United States District Court,
W.D. Wisconsin.

SILICON GRAPHICS, INC,
Plaintiff.
v.
ATI TECHNOLOGIES, INC., ATI Technologies ULC, and Advanced Micro Devices, Inc,
Defendants.

No. 06-cv-611-bbc

Aug. 1, 2008.

Background: Owner of patents relating to advanced graphics processing of the kind enabling the production of video games and movies brought infringement action against competitor, and competitors brought counterclaims based on, inter alia, invalidity. After infringement claims were dismissed, and jury found in favor of patent owner on competitors' invalidity counterclaim, competitors moved for, inter alia, judgment as a matter of law and for fees and costs as the prevailing party.

Holdings: The District Court, Barbara B. Crabb, J., held that:
(1) steps recited in method claims of one of the patents had to be performed in order;
(2) patent claims were directed to special purpose hardware;
(3) phrase "operating directly on" was limited to a process that results in floating point output;
(4) floating point buffer in alleged prior art patent could not constitute prior art;
(5) there was ample evidence to support jury's conclusion of no anticipation; and
(6) neither party prevailed as required to be a prevailing party entitled to fees and costs.

Motions denied.

6,650,327. Valid.

James M. Bollinger, David Nir, Jennifer L. Dereka, Joseph D. Etra, Philip Laurence Hirschhorn, Daniel Patrick Murphy, Morgan, Lewis & Bockius LLP, New York, NY, David W. Marston, Jr., Morgan, Lewis & Bockius LLP, Philadelphia, PA, Steven Duane Underwood, Thomas Patrick Heneghan, Edward Pardon, Michael Best & Friedrich LLP, Madison, WI, for Plaintiff.

Diane Simerson, Samuel L. Walling, William Manning, Aaron Robert Fahrenkrog, Amy Slusser, Andrew Martin Kepper, Brian Arthur Mayer, Cole Fauver, Jacob Zimmerman, Robins, Kaplan, Miller & Ciresi L.L.P., Minneapolis, MN, Joseph A. Ranney, Dewitt Ross & Stevens S.C., Madison, WI, for Defendants.

OPINION AND ORDER

BARBARA B. CRABB**, District Judge.**

The inevitable post trial motions are before the court after the jury found that defendants ATI Technologies,

Inc., ATI Technologies ULC and Advanced Micro Devices, Inc. had failed to prove the invalidityof claims 17, 18, 22 and 23 of plaintiff Silicon Graphics, Inc.'s U.S. Patent No. 6,650,327 patent. Defendants have moved for judgment as a matter of law in their favor or for a new trial on their unsuccessful invalidity claims, for a court trial on their claim of inequitable conduct, for attorney fees incurred in defending against plaintiff's allegedly baseless assertion of infringement of its 6,886,376 patent and for fees and costs as the prevailing party on infringement. Plaintiff has moved for attorney fees incurred in defending against defendants' charge of inequitable conduct. I conclude that defendants are not entitled to judgment as a matter of law or to a new trial on their invalidity claims, that they are not entitled to a trial on their claim of inequitable conduct, that neither side is entitled to attorney fees under 35 U.S.C. s. 285 or 28 U.S.C. s. 1927 and that defendants cannot seek reimbursement of their fees and costs because they were not the prevailing party under Fed.R.Civ.P. 54(b).

Familiarity with the previous decisions in this case is presumed. Suffice it to say that plaintiffs sued for infringement of three of its patents; as to all three, defendants asserted counterclaims based on invalidity, unenforceability and failure to satisfy the requirements of patentability under 35 U.S.C. s.s. 102, 103 and 112. In pretrial rulings, I found no basis for infringement as to two of plaintiff's patents. At the final pretrial conference, plaintiff conceded that it could not prove infringement as to its remaining patent, U.S. Patent No. 6,650,327, withdrew its remaining infringement claims and agreed to dismissal of those claims with prejudice. Trial went forward on defendants' counterclaims of invalidity after considerable argument by the parties about the propriety of hearing invalidity claims after a finding of no infringement. Defendant limited its claims of invalidity to anticipation and to only four claims: claims 17, 18, 22 and 23 of the '327 patent.

Among the contentions made by defendants in their invalidity case was that the U.S. Patent No. 6,567,083 ("the Baum patent"), anticipated the disputed claims of plaintiff's patent. The jury found that defendants did not prove by clear and convincing evidence that the claims were anticipated by Baum or any of the other three pieces of prior art they cited.

After the jury found no anticipation, I declined to hold a court trial on defendants' assertion of inequitable conduct, which rested solely on the contention that plaintiff had withheld a material reference (the Baum patent) from the patent office. The question of materiality had been determined by the jury when it found that the Baum patent did not anticipate. The verdict barred the court from considering the same issue.

I. DEFENDANTS' MOTION FOR JUDGMENT AS A MATTER OF LAW

A. *Background*

The court may grant a motion for judgment as a matter of law only if it concludes that no reasonable jury would have reached the verdict at issue. In making that decision, the court must view the evidence in the light most favorable to the party opposing the motion and give that party the benefit of all reasonable inferences that may be drawn from the evidence. At the same time, the court must make its own assessment of the sufficiency of the nonmovant's evidence. Erickson v. Wisconsin Dept. of Corrections, 469 F.3d 600, 602 (7th Cir.2006) (in reviewing district court's denial of motion for judgment as a matter of law, appellate court determines " 'whether the evidence presented, combined with all reasonable inferences permissibly drawn therefrom, is sufficient to support the verdict when viewed in the light most favorable to the party against whom the motion is directed' ") (quoting Mack v. Great Dane Trailers, 308 F.3d 776, 780 (7th Cir.2002)). In reviewing motions for judgment as a matter of law in patent cases, the district court applies the law of the regional circuit. NTP, Inc. v. Research in Motion, Ltd., 418 F.3d 1282, 1324 (Fed.Cir.2005).

It is never easy to overturn a jury verdict, but in this one, defendants have an extra burden. They are attacking the validity of plaintiff's patent and, by extension, the judgment of the patent office in issuing the patent. To prevail on an invalidity claim, they must prove their case by the higher civil standard of clear and convincing proof.

B. *The Patent in Suit*

The '327 patent relates to advanced graphics processing of the kind that enables the production of video games and movies such as "Toy Story" and "Wall-E." According to the patent abstract, the patent discloses a "floating point rasterization and frame buffer in a computer system graphics program." The novel aspects of the invention are alleged to be the capacity to refine all color values in a floating point format and to recycle data through a frame buffer multiple times without losing the desired range and precision of the data.

C. *Invalidity*

[1] Proving invalidity is a two-step process. "The first step involves the proper interpretation of the claims. The second step involves determining whether the limitations of the claims as properly interpreted are met by the prior art." Teleflex, Inc. v. Ficosa North America Corp. 299 F.3d 1313, 1335 (Fed.Cir.2002) (citing Beachcombers v. WildeWood Creative Products, Inc., 31 F.3d 1154, 1160 (Fed.Cir.1994)). Thus, to show that one or more of the prior art references anticipated claims 17, 18, 22 and 23 of the '327 patent, defendants had to first establish the proper interpretation of the claims. The claim interpretation was hotly disputed at trial, with the disputes centering on the following issues.

1. Whether the method claims (claims 17 and 18) require a specific order of steps.

2. Whether the four disputed claims (17, 18, 22 and 23) are limited to graphics hardware.

3. Whether the claims require floating point rasterization and whether the term "operating directly on" in claims 17 and 18 requires floating point output or a rasterization process; and

4. Whether the term "comprised of" in claims 18 and 23 limits the floating point data format to a specialized 16-bit format.

1. *Interpretation of claims*

a. Order of steps recited in claims 17 and 18

[2] The two claims read as follows:

17. In a computer system, a method for operating on data stored in a frame buffer, comprised of:

storing the data in the frame buffer in a floating point format;

reading the data from the frame buffer in the floating point format;

operating directly on the data in the floating point format; and

writing the data to the frame buffer in the floating point format;

wherein the steps of writing, storing, and reading the data in the frame buffer in the floating point format are further comprised of a specification of the floating point format, wherein the specificationcorresponds to a level of range and precision.

18. The method of claim 17 wherein the specification is comprised of 16 bits of data and the data are comprised of one sign bit, ten mantissa bits, and five exponent bits.

At trial, defendants' expert, Dr. Michael Potel, testified that claims 17 and 18 do not require a specific order. From this, he concluded that both claims were anticipated by two of defendants' prior art references, RenderMan Interface and the Lucas patent, neither of which requires a specific order. Plaintiff's expert, Dr. Robert Stevenson, reached the opposite conclusion: the steps *must* be performed in order; neither RenderMan Interface nor Lucas discloses the particular order of steps; therefore neither reference anticipated the claims.

At the end of the trial, I construed the terms of claims 17 and 18 as requiring the specified steps to be performed in the order listed and instructed the jury accordingly. Defendants challenge this ruling on several grounds. Their first objection is a purely procedural one, that the court should not have engaged in claim construction at trial on a matter plaintiff failed to raise at the time of claims construction. Defendants have a point. The whole purpose of doing claim construction in advance is to tease out issues such as this in advance of trial, so that all parties understand the rules of the game. However, the Federal Circuit has held that courts retain the discretion to revisit and alter claim constructions or construe previously unconstrued claims as they gain familiarity with the case or become aware of the need for a construction. CytoLogix Corp. v. Ventana Medical Systems, Inc., 424 F.3d 1168, 1172 (Fed.Cir.2005).

In this case, the need for a construction on the order of steps became apparent after defendants' expert testified that claims 17 and 18 did not prescribe a specified order. (Defendants argue that they tried to avoid the problem by filing written motions asking the court to preclude plaintiff from eliciting expert testimony relating to claim construction, dkt. # 402 at 3, and to exclude testimony that claim 17 is limited to the order of steps recited in the patent, dkt. # 509, and by making several oral requests to the same effect. Despite their interest in avoiding such testimony, they were the first to elicit testimony from their own expert on this issue.)

[3] The next question is whether the construction was the correct one. Defendants argue that it was not, relying on the general rule that methods claims are not limited to performance of the steps in a particular order unless the claim explicitly or implicitly requires a specific order. Baldwin Graphic Systems, Inc. v. Siebert, Inc., 512 F.3d 1338, 1345 (Fed.Cir.2008) (citing Interactive Gift Exp. Inc. v. Compuserve Inc., 256 F.3d 1323, 1345 (Fed.Cir.2001)). They point out the absence of any language in either claim 17 or 18 prescribing a specific order. However, as the Federal Circuit explained in Interactive Gift Exp., 256 F.3d at 1345, a method claim that does not recite an order may require one if, logically or grammatically, the steps must be performed in the order written or if the specification "implicitly requires such a narrow construction."

Claims 17 and 18 come within the Interactive Gift exception. A person of ordinary skill would understand from reading the claims that they prescribe a certain order. They are steps for a computer; computers operate solely by logic and solely by sequential steps. In addition, the person would understand that no other order would produce the desired result. As the '327 abstract states, the invention has two aspects, one of which is the conceptof recycling data through a frame buffer multiple times to refine the texture and shading of the color values of the image. This part of the invention necessarily requires a particular sequence of steps if it is to achieve the desired outcome. The color values (the data) cannot be written on before they have been operated on; they cannot be operated on before they have been read; and they cannot be read until they have been retrieved from storage in the frame buffer.

If logic and common sense were not enough, a reading of the specification makes it clear that order is key to the process. The point of the invention is the use of floating point in multipass operations; multipass means what it says: recycling data through the graphics pipeline over and over. This necessarily implies an order. Not so, say defendants, adding that plaintiff's position would be true only if the specification disclaims all operations other than multi-pass or all starting points in the multi-pass operation other than "storing," which it does not.

In making this argument, defendants are misreading the specification. For example, defendants point out that at col. 10, lns. 5-9, the specification describes reading from the frame buffer, operating on the data and then writing the data back into the frame buffer but says nothing about storing. Technically, defendants are correct, yet storing is implicit in the cited description. The data could not be "read from" the frame buffer if they had not been stored there in the first place; for the same reason, they could not be written "back into" the frame buffer had they not been there earlier. The method described is one of recycling data, which is necessarily a circular process in which the steps are done in the same order repeatedly until the desired effect is achieved.

Turning to Figure 5 of the specification, defendants argue that the specification describes many processes that do not perform multi-pass operations, but still perform "writing," "storing," "operating directly on" and "reading."

Figure 5, for example, shows a system that first operates directly on data in any of the stages that occur before frame buffer 522, such as "masking" 519. The system in Figure 5 next writes the data to the frame buffer, then stores that data in the frame buffer, and finally reads the data from the frame buffer and sends it to display 523.

Dfts.' Br. in Supp. of M., dkt. # 579, at 12 (citing col. 11, ln. 47-col. 12, ln. 26 of '327 patent). In fact, the cited section of the specification says nothing about writing or operating directly on or reading. Rather, it describes the different rasterization processes that can be applied to floating point data in earlier stages of the graphics pipeline, before they reach the frame buffer. The specification does not describe the frame buffer in this context except to say that "The resulting floating point values are stored in the frame buffer ...." "[e]ventually, those floating point values are read out [of the frame buffer] and drawn for display." Col. 12, lns. 24-25.

Defendants' reliance on Fig. 2 is equally unavailing. Fig. 2 and the accompanying description in the specification give an overview of the entire invention, starting with the preliminary steps (per-vertex and pixel operations, primitive assembly, texturizing and perfragment operations) that precede storage in the frame buffer where "the user can operate directly on the frame buffer data." Col. 7, lns. 44-45. The specification then describes the process disclosed in claims 17 and 18, which starts with reading data from the frame buffer, operating on the data and then writing the data back into the frame buffer. Col. 10, lns. 5-7.

Defendants make the point that the required steps could start anywhere in the process and reason from this that no specific order is required. They overlook the fact that the process is a circular one. Wherever the steps start, they run in the same order. If the first step is "reading," the next is "operating directly on," then "writing" and back to "storing."

Defendants' final argument rests on the prosecution history, which in their view undermines plaintiff's reading of claims 17 and 18 as requiring a specific order. This argument is one that defendants never made at trial. Therefore, I consider it waived.

b. Graphics hardware

[4] The parties are at odds over a major issue: whether the claims in issue are directed to a computer system operating on specialized rasterization *hardware* that allows for high speed, interactive rendering through a graphics pipeline. It was reasonable for the jury to find that it was. Plaintiff's expert, Dr. Stevenson, testified that the '327 patent is directed to "a special purpose hardware component designed and optimized specifically for high speed graphics processing." Trial Tr., dkt. # 559, at 49. The specification makes it plain that the invention does not relate to software for graphics. As the inventors noted, such programs "are well known in the art." 327 pat., col. 1, ln. 13. The inventors explained that they had discovered "that it is now

practical to implement some portions or even the entire rasterization process by *hardware* in a floating point format." Col. 2, lns. 54-57. (Emphasis added.) Even defendants' expert, Dr. Potel, agreed that the claims at issue in the '327 patent cover hardware. Trial Tr., dkt. # 563 at 124.

Claim 17 does not say in so many words that the method it discloses is a rasterization circuit operating on a floating point format, but that is what it describes. Reading the disputed claims as disclosing hardware is not reading a preferred embodiment in the claims; it is simply reading the claims as the person of ordinary skill would read a patent directed to special purpose hardware.

c. "Operating directly on" and floating point

[5] On this issue, the parties' dispute is whether it was error for plaintiff to argue to the jury that "operating directly on" is limited to a process that results in floating point output. Defendants take the position that the process could result in fixed point data and that neither claim limits the term "operating directly on" to rasterization. They add that if the inventors had intended to limit the term in this way, they should have specified "rasterizing the data," rather than saying "operating directly on" the data. Dfts.' Br. in Supp. of M. for Summ. J, dkt. # 579, at 35.

Interestingly enough, defendants made the contrary argument in their claim construction brief, dkt. # 170 at 37. In discussing the term "operating directly on" at that time, they argued that "converting from floating point values to fixed point values is antithetical to the stated objective of the invention." *See also* id. at 38 ("'327 patent consistently uses 'operating on' and 'operating directly on' to refer to calculations made without converting from floating point to fixed point.") Their expert made the same observation at trial, testifying that "operating directly on" "requires an operation; it usually would be some manipulation, transformation, calculation that works on the data and it has to remain or has to still be in floating point format." Trial Tr., dkt. # 563, at 14-15. *See also* id. at 44 (same expert testifying that claim 17 requires that same data that has been stored, read and operated on has to be written at some time to the frame buffer in the same floating point format in which it was stored, read and operated on).

When "operating directly on" is read in light of the claims and specification, it is evident that it refers to the process of additional rendering on modified data, then recycling the data before they go out to a display. The data remain in floating point format throughout the process, allowing them to retain range and precision, as defendants noted. Dfts.' Br. on Claim Const., dkt. # 170 at 36 ("For example, the '327 patent instructs that when the claimed invention 'operates on' data, it preserves the range and precision of the data.") (citing '327 patent at col. 10, lns. 5-9). As defendants recognized at the time of claim construction, reading the term as permitting a change of format would ignore the entire point of the patent.

Defendants make two other arguments in support of their current contention that "operating directly on" could mean converting data to fixed point. First, they cite Fig. 2 of the '327 specification, arguing that the figure shows pixel data read from the frame buffer that are processed within the pixel operations and special pixel operations to copy data in the frame buffer to other parts of the frame buffer. Col. 6, ln. 65-col. 7, ln. 11. Defendants contend that such copying constitutes operating directly on the data without satisfying either part of rasterization (translating three-dimensional primitives into a set of corresponding pixels of fragments or filling them in). Defendants did not raise this argument at trial. By failing to do so, they have waived it.

In addition, defendants rely on certain statements made by plaintiff during the prosecution of the continuation application that claims priority to the '327 patent. Before trial, I ruled that nothing that happened during that process was admissible in the trial of the invalidity counterclaims. I see no reason to reverse that ruling.

d. "Comprised of"

[6] The dispute between the parties as to this claim term is a straightforward one. Can "comprising" be read to include a 32-bit format or is it limited to a 16-bit format as set out in claims 18 and 23? Plaintiff has the better of the argument: the general rule is that "comprising" is an open-ended term, but it is not to be read as expanding the meaning of a patent term to eliminate one or more necessary elements from the patent. Moleculon Research Corp. v. CBS, Inc., 793 F.2d 1261, 1271 (Fed.Cir.1986). Reading the disclosure of claims 18 and 23 "wherein the specification is comprised of 16 bits of data and the data are comprised of one sign bit, ten mantissa bits, and five exponent bits," to include a 32-bit format would eliminate from the claim the necessary element of a 16-bit format. Such a reading cannot be correct.

2. ***Anticipation***

[7] To prove anticipation of a patent claim, the challenger must show that every element of the claim was disclosed in a single piece of prior art. Defendants' anticipation case rested on four publications filed or published before the application for the '327 patent was filed on June 16, 1998: RenderMan Interface Version 3.1 (Sept.1989); The OpenGL Graphics System, Version 1.1 (Mar.1997); U.S. Patent No. 5,528,741, issued to Bruce Lucas on June 18, 1996; and U.S. Patent No. 6,567,083, filed on September 25, 1997, issued to Daniel Baum and others on May 20, 2003 and assigned to plaintiff. (Although the world would not have known about the Baum patent's disclosures before the patent issued, Baum was employed by plaintiff when the patent application was filed and it is undisputed that the inventors of the ' 327 patent were familiar with the Baum patent application.) Defendants contend that each of these publications anticipated every element of claims 17, 18, 22 and 23. However, they failed to show that no reasonable jury could have found otherwise. It was not unreasonable for the jury to find that none of the patents anticipated the disputed claims.

1. U.S. Patent No. 6,657,083 (the Baum patent)

[8] The floating point buffer referred to in col. 1 of the Baum patent is the work of two of the inventors of the '327 patent; by that fact alone, the frame buffer cannot constitute prior art. In re Mathews, 56 C.C.P.A. 1033, 408 F.2d 1393, 1396 (C.C.P.A.1969) (" 'When the 102(e) reference patentee got knowledge of the applicant's invention from him, as by being associated with him, ... and thereafter describes it, he necessarily files the application after the applicant's invention date and the patent as "reference" does not evidence that the invention, when made, was already known to others.' ") (citing In re Land, 54 C.C.P.A. 806, 368 F.2d 866, 879 (1966)). Defendants introduced no evidence to suggest that anyone other than John Airey and Mark Peercy (two of the named inventors of the '327 patent) invented the frame buffer in question.

[9] Even if this were not true, the Baum patent is not about color values but about an advanced rendering technique to improve illumination. It does not specify any floating-point color format, any storage in floating point of color values, any floating-point format or the specific 16-bit floating-point format disclosed in claim 18.

Moreover, the Baum patent does not teach "operating directly on" as disclosed by claims 17 and 18. The patent does not disclose saving color values in the frame buffer in floating point or retrieving them for further floating point calculations.

2. U.S. Patent No. 5,528,741 (the Lucas patent)

[10] As with the Baum patent, the Lucas patent fails to disclose every element of the claims at issue. Those claims all require rasterization; rasterization has been construed to include scan conversion that must be entirely in floating point. The Lucas patent does not disclose rasterization. Moreover, it does not teach the specific order of the steps in claims 17 and 18 or the concept of "operating directly on" as disclosed in claims 17 and 18. It does not mention the concept of reusing floating point color values or any kind of frame buffer.

3. *OpenGL*

[11] OpenGL is an interface specification developed by plaintiff that enables users to implement different types of hardware and run programs through the interface. It is not hardware itself and it does not include any description of the underlying hardware that the program might be running. OpenGL mentions a frame buffer but not one that meets the court's construction of a frame buffer. It does not teach scan conversion entirely in floating point in the rasterization process and it does not teach multi-pass operations or "operating directly on." It fails to disclose a particular 16-bit floating point format; to the contrary, it states explicitly that it is not specifying any format. Although defendants maintain that the accumulation buffer in OpenGL was a frame buffer, they produced no evidence that the accumulation buffer used floating point. On the other hand, John Airey testified from his own experience that plaintiff made the accumulation buffer fixed point.

4. *RenderMan Interface*

[12] Like OpenGL, the RenderMan Interface prior art reference is a written interface for controlling hardware, not a hardware system as the '327 patent discloses. The Interface does not disclose any rasterization; it does not teach performing the steps of claims 17 and 18 in order; and it does not disclose a floating point frame buffer. It follows therefore that it can not disclose the process of operating directly on the data stored in the frame buffer in floating point. As plaintiff's expert testified, the RenderMan Interface has an "image device," which is used for storage, but not for retrieval and re-work of an image. Trial Tr., dkt. # 559, at 17-18. Finally, the RenderMan Interface does not teach a 16-bit floating point format.

D. *Conclusion*

Defendants have failed to show that no reasonable jury would have found that one or more of defendants' four prior art references disclosed each and every element of claims 17, 18, 22 or 23. To the contrary, the jury had ample evidence to support its conclusion of no anticipation. Defendants' motion for judgment as a matter of law will be denied.

II. DEFENDANT'S MOTION FOR A NEW TRIAL

Defendants contend that the jury's verdict was against the manifest weight of the evidence for a number of reasons, starting with the court's alleged error in allowing expert testimony about claim construction. As I explained earlier, the only testimony of this sort was plaintiff's expert's response to defendants' expert's testimony construing the claims as *not* requiring a specific order and this testimony was kept to a minimum. As to the decision to construe this aspect of claims 17 and 18 at trial, I have discussed this point at length in the preceding section of this opinion and need not expand on it in this section.

Defendants contend that it was error to allow plaintiff to argue that the claims of the '327 patent were directed at hardware (and a compounded error for the jury to find that they were), but it is obvious from the patent that they are. The jury did not need any claim construction instruction on that point. If defendants disagreed, it was their duty as officers of the court to request such a construction before the jury was instructed, not to stay silent in the hope of conserving an issue for re-trial.

Defendants say that it was error to allow plaintiff to argue to the jury that claims 22 and 23 must be construed to require multi-pass operations, but they waived any objection to this alleged argument by not objecting at the time plaintiff made it. Their failure to raise a timely objection when they thought they heard plaintiff make this argument prevented the court from issuing a corrective instruction to the jury.

In any event, I cannot find any place in the transcript at which plaintiff made the arguments that defendants attribute to it. More important, the jury was instructed that *claims* 17 and 18 are method claims that require a certain order of steps; they were never instructed that all four of the claims in issue required a specific order.

Defendants take issue with allowing one of the inventors, John Airey, to testify about claim construction. In fact, his testimony was limited to matters that did not involve claim construction, such as the background of the invention and the efforts made by the inventors to resolve problems existing in the art at the time. He did not testify about claim construction.

To the extent that defendants challenge plaintiff's references to Airey's testimony in his closing argument, they waived those objections by failing to object when they were made. One of those challenges goes to counsel's statement that Airey had worked with accumulation buffers and "knew" that all of them used fixed point formats rather than floating point. I do not view Airey's testimony as "expert" testimony; he had worked closely with the accumulation buffer described in the OpenGL specification developed by plaintiff while he worked there and knew what it included. This was not expert testimony but rather permissible testimony about the prior state of the art.

Defendants have waited too long to attack statements made by plaintiff's counsel in opening and closing arguments. The time to object was at trial, when curative instructions could have been given, if they were necessary. By waiting as they did, defendants have waived their right to object to any improper statements. Moreover, they have not explained why the jury would have disregarded the court's repeated instruction not to consider as evidence anything said by the lawyers. Finally and most important, they have not identified anything improper said by plaintiff's lawyer in either the closing or opening argument.

Two of defendants' objections are almost too trivial to mention. Defendants object to the court's comment about the materiality of their questioning of plaintiff's expert, which was directed to the alleged similarity of his report with that of another of plaintiff's experts. Defendants had asked Dr. Stevenson to compare his report to the other expert's, which he had never seen before. I did not view this paragraph by paragraph review as a good use of the jury's time; it was not a comment on Stevenson's credibility. The second matter relates to the court's decision not to send back to the jury the demonstrative exhibits of the claims of the '327 patent that defendants had used at trial. This was not an error. Defendants told the court and jury they were using the exhibits for demonstrative purposes only. They prepared them for this purpose, showing the language of the disputed terms, with specific terms outlined in red to make their point. It is understandable why defendants would want the jury to have these exhibits during their deliberations, but the exhibits were not in evidence and were not exhibits the jury should be considering. It is not as if the jury did not have copies of the '327 patent in the jury room; they did.

Defendants raise another alleged error that requires little discussion. They complain that plaintiffs argued that the disputed claims are limited to high-speed operations, but they cannot point to any place in the transcript in which plaintiff made such an argument to the jury or otherwise suggested that any of the disputed claims required a particular speed.

Defendants' final argument is that the court erred in giving the jury the construction of all of the terms that had been the subject of the claim construction ruling, some of which applied only to claims other than the disputed ones. Defendants have failed to show that this was error; the jury was instructed that the constructions related to the patent as a whole and not to the individual claims in dispute.

The trial was hard-fought and no more error-free than any trial is. However, defendants have failed to show any errors that undermined the fairness of the trial or led to an incorrect verdict.

III. NEW TRIAL TO DETERMINE ENFORCEABILITY OF '327 PATENT

Defendants contend that plaintiff was guilty of inequitable conduct because it failed to disclose material information, specifically the Baum patent, with an intent to deceive the patent office. After the jury found that the Baum patent did not anticipate any of the disputed claims of the '327 patent, I dismissed defendants'

inequitable conduct case on the ground that the court was foreclosed from reaching a decision contrary to the jury's determination. Therma-Tru Corp. v. Peachtree Doors Inc., 44 F.3d 988, 995 (Fed.Cir.1995) (court not authorized to make judicial findings independent of and contrary to facts found by jury in reaching its verdict). Defendants say now that the dismissal was erroneous because Therma-Tru applies only when judges are deciding the same matters of fact or law that the jury decided. In defendants' view, the issue the court needed to reach was not whether the Baum patent anticipated, which is what the jury decided, but rather whether the Baum patent was material to the patent office.

Defendants are correct when they argue that anticipation and materiality can be two different matters. The flaw in their argument is that they never advanced any other theory of materiality. Instead, in preparation for the inequitable conduct phase of trial, they talked of materiality only in terms of anticipation by the Baum patent. *See* Defendants' Proposed Findings of Fact for Potential Non-Jury Issues, dkt. # 459, at 46 ("The [Baum] patent anticipates at least claims 17 and 22 of the '327 patent"; "Because the [Baum] patent anticipates '327 patent claims, the [Baum] patent and application 'establishes by itself or in combination with other information, a prima facie case of unpatentability of a claim,' and is material art under 37 C.F.R. s. 1.56."). Once the jury determined that the Baum patent did not anticipate, defendants' case of inequitable conduct could not go forward. Although defendants worked hard to convince the court that they should be allowed to argue additional reasons for a finding of inequitable conduct, their efforts failed. It was too late for them to go forward on a wholly new theory they had never disclosed to plaintiff.

Defendants suggest that their proposed finding of fact, # 450, dkt. # 459 at 65, was sufficient to give notice of their theory of inequitable conduct. A reading of the proposed finding dispenses with that argument. In full, the proposal reads: "The '450 patent and application are highly material prior art because they invalidate '327 patent claims and/or present a prima facie case of unpatentability." This statement falls far short of being a sufficient factual proposal on which to base an inequitable conduct claim. Defendants do not say what other showing of materiality they could have made; if they are contending that they could have shown that Baum made the '327 patent obvious, they never raised this point at trial. I conclude that it was not error to dismiss defendants' inequitable conduct claim without a trial.

IV. THE PARTIES' MOTIONS FOR ATTORNEY FEES

Defendants have moved for an award of attorney fees under 35 U.S.C. s. 285 and 28 U.S.C. s. 1927 against plaintiff for bringing an allegedly baseless suit against defendants for infringement of plaintiff's U.S. Patent No. 6,885,376. In turn, plaintiff has moved for an award of attorney fees under the same two statutes for defendants' pursuit of an allegedly baseless claim of inequitable conduct in the Patent and Trademark Office in connection with the application process for the '327 patent.

A. *Defendants' Motion for Fees*

Defendants attack plaintiff for bringing a claim for infringement of the ' 376 patent without undertaking a thorough examination of the allegedly infringing products. They do not explain how plaintiff could have done more than it did. Plaintiff was faced with products whose workings could not be analyzed by mere examination but only by analysis of their working code and it was prohibited from reviewing the code. Prior to suit, plaintiff was limited to review of publicly available information, which indicated that the products employed plaintiff's patented methods of dynamic load balancing. (The publicly available information included the '376 patent and its file history, a study of its claims, preparation of infringement claim charts, discussion with company engineers in the field and review of publications in which defendants described their products and their capabilities.)

In itself, this way of proceeding was not improper or inadequate. Hoffmann-LaRoche, Inc. v. Invamed, Inc., 213 F.3d 1359, 1364 (Fed.Cir.2000) (citing Cambridge Products Ltd. v. Penn Nutrients Inc., 962 F.2d 1048, 1050 (Fed.Cir.1992) (plaintiff acted reasonably in testing sample of allegedly infringing product,

commissioning additional chemical analyses and acquiring documentary evidence seeming to confirm infringement)). Although defendants argue that plaintiff should have acquired and tested the products' functionality before filing, they have not shown that testing would have disclosed the information they now say plaintiff should have had before suing.

It is not clear that plaintiff was wrong in believing that the '376 patent was infringed by defendants' products. It is true, however, that plaintiff was unable to develop any evidence of infringement by the time that defendants filed their first motion for summary judgment. Therefore, I granted summary judgment to defendants on August 21, 2007, on plaintiff's charge of direct infringement of the disputed claims of the '376 patent (except for claim 16, which I overlooked) because plaintiff had failed to adduce any evidence of direct infringement on those claims.

Subsequently, plaintiff tried to withdraw all of its '376 claims but was thwarted by defendants' alleged insistence on a quid pro quo for the withdrawal and their refusal to drop their invalidity counterclaims as to those claims. The result was that the parties assumed that terms from the '376 claims were still in contention at the claims construction hearing and prepared accordingly. (It is unlikely that this caused defendants much additional work because the hearing took place only ten days after the issuance of the summary judgment decision; presumably they were preparing for the hearing considerably before then.) I declined to construe any terms from the '376 patent, believing that the patent was no longer at issue. In December 2007, plaintiff moved to withdraw the '376 patent with prejudice. Defendants opposed the motion, arguing that conditions should be placed on the dismissal, one of which was that they should be awarded their attorney fees expended in defending against the asserted claims. I declined to award fees as a condition of dismissal, but advised the parties that defendants would have a right to seek such fees under s. 285 at the end of the case.

Despite the umbrage defendants take at plaintiff's assertion of the '376 claims, I am not convinced that pressing them was baseless or frivolous or otherwise deserving of an award of attorney fees under either s. 285 or 28 U.S.C. s. 1927. Both statutes are aimed at exceptional cases in which the parties (or counsel, in the case of s. 1927) have acted so outrageously as to be subject to sanctions. This is not one of those cases. Both sides prosecuted their cases vigorously and tenaciously. Both sides advanced and maintained positions that in hindsight they may regret. That is not exceptional or even unusual in litigation of this nature.

Defendants' motion for sanctions relating to plaintiff's pleading and litigation of its '376 claims will be denied.

B. *Plaintiff's Motion for Fees*

Defendants had little ground on which to advance their inequitable conduct position and even less on which to pursue it through to the verge of trial. However, as with plaintiff's litigation of its '327 patent, their strategy was not exceptional. That is to say, it was not entirely frivolous or baseless or otherwise deserving of a sanction.

Although I believe that defendants would never have been able to show that Michael Messinger acted improperly in any respect or that the Baum patent was material to the patent office's determination of the novelty of the '327 patent, I cannot say that it was wholly improper for defendants to pursue their claim of inequitable conduct.

This case would have been easier for counsel and the court to deal with had counsel for both sides confined their claims to those for which they had a stronger foundation, but determining which claims are the stronger ones is always easier at the end of the case than it is at the outset. I conclude that plaintiff has not shown that it is entitled to attorney fees for defendants' prosecution of their inequitable conduct case under either s. 285 or s. 1927.

V. DEFENDANTS' ENTITLEMENT TO FEES AND COSTS

[13] Despite the more than 100 pages that the parties have devoted to the issue of defendants' entitlement to fees and costs and the amount of such fees and costs, the resolution of the matter is straightforward. Fees and costs are awarded only to prevailing parties; in this suit neither side prevailed.

The Court of Appeals for the Federal Circuit follows the Supreme Court's definition of prevailing party: "A plaintiff 'prevails' when actual relief on the merits of his claim materially alters the legal relationship between the parties by modifying the defendant's behavior in a way that directly benefits the plaintiff." Farrar v. Hobby, 506 U.S. 103, 111-13, 113 S.Ct. 566, 121 L.Ed.2d 494 (1992); *see also* Manildra Mill. Corp. v. Ogilvie Mills, Inc. 76 F.3d 1178, 1182 (Fed.Cir.1996) (finding that party who won declaration of invalidity and defended successfully against charge of infringement was prevailing party even though it won no damages). Applying the Farrar definition in this case, I find that neither side prevailed and neither side lost. Plaintiff lost its claim for infringement but the jury found that claims 17, 18, 22 and 23 of its '327 patent were not invalid; defendants learned that their products did not infringe the '327 patent but lost when they tried to prove the invalidity of certain claims of the '327 patent. Under the circumstances, no reason exists to award fees and costs to either side. Therefore, it is not necessary to examine defendants' arguments for an award of fees or the costs they allege they expended.

ORDER

IT IS ORDERED that

1. The motion for judgment as a matter of law filed by defendants ATI Technologies, Inc., ATI Technologies ULC and Advanced Micro Devices, Inc., dkt. # 578, is DENIED;

2. Defendants' motion for a new trial on their invalidity counterclaims, dkt. # 578, is DENIED;

3. Defendants' motion for a new trial on inequitable conduct, dkt. # 578, is DENIED;

4. Defendants' motion for attorney fees incurred in connection with plaintiff Silicon Graphics, Inc.'s assertion of its 6,885,376 patent, dkt. # 582, is DENIED;

5. Plaintiff's motion for attorney fees incurred in defending against defendants' assertion of their inequitable conduct claim, dkt. # 590, is DENIED; and

6. Defendants' motion for an award of its costs and fees, dkt. # 586, is DENIED on the ground that they were not prevailing parties.

The clerk of court is directed to enter judgment accordingly.

W.D.Wis.,2008.
Silicon Graphics, Inc. v. ATI Technologies, Inc.