

**IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF NEW YORK**

ANALOG INTEGRATIONS
CORPORATION

Plaintiff,

v.

MAGNACHIP SEMICONDUCTOR
CORPORATION

Defendant.

**COMPLAINT
PATENT INFRINGEMENT**
(Jury Trial Demanded)

COMPLAINT FOR PATENT INFRINGEMENT

Analog Integrations Corporation (“Analog” or “Plaintiff”) for its Complaint against Defendant MagnaChip Semiconductor Corporation (“MagnaChip” or “Defendant”) alleges the following:

NATURE OF THE ACTION

1. This is an action for patent infringement arising under the Patent Laws of the United States, 35 U.S.C. § 1 *et seq.*

THE PARTIES

2. Plaintiff Analog is a Taiwanese company organized and existing under the laws of Taiwan with a place of business at 1A1, 1 Li-Hsin 1st Rd., Science Park, Hsinchu 300, Taiwan.

3. Upon information and belief, MagnaChip is a corporation incorporated under the laws of Delaware, with a headquarters in South Korea at 891 Daechi-dong, Gangnam-gu, Seoul, 135-738, South Korea. MagnaChip trades its stock exclusively on the New York Stock Exchange

(NYSE); and, MagnaChip's primary distributor, Arrow Electronics, Inc., maintains several facilities in this judicial district.

4. Upon information and belief, Defendant sells and offers to sell products and services throughout the United States, including in this judicial district, and introduces products and services into the stream of commerce and that incorporate infringing technology knowing that they would be sold in this judicial district and elsewhere in the United States. Upon information and belief, Defendant sells and offers to sell products and services throughout the United States, including in this judicial district, and introduces products and services that perform infringing processes into the stream of commerce knowing that they would be sold in this judicial district and elsewhere in the United States.

JURISDICTION AND VENUE

5. This is an action for patent infringement arising under the Patent Laws of the United States, Title 35 of the United States Code.

6. This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a).

7. Venue is proper in this judicial district under 28 U.S.C. §§ 1391(b), (c), (d) and/or 1400(b). On information and belief, Defendant conducts business in this District, the claims alleged in this Complaint arise in this District, and the acts of infringement have taken place and are continuing to take place in this District.

8. Upon information and belief, Defendant conducts substantial business in this forum, directly or through intermediaries, including: (i) at least a portion of the infringements alleged herein; and (ii) regularly doing or soliciting business, engaging in other persistent courses of conduct and/or deriving substantial revenue from goods and services provided to individuals and business in California. Further, this Court has personal jurisdiction over Defendant because it

has purposely availed itself of the privileges and benefits of the laws of New York, at least by trading its stock exclusively on the NYSE. Additionally, MagnaChip's primary authorized distributor, Arrow Electronics, Inc., maintains a facility in this judicial district at 405 Lexington Ave, New York, NY, 10174.

COUNT I – INFRINGEMENT OF U.S. PATENT NO. 8,339,049

9. The allegations set forth in the foregoing paragraphs 1 through 8 are incorporated into this First Claim for Relief.

10. On December 25, 2012, U.S. Patent No. 8,339,049 patent (the "'049 patent") entitled "LED DRIVING CIRCUIT HAVING A LARGE OPERATIONAL RANGE IN VOLTAGE" was duly and legally issued by the United States Patent and Trademark Office. A true and correct copy of the '049 patent is attached as Exhibit 1.

11. Plaintiff is the assignee and owner of the right, title and interest in and to the '049 patent, including the right to assert all causes of action arising under said patents and the right to any remedies for infringement of them. Upon information and belief, Defendant has and continues to directly infringe at least claims 1, 3, 4, and 5 of the '049 patent by making, using, selling, importing and/or providing and causing to be used a driving circuit having a large operational voltage range and configured to drive a plurality of serially-coupled luminescent units. Specifically, the Accused Instrumentalities include but are not limited to Product Model No. MAP9000 and other similarly configured products.

12. Claim 1 of the '049 generally patent recites a driving circuit having a large operational voltage range and configured to drive a plurality of serially-coupled luminescent units. Specifically, the driving circuit includes a current-selecting circuit configured to control current paths in the plurality of luminescent units according to a plurality of current limits and

respective threshold voltages of corresponding light emitting diodes in the plurality of luminescent units. Additionally, the current-selecting circuit includes a plurality of current sources respectively configured to provide the plurality of current limits; and, a plurality of adjusting circuits respectively configured to adjust the plurality of current limits according to voltages established between two corresponding adjacent luminescent units among the plurality luminescent units.

13. The Accused Instrumentalities infringe claim 1 of the '049 patent. Specifically, the Accused Instrumentalities include a driving circuit having a large operational voltage range and configured to drive a plurality of serially-coupled luminescent units. (See e.g., MAP9000 data sheet.) Specifically, the Accused Instrumentalities include a current-selecting circuit configured to control current paths in the plurality of luminescent units according to a plurality of current limits and respective threshold voltages of corresponding light emitting diodes in the plurality of luminescent units. (*See e.g., Id.*) Additionally, the current-selecting circuit includes a plurality of current sources respectively configured to provide the plurality of current limits. (*See e.g., Id.*) Additionally, the Infringing Instrumentalities include a plurality of adjusting circuits respectively configured to adjust the plurality of current limits according to voltages established between two corresponding adjacent luminescent units among the plurality luminescent units. (*See e.g., Id.*)

14. Claim 3 of the '049 patent generally recites the driving circuit recited in claim 1, further comprising the current-selecting circuit and the plurality of serially-coupled luminescent units being arranged in a matrix. (*See e.g., Id.*)

15. The Accused Instrumentalities infringe claim 3 of the '049 patent. Specifically, within the Accused Instrumentalities, the current-selecting circuit and the plurality of serially-coupled luminescent units are arranged in a matrix. (*See e.g., Id.*)

16. Claim 4 generally recites the driving circuit of claim 1, further comprising that each luminescent unit includes a light emitting diode (LED).

17. The Accused Instrumentalities infringe claim 4 of the '049 patent. Specifically, within the Accused Instrumentalities, each luminescent unit includes a light emitting diode.

18. Claim 5 of the '049 patent generally recites the driving circuit of claim 1, further comprising that each luminescent unit includes a plurality of serially-coupled LEDs.

19. The Accused Instrumentalities infringe claim 5 of the '049 patent. Specifically, within the Accused Instrumentalities, each luminescent unit includes a plurality of serially-coupled LEDs. (*See e.g., Id.*)

20. On information and belief, the Accused Instrumentalities are marketed, provided to, and/or used by or for Defendant's partners, clients, customers and end users across the country and in this District.

21. Defendant was made aware of the '049 patent and its infringement thereof at least as of the filing and/or service of this Complaint.

22. Upon information and belief, since at least the time Defendant received notice, Defendant has induced and continues to induce others to infringe at least one claim of the '049 patent under 35 U.S.C. § 271(b) by, among other things, and with specific intent or willful blindness, actively aiding and abetting others to infringe, including but not limited to Defendant's partners, clients, customers, and end users, whose use of the Accused Instrumentalities constitutes direct infringement of at least one claim of the '049 patent.

23. In particular, Defendant's actions that aid and abet others such as its partners, customers, clients, and end users to infringe include advertising and distributing the Accused Instrumentalities and providing instruction materials, training, and services regarding the

Accused Instrumentalities. On information and belief, Defendant has engaged in such actions with specific intent to cause infringement or with willful blindness to the resulting infringement because Defendant has had actual knowledge of the '049 patent and knowledge that its acts were inducing infringement of the '049 patent since at least the date Defendant received notice that such activities infringed the '049 patent.

24. Upon information and belief, Defendant is liable as a contributory infringer of the '049 patent under 35 U.S.C. § 271(c) by offering to sell, selling and importing into the United States driving circuits and display devices to be especially made or adapted for use in an infringement of the '049 patent. The Accused Instrumentalities are a material component for use in practicing the '049 patent and are specifically made and are not a staple article of commerce suitable for substantial non-infringing use.

25. Plaintiff has been harmed by Defendant's infringing activities.

JURY DEMAND

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, Plaintiff demands a trial by jury on all issues triable as such.

PRAYER FOR RELIEF


WHEREFORE, Plaintiff demands judgment for itself and against Defendant as follows:

- A. An adjudication that Defendant has infringed the '049 patent;
- B. An award of damages to be paid by Defendant adequate to compensate Plaintiff for Defendant's past infringement of the '049 patent, and any continuing or future infringement through the date such judgment is entered, including interest, costs, expenses and an accounting of all infringing acts including, but not limited to, those acts not presented at trial;

C. A declaration that this case is exceptional under 35 U.S.C. § 285, and an award of Plaintiff's reasonable attorneys' fees; and

D. An award to Plaintiff of such further relief at law or in equity as the Court deems just and proper.

Dated: 11/6/2016



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