IN THE UNITED STATES DISTRICT COURT
FOR DISTRICT OF DELAWARE

NORTH STAR INNOVATIONS INC. **Plaintiff,** **v.** **NANYA TECHNOLOGY CORP. U.S.A., and NANYA TECHNOLOGY CORP.,** **Defendants.**	**C.A. No. _____** **JURY TRIAL DEMANDED**

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff, North Star Innovations Inc., by and through its undersigned counsel, files this Complaint for Patent Infringement against Defendants Nanya Technology Corp. U.S.A. and Nanya Technology Corp. (collectively "Nanya" or "Defendants").

THE PARTIES

1. Plaintiff North Star Innovations Inc. ("NSI") is a corporation formed under the laws of the State of Delaware with its principal place of business at Plaza Tower, 600 Anton Boulevard, Suite 1350, Costa Mesa, CA 92626. NSI is an owner of seminal patents in the field of semiconductor and computer memory technologies, and is actively engaged in the licensing of such technologies.

2. Nanya Technology Corp. U.S.A. ("Nanya US") is a company organized under the laws of the State of Delaware and having a principal place of business at 1735 Technology Dr., Ste. 400, San Jose, California 95110-1334. Upon information and belief, Nanya US may be served with process in this judicial District. .

3. Nanya Technology Corp. ("Nanya Taiwan") is a company incorporated in Taiwan, R.O.C. and having a principal place of business at No. 669, Fusing 3rd Rd., Gueishan Dist., Taoyuan City 333, Taiwan, R.O.C. Upon information and belief, Nanya Taiwan may be served with process in Taiwan, R.O.C. pursuant to the Hague Convention on the Service Abroad of Judicial and Extrajudicial Documents in Civil or Commercial Matters.

4. Upon information and belief, Nanya has conducted and regularly conducts business within this District, has purposefully availed itself of the privileges of conducting business in this District, and has sought protection and benefit from the laws of the State of Delaware.

JURISDICTION AND VENUE

5. This action arises under the Patent Laws of the United States, 35 U.S.C. § 1, *et seq.*, including 35 U.S.C. §§ 271, 281, 283, 284, and 285. This Court has subject matter jurisdiction over this case for patent infringement under 28 U.S.C. §§ 1331 and 1338(a).

6. As further detailed herein, this Court has personal jurisdiction over Nanya US. Nanya US is amenable to service of summons for this action. Furthermore, personal jurisdiction over Nanya US in this action comports with due process. Nanya US has conducted and regularly conducts business within the United States and this District. Nanya US has purposefully availed itself of the privileges of conducting business in the United States, and more specifically in Delaware and this District. Nanya US has incorporated under the laws of the State of Delaware and sought protection and benefit

from the laws of the State of Delaware by placing infringing products into the stream of commerce through an established distribution channel with the awareness and/or intent that they will be purchased by consumers in this District.

7. On information and belief, Nanya US, directly or through intermediaries (including distributors, retailers, and others), subsidiaries, alter egos, and/or agents, ships, distributes, offers for sale, and/or sells its products in the United States and this Judicial District. On information and belief, Nanya US has purposefully and voluntarily placed one or more of its infringing products, as described below, into the stream of commerce with the awareness and/or intent that they will be purchased by consumers in this District. On information and belief, Nanya US knowingly and purposefully ships infringing products into and within this District through an established distribution channel. On information and belief, these infringing products have been and continue to be purchased by consumers in this District. Upon information and belief, through those activities, Nanya US has committed the tort of patent infringement in this District and/or has induced others to commit patent infringement in this District.

8. As further detailed herein, this Court has personal jurisdiction over Nanya Taiwan. Nanya Taiwan is amenable to service of summons for this action. Furthermore, personal jurisdiction over Nanya Taiwan in this action comports with due process. On information and belief, Nanya Taiwan has conducted and regularly conducts business within the United States and this District. On information and belief, Nanya Taiwan has purposefully availed itself of the privileges of conducting business in the United States, and more specifically in Delaware and this District. Nanya Taiwan has sought protection

and benefit from the laws of the State of Delaware by placing infringing products into the stream of commerce through an established distribution channel with the awareness and/or intent that they will be purchased by consumers in this District.

9. On information and belief, Nanya Taiwan, directly or through intermediaries (including distributors, retailers, and others), subsidiaries, alter egos, and/or agents, ships, distributes, offers for sale, and/or sells its products in the United States and this District. On information and belief, Nanya Taiwan has purposefully and voluntarily placed one or more of its infringing products, as described below, into the stream of commerce with the awareness and/or intent that they will be purchased by consumers in this District. On information and belief, these infringing products have been and continue to be purchased by consumers in this District. Upon information and belief, through those activities, Nanya Taiwan has committed the tort of patent infringement in this District and/or has induced others to commit patent infringement in this District.

10. Venue is proper in this Court according to the venue provisions set forth by 28 U.S.C. §§ 1391(b)-(d) and 1400(b). Nanya Taiwan is subject to personal jurisdiction in this District, and therefore is deemed to reside in this District for purposes of venue. Upon information and belief Nanya Taiwan has committed acts within this judicial District giving rise to this action and does business in this District, including but not limited to making sales in this District.

BACKGROUND

A. The Patents-In-Suit

11. U.S. Patent No. 5,892,777 titled "Apparatus and Method for Observing the Mode of a Memory Device" ("the '777 patent") was duly and legally issued by the U.S. Patent and Trademark Office on April 6, 1999, after full and fair examination. Michael Nesheiwat, Roger Grass and Arthur O'Donnell are the named inventors listed on the '777 patent. The '777 patent has been assigned to Plaintiff NSI, and Plaintiff NSI holds all rights, title, and interest in the '777 patent, including the right to collect and receive damages for past, present and future infringements. A true and correct copy of the '777 patent is attached as Exhibit A and made a part hereof.

12. U.S. Patent No. 6,127,875 titled "Complimentary Double Pumping Voltage Boost Converter" ("the '875 patent") was duly and legally issued by the U.S. Patent and Trademark Office on October 3, 2000, after full and fair examination. Steven Peter Allen, Ahmad H. Atriss, Gerald Lee Walcott and Walter C. Seelbach are the named inventors listed on the '875 patent. The '875 patent has been assigned to Plaintiff NSI, and Plaintiff NSI holds all rights, title, and interest in the '875 patent, including the right to collect and receive damages for past, present and future infringements. A true and correct copy of the '875 patent is attached as Exhibit B and made a part hereof.

13. U.S. Patent No. 6,157,583 titled "Integrated Circuit Memory Having a Fuse Detect Circuit and Method Therefor" ("the '583 patent") was duly and legally issued by the U.S. Patent and Trademark Office on December 5, 2000, after full and fair examination. Glenn E. Starnes, Stephen T. Flannagan and Ray Chang are the named

inventors listed on the '583 patent. The '583 patent has been assigned to Plaintiff NSI, and Plaintiff NSI holds all rights, title, and interest in the '583 patent, including the right to collect and receive damages for past, present and future infringements. A true and correct copy of the '583 patent is attached as Exhibit C and made a part hereof.

14. U.S. Patent No. 6,372,638 titled "Method for Forming a Conductive Plug Between Conductive Layers of an Integrated Circuit" ("the '638 patent") was duly and legally issued by the U.S. Patent and Trademark Office on April 16, 2002, after full and fair examination. Robert Arthur Rodriguez and Heather Marie Klesat are the named inventors listed on the '638 patent. The '638 patent has been assigned to Plaintiff NSI, and Plaintiff NSI holds all rights, title, and interest in the '638 patent, including the right to collect and receive damages for past, present and future infringements. A true and correct copy of the '638 patent is attached as Exhibit D and made a part hereof.

15. U.S. Patent No. 6,492,686 titled "Integrated Circuit Having Buffering Circuitry with Slew Rate Control" ("the '686 patent") was duly and legally issued by the U.S. Patent and Trademark Office on December 10, 2002, after full and fair examination. Bernard J. Pappert and Roger A. Whatley are the named inventors listed on the '686 patent. The '686 patent has been assigned to Plaintiff NSI, and Plaintiff NSI holds all rights, title, and interest in the '686 patent, including the right to collect and receive damages for past, present and future infringements. A true and correct copy of the '686 patent is attached as Exhibit E and made a part hereof.

16. By assignment, NSI owns all right, title, and interest in and to the '777 patent, the '875 patent, the '583 patent, the '638 patent and the '686 patent (collectively, "the Patents-in-Suit").

B. Nanya's Infringing Conduct

17. Upon information and belief, Nanya makes, uses, offers to sell, and/or sells within, and/or imports into the United States products that incorporate the fundamental technologies covered by the Patents-in-Suit. Upon information and belief, the infringing products include, but are not limited to, semiconductor memory products. By way of example only, Plaintiff identifies the Nanya512Mb LPDDR2-S4 SDRAM NT6TL16M32AQ/ NT6TL32M16AQ; Nanya NT5TU32M16DG-AC U57A 512 Mb DDR2SDRAM, Nanya NT5CC512M8BB-DI-V70A 4Gb DDR3 SDRAM, and Nanya NT5CB64M16FP-DH DDR3 1Gbit SDRAM; Nanya NT5CB64M16FP-DH DDR3 1Gbit SDRAM; NT5TU32M16DG-AC 512 Mb DDR2 SDRAM, NT6TL256F32AQ-G1 8 Gb Low-Power DDR2 SDRAM and NT5CC512M8BN-DI DDR3 SDRAM; Nanya NT5TU32M16DG-AC U57A 512 Mb DDR2SDRAM, as infringing products of one or more of the Patents-in-Suit. On information and belief, similar models of Nanya semiconductor and computer memory products are believed to infringe as well.

18. By incorporating the fundamental inventions covered by the Patents-in-Suit, Nanya can make improved products with the features thereof. Upon information and belief, third-party integrators have purchased and imported Nanya's infringing products for subsequent sale throughout the United States, including this District. Upon

information and belief, third-party consumers use and have used Nanya's infringing products in the United States, including this District.

COUNT I

Patent Infringement of U.S. Patent No. 5,892,777

19. Plaintiff repeats and re-alleges each and every allegation of paragraphs 1-18 as though fully set forth herein.

20. The '777 patent is valid and enforceable.

21. Nanya has never been licensed, either expressly or impliedly, under the '777 patent.

22. Upon information and belief, Nanya has been and is directly infringing under 35 U.S.C. § 271(a), either literally or under the doctrine of equivalents, and/or indirectly infringing, by way of inducement with specific intent under 35 U.S.C. § 271(b), the '777 patent by making, using, offering to sell, and/or selling to third-party manufacturers, distributors, and/or consumers (directly or through intermediaries and/or subsidiaries) in this District and elsewhere within the United States and/or importing into the United States, without authority, products that include all of the limitations of one or more claims of the '777 patent, including but not limited to semiconductor memory products (e.g., Nanya512Mb LPDDR2-S4 SDRAM NT6TL16M32AQ/ NT6TL32M16AQ) and/or other products made, used, sold, offered for sale, or imported by Nanya that include all of the limitations of one or more claims of the '777 patent.

23. Upon information and belief, product integrators, distributors and consumers that purchase Nanya's products that include all of the limitations of one or

more claims of the '777 patent, including but not limited to semiconductor memory products (e.g., Nanya512Mb LPDDR2-S4 SDRAM NT6TL16M32AQ/ NT6TL32M16AQ), also directly infringe, either literally or under the doctrine of equivalents, under 35 U.S.C. § 271(a), the '777 patent by using, offering to sell, and/or selling infringing products in this District and elsewhere in the United States.

24. Upon information and belief, the third-party manufacturers, distributors, and importers that sell products to Nanya that include all of the limitations of one or more claims of the '777 patent, also directly infringe, either literally or under the doctrine of equivalents, under 35 U.S.C. § 271(a), the '777 patent by making, offering to sell, and/or selling infringing products in this District and elsewhere within the United States and/or importing infringing products into the United States.

25. Upon information and belief, Nanya had knowledge of the '777 patent and its infringing conduct at least since October 21, 2015, when Nanya was offered the opportunity to take a license to the '777 patent by letter to Brian Donahue, President of Nanya US, and Charles Kau, President and Director of Nanya Taiwan.

26. Upon information and belief, since at least the above-mentioned date when Plaintiff formally notified Nanya, Nanya has actively induced, under U.S.C. § 271(b), third-party manufacturers, distributors, importers and/or consumers to directly infringe one or more claims of the '777 patent. Since at least the notice provided on the above-mentioned date, Nanya does so with knowledge, or with willful blindness of the fact, that the induced acts constitute infringement of the '777 patent. Upon information and belief, Nanya intends to cause infringement by these third-party manufacturers, distributors,

importers, and/or consumers. Upon information and belief, Nanya has taken affirmative steps to induce their infringement by, *inter alia*, creating advertisements that promote the infringing use of products, creating established distribution channels for these products into and within the United States, selling these products, manufacturing these products in conformity with U.S. laws and regulations, and/or distributing or making available instructions or manuals for these products to purchasers and prospective buyers.

27. Despite having knowledge of the '777 patent, Nanya has specifically intended and continues to specifically intend for persons who acquire and use the products that include all of the limitations of one or more claims of the '777 patent, including but not limited to semiconductor memory products (e.g., Nanya512Mb LPDDR2-S4 SDRAM NT6TL16M32AQ/ NT6TL32M16AQ), including third-party manufacturers, distributors, importers, and/or consumers, to use such devices in a manner that infringes one or more claims of the '777 patent. This is evident when Defendants encourage and instruct customers and other end users in the use and operation of the products via advertisement and instructional materials.

28. In particular, despite having knowledge of the '777 patent, Nanya has provided, and continues to provide, instructional materials, such as user guides, owner manuals, and similar online product support resources, such as for example, "Nanya512Mb LPDDR2-S4 SDRAM NT6TL16M32AQ/NT6TL32M16AQ" specification, March 2013 (and other instructional materials and documentation provided or made available by Nanya to customers after purchase) that specifically teach the customers and other end users to use products in an infringing manner. By providing such

instructions, Nanya knows (and has known), or should know (and should have known), that their actions have, and continue to, actively induce infringement.

29. Upon information and belief, Nanya's acts of infringement of the '777 patent have been willful and intentional. Since at least the above-mentioned date of notice, Nanya has acted with an objectively high likelihood that its actions constituted infringement of the '777 patent by refusing to take a license and continuing to make and sell its products, including but not limited to semiconductor memory products (e.g., Nanya512Mb LPDDR2-S4 SDRAM NT6TL16M32AQ/ NT6TL32M16AQ), and the objectively-defined risk was either known or so obvious that it should have been known.

30. As a direct and proximate result of these acts of patent infringement, Nanya has encroached on the exclusive rights of Plaintiff and its licensees to practice the '777 patent, for which Plaintiff is entitled to at least a reasonable royalty.

COUNT II

Patent Infringement of U.S. Patent No. 6,127,875

31. Plaintiff repeats and re-alleges each and every allegation of paragraphs 1-18 as though fully set forth herein.

32. The '875 patent is valid and enforceable.

33. Nanya has never been licensed, either expressly or impliedly, under the '875 patent.

34. Upon information and belief, Nanya has been and is directly infringing under 35 U.S.C. § 271(a), either literally or under the doctrine of equivalents, and/or indirectly infringing, by way of inducement with specific intent under 35 U.S.C. §

271(b), the '875 patent by making, using, offering to sell, and/or selling to third-party manufacturers, distributors, and/or consumers (directly or through intermediaries and/or subsidiaries) in this District and elsewhere within the United States and/or importing into the United States, without authority, products that include all of the limitations of one or more claims of the '875 patent, including but not limited to semiconductor memory products (e.g., Nanya NT5TU32M16DG-AC U57A 512 Mb DDR2SDRAM, Nanya NT5CC512M8BB-DI-V70A 4Gb DDR3 SDRAM, and Nanya NT5CB64M16FP-DH DDR3 1Gbit SDRAM) and/or other products made, used, sold, offered for sale, or imported by Nanya that include all of the limitations of one or more claims of the '875 patent.

35. Upon information and belief, product integrators, distributors and consumers that purchase Nanya's products that include all of the limitations of one or more claims of the '875 patent, including but not limited to semiconductor memory products (e.g., Nanya NT5TU32M16DG-AC U57A 512 Mb DDR2SDRAM, Nanya NT5CC512M8BB-DI-V70A 4Gb DDR3 SDRAM, and Nanya NT5CB64M16FP-DH DDR3 1Gbit SDRAM), also directly infringe, either literally or under the doctrine of equivalents, under 35 U.S.C. § 271(a), the '875 patent by using, offering to sell, and/or selling infringing products in this District and elsewhere in the United States.

36. Upon information and belief, the third-party manufacturers, distributors, and importers that sell products to Nanya that include all of the limitations of one or more claims of the '875 patent, also directly infringe, either literally or under the doctrine of equivalents, under 35 U.S.C. § 271(a), the '875 patent by making, offering to sell, and/or

selling infringing products in this District and elsewhere within the United States and/or importing infringing products into the United States.

37. Upon information and belief, Nanya had knowledge of the '875 patent and its infringing conduct at least since October 21, 2015, when Nanya was offered the opportunity to take a license to the '875 patent by letter to Brian Donahue, President of Nanya US, and Charles Kau, President and Director of Nanya Taiwan.

38. Upon information and belief, since at least the above-mentioned date when Plaintiff formally notified Nanya, Nanya has actively induced, under U.S.C. § 271(b), third-party manufacturers, distributors, importers and/or consumers to directly infringe one or more claims of the '875 patent. Since at least the notice provided on the above-mentioned date, Nanya does so with knowledge, or with willful blindness of the fact, that the induced acts constitute infringement of the '875 patent. Upon information and belief, Nanya intends to cause infringement by these third-party manufacturers, distributors, importers, and/or consumers. Upon information and belief, Nanya has taken affirmative steps to induce their infringement by, *inter alia*, creating advertisements that promote the infringing use of products, creating established distribution channels for these products into and within the United States, selling these products, manufacturing these products in conformity with U.S. laws and regulations, and/or distributing or making available instructions or manuals for these products to purchasers and prospective buyers.

39. Despite having knowledge of the '875 patent, Nanya has specifically intended and continues to specifically intend for persons who acquire and use the products that include all of the limitations of one or more claims of the '875 patent,

including but not limited to semiconductor memory products (e.g., Nanya NT5TU32M16DG-AC U57A 512 Mb DDR2SDRAM, Nanya NT5CC512M8BB-DI-V70A 4Gb DDR3 SDRAM, and Nanya NT5CB64M16FP-DH DDR3 1Gbit SDRAM), including third-party manufacturers, distributors, importers, and/or consumers, to use such devices in a manner that infringes one or more claims of the '875 patent. This is evident when Defendants encourage and instruct customers and other end users in the use and operation of the products via advertisement and instructional materials.

40. In particular, despite having knowledge of the '875 patent, Nanya has provided, and continues to provide, instructional materials, such as user guides, owner manuals, and similar online product support resources, such as for example, "ISS Analysis Report for the Nanya NT5TU32M16DG-AC U57A 512 Mb DDR2SDRAM" (and other instructional materials and documentation provided or made available by Nanya to customers after purchase) that specifically teach the customers and other end users to use products in an infringing manner. By providing such instructions, Nanya knows (and has known), or should know (and should have known), that their actions have, and continue to, actively induce infringement.

41. Upon information and belief, Nanya's acts of infringement of the '875 patent have been willful and intentional. Since at least the above-mentioned date of notice, Nanya has acted with an objectively high likelihood that its actions constituted infringement of the '875 patent by refusing to take a license and continuing to make and sell its products, including but not limited to semiconductor memory products (e.g., Nanya NT5TU32M16DG-AC U57A 512 Mb DDR2SDRAM, Nanya NT5CC512M8BB-

DI-V70A 4Gb DDR3 SDRAM, and Nanya NT5CB64M16FP-DH DDR3 1Gbit SDRAM), and the objectively-defined risk was either known or so obvious that it should have been known.

42. As a direct and proximate result of these acts of patent infringement, Nanya has encroached on the exclusive rights of Plaintiff and its licensees to practice the '875 patent, for which Plaintiff is entitled to at least a reasonable royalty.

COUNT III

Patent Infringement of U.S. Patent No. 6,157,583

43. Plaintiff repeats and re-alleges each and every allegation of paragraphs 1-18 as though fully set forth herein.

44. The '583 patent is valid and enforceable.

45. Nanya has never been licensed, either expressly or impliedly, under the '583 patent.

46. Upon information and belief, Nanya has been and is directly infringing under 35 U.S.C. § 271(a), either literally or under the doctrine of equivalents, and/or indirectly infringing, by way of inducement with specific intent under 35 U.S.C. § 271(b), the '583 patent by making, using, offering to sell, and/or selling to third-party manufacturers, distributors, and/or consumers (directly or through intermediaries and/or subsidiaries) in this District and elsewhere within the United States and/or importing into the United States, without authority, products that include all of the limitations of one or more claims of the '583 patent, including but not limited to semiconductor memory products (e.g., Nanya NT5CB64M16FP-DH DDR3 1Gbit SDRAM) and/or other

products made, used, sold, offered for sale, or imported by Nanya that include all of the limitations of one or more claims of the '583 patent.

47. Upon information and belief, product integrators, distributors and consumers that purchase Nanya's products that include all of the limitations of one or more claims of the '583 patent, including but not limited to semiconductor memory products (e.g., Nanya NT5CB64M16FP-DH DDR3 1Gbit SDRAM), also directly infringe, either literally or under the doctrine of equivalents, under 35 U.S.C. § 271(a), the '583 patent by using, offering to sell, and/or selling infringing products in this District and elsewhere in the United States.

48. Upon information and belief, the third-party manufacturers, distributors, and importers that sell products to Nanya that include all of the limitations of one or more claims of the '583 patent, also directly infringe, either literally or under the doctrine of equivalents, under 35 U.S.C. § 271(a), the '583 patent by making, offering to sell, and/or selling infringing products in this District and elsewhere within the United States and/or importing infringing products into the United States.

49. Upon information and belief, Nanya had knowledge of the '583 patent and its infringing conduct at least since October 21, 2015, when Nanya was offered the opportunity to take a license to the '583 patent by letter to Brian Donahue, President of Nanya US, and Charles Kau, President and Director of Nanya Taiwan.

50. Upon information and belief, since at least the above-mentioned date when Plaintiff formally notified Nanya, Nanya has actively induced, under U.S.C. § 271(b), third-party manufacturers, distributors, importers and/or consumers to directly infringe

one or more claims of the '583 patent. Since at least the notice provided on the above-mentioned date, Nanya does so with knowledge, or with willful blindness of the fact, that the induced acts constitute infringement of the '583 patent. Upon information and belief, Nanya intends to cause infringement by these third-party manufacturers, distributors, importers, and/or consumers. Upon information and belief, Nanya has taken affirmative steps to induce their infringement by, *inter alia*, creating advertisements that promote the infringing use of products, creating established distribution channels for these products into and within the United States, selling these products, manufacturing these products in conformity with U.S. laws and regulations, and/or distributing or making available instructions or manuals for these products to purchasers and prospective buyers.

51. Despite having knowledge of the '583 patent, Nanya has specifically intended and continues to specifically intend for persons who acquire and use the products that include all of the limitations of one or more claims of the '583 patent, including but not limited to semiconductor memory products (e.g., Nanya NT5CB64M16FP-DH DDR3 1Gbit SDRAM), including third-party manufacturers, distributors, importers, and/or consumers, to use such devices in a manner that infringes one or more claims of the '583 patent. This is evident when Defendants encourage and instruct customers and other end users in the use and operation of the products via advertisement and instructional materials.

52. In particular, despite having knowledge of the '583 patent, Nanya has provided, and continues to provide, instructional materials, such as user guides, owner manuals, and similar online product support resources, such as for example,

"ScienceVisionCircuit Analysis Report for the Nanya NT5CB64M16FP-DH DDR3 1Gbit SDRAM" (and other instructional materials and documentation provided or made available by Nanya to customers after purchase) that specifically teach the customers and other end users to use products in an infringing manner. By providing such instructions, Nanya knows (and has known), or should know (and should have known), that their actions have, and continue to, actively induce infringement.

53. Upon information and belief, Nanya's acts of infringement of the '583 patent have been willful and intentional. Since at least the above-mentioned date of notice, Nanya has acted with an objectively high likelihood that its actions constituted infringement of the '583 patent by refusing to take a license and continuing to make and sell its products, including but not limited to semiconductor memory products (e.g., Nanya NT5CB64M16FP-DH DDR3 1Gbit SDRAM), and the objectively-defined risk was either known or so obvious that it should have been known.

54. As a direct and proximate result of these acts of patent infringement, Nanya has encroached on the exclusive rights of Plaintiff and its licensees to practice the '583 patent, for which Plaintiff is entitled to at least a reasonable royalty.

COUNT IV

Patent Infringement of U.S. Patent No. 6,372,638

55. Plaintiff repeats and re-alleges each and every allegation of paragraphs 1-18 as though fully set forth herein.

56. The '638 patent is valid and enforceable.

57. Nanya has never been licensed, either expressly or impliedly, under the '638 patent.

58. Upon information and belief, Nanya has been and is directly infringing under 35 U.S.C. § 271(a), either literally or under the doctrine of equivalents, and/or indirectly infringing, by way of inducement with specific intent under 35 U.S.C. § 271(b), the '638 patent by making, using, offering to sell, and/or selling to third-party manufacturers, distributors, and/or consumers (directly or through intermediaries and/or subsidiaries) in this District and elsewhere within the United States and/or importing into the United States, without authority, products that include all of the limitations of one or more claims of the '638 patent, including but not limited to semiconductor memory products (e.g., NT5TU32M16DG-AC 512 Mb DDR2 SDRAM, NT6TL256F32AQ-G1 8 Gb Low-Power DDR2 SDRAM and NT5CC512M8BN-DI DDR3 SDRAM) and/or other products made, used, sold, offered for sale, or imported by Nanya that include all of the limitations of one or more claims of the '638 patent.

59. Upon information and belief, product integrators, distributors and consumers that purchase Nanya's products that include all of the limitations of one or more claims of the '638 patent, including but not limited to semiconductor memory products (e.g., NT5TU32M16DG-AC 512 Mb DDR2 SDRAM, NT6TL256F32AQ-G1 8 Gb Low-Power DDR2 SDRAM and NT5CC512M8BN-DI DDR3 SDRAM), also directly infringe, either literally or under the doctrine of equivalents, under 35 U.S.C. § 271(a), the '638 patent by using, offering to sell, and/or selling infringing products in this District and elsewhere in the United States.

60. Upon information and belief, the third-party manufacturers, distributors, and importers that sell products to Nanya that include all of the limitations of one or more claims of the '638 patent, also directly infringe, either literally or under the doctrine of equivalents, under 35 U.S.C. § 271(a), the '638 patent by making, offering to sell, and/or selling infringing products in this District and elsewhere within the United States and/or importing infringing products into the United States.

61. Upon information and belief, Nanya had knowledge of the '638 patent and its infringing conduct at least since October 21, 2015, when Nanya was offered the opportunity to take a license to the '638 patent by letter to Brian Donahue, President of Nanya US, and Charles Kau, President and Director of Nanya Taiwan.

62. Upon information and belief, since at least the above-mentioned date when Plaintiff formally notified Nanya, Nanya has actively induced, under U.S.C. § 271(b), third-party manufacturers, distributors, importers and/or consumers to directly infringe one or more claims of the '638 patent. Since at least the notice provided on the above-mentioned date, Nanya does so with knowledge, or with willful blindness of the fact, that the induced acts constitute infringement of the '638 patent. Upon information and belief, Nanya intends to cause infringement by these third-party manufacturers, distributors, importers, and/or consumers. Upon information and belief, Nanya has taken affirmative steps to induce their infringement by, *inter alia*, creating advertisements that promote the infringing use of products, creating established distribution channels for these products into and within the United States, selling these products, manufacturing these products in

conformity with U.S. laws and regulations, and/or distributing or making available instructions or manuals for these products to purchasers and prospective buyers.

63. Despite having knowledge of the '638 patent, Nanya has specifically intended and continues to specifically intend for persons who acquire and use the products that include all of the limitations of one or more claims of the '638 patent, including but not limited to semiconductor memory products (e.g., NT5TU32M16DG-AC 512 Mb DDR2 SDRAM, NT6TL256F32AQ-G1 8 Gb Low-Power DDR2 SDRAM and NT5CC512M8BN-DI DDR3 SDRAM), including third-party manufacturers, distributors, importers, and/or consumers, to use such devices in a manner that infringes one or more claims of the '638 patent. This is evident when Defendants encourage and instruct customers and other end users in the use and operation of the products via advertisement and instructional materials.

64. In particular, despite having knowledge of the '638 patent, Nanya has provided, and continues to provide, instructional materials, such as user guides, owner manuals, and similar online product support resources, such as for example, http://www.nanya.com/PageNewsDetail.aspx?Menu_ID=30&lan=en-us&def=310&isPrint=&KeyWords=&ID=1387&R_Title_Name=Press%20Release

(and other instructional materials and documentation provided or made available by Nanya to customers after purchase) that specifically teach the customers and other end users to use products in an infringing manner. By providing such instructions, Nanya knows (and has known), or should know (and should have known), that their actions have, and continue to, actively induce infringement.

65. Upon information and belief, Nanya's acts of infringement of the '638 patent have been willful and intentional. Since at least the above-mentioned date of notice, Nanya has acted with an objectively high likelihood that its actions constituted infringement of the '638 patent by refusing to take a license and continuing to make and sell its products, including but not limited to semiconductor memory products (e.g., NT5TU32M16DG-AC 512 Mb DDR2 SDRAM, NT6TL256F32AQ-G1 8 Gb Low-Power DDR2 SDRAM and NT5CC512M8BN-DI DDR3 SDRAM), and the objectively-defined risk was either known or so obvious that it should have been known.

66. As a direct and proximate result of these acts of patent infringement, Nanya has encroached on the exclusive rights of Plaintiff and its licensees to practice the '638 patent, for which Plaintiff is entitled to at least a reasonable royalty.

COUNT V
Patent Infringement of U.S. Patent No. 6,492,686

67. Plaintiff repeats and re-alleges each and every allegation of paragraphs 1-18 as though fully set forth herein.

68. The '686 patent is valid and enforceable.

69. Nanya has never been licensed, either expressly or impliedly, under the '686 patent.

70. Upon information and belief, Nanya has been and is directly infringing under 35 U.S.C. § 271(a), either literally or under the doctrine of equivalents, and/or indirectly infringing, by way of inducement with specific intent under 35 U.S.C. § 271(b), the '686 patent by making, using, offering to sell, and/or selling to third-party

manufacturers, distributors, and/or consumers (directly or through intermediaries and/or subsidiaries) in this District and elsewhere within the United States and/or importing into the United States, without authority, products that include all of the limitations of one or more claims of the '686 patent, including but not limited to semiconductor memory products (e.g., Nanya NT5TU32M16DG-AC U57A 512 Mb DDR2SDRAM) and/or other products made, used, sold, offered for sale, or imported by Nanya that include all of the limitations of one or more claims of the '686 patent.

71. Upon information and belief, product integrators, distributors and consumers that purchase Nanya's products that include all of the limitations of one or more claims of the '686 patent, including but not limited to semiconductor memory products (e.g., Nanya NT5TU32M16DG-AC U57A 512 Mb DDR2SDRAM), also directly infringe, either literally or under the doctrine of equivalents, under 35 U.S.C. § 271(a), the '686 patent by using, offering to sell, and/or selling infringing products in this District and elsewhere in the United States.

72. Upon information and belief, the third-party manufacturers, distributors, and importers that sell products to Nanya that include all of the limitations of one or more claims of the '686 patent, also directly infringe, either literally or under the doctrine of equivalents, under 35 U.S.C. § 271(a), the '686 patent by making, offering to sell, and/or selling infringing products in this District and elsewhere within the United States and/or importing infringing products into the United States.

73. Upon information and belief, Nanya had knowledge of the '686 patent and its infringing conduct at least since October 21, 2015, when Nanya was offered the

opportunity to take a license to the '686 patent by letter to Brian Donahue, President of Nanya US, and Charles Kau, President and Director of Nanya Taiwan.

74. Upon information and belief, since at least the above-mentioned date when Plaintiff formally notified Nanya, Nanya has actively induced, under U.S.C. § 271(b), third-party manufacturers, distributors, importers and/or consumers to directly infringe one or more claims of the '686 patent. Since at least the notice provided on the above-mentioned date, Nanya does so with knowledge, or with willful blindness of the fact, that the induced acts constitute infringement of the '686 patent. Upon information and belief, Nanya intends to cause infringement by these third-party manufacturers, distributors, importers, and/or consumers. Upon information and belief, Nanya has taken affirmative steps to induce their infringement by, *inter alia*, creating advertisements that promote the infringing use of products, creating established distribution channels for these products into and within the United States, selling these products, manufacturing these products in conformity with U.S. laws and regulations, and/or distributing or making available instructions or manuals for these products to purchasers and prospective buyers.

75. Despite having knowledge of the '686 patent, Nanya has specifically intended and continues to specifically intend for persons who acquire and use the products that include all of the limitations of one or more claims of the '686 patent, including but not limited to semiconductor memory products (e.g., Nanya NT5TU32M16DG-AC U57A 512 Mb DDR2SDRAM), including third-party manufacturers, distributors, importers, and/or consumers, to use such devices in a manner that infringes one or more claims of the '686 patent. This is evident when Defendants

encourage and instruct customers and other end users in the use and operation of the products via advertisement and instructional materials.

76. In particular, despite having knowledge of the '686 patent, Nanya has provided, and continues to provide, instructional materials, such as user guides, owner manuals, and similar online product support resources, such as for example, " ISS Circuit Analysis of the Nanya NT5TU32M16DG-AC U57A 512 Mb DDR2SDRAM" (and other instructional materials and documentation provided or made available by Nanya to customers after purchase) that specifically teach the customers and other end users to use products in an infringing manner. By providing such instructions, Nanya knows (and has known), or should know (and should have known), that their actions have, and continue to, actively induce infringement.

77. Upon information and belief, Nanya's acts of infringement of the '686 patent have been willful and intentional. Since at least the above-mentioned date of notice, Nanya has acted with an objectively high likelihood that its actions constituted infringement of the '686 patent by refusing to take a license and continuing to make and sell its products, including but not limited to semiconductor memory products (e.g., Nanya NT5TU32M16DG-AC U57A 512 Mb DDR2SDRAM), and the objectively-defined risk was either known or so obvious that it should have been known.

78. As a direct and proximate result of these acts of patent infringement, Nanya has encroached on the exclusive rights of Plaintiff and its licensees to practice the '686 patent, for which Plaintiff is entitled to at least a reasonable royalty.

CONCLUSION

79. Plaintiff is entitled to recover from Nanya the damages sustained by Plaintiff as a result of Nanya's wrongful acts in an amount subject to proof at trial, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court.

80. Plaintiff has incurred and will incur attorneys' fees, costs, and expenses in the prosecution of this action. The circumstances of this dispute create an exceptional case within the meaning of 35 U.S.C. § 285, and Plaintiff is entitled to recover its reasonable and necessary attorneys' fees, costs, and expenses.

JURY DEMAND

81. Plaintiff hereby requests a trial by jury pursuant to Rule 38 of the Federal Rules of Civil Procedure.

PRAYER FOR RELIEF

82. Plaintiff respectfully requests that the Court find in its favor and against Nanya, and that the Court grants Plaintiff the following relief:

A. A judgment that Nanya has infringed the Patents-in-Suit as alleged herein, directly and/or indirectly by way of inducing infringement of such patents;

B. A judgment for an accounting of all damages sustained by Plaintiff as result of the acts of infringement by Nanya;

C. A judgment and order requiring Nanya to pay Plaintiff damages under 35 U.S.C. § 284, including up to treble damages for willful

infringement of the ’654 and ’774 patents as provided by 35 U.S.C. § 284, and any royalties determined to be appropriate;

D. A permanent injunction enjoining Nanya and its officers, directors, agents, servants, employees, affiliates, divisions, branches, subsidiaries, parents and all others acting in concert or privity with them from direct and/or indirect infringement of the Patents-in-Suit pursuant to 35 U.S.C. § 283;

E. A judgment and order requiring Nanya to pay Plaintiff pre-judgment and post judgment interest on the damages awarded; and

F. Such other and further relief as the Court deems just and equitable.

Dated: November 5, 2015

Respectfully submitted,

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