# IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

LAZER IP LLC,	
Plaintiff,	Case No.
<b>v.</b>	Jumy Twial Damandad
NXP SEMICONDUCTORS USA, INC.,	Jury Trial Demanded
Defendant.	

## **COMPLAINT FOR PATENT INFRINGEMENT**

Plaintiff Lazer IP LLC, by and through the undersigned counsel, files this Complaint for patent infringement against Defendant NXP Semiconductors USA, Inc. and in support states, all upon information and belief:

#### **PARTIES**

- 1. Plaintiff Lazer IP LLC 6009 W Parker Rd, Ste 149 1186, Plano, TX 75093-8121 ("Lazer" or "Plaintiff") is a limited liability company organized and existing under the laws of the State of Texas and having its office address at 6009 W Parker Rd, Ste 149 1186, Plano, TX 75093-8121.
- Defendant NXP Semiconductors USA, Inc. ("NXP" or "Defendant") is a
  corporation organized and existing under the laws of the State of Delaware. NXP maintains its
  registered office at Corporation Service Company, 251 Little Falls Drive, Wilmington, DE
  19808.

#### JURISDICTION AND VENUE

- 3. This is an action for patent infringement arising under the patent laws of the United States, 35 U.S.C. § 1 *et seq.*, including 35 U.S.C. §§ 271. This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a).
- 4. This Court has personal jurisdiction over Defendant at least because Defendant is a corporation organized under the laws of the State of Delaware.
- 5. Venue is proper in this Judicial District under 28 U.S.C. §§ 1391 and 1400(b) because Defendant is deemed to be a resident of this District.

### **PATENT 6,701,508**

- 6. U.S. Patent No. 6,701,508, entitled "Method And System For Using A Graphics User Interface For Programming An Electronic Device" (the "508 Patent") was duly and legally issued on March 2, 2004. A true and correct copy of the '508 Patent is attached as Exhibit A.
- 7. The Patent disclosed and exemplified a unique and valuable method for designing a microcontroller device using a design system having modularized user component modules defining functional components. Only the method claims of the '508 Patent are being asserted here.
- 8. Plaintiff is the named assignee of, owns all right, title and interest in, and has standing to sue and recover all past damages for infringement of the '508 Patent.
- 9. The method claims of the '508 Patent are patent eligible under 35 U.S.C. § 101. The claims are not abstract. The claims are directed to a novel improvement in designing devices by providing and using a flexible and customizable architecture that handles compute-intensive design aspects that would otherwise have to be handled by parallel operations. The result are methods of that can be adapted to evolving algorithms and workload needs.

- 10. The '508 Patent described the prior art methods to modify the contents of a microcontroller, and the difficulties and restrictions in such prior methods. The invention of the '508 Patent included the steps of compartmentalizing the design of a microcontroller by modularizing the various components that create the desired functionality of the microcontroller using a graphics user interface. The method includes modules which are made available to the programmer who can then retrieve information on selected predefined and pre-configured user modules of the desired microcontroller components. For example, at a high level, Claim 24 and its dependent claims provide for a method that comprises providing a workspace that includes selectable pre-configured modules for programming in a target microcontroller that can be placed in a workspace and providing a pin out workspace for specifying pin out information placed and selected user modules.
- 11. During the prosecution of the '508 Patent, the Examiner had asserted various prior art. With respect to the last item of prior art cited by the Examiner, the applicant had explained that the claims include, *inter alia*, providing "user modules," and particularly "selectable user modules each pre-configured components for programming in a target microcontroller; providing a user module placement workspace for placing selected ones of said plurality of user modules within allowable hardware resources; and providing a pin out workspace for specifying pin out information placed and selected user modules." The applicant further pointed out that providing the "user modules" was illustrated and defined in the specification, and that providing these modules benefited computer operation:

the user module selection allows a user to select any number of user modules from a catalog of user modules. For example, as shown in Figure 3 of the present application, a catalog of individual user modules is shown in subworkspace 310. From sub-workspace 310, a user may select a user module to be programmed into a microcontroller. In particular, the user module may be selected directly at the user module selection workspace, as claimed. As

described above, a user module is a circuit design that can be implemented by one or more hardware resources of the programmable microcontroller.

The user module placement workspace allows a user to place the selected user modules according to the hardware resources of the electronic device. Because a user module is implemented by one or more hardware resources of a microcontroller, the user module placement workspace "illustrates the placement of the user module with respect to available resources of the target microcontroller device in a hardware layout graphical display" (page 17, lines 15-17). In particular, the user module placement workspace is useful for presenting a user with a view of the specific hardware resources that a particular user module requires.

The user module pin out workspace allows a user to configure pin selections and drive types. As described in the present invention, the user module pin out workspace allows a designer to "connect internal ports of the system of user modules to external pins" (page 20, lines 26-27).

The three workspaces provided in the claimed embodiments of the present invention provide a useful tool for selection, placement, and pin selection for use in microcontroller design. In particular, each workspace performs a particular independent function, facilitating a particular step of a programmable microcontroller design process.

# 12. Applicant further pointed out that these claimed method steps that provide the benefit to computer functionality were not found in the prior art:

Applicants respectfully assert that the components as described in [the prior art] are not user modules as claimed. As described above, a user module is a circuit design that can be implemented by one or more hardware resources of the programmable microcontroller. In order to select and place user modules, as claimed, a corresponding programmable microcontroller having hardware resources is used. Applicants respectfully assert that [the prior art] does not teach, describe or suggest an electronic device configuration system utilizing user modules.

Furthermore, Applicants understand [the prior art] {sic} to system for interactive design and simulation of an electronic circuit allowing a user to design a circuit and view simulation results in the same display window. ... In particular, [the prior art] teaches a system that utilizes a single display window for presenting this graphical information (abstract). As described above, an aspect of the current invention provides a programming application that provides an organized device editor workspace for efficient programming of a microcontroller. By providing three distinct workspaces for performing particular function of the programming application, the present invention facilitates the design process of a microcontroller.

Applicants respectfully assert that [the prior art] in particular does not teach, describe or suggest a device editor sub-system comprising a user module selection, workspace, a user module placement workspace, and a user module pin out workspace as claimed. In contrast, [the prior art] teaches a system for designing and simulating a circuit using a single display window. ....

- 13. Thus, the '508 Patent claims focus on specific improvements in computer capabilities as opposed to an invention that simply uses computers as a tool. The focus of the claimed advance is on a solution to a technological problem arising in computer operations and provides a specific improvement in computer capabilities or functionality, rather than only claiming a desirable result or function.
- 14. Further, Claim 24 and its dependent claims, individually and as an ordered combination, recite an inventive concept, which is manifestly more than the application of an abstract idea using well-understood, routine, and conventional activities previously known to the industry. Prior to the present invention, there was no prior art disclosing a method for designing a microcontroller device by providing a workspace that includes selectable pre-configured modules for programming in a target microcontroller that can be placed in a workspace and providing a pin out workspace for specifying pin out information placed and selected user modules. Thus, even if somehow the claims were viewed as defining an abstract idea, the claimed unique and novel and unconventional combination of steps transform any abstract idea into a patent-eligible invention. For example, the prior art methods did not include providing a workspace that includes selectable pre-configured modules for programming in a target microcontroller that can be placed in a workspace and providing a pin out workspace for specifying pin out information placed and selected user modules.

#### **COUNT I – INFRINGEMENT OF THE '508 PATENT**

15. Plaintiff restates and incorporates by reference the foregoing allegations.

- 16. In violation of 35 U.S.C. § 271(a), NXP has practiced and continues to practice a method for designing a microcontroller device using a design system (e.g., MCUXpresso Integrated Development Environment ("IDE")) having modularized user component modules (e.g., various programmed and other predefined user modules) defining functional components (e.g., functional components like signal processing routines, input output type of the module, mathematical functions, etc. corresponding to various modules) (the accused methods are hereafter referred to collectively as "Accused Method").
- 17. Using the Accused Method necessarily and inherently required practicing the steps of Claim 24 of the '508 Patent and, at least dependent claims 25, 30 and 32 ("Asserted Claims"). Attached hereto as Exhibit 2, and incorporated herein by reference, is a claim chart detailing why practicing the Accused Method constituted and constitutes infringement of the Asserted Claims of the '508 Patent.
- 18. NXP's use of the invention is critical to the success of its sales of NXP's other product lines.
- 19. Further, NXP's use of the inventions benefited Defendant in that the invention was a material part of overall industry solutions from which Defendant may not have been able to benefit, but for its inclusion of the invention in its overall marketing of all its solutions.
- 20. NXP is also continuing to violate 35 U.S.C. § 271(b) ("Whoever actively induces infringement of a patent shall be liable as an infringer"). NXP will have had knowledge of the '508 Patent since at least the date of the filing of this Complaint. With knowledge of the '508 Patent, NXP will have induced its customers to acquire Defendant's products in this country and to practice in this country the methods of the Asserted Claims. The inducement is apparent in the instructions that NXP has provided and continues to provide to its customers, such as the

claims. The instructions are found, *inter alia*, at documents that NXP has published on its websites at, for example, <a href="https://www.nxp.com/design/software/development-software/mcuxpresso-software-and-tools-/mcuxpresso-integrated-development-environment-ide:MCUXpresso-IDE">https://www.nxp.com/design/software/development-software/mcuxpresso-software-and-tools-/mcuxpresso-integrated-development-environment-ide:MCUXpresso-IDE</a>, and particularly the training and support provided by NXP to its customers to practice the claimed methods as reflected in <a href="https://www.nxp.com/design/software/development-software/mcuxpresso-software-and-tools-/mcuxpresso-integrated-development-environment-ide:MCUXpresso-IDE?tab=Design\_Support\_Tab.">https://www.nxp.com/design/software/development-environment-ide:MCUXpresso-IDE?tab=Design\_Support\_Tab.</a>

- 21. As a result of NXP's infringement of the '508 Patent, Plaintiff has suffered damages.
- 22. Plaintiff is entitled to a money judgment in an amount adequate to compensate for NXP'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.
- 23. Patent marking is not an issue in this case, as Plaintiff is asserting only method claims.

#### **JURY DEMAND**

Plaintiff demands a trial by jury on all issues so triable.

#### PRAYER FOR RELIEF

Plaintiff Lazer IP LLC respectfully requests that the Court find in its favor and against Defendant NXP Semiconductors USA, Inc., and that the Court grant Plaintiff the following relief:

A. an adjudication that Defendant had infringed the '508 Patent;

- B. an award of damages to be paid by Defendant adequate to compensate Plaintiff for Defendant's past infringement of the '508 Patent, including pre-judgment and post-judgment interest, costs, expenses, and an accounting of all infringing acts; and
- C. any and all such further relief at law or in equity that the Court may deem just and proper, including but not limited to attorneys' fees.

Dated: January 27, 2021 Respectfully submitted by:

/s/ George Pazuniak George Pazuniak (#478) O'KELLY & ERNEST, LLC 824 N. Market Street Suite 1001A Wilmington, DE 19801 (302) 478-4230 gp@del-iplaw.com

Attorney for Plaintiff