I, Richard Lang, declare that:

- I am the inventor of the claimed inventions in the '995, '932, '839 and '705 Patents in suit. I am currently the CEO of Burst.com, Inc. (Burst), the Defendant in the above-referenced Lawsuit. I have held various positions with Burst since its inception in 1987. When I refer to Burst, I am also referring to Explore Technology, Inc. and Instant Video Technologies, Inc., which are previous names used by Burst in its business. As a result of my affiliation with Burst, I have personal knowledge of its business.
- 2. Soon after filing the '995 patent application in December 1988, Burst began to look for additional financial backing to commercialize the invention. One early investor was the financial arm of the band U2. U2 had become interested in new technologies that might eventually distribute its products electronically and found Burst's invention to be far ahead of the current state of the art and thus a worthy of high risk development investment. U2 invested \$2 million in Burst.
- 3. Other investors in Burst over the years included several dozen various private investors who followed the company's progress over a period of approximately 15 years and invested in ongoing multiple financing rounds. Also, several private equity funds invested in Burst, including Storey Partners, Bay Star Ventures, Special Situations Fund, Millenium Capital Partners and Kellogg Capital Partners. Also, SBC Ventures, the investment arm of SBC Communications, invested \$5 million in Burst, in conjunction with the execution of an Operating Agreement with SBC Communications. These companies have invested tens of millions of dollars in Burst and its technology. At its peak, Burst had over 100 employees in 2000.
- 4. In January 1991, Burst introduced its invention at the Consumer Electronics Show, the largest trade show for the consumer electronics industry, held each year in January in Las Vegas,

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27 (00200589V1 Nevada. At the trade show, Burst demonstrated two prototypes embodying the company's invention. I was at the trade show and have personal knowledge of the events at the trade show.

5. As described in Burst's Opposition to Apple's Second Summary Judgment Motion, my invention includes the following:

> '932 Claim 4 is representative. It covers an "audio/video transceiver apparatus," meaning the components must be in a single housing, which is a feature of today's consumer electronics devices. Because "the steps of Burst's patents are necessarily sequential" (C.C. Ord. 24), the claimed components must be configured to allow each function to occur in a specific order. First, the "input" port receives large "full motion video programs." These programs or works must have a temporal dimension and artistic merit (as opposed to a text file that has no temporal quality or a voice mail that lacks creativity). Next, the "compression means" employs a compressor that reduces the number of bits of the video by performing specific compression algorithms designed for "efficient storage, transmission, and reception." '995 Following compression, the time compressed video work is efficiently stored in "random access storage" (e.g., a magnetic disk), providing random access to any given segment of video. Such random access capability allows easy viewing and "provides convenience in the editing of stored data." **'995** 2:59-3:2. Finally, the random access allows the compressed video to be efficiently located and transmitted through an "output" port that sends the compressed video to an external device faster than it would take to play in real-time (i.e., FTRT transmission). In some of the claims (e.g., '995 Claim 17), the external device that receives the compressed work FTRT can store it in random access memory so that it can later be transmitted away FTRT again.

> Representative '932 Claim 4, therefore, covers an integrated device that incorporates specialized components specifically configured to provide for the most efficient processing of a/v digital data, including receiving, compressing, decompressing, storing, viewing, editing, recording, and transmitting FTRT.

- 6. The prototypes shown at the 1991 CES embodied the above claim ('932 Claim 4), as well as other claims including: claims 1, 8, 17, and 19 of the '995 Patent; claims 1, 17, 19, 76, and 77 of the '839 Patent; and claims 12 and 21 of the '705 Patent.
- 7. Burst conducted live demonstrations of the prototypes at the 1991 CES. In general, to the best of my recollection, those demonstrations included the following functionality: receiving

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(through a camera) audio/video at a first prototype, compressing the audio/video in the first prototype, storing the compressed audio/video in the first prototype, and then transmitting the compressed audio/video to a second prototype faster than real time. (Previously compressed audio/video stored in memory in the first prototype was also transmitted faster than real time to the second prototype.) The prototypes had a single housing, and the transmission occurred over a fiber optic line that connected the two prototypes. Once the content was received (faster than real time) at the second prototype, it then decompressed the audio/video and played it back in real time on a monitor.

- 8. Burst's invention generated a lot of excitement at the trade show, and it was seen by many as heralding the future of true video-on-demand, whereby digital content could be sent faster than real time to consumers through a network. Following the trade show, Burst received more than 1,500 inquiries about the prototypes, including at least seven from Apple employees who had seen the demonstration. The invention was also written up in many publications (e.g., the Philadelphia *Inquirer, Christian Science Monitor, etc*) that were very complimentary.
- 9. Burst's demonstration generated excitement because it represented a new direction for the audio/video content industry. At the time of invention, the industry standard for such content delivery was the real-time broadcast/streaming paradigm. This means that content was transmitted at the same rate at which the content would be played back.
- 10. Starting in 1998, Burst began selling and licensing a software product called Burstware, which utilized faster-than-real-time delivery of audio/video content. Burstware worked in conjunction with some of the leading media players already on the market, including Microsoft's Windows Media Player and Apple's QuickTime, and solved many of the service problems inherent in conventional real-time streaming. In particular, Burstware's functionality included the faster-

than-real-time transmission method that allowed smoother audio/video playback because content would be "burst" – i.e., transmitted faster than real time – through the network, and stored at the viewer's (or listener's) end, ahead of the time in which it would need to be played back. This means that momentary interruptions in the network wouldn't interrupt the viewing (or listening) on the user's end because the content would have already been sent through the network before the interruption, and would be viewed or listened to from the user's storage. Burstware also allowed for content to be sent through the network and stored permanently on a consumer's device for later playback. As described, the Burstware product solved real-time streaming problems including, among others, jittery pictures and black-out periods, which resulted from interruptions in the network service.

- 11. While Burst's invention has been very important to the audio/video content industry and has driven the commercial success of many products that incorporate the technology, there were many skeptics along the way. Perhaps the most notable skeptic was Microsoft. Burst tried many times to convince Microsoft of the importance, and uses of, Burst's technology. True and correct copies of emails between Burst and Microsoft managers and engineers (primarily Bill Shiefelbein and Will Friedman) showing this skepticism are attached hereto as Exhibits 1 and 2.
- 12. After Microsoft received positive reports from Burst's customers, including the major broadband internet services provider Excite@Home, Microsoft began to believe in the viability and advantages of the Burst faster than real time model for content delivery. A true and correct copy of an email from Microsoft employee Will Friedman to various Microsoft employees, discussing Burst and the conversation with Excite@Home, is attached hereto as Exhibit 3. This email was produced by Microsoft during prior litigation with Burst.

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- 13. Excite@Home conducted its own analysis of Burst's technology and found it superior in many ways to the conventional real-time streaming approach then in vogue, including offering the benefits of download and play. I believe that Apple is now using Burst's technology as Excite@Home had envisioned and has achieved remarkable commercial success doing so. Unfortunately, Excite@Home reorganized after testing Burst's product and failed to take advantage of the opportunity presented. A true and correct copy of an email from Excite@Home is attached hereto as Exhibit 4.
- 14. In late-2000, Burst hired Approach, Inc., an independent testing laboratory often used by Microsoft itself, to run a performance comparison between the ordinary Windows Media Player and the Burst-enabled Windows Media Player. Burst had hired Approach as a result of Microsoft's skepticism which I mentioned above. A true and correct copy of Approach's study is attached hereto as Exhibit 5. This study clearly showed that the Burst-enabled Windows Media Player was, among other things, "more scalable," "more efficient," and "able to deliver a higher-quality end-user experience than conventional [real time] streaming." Ex. 5, at APBU-00016782-83.
- 15. Burst has licensed the patents in suit. Six Burst patent licenses are attached hereto as Exhibits 6 11. Burst has also licensed its Burstware product, which allows for faster-than-real-time transmission among other things. Burst has granted more than 20 licenses for its Burstware product. An example of these product licenses is attached hereto as Exhibit 12.
- 16. In April, 2005, Microsoft paid \$60 million for a nonexclusive license to Burst's patents. This license was part of a settlement of litigation between Microsoft and Burst. A true and correct copy of this license agreement is attached hereto as Exhibit 11 (Filed under Seal). Burst had sued Microsoft over, among other things, Microsoft's distribution of its Windows Media Server and

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