UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

INTERNATIONAL BUSINESS MACHINES CORPORATION, Plaintiff, vs. MARK D. PAPERMASTER, Defendant.	08 Civ. 9078 (KMK) **DECLARATION OF ROBERT MANSFIELD**

I, Robert Mansfield, declare as follows:

1.   I am currently employed by Apple Inc. ("Apple") as Senior Vice President of Macintosh Hardware Engineering. In this role, I manage the development of desktop and laptop personal computers for Apple.

2.   Apple's primary business is the design, manufacture and marketing of consumer electronic products, which include personal computers (Macs), portable digital music players (iPods), and mobile communications devices (iPhones). Apple also sells a variety of products that are compatible with those consumer electronic products, including application software, printers, storage devices, speakers, headphones and various other accessories.

3.   By contrast, IBM's business focuses on high performance services for business customers. The only Apple product of which I am aware that arguably competes with an IBM product is Apple's top of the line Xserve (servers are computers that share resources with other computers on a network). Xserve sales represent a small portion of Apple's business, providing approximately   of Apple's revenues. To my knowledge, IBM currently has no consumer electronics business of its own, having sold its personal computer ("PC") business to Lenovo in 2005.   **REDACTED**

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4. I began my own career at IBM in 1982 after graduating from the University of Texas at Austin with a Bachelors of Science degree in electrical engineering. I first met Mark Papermaster in college, where we were in the same program and class. And like Mark, I went to work for IBM out of school in the Fall of 1982. When I first started at IBM in Austin, Texas, I was working with what was then a small microprocessor design group. Microprocessors are the tiny computer processors that essentially "run" a PC or other device. At that time, Mark was working for IBM in Burlington, Vermont. IBM eventually centralized its microprocessor development in Austin, and it was around that time that Mark moved there.

5. It was also at this time that IBM created the "PowerPC" design center. PowerPC is a RISC (reduced instruction set computing) instruction set architecture – or design strategy – created as part of the 1991 Apple–IBM–Motorola alliance, and was originally intended for PCs. Mark and I were both managers at this time and I considered him a peer. My efforts focused on the development of PowerPC microprocessors, while Mark worked in the "POWER" architecture design group, developing more sophisticated and bigger microprocessors for servers. The microprocessors that Mark's group developed were used primarily for IBM's own internal use.

6. The microprocessors used in servers are completely different from the microprocessors used in PCs, and even farther removed from the microprocessors embedded in other electronic devices (such as iPods and iPhones). First, the electrical power used and the cost differ greatly: while a server microprocessor may use 250 watts and cost $1,000 or more, a PC microprocessor will typically use 50 watts and cost $200 or less, and an embedded microprocessor will use ½ watt and cost about $20.

7.   More significantly, the process to create the microprocessors embedded in consumer electronics is very different from the process of creating server or PC microprocessors. The key design constraint in developing microprocessors for devices such as the iPod and the iPhone is that the microprocessors must be both highly compact and highly energy efficient, so as to accommodate the small size of the device and the fact that it runs on a battery. In particular, these embedded microprocessors must have a low leakage level – they cannot "bleed" energy when not in use – so that the consumer does not have to constantly recharge the battery. Server microprocessors, by contrast, are typically used in large business environments with an ample power supply, and thus have no such constraints. Server microprocessors, moreover, are tasked with executing numerous commands and performing multiple tasks simultaneously. Speed is critical in server microprocessors. As such, the goal in designing server microprocessors is to obtain the fastest and most powerful microprocessor possible, without any similar concern present in consumer electronic microprocessors regarding size or power use.

8.   I left IBM in 1994 to become a director (and eventually senior director) at SGI, where I was responsible for the development of various microprocessor designs, including designs for Nintendo game consoles and high-end microprocessors for servers. I left SGI in mid-1997 to become the vice president of Engineering at Raycer Graphics, a start-up company, where I again worked on microprocessor design. Raycer Graphics was acquired by Apple in 1999.

9.   At first, I continued to do microprocessor work at Apple. I was the Vice President of VLSI (very large scale integration). In 2006, I was tasked with taking over the hardware engineering of Apple's Mac products; I became the Senior Vice President of the group earlier this year. Prior to this time, I had no experience in designing consumer electronics, as my entire career had been devoted to microprocessor technology. Nonetheless, I have used my

general engineering and management skills to oversee the development of dozens of breakthrough Mac products, including the MacBook Air and the all-in-one iMac line.

10.   In January of this year, I discussed with other members of Apple's senior management how certain members of Apple's management team (including myself) came to the company with strong general technical engineering backgrounds, but no specific experience in consumer electronics. We discussed how Apple might be interested in hiring other people with similar backgrounds. I subsequently provided Danielle Lambert, Apple's Vice President of Human Resources, with a list of names.

11.   I compiled a list of eight individuals whom I knew had strong technical engineering backgrounds and that I thought would be a good cultural "fit" for the position at Apple. The individuals had to possess a solid engineering mind and a passion to create great products, as well as having strong managerial skills. If there is one ability, however, that an individual must possess to be successful at Apple, it is the ability and willingness to learn new things. Mark was one of those individuals who fit the profile. As I mentioned before, I had known Mark since college, and I believed that he was immensely smart and had a passion for technology. Even though he had spent his entire career at IBM, I was confident that he would adapt to Apple's more "team"-focused approach that forces cooperation across traditional lines. My only concern was his lack of a technical background in consumer electronics. The other seven individuals on my list similarly did not come from the consumer electronics field, but rather had experience in areas such as semiconductors and microprocessor design. There was at least one individual who fit the profile in every other way, but whom I did not include on my list because I believed that he would have trouble learning new things, and was too entrenched in the culture of his current employer.

12.   I know that Dani contacted some or all of the eight individuals on my list and brought them in for interviews at Apple. I did not interview Mark myself, as I already knew him very well, but we did meet briefly to discuss the company when he came to interview with others.
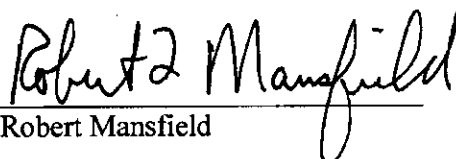
13.   I understand that Mark has been hired to lead Apple's iPhone and iPod product development. The work that Mark will be doing in this role is nothing like the work that he has been doing at IBM with servers and microprocessor development. Rather, Mark will be managing the development of an "end product" consumer electronic device, not the design of the microprocessors or other components that go into those products. Moreover, as I mentioned above, "embedded" microprocessors vastly differ from the server microprocessors on which Mark worked.

14.   I understand that IBM has expressed a concern that Mark was hired to work on P.A. Semi microprocessor design (P.A. Semi is a company that Apple acquired in April 2008). As noted above, Mark was hired to lead the iPod and iPhone development teams. Apple acquires the microprocessors used in those products from an outside vendor. The group acquired from P.A. Semi is managed by me, and it is not part of the group that Mark was hired to lead.

REDACTED

I declare under penalty of perjury that the foregoing is true and correct.

Executed: October 31, 2008
Cupertino, California

Robert Mansfield