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**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF UTAH**

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THE SCO GROUP, INC.

Plaintiff/Counterclaim Defendant

vs.

INTERNATIONAL BUSINESS  
MACHINES CORPORATION

Defendant/Counterclaim Plaintiff

**PLAINTIFF/COUNTERCLAIM  
DEFENDANT SCO'S  
MEMORANDUM IN OPPOSITION  
TO IBM'S MOTION TO STRIKE  
MATERIALS SUBMITTED BY  
SCO IN OPPOSITION TO IBM'S  
CROSS-MOTION FOR PARTIAL  
SUMMARY JUDGMENT**

**Case No. 2:03-CV-0294 DAK**

Honorable Dale A. Kimball  
Magistrate Judge Brooke C. Wells

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Pursuant to Federal Rule of Civil Procedure 56(f) and Federal Rules of Evidence 602 and 701, Plaintiff and Counterclaim Defendant The SCO Group, Inc. ("SCO") respectfully submits this Memorandum in opposition to Defendant/Counterclaim Plaintiff International Business Machines Corporation's ("IBM") August 23, 2004, Motion To Strike Materials Submitted By SCO In Opposition To IBM's Cross-Motion For Partial Summary Judgment ("IBM's Motion to Strike").

SCO's opposition to IBM's Motion to Strike is based on the following grounds:

### **PRELIMINARY STATEMENT**

SCO filed the Declarations of Chris Sontag, Sandeep Gupta and John Harrop in support of SCO's Memorandum in Opposition to IBM's Cross-Motion for Partial Summary Judgment ("IBM's Cross-Motion"). SCO submitted these declarations for a very narrow purpose: to provide the Court with Rule 56(f) facts which demonstrate that SCO has not yet had the discovery it needs to respond to IBM's Cross-Motion on the merits. Specifically, the declarations present facts which show that:

- ! Responding to IBM's Tenth Counterclaim is a task which could take many man-years to complete without the discovery SCO requests;
- ! IBM refuses to give SCO access to IBM's internal software configuration management system and related materials, thereby precluding SCO from adducing evidence it needs to respond on the merits to IBM's Cross-Motion efficiently and in a reasonable time;
- ! SCO will need to take discovery from third-parties who have contributed source code to Linux to enable SCO to identify UNIX source code copied into Linux; and
- ! Linux contains copied portions of UNIX source code which suggests that further discovery will reveal that Linux infringes SCO's UNIX copyrights.

Only seven weeks after IBM amended its Answer on March 29, 2004 to add a Counterclaim seeking a declaration under 28 U.S.C. § 2201 giving IBM a "clean bill of health"

under the copyright laws for *all* of Linux and *all* of IBM's Linux activities, IBM asked the Court to enter partial summary judgment in IBM's favor on that same counterclaim.

At the time that IBM filed its Motion for Partial Summary Judgment, SCO and IBM were engaged (and remain engaged) in a discovery dispute over the IBM-controlled source code and related materials and information that SCO needs to defend against IBM's counterclaim and which SCO needs to present its case on SCO's claims. That dispute remains unresolved and is the subject of pending proceedings before this Court.

SCO had no choice but to invoke Federal Rule of Civil Procedure 56(f) to oppose IBM's Cross-Motion because IBM refused to produce the source code and version and change history SCO needs to respond to IBM's Tenth Counterclaim. SCO also identified the extensive third party discovery which will be necessary to respond to IBM's Tenth Counterclaim, including the depositions of *as yet unknown* third party contributors to the Linux source code. SCO's Memorandum in Opposition to IBM's Motion for Partial Summary Judgment describes in detail the discovery SCO needs, its inability to obtain that discovery from IBM, how SCO would use that discovery if it had it, and the reasons why SCO cannot respond to IBM's Motion without that discovery.

At the same time that IBM filed its Reply Brief in Support of its Cross-Motion for Partial Summary Judgment, IBM also filed a Motion to Strike Mr. Sontag's and Mr. Gupta's declarations and portions of Mr. Harrop's declaration. In moving to strike SCO's declarations, IBM claims they are impermissible because:

- ! The Sontag and Gupta declarations are allegedly not based upon the declarants' personal knowledge, *see* IBM's Motion to Strike at 4;
- ! The Sontag and Gupta declarations allegedly offer impermissible lay opinion testimony under Federal Rule of Evidence 701, *see* IBM's Motion to Strike at 6.

- ! The Sontag and Gupta declarations allegedly offer impermissible “lay opinion testimony” without the declarants being qualified as experts under Federal Rule of Evidence 702, *see* IBM’s Motion to Strike at 6;
- ! The Gupta declaration does not follow the “*Gates Rubber*” test for showing copyright infringement, even if Mr. Gupta were qualified to testify as an expert under Federal Rule of Evidence 702, *see* IBM’s Motion to Strike at 9; and
- ! The Harrop declaration is allegedly either not based on personal knowledge or is legal argument, *see* IBM’s Motion to Strike at 5,12.

IBM’s Motion to strike should be denied because, contrary to IBM’s claims, each of the three declarants presented testimony based upon their personal knowledge, as shown in both their original declarations and in their Supplemental Declarations submitted contemporaneously with this Memorandum. IBM is also wrong to claim that the witnesses offered impermissible opinion testimony. However, even if the witnesses did present opinion testimony, the witnesses’ statements are well within the scope of lay opinion allowed by Federal Rule of Evidence 701. Although qualified to render opinions as experts, none of the three declarants offer testimony that requires expert qualifications.

Specifically, IBM’s Motion to Strike should be denied because:

- ! The Declarations are based on the declarants’ personal knowledge, including their review of portions of the UNIX and Linux source codes and other documents in this case;
- ! To the extent that the declarants’ testimony can be construed as opinion, it is admissible lay opinion not based on scientific, technical, or other specialized information;
- ! The seventy-two paragraphs at issue in Mr. Harrop’s declaration should not be struck because they are based upon facts personally known to Mr. Harrop as a result of his work on this case; and
- ! In any event, each of the three declarants could qualify as an expert witness.

IBM’s Motion to Strike should be seen for what it is: an attempt to win by maneuver what it cannot win on the merits. IBM asks this Court to strike SCO’s evidence which shows

what discovery is needed, how it could be used, and instances in which UNIX source code has been copied into Linux. IBM has not presented facts or arguments which warrant the drastic remedy of striking SCO's declarations.

**ARGUMENT**

**I. SCO's Declarants Presented Factual Testimony Based on Their Personal Knowledge To Demonstrate SCO's Need for Further Discovery Under Rule 56(f)**

SCO's three declarants presented factual testimony in the following areas: 1) the magnitude and nature of the discovery SCO needs to respond to IBM's Cross-Motion; 2) the existing evidence that portions of UNIX have been copied into Linux; and 3) the procedural history of the case, including SCO's inability to obtain the discovery it needs, despite repeated efforts to do so. To assist the Court in understanding what it is that IBM seeks to strike, SCO provides a summary of the witnesses' declarations below.

**A. Chris Sontag Presented Facts Showing the Scope of the Discovery SCO Needs**

IBM moves to strike the entirety of Mr. Sontag's declaration. SCO filed Mr. Sontag's declaration to present facts which show that SCO is unable to respond to IBM's Cross-Motion on the merits without further discovery. Mr. Sontag's declaration provides factual testimony in the following areas.

**1. The Magnitude of the Discovery Task Based on the Amount of the Source Code**

Paragraphs 4-23 of Mr. Sontag's declaration explain what SCO would have to do to respond to IBM's Tenth Counterclaim and the magnitude of the task. Mr. Sontag provides basic, rudimentary facts about the UNIX and Linux operating systems. He also shows why automated code comparisons will not detect all possible cases of copying and why a manual, line-by-line

comparison could not be done in a reasonable and timely manner. For example, Mr. Sontag testified:

- ! “A kernel is the core portion of the operating system. The kernel performs the most essential operating system tasks, such as handling disk input and output operations and managing the internal memory.” Sontag Declaration at ¶6.
- ! “The operating system kernel is a lengthy, complex computer program comprising numerous modules and files, and millions of lines of code. The Linux kernel (ver. 2.4) comprises 4 million lines of code and the UNIX SVR 4.2 MP kernel comprises 3.4 million lines of code.” Sontag Declaration at ¶7.
- ! “The 4 million lines of Linux kernel code takes up 66,000 pages; the 3.4 million lines of UNIX code takes up 58,000 pages. A simplistic manual comparison would involve placing the pages of code side by side in some ordered manner and then looking for the same or similar structure, sequence and organization of the code. Assuming each page comparison takes one (1) minute, and that there are 66,000 x 58,000 comparisons, ‘this initial’ review could take on the order of 25,000 man-years.” Sontag Declaration at ¶14.

**2. The Tools SCO Could Use to Show Copyright Infringement**

Paragraphs 24-42 of Mr. Sontag’s declaration explain alternative ways in which SCO could search for infringing Linux code. Mr. Sontag explains how SCO could use IBM’s Configuration Management and Version Control (“CMVC”) tool to identify programmers who worked on the code. These programmers might be deposed to find other programmers and the reasons why certain code was copied or modified. Mr. Sontag also explains how SCO may not be able to directly determine if Linux source code was derived from UNIX source code without some history of IBM’s AIX code development. For example, Mr. Sontag testified:

- ! “Another way for SCO to obtain all of the reasonably available and necessary evidence to support its claims and to oppose IBM’s Tenth Counterclaim is to access the numerous IBM and Sequent engineers and programmers who have, over the years, developed AIX and Dynix code, contributed AIX and Dynix code to Linux, or assisted others in contributing to Linux. These engineers have access to and have studied UNIX based operating systems that have been enterprise hardened and made multiprocessor capable.” Sontag Declaration at ¶24.
- ! “[A] revision control system (RCS) – implemented by IBM as the Configuration Management/Version Control (CMVC) is an excellent source for finding the

programmers and engineers familiar with relevant UNIX based code that has been contributed by IBM and third parties to make Linux enterprise hardened and multiprocessor capable. Depositing these programmers and engineers will allow SCO to prioritize its efforts to find Linux code that is substantially similar to UNIX code.” Sontag Declaration at ¶26.

- ! “Software developers rely on version control systems (VCSs), or version management systems (VMSs), to control changes and revisions to source code. Version control systems are automated tools that provide specific access and tracking features to allow multiple parties to operate on and revise source code. For example, a “Checkout” feature allows a user to retrieve, from a source code repository, a section of source code for which some changes are intended. A “Checkin” feature deposits the changed source code in a source code repository. Version control systems also provide an approval process, and many other features. In short, version controls systems are software tools that provide detailed software change histories.” Sontag Declaration at ¶31.

### **3. The Discovery SCO Needs and Can Use to Respond to IBM’s Tenth Counterclaim**

Paragraphs 43-60 of Mr. Sontag’s declaration describe the materials that SCO would need to defend against IBM’s Tenth Counterclaim. Mr. Sontag explains how SCO could use source code and log information to rebut IBM’s allegations that SCO cannot prove copying. Mr. Sontag also explained how other development records can be used to track the history of a source code’s development. For example, Mr. Sontag testified:

- ! “White papers are usually generated early in the software code development process, and often discuss reasons for implementing code changes, problems with existing code, and alternative solutions. Thus, white papers serve as an early indication of possible code changes. By setting forth solutions, white papers can be used to look for specific code segments in Linux and thus help SCO prioritize its search.” Sontag Declaration at ¶51.
- ! “Design documents are often prepared by the group that ultimately authors the changes to the code sequences. Design documents are generally more detailed than white papers. For example, SCO proprietary design document “Virtual Memory Design for UNIX System V Release 4.2 Multiprocessor,” contains almost 150 pages of detailed description and code requirements to implement virtual memory in a UNIX-based processor. The design document is directed to such implementation on a specific processor family, namely the Sequent Symmetry Model S16. This and other design documents explain the initial code concepts, and how such code will be developed and written. As such, design documents provide an invaluable bridge between existing code sequences, such as in UNIX, and derivative works, such as in

AIX and Dynix. Because these design documents describe the basis for code development, they may be useful for pointing to a portion of Linux that contains code substantially similar to UNIX code.” Sontag Declaration at ¶ 52.

- ! “[P]rogramming notes contain the thought processes of individual programmers as they write and revise code sequences. For example, programming notes might list changes made to code, and might list additional changes to consider. As such, programming notes provide detailed rationale for code changes and an indication of how the code may change in the future. Programming notes may reflect the purpose for code changes and where in the kernel those changes occur. Thus programming notes are another source SCO can use to streamline its efforts to locate Linux code that is substantially similar to UNIX code.” Sontag Declaration at ¶53.

**B. Sandeep Gupta Presented Facts Showing that Linux Contains Source Code Copied from UNIX**

IBM also moves to strike the entirety of Mr. Gupta’s declaration. SCO submitted Mr. Gupta’s declaration to show that what little discovery SCO has obtained to date demonstrates that portions of SCO’s UNIX source code appear in Linux. Mr. Gupta provides specific examples of SCO UNIX source code which can be found in Linux. Mr. Gupta does not discuss whether any of the Linux code he observed infringes any of SCO’s copyrights. Mr. Gupta’s declaration provided factual testimony in the following areas.

**1. The UNIX Read-Copy-Update (“RCU”) Routines Can be Found in Linux**

Paragraphs 5-23 of Mr. Gupta’s declaration explain what the Read-Copy-Update (“RCU”) routine is and present facts which show that the source code implementing the RCU routine can be found in both UNIX and Linux. For example, Mr. Gupta testified:

- ! “RCU (Read-Copy-Update) is one of the methods used to synchronize access to shared data in a multiprocessing environment.” Gupta Declaration at ¶7.
- ! “Each of the five acts of the UNIX RCU -- and of the Linux RCU -- routine is expressed in one or a few lines of code.” Gupta Declaration at ¶15.
- ! “The first act, ‘allocating a new data structure of a certain size,’ is expressed in UNIX RCU and Linux RCU by a single line of nearly identical code. From a software programmer’s perspective, the UNIX RCU expression of the act of allocating a new data structure has been identically copied into Linux RCU. As can be seen in

attached Exhibit A, the Linux RCU code (column 4) for the first act is nearly identical to the UNIX RCU code (column 1) for the first act.” Gupta Declaration at ¶16.

- ! “In Linux RCU, in contrast, the fifth act of deferred deletion is achieved by a callback function that is automatically called when no current users remain so that the old data structure may be deleted.” Gupta Declaration at ¶21.

## **2. Sequent Employees Had Access to UNIX RCU and Could Have Copied that Into Dynix, Which was Released into Linux**

Paragraphs 25-29 of Mr. Gupta’s declaration explain that Sequent employees who had worked on Dynix RCU had worked on UNIX RCU when they worked under the Multiprocessor Software Agreement and had access to the UNIX RCU to copy it into the Dynix RCU. Mr. Gupta presented these facts to support SCO’s argument that UNIX source code was placed into Linux via such intermediate products as Dynix. Mr. Gupta also presented facts which show that an IBM employee (and former Sequent employee) used the Dynix version of RCU to create a patch for Linux RCU which was incorporated into Linux. For example, Mr. Gupta testified:

- ! “Jack Slingwine and Paul McKenney are the credited authors of Dynix RCU, and were both Sequent employees. At least Mr. Slingwine was involved in the UNIX development work under the MP Agreement. At least Mr. Slingwine had access to the UNIX RCU work because of his involvement in the UNIX development work. I believe that Mr. Slingwine would have used that access to UNIX development to review UNIX RCU because of his clear interest in RCU. Regarding his clear interest in RCU, Mr. Slingwine and Mr. McKenney authored a paper on RCU, ‘Read-Copy Update : Using Execution History To Solve Concurrency Problems,’ which refers to ‘work performed at Sequent.’ See Exhibit C. In this paper, Mr. Slingwine and Mr. McKenney thank (among others) Brent Kingsbury, and Mr. Kingsbury was one of the authors of a design document for UNIX which discusses, among other things, UNIX RCU.” Gupta Declaration at ¶25.
- ! “[A]t least Mr. Slingwine (and perhaps Mr. McKenney) had access to UNIX developments during the USL/Sequent collaboration under the MP Agreement, which included development of UNIX RCU, and both showed great interest in RCU by filing a patent application (as co-inventors) relating to RCU immediately after the MP Agreement collaboration.” Gupta Declaration at ¶27.
- ! “IBM thereafter released Dynix, with a copied and modified UNIX RCU in Dynix, into Linux. More specifically, the Dynix version of RCU was used by IBM employee (and former Sequent employee) Dipankar Sarma to create a software patch for placing a substantially similar version of RCU into Linux. I believe that the first

patch appears to be for Linux version 2.4.1 and was contributed by Mr. Sarma. *See* Exhibit E. A paper entitled ‘Read-Copy Update’ also lists Mr. Sarma along with Mr. McKenney and others as authors. *See* Exhibit F. Another patch was also provided to Linux version 2.5.44 by IBM employee Mingming Cao. *See* Exhibit G. This patch appears to be incorporated into the Linux version 2.6.” Gupta Declaration at ¶29.

### **3. The User Level Synchronization Routines and Inter Process Communication Source Code and Header Files of UNIX and Linux are Substantially Similar**

Paragraphs 30-49 of Mr. Gupta’s declaration explain the bases for his belief that the User Level Synchronization (“ULS”) routines in Linux version 2.6 are substantially similar to those in UNIX SVR4.2 MP. In these paragraphs, Mr. Gupta explains the purpose and function of ULS and the facts he has observed which led him to conclude that the two routines were substantially similar. Paragraphs 50-62 of Mr. Gupta’s declaration explain how the Linux System V Inter-Process Communications (“IPC”) source code and associated header files are substantially similar to those in UNIX System V IPC source code. Mr. Gupta provides tables which give a side-by-side comparison of the relevant UNIX and Linux source code. For example, Mr. Gupta testified:

- ! “The ULS routines in Linux are commonly referred to as FUTEX (Fast User Mutex), but will be called Linux ULS here.” Gupta Declaration at ¶31.
- ! “The main purpose of the ULS routines is to facilitate inter-process synchronization by blocking and unblocking processes attempting to access shared data.” Gupta Declaration at ¶33.
- ! “IPC stands for Inter-Process Communication. UNIX System V IPC is used to communicate and synchronize between operating system processes on the same machine in a multiprocessing environment.” Gupta Declaration at ¶51.
- ! “With regard to the organization of Linux SysVIPC and UNIX System V IPC, both consist of three mechanisms: message queues, semaphore, and shared memory. There is no reason for the organization to be identical other than the fact that Linux SysVIPC has been copied from UNIX System V IPC.” Gupta Declaration at ¶53.

#### **4. Linux has Copies of UNIX Interface and Header and Init and Executable Linking Format (“ELF”) Code**

Paragraphs 63-72 of Mr. Gupta’s declaration explain that a copy of the UNIX System V IPC header code appears in Linux. Mr. Gupta explains the purpose and function of a header file and the facts he has observed which led him to conclude that the two routines were substantially similar. Paragraphs 73-76 of Mr. Gupta’s declaration explain how Linux version 2.6 contains an identical copy of the UNIX System V init code. Mr. Gupta explains the function and purpose of the init code and the facts he observed which showed him that the init code had been copied into Linux. Paragraphs 77-86 of Mr. Gupta’s declaration provided facts which show that an identical or substantially similar copy of the UNIX ELF code can be found in Linux. Mr. Gupta provides tables which give a side-by-side comparison of the relevant UNIX and Linux source code. For example, Mr. Gupta testified:

- ! “UNIX header and interface source code is available in SCO-copyrighted documentation, such as manual pages. These manual pages are published on the Internet with copyright notices. Also, UNIX header and interface code is available to any entity having a license to UNIX, or who can otherwise access the UNIX code.” Gupta Declaration at ¶64.
- ! “A header file is a programming source file containing declarations of interfaces that facilitate communication between different regular source files that comprise the program.” Gupta Declaration at ¶65.
- ! “SYS V init was accessible for copying because the manual pages defining SYS V init features, for example init and inittab, are published as electronic documents and are available to anyone with an Internet browser. These manual pages, however, carry appropriate copyright notices. Using the manual pages, a skilled programmer could copy the structure, sequence, and organization of SYS V init routines. SYS V init and inittab were included in documentation with each release of UNIX System V as manual pages init(1M) and inittab(4), respectively. *See* Exhibits Z and AA. Also, SYS V init code is available to any entity having a license to UNIX, or who can otherwise access the UNIX code.” Gupta Declaration at ¶74.

**C. John Harrop Presented Facts Showing the Procedural Posture of the Case and SCO's Unsuccessful Attempts to Secure Needed Discovery From IBM**

IBM asks this Court to strike seventy-two separate paragraphs of Mr. Harrop's Declaration. SCO filed Mr. Harrop's declaration to show facts which establish the nature and amount of discovery that SCO needs, its timely efforts to obtain that discovery, and IBM's refusal to provide essential documents. In addition, Mr. Harrop presents facts regarding the procedural history of this case which show that IBM's Tenth Counterclaim was only recently filed and broadened considerably the nature and amount of discovery that SCO must now obtain. Mr. Harrop further presents facts which demonstrate the breadth and difficulty of the discovery SCO now needs. Mr. Harrop's declaration provides factual testimony in the following areas.

**1. Facts Giving Rise to the Case and the Procedural History of the Dispute**

Paragraphs 4-13 describe the background of the license agreements which give rise to SCO's claim against IBM. Paragraphs 14-23 and 76-90 give facts concerning the procedural posture of the case, how IBM's Tenth Counterclaim raises issues broader than those raised by SCO's claims against IBM, and the history of IBM's refusal to provide SCO with its needed discovery. For example, Mr. Harrop testified:

! "SCO has not brought any claim that IBM contributed source code to Linux in violation of any SCO copyright. SCO has not asserted here any claim that any third party has contributed any source code to Linux in violation of any SCO copyright. SCO has not brought any copyright claim against IBM in this action in regard to any of IBM's numerous activities relating to Linux." Harrop Declaration at ¶9.

! "The inappropriateness of IBM's Tenth Counterclaim and the fact that SCO's Motion to Dismiss or Stay the Tenth Counterclaim is still pending support SCO's opposition to IBM's Motion." Harrop Declaration at ¶17.

"In light of the procedural posture of this case, the parties reasonably have not taken discovery on IBM's Tenth Counterclaim . . . . What is more, to date SCO has been unable to obtain discovery relevant to its own, long-standing claims in this case. Such discovery would permit SCO to take further discovery, significant portions of which would bear on IBM's Tenth Counterclaim." Harrop Declaration at ¶76.

## **2. The Impact of IBM's Tenth Counterclaim on the Discovery SCO Needs**

Paragraphs 24-40, 69-75, and 91-95 of Mr. Harrop's declaration state facts which demonstrate how IBM's Tenth Counterclaim substantially broadened the scope of discovery; the nature of the discovery SCO needs and how that discovery is broadened by the public, open-source nature of Linux; the nature of evidence that SCO needs to examine besides source code; and the limitations of searching source code for proof of IBM's copyright infringement. For example, Mr. Harrop testified:

- ! "To justify opposition to IBM's Cross Motion -- that is, to contend that IBM is not entitled to a declaration of non-infringement with respect to all of its activities relating to Linux -- SCO must first be able to identify all of IBM's activities relating to Linux. Assuming a scenario in which IBM will argue for an entitlement to a declaration of non-infringement with respect to as many activities relating to Linux as possible. SCO must have discovery to identify IBM's activities relating to Linux as a threshold matter." Harrop Declaration at ¶29.
- ! "In an article dated March 3, 2004, for example, the person regarded as the developer of Linux, Mr. Torvalds, grudgingly acknowledged with respect to the issue of whether Linux infringes on SCO's copyrights: 'The only thing that makes any ounce of sense is their claims about somebody using (Unix) System V libraries.' (Exh. 64.)" Harrop Declaration at ¶70.
- ! "In an article dated November 29, 2003, 'Linux kernel maintainer' Andrew Morton commented as follows on this litigation, specifically in reference to 'the XFS and JFS file systems, which were originally developed under a Unix license and then ported over to Linux': "'SGI did develop it. It could be [SCO] has a legitimate case there, not technically, but on the letter of the law.'" (Exh. 56.)" Harrop Declaration at ¶71.

## **3. Depositions of Contributors are Needed to Determine the Origins of the Linux Source Code**

Paragraphs 41-58 of Mr. Harrop's declaration present facts which demonstrate that it is difficult to know who made what contributions to Linux and that SCO needs to depose those individuals who did contribute to Linux to determine the original sources for the Linux source code. For example, Mr. Harrop testified:

- ! “SCO has not had the opportunity to depose *any* of the contributors of *any* source code into *any* version of Linux -- much less the major contributors of source code -- and therefore has not had any opportunity to discover admissions highly relevant to IBM’s Tenth Counterclaim. Harrop Declaration at ¶47.
- ! “SCO also needs to depose programmers who work for these companies and made the contributions to determine the sources of those programmers’ code contributions. Such programmer depositions should enable SCO to streamline and prioritize and make its investigation of substantially similar copying from UNIX to Linux more efficient. A streamlined and prioritized investigation of substantially similar copying will not be nearly as time-consuming as a systematic line-by-line comparison would be. The programmers might say, for example, that in some areas of Linux development they relied on UNIX to a great extent and in other areas they did not. Such testimony would enable SCO to focus on those areas the programmers identified as relying on UNIX. Furthermore, this discovery will show why the contributions were made and what features the contributions relate to, and will allow SCO to trace back from the Linux code to UNIX.” Harrop Declaration at ¶50.
- ! “IBM has produced only later versions of AIX. IBM has not yet produced the earlier versions of AIX (or of Dynix, ptx, and Dynix/ptx). On that basis alone, SCO therefore has been significantly hampered in its ability to discover relevant facts essential to oppose IBM’s Cross-Motion.” Harrop Declaration at ¶62.

## **II. SCO’s Declarants Presented Proper Declarations and IBM’s Motion to Strike Should be Denied**

As shown below, the declarants’ testimony was based on their personal knowledge and describes facts which they observed during their education, their careers or the conduct of this case as set forth in the Supplemental Declarations filed contemporaneously with this Memorandum.

### **A. SCO’s Declarants Presented Testimony Based Upon Their Personal Knowledge**

IBM’s claims that the Sontag, Gupta, and Harrop declarations are not based upon their personal knowledge are baseless, *see* IBM’s Motion to Strike at 3.<sup>1</sup> As both the original and

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<sup>1</sup> IBM states: “[T]o the extent SCO offers Mr. Gupta, Mr. Sontag and Mr. Harrop as *fact* (as opposed to expert) witnesses, their testimony is inadmissible because not based on personal knowledge.” IBM’s Motion to Strike at 3 (emphasis in original).

supplemental declarations show, the Sontag, Gupta, and Harrop declarations are based on personal knowledge.

**1. Mr. Sontag's Declaration was Based on His Personal Knowledge Developed During His Education, Career and Participation in this Case**

First, Mr. Sontag stated in the first paragraph of his declaration that “[u]nless otherwise noted or evident from their context, this declaration is based on my personal knowledge and information available to me from reliable sources.” Sontag Declaration at ¶1, Gupta Declaration at ¶1, and Harrop Declaration at ¶1.

As made clear in his Supplemental Declaration, Mr. Sontag presented factual testimony based on his personal knowledge. Mr. Sontag's declaration covers three principal areas: 1) the magnitude of the discovery task based on the amount of source code; 2) the tools SCO could use to show copyright infringement; and 3) the discovery SCO needs and can use to respond to IBM's Tenth Counterclaim. The facts included within each of these topics are well within Mr. Sontag's personal knowledge, as confirmed by his Supplemental Declaration.

A summary of the experience that Mr. Sontag drew upon for his declaration shows that the facts presented in his declaration are well within the scope of his personal knowledge:

- ! Sixteen years of experience, including four years as the Chief Technical Officer (“CTO”) of a company that he co-founded. *See* Sontag Supplemental Declaration at ¶9.
- ! Bachelor's Degree in Information Management from Brigham Young University including courses in data program management, software engineering, and computer systems analysis. *See* Sontag Supplemental Declaration at ¶5.
- ! Responsibility for managing the development and release of a major software product, Netware 4.0, while employed by Novell, Inc., a major software company. *See* Sontag Supplemental Declaration at ¶7.

As an experienced software developer and software program manager, Mr. Sontag has personal knowledge of many areas of software design, development, and operation, including:

the function and contents of computer operating systems (including their kernels); computer programming; and source code analysis. *See* Sontag Supplemental Declaration at ¶¶14-15; 22. From his experience at SCO and other companies, and his own knowledge of the field, Mr. Sontag is familiar with various operating systems such as UNIX (which he has worked with for over four years) and Linux. *See* Sontag Supplemental Declaration at ¶14. From that experience, Mr. Sontag has personal knowledge of both the UNIX and Linux operating systems. Mr. Sontag applied that experience and knowledge to his examination of the source code and other documents in this case.

Mr. Sontag has used and supervised the use of software configuration management and control systems. *See* Sontag Supplemental Declaration at ¶¶8, 12. His knowledge of IBM's particular tool, CMVC, is based upon information he read in IBM documents describing CMVC. *See* Sontag Supplemental Declaration at ¶12. Mr. Sontag's experience as a software developer and manager has also given him experience in the nature and uses of software development white papers, design documents, and programming notes. *See* Sontag Supplemental Declaration at ¶27. Mr. Sontag's experience also gave him personal knowledge concerning the use of software comparison tools and methods. *See* Sontag Supplemental Declaration at ¶¶18-19. His past work also gives him personal knowledge of the kinds of information that can be learned from software programmers and engineers. *See* Sontag Supplemental Declaration at ¶27.

Indeed, Mr. Sontag has first-hand knowledge of the obstacles SCO has faced and continues to face in identifying substantial similarities between UNIX code and Linux code. *See* Sontag Supplemental Declaration at ¶¶19-22; 26. Mr. Sontag also has personal knowledge of the ways in which the code comparison can be streamlined through further discovery of IBM materials. *See* Sontag Supplemental Declaration at ¶21. The facts that Mr. Sontag presents are

based directly upon his review of the code comparison process undertaken by SCO and on his industry experience. *See* Sontag Supplemental Declaration at ¶¶21-22.

**2. Mr. Gupta's Declaration was Based on His Personal Knowledge Developed During His Education, Career and Participation in this Case**

Mr. Gupta's declaration begins with a statement that his declaration is based upon personal knowledge. *See* Gupta Declaration at ¶1. Mr. Gupta's declaration covers five principal areas: 1) The UNIX Read-Copy-Update ("RCU") routines which can be found in Linux. 2) the UNIX Inter-Process Communications ("IPC") Code was copied into Linux; 3) Sequent employees had access to UNIX RCU and could have copied that into Dynix, which was released into Linux; 4) the User Level Synchronization routines of UNIX and Linux are substantially similar; and 5) the UNIX Inter-Process Communications ("IPC") code was copied into Linux. The facts included within each of these topics are well within Mr. Sontag's personal knowledge, as shown by his Supplemental Declaration.

Mr. Gupta's declaration is based on his personal knowledge developed during his education, career, and participation in this case. Mr. Gupta graduated with a Bachelor of Science degree in Computer Engineering from Delhi College of Engineering, in Delhi, India in 1993. *See* Gupta Supplemental Declaration at ¶7. His course work included Computer System Architecture, Network and Communications, Compiler Design, Operating Systems, Microprocessors, Analog Circuits, Computer Software Engineering, Databases and Programming, Parallel Processors, and Design of UNIX Operating Systems. *See* Gupta Supplemental Declaration at ¶7. Upon graduation, he was employed for a year by Fujitsu in India as a computer systems engineer. *See* Gupta Declaration at ¶8. From 1994 to 1996, he was employed by ICL in the United Kingdom as a Senior Systems Engineer working on UNIX System V technology. *See* Gupta Declaration at ¶9. He has worked for SCO since 1996. He has

been Lead Engineer for the UnixWare Escalations and Research Division, Senior Manager of Operating Systems Engineering, and is currently Vice-President of Engineering for the SCO Engineering Division. *See Gupta Declaration at ¶¶10-14.*

His responsibilities at SCO have included numerous projects on Unixware 7, including assisting IBM in their DB2 and SNA Gateway ports to UnixWare 7, and developing modules to detect kernel memory leaks and corruptions. *See Gupta Declaration at ¶¶11-12.* More recently, his SCO responsibilities have included being lead engineer on the development of Unixware 7.1.2 and Unixware 7.1.3 releases, and lead engineer on the support and development of SCO's Linux product line. *See Gupta Supplemental Declaration at ¶13.*

As Vice-President of SCO Engineering, his responsibilities include all UNIX System V technology and engineering, as well as like responsibilities for other SCO products such as OpenServer and OffiServer. *See Gupta Declaration at ¶14.*

Mr. Gupta examined UNIX and Linux source code. *See Gupta Supplemental Declaration at ¶18.* In addition, Mr. Gupta has worked with the UNIX System V or related code for eleven years. *See Gupta Supplemental Declaration at ¶15.*

Mr. Gupta analyzed both the UNIX System V source code and portions of Linux source code. In examining those source codes, Mr. Gupta identified and examined several instances in which Linux contained source code that appears to have been copied from UNIX into Linux. *See Supplemental Gupta Declaration at ¶18.* SCO presented Mr. Gupta's declaration to show the Court that, given adequate opportunity for discovery, SCO is likely to find evidence that raises genuine issues of material fact that would preclude granting of summary judgment.

**3. Mr. Harrop's Declaration was Based on His Personal Knowledge and Participation in this Case**

Mr. Harrop's declaration begins with the acknowledgment that his declaration is based on his personal knowledge. *See* Harrop Declaration at ¶1. Mr. Harrop's declaration covers three principal areas: 1) facts giving rise to the case and the procedural history of the dispute; 2) the impact of IBM's Tenth Counterclaim on the discovery SCO needs; and 3) the need for depositions of contributors to determine the origins of the Linux source code. *See* Harrop Declaration at ¶1. Mr. Harrop's declaration was based on his personal knowledge developed during this case, including review of pleadings, discovery filings and public articles quoted or referred to in his July 9, 2004 Declaration. *See* Harrop Supplemental Declaration at ¶7.

**4. IBM's Grounds for Striking Seventy-Two Paragraphs of the Harrop Declaration are Baseless**

IBM identifies a number of paragraphs in Mr. Harrop's declaration for which it claims Mr. Harrop has no personal knowledge. *See* IBM's Motion to Strike at 5. However, Mr. Harrop is familiar with documents in this case. *See* Harrop Supplemental Declaration at ¶7.

Review of such documents is a proper basis for personal knowledge. *See In re Real Estate Assocs. Ltd. P'ship Litig.*, No. CV98-7035 (DDP) (AJWX), 2002 WL 31027557, \*1 (C.D. Cal., Aug. 29, 2002) (declarations by counsel based on the attorney's analysis of the discovery documents and pleadings in the case are admissible in support of summary judgment motion). A witness' personal knowledge can be based on documents the witness reviews. *See, e.g., In re Texas E. Transmission Corp. PCB Contamination Ins. Coverage Lit.*, 870 F.Supp. 1293, 1304 (E.D. Pa. 1992), *aff'd*, 995 F.2d 219 (3rd Cir. 1993) (employee's personal knowledge concerning past corporate practices concerning PCB use and containment could be based on review of corporate documents and employee's affidavit could be submitted in support of summary judgment).

“It is a common and proper use of an attorney affidavit” to “put . . . documents before the Court . . . on summary judgment motions as enclosures to counsel’s affidavit . . . and to set forth the procedural history of the case.” *United States v. Letscher*, 83 F.Supp. 2d 367, 381 (S.D.N.Y. 1999); *see also Sitts v. United States*, 811 F.2d 736 (2d Cir. 1987). In *Letscher*, the United States submitted the affidavit of one of its attorneys setting forth the procedural history of the case and attaching verified Certificates of Assessments and Payments as well as court documents related to the case. *See id.* at 369, 373. The defendant moved to strike the affidavit, arguing that the attorney lacked personal knowledge of the facts in the case. The court overruled the defendant’s objection, noting the propriety of using an attorney affidavit to put documents before the court and to present facts concerning the procedural history of the case.

In *Sitts*, the United States moved for summary judgment and included the attorney’s affidavit. The plaintiff moved to strike the affidavit for lack of personal knowledge. The court denied the motion to strike, concluding that although the attorney could not testify regarding the historical facts leading to the lawsuit, the attorney could present an affidavit when “the material fact [at issue] was a procedural fact that was within the personal knowledge of the attorney, supported by the pretrial discovery materials of . . . the case.” *Id.* at 742.

SCO is opposing IBM’s Cross-Motion on the ground that SCO has not yet had essential discovery with which to oppose IBM’s Cross-Motion. One of the facts relevant to SCO’s Rule 56(f) submission is the degree to which IBM has resisted providing discovery and the motions to compel SCO has filed in an attempt to obtain it. Mr. Harrop has personal knowledge of that history. *See* Harrop Declaration at ¶¶5, 8. As such, the procedural history of the case is material to the Cross-Motion before the Court and Mr. Harrop presents admissible evidence based on his personal knowledge regarding those facts.

However, ¶41 discusses one of the means by which SCO might gain the information it needs to defeat IBM's Tenth Counterclaim, and the fact that there is no road map that would allow SCO to trace the migration of UNIX code into Linux. Mr. Harrop has personal knowledge of the fact that SCO could gather the information it needs by taking discovery of those who contributed source code to Linux. Mr. Harrop's involvement in the case also gives him personal knowledge of the absence of a "road map" that SCO can use. *See* Harrop Supplemental Declaration at ¶¶8, 10.

IBM has no basis for its claim that Mr. Harrop lacks personal knowledge of SCO's positions in this case. *See* IBM's Motion to Strike at 5 (citing Harrop Declaration at ¶ 7, discussing SCO's positions in the case).

Other Harrop paragraphs that IBM objects to recite facts about which Mr. Harrop is knowledgeable through personal information, *e.g.*, SCO has been unable to take the discovery necessary to fully respond to IBM's Motion for Partial Summary Judgment. *See* Harrop Declaration at ¶43 (no existing list of all Linux contributors); ¶47 (SCO has not yet had any opportunity to depose any Linux contributors); ¶51 (SCO has identified some authors of various portions of Linux code from the Linux change log); ¶¶59-61 (SCO could streamline discovery by having access to certain information regarding AIX, Dynix and Dynix.ptx source code and software configuration management systems); ¶¶63-65 (design information needed); ¶¶69-72 (articles containing statements by Linus Torvalds and Andrew Morton discussing whether Linux infringes SCO's copyrights); ¶84 (SCO's review of AIX files does not identify precise contribution to source code of individuals); and ¶¶91-95 (summarizing difficulties associated with comparing source code and efforts SCO has been unable to undertake notwithstanding the difficulties).

IBM also faults Mr. Harrop's declaration for setting forth background facts about the development of Linux. *See* IBM's Motion to Strike at 5. It is unclear why IBM chose to object to Mr. Harrop's inclusion of background facts which he learned during the course of this case. Such facts are often included in summary judgment briefing and attorney argument to provide the Court with some context and are rarely objected to. *See* Harrop Supplemental Declaration at ¶14 (stating that he provided facts to give the Court some background and context). While such use admittedly does not strictly conform to the letter of the Federal Rules of Evidence, it is a practice frequently used in connection with background information.

In fact, the two paragraphs IBM found to be particularly "egregious," *see id.* at 5 n.1, regarding the origins of the Linux operating system in paragraphs 33 and 34 of Mr. Harrop's declaration, are virtually identical to statements IBM included in its opening brief in support of partial summary judgment.<sup>2</sup> IBM – in attorney argument – told the Court "[t]he development of Linux began when an undergraduate student at the University of Helsinki, by the name of Linus Torvalds, set out to create a new, free operating system." IBM's Cross-Motion at 8. IBM then states that "[w]ith the Internet providing for a distributed collaboration, other programmers joined to create code making up the kernel." *Id.*

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<sup>2</sup> Mr. Harrop's declaration states:

33. It is public knowledge that in contrast to UNIX, AIX, Dynix, ptx and Dynix/ptx, the Linux operating system was not developed under the control of any single entity or corporation. In 1991 a Finish college student named Linus Torvalds began composing an operating system. In his classes, Mr. Torvalds had been studying an operating system that one of his professors (having received an educational license to do so) based on and derived from UNIX.

34. Mr. Torvalds posted the material about the operating system on the Internet for comment. The development of the operating system thereafter became in effect a group project in which Mr. Torvalds and his delegates made final determinations about which suggestions from numerous third parties, many of whom are anonymous, to incorporate. The kernel of the operating system that resulted came to be known as Linux. According to IBM, IBM and thousands of third parties have contributed source code to Linux.

IBM also claims that a number of exhibits cited in SCO's brief in opposition to IBM's Cross-Motion and in Mr. Harrop's declaration are inadmissible. Among those documents that IBM seeks to strike are various newspaper articles. *See* IBM's Motion to Strike at 14. According to IBM, the materials should be struck because they constitute inadmissible hearsay. *See* IBM's Motion to Strike at 15. The articles should not be struck because they contain facts which show that IBM's Cross-Motion should not be granted and because they contain facts which SCO can adduce at trial through admissible evidence.

It is well-established that a party opposing summary judgment must "set forth such *facts* as would be *admissible* in evidence." *See* Fed. R. Civ. P. 56(e) (emphasis added). However, the facts need not be submitted in admissible *form* at this stage of the proceedings. "[T]he *nonmoving* party [need not] produce evidence in a form that would be admissible at trial in order to avoid summary judgment." *Celotex Corp. v. Catrett*, 477 U.S. 317, 324 (1986) (emphasis added). This is because the argument that the nonmoving party's evidence constitutes "inadmissible hearsay does not undercut the existence of any material facts the [evidence] may put into question." *Offshore Aviation v. Transcon Lines, Inc.*, 831 F.2d 1013, 1015 (11th Cir. 1987) (holding that hearsay letter should have been considered by trial court in opposition to summary judgment because letter put material facts into question).<sup>3</sup>

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<sup>3</sup> Consequently, parties have been allowed to oppose summary judgment with evidence frequently considered to be "hearsay." For example, newspaper articles have been admitted in opposition to summary judgment for the purpose of showing the existence of facts which create a genuine dispute of material fact, even though newspaper articles are typically treated as hearsay. *See, e.g., Church of Scientology Flag Service Org., Inc. v. City of Clearwater*, 2 F.3d 1514, 1530-31 (11th Cir. 1993) (holding that various materials, including newspaper articles, were appropriately submitted by the non-moving party in opposition to the motion for summary judgment to show that City Commission singled out Church of Scientology for burdensome regulation). The Supreme Court similarly allowed an opponent to submit three letters which constituted hearsay in opposition to a motion for summary judgment. *See Celotex*, 477 U.S. at 320; *see also Offshore Aviation*, 831 F.2d at 1015.

**B. SCO's Witnesses Do Not Present "Opinion" Testimony Within the Scope of Rule 702**

**1. The Declarants Present Facts -- Not Opinions -- in Their Testimony**

IBM also seeks to strike Mr. Sontag's declaration because, according to IBM, it is opinion testimony requiring scientific, technical, or other specialized knowledge under Federal Rule of Evidence 702. *See* IBM's Motion to Strike at 5. IBM provides only three *specific* examples of so-called opinion testimony. None of these actually constitute "opinions" and, even if they did, they certainly would not require expert qualification under Rule 702, as IBM argues. Specifically IBM claims the following statements are inadmissible opinion testimony:

- ! In this declaration, I explain why I believe that "several routines and several groupings of code for which SCO has copyright protection were copied into the Linux operating system." Gupta Declaration at ¶3.
- ! "Attempting to use an automated process to perform a complete comparison of all of the source code in UNIX and Linux computer operating systems is not feasible." Sontag Declaration at ¶10.
- ! "This 'initial' review could take on the order of 25,000 man-years." Sontag Declaration at ¶14.

*See* IBM's Motion to Strike at 5.

First, IBM does not explain what is about these three statements that make them "opinion" testimony, rather than fact testimony. Second, each statement is clearly a factual one within the personal knowledge of that declarant. In the first instance, Mr. Gupta is merely stating that his declaration will describe facts which led him to conclude that several routines for which SCO has copyright protection were copied into the Linux operating system

Similarly, the second statement, made by Mr. Sontag, is also a factual statement based on Mr. Sontag's personal knowledge. Mr. Sontag has first-hand knowledge that it is not feasible to use an automated process to perform a complete comparison of all of the source code in UNIX and Linux computer operating systems. This statement is drawn from Mr. Sontag's participation

in efforts to use automated tools to compare UNIX and Linux. *See* Sontag Supplemental Declaration at ¶¶15; 19-20.

The third so-called “opinion” is a mathematical calculation based upon Mr. Sontag’s knowledge of the amount of information that would need to be analyzed and how long it would take if one just assumed it took a fixed amount of time to review each page. It is a simple arithmetic calculation that requires no specialized scientific skill.

To add weight (but not substance) to its arguments, IBM states that Mr. Sontag also impermissibly “opines” about the topics below:

- ! Operating systems, computer programming, and electronic discovery, including methods for performing code analyses;
- ! The function and composition of an operating system kernel;
- ! The structure, size, and contents of the UNIX, Linux, AIX, Dynix, ptx, and Dynix/ptx operating systems;
- ! Software revision control systems, including one known as Configuration Management Version Control (“CMVC”) that is proprietary to IBM;
- ! Software development generally; “bug” fixing and tracking;
- ! The nature and uses of software development white papers, design documents, and programming notes; and
- ! Linux development process.

*See* IBM’s Motion to Strike at 8. However, IBM does not state what it considers to be objectionable about these paragraphs of Mr. Sontag’s declaration, including which portion constitutes opinion (and why it constitutes opinion) and which portion is based on facts.

The absurdity of IBM’s position, however, is made clear by IBM’s claim that Mr. Sontag’s statement about operating system kernels is “opinion” testimony under Federal Rule of Evidence 702. Mr. Sontag stated that:

- ! A kernel is the core portion of the operating system. The kernel performs the most essential operating system tasks, such as handling disk input and output operations and managing the internal memory. Sontag Declaration at ¶6.

According to IBM, this is an impermissible “opinion,” requiring expert testimony under Rule 702 and should be struck. *See* IBM’s Motion to Strike at 8. However, there is nothing about this statement that would constitute an opinion under Federal Rule of Evidence 702. This information is nothing more than background on operating systems. Moreover, there can be no legitimate dispute that it is information well within the personal knowledge of someone with Mr. Sontag’s experience. *See* Sontag Supplemental Declaration at ¶17. IBM does not explain why it believes the statements listed above are opinions requiring specialized knowledge as set forth in Federal Rule of Evidence 702, rather than being observations made by Mr. Sontag in reliance upon his personal knowledge. However, as Mr. Sontag makes clear, they are all based on Mr. Sontag’s personal knowledge.

**2. Even if Treated as Opinion Testimony, The Declarants Statements Are Admissible Lay Opinion**

Even if the Court were to conclude that all (or portions) of the declarations were opinion, it would still be admissible lay opinion under Federal Rule of Evidence 701. Federal Rule of Evidence 701 permits lay witnesses like Mr. Sontag, Mr. Gupta, and Mr. Harrop to offer opinion testimony if the testimony is “(a) rationally based on the perception of the witness, (b) helpful to a clear understanding of the witness’ testimony or the determination of a fact in issue,” and (c) not based on scientific, technical, or other specialized knowledge within the scope of Rule 702. Fed. R. Evid. 701. “Lay opinion testimony is. . . admissible when the inference is a conclusion drawn from a series of personal observations over time.” 4 Jack B. Weinstein, Weinstein’s Evidence § 701.02 (2d ed. 2004).

Thus, a witness with personal knowledge of the subject matter may give testimony in the form of “lay” opinions or inferences rationally based on perception. *See Fenstermacher v. Telelect, Inc.*, 21 F.3d 1121 (Table), 1994 WL 118046, at ¶5 (10th Cir. Mar. 28, 1994); *see also Visser v. Packer Eng’g Assocs., Inc.*, 924 F.2d 655, 659 (7th Cir. 1991) (“[P]ersonal knowledge’ includes inferences – all knowledge is inferential – and therefore opinions. But the inferences and opinions must be grounded in observation or other first-hand personal experience. They must not be flights of fancy, speculations, hunches, intuitions, or rumors about matters remote from that experience.”) (citations omitted). “A witness may give an opinion when he has personal knowledge of the facts.” *Kloepfer v. Honda Motor Co., Ltd.*, 898 F.2d 1452, 1459 (10th Cir. 1990). “If a witness is not testifying as an expert, his testimony need be rationally based on his perception and helpful to determination of a fact in issue to be admissible.” *Id.*

The Advisory Committee Notes to Rule 702 explain the distinction (which IBM misses) between lay opinion testimony offered in scientific or technical areas based upon personal experience and expert opinion testimony, such as that now covered by Rule 702. In explaining the difference, the commentators provide the example of a

“lay witness with experience [who] could testify that a substance appeared to be blood, but that a witness would have to qualify as an expert before he could testify that bruising around the eyes is indicative of skull trauma.”

Fed. R. Evid. 702 Advisory Committee’s Note to 2000 Amendments. Thus, the Advisory Committee draws a distinction between facts and opinions that a lay witness may state based upon personal experience, versus those opinions that require some additional training or expertise to make the inferential leap from observed facts to stated conclusion. SCO’s witnesses do not take that kind of inferential leap.

The Tenth Circuit in particular takes an expansive view of what lay opinion testimony may be offered under Rule 701. The Tenth Circuit allows lay witnesses to offer opinion testimony based on the witness's personal experience and specialized knowledge obtained in his profession. *See, e.g., Weese v. Schukman*, 98 F.3d 542, 550 (10th Cir. 1996) (allowing doctor testifying as lay witness to offer opinion testimony about medical standard of care in community). Such opinions may be admitted if they help the finder-of-fact to understand the facts more completely.

The mere fact that Mr. Sontag and Mr. Gupta are knowledgeable about computer science does not automatically convert their lay opinion into "expert opinion" under Rule 702. A lay witness who has conducted a study, even one based on specialized knowledge, may testify about the facts learned during the course of that study, as well as the opinions the witness formed which are rationally based on his perceptions of that study, without being qualified as an expert under Rule 702. *See West Tennessee Chapter of Associate Builders and Contractors, Inc. v. City of Memphis*, 219 F.R.D. 587 (W.D. Tenn. 2004). As long as a witness has personal knowledge of the facts, "he [is] entitled to draw conclusions and inferences from those facts, regardless of whether he applied any specialized expertise." *Id.* at 590.

In *West Tennessee*, the Defendant City of Memphis sought to call as witnesses consultants who had prepared a study examining whether racial disparities existed in City contracting. *See id.* at 588. The Court allowed the witnesses to testify about the results of the study they conducted, the methods they used, and what they observed as lay witnesses over the Plaintiff's objection. The court rejected the argument that the witnesses could not testify as lay witnesses because their study was based on scientific or technical knowledge. *See id.* at 590. The court allowed the witnesses to testify, concluding that "the fact that a person has expertise

[does not] mean that the person *must* be offered as an expert at trial. *Id.* at 589. The court allowed the witnesses to testify about their “opinions rationally based on their perceptions of the study, since they were the individuals who conducted the study. Their testimony could be helpful to a clear understanding of the facts at issue, since the methods of the study are undisputedly at the center of the controversy in this case.” *See id.* at 590.

The fact that a witness has specialized knowledge, or that he carried out an investigation because of that knowledge, “does not preclude him from testifying pursuant to Rule 701, so long as the testimony was based on the investigation and reflected his investigatory findings and conclusions, and was not rooted exclusively in his expertise.” *Bank of China, New York Branch v. NBM LLC*, 359 F.3d 171, 181 (2d Cir. 2004). In *Bank of China*, the Second Circuit held that one of plaintiff’s employees with many years of experience in international banking and trade could testify about his investigatory findings and conclusions reached during the course of an investigation he undertook for plaintiff because they were based on his perceptions. *See China Bank*, 359 F.3d at 181.

In *People v. Caldwell*, 43 P.3d 663, 667 (Colo. App. 2001), the Colorado Court of Appeals held that a crime scene technician could present lay opinion testimony concerning the track bullets followed at a crime scene. *See id.* The witness had traced the path of a bullets backward from their holes, using dowels and string and was allowed to testify as to his resulting observations, over objections that the testimony constituted expert opinion. *See id.*

IBM cites *Lifewise Master Funding v. Telebank*, 374 F.3d 917 (10th Cir. 2004), for the proposition that “a lay witness is not permitted to ‘express an opinion as to matters . . . which require the special skill and knowledge of an expert witness.’” IBM’s Motion to Strike at 7. However *Lifewise* stands for the proposition that the mere fact that a witness’ testimony may

include scientific, technical, or other specialized knowledge does not automatically render it inadmissible under Rule 701. In *Lifewise*, the Tenth Circuit affirmed the district court's decision to exclude the testimony of a bank president concerning factors used in a model for estimating lost profits. *See Lifewise*, 374 F.3d at 929. "The model concerned moving averages, compounded growth rates, and S-curves. Mr. Livingston could not testify about these technical, specialized subjects under Rule 701." *Id.* "[A]lthough Mr. Livingston was the president of the company, he does not have personal knowledge of the factors used by LifeWise's fourth damages model to estimate its lost profits." *Id.* at 930. The court excluded the testimony because testimony regarding the damages model itself was not "rationally-related" to the witness' perception. *See id.* at 930.

However, the court noted that the witness could have testified about his "opinion as to lost profits using conventional methods based on LifeWise's actual operating history. Indeed, the court essentially invited LifeWise to have him so testify," even though he was not qualified as an expert. *See id.* Thus, a witness can testify as to matters involving specialized knowledge, provided the testimony is rationally-related to the witness' perceptions.

Although IBM cites *Hilgraeve Corp. v. McAfee Assocs., Inc.*, 70 F. Supp. 2d 738, 735 (E.D. Mich. 1999), *affirmed in part, vacated in part*, 224 F.3d 1349 (Fed. Cir. 2000) for the proposition that computer science is precisely the type of specialized knowledge governed by Rule 702, the case does not support its position. In *Hilgraeve*, the opinion being offered was an infringement opinion that required the comparison of an accused product to the asserted claims of a patent. *See Hilgraeve*, 70 F. Supp. 2d at 754. Thus, the expert's opinion called upon him to do more than rationally relate his conclusions to his perceptions. Reaching an "expert" opinion required the expert to "tie observations to conclusions through the use of specialized knowledge

or experience.” *Id.* at 755. This higher standard applies to experts, but not to all matters of computer science.

Neither Mr. Sontag nor Mr. Gupta testify to the ultimate issue of copyright infringement. There can be no legitimate dispute that Mr. Sontag’s and Mr. Gupta’s statements – even when treated as lay opinion – are “rationally-related” to a series of personal observations of the UNIX and Linux source code over time. Statements about the nature of operating system kernels, what UNIX routines have been copied into Linux and the like were derived from the witnesses’ personal observation.

**C. Even if the Court Concludes the Witnesses Should be Treated as Experts, SCO’s Declarants Can Qualify as Such**

IBM further objects to the declarations SCO submitted on the grounds that they contain unqualified expert opinion. *See* IBM’s Motion to Strike at 6. Here again, IBM misconstrues the purpose for which SCO offered its supporting declarations. SCO was not attempting to resolve this motion “on the merits.” As SCO’s brief makes clear, SCO is opposing IBM’s motion under Rule 56(f). Consequently, SCO’s declarations are directed at what discovery SCO needs and the reason why it needs it. Accordingly, IBM’s objections are misplaced and should be ignored.

While SCO’s three declarants need not be qualified as experts because their declarations are based on personal knowledge and offer only facts and lay opinions, the declarants education and work experience are more than sufficient to qualify them as experts for purposes of resolving the Rule 56 (f) dispute currently before the Court.

To permit expert testimony, the Court must determine whether the proposed expert witness is qualified by “knowledge, skill, experience, training or education” to render an opinion. The dispositive question with regard to qualification is whether the opinion is “within the reasonable confines” of the expert’s subject area. *Burton v. R.J. Reynolds Tobacco Co.*, 183 F.

Supp. 2d 1308, 1313-14 (D. Kan. 2002). As discussed above, the declarants have many years of experience, and specific knowledge and training in the confines of the subject matter of their declarations. Each has first-hand, personal knowledge of the matters which he presents, or obtained pertinent knowledge from reliable sources or public information.

IBM's argument that Mr. Gupta's testimony is unreliable expert testimony because he did not apply the "abstraction-filtration-comparison" test, *see Gates Rubber Co. v. Bando Chem. Indus., Ltd.*, 9 F.3d 823 (10th Cir. 1993), is misplaced. The *Gates Rubber* test applies to analysis of copyright infringement. Mr. Gupta's declaration was offered not to show IBM's copyright infringement of SCO's protected UNIX code, but to show that there is evidence that UNIX source code has been copied into Linux. SCO offered this showing in support of its Rule 56(f) opposition to IBM's Cross-Motion to explain to the Court why SCO cannot yet present facts to oppose IBM's Cross-Motion on the merits.

#### **D. The Court Should Reject the Drastic Remedy of Striking Declarations**

The Court has discretion in considering IBM's Motion to Strike. Granting a motion to strike is considered a drastic remedy and is generally disfavored. *See* 2 James Wm. Moore, Moore's Federal Practice §12.37 (3rd ed. 2004). IBM's Motion stands in sharp contrast to the indulgence generally shown to declarations submitted in opposition to summary judgment. "In general, courts are more indulgent of affidavits submitted in opposition to summary judgment in keeping with the standard that all reasonable inferences are to be drawn in the nonmovant's favor." *Aoki Technical Laboratory v. FMT Corp., Inc.*, No. Civ. 96-042 – JD, 1999 WL 33601097, \*1 (D.N.H., Feb. 3, 1999). Even if IBM were correct and the declarations contained evidence outside of the witnesses' personal knowledge, striking the declarations is not the proper remedy. Instead, the better practice in cases in which a party objects to certain statements in a declaration is simply for the Court to disregard the objectionable statements. Striking of the

entire declaration is not required. *See Lee v. National Life Assurance Co. of Canada*, 632 F.2d 524, 529 (5th Cir. 1980).

**CONCLUSION**

For the foregoing reasons, the Court should deny Defendant/Counterclaim-Plaintiff IBM's Motion To Strike Materials Submitted By SCO In Opposition To IBM's Cross-Motion For Partial Summary Judgment.

Respectfully submitted,

DATED this 7th day of September, 2004.

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**CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that I caused a true and correct copy of the foregoing  
PLAINTIFF/COUNTERCLAIM DEFENDANT SCO'S MEMORANDUM IN OPPOSITION TO IBM'S  
MOTION TO STRIKE MATERIALS SUBMITTED BY SCO IN OPPOSITION TO IBM'S  
CROSS-MOTION FOR PARTIAL SUMMARY JUDGMENT to be mailed by U.S. Mail, first  
class postage prepaid, this 7<sup>th</sup> day of September, 2004, to the following:

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A handwritten signature in black ink, appearing to be "D. J. Rosenberg", written over a horizontal line.