UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF FLORIDA
JACKSONVILLE DIVISION

Aatrix Software, Inc., Plaintiff, v. Green Shades Software, Inc. Defendant.	**SECOND AMENDED COMPLAINT AND DEMAND FOR JURY TRIAL [PROPOSED]** **[INJUNCTIVE RELIEF SOUGHT]** Civil Action No. 3:15-cv-00164-HES-MCR

For its Second Amended Complaint against Defendant Green Shades Software, Inc., a Florida corporation with its registered address and principal place of business at 7020 AC Skinner Parkway, Suite 100, Jacksonville, FL 32256 ("Green Shades"), Plaintiff Aatrix Software, Inc., a North Dakota corporation with its principal place of business at 2100 Library Circle, Grand Forks, North Dakota 58201 ("Aatrix") states and alleges the following:

JURISDICTION

1. This Second Amended Complaint is for patent infringement and injunctive relief against Defendant Green Shades Software, Inc., a Florida corporation with its principal place of business at 7020 AC Skinner Parkway, Suite 100, Jacksonville, FL 32256. Defendant has advised that the true and correct name of the Defendant is Green Shades Software, Inc. Defendant sometimes uses the name "Greenshades" (one word) in the names of its products and in connection with advertising of its products.

2. Subject matter jurisdiction is based on 28 U.S.C. §1338.

3. Personal jurisdiction is based upon Federal Rule of Civil Procedure 4(e) and Florida Statutes §48.193.

4. Venue is proper in this District pursuant to 28 U.S.C. §§ 1391(c) and 1400.

5. The products at issue in this lawsuit are the Greenshades Tax Filing Center("TFC"), which is the product name for an installed software product made, offered for sale, and sold or licensed by Defendant Green Shades, and the Greenshades Payroll Tax Service("PTS"), which is the product name for software accessed and used over the Internet, and which is also made, offered for sale, and sold or licensed by Defendant Green Shades. Both products are installed and operated on computer systems by Green Shades and others, including partners and customers of Green Shades. Defendant Green Shades may also make, use, sell, license, or offer for sale or license other products not yet discovered or examined by or on behalf of Plaintiff Aatrix.

6. A copy of the accused TFC software product was acquired on behalf of the Plaintiff, installed on a computer, examined and analyzed. Defendant Green Shades publishes on the Internet numerous videos that purport to show the operation of the TFC and PTS software which were also examined.

7. Plaintiff Aatrix, through its counsel, wrote Defendant Green Shades and requested that Green Shades allow examination and analysis of its software, and an agreement permitting such examination and analysis was entered into between the parties. Subject to the agreement, counsel for Aatrix caused an examination and analysis of the TFC software to be conducted, and determined that probable cause exists to

believe that the TFC software infringes US Patent 7,171,615 Patent (the "'615 Patent") owned by Plaintiff Aatrix, a true and correct copy of which is attached hereto as Exhibit A.

8. Defendant Green Shades, by and through its counsel, also provided a letter dated November 17, 2014 (Sealed Ex. S-33 in the Court's file) and Aatrix understands from that letter that the PTS software product contains the same material structures as the TFC software, with the difference that some elements of the PTS software product are accessible on servers over the Internet, as opposed to being part of an installed software package.

9. Subsequently, in the course of this litigation, experts working on behalf of Plaintiff have examined the source code for the Green Shades TFC and PTS software products and have confirmed that probable cause exists to believe that both software products infringe both the '615 Patent, and US Patent 8,984,393, also owned by Plaintiff Aatrix (the "'393 Patent")(the '615 Patent and the '393 Patent are referred to collectively herein as the "Aatrix Patents"). A copy of the '393 Patent is attached hereto as Ex. B.

GENERAL BACKGROUND OF THE INVENTION

10. Plaintiff Aatrix and Defendant Green Shades are competitors in the business of creating and providing computerized forms used to make out and/or file tax returns and reports with governmental agencies, and which are also used for other purposes such as tax planning and "what if" scenarios.

11. The process of creating and updating such forms is complex, exacting, error-prone and costly. Using the inventions disclosed in the Aatrix Patents makes the

process much less so, and as a consequence, Aatrix has been able to create and currently maintains approximately 850 separate forms, comprising 1,752 pages of forms, each of which must be updated, provided to the particular governmental entity for approval, and edited to each agency's specific requirements, generally on at least an annual basis.

12. The inventors of the patents at issue in this lawsuit, both employees of Aatrix, invented machines, systems, computer programming structures, and methods for creating, displaying, and importing data into computerized forms, which were and are a significant improvement over the numerous prior art and patentably distinct means and methods for computerizing forms.

13. The term "business accounting software" is used herein to broadly to encompass general or task-specific software that businesses use to manage accounting information. Embodiments of the patent claims are generally "add-on" software to a business accounting software, within a computer system. The add-on software accepts values from the business accounting software in a "data file" as that term is used in the claims of the Aatrix Patents. It creates an onscreen replica of a published form such as the Federal Form 941, containing the values, via a program disclosed in the Aatrix Patents as a "form viewer," which interprets a model of the form that is disclosed in the Aatrix Patents as a "form file." As an example, Microsoft publishes a series of business accounting software products under the name "Microsoft Dynamics," which maintain the accounting data of a business. Embodiments of the Aatrix Patents are capable of displaying values from Dynamics which are then displayed onscreen in a replica form

selected by the user. The Aatrix Patents are not limited to forms to be used with business accounting software and systems, but the inventions of the patents were developed primarily with business accounting software and systems in mind and the use of the term helps describe what was done in developing the inventions.

14. Green Shades creates its form files and sells its infringing forms software, including a form viewer, for operation on a computer system, and for use with Microsoft Dynamics, a family of software products used to manage most accounting data of a typical company, and with several other business accounting software products. Green Shades also incorporates the products into computer systems and causes others to do so, or to electronically access computer systems hosted by Green Shades containing and executing the software products, or components thereof.

EARLY PRECURSORS OF THE AATRIX PATENTED INVENTIONS

15. At one time, Aatrix made and sold business accounting software products that played a role in the development of the patented inventions. The products were Aatrix's Payroll Series, which generally were software products used by businesses to manage payroll.

16. For a number of reasons it is preferable that a human not be used to fill out tax forms by hand by reading data from a business accounting software. It is slow, costly, and error-prone. Customers for Aatrix's Payroll Series software began asking for the ability to simply import values into a tax form displayed onscreen.

17. Aatrix began development of the forerunners of its patented technology in the early 1990's. Its Payroll Series software packages, built on and for use with the

Macintosh computing system, allowed users to put payroll data into a limited number of tax forms which could then be filed with the appropriate governmental agency.

18. It is generally understood by those of ordinary skill in the art of software programming that there are at least two basic types of code, "source code" and "machine code." Machine code is also referred to as "executable code." Source code is written and can be read and understood by software programmers in a source code language, examples being Pascal or C++. Computers, however, do not use source code in executing a software application, they use code only readable by the machine. The programmer writes the source code, which is readable by humans (specifically by programmers). The source code is then transformed into executable code (not human readable), in the format required by the particular computer platform, by a standard tool called a compiler. The machine languages for Apple computers such as the Macintosh, and Windows-based PCs, are different. In the early days of the development of the Aatrix inventions, the work was done on Apple computers such as the Macintosh, and the corresponding machine readable code was also compatible with the Macintosh. Later versions of the Aatrix patented inventions can be incorporated into other computing platforms such as Windows-based PCs.

19. The software model that was in wide use at the time, at Aatrix and elsewhere, is often referred to as "monolithic software architecture." This was a way of developing software in which the basic components of a user interface, business logic, and data management were all contained in a single body of code rather than separated

out into components. A vendor of software for personal computers, for example, would develop and distribute its products as single executable files of code. This meant (among other things) that if the vendor needed to change the functionality of the product in any way, it had to ship an entire new executable code file to its customers. In the early 90s, it was not practical to ship software over the Internet or other networks, so software was most commonly distributed on physical media such as floppy disks or, later, CDs. In a monolithic software application the entire software is written as one block of code.

20. The precursors of the Aatrix patented inventions were first created circa 1990-1993. The classic monolithic software applications which prevailed at the time had many limitations. All of the components of the software, such as Aatrix's Payroll series software, including the forms, were "hard coded," meaning that they were written into the software's monolithic source code. Creating forms and revising them when necessary meant that software programmers had to be employed to write, modify, and debug the code for the entire software, including the part of the source code that represented and implemented the forms.

21. Governmental agencies publish paper tax forms to be completed and remitted to the agency, as a tax return or report. In order to capture the data from all of the tax forms a governmental agency receives, the agencies use high speed scanning systems which scan all the forms, capture the values in the tax return or report, and put those values into the government's database for analysis. These high speed scanners rely on the precise physical layout of the form in order to determine, for example, that a

value in a particular place on a tax return or report being scanned is the value for "Total Wages, Tips and Salaries." The governmental agency's systems then recognize that value and record it for analysis and processing.

22. Because their scanners rely on the exact layout of the form, governmental agencies require that any computerized forms be exact copies of the paper form the agency publishes, and they further require that companies, such as Aatrix, that publish computerized forms, must submit the forms for review and approval by the governmental agency before deployment. Governmental requirements are so exacting that Aatrix is sometimes asked to move a particular character or line on a form by as little as a pixel or two. Compounding the problem of computerizing the forms is that agencies change most of the forms annually, requiring that the corresponding computerized form must be revised. In general, every computerized form corresponding to a governmental form needs to be revised a minimum of two times a year and often more; once when the form is first completed or revised at the publishing company, and again when the agency reviews the form and requires further changes. When the inventions of the Aatrix Patents were being devised, all of that work had to be done by software programmers at software programmer compensation rates, and the entire code for the business accounting software of which the forms were a part needed to be reviewed and debugged.

23. Computerizing forms of the type that government agencies publish is not simple. Each computerized form can be conceptualized as consisting of three layers.

Figure 1 shows an example of this, including examples of the types of information represented at each of the three layers.

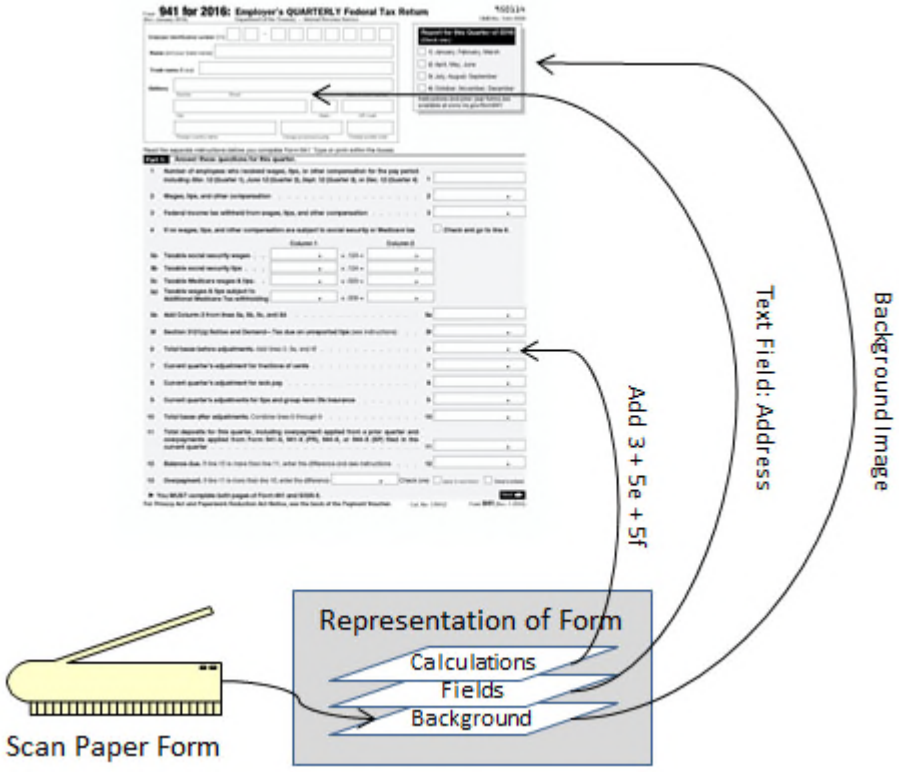

Figure 1: A computerized representation of a form in three layers.

24. The first (lowest) layer represents the background of the form, including the text and graphics. This can be captured by scanning a paper copy of the government form or by other capture means as disclosed in the Aatrix Patents, resulting in an image that can be displayed on a computer screen and printed. In more recent years, some governmental agencies have begun publishing their own digital versions of their paper forms. The use of a governmentally issued digital form only saves having to scan the form into a digital file, the concept remains the same.

25. The second layer of the computerized representation of the form represents the fields that users must fill out, or that the computer can fill out automatically by importing values from application software (such as business accounting software), or performing calculations on other fields in the form and/or other values. A programmer must create representations of these fields which include their physical locations and sizes on the form layout. Each field on a form corresponds to a memory location in the computer that stores the value of the field. The user interface function of the forms program displays these fields at the proper locations and sizes, and either accepts input from users or displays values that the software imports and/or calculates itself.

26. The third (top) layer comprises the calculations and rule conditions used to compute values of fields and check them for validity. For example, one field might have a calculated value that is the sum of other fields; another field might be a user-input field which must contain a numeric value (e.g., Total Wages, Tips and Salaries) while another must contain text (e.g., address of taxpayer). A "rule condition" can be any number of conditional statements as described in the patent. An example would be "if there is not a numeric value for Total Wages, Tips and Salaries, display 'NUMERIC VALUE REQUIRED'"; another might be "if this value is less than X, apply tax rate Y, otherwise apply tax rate Z."

27. In the monolithic programming architecture, revising a form when it was changed by the governmental agency meant potentially making modifications throughout the source code, not just the code for all of the layers of the form. This

included references to memory locations in the business accounting software products, positions of form fields, graphical elements of the form designs, and formulas for calculating values of certain fields – all of which were "hard-coded" (represented in fixed code) in the monolithic software. It was necessary not only to make sure that the particular sections of the code for the form were implemented correctly, but that those sections of code properly coordinated with the rest of the source code for the monolithic business accounting software package. This is depicted in Figure 2.

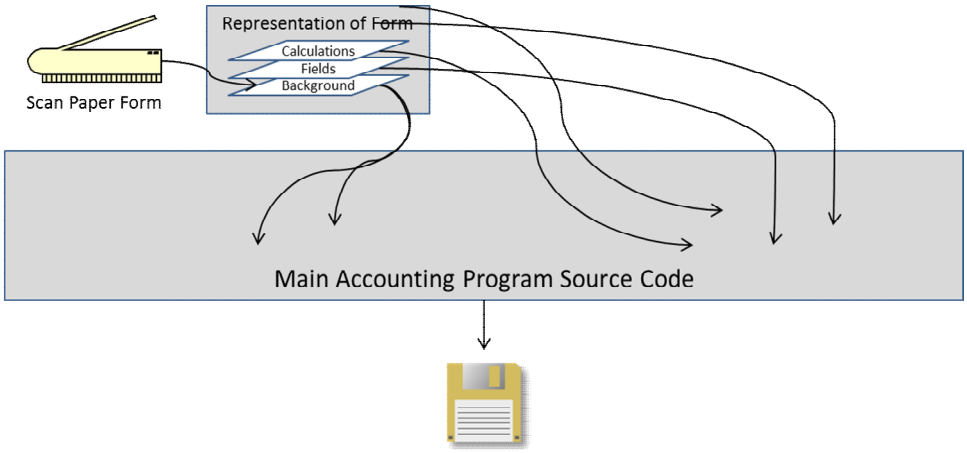

Figure 2: Monolithic accounting program with hard-coded references to form elements.

28. Minor changes to the form, such as changing the coordinates of a data field to move it from one location to another, were not particularly difficult to implement, but major changes, such as would occur if a provision of the tax code were changed and the formulas in the form needed to be changed, required significant changes -- not only to the source code for the form but also to the source code for the entire business accounting software. This was the case because the source code for the business accounting software and for the forms was so interdependent and intertwined that if the

source code for one changed, the source code for the other would likely also need to change in order for the whole system to work as intended. Unintended effects on functionality due to such changes are known in the art of software development as "regression bugs," requiring "regression testing" to find and isolate them.

29. The need to revisit the entirety of a monolithic body of source code in order to change a single form also created the problem of distributing updates to existing users of the software. In the early 1990's broadband Internet did not exist. Most communications over the Internet took place over slow dial-up connections, which made it impractical (time-consuming and unreliable) to transmit large software files to users. Aatrix's business model at the time was to charge a subscription fee for updates; on a periodic basis, at least once a year and sometimes more often, Aatrix mailed out physical disks with the current version of its Payroll series software, which included any new forms as well as the latest versions of existing forms.

DEVELOPMENT OF THE PATENTED INVENTIONS

30. Aatrix's first step in solving the problems present in the prior art circa 1993 was to develop its Form Designer. Arthur D. Jensen ("Jensen"), one of the inventors of the patented inventions, had the insight to break from the monolithic architecture by creating a separate program component for designing forms. As a preliminary step, Jensen developed a precursor to the Form Designer of the patents as a tool to generate source code that implements a particular form, which would then be copied into the monolithic software of the Payroll Series. As it functioned at the time,

the Form Designer did not write a form file as that term is used in the Aatrix Patents. Rather, it would generate a segment of source code for the form so that segment could be copied into the monolithic code for the Payroll Series software.

31. Jensen eventually developed the Form Designer further so that it would generate a separate form file, containing a representation or model of a form, rather than generating a piece of source code to be incorporated into the Payroll Series source code.

32. This Form Designer is disclosed in the Aatrix Patents; it is a tool for automating the tasks needed to create the various layers of a form and to generate the form file. The Aatrix Patents make extensive disclosure of the available functionalities in the Form Designer, see '615 Patent, col. 3, l. 32 – col. 12, l. 24. A user such as a Aatrix employee would use the Form Designer to create or edit a form, and then the Form Designer would generate a form file which the Payroll Series software would interpret and use. In other words, Jensen re-architected the Payroll Series software to accommodate the model of the form generated by the Form Designer instead of building representations of specific forms directly into the application code. This is depicted in Figure 3.

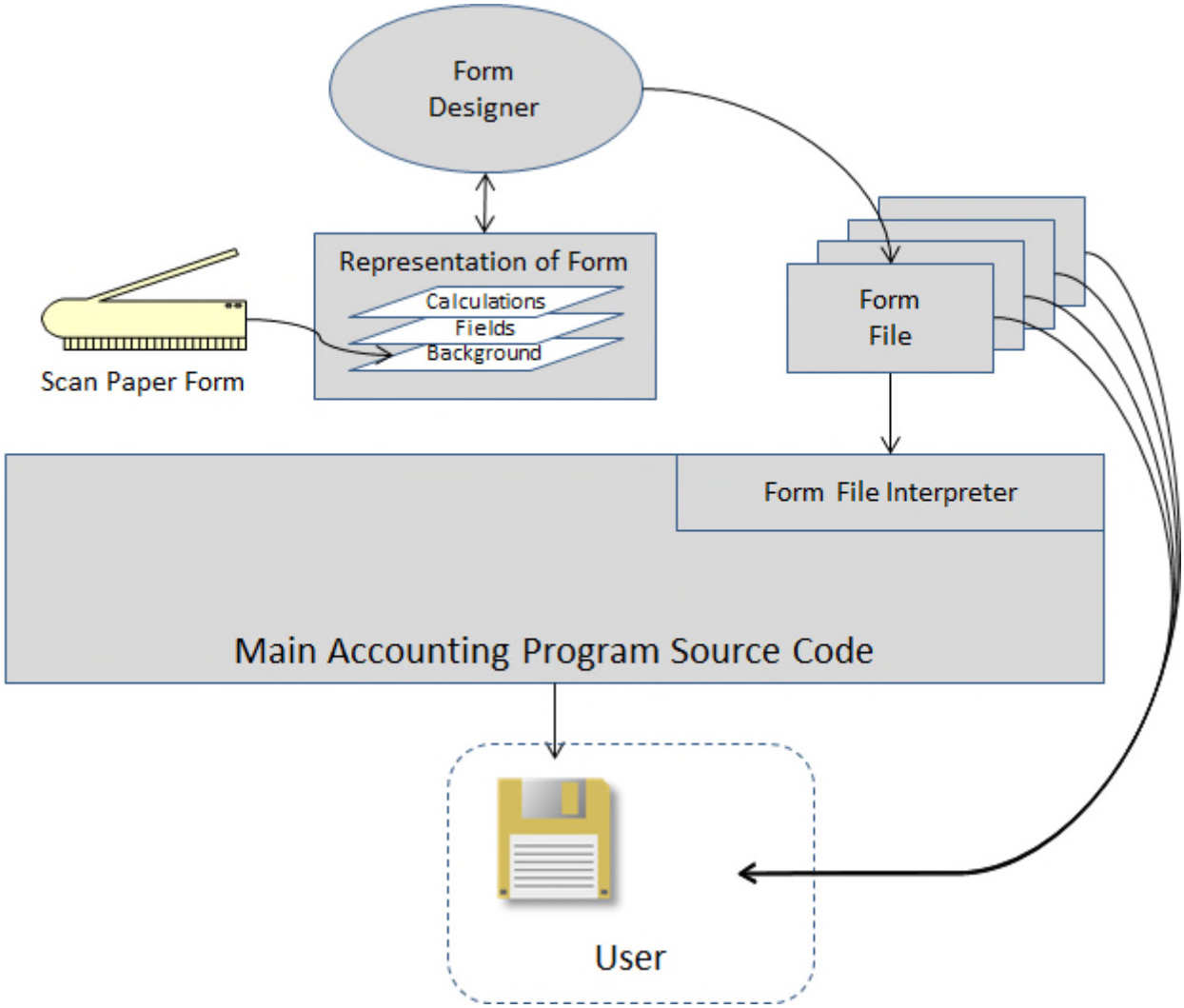

Figure 3: The Form Designer and Form Files.

33. The Form Designer and form file offered five distinct and significant advantages over Aatrix's prior method for writing the code for forms. First was increased simplicity of code maintenance. Since a form file was used, the digital model of each form was separated out from the source code for the business software. This meant that if a particular form needed to be revised, it was only necessary to revise that

form file. It also eliminated the need to do regression testing (see ¶28 above) of the application code when forms had to be changed, generally at least once a year.

34. The second advantage was major reductions in the time and level of skill required to create and update forms. Instead of requiring people with programming skills, experience with tax software, and higher compensation rates, it became possible for people with generic computer skills, a rudimentary understanding of accounting principles, and lower compensation rates to do forms design and maintenance, and those people could do the job an order of magnitude faster. More fundamentally, this invention transformed the Payroll Series from systems that programmers configured to fill out forms to systems that enabled non-programmers to do so, and lowered the costs and the time involved of doing so. By way of example, the first time the Federal Form 941 deployed within the monolithic code model had to be revised, the revisions required three weeks of a software programmer's time. Using the inventions of the Aatrix Patents, the process now takes a few hours of a non-programmer's time.

35. The third advantage was the small size of form files, combined with the decoupling of form models from the monolithic software. This enabled Aatrix to send new or updated form files to customers by themselves, instead of distributing entire monolithic applications.

36. The fourth advantage was that the systems and software could be cross-platform, meaning that they could be used on any type of computer platform, including without limitation Macintoshes and Windows-based PCs, or on systems with multiple

types of platforms. All that was required was to develop a viewer for each platform on which it was desired to display a form (see Figure 3).

37. Finally, form files made it possible to dramatically increase the number of forms that Aatrix could support in its software products. Before the advent of form files, Aatrix supported only a small number of forms (the federal Form 941 and a couple of state forms), and the monolithic Payroll Series product contained source code for all of these; this imposed a severe practical limit on the number of different forms that the product could support. With form files, this limit disappeared; the product could support many different forms.

38. Moreover, users needed to store only the forms that they actually used on their computers, which saved storage space both in users' computers' RAM (Random Access Memory, which is fast, short-term storage used by running programs) and hard disk (permanent slower storage used for files and programs when not running). As a result, form files made computers processing tax forms more efficient in their use of storage space.

39. This invention increased the efficiencies of computers processing tax forms in other ways. It is often the case that executable computer applications take up more RAM than is physically available on the computer, particularly when more than one program is running on a computer at a given time. When that happens, computer systems have means for treating hard disk storage as a logical extension of RAM, albeit one that runs much more slowly. The computer's operating system loads (from hard

disk into RAM) only those portions of a program that it needs at a given time, then unloads those (from RAM to hard disk) and loads new portions as they are needed. This type of scheme is sometimes known in the art as "page swapping," or "swapping" for short, and it has always been available on the computers for which Aatrix developed its software. Swapping makes it possible for large programs to run on computers with limited RAM, but it causes them to slow down; in fact excessive swapping leads to a condition known in the art as "thrashing," in which a computer spends the bulk of its time and effort on swapping and is unable to keep up with the actions that users actually need to be performed. Thus, because the software uses less memory with form files than without them, the invention of form files can result in faster operation of tax form processing software and less risk of thrashing, thereby making the computers that run tax form processing software more efficient. These effects vary according to the hardware configurations of individual computers and systems that run the software.

40. Eventually, Aatrix began creating its form files as simple text files that are much smaller than source code files (a few kilobytes each, compared to megabytes for monolithic executable code and associated files) and can be sent out over relatively slow Internet connections. The development of the Form Designer software and the form files allowed Aatrix, in a very short period of time, to go from offering the Federal form 941, to offering forms for all 50 states as well as the Federal forms.

41. At Aatrix, the thought developed that if an add-on solution could be developed that would work with multiple accounting software products and across

multiple computing platforms, Aatrix could market that solution to other accounting software makers, to add on to their existing accounting software products. To create add-on software, Aatrix developed two further elements of the patented inventions, the Form Viewer and the data file.

42. The Form Viewer is a software module separate from the business accounting software. The Form Viewer software was designed to read and interpret the contents of the form file, and then to display an onscreen viewable form. The viewer enables the user to edit the field values in an onscreen form, but does not allow the user to alter the form itself (that is, the background image, field definitions, or programming of calculations and rule conditions are not editable). The Form Viewer is disclosed in the Aatrix Patents at, for example, the '615 Patent at col. 3, ll.23-31, col. 9, ll. 33-41, col. 12, ll. 26-33, and col. 12, l. 63-col. 13, l.63.

43. The remaining problem was to devise a way to import data from a user application, such as a business accounting software product, so that such data would populate fields in the form. It is very difficult to do this without the cooperation of vendors of application software; in the field of business accounting software (as in many other types of applications), several such vendors competed in the market.

44. Jensen found that business accounting software vendors were not generally willing to expose their proprietary data structures to other software vendors out of concern that those other vendors might become competitors with detailed knowledge of their trade secrets. Reverse engineering their code, in addition to likely

violating the terms of those products' End User License Agreements, would have been highly unreliable and may have resulted in the vendors taking steps to make their code difficult to reverse engineer (to the extent that it was not already difficult to reverse engineer).

45. Instead, Aatrix created the data file element of the patented inventions, called the Aatrix Universal File or "AUF file." This is a file template describing what values need to be extracted from the business accounting software and where they need to appear in the AUF file. The AUF is disclosed, for example, in the '615 Patent at Fig. 1, 3:14-22, 4:57-67, and in detail at 10:59-12:24.

46. Business accounting software vendors saw the opportunity to add value to their software products by incorporating Aatrix's tax form processing software, so they agreed to implement code that generates data files, which contain the data that Aatrix's software requires for importing into forms, without exposing their trade-secret data structures. The other benefit of the data file was that the Aatrix software could read the business accounting data in a consistent and straightforward way, across computer platforms of different types, without having to develop different interfaces for each of the several business accounting software products.

47. Aatrix made efforts to find third party software vendors interested in their solution, but in the 1995 time frame in which Jensen developed the code, monolithic software was the norm, the idea of add-on forms software was before its time, and it was

not until the early 2000's that Aatrix was able to revive the project and secure the cooperation from business accounting software vendors described above.

OTHER PRIOR ART IMPLEMENTATIONS OF FORMS SOFTWARE AND SYSTEMS

48. In May 1990 Microsoft released Windows 3.0, its first truly effective Graphical User Interface ("GUI") type operating system for what was then known as the "IBM-compatible" PC (as distinct from the Apple Macintosh, among others). Prior to that point in time, not only was the operating system not capable enough to display forms on a PC, but existing PC hardware was not sufficiently powerful to do so effectively. In contrast, Apple's Macintosh supported a GUI as far back as 1984; yet IBM-compatible PCs had become much more prevalent in business settings.

49. Following the release of Windows 3.0, a number of software products were developed for designing, creating, and displaying forms; these are part of the prior art to Aatrix's patented invention. These products incorporated the ability to populate the forms with values, establish calculations, and run rules conditions, and they had components that enabled users to view forms on a computer screen, input data, and print the resulting completed form or send it by email. These were known in the market as "e-forms" (electronic forms) software products.

50. These e-forms products also enabled form designers to graphically create onscreen forms. A few of them also had the capability, typically through add-on modules or utilities purchased separately, to enable the user to scan in a previously

published form to use as a template during the forms design process. One such e-forms product was JetForm 1.0, published circa 1990 ("JetForm"). At the completion of the design process, JetForm could compile the result into a form file, and a separate software component called the Form Filler could then be used to display the form thus created and enable users to fill in the form, change pre-populated values, and print or email the resulting completed form. Figure 4 is a screenshot of a form during the process of being created in JetForm 1.0.

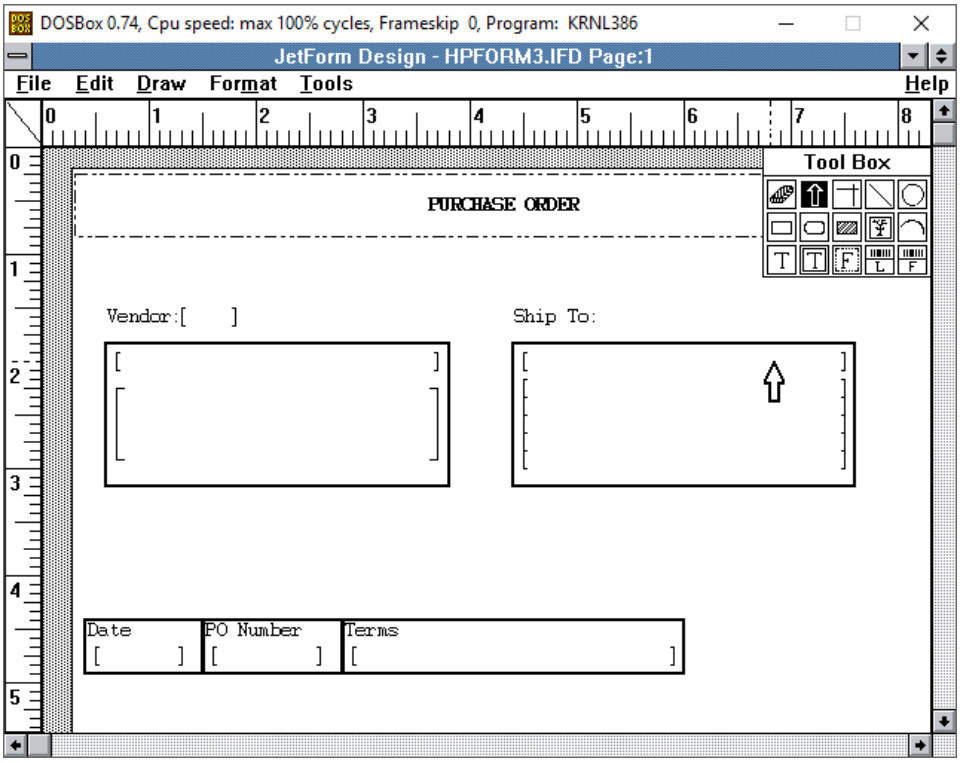

Figure 4: Screenshot of JetForm Design 1.0.

51. However, these prior art software products had a number of deficiencies compared to the Aatrix inventions and lacked elements of the claims of the Aatrix Patents. For one thing, although a published form could be used as a template to place

data fields or boxes, the published form could not be made a part of the form file; all that would appear in the form displayed in the Form Filler was a set of blanks to be filled in, without any of the corresponding labels, text instructions, or graphic elements, as shown in Figure 5.

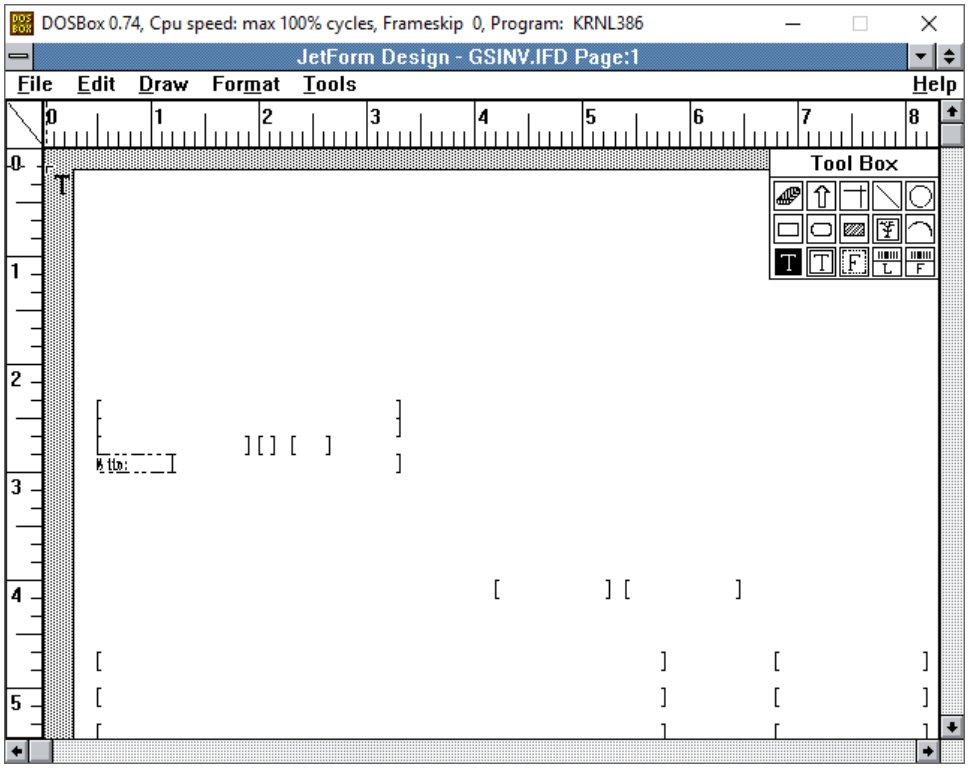

Figure 5: Screenshot of JetForms 1.0 Design without template from printed form.

52. A user sitting at a computer seeking to use or to understand the information being displayed would need to have a paper copy of the published form in hand to reference, to determine which box represented what value. Alternatively, the forms designer would have to use graphical tools to create an ad-hoc on-screen emulation of the print form, and it is unclear whether the graphical tools supplied with these prior art software products had the flexibility, precision, or capabilities necessary

to enable the creation of forms that emulated the print versions accurately enough to be acceptable to government agencies. There is no evidence that e-forms software products were designed or used for this purpose.

53. Yet another deficiency and difference from the claims of the Aatrix Patents was that the prior art software products could extract and import data from databases, but not from a "user application" as that term is used in the Aatrix Patents, nor did they use a "data file" as that term appears in the Aatrix Patents. These differences were significant. E-forms products would typically enable a form designer to define a field whose value is the result of a query on a database. They would support queries on a range of database products that were in popular use at the time (e.g., dBase, FoxPro, Clipper), most of which defined their own syntaxes for queries. This would be convenient for integrating forms with a person's or company's own databases, but it would be insufficient for integration with third-party application software (such as business accounting software). As mentioned above, application software has data structures which may or may not use commonly available database systems and which are generally trade secrets of the application software vendor. Vendors are unwilling to reveal the "guts" of their application designs. Jensen developed the data file as, among other things, a way to allow integration of add-on e-forms software by "pushing" data into data files so that the forms software can use it to populate forms. Thus, prior-art e-forms software products did not practice "data files" as taught in the Aatrix patents,

because they were not designed to be integrated with third-party applications software products, as the Aatrix products were.

EXAMINATION AND ISSUANCE OF THE AATRIX PATENTS

54. As is well known, to obtain a patent an inventor must file an application with the United States Patent and Trademark Office ("USPTO"), and in that application must disclose what the inventor invented in sufficient detail such that one skilled in the art can make and/or use the invention.

55. Examiners at the USPTO review patent applications to determine whether a claimed invention should be granted a patent. In general, the most important task of a patent examiner is to review the technical information disclosed in a patent application and to compare it to the state of the art. This involves reading and understanding a patent application, and then searching the prior art to determine what technological contribution the application teaches the public. A patent is a reward for informing the public about specific technical details of a new invention. The work of a patent examiner includes searching prior patents, scientific literature databases, and other resources for prior art. Then, an examiner reviews the claims of the patent application substantively to determine whether each complies with the legal requirements for granting of a patent. A claimed invention must meet patentability requirements including statutory subject matter, novelty, inventive step or non-obviousness, industrial application (or utility) and sufficiency of disclosure and examiners must apply federal

laws (Title 35 of the United States Code), rules, judicial precedents, and guidance from agency administrators.

56. To have signatory authority (either partial or full), Examiners must pass a test equivalent to the Patent Bar. All examiners must have a college degree in engineering or science. Examiners are assigned to "Art Units," typically groups of 8-15 Examiners in the same area of technology. Thus, by way of required background and work experience, Examiners have special knowledge and skill concerning the technologies examined by them and in their particular Art Unit.

57. The basic steps of the examination consist of:

- reviewing patent applications to determine if they comply with basic format, rules and legal requirements;
- determining the scope of the invention claimed by the inventor;
- searching for relevant technologies to compare similar prior inventions with the invention claimed in the patent application; and
- communicating findings as to the patentability of an applicant's invention via a written action to inventors/patent practitioners.

58. Communication of findings as to patentability are done by way of one or more Office Actions in which the Examiner accepts or rejects proposed claims filed by the applicant(s) and provides reasons for rejections. The applicant(s) are then permitted to file a Response to Office Action, in which claims may be amended to address issues raised by the Examiner, or the applicant states reasons why the Examiner's findings are incorrect. If an applicant disagrees with a Final Rejection by an Examiner, the applicant may file an appeal with the Patent Trial and Appeal Board ("PTAB"). If, after this

process, the USTPO determines that the application meets all requirements, a patent is duly allowed, and after an issue fee is paid, the patent is issued.

59. A patent duly allowed and issued by the USTPO is presumptively valid and becomes the property of the inventor(s) or assignee(s).

60. A "Continuation Application" is one where, typically after allowance but in any event prior to issuance, the inventor applies for a second, related patent. A Continuation employs the same invention disclosure as the previous, allowed application, but seeks new or different claims. A patent issued on a Continuation Application receives the priority date of the previously allowed patent, but the applicant must disclaim any patent life beyond that of the first allowed patent to which the Continuation seeks priority. The '393 Patent is a Continuation of the '615 Patent.

61. A "Continuation-in-Part" application ("CIP)" is similar to a "Continuation," except that the applicant amends the invention disclosure to include new or different material. As to the original material that was in the first allowed patent, the CIP has the same priority date as the first allowed patent, but as to the new or different material, that material is subject to a priority date determined by the date of filing of the CIP. As with the Continuation Application, the patentee(s) must disclaim an extended life for the patent.

EXAMINATION AND ISSUANCE OF THE '615 PATENT

62. The examination, or "prosecution," of the '615 Patent required five years, from the date of filing of the application on March 26, 2002, through the issue date of

January 30, 2007. A true and correct copy of the examination file (referred to as a "file wrapper") of the USPTO for the '615 Patent is attached hereto as Exhibit C. The complete search history of the '615 Patent is contained in Exhibit C (the face of the patent, Ex. A, states "See application file for complete search history."). Some of the materials at the beginning of Ex. C are materials from Reed Tech, which obtained the file wrapper for Plaintiff. The Reed Tech materials are incorporated in Ex. C because they include a table of contents that may help locate materials in the file wrapper. The Reed Tech materials are not from the USPTO but they are marked "Reed Tech" and are obvious.

63. There were three Examiners involved in examining the application for the '615 Patent, Assistant Examiner Quoc A. Tran ("Examiner Tran"), Primary Examiner William Bashore ("Examiner Bashore"), and Primary Examiner Sanjiv Shah ("Examiner Shah").

64. As evidenced by the file wrapper for the '615 Patent, a search was conducted for patents linguistically connected to the application on October 25, 2004, which returned 300 issued patents.

65. On March 14, 2005, the USPTO performed 19 line item Boolean searches for prior art, including such terms as "turbo tax" (the tradename of a tax software and forms product published by Intuit), and "adobe," the publisher of products such as Adobe Acrobat, including many forms functionalities. The USPTO received 757 "hits"

on these line items. (The line item count and "hit" count in this paragraph does not include one apparently erroneous search on "a" which returned millions of items.)

66. On March 15, 2005, the USPTO performed 36 line item Boolean searches for prior art, including such terms as "quicken" (the tradename of another Intuit product that included forms), several specific patents or applications, and search terms such as "form near4 filling," and "tax near4 return." These searches returned over 98,000 "hits."

67. On March 15, 2005, the USTPO performed an additional 11 line item Boolean searches on terms such as "turbo near4 tax," "intuit.as," and others, which returned over 300,000 "hits."

68. On March 25, 2005, Examiner Tran mailed a First Office Action, a copy of which is included in Ex. C. Among other things in the Office Action, it stated:

> 35 U.S.C. 101 reads as follows:
>
> **Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.** [Bold in original.]
>
> Claims 11 and 22-23 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 11 and 22-23 set forth non-functional descriptive material but fail to set forth physical structures or materials comprising hardware or a combination of hardware and software within the technological arts (i.e. a computer) to produce a "useful, concrete and tangible" result. For example, Claims 11 and 22-23 the "method" reads on a mental construct/abstract idea or at best a computer program, per se. The language such as "A method for designing, creating, and importing data…comprising…, does not clearly define structural elements and are not tangibly embodied on a computer readable medium. Claims 11, and 22-23 are

interpreted as software per se, abstract ideas or mental construct and not tangibly embodied on a computer readable medium or hardware.

69. In response to the First Office Action, Claims 11 and 22 as they appeared in the application were amended to include specific hardware elements and 23 was cancelled. The amendment is part of Ex. C and speaks for itself.

70. The Examiners made no rejection of Claim 1 of the application for the '615 Patent (which became Claim 1 of the issued patent). Given that the claims were specifically examined for "tangible embodiment" and to insure that what was claimed was not merely "software per se," it is plain that the Examiner considered Claim 1 as submitted to contain "tangible embodiment" (i.e. hardware) and not to constitute "software per se," and that has also been the applicants' understanding of Claim 1 at all material times. Claim 1 was subsequently amended, but not to add any further hardware elements, hardware already being present in the claim. The inventors, and persons skilled in the art, understand the term "data processing system" in Claim 1 (and incorporated in dependent claims 2-10), as well as in other claims of the Aatrix Patents, to include hardware, such as computers, readable memory, and peripheral equipment. As reflected in the file wrapper, Examiner Tran and Examiner Shah examined the claims for subject matter eligibility, and made no rejection of claims containing the term "data processing system" on the ground that they did not claim a "machine" and therefore were not directed to statutory subject matter.

71. The First Office Action was reviewed and signed by Examiner Sanjiv Shah.

72. Following the First Office Action and applicants' Response thereto, the USPTO performed hundreds of additional line item searches returning "hits" on several tens of thousands of additional prior art references.

73. During the prosecution of the '615 Patent, the Examiners made obviousness-type rejections to the claims, based on combinations of several pieces of prior art, all for machines or methods, or parts of machines or methods, for creating, designing and importing data into forms, including tax forms. On information and belief, it is the practice of the USPTO not to cite excessive cumulative art, in other words, in this instance, the art cited is representative of considerable other art located by the USPTO and not cited. Further on information and belief, it is the practice of the USPTO to discuss in its Office Actions those pieces of art that best represent the cited art. On the face of the '615 patent itself the USPTO listed several patents reviewed in the examination of the '615 Patent that constitute pieces of art in the field of creating, designing and importing data into forms, including without limitation tax forms, which are listed in Table 1. Copies of the patents and published applications are attached to this Second Amended Complaint as Exhibits with the letter as noted in the table:

Pat. or App. No.	**Inventor**	**Title**	**Exh.**
5,140,650	Casey	Computer-Implemented Method for Automatic Extraction of Data from Printed Forms	D
5,495,565	Millard	Integrated Form Document Editor with Form Descriptor Table, Background Bitmap, Graphics Editor and Test Editor, Composite Image Generator and Intelligent Autofill	E

6,446,048	Wells	Web-Based Entry of Financial Transaction Information and Subsequent Download of Such Information	F
02/0111888	Stanley	Automated Tax Return with Universal Data Import	G
02/0154334	Laverty	PostScript to PDF Conversion of Graphic Image Files	H
03/0120516	Perednia	Interactive Record-Keeping System and Method	I
03/0233296	Wagner	System and Method for Automated Form Generation and Comparison	J
n/a		http://web.archive.org/web/19980117145007/www.intuit.com/turbotax/-publishing 1998	n/a
n/a	Padova	"Acrobat PDF Bible" Published 1999 by IDF Books	n/a

Table 1: References listed as prior art in the '615 Patent.

74. In addition, the prior art references cited by the USPTO during the prosecution of the '615 Patent themselves cited a total of 32 additional references in the field.

75. On September 19, 2006, Examiner Bashore issued a Notice of Allowance (included in Ex. C) for the '615 Patent. In the Notice of Allowance, Examiner Bashore gave the following Reasons for Allowance, *inter alia*:

> Examiner finds the claimed invention [in the '615 Patent] *is patentably distinct from the prior art of record*. [Emphasis added.]

76. The art cited by the USTPO in the examination of the '615 Patent represents, as stated by Examiner Bashore, patentably distinct art from the '615 Patent, and thus sets forth other machines, structures, and processes to which the '615 Patent is not directed, for creating, designing and importing data into forms, including without limitation tax forms.

EXAMINATION AND ISSUANCE OF THE '393 PATENT

77. On or about January 26, 2007, the inventors filed with the USTPO a Continuation Application that was then examined by the USPTO and ultimately issued as the '393 Patent. A true and correct copy of the file wrapper is attached hereto as Ex. K. Some of the materials at the beginning of Ex. K are materials from Reed Tech, which obtained the file wrapper for Plaintiff. The Reed Tech materials are incorporated in Ex. K because they include a table of contents that may help locate materials in the file wrapper. The Reed Tech materials are not from the USPTO but they are marked "Reed Tech" and are obvious.

78. Examiner Quoc A. Tran ("Examiner Tran") examined the Continuation Application under the supervision of Supervisory Patent Examiner Doug Hutton ("Examiner Hutton").

79. As evidenced by the file wrapper for the '393 Patent, several hundred line item searches for prior art were conducted resulting in several thousand "hits."

80. On or about March 4, 2010, Examiner Tran, under the supervision of Examiner Hutton, mailed a First Office Action, a copy of which is included in Ex. K. Among other things in the Office Action, it stated:

> 35 U.S.C. 101 reads as follows:
>
> **Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.** [Bold in original.]

> Claim 18 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.
>
> Claim 18:
> Claim 18 recites **"An article of manufacture"** comprising **"a propagated signal"**. As such claim 18 is drawn to a form of energy.
>
> Energy is not a process, a machine, a manufacture or a composition of matter. Accordingly, Claim 18 fails to recite statutory subject matter, as defined in 35 U.S.C. 101. [Bold in original.]

81. Examiner Tran made no other rejection of any Claim in the application for non-statutory subject matter during the prosecution. Plaintiff is therefore informed and believes that Examiner Tran understood all of the other claims of the '393 Patent to include statutory subject matter.

82. In the First and subsequent Office Actions, Examiner Tran made a series of rejections of the claims applied for on grounds of anticipation and obviousness, citing a number of pieces of prior art. In response, in an authorized process known as "swearing behind," the inventors filed a succession of Declarations culminating in the Sixth Declaration of Steven H.N. Lunseth and the Fourth Declaration of A. Dale Jensen, dating the reduction to practice of subject matter of the '393 Patent to at least November 28, 1995. These Declarations are all included in Ex. K hereto, along with the voluminous exhibits to the Declarations comprising source code.

83. On or about June 9, 2014, while the examination and prosecution of the '393 were still pending before the USPTO, the United States Supreme Court issued its opinion in *Alice Corporation Pty. Ltd. v. CLS Bank International*, 134 S. Ct. 2347. On December 16, 2014 the USPTO published in the Federal Register, its Interim Guidance

on Patent Subject Matter Eligibility ("Interim Eligibility Guidance") expressly for use by USPTO personnel in determining subject matter eligibility under 35 U.S.C. 101 in light of recent US Supreme Court cases, specifically including *Alice.* A copy of the published Interim Eligibility Guidance is attached hereto as Ex. L. The December 2014 Interim Eligibility Guidance was preceded by a number of other guidances, as stated in the publication of the Interim Eligibility Guidance. On information and belief, all personnel in the USPTO, including Examiners Tran and Hutton, were well aware of *Alice,* the US Supreme Court cases that preceded *Alice,* and of the Interim Eligibility Guidance and preceding guidances.

84. On or about January 7, subsequent to *Alice* and the Interim Eligibility Guidance, an interview was held by prosecution counsel with Examiner Tran. On or about January 15, 2015 a Notice of Allowance was issued for the '393 Patent.

85. The prosecution of the '393 Patent extended for 8 years, during which the USPTO performed hundreds of prior art searches, resulting in tens of thousands of "hits," and reviewed scores of pieces of prior art. Examiner Tran well understood the field of art of the application for the '393 Patent, and other patents, publications and methods of creating, designing and importing data into forms, including without limitation tax forms. Examiner Tran and the USPTO well understood the claims of the '393 Patent and the meaning of its terms, as evidenced in the extensive number of Office Actions and Responses in the file wrapper.

86. During the prosecution of the '393 Patent, Examiner Tran made obviousness-type rejections to the claims, based on combinations of several pieces of prior art, all for machines or methods, or parts of machines or methods, for creating, designing and importing data into forms, including tax forms. On information and belief, it is the practice of the USPTO not to cite excessive cumulative art, in other words, the art cited is representative of considerable other art located by the USPTO and not cited. Further on information and belief, it is the practice of the USPTO to discuss in its Office Actions those pieces of art that best represent the cited art. The art cited by the USPTO included several pieces of art in the field of creating, designing and importing data into forms, including without limitation tax forms. The references cited by the USPTO during the prosecution of the '393 Patent are listed in the following table. Copies of the patents and published applications are attached to this Second Amended Complaint as Exhibits with the letter as noted in Table 2:

Pat. or App. No.	Inventor	Title	Exh.
5,140,650	Casey	Computer-Implemented Method for Automatic Extraction of Data from Printed Forms	D
5,832,100	Lawton	Method and Apparatus for Converting Documents Between Paper Medium and Electronic Media Using a User Profile	M
6,043,819	LeBrun	Image Based Document Processing and Information Management System and Apparatus	N
6,199,079	Gupta	Method and System for Automatically Filling Form in an Integrated Network Based on Transaction Environment	O
6,182,142	Win	Distributed Access Management of Information Resources	P

Table 2: References listed as prior art in the '393 Patent.

87. In addition, the prior art references cited by the USPTO during the prosecution of the '393 Patent, themselves cited scores of additional references in the field.

88. Examiner Tran and the USPTO expressly examined the application for the ‘393 Patent for subject matter eligibility and made one subject matter rejection at the start of the examination. On information and belief, Examiner Tran and the USPTO were well aware of the decisions of the US Supreme Court concerning subject matter eligibility in *Alice* and preceding cases. Examiner Tran and the USPTO made no rejection of any of the claims of the ‘393 Patent for subject matter eligibility, and on information and belief did not regard the subject matter of the claims as directed to any abstract idea or ineligible subject matter.

EXAMINATION OF THE RELATED CONTINUATION-IN-PART APPLICATION NO. 11/699,955

89. As previously stated herein, after allowance of an application and before issuance of the patent, inventors may make and file an application for a continuation or a continuation-in-part. The invention disclosure portion of a continuation-in-part may be amended to include new material, but otherwise a CIP shares the same invention disclosure as the previously issued patent(s). The inventors filed a CIP on or about January 29, 2007, which is application serial no. 11/699,955 (the “’955 Application”).

90. The CIP is still pending and has not issued as a patent nor yet been allowed, and therefore the entirety of the file wrapper has not been attached hereto as an Exhibit. However, parts of it are attached as noted herein. The ‘955 Application is a

published application and the entire file wrapper can be obtained and reviewed on the USPTO's "Public Pair" site at http://portal.uspto.gov/pair/PublicPair .

91. The CIP is being examined by Examiner Mustafa A. Amin ("Examiner Amin").

92. On June 5, 2015, Examiner Amin issued an Office Action in the examination of the '955 Application, the pertinent parts of which (pp. 1-5) are attached hereto as Ex. Q (the remainder is available at the Public Pair site).

93. Neither the June 5, 2015 Office Action nor any other prior office action in the examination of the '955 Application have rejected any of the claims of the application as being directed to an abstract idea. On information and belief, Examiner Amin, being experienced in the field of art of the '955 Application, and being aware of the Interim Eligibility Guidance and of *Alice*, has not considered the subject matter of the '955 Application to be directed to an abstract idea.

94. In the June 5, 2015 Office Action, Examiner Amin made the following rejection under 35 U.S.C. 101:

> Claim 1 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.
>
> Claim 1:
>
> In summary, claim 1 recites "*a data processing[sic], **on** a digital computer having memory and processor…the data processing system comprising; a form file, a form file creation program, a data file, a viewer program*". The "data processing" [sic] is "**on**" a "digital computer", where the "digital computer" is not necessarily part of the "data processing system". Additionally, other recited components are software per se. Claim 1 fails recited [sic] at least one hardware component that is necessarily part of the "data processing system".

> Thus, the recited " data processing system" is not a "process", a "machine", a "manufacture", or "composition of matter", as defined in 35 U.S.C. 101.
>
> At least due to dependency, claims 2-16 are rejected under the same rational [sic] as set forth above. [Emphasis in original.]

95. Applicant responded to the Office Action of June 5, 2015 with an Amendment and Response to Office Action and Request for Interview on December 3, 2015. The pertinent parts of the Response are attached hereto as Ex. R, and the remainder is available on the Public Pair site. Applicant provided the Examiner with decisions from the Patent Trial and Appeal Board (PTAB) in *Ex Parte Michael Muller and Meggan H. Todd*, 2015 WL 1387574 (Patent Tr. & App. Bd., March 25, 2015) and *Ex Parte Jeffrey T. Calow, et.al.*, 2015 WL 1325268, (Patent Tr. & App. Bd., March 23, 2015), both interpreting the term "data processing system" to include a processor and hardware. See Ex. O, pp. 20-21.

96. Further, applicant provided Examiner Amin with a definition from the IBM Dictionary of Computing (Tenth Ed. August 1993), a dictionary published when the invention of the Aatrix Patents and the '955 Application were being developed, defining "data processing system" as:

> One or more *computers, peripheral equipment,* and software that perform data processing. Synonymous with computer system, computing system. See also computer, computer system, information processing system. [Emphasis added.]

See Ex. R, p. 21 and the attachment to the Response from the IBM Dictionary of Computing.

97. On March 8, 2016 Examiner Amin issued a Non-Final Rejection of claims of the '955 Application, a copy of pertinent parts of which is attached hereto as Ex. S. At the page numbered 2 (the third page of the document), Examiner Amin states:

> In light of applicant's amendments/remarks, all rejections to the claims under 35 U.S.C. 101 previously set forth are withdrawn.

Applicant made no amendments with respect to the "data processing system" language of Claims.

98. Examiner Amin, thus, removed his rejection under 101 based on his understanding that language included hardware, viz. at least one computer.

99. Claims of both the Aatrix Patents, and claims of the '955 Application contain the term "data processing system," which is to be consistently interpreted as having the same meaning in the same family of patents.

OTHER METHODS OF DISPLAYING FORMS ON A COMPUTER NOT COVERED BY THE CLAIMS OF THE AATRIX PATENTS

100. Many means and methods exist for displaying forms on a computer not covered by the claims of the Aatrix Patents.

101. The art cited by the Examiners in the examination of the '615 and '393 Patents all represent patentably distinct and in some instances prior art means and methods for designing, creating, displaying and importing data into forms, from those of the Aatrix Patents.

102. Software sold prior to the reduction to practice of the invention of the Aatrix Patents, such as JetForm 1.0 and others, represent patentably distinct means and methods from the Aatrix Patents.

103. Further, a number of companies make and sell blank forms that can be displayed on a computer screen and filled in by the user, by hand typing in the values. The Aatrix Patents are not directed to this method. As an example, Bloomberg/BNA publishes numerous forms under the tradename Superforms, which uses this model.

104. Plaintiff believes that there are various ways to provide add-on software without infringing the Aatrix patents. As an example, software developers such as Microsoft, which makes and sells the Microsoft Dynamics line of products, distribute Software Development Kits ("SDK's") that are distributed to third party software developers. These permit the writing of add-on software that works with specific functions and data structures of the primary software application. SDKs specify to third-party inventors how to write code and system calls to make the add-on work with the primary software. One way of avoiding infringement would be to write an add-on forms software as it was done under the prior art, where all of the software including the forms is written as a piece of monolithic source code, and compiled into a monolithic executable application. Other examples are demonstrated in the patentably distinct art set forth in the prosecution of the Aatrix patents, and in the patentably distinct prior art commercial software such as JetForm 1.0.

IMPROVEMENTS AND PROBLEMS SOLVED BY THE AATRIX PATENTED INVENTIONS

105. The inventions of the Aatrix Patents are improvements over prior art and subsequent patentably distinct means and methods of creating, designing, and importing data into forms, and the Aatrix Patents enable a combination of features not present in such prior art and other means and methods.

106. The inventions of the Aatrix Patents improve the process of creating computerized forms and forms software. It is not necessary to hire programmers to create, edit, update and maintain forms. The person doing such work, known to those skilled in the art as a form designer, need not be a programmer. Typically, in hiring form designers, Aatrix looks for persons with general PC experience and a rudimentary understanding of accounting principles. Such employees' rates of compensation are well below those of programmers. Thus, the inventions also transformed computers running forms applications from those that require programmers to configure them to those that do not.

107. The inventions of the Aatrix Patents improve the functioning of the data processing systems, computers, and other hardware that are incorporated in the claims in ways including but not limited to those described in ¶¶38-39 above.

108. The inventions claimed in the Aatrix Patents enable systems that are capable of producing exact on-screen copies of published forms, although the inventions are not limited to creating exact copies. The ability to make an exact copy is highly desirable particularly where governmental agencies that publish forms will not allow

electronic forms that are not created on exact copies, nor will they accept returns or reports that are not exact copies. Some prior art solutions such as JetForm 1.0 displayed a viewable form. However, the form was a set of blanks without the background of the original form, so the user was left to his or her own devices to understand what the values in the viewable form represented, unless the forms designer was able to create an *ad hoc* replica of the original form using the prior art solution's form design capabilities. Some prior art would allow a user to put a blank published form in a printer and print out the values onto that form. However, the user was left to his or her own devices with respect to formatting the output so that values were printed in the box or blank where they belonged, in a type size conforming to the box or blank.

109. The inventions claimed in the Aatrix Patents allow data to be imported into the viewable electronic form from outside applications. Prior art forms solutions allowed data to be extracted only from widely available databases with published database schemas, not the proprietary data structures of application software. The inventions of the Aatrix Patents allowed data to be imported from an end user application without needing to know proprietary database schemas and without having to custom program the form files to work with each outside application. The inventions of the Aatrix Patents permit data to be retrieved from a user application and inserted into a form, eliminating the need for hand typing in the values and eliminating the risk of transcription error.

110. Another principal object and advantage of the invention claimed in the Aatrix Patents is that it performs calculations on the imported data and allows the user to review and change the data and create viewable forms and reports.

111. Another object and advantage of the present invention is that it allows the creation of an electronically fileable form from the viewable form, based on a template.

112. Another object and advantage of the present invention is that it allows the electronically fileable form to be electronically filed in a variety of formats.

113. Another object and advantage of the present invention is that it allows the deployment of components of the software across multiple, electronically connected computers, devices, or systems, and is usable cross-platform, that is, regardless of whether the connected computers, devices or systems are a Macintosh, a Windows-based PC, or some other computer type.

114. Another object and advantage of the present invention is that it allows the distribution of updated form files and data files, via electronic communication such as the Internet, separate from the distribution of updated software that uses those files and without requiring distribution of physical media.

115. The inventions of the Aatrix Patents, and the claims of the Patents, represent new, novel and useful improvements over the existing and/or patentably distinct means and methods.

116. The Aatrix Patents, having been duly examined, allowed, and issued, for which Aatrix paid substantial fees to the USPTO, represent property rights of Aatrix,

and Defendant has, as herein set forth, infringed those rights. Aatrix estimates that the research and development cost of bringing the inventions to the point of reduction to practice in or about 1995 was $500,000, and the research and development cost of creating the end product that it was able to bring to market was an additional $2-3 million.

COUNT I

INFRINGEMENT OF U.S. PATENT 7,171,615

117. Paragraphs 1-116 hereof are incorporated herein by reference.

118. On January 30, 2007, United States Letters Patent No. 7,171,615 was duly and legally issued to Arthur D. Jensen and Steven H.N. Lunseth for a Method and Apparatus for Creating and Filing Forms (the "`615 Patent"). The '615 patent was assigned to Plaintiff Aatrix as reflected on the face of the patent and in the records of the United States Patent and Trademark Office ("USPTO"), and Plaintiff Aatrix has owned the '615 Patent throughout the period of the defendant's infringing acts and still owns the patent by assignment. A copy of the '615 Patent is attached as Exhibit A.

119. Defendant Green Shades has infringed and is still infringing the '615 Patent by making, selling, and using methods and apparatuses that embody the patented invention, and Defendant Green Shades will continue to do so unless enjoined by this court.

120. Defendant Green Shades makes, uses, sells and offers to sell two different software product packages and operates the products and components of the products on computers and data processing systems in infringement of the patent, as previously

alleged herein. They are called the TFC and the PTS. In about March 2015, Defendant attempted to create and implemented a redesign of both software products. Defendant loads the software on at least one computer and operates it. Plaintiff has, through experts, examined the source code for both the TFC and the PTS, and for the redesigned software for both products as well as prior versions of the TFC and PTS. The inspection, analysis and review of the software products has been pursuant to a process which has been both Confidential by agreement of the parties, and Confidential by virtue of this Court's Protective Order (Dkts. 15-17) previously entered in this case. Plaintiff is able to state in detail the structures and methods of Defendant's products that cause the Aatrix Patents to both be infringed, but Plaintiff is barred from setting those forth in this Second Amended Complaint in such detail by virtue of confidentiality restrictions. Plaintiff is able to do so within a reasonable period of time after filing of this Second Amended Complaint, in such confidential manner as is Ordered by the Court.

121. Plaintiff Aatrix has complied with the statutory requirement of placing a notice of the '615 Patent on the products it manufactures and sells by placing such notice on Aatrix's website, through which Aatrix's software products are obtained by purchasers. Plaintiff Aatrix has notified Defendant Green Shades of its patent, and its concerns that Defendant Green Shades has and continues to infringe the '615 Patent.

122. The Green Shades products that infringe the '615 Patent are the TFC and the PTS, which are made, used, offered for sale and sold by Green Shades, or made available by Green Shades for licensed use over the Internet. It is the understanding of

Plaintiff Aatrix that the difference between the TFC and the PTS is that the TFC is an installed software package, while the PTS is software as a web service, hosted on servers and accessed by a user over the Internet.

123. Plaintiff alleges that the PTS and TFC products and services of Defendant Green Shades directly infringe the '615 Patent. Alternatively, Plaintiff alleges that Defendant conditions participation in the use of its products and the receipt of the benefits upon allowing Defendant's products to create a data file on a customer's data processing system, or to deliver a data file to the customer's system, or for the customer to follow the instructions, directions or suggestions of Defendant for the creation of a data file, and to operate on a data file and a form file supplied by Defendant, using a form viewer program or programs supplied by the Defendant. Defendant establishes the manner or timing of that performance. Defendant Green Shades is liable for its direct infringement of the '615 Patent, or alternatively, vicariously liable for infringement by virtue of operations it causes or directs or suggests to be conducted on a customer's data processing system to its profit, which it has the ability to stop or prevent.

124. Defendant infringes the '615 Patent under the Doctrine of Equivalents. Among other things, Plaintiff understands Defendant to contend that certain limitations of claims of the Aatrix Patents, such as the form file limitation, are limited to a single file when one skilled in the art would know that the functions can be divided into two or more files that are equivalents of a single file.

125. On information and belief, Defendant Green Shades has known of the '615 Patent since its date of issue and has knowingly and willfully infringed the '615 Patent in willful disregard of the patent rights held by Plaintiff Aatrix.

126. The claims of the '615 Patent that are known by Plaintiff to infringe the Patent based on Plaintiff's examination of the PTS (both the pre- and post-March 2015 versions) are Claims 1, 5, 22, 23, 28-34, and 36-39. Plaintiff alleges on information and belief that Claims 2-4, 6-10, 24-27, and 35 are also infringed by the PTS.

127. The claims of the '615 Patent that are known by Plaintiff to infringe the Patent based on Plaintiff's examination of the TFC (both the pre- and post-March 2015 versions) are Claims 1, 2, 5, 22, 28, 33, and 36-39. Plaintiff alleges on information and belief that Claims 3, 4, 6-10, 23-27, 29-32, 34, and 35 are also infringed by the TFC.

128. The acts and infringements by Defendant Green Shades as alleged herein have caused and will continue to cause Plaintiff Aatrix harm and damages, including but not limited to lost sales and profits.

COUNT II

CONTRIBUTORY INFRINGEMENT OF U.S. PATENT 7,171,615

129. Paragraphs 1-128 are incorporated herein by reference.

130. Defendant had actual knowledge of Plaintiff's '615 Patent by at least the end of September, 2014. Plaintiff's counsel sent a letter enclosing the '615 Patent on or about September 25, 2014. Defendant also knew or was willfully blind to the fact that its products and services in the form of the TFC and the PTS would be purchased or

licensed by others and used as part of systems and processes which infringed the '615 Patent.

131. Defendant sold or offered to sell within the United States the components of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use, and Defendant is thereby liable for contributory infringement of the '615 Patent.

132. Defendant's acts of contributory infringement as alleged herein have caused and will continue to cause Plaintiff Aatrix harm and damages, including but not limited to lost sales and profits.

COUNT III

INDUCEMENT TO INFRINGE U.S. PATENT 7,171,615

133. Paragraphs 1-132 are incorporated herein by reference.

134. Defendant actively induced infringement of the '615 Patent and sold or held out for license the TFC and PTS products and services with advertising or instructions about an infringing use.

135. Defendant is liable for inducement to infringe the '615 Patent.

136. Defendant's acts inducing infringement have caused and will continue to cause Plaintiff Aatrix harm and damages, including but not limited to lost sales and profits.

COUNT IV

INFRINGEMENT OF U.S. PATENT 8,984,393

137. Plaintiff incorporates herein paragraphs 1-136 hereof by reference.

138. On March 17, 2015, United States Letters Patent No. 8,984,393 was duly and legally issued to Arthur D. Jensen and Steven H.N. Lunseth for a Method and Apparatus for Creating and Filing Forms (the "`393 Patent"). The '393 patent was assigned to Plaintiff Aatrix as reflected on the face of the patent and in the records of the United States Patent and Trademark Office ("USPTO"), and Plaintiff Aatrix has owned the '393 Patent throughout the period of the defendant's infringing acts and still owns the patent by assignment. A copy of the '393 Patent is attached as Exhibit B.

139. Defendant Green Shades has infringed and is still infringing the '393 Patent by making, selling, and using methods and apparatuses that embody the patented invention, and Defendant Green Shades will continue to do so unless enjoined by this court.

140. Plaintiff Aatrix has notified Defendant Green Shades of the '393 patent, and Defendant Green Shades has had actual notice of the '393 Patent since at least the date of allowance of the Patent.

141. Defendant Green Shades makes, uses, sells and offers to sell, and licenses two different software products and operates the products and components of the products on computers and data processing systems in infringement of the patent, as previously alleged herein. They are called the TFC and the PTS. In about March 2015, Defendant attempted to create and implemented a redesign of both software products.

Defendant loads the software on at least one computer and operates it. Plaintiff has, through experts, examined the source code for both the TFC and the PTS, and for the redesigned software for both products as well as prior versions of the TFC and PTS. The inspection, analysis and review of the software products has been pursuant to a process which has been both Confidential by agreement of the parties, and Confidential by virtue of this Court's Protective Order (Dkts. 15-17) previously entered in this case. Plaintiff is able to state in detail the structures and methods of Defendant's products that cause the Aatrix Patents to both be infringed, but Plaintiff is barred from setting those forth in such detail in this Second Amended Complaint by virtue of the confidentiality restrictions. Plaintiff is able to do so within a reasonable period of time after filing of this Second Amended Complaint, in such confidential manner as is Ordered by the Court..

142. Plaintiff alleges that the PTS and TFC products and services of Defendant Green Shades directly infringe the '393 Patent. Alternatively, Plaintiff alleges that Defendant conditions participation in the use of its products and the receipt of the benefits upon allowing Defendant's products to create a data file on a customer's data processing system, or deliver a data file to the customer's system, or for the customer to follow the instructions, directions or suggestions of Defendant for the creation of a data file, and to operate on a data file and a form file supplied by Defendant, using a form viewer program or programs supplied by the Defendant. Defendant establishes the manner or timing of that performance. Defendant Green Shades is liable for its direct

infringement of the ‘393 Patent, or alternatively, vicariously liable for infringement by virtue of operations it causes or directs or suggests to be conducted on a customer’s data processing system to its profit, which it has the ability to stop or prevent.

143. Defendant infringes the ‘393 Patent under the Doctrine of Equivalents. Among other things, Plaintiff understands Defendant to contend that certain limitations of claims the Aatrix Patents, such as the form file limitation, are limited to a single file when one skilled in the art would know that the functions can be divided into two or more files that are equivalents of a single file.

144. On information and belief, Defendant Green Shades has known of the ‘393 Patent since its date of issue and has knowingly and willfully infringed the ‘393 Patent in willful disregard of the patent rights held by Plaintiff Aatrix.

145. The claims of the '393 Patent that are known by Plaintiff to infringe the Patent based on Plaintiff's examination of the PTS (both the pre- and post-March 2015 versions) are Claims 1, 2, 7, and 13-17. Plaintiff alleges on information and belief that Claims 3-6 and 8-12 are also infringed by the PTS.

146. The claims of the '393 Patent that are known by Plaintiff to infringe the Patent based on Plaintiff's examination of the TFC (both the pre- and post-March 2015 versions) are Claims 1, 2, 7, 13-17. Plaintiff alleges on information and belief that Claims 3-6 and 8-12 are also infringed by the TFC.

147. The acts and infringements by Defendant Green Shades as alleged herein have caused and will continue to cause Plaintiff Aatrix harm and damages, including but not limited to lost sales and profits.

COUNT V

CONTRIBUTORY INFRINGEMENT OF U.S. PATENT 8,984,393

148. Paragraphs 1-147 are incorporated herein by reference.

149. Defendant had actual knowledge of the allowance of Plaintiff's '393 Patent by at least February 12, 2015 when its counsel received a letter from Plaintiff's counsel notifying of the allowance of the Patent. Defendant knew of the issuance of the '393 Patent on or about the issue date of the Patent, and in any event no later than the date of service of the Amended Complaint in the present lawsuit. Defendant also knew or was willfully blind to the fact that its products and services in the form of the TFC and the PTS would be purchased or licensed by others and used as part of systems and processes which infringed the '393 Patent.

150. Defendant sold or offered to sell within the United States the components of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use, and Defendant is thereby liable for contributory infringement of the '393 Patent.

151. Defendant's acts of contributory infringement as alleged herein have caused and will continue to cause Plaintiff Aatrix harm and damages, including but not limited to lost sales and profits.

COUNT VI

INDUCEMENT TO INFRINGE U.S. PATENT 8,984,393

152. Paragraphs 1-151 are incorporated herein by reference.

153. Defendant actively induced infringement of the '393 Patent and sold or held out for license the TFC and PTS products and services with advertising or instructions about an infringing use.

154. Defendant is liable for inducement to infringe the '393 Patent.

155. Defendant's acts inducing infringement have caused and will continue to cause Plaintiff Aatrix harm and damages, including but not limited to lost sales and profits.

THEREFORE, PLAINTIFF AATRIX REQUESTS:

(a) Judgment that the TFC and PTS softwares infringe, and have infringed Aatrix's '615 Patent and Aatrix's '393 Patent, either directly, by virtue of Defendant's vicarious liability for the acts of others, and/or under the Doctrine of Equivalents;

(b) Judgment that Defendant has and is liable for contributory infringement or inducement to infringe the '615 and '393 Patents;

(c) a preliminary and final injunction against the continuing infringement, whether direct, vicarious, contributory or by inducement;

(d) an accounting for damages, including but not limited to Aatrix's lost sales and profits, or in the alternative, a reasonable royalty, and a trebling of damages because of the knowing, willful, and wanton nature of Defendant Greenshade's conduct;

(e) interest and costs;

(f) an award of Plaintiff Aatrix's attorneys' fees and costs in this action; and

(g) such other and further relief as the Court deems just and equitable.

Dated: April 25, 2016

By s/John B. Lunseth
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