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UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

APPLE COMPUTER, INC.,

Plaintiff,

v.

BURST.COM, INC.,

Defendant.

Case No. C 06-0019 MHP

APPLE COMPUTER INC.'S MOTION FOR SUMMARY JUDGMENT OF INVALIDITY BASED ON KRAMER AND AT&T PATENTS

Date: February 8, 2007
Time: 9:00 a.m.
Hon. Marilyn Hall Patel

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

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I.

INTRODUCTION

Burst seeks claim constructions from this Court that would allow its claims to cover virtually any faster-than-real-time transfer of audio or video information. Under Burst's proposed constructions, particularly its proposed constructions of the terms in the phrase "time compressed representation having an associated burst time period," Burst's patents are invalid because they are anticipated by the prior art.

As discussed in detail in Apple's Claim Construction Brief, Burst's patents are limited to systems that store and transmit "time compressed representations" of audio or video signals. Burst's patents also require that this "time compressed representation" have "an associated burst time period." In an attempt to read its patents to cover Apple's iPod and iTunes products, Burst attempts to avoid the ordinary meaning of "time compressed" and neuter the language "associated burst time period" in order to claim all *data compression* that allows faster-than-real-time transfer of audio or video data. For example, Burst contends Apple's iPod products infringe its claims because each iPod "receives audio or video programs in compressed form, stores them, and transmits them faster than real time."[1] However, Burst did not invent the combination of data compression and faster-than-real-time transmission for audio or video information. Faster-than-real-time transmission of audio and video information in combination with data compression was well known in the art long before June of 1987, the month in which Burst claims to have conceived of faster-than-real-time transmission.[2]

For purposes of this motion, Apple focuses on two prior art patents that are particularly clear in disclosing data compression coupled with faster-than-real-time transmission in the area of audio signals. The Kramer patent, which was filed in 1982, describes a portable digital music player that transfers compressed digital music onto and off its digital memory card "at a speed much faster (at least 100 times) than that required for actual sound reproduction."[3]

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[1] Burst Reply Claim Construction Brief at 3.

[2] Kalay Decl., Exh. 3 [7.23.03 Lang Deposition] at 113-115; Brown Invalidity Decl., Exh. 1 [Burst's Answer to Interrogatory No. 1].

[3] Brown Invalidity Decl., Exh. 2 [Kramer patent] at 4:24-26.

Just like the allegedly infringing iPod, the portable music player disclosed in the Kramer patent receives audio programs in compressed form, stores them, and transfers them faster than real time. The AT&T patent, filed in April 1987, describes a voicemail system that allows voice messages to be transmitted between corporate campuses in compressed digital form "faster than a realtime voice message transmission."[4] Again, just like the allegedly infringing iPod, the voicemail system of the AT&T patent receives audio content in compressed form, stores it, and transfers it faster than real time. Accordingly, Apple seeks summary judgment that under Burst's proposed constructions, the Kramer and AT&T patents anticipate the Burst patent claims that encompass audio-only information, which are the bulk of the claims of the '839 and '995 patents.[5]

While this motion is based on these two prior art patents, this should not be taken to imply that these patents represent the complete extent of the prior art. Both data compression and transmission were well established long before the time of Burst's alleged invention. Modern data compression goes back at least to the techniques described by David Huffman in his 1952 paper "A Method for the Construction of Minimum-Redundancy Codes" and Abraham Lempel and Jacob Ziv's 1978 paper "A Universal Algorithm For Sequential Data Compression."[6] In the area of data transmission, to take one example, the now ubiquitous ethernet network technology goes back at least to a 1976 paper by Robert Metcalfe and David Boggs entitled "Ethernet: Distributed Packet Switching for Local Computer Networks," which described transmission at 3 megabits/s.[7] That is a data rate fast enough to transmit even uncompressed audio faster than real-time.[8] Burst's claim to have invented transmitting data-compressed audio or video data faster-

[4] Brown Invalidity Decl., Exh. 3 [AT&T patent] at 2:63-66.

[5] As discussed below, Apple seeks summary judgment of invalidity for claims 1, 9, 15, 16, 17, and 44 of the '995 patent and claims 1, 9, 15, 16, 17, 44, and 47 of the '839 patent. Apple also contends that the Kramer and AT&T references invalidate the remaining asserted claims, but does not seek summary judgment on those claims at this time. The remaining claims are limited to video information, or contain other specific limitations and this motion is directed only at audio.

[6] Brown Invalidity Decl., Exh. 5 [1952 Huffman paper]; Brown Invalidity Decl., Exh. 6 [1978 Lempel & Ziv paper].

[7] Brown Invalidity Decl., Exh. 7 [1976 Metcalfe & Boggs paper].

[8] Uncompressed CD-quality audio is 44,100 samples per second and 16 bits per sample, meaning 705,600 bits per second. That is well under 3,000,000 bits per second (i.e., 3 megabits/s).

than-real time is untenable because the concept was an inherent result of the use of these commonplace technologies. This is reflected by the fact that neither the Kramer patent nor the AT&T patent *claims* the faster-than-real-time transmission of data compressed audio that they each plainly disclose—apparently neither set of inventors believed that concept to be patentable.[9]

II.

LEGAL BACKGROUND

Summary judgment of invalidity is regularly affirmed by the Federal Circuit based on anticipation by prior art.[10] A prior art reference anticipates a claim if it discloses "each and every limitation" of the claimed invention.[11] The prior art reference's disclosure of the claimed invention's limitations must be "such that a skilled artisan could take its teachings in combination with his own knowledge of the particular art and be in possession of the invention."[12]

Although there is a presumption of validity, the fact that the Patent Office did not receive prior art for consideration must be taken into account. "What the production of new prior art or other invalidity evidence not before the PTO does is to eliminate, or at least reduce, the element of deference due the PTO, thereby partially, if not wholly, discharging the attacker's burden, but neither shifting nor lightening it or changing the standard of proof."[13]

III.

THE BURST PATENTS

Burst seeks claim constructions from this Court that would allow its claims to cover virtually any faster-than-real-time transfer of audio or video information.

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[9] Brown Invalidity Decl., Exh. 2 [Kramer patent]; Brown Invalidity Decl., Exh. 3 [AT&T patent].

[10] *Schering Corp. v. Geneva Pharms., Inc.*, 339 F.3d 1373 (Fed. Cir. 2003) (affirming grant of summary judgment of invalidity due to anticipation); *Telemac Cellular Corp. v. Topp Telecom, Inc.*, 247 F.3d 1316 (Fed. Cir. 2001) (same); *In re Cruciferous Sprout Litigation*, 301 F.3d 1343 (Fed. Cir. 2002) (same).

[11] *Schering*, 339 F.3d at 1377 (citation omitted).

[12] *In re Graves*, 69 F.3d 1147, 1152 (Fed. Cir. 1995) (citation omitted); *In re Baxter Travenol Labs.*, 952 F.2d 388, 390 (Fed. Cir. 1991).

[13] *American Hoist & Derrick Co. v. Sowa & Sons*, 725 F.2d 1350, 1360 (Fed. Cir. 1984) (emphasis omitted). Neither the Kramer patent nor the AT&T patent were considered by the PTO during prosecution of the Burst patents. *See* Brown CC Decl., Exh. A ['995 patent]; Exh. AA ['839 patent] (showing the Kramer and AT&T patents were not cited as prior art).

As discussed in Apple's Claim Construction Brief, Burst's claims use one of two related styles. A first style of claim requires (1) receiving audio/video data, (2) compressing it, (3) storing it, and (4) transmitting it in a shorter time than would be required for playback. These four features are illustrated in Claim 1 of the '839 patent:

> **1.** A method for handling audio/video source information, the method comprising:
> receiving audio/video source information;
> compressing the received audio/video source information into a time compressed representation thereof having an associated burst time period that is shorter than a time period associated with a real time representation of the received audio/video source information;
> storing said time compressed representation of the received audio/video source information; and
> transmitting, in said burst time period, the stored time compressed representation of the received audio/video source information to a selected destination.

A second style of claim shortens this sequence to three steps by requiring that the audio/video source information be compressed before it is received. Claim 17 of the '839 patent illustrates this style of claim:

> **17.** A method for handling audio/video source information, the method comprising:
> receiving audio/video source information as a time compressed representation thereof, said time compressed representation of said audio/video source information being received over an associated burst time period that is shorter than a real time period associated with real time playback of said audio/video source information;
> storing the time compressed representation of said received audio/video source information; and
> transmitting, in said burst time period, the stored time compressed representation of said received audio/video source information to a selected destination.

In both of these two types of claims, the audio/video data is "time compressed" into a representation having "an associated burst time period," which must be shorter (i.e. faster) than real time. This data is either received and then "time compressed" (Claim 1), or received already in "time compressed" form (Claim 17). Next, the "time compressed representation" is stored, and then the "stored time compressed representation" is transmitted "in said burst time period," i.e. the faster-than-real-time period that was "associated" with the time compressed representation in the earlier compressing or receiving step. These same basic steps are part of each of the asserted claims in this case.

Burst's proposed constructions seek to avoid the ordinary meaning of "time compressed" and neuter the language "associated burst time period" in order to allow its claims to cover essentially any and all *data compression* that allows faster-than-real-time transfer of audio or video data, so long as the transfer occurs over "an external communications link" to a "device capable of playback."[14] Substituting Burst's proposed constructions into Claim 1 of the '839 patent in parentheses—with the language in brackets added so the claim remains in sentence form—produces the following:

> **1**. A method for handling (an audio and/or video work having a temporal dimension), the method comprising:[15]
>
> receiving (an audio and/or video work having a temporal dimension);[16]
>
> (reducing the number of bits necessary to represent the audio/video source information) [by compressing it] into (a version of audio/video source information having a reduced number of bits that allows data transfer over an external communications link in a time period that is shorter than the time required for normal playback);[17]
>
> storing (the version of audio/video source information having a reduced number of bits that allows data transfer over an external communications link in a time

[14] Burst's Opening Claim Construction Brief at 48-49 (constructions for "time compressed representation … having an associated time period …" and related terms); Burst's Opening Claim Construction Brief at 45 (construction for "compressing" terms); Burst's Opening Claim Construction Brief at 35-36 (construction of "audio/video source information"); Burst's Opening Claim Construction Brief at 72 (constructions of "transmitting" terms)

[15] Construction from Burst's Opening Construction Brief at 35-36.

[16] Construction from Burst's Opening Construction Brief at 35-36.

[17] Constructions, respectively, from Burst's Opening Claim Construction Brief at 45 and 48-49.

period that is shorter than the time required for normal playback)[18]; and

(sending to an external device capable of playback), (in a time period that is shorter than the time required for normal playback), (the version of audio/video source information having a reduced number of bits that allows data transfer over an external communications link in a time period that is shorter than the time required for normal playback), to a selected destination.[19]

As this inspection of this language shows, under Burst's proposed constructions, the claims cover receiving an audio and/or video "work," compressing it into a version that has a "reduced number of bits that allows data transfer over an external communications link in a time period that is shorter than the time required for normal playback," storing that compressed version, and then sending the compressed version to "an external device capable of playback" in less time that it takes to play the work. This shows that Burst contends its claims cover essentially any and all data compression that allows faster-than-real-time transfer of audio or video data, so long as the transfer occurs over "an external communications link" to a "device capable of playback."

However, Burst was not the first to combine data compression with storage and faster-than-real-time transmission of audio and video, even when limited to transfers over "an external communications link" to a "device capable of playback." As described below, the Kramer and AT&T patents show that receiving, compressing, storing, and transmitting audio faster than real-time had been done before Burst.

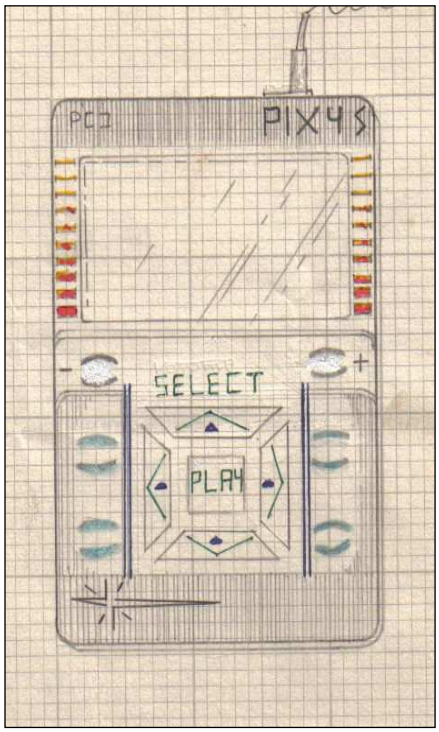
[18] Construction from Burst's Opening Construction Brief at 48-49.

[19] Constructions, respectively, from Burst's Opening Construction Brief at 72, Brown Invalidity Decl., Exh. 4 [Joint Claim Construction Statement] Appendix C at 3; and Burst's Opening Construction Brief at 48-49.

IV.

THE KRAMER PATENT ANTICIPATES BURST'S AUDIO CLAIMS AS A MATTER OF LAW

The Kramer patent was originally filed in 1982 and is indisputably prior art to the Burst patents.[20] The Kramer patent discloses a portable digital music player, pictured below, that transfers compressed digital music onto and off its digital memory card "at a speed much faster (at least 100 times) than that required for actual sound reproduction."[21] The portable music player disclosed in the Kramer patent contains all of the elements that Burst claims are infringing in Apple's iPod. Thus, the Kramer patent anticipates the claims Burst has asserted against the iPod under Burst's proposed constructions.



A. The 1982 Kramer Patent Discloses a Portable Digital Music Player With Faster-Than-Real-Time "Transmission"

The Kramer patent describes a system that allows storing and playing digital music on a portable music player. Mr. Kramer's 1979 drawing of a portable "replay unit" is shown to the right. The system revolves around the memory cards, which are "preferably of standard credit card areal size" and "3 to 4 mm" thick.[22] One of these cards can be used to hold "3 1/2 minutes of music" (i.e. one song) in digital, compressed form.[23] These one-song music cards were designed

[20] Brown Invalidity Decl., Exh. 2 [Kramer patent]. The Kramer patent issued on May 19, 1987, based on a European Patent Application that was filed November 1, 1982 and published July 1, 1983. Kramer is prior art to the '839 Patent under 35 U.S.C. §102(b) because it issued more than one year before December 27, 1988, the earliest priority date of the '839 Patent. The European Patent Application that led to the Kramer patent is also prior art because it was published more than five years before the Burst patent application was filed.

[21] Brown Invalidity Decl., Exh. 2 [Kramer patent] at 4:24-26.

[22] *Id.* at 2:38-40.

[23] *Id.* at 3:35-37; *see generally id.* at 3:5-41 (describing music "encoded" into "digital form, by any suitable technique, that known as differential pulse code modulation (DPCM) is suitable.")

to plug into a "replay unit," which "apart from amplifier and loud speakers or headphones, can be very compact, e.g. little larger than the storage system card itself."[24] "[I]f used with headphones, and batteries as the power supply, the entire system can be portable."[25]

In addition to describing a portable digital music player, the Kramer patent also describes a player that could hold multiple music cards and play the music on them in a user-specified sequence: "for use in the home, vehicle or commercial applications, a single replay unit can be arranged to receive a plurality of cards, and the control means can be arranged so that the cards can be played in any specified sequence."[26]

Mr. Kramer saw these "highly convenient and portable" digital music cards as "a replacement for conventional discs or cassettes."[27] He envisioned that the music cards could be filled and re-filled with music of the customer's choosing: "A record shop can have a stock of 'blank' cards and can encode one with the desired piece of music from a data store in the shop or at a distant location."[28] The music that the record shop had for sale could be stored on the digital music cards: "A data store in the shop could be held on one of the card systems of the invention, instructed to give a digital output."[29] This would allow cheap high-speed recording of the music selected for purchase by a customer: "Since the recording of sound data can be rapidly performed in a shop, there are considerable savings in costs of reproduction [and] distribution … compared to conventional gramaphone disks and pre-recorded tape cassettes."[30] Kramer even envisioned the possibility of providing protections for copyright owners by setting limits on the number of times a digital copy could be made of the music on a card.

To enable the "rapid" transfer of digital music from one card to another, the Kramer patent discloses outputting the data on a card "at a speed much faster (at least 100 times)

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[24] Brown Invalidity Decl., Exh. 2 [Kramer patent] at 6:6-8.

[25] *Id.* at 6:8-10.

[26] *Id.* at 6:13-17.

[27] *Id.* at 6:23-25.

[28] *Id.* at 6:25-28.

[29] *Id.* at 6:28-30.

[30] *Id.* at 6:35-40.

than that required for actual sound reproduction."[31] As noted above, the digital music contained on the cards is in compressed form—the use of "differential pulse code modulation (DPCM)" is specifically described.[32] Thus, Kramer describes digital memory cards that both output and receive compressed digital music at "at a least 100 times" faster than real-time.

B. Kramer Anticipates Independent Claims 1 and 17 of the '839 and '995 Patents Under Burst's Proposed Claim Constructions

The portable music player disclosed in the Kramer patent contains all of the elements that Burst claims are infringing in Apple's iPod.[33] Thus, the Kramer patent invalidates the asserted independent claims of the Burst patents under Burst's proposed claim constructions.

As stated above, the asserted independent claims can be divided into two types. Claim 1 of the '839 patent, which is of the first type, requires (1) receiving audio/video data, (2) compressing that data into a "time compressed representation", (3) storing the time compressed representation, and (4) transmitting the time compressed representation in less time than would be require to play the audio/video data in real time. Claim 17 of the '839 patent, which is the second type of claim, requires (1) receiving a time-compressed representation of audio/video data faster than real time; (2) storing the time compressed representation, and (3) transmitting the time compressed representation in the same "burst time period" in which it was received. Kramer contains all of these elements.

1. Kramer anticipates Claim 1 of the '839 and '995 patents

Kramer discloses all of the elements of Claim 1 of the '839 patent. Kramer discloses the ***receiving*** and ***compressing*** elements of claim 1 where it describes acquiring audio data and compressing it.[34] Kramer discloses ***storing*** the compressed audio data on the memory

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[31] Brown Invalidity Decl., Exh. 2 [Kramer patent] at 4:24-26.

[32] *Id.* at 3:9-12.

[33] *See generally* Appendix A.

[34] *See id.* (*citing* Kramer at 1:8-13 ("[A] system which is constructed so that information in analogue form can be stored in a memory in digital form and can be retrieved as desired and reproduced again in analogue form. The system is particularly intended for the storage of music."); *citing id.* at 3:9-11 (The music signal is encoded "by any suitable technique; that known as differential pulse code modulation (DPCM) is suitable.")).

card.[35] And it discloses ***transmitting*** the stored compressed audio data under Burst's proposed construction where it describes transferring the compressed audio data from one memory card to another "at a least 100 times" faster than real-time.[36] While this card-to-card data transfer is not a "transmission" in the conventional sense of sending information over a distance, it is a "transmission" if the transfer of information from a computer hard drive to an iPod is a "transmission," as Burst asserts.[37] There can thus be no genuine dispute of fact that anticipates Claim 1 of the '839 patent under Burst's constructions.

Kramer also anticipates Claim 1 of the '995 patent, which contains the same limitations as the '839 patent, written in means-plus-function format:

> **1**. An audio/video transceiver apparatus comprising:
>
> ***input means for receiving*** audio/visual source information;
>
> ***compression means***, coupled to said input means, ***for compressing*** said audio/video source information into a time compressed representation thereof having an associated time period that is shorter than a time period associated with a real time representation of said audio/video source information;
>
> ***random access storage means***, coupled to said compression means, ***for storing*** the time compressed representation of said audio/video source information; and
>
> ***output means***, coupled to said random access storage means, ***for receiving*** the time compressed audio/video source information stored in said random access storage means for transmission away from said audio/video transceiver apparatus.

As described above, Kramer describes an apparatus that receives audio, compresses audio through DPCM,[38] stores the compressed audio on memory cards,[39] and

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[35] *See* Appendix A (*citing* Kramer at 3:46-64 ("The encoded data is then fed into input 14 on the card system …. The controller then instructs the memory 22 and its clock to be ready to receive and store the incoming data, and it then instructs the input register 20 to release the encoded analogue data into the memory.")).

[36] *See id.* (*citing* Kramer at 4:9-26 ("This output will be at a speed much faster (at least 100 times) than that required for actual sound reproduction.")).

[37] Burst's proposed construction of "transmitting" is "sending to an external device that is capable of playback." *See* Burst's Opening Claim Construction Brief at 72. The media device of Kramer meets this construction because in Kramer, songs are sent to an external card for subsequent playback or transfer.

[38] *See* Appendix A (*citing* Kramer at 1:8-13, 3:9-11).

[39] *See id.* (*citing* Kramer at 2:25-28 ("The memory preferably consists of magnetic bubble elements, which are known to be used for storage of data but not for storage of data in digital

transmits the compressed audio to another card at least 100 times faster than real time.[40] These features meet the input means,[41] compression means,[42] random access storage means,[43] and output means[44] elements at least under Burst's proposed construction of those terms.

2. Kramer anticipates Claim 17 of the '839 and '995 patents

Kramer anticipates Claim 17 of the '839 and '995 patents because it discloses the ability for one media card to receive compressed audio from another card, store that compressed audio, and retransfer the compressed audio.

The Kramer patent discloses receiving compressed audio data—when the compressed audio data is transferred from one memory card to another "at a least 100 times" faster than real-time, the second card receives it in compressed form.[45] As described above, Kramer also discloses the storing and transmission elements under Burst's constructions. Thus, Kramer anticipates Claim 17 of both the '839 and '995 patents under Burst's constructions.

C. Kramer Anticipates Dependent Claims Of the '839 And '995 Patents

In addition to anticipating the broadest independent claims of the '839 and '995 patents, Kramer also anticipates numerous dependent claims that add limitations such as handing

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form for retrieval serially."); *citing also id.* at 3:46-64.).

[40] *See* Appendix A (*citing* Kramer at 4:24-26; *citing also id.* at 2:48-53 ("Two connectors 14, 15 are shown for input and output of data. These connections can be for connection to an optical fibre data communications system; in that case an optical receiver and transmitter of known type is required to convert the optical signals to electrical signals.")).

[41] Burst proposes that "input means" is "an input port or terminal capable of receiving information." *See* Burst's Opening Claim Construction Brief at 29. To receive audio information, the system of Kramer necessarily contains an input port or terminal.

[42] Burst proposes that the audio "compression means" in the '995 patent "reduc[es] the number of bits by comparing two or more samples and coding certain differences between those samples." *See* Burst's Opening Claim Construction Brief at 60. This is exactly what Differential Pulse Code Modulation of Kramer accomplishes.

[43] Burst proposes that "random access storage means" is "storage that provides for random access to any given segment of stored audio/video source information." *See* Burst's Opening Claim Construction Brief at 18. The bubble memory of Kramer is random access storage.

[44] Burst proposes that "output means" is "an output port or terminal capable of transmitting information." *See* Burst's Opening Claim Construction Brief at 33. The media cards in Kramer have output ports that allow transmission at least 100 times faster than real time. *See* Appendix A (*citing* Kramer at 2:48-53, 4:24-26).

[45] *See* Appendix A (*citing* Kramer at 8:28-31 ("the encoded digital output data is used as the input to be stored in the memory of one or more other of said portable systems.")).

digital source information and recording the compressed data on a removable medium. Kramer anticipates Claims 9, 15, 16, 44, and 47 of the '839 patent, and Claims 9, 15, 16, and 44 of the '995 patent.

1. Kramer anticipates Claim 9 of the '839 and '995 patents

In both the '839 and '995 patents, Claim 9 depends from Claim 1 and adds the requirement that the source information be in digital form.[46] Kramer discloses handling digital audio source information. Kramer teaches that "Prior to being used, the control unit 34 is programmed in the factory so as to correctly deal with digitized analogue data, control data, and analogue data."[47] Thus, because the system of Kramer can handle either analog or digitized analog source data, Kramer anticipates Claim 9.

2. Kramer anticipates Claim 15 of the '839 and '995 patents

In both the '839 and '995 patents, Claim 15 depends from Claim 9 and adds the requirement that the audio/video source information "comprises information received from a computer." Kramer specifically discloses that the data could be "data other than sound, e.g. for recording scientific, technical, medical, or computer information."[48] Thus, Kramer anticipates Claim 15.

3. Kramer anticipates Claim 16 of the '839 and '995 patents

In both the '839 and '995 patents, Claim 16 depends from Claim 9 and adds the requirement that the information is received "over a fiber optic transmission line." Kramer discloses that the input connections on the card "can be for connection to an optical fibre data communications system."[49] Thus, Kramer anticipates Claim 16.

4. Kramer anticipates Claim 44 of the '839 and '995 patents

In both the '839 and '995 patents, Claim 44 depends from Claim 1 and adds the requirement that the stored time compressed representation be recorded "onto a removable

[46] *See, e.g.*, '839 patent claim 9 ("A method as in claim 1 wherein: said audio/video source information comprises digital audio/video source information.").

[47] *See* Appendix A (*citing* Kramer at 3:5-7).

[48] *See id.* (*citing* Kramer at 6:31-33).

[49] *See id.* (*citing* Kramer at 2:48-53).

recording medium."[50] The centerpiece of Kramer is the "credit card size portable system" for recording compressed audio on a removable medium.[51] Kramer describes its card system as "a replacement of conventional discs or cassettes."[52] Thus, Kramer anticipates Claim 44 of the '839 and '995 patents.

5. Kramer anticipates Claim 47 of the '839 patent

In the '839 patent, Claim 47 depends from Claim 17 and adds the step of "recording the time compressed representation of said audio/video source information onto a removable recording medium." As described above, Kramer discloses a portable credit-card-size storage medium for recording compressed audio.[53] Thus, Kramer anticipates Claim 47 of the '839 patent.

V.

THE AT&T PATENT ANTICIPATES BURST'S AUDIO CLAIMS AS A MATTER OF LAW

The AT&T patent,[54] which describes transmitting voicemails between different digital voicemail systems, was filed on April 27, 1987 and is indisputably prior art.[55] The described system allows digitized voicemails to be transmitted between separate voicemail systems in a time period "faster than a realtime voice message transmission."[56]

The faster-than-real-time voicemail transmission system described in the AT&T patent contains all of the elements that Burst claims are infringing in Apple's iTunes product and online store. The AT&T patent invalidates at least claims 1, 9, 15, and 17 of the '839 and '995 patents under the claim interpretation required by Burst's infringement contentions—though it

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[50] *See, e.g.*, '839 patent claim 44 ("A method as in claim 1 further comprising the step of recording the stored time compressed representation of said audio/video source information onto a removable recording medium.").

[51] *See* Appendix A (*citing* Kramer at Abstract).

[52] *See id.* (*citing* Kramer at 6:23-24).

[53] *See id.*

[54] Brown Invalidity Decl., Exh. 3 [AT&T patent].

[55] The AT&T patent issued on December 6, 1988 based on an application filed on April 27, 1987. *Id.* The AT&T patent is prior art to the '839 Patent under 35 U.S.C. §102(e) because it was filed prior to June 1987, the earliest claimed conception date for the Burst patents.

[56] *See id.* at Abstract; 2:63-66.

would not anticipate those claims under Apple's proposed construction of the term "time compressed representation."

A. The AT&T Patent Discloses a Voice Mail Network With Faster Than Real-Time Transmission

The AT&T patent describes "a message service system network that interconnects a plurality of message service systems and provides a voice mail message transfer capability between message service systems."[57] In the described system, after a user records a voice mail, it is sent to a voice processor that digitizes and then "compress[es] the voice data from 64k bits/s down to 16k bits/s."[58] The compressed voice mail files are stored in "disk storage" using a "data base*(sic)* processor" which "serves as a mass storage element to store all the digitally encoded voice signals," and which includes a "disk controller" as well as "disk storage."[59] Delivery of the compressed voice mails "is accomplished as a computer-to-computer data file transfer" over "high speed data lines."[60] This allows the compressed voicemails to be transmitted "faster than a realtime voice message transmission."[61] "The transmission of the digitally encoded, compressed voice mail message over high speed digital facilities also is timewise efficient compared to transmitting the analog version of the voice mail message," because the "use of digital high speed transmission facilities of speed greater than 9.6 Kbps enables the exchange of digitally encoded and compressed voice mail messages faster than real time speech."[62]

B. The AT&T Patent Discloses Every Limitation in Claims 1 and 17 of the '839 Patent

The voicemail system described in the AT&T patent contains all of the elements that Burst claims are infringing in Apple's iTunes product and on-line store.[63] Thus, the AT&T

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[57] Brown Invalidity Decl., Exh. 3 [AT&T patent] at 1:6-10, Abstract.

[58] *Id.* at 8:26-31, 4:8; 5:34-39; and 15:33-36.

[59] *Id.* at 5:42-44, 8:10-15; 9:17-20.

[60] *Id.* at 5:66-67, Abstract.

[61] *Id.* at 2:63-66.

[62] *Id.* at 15:65-16:1, 13:31-37.

[63] *See generally* Appendix B (*citing* AT&T patent).

patent invalidates the asserted claims of the Burst patents under the claim interpretation required by Burst's infringement contentions—though it would not anticipate those claims under Apple's proposed construction of the term "time compressed representation."

1. The AT&T patent anticipates Claim 1 of the '839 and '995 patents

As stated above, Claim 1 of the '839 patent requires (1) receiving audio/video data, (2) compressing that data into a "time compressed representation," (3) storing the time compressed representation, and (4) transmitting the time compressed representation in less time than would be require to play the audio/video data in real time. Claim 1 of the '995 patent phrases these limitations in means-plus-function format, requiring (1) input means for receiving audio/video data, (2) compression means for compressing that data into a "time compressed representation," (3) random access storage means for storing the time compressed representation, and (4) output means for receiving the compressed data for transmission.

The AT&T patent discloses all of these elements. The AT&T patent discloses ***receiving*** the audio signals representing a voice message, digitizing them, and then ***compressing*** them.[64] It discloses ***storing*** the compressed voice mail message as a data file.[65] It also discloses ***transmitting*** the compressed voice mail message over a network from a first corporate campus to the voice mail system on a second, separate corporate campus "faster than a realtime voice message transmission."[66]

By the same token, the AT&T patent discloses an ***input means*** under Burst's construction because it describes a system that receives audio through an input port or terminal.[67] The AT&T patent discloses a ***compression means*** where it describes compressing the signal from

[64] *See* Appendix B (*citing* AT&T patent at 4:8; 5:34-39; 8:26-31; and 15:33-36).

[65] *See id.* (*citing* AT&T patent at 5:42-44, 8:10-15; 15:34-36 ("The voice mail message is stored in voice mail service system 110 in digitally encoded and compressed form.")).

[66] *See id.* (*citing* AT&T patent at 2:63-66; 5:66-6:7; 13:31-37 ("The use of digital high speed transmission facilities of speed greater than 9.6 Kbps enables the exchange of digitally encoded and compressed voice mail messages faster than real time speech.")).

[67] *See id.* (*citing* AT&T patent at 12:33-37 ("Feature processor CPU 250 responds to the received message in standard fashion to complete the voice connection from telephone station set T100 to voice mail service system 110 via the selected voice port (ex. 210).")).

64k bits/s to 16k bits/s.[68] It discloses a ***random access storage means*** as the disk storage.[69] Finally the transmission element of the AT&T patent is an ***output means*** under Burst's construction because it is an output port or terminal.[70]

Thus, the AT&T patent anticipates Claim 1 of the '839 and '995 patents.

2. The AT&T patent anticipates Claim 17 of the '839 and '995 patents

Claim 17 of the '839 patent requires (1) receiving a time-compressed representation of audio/video data faster than real time, (2) storing the time compressed representation, and (3) transmitting the time compressed representation in the same "burst time period" in which it was received.

The AT&T patent discloses all of the limitations of Claim 17 under Burst's proposed constructions. The AT&T patent discloses ***receiving*** compressed audio data faster than real time—a voicemail message that has been transmitted from one campus is received at the second campus in compressed form.[71] That compressed audio message is ***stored*** at the second campus in compressed form, and can then be forwarded to other recipients, meeting the second ***transmitting*** element.[72] Thus, the disclosed voicemail system satisfies the limitations of Claim 17 of the '839 patent, at least under Burst's proposed construction of "time compressed representation."

Similarly, the receipt of the compressed voicemail message at the second campus is performed through an input port or terminal.[73] Thus, the AT&T patent contains an ***input means*** under Burst's construction of that term.

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[68] *See* Appendix B (*citing* AT&T patent at 8:26-35 ("Voice processors (220-22n) and voice ports (210-21n) take care of . . . bandwidth compression (compress the voice data from 64k bits/s down to 16k bits/s) and expansion")).

[69] *See id.* (*citing* AT&T patent at 8:10-14).

[70] *See id.* (*citing* AT&T patent at 4:5-9 ("This network maintains the integrity of the voice mail message by using a computer-to-computer data file transfer operation to directly transfer the digitally encoded and compressed voice mail message.")).

[71] *See id.* (*citing* AT&T patent at 12:48-13:36).

[72] *See id.*

[73] *See id.* (*citing* AT&T patent at 12:48-13:36 ("the call is terminated on the corresponding data port.")).

There can be no genuine dispute that the AT&T patent anticipates claims 1 and 17 of the '839 and '995 patents under Burst's proposed claim constructions.

C. The AT&T Patent Anticipates Dependent Claims Of The '839 And '995 Patents

In addition to anticipating the broadest independent claims of the '839 and '995 patents, the AT&T patent also anticipates numerous dependent claims that add limitations such as handing digital source information. The AT&T patent anticipates Claims 9 and 15 of the '839 and '995 patents.

1. The AT&T patent anticipates Claim 9 of the '839 and '995 patents

In both the '839 and '995 patents, Claim 9 depends from Claim 1 and adds the requirement that the source information be in digital form. The AT&T patent discloses handling digital audio source information. The AT&T patent teaches that the voice data, before compression, is 64k bits/s, and is thus digital.[74] Because the system of the AT&T patent handles digitized audio source information, the AT&T patent anticipates Claim 9.

2. The AT&T patent anticipates Claim 15 of the '839 and '995 patents

In both the '839 and '995 patents, Claim 15 depends from Claim 9 and adds the requirement that the audio/video source information "comprises information received from a computer." The AT&T patent specifically discloses that "a typical voice mail message system converts the received analog voice signal to digitally encoded form and stores this message in memory."[75] This digital, memory-stored voice message is described as one source of audio data: "A message sender at a first telephone switching system generates a voice mail message in well-known fashion."[76] One of skill in the art would recognize that the audio source information is received by the AT&T system "from a computer," because the system receives this digital voice message, which has been stored in memory. Thus, the AT&T patent anticipates Claim 15.

[74] *See* Appendix B (*citing* AT&T patent at 8:27-31).

[75] *See id.* (*citing* AT&T patent at 1:63-65).

[76] *See id.* (*citing* AT&T patent at 3:7-9).

VI.

CONCLUSION

For the reasons stated herein, Apple's Motion For Summary Judgment of Invalidity should be granted if the Court adopts Burst's proposed claim constructions.

Dated: January 4, 2007

WEIL, GOTSHAL & MANGES LLP

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APPENDIX A

I. Invalidity Claim Charts Comparing the Asserted Patent Claims To Prior Art U.S. Patent No. 4,667,088 to Kramer et al. ("The Kramer patent")

A. Claim Chart Showing Anticipation of the '839 Patent Asserted Claims By The Kramer patent

Asserted U.S. Patent No. 5,164,839	The Kramer patent
1. A method for handling audio/video source information, the method comprising:	This prior art patent describes "a method of recording and replay of music data" using a portable memory card that involves "feeding into the card an analogue signal which has been encoded in digital form, together with appropriate control data to control the recording and reply steps." [8:13 and 2:4-5 and 2:11-14] The patent describes "a system which is constructed so that information in analogue form can be stored in a memory in digital form and can be retrieved as desired and reproduced again in analogue form. The system is particularly intended for the storage of music." [1:8-13]
[a] receiving audio/video source information;	"The music signal is encoded (outside the illustrated system), into digital form, by any suitable technique; that known as differential pulse code modulation (DPCM) is suitable." [3:9-12] The music signal (*i.e.*, audio source information) is received by a "means for converting analogue data to digital data to be stored in the portable system." [7:30-31]
[b] compressing the received audio/video source information into a time compressed representation thereof having an associated burst time period that is shorter than a time period associated with a real time representation of the received audio/video source information;	"The music signal is encoded (outside the illustrated system), into digital form, by any suitable technique; that known as differential pulse code modulation (DPCM) is suitable. … An 8 megabyte memory 22 should allow recording of at least 3 1/2 minutes of music, i.e. corresponding to one side of a 'singles' record disc. … The encoding should be done by use of a program which needs minimal storage in the memory 22." [3:9-41] The burst time period is shorter than real time because the digitized "output will be at a speed much faster (at least 100 times) than that required for actual sound

	reproduction." [4:24-26]
[c] storing said time compressed representation of the received audio/video source information; and	"The encoded data is then fed into input 14 on the card system …. The controller then instructs the memory 22 and its clock to be ready to receive and store the incoming data, and it then instructs the input register 20 to release the encoded analogue data into the memory." [3:46-64; *see also* 1:23-37; 1:56-60; 6:21-51]
[d] transmitting, in said burst time period, the stored time compressed representation of the received audio/video source information to a selected destination.	The compressed data is transferred from memory 22 in a burst time period that is shorter than real time playback: "For replay of the recorded data, the card is placed in an appropriate replay location (see FIG. 2) with an input 44 thereof in contact with the card output 15. … On receipt of the appropriate signal, the controller 34 instructs the memory controller clock 36 to prepare the memory 22 for output of its stored data. … This output will be at a speed much faster (at least 100 times) than that required for actual sound reproduction. …" [4:9-26] Alternatively, the compressed, digital output can also be sent from one portable card to another in a burst time period that is shorter than real time playback: "In another mode of use, … the output is of the data in its digital form; … such a digital output can be used, as mentioned above, as input into another memory, e.g. of another portable card of the invention." [5:5-12]
9. A method as in claim 1 wherein:	See cites above for claim 1
said audio/video source information comprises digital audio/video source information;	"Prior to being used, the control unit 34 is programmed in the factory so as to correctly deal with digitized analogue data, control data and analogue data." [3:5-7] Claim 8: "A combination of a system as claimed in claim 1, together with means for converting analogue data to digital data to be stored in the portable system."
said step of compressing comprises compressing said digital audio/video source information into a	See cites above for element [b] of claim 1

digital time compressed representation thereof having an associated burst time period that is shorter than a time period associated with a real time representation of said digital audio/video source information; and	
said step of storing comprises storing said digital time compressed representation of said digital audio/video source information.	See cites above for element [c] of claim 1
15. A method as in claim 9 wherein said audio/video source information comprises information received from a computer.	The source data could be "data other than sound, e.g. for recording scientific, technical, medical or computer information." [6:31-33] Claim 13: "A method as claimed in claim 12, wherein the encoded digital output data is used as the input to be stored in the memory of one or more other of said portable systems."
16. A method as in claim 9 wherein said audio/video source information comprises information received over a fiber optic transmission line.	"Two connectors 14, 15 are shown for input and output of data. These connections can be for connection to an optical fibre data communications system; in that case an optical receiver and transmitter of known type is required to convert the optical signals to electrical signals." [2:48-53]
17. A method for handling audio/video source information, the method comprising:	See cites above for preamble of claim 1
receiving audio/video source information as a time compressed representation thereof, said time compressed representation of said audio/video source information being received over an associated burst time period that is shorter than a real time period associated with real time playback of said audio/video source information;	The compressed, digital output can be sent from one portable card and received by another, as follows: "the encoded digital output data is used as the input to be stored in the memory of one or more other of said portable systems." [8:28-31] "In another mode of use, … the output is of the data in its digital form; … such a digital output can be used, as mentioned above, as input into another memory, e.g. of another portable card of the invention." [5:5-12]

	The output of the stored data "will be at a speed much faster (at least 100 times) than that required for actual sound reproduction." [4:24-26] Claim 13: "A method as claimed in claim 12, wherein the encoded digital output data is used as the input to be stored in the memory of one or more other of said portable systems."
storing the time compressed representation of said received audio/video source information; and	"The encoded data is then fed into input 14 on the card system …. The controller then instructs the memory 22 and its clock to be ready to receive and store the incoming data, and it then instructs the input register 20 to release the encoded analogue data into the memory." [3:46-64; *see also* 1:23-37; 1:56-60; 6:21-51]
transmitting, in said burst time period, the stored time compressed representation of said received audio/video source information to a selected destination.	The compressed data is transferred from memory 22 in a burst time period that is shorter than real time playback: "For replay of the recorded data, the card is placed in an appropriate replay location (see FIG. 2) with an input 44 thereof in contact with the card output 15. … On receipt of the appropriate signal, the controller 34 instructs the memory controller clock 36 to prepare the memory 22 for output of its stored data. … This output will be at a speed much faster (at least 100 times) than that required for actual sound reproduction. …" [4:9-26] Alternatively, the compressed, digital output can also be sent from one portable card to another in a burst time period that is shorter than real time playback: "In another mode of use, … the output is of the data in its digital form; … such a digital output can be used, as mentioned above, as input into another memory, e.g. of another portable card of the invention." [5:5-12] Claim 13: "A method as claimed in claim 12, wherein the encoded digital output data is used as the input to be stored in the memory of one or more other of said portable systems."
44. A method as in claim 1 further comprising	"A credit card size portable system comprises a bubble memory for storage

the step of recording the stored time compressed representation of said audio/video source information onto a removable recording medium.	serially of digital data, especially of sound analogue signal which has been digitally encoded." [Abstract] "When recording is completed, which can take a very short time, the card is removed from the input recorder and can be stored or transported as required." [4:6-8] "As a replacement of conventional discs or cassettes the card of the invention is highly convenient and portable." [6:23-25]
47. A method as in claim 17 further comprising the step of recording the time compressed representation of said audio/video source information onto a removable recording medium.	See cites above for claim 44.

B. Claim Chart Showing Anticipation of the '995 Patent Asserted Claims By The Kramer patent

Asserted U.S. Patent No. 4,963,995	The Kramer patent
1. An audio/video transceiver apparatus comprising:	The Kramer patent describes a portable music card for recording and replaying music signals that includes a "signal detector and transmitter 18." [2:19-24 and 2:55-56] "In place of the single unit 18 shown, there could be separate receptor and transmission units connected respectively to the input 14 and output 15." [2:68-3:2]
[a] input means for receiving audio/visual source information;	"[A] system which is constructed so that information in analogue form can be stored in a memory in digital form and can be retrieved as desired and reproduced in again in analogue form. The system is particularly intended for the storage of music." [1:8-13] "The music signal is encoded (outside the illustrated system), into digital form, by any suitable technique; that known as differential pulse code modulation (DPCM) is suitable." [3:9-12] A "pulse code modulation coder" is used for DPCM. [3:14-15] The music signal (*i.e.*, audio source information) is received by a "means for converting analogue data to digital data to be stored in the portable system." [7:30-31] "The encoded data is fed into **input 14** on the card system." [3:46-47]
[b] compression means, coupled to said input means, for compressing said audio/video source information into a time compressed representation thereof having an associated time period that is shorter than a time period associated with a real time representation of said audio/video source information;	The music signal (*i.e.*, audio source information) is encoded by a "means for converting analogue data to digital data to be stored in the portable system." [7:30-31] "The music signal is encoded (outside the illustrated system), into digital form, by any suitable technique; that known as differential pulse code modulation (DPCM) is suitable. … (A **pulse code modulation coder** quantises sampled

	sound amplitudes …. An 8 megabyte memory 22 should allow recording of at least 3 1/2 minutes of music, i.e. corresponding to one side of a 'singles' record disc. … The encoding should be done by use of a program which needs minimal storage in the memory 22." [3:8-41] The time period is shorter than real time because the digitized "output will be at a speed much faster (at least 100 times) than that required for actual sound reproduction." [4:24-26]
[c] random access storage means, coupled to said compression means, for storing the time compressed representation of said audio/video source information; and	"The encoded data is then fed into input 14 on the card system …. The controller then instructs the memory 22 and its clock to be ready to receive and store the incoming data, and it then instructs the input register 20 to release the encoded analogue data into the memory." [3:46-64; see also 1:23-37; 1:56-60; 6:21-51] "The memory preferably consists of magnetic bubble elements, which are known to be used for storage of data but not for storage of data in digital form for retrieval serially." [2:25-28]
[d] output means, coupled to said random access storage means, for receiving the time compressed audio/video source information stored in said random access storage means for transmission away from said audio/video transceiver apparatus.	(i) "Two connectors 14, 15 are shown for **input and output** of data. These connections can be for connection to an optical fibre data communications system; in that case an optical receiver and transmitter of known type is required to convert the optical signals to electrical signals." [2:48-53] (ii) The card also includes a "signal detector and transmitter 18" for sending and receiving the audio/video source information. [2:19-24 and 2:55-56] The time period is shorter than real time because the digitized "output will be at a speed much faster (at least 100 times) than that required for actual sound reproduction." [4:24-26] The music card also transmits and receives the data in compressed digital form when the output is sent from one music card to another, as follows:

	"In another mode of use, … the output is of the data in its digital form; … such a digital output can be used, as mentioned above, as input into another memory, e.g. of another portable card of the invention." [5:5-12]
9. An audio/video transceiver apparatus as in claim 1 wherein:	See cites above for claim 1
said audio/video source information comprises digital audio/video source information;	"Prior to being used, the control unit 34 is programmed in the factory so as to correctly deal with digitized analogue data, control data and analogue data." [3:5-7]
said compression means is operative for compressing said digital audio/video source information into a digital time compressed representation thereof having an associated time period that is shorter than a time period associated with a real time representation of said digital audio/video source information; and	See cites above for element [b] of claim 1
said random access storage means is operative for storing said digital time compressed representation of said digital audio/video source information.	See cites above for element [c] of claim 1
15. An audio/video transceiver apparatus as in claim 9 wherein said input means is coupled to an external computer and said digital audio/video source information comprises computer-generated audio/video information.	The source data could be "data other than sound, e.g. for recording scientific, technical, medical or computer information." [6:31-33]
16. An audio/video transceiver apparatus as in claim 9 wherein said input means comprises a fiber optic input port coupled to a fiber optic transmission line and said digital audio/video source information comprises information received over said fiber optic transmission line.	"Two connectors 14, 15 are shown for input and output of data. These connections can be for connection to an optical fibre data communications system; in that case an optical receiver and transmitter of known type is required to convert the optical signals to electrical signals." [2:48-53]

17. An audio/video transceiver apparatus comprising:	See cites above for preamble of claim 1.
input means for receiving audio/video source information as a time compressed representation thereof, said time compressed representation of said audio/video source information being received over an associated burst time period that is shorter than a real time period associated with said audio/video source information;	"The encoded data is fed into **input 14** on the card system." [3:46-47] The compressed, digital output can be sent from one portable card to another, as follows: "In another mode of use, … the output is of the data in its digital form; … such a digital output can be used, as mentioned above, as input into another memory, e.g. of another portable card of the invention." [5:5-12] "the encoded digital output data is used as the input to be stored in the memory of one or more other of said portable systems." [8:28-31] The time period is shorter than real time because the digitized "output will be at a speed much faster (at least 100 times) than that required for actual sound reproduction." [4:24-26]
random access storage means, coupled to said input means, for storing the time compressed representation of said audio/video source information received by said input means; and	See cites above for element [c] of claim 1
output means, coupled to said random access storage means, for receiving the time compressed representation of said audio/video source information stored in said random access storage means for transmission away from said audio/video transceiver apparatus	See cites above for element [d] of claim 1
44. An audio/video transceiver apparatus as in claim 1 further comprising recording means, including a removable recording medium coupled to said random access storage means, for storing	"A credit card size portable system comprises a bubble memory for storage serially of digital data, especially of sound analogue signal which has been digitally encoded." [Abstract]

the time compressed representation of said audio/video source information stored in said random access storage means onto said removable recording medium.	"When recording is completed, which can take a very short time, the card is removed from the input recorder and can be stored or transported as required." [4:6-8] "As a replacement of conventional discs or cassettes the card of the invention is highly convenient and portable." [6:23-25]

APPENDIX B

II. Invalidity Claim Charts Comparing the Asserted Patent Claims To Prior Art U.S. Patent No. 4,790,003 to Kepley et al. ("the AT&T patent")

A. Claim Chart Showing Anticipation of the '839 Patent Asserted Claims By The AT&T Patent

Asserted U.S. Patent No. 5,164,839	The AT&T Patent
1. A method for handling audio/video source information, the method comprising:	The AT&T patent discloses a high speed network and method for transferring digitized voice mails across multiple corporate campuses in a time period "faster than a realtime voice message transmission." [Abstract; 2:63-66]
[a] receiving audio/video source information;	The method uses "a network for transmitting a voice message received from a message sender on a first one of said message service systems." [17:26-28] A voice message created by the user at telephone station set T100 is received by the voice mail service system 110 shown in Fig. 2. [5:11-22; 4:52-58; and 5:34-39]
[b] compressing the received audio/video source information into a time compressed representation thereof having an associated burst time period that is shorter than a time period associated with a real time representation of the received audio/video source information;	The voice mail messages are "digitally encoded and compressed" in voice storage processor 111 before being transmitted across the network. [4:8; 5:34-39; and 15:33-36] The voice mails are compressed by voice processors (220-22n) and voice ports (210-21n) contained within voice storage processor 111 shown in Fig. 2, which include functions such as "bandwidth compression (compress the voice data from 64k bits/s down to 16k bits/s) and expansion" and "silence compression (encode the length of long silences so that the encoded length value rather than the actual silent interval can be stored on disk) and expansion." [8:26-35] Transmitting compressed voice mails over the high speed network reduces the "burst time period" (*i.e.*, transmission time) because "[t]he use of digital high speed transmission facilities of speed greater than 9.6 Kbps enables the exchange of digitally encoded and compressed voice mail messages faster than real time speech." [13:31-37]
[c] storing said time compressed representation of	"The voice mail message is stored in voice mail service system 110 in digitally

the received audio/video source information; and	encoded and compressed form." [15:34-36] Fig. 1 shows the voice mail service system 110, which includes a "[d]ata base processor 113 [that] serves as a mass storage element to store all the digitally encoded voice signals …" [5:42-44] "Data base processor 113 includes central processing unit (CPU) 200, memory 201 and disk controller 202. Central processing unit 200 operates under control of instructions stored in memory 201 to transfer data from DBP BUS to disk storage 203 via disk controller 202." [8:10-14]
[d] transmitting, in said burst time period, the stored time compressed representation of the received audio/video source information to a selected destination.	"This network maintains the integrity of the voice mail message by using a computer-to-computer data file transfer operation to directly transfer the digitally encoded and compressed voice mail message." [4:5-9] "If a wideband transmission facility is available, this computer data file transmission can be executed faster than a realtime voice message transmission." [2:63-66] Compressed voice mails are transmitted from the originating voice mail service system 110 and through switching network 101 and central office exchange 130 at high speed to the destination voice mail service system 150 shown in Fig. 1. [5:66-6:7 and 12:48 to 13:36]
9. A method as in claim 1 wherein:	See cites above for claim 1
said audio/video source information comprises digital audio/video source information;	The voice data handled by the system is in digital form before it is compressed, evidenced by the fact that the voice processors "compress the voice data from 64k bits/s down to 16k bits/s" [8:27-31]
said step of compressing comprises compressing said digital audio/video source information into a digital time compressed representation thereof having an associated burst time period that is shorter than a time period associated with a real time representation of said digital audio/video	See cites above for element [b] of claim 1

source information; and	
said step of storing comprises storing said digital time compressed representation of said digital audio/video source information.	See cites above for element [c] of claim 1
15. A method as in claim 9 wherein said audio/video source information comprises information received from a computer.	The audio source information is a voice mail message generated "in well known fashion on the associated originating voice mail service system." [3:7-9] That voice mail source information is received from a computer because "[a] typical voice mail message system converts the received analog voice signal to digitally encoded form and stores this message in memory." [1:63-65]
17. A method for handling audio/video source information, the method comprising:	See cites above for preamble of claim 1.
receiving audio/video source information as a time compressed representation thereof, said time compressed representation of said audio/video source information being received over an associated burst time period that is shorter than a real time period associated with real time playback of said audio/video source information;	After the voice mails are "digitally encoded and compressed" in the storage processor 111 contained in system 110 [see 4:8; 8:26-35], they are received by database processor 113, switching network 101, and central exchange office 130 before they are transmitted to destination voice mail service system 150. [12:48 to 13:36] Transmitting compressed voice mails over the high speed network reduces the "burst time period" (*i.e.*, transmission time) because "[t]he use of digital high speed transmission facilities of speed greater than 9.6 Kbps enables the exchange of digitally encoded and compressed voice mail messages faster than real time speech." [13:31-37]
storing the time compressed representation of said received audio/video source information; and	See above cites for element [c] in claim 1
transmitting, in said burst time period, the stored time compressed representation of said received audio/video source information to a selected destination.	See above cites for element [d] in claim 1

B. Claim Chart Showing Anticipation of the '995 Patent Asserted Claims By The AT&T Patent

Asserted U.S. Patent No. 4,963,995	The AT&T Patent
1. An audio/video transceiver apparatus comprising:	The AT&T patent discloses a voice mail system and high speed network for transferring digitized voice mails across multiple corporate campuses in a time period "faster than a realtime voice message transmission." [Abstract; 2:63-66]
[a] input means for receiving audio/visual source information;	A voice message from telephone station set T100 is received by the voice mail service system 110 shown in Fig. 2. [5:11-22; see also 3:7-13; 4:52-58; 5:34-39; 9:13-20; 12:20-37] The AT&T patent shows a line and a voice port for receiving the voice mail data: (i) "This establishes a voice communication connection from telephone station set T100 via switching network 101 and voice mail service access line 104 to voice mail service system 110." [5:18-22] (ii) "Feature processor CPU 250 responds to the received message in standard fashion to complete the voice connection from telephone station set T100 to voice mail service system 110 via the selected voice port (ex. 210)." [12:33-37]
[b] compression means, coupled to said input means, for compressing said audio/video source information into a time compressed representation thereof having an associated time period that is shorter than a time period associated with a real time representation of said audio/video source information;	The voice mail messages are "digitally encoded and compressed" before being transferred across the network. [4:8] Transmitting compressed voice mails over the high speed network reduces the "burst time period" (*i.e.*, transmission time) because "[t]he use of digital high speed transmission facilities of speed greater than 9.6 Kbps enables the exchange of digitally encoded and compressed voice mail messages faster than real time speech." [13:31-37] The voice mails are compressed by voice processors (220-22n) and voice ports (210-21n) (which are connected to access lines 104 and contained within voice storage processor 111 as shown in Fig. 2). The voice processors and voice

	ports include functions such as "bandwidth compression (compress the voice data from 64k bits/s down to 16k bits/s) and expansion" and "silence compression (encode the length of long silences so that the encoded length value rather than the actual silent interval can be stored on disk) and expansion." [8:26-35]
[c] random access storage means, coupled to said compression means, for storing the time compressed representation of said audio/video source information; and	"The voice mail message is stored in voice mail service system 110 in digitally encoded and compressed form." [15:34-36] Fig. 1 shows the voice mail service system 110, which includes a "[d]ata base processor 113 [that] serves as a mass storage element to store all the digitally encoded voice signals …" [5:42-44] "Data base processor 113 includes central processing unit (CPU) 200, memory 201 and disk controller 202. Central processing unit 200 operates under control of instructions stored in memory 201 to transfer data from DBP BUS to disk storage 203 via disk controller 202." [8:10-14]
[d] output means, coupled to said random access storage means, for receiving the time compressed audio/video source information stored in said random access storage means for transmission away from said audio/video transceiver apparatus.	Compressed voice mails are received by the switching network 101 from storage in the database processor 113 over communications lines 104 for transmission to the destination voice mail service system 150 shown in Fig. 1. [5:66-6:7 and 12:48 to 13:36] "This network maintains the integrity of the voice mail message by using a computer-to-computer data file transfer operation to directly transfer the digitally encoded and compressed voice mail message." [4:5-9] "If a wideband transmission facility is available, this computer data file transmission can be executed faster than a realtime voice message transmission." [2:63-66]
9. An audio/video transceiver apparatus as in claim 1 wherein:	See cites above for claim 1
said audio/video source information comprises digital audio/video source information;	The voice data handled by the system is in digital form before it is compressed, evidenced by the fact that the voice processors "compress the voice data from

	64k bits/s down to 16k bits/s" [8:27-31]
said compression means is operative for compressing said digital audio/video source information into a digital time compressed representation thereof having an associated time period that is shorter than a time period associated with a real time representation of said digital audio/video source information; and	See cites above for element [b] of claim 1
said random access storage means is operative for storing said digital time compressed representation of said digital audio/video source information.	See cites above for element [c] of claim 1
15. An audio/video transceiver apparatus as in claim 9 wherein said input means is coupled to an external computer and said digital audio/video source information comprises computer-generated audio/video information.	The audio source information is a voice mail message generated "in well known fashion on the associated originating voice mail service system." [3:7-9] That voice mail source information is received from a computer because "[a] typical voice mail message system converts the received analog voice signal to digitally encoded form and stores this message in memory." [1:63-65]
17. An audio/video transceiver apparatus comprising:	See cites above for preamble of claim 1.
input means for receiving audio/video source information as a time compressed representation thereof, said time compressed representation of said audio/video source information being received over an associated burst time period that is shorter than a real time period associated with said audio/video source information;	The voice mails that are digitally compressed in voice storage processor 111 (see 8:26-35) are received by database processor 113, switching network 101, and central exchange office 130 before they are transmitted to destination voice mail service system 150. [12:48 to 13:36] (i) The S bus and data base processor interface 290 shown in FIG. 2 are used to input compressed voice mails into the data base processor 113, as follows: "CPU 240 interprets this data message and causes a voice connection to be established from voice port 210 to a voice processor 220 where the voice message is converted to digitally encoded voice signals. These voice signals

	are transmitted via TD bus, a selected voice buffer 230, S bus, data base processor interface 290 to data base processor 113 where the encoded voice is stored for later retrieval." [9:13-20] (ii) The data port circuit 115 (shown in FIG. 2) and the trunks TR1-TRn (shown in FIG. 1) are used to input compressed voice mails into the switching network 101 and the central exchange office 130, respectively: "At step 803, network controller 114 transmits the 128 byte segment with the header identified above over the data call connection through DCP port 115, switching network 101, one of trunks TR1-TRn, central exchange office 130, one of trunks TR171-TR17n, switching network 141 to destination voice mail service system 150." [16:5-10] Transmitting compressed voice mails over the high speed network reduces the "burst time period" (*i.e.*, transmission time) because "[t]he use of digital high speed transmission facilities of speed greater than 9.6 Kbps enables the exchange of digitally encoded and compressed voice mail messages faster than real time speech." [13:31-37] "If a wideband transmission facility is available, this computer data file transmission can be executed faster than a realtime voice message transmission." [2:63-66]
random access storage means, coupled to said input means, for storing the time compressed representation of said audio/video source information received by said input means; and	See cites above for element [c] of claim 1
output means, coupled to said random access storage means, for receiving the time compressed representation of said audio/video source information stored in said random access storage means for transmission away from said audio/video transceiver apparatus	See cites above for element [d] of claim 1