IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF TEXAS MARSHALL DIVISION

511 TECHNOLOGIES INC.; and CADDO SYSTEMS, INC,	
Plaintiff, v.	Case No.
SK HYNIX, INC., and SK HYNIX, AMERICA INC.,	Jury Trial Demanded
Defendant.	

COMPLAINT FOR PATENT INFRINGEMENT

In this action for patent infringement, Plaintiff 511 Technologies Inc. and Caddo Systems, Inc. ("Plaintiffs") make the following allegations against SK Hynix, Inc. and SK Hynix America, Inc. (collectively referred to hereinafter as "Defendant").

BACKGROUND

- 1. Plaintiffs are the exclusive assignee and/or licensee of all right, title, and interest to the patent-in-suit, U.S. Patent No. 8,352,880 (the "'880 Patent), and certain related patents, including U.S. Patent No. 7,191,411 (the "'411 Patent), U.S. Patent No. 7,216,301 ("'301 Patent"), U.S. Patent No. 7,640,517 ("'517 Patent), and U.S. Patent No. 7,725,836 "'836 Patent, as well as certain pending application (the "Moehrle Patents") from their inventor, Armin Moehrle.
- 2. Nearly fifteen years ago, Mr. Moehrle began the process of patenting the inventions disclosed in the Moehrle patents and certain outstanding applications.
- 3. Since his training as an architect and city planner in the early 90s, Mr. Moehrle has been fascinated with navigation and orientation of humans in the physical space. When Mr. Moehrle entered the information systems design world in the late 90s, he was surprised by the data-centric dominance of user interface design and started to apply human-centered design principles to the design of information systems. By observing how users interact with

information systems, he realized the inefficiencies and frustrations of human computer interaction.

- 4. Mr. Moehrle invented ways of overcoming these drawbacks, and for navigating hierarchical menu structures more efficiently. His inventions improved upon the then-available technology.
- 5. Mr. Moehrle disclosed his inventions to the public, had the claims repeatedly scrutinized on grounds of eligibility, novelty, nonobviousness, written description, and enablement by examiners at the U.S. Patent Office, overcame several prior art references through prosecution proceedings, paid and continues to pay filing and maintenance fees to the Patent Office, and was awarded the Moehrle Patents. Because of those actions, the public has benefitted from Mr. Moehrle's disclosures, and each claim of each patent is statutorily protected by a presumption of validity that can be rebutted only by clear and convincing evidence.
- 6. The Moehrle Patents consist of a single family of five patents, examined by at least three different examiners and containing over 50 issued claims.
- 7. The Moehrle Patents include the '880 patent-in-suit, which, according to its abstract discloses "a method of navigating an information structure comprising: providing a graphical menu interface displaying the items of a given level of the information structure and enabling selection thereof; dynamically constructing an active path as a sequence of active links after an item of the information structure has been selected; said active links allowing the display of one or more items on a given level of the information structure; and said active links allowing a user to access an item in the information structure by selecting from the one or more items displayed by one of the active links on the active path."
- 8. The examiners who issued the Moehrle Patents examined claims in parent and related applications, and repeatedly cited many prior art references, before satisfying themselves that the claims of the patents differed substantially from the paradigm of earlier technology.
- 9. During examination of the Moehrle Patents, the U.S. Patent Office had access to and knowledge of the then-current state of the art and earlier technology. For the '880 Patent

alone, the materials cited on the face of the patent and considered by the examiners include U.S. patents and published applications, foreign patent documents, and non-patent references.

- 10. Examination of the Moehrle patents has extended over fourteen years and continues today in pending patent applications.
- 11. The claims of the Moehrle Patents comprise meaningful, technological limitations that, when combined in the claims, define inventions that operate in a new paradigm compared to earlier ways navigating hierarchical information systems.
- 12. Earlier methods of navigating hierarchical information systems included a "collapsing menu system" in which the "navigation always commences from the initial or root level and . . . the menu collapses back to the root level after a selection is made." '880 Patent at 1:29-36. "The problem with the collapsing menu system is that navigation must always commence from the root level. Consequently, more experienced users are unable to take advantage of their knowledge of the hierarchical structure to directly access a given level." *Id.* at 1:65-2:3. Another method was using pre-defined short-cuts which were not desirable as it "required the user to memorize and enter complex hierarchical sequences" which "was time consuming and not suitable for users who have not memorized the path." *Id.* at 1:21-64; 2:3-26.
- 13. The '880 Patent, and the rest of the Moerhle Patents solved this problem creating an "Active Path" which was defined as a "dynamically constructed as a sequence of active links as items are selected using the graphical user menu system, with one active link correspond to each of the items selected. The active links provide direct access to a function corresponding level or menu item without the need to navigate using the graphical user menu system." *Id.* at 2:37-47. Further, "navigation using the Active Path is accomplished by rolling over an active link with a pointing device or selecting an active link using a pointing device. Rolling over a given active link triggers the display of sibling menu items on the level associated with the given active link. Selecting a given active link triggers the execution of a function associated with the given active link." *Id.* at 54-61.

- 14. Other ways of navigating hierarchical menu structures that were distinct and not preempted by Mr. Moehrle's inventions included, for example, a prior art reference to MacPhail that appears on the face of, and was addressed during the prosecution history of, the '880 Patent.
- 15. In considering the MacPhail reference in the context of his inventions, Mr. Moerhle explained during the prosecution history the '880 Patent that: it "fails to disclose or suggest the feature of independent Claim 1 where, upon provisional selection of any said active link, displaying one or more items on a given level of the information structure without affecting the active path." The examiner issued a notice of allowance based on this distinction of MacPhail.
- 16. Plaintiffs seek monetary damages for Defendant's infringement and a permanent injunction prohibiting Defendant from continuing to infringe the patents-in-suit.

PARTIES

- 17. 511 Technologies Inc. ("511 Tech") is a Texas corporation with its principal place of business at 511 N. Washington Avenue, Marshall, Texas 75670. Since 2010, 511 Tech has operated the 511 Technology Center, including the provision of invention, patent and product development support services in diverse fields including color measurement, flash storage devices, communication protocols, electronic circuitry, software development, energy storage and control, and art instruction from its headquarters in the former Coca-Cola bottling plant located in the Ginocchi Historic District in Marshall, Texas.
- 18. Caddo Systems, Inc. is a Texas company with its principal place of business in the 511 Technology Center at 511 N. Washington Avenue, Marshall, Texas 75670.
- 19. In collaboration with 511 Tech and others working in the 511 Technology Center, Caddo Systems researches, designs, develops and markets information systems, including systems based on the Moerhle Patents. The Caddo Systems and 511 Tech collaboration includes software products utilizing inventions described and claimed in the Moerhle Patents.
- 20. Caddo is the owner by assignment of 100% interest in the Moerhle Patents. 511 Tech has the exclusive license to practice and develop the inventions of the Moerhle Patents.

- 21. On information and belief, Defendant SK Hynix, Inc. is a Korean corporation with its principal office at 2091, Gyeongchung-daero, Bubal-eup, Icheon-si, Gyeonggi, Republic of Korea.
- 22. On information and belief, Defendant SK Hynix America, Inc. is a California corporation with its principal place of business at 3101 North First Street, San Jose, CA 95134. On information and belief, SK Hynix America, Inc. has appointed The Prentice-Hall Corporation System, 211 E. 7th Street, Suite 620, Austin, TX 78701-3218 as its agent for service of process.
- 23. On information and belief, SK Hynix America Inc. maintains major offices in Texas and is registered with the Texas Secretary of State to do business in Texas.

JURISDICTION AND VENUE

- 24. This action arises under the patent laws of the United States, 35 U.S.C. § 1, et seq., including § 271. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a).
- 25. This Court has personal jurisdiction over Defendant because, among other reasons, Defendant has done business in this District, has committed and continues to commit acts of patent infringement in this District.
- 26. Venue is proper in this District under 28 U.S.C. §§ 1391(b)-(d) and 1400(b) because, among other reasons, Defendant is subject to personal jurisdiction in this District, and has committed and continues to commit acts of patent infringement in this District.

COUNT I

INFRINGEMENT OF U.S. PATENT NO. 7,191,411

- 27. Plaintiffs incorporate by reference each of the allegations in the foregoing paragraphs, and further allege as follows:
- 28. On March 13, 2007 the United States Patent and Trademark Office issued the '411 patent for inventions covering technology that includes methods for navigating within a multi-level hierarchical collapsing menu structure, each level in the menu structure containing plural items, each item being at least one of a function, a pointer to a location, and a pointer to another level. The methods including a step of providing a graphical user menu system

displaying the items of a given level and enabling selection thereof, wherein access of the given level requires sequential access of each of the levels preceding the given level in the hierarchy. An Active Path is dynamically constructed as a sequence of active links as items are selected using the graphical user menu system, with one active link correspond to each of the items selected. The active links provide direct access to a function corresponding level or menu item without the need to navigate using the graphical user menu system, as described and claimed in the '411 patent. 511 Tech and Caddo are the exclusive licensees of all right, title, and interest in the '411 patent, including all rights to pursue and collect damages for past infringements of the patent. A true and correct copy of the '411 patent is attached as Exhibit A.

- 29. Defendant has been and is now directly infringing one or more claims of the '411 patent, in this judicial District and elsewhere in the United States, by, among other things, through its website https://www.skhynix.com (hereinafter, "Website"), which contains a navigation system for its customers and potential customers that comprises: navigating within a multi-level hierarchical collapsing menu structure, each level in the menu structure containing plural items, each item being at least one of a function, a pointer to a location, and a pointer to another level. The methods including a step of providing a graphical user menu system displaying the items of a given level and enabling selection thereof, wherein access of the given level requires sequential access of each of the levels preceding the given level in the hierarchy. An Active Path is dynamically constructed as a sequence of active links as items are selected using the graphical user menu system, with one active link correspond to each of the items selected. The active links provide direct access to a function corresponding level or menu item without the need to navigate using the graphical user menu system.
- 30. Defendant has committed these acts of infringement without license or authorization.
- 31. By engaging in the conduct described herein, Defendant has injured Plaintiffs and is thus liable for infringement of the '411 patent under 35 U.S.C. § 271.
- 32. As a result of Defendant's infringement of the '411 patent, Plaintiffs have been damaged and are entitled to a money judgment in an amount adequate to compensate for

Defendant's infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendant, together with interest and costs as fixed by the Court.

- 33. Plaintiffs have also suffered and will continue to suffer severe and irreparable harm unless this Court issues a permanent injunction prohibiting Defendant, its agents, servants, employees, representatives, and all others acting in active concert therewith from infringing the '411 patent.
- 34. To the extent that facts learned in discovery show that Defendant's infringement of the '411 patent is or has been willful, Plaintiffs reserve the right to request such a finding at the time of trial.

COUNT II

INFRINGEMENT OF U.S. PATENT NO. 7,216,301

- 35. Plaintiffs incorporate by reference each of the allegations in the foregoing paragraphs, and further allege as follows:
- 36. On May 8, 2007 the United States Patent and Trademark Office issued the '301 patent for inventions covering technology that includes methods for navigating within a multilevel hierarchical collapsing menu structure, each level in the menu structure containing plural items, each item being at least one of a function, a pointer to a location, and a pointer to another level. The methods including a step of providing a graphical user menu system displaying the items of a given level and enabling selection thereof, wherein access of the given level requires sequential access of each of the levels preceding the given level in the hierarchy. An Active Path is dynamically constructed as a sequence of active links as items are selected using the graphical user menu system, with one active link correspond to each of the items selected. The active links provide direct access to a function corresponding level or menu item without the need to navigate using the graphical user menu system, as described and claimed in the '301 patent. 511 Tech and Caddo are the exclusive licensees of all right, title, and interest in the '301 patent, and any patent to which the '301 Patent is subject to a terminal disclaimer, including all rights to pursue and collect damages for past infringements of the patent. A true and correct copy of the '301 patent is attached as Exhibit B.

- patent, in this judicial District and elsewhere in the United States, by, among other things, through its Website, which contains a navigation system for its customers and potential customers that comprises: navigating within a multi-level hierarchical collapsing menu structure, each level in the menu structure containing plural items, each item being at least one of a function, a pointer to a location, and a pointer to another level. The methods including a step of providing a graphical user menu system displaying the items of a given level and enabling selection thereof, wherein access of the given level requires sequential access of each of the levels preceding the given level in the hierarchy. An Active Path is dynamically constructed as a sequence of active links as items are selected using the graphical user menu system, with one active link correspond to each of the items selected. The active links provide direct access to a function corresponding level or menu item without the need to navigate using the graphical user menu system.
- 38. Defendant has committed these acts of infringement without license or authorization.
- 39. By engaging in the conduct described herein, Defendant has injured Plaintiffs and is thus liable for infringement of the '301 patent under 35 U.S.C. § 271.
- 40. As a result of Defendant's infringement of the '301 patent, Plaintiffs have been damaged and are entitled to a money judgment in an amount adequate to compensate for Defendant's infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendant, together with interest and costs as fixed by the Court.
- 41. Plaintiffs have also suffered and will continue to suffer severe and irreparable harm unless this Court issues a permanent injunction prohibiting Defendant, its agents, servants, employees, representatives, and all others acting in active concert therewith from infringing the '301 patent.
- 42. To the extent that facts learned in discovery show that Defendant's infringement of the '301 patent is or has been willful, Plaintiffs reserve the right to request such a finding at the time of trial.

COUNT III

INFRINGEMENT OF U.S. PATENT NO. 7,640,517

- 43. Plaintiffs incorporate by reference each of the allegations in the foregoing paragraphs, and further allege as follows:
- 44. On December 29, 2009, the United States Patent and Trademark Office issued the '517 patent for inventions covering technology that includes methods for navigating within a multi-level hierarchical collapsing menu structure, each level in the menu structure containing plural items, each item being at least one of a function, a pointer to a location, and a pointer to another level. The methods including a step of providing a graphical user menu system displaying the items of a given level and enabling selection thereof, wherein access of the given level requires sequential access of each of the levels preceding the given level in the hierarchy. An Active Path is dynamically constructed as a sequence of active links as items are selected using the graphical user menu system, with one active link correspond to each of the items selected. The active links provide direct access to a function corresponding level or menu item without the need to navigate using the graphical user menu system, as described and claimed in the '517 patent. 511 Tech and Caddo are the exclusive licensees of all right, title, and interest in the '517 patent, and any patent to which the '517 patent is subject to a terminal disclaimer, including all rights to pursue and collect damages for past infringements of the patent. A true and correct copy of the '517 patent is attached as Exhibit C.
- 45. Defendant has been and is now directly infringing one or more claims of the '517 patent, in this judicial District and elsewhere in the United States, by, among other things, through its Website, which contains a navigation system for its customers and potential customers that comprises: navigating within a multi-level hierarchical collapsing menu structure, each level in the menu structure containing plural items, each item being at least one of a function, a pointer to a location, and a pointer to another level. The methods including a step of providing a graphical user menu system displaying the items of a given level and enabling selection thereof, wherein access of the given level requires sequential access of each of the levels preceding the given level in the hierarchy. An Active Path is dynamically constructed as a

sequence of active links as items are selected using the graphical user menu system, with one active link correspond to each of the items selected. The active links provide direct access to a function corresponding level or menu item without the need to navigate using the graphical user menu system.

- 46. Defendant has committed these acts of infringement without license or authorization.
- 47. By engaging in the conduct described herein, Defendant has injured Plaintiffs and is thus liable for infringement of the '517 patent under 35 U.S.C. § 271.
- 48. As a result of Defendant's infringement of the '517 patent, Plaintiffs have been damaged and are entitled to a money judgment in an amount adequate to compensate for Defendant's infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendant, together with interest and costs as fixed by the Court.
- 49. Plaintiffs have also suffered and will continue to suffer severe and irreparable harm unless this Court issues a permanent injunction prohibiting Defendant, its agents, servants, employees, representatives, and all others acting in active concert therewith from infringing the '517 patent.
- 50. To the extent that facts learned in discovery show that Defendant's infringement of the '517 patent is or has been willful, Plaintiffs reserve the right to request such a finding at the time of trial.

COUNT IV

INFRINGEMENT OF U.S. PATENT NO. 7,725,836

- 51. Plaintiffs incorporate by reference each of the allegations in the foregoing paragraphs, and further allege as follows:
- 52. On May 25, 2010, the United States Patent and Trademark Office issued the '836 patent for inventions covering technology that includes methods for navigating within a multilevel hierarchical collapsing menu structure, each level in the menu structure containing plural items, each item being at least one of a function, a pointer to a location, and a pointer to another level. The methods including a step of providing a graphical user menu system displaying the

items of a given level and enabling selection thereof, wherein access of the given level requires sequential access of each of the levels preceding the given level in the hierarchy. An Active Path is dynamically constructed as a sequence of active links as items are selected using the graphical user menu system, with one active link correspond to each of the items selected. The active links provide direct access to a function corresponding level or menu item without the need to navigate using the graphical user menu system, as described and claimed in the '836 patent. 511 Tech and Caddo are the exclusive licensees of all right, title, and interest in the '836 patent, and any patent to which the '836 patent is subject to a terminal disclaimer, including all rights to pursue and collect damages for past infringements of the patent. A true and correct copy of the '836 patent is attached as Exhibit D.

- patent, in this judicial District and elsewhere in the United States, by, among other things, through its Website, which contains a navigation system for its customers and potential customers that comprises: navigating within a multi-level hierarchical collapsing menu structure, each level in the menu structure containing plural items, each item being at least one of a function, a pointer to a location, and a pointer to another level. The methods including a step of providing a graphical user menu system displaying the items of a given level and enabling selection thereof, wherein access of the given level requires sequential access of each of the levels preceding the given level in the hierarchy. An Active Path is dynamically constructed as a sequence of active links as items are selected using the graphical user menu system, with one active link correspond to each of the items selected. The active links provide direct access to a function corresponding level or menu item without the need to navigate using the graphical user menu system.
- 54. Defendant has committed these acts of infringement without license or authorization.
- 55. By engaging in the conduct described herein, Defendant has injured Plaintiffs and is thus liable for infringement of the '836 patent under 35 U.S.C. § 271.
 - 56. As a result of Defendant's infringement of the '836 patent, Plaintiffs have been

damaged and are entitled to a money judgment in an amount adequate to compensate for Defendant's infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendant, together with interest and costs as fixed by the Court.

- 57. Plaintiffs have also suffered and will continue to suffer severe and irreparable harm unless this Court issues a permanent injunction prohibiting Defendant, its agents, servants, employees, representatives, and all others acting in active concert therewith from infringing the '836 patent.
- 58. To the extent that facts learned in discovery show that Defendant's infringement of the '836 patent is or has been willful, Plaintiffs reserve the right to request such a finding at the time of trial.

COUNT V

INFRINGEMENT OF U.S. PATENT NO. 8,352,880

- 59. Plaintiffs incorporate by reference each of the allegations in the foregoing paragraphs, and further allege as follows:
- 60. On January 8, 2013 the United States Patent and Trademark Office issued the '880 patent for inventions covering technology that navigates an information structure comprising: providing a graphical menu interface displaying the items of a given level of the information structure and enabling selection thereof; dynamically constructing an active path as a sequence of active links after an item of the information structure has been selected; said active links allowing the display of one or more items on a given level of the information structure; and said active links allowing a user to access an item in the information structure by selecting from the one or more items displayed by one of the active links on the active path, as described and claimed in the '880 patent. 511 Tech and Caddo are the exclusive licensees of all right, title, and interest in the '880 patent, and any patent to which the '880 Patent is subject to a terminal disclaimer, including all rights to pursue and collect damages for past infringements of the patent. A true and correct copy of the '880 patent is attached as Exhibit E.
- 61. Defendant has been and is now directly infringing one or more claims of the '880 patent, in this judicial District and elsewhere in the United States, by, among other things,

through its Website, which contains a navigation system for its customers and potential customers that comprises: providing a graphical menu interface displaying the items of a given level of the information structure and enabling selection thereof; dynamically constructing an active path as a sequence of active links after an item of the information structure has been selected; said active links allowing the display of one or more items on a given level of the information structure; and said active links allowing a user to access an item in the information structure by selecting from the one or more items displayed by one of the active links on the active path.

- 62. Defendant has committed these acts of infringement without license or authorization.
- 63. By engaging in the conduct described herein, Defendant has injured Plaintiffs and is thus liable for infringement of the '880 patent under 35 U.S.C. § 271.
- 64. As a result of Defendant's infringement of the '880 patent, Plaintiffs have been damaged and are entitled to a money judgment in an amount adequate to compensate for Defendant's infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendant, together with interest and costs as fixed by the Court.
- 65. Plaintiffs have also suffered and will continue to suffer severe and irreparable harm unless this Court issues a permanent injunction prohibiting Defendant, its agents, servants, employees, representatives, and all others acting in active concert therewith from infringing the '880 patent.
- 66. To the extent that facts learned in discovery show that Defendant's infringement of the '880 patent is or has been willful, Plaintiffs reserve the right to request such a finding at the time of trial.

PRAYER FOR RELIEF

Plaintiffs respectfully request the following relief from this Court:

- A. A judgment in favor of Plaintiffs that Defendant has infringed the patents-in-suit;
- B. A permanent injunction enjoining Defendant and its officers, directors, agents, servants, affiliates, employees, divisions, branches, subsidiaries, parents, and all

others acting in active concert therewith from infringing of the patents-in-suit, or

such other equitable relief the Court determines is warranted;

C. A judgment and order requiring Defendant to pay Plaintiffs their damages, costs,

expenses, and pre-judgment and post-judgment interest for Defendant's

infringement of the patents-in-suit as provided under 35 U.S.C. § 284;

D. A judgment and order finding that this is an exceptional case within the meaning

of 35 U.S.C. § 285 and awarding to Plaintiffs their reasonable attorneys' fees

against Defendant;

E. A judgment and order requiring Defendants to provide an accounting and to pay

supplemental damages to Plaintiffs, including without limitation, pre-judgment

and post-judgment interest; and

F. Any and all other relief to which Plaintiffs may be entitled.

DEMAND FOR JURY TRIAL

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, Plaintiff requests a trial by jury of any issues so triable by right.

Dated: May 12, 2017 Russ August & Kabat

/s/ Marc Fenster

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