

offers for sale in the United States televisions. In addition, VIZIO's televisions are marketed, offered for sale, and/or sold throughout the United States, including within this District.

JURISDICTION AND VENUE

4. This action arises under the Patent Act, 35 U.S.C. § 1 *et seq.*
5. Subject matter jurisdiction is proper in this Court under 28 U.S.C. §§ 1331 and 1338(a).
6. Venue in this District is proper under 28 U.S.C. §§ 1391(b) and (c) and 1400(b).
7. This Court has personal jurisdiction over Defendant. Defendant has conducted and does conduct business within the State of Delaware. Defendant, directly or through subsidiaries or intermediaries (including distributors, retailers, and others), ships, distributes, offers for sale, sells, and advertises (including the provision of an interactive web page) its products and/or services in the United States and the District of Delaware. Defendant, directly and through subsidiaries or intermediaries (including distributors, retailers, and others), has purposefully and voluntarily placed one or more of its infringing products and/or services, as described below, into the stream of commerce with the expectation that those products will be purchased and used by consumers in the District of Delaware. These infringing products and/or services have been and continue to be purchased and used by consumers in the District of Delaware. Defendant has committed acts of patent infringement within the District of Delaware.

THE PATENTS

8. United States Patent No. 7,633,506 (“the ’506 Patent”) is entitled “Parallel pipeline graphics system” and issued on December 15, 2009 to inventors Mark M. Leather and Eric Demers. The ’506 Patent issued from United States Patent Application No. 10/724,384, filed on November 26, 2003. The ’506 Patent claims priority to U.S. provisional application

serial number 60/429,976, filed on November 27, 2002. A copy of the '506 Patent is attached hereto as Exhibit A.

9. United States Patent No. 7,796,133 (“the '133 Patent”) is entitled “Unified shader,” and issued on September 14, 2010 to inventors Mark M. Leather and Eric Demers. The '133 Patent issued from United States Patent Application No. 10/730,965, filed on December 8, 2003. The '133 Patent is a continuation of U.S. application Ser. No. 10/716,946, filed Nov. 18, 2003, now abandoned, which claims priority to U.S. provisional application serial no. 60/427,338, filed November 18, 2002. A copy of the '133 Patent is attached as Exhibit B.

10. ATI Technologies is the original assignee and owns all rights, title, and interest to the '506 and '133 Patents.

11. The '506 and '133 Patents are each valid and enforceable.

BACKGROUND

12. Plaintiffs incorporate the allegations of all of the foregoing Paragraphs as if fully restated herein.

13. Advanced Micro Devices, Inc. is an American multinational semiconductor company and pioneer of cutting-edge computer graphics technology. Since at least as early as 1985, ATI Technologies has made substantial investments to research, develop, and have manufactured high quality graphics systems. The Asserted Patents stem from the research and design of innovative proprietary technology developed by ATI Technologies. Advanced Micro Devices, Inc. acquired ATI Technologies in 2006, and has continued to make substantial investments to research, develop, and have manufactured high quality graphics systems that practice the Asserted Patents. Advanced Micro Devices, Inc. has invested substantial resources

collectively researching, developing, testing, launching, supporting, and maintaining groundbreaking graphics technology that practices the Asserted Patents.

14. The Asserted Patents cover inventions relating to important aspects of Advanced Micro Devices, Inc.'s graphics processing units ("GPUs") and accelerated processing units ("APUs").

15. Defendant has imported into the United States, marketed, offered for sale and/or sold in the United States televisions and other similar devices that infringe the Asserted Patents.

16. Defendant has been placed on actual notice of one or more of the Asserted Patents. The filing of this Complaint also constitutes notice in accordance with 35 U.S.C. § 287. Despite such notice, Defendant continues to import into, market, offer for sale and/or sell in the United States products that infringe the Asserted Patents.

17. Defendant has, and continues to, directly infringe the Asserted Patents by engaging in acts constituting infringement under 35 U.S.C. § 271, including but not necessarily limited to one or more of making, using, selling and/or offering to sell, in this District and elsewhere in the United States, and importing into this District and elsewhere in the United States, certain infringing televisions including but not limited to televisions which incorporate the functionalities and compositions described in detail in Counts I-III (collectively, "VIZIO Accused Products").

18. The infringing VIZIO Accused Products include, but are not limited to the D Series, E Series, M Series, P Series, and R Series televisions. For example, without limitation, the E43U-D2 television ("Exemplary Vizio Television") is an infringing VIZIO Accused Television.

19. Defendant's acts of infringement have caused damage to Plaintiffs. Plaintiffs are entitled to recover from Defendant the damages sustained by Plaintiffs as a result of Defendant's wrongful acts.

COUNT I
(Defendant's Infringement of the '506 Patent)

20. Plaintiffs incorporate the allegations of all of the foregoing Paragraphs as if fully restated herein.

21. Defendant has directly infringed and continues to directly infringe the '506 Patent by making, using, selling, offering for sale, or importing into the United States products and/or methods covered by one or more claims of the '506 Patent including, but not limited to, televisions and smart devices. The accused televisions and smart devices that infringe one or more claims of the '506 Patent include, but are not limited to, at least the VIZIO Accused Products. Further discovery may reveal additional infringing products and/or models.

22. For example, and without limitation, operation and use of the Exemplary VIZIO Television and the Exemplary VIZIO Smart Device infringes one or more claims of the '506 Patent, including but not limited to Claim 1.

23. Attached hereto as Exhibit C, and incorporated into this Complaint, is a claim chart showing where in the VIZIO Accused Televisions and the VIZIO Accused Smart Devices each limitation of Claim 1 is met.

24. Defendant has had knowledge of the '506 Patent since at least as of the filing of this Complaint.

25. Defendant's continued infringement of the '506 Patent has damaged and will continue to damage Plaintiffs.

26. Plaintiffs are entitled to recover damages adequate to compensate for Defendant's infringement.

27. ATI Technologies is the assignee and lawful owner of all right, title and interest in and to the '506 Patent. The '506 Patent is valid and enforceable.

COUNT II
(Defendant's Willful Infringement of the '506 Patent)

28. Plaintiffs incorporate the allegations of all of the foregoing Paragraphs as if fully restated herein.

29. Defendant has willfully infringed and/or does willfully infringe the '506 Patent.

30. Defendant received actual notice of the '506 Patent at least as early as December 2015 by way of a presentation AMD made to VIZIO. After receiving such actual notice of the '506 Patent, VIZIO proceeded to make, use, test, sell. And offer to sell in this District and elsewhere in the United States, and import into this District and elsewhere in the United States, the VIZIO Accused Products including the Exemplary VIZIO Television.

31. On information and belief, VIZIO engaged in such activities despite an objectively high likelihood that its actions constituted infringement of valid patents, including the '506 Patent. VIZIO knew of should have known that its actions would cause direct infringement of the '506 Patent.

COUNT III
(Defendant's Infringement of the '133 Patent)

32. Plaintiffs incorporate the allegations of all of the foregoing Paragraphs as if fully restated herein.

33. Defendant has directly infringed and continue to directly infringe the '133 Patent by making, using, selling, offering for sale, or importing into the United States products and/or

methods covered by one or more claims of the '133 Patent including, but not limited to, televisions. The accused televisions that infringe one or more claims of the '133 Patent include, but are not limited to, at least the VIZIO Accused Products. Further discovery may reveal additional infringing products and/or models.

34. For example, and without limitation, operation and use of the Exemplary VIZIO Television infringes one or more claims of the '133 Patent, including but not limited to Claim 1 and Claim 40.

35. Attached hereto as Exhibit D, and incorporated into this Complaint, is a claim chart showing where in the VIZIO Accused Products each limitation of Claim 1 and Claim 40 are met.

36. Defendant has had knowledge of the '133 Patent since at least as of the filing of this Complaint.

37. Defendant's continued infringement of the '133 Patent has damaged and will continue to damage Plaintiffs.

38. Plaintiffs are entitled to recover damages adequate to compensate for Defendant's infringement.

39. ATI Technologies is the assignee and lawful owner of all right, title and interest in and to the '133 Patent. The '133 Patent is valid and enforceable.

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs respectfully request the following relief:

- a) A judgment that the '506 Patent and the '133 Patent are valid and enforceable.
- b) A judgment that Defendant has infringed, either literally or under the Doctrine of Equivalents, one or more claims of the '506 Patent;

- c) A judgment that Defendant was willful, and that Defendant's continued infringement of the '506 Patent is willful;
- d) A judgment that Defendant has infringed, either literally or under the Doctrine of Equivalents, one or more claims of the '133 Patent;
- e) A judgment that awards Plaintiffs all appropriate damages under 35 U.S.C. § 284 for Defendant's past infringement, and any continuing or future infringement of the Asserted Patents, up until the date such judgment is entered, including pre or post judgment interest, costs, and disbursements as justified under 35 U.S.C. § 284 and, if necessary, to adequately compensate Plaintiffs for Defendant's infringement, an accounting:
 - i. that Plaintiffs be awarded enhanced damages by reason of the Defendant's willful infringement of the '506 Patent;
 - ii. that this case be declared exceptional within the meaning of 35 U.S.C. § 285 and that Plaintiffs be awarded its reasonable attorneys' fees against Defendant that it incurs in prosecuting this action; and
 - iii. that Plaintiffs be awarded costs, and expenses that it incurs in prosecuting this action; and
- f) A judgment that Plaintiffs be awarded such further relief at law or in equity as the Court deems just and proper.

DEMAND FOR JURY TRIAL

Plaintiffs hereby demand trial by jury on all claims and issues so triable.

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