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10 UNITED STATES DISTRICT COURT  
 11 NORTHERN DISTRICT OF CALIFORNIA  
 12

13 APPLE COMPUTER, INC.,  
 14 Plaintiff,  
 15 v.  
 16 BURST.COM, INC.,  
 17 Defendant.

Case No. C 06-0019 MHP

**APPLE COMPUTER, INC.'S SECOND  
 MOTION FOR SUMMARY  
 JUDGMENT OF INVALIDITY**

Date: September 10, 2007  
 Time: 2:00 p.m.  
 Hon. Marilyn Hall Patel

Complaint Filed: January 4, 2006  
 Trial Date: February 26, 2008

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1 **I. INTRODUCTION**

2 Apple Inc.'s Motion for Summary Judgment of Invalidity Based on Kramer and  
3 Kepley patents ("Audio Anticipation Motion") established that certain claims asserted by  
4 Burst.com, Inc. ("Burst") are invalid because they are anticipated by the Kramer and Kepley  
5 patents.<sup>1</sup> This motion seeks summary judgment of anticipation and/or obviousness of **all** the  
6 asserted claims—including those claims requiring the processing of full motion video  
7 information—by four additional references, as well as by Kramer and Kepley.<sup>2</sup>

8 To be valid, patent claims must be both novel (i.e., unanticipated by prior art) and  
9 nonobvious. The asserted Burst claims are neither. Rather, the Burst claims describe systems  
10 and methods for compressing, storing, transmitting (and in some cases, editing) digitized  
11 audio/video information that were known, described, and used long before Burst's alleged June  
12 1987 conception date.<sup>3</sup> Indeed, as demonstrated in Apple's Audio Anticipation Motion, and  
13 below, such systems and methods date back to the 1970s and early 1980s and are based on data  
14 compression work that was done beginning in the 1950s. Burst's asserted patents and claims add  
15 nothing to this extensive collection of prior art patents, literature, and products and thus are  
16 anticipated. And even if Burst were able to point to elements in one or more Burst claims as  
17 missing in a single prior art reference, the claims would at best be an obvious combination of  
18 known elements yielding predictable results, and thus would be invalid under a long line of  
19 Supreme Court precedent recently extended just this April in *KSR Int'l Co. v. Teleflex Inc.*, No.  
20 04-1350, 127 S. Ct. 1727, 1740 (April 30, 2007) ("when a patent 'simply arranges old elements  
21 with each performing the same function it had been known to perform' and yields no more than

22 <sup>1</sup> Apple's Audio Anticipation Motion was originally directed to claims 1, 9, 15, 16, 17, and 44 of  
23 the '995 patent and claims 1, 9, 15, 16, 17, 44, and 47 of the '839 patent. Burst subsequently  
24 dropped claim 16 of the '995 patent and claim 16 of the '839 patent from this lawsuit, and  
25 accordingly those claims are not at issue in Apple's Audio Anticipation Motion. That Motion  
was filed in January 2007, but Burst's opposition was deferred until after the Court's May 8, 2007  
Claim Construction Order. Briefing was completed on June 21 and a hearing is currently  
scheduled for July 19.

26 <sup>2</sup> As was stated in Apple's Audio Anticipation Motion, the references upon which this motion is  
27 based do not by any means represent the full extent of the invalidating prior art upon which Apple  
may rely in this case. Only a few such references are addressed herein.

28 <sup>3</sup> Apple does not believe that Burst will be able to corroborate its claim to a June 1987 conception  
date, or establish its entitlement to a priority date earlier than its December 27, 1988 filing date.

1 one would expect from such an arrangement, the combination is obvious”).

2 According to Burst, the “innovation [that] is at the heart of Burst’s patents” is that  
3 “Burst’s inventions effectively decouple the time required to transmit and receive audio and video  
4 works from the time required to play them back.”<sup>4</sup> In other words, Richard Lang, the named  
5 inventor of the Burst patents-in-suit, believes he was the first to see that “the delivery of an audio  
6 or video work could be accomplished faster than the real-time period required for playback.”<sup>5</sup>

7 Mr. Lang admits, however, that he did not invent any of the various components  
8 that would allow compressed audio or video to be sent faster than real-time. Specifically, Mr.  
9 Lang admits that he did not invent compression, data compression of audio/video information, or  
10 any improved method of data compression.<sup>6</sup> He did not invent the idea of sending a data-  
11 compressed audio or video representation over a transmission medium, or any new or improved  
12 transmission medium,<sup>7</sup> including the fiber optic link described in the Burst patents as transmitting  
13 digital signals at “about 200 megabytes/second).<sup>8</sup> Mr. Lang admits that he did not invent any  
14 “improved storage system” but rather contemplated using existing storage systems.<sup>9</sup> He also  
15 admits that he did not invent or improve the process of digitizing audio or video data.<sup>10</sup> In short,  
16

17 <sup>4</sup> Burst’s Opening Claim Construction Brief at 1.

18 <sup>5</sup> *Id.* at 2. *See* Kalay Decl., Exh A [Lang Depo.] at 18:13-17 (“Q. Are you the first person to ever  
send digitized audio or video faster than real time? A. I believe I’m the first person to invent an  
apparatus and method specifically designed for doing so, as a distribution model.”)

19 <sup>6</sup> *Id.* at 74:16-22 (“Q. ... You did not invent the idea of using fewer bits to represent data, is that  
20 right? A. That’s correct. Q. Now is it also true that you did not invent data compression of audio  
or video information? A. That’s correct.”); *Id.* at 82:2-4 (“Q. Did you in the ‘995 patent invent an  
21 improved method of data compression? A. No.”).

22 <sup>7</sup> *Id.* at 74:23-75:2 (“Q. And you did not invent the idea of sending a data-compressed audio or  
video representation over a transmission medium, correct? A. Correct.”); *id.* at 84:17-25 (“Q. ...  
23 Did you invent any new or improved digital transmission medium? A. Medium? Q. Yes, like a  
fiberoptic line, or a telephone line, or a telephone modem. A. So you’re talking about the  
transmission, the networking side of it? Q. Yes. A. No.”).

24 <sup>8</sup> Docket #110, Crosby Decl., Exh. A [‘995 patent] at 7:55-58.

25 <sup>9</sup> Kalay Decl., Exh. A [Lang Depo] at 82:5-15 (“Q. Did you invent an improved storage system?  
A. Well, what do you mean by “improved storage system”? Q. A storage system that’s improved  
26 in any way over what was already known at the time you came up with your idea improved  
method of data compression? A. I utilized existing storage systems. Q. And you didn’t come up  
27 with a new, improved storage system, is that right? A. No. If I understand your question  
correctly.”)

28 <sup>10</sup> *Id.* at 84:3-5 (“Q. Did you invent any new or improved method or apparatus for digitizing audio  
or video data? A. No, we used existing.”)

1 Mr. Lang has admitted that the component parts of his alleged invention were known,<sup>11</sup> and  
2 asserts that what he contributed was the idea of sending compressed audio or video data faster  
3 than real-time.<sup>12</sup> Yet, as shown in this motion and Apple’s Audio Anticipation Motion, Mr. Lang  
4 was unquestionably not the first to have the idea of sending compressed audio or video faster than  
5 real-time. Moreover, Mr. Lang has admitted that it was known that compressing a file would  
6 allow it to be sent faster, acknowledging that “persons of skill in the art at the time [he] filed the  
7 ’995 patent application understood that a digital representation that had fewer bits took less time  
8 to send over a given transmission medium than one that had more bits.”<sup>13</sup>

9           Indeed, faster-than-real-time transmission of compressed audio and video data is  
10 simply an inevitable result of the advance of technology for compression, storage, and  
11 transmission—technology to which Mr. Lang admits he did not contribute. By 1988, there were a  
12 variety of fast data transmission technologies available, including T1 lines with a bandwidth of  
13 1.544 Mbps dating back to at least 1966, Ethernet with a bandwidth of at least 3 Mbps dating  
14 back to 1976, and the 200 MB/s fiber optic link described in the Burst patents.<sup>14</sup> Storage systems  
15 described in the 1988 “Peripheral Storage” article Burst referenced in its patent application  
16 included external hard drives arrays with 3 gigabytes of capacity and a bandwidth of “3  
17 Mbytes/sec.”<sup>15</sup> Compression and digitization of audio and video data were known, and any  
18 digitized and compressed audio file that was copied to one of these external hard drives, or sent  
19 over any of these transfer mechanisms, would have transferred faster-than-real-time.<sup>16</sup>

20 <sup>11</sup> *Id.* at 20:24-21:23 (testifying that a “general summary of key features” of his invention was  
21 “data compression,” “storage, output ports, and sending audio or video faster than real time” and  
22 “creation of a time-compressed representation”; *see also id.* at pp. 14-21 (questions and answers  
23 regarding the components of Mr. Lang’s alleged invention).

24 <sup>12</sup> *Id.* at 76:23-77:5 (“Q. And I think you said you did not invent the concept of sending data-  
25 compressed representations of audio/video information, is that correct? A. Well, what I said I  
26 believe is that I invented an apparatus and a method of doing so that departed from the  
27 conventional method at that time, which was to play them in real time.”)

28 <sup>13</sup> *Id.* at 76:9-15 (“Q. Is it your view that persons of ordinary skill in the art at the time you filed  
the ’995 patent application understood that a digital representation that had fewer bits took less  
time to send over a given transmission medium than one that had more bits? A. I think that’s a  
fair statement.”)

<sup>14</sup> Docket #116 [Kalay Decl.], Exh. E (1966 Ronne paper); Docket #93 [Brown Decl.], Exhibit 7  
(1976 Metcalfe paper); Kalay Decl., Exh. L [’932 patent] at 8:15-18.

<sup>15</sup> Kalay Decl., Exh. J [Peripheral Storage]; *See* Kalay Decl., Exh A [Lang Depo.] at 82:5-15.

<sup>16</sup> This is clear because even uncompressed audio would have transferred faster than real time at

1 Furthermore, as shown for example by the Tescher reference described below, it was known by  
 2 1985 that video could be compressed down to a data rate of 239 kbps, and any video file  
 3 compressed to that data rate would have transferred faster-than-real-time if copied to one of the  
 4 above external hard drives or across an Ethernet or T1 communication link. As this shows, it was  
 5 both inevitable and unremarkable that digitized audio and video data would be moved from one  
 6 place to another faster-than-real-time. Accordingly, to the extent that they are not anticipated, the  
 7 asserted Burst claims are obvious because they are: a set of known elements performing known  
 8 functions, whose combination yields a result even Mr. Lang admits was predictable.<sup>17</sup>

## 9 **II. THE PRIOR ART**

### 10 **A. Walter – A Faster-Than-Real-Time Video Distribution System**

11 The Walter patent (U.S. Patent No. 4,506,387, Kalay Decl., Exh. B) was filed June  
 12 24, 1983, and issued on September 13, 1988. Thus, Walter is prior art to all of the asserted Burst  
 13 claims under at least 35 U.S.C. sections 102(a) and (e).<sup>18</sup>

14 Walter describes a video-on-demand system where a “central data station” can  
 15 transmit a “video program at a high non-real-time-rate over a fiber optic line network to a data  
 16 receiving station at the user’s location.” Through the use of compression and multiple parallel  
 17 fiber optic lines, “a two hour movie can be transmitted in about 31 seconds.” [7:37-47].

18 In Walter, a “library of video programs [is] maintained at the central data station.”  
 19 Each video program “is converted to compressed digital form and stored in suitable high density

---

20 these data rates. *See* Hemami Decl., ¶ 22 (“digitized uncompressed wideband audio signal has a  
 21 data rate of 705.6 Kilobits/second”); ¶ 50.

22 <sup>17</sup> Mr. Lang also admitted that he, the sole named inventor, could not have built what his patents  
 23 describe, because he was “not an electrical engineer, [so] its not in my field of expertise to build  
 24 it.” Kalay Decl., Exh. A [Lang Depo.] at 234:6-23. *See Leapfrog v. Fisher-Price*, 485 F.3d 1157  
 (Fed. Cir. 2007) (“Our conclusion [of obviousness] is further reinforced by testimony from the  
 sole inventor at trial that he did not have a technical background, could not have actually built the  
 prototype himself, and relied on the assistance of an electrical engineer”).

25 <sup>18</sup> Walter was submitted with during the prosecution of the ‘932 application about two weeks after  
 26 the claims were allowed. Burst did not disclose to the Patent Office that Walter describes sending  
 27 a 2 hour movie in “about 31 seconds.” Kalay Decl., Exh. K [Notice of Allowance and  
 28 Information Disclosure Statement]. When asked about the Walter reference, Mr. Lang testified  
 that “I can’t distinguish my patent from the Walter patent without relying on opinions and  
 information that I have garnered in my discussions with my patent counsel” and was instructed  
 not to answer questions “concerning the extent to which [Walter] does or does not anticipate the  
 patents-in-suit.” Kalay Decl, Exh. A [Lang Depo.] at 373, 368; *see generally id.* at 368-380.

1 memory devices.” [2:13-18]. These devices are organized into “memory modules,” each of  
2 which “contains a specific video program for broadcasting.” [4:7-14].<sup>19</sup> Memory modules are  
3 included both at the “central data station” and at the “receiving station,” and are “arranged  
4 identically” in both places. [7:8-11]. Walter describes in some detail the circuitry and devices  
5 used for reading data from the memory modules, converting it into optical data, transmitting it  
6 through multiple parallel fiber optic lines faster than real-time to the receiving station, where it is  
7 stored “for an indefinite period of time for viewing at a later date.” [Abstract; 4:3-7:47].

8           The video data is compressed using circuitry that performs an “inter-frame  
9 differential pulse code modulation technique [that] is known in the art, [although] additional  
10 circuitry may be added to avoid problems caused by rapid motion in the picture.” [7:25-34].  
11 Walter does not expressly state where the “circuitry” that performs this compression is located,  
12 saying only that “the digital data is compressed in memory modules 24-34 [which are in the  
13 central data station] by a technique known as inter-frame differential pulse code modulation.”  
14 [7:26-30]. This suggests that the compression process occurs in the central data station.  
15 However, Walter also states that the “video programs are preprogrammed into respective memory  
16 modules 24-34.” This suggests that the compression occurs elsewhere. [4:10-13]. This  
17 ambiguity is significant here because two of Burst’s independent apparatus claims (‘995 claim 1  
18 and ‘932 claim 4) require a device within a “common housing” to receive, compress, store, and  
19 transmit audio/video data – a requirement that is not literally met if the compression occurs  
20 outside the central data station. However, as discussed below, Walter renders these claims  
21 obvious in any event. Wicker Decl., ¶ 15.

## 22           **B. Gremillet – A Faster-Than-Real-Time Music Distribution System**

23           The Gremillet patent (U.S. Patent No. 4,499,568, Kalay Decl., Exh. C) issued in  
24 1985 and claims priority to a 1981 French patent application. Thus, Gremillet is prior art to all of  
25 the asserted Burst claims under at least 35 U.S.C. section 102(b). Gremillet was not cited during  
26 prosecution of any of the asserted Burst patents.

27 \_\_\_\_\_  
28 <sup>19</sup> Each memory module is subdivided in the preferred embodiment into 16 memory cells, one for  
each of the 16 parallel “optical data channels” to be used. [5:29-65; 7:39-44].

1           The music-on-demand system described in Gremillet transmits music from a  
2 distribution center to a customer over a television transmission channel much faster than real-  
3 time. This is possible because “[t]he information flow rate linked with classical music is  
4 approximately 0.5 Mbits/s,” while “the information flow rate of picture transmission channels  
5 used in television ... is well above this value, being about 100 Mbits/s.” [2:3-8]. This means that  
6 “a musical work lasting one hour can be transmitted in 18 seconds.” [2:8-12].

7           To accomplish the transmission, the distribution center has a television transmitter,  
8 either a “transmitting antenna” or “a cable or optical fibres.” [4:1-7]. At the receiving end, “the  
9 user equipment 20 comprises a television receiver” as well as “a video recorder” and a “rate  
10 recorder 24 connected to the video recorder and able to restore the normal speed to the  
11 information.” [3:55-62]. In operation, a “user wishing to listen to a work belonging to the  
12 collection recorded in the [distribution] centre supplies the latter with the references of the chosen  
13 work by means of the telephone line,” and “provides his identity,” for example by “a numerical  
14 code.” [4:8-18]. The user-selected digitized music is sent over a television channel, “preceded  
15 by the addressing code of the subscriber.” [4:18-20]. When user’s device receives the addressing  
16 code, it sends a “writing control instruction” to the “video recorder,” where “it is recorded at the  
17 fast speed ... until the work has been completely recorded.” [4:20-25]. The transmitted work  
18 then can be played using the rate converter that restores it to its normal speed, or the user can  
19 keep the transmitted recording “for the purpose of listening to it later.” [4:36-37].

### 20           **C. Tescher – An Intra-Frame and Inter-Frame Video Compression Method**

21           The Tescher patent (U.S. Patent No. 4,541,012, Kalay Decl., Exh. D) was filed in  
22 1982 and issued in 1985. Thus, Tescher is prior art to all of the asserted Burst claims under at  
23 least 35 U.S.C. section 102(b). Tescher was not cited during prosecution of the Burst patents.

24           Generally, Tescher describes a system for digitizing analog/video information,  
25 compressing that digitized information, storing and/or transmitting that information, and then  
26 decompressing, and/or displaying the video information. [2:32-45]. Tescher is significant  
27 because it discloses a video compression technique that achieves a data rate of 239 kbps (“2.39 x  
28 10<sup>5</sup> bits per second”) for full motion video information. [Tescher at 11:52-12:1]. Notably, this

1 video data rate (239 kbps, or 0.239 Mbits/s) is lower than the data rate of the music that is  
2 distributed faster than real-time in Gremillet (“approximately 0.5 Mbits/s”). Tescher is also  
3 significant because it uses both the intraframe and interframe compression mentioned in the  
4 Court’s claim construction order. [1:40-45; 1:59-66; 2:32-45].

5 **D. Kramer and Kepley – Patents From Apple’s Audio Anticipation Motion**

6 The Kramer patent (U.S. Patent No. 4,667,088, Kalay Decl., Exh. E) and Kepley  
7 (AT&T) (U.S. Patent No. 4,790,003, Kalay Decl., Exh. F) patents were described in Apple’s  
8 Audio Anticipation Motion, and those descriptions are not repeated here. Burst has not denied  
9 that these references are prior art to its claims. Neither Kepley nor Kramer was cited during  
10 prosecution of any of the asserted Burst patents.

11 **E. CompuSonics – Editing**

12 In the 1980s a public company called CompuSonics sold a series of digital audio  
13 products, including the “DSP-2000 Series,” which was a “multitrack digital audio recorder/editor  
14 for professional use.” Kalay Decl, Exh. G [6/15/87 CompuSonics Form 10-K] at 4. The DSP-  
15 2000 is prior art to Burst’s patents under at least 35 U.S.C. § 102(b): “As of May 30, 1987, 15  
16 DSP-2000 series systems have been sold.” *Id.* The CompuSonics DSP-2000 digitized and  
17 compressed audio data<sup>20</sup> and performed editing of the digital audio files,<sup>21</sup> which it stored on hard  
18 disks and high density floppy disks.<sup>22</sup> It could output the edited audio to a Sony PCM-1610  
19 encoder for mastering CDs. Exh. H at APBU-00016099. The CompuSonics DSP-2000 product  
20 demonstrates that editing digitized and compressed audio information was known prior to Burst’s

21 \_\_\_\_\_  
22 <sup>20</sup> “[T]he analysis stage of the CompuSonics system, which compresses and filters the digital-  
23 audio data rate and allows for high speed editing and greater data density.” Kalay Decl., Exh. G  
24 [6/15/87 CompuSonics Form 10-K] at APBU 653390. “Use of CompuSonics proprietary CSX  
25 encoding is optional when making recordings on the DSP-2002.” Kalay Decl., Exh H  
26 [CompuSonics DSP 2002 brochure, copyright 1985] at APBU-0016100.

27 <sup>21</sup> “The DSP-2000 is ... configured as a single user workstation for the recording and editing of  
28 live and recorded music.” Exh. G at APBU 653390. “Because you are now dealing wholly within  
the digital domain, the DSP-2002 lets you take advantage of the following features: ... real-time  
trial edits ... razor-sharp edits, butt splices, and cross-fades.” Exh. H at APBU-00016099.

<sup>22</sup> “The standard system comes with a 143 megabyte hard disk capable of holding at least 18  
minutes of mono or 9 minutes of stereo.” Exh H at APBU-00016099; “Superfloppy disk drive ...  
3.3 Megabytes (unformatted).” *Id.* at APBU-00016100. CompuSonics also sold the DSP-1000,  
which stored digital audio in compressed or uncompressed form on a WORM (write-once read-  
many) optical disk. Exh. G at APBU 653391-392.

1 patent application.<sup>23</sup>

### 2 **III. LEGAL STANDARDS**

3 Summary judgment legal standards and the law of anticipation are well-known to  
4 the Court and were addressed in Apple's Audio Anticipation Motion. This law is not repeated  
5 here. However, very recently, the Supreme Court overturned long-standing Federal Circuit law  
6 regarding "obviousness," and urged "caution in granting a patent based on the combination of  
7 elements found in the prior art." *KSR Int'l Co. v. Teleflex Inc.*, No. 04-1350, 127 S. Ct. 1727,  
8 1731 (April 30, 2007). The *KSR* decision rejected the rigid application of a "teaching, suggestion  
9 or motivation" (or "TSM") requirement for a finding of obviousness, and adopted instead what it  
10 called a "common sense" approach, explaining that a patent claim is obvious, and thus invalid,  
11 "when it does no more than yield predictable results." *Id.* at 1731.

12 The Supreme Court has repeatedly held that a combination of known elements  
13 according to known methods is obvious when it does no more than yield predictable results.  
14 *Great Atlantic & Pacific Tea Co. v. Supermarket Equipment Corp.*, 340 U.S. 147, 152-153, 71  
15 S.Ct. 127, 130 (1950) ("a patent for a combination which only unites old elements with no change  
16 in their respective functions . . . obviously withdraws what is already known into the field of its  
17 monopoly and diminishes the resources available to skillful men."); *Anderson's Black Rock, Inc.*  
18 *v. Pavement Salvage Co.*, 396 U.S. 57, 62; 90 S. Ct. 305, 308-309 (1969) (combination of radiant  
19 heat burner and paving machine was obvious because each element performed as expected:  
20 "while the combination of old elements performed a useful function, it added nothing to the  
21 nature and quality of the radiant-heat burner already patented.").

22 The Supreme Court applied these precedents in *KSR*, which involved a claim  
23 which combined an adjustable automobile pedal and an electronic pedal position sensor. The  
24 district court had found, on summary judgment, that claim 4 was obvious over the combination of  
25 the prior art Asano patent (which disclosed an adjustable automobile pedal) with the prior art

26 <sup>23</sup> Apple believes that the CompuSonics products anticipate all of Burst's asserted claims, in part  
27 because they could compress and store audio and video information, and could transmit the  
28 compressed audio and video files between various internal and external disk drives faster-than-  
real-time, but that is beyond the scope of this motion, which relies on the CompuSonics DSP-  
2000 to show editing.

1 Smith patent (which disclosed an electronic position sensor on an automobile pedal.) *Id.* at 1738.  
 2 The Federal Circuit reversed the district court, and the Supreme Court reversed again, reinstating  
 3 the district court’s finding of obviousness. As it explained,

4           When a work is available in one field of endeavor, design  
 5 incentives and other market forces can prompt variations of it,  
 6 either in the same field or a different one. If a person of ordinary  
 7 skill can implement a predictable variation, § 103 likely bars its  
 8 patentability. For the same reason, if a technique has been used to  
 improve one device, and a person of ordinary skill in the art would  
 recognize that it would improve similar devices in the same way,  
 using the technique is obvious unless its actual application is  
 beyond his or her skill.

9 *Id.* at 1740. Thus, the Supreme Court explained, “when a patent ‘simply arranges old elements  
 10 with each performing the same function it had been known to perform’ and yields no more than  
 11 one would expect from such an arrangement, the combination is obvious.” *Id.* at 1740. In sum,  
 12 the *KSR* Court concluded, the results of “ordinary innovation” are not patentable, because  
 13 “granting patent protection to advances that would occur in the ordinary course without real  
 14 innovation retards progress.” *Id.* at 1732, 1746

15           Notably, the Federal Circuit’s reversal of summary judgment had relied in part on  
 16 an affidavit submitted by the patentee’s expert, and the Supreme Court disagreed with the Federal  
 17 Circuit on this point as well, noting that the ultimate judgment of obviousness is a legal  
 18 determination. *Id.* at 1745. “Where, as here, the content of the prior art, the scope of the patent  
 19 claim, and the level of ordinary skill in the art are not in material dispute and the obviousness of  
 20 the claim is apparent in light of these factors, summary judgment is appropriate.” *Id.* at 1745-  
 21 1746. *See Pharmastem Therapeutics Inc. v. Viacell, Inc.*, Nos. 05-1490, 05-1551, 2007 WL  
 22 1964863 (Fed. Cir. July 9, 2007) (applying *KSR* to overturn jury verdict of non-obviousness).

#### 23 **IV. EACH OF THE ASSERTED CLAIMS IS INVALID**

##### 24 **A. The Asserted Claims.**

25           Thirty-six of the sixty claims originally asserted by Burst in this lawsuit remain  
 26 asserted, of which nine are independent claims (marked in bold below).<sup>24</sup>

27 <sup>24</sup> Burst dropped claims 16, 21 and 24-28 of the ‘995 patent, claims 7-8, 16, 22-23, 26-27, 46, 48-  
 28 50, 52, 58-59 and 73 of the ‘839 patent, and claims 1-3 of the ‘705 patent in its June 8, 2007 Final  
 Infringement Contentions.

Patent	Asserted Claims
'995	1, 2, 3, 7, 8, 9, 15, <b>17</b> , 19, 20, 22-23, 44, 47, 51, 52, 80
'839	1, 2, 3, 9, 15, <b>17</b> , 19, 20, 28, 44, 45, 47, 51, <b>76, 77</b>
'705	<b>12,13, 21</b>
'932	<b>4</b>

As explained in Apple's Audio Anticipation Motion, all of Burst's asserted independent claims can be divided into two groups. The first set of claims—the “compressing” claims—each requires (1) receiving audio/video source information, (2) compressing it, (3) storing it, and (4) transmitting it faster than real-time. The second set of claims—the “receive compressed” claims—shortens this sequence to three steps by requiring that the audio/video source information be compressed before it is received. Of the nine independent claims at issue, five are “compressing” claims,<sup>25</sup> and four are “receive compressed” claims.<sup>26</sup>

The independent claims at issue can be further categorized as either method or apparatus, and as either audio or video.<sup>27</sup> The six asserted independent claims in the '705 and '839 patents are method claims, and the three in the '995 and '932 patent are apparatus claims. Five claims are limited to “full motion video,”<sup>28</sup> and four encompass audio only.<sup>29</sup>

This motion first addresses the independent claims, then turns to the dependent claims. All of the dependent claims at issue, except for claim 13 of the '705 patent, depend from audio-only claims, and can thus be anticipated by either audio or video references.

## **B. The Independent Claims**

### **1. The Audio-Only Claims Are Obvious If They Are Not Anticipated**

Apple's Audio Anticipation Motion did not assert obviousness. This motion asserts obviousness. Even if the court accepts some or all of the arguments that Burst has made in

<sup>25</sup> “Compressing” claims: '995 claim 1; '932 claim 4; '839 claims 1 and 76, '705 claim 12

<sup>26</sup> “Receive Compressed” claims: '995 claim 17, '839 claims 17 and 77, '705 claim 21

<sup>27</sup> An “audio” claim refers to a claim that can be met with audio-only audio/video source information. A “video” claim refers to a claim that requires video audio/video source information.

<sup>28</sup> Video claims: '839 claims 76, 77; '932 claim 4, '705 claims 12, 21.

<sup>29</sup> Audio claims: '995 claims 1, 17; '839 claims 1, 17. All but one of the dependent claims—'705 claim 12—depend from these audio-only claims.

1 opposition to Apple's Audio Anticipation Motion, all of Burst's audio-only independent claims  
2 ('995-1, '995-17, '839-1, and '839-17) are nonetheless obvious over Kepley and Kramer. Both  
3 Kepley and Kramer, which are undisputedly prior art, describe what Burst claims to have  
4 invented: faster-than-real-time transmission of compressed audio source information.

5 **a. Kramer Makes Obvious Burst's Audio-Only Claims**

6 Burst makes four arguments in an effort to distinguish Kramer, none of which  
7 could avoid summary judgment of obviousness even if accepted for purposes of anticipation.

8 Burst's first argument is that the DPCM encoding in Kramer is not compression  
9 because the disclosed DPCM supposedly encodes audio in an analog circuit and thus does not  
10 reduce the number of "bits" as the Court required. Even if the Court were to accept this  
11 argument, Burst cannot deny that it would have been obvious to perform DPCM encoding in a  
12 digital circuit, and that in a digital circuit, the number of "bits" is reduced. Indeed, a reference  
13 text cited by Burst's Dr. Gersho states that "due to the availability of digital signal processing  
14 components, digital processing ... is generally the most effective means of implementing a  
15 DPCM algorithm." Audio Anticipation Reply at 5. Burst also argues that Kramer fails to  
16 disclose a "compression means" because it does not mention a "compressor/decompressor." But  
17 Burst cannot dispute that use of a "compressor/decompressor" would have been obvious in light  
18 of Kramer's disclosure of an "encoding system" and a "coder." Dr. Gersho's reference text  
19 describes the "availability of digital signal processing components." Moreover, Mr. Lang admits  
20 that he did not invent compression of audio/video information, or any improved method of data  
21 compression, and his patents do not describe any particular hardware for audio compression, so  
22 standard, known components must have been used.

23 Burst's second argument is that Kramer does not actually disclose faster-than-real-  
24 time output when it says "output will be at a speed much faster (at least 100 times) than that  
25 required for actual sound reproduction." Audio Anticipation Reply at 5. Even if the Court were  
26 to accept Burst's strained logic on this point, Burst cannot deny that Kramer's express disclosure  
27 of outputting faster than real-time would make faster-than-real-time output obvious.

28 Burst's third argument is that Kramer does not disclose "random access storage"

1 even though it states that “the systems of the preset invention” are portable cards whose memory  
2 allows “immediate recall of the data in any portion of the memory.” Audio Anticipation Reply at  
3 9. This teaching would make the use of random access memory obvious, even if it does not  
4 anticipate it, and there can be no dispute that random access memory was known, at least because  
5 Mr. Lang has acknowledged that he did not invent any new storage system.

6 Burst’s fourth and final argument, which applies only to the “compressing”  
7 apparatus claims, is that Kramer fails to disclose the presence of a “compression means” in a  
8 “common housing” with the other components—input, storage, and output means. Apple  
9 believes that this limitation is inherently disclosed by Kramer’s disclosure of an “encoding  
10 system,” but if the Court finds otherwise, obviousness applies. As the Supreme Court stated in  
11 *KSR*, “when a patent ‘simply arranges old elements with each performing the same function it had  
12 been known to perform’ and yields no more than one would expect from such an arrangement, the  
13 combination is obvious.” *KSR*, 127 S.Ct. at 1740. All that is needed here is putting a sheet metal  
14 enclosure around the combination of the “encoding system” and at least one of the described  
15 memory cards, and one would have compression in a common housing with input, storage, and  
16 output. Wicker Decl., ¶ 13. There can be no dispute that the sheet metal, compression, input,  
17 storage, and output would each be performing “the same function it had been known to perform”  
18 and that the combination would “yield no more than one would expect,” so the result is obvious  
19 as a matter of law. *See* Wicker Decl., ¶ 13.

20 **b. Kepley Makes Obvious Burst’s Audio-Only Claims**

21 Burst makes five arguments in an effort to distinguish Kepley, none of which  
22 could avoid summary judgment of obviousness even if accepted.

23 Three of Burst’s arguments about Kepley are similar to the arguments it makes  
24 regarding Kramer. First, Burst argues that Kepley does not disclose the kind of compression  
25 required by the Court’s order when it refers to using “bandwidth compression” and “silence  
26 compression.” Even if this were true, Burst cannot deny that it would have been obvious to  
27 perform compression that met the Court’s definition for the reasons stated above with respect to  
28 Kramer. Moreover, the core of Burst’s no-anticipation argument is that the “voice processor” in

1 Kepley does not necessarily encode differences between audio samples, because, as Dr Gersho  
 2 explains, there is a “rich variety of speech coding algorithms that were known prior to the filing  
 3 of the Kepley patent,” some of which do not encode differences. This argument itself shows that  
 4 it would have been obvious to use a technique such as DPCM, which does encode differences.

5 Second, Burst argues that Kepley fails to teach faster-than-real-time transmission  
 6 notwithstanding its express statement that “use of digital high speed transmission facilities of  
 7 speed greater than 9.6 Kbps enables the exchange of digitally encoded and compressed voice mail  
 8 messages faster than real time speech.” Audio Anticipation Reply at 12-13. Again, even if the  
 9 Court were to accept Burst’s strained logic on this point, Burst cannot deny that Kepley’s  
 10 disclosure of transmitting faster than real-time makes faster-than-real-time transmission obvious.

11 Third, Burst argues that Kepley fails to meet the “common housing” requirement  
 12 of the apparatus claims. Even if this were true, Kepley would still make Burst’s claims obvious  
 13 for reasons analogous to those described in the context of Kramer. Wicker Decl., ¶ 14.

14 Burst’s last two non-anticipation arguments also fail to survive an obviousness  
 15 analysis. Burst claims that Kepley fails to disclose re-transmitting voice mail messages,  
 16 notwithstanding its disclosure of forwarding voice mail. But it is common sense (and obvious)  
 17 that a forwarded voicemail is a re-transmitted voicemail. Burst also argues that Kepley’s  
 18 voicemail is not the claimed “audio/video source information” because it is not a “work.” Again,  
 19 even if that were correct, it would have been obvious that Kepley’s voicemail system could  
 20 transmit songs or other audio that Burst admits are “works.”<sup>30</sup>

## 21 2. The “Compressing” Method Claims (‘839 claims 1, 76, ‘705 claim 12)

22 Each of the three asserted “compressing” method claims—‘839 claims 1 and 76  
 23 and ‘705 claim 12—requires (1) receiving audio/video source information, (2) compressing it, (3)  
 24 storing it, and (4) transmitting it faster than real-time. ‘839 claim 1 was addressed in Apple’s  
 25 Audio Anticipation Motion. The two other claims, ‘839-76 and ‘705-12, differ primarily in that  
 26 they add the requirement that the “audio/video source information” must include “full motion

27  
 28 <sup>30</sup> Kalay Decl, Exh. I [*The Cambridge Companion to Proust*] at 19 (describing listening to the opera over the telephone.)

1 video.” ‘839 claim 76 also requires that the storage be on a “magnetic disk,” while ‘705 claim 12  
2 requires that the burst time period be “substantially” shorter than real time.

3 **a. Walter Anticipates ‘839 Claim 1 And ‘705 Claim 12, And**  
4 **Renders Obvious ‘839 Claim 76.**

5 As explained above, Walter describes a video-on-demand system that uses “inter-  
6 frame differential pulse code modulation” and multiple fiber optic transmission lines in order to  
7 allow “a two hour movie [to] be transmitted in about 31 seconds.” [Walter at 7:37-47]. Thus,  
8 Walter describes what Mr. Lang says he invented: creation of a time-compressed representation  
9 of video source information that is sent faster than real-time.<sup>31</sup> Walter also describes the other  
10 elements of Burst’s claims: a “central data station” that receives video source information,<sup>32</sup>  
11 stores the digital time compressed representation of the video,<sup>33</sup> and transmits it to a receiving  
12 station faster than real-time.<sup>34</sup> Walter does not, however, mention the use of “magnetic disks” for  
13 storage—it describes “suitable high density memory devices.” [2:13-18]. But storage on  
14 magnetic disks was well-known and routine at the time to one of ordinary skill, as evidenced by  
15 Mr. Lang’s testimony that he used existing storage devices, and by the disclosure of such disks in

16 \_\_\_\_\_  
17 <sup>31</sup> Walter discloses the use of compressed audio and video data whose bit rate is reduced by using  
18 an “inter-frame differential pulse code modulation” (DCPM) technique, which according to the  
19 Walter patent was “known in the art.” [7:25-34]. See also 2:15-18 and 7:32-36, 7:32-34. Walter  
20 explains that the compressed video programs can be sent from the “central data station” to a  
21 subscriber’s “data receiving station” at a faster-than-real-time rate. Specifically, “a two hour  
22 movie can be transmitted in about 31 seconds” from the “central data station” to the customer’s  
23 “data receiving station.” [Abstract; 7:44-47].

24 <sup>32</sup> Walter discloses a “central data station” that receives the video data that is compressed and  
25 then stored in the memory module and then transmitted to the “data receiving station.” [6:6-31;  
26 7:38-47; Fig. 2]. “To facilitate the storage and manipulation of the video programs, and to allow  
27 the method to be placed under automatic computer control, the electrical data representing each  
28 video program is converted to compressed digital form and stored in suitable high density  
memory devices.” [2:13-18].

<sup>33</sup> Walter discloses the use of memory module 102 in the receiving station that stores the received  
programs. [7:25-34]. This memory module is “arranged identically to memory modules 24-34  
with sixteen parallel cells for containing the data.” [7:8-11]. Memory modules 24-34 are the  
modules located in the “central data station,” which store the compressed video prior to  
transmission to the customer. [7:8-11; 7:25-34]. Wicker Decl., ¶ 15.

<sup>34</sup> The Walter patent discloses the circuitry and devices for reading compressed video data from  
the memory module and transmitting it to the “data receiving station.” The program is sent  
through the central data station’s “output ports or terminals” which are shown in Figure 2 and  
sent across fiber optic lines at a faster-than-real-time rate. [6:6-31; 7:38-47; Fig. 2]; Wicker  
Decl., ¶¶ 15, 17.

1 the “Peripheral Storage” article Burst referenced in its patent application and submitted to the  
2 Patent Office.<sup>35</sup> Magnetic disks were certainly “suitable high density memory devices.” Wicker  
3 Decl., ¶ 15. Moreover, known magnetic disks could have been used in the normal manner in  
4 combination with the apparatus described in Walter to provide permanent storage of the  
5 compressed digital video information with entirely predictable results. Wicker Decl., ¶ 15.  
6 Accordingly, Walter anticipates ‘839 claim 1 and ‘705 claim 12 and at least renders obvious  
7 claim 76 of the ‘839 patent.

8 **b. Gremillet In Combination With Tescher Makes Obvious The**  
9 **“Compressing” Method Claims**

10 As described above, Gremillet describes a music-on-demand system that transmits  
11 music from a distribution center to a customer much faster than real-time: “a musical work lasting  
12 one hour can be transmitted in 18 seconds.” [Gremillet at 2:8-12]. Tescher discloses a digital  
13 video compression technique that achieves a data rate of 0.239 Mbps (“ $2.39 \times 10^5$  bits per  
14 second”), which is lower than the data rate of the music that is distributed faster than real-time in  
15 Gremillet (“approximately 0.5 Mbits/s”). [Tescher at at 11:52-12:1; Gremillet at 2:3-8]. Given  
16 this lower data rate, it would have been obvious that video data compressed as taught in Tescher  
17 could have been stored, transmitted, and received using Gremillet’s faster-than-real-time media  
18 distribution system. Wicker Decl, ¶ 16. This would have been accomplished with all  
19 components performing their known functions, and would have achieved the predictable and  
20 obvious result of sending compressed video information faster-than-real-time. Wicker Decl, ¶ 16.  
21 Thus, Gremillet in combination with Tescher describes what Mr. Lang says he invented: creation  
22 of a compressed representation of video source information<sup>36</sup> that is sent faster than real-time.<sup>37</sup>

23 <sup>35</sup> Kalay Decl., Exh A [Lang Depo.] at 82:5-15; Kalay Decl., Exh. J [Peripheral Storage].

24 <sup>36</sup> Gremillet refers to the music it transmits as “compressed” but does not expressly describe a  
25 reduction in the number of bits used to represent the music: “[t]he compression of the sound  
26 information can be obtained by writing into a memory and then reading from the memory at the  
27 accelerated speed.” [3:42-45]. Gremillet describes the “information flow rate” of the musical  
28 works it transmits as “approximately 0.5 Mbit/s.” This is less than the data rate of an  
uncompressed wideband audio signal (e.g. CD audio) which is approximately 0.7 Mbit/s,  
suggesting that the audio information in Gremillet has been compressed in a manner that reduces  
the number of bits used to represent the music. See Docket #109, Hemami Decl., at 6 (“digital  
uncompressed wideband audio signal has a data rate of 705.6 Kilobits/second). In any event, as  
described above it would have been obvious to combine Gremillet with any one of several known

1 Gremillet in combination with Tescher also discloses the other elements of Burst's claims:  
 2 receiving audio/video source information,<sup>38</sup> storage of the digital time-compressed representation,  
 3 <sup>39</sup> and transmission to a selected destination (the subscriber station).<sup>40</sup> Gremillet does not disclose  
 4 a "magnetic disk" for storage—it discloses a video disk or a video recorder [3:40-42; 4:26-39].  
 5 However, as explained above, storage on magnetic disks was admittedly well-known and routine  
 6 and could have been substituted for the video disk with predictable results. Wicker Decl., ¶ 16.  
 7 Indeed, the Burst patents themselves describe video disks and magnetic disks as alternatives.<sup>41</sup>  
 8 Thus, each of the "compressing" method claims ('839 claims 1 and 76, and '705 claim 12) is  
 9 rendered obvious by Gremillet in combination with Tescher.

### 10 3. The "Compressing" Apparatus Claims ('995 claim 1, '932 claim 4)

11 Each of the two asserted "compressing" apparatus claims—'995 claim 1 and '932  
 12 claim 4—mirrors the "compressing" method claims, except that they are in apparatus form. Thus,  
 13 each requires (1) an "input port or terminal" for receiving audio/video source information, (2) "a  
 14 compressor/decompressor" for compressing the source information, (3) "random access storage"  
 15 compression technologies, including those disclosed in Tescher for compressing video.

16 <sup>37</sup> Gremillet describes a "need for a distribution system ... which is able to make almost  
 17 instantaneously available to the music lover the musical work of his choice," and discloses to  
 18 meet that need a music on demand system for "the teledistribution of recorded information" that  
 19 "offers[s], to requesting users, any piece of music of their choice . . . [transmitted] in a few  
 20 seconds" from a distribution center using the "transmission channels used in television." [1:47-  
 21 50; 1:64-68; 2:4-7; 3:5-10]. Gremillet explains "a musical work lasting one hour can be  
 22 transmitted in 18 seconds." [2:11-12].

20 <sup>38</sup> Gremillet discloses "a bank of musical recordings recorded at a faster speed than normal (100  
 21 to 200 times faster)." This "information recording bank" can be formed from "the sound  
 22 information . . . by writing into a memory and then reading from the memory at an accelerated  
 23 speed." [Gremillet at 3:42-44]. Tescher discloses that "analog video signals are coupled to the  
 24 input of an analog processor unit." [Tescher at 5:32-34, Fig. 1].

23 <sup>39</sup> Gremillet's "central data station" uses a "recording support [which] can be a video disk." [3:40-  
 24 42]. The user's equipment has a "video recorder" which records the transmitted information: "the  
 25 writing phase continues until the work has been completely recorded. However, as stated  
 26 hereinbefore, this phase is of a short duration, in view of the high compression level of the  
 27 recorder information (greater than 100)." [4:16-40]. This "recording can be kept on the video  
 28 recorder for the purpose of listening to it later." [4:36-39].

26 <sup>40</sup> Gremillet describes a "broadcasting means consisting of a transmitter 31, a transmitting  
 27 antenna 32, a receiving antenna 33, or a cable or optical fibres 34," that connect the distribution  
 28 center with the subscriber equipment, and whose information "flow rate is approximately 100  
 Mbits/s" [4:1-7].

<sup>41</sup> Kalay Decl., Exh. L ['932 patent] at 6:37-39 ("Other types of memory include the above  
 mentioned optical disc memories, bubble memories, and magnetic disks").

1 for storing the compressed information, and (4) an “output port or terminal” for transmitting it  
 2 faster than real-time.<sup>42</sup> Furthermore, because of the agreed construction of “transceiver  
 3 apparatus,” these claims require each of these elements to be in a “common housing.”

4 ‘995 claim 1 was addressed in Apple’s Audio Anticipation Motion. ‘932 claim 4  
 5 differs from ‘995 claim 1 only in that the audio/video source information must include “full  
 6 motion video” information, and in that the storage means must be a “magnetic disk.”

7 **a. Walter Anticipates ‘995 Claim 1 And Renders Obvious ‘932**  
 8 **Claim 4**

9 As described above, the video-on-demand system of Walter allows “a two hour  
 10 movie [to] be transmitted in about 31 seconds” from a “central data station” to a “data receiving  
 11 station,” and thus discloses what Burst claims to have invented.

12 Applying Walter to the remaining elements of the “compressing” apparatus claims  
 13 turns on whether Walter’s compression circuitry<sup>43</sup> is located inside the “central data station” or  
 14 not. If the compression circuitry in Walter is understood to be part of its “central data station,”<sup>44</sup>  
 15 then that “central data station” anticipates ‘995 claim 1 and all the elements of ‘932 claim 4  
 16 except the “magnetic disk.” Specifically, Walter’s “central data station” includes an “input  
 17 means,”<sup>45</sup> a “compression means,”<sup>46</sup> a “random access storage means,”<sup>47</sup> and an “output

18 <sup>42</sup> See Docket # 104, Claim Construction Order.

19 <sup>43</sup> Walter describes video data that is compressed using circuitry that performs an “inter-frame  
 20 differential pulse code modulation technique [that] is known in the art, [although] additional  
 21 circuitry may be added to avoid problems caused by rapid motion in the picture.” [7:25-34].

22 <sup>44</sup> As explained above, Walter suggests that compression occurs in the central data station by  
 23 stating that “the digital data is compressed in memory modules 24-34 [which are in the central  
 24 data station] by a technique known as inter-frame differential pulse code modulation” [7:26-28].

25 <sup>45</sup> Walter explains that “the electrical data representing each video program is converted into  
 26 compressed digital form,” and discloses that this compression is performed in (unspecified)  
 27 circuitry. [2:16-19; 7:25-34]. While not expressly mentioned, this circuitry inherently has an  
 28 input that receives audio/video source information and is coupled to the circuitry for compressing  
 audio/video data, and thus is the claimed “input means.” Wicker Decl., ¶ 15.

<sup>46</sup> As previously stated, Walter describes circuitry that performs an “inter-frame differential pulse  
 code modulation technique.” [7:25-34].

<sup>47</sup> Walter discloses storing the compressed video in “suitable high density memory devices.”  
 [2:17-19] Magnetic disks and optical disks were certainly “suitable high density memory  
 devices” and are also random access storage devices, and are thus disclosed by implication.  
 Wicker Decl., ¶ 16. At a minimum, Walter makes obvious the use of random access storage  
 such as magnetic disks, because as explained previously storage on magnetic disks was well-

1 means,”<sup>48</sup> all within the “common housing” of the central data station.

2 At a minimum, regardless of whether the compression circuitry in Walter is part of  
3 its “central data station,” Walter makes obvious the combination of elements required by ‘995  
4 claim 1, because housing the input, compression, storage, and output functions together of the  
5 central data station would have been routine and straightforward. Wicker Decl., ¶ 15. There can  
6 be no dispute that in this arrangement the housing, compression, input, storage, and output would  
7 each be performing “the same function it had been known to perform” and that the combination  
8 would “yield no more than one would expect,” *See* Wicker Decl., ¶ 15. Thus, the “central data  
9 station” is the claimed “transceiver” or an obvious variant thereof. *KSR*, 127 S.Ct. at 1740.

10 Furthermore, as described above, the magnetic disk storage required by ‘932 claim  
11 4 was a known element that it would have been obvious and routine to add it to Walter, with  
12 predictable results. Wicker Decl., ¶ 16.

13 **b. Gremillet In Combination With Tescher Renders Obvious ‘995**  
14 **Claim 1 and ‘932 Claim 4**

15 As explained above, Gremillet in combination with Tescher describes what Mr.  
16 Lang says he invented: creation of a compressed representation of video source information that  
17 is sent faster than real-time. The music-on-demand cable system of Gremillet ‘586 combined  
18 with the video compression system of Tescher also renders obvious the remaining elements of  
19 Burst’s “compressing” apparatus claims. Specifically, Gremillet discloses a “distribution centre  
20 10 [that] comprises a bank 11 of musical recordings recorded at a faster speed than normal” on “a  
21 video disk or video recorder.” [3:37-42]. This bank of recordings on video disk satisfies the  
22 “random access storage means” limitation. It also renders obvious the “magnetic disk” limitation

23 known and routine at the time to one of ordinary skill. This is shown by Mr. Lang’s testimony  
24 that he used existing storage devices, and by the disclosure of such disks in the “Peripheral  
25 Storage” article Burst referenced in its patent application and submitted to the Patent Office.  
26 [‘995 patent at 4:2-5]. Moreover, known magnetic disks could have been used in the normal  
manner in combination with the apparatus described in Walter ‘387 to provide permanent storage

27 of the compressed digital video information with entirely predictable results. Wicker Decl., ¶ 16.  
28 <sup>48</sup> The compressed audio/video information in Walter is sent through the central data station’s  
“output ports or terminals” which are shown in Figure 2 and sent across fiber optic lines. [6:6-31;  
7:38-47; Fig. 2]. At a minimum, Walter makes obvious the use of “output ports or terminals” for  
transmitting data. Wicker Decl., ¶ 17.

1 because magnetic discs were known to be substituted for the optical disks, as shown by the Burst  
 2 patents themselves. *See* Wicker Decl., ¶ 19. Furthermore, it is inherent that the music entered  
 3 this bank of recordings somehow, and it would have been obvious to receive it through an input  
 4 port or terminal from a standard audio device. Wicker Decl., ¶ 20. Thus, Gremillet makes  
 5 obvious the “input means” of the claims. Gremillet also discloses the “output means”: it  
 6 describes transmitting music through “broadcasting means consisting of a transmitter 31, a  
 7 transmitting antenna 32, a receiving antenna 33, or a cable or optical fibres 34,” that connects the  
 8 distribution center with the subscriber equipment. [4:1-7]. Figure 1 of Gremillet illustrates this  
 9 broadcasting means as being outside the dotted line indicating the “distribution center” but  
 10 coupled to it. Either the broadcasting means itself, or the illustrated output from the distribution  
 11 center to the broadcasting means, satisfies the “output means” requirement of the claims. Thus,  
 12 Gremillet shows a “distribution center” (i.e. a “transceiver apparatus”) with “input means,”  
 13 “random access storage means,” and “output means.”

14 As explained above, Tescher discloses a digital video compression technique that  
 15 achieves a data rate of 0.239 Mbps, which is lower than the data rate of the music that is  
 16 distributed faster than real-time in Gremillet, and would thus have been obvious to use in  
 17 conjunction with Gremillet’s distribution system. Tescher illustrates in Fig. 1 “a block diagram  
 18 illustrating an encoder incorporating the invention.” [5:7-8]. This encoder uses both the  
 19 intraframe and interframe compression mentioned in the Court’s claim construction order. [1:40-  
 20 45; 1:59-66; 2:32-43]. Thus, the illustrated video encoder is a “compressor” that satisfies the  
 21 Court’s construction of “compression means.”

22 Accordingly, in combination Gremillet and Tescher make obvious Burst’s  
 23 “compressing” apparatus claims, because they collectively disclose a distribution center with  
 24 “input means,” “compression means,” “random access storage,” and “output means.”

25 **4. The “Receive Compressed” Method Claims (‘839 claims 17 and 77,  
 26 ‘705 claim 21) Are Made Obvious By Walter and the Combination of  
 Gremillet and Tescher**

27 Each of the three asserted “receive compressed” method claims—‘839 claims 17  
 28 and 77 and ‘705 claim 21—requires (1) receiving compressed audio/video source information

1 faster than real-time, (2) storing it, and (3) re-transmitting it faster than real-time. These claims  
2 thus differ from the previously discussed method claims in that they require receiving compressed  
3 source information, rather than receiving source information and then compressing it.

4 ‘839 claim 17 was addressed in Apple’s Audio Anticipation Motion. The two  
5 other claims, ‘839 claim 77 and ‘705 claim 21, differ primarily in that they add the requirement  
6 that the “audio/video source information” include “full motion video.” ‘705 claim 21 also  
7 requires the video be “selected from a video library” and that the burst time period be  
8 “substantially” shorter than real time.

9 As explained above, in Walter’s video-on-demand system the “central data  
10 station” transmits a “a two hour movie can be transmitted in about 31 seconds” to a “receiving  
11 station.” [7:37-47]. The compressed movie is stored in “suitable high density memory devices,”  
12 organized into “memory modules,” which are “arranged identically” at the “central data station”  
13 and at the “receiving station.” [7:8-11]. Walter also describes in some detail the circuitry and  
14 devices used for reading data from the memory modules, converting it into optical data,  
15 transmitting it through multiple parallel fiber optic lines faster than real-time to the receiving  
16 station, where it is captured and stored. [Abstract; 4:3-7:47]. In other words, Walter expressly  
17 describes both the apparatus for faster-than-real-time transmission of video data from the memory  
18 modules, and the apparatus for receiving and storing this faster-than-real-time transmission in the  
19 memory modules. Walter does not, however, explicitly disclose the specific *order* of the claimed  
20 steps: it discloses “receiving compressed” (at the receiving station”), storing (at both the receiving  
21 station and the central data station) and “transmitting” (at the central data station), but in the  
22 opposite order. Nonetheless, it would have been obvious and routine for one of skill in the art to  
23 perform these steps in the order required by the claims. Wicker Decl., ¶ 15. The claimed order  
24 could be motivated, for example, by a desire to quickly transfer a movie from a content provider  
25 such as a movie studio to the central data station. Wicker Decl., ¶ 15. The same analysis applies  
26 to the combination of Gremillet and Tescher, because again, each of the constituent steps of the  
27 method is disclosed, just not in the required order. Wicker Decl., ¶¶ 18, 20-21.

28 Regarding the additional limitations of ‘705 claim 21, Walter’s disclosure that “a

1 two hour movie can be transmitted in about 31 seconds” satisfies the “substantially” faster than  
 2 real-time limitation, as does Gremillet’s disclosure that “a musical work lasting one hour can be  
 3 transmitted in 18 seconds.” Furthermore, Walter expressly discloses a video library,<sup>49</sup> Gremillet  
 4 expressly discloses a music library,<sup>50</sup> and Kepley expressly discloses an audio library.<sup>51</sup>

5 Accordingly, each of Burst’s three asserted “receive compressed” method claims  
 6 would have been obvious in light of either Walter or Gremillet in combination with Tescher.

### 7 **5. The “Receive Compressed” Apparatus Claim (‘995 claim 17)**

8 Burst’s only “receive compressed” apparatus claim, ‘995 claim 17, encompasses  
 9 audio-only information. Thus, Burst does not have an “receive compressed” apparatus claim that  
 10 is limited to full motion video. Claim 17 of the ‘995 was addressed in Apple’s Audio  
 11 Anticipation Motion. As explained above, if this claim is not anticipated by Kramer and/or  
 12 Kepley, it is rendered obvious by those references.

### 13 **C. The Dependent Claims**

#### 14 **1. The “Editing” And “Monitor” Limitations (‘995 claims 2, 3, 22, 80; 15 ‘839 claims 2, 3, ‘705 claim 13)**

16 Several of Burst’s dependent claims add a limitation requiring “editing” the  
 17 audio/video information,” and some further require “monitoring” during editing. Most of these  
 18 “editing” claims encompass audio-only representations, with the exception of ‘705 claim 13,  
 19 which requires editing video content. Claim 22 of the ‘995 Patent adds to claim 1 a  
 20 decompression means and a monitor means—the decompression means is discussed below.

21 Generally, the editing limitations in Burst’s patents were obvious because it was  
 22 known that once audio/video information was stored in digital form, it could be edited. Wicker

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 24 <sup>49</sup> See, e.g., Walter at 3:59-61 (“The electronic switching system 22 is electrically connected to a  
 25 library of memory modules 24, 26, 28, 30, 32, 34 . . .”) and 6:7-10 (“In this particular  
 embodiment, only six such memory modules 24-34 are illustrated, and each one contains a  
 specific program for broadcasting.”).

26 <sup>50</sup> See, e.g., Gremillet ‘586 at 3:38-40 (“In a more detailed manner, the distribution centre 10  
 27 comprises a bank 11 of musical recordings recorded at a faster speed than normal (100-200 times  
 faster).”)

28 <sup>51</sup> See, e.g., Kepley ‘003 at 7:64-67 (“Both voice and non-voice files are stored by data base  
 processor system 113 for voice mail service system 110. The voice files will include  
 announcements and messages.”).

1 Decl., ¶ 24. As described above, the CompuSonics Corporation’s DSP-2000 product digitized  
2 and compressed audio data and performed editing of the digital audio files: “Because you are  
3 now dealing wholly within the digital domain, the DSP-2002 lets you take advantage of the  
4 following features: ... real-time trial edits ... razor-sharp edits, butt splices, and cross-fades.”  
5 Kalay Decl. Exh. H at APBU-00016099. The CompuSonics DSP-2000 Series demonstrates that  
6 editing digitized and compressed audio information was known prior to Burst’s patent  
7 application. The fact that digital information is readily edited is confirmed, for example, by  
8 Kepley, which describes editing the contents of a voicemail by appending comments to it.  
9 [Kepley at 1:38-43]. Kepley also describes a processor as having the ability to “insert, modify,  
10 [and] delete data in file.” [Kepley at 6:68-8:9].

11 The CompuSonics system described also included the ability to monitor the stored,  
12 time compressed digital representation of the audio information during editing.<sup>52</sup> Indeed, it is  
13 clear that during editing, it is desirable for the user to be able to “identify” or “monitor” what s/he  
14 is editing, be it through a display or speakers. Allowing the user to “identify” or “monitor” what  
15 s/he is editing is a known element, and using it in its known manner cannot be said to produce  
16 “unexpected results.” Wicker Decl., ¶ 24.

17 Claims 2 and 3 of ‘995 Patent adds to apparatus claim 1 the limitation of an  
18 “editing means”<sup>53</sup> for editing the time compressed representation. Apple does not contend that  
19 the CompuSonics system literally satisfies the Court’s construction of “editing means,” because  
20 that construction requires the editing instructions to be located in ROM. However, it would have  
21 been obvious that software designed to operate in RAM could be loaded into ROM and run from  
22 ROM, with predictable results. Wicker Decl., ¶ 25.

23 In sum, as shown by Kepley and CompuSonics, the addition of editing and/or  
24 monitoring to any of the references discussed above would have been routine for one of ordinary  
25 skill, and would have yielded predictable results. Wicker Decl., ¶¶ 24-25. Thus, the editing and  
26

27 <sup>52</sup> See e.g. Kalay Decl., Exh. H at APBU-00016100 (describing CompuSonics’ “displays”).

28 <sup>53</sup> The Court has construed “editing means” to be “a processor executing stored editing software in ROM, a controller, and a high speed data bus, plus equivalents.” *Id.*

1 monitoring claims are obvious in light of CompuSonics and the other references discussed herein.

2 **2. “Semiconductor Memory” (‘995 claim 7)**

3 The storage means identified above for Kramer, Kepley, Walter, and Gremillet all  
4 include semiconductor memory.<sup>54</sup> In any event, random access memories comprising  
5 semiconductor memories were well-known to those of ordinary skill in the art at the time, as  
6 shown for example by the statements in Burst’s patents. *See* Wicker Decl., ¶ 23. Thus, Kramer,  
7 Kepley, and Walter all anticipate claim 7 or render claim 7 obvious when combined with the  
8 knowledge of one of ordinary skill, and Gremillet anticipates claims 7 and renders claim 7  
9 obvious when combined with the knowledge of one of ordinary skill and/or Tescher.

10 **3. “Analog To Digital Conversion” (‘995 claim 8)**

11 Claim 8 of the ‘995 patent adds to claim 1 the requirement of an analog to digital  
12 converter means that converts analog source information to digital form before passing it to the  
13 previously claimed compression means. Gremillet and Kepley expressly disclose that the audio  
14 source information is analog information and the use of an analog to digital converter in the  
15 transceiver. [Gremillet at 5:7-9, Kepley at 1:63-2-2]. Tescher discloses both an analog to digital  
16 converter and the compression of digital audio/video information into a digital time compressed  
17 representation thereof. [5:32-37]. As explained above, the storage means of Gremillet and  
18 Kepley store digital time compressed representations of audio/video source information. In any  
19 event, analog audio/video source information, the use of analog to digital converters, and the  
20 compression and storage of digital information were all very well known to those of ordinary  
21 skill, and the combination of these elements with the teachings of Kramer, Kepley,<sup>55</sup> or Walter  
22 would have been routine for one of ordinary skill. Wicker Decl., ¶¶ 8-9, 22. Thus, claim 8 is  
23 obvious in light of any of these references combined with the knowledge of one of ordinary skill.

24 **4. “Digital Source Information” (‘995 claim 9 and ‘839 claim 9)**

25 Claim 9 of the ‘995 and ‘839 patents each add to claim 1 the requirements that: (1)  
26

27 <sup>54</sup> Wicker Decl., ¶ 23.

28 <sup>55</sup> The form of the source information in Walter is not expressly disclosed. However, one of skill in the art would have understood that analog to digital conversion occurred. Wicker Decl., ¶ 22.

1 the audio/video source information comprises digital audio/video source information; (2) the  
2 compression means compresses the digital audio/video source information into a digital time  
3 compressed representation having an associated [burst] time that is shorter than real time; and (3)  
4 the random access storage means stores the compressed digital time compressed representation.  
5 Claim 9 is thus the same as claim 8 except that the source information is in digital form and no  
6 analog to digital converter is required. Anticipation of claim 9 by Kramer and Kepley was  
7 addressed in Apple's Audio Anticipation Motion. To the extent that these claims are not  
8 anticipated by Kramer and Kepley, claim 9 is obvious in light of those references individually  
9 combined with the knowledge of one of ordinary skill. Wicker Decl., ¶ 22. Because one of  
10 ordinary skill would be equally capable of designing a system with analog audio/video source  
11 information that was then converted to digital audio/video information as a system with digital  
12 audio/video data source information, and because the combination of the elements of claim 9 is  
13 routine and predictable, claim 9 is also obvious in light of either of Walter or Gremillet '586 and  
14 Tescher, combined with the knowledge of one of ordinary skill.

15 **5. "Computer-Generated Information" ('995 claim 15 and '839 claim 15)**

16 Claim 15 of the '995 and '839 patents each adds to claim 9 the requirement that  
17 the input means is coupled to an external computer and the digital audio/video source information  
18 comprises computer-generated audio/video information. CompuSonics expressly discloses the  
19 use of computer-generated audio/video information.<sup>56</sup> It would have been obvious and  
20 straightforward to use computer-generated information in combination with the references  
21 discussed herein. Wicker Decl., ¶ 26.

22 **6. "Video Library" ('995 claim 19 and '839 claim 19)**

23 Claim 19 of the '995 Patent adds to claim 17 (discussed above) a video library  
24 storing a multiplicity of items of audio/video source information in said time compressed  
25 representation for selective retrieval. Claim 19 of the '839 Patent adds to claim 17 the  
26 requirement that the source information comprises information received over a communications

27 \_\_\_\_\_  
28 <sup>56</sup> Kalay Decl., Exh. H at APBU-00016099 ["S-t-r-e-t-c-h a sound" performed by the CompuSonics computer].

1 link from a video library storing a multiplicity of programs of time compressed representations of  
 2 audio/video source information. As described above, Walter expressly discloses a video library,<sup>57</sup>  
 3 and Gremillet expressly discloses a music library.<sup>58</sup>

4 **7. “Removable Recording Medium” (‘995 claims 44, 45, 47; ‘839 claims**  
 5 **45, 47) and “Optical Disk” (‘995 claims 51 and 52; ‘839 claim 51)**

6 Claims 44, 45, and 47 of the ‘839 and ‘995 patents adds to claims 1, 2, and 17,  
 7 respectively, the requirement of recording a compressed representation onto a removable  
 8 recording medium. The use of removable recording media, including optical disks, was well-  
 9 known and routine to one of ordinary skill. Wicker Decl., ¶ 27; Kalay Decl., Exh. L [‘932 patent]  
 10 at 4:7-17. Kramer shows the use of removable recording media, and Gremillet expressly  
 11 discloses the use of removable recording media – video tape or video disk. [Gremillet at 3:41]. It  
 12 would have been a routine design exercise with predictable results to add removable recording  
 13 media (including optical disk media) to those systems that are not expressly described as  
 14 including it. Wicker Decl., ¶ 27. Accordingly, these claims are obvious.

15 **8. The Decompression Limitations (‘965 claims 20, 22, and 23, and ‘839**  
 16 **claims 20, 28)**

17 Claims 20, 22 and 23 of the ‘965 patent, and claims 20 and 28 of the ‘839 patent  
 18 add a decompression limitation, along with one or more limitations discussed above. Each of the  
 19 references discussed herein expressly describe decompression. *See, e.g.*, Kramer at 4:27-64,  
 20 Kepley at 15:33-44, Walter at 7:26-36, Gremillet at 3:55-62, Tescher at 4:24-42. Accordingly,  
 21 the decompression limitations have no impact on validity with respect to these references, and  
 22 claims 20, 22 add 23 of the ‘965 patent, and claims 20 and 28 of the ‘839 patent are invalid as  
 23 obvious based upon the same combinations as the claims upon which they depend.

24  
 25 <sup>57</sup> *See, e.g.*, Walter at 3:59-61 (“The electronic switching system 22 is electrically connected to a  
 26 library of memory modules 24, 26, 28, 30, 32, 34 . . .”) and 4:7-10 (“In this particular  
 27 embodiment, only six such memory modules 24-34 are illustrated, and each one contains a  
 28 specific program for broadcasting.”).

<sup>58</sup> *See, e.g.*, Gremillet ‘586 at 3:38-40 (“In a more detailed manner, the distribution centre 10  
 comprises a bank 11 of musical recordings recorded at a faster speed than normal (100 to 200  
 times faster).”).

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**V. CONCLUSION**

For the reasons stated herein, Apple’s Motion For Summary Judgment of Invalidity should be granted.

Dated: July 13, 2007

WEIL, GOTSHAL & MANGES LLP

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