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

I am a party to this action. I am submitting this Declaration in Support of the Motion for Preliminary Injunction.

BACKGROUND

PLAINTIFF’S ROLE IN THE NMRA AND JMRI

1. I am model railroader. As part of my model-railroading hobby, I have contributed to the
development of the National Model Railroad Association (NMRA) Digital Command
Control (DCC) standards used by many model railroaders and present in many types of
model railroad equipment. I have served as the Chair of the DCC Working Group, a
standards-setting organization within the NMRA. I worked directly with many types of
digital model railroad equipment, including all common types of DCC systems. I have used
and observed many types of model railroad software. In several cases, I have helped people
debug several types of model railroad software.

2. I am the owner and assignee of JMRI software. The copyright registrations are Ex. C
through L in the Second Amended Complaint. The first page of copyright registration
applications are in Exs. A to G of this declaration. I have been involved in the Java Model
Railroad Interface (JMRI) open-source software project since shortly after its inception in
2001, and am currently one of its leaders. I have written parts of JMRI’s code and
documentation. I have helped others write parts of the code and documentation. I have
given public talks about the use and structure of the software. I have periodically built
versions of the JMRI software for general use, and posted them to the SourceForge web site
for public download.

3. JMRI software is popular among its users. As of October 1, 2008, there have been
approximately 160,000 downloads. JMRI software has received laudatory reviews in the
model train press, and won a prestigious Duke’s Choice award from Sun Microsystems.
User group meetings held in various countries draw large crowds, and model train
hobbyists discuss JMRI software regularly on model train listservs. Other model train
software companies include JMRI software with their products.

JMRI CREATES DECODER DEFINITION FILES

4. To allow more realistic operation, certain model railroads use decoders, or computer chips,
in locomotives and other equipment to control their operation. Properly-configured
decoders give model railroaders the greatest range of use. The process of configuring a
decoder is referred to as “programming” it.

5. There are many different types of decoders, and they vary greatly in complexity. The
configuration information for each of them also varies greatly.

6. DecoderPro, part of JMRI, is a tool that makes it easier to program decoders. Without DecoderPro, the user would have to specify numeric values to be stored in computer locations. With DecoderPro, a user selects options and settings in a language and interface naturally understood by model railroaders. DecoderPro uses Decoder Definition Files to help with the programming, and a Decoder Definition File may define more than one decoder. Here are several examples of programming without DecoderPro, and with DecoderPro:

- If a user wanted to program a locomotive so that its top speed is limited, he could store a value of 80 in location 5. DecoderPro simplifies this by providing a sliding scale on the screen that the user moves to limit the speed, without needing to know precise numbers.
- If a user wants to provide a negative voltage to the motor, instead of the usual positive voltage for the train moving forward, he would add one to the value in location 29. DecoderPro makes this much easier by providing a checkbox to select negative motor voltages.
- If he wanted the decoder to respond to long addresses instead of short ones, he’d add 32 to the value in location 29. DecoderPro also simplifies this by providing a checkbox to select long addresses instead of short addresses.

7. I first wrote some of these files in the summer of 2001. I have edited others’ Decoder Definition Files. I have helped people create and edit Decoder Definition Files. Since 2001, approximately 75 other model railroaders have written JMRI Decoder Definition files.

8. When I discovered Defendants’ infringement, JMRI authors had written more than 100 files with a total of about 350 decoders. As of October 1, 2008, 195 files exist that define 635 decoders. More decoder files and decoders are added with each JMRI release.

9. JMRI files were subject to the Artistic License, and are now subject to the GNU General Public License 2.0. Copies of these licenses are attached as Exs. H and I, respectively. Copyright notices and authors’ names are present at the top of the files, as is a reference to
the license in a COPYING file. The license is distributed with the package.

CREATING DECODER DEFINITION FILES INVOLVES CREATIVE EXPRESSION

10. As discussed above, decoders in model trains control the train’s operation. Modern decoders can control lights and sounds from the locomotives, provide precise control of the speed and power of the motor, and do other advanced functions. To adjust and configure these functions, the user can put new numeric values into “Configuration Variables” (CVs) in the decoder. Each Configuration Variable controls one or more aspects of the decoder, and therefore, the model train’s, operation.

11. For example, a particular CV may control the pitch of a sound. Another might control when that sound is played. Another might provide a number of bits for selecting which lights come on at the same time.

12. Basic decoders may have only a few Configuration Variables, because they have few features. More advanced decoders, such as those that provide sounds or complicated lighting effects, will generally have many more Configuration Variables. The advanced decoders tend to be more popular—and more complex—because of their range of features. All decoders have certain CVs in common, but generally the number and ordering of CVs differ greatly from one manufacturer’s decoder to another.

13. In addition to DecoderPro, several computer programs, including Defendants’ Decoder Commander, have been written to make it easier to set values for a large number of decoder CVs.

14. In order to work, these programs must have information about what each Configuration Variable does. This information is called a decoder definition by JMRI, and a decoder template by Defendants.

15. Decoder definitions are separate from the programs that use them. Multiple decoder-setting programs can use the same decoder definition, just like differing MP3 players, such as an iPod or a computer, can play the same songs. The internal operation of the decoder programs, and the language in which they are written, is irrelevant to the end result—setting Configuration Variables on the decoder. And like an iPod without songs, a decoder-setting
program is virtually useless without a decoder definition. Without the definitions—whether in a database or in their decoder templates—Decoder Commander would be essentially inert and without value to the customers.

16. The process of creating a decoder definition file involves understanding information from a number of sources, integrating it, and then expressing it in a way useful to model railroaders. For instance, when I wrote JMRI Decoder Definition Files, I started with nothing more than a bare JMRI template, information about the decoder, and my impressions of how best to understand the decoder. When I finished, the resulting Decoder Definition File expressed, in an organized way, my ideas about how best to configure a specific type of decoder. Programmers can then use that Decoder Definition File to create programs to help users properly configure the decoder through setting Configuration Values.

17. I use the following example in paragraphs 18 to 25 to describe how I selected variable names for CV 1 through CV 5 for early decoder definitions.

18. Consider the first configuration variable (CV) present in the decoder, which is numbered as CV 1. CV 1 contains an eight-bit number that determines the digital address the decoder will respond to. For technical reasons, it can only have values from 1 to 127. This quantity is called different things in different documents.

19. The “Recommended Practices” document of the National Model Railroad Association (NMRA) refers to CV1 as the “Primary Address”. Exhibit J is a true and accurate copy of this Recommended Practice document.

20. Lenz, a prominent German manufacturer of decoders, refers to CV1 as “Locomotive Address” in their manuals. Exhibit K is a true and accurate copy of a Lenz manual that shows this on page 8.

21. Digitrax, a prominent manufacturer of decoders based in Norcross, Georgia, calls CV1 “2-digit address” in their manuals. Exhibit L is a true and accurate copy of a Digitrax manual that shows this on page 2.

22. Many model railroaders refer to this as the “short address”, because there is another place to
store addresses that can be up to four digits long, called the “long address”.

23. When I wrote the early Decoder Definition Files, I described CV 1 as “Primary Address”. I considered the names that both the NMRA and the manufacturers use, plus several terms that are in common use, and then picked or created one to include in the decoder definition. I chose “Primary Address” because most model railroaders are familiar with the term. I did not select any of the manufacturer-specific terms, because they are less commonly used.

24. The tables in Exhibit M show further examples. Each lists a Configuration Variable number, the NMRA Recommended Practice for the name, the name given to it in Lenz and Digitrax manuals, and the name in the JMRI definition files.

25. For CV 1 and 5, I chose the name from the NMRA; for CV 2, I chose an abbreviated form of what two manufacturers were using; and for CV 3 and 4, I used an original form. I selected those variable names because I thought they made DecoderPro the most user friendly.

26. There are numerous examples of this throughout the JMRI Decoder Definition Files, where the author has chosen a variable name that expresses the function—sound, lights, speed, etc.—a particular Configuration Value controls.

27. Authors also must choose what information to represent. For some very complicated decoders, authors occasionally decide to omit some of the more esoteric options to avoid confusing the user.

28. The decoder definition for the Digitrax DS54 decoder is an example of this. I am the original author of this definition. Configuration Variable 9 is used as part of an extended address. Its use is described in the Digitrax manual for the DS54 decoder. It is a complex feature, however, easy to get wrong, and of interest to few users, so I chose not to include it in the JMRI Digitrax_yDS54 Decoder Definition File.

29. As a further example, model railroaders sometimes discover features in decoders that are not documented by the manufacturer. Authors may choose to include these, rather than including information from manuals only. For example, there is a bit in CV61 of the Digitrax DH163 decoder that can be used to turn on and off the decoder’s protection against
short circuits. The DH163 manual does not document this feature. It is described in the
JMRI Digitrax_01x3 Decoder Definition File as “Short-circuit protection” with value
“Disabled”.

30. A more extensive example can be found in the Decoder Definition Files for the MERG
decoders. MERG is a group of electronic hobbyists and model railroaders in the United
Kingdom. They design and produce decoders. Like many hobbyist organizations, they do
not develop detailed documentation. Creating the Decoder Definition Files for the MERG
decoders involved extensive discussions with the decoder designer (Michael Bolton) about
what features were present, how to operate them, and how best to explain their intended
use. These conversations then informed the choices about what to include in the Decoder
Definition File.

31. There are multiple examples of JMRI Decoder Definition Files containing this type of non-
documented information.

32. For many Configuration Variables, the Decoder Definition File will include a “default”
value. What value to include, if any, is the definition’s author’s choice. In some cases, this
is taken from the manufacturer’s recommendation in the decoder manual. In others, the
author will use a value that, in his opinion, works better than the manufacturer’s default.
An example of this can be seen in the JMRI Lenz_51 Decoder Definition File, where CV 2
and CV 3 both have default values of 4, although the manufacturer’s manual recommends
values of 1.

GAINING ACCESS TO JMRI DECODER DEFINITION FILES

33. As one of the original leaders of the JMRI Project, I know how JMRI distributes its
software. The software is posted on SourceForge.net’s website. As described earlier, this
software is subject to a license called the Artistic License, Ex. H, and GPL 2.0, Ex. I.

34. There are two ways to download the software from SourceForge: (1) a complete “released”
version, containing both the complete set of JMRI Decoder Definition Files and other
components, or (2) individual files created by project members, including the individual
JMRI Decoder Definition Files.
35. To download a complete released version, a person clicks a URL such as http://prdownloads.sourceforge.net/jmri/JMRI.1.7.1.exe?download, taking him or her to a web page. A true and accurate copy of this webpage is attached as Exhibit N. Most web browsers will also start downloading the version at this point. Some web browsers will require clicking one of the "Download" links in the right-center of the page. Once the download is complete, most browsers will start the installation process. Some browsers will require moving or clicking the downloaded file to start the installation. Neither the software nor download present anyone with a license agreement to accept.

36. To download individual files, a person navigates from the main JMRI web site to the repository that contains all JMRI source code. Individual files can then be examined. Attached as Exhibit O is a typical web page from which a JMRI Decoder Definition file can be examined or downloaded. Neither the software nor download present anyone with a license agreement to accept.

OTHERS’ AUTHORIZED USE OF THE FILES

37. Several individuals and organizations use JMRI software as part of their products. Except for Defendants, I have never experienced any problems with non-compliance with license terms.

38. For example, GPP Software, located in Australia, uses the JMRI Decoder Definition Files as part of its products. They distribute the JMRI files unmodified, without having removed any of their contents. GPP Software credits JMRI as the source in their documentation, and follows license terms.

39. MTS Associates distributes JMRI, including the Decoder Definition Files, as part of its Model Railroad Manager product. They credit JMRI on their web pages and in their documentation, and follow license terms. Tom Stack of MTS Associates modified certain JMRI files and, following the terms of the Artistic License, contributed them back to JMRI so JMRI could include the changes in later releases.

40. Bruce Petrarca of Litchfield Station in Arizona distributes JMRI on a CD along with additional information for his customers. He identifies JMRI as the source of the files, and
follows license terms.

41. In contrast, neither Defendant Katzer nor any agent or employee from Defendant KAMIND Associates, Inc. ever contacted me for authorization to use the JMRI Decoder Definition Files, even after I charged them with infringement.

42. Neither Defendant Katzer nor any agent or employee from Defendant KAMIND Associates, Inc. ever contacted me to negotiate a contract to use the JMRI Decoder Definition Files, even after I charged them with infringement.

DEFENDANTS OBTAINED THE JMRI DECODER DEFINITION FILES

43. Defendants have been aware of and accessed JMRI software and its Decoder Definition files since 2001. Defendants have also been aware that this software is subject to a license, and are aware of the license terms.

44. In an internet discussion on May 2, 2003, I replied to Defendant Katzer that “JMRI uses XML files to store state information (decoder definitions, layout configuration, etc), …”. Attached as Exhibit P is a true and accurate copy of this posting.

45. On May 10, 2003, Defendant Katzer replied to another post in that same discussion. That reply said, in part, “Like wise, the xml definitions you use in jmri for the data files I suspect that you would like to see them submitted.” Attached as Exhibit Q is a true and accurate copy of this posting.

46. On August 8, 2003, I replied to a question in an email post by Defendant Katzer with information about the JMRI Decoder Definition Files and where to obtain additional information, including the files. Attached as Exhibit R is a true and accurate copy of this posting.

47. Defendant Katzer is a member of the JMRI users electronic discussion group on which the JMRI Decoder Definition Files are discussed. He has posted to this listserv numerous times in 2004 and 2005, indicating that he read posts to this listserv during that period.

48. On March 30, 2004, Defendant Katzer wrote to me via direct email. Attached as Exhibit S is a true and accurate copy of this email. In it, he made the statement: “Currently you are supply [sic] software under the GNU license”. His statement was incorrect, as JMRI then
was using the Artistic License. I brought this to his attention explicitly, including both
pointers to the full license and discussion of its terms, in an email dated March 30, 2004.
Attached as Exhibit T is a true and accurate copy of this email.

49. On September 7, 2004 in another internet discussion, Defendant Katzer indicated his
familiarity with the terms of the JMRI license by saying “JMRI license agreement requires
them to ship source, and dictates what can be charge [sic].” (These license terms are in Ex.
H ¶¶ 3-5.) Attached as Exhibit U is a true and accurate copy of this posting.

50. On July 25, 2005, and after Defendants started distributing their infringing software,
Defendant Katzer posted to a NMRA Working Group mailing list to start a discussion about
creating a common format for decoder information. It included the following (emphasis
added):

“I had an old action item from 2004, to develop an XML cv format that the NMRA,
mfg and software developers cuyl use as a standard.

... 

- KAM has a format that we use for our Decoder Commander.
- JMRI folks have a format that they use for decoder pro.

Does this make sense to merge the two together to create a NMRA document that
defines what the format should be, that way we can all use the same data format?”

Attached as Exhibit V is a true and accurate copy of this posting. By the time Defendant
Katzer made this posting, he had already merged JMRI content into Decoder Commander’s
templates. On a related note, I believe Defendant Katzer was attempting to persuade the
NMRA to adopt his infringing software as a standard. If Defendants had been successful,
then both the NMRA and all who used this standard would have been infringers. Also, if
Defendants had been successful, their actions would have pitted JMRI against the NMRA
and model train computer users, if JMRI sought to enforce its copyright and license terms.

51. Defendants’ lawyer wrote to me on August 24, 2005 to describe their “analysis of (my)
existing implementation of the JMRI software”. Attached as Exhibit W is a true and
accurate copy of this letter. To make their analysis, they must have downloaded the JMRI
software, in which case they would have received copies of the entire collection of current
JMRI Decoder Definition Files, and the license.

52. I attended the NMRA DCC Working Group meeting in Austria during September 2004. At
that meeting, I met Robert Bouwens of Switzerland. We had previously corresponded over
email. He gave me a business card which identified him as working for KAM.

53. On December 31, 2001 Robert Bouwens had posted a note about looking at specific JMRI
Decoder Definition Files on the web. Attached as Exhibit X is a true and accurate copy of
this posting.

54. On August 15, 2005, Robert Bouwens posted a note about the Decoder Definition Files and
templates. Attached as Exhibit Y is a true and accurate copy of this posting. It contains the
following statement: “When you look at the jmri defs for the gold decoder then you see my
personal view of open source ;-)”, followed by lines quoted from the JMRI Decoder

55. That August 15, 2005 posting by Bouwens then shows a template in the KAM format that
contains information copied from the JMRI “Umelec_ATL2064.xml” Decoder Definition

56. The August 15, 2005 posting also contains the statement:

“I’ve written a converter to make jmri templates a bit more strict.
The panel info will also be stripped.
But it need additional work to complete the resulting template…”


57. Thus, Defendant Katzer and Defendant KAM’s employee both knew about the JMRI
Decoder Definition Files, the license governing their use, had obtained copies of them, were
modifying them, and had intentionally created a tool to convert them.

DEFENDANTS ANNOUNCE PLANS FOR THEIR DECODER TEMPLATES, AND BEGIN
INFRINGEMENT

58. On April 24, 2005, Defendant Katzer published an announcement of KAM’s “Train Server
3.0” product. Exhibit Z is a true and accurate copy of that announcement. It says in part:
Our latest product release is “Decoder Commander®”. This software is design [sic] to provide the most intuitive programmer on the market. Our users tell us that Decoder Commander far surpasses any other solution available in the market (free or commercial). We are very pleased with the command station integration and ease of use that this software provides. Decoder Commander will set the new programmer standard.

[…]

Build 30 has the following features: Decoder Commander® – a distributed GUI programmer for loco programming allowing importing of ours or other third party decoder templates

[…]

Decoder Commander will be available to all KAM subscription customers at a reduce [sic] price prior to June 30, 2005. This offer will only be available to subscription customers, for orders on the web, electronic download only. The special introduction price will be 40% below the retail price of the software. You may order Decoder Commander on June 1, 2005 from <http://www.kamind.com/>www.kamind.com web site. Decoder Commander® suite will also be available from our dealers after June 30, 2005. Decoder Commander® Suite will retail for $59.

Ex. Z (emphasis added).

59. In July 2005, Defendants presented their Decoder Commander product at the National Model Railroad Association convention in Cincinnati, Ohio.

60. Defendant Katzer was scheduled to give a talk entitled “Decoder Commander – Easy Tool for Programming Decoders” at the convention. A true and accurate copy is attached as Ex. AA. The talk is at page 7.

61. Exhibit AB is a true and accurate copy of a KAM sales brochure. It carries a copyright date of 2005. It says in part:

Decoder Commander uses a set of configurable templates that you can customize for your own use. KAM ships all of the popular templates with the software, and provides additional templates on www.kamind.com. Decoder commander also supports a full set of programming tools that allows you to import a template from different decoder programming software packages.

Ex. AB (emphasis added).

62. Exhibit AC is a true and accurate copy of the KAM manual for their Decoder Commander product. Here, they claim that they created the template files:

All decoders have unique characteristics. KAM has created a set of Decoder Templates that has these characteristics in a XML configuration file.
63. No credit or acknowledgement was given to the JMRI Project. As discussed next, the original JMRI files were not shipped with the KAM files, as required by JMRI’s license. Defendants did not include a statement describing how and when the changes were made to JMRI files. They also did not grant a license back to JMRI to use their modifications. They did not follow any license terms. Defendants did not get my approval to make the infringing modifications or distributions.

DEFENDANTS’ COPYRIGHT INFRINGEMENT DISCOVERED

64. Aware of Defendant Katzer’s unauthorized registration of decoderpro.com in 2004, I had initially conducted a brief review of their software in summer 2005. Given Defendants’ history of problematic software releases, I found it strange that Katzer could provide software with such a broad range of functionality, and I wondered if he had used JMRI. I searched his website and downloadable files for the JMRI copyright, the Artistic License, and author information to see if he was using JMRI Decoder Definition Files. I found nothing. This led me to believe that Katzer and Bouwens had created the KAM files themselves. I did not investigate further.

65. As a part of opposing Defendants’ anti-SLAPP motion in Spring 2006, I took a closer look at KAMIND Associates, Inc.’s products.

66. Their advertising said that demonstration versions were available for download from their website. I updated a computer to the required Windows version and attempted to download a copy of Defendants’ software. As part of this, I identified myself on Defendants’ web site, thus informing them that I was trying to examine their software. After I identified myself, Defendants’ website did not allow me to download a demonstration copy of the software.

67. Undeterred, I downloaded a copy of the Decoder Commander manual from the Defendants’ web site. This manual was dated Oct. 4, 2005. The manual contains several figures showing Defendants’ program and the text the program displayed. I recognized the text as coming from the JMRI Decoder Definition Files.

68. Based on this, I believed Defendants were infringing the JMRI copyright. Although very
busy with work on three oppositions and their declarations due by June 9, 2006, I immediately started to gather assignments from my JMRI co-authors. I had an appropriate assignment agreement prepared immediately, and sent it out to the co-authors June 5-6, 2006. I received them back over the next week or so. I then submitted a copyright registration for the JMRI Decoder Definition Files on June 13, 2006, paying approximately $500 extra for expedited handling due to pending litigation.

69. After seeking a copy of Defendants’ Decoder Commander from several sources, I obtained a copy in mid-June 2006. I received a package on June 16, 2006, containing a CD ROM labeled TS3.30.304, the “304 CD”, and examined it. It had several copyright notices, including “Copyright 1992-2005 KAMIND Associates, Inc.”, “Copyright 2003”, and “Copyright 2005. KAM Industries.” I used KAM’s registration key provided with the CD to view the files. I also began the installation process, and was presented with KAM’s license, which made no mention of JMRI’s license.

70. When I viewed the KAM CD’s files, I recognized the contents. Because of my role with JMRI, I am familiar with the file names of JMRI software. When I reviewed the names of the decoder template files on the KAM 304 CD, I immediately recognized the names of the JMRI Decoder Definition Files. Defendants had merely added a “.tpl” to the names. I opened the files.

71. I compared the JMRI Decoder Definition Files with the decoder template files on the KAM 304 CD. Attached as Exhibit AD is a true and accurate copy of the JMRI Decoder Definition File, “QSI_Electric.xml”. Attached as Exhibit AE is a true and accurate copy of Defendants’ decoder template, “QSI_Electric.tpl.xml”, from the KAM 304 CD.

72. I found numerous instances of copying the variable structure, selection, naming and default variable values in Defendants’ files, in addition to minor technical differences in format. I also found numerous examples that proved copying:

• Each template file on the KAM 304 CD and each JMRI Decoder Definition file contains a version number and modification date. These vary from Decoder Definition File to Decoder Definition File. The version number in each file on the
KAM 304 CD was identical to the version number in the corresponding JMRI Decoder Definition File. The modification date in each file on the KAM 304 CD was identical to the modification date in the corresponding JMRI Decoder Definition file. Compare Ex. AD at 1 with Ex. AE at 1.

• Within individual files, there are numerous examples of information directly copied. As one example of many, I compare here the JMRI “QSI_Electric.xml” file and the corresponding “QSI_Electric.tpl.xml” file on the KAM 304 CD. In one section, these files describe the 7th output of the decoder and what it can do. The evidence of copying in just this small area of the files includes:
  - The author of the JMRI file used “and” and “+” to represent the word “and”. This appears in the following choices:
    - “Directional Headlight + Directional Mars Light”
    - “Directional Headlight + Directional Ditch Lights”
    - “Scale mph Report and Status Report”
    - “Squealing Brakes + Air Brakes”.
  These variations are also present in the file on the KAM 304 CD. Compare Ex. AD at 9 (near top) with Ex. AE at 29 (bottom).
  - The author of the JMRI file used lower case in “Scale mph Report and Status Report” although one might expect the “MPH” to be capitalized. It is also present in lower case in the file on the KAM 304 CD. Compare Ex. AD at 9 (near top) with Ex. AE at 29 (bottom).
  - A typographical error appears exactly the same in the two files. Instead of using “output” (for the output of the decoder), the name is given as “outout”. Compare Ex. AD at 8 (bottom) with Ex. AE at 29 (quarter page from top).
  - One choice for this element is “Stobe Ditch Lights”—another misspelling, since it should be “Strobe Ditch Lights”. This misspelling is also present in the file on the KAM 304 CD. Compare Ex. AD at 9 (near top) with Ex. AD at
• A large number of additional similarities of this type are present in this specific pair of files.

• Each JMRI Decoder Definition File contains a copyright notice and an author name. These are missing from the KAM template files. Compare Ex. AD at 1 (top – near date) with Ex. AE at 1 (top – should have been near date). In many cases, these are omitted from the KAM template files even though other information on the same line of code in the JMRI file was copied to the KAM file.

73. Similar evidence of copying existed in all approximately 100 files. For example:

• The tables in Exhibit M, discussed in paragraphs 17 to 25, show the names of the NMRA, Digitrax, Lenz, and JMRI variables. These tables also show the KAM Lenz_51.tpl template from version 304 of the KAM software. KAM chose the same variable names and settings as JMRI.

• As discussed in paragraph 28, Configuration Variable 9 in the Digitrax DS54 decoder is a complex feature that I, as the author of this decoder definition, chose not to include in the JMRI Digitrax_yDS54 Decoder Definition File. This configuration variable is also not present in the KAM Digitrax_yDS54.tpl template file.

• As discussed in paragraph 29, there is a bit in CV61 of the Digitrax DH163 decoder that can be used to turn on and off the decoder’s protection against short circuits. The DH163 manual does not document this feature, but a JMRI programmer found it. This configuration variable is described in the JMRI Digitrax_01x3 Decoder Definition File as “Short-circuit protection” with value “Disabled”; it appears in the KAM Digitrax_01x3.tpl template as “Short-circuit protection Disabled”, merely merging the two strings.

• Defendants also copied exactly JMRI’s variable selection, names and settings for the MERG decoders. As discussed in paragraph 30, documentation on the MERG...
decoders is not complete, so the JMRI programmer had to determine what configuration variables, names, and settings, to include in the Decoder Definition File. Defendants copied JMRI’s choices exactly. JMRI programmers developed decoder definitions for many other decoders whose documentation is incomplete. KAM copied those variable selection, naming, and setting exactly.

- In some instances, the JMRI programmer chose a default variable setting that was different from the manufacturer’s recommended setting. As discussed in paragraph 32, an example of this can be seen in the JMRI Lenz_51 Decoder Definition File, where CV 2 and CV 3 both have default values of 4, although the manufacturer’s manual recommends values of 1. The value from the JMRI file was copied into the KAM Lenz_51.tpl file.

74. Meanwhile, on June 5, 2006, Alex Shepherd emailed me that he had downloaded from Defendants’ web site a “utility that imports templates”. Attached as Exhibit AF is a true and accurate copy of this email. He included a copy of the download as a compressed file, and also the contents of the “readme” information. This “readme” file says:

4. If you wish to use third party templates, you can run the template conversion on the third party template. We have added "tabs" in the menu to allow you to select the format and convert it to the a Decoder Commander template.

[…]

As we become aware of third party templates, we will list them here for your reference. Different software producers have different rules on the use of their decoder templates. Please check with the produce and verify that you have the rights to use there templates.

Non dtd templates

- Use the verification tab for conversion

JMRI templates:

- These are located at http://jmri.sourceforge.net/xml/decoders/

- You will need to download the schema at http://jmri.sourceforge.net/xml/DTD/

- You can also download the s/w at http://jmri.sourceforge.net/download/
75. After receiving Alex Shepard’s email, I downloaded Defendants’ template tool from their web site on June 6, 2006. I found that it worked as Alex Shepherd had described.

76. As noted earlier, the KAM 304 CD contains an installer which unpacks and installs Decoder Commander on a Windows PC. When I ran that installer, I found that it had installed a software tool called “Template_verifier.exe”.

77. The instructions for the use of this tool describe its use as:

The Template Verification Tools is a tool that KAM has released to allow you to create your own template file, and use third party templates, and convert them into a format that is usable by Decoder Commander.

Ex. AC at 30 (emphasis added).

78. I ran the tool. It presented a tab labeled “JMRI”, and the option to “Convert JMRI template into a KAM template”. There are no tabs for any other “third party template”. A true and accurate copy of this screen is attached as Exhibit AG.

79. After running the tool, I determined the tool’s purpose is to convert JMRI Decoder Definition Files to Defendants’ decoder templates. I know of no other decoder definition that this tool can convert other than JMRI Decoder Definition Files.

80. I compared the JMRI Decoder Definition Files and the files produced by the software tool. Attached as Exhibit AH is a true and accurate copy of the decoder template output from Defendants’ software tool after it processed the QSI_Electric.xml JMRI file. The output files are in a different technical format than the template files on the KAM 304 CD, but contain the same information expressed in the same way. The same structure, variable selection, naming, and default values were present. However, the authors’ names, copyright notices, references to the license, and the license, were not included. I again found numerous examples that prove copying:

- The version number and modification date were preserved intact from the input JMRI Decoder Definition File to the output decoder template. However, the version author—present in the same line of code as the version number and
modification date within the input JMRI Decoder Definition File—was intentionally not copied. The version author was also not copied. Compare Ex. AD at 1 (top, near date) with Ex. AH at 1 (missing, should be near date).

- The copyright notice from the input JMRI Decoder Definition File was not copied to the output decoder template created by the software tool. Compare Ex. AD at 1 (top) with Ex. AH at 1 (missing, should be at top).
- Within individual files, there are numerous examples of information directly copied. As one example of many, I compared the JMRI “QSI_Electric.xml” file and the corresponding template output file. In one section, these files describe the 7th output of the decoder and what it can do. The evidence of copying in just this small area of the files includes:
  - The author of the JMRI file used “and” and “+” to represent the word “and”. This appears in the following choices:
    - “Directional Headlight + Directional Mars Light”
    - “Directional Headlight + Directional Ditch Lights”
    - “Scale mph Report and Status Report”
    - “Squealing Brakes + Air Brakes”.
  These variations are present in both the JMRI file and the template output file. Compare Ex. AD at 9 (near top) with Ex. AH at 24 (lower mid-page).
  - The author of the JMRI file used lower case in “Scale mph Report and Status Report” although one might expect the “MPH” to be capitalized. It is present in lower case in both the JMRI file and the template output file. Compare Ex. AD at 9 (near top) with Ex. AH at 24 (lower page).
  - A typographical error appears exactly the same in the two files. Instead of using “output” (for the output of the decoder), the name is given as “outout”. Compare Ex. AD at 8 (bottom) with Ex. AH at 24 (top).
  - One choice for this element is “Stobe Ditch Lights”—another misspelling, since it should be “Strobe Ditch Lights”. This misspelling
is present in both the JMRI file and the template output file. Compare Ex. AD at 9 (near top) with Ex. AH at 24 (lower mid-page).

A large number of additional similarities of this type are present in this specific pair of files.

81. Again, similar evidence of copying, including that described in paragraph 73, exists in all infringing files.

82. I obtained different KAMIND Associates, Inc. product CDs. I found KAMIND distributes the same CD for all products. The registration key determines which product operates after the software is installed. The same files and software tool are on each CD.

DEFENDANTS’ INFRINGEMENT CONTINUES

83. On Aug. 14, 2006, the day I received the copyright registration, I ordered a copy of Defendants’ Engine Commander software from a supplier. I received it on Aug. 21, 2006. I examined the CD’s contents. It was labeled “TS3.30.304”, and appeared to have contents identical to the Decoder Commander CD I bought in June. It included the KAM decoder templates that were copied from the JMRI Decoder Definition Files.

84. Also on Aug. 14, 2006, I was again able to download the template verifier tool from Defendants’ website.

85. In September, I obtained copies of Engine Commander and Decoder Commander products. They were both version 305. Both CDs included KAM decoder templates that were copied from the JMRI Decoder Definition Files.

86. Many of the decoder template files from the KAM 304 CD were gone, but some were still present.

87. I reviewed those that were present and found the same evidence of copying as I had on the KAM 304 CD.

88. The software tool was not present on the KAM 305 CD. Instead, there was a note that said (emphasis added): “Smart decoder Editor (.net 2.0) v1.0 is released. Editor can read 3rd party decoder templates. The editor is available as a separate [sic] download from our website.”
89. In late September 2006, after I charged Defendants with copyright infringement, Defendants sent me another CD labeled TS4.30.306, the KAM 306 CD.

90. I reviewed the KAM 306 CD. I found that one file which had been named in the Amended Complaint had been removed. There was a note claiming that “Incorrect decoder template shipped with software.” However, other files which I and others originally authored were present. Evidence of copying was still present in those files, and the authors’ names and copyright information had been stripped. The tool remained available on the web.


92. Information copied from the JMRI Decoder Definition Files appears in figure 13 on page 20, page 14 on page 21, and figure 15 on page 22 in this manual, among others. These figures are screen shots taken from the running program. Attached as Exhibit AI is a true and accurate copy of this manual. Comparing variable names in figure 15 from Exhibit AI with variable names in my discussion in paragraphs 72 and 80, one can see that Defendants took their template from the JMRI Decoder Definition File.

93. On November 10, 2006, I downloaded a copy of Defendants’ web page that describes their Decoder Commander product from their web site. Attached as Exhibit AJ is a true and accurate copy of this web page. It contained in part:

Decoder Commander can read third party decoder templates using our Smart Decoder® editor. The smart decoder editor allows you to read third party templates, create your own decoder template and verify existing Decoder Commander templates.

To use this feature, download KAM’s Smart Decoder Template utility form our download area and convert the 3rd party templates to a Decoder Commander format. This utility is not included in the Train Tools software release. The smart decoder utility verifies the template information and adds additional information that is needed to be used by Decoder Commander.

Note: Before you convert any third party template, you will need to verify that the 3rd party template license agreement allows you to run the smart decoder conversion utility on the 3rd party template. Kam software supports Microsoft current operating systems, Win CE (PC2002-03, Mobile 5.x), Win 200x, Windows XP and .NET servers.
94. On November 16, 2006, I downloaded a description of Defendants’ Decoder Commander product from the website of their distributor in Cincinnati, Ohio. Attached as Exhibit AK is a true and accurate copy of this page. This page contains the same language about reading third party decoder templates and Defendants’ Smart Decoder Template utility.

95. On November 16, 2006, I downloaded a similar description of Defendants’ Decoder Commander product from the website of their UK distributor. Attached as Exhibit AL is a true and accurate copy of this page. This page contains the same language about reading third party decoder templates and Defendants’ Smart Decoder Template utility.

96. On November 10, 2006, I downloaded an advertising flyer from Defendants web site. Attached as Exhibit AM is a true and accurate copy of that flyer. It says in part:

Decoder Commander uses a set of configurable templates that you can customize for your own use. KAM ships all of the popular templates with the software, and provides additional templates on www.kamind.com. Decoder commander also supports a full set of programming tools that allows you to import a template from different decoder programming software packages.

97. Defendants sent me version 307, which Defendants said used a new database in place of its infringing decoder templates. However, version 307 did not work, so I could not verify if the new database was created from JMRI materials.

AFTER JACOBSEN’S ANALYSIS SHOWS CONTINUED INFRINGEMENT, DEFENDANTS WITHHOLD NEW VERSIONS FROM JACOBSEN’S REVIEW


99. On December 18, 2006, Katzer announced via email that "All dealers and OEMS are currently stocking Train Tools version 308." and “Lenz and ZTC are shipping KAM software products.” Ex. AN is a true and accurate copy of that posting. I did not receive a copy of the version 308 CD. I tried to buy a copy from DCC Train, but was told I had to buy it directly from Katzer.
100. On February 4, 2007, Katzer posted that build 309 was “released February 1, 2007”. Ex. AO is a true and accurate copy of that posting. I did not receive a copy of this version.

101. I did not receive announcements from sometime in February 2008 to sometime in May 2008 because, without telling me, Katzer removed me from his announcement mailing list.

102. On May 17, 2007, Katzer posted that he had mailed a customer a build 310 CD. Ex. AP is a true and accurate copy of that posting. I did not receive a copy of that version.

103. On July 2, 2007, Katzer posted about the install process for build 311. Ex. AQ is a true and accurate copy of that posting. I did not receive a copy of that version.

104. Jon Miller and Eric Eggel bought copies of KAMIND software during summer 2006. They received updates through version 307 in November 2006, but none after that.

105. In December 2007, I received version 312 after my attorney sent multiple demand letters to defense counsel.

106. I installed the software. Defense counsel Scott Jerger had told this Court that version 308 had the full functionality of JMRI’s decoder definitions and was not created from JMRI’s work. Based on this statement, I expected to find at least 350 decoder models.

107. I found decoder-specific definitions for only 4 decoder models. They were partially functional. They require additional variables and inputs to work. Attached as Exhibit AR is a screen-shot showing that there are only four models to select (left side of screen), along with the NMRA standard definitions which have been listed as “KAM”. Defendants had also included two non-functional generic definitions, which cannot be used to program a decoder.

108. KAMIND’s software cannot, generally speaking, operate without decoder definitions. The primary purpose of Katzer’s Decoder Commander software is to make it easier to program decoders by using custom decoder definitions. See Defendants statements in paragraphs 58 and 61. Without decoder definitions, Decoder Commander...
serves no useful purpose.

109. Some variable names were the same as used in JMRI. For instance, CV25 of the KAM “QSI Decoder” definition is “Speed Table Selection”. The corresponding JMRI definition uses the same name. The NMRA standard name is different: “Speed Table/Mid-range Cab Speed Step” or sometimes just “Speed Table”. The QSI decoder manual calls it by a longer name: “Quantum Speed Table Selection”. The KAMIND software’s definition uses the JMRI name, not any of the other forms.

110. Because version 312 is essentially unusable without additional decoder definitions, but Katzer claims that people are buying and using it, I believe that Katzer and KAMIND are permitting continued use of infringing files. Furthermore, because a trade magazine, Model Railroad News, is reviewing Defendants’ software and JMRI software concurrently in the February through April 2009 issues, I believe that Defendants have motive to continue using JMRI software as a basis for their product.

111. Defendants’ latest venture is to distribute KAM CDs with a “dog DNA” kit called Link-Vet. Attached as Exhibit AS is a true and correct copy of the relevant Link-Vet webpage. RAK Associates, owned by Rod and Emily Katzer, have been distributing Link-Vet since June 2008. I believe that Katzer is ridding himself of infringing CDs at a low price so that he can obtain tax breaks for a business loss.

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

Executed this third day of October, 2008, in Berkeley, California.

By ________________________________

Robert Jacobsen