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10 UNITED STATES DISTRICT COURT  
11 FOR THE NORTHERN DISTRICT OF CALIFORNIA  
12 SAN FRANCISCO DIVISION

13 ROBERT JACOBSEN, )  
14 )  
Plaintiff, )  
15 v. )  
16 MATTHEW KATZER, et al., )  
17 )  
Defendants. )  
18 )  
19 )  
20 )

No. C-06-1905-JSW  
**DECLARATION OF ROBERT  
JACOBSEN IN OPPOSITION TO  
MOTION TO STRIKE CLAIMS 5 AND 7  
BY DEFENDANT KEVIN RUSSELL**  
Courtroom: 2, 17th Floor  
Judge: Hon. Jeffrey S. White

21 I, ROBERT JACOBSEN, have personal knowledge to the facts stated herein and hereby  
22 declare as follows:

23 1. I am a party to this action. I am submitting this Declaration in Opposition to  
24 Defendant Kevin Russell’s Motion to Strike Claims 5 and 7.

25 My Background

26 2. I earned a Bachelor of Science degree in Electrical Engineering and Computer  
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1 Science from MIT in 1978. From approximately 1975 through 1979, I worked in the process  
2 control industry, building computer controls for devices such as machine tools, X-ray survey  
3 instruments, and vapor deposition furnaces. I then worked until 1986 in the data  
4 communications industry building devices and systems for conveying and processing digital  
5 information. I am co-inventor of two patents, including one for a multi-protocol digital  
6 communications device. I have published articles on data communications devices and  
7 techniques including articles on communications between multiple devices (R.G. Jacobsen and  
8 D.P. Misunas. Analysis of structures for packet communication, in *Proceedings of the 1977*  
9 *Intern'l Conf. on Parallel Processing*, J.L. Bear (ed.), IEEE (1977)) and on how converting  
10 between different types of communications protocols would be an effective technique (D.P.  
11 Misunas and R.G. Jacobsen. Protocol convertors expanding network horizons. *Data Comm.* 9,  
12 41 (1979)).

13 3. I earned a Ph.D. in experimental high-energy physics from Stanford University  
14 in 1991. Since then, I have worked in experimental physics as a researcher and professor. I  
15 have led hundreds of researchers in efforts to collaboratively build complex software systems,  
16 including multi-protocol data communications efforts. I have taught, published articles and  
17 presented invited talks at professional meetings on these topics. As a single example of each  
18 type, I presented invited lectures at the 2005 CERN Summer Lecture Series; I presented an  
19 invited course at the 2005 CERN School of Computing, St. Malo, France; I published a paper  
20 entitled "Applying object-oriented software engineering at the BaBar collaboration" in the  
21 referred journal *Nuclear Instruments and Methods* (**A389**, 1-7).

22 4. I am a tenured professor of physics at the University of California, Berkeley. I  
23 serve as the Associate Dean for Undergraduate Advising of the College of Letters and Science,  
24 a Vice Chair of the physics department, and Chair of the Faculty Senate committee on  
25 undergraduate admissions. I have won awards for research, service and teaching, including  
26 Berkeley's highest recognition, the Distinguished Teaching Award.

27 5. I have a part-time faculty appointment in the Physics Division at the Lawrence  
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1 Berkeley National Laboratory (LBNL). LBNL is managed by the University of California for  
2 the United States Department of Energy under contract. LBNL engages in leading edge  
3 research in physics, chemistry, biology, energy and material science. LBNL currently has about  
4 3,800 employees and a total budget of about \$500 million. Since its founding, nine LBNL  
5 researchers have won the Nobel Prize. The LBNL Director is currently Prof. Steve Chu, winner  
6 of the 1999 Nobel Prize in Physics. LBNL researchers and the programs they create routinely  
7 win national recognition. Most recently, President Bush awarded the Fermi Medal to Prof.  
8 Arthur Rosenfeld for his accomplishments in energy research.

9 6. My experimental particle physics research program is located at LBNL. I  
10 currently have three graduate students. I am involved in two major experimental high-energy  
11 physics collaborations: the BaBar experiment at the Stanford Linear Accelerator Center  
12 (SLAC), and the ATLAS experiment at the Center for European Nuclear Research (CERN). My  
13 official UC bibliography credits me with authorship or co-authorship of over 250 published  
14 papers, of which the most recent is "Measurement of time-dependent CP-violating asymmetries  
15 and constraints on  $\sin(2\beta + \gamma)$  with partial reconstruction of  $B \rightarrow D^{*\mp} \pi^{\pm}$  decays" (*Phys. Rev. D*  
16 **71**, 112003-1-17 2005).

17 7. I also have a hobby: model railroading.

#### 18 19 My Interest in Model Railroads and Related Software

20 8. As part of my model-railroading hobby, I have contributed to the development of  
21 the underlying National Model Railroad Association (NMRA) Digital Command Control  
22 (DCC) standards used by many model railroaders and present in many types of model railroad  
23 equipment. I have served as the Chair of the DCC Working Group within the NMRA. I  
24 worked directly with many types of digital model railroad equipment, including all common  
25 types of DCC systems. I have used and observed many types of model railroad software. In  
26 several cases, I have helped people debug other types of model railroad software.

27 9. I am involved in the Java Model Railroad Interface (JMRI) open-source software  
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1 project. I have been involved since approximately the beginning of the effort in 2001, and am  
2 currently one of the leaders of it. I have written parts of the code and documentation. I have  
3 helped others write parts. I have given public talks about the use and structure of the software.  
4 I have periodically built versions of the JMRI software for general use, and posted them to the  
5 SourceForge web site for downloading by the public. The JMRI software is popular among its  
6 users.

7 10. The JMRI software project recently won a prestigious award at a large meeting  
8 of Sun Java users that recognizes it as one of “the most innovative Java technology-based  
9 applications of the year” for its community, its use of technology to empower people to  
10 contribute, and for the impact it’s had.

11 11. The JMRI software has been jointly developed by people located all over the  
12 world. Currently, 17 developers from at least 5 countries can directly contribute code. More  
13 than 30 other people from at least 7 countries have contributed elements of the software through  
14 these developers.

15 12. My membership in the DCC Working Group lists me as a hobbyist and  
16 representative of JMRI itself. It does not associate LBNL with JMRI.

17 13. Besides myself, I am aware of no developer or user of the JMRI software who is  
18 employed by either the University of California at Berkeley or the Lawrence Berkeley National  
19 Laboratory.

20 14. I have communicated with Katzer via email both directly and through mailing  
21 lists numerous times since April 2001.

22 15. Katzer is a member of the NMRA DCC Working Group.

23 16. The people who develop popular model railroad software all know each other or  
24 know of each other. It’s a small group.

25 17. I have met Katzer in person at one or more national conventions of the NMRA,  
26 including the associated meetings of the NMRA DCC Working Group. At none of those  
27 meetings did I identify myself as from LBNL, nor did my convention badge identify my  
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1 employer(s).

2 18. Katzer has given presentations and workshops on his software at NMRA  
3 meetings.

4 19. I attended some of those presentations and workshops.

5 20. Katzer has been present when I spoke about JMRI at least once.

6 21. I routinely distinguish between my “day job” and JMRI hobby activities in  
7 emails. Attached hereto as Exhibit A is a true and correct copy of one example of this.

8 22. I have never heard anyone state that JMRI is an official DOE project. I have  
9 never seen that stated in email, on the internet or in writing with the exception of Russell’s  
10 Freedom of Information Act request.

11 23. The September 2003 issue of Railroad Model Craftsman contained an article  
12 about JMRI. Railroad Model Craftsman is a large circulation magazine for model railroaders.  
13 Attached hereto as Exhibit B is a true and correct copy of this article. It refers to JMRI’s  
14 Decoder Pro (sic) program as “started by a grass roots project by a couple of members of the  
15 Silicon Valley Lines in San Jose, California”. Silicon Valley Lines is a well-known model-  
16 railroad club in San Joe California. Further, the article says “One of the interesting aspects of  
17 this program is the project has been done by volunteers.”

18 24. The November 2004 issue of Model Railroader contained an article about JMRI.  
19 Model Railroader is a large circulation magazine for model railroaders. KAM Industries  
20 advertises in Model Railroader. Attached hereto as Exhibit C is a true and correct copy of this  
21 article. Referring to the JMRI software, the 2<sup>nd</sup> paragraph says “a group of dedicated hobbyists  
22 have created computer software that makes the task of programming decoder much simpler”.  
23 The 4th paragraph says “DecoderPro is one of several programs available from a private group  
24 called JMRI (Java Model Railroad Interface)”. This issue of the magazine was available on  
25 newsstands and to subscribers at the start of October. I observed a large increase in traffic to  
26 the JMRI web site when this article came out.

27 25. Katzer has been aware that JMRI is a non-commercial activity by hobbyists. He  
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1 has alluded to this multiple times in emails and internet postings. Attached hereto as Exhibit D  
2 is a true and correct copy of one example, in which he states "So in essence JMRI, while  
3 containing some good ideas from an educational perspective, is not a commercial product ...".  
4

5 Russell and Katzer's Letter Writing Campaign and FOIA Request

6 26. In March of 2005, I received a letter from Russell of Chernoff, Vilhauer,  
7 McClung & Stenzel LLP. In this letter, Russell expressed his belief that the JMRI software  
8 infringed Claim 1 of US Patent 6,530,329 (the '329 Patent).

9 27. Attached hereto as Exhibit E is a true and correct copy of this letter.

10 28. I sent a letter in reply on March 29, 2005 that said that I was "unable to locate  
11 any functionality that infringes on valid claims in U.S. Patent 6,530,329 B2" and requested  
12 additional information. Included in the letter was information on how to obtain access to the  
13 JMRI code.

14 29. Attached hereto as Exhibit F is a true and correct copy of this letter.

15 30. Later, I received a second letter from Mr. Russell dated August 24, 2005, again  
16 claiming that the JMRI software infringed the '329 Patent. Included with the letter was a  
17 solicitation to pay \$203,000 for 7,000 patent licenses.

18 31. Attached hereto as Exhibit G is a true and correct copy of this letter.

19 32. And again, I received yet a third letter from Russell dated October 20, 2005,  
20 which contained another solicitation to buy 7,000 licenses, described as an "updated Account  
21 Statement", and requested that I let Russell know how I "would like to arrange a payment  
22 schedule for (my) outstanding account balance".

23 33. Attached hereto as Exhibit H is a true and correct copy of this letter and its  
24 enclosures.

25 34. In early November, 2005, I was contacted at work by a lawyer for LBNL, Mr.  
26 Patrick Burke (Mr. Burke). Mr. Burke informed me he was handling a Freedom of Information  
27 Act (FOIA) request from Russell regarding JMRI. He asked a number of questions regarding  
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1 my work on and contributions to JMRI, whether LBNL resources had been used during that  
2 work, what my position at LBNL was, what LBNL projects I was working on, and similar  
3 topics.

4 35. Specifically, Mr. Burke informed me that LBNL had received a FOIA request  
5 from Russell wherein it was alleged that I had used LBNL resources in the form of an email  
6 account during the course of engaging in patent infringement. The requests asked LBNL and  
7 the Department of Energy (DOE) to produce all documents related to the JMRI project. This  
8 FOIA request is Katzer Declaration Ex. 1 and Russell Declaration Ex. 4.

9 36. The FOIA request surprised me because for I could not understand how the mere  
10 use of an email account would lead someone such as Russell or Katzer to believe that the  
11 internet service provider (ISP), or domain name holder associated with the email account had  
12 some relationship to an allegation of patent infringement.

13 37. Further, the FOIA request referred to “the KAM legal action in federal court”.  
14 Although that is now known to have never existed, at the time it led me to believe that a lawsuit  
15 was already in progress.

16 38. The FOIA request refers to the “Physics Division Berkley (sic) Livermore  
17 Labs”. There are two Lawrence Laboratories: Lawrence Berkeley National Laboratory, for  
18 which I work, and Lawrence Livermore National Laboratory. Because the names are similar  
19 and because the Livermore name is better known, it is common for people to confuse or merge  
20 the two names. My listing in the LBNL directory shows that I am associated with the Physics  
21 Division. It also shows that I am a staff member employed by LBNL. Attached hereto as  
22 Exhibit I is a true and correct copy of this directory listing. I know of no directory listing that  
23 would identify me as a member of the Physics Division at LBNL without showing that I am a  
24 member of the staff.

25 39. Due to this FOIA request, I had to appear before the Director of the Physics  
26 Division of LBNL to explain the situation. This was an embarrassing experience. He asked  
27 detailed questions about my activity. He said he was concerned about the impact of allegations  
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1 of patent infringement on both my reputation and the reputation of LBNL.

2 40. Later, I received a fourth letter from Russell dated January 3, 2006, which  
3 contained a copy of a letter dated November 23, 2005 which I had never received. This  
4 contained another solicitation to buy 7,000 licenses, described as an "updated Account  
5 Statement", and requested that I let Russell know how I "would like to arrange a payment  
6 schedule for (my) outstanding account balance".

7 41. Attached hereto as Exhibit J is a true and correct copy of this letter and its  
8 enclosures.

9 42. I replied to Russell by letter on January 31, 2006, indicating that multiple  
10 examples of prior art are available to invalidate the patent. I pointed out that JMRI is itself  
11 prior art, as it was available at the time that the patent was filed. I reminded him that he was  
12 aware of some of this prior art during prosecution of the patent, but chose not to inform the  
13 Patent Examiner.

14 43. Attached hereto as Exhibit K is a true and correct copy of this letter.

15 44. I later received a fifth letter from Mr. Russell dated February 7, 2006,  
16 maintaining his insistence that JMRI infringes the '329 patent and incorrectly stating that the  
17 patent had been filed before the JMRI code was available.

18 45. Attached hereto as Exhibit L is a true and correct copy of this letter.

19

20 Professional, Economic Harm and Embarrassment as a Result of the FOIA Request

21 46. I spent considerable time in the course of dealing with this sequence of letters  
22 and the Freedom of Information Act (FOIA) request. This required me to turn down two  
23 consulting contracts.

24 47. In addition to forcing me to turn down a number of lucrative consulting  
25 contracts, the FOIA request by Mr. Russell and Katzer caused me embarrassment, and I felt was  
26 done to try to force me into making a monetary payment to them. My embarrassment arose, in  
27 part, due to the fact that in the course of performing my duties at LBNL, there are certain  
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1 regulations and policies that I am required to follow. For example, the LBNL policy on  
2 Authorized Use of Information Resources states:

3 “‘Incidental personal use’ is allowed as long as it is consistent with this  
4 policy and all implementing policies and procedures and does not:

5 ...

6 Constitute an "unacceptable use," as defined in Paragraph  
7 (C)(4)(c), below.”

8 48. The LBNL policy statement describes “unacceptable use” as:

9 “Use of resources in connection with conduct or activities prohibited by  
10 Laboratory policy (e.g., fabrication, falsification, or plagiarism in proposing,  
11 conducting, or reporting research; unauthorized disclosure of Laboratory  
12 proprietary information) or use in violation of applicable copyright or patent  
13 laws.”

14 49. The sanctions for violations of the policies are stated as:

15 “Any use of Laboratory information resources in violation of this policy  
16 may result in one or more of the following sanctions:

17 Restriction of access to such resources;

18 Disciplinary action, up to and including dismissal.”

19 50. Attached hereto as Exhibit M is a true and correct copy of the Lawrence  
20 Berkeley National Laboratory policy on Authorized Use of Information Resources.

21 51. Furthermore, Russell and Katzer’s action threatened my position with the  
22 University of California at Berkeley. As a faculty member, I am bound by certain rules  
23 regulating professional conduct as codified in the University of California Academic Policy  
24 Manual (APM). Sanctions for violations of these rules include dismissal. One such rule of  
25 professional conduct relates to “Scholarship”, and defines “Types of unacceptable conduct” as:

26 Violation of canons of intellectual honesty, such as research  
27 misconduct and/or intentional misappropriation of the writings,

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1 research, and findings of others.

2 52. Attached hereto as Exhibit N is a true and correct copy of section 15 of the  
3 University of California Academic Policy Manual, titled "GENERAL UNIVERSITY POLICY  
4 APM REGARDING ACADEMIC APPOINTEES The Faculty Code of Conduct".

5 53. It is common knowledge among university faculty members that there exists  
6 numerous instances of faculty members being disciplined, and in many cases dismissed, for  
7 failure to acknowledge the use of others' intellectual property. As an example, a Dean at the  
8 University of Missouri recently lost his position due to using the work of another without  
9 attribution in one speech.

10 54. Attached hereto as Exhibit O is a true and correct copy of a news account of this  
11 incident in the Chronicle of Higher Education, a publication widely read by faculty.

12 55. At the NMRA convention in Cincinnati in July 2005, Katzer gave a talk about  
13 his products. I arrived part-way through the presentation. During the discussions at the end, I  
14 heard Katzer comment on his determination to "enforce" his "intellectual property rights". This  
15 aggressive attitude concerned me greatly.

16 56. As a faculty member, I am on salary during the school year, but paid via research  
17 contracts during the summer based on specific days worked. As such, I had to forgo being paid  
18 for certain days during Summer 2005 due to time spent addressing Mr. Russell and Katzer's  
19 patent assertions.

20 57. In addition I felt that because I was one of the main participants in the JMRI  
21 project, Russell and Katzer were targeting me to force me and JMRI out of the market place.  
22 By virtue of my involvement with JMRI, I am a presence in the model railroad software market  
23 as is Katzer, and with me and JMRI out of the picture Katzer would be in a better position to  
24 control the market.

25

26 Overview of the JMRI Development Process

27 58. As part of normal operations, when any JMRI developer decides that new or  
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1 modified files are ready for use, he/she “commits” them to our central code repository on the  
2 SourceForge web site. We have been using this development method since at least before  
3 August 2001. Any changes are automatically and rapidly made visible to the public via the web  
4 site.

5 59. A summary of the changes is published on a public web site, and sent to a public  
6 mailing list.

7 60. Attached hereto as Exhibit P is a true and correct copy of the part of the  
8 SourceForge web site that lists this mailing list traffic during the latter part of March 2002.

9 61. Generally, the first few changes made by a new contributor are sent to one of the  
10 existing developers for checking before being committed to the common repository. If those  
11 changes are acceptable, they’re committed and the new developer is given permission to  
12 commit directly in the future.

13 62. On March 27, 2002, I committed some new code and documentation contributed  
14 by Alex Shepherd of New Zealand. In part, I did this because he was a new developer, and in  
15 part because he was having technical difficulties committing directly. Included in these files  
16 was a new README file, which stated:

17 The jmrix.loconet Java package defines loconet-specific  
18 implementations for the JMRI interfaces. The  
19 jmrix.loconet.locormi package implements remote  
20 communication between a "LocoNet server" and a "LocoNet  
21 client" process.

22 The JMRI web page is located at <http://jmri.sourceforge.net/>

23 This package is the work of Alex Shepherd.

24 This new README file was immediately available to the public from the SourceForge web  
25 site, as was all the code implementing this feature. The feature used a straight-forward  
26 implementation of a traditional client-server technique to allow multiple “client” computers to  
27 connect to a single “server” computer, and through that server to the shared-resource of the  
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1 model railroad layout. Each client would then be able to operate trains on the layout.

2 63. Alex Shepherd was given direct access to the repository after this, and made  
3 additional contributions directly.

4 64. Starting in early April 2002, I constructed a new public release of the JMRI  
5 code, called version 0.9.2. It was made available to the public for downloading on April 14,  
6 2002. A summary of the changes in this release was mailed to several public mailing lists and  
7 public web sites.

8 65. Attached hereto as Exhibit Q is true and correct copy of one of these email  
9 announcements as shown on the SourceForge web site archive.

10 66. As a part of this version 0.9.2, certain software documentation was made  
11 available that stated, in part: "Initial support in JMRI libraries for. . .Remote LocoNet server  
12 and client." This feature allows multiple programs to communicate to run trains on the same  
13 model train layout.

14 67. On April 17, 2002 two days after the release of version 0.9.2, Katzer filed United  
15 States Patent Application No. 10/124,878. This patent application claimed, among other things,

16 1. A method of operating a digitally controlled model  
17 railroad comprising the steps of:

18 (a) transmitting a first command from a first program to  
19 an interface;

20 (b) transmitting a second command from a second  
21 program to said interface; and

22 (c) sending third and fourth commands from said interface  
23 representative of said first and second commands,  
24 respectively, to a digital command station.

25 16. A method of operating a digitally controlled model  
26 railroad comprising the steps of:

27 (a) transmitting a first command from a first program to  
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an interface;  
(b) transmitting a second command from a second program to said interface; and  
(c) said interface sending a third and fourth command representative of said first command and said second command, respectively, to the same digital command station.

68. These claims are conspicuously similar to the very technology disclosed in version 0.9.2.

69. Attached hereto as Exhibit R is a true and correct copy of pages from the jacket of United States patent application 10/124,878 (the '878 application). Page 1 shows that the patent was closed for prosecution on the merits on November 4, 2002. Page 2 shows that the patent issued on March 11, 2003. I have examined the patent file wrapper, and there is no indication that the references produced by Tanner, and referred to in his declaration, were sent to the USPTO.

70. JMRI technology has been discussed on numerous public mailing lists since at least August 2001.

71. For example, emails pointing to the JMRI web site were posted to the Digitrax Yahoo list on August 3, 2001.

72. Katzer has been on the Digitrax mail list since at least September 1998.

73. Attached hereto as Exhibit S is a true and correct copy of the Digitrax mailing list showing Katzer's participation in the Digitrax mailing list.

74. Katzer has been on the jmriusers mail list of the JMRI project since at least January 16, 2004.

75. All members of the jmriusers email list regularly receive updates regarding new releases of JMRI technology. Each update provides a short summary of the function of new features and other changes. The code implementing the new features and changes is always

1 available immediately via the JMRI web site.

2 76. Attached hereto as Exhibit T is a true and correct copy of the JMRI mailing list  
3 showing Katzer's participation in the jmriusers mailing list.

4 77. To my knowledge no member of the JMRI project was listed as co-inventor on  
5 the '878 application.

6 78. Mr. Russell was the attorney/agent who filed the '878 application.

7 79. The previously-described Exhibit R is a true and correct copy of pages from the  
8 jacket of United States patent application 10/124,878, the '878 application. Page 4 shows the  
9 attorney information for the '878 application.

10 80. Prior to the arrival of the first letter from Mr. Russell in March 2005, I would  
11 normally release a new version of JMRI to the public approximately once per month. In the  
12 eighteen months before the first letter was received, I released eighteen versions.

13 81. In the fifteen months since the first letter from Mr. Russell in March 2005, I  
14 have released six versions of the software. In the 9 months since being presented with a "Sales  
15 Receipt" for \$203, 000, I have released one version. This reduced rate was due legal  
16 uncertainty. Moreover, this reduced release rate has lessened the popularity of JMRI in the  
17 marketplace.

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19 Russell's Admission of Illegal Conduct on the part of his client Katzer

20 82. On April 3, 2006, Russell filed a request to withdraw from issue the United  
21 States Patent Application No. 10/989,815 (the '815 Application). The cited basis for the  
22 petition to withdrawal is illegality of the application or a Rule 1.56 violation.

23 83. Attached hereto as Exhibit U is a true and correct copy of Russell's petition to  
24 withdraw.

25 84. From reading the file history of the '815 Application, this patent application is a  
26 continuation of United States Patent Application No. 10/713,476, which matured into United  
27 States Patent No. 6,909,945 (the '945 Patent). This '945 Patent is a continuation of United  
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1 States Patent Application No. 09/311,936 which matured into United States Patent No.  
2 6,676,089 (the '089 Patent). Furthermore, the '089 Patent is a continuation of United States  
3 Patent Application No. 09/104,461 (the '461 application), which matured into United States  
4 Patent No. 6,065,406 (the '406 Patent). The '406 Patent was filed on June 24, 1998, and was  
5 the first patent filed by Katzer relating to model train software. The '878 application is also a  
6 continuation of the '461 application.

7 85. Attached hereto as Exhibit V is a true and correct copy of the patent continuity  
8 data for the '815 Application.

9  
10 Various Examples of Prior Art Available to Katzer

11 86. I am familiar with the LocoNet system produced by Digitrax, Inc, of Norcross,  
12 Georgia. I have studied the protocol documentation, worked with the products embodying the  
13 protocol, and have developed software and products that implement it.

14 87. The LocoNet system produced by Digitrax, Inc, of Norcross, Georgia performs  
15 the functions described by claim 1 and other claims in the '406 patent. Specifically, the  
16 LocoNet protocol combines with the "Chief" command station, Digitrax model DCS100, to  
17 implement a feature called the "Bushby bit". With this, multiple separate programs send  
18 commands to a single central program, which then relays their commands to the command  
19 station as needed. This is the functionality described by claim 1 of the '406 patent.

20 88. The LocoNet version 1.1 specification containing this information was settled in  
21 April 1996.

22 89. Digitrax shipped Chief command stations with this capability in November  
23 1996.

24 90. LocoNet is the only communications protocol that a program could use to talk to  
25 Digitrax command stations.

26 91. Attached hereto as Exhibit W is a true and correct copy of a page from the KAM  
27 Industries web site, at <http://www.trainpriority.com>. It lists "Train Server", "Train Tools",  
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1 “Engine Commander” and “Computer Dispatcher” as KAM products.

2 92. Attached hereto as Exhibit X is a true and correct copy of an advertisement by  
3 KAM Industries for “Engine Commander” that appeared in the January 1995 issue of the Model  
4 Railroader magazine. It describes the product as “for ... Digitrax”. Its size is approximately 2.3  
5 inches x 1.3 inches.

6 93. Attached hereto as Exhibit Y is a true and correct copy of an advertisement by  
7 KAM Industries for “Engine Commander 2.0” that appeared in the July 1996 issue of the  
8 Model Railroader magazine. It describes the product as having “support for ... Digitrax”. Its  
9 size is approximately 2.3 inches x 1.0 inches.

10 94. Attached hereto as Exhibit Z is a true and correct copy of an advertisement by  
11 KAM Industries for “Engine Commander w/Train Server (ver 2.1)” that appeared in the  
12 December 1997 issue of the Model Railroader magazine. It describes the product as  
13 “supporting ... Digitrax” equipment. Its size is approximately 7.1 inches x 2.3 inches.

14 95. Attached hereto as Exhibit AA is a true and correct copy of slides from a  
15 presentation made by Katzer at the 1996 NMRA Convention, copied from the KAM Industries  
16 web site. Slides 6, 9, 10 and 26 mention Digitrax. Slides 9 and 10 discuss the KAM Industries  
17 “Train Commander” product, and discuss its support for Digitrax equipment.

18 96. This presentation has recently been removed from the KAM Industries web site.

19 97. Attached hereto as Exhibit AB is a true and correct copy of Digitrax computer  
20 applications web page at <http://www.digitrax.com/computer.htm>, that was captured on the  
21 Internet Archive on November 2, 1996. The page said "We also have a number of other third  
22 party software developers who are working on LocoNet Certified products that run on the IBM  
23 or Mac PC's. We will soon be testing some pre-release software from KAM Industries  
24 (developer of Engine Commander) for the IBM/ Windows environment. We'll let you know as  
25 soon as it is ready to go."

26 98. Starting in 1995, John E. Kabat was writing software to interface with LocoNet.  
27 In April 1996 he made available for free download version 1.2 of his “LOCONET1” software.

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1 This is a DOS “Terminate and Stay Resident” (TSR) program that allowed other programs to  
2 access LocoNet, hence the digital model railroad. It therefore forms an “interface”. Kabat then  
3 generalized LOCONET1 to work under Windows. It was distributed under various names. As  
4 “LOCONET1.VxD” it was made available to the public for free download at some date in  
5 1996; the second version was made available on February 4, 1997. LOCONET1VxD allowed  
6 multiple programs on a single Windows PC to communicate with the LocoNet command  
7 station simultaneously. It contained an internal message queue, and operated asynchronously.

8 99. Attached hereto as Exhibit AC is a true and correct copy of Mr. Kabat’s web  
9 page announcing that “LOCONET1.VxD Version 1.1 (BETA) Released: February 4, 1997”.

10 100. Katzer included discussion of Mr. Kabat’s software in his presentations at the  
11 NMRA conventions in 1996, 1997 and 1998.

12 101. The previously-described Exhibit AA is a presentation made by Katzer at the  
13 1996 NMRA convention. Page 25 refers to Mr. Kabat’s web site.

14 102. Attached hereto as Exhibit AD is a true and correct copy of pages from the  
15 jacket of United States patent application 09/104,461, the ‘461 application. The page marked 1  
16 shows that the application was filed on June 24, 1998. The page marked 2 and 3 lists the  
17 attorney information for the ‘461 application. It shows that Russell was the attorney/agent. The  
18 pages marked 4 and 5 are Katzer’s oath. The page marked 6 includes a reference to a software  
19 program by DigiToys of Lawrenceville, Georgia. I have reviewed the patent jacket and did not  
20 find any disclosure of the Train Server or Engine Commander products.

21 103. The previously-described Exhibit AA is a true and correct copy of slides from a  
22 presentation made by Katzer at the July 1996 NMRA Convention. Page 7 mentions WinLok.  
23 Page 8 discusses WinLok’s features.

24 104. This presentation was recently removed from the KAM Industries web site.

25 105. Tanner Decl. Ex. F. contains pages that were inserted into the ‘461 application at  
26 the request of Dr. Tanner. They disclose features of the WinLok program that were claimed by  
27 Katzer in this patent application.

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1           106.     I am familiar with the WinLok software.

2           107.     The WinLok 1.5 and WinLok 2.0 programs perform functionality claimed by the  
3 ‘461 application.

4           108.     I have reviewed the 11 patents issued to Katzer to date. None of them include  
5 WinLok in their ‘References Cited’ section. WinLok is described in the ‘Background of the  
6 Invention’ sections.

7           109.     Attached hereto as Exhibit AE is a true and correct copy of the complaint for  
8 Oregon Federal District Court case 3:02-cv-01293-ST, Katzer et al v. Tanner. This shows the  
9 case was filed September 17, 2002. The plaintiff’s attorney was Russell. A Notice of Voluntary  
10 Dismissal was filed 12/20/2002. Attached hereto as Exhibit AF is a true and correct copy of  
11 this notice.

12           110.     Attached hereto as Exhibit AG is a true and correct copy of slides from a  
13 “Computer Interface” presentation made by Katzer at the July 1998 NMRA Convention, copied  
14 from a compact disk distributed by KAM Industries in the October 1998 issue of Model  
15 Railroading magazine. Slide 14 mentions “Real Railroad”. Slide 17 describes “Real Railroad”,  
16 points to Mr. Freiwald’s web site as of that time, and shows a screen image from running the  
17 program. The date on the screen image is August 31 1997.

18           111.     I am familiar with the Railroad&Co software.

19           112.     The Railroad & Co software performs functionality claimed by the ‘461  
20 application.

21           113.     I have reviewed the 11 patents issued to Katzer to date. None of them include  
22 the Railroad & Co software in their ‘References Cited’ section.

23           114.     Attached hereto as Exhibit AH is a true and correct copy of the complaint for  
24 Oregon Federal District Court case 3:02-cv-01292-HU Katzer et al v. Friewald Software et al.  
25 This shows the case was filed September 17, 2002. The plaintiff’s attorney was Russell. A  
26 Notice of Voluntary Dismissal was filed 12/20/2002. Attached hereto as Exhibit AI is a true  
27 and correct copy of this notice.

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1           115. Attached hereto as Exhibit AJ is a true and correct copy of slides from a  
2 presentation on “Railroad Open System Architecture” (ROSA) by Dr. Tanner at the NMRA  
3 National Convention during July 1997. The presentation was during the DCC Working Group  
4 meeting. Pages 7 through 13 describe various functionality claimed by Katzer’s patents. For  
5 example, page 7 shows a program operating multiple DCC systems over communications paths.  
6 This is a capability claimed by Katzer’s patents. Page 11 shows multiple computers using  
7 communications paths to control one or more DCC systems through another computer. This is  
8 a capability claimed by Katzer’s patents. Page 7 and 12, together with 13, show operation of  
9 communication systems in concert with a database of common status information. This is a  
10 capability claimed by Mr. Kater’s patents.

11           116. The previously-described Exhibit AG is a “Computer Interface” presentation  
12 made by Katzer at the July 1998 NMRA Convention. Slide 4 mentions Dr. Tanner’s Railroad  
13 Open System Architecture (ROSA) proposal of 1997. Slide 7 refers to the “Rosa application  
14 model”, references the DigiToys web site, and includes Katzer’s statement that KAM’s Engine  
15 Commander and Train Server products “conform in architecture model”.

16           117. Attached hereto as Exhibit AK is a true and correct copy of slides from a “Train  
17 Tools API” presentation made by Katzer at the July 1998 NMRA Convention, copied from a  
18 compact disk distributed by KAM Industries in the October 1998 issue of Model Railroading  
19 magazine. Slide 5 mentions Dr. Tanner’s ROSA proposal of 1997. Slide 8 refers to the “Rosa  
20 application model”, references the DigiToys web site, and includes Katzer’s statement that  
21 KAM’s Engine Commander and Train Server products “conform in architecture model”.

22           118. Attached hereto as Exhibit AL is a true and correct copy of slides from a  
23 “NMRA Software Architecture Status” presentation made by Katzer at the July 1998 NMRA  
24 Convention, copied from a compact disk distributed by KAM Industries in the October 1998  
25 issue of Model Railroading magazine. Slide 2 mentions Dr. Tanner’s ROSA proposal of 1997.  
26 Slide 5 refers to the “Rosa application model”, references the DigiToys web site, and includes  
27 Katzer’s statement that KAM’s Engine Commander and Train Server products “conform in  
28

1 architecture model”.

2 119. Attached hereto as Exhibit AM is a true and correct copy of a web page from the  
3 KAM Industries web site at <http://www.trainpriority.com/kamind/AboutKam.aspx>, captured on  
4 November 28, 2005, which says in part:

5 In 1996, Matt and Ken West introduced Train Server, along  
6 with the proposed NMRA programming API. The programming API  
7 was the first multi user, multi programmed interface that allows  
8 developers to create software applications that are not tied to a  
9 manufacturer’s command station hardware, or any operating system.

10 Train Server was established as the programming standard  
11 overnight. Since 1996, KAM has shipped over 100,000 CD-ROMs  
12 to end users and developers. Train Server is such an innovative and  
13 unique programming environment that numerous patents (see  
14 footnotes on this page) have been granted to KAM both in the United  
15 States, Germany, Great Britain, Canada and other countries.

16 The footnote at the end of the document says in part

17 Products covered under Patent 6065406, 6267061, 6270040,  
18 6530329, 6460467, 6494408, 6676089, 6702235, 6827023, 6877699,  
19 Ger 29923834.2, GB 2353228, CDN 2330931 and other US and  
20 international patents pending

21 120. On May 24, 2006, I noticed that the page in Exhibit AM on the KAM Industries  
22 web site had been replaced with a version that does not contain the 1996 date. Attached hereto  
23 as Exhibit AN is a true and correct copy of this web page as of June 4, 2006.

24 121. Attached hereto as Exhibit AO is a true and correct copy of a web page from the  
25 United States Patent and Trademark Office web site, listing the status of the trademark “Engine  
26 Commander”. It shows that the trademark application was filed on January 14, 1998, listing a  
27 date of first use on or before January 1, 1993 and first commercial use on or before January 1,  
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1 1993, and that the attorney of record was Kevin Russell.

2 122. Attached hereto as Exhibit AP is a true and correct copy of a web page from the  
3 United States Patent and Trademark Office web site, listing the status of the trademark “Train  
4 Tools”. It shows that the trademark application was filed on January 14, 1998, listing a date of  
5 first use in or before June 1996 and first commercial use in or before July 1997, and that the  
6 attorney of record was Kevin Russell.

7 123. Attached hereto as Exhibit AQ is a true and correct copy of a web page from the  
8 United States Patent and Trademark Office web site, listing the status of the trademark “Train  
9 Server”. It shows that the trademark application was filed on January 14, 1998, listing a date of  
10 first use in or before June 1997 and first commercial use in or before June 1997, and that the  
11 attorney of record was Kevin Russell.

12 124. Attached hereto as Exhibit AR is a true and correct copy of a web page from the  
13 United States Patent and Trademark Office web site, listing the status of the trademark  
14 “Computer Dispatcher”. It shows that the trademark application was filed on January 14, 1998,  
15 listing a date of first use in or before June 1996 and first commercial use in or before July 1997,  
16 and that the attorney of record was Kevin Russell.

17 125. Attached hereto as Exhibit AS is a true and correct copy of literature for the  
18 KAM Industries “Engine Commander” product distributed by a compact disk in the October  
19 1998 issue of the Model Railroading magazine. This says in part “Engine Commander(TM)  
20 includes Train Tools(TM) Command station interface. The program allows the user to run  
21 Engine Commander(TM) or a Visual Basic application at the same time. This dual interface  
22 support can be supported locally on you system or on a remote Train Tools(TM) server. “

23 126. Attached hereto as Exhibit AT is a true and correct copy of a KAM Industries  
24 web page at <http://kam.rain.com/whatsnew.htm> captured by the Internet Archive on April 12,  
25 1997 that is dated December 18, 1996 and says in part

26 Preliminary features of Engine-Commander 2.0 beta 2 (avaiable 1/10/97

27 Engine Commander 2.0 is an unreleased product. Product features my change.

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...  
Dual controller support; on multiple serial ports ( 1 - 10) so you can run one  
controller on one port and different controller on the other port.

127. Engine Commander 2.0 beta 2 provided functionality claimed by the '406 patent.  
The '406 patent includes claim 27:

A method of operating a digitally controlled model  
railroad comprising the steps of:  
(a) transmitting a first command from a first client  
program to a resident external controlling interface  
through a first communications transport;  
(b) receiving said first command at said resident external  
controlling interface; and  
(c) said resident external controlling interface selectively  
sending a second command representative of said first  
command to one of a plurality of digital command stations  
for execution on said digitally controlled model railroad  
based upon information contained within at least one of  
said first and second commands.

128. Attached hereto as Exhibit AU is a true and correct copy of slides from a  
presentation made by Katzer at the 1997 NMRA Convention, copied from the KAM Industries  
web site. Numerous slides discuss Engine Commander and the Train Tools interface. Slide 19  
says in part:

OK what did we see (sic)  
TrainTools™ interface supplied with EnigneCommander™ (sic)  
We used the local server, instead of a networked server  
Ran a Visual Basic application

Thus, the Train Tools interface is a part of Engine Commander and provides connections to a

1 server from multiple local and/or remote application programs. Page 30 discusses that it is  
2 “Designed to support up to 10 command station divisions”, a plurality of command station  
3 connections.

4 129. Train Tools and Engine Commander provide functionality claimed by the ‘406  
5 patent.

6 130. Attached hereto as Exhibit AV is a true and correct copy of the KAM Industries  
7 Train Server Administration Guide, dated October 6, 2004. It states that it is copyright 1991-  
8 2004.

9 131. Attached hereto as Exhibit AW is a true and correct copy of the KAM Industries  
10 Train Server Interface Description, Volume 1, dated June 7, 1999. It states that it is copyright  
11 1992-1998, and says in part:

12 Train Tools(TM) is the applications interface that uses the Train  
13 Server(TM) to send commands to and from the command stations. The  
14 Train Server(TM) uses a patented cache model to maintain decoder state,  
15 provide updates, and to establish a fault tolerant command execution  
16 sequence to the command station.

17 132. Train Server provides functionality claimed by the ‘406 patent.

18 133. I have reviewed the 11 patents issued to Katzer to date. None of them include  
19 Train Server, Train Tools or Engine Commander in their ‘References Cited’ section.

20 134. Attached hereto as Exhibit AX is a true and correct copy of literature for the  
21 KAM Industries “Computer Dispatcher” product distributed by a compact disk in the October  
22 1998 issue of the Model Railroading magazine. It says in part:

23 Computer Dispatcher(R) is modeled after the TrainTrack’s TPro(TM)  
24 system, which is in production on over 20 Class 1 railroads worldwide.  
25 Train Track’s web page is at <http://www.traintrack.com>.

26 135. Attached hereto as Exhibit AY is a true and correct copy of a KAM Industries  
27 product brochure downloaded from the KAM Industries web site during June 2006. It says in  
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1 part:

2 Train Driver Professional is a commercial software application that was  
3 designed for the American railroads in the 80's. This software was in  
4 operation on 21 class 1 railroads in the United States and in Western  
5 Australia. The software is still in use today and its primary focus is the  
6 light rail systems in the US. KAM has updated Train driver professional  
7 and has converted the software to DCC.

8 136. Attached hereto as Exhibit AZ is a true and correct copy of a Train Track  
9 Computer Systems Web page, at <http://www.traintrack.com/History.asp>. It says in part:

10 Many other changes were happening in the computer industry  
11 simultaneously, including LANs (local area networks), Cheap PCs and  
12 the ubiquitous Microsoft Windows platform. While all other companies  
13 focused on Unix, VMS or OS/2, Train Track was the first to develop this  
14 technology.

15 ...

16 In 1996 we licensed the software for UNIX applications to GE Harris in  
17 Melbourne, FL. In 1997 we decided to exit the large systems business  
18 and license the software wherever practical.

19 137. Attached hereto as Exhibit BA is a true and correct copy of a presentation from  
20 the KAM website titled "1999 Computer Dispatcher® Pro Training Session" This presentation  
21 discusses the "Track Driver Professional 32" (TD Pro 32) software product of Train Track  
22 Computer Systems. Slide 4 indicates the TD Pro 32 product was "client-server" in 1993. Slide  
23 13 again describes TD Pro 32 as "client-server", and shows that communication among several  
24 computers is involved in operating the railroad. Slide 14 shows multiple "workstation"  
25 computers connected to send commands to the railroad via multiple "CodeServer" computers,  
26 the equivalent of model railroad command stations. This is the functionality claimed by  
27 Katzer's patents. Slide 25 shows that KAM is a "Dealer" for this product.



1 138. This presentation has recently been removed from the KAM Industries web site.

2 139. KAM built their "Computer Dispatcher Pro" product based on Train Track  
3 software, for which KAM is a licensee.

4 140. Attached hereto as Exhibit BB is a true and correct copy of a press release  
5 copied from a compact disk distributed by KAM Industries in the October 1998 issue of Model  
6 Railroading magazine. The press release is titled "KAM Licenses Train Track(TM) Software  
7 for Model Railroad Enthusiasts". It is dated July 24, 1998. It includes in part:

8 KAM Industries announced today that they have received  
9 an exclusive, worldwide license for Train Track's TDDPro  
10 software for the model railroad market.

11 ...

12 KAM will convert the world class Train Track software  
13 for use by the model railroad enthusiast and combine it  
14 with KAM's patent-pending Train Server(R) technology.

15 KAM will introduce their product based on the TDDPro  
16 software in Q1'99 ...

17

18 Various Examples of Prior Art Available to Katzer and Russell

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20 141. The previously-described Exhibit AD is a true and correct copy of pages from  
21 the jacket of United States patent application 09/104,461, the '461 application. The page  
22 numbered 7 says that application describes the "Train Tools™ Interface Description" and that it  
23 is "Copyright 1992-1998". The page numbered 8 says that "This document describes the IDL  
24 interface to the KAM Industries Engine Commander Train Server."

25 142. Together, these indicate that the invention in the '461 application is embodied in  
26 the KAM Industries Engine Commander and Train Server products.

27 143. As demonstrated in earlier paragraph 126, Engine Commander was advertised to  
28

1 the public on April 12, 1997 or before as specifically having the capability to "run one  
2 controller (sic) on one port and different controller on the other port." This functionality was  
3 claimed in the original 6,065,406 patent as claim 27:

4 27. A method of operating a digitally controlled model railroad  
5 comprising the steps of:

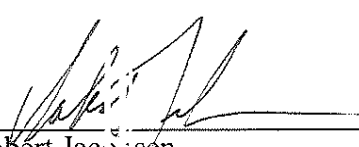
6 (a) transmitting a first command from a first client program to a  
7 resident external controlling interface through a first  
8 communications transport;

9 (b) receiving said first command at said resident external  
10 controlling interface; and

11 (c) said resident external controlling interface selectively sending a  
12 second command representative of said first command to one of a  
13 plurality of digital command stations for execution on said  
14 digitally controlled model railroad based upon information  
15 contained within at least one of said first and second commands.  
16

17 I declare under penalty of perjury under the laws of the United States of America that  
18 the foregoing is true and correct.

19 Executed this 9th day of June, 2006, in Berkeley, California.  
20

21  
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24 By   
25 Robert Jacobsen  
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