

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WISCONSIN

WILLIAM C. FRAZIER, FRAZIER
INDUSTRIES, INC. and AIRBURST
TECHNOLOGIES, LLC,

Plaintiffs,

v.

LAYNE CHRISTENSEN COMPANY
and PROWELL TECHNOLOGIES, LTD.,

Defendants.

OPINION AND ORDER

04-C-315-C

This civil action for patent infringement is before the court following a jury trial limited to the affirmative defense of patent invalidity asserted by defendants Layne Christensen Company and ProWell Technologies, Ltd. Following a jury verdict in favor of plaintiffs, defendants have renewed the motions for judgment as a matter of law and in the alternative for a new trial that they made at trial at the close of evidence.

Defendants maintain that the invention disclosed in the patent in dispute, U.S. Patent No. 5,579,845, would have been obvious to persons of ordinary skill in the art. They assert that the jury's finding to the contrary is incorrect as a matter of law and that the jury

would not have reached the wrong answer but for the court's erroneous evidentiary rulings. Plaintiffs William Frazier, Frazier Industries, Inc. and Airburst Technologies, Ltd. deny that the court erred in making the rulings of which defendants complain but suggest that if it did, the rulings were either harmless error or offset by erroneous rulings that favored defendants. Plaintiffs argue that the jury's verdict is supported by the credible evidence.

I conclude that the jury did reach the wrong decision and that its verdict cannot stand. It was not reasonable to find that defendants had failed to show by clear and convincing evidence that the '845 patent was obvious. The prior art in the field showed conclusively that others had thought of using adjustable air guns and adjustable arc generators in water wells for rehabilitative purposes and monitoring the results with video cameras. I conclude also that it was error to deny defendants' motion to strike all of plaintiffs' expert's testimony.

Ordinarily, the issue of infringement would be the first to be tried in a patent case. In this case, however, continuing disputes over discovery relating to infringement militated in favor of starting with trial of the invalidity issue, which was not dependent upon the disputed discovery. My conclusion that defendants are entitled to judgment as a matter of law ends the proceedings in this court and renders moot the motions for summary judgment on infringement filed by defendants on January 3, 2006, as well as the motion for a protective order filed by plaintiffs on May 22, 2006. Accordingly, these motions will be

denied. However, three other motions are not mooted by this decision: (1) plaintiffs' motion for sanctions under Fed. R. Civ. P. 37(c)(2); (2) defendants' motion for costs and fees for the deposition of Jeff Moore; and (3) plaintiffs' motion for sanctions regarding the deposition of Tatiana Scanlan. I will grant the first two motions and deny the third. Plaintiffs' motion for Rule 37 sanctions will be granted because they have demonstrated that defendants violated the court's September 29, 2005 order, which required them to identify every job site at which defendant Layne had used BoreBlast or BoreBlast II and to turn over all documents related to those job sites. In addition, I conclude that defendants violated their discovery obligations by failing to produce documents responsive to plaintiffs' first set of requests for production before defendant Layne's Fontana, California office was flooded. Defendants' motion for costs for Moore's deposition will be granted because plaintiffs violated Fed. R. Civ. P. 30(g)(1) by failing to appear at the deposition and by failing to make arrangements to appear by telephone. Finally, plaintiffs' motion for sanctions regarding the Scanlan deposition will be denied because defendants' position that Scanlan was not an expert witness was not so unreasonable as to be sanctionable. At the end of this order, I will set a schedule for the parties to submit itemizations of the costs and fees to be awarded.

Part I of this opinion addresses defendants' motion for judgment as a matter of law. Part II addresses the three discovery-related motions.

I. MOTION FOR JUDGMENT AS A MATTER OF LAW OR IN THE ALTERNATIVE
FOR A NEW TRIAL

From the evidence adduced at trial, I find the following facts material to resolution of defendants' motion for judgment as a matter of law or in the alternative for a new trial.

A. Facts

1. Plaintiff's patent and the prior art

Plaintiff William C. Frazier's U.S. Patent No. 5,579,845 discloses a method for rehabilitating water wells that employs a device or combination of devices to generate pressure waveforms and mass displacement within well water. The waves generated in the water remove scale and other incrustations that collect within the well and impede water production. The patented method employs either a "percussive gas venting apparatus" or an electrical arc generator, either of which is inserted into the well and activated to create waveforms. The well is then monitored with video equipment to determine the effectiveness of the wave generation. If necessary, the apparatus or generator is adjusted, reinserted and re-activated until the desired well performance characteristics are achieved.

The two independent claims of the '845 patent in dispute are claims 1 and 19, which read as follows:

1. A method of stimulating water well production, comprising:

providing a water well, said well having a bore volume;

inserting into said bore volume means for generating pressure waveforms and mass displacement through said bore volume, said waveform generation means selected from the group consisting of at least one percussive gas venting apparatus, at least one electrical arc generator, and combinations thereof;

activating said generation means whereby impediments to well production are removed through interaction with said waveforms;

monitoring the effect of said waveforms using video equipment, bore diameter measuring equipment, or a combination of said equipment; and
adjusting the frequency and amplitude of waveforms generated to meet well performance characteristics.

19. A non-destructive method of rehabilitating a water well by removing impediments to water production, comprising:

lowering into the bore of a water well means for generating percussive energy, said generating means selected from the group consisting of at least one high pressure gas gun, at least one electrical arc generator and combinations thereof;

initiating percussive impact with in [sic] the well bore;

monitoring said removal and the effect of said percussive energy using video equipment, bore diameter measuring equipment, or a combination of said equipment;
and

adjusting said percussive energy whereby the mechanical action of said energy propagating within said bore improves water production such that well performance characteristics are met.

(Also in dispute are eight dependent claims that need not be discussed separately.)

Together with two co-inventors, Robert Taylor and John Jansen, plaintiff William Frazier submitted a patent application to the patent office on February 7, 1995, claiming the invention of a “non-destructive method for stimulating, refurbishing, or otherwise increasing production from water wells, using pressure waveforms and mass displacement with the well bore volume.” ‘845 patent, Dfts.’ Exh. #501, at LC00001. (For simplicity, I will refer to the application as the Frazier application, as Frazier is now the sole owner of the issued patent.) The applicants cited no prior art. The examiner rejected the application on the ground that a previous patent, U.S. Patent No. 5,297,631, issued to Gipson, disclosed an apparatus and method for stimulating oil production in oil wells substantially similar to plaintiff Frazier’s proposed apparatus and method for water production. Additionally, the examiner questioned whether plaintiff had explained adequately how the solenoid in the gas gun is activated to allow the gas to leave the upper chamber rapidly and how the shuttle contacted the lower chamber as set forth in the specification. In response, Frazier advised the examiner that gas guns, their components and their operation are well known to those skilled in the art and are available commercially from Bolt Technology Corporation.

Plaintiff amended the application by adding the “monitoring by video equipment” limitation to the independent claims and re-submitted it to the patent office, together with a brochure from the Bolt Technology Corporation. In his amended application, Frazier made a point of emphasizing the novelty of the adjustability of the frequency and amplitude

of the wave form that could be generated to meet well performance characteristics. The new information persuaded the patent examiner to find the method patentable. The patent issued on December 3, 1996.

As of February 7, 1995, when the application for the '845 patent was filed, the following eight items of prior art were in existence: (1) the Gipson '631 patent; (2) a Bolt sales publication describing gas guns (also referred to as air guns); (3) U.S. Patent No. 4,997,044, issued to Stack, disclosing an apparatus for electrically generating hydraulic shock waves in a solid bearing formation of a bore hole, designed for "generating hydraulic shock waves in an oil, gas, or water bearing formation"; (4) a 1975 article by Michael S. Nissley entitled "Electrohydraulic Stimulation of Water Wells"; (5) an excerpt from a book entitled Water Well Technology by Michael Campbell and Jay Lehr (copyright 1973) describing the use of "closed-circuit television evaluations" of downhole conditions in wells; (6) a 1987 article from Groundwater Age by Stuart Smith entitled "A Light in the Dark" and subtitled "The market for water well TV cameras is here to stay"; (7) a 1970 article by Dennis E. Williams describing the use of an arc generator to generate shock waves to dislodge the incrustations on perforated well screens; and (8) a 1986 article by G.T. Darilek, published by the Society of Petroleum Engineers, entitled "A Color Borehole Television System for Developing Gas Production from Devonian Shales."

Both the Nissley and the Williams articles described rehabilitation work done in Los

Angeles in the late 1960s on municipal water wells, using an arc generator to produce shock waves. The arc generator was adjustable: the level of the charging voltage applied to the capacitors was controlled by varying the speed of the generator and the voltage at which the capacitors were discharged could be adjusted by changing the spacing of the electrodes of the arc switch. Adjusting the two parameters gave the operators control of the amount of energy transmitted to the underwater arc. Williams noted in his article that he and his colleagues had used a 3-D still camera to review the before-and-after condition of the Los Angeles wells.

In the Groundwater Age article, Stuart Smith described the use of video cameras and recorders to survey wells before and after rehabilitation. He reported that an advance video survey gives the operator information about what is down in the well before he inserts his equipment; a post-rehabilitation survey allows the operator to assess the success of the work and make sure that no damage was done or debris lost in the process. Dfts.' Exh. #548, at LC00256. Smith wrote that video cameras had a "natural link" to well maintenance and rehabilitation. Id. at LC00257.

The level of ordinary skill in the art of well rehabilitation is a master's degree in geology or hydrology and several years' work experience in the field.

2. Expert witness testimony

The parties' expert witnesses provided clashing views of the obviousness of the '845

patent. Defendants' expert witness, Dennis E. Williams, testified to his opinion that the process disclosed in the '845 patent was not an innovation at the time the patent application was filed. Williams is a groundwater hydrologist and president of a groundwater consulting firm. He has a Ph.D. degree in groundwater hydrology and has been involved in the design, construction or rehabilitation of about 700 wells in the United States and overseas during the course of his career. He is the director of the University of Southern California geohydrologic laboratory, a research professor at the school and the author of approximately 30 publications.

Starting in the mid-80s, Williams and others used video cameras in well rehabilitation. It was commonplace to drop a video camera down a well at the outset of a job to determine the reasons for the well's declining production and repeat the process at the end to gauge the effectiveness of the cleaning process before running a pumping test to check the results.

Williams described the process claimed in the '845 patent as starting with a gas gun or arc generator; second, turning on the pressure on the gas gun and adjusting the volume or, on the arc generator, adjusting the voltage and perhaps the air gap as well (the spacing between the electrodes to change the energy released downhole); and third, lowering the video camera into the well to evaluate the effectiveness of the cleaning. It was his opinion that the process, tools and techniques outlined in the patent would have been obvious to one

of ordinary skill in the art in 1994 (when Frazier filed the patent application).

Williams testified that it was common for technological advances in the petroleum industry to be carried over to the water well industry. Therefore, he said, a person of ordinary skill in the art reading the Gipson patent would find it easy to make the connection between using a gas gun in an oil well and using one in a water well, just as the patent examiner had found when he made his first review of the application for the '845 patent. Williams testified that both the Gipson patent and the Bolt publication contained information about the adjustable features of the gas gun and the ranges of adjustments that could be made and he described his own experiments with using an arc generator to rehabilitate municipal water wells in Los Angeles. It was Williams's opinion that the steps in the independent claims of the '845 patent, claims 1 and 19, would have been obvious to one of ordinary skill in the art in 1994 who had access to the eight pieces of prior art introduced at trial. (He did not tie his findings of obviousness to specific publications out of the eight he had identified.) He made the same findings of obviousness with respect to the disputed dependent claims.

Plaintiffs' expert was Fletcher Driscoll, a groundwater consultant with a Ph.D. in hydrogeology who has taught at a number of universities. He admitted at trial that when he gave his deposition he did not have a clear understanding of the term "prior art." At the time, he did not understand that a publication could constitute prior art even if it described

a concept that was not built and functioning. During his trial testimony, it became evident that he did not understand what obviousness means in the context of patent law. For example, he discussed the Gipson patent in terms of its differences from the '845 patent, with no apparent recognition of the principle that a finding of obviousness does not require that every element of the patented invention be found in one piece of prior art. Trial Trans., dkt. #402, at 785 (“the Gipson patent really misses the actuation part of [the '845 patent], it misses the monitoring part of it, and it misses the adjustment part of it”); 818 (“The definition that I’ve used for obviousness or nonobviousness is that if you look at all of the prior art and if there is no art that encompasses all of the elements in a claimed patent, then that was not obvious.”)

On re-direct examination, plaintiffs’ counsel attempted to rehabilitate Driscoll by asking him specifically for his opinions on the obviousness of combining certain prior art publications. Driscoll said none of the combinations would have made the invention claimed in the '845 patent obvious. In response to questions on re-cross-examination, he said that, in formulating his opinions, he was relying on his new understanding of obviousness. From the questions put to him by plaintiffs’ counsel, it is apparent that this “new understanding” was that obviousness does not require that every element of a device or method be present in a single piece of prior art; obviousness may be found in a combination of the prior art provided that (1) the prior art would have suggested to those

of ordinary skill in the art that they should make the claimed device and (2) the prior art would have revealed that in doing so, those of ordinary skill would have a reasonable expectation of success. Medichem, S.A. v. Rolabo, S.L., 437 F.3d 1157, 1164 (Fed. Cir. 2006).

After Driscoll had finished testifying, defendants' counsel moved to strike all of his testimony on the grounds that he had first used an incorrect definition of obviousness and that after counsel attempted to rehabilitate him, gave new opinions that he had never disclosed to defendants. I granted the motion to strike only as it related to Driscoll's testimony on direct examination, after finding that defendants' counsel had an opportunity to cross-examine Driscoll about the opinions he expressed on re-direct examination.

B. Discussion

To be patentable, a device or process must not be obvious. 35 U.S.C. § 103(a) (patent may not be obtained "if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains"). The federal government's constitutional patent power represents a careful balancing between the drafters' desire to promote innovations in the "useful arts" and their reluctance to grant monopolies. Graham v. John Deere & Co., 383

U.S. 1, 5-10 (1966). Therefore, even a limited monopoly must be justified by “the innovation, advancement or social benefit gained thereby.” Id. at 6.

The Supreme Court has fleshed out § 103 by listing several factual inquiries for courts to follow in making a finding of obviousness or nonobviousness. Id. at 17. “[T]he scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved.” Id. If relevant, secondary considerations may be taken into consideration, including such things as commercial success, long felt need that has gone unresolved and failure of others to come up with the allegedly novel idea. Id. at 17-18.

The patent office’s approval of a patent is presumptive but not conclusive evidence that a patent is valid in all respects, including lack of obviousness. The office’s finding may be overturned in court, but only if the challenger establishes by clear and convincing evidence that the finding is erroneous. 35 U.S.C. § 282; North American Vaccine, Inc. v. American Cyanamid Co., 7 F.3d 1571, 1579 (Fed. Cir. 1993).

Although this case has engendered an unusual quantity of disputes, argued out in numerous lengthy briefs, this phase of the litigation is fairly straightforward. The only question is whether the jury erred in finding that defendants had not proved by clear and convincing evidence that the invention claimed by the ‘845 patent was obvious.

I am persuaded that no reasonable jury could have made even a cursory review of the

prior art introduced by defendants without reaching the determination that the invention claimed in plaintiffs' '845 patent was not novel. Plaintiff Frazier's application had only two potential areas of novelty: the one he added in his amendment, which was monitoring with video equipment, and the second that he emphasized when he filed his amended application, which was the ability to adjust the frequency and amplitude of waveforms generated to meet well performance characteristics. Neither of these was truly novel, nor was their use in combination. Video monitoring had been used for years in connection with well rehabilitation, using traditional methods; it took no insight to use it in connection with a gas gun or arc generator. As the Smith article shows, a person of ordinary skill in the art would have found it obvious to combine video monitoring with the well rehabilitation process disclosed in the '845 patent. "Adjusting" was not a novel idea; it was inherent in the choice of an adjustable gas gun or arc generator as the means of generating percussive waveforms.

Although plaintiffs assert that they disclosed more than simply adjusting the apparatus but specified adjusting to "meet well performance characteristics" and that this language differentiates the '845 patent from Gipson, their assertion does not stand up to close scrutiny. Claims 1 and 19 of the '845 patent say only to use the two adjustable devices to meet "well performance characteristics," which seems self-evident. Why would anyone use such a device for well rehabilitation except to improve the well's performance?

Defendants' counsel pointed out more than once during the trial that the '845 patent

discloses no specific information about adjusting the device to meet a particular characteristic. Defendants believed that this omission made the patent invalid under 35 U.S.C. § 112, which requires the specification of a patent to contain a written description of the invention in terms sufficient to enable any person skilled in the art to make and use the same. Defendants are wrong on this point; a person of ordinary skill in the art can figure out the frequency and amplitude of waveforms he needs. However, the omission of specific directions for adjustment undermines plaintiffs' argument that adjusting is an inventive feature of the patent. It is not an "invention" to specify an adjustable tool and tell users to adjust the tool as they see fit.

At this point, it may be appropriate to note that the evidence adduced at trial caused me to re-think the construction of the patent terms that I determined prior to trial. At that time, I construed the patent language to require that the "activating," "monitoring" and "adjusting" steps set out in independent claim 1 and the "initiating," "monitoring" and "adjusting" steps set out in independent claim 19 of the '845 patent be performed in the order in which they are written in the claims. Now that I have had the opportunity to learn more about how the well rehabilitation process is performed, I am persuaded that it was error to construe the claims to require that the adjusting step take place only after the third step (monitoring the waveforms). It is apparent that plaintiffs and other well rehabilitators adjust the apparatus before and during the process to insure that the waveforms that are

generated are appropriate to the size, depth and construction of the particular well and not just to cure problems remaining unresolved after the first cleaning process.

This error in claim construction does not affect the question of invalidity. As I have explained, the element of adjustability was not a novel part of the patented process. For the same reason, the erroneous construction would not have affected the parties' preparation or strategy in this phase of the litigation.

The second error was outcome-determinative. It was the decision not to grant defendants' motion to strike all of the testimony of plaintiffs' expert, Fletcher Driscoll. Although Driscoll testified on re-direct examination to the same opinion he had given on direct examination, that is, that the invention claimed in the '845 patent would not have been obvious to a person of ordinary skill in the art, the basis for his testimony had changed completely. On re-direct, plaintiffs' counsel asked him explicitly about particular combinations of prior art. Given his misunderstanding of obviousness, he would not have had any prior opportunity to consider the effect of combining those publications. Even if he had had such an opportunity, he had not revealed his new opinions to defendants, as required under the Federal Rules of Civil Procedure. It was unfair to defendants to be forced to defend against those new opinions on the critical issue in the case with no notice and no time to prepare.

If Driscoll's testimony had been struck in full, as it should have been, defendants'

evidence of obviousness would have stood unchallenged. Although I believe that even with Driscoll's testimony, plaintiffs' evidence did not refute defendants' showing that the '845 patent did not disclose a novel process, if the jury had not been allowed to consider any of that testimony, it would have had no reason to reach the verdict it did. Without Driscoll's testimony, it is likely that it would have reached the correct decision.

Plaintiffs do not concede the point easily. They argue that the prior art would not have suggested to persons of ordinary skill in the art the process claimed in the '845 patent. They assert, for instance, that the Stack patent would not have been suggestive because it describes the use of an arc generator in a gas well, which is a dangerous process. Plaintiffs seem to forget that Stack talked explicitly about using the patented process for *water* wells. The Stack patent is not limited to gas and oil wells. Furthermore, plaintiffs are ill-positioned to argue that the dangers of an arc generator would have deterred persons of ordinary skill from using the apparatus to generate wave forms in a water well. Their own '845 patent discloses the use of an arc generator for that purpose.

Finally, plaintiffs maintain that defendants' expert, Dr. Williams, was unable to point to any reference in the prior art showing that an adjustment had been made to a device for generating waveforms while the device was in operation. This argument is refuted by Nissley's description in the prior art of the adjustments made to the arc generator during one cycle of operation in which the "level of the charging voltage to the capacitors was controlled

by varying the speed of the generator.” Dfts.’ Exh. #546, at 732.

Plaintiffs’ evidence of commercial success and long felt need do not offset defendants’ showing of invalidity. That evidence was insufficient to show that the patented apparatus and method were responsible for any commercial success, as opposed to the use of an air gun, coupled with video monitoring.

It was unfortunate and not helpful to the jury that plaintiffs seemed to base so much of their case on the supposedly novel use of a gas gun in a well. It is clear that the use was not novel. The Gipson patent described the use of such guns in wells. Plaintiff Frazier had conceded in his amended patent application that the use of such guns was well known in the industry. Moreover, plaintiffs’ counsel was aware of the existence of several Russian patents disclosing such use. (These patents were excluded from trial for reasons having to do with the lateness of the production of English translations and plaintiffs’ objection to defendants’ reliance on translations provided by Gennady Carmi, president of defendant ProWell.) Knowing that these patents existed but could not be used by defendants, plaintiffs’ counsel should not have told the jury twice in opening statement that “before this invention, percussive air guns were never used in water wells.” Trial Trans., dkt. #397, at 109, 110. Too, it may have given the jury a flawed impression of the novelty of the patent to elicit testimony from the inventors that they had never heard of using a gas gun in a well before 1994. It is irrelevant whether the inventors had *actual* knowledge of the prior art. The law

holds them to have *constructive* knowledge of all of the art. “It is but an evenhanded application to require that those persons granted the benefit of a patent monopoly be charged with an awareness of [new developments in the art].” Graham, 383 U.S. at 19.

Although I am granting defendants’ motion for judgment as a matter of law, I note that if the case is appealed and the court of appeals disagrees with my decision, the error in allowing the jury to consider Driscoll’s testimony on re-direct examination would require a new trial. That testimony was prejudicial to defendants and should have been struck.

II. DISCOVERY MOTIONS

A. Plaintiffs’ Motion for Sanctions Under Fed. R. Civ. P. 37(c)

The discovery problems in this case began almost two years ago, when plaintiffs served their first set of interrogatories on defendants. An order in this case dated August 4, 2005 contains a detailed account of the discovery problems that accompanied the parties’ first round of summary judgment briefing. By way of review, after I granted summary judgment to defendants with respect to plaintiffs’ infringement claims, plaintiffs moved for reconsideration, citing defendants’ failure to turn over all documents related to applications of the BoreBlast and BoreBlast II processes as their excuse for not developing a factual record sufficient to withstand summary judgment. Plaintiffs argued that defendant Layne had not identified all of the sites at which it had performed the BoreBlast and BoreBlast II processes

and had not produced complete documentation for many of the sites identified by defendant Layne's employees as places where BoreBlast or BoreBlast II treatments had been performed. They argued that defendant Layne's disclosures had been disorganized and unspecific. In addition, plaintiffs noted multiple occasions in which documents produced belatedly by defendant Layne contradicted representations made by its employees concerning the work done at various sites around the country. In the August 4 order, I concluded that defendants had not provided complete and timely disclosure of documents requested by plaintiffs. Pursuant to Fed. R. Civ. P. 37(b)(2)(A), I ordered that defendants would be precluded from contesting infringement with respect to any job site for which they had not produced documentation before filing their motions for summary judgment.

The events that are material to the present motion began on September 29, 2005. On that date, I issued an order rescinding the sanction imposed in the August 4 order. Order, dkt. #236, at 2. Also, in anticipation of a second round of summary judgment briefing, I ordered defendants to "identify all sites on which they used the BoreBlast/BoreBlast II process and produce all documents related to those sites and the use of the process." Id.

Defendants Layne and ProWell filed second motions for summary judgment on January 3, 2006. On January 19, 2006, plaintiffs moved to have sanctions re-imposed against defendants under Rule 37. Plaintiffs base their renewed request for sanctions on (1)

defendants' alleged failure to follow the court's directive to identify all BoreBlast and BoreBlast II sites and produce all documents related to those sites; (2) defendants' alleged misrepresentations concerning the status of documents in defendant Layne's office in Fontana, California, which was flooded in October 2004; and (3) defendants' alleged misrepresentations concerning the health and availability of their expert witness, Dr. Williams.

1. Failure to follow September 29, 2005 order

Through the course of this litigation, it has become apparent that plaintiffs and defendant Layne do not follow a fixed course of action at each well they service. One application of BoreBlast or Airburst might be all that is needed to remove the impediments at one well, while multiple firings of the air gun at different pressures might be needed at the next. In the same vein, a video camera may or may not be used at a well before, during or after treatment. Because the work done varies from well to well, it was essential that plaintiffs receive as much information as possible about each application of the BoreBlast and BoreBlast II processes. With this in mind, on September 29, 2005, I ordered defendants to do two things: (1) identify all of the sites at which defendant Layne had used the BoreBlast and BoreBlast II processes and (2) produce all of the documents generated in connection with each site. The order was issued three months before dispositive motions

were due. This gave defendant Layne more than enough time to make a thorough search of its records, gather the necessary documents wherever they were kept and turn them over to plaintiffs. My hope was that by the time the parties submitted dispositive motions, plaintiffs would know about each and every application of the BoreBlast and BoreBlast II processes and have in their possession all of the documents generated by defendant Layne in connection with each job site, thereby enabling them to develop a full and complete factual record for the court to consider on summary judgment.

After the September 29 order issued, defendant Layne sent a memorandum to all of its district managers asking them to identify, by location or project name, each BoreBlast or BoreBlast II project carried out in their district and to “provide copies of all documents that relate to the project, even if those documents were previously produced.” Letter from Richard Johnson to Judge Crabb, Jan. 23, 2006, Exh. A. Also, district managers were instructed to collect all documents relating to any future projects and provide copies as soon as the projects were completed. The memorandum concluded with the following: “It is important that thorough searches be made and that all relevant documents be located and produced, so please be careful and thorough in your efforts.” Id. Finally, defendant Layne’s general counsel made follow-up calls to district offices. Letter from Richard Johnson to Magistrate Judge Crocker, dkt. #283, at 2. So far, so good.

From September 29, 2005 to December 28, 2005, defendants produced more than

5,200 documents. Plts.' Br. in support of Mot. for Sanctions, dkt. #260, at 6; Letter from Richard Johnson to Magistrate Judge Crocker, dkt. #283, at 3. These documents were not turned over at once but rather in smaller packets and, according to defendants' counsel, as they were kept in the ordinary course of defendant Layne's business. On December 29, 2005, plaintiffs sent a 30-page letter to defendants complaining that defendant Layne had not disclosed complete records for many BoreBlast and BoreBlast II job sites. Aff. of Richard Johnson, dkt. #285, Exh. F. The letter included a chart in which plaintiffs listed 186 job sites, each of which involved rehabilitation of at least one well. For some of the wells, plaintiffs listed the documents (if any) that defendant Layne had produced and those it had not produced; for other wells, plaintiffs stated simply that defendant Layne had failed to produce complete records. Id.

Defendants filed motions for summary judgment on January 3, 2006; plaintiffs had three weeks to file their responses. Beginning a week later, from January 9-17, 2006, defendants turned over to plaintiffs approximately 8,600 documents. According to a chart produced by plaintiffs, these documents were produced in five installments. Plts.' Br. in Support of Mot. for Sanctions, dkt. #260, at 7. A chart prepared by defendants indicates that a substantial portion of the 8,600 documents were disclosed for the first time in January 2006. Letter from Richard Johnson to Magistrate Judge Crocker, dkt. #283, App. 1.

Plaintiffs contend that defendants violated the September 29, 2005 order by failing

to turn over the 8,600 documents until after they filed for summary judgment. Plaintiffs contend also that many of the documents produced after the September 29 order pertained to projects that had been completed between 1999 and 2004, and therefore should have been produced in response to plaintiffs' first and second sets of interrogatories and requests for production, which were served on defendants on August 16, 2004 and March 22, 2005. Plts. Br. in Resp. to Jan. 26, 2006 Order, dkt. #296, at 23-24. Defendant Layne argues that the documents it disclosed in January 2006 were outside the scope of the September 29 order; instead, defendants disclosed them after receiving an expanded request for documents in plaintiffs' December 29, 2005 letter.

I disagree with defendants' characterization of plaintiffs' letter; it did not request documents not covered by the September 29 order. The September 29 order required production of all documents relating to sites at which BoreBlast and BoreBlast II had been performed; it was not limited only to documents concerning application of the processes at those sites. I used the words "produce all documents related to those sites" in the order intentionally to insure that plaintiffs would receive the broadest possible category of documents allowable under the Federal Rules of Civil Procedure. Fed. R. Civ. P. 26(b)(1) (party may obtain discovery of relevant information, which "need not be admissible at the trial if the discovery appears reasonably calculated to lead to the discovery of admissible evidence").

Although I do not believe that defendants' violation of the September 29 order was willful or intended to obstruct or frustrate plaintiffs' efforts to respond to the motions for summary judgment, the fact remains that defendants' belated production of thousands of documents hampered plaintiffs' efforts to respond to the motions in a timely manner. As Magistrate Judge Crocker wrote, defendants' tardy disclosures violated the letter and spirit of the September 29 order. This is the big-picture conclusion and it is enough to support a sanction. Therefore, I will not wade into the smaller skirmishes fought by the parties about specific documents and job sites.

2. Flood at Fontana Office

Defendant Layne maintains a district office in Fontana, California. In October 2004, the office was flooded, causing extensive damage to the office and documents stored there. Aff. of Jane Schlicht dated Jan. 18, 2006, dkt. #261, Exh. 17. Defendant Layne hired Envirotech, a restoration company, to restore flood-damaged documents in the office. Letter from Richard Johnson to Magistrate Judge Crocker dated Feb. 17, 2006, dkt. #328, at 30. That relationship soured quickly, however. According to a complaint filed by defendant Layne against Envirotech in California state court, defendant's office was flooded on or about October 20, 2004. Aff. of Richard Johnson, dkt. #332, App. DD. That same day, defendant hired Envirotech to clean up the mud and water damages. Id. Envirotech took

possession of two boxes of documents to be dried but refused to return them to defendant Layne after the parties disagreed about payment terms. Id.

On October 25, 2004, defendant Layne hired a second restoration company, American Technologies and Restoration, to complete the work. Jeff Moore was the employee of American Technologies who managed the restoration work done for defendant Layne. Moore testified at his deposition that Layne contacted his employer on October 22, 2004. Aff. of Jane Schlicht, dkt. #261, Exh. 3. After examining the documents affected by the flood, Moore estimated that “approximately 150 to 175 boxes solely needed drying. . . . And there was approximately 150 to 175 boxes that needed both photocopying and data manipulation because the documents were severely damaged.” Id. Moore testified further that his company took possession of the documents around November 1, 2004, repackaged them into about 50 boxes, restored them and returned them to defendant Layne on December 17, 2004. Id. He never heard of any complaints from defendant concerning the restoration work. Meanwhile, at some point the boxes withheld by Envirotech were returned to defendant Layne unrestored. (Plaintiffs say they were returned on November 11, 2004). Letter from Richard Johnson to Magistrate Judge Crocker dated Feb. 17, 2006, dkt. #328, at 30.

In light of these facts, plaintiffs argue, defendants’ attorneys were not truthful when they repeated assertions that documents in the Fontana office could not be disclosed because

they had been lost or destroyed in the flood. Defendants contend that they were truthful about the status of documents from the Fontana office, that they produced documents for 81 of the 92 BoreBlast and BoreBlast II jobs whose records were in the office and that other evidence shows that the 11 sites for which documents were lost did not infringe plaintiffs' patent. Dfts.' Br. in Opposition to Motion for Sanctions, dkt. #428, at 19-22.

Certainly, defendants could have been more forthcoming with details about defendant Layne's restoration efforts. There is evidence to suggest that defendant Layne had recovered most if not all of the documents affected by the flood months before defendants informed plaintiffs and the court that those documents had been permanently damaged or lost in the flood. The evidence indicates that the office was flooded and that at least two boxes of documents were withheld by Envirotech while around 50 boxes of documents were restored by American Technologies and Restoration and returned to defendant Layne in December 2004. It is not clear whether documents related to BoreBlast and BoreBlast II job sites were in the boxes kept by Envirotech or in the boxes restored by American Technologies and Restoration. Also, it is possible that some or all of the documents pertaining to BoreBlast job sites were not affected by the flood at all. In a fax dated November 4, 2004, two weeks after the flood, Bob Ereth, branch manager of the Fontana office, wrote the following to Shelly Clausen, an attorney for defendant Layne: "By the way we are gathering the BoreBlast info for you. Give us a week." This fax was sent before defendant regained

possession of documents from either Envirotech or American Technologies and Restoration. It suggests that efforts to collect BoreBlast and BoreBlast documents were not affected by the flood.

Lost in the shouting about whether defendants lied about the status of documents in the Fontana office is the fact that defendant Layne was asleep at the switch after it received plaintiffs' first set of requests for production of documents on August 16, 2004, more than two months before the flood. The fact that the parties are fighting about whether BoreBlast documents were destroyed by the flood suggests that defendant had not searched for and collected BoreBlast documents from its Fontana office before the flood. Defendant Layne has not explained why, two months after it received plaintiffs' requests for production, it had not turned over responsive documents from the Fontana office. Had defendant Layne moved promptly to collect documents from its district offices, the flood would not have had any effect on this litigation. Defendant had more than two months to collect and turn over BoreBlast documents from the Fontana office before the flood and it did not.

3. Availability of Dr. Williams

Plaintiffs's final argument in support of sanctions concerns defendants' alleged misrepresentation concerning the availability of their expert witness, Dr. Dennis Williams. In a letter to the court dated April 13, 2005, defendants stated that Dr. Williams had been

in a bicycling accident and had broken a rib and punctured a lung and that, as a result, Dr. Williams would be unavailable for deposition or trial until August 2005. Aff. of Jane Schlicht, dkt. #261, Exh. 18. At the time this letter was sent, trial in this case was scheduled for May 23, 2005. In light of Dr. Williams's injuries, the trial date was moved until October 24, 2005. Order dated Apr. 21, 2005, dkt. #173, at 1.

When plaintiffs deposed Dr. Williams in December 2005, the following exchange occurred:

Q: Could you tell me a little bit about the injuries you sustained?

A: I just fell on my bicycle and broke a rib, and a lung collapsed, and they just pumped it out; and that was it. I'm back up to full speed. I have been for six months.

Q: And were you hospitalized?

A: Yes.

Q: How long?

A: About a week.

Q: And, obviously, when you were in the hospital, you couldn't travel. But after that, could you travel?

A: Yes.

Q: So you were unable to travel for about a week?

A: I didn't. No. I was in the hospital.

Aff. of Jane Schlicht, dkt. #261, Exh. 19. Plaintiffs contend that this testimony proves that defendants misled the court and plaintiffs concerning Dr. Williams's availability. Plaintiffs construe Dr. Williams's testimony to indicate that he had no travel restrictions after being discharged from the hospital, but the testimony does not support this construction. Dr. Williams testified that he did not travel during the week that he was hospitalized. Plaintiffs did not ask him how long he was unable to travel and Dr. Williams did not volunteer this information. Defendants have obtained a statement from Dr. Williams's treating physician, Dr. Andre Ettinger. Aff. of Richard Johnson, dkt. #332, Exh. GG. According to Dr. Ettinger, Dr. Williams's accident occurred on March 30, 2005. He was hospitalized for six days following his accident and "was probably not able to work or do much else for about 60 days following his accident." Id. I find nothing in Dr. Williams's deposition testimony to indicate that defendants lied to the court and plaintiffs concerning his condition in their April 13, 2005 letter.

4. Conclusion

"Rule 37 sanctions must be applied diligently both 'to penalize those whose conduct may be deemed to warrant such a sanction, [and] to deter those who might be tempted to such conduct in the absence of such a deterrent.'" Roadway Express, Inc. v. Piper, 447 U.S. 752, 763-64 (1980) (quoting National Hockey League v. Metropolitan Hockey Club, 427

U.S. 639, 643 (1976)). They may be imposed only “where a party displays ‘wilfulness, bad faith, or fault.’” Langley by Langley v. Union Elec. Co., 107 F.3d 510, 514 (7th Cir. 1997) (quoting Philips Medical Systems Int'l, B.V. v. Bruetman, 982 F.2d 211, 214 (7th Cir. 1992)). As used in this context, “fault” refers to “the reasonableness of the conduct-or lack thereof-which eventually culminate[s] in the violation.” Marrocco v. General Motors Corp., 966 F.2d 220, 224 (7th Cir. 1992). I believe that defendants acted unreasonably in disclosing 8,600 documents after they filed motions for summary judgment and in failing to produce documents housed in the Fontana, California office before it was flooded. These actions satisfy the “fault” standard. The materials submitted by the parties are sufficient to support this finding. Langley by Langley, 107 F.3d at 515 (where briefs and affidavits recount fully circumstances surrounding party’s noncompliance with court order, no evidentiary hearing needed before imposition of Rule 37 sanctions).

Intentional or not, defendants’ missteps in the discovery phases of this case, as recounted in this order and the August 4 order, are too numerous to escape sanction. Because the issue of infringement will not be tried, the possible sanctions listed in Fed. R. Civ. P. 37(b)(2)(A)-(C) would have no effect. I am left with monetary sanctions. Maynard v. Nygren, 332 F.3d 462, 470 (7th Cir. 2003) (“While fines are not specifically included in the non-exclusive list of sanctions in Rule 37(b)(2), they are among the tools available to trial courts to remedy the harms of discovery violations.”). Plaintiffs are entitled to recover

the expenses, including costs and reasonable attorney fees, caused by defendants' failure to comply with the terms of the September 29 order, including expenses incurred in (1) sorting and analyzing the documents defendants disclosed after filing their motions for summary judgment on January 3, 2006; (2) drafting their January 18, 2006 and January 26, 2006 letters to the court; and (3) preparing and filing the January 19, 2006, motion for sanctions, including the briefs and affidavits filed on January 19, 2006, February 8, 2006 and June 9, 2006. To that amount I will add \$10,000 as a sanction for defendants' failure to respond timely to plaintiffs' first set of requests for production by collecting and turning over all responsive documents located in defendant Layne's Fontana, California office before the office was flooded. Plaintiffs may submit an itemization of their costs and attorney fees in accordance with the deadlines set out at the end of this order.

B. Defendants' Motion for Costs Regarding Moore Deposition

Defendants request recovery of costs and fees incurred in traveling to California for the deposition of Jeff Moore, pursuant to Fed. R. Civ. P. 30(g). According to defendants, plaintiffs sent them a notice of the deposition on December 16, 2005. The notice indicated that Moore would be deposed on January 5, 2006 in San Bernardino, California. Defendants' attorney traveled to California to attend the deposition; plaintiffs decided to appear by telephone, without first seeking leave of court or permission from defendants. On

the morning of January 5, Moore called plaintiffs' attorney and said that he was out of town and would not be appearing at the deposition. Plaintiffs's attorney telephoned the office of defendants' attorney and told him that Moore would not appear. The deposition was taken by telephone on January 13, 2006.

Rule 30(g) establishes two situations in which a party may recover reasonable costs, including attorney fees, incurred in attending a deposition. Rule 30(g)(1) permits a court to award costs if "the party giving the notice of the deposition fails to attend and proceed therewith and another party attends in person or by attorney pursuant to the notice." There is no dispute that plaintiffs did not appear in person on January 5, 2006. Plaintiffs planned to appear by telephone, but defendants note that a party may appear at a deposition by telephone only if the parties agree in writing or if the party receives permission from the court. Fed. R. Civ. P. 30(b)(7).

Plaintiffs do not contend that they had an agreement with defendants to appear by telephone and they did not seek leave of court to do so. Instead, they argue that the deposition would not have been necessary if defendants had fulfilled their discovery obligations. Also, they argue that are not at fault for Moore's failure to attend. Plaintiffs' arguments are off the mark; defendants' conduct during discovery has been addressed and the fact that Moore failed to attend does not absolve them. The fact remains that defendants' attorney traveled to California for a deposition plaintiffs scheduled. He relied

on the notice sent by plaintiffs. Plaintiffs failed to attend the deposition in person and did not arrange with defendants or the court to appear by telephone. Accordingly, I find that plaintiffs violated Rule 30(g)(1). Therefore, defendants' motion will be granted. Defendants may submit an itemization of the costs and reasonable attorney fees incurred in traveling to California for the deposition in accordance with the deadlines set out at the end of this order.

C. Plaintiffs' Motion for Sanctions Regarding Scanlan Deposition

Defendants disclosed Tatiana Scanlan as a potential witness in this case on January 18, 2006. Defendants retained Scanlan to testify about translations of Russian patents and publications they wanted to introduce as prior art. Scanlan translated the Russian documents into English. Defendants denied that Scanlan was an expert witness, stating that they intended to use her testimony merely to lay foundation for the English translations. Plaintiffs moved to quash her deposition and Magistrate Judge Crocker denied that request. However, he left a door open for plaintiffs: "If it turns out that defendants misrepresented the nature, relevance or potential admissibility" of Scanlan's testimony, plaintiffs could move for sanctions. Order dated Jan. 30, 2006, dkt. #282, at 2.

At the final pretrial conference, I excluded from trial the Russian patents, publications and their English translations. One of the reasons for this decision was that I considered

Scanlan to be an expert witness and defendants had disclosed her long after the deadline for naming expert witnesses had passed. Despite a dearth of authority on the subject, I continue to believe that translating technical documents from Russian to English requires specialized knowledge and expertise beyond that possessed by the ordinary layman. Had defendants been allowed to introduce the Russian documents at trial, they would have had to qualify Scanlan as an expert to testify about the accuracy of the translations of the documents, whether or not she had done them herself.

At her deposition, defendants elicited from Scanlan the following: (1) she earned a master's degree in Russian as a foreign language and completed almost all of the requirements for a Ph.D. in linguistics; (2) she had taken special courses in translation, where she learned to translate military texts and technical documents; and (3) she has worked in Russia and the United States as a freelance translator for approximately twenty years. Dfts.' Br. in Opposition to Motion for Sanctions, dkt. #471, Exh. A (Scanlan Dep.), at 7:1-3, 65:8-23; 8:3-21; 9:6-14. In addition, defendants asked her about the sources and methods she uses to translate various documents. Id. at 11:1-10; 12:2-13:6. Obviously, she was offering testimony based upon her training and experience, not her own personal knowledge. Id. at 19:16-19.

Although I disagreed with defendants that Scanlan could provide lay testimony, I do not believe that their position was so frivolous or unfounded as to be sanctionable. Given

the lack of authority on the point, defendants were not out of bounds in arguing that her testimony would not fall into the realm of expert testimony. Accordingly, I conclude that defendants did not misrepresent the nature, relevance or admissibility of her testimony. Plaintiffs' motion for sanctions will be denied.

ORDER

IT IS ORDERED that

1. The motion for judgment as a matter of law or in the alternative for a new trial filed by defendants Layne Christensen and ProWell Technologies, dkt. #414, is GRANTED;
2. Defendant Layne Christensen's motion for summary judgment, dkt. #240, is DENIED as moot;
3. Defendant ProWell Technologies's motion for summary judgment, dkt. #248, is DENIED as moot;
4. The motion for protective order under Fed. R. Civ. P. 26(c) filed by plaintiffs William Frazier, Frazier Industries, Inc. and Airburst Technologies, LLC, dkt. #423 is DENIED as moot;
5. Plaintiffs's motion for sanctions under Rule 37(c)(2), dkt. #259, is GRANTED;
6. Defendants's motion for costs and fees for the deposition of Jeff Moore, dkt. #374, is GRANTED;

7. Plaintiffs' motion for sanctions regarding the deposition of Tatiana Scanlan, dkt. #369, is DENIED;

8. The parties may have until July 25, 2006 to submit detailed itemizations of the fees and costs to be awarded them. Responses to these submissions will be due August 1, 2006.

Entered this 17th day of July, 2006.

BY THE COURT:
/s/
BARBARA B. CRABB
District Judge