

# ADDENDUM H Analysis of SCO's Assertions Regarding UNIX Licensees' Disclosure of Homegrown Material

IBM Ex. 508: IBM Technical Disclosure	nSC00 Rochkind ¶ 6:	
Bulletin by V. A. Albaugh, titled "Combined Event Performance Trace for AIX", dated March 1990	"[IBM] Ex. 508 is a one-page IBM Technical Disclosure Bulletin, which contains no indication that it was ever published or otherwise made available to the public."  "In my 35-plus years as a professional software developer, I have never seen an IBM Technical Disclosure Bulletin, nor was I aware that such	IBM Ex. 508 is currently available on the web: http://www.priorartdatabase.com/IPCOM/000099951/  A google.com search for the quoted term "IBM Technical Disclosure Bulletin" results in about 495,000 hits. A search of issued patents from 1976 to the present for the term "IBM Technical Disclosure Bulletin" results in 34,187 hits.
	documents even existed until I reviewed Ex. 508 for this case. "  "In any event, the Bulletin discloses an obscure aspect of AIX's behavior that is unlikely to be useful to developers of other operating system, such as Linux."	(http://patft.uspto.gov/netahtml/PTO/search-bool.html)  IBM Ex. 508 is of the same character as many of SCO's other claims. Ex. 508 "[d]isclos[es] a design that permits event and performance tracing of system software in the AIX environment". Compare SCO's Item 58 ("Discloses methods in Dynix/PTX for avoiding shuttling shared data between CPUs, so as to improve NUMA performance."); Item 61 ("Disclosure that high performance VM efforts in Dynix/PTX resulted in good TLB (translation look-aside buffer) savings."); Item 68 ("Disclosure that hand-placing/binding are frequently used in Dynix/ptx for benchmarks, in tuning customer applications, and in working around performance bugs."); Item 74 ("Discloses method used in Dynix/PTX for keeping related processes together so as to improve performance for Oracle and BAAN applications.") (IBM Ex. 54.)

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IBM Exs. 509-12: U.S. Patent Nos. 4,742,447, 4,742,450, 4,918,653, 5,032,979	Rochkind ¶ 7:  "[IBM] Ex. 509-12 are IBM patents. My understanding of a patent is that it provides an enforceable, legal way to prevent anyone else from using an invention, and that an operating system method or concept disclosed in a patent may not be used by an operating system developer without permission of the patent holder."	Patents are public, therefore, filing a patent is inconsistent with any claim by SCO that the material described in the patent must be held "in confidence" under a non-disclosure agreement.  SCO Item 271 specifically lists "All IBM UNIX-based patents from AIX or Dynix/ptx" as the allegedly "Improperly Disclosed Code, Method, or Concept" and cites, among others, US Patent Nos. 4,742,447, 4,742,450, and
IBM Ex. 559: Excerpts from book titled HP-UX Reference Release 10.0. Volume 3 (of 4), published by Hewlett- Packard Co. in 1983.	"[IBM] Ex. 559 reproduces pages from a Hewlett-Packard programmer's manual of the sort that is normally distributed to purchasers of an operating system. It contains no indication that it was ever published or otherwise made available to the public. A legal notice at the front of the manual says that 'Use of this manual and flexible disks(s) or tape cartridge(s) supplied for this pack is restricted to this product only.' The copyright notice says that 'Reproduction, adaptation, or translation of this document without prior written permission is prohibited, except as allowed under the copyright laws.' The manual pages in [IBM] Ex. 559 appear to be of the sort that programmers typically receive with an operating system, and they disclose only high-level aspects of the HP-UX operating system, not detailed internal operating system methods and concepts. The purpose of such disclosures in an operating system manual is to make it easier to write application programs that run on the operating system."	This manual is publicly available from oracle-base.com.  http://www.oracle-base.com/books/BooksList.php?mode=books&page=5&search=HP-UX  SCO has accused IBM breaching the Agreements by disclosing "high-level" aspects of its operating system. For example, SCO's Item 108 states the "Summary of Improper Disclosure or Use" as follows: "The SMP-scaling work will necessarily be high-level, but we can get (very rough) data points from AIX and ptx." (IBM Ex. 54 at Item 108 (emphasis added).)

IBM Ex. 560: Excerpts from book titled AIX Operating System: Programming Tools and Interfaces, published by IBM in 1989  IBM Ex. 561: Excerpts from book titled Solaris Porting Guide, Second Edition, published by Sun Microsystems, Inc. in 1995	Rochkind ¶ 9:  "[IBM] Ex. 560 reproduces pages from an IBM programmer's manual of the sort that is normally distributed to purchasers of an operating system. It contains no indication that it was ever published or otherwise made available to the public. It describes a programming library, called Curses, that is used to display characters on a display screen and which is totally unrelated to any internal operating system methods and concepts. I am an expert on Curses, and have even written a book on it ('Advanced C Programming for Displays,' Prentice-Hall, 1988)."  Rochkind ¶ 10:  "[IBM] Ex. 561 reproduces pages from a book called 'Solaris Porting Guide.' Its copyright notice says 'This book is protected by copyright and distributed under licenses restricting the use, copying, distribution, and decompilation. No part of this book may be reproduced in any form by any means without prior written authorization of Sun and its licensors, if any.' The pages describe an application programming interface (API) for the Solaris scheduler, and is the sort of high-level information that programmers need when using operating system APIs. They disclose no detailed internal operating system methods and concepts. The purpose of such disclosures in an operating system manual is to make it easier to write application	IBM Ex. 560 contains a stamp on the top of the second page stating "CORNELL UNIVERSITY LIBRARY", which indicates that the document is publicly available.  The fact that certain technologies are "unrelated to any internal operating system methods and concepts" has not stopped SCO from claiming their disclosure as a breach of the Agreements. For example, SCO does not dispute that for Items 187 and 188, "the cited technology did not even exist in Dynix." (SCO K Br. App. A ¶ 274.)  IBM Ex. 561 is publicly available from amazon.com: <a href="http://www.amazon.com/Solaris-Porting-Guide-Microsystems-Press/dp/0134436725">http://www.amazon.com/Solaris-Porting-Guide-Microsystems-Press/dp/0134436725</a> SCO has claimed that disclosure of an API is a violation of its rights: SCO Item 9 lists as the allegedly "Improperly Disclosed Code, Method, or Concept", "Disclosure of several internal implementation details of the Dynix/PTX NUMA API (application-program interface)." (IBM Ex. 54 at Item 9.)

IBM Ex. 562: Excerpts from book titled Solaris Multithreaded Programming Guide, published by Sun Microsystems, Inc. in 1995

#### Rochkind ¶ 11:

"[IBM] Ex. 562 reproduces pages from a book called 'Solaris Multithreaded Programming Guide.' Its copyright notice says 'This product and related documentation are protected by copyright and distributed under licenses restricting its use, copying, distribution, and decompilation. No part of this product or related documentation may be reproduced in any form by any means without prior written authorization of Sun and its licensors, if any.' The pages describe an application programming interface (API) for the Solaris multithreaded library, and is the sort of highlevel information that programmers need when using operating system and library APIs. They disclose no detailed internal operating system methods and concepts. The purpose of such disclosures in an operating system manual is to make it easier to write application programs that run on the OS."

IBM Ex. 562 is publicly available from amazon.com: <a href="http://www.amazon.com/Solaris-Multithreaded-Programming-Guide-Microsystems/dp/0131608967/sr=1-1/qid=1166553598/ref=sr\_1\_1/103-7897551-4881428?ie=UTF8&s=books">http://www.amazon.com/Solaris-Multithreaded-Programming-Guide-Microsystems/dp/0131608967/sr=1-1/qid=1166553598/ref=sr\_1\_1/103-7897551-4881428?ie=UTF8&s=books</a>

SCO has claimed that disclosure of an API is a violation of its rights: SCO Item 9 lists as the allegedly "Improperly Disclosed Code, Method, or Concept", "Disclosure of several internal implementation details of the Dynix/PTX NUMA API (application-program interface)." (IBM Ex. 54 at Item 9.)

IBM Ex. 563:
Excerpts from book by
Rudy Chukran, titled
Accelerating AIX:
Performance Tuning
for Programmers and
System
Administrators,
published by IBM in
I998

#### Rochkind ¶ 12:

"[IBM] Ex. 563 reproduces pages from a book called 'Accelerating AIX: Performance Tuning for Programmers and System Administrators.' Its copyright notice says 'No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the publisher.' The pages in the Exhibit describe 'basic design points about the AIX that affect system performance' ([IBM] Ex. 563 at 7). They disclose no detailed internal operating system methods and concepts. The purpose of such disclosures in an operating system performance-tuning guide is to make it easier to tune the operating system."

IBM Ex. 563 is currently available from amazon.com: http://www.amazon.com/Accelerating-AIX-Performance-Programmers-Administrators/dp/0201633825

IBM Ex. 563 is of the same character as many of SCO's claims. IBM Ex. 563 includes a five-page discussion of "virtual memory" (Ex. 563 at 11-15), whereas SCO's Item 192 alleges "Disclosure of Dynix/ptx virtual memory implementation techniques" as a breach of contract. (IBM Ex. 54 at Item 192 (emphasis added).) Further, Item 68 claims that IBM breached the Agreement by a "Disclosure that hand-placing/binding are frequently used in Dynix/ptx for benchmarks, in tuning customer applications, and in working around performance bugs." (IBM Ex. 54 at Item 68 (emphasis added).) According to SCO, then, a three page email on performance tuning is a material breach of the Agreements, but an entire book on performance tuning is not.

IBM Ex. 564: Excerpts from book by David A. Kelly, titled AIX 6000: Internals and Architecture, published by IBM in 1996.

#### Rochkind ¶ 13:

"[IBM] Ex. 564 reproduces pages from a book called 'AIX/6000 internals and architecture.' Its copyright notice says 'no part of this publication may be reproduced or distributed in any form or by any means, or stored in a data base or retrieval system, without the prior written permission of the publisher.' The pages in the Exhibit describe some internal design aspects of AIX, but at a superficial level. For example, while the existence of the JFS journal is mentioned, details of how the journal is actually implemented are omitted. In my opinion, the methods and concepts disclosed in the book are not explained in nearly enough detail to enable an operating system developer to incorporate those methods and concepts into an operating system like Linux."

IBM Ex. 564 is currently available from barnesandnoble.com: http://search.barnesandnoble.com/used/productMatches.asp? PEAN=9780070340619&z=y

SCO has accused IBM of disclosing "high-level" (i.e. "superficial-level") aspects of its operating system. For example, SCO's Item 108 states the "Summary of Improper Disclosure or Use" as follows: "The SMP-scaling work will necessarily be high-level, but we can get (very rough) data points from AIX and ptx." (IBM Ex. 54 at Item 108.)

IBM Ex. 565:
Excerpts from book by
Robert F. Sauers and
Peter S. Weygant,
titled HPUX: Tuning
and Performance.
Concepts, Tools &
Methods, published by
Hewlett-Packard Co.
in 2000

## Rochkind ¶¶ 14:

"[IBM] Ex. 565 reproduces pages from a book called 'HP-UX Tuning and Performance.' Its copyright notices says 'No part of this book may be reproduced, in any form or by any means, without permission in writing from the publisher.' It is stated on the front cover of the book that it 'Covers application design and system administration.' The pages in the Exhibit disclose no detailed internal operating system methods and concepts. The purpose of such disclosures in an operating system tuning and performance guide is to make it easier to design applications for and to maintain the operating system."

IBM Ex. 565 is currently available from amazon.com: <a href="http://www.amazon.com/HP-UX-Tuning-Performance-Concepts-Methods/dp/0131027166">http://www.amazon.com/HP-UX-Tuning-Performance-Concepts-Methods/dp/0131027166</a>

Item 68 claims that IBM breached the Agreement by a "Disclosure that hand-placing/binding are frequently used in Dynix/ptx for benchmarks, in tuning customer applications, and in working around performance bugs." According to SCO, then, a three page email on performance tuning is a material breach of the Agreements, but an entire book on performance tuning is not. (IBM Ex. 54 at Item 68 (emphasis added).)

IBM Ex. 567: Excerpts from book by Phil Colledge, titled The Advanced Programmer's Guide to AIX 3.x, published by IBM in 1994

### Rochkind ¶ 17:

"[IBM] Ex. 567 reproduces pages from a book called 'The Advanced Programmer's Guide to AIX 3.x.' Its copyright notice says 'No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior permission of McGraw-Hill International (UK) Limited, with the exception of material entered and executed on a computer system for the reader's own use.' The code in the Exhibit is example code that shows how to write application programs; it is not operating system implementation code. The copyright notice, in my opinion, does not allow even that code to be incorporated into an operating system like Linux, since that would not be 'for the reader's own use.' The pages in the Exhibit describe how to use AlX-specific system calls to write application programs, and is the sort of high-level information that programmers need when using operating system APIs. They disclose no detailed internal operating system methods and concepts. The purpose of such disclosures in such a book is to make it easier to write application programs that run on an operating system."

IBM Ex. 567 is currently available from amazon.com: <a href="http://www.amazon.com/gp/offer-listing/007707663X/ref=dp\_olp\_0/103-7897551-4881428?ie=UTF8&condition=all">http://www.amazon.com/gp/offer-listing/007707663X/ref=dp\_olp\_0/103-7897551-4881428?ie=UTF8&condition=all</a>

Whatever the terms of the copyright notice, the material in Ex. 567 is not held "in confidence".

SCO has claimed that disclosure of an API is a violation of its rights: SCO Item 9 lists as the allegedly "Improperly Disclosed Code, Method, or Concept", "Disclosure of several internal implementation details of the Dynix/PTX NUMA API (application-program interface)." (IBM Ex. 54 at Item 9.)

IBM Ex. 568: Excerpts from book by John R. Graham, titled Solaris: Internals & Architecture, published in 1995	Rochkind ¶ 18:  "[IBM] Ex. 568 reproduces pages from a book called 'Solaris Internals and Architecture.' Its copyright notice says 'no part of this publication may be reproduced or distributed in any form or by any means, or stored in a data base or retrieval system, without the prior written permission of the publisher.' The pages in the Exhibit show trivial and obvious code fragments, some of which are pseudo-code (not actual programming-language code), for (1) wrapping a system call so as to associate a name with a number and (2) associating a file descriptor number with an open file. In my opinion, these code and pseudo-code fragments would not be useful to an operating system developer working on an operating system like Linux. Rather, the purpose of the information in the Exhibit is to provide information to application programmers or system maintainers who are using the Solaris operating system."	IBM Ex. 568 is currently available from amazon.com: <a href="http://www.amazon.com/exec/obidos/ASIN/0079118763/acmorg-20">http://www.amazon.com/exec/obidos/ASIN/0079118763/acmorg-20</a> SCO has accused IBM of disclosing "STREAMS implementation from SVR4" and the basis for its claim is an email which refers to "Sun's documentation [web]site". (IBM Ex. 54 at Item 166.)  Mr. Rochkind himself has discussed allegations of misuse in connection with disclosing "some pseudo-code". (IBM Ex. 285 at 126.)
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IBM Ex. 570: Excerpts from book titled Guide to Parallel Programming, on Sequent Computer Systems, Second Edition, published by sequent in 1987

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#### Rochkind ¶ 20:

"[IBM] Ex. 570 reproduces pages from a document called 'Guide to Parallel Programming on Sequent Computer Systems.' It contains no indication that it was ever published or otherwise made available to the public. In any event, the pages in the Exhibit describe how to use parallel-programming features of the Dynix operating system to write application programs, and is the sort of high-level information that programmers need when writing applications for an operating system. They disclose no detailed internal operating system methods and concepts. The purpose of such disclosures in such a book is to make it easier to write application programs that run on an operating system. In addition, the material in the Exhibit is extremely specific to Dynix and would not be applicable to another operating system, such as Linux."

The book is available for purchase from at least 11 sellers: <a href="http://www.abebooks.com/servlet/SearchResults?&isbn=0133704467&nsa=1">http://www.abebooks.com/servlet/SearchResults?&isbn=0133704467&nsa=1</a>

SCO has accused IBM of disclosing "high-level" aspects of its operating system. For example, SCO's Item 108 states the "Summary of Improper Disclosure or Use" as follows: "The SMP-scaling work will necessarily be <a href="high-level">high-level</a>, but we can get (very rough) data points from AIX and ptx." (IBM Ex. 54 at Item 108 (emphasis added).)