PARKER C. FOLSE III (WA Bar No. 24895 – *Pro Hac Vice*)
pfolse@susmangodfrey.com
IAN B. CROSBY (WA Bar No. 28461 – *Pro Hac Vice*)
icrosby@susmangodfrey.com
FLOYD G. SHORT (WA Bar No. 21632 – *Pro Hac Vice*)
fshort@susmangodfrey.com
SUSMAN GODFREY, L.L.P.
1201 Third Avenue, Suite 3800
Seattle, Washington 98101-3000
(206) 516-3880 Tel.
(206) 516-3883 Fax

SPENCER HOSIE (CA Bar No. 101777)
shosie@hosielaw.com
BRUCE WECKER (CA Bar No. 078530)
bwecker@hosielaw.com
HOSIE McARTHUR LLP
One Market, 22nd Floor
San Francisco, CA 94105
(415) 247-6000 Tel.
(415) 247-6001 Fax
(additional attorneys listed on signature page)

Attorneys for Defendant/Counterclaimant
BURST.COM, INC.

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN FRANCISCO DIVISION

APPLE COMPUTER, INC.,

Plaintiff/Counterdefendant,

v.

BURST.COM, INC.,

Defendant/Counterclaimant.

CASE NO. C06-00019 MHP

DEFENDANT BURST.COM, INC'S OPPOSITION TO PLAINTIFF APPLE COMPUTER, INC.'S MOTION FOR SUMMARY JUDGMENT ON INVALIDITY BASED ON KRAMER AND KEPLEY PATENTS

TABLE OF CONTENTS

TABLE OF AUTHORITIES

Cases

Misc.

Defendant Burst.com, Inc. ("Burst") opposes Plaintiff Apple, Inc.'s, (f/k/a Apple Computer, Inc.) ("Apple") partial Motion for Summary Judgment on Invalidity of Claims 1, 9, 15, 17, and 44 of U.S. Patent No. 4,963,995 (the "'995 Patent"), Crosby Dec. Ex. 1, and Claims 1, 9, 15, 17, 44, and 47 of U.S. Patent No. 5,164,839 (the "'839 Patent"),[1] Crosby Dec. Ex. 2, based on U.S. Patents No. 4,667,088 ("Kramer") and 4,790,003 ("Kepley"), and in support would show as follows:

I. INTRODUCTION

Proof of invalidity must be clear and convincing, yet Apple's summary judgment motion is neither. Apple pretends that Kramer discloses the iPod-like player shown in its brief but the picture is not from the patent. Apple then equivocates that a memory card bearing not even a superficial resemblance to the pictured device anticipates Burst's claims. The voice mail system of Kepley also invites no obvious comparisons to Burst's inventions. Apple's efforts to draw such comparisons fall far short of identifying clear and convincing evidence that either reference teaches each and every limitation of any of the challenged claims. Apple thus fails to meet the rigorous standard for obtaining summary judgment on grounds of anticipation.

Apple does not even try to meet this standard for some limitations. For example, Apple never addresses the "transceiver apparatus" limitation that appears in every challenged apparatus claim and that requires every component of the claimed invention be contained in a common housing. In fact, even the elements of Kramer and Kepley that Apple erroneously maps to the limitations of the challenged apparatus claims are not disclosed by those references together in a single device. For this reason alone, Apple's arguments on the apparatus claims must fail.

For those elements that Apple does attempt to address, its arguments repeatedly mischaracterize and often simply misunderstand the reference. Kramer just doesn't teach "compression" in the sense of "reducing the number of bits" as required by the Court's

[1] Burst has withdrawn its infringement assertion of Claim 16 of the '995 and '839 Patents, as well as of additional claims that are not at issue in the motion. Burst understands that Apple intends to withdraw its motion respecting Claim 16, and Burst has not addressed Apple's arguments about their validity here.

construction. Kramer expressly distinguishes the "serialized" memory it employs from the "random access" memory required by many of the claims. Kramer's reference to "output . . . at a speed much faster . . . than that required for actual sound reproduction" concerns an internal operation, not "sending to an external device" as the Court's construction of "transmission away" demands. Kramer does not disclose sending information faster than real time. In fact, a person of skill in the art would understand Kramer to disclose real-time transmission only.

Apple's arguments about Kepley are similarly wide of the mark. The Kepley voice mail system is incapable of the fundamental Burst function of faster-than-real-time transmission. Instead, technical limitations inherent in the communication protocols and medium that Kepley employs would prevent Kepley from sending even a simple voice mail in real time, let alone faster. Moreover, that voice mail would not be "audio/video source information" under the Court's construction in any event. Under the Court's construction, and by agreement of the parties, "audio/video source information" must comprise a "work," that is, a product of creative effort and authorship that a voice mail is not. Apple does not even attempt to show that Kepley employs the specific methods required by the Court's construction of "compression means." This omission is not surprising in light of the radically different technical requirements for processing voice mail as opposed to audio/visual works.

These and other failings are demonstrated below and in the accompanying declarations of Burst's experts Dr. Sheila Hemami, with whom the Court is already familiar, and Dr. Allen Gersho, also a leading figure in digital compression and communications. Their statements show that at the very least, significant issues of fact preclude the partial summary judgment that Apple seeks.

II. BACKGROUND

The Court's Claim Construction Order construes the Burst patents to claim methods and apparatus for "sharing, editing and playing of audio and video information through computers, compression, and high-speed transmission." C.C. Ord. 1. Apple's motion challenges independent Claims 1 and 17 of the '995 and '839 patents, along with several dependent claims, asserting literal anticipation by the Kramer and Kepley patents. Apple's motion does not challenge the twenty-five

remaining claims that Burst has asserted, including any video claims. Apple's motion, though not so styled, is really only one for partial summary judgment.

Under the Court's and agreed constructions, '995 Claim 1 requires a transceiver in a common housing that receives an audio and/or video work, applies a specific algorithm to compress it into a representation having a reduced number of bits, stores the compressed work in a memory providing random access to any given segment, and transmits the compressed work to an external device faster than it would take to play in real time. '995 Claim 17 requires a transceiver that receives a previously compressed work faster than real time, stores it in random access memory, and transmits it away faster than real time. '839 Claims 1 and 17 are method versions of the '995 apparatus claims. The Court has found that "the steps of Burst's patents are necessarily sequential." C.C. Ord. 24. The challenged dependent claims involve receiving works in digital form, receiving them from a computer, receiving computer-generated works, and storing them on removable storage media.

The methods and apparatus of the challenged claims embody fundamental innovations over the prior art by using a combination of compression, memory, and high-speed transmission to decouple the time required to transmit and receive digital audio and video works from the time required to play them. At the time of the first Burst patent application in 1988, audio and video were transmitted primarily through broadcasting in real time. Radio and television stations transmitted programming continuously, and listeners or viewers tuned in as it was received. The time required for transmission of a program was no different than the time required for viewing or listening. To the extent that listeners or viewers wanted to record the work for later playback, they were limited to receiving the work in real time and using nonrandom storage means, such as magnetic tape. When broadcasters employed compression at all, they did so to allow transmitting more programs in real time over a shared communication channel.

Against this background, the Burst patents reflect insights by their inventor Richard Lang that are not realized in either Kramer or Kepley. Lang recognized, as those inventors did not, that compression could be used to transmit even the large amounts of data required to represent high-

quality digital audio and video works like TV programs and movies in less time that it takes to view them; that random access memory could be used to store such works for editing, viewing, or further transmission; and that all of this could be accomplished in an integrated consumer device. Kepley and Kramer don't anticipate the challenged claims of the Burst patents not merely for narrow, technical reasons, but in large part because their inventors did not share this vision.

III. STANDARD FOR SUMMARY JUDGMENT OF ANTICIPATION

The Patent Act presumes that Burst's patents are valid. 35 U.S.C. § 282. Each claim of Burst's patents is entitled to this presumption and treated as a separate invention that must be independently assessed in determining validity. *Honeywell Int'l Inc. v. Hamilton Sundstrand Corp.*, 370 F.3d 1131, 1148-49 (Fed. Cir. 2004). To overcome this presumption, Apple bears the heavy burden to prove invalidity by clear and convincing evidence. *State Contracting & Eng'g Corp. v. Condotte Am., Inc.*, 346 F.3d 1057, 1067 (Fed. Cir. 2003).

In patent cases as in others, summary judgment may be granted only when there is no genuine issue as to any material fact and the movant is entitled to judgment as a matter of law. Fed. R. Civ. P. 56(c); *Celotex Corp. v. Catrett*, 477 U.S. 317, 322 (1986). The movant bears the burden to establish the absence of any genuine issues of material fact and legal entitlement to judgment. Fed. R. Civ. P. 56(c); *Cable Elec. Prods., Inc. v. Genmark, Inc.*, 770 F.2d 1015, 1022 (Fed. Cir. 1985). "The evidence of the non-movant is to be believed, and all justifiable inferences are to be drawn in his favor." *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 255 (1986). A genuine issue of material fact precluding summary judgment exists "if the evidence is such that a reasonable jury could return a verdict for the nonmoving party." *Id.* at 248.

"In rendering a decision on a motion for summary judgment, a court must 'view the evidence presented through the prism of the substantive evidentiary burden' that would inhere at trial." *Monarch Knitting Mach. Corp. v. Sulzer Morat Gmbh*, 139 F.3d 877, 880 (Fed. Cir. 1998) (quoting *Anderson*, 477 U.S. at 254). Summary judgment of invalidity, therefore, must be predicated on facts established by clear and convincing evidence. *Rockwell Int'l Corp. v. United States*, 147 F.3d 1358,1362 (Fed. Cir. 1998).

Apple has moved for summary judgment of invalidity solely on grounds of anticipation under 35 U.S.C. § 102(b).[2] Anticipation is a question of fact. *Shatterproof Glass Corp. v. Libbey-Owens Ford Co.*, 758 F.2d 613, 619 (Fed. Cir. 1985). Finding invalidity on grounds of anticipation requires that all of the elements and limitations of the challenged claim be found either expressly or inherently within a single prior art reference. *Sanofi-Synthelabo v. Apotex, Inc.*, 470 F.3d 1368, 1375 (Fed. Cir. 2006). "There must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention." *Scripps Clinic & Research Foundation v. Genentech, Inc.*, 927 F.2d 1565, 1576 (Fed. Cir. 1991). "This is known as the requirement that there be 'identity' between the patent and the anticipatory device." *IXYS Corp. v. Advanced Power Tech., Inc.*, 2004 WL 540513, at *4 (N.D. Cal. 2004).

For a reference to inherently disclose an otherwise missing claim limitation, it must be "clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." *In re Robertson*, 169 F.3d 743, 745 (Fed. Cir. 1999) (emphasis added). Inherency may not be established by probabilities or possibilities. *Continental Can Co. v. Monsanto Co.*, 948 F.2d 1264, 1269 (Fed. Cir. 1991). The mere fact that a certain thing may result from a given set of circumstances is not sufficient to establish inherency. *Id.* Whether a claimed feature is inherent in a prior art reference is a factual issue. *Hazani v. U.S. Int'l Trade Comm'n*, 126 F.3d 1473, 1477 (Fed. Cir. 1997).

IV. KRAMER DOES NOT ANTICIPATE BURST'S AUDIO CLAIMS

Apple simply mischaracterizes Kramer when it states that "[t]he Kramer patent discloses a portable music player" pictured in its brief, and asserts that "[t]he portable music player disclosed in the Kramer patent contains all of the elements that Burst claims are infringing in Apple's iPod." M.S.J. 7.[3] The portable music player in Kramer is the "replay unit" shown in Figure 2, which has

---

[2] Apple has not asserted invalidity based on obviousness, and therefore, Burst has not addressed and has no obligation to address that issue.

[3] Apple describes the picture as "Kramer's 1979 drawing of a portable 'replay unit.'" M.S.J. 7. Neither the picture itself and nor claim of its provenance are attributed in Apple's brief,

no memory for storing audio, no means of compression, and no ability to transmit or receive digital audio faster than real time. All of Apple's invalidity arguments based on Kramer instead rely on features that Apple attributes to separate memory cards, shown in Figure 1, from which the replay unit reads and plays back audio in real time. These cards have no compression or random access storage capabilities, and lack the ability to transmit faster than real time. In short, Kramer's replay unit and card, either alone or in combination, are nothing like Burst's inventions.

A. Kramer Does Not Anticipate '995 Claim 1

'995 Claim 1 requires a "transceiver" having "input means," "compression means," "random access storage means," and the ability to "transmi[t] away" a "time compressed representation" faster than "real time." Kramer does not teach a device with any of these features.

1. Kramer Does Not Disclose a "Transceiver Apparatus"

The parties have agreed that the term "transceiver apparatus" means "a combination of components, in a common housing, that transmits and receives data." '995 Claim 1 requires "[a]n audio/video transceiver apparatus" having all of the elements of the claim. This means that the input, compression, random access storage, and output means must all be in a single housing. Apple's brief does not even address this limitation and should be denied respecting Kramer for that reason alone.

In fact, Kramer does not disclose the claimed audio/video transceiver because the alleged compression means is clearly outside any housing for the replay unit or memory card. Apple claims that "the use of 'differential pulse code modulation (DPCM)'" in Kramer discloses compression. M.S.J. 9 & nn. 32 & 34 (citing Kramer ("Kr.") 3:9-12). Apple fails to quote the entire cited passage, which makes clear that the Kramer system (*i.e.*, the replay unit and card) does not include any component that uses DPCM:

---

but appear to be taken from Kane Kramer's website, www.kanekramer.com. Crosby Dec. Ex. 3. There Kramer claims at one point to have lodged all the drawings and prototypes for his invention with a solicitor who discarded them four years later when he moved offices. *Id.* Apple does not explain how the drawing that appears in its brief survived.

> 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.

Kr. 3:9-2 (emphasis added). That the DPCM encoding that Apple calls compression occurs outside of the card and replay unit is apparent from Figure 1 (card) and Figure 2 (replay unit), which show no compression components. Gersho Dec. ("G") par. 7. Kramer reinforces that the replay unit and cards themselves do not "encode" audio in the example of "[a] record shop [that] can have a stock of 'blank' cards and can encode one with the desired piece of music . . . ." Kr. 6:25-27. A "record shop" is clearly not within the housing for either the memory card or replay unit.

2. Kramer Does Not Disclose "Compression Means"

The Court has construed the term "compression means" to be "a compressor/decompressor executing the following data compression algorithm: reducing the number of bits by comparing two or more samples and coding certain differences between those examples, plus equivalents." C.C. Ord. 44 (emphasis added). As shown, the claimed compression means is not disclosed in Kramer because there is no compression within the replay unit or memory card housing. In addition, Kramer does not disclose either a compressor/decompressor or any reduction in the number of bits of audio/video source information. Kramer thus does not disclose any "compression means" for these reasons as well.

Apple identifies no description in Kramer of a structure that performs DPCM encoding inside or "outside the illustrated system." Kramer says that a record shop may perform encoding, but doesn't say how. Kr. 6:25-27. There certainly is no mention of a compressor/decompressor at the record shop. Kramer simply does not disclose a compressor/decompressor, as required for "compression means" under the Court's construction.

The DPCM encoding referred to in Kramer does not constitute compression in any event because it does not "reduc[e] the number of bits" as required by the Court's construction of "compression means." C.C. Ord. 44. The bits that the claimed compression means reduces are those of the audio/video source information, which the compression means compresses "into a time compressed representation thereof . . . ." '995 10:61-63. Similarly, the Court has construed "time

compressed representation" as "a version of audio/video source information having a reduced number of bits." C.C. Ord. 20. But Kramer does not disclose reducing the number of bits of audio/video source information using DPCM or any other technique. Kramer states that a "music signal is encoded . . . into digital form" using techniques such as DPCM. Kr. 3:10-11. A person of skill in the art would readily understand this to describe using DPCM to convert an analog audio signal into a digital signal. G par. 8. But an analog signal does not have any bits to reduce. *Id.*[4] The encoding of an analog signal, which does not have bits, into digital form, which does, using DPCM does not involve "reducing the number of bits" of anything, and thus cannot be the "data compression" performed by the "compression means" of '995 Claim 1.

Apple itself has admitted that encoding analog signals into digital form is not "compression" for purposes of the Burst patents as the Court has construed them. Apparently recognizing that Kramer only discloses analog encoding, Apple attempted to elicit direct testimony from its 30(b)(6) witness Greg Mullins that digitization is a form of "compression." Mullins Dep. 119:19-22, Crosby Dec. Ex. 4. But on cross-examination, Mullins admitted that he wasn't using the word "compression" as the Court has construed it to mean "reducing the number of bits" of audio source information:

> Q. So you understand the term compression to be broader than simply reducing the number of bits to represent something, correct?
>
> A. I consider compression to be if any of the original information is lost, and the resultant is smaller than the original, that is a form of compression.

Id. at 120:24-122:8. And he conceded that digitization does not reduce the size of analog information by any metric:

> Q. Analog source information doesn't have a size, does it?
>
> A. I guess not.

[4] Indeed, the parties have agreed that an analog signal represents "information in the form of continuously varying physical quantities," in contrast to a digital signal that represents "information in the form of digits or discrete quantities," *i.e.*, bits. Jnt. C.C. Stmt. Ex. A, Docket No. 59-2.

> Q. Okay. So to the extent you understand that process of digitization of analog source to be compression, you understand it to be that way only in the sense that information is removed, correct?
>
> A. Yes.
>
> Q. Okay. You don't understand it to be that way in the sense that any comparable measure of size is reduced, correct?
>
> A. Yes.

Id. at 125:5-16. Apple's admission through its 30(b)(6) witness that digitization of an analog source does not reduce its size, in bits or otherwise, is fatal to Apple's contention that Kramer discloses "compression means" under the Court's construction.

3. Kramer Does Not Disclose Faster Than Real Time "Transmission Away" in a "Burst Time Period"

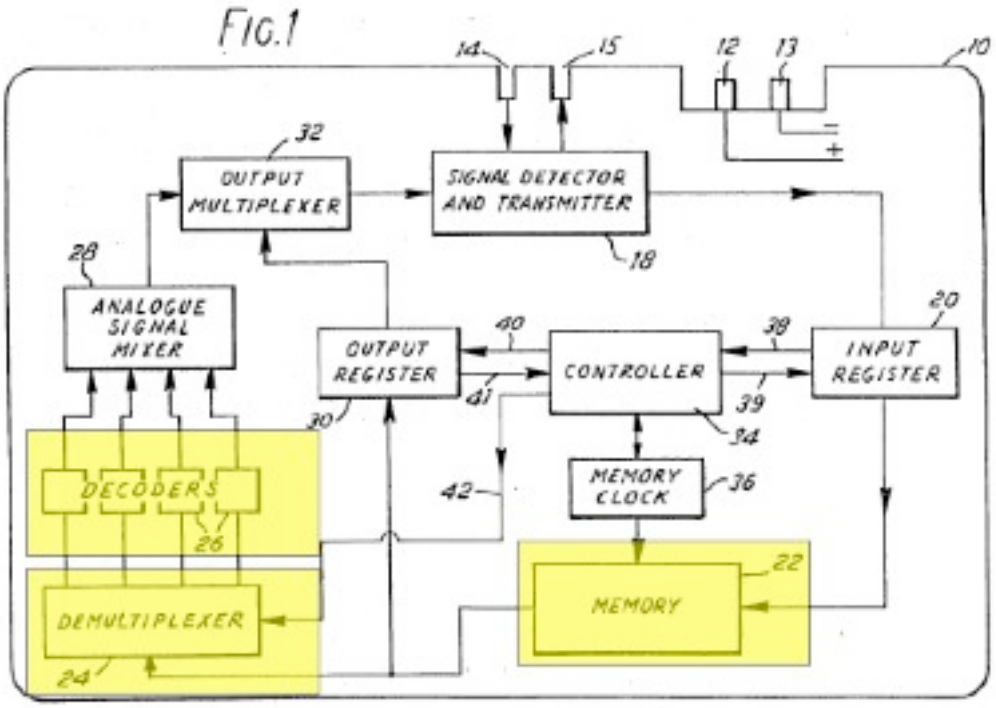
The Court has construed the term "burst time period" to mean a "transmission time period shorter than the time period associated with a real time representation." C.C. Ord. 21. '995 Claim 1 requires that the "time compressed representation" generated by the compression means have a faster-than-real-time burst transmission time period. '995 Claim 1 further requires that the "transmission" of the time-compressed representation be "away" from the claimed transceiver. The Court has construed all of the "transmission" terms in the Burst patents to require "sending information to an external device." Kramer does not disclose transmission of compressed audio/video source information to an external device in less than a real time period. Thus Kramer does not disclose "transmission away" in a "burst time period."

Apple claims that Kramer "describes transferring the compressed audio data from one memory card to another 'at least 100 times' faster than real-time." M.S.J. 10. (citing Kr. 4:9-26). This assertion is simply mistaken. Kramer never states the speed at which transfer from one memory card to another would occur. The passage Apple cites refers instead to the speed of a data transfer that occurs between internal components entirely within the memory card:

> 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; the controller also will instruct the demultiplexer **24** (and decoders **26**) how to deal with the data which they will receive, if this information is not already adequately programmed into these

> components. This output will be at a speed much faster (at least 100 times) than that required for actual sound reproduction.

Kr. 4:17-26 (emphasis added). "This output" – the output "faster . . . than that required for actual sound reproduction" – refers to the previously mentioned "output" of "stored data" from the "memory **22**" which is "received" by the "demultiplexer **24**" and the "decoders **26**." As shown in Figure 1 of Kramer below, the "memory **22**," the "demultiplexer **24**," and the "decoders **26**" are all internal components of the memory card.



None of these components constitutes an "external device" as required by the Court's construction of "transmission away."

Moreover, Kramer makes clear that the output from the decoders 26 (see above) out of the memory card to the required external device does not occur at an accelerated speed:

> The decoder can read the data at the required slower reproduction rate by taking, e.g. only one out of every 100 bits of information presented to it at a time; the intervening 99 bits will be read on subsequent cycles of memory, so the data in the memory is held in an interleaved fashion.

Kr. 4:47-53. The "slower reproduction rate" is the real-time rate at which the decoders produce an analog signal to pass to the replay unit. Kr. 4:58-64. This analog signal, therefore, does not leave the card faster than real time. Nor could this analog signal qualify as the claimed "time compressed representation," which is necessarily a digital signal under the Court's claim construction. Apple claims that Kramer discloses transferring information from one card to another "at least 100 times faster than real time." M.S.J. 11. But Kramer's discussion of transferring information from one card to another never states the speed at which that transfer would occur. Kr. 5:9-14.

Even if transfer from card to card occurred at the same speed as the output from the memory to the multiplexers and decoders, it would still not transmit a work away from the card faster than real time. As Dr. Gersho's declaration sets forth, the reference in Kramer to output faster than that required for sound reproduction refers to the speed at which data is output from the memory for all the decoders relative to the rate that data is needed for reproduction by a single decoder. G par. 9. In Kramer, the signal is coded into many sub-bands, each corresponding to a small slice of the total frequency to be reproduced, and a decoder is provided for each sub-band. *Id.*; *see* Kr. 3:20-23. The data for many sub-bands is stored sequentially in the memory in an "interleaved fashion," *i.e.*, the first bit for sub-band one is followed by the first bit for sub-band two and so forth for each sub-band, followed then by bit two for sub-band one, bit two for sub-band two, and so forth. G par. 9; *see* Kr. 4:51-52. While the data rate of the memory is faster than required to reproduce sound in any given sub-band in real time, the interleaving of sub-band data outputs the information required to reproduce and multiplex together all of the sub-bands exactly in real time. G pars. 9-11. Thus even if the signal were passed "directly to the output multiplexer 32 without passing through the [d]ecoders 26" at 100 times the speed required for reproduction of a single sub-band by a single decoder as stated in Kramer, Kr. 5:5-10, the data rate for all of the (in this case 100) sub-bands would still be exactly that required for real-time reproduction of the complete work. *Id*.

4. Kramer Does Not Disclose "Random Access Storage Means"

The Court construed "random access storage means" as "storage that provides for random access to any given segment of stored audio/video source information." C.C. Ord. 37. '995 Claim

1 requires "random access storage means, coupled to said compression means, for storing the time compressed representation of said audio/video source information." The Kramer memory card does not provide for random access to any given segment of stored audio/video source information, nor is it coupled to any compression means. Thus Kramer does not disclose "random access storage means."

The Kramer card memory is a "bubble memory." Kr. 2:38-40. Kramer notes that the prior art includes bubble memory "arranged so as to allow immediate recall of the data stored in any portion of the memory." Kr. 1:35-37.[5] But in express contrast to such memories, Kramer states:

> 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.

Kramer 2:25-28.[6] To achieve this, Kramer provides that "[t]he memory is preferably organized so as to appear to be a circular shift register . . . ." *Id.* 4:1-2. Kramer is explicit that data is written to the card memory as a "data stream, in serial order." Kr. 3:56-57. The memory in Kramer is specifically described as a serial access device in which each bit of data is written and read sequentially, and specifically distinguished from memory configured to "allow immediate recall of the data in any portion of the memory." Kr. 1:35-37; G par. 12. Kramer, therefore, expressly disavows and teaches away from "random access storage means" within the meaning of '995 Claim 1 as construed by the Court.

Even the sequential storage means in Kramer are not "coupled to . . . compression means." As noted above, Kramer does not disclose the claimed compression means. Even the referenced analog encoding, which is not the claimed compression, takes place "outside the illustrated

---

[5] Some of the Burst patents likewise mention using bubble memories for random-access storage. *See* U.S. Pat. No. 5,057,932, at 6:39, 13:43; U.S. Pat. No. 5,995,705, at 6:25.

[6] *See also* Kr. 1:63-64 ("a memory for the storage serially of digital data"); 7:55-56 ("said memory capable of storage serially of digital data").

system." Kr. 3:10. Whatever undisclosed means may perform this encoding (*e.g.*, at the record shop), it is not coupled to memory in Kramer. G par. 12.

B. Kramer Does Not Anticipate '995 Patent Claim 17

'995 Claim 17 requires a transceiver apparatus in a common housing that includes an input for receiving the time compressed representation faster than real time, random access storage for storing it, and an output for re-transmitting it to an external device. Kramer does not disclose the claimed "input means for receiving audio/video source information as a time compressed representation." As shown, the information that the Kramer memory card receives is not a "time compressed representation" under the Court's construction because, it does not have a "reduced number of bits." And Kramer never states that the memory card receives compressed audio information (from "outside the illustrated system") faster than real time, as required by the claim.

Additionally, Kramer does not disclose the claimed "random access storage means" because, as previously shown, Kramer only discloses a serial-access memory. Finally, the last limitation of '995 Claim 17 requires that the time compressed representation have "an associated burst time period" that the Court construed as a shorter than real-time "transmission period" to an "external device." C.C. Ord. 23. Also as shown, Kramer does not disclose transmission (much less the claimed re-transmission) to an external device faster than real time. Instead, as shown, Kramer's "at least 100 times" statement refers to an internal transfer relative to sub-band decoder speed, and does not disclose a faster-than-real-time transmission from card to card. For each of these reasons, Kramer fails to anticipate '995 Claim 17.

C. Kramer Does Not Anticipate '839 Claims 1 or 17

'839 Claim 1 is a method claim that parallels the elements of '995 Claim 1. '839 Claim 1 includes the following steps: (1) receiving audio/video source information; (2) "compressing the received audio/video source information into a time compressed representation having an associated burst time period;" storing the time compressed representation; and (4) "transmitting, in said burst time period, the . . . time compressed representation." As shown above, Kramer does not disclose "compressing" audio/video source information into a "time compressed representation"

because there is no reduction in the number of bits of the received audio. Also as shown above, Kramer fails to disclose "transmission" in "an associated burst time period" as the Court has construed those terms.

There is yet another flaw in Apple's argument based on the required sequence of steps. Kramer teaches that the memory card – the focus of Apple's motion – receives audio that has been subjected to DPCM (Apple's alleged compression) at the record shop. This is out of sequence with the claims because the claimed compression must occur *after* (not before) the audio is received. But, as discussed above, neither the memory card nor the replay unit in Kramer has any compression components, which necessarily means that no compression can occur *after* the audio is received. For these reasons, Kramer does not anticipate claim 1 of the '839 patent.

Kramer fails to anticipate '839 claim 17 on similar grounds. '839 Claim 17 is a method claim that parallels the elements of '995 Claim 17. '839 Claim 17 includes the steps of "receiving audio/video source information as a time compressed representation thereof . . . over an associated burst time period," storing it and then "[re-]transmitting, in said burst time period, the . . . time compressed representation" to an external device. But Kramer does not disclose receiving or transmitting a "time compressed representation" because there is no reduction in the number of bits of the original audio. Nor does Kramer satisfy the claimed "burst time period" since it has no faster than real time reception or re-transmission capabilities. Accordingly, Kramer fails to anticipate claim 17 of the '839 patent.

D. Kramer Does Not Anticipate '995 or '839 Claim 9

Both '995 and '839 Claim 9 depend from Claim 1 and add the further limitation that "said audio/video source information comprises digital audio/video source information." But Kramer's source information is analog – not digital. The antecedent basis of the limitation is the first element of Claim 1, which refers in both patents to receiving audio/video source information prior to the steps of compressing, storing, and transmitting. Kramer never discloses receiving digital audio prior to compression, as '995 and '839 Claim 9 require. The outside encoding into digital form that Apple mistakenly calls compression in Kramer only operates on analog source information – not

the claimed digital source information. G par. 8. Kramer also fails to anticipate '995 and '839 Claim 9 because, as shown, it does not anticipate the independent claims from which '995 and '839 Claim 9 depend.

E. Kramer Does Not Anticipate '995 and '839 Claim 15

'995 and '839 Claim 15 depend from Claim 9, and further require that the audio/video source information be received from a computer. Apple quotes Kramer's statement that "[t]he data stored on the system could be analogue data other than sound, e.g. for recording scientific, technical, medical or computer information." M.S.J. 12 (citing Kr. 6:31-33). But Apple does not cite any disclosure of such information actually being received from a computer. Nor is such reception inherent. Computer information could be received by the Kramer system from some other storage medium, such as a disk. G par. 13. Kramer does not disclose this element of '995 and '839 Claim 15.

'995 Claim 15 further requires that the received audio/video source information be computer generated. But the "computer information" in Kramer is expressly described as being "other than sound." Kr. 6:31-33. Kramer does not suggest that the computer information might be video, and Kramer has no capacity to handle video in any event. G par. 14. Because the computer information referred to in Kramer is neither sound nor video, it cannot be the claimed "audio/video source information." *Id.* Kramer fails to anticipate '995 Claim 15 for this reason as well.

F. Kramer Does Not Anticipate '995 and '839 Claim 44 or '839 Claim 47

'995 and '839 Claim 44 depend on Claim 1, and '839 Claim 47 depends on Claim 17. All of these claims involve recording a "time compressed representation" onto a "removable storage medium." '995 Claim 44 requires that the transceiver of Claim 1 possess recording means that includes the removable storage medium coupled to the claimed random access storage means. There is no disclosure in Kramer of inserting a further storage medium into one of the memory cards, and even if there were, the memory cards possess no means of recording to such a medium. G par. 15. Kramer does disclose a slot for inserting a memory card in a player unit, Kr. 6:10-12, but Apple does not contend that a player unit is a transceiver, and Kramer never discloses recording

onto a card using a player unit. G par. 15. For this reason, and because Kramer fails to anticipate the independent claims from which they depend, Kramer fails to anticipate '995 and '839 Claim 44 or '839 Claim 44.

V. KEPLEY DOES NOT ANTICIPATE THE BURST AUDIO CLAIMS

If Kramer misses the mark of the Burst patents, Kepley isn't even aimed at the target. The Kepley patent that Apple claims anticipates claims 1, 9, 15 and 17 of the '995 and '839 patents describes a distributed voice mail system that has nothing to do with receiving, compressing, transmitting, and storing audio or video works in a common housing transceiver.

A. Kepley Does Not Anticipate '995 Claim 1

Kepley lacks the "transceiver apparatus," "audio/video source information," "compression means," "time compressed representation," and "associated [burst] time period that requires faster than real time transmission" elements of '995 Claim 1.

1. Kepley Does Not Disclose a "Transceiver Apparatus"

Kepley fails to meet the "common housing" requirement of the "transceiver apparatus" limitation of '995 Claim 1. Instead, Kepley discloses a voice mail system having multiple housings for its components. Apple fails entirely to address this limitation, much less present clear and convincing evidence of its presence in Kepley.

Figure 1 of Kepley, right, and the accompanying specification show an originating "voice mail system 110" with three processor systems depicted in separate blocks ("voice storage processor 111," "feature processor 112" and "data base processor 113"). Kepley ("Ke.") 5:23-39, 9:1-20 & Fig. 1. The voice storage processor receives the original telephone call at "voice ports 210-21n," and the speech data is then processed in "voice processors 220-22n," shown in the expanded view of the voice mail system in

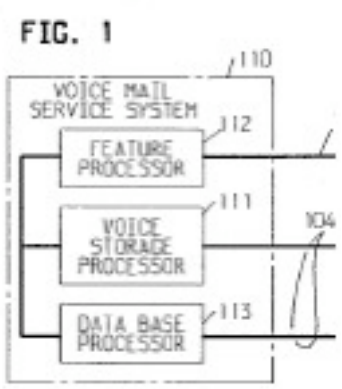
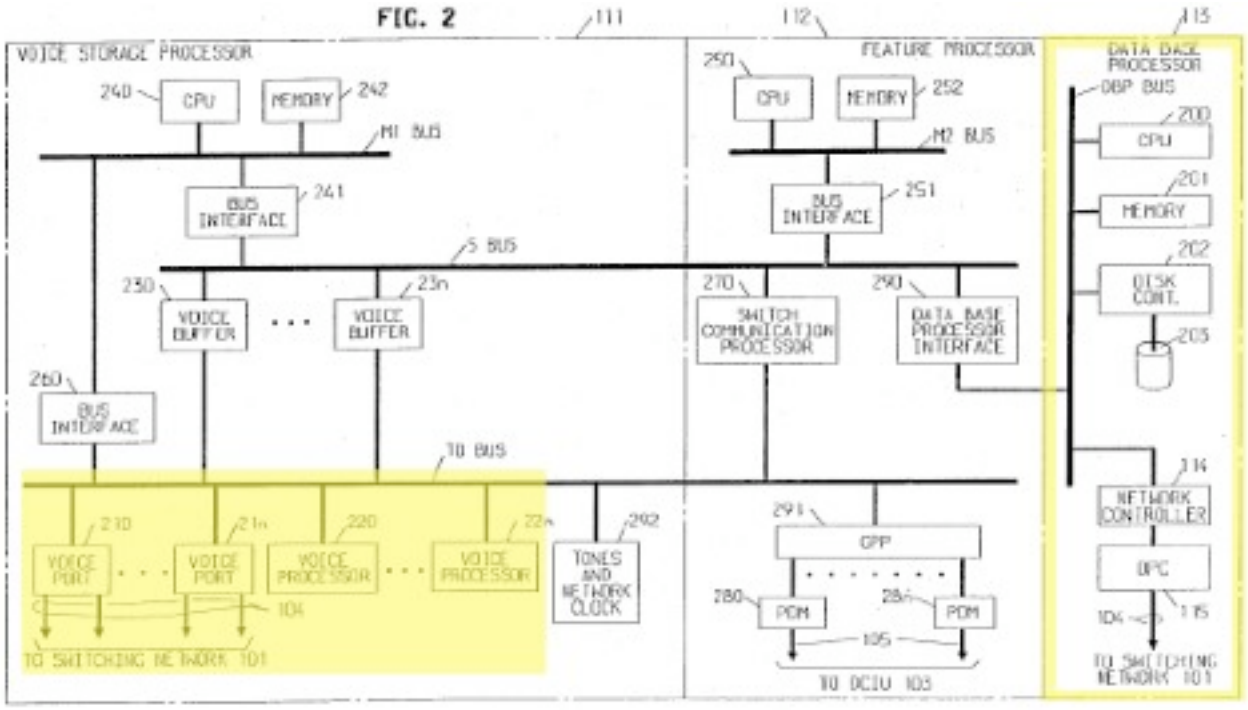


Figure 2, below. Ke. 8:27-35, 9:16-20 & Fig. 2. The resulting speech file is then "transmitted" from the voice storage processor to the data base processor, where the file is stored in "disk storage 203." Ke. 9:16-20 & Fig. 2. The data base processor is further described as:

> a **back-end file system** and **data base machine**. As a back-end processor, data base processor **system** 113 serves to offload file system and data base operations from voice storage processor 111.

Ke. 7:58-62 (emphasis added).



The description and drawings in Kepley show that the data base processor that stores and transmits voice mails is a separate device from the voice storage processor that receives and compresses them. "Machine" and "back-end file system" connote a stand-alone unit with its own housing. Hemami Dec. ("H") par. 29. So does the general use of the word "system" to describe the data base processor components. *Id.* Use of an "interface" to allow communication between the voice storage processor and the data base processor further indicates that they are separately housed devices. *Id*. Certainly, nothing in Kepley expressly or inherently teaches the opposite conclusion.

2. Kepley Does Not Disclose "Audio/Video Source Information"

'995 Claim 1 requires receiving, compressing, storing, and transmitting "audio/video source information." The audio/video source information limitation permeates the claim, appearing in every element. The Court has construed this term in relevant part to mean "an audio and/or video work . . . including a portion of a complete program." C.C. Ord. 8. Both parties agreed that the construction of "audio/video source information" requires a work. Jnt. C.C. Cht. by Term Ex. A, Docket No. 97-1. But a voice mail – the only kind of sound information disclosed in Kepley – is not a "work" by any definition.

A work is "something produced by the exercise of creative talent or expenditure of creative effort." Webster's New Collegiate Dictionary 1340 (1981), H Ex. A; *see* H par. 13. The Burst patents track this concept in the examples of "audio/video source information" that they depict, such as television programs and movies. *See, e.g.*, '995 at 1:6-18, 1:40-62, 2:1-7, 5:28-32, 7:1-8. The Court's construction likewise identifies a "program" as an example of an audio/video work. C.C. Ord. 8. Even Apple's *Markman* brief describes a work as a "song" or "video." Apple C.C. Br. 39-40, Docket No. 71. No speaker of English consulting a dictionary, much less a person of skill in the art consulting the Burst patents as construed by the Court, would call a voice mail a "work." H par. 11-15, 28.

To a person of skill in the art, the distinction between a voice mail as disclosed in Kepley and an audio/video work as claimed in the Burst patent goes much deeper than plain meaning. *See* generally H par. 11-28. In the field of digital signal processing particularly, voice processing and wideband audio processing are vastly different. H par. 14-28. This difference begins with the widely divergent characteristics of speech and wideband audio. While human hearing spans a frequency range of approximately 5 Hertz to 20 kHz, speech is concentrated in the frequency range of 200 Hz to 3.2-3.4 kHz, with normal speech having a dynamic range of approximately 30 dB. H par. 21. In contrast, wideband audio works span the entire frequency range of human hearing (5 – 20kHz), with a dynamic range of over 100 dB. *Id.* Representing the vastly greater complexity of

full-spectrum audio works in a digital signal requires an order of magnitude more data than representing narrowband voice signals. H par. 22.

This quantity of data has a quality all its own. A system like Kepley designed for speech processing simply cannot handle the huge volume of data required to represent digital audio works. The Kepley system digitizes speech by taking 8,000 samples/second (about twice the frequency range for normal speech), representing each sample with 8 bits. This produces a digital signal having a data rate of 64 thousand bits per second (kb/s) (8k samples/sec X 8 bits/sample). *Id.* By contrast, a system designed for wideband audio, like the Burst inventions, requires much more data. *Id.* For example, Apple's brief states that CD-quality audio requires 705 kb/s (44.1k samples/sec X 16 bits/sample). M.S.J. 2 n.8.

Kepley does not disclose and could not process anything remotely like the much higher data rates required for wideband audio works. Moreover, application of the Kepley system to audio works would eliminate all frequencies between 3.2kHz and 20kHz, filtering out 85% of the frequency content of the wideband signal. H par. 23. The resulting digital signal would be highly degraded. *Id.* Application of the voice compression techniques described in Kepley and discussed below would further degrade the signal beyond acceptable criteria for audio works. To a person of skill in the art, such a signal would not be a representation of "audio/video source information" as the Court has construed that term. *Id.*

Obviously, some works, such as audiobooks or recited poetry, do consist entirely of spoken voice. But Kepley does not disclose any works of this kind. Nor would it make sense to receive, store, or send such works using the Kepley system. Kepley discloses no means for receiving pre-recorded works, and there would never be any reason to create a vocal work in the first instance by reciting it into a voice mail system by telephone. Nor would it make any sense to tie up a phone line with a call into a voice mail system to play back such a recording over the telephone. Suggesting otherwise is no less strained than Apple's previous attempts to come up with an example of storing a time-compression multiplexed file. *See* C.C. Ord. 12-13.

Because Kepley fails to expressly or inherently disclose an audio work, it does not disclose "audio/video source information" under the Court's construction, and thus fails to anticipate '995 Claim 1.[7]

3. Kepley Does Not Disclose "Compression Means"

The third limitation of '995 Claim 1 missing in Kepley is "compression means." This limitation requires "for audio, a compressor/decompressor executing the following data compression algorithm; reducing the number of bits by comparing two or more samples and coding certain differences between those samples, plus equivalents." C.C. Ord. 9. Kepley fails to disclose this limitation because it does not disclose any algorithm, much less the claimed algorithm of comparing two or more samples and coding certain differences.

Apple does not even argue that Kepley discloses the claimed algorithm. M.S.J. 16 & n.68. Instead, it just cites Kepley's reference to "bandwidth compression (compress the voice data from 64k bits/s down to 16k bits/s)" 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)." Ke. 8:27-35. "Silence compression," as described in Kepley and understood by a person of skill in the art, does not involve comparing samples and coding differences as required by the Court's construction. G par. 27. "Bandwidth compression" does not specify any particular compression technique at all. G par. 20. Certainly, there were widely known algorithms for compressing audio from 64 kb/s to 16 kb/s that did not involve comparison and coding of certain differences between samples. G. par. 19-26. In short, nothing in Kepley either expressly or inherently discloses the audio compression algorithm required under the Court's construction of "compression means."

[7] Moreover, because the Court's construction of "time compressed representation" requires a representation of "audio/video source information," Kepley fails to disclose that limitation as well.

4. Kepley Does Not Disclose an "Associated [Burst] Time Period"

Finally, Kepley does not disclose a faster-than-real-time "burst" transmission time period as required by '995 Claim 1. In fact, a person of skill in the art would recognize that the Kepley system is incapable of faster than real-time transmission. *See generally* H par. 34-50.

Substantial signaling overhead limits the practical amount of bandwidth available for transmission in Kepley. In the Kepley system, voice mail messages are "transmitted by the network controller in 128 byte segments." Ke. 14:59-60. Each segment travels "from originating voice mail service system 110 over one of communication lines 104, through telephone switching system 100, central exchange office 130, telephone switching system 140, over one of communication lines 154 to destination voice mail service system 150." Ke. 5:66-6:5 & Fig. 1; H par. 35. The transmission over this path is initiated at "DCP port 115 [which] is a standard data port connected to switching network 101 and functions to provide data call connection capability between voice mail service systems." Ke. 8:16-24 & Fig 2; H par. 36. "DCP" stands for "digital communications protocol," which was a proprietary AT&T protocol for digital communications over telephone lines. H par. 37. Kepley employs several additional protocols in conjunction with DCP to accomplish transmission. Ke. 14:58-15:32 & Figs. 4-6; H par. 37-48. Control information for each protocol employed must be appended to each 128 byte segment of voice mail data transmitted between the systems. *Id.* Dr. Hemami has calculated that the number of additional bytes per segment required for protocol headers would impose transmission overhead of 17.2% to 18.8%, requiring available bandwidth of 18.8 kb/s to 19 Kbps to transmit a 16 kb/s voice mail as described in Kepley in real time. H par. 45.

The Kepley system has nothing like this available bandwidth. Kepley's use of the protocol LAPD, which stands for "Link Access Procedure on the D-channel," indicates that digital communications in the Kepley system occurred over a 16 kb/s link known as the D-channel of a

standard AT&T line. H par. 41.[8] The combination of LAPD with another protocol called X.25 has a well-known and lower default data rate of only 9.6 kb/s. H par. 48. It is clear that this is in fact the maximum bandwidth available in Kepley from the otherwise enigmatic statement that "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." Ke. 13:33-37. Plainly, 9.6 kb/s cannot be a threshold speed for transmitting 16 kb/s voice mail faster than real time using the Kepley system, even leaving aside that transmission overhead would require a much higher rate merely for real-time transmission. H par. 48. A person of skill in the art would understand this reference to 9.6 Kbps to refer to the actual maximum bandwidth available in Kepley, which is well below the threshold required for faster than real time transmission of even voice mails, much less wideband audio works. H pars. 48-50.[9] A person of skill in the art would consider the reference to faster than real time transmission in Kepley to be purely aspirational, inasmuch as Kepley contains no teaching of what the actual threshold would be for achieving it, nor any indication of how to do so using Kepley's signaling techniques or facilities. *Id.*

B. Kepley Does Not Anticipate '995 Claim 17

As shown above, Kepley lacks the "transceiver apparatus," "audio/video source information," "time compressed representation," and "burst transmission" limitations that are common to '995 Claims 1 and 17. Lack of faster-than-real-time transmission means that Kepley necessarily lacks the faster than real time reception required by '995 Claim 17 as well, since voice mail systems in Kepley only transmit to and receive from each other. H par. 48-50, 55. Moreover, even if Kepley did teach faster than real time reception and re-transmission, it does not teach them in combination as required by '995 Claim 17. H par. 55.

---

[8] The reference in Kepley to 19.2 Kbps data links at 10:22-23 refers to links for control messages between the various system elements and are not the same as the links used to transmit voice data between Kepley voice mail systems. H par. 51.

[9] For example, using Kepley's 4:1 compression ratio, a 705.6 kb/s CD audio file would require 176.4 kb/s for audio date alone before signaling overhead. H par. 50.

Apple does not contend that either the recording or the playback of messages in Kepley occurs in anything but real time. Apple only argues that transmission from the originating system and reception by the destination system may occur faster than real time. The discussion with respect to Claim 1 above shows this to be false because there is no faster than real time transmission to the destination system. But even were Apple correct about the transmission from the originating to the destination system, Kepley never teaches that the destination system might store a message that it receives and transmit it onward to further destination. H par. 55. Indeed, Kepley wholly fails to address the concept of re-transmission (much less faster than real time re-transmission) of a stored voice mail that was received from the originating voice mail system. *Id.*

The Kepley specification makes clear that the party leaving the voice mail must designate a specific time for its transmission from originating voice mail system 110 to destination voice mail system 150. Ke. 3:13-18, 5:50-56, 12:48-54. For example, a caller may record a voice mail at 2 p.m. on Monday and designate that it be transmitted at 8 a.m. on Tuesday. Kepley has no similar discussion about the recipient's ability to re-transmit a voice mail that has been delivered to the destination voice mail system. H par. 55. Kepley merely discloses that the recipient can dial up the destination voice mail system to receive certain information about the caller who left the voice mail and to listen to it. Ke. 16:33 – 17:13. There is no express teaching, or even suggestion, that the recipient can re-transmit the received voice mail after listening to it, much less that this undisclosed re-transmission could be done faster than real time, as required by claim 17. H par. 55.

C. Kepley Does Not Anticipate '839 Claims 1 and 17

'839 Claims 1 and 17 are method versions of '995 Claims 1 and 17. As shown above in the apparatus claim context, Kepley does not disclose the claimed "audio/video source information" at all, much less a "time compressed representation" of that source information. Kepley simply does not disclose an audio work as required by these claims. H pars. 11-28. Nor does Kepley disclose any form of faster than real time reception (required by '839 claim 17), transmission (required by '839 claim 1) or re-transmission (required by '839 claim 17). There is simply no faster than real

time operation in Kepley. H pars. 34-50, 55. For these reasons, Kepley does not anticipate '839 Claims 1 and 17.

D. Kepley Does Not Anticipate '995 and '839 Claim 9

Kepley does not anticipate '995 and '839 Claim 9 because, as shown, it does not anticipate Claim 1 of those patents from which Claim 9 depends, and also because it does not receive digital audio prior to compression as required by the Court's construction.

In Kepley, the only information that is received prior to compression is analog voice when a message is recorded at the originating voice mail system. H pars. 52-53. Kepley clearly discloses that speech information is first received in analog form by the originating system. Kepley states that "hardware necessary to digitize voice and successfully buffer it before storing it . . . is part of the voice storage processor **111**." Ke. 5:37-39 & Fig 2. Digitizing refers to the process of converting an analog signal into a digital signal and is unnecessary for information received in digital form. H par. 52. Incoming messages are received through the "voice port **210**" component of the voice storage processor by means of a "switching network **101**," which is a switched analog telephone network. The voice port is connected within the voice storage processor to a "voice processor **220**" where only then are messages "converted to digitally encoded voice signals." Ke. 9:5-16; H pars. 52-53. The destination system may receive audio in digital form, but only after it is first compressed and stored by the originating system. Ke. 15:34-40.

Apple argues that "voice data, before compression, is 64 k bits/s, and is thus digital." M.S.J. 17 (citing Ke. 8:27-31). But the passage Apple cites refers to compression by the voice processor described previously as also performing conversion of analog voice into digital. Ke. 9:5-16. Thus, the voice processor does not ever receive digital voice data prior to compression within the Kepley system. Rather, analog to digital conversion and compression are performed within the same component. H par. 52. Because Kepley fails to follow the sequence of steps in the patents respecting digital audio, it cannot anticipate '839 or '995 Claim 9.

E. Kepley Does Not Anticipate '995 and '839 Claim 15

'995 and '839 Claim 15 depend from Claim 9, which means they include all of the limitations in Claims 1 and 9. Accordingly, Claim 15 of both patents are not anticipated for the same reasons stated above with respect to those claims. In addition, '995 Claim 15 adds the limitation that the "input means is coupled to an external computer and said digital audio/video source information comprises computer-generated audio/video information." Similarly, claim 15 of the '839 Patent adds the limitation that the "audio/video source information comprises information received from a computer." The passages Apple cites as showing these limitations describe converting an analog voice signal received from a human being into digital form and storing it in a computer. Ke. 1:63-65. On its face, this audio information is neither generated by nor received from a computer. H par. 54. Without citation to any source, Apple claims that "one of skill in the art would recognize" that the speech thus generated and stored is "received . . . 'from a computer.'" M.S.J. 17. This argument is baseless and unsupported. It is also a complete non-sequitur. While the stored digital speech generated from the analog signal may be transmitted to a destination voice mail system, as shown above, Kepley only discloses doing so after it has first been compressed, stored, and transmitted. But also as shown, the claims require that the information be received from a computer before it is compressed, stored, and transmitted. Kepley never discloses compressing, storing, and transmitting information that is first received from or generated by a computer. H par. 54.

VI. CONCLUSION

Apple has failed to carry its burden to show by clear and convincing evidence that either Kramer or Kepley anticipates any challenged claim of Burst's patents. To the contrary, the record unequivocally shows that each reference fails to disclose multiple elements of each challenged claim. At the very least, there are numerous genuine and material fact issues on which a jury could find for Burst. This precludes summary judgment for Apple. For these reasons, Burst respectfully requests that Apples Motion for Summary Judgment on Invalidity be DENIED.

Dated: June 7, 2007

PARKER C. FOLSE III
(WA Bar No. 24895 – *Pro Hac Vice*)
pfolse@susmangodfrey.com
IAN B. CROSBY
(WA Bar No. 28461 – *Pro Hac Vice*)
icrosby@susmangodfrey.com
FLOYD G. SHORT
(WA Bar No. 21632 – *Pro Hac Vice*)
fshort@susmangodfrey.com
SUSMAN GODFREY, L.L.P.
1201 Third Avenue, Suite 3800
Seattle, Washington 98101-3000
(206) 516-3880 Tel.
(206) 516-3883 Fax

SPENCER HOSIE (CA Bar No. 101777)
shosie@hosielaw.com
BRUCE WECKER (CA Bar No. 078530)
bwecker@hosielaw.com
HOSIE McARTHUR LLP
One Market, 22nd Floor
San Francisco, CA 94105
(415) 247-6000 Tel.
(415) 247-6001 Fax

MICHAEL F. HEIM
(TX Bar No. 9380923 – *Pro Hac Vice*)
LESLIE V. PAYNE
(TX Bar No. 0784736 – *Pro Hac Vice*)
HEIM, PAYNE & CHORUSH, L.L.P.
600 Travis Street, Suite 6710
Houston, TX 77002
(713) 221-2000 Tel.
(713) 221-2021 Fax

ROBERT J. YORIO (CA Bar No. 93178)
ryorio@carrferrell.com
V. RANDALL GARD (CA Bar No. 151677)
rgard@carrferrell.com

COLBY B. SPRINGER (CA Bar No. 214868)
cspringer@carrferrell.com
CARR & FERRELL LLP
2200 Geng Road
Palo Alto, CA 94303
(650) 812-3400 Tel.
(650) 812-3444 Fax

ATTORNEYS FOR DEFENDANT
BURST.COM, INC.

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the above and foregoing **DEFENDANT BURST.COM, INC'S REPLY TO PLAINTIFF APPLE COMPUTER, INC.'S MOTION FOR SUMMARY JUDGMENT ON INVALIDITY BASED ON KRAMER AND KEPLEY PATENTS** was served as follows on the following counsel of record:

Nicholas A. Brown Matthew D. Powers WEIL, GOTSHAL, & MANGES, LLP 201 Redwood Shores Parkway Redwood Shores, CA 94065	*via Electronic Mail and Federal Express*
Garland T. Stephens WEIL, GOTSHAL, & MANGES, LLP 700 Louisiana, Suite 1600 Houston, TX 77002	*via Electronic Mail*

DATED: June 7, 2007