

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

_____	:	
ADVANCED SILICON TECHNOLOGIES, LLC	:	
Plaintiff,	:	
	:	
v.	:	Civil Action No.
	:	
BAYERISCHE MOTOREN WERKE AG,	:	
AG BMW OF NORTH AMERICA, LLC, AND	:	Jury Trial Demanded
BMW MANUFACTURING CO., LLC	:	
Defendants.	:	
_____	:	

COMPLAINT

Advanced Silicon Technologies, LLC (“Advanced Silicon” or “Plaintiff”), brings this action for patent infringement against Defendants Bayerische Motoren Werke AG, BMW of North America, LLC and BMW Manufacturing Co. LLC (collectively, “BMW” or “Defendant”), and alleges as follows:

NATURE OF THE ACTION

1. This is an action for patent infringement under the patent laws of the United States, Title 35 of the United States Code. Advanced Silicon seeks remedies for Defendant’s infringement of Advanced Silicon’s U.S. Patent Nos. 6,339,428 (“the ’428 Patent”), 6,546,439 (“the ’439 Patent”), 6,630,935 (“the ’935 Patent”), and 8,933,945 (“the ’945 Patent”) (collectively, the “Patents-in-Suit”).

THE PARTIES

2. Advanced Silicon is a Delaware limited liability company, with a principal place of business at 118 Maplewood Avenue Unit C-2/Box 8, Portsmouth, NH 03801.

3. Upon information and belief, Bayerische Motoren Werke AG is a corporation organized and existing under the laws of Germany, with its principal place of business at Petuelring 130, D-80788, Munich, Germany.

4. Upon information and belief, BMW of North America, LLC is a New Jersey limited liability company headquartered at 300 Chestnut Ridge Road, Woodcliff Lake, New Jersey 07677.

5. Upon information and belief, BMW Manufacturing Co., LLC is a Delaware limited liability company headquartered at 1400 Hwy. 101 S., Greer, South Carolina 29651.

JURISDICTION AND VENUE

6. This action arises under the Patent Act, 35 U.S.C. § 1 *et seq.*

7. Subject matter jurisdiction is proper in this Court under 28 U.S.C. §§ 1331 and 1338.

8. Venue in this district is proper under 28 U.S.C. §§ 1400(b) and 1391(b) and (c).

9. This court has personal jurisdiction over BMW by virtue of, *inter alia*, (i) maintaining a regular place of business and a continuing presence in this jurisdiction; (ii) committing at least a portion of the infringements alleged herein within this district; and (iii) regularly doing business or soliciting business, engaging in other persistent courses of conduct and/or deriving substantial revenue from good and services provided to individuals in this district.

THE PATENTS

10. United States Patent No. 6,339,428 (“the ’428 Patent”) is entitled “Method and Apparatus for Compressed Texture Caching in a Video Graphics System,” and issued January 15, 2002 to inventors Mark C. Fowler, Paul Vella, and Michael T. Wright. The ’428 Patent

issued from United States Patent Application No. 09/356,398 filed on July 16, 1999. A copy of the '428 Patent is attached hereto as Exhibit A.

11. United States Patent No. 6,546,439 (“the '439 Patent”) is entitled “Method and System for Improved Data Access,” and issued April 8, 2003 to inventors Geoffrey S. Strongin and Qadeer A. Qureshi. The '439 Patent issued from United States Patent Application No. 09/207,970 filed on December 9, 1998. A copy of the '439 Patent is attached hereto as Exhibit B.

12. United States Patent No. 6,630,935 (“the '935 Patent”) is entitled “Geometric Engine Including a Computational Module for use in a Video Graphics Controller,” and issued October 7, 2003 to inventors Ralph Clayton Taylor, Michael Andrew Mang, and Michael Mantor. The '935 Patent issued from United States Patent Application No. 09/556,474 filed on April 21, 2000. A copy of the '935 Patent is attached as Exhibit C.

13. United States Patent No. 8,933,945 (“the '945 Patent”) is entitled “Dividing Work Among Multiple Graphics Pipelines Using a Super-Tiling Technique,” and issued January 13, 2015 to inventors Mark M. Leather and Eric Demers. The '945 Patent issued from United States Patent Application No. 10/459,797 filed on June 12, 2003. The '945 Patent claims priority to U.S. provisional application serial number 60/429,641 filed on November 27, 2002. A copy of the '945 Patent is attached as Exhibit D.

14. Advanced Silicon is the lawful assignee and owner of all right, title and interest in and to the '428 Patent, the '439 Patent, the '935 Patent, and the '945 Patent (collectively, the “Patents-in-Suit”).

INFRINGEMENT OF THE PATENTS-IN-SUIT

15. BMW has infringed and continues to infringe at least four of Advanced Silicon's patents that cover important aspects of automotive infotainment systems, head-end units,

navigation systems, graphics processors, microprocessors, integrated circuits, and other computing and graphics-capable electronic devices, and automobiles containing such components.

16. Advanced Silicon incorporates by reference in its allegations herein certain claim charts comparing the independent claims of the Patents-in-Suit to certain automotive infotainment systems and the automobiles containing same.

17. Exhibits E through K include charts comparing the exemplary independent claims of the Patents-in-Suit to the exemplary products BMW 428i Infotainment and BMW i8 Infotainment systems and BMW's 2015 428i and 2015 i8 vehicles containing same.

18. Advanced Silicon believes that the BMW 428i Infotainment and BMW i8 Infotainment systems and vehicles containing the same are exemplary of numerous other BMW products because such other devices feature the same or substantially similar infringing functionality. Accordingly, on information and belief, numerous other devices that are covered by the claims of the Patents-in-Suit have been imported, made, used, sold, and/or offered for sale by BMW.

COUNT I
(BMW's Infringement of the '428 Patent)

19. Paragraphs 1 through 18 are incorporated by reference as if fully restated herein.

20. Advanced Silicon is the assignee and lawful owner of all right, title and interest in and to the '428 Patent.

21. The '428 Patent is valid and enforceable.

22. Defendants have infringed, and are still infringing, one or more claims of the '428 Patent in at least this District by making, using, offering to sell, selling and/or importing products that infringe one or more claims of the '428 Patent literally or by the doctrine of equivalence.

Exemplary products include Defendants' vehicles and electronic control units that are used within its vehicles that include a graphics processor and/or microprocessor, including, without limitation, Defendants' BMW 428i Infotainment and BMW i8 Infotainment systems and BMW 2015 428i and 2015 i8 vehicles containing same infringe the '428 Patent.

23. Advanced Silicon is asserting at least claims 1 – 6, 8 – 9, 10 – 14, 16-17, and 25 – 29 of the '428 Patent against the Defendants.

24. Exhibit E includes charts comparing the exemplary independent claims 1, 10, and 25 of the '428 Patent to the exemplary products such as the BMW 428i Infotainment system and 2015 BMW's 428i vehicles containing same. Exhibit F includes charts comparing exemplary independent claims 1, 10, and 25 of the '428 Patent to the exemplary products BMW i8 Infotainment systems and 2015 BMW's i8 vehicles containing same. Accordingly, the BMW 428i Infotainment and BMW i8 Infotainment systems and vehicles containing the same directly infringe at least independent claims 1, 10, and 25 of the '428 Patent.

25. Defendants, directly or through their agents, customers, and/or intermediaries, have made, used, sold, tested, imported, provided, supplied, distributed, and or/ offered for sale products, services, methods, or processes (for example automotive infotainment systems, head-end units, navigation systems, graphics processors, microprocessors, integrated circuits, and other computing and graphics-capable electronic devices, and automobiles containing such components) that directly infringe, literally and/or under the doctrine of equivalents, or which employ systems, components, and/or processes that make use of systems or processes that directly infringe, literally and/or under the doctrine of equivalents, at least exemplary claims 1 – 6, 8 – 9, 10 – 14, 16 – 17, and 25 – 29 of the '428 Patent.

26. Advanced Silicon is entitled to recover damages adequate to compensate for Defendants' infringement.

COUNT II
(BMW's Infringement of the '439 Patent)

27. Paragraphs 1 through 26 are incorporated by reference as if fully restated herein.

28. Advanced Silicon is the assignee and lawful owner of all right, title and interest in and to the '439 Patent.

29. The '439 Patent is valid and enforceable.

30. Defendants have infringed, and are still infringing, one or more claims of the '439 Patent in at least this District by making, using, offering to sell, selling and/or importing products that infringe one or more claims of the '439 Patent literally or by the doctrine of equivalence. Exemplary products include Defendants' BMW 428i Infotainment and BMW i8 Infotainment systems and 2015 BMW 428i and 2015 i8 vehicles containing the same infringe the '439 Patent.

31. Advanced Silicon is asserting at least claims 1 – 11, and 14- 16 of the '439 Patent against the Defendants.

32. Exhibit G includes charts comparing the exemplary independent claim 1 of the '439 Patent to the exemplary products such as the BMW 428i Infotainment system and 2015 BMW 428i vehicles containing the same and the BMW i8 Infotainment system and 2015 BMW i8 vehicles containing the same. Accordingly, the BMW 428i Infotainment and BMW i8 Infotainment systems and vehicles containing the same directly infringe at least independent claim 1 of the '439 Patent.

33. Defendants, directly or through their agents, customers, and/or intermediaries, have made, used, sold, tested, imported, provided, supplied, distributed, and or/ offered for sale products, services, methods, or processes (for example automotive infotainment systems, head-

end units, navigation systems, graphics processors, microprocessors, integrated circuits, and other computing and graphics-capable electronic devices, and automobiles containing such components) that directly infringe, literally and/or under the doctrine of equivalents, or which employ systems, components, and/or processes that make use of systems or processes that directly infringe, literally and/or under the doctrine of equivalents, at least exemplary claims 1 – 11, and 14 – 16 of the '439 Patent.

34. Advanced Silicon is entitled to recover damages adequate to compensate for Defendants' infringement.

COUNT III
(BMW's Infringement of the '935 Patent)

35. Paragraphs 1 through 34 are incorporated by reference as if fully restated herein.

36. Advanced Silicon is the assignee and lawful owner of all right, title and interest in and to the '935 Patent.

37. The '935 Patent is valid and enforceable.

38. Defendants have infringed, and are still infringing, one or more claims of the '935 Patent in at least this District by making, using, offering to sell, selling and/or importing products that infringe one or more claims of the '935 Patent literally or by the doctrine of equivalence. Exemplary products include Defendants' vehicles and electronic control units that are used within its vehicles that include a graphics processor and/or microprocessor, including, without limitation, Defendants' BMW 428i Infotainment, BMW i8 Infotainment systems and 2015 BMW 428i and 2015 i8 vehicles containing the same infringe the '935 Patent.

39. Advanced Silicon is asserting at least claims 1, 2, and 4 – 8 of the '935 Patent against the Defendants.

40. Exhibit H includes a chart comparing the exemplary independent claim 1 of the '935 Patent to the exemplary products BMW 428i Infotainment system and 2015 BMW 428i vehicles containing the same. Exhibit I includes a chart comparing the exemplary independent claim 1 of the '935 Patent to the exemplary products such as the BMW i8 Infotainment systems and 2015 BMW i8 vehicles containing the same. Accordingly, the BMW 428i and the BMW i8 Infotainment systems and vehicles containing the same directly infringe at least independent claim 1 of the '935 Patent.

41. Defendants, directly or through their agents, customers, and/or intermediaries, have made, used, sold, tested, imported, provided, supplied, distributed, and or/ offered for sale products, services, methods, or processes (for example automotive infotainment systems, head-end units, navigation systems, graphics processors, microprocessors, integrated circuits, and other computing and graphics-capable electronic devices, and automobiles containing such components) that directly infringe, literally and/or under the doctrine of equivalents, or which employ systems, components, and/or processes that make use of systems or processes that directly infringe, literally and/or under the doctrine of equivalents, at least exemplary claims 1, 2, and 4 – 8 of the '935 Patent.

42. Advanced Silicon is entitled to recover damages adequate to compensate for Defendants' infringement.

COUNT IV
(BMW's Infringement of the '945 Patent)

43. Paragraphs 1 through 42 are incorporated by reference as if fully restated herein.

44. Advanced Silicon is the assignee and lawful owner of all right, title and interest in and to the '945 Patent.

45. The '945 Patent is valid and enforceable.

46. Defendants have infringed, and are still infringing, one or more claims of the '945 Patent in at least this District by making, using, offering to sell, selling and/or importing products that infringe one or more claims of the '945 Patent literally or by the doctrine of equivalence. Exemplary products include Defendants' vehicles and electronic control units that are used within its vehicles that include a graphics processor and/or microprocessor, including, without limitation, Defendants' BMW 428i Infotainment and BMW i8 Infotainment systems and 2015 BMW 428i and 2015 i8 vehicles containing the same infringe the '945 Patent.

47. Advanced Silicon is asserting at least claims 1-11 and 21 of the '945 Patent against the Defendants.

48. Exhibit J includes a chart comparing exemplary independent claims 1 and 21 of the '945 Patent to the exemplary products such as the BMW 428i Infotainment system and 2015 BMW 428i vehicles containing the same. Exhibit K includes a chart comparing exemplary independent claims 1 and 21 of the '945 Patent to the exemplary BMW i8 Infotainment systems and 2015 BMW i8 vehicles containing the same. Accordingly, the BMW 428i Infotainment and BMW i8 Infotainment systems and vehicles containing the same directly infringe at least independent claims 1 and 21 of the '945 Patent.

49. Defendants, directly or through their agents, customers, and/or intermediaries, have made, used, sold, tested, imported, provided, supplied, distributed, and or/ offered for sale products, services, methods, or processes (for example automotive infotainment systems, head-end units, navigation systems, graphics processors, microprocessors, integrated circuits, and other computing and graphics-capable electronic devices, and automobiles containing such components) that directly infringe, literally and/or under the doctrine of equivalents, or which employ systems, components, and/or processes that make use of systems or processes that

directly infringe, literally and/or under the doctrine of equivalents, at least claims 1-11 and 21 of the '945 Patent.

50. Advanced Silicon is entitled to recover damages adequate to compensate for Defendants' infringement.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff respectfully requests the following relief:

a) A judgment that the '428 Patent, the '439 Patent, the '935 Patent, and the '945 Patent are valid and enforceable.

b) A judgment that Defendants have infringed one or more claims of the '428 Patent;

c) A judgment that Defendants have infringed one or more claims of the '439 Patent;

d) A judgment that Defendants have infringed one or more claims of the '935 Patent;

e) A judgment that Defendants have infringed one or more claims of the '945 Patent;

and

f) A judgment that awards Plaintiff all appropriate damages under 35 U.S.C. § 284 for Defendants' past infringement, and any continuing or future infringement of the Patents-in-Suit, up until the date such judgment is entered, including pre and post judgment interest, costs, and disbursements as justified under 35 U.S.C. § 284 and, if necessary, to adequately compensate Plaintiff for Defendants' infringement, an accounting:

- i. that this case be declared exceptional within the meaning of 35 U.S.C. § 285 and that Plaintiff be awarded its reasonable attorneys' fees against Defendants that it incurs in prosecuting this action;

- ii. that Plaintiff be awarded costs, and expenses that it incurs in prosecuting this action; and
- iii. that Plaintiff be awarded such further relief at law or in equity as the Court deems just and proper.

DEMAND FOR JURY TRIAL

Plaintiff hereby demands trial by jury on all claims and issues so triable.

Dated: December 21, 2015

Of Counsel:

Michael T. Renaud
James M. Wodarski
Andrew H. DeVoogd
Marguerite McConihe
Adam S. Rizk
MINTZ, LEVIN, COHN, FERRIS,
GLOVSKY & POPEO P.C.
One Financial Center
Boston, MA 02111
(617) 542-6000
mtrenaud@mintz.com
jwodarski@mintz.com
ahdevoogd@mintz.com
mmconihe@mintz.com
arizk@mintz.com

FARNAN LLP

/s/ Brian E. Farnan

Brian E. Farnan (Bar No. 4089)
919 N. Market Street, 12th Floor
Wilmington, Delaware, 19801
Telephone: (302) 777-0300
Facsimile: (302) 777-0301
bfarnan@farnanlaw.com

*Attorneys for Advanced Silicon
Technologies, LLC*