

ORIGINAL

GREGORY P. STONE (SBN 078329)
gregory.stone@mto.com
 HEATHER E. TAKAHASHI (SBN 245845)
heather.takahashi@mto.com
 MUNGER, TOLLES & OLSON LLP
 355 South Grand Avenue, 35th Floor
 Los Angeles, CA 90071-1560
 Telephone: (213) 683-9100
 Facsimile: (213) 687-3702

PETER A. DETRE (SBN 182619)
peter.detre@mto.com
 MUNGER, TOLLES & OLSON LLP
 560 Mission Street, 27th Floor
 San Francisco, CA 94105
 Telephone: (415) 512-4000
 Facsimile: (415) 512-4077

Attorneys for Plaintiff
 RAMBUS INC.

UNITED STATES DISTRICT COURT
 NORTHERN DISTRICT OF CALIFORNIA

RAMBUS INC.,

Plaintiff,

v.

NVIDIA CORPORATION,

Defendant.

FILED
 2010 DEC -1 12 04
 RICHARD W. WIEKING
 CLERK, U.S. DISTRICT COURT
 NORTHERN DISTRICT OF CALIFORNIA

E-filing

CV10

5448

CASE NO.

COMPLAINT FOR PATENT
 INFRINGEMENT

DEMAND FOR JURY TRIAL

1 Plaintiff Rambus Inc. ("Rambus") states the following as its Complaint against Defendant
2 NVIDIA Corporation ("NVIDIA"):

3 **I.**

4 **THE PARTIES**

5 1. Plaintiff Rambus is a Delaware corporation with its principal place of business at
6 1050 Enterprise Way, Sunnyvale, California 94089.

7 2. Rambus is informed and believes, and thereupon alleges, that defendant NVIDIA is a
8 Delaware corporation with its principal place of business at 2701 San Tomas Expressway, Santa
9 Clara, California 95050. Upon information and belief, NVIDIA has substantial contacts and
10 transacts substantial business, either directly or through its agent, on an ongoing basis in this judicial
11 district and elsewhere in the United States.

12 3. Unless specifically stated otherwise, the acts complained of herein were committed
13 by, on behalf of, and/or for the benefit of NVIDIA.

14 **II.**

15 **NATURE OF THE ACTION**

16 4. This is an action for patent infringement.

17 5. Rambus is informed and believes, and thereupon alleges, that NVIDIA has been and
18 is infringing, contributing to the infringement of, and/or actively inducing others to infringe claims
19 of U.S. Patent No. 6,542,555 (the "555 Patent"), U.S. Patent No. 7,099,404 (the "404 Patent"),
20 U.S. Patent No. 7,580,474 (the "474 Patent"), U.S. Patent No. 7,602,857 (the "857 Patent"), U.S.
21 Patent No. 7,602,858 (the "858 Patent"), and U.S. Patent No. 7,715,494 (the "494 Patent")
22 (collectively the "Asserted Patents").

23 **III.**

24 **JURISDICTION AND VENUE**

25 6. This action arises under the patent laws of the United States, 35 U.S.C. § 1 *et seq.*,
26 including 35 U.S.C. § 271. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331
27 and 1338(a).
28

5 8. Venue is proper in this Court pursuant to 28 U.S.C. §§ 1391(b), 1391(c), 1391(d)
6 and/or 1400(b) because a substantial part of the events giving rise to Rambus's claims occurred in
7 the Northern District of California and because NVIDIA is subject to personal jurisdiction in the
8 Northern District of California.

FACTUAL BACKGROUND

9. Rambus is one of the world's leading designers of semiconductor interface technologies that are used in a broad range of consumer, computing, and communications applications. In addition to the development of high-speed interfaces, Rambus's breakthrough technology and unparalleled engineering expertise have solved the most challenging interface problems and have brought industry-leading products to market. Rambus's interface solutions have enabled state-of-the-art performance in many products, such as personal computers, workstations, servers, gaming consoles, televisions, Blu-ray players, set-top boxes, printers, video projectors, network switches, modems, routers, mobile phones, and graphics cards.

10. In the late 1980s, Michael Farmwald and Mark Horowitz, the founders of Rambus, recognized and set out to solve the “memory bottleneck problem,” the failure of memory interfaces to keep pace with the exponential growth in microprocessor speed. Farmwald and Horowitz’s inventions enabled a dynamic random access memory (DRAM) memory architecture that achieved data transmission rates of 500 megahertz, at a time when other DRAM chips were running in the range of 20-30 megahertz.

11. Since its founding in 1990, Rambus has continued to design, develop, market, and license its high speed interface technology. Rambus's inventions include new memory devices, new controllers for controlling such memory devices, and new systems incorporating those memory

1 devices and memory controllers. Rambus's inventions also include new transmitters and receivers
2 and interface technology.

3 12. Rambus has made large-scale investments in the exploitation of its technology and a
4 large number of companies have paid for licenses to its patents. Rambus has granted licenses of
5 varying scope to its technology to many of the world's largest semiconductor manufacturers.

6 13. Since 1990, Rambus has spent millions of dollars on research and development of its
7 valuable technology. Rambus relies on the United States patent system to protect the technology
8 resulting from its research and development. Rambus's continued success depends on its research
9 and development of memory interface and other solutions, as well as the protection of intellectual
10 property in its innovative technology.

11 **B. Asserted Patents**

12 14. On April 1, 2003, U.S. Patent No. 6,542,555, titled "Digital Transmitter With
13 Equalization," was duly and legally issued to the Massachusetts Institute of Technology ("MIT"), as
14 assignee of named inventor William J. Dally.

15 15. On August 29, 2006, U.S. Patent No. 7,099,404, titled "Digital Transmitter," was
16 duly and legally issued to MIT, as assignee of named inventor William J. Dally.

17 16. On August 25, 2009, U.S. Patent No. 7,580,474, titled "Digital Transmitter," was
18 duly and legally issued to MIT, as assignee of named inventor William J. Dally.

19 17. On October 13, 2009, U.S. Patent No. 7,602,857, titled "Digital Transmitter," was
20 duly and legally issued to MIT, as assignee of named inventor William J. Dally.

21 18. On October 13, 2009, U.S. Patent No. 7,602,858, titled "Digital Transmitter," was
22 duly and legally issued to MIT, as assignee of named inventor William J. Dally.

23 19. On May 11, 2010, U.S. Patent No. 7,715,494, titled "Digital Transmitter," was duly
24 and legally issued to MIT, as assignee of named inventor William J. Dally.

25 20. The Asserted Patents include claims directed to improving the performance of digital
26 communications.

27 21. At all relevant times, the Asserted Patents have been owned by MIT. MIT has
28 exclusively licensed the Asserted Patents to Rambus, subject only to any rights retained by the

1 United States federal government pursuant to 35 U.S.C. §§ 201-211, with the right to sublicense, and
2 the right to prosecute any past, present, or future infringement of the Asserted Patents.

3 **C. NVIDIA's Acts of Infringement**

4 22. Rambus is informed and believes, and thereupon alleges, that NVIDIA has made,
5 used, sold, imported and/or offered for sale, and/or continued to make, use, sell, import and/or offer
6 for sale, products in the United States consisting of or including high-speed SerDes interfaces,
7 including PCI Express and DisplayPort peripheral interfaces.

8 23. The aforementioned NVIDIA products are hereinafter referred to collectively as the
9 "Accused Products." The Accused Products include at least products that are part of, for example,
10 NVIDIA's GeForce, nForce, Ion, Tegra, Quadro, and Tesla product lines.

11 24. NVIDIA's making, use, sale, offers for sale, and/or importation of the Accused
12 Products in the United States constitute acts of direct infringement of the Asserted Patents.

13 25. Rambus is informed and believes, and thereupon alleges, that William J. Dally, the
14 named inventor of the Asserted Patents, has been NVIDIA's Chief Scientist since January 2009.

15 26. Rambus is informed and believes, and thereupon alleges, that NVIDIA has sold or
16 offered to sell its Accused Products to third parties who incorporate the Accused Products into their
17 own products. Those third parties in turn have made, used, sold, offered for sale, and/or imported
18 and/or continue to make, use, sell, offer for sale, and/or import their own products in the United
19 States. These activities undertaken by the third parties constitute acts of direct infringement of the
20 Asserted Patents. The peripheral interfaces in NVIDIA's Accused Products are known by NVIDIA
21 to be especially made or especially adapted for use in infringement of the Asserted Patents and are
22 not staple articles or commodities of commerce suitable for substantial non-infringing use. NVIDIA
23 has thereby contributed to and continues to contribute to the infringement of the Asserted Patents.

24 27. Rambus is informed and believes, and thereupon alleges, that, by its sales and/or
25 offers for sale of the Accused Products to third parties, NVIDIA also has induced and continues to
26 induce acts by third parties that NVIDIA knew or should have known would constitute direct
27 infringement of the Asserted Patents. NVIDIA actively induces infringement of the Asserted Patents
28

1 by designing the Accused Products to be capable of infringement and by promoting and encouraging
2 the use of its products by the third parties in ways that infringe the Asserted Patents.

3 28. Rambus is entitled to recover from NVIDIA the actual damages it sustained as a
4 result of NVIDIA's wrongful acts alleged herein under 35 U.S.C. § 284 in an amount to be proven at
5 trial, together with interest and costs.

6 29. Rambus is informed and believes, and thereupon alleges, that NVIDIA's infringement
7 of the Asserted Patents as set forth herein has been and is willful, deliberate and in disregard of
8 Rambus's patent rights, and Rambus is therefore entitled to increased damages up to three times the
9 amount of actual damages and attorneys' fees, pursuant to 35 U.S.C. §§ 284, 285.

10 30. NVIDIA's infringement of the Asserted Patents will continue to damage Rambus,
11 causing irreparable harm for which there is no adequate remedy at law, unless it is enjoined by this
12 Court.

13 V.

14 CLAIMS FOR RELIEF

15 COUNT I

16 (Patent Infringement of U.S. Patent No. 7,542,555 17 Under 35 U.S.C. § 271, *et. seq.*)

18 31. Rambus incorporates by reference and realleges paragraphs 1 through 30 above as
19 though fully restated herein.

20 32. Rambus is informed and believes, and thereupon alleges, that NVIDIA: (1) has
21 infringed and continues to infringe claims of the '555 Patent, literally and/or under the doctrine of
22 equivalents, by making, using, offering to sell, selling (directly or through intermediaries), and/or
23 importing Accused Products consisting of or including PCI Express and DisplayPort peripheral
24 interfaces, in this district and elsewhere in the United States, and/or (2) has contributed and
25 continues to contribute to the literal infringement and/or infringement under the doctrine of
26 equivalents of claims of the '555 Patent, and/or has actively induced and continues to actively induce
27 others to infringe claims of the '555 Patent, literally and/or under the doctrine of equivalents, in this
28 district and elsewhere in the United States.

COUNT II**(Patent Infringement of U.S. Patent No. 7,099,404
Under 35 U.S.C. § 271, *et. seq.*)**

33. Rambus incorporates by reference and realleges paragraphs 1 through 32 above as though fully restated herein.

34. Rambus is informed and believes, and thereupon alleges, that NVIDIA: (1) has infringed and continues to infringe claims of the '404 Patent, literally and/or under the doctrine of equivalents, by making, using, offering to sell, selling (directly or through intermediaries), and/or importing Accused Products consisting of or including PCI Express and DisplayPort peripheral interfaces, in this district and elsewhere in the United States, and/or (2) has contributed and continues to contribute to the literal infringement and/or infringement under the doctrine of equivalents of claims of the '404 Patent, and/or has actively induced and continues to actively induce others to infringe claims of the '404 Patent, literally and/or under the doctrine of equivalents, in this district and elsewhere in the United States.

COUNT III**(Patent Infringement of U.S. Patent No. 7,580,474
Under 35 U.S.C. § 271, *et. seq.*)**

35. Rambus incorporates by reference and realleges paragraphs 1 through 34 above as though fully restated herein.

36. Rambus is informed and believes, and thereupon alleges, that NVIDIA: (1) has infringed and continues to infringe claims of the '474 Patent, literally and/or under the doctrine of equivalents, by making, using, offering to sell, selling (directly or through intermediaries), and/or importing Accused Products consisting of or including PCI Express and DisplayPort peripheral interfaces, in this district and elsewhere in the United States, and/or (2) has contributed and continues to contribute to the literal infringement and/or infringement under the doctrine of equivalents of claims of the '474 Patent, and/or has actively induced and continues to actively induce others to infringe claims of the '474 Patent, literally and/or under the doctrine of equivalents, in this district and elsewhere in the United States.

COUNT IV**(Patent Infringement of U.S. Patent No. 7,602,857
Under 35 U.S.C. § 271, *et. seq.*)**

37. Rambus incorporates by reference and realleges paragraphs 1 through 36 above as though fully restated herein.

38. Rambus is informed and believes, and thereupon alleges, that NVIDIA: (1) has infringed and continues to infringe claims of the '857 Patent, literally and/or under the doctrine of equivalents, by making, using, offering to sell, selling (directly or through intermediaries), and/or importing Accused Products consisting of or including PCI Express and DisplayPort peripheral interfaces, in this district and elsewhere in the United States, and/or (2) has contributed and continues to contribute to the literal infringement and/or infringement under the doctrine of equivalents of claims of the '857 Patent, and/or has actively induced and continues to actively induce others to infringe claims of the '857 Patent, literally and/or under the doctrine of equivalents, in this district and elsewhere in the United States.

COUNT V**(Patent Infringement of U.S. Patent No. 7,602,858
Under 35 U.S.C. § 271, *et. seq.*)**

39. Rambus incorporates by reference and realleges paragraphs 1 through 38 above as though fully restated herein.

40. Rambus is informed and believes, and thereupon alleges, that NVIDIA: (1) has infringed and continues to infringe claims of the '858 Patent, literally and/or under the doctrine of equivalents, by making, using, offering to sell, selling (directly or through intermediaries), and/or importing Accused Products consisting of or including PCI Express and DisplayPort peripheral interfaces, in this district and elsewhere in the United States, and/or (2) has contributed and continues to contribute to the literal infringement and/or infringement under the doctrine of equivalents of claims of the '858 Patent, and/or has actively induced and continues to actively induce others to infringe claims of the '858 Patent, literally and/or under the doctrine of equivalents, in this district and elsewhere in the United States.

COUNT VI**(Patent Infringement of U.S. Patent No. 7,715,494
Under 35 U.S.C. § 271, *et. seq.*)**

41. Rambus incorporates by reference and realleges paragraphs 1 through 40 above as though fully restated herein.

42. Rambus is informed and believes, and thereupon alleges, that NVIDIA: (1) has infringed and continues to infringe claims of the '494 Patent, literally and/or under the doctrine of equivalents, by making, using, offering to sell, selling (directly or through intermediaries), and/or importing Accused Products consisting of or including PCI Express and DisplayPort peripheral interfaces, in this district and elsewhere in the United States, and/or (2) has contributed and continues to contribute to the literal infringement and/or infringement under the doctrine of equivalents of claims of the '494 Patent, and/or has actively induced and continues to actively induce others to infringe claims of the '494 Patent, literally and/or under the doctrine of equivalents, in this district and elsewhere in the United States.

VI.**PRAYER FOR RELIEF**

WHEREFORE, Plaintiff Rambus asks this Court to enter judgment in its favor against NVIDIA and grant the following relief:

A. An adjudication that NVIDIA has infringed and continues to infringe the Asserted Patents as alleged above;

B. An accounting of all damages sustained by Rambus as a result of NVIDIA's acts of infringement of the Asserted Patents;

C. An award to Rambus of actual damages adequate to compensate Rambus for NVIDIA's acts of patent infringement, together with prejudgment and postjudgment interest;

D. An award to Rambus of enhanced damages, up to and including trebling of Rambus's damages pursuant to 35 U.S.C. § 284 for NVIDIA's willful infringement of the Asserted Patents;

1 E. An award of Rambus's costs of suit and reasonable attorneys' fees pursuant to 35
2 U.S.C. § 285 due to the exceptional nature of this case, or as otherwise permitted by law;

3 F. A grant of a permanent injunction pursuant to 35 U.S.C. § 283, enjoining
4 NVIDIA, and each of its agents, servants, employees, principals, officers, attorneys, successors,
5 assignees, and all those in active concert or participation with NVIDIA, including related individuals
6 and entities, customers, representatives, OEMs, dealers, and distributors from further acts of (1)
7 infringement, (2) contributory infringement, and (3) active inducement to infringe with respect to the
8 claims of the Asserted Patents;

9 G. Any further relief that this Court deems just and proper.

10 **VII.**

11 **JURY DEMAND**

12 Plaintiff Rambus requests a jury trial on all issues triable to a jury in this matter.

13
14 Respectfully Submitted,

15 DATED: December 1, 2010

MUNGER, TOLLES & OLSON LLP

16
17 By: 

PETER A. DETRE

18
19 Attorneys for Plaintiff
20 RAMBUS INC.