what was actually claimed . . . was added after the initial application was filed. As such, any additional disclosure that ultimately added these details is new matter and, therefore, invalid pursuant to 35 U.S.C. § 132(a)."). See Ex. 1051 ¶ 94.

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. 104677-5005-801.

Respectfully submitted,

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May 6, 2013

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

S	Attorney Docket No.:
S	104677-5005-801
S	Customer No. 28120
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S	Petitioner: Apple Inc.
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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:

EXHIBIT LIST	
Exhibit 1001	United States Patent No. 5,191,573
Exhibit 1002	United States Patent No. 5,191,573 File History
Exhibit 1003	Application No. 90/007,402 ('573 Patent Reexamination).
Exhibit 1004	United States Patent No. 5,675,734
Exhibit 1005	United States Patent No. 5,966,440

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Exhibit 1006	United States Patent No. 5,966,440 File History	
Exhibit 1007	David Needle, "From the News Desk: Audio/digital interface for the IBM PC?," InfoWorld, vol. 6, no. 23, p. 9, June 4, 1984	
Exhibit 1008	Excerpt from, Larry Israelite, "Home Computing Scenarios for Success," Billboard Magazine Charts the Future (Dec. 1984)	
Exhibit 1009	Excerpt from, Steve Dupler, "Compusonics, AT&T Link," Billboard Newspaper, vol. 97 no. 40 (Oct. 5, 1985)	
Exhibit 1010	10/10/1985 CompuSonics Letter from David Schwartz to Shareholders	
Exhibit 1011	International Patent Application WO85/02310, filed on Nov. 14, 1984, and published on May 23, 1985 ("Softnet")	
Exhibit 1012	United States Patent No. 3,718,906, filed on June 1, 1971, and issued on Feb. 27, 1973 ("Lightner")	
Exhibit 1013	United States Patent No. 3,990,710, filed on Mar. 1, 1971, and published on Nov. 9, 1976 ("Hughes")	
Exhibit 1014	2/13/13 Order re Claim Construction (D.I. 175), SightSound Techs., LLC v. Apple Inc., No. 11-1292 (W.D. Pa.)	
Exhibit 1015	11/19/12 Special Master's Report and Recommendation on Claim Construction (D.I. 142), SightSound Techs., LLC v. Apple Inc., No. 11-1292 (W.D. Pa.)	
Exhibit 1016	4/20/01 Markman Hearing Transcript, SightSound.com Inc., v. N2K, Inc., et al., No. 98-118 (W.D. Pa.)	
Exhibit 1017	Excerpt from Webster's II New Riverside University Dictionary (1988)	
Exhibit 1018	Deposition Transcript of Douglas Tygar, dated Oct. 8, 2012 SightSound Techs., LLC v. Apple Inc., No. 11-1292 (W.D. Pa.)	
Exhibit 1019	Jennifer Sullivan, "The Battle Over Online Music," Wired.com (Jan. 29, 1999), available at http://www.wired.com/techbiz/media/news/1999/01/17609	
Exhibit 1020	Declaration of Dr. John P.J. Kelly, dated Sept. 7, 2012	
Exhibit 1021	Declaration of J.D. Tygar, dated Sept. 7, 2012	

EXHIBIT LIST		
Exhibit 1022	Responsive Declaration of J.D. Tygar, dated Sept. 28, 2012	
Exhibit 1023	Excerpt from Benjamin Krepack and Rod Firestone, Start Me Up! the music biz meets the personal computer, pages 126-127 (Mediac Press May 1986)	
Exhibit 1024	Plaintiff SightSound Techs., LLC's Expert Report of Dr. J. Douglas Tygar Regarding Infringement, dated April 22, 2013	
Exhibit 1025	Expert Report of Mark M. Gleason, CPA/ABV/CFF, CVA, CLP, dated April 22, 2013	
Exhibit 1026	7/16/84 CompuSonics Letter from David Schwartz to Shareholders	
Exhibit 1027	Deposition Transcript of Arthur Hair, dated Dec. 11, 2012, SightSound Techs., LLC v. Apple Inc., No. 11-1292 (W.D. Pa.)	
Exhibit 1028	Deposition Transcript of Scott Sander, dated Dec. 18, 2012, SightSound Techs., LLC v. Apple Inc., No. 11-1292 (W.D. Pa.)	
Exhibit 1029	Excerpt from Chambers Science and Technology Dictionary (1988)	
Exhibit 1030	Don Crabb, "A Beginner's Guide to the Ins and Outs of Appletalk LANs," InfoWorld (April 10, 1989)	
Exhibit 1031	"Inside Macintosh," Volumes I, II, and III, Addison-Wesley Publishing Company, Inc. (1985)	
Exhibit 1032	Craig Partridge, "The Technical Development of Internet Email," BBN Technologies	
Exhibit 1033	Excerpt from PC Magazine, Vol. 11 No. 9 (May 12, 1992)	
Exhibit 1034	United States Patent No. 4,124,773 filed on November 26, 1976, issued on November 7,1978 ("Elkins")	
Exhibit 1035	United States Patent No. 4,667,088 filed on November 1, 1982, issued on May 19, 1987 ("Kramer et al.")	
Exhibit 1036	United States Patent No. 4,528,643 filed on January 10, 1983, issued on July 9, 1985 ("Freeny")	
Exhibit 1037	Photo of CompuSonics equipment	

EXHIBIT LIST		
Exhibit 1038	Excerpts from Dr. Sidnie Feit, "Wide Area High Speed Networks," Macmillan Technical Publishing USA (1999)	
Exhibit 1039	"The Ethernet- A Local Area Network Data Link Layer and Physical Layer Specifications V 2.0," AA-K759B-TK (November, 1982)	
Exhibit 1040	"Apple IIGS Owner's Guide," Apple Computer, Inc. (1988)	
Exhibit 1041	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 1042	Excerpts of Lecture at Stanford by D. Schwartz and J. Stautner, 1987 (video)	
Exhibit 1043	Second Declaration of Dr. John P.J. Kelly, dated 9/28/12	
Exhibit 1044	United States Patent No. 4,682,248 filed on September 17, 1985, issued on July 21, 1987 ("Schwartz Patent")	
Exhibit 1045	Excerpt of Plaintiff Sightsound Technologies, LLC's Expert Report of John Snell dated April 22, 2013	
Exhibit 1046	Declaration of Flora D. Elias-Mique In Support of Petition for Covered Business Method Patent Review	
Exhibit 1047	Declaration of David Schwartz In Support of Petition for Covered Business Method Patent Review	
Exhibit 1048	Declaration of Roberto J. Gonzalez In Support of Petition for Covered Business Method Patent Review	
Exhibit 1049	Declaration of Megan F. Raymond In Support of Petition for Covered Business Method Patent Review	
Exhibit 1050	Declaration of Ching-Lee Fukuda In Support of Petition for Covered Business Method Patent Review	
Exhibit 1051	Declaration of Dr. John P.J. Kelly 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:

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