

United States Court of Appeals for the Federal Circuit

05-1546, -1579

INTAMIN, LTD.,

Plaintiff-Appellant,

v.

MAGNETAR TECHNOLOGIES, CORP.,

Defendant-Cross Appellant.

Ted S. Ward, Ward & Harrison, LLP, of Los Angeles, California, argued for plaintiff-appellant.

John B. Sganga, Jr., Attorney, Knobbe, Martens, Olson & Bear, LLP, of Irvine, California, argued for defendant-cross appellant. With him on the brief were Joseph S. Cianfrani and Christopher L. Ross.

Appealed from: United States District Court for the Central District of California

Judge Gary A. Feess

United States Court of Appeals for the Federal Circuit

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INTAMIN LTD.,

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MAGNETAR TECHNOLOGIES, CORP.,

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DECIDED: April 18, 2007

Before RADER, Circuit Judge, PLAGER, Senior Circuit Judge, and PROST, Circuit Judge.

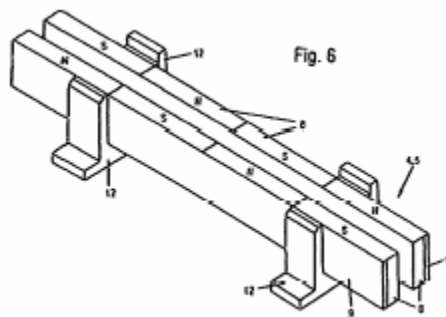
RADER, Circuit Judge.

On summary judgment, the United States District Court for the Central District of California ruled that Magnetar Technologies, Corp. (Magnetar) does not infringe Intamin, Ltd.'s (Intamin's) U.S. Patent No. 6,062,350 (the '350 patent). Intamin appeals that ruling. Magnetar appeals the district court's order vacating a previous award of Rule 11 sanctions. Upon consideration of the claim terms on appeal, this court vacates part of the district court's claim construction and remands. This court also affirms the district court's decision to vacate the Rule 11 sanctions.

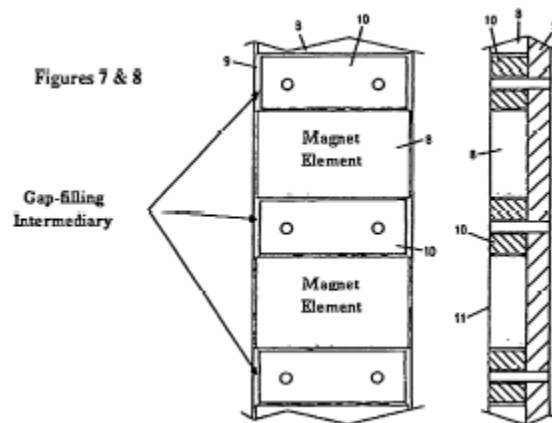
I

The '350 patent, entitled "Braking System for an Amusement Device," discloses a magnetic braking system for amusement park rides such as drop towers and roller coasters. Magnetic brakes create "eddy currents" when a conductor passes through a

gap between two sets of magnets. These eddy currents, in turn, create a magnetic friction that slows and stops the car attached to the conductor. The '350 patent describes specific arrangements for the conductor and the magnets. Figure 6 of the '350 patent illustrates a configuration with the adjacent magnets of opposite polarity in direct contact. The '350 specification states that "[a]ccording to Fig. 6, the polarity of the magnet elements (8) are reversed along the direction of the carrying rail." '350 patent col.4 ll.22-23.



Figures 7 and 8 of the '350 patent show gaps between magnet elements that are filled with spacers or "intermediaries."



In one embodiment in the specification, the intermediary is non-magnetic. '350 patent col.4 ll.15-18.

Magnetar sells a magnetic braking system under the name "Soft Stop" brakes. Magnetar's brakes contain magnets arranged as a "Halbach array." A "Halbach array" rotates the polarities of adjacent magnets by 90 degrees, rather than by 180 degrees as in Figure 6 of the '350 patent. By configuring the magnets in a Halbach array arrangement, Magnetar's brake creates a one-sided flux, meaning the configuration concentrates the magnetic force on one side of a magnet while nearly canceling out the magnetic force of the other side of a magnet. For example, the one-sided flux of a Halbach array is the technology behind a refrigerator magnet that sticks on only one side.

Magnetar joins the magnets into rows with epoxy, with one magnet abutting another, and places these rows of magnets into metal tubes. Then Magnetar attaches these magnetized tubes to the track. A conductive rail, or fin, is attached to the movable passenger car. Magnetar's president allegedly offered to sell Magnetar's brakes in a configuration with the fin on the track and the magnets on the passenger cars.

Intamin sued Magnetar alleging that the Soft Stop brakes infringe claim 1 of the '350 patent. Claim 1 of the '350 patent reads:

A braking device for use with an amusement apparatus having a fixed device part, at least one running rail secured to the fixed device part, and a movable device part including at least one traveling gear configured for movement along the at least one running rail, the braking device comprising:

an eddy current brake assembly including:

a conducting part having at least one conductive rail configured for attachment to the fixed device part, said at least one conductive rail being adapted to extend the length of the fixed device part;

an energizing portion having at least one yoke aligned in correspondence with each said at least one conductive rails, each said yokes including a pair of yoke arms for receiving said at least one conductive rail therebetween;

at least one pair of carrying rails extending a predetermined distance along the direction of said at least one conductive rail, each said carrying rails being mounted on corresponding yoke arms of said plurality of yokes;

a plurality of magnet elements mounted on each of said carrying rails with alternating polarities, said plurality of magnet elements being further arranged such that the poles of magnet elements mounted on one carrying rail have opposite polarities from the poles of magnet elements mounted on a corresponding carrying rail of said at least one pair of carrying rails; and

an intermediary disposed between adjacent pairs of said plurality of magnet elements;

wherein:

an interferric gap is defined between each said yoke arms and the at least one conductive rail, and

movement of the movable device part, relative in the fixed device part, induces eddy currents that create a magnetic brake force between said conducting part and said energizing part.

'350 patent col.8 ll.29-65.

Seeking summary judgment of non-infringement, Magnetar asserted that its brakes did not infringe this claim because they did not include an "intermediary," because they were not "attached to the fixed device part," and because they did not include a "conductive rail" "adapted to extend the length of the fixed device part." The district court agreed that Magnetar's brakes did not contain an intermediary. Intamin, Ltd. v. Magnetar Techs. Corp., SA CV 04-511-GLT, slip op. at 7 (C.D. Cal. Jan. 25, 2005) (Initial Decision). The district court further found that Magnetar's brakes could not infringe, either literally or under the doctrine of equivalents, the limitation requiring attachment to the fixed device part. Id. at 8-10. Finally, the district court also determined that Magnetar's Soft Stop brakes did not infringe literally a limitation requiring the conductive rail to "extend the length of the fixed device part." Id. at 10-12. The district court opined that Magnetar's Soft Stop brakes may infringe this limitation under the doctrine of equivalents but did not reach that issue because the absence of

other limitations already showed that Magnetar's brakes did not infringe the '350 patent. Id. at 12-13. Thus the district court granted summary judgment of non-infringement. Id.

Magnetar also alleged that Intamin's complaint violated Rule 11(b). Magnetar argued that Intamin filed its complaint as retaliation for Magnetar's president's public criticism of Intamin's brakes. Magnetar also argued that Intamin's complaint was frivolous. Intamin responded that its law suit was not retaliatory and was adequately supported by pre-filing investigations. Initially, the district court granted Rule 11 sanctions. Id. at 13-16. Upon reconsideration, the district court affirmed its finding that Intamin filed the complaint for an improper purpose but vacated its decision that Intamin's pre-filing investigation was frivolous. Intamin, Ltd. v. Magnetar Techs. Corp., SA CV 04-511-GLT, slip op. at 6-7 (C.D. Cal. Mar. 11, 2005) (Reconsideration Decision). Magnetar then moved for attorneys' fees. Intamin, Ltd. v. Magnetar Techs. Corp., SA CV 04-511-GLT, slip op. at 2 (C.D. Cal. Apr. 25, 2005) (Fee Decision). In opposition to Magnetar's motion for attorneys' fees, Intamin argued that, under Ninth Circuit law, a meritorious (non-frivolous) complaint cannot have an improper purpose. Id. As such, Intamin argued that the district court could no longer award sanctions. Id. The district court agreed and vacated its sanctions. Id. at 2-3.

As noted, the district court found on summary judgment that Magnetar's accused brake system did not infringe Intamin's patent. Initial Decision, slip op. at 7. Intamin petitioned for reconsideration of the court's finding of non-infringement. The district court affirmed its finding of non-infringement. Reconsideration Decision, slip op. at 8. Intamin appeals the district court's grant of summary judgment of non-infringement. Magnetar cross-appeals the district court's decision to vacate the Rule 11 sanctions.

II

This court reviews a grant of summary judgment without deference. Ethicon Endo-Surgery, Inc. v. U.S. Surgical Corp., 149 F.3d 1309, 1315 (Fed. Cir. 1998). On appeal, the parties dispute the district court's construction of the claim limitation requiring "an intermediary disposed between adjacent pairs of said plurality of magnets." The parties also dispute the district court's claim construction of a second limitation found in claim 1 of the '350 patent: "said at least one conductive rail being adapted to extend the length of the fixed device part." Like summary judgment itself, this court reviews claim construction without deference. Cybor Corp. v. FAS Techs. Inc., 138 F.3d 1448, 1456 (Fed.Cir. 1998) (en banc).

Regarding the limitation requiring an "intermediary," the dispute rests on whether the intermediary between adjacent pairs of magnets can itself be a magnet. The use of the word "said" in a claim refers to an earlier use of the term in the claim. See Bell Commc'n Research, Inc. v. Vitalink Commc'n Corp., 55 F.3d 615, 621 (Fed. Cir. 1995). Here, the claim proceeds from the following definition: "a plurality of magnet elements mounted on each of said carrying rails with alternating polarities, said plurality of magnet elements being further arranged such that the poles of magnet elements mounted on one carrying rail have opposite polarities from the poles of magnetic elements mounted on a corresponding carrying rail of said at least one pair of carrying rails." '350 patent col.8 ll.49-55. Thus, according to claim 1, the magnets surrounding the intermediary have at least "alternating" polarities.

Intamin argues that adjacent pairs of magnets with alternating polarities must mean two magnets on the same rail with opposite polarity, as shown in Figure 6 of the

'350 patent. Thus, according to Intamin, anything between the magnets of opposite polarity is an intermediary, whether magnetic or not. Magnetar argues that "adjacent pairs of magnets" means any two magnets next to each other or abutting each other on the rail, as shown in Figure 6. Further, according to Magnetar, the term "alternating" does not require that such magnets have opposite polarity as shown in Figure 6. Thus, because adjacent magnets are any two magnets abutting each other on a single rail, Magnetar argues that another magnet cannot be an intermediary. Under its interpretation, Magnetar's Soft Stop brakes would not infringe claim 1 because they lack an intermediary.

The district court construed the term "intermediary" without determining the meaning of "adjacent magnets with alternating polarities." The parties disagree therefore about the meaning the district court actually gave to the term "intermediary." Intamin argues that the district court determined that the intermediary could not be magnetic, thus precluding infringement. Magnetar disagrees that the district court made such a determination.

In any event, the parties agree that this court cannot interpret "intermediary" without addressing the polarities of the adjacent magnets. Specifically, an intermediary cannot be another magnet if this court construes "adjacent pairs of magnets" as two magnets abutting each other with polarities that alternate at some degree such as found in a Halbach array. In other words, an intermediary can only be a magnet if the limitation "alternating polarities" means "opposite polarities." Under that interpretation, some magnets become "adjacent pairs" and other magnets in between become "intermediaries." In addition, "adjacent pairs of magnets" with opposite polarities, as in

Figure 6, would need some separation.¹ Intamin argues that another magnet can provide this separation.

The district court adopted Magnetar's proposed claim construction: "In short, ordinary meaning supports Defendant's construction, and neither the specification nor the prosecution history changes the ordinary meaning." Initial Decision, slip op. at 4. On its face, the district court construed the term "intermediary" to mean "a member between others." Id. at 3-4. In reaching that conclusion, the district court dismissed Intamin's proposed claim construction that the intermediary can be a magnet between two other magnets. Id. In fact, the trial court specifically points to language in the patent that the intermediary is non-magnetic. Id. Thus, the district court apparently construed the term "intermediary" to mean something non-magnetic between the adjacent magnets.

The first step in an infringement analysis is the determination of the scope of the claims. Markman v. Westview Instruments, Inc., 52 F.3d 967, 979 (Fed. Cir. 1995), aff'd, 517 U.S. 370 (1996). This court construes claims according to the principles set forth by this court in Phillips v. AWH Corp., 415 F.3d 1303 (Fed. Cir. 2005) (en banc). As such, the court consults primarily the claims themselves in context, with much of that context supplied by the specification and the prosecution history. Id. at 1312.

¹ At oral argument, Intamin's counsel, in response to a question regarding the meaning of and the necessity for an "intermediary," stated that "the intermediary serves the purpose to provide spacing and support for the magnets of the magnet elements which are the magnets of alternating polarity [because] for physics reasons there has to be spacing between those two magnets of alternating polarities and also the magnets are so strong that if there is not something in between they tend to spin into a new location." Thus, whether another magnet can be an intermediary may depend on whether it can serve as a spacing and support element. Arguably, none of Magnetar's magnets are used as spacing and support elements; rather, all are necessary to create the one-sided flux of the Halbach array.

In this case, the claim language itself does not require a non-magnetic "intermediary." Just as in the Phillips case itself, the claim uses a broad term with an understandable meaning. As the district court noted, the term "intermediary" standing alone means a "member between others." Initial Decision, slip op. 4. This term takes on additional meaning, however, in the context of magnetized members. The context of the rest of the patent helps show that additional meaning, namely whether the intermediary may be magnetic.

In Phillips, this court noted that dependent claims can supply additional context for construing the scope of the independent claims associated with those dependent claims. 415 F.3d at 1314. An independent claim impliedly embraces more subject matter than its narrower dependent claim. In this case, dependent claim 2 modifies the term "intermediary." Claim 2 of the '350 patent discloses "[t]he braking device of claim 1 wherein said intermediary is non-magnetic." This dependent claim shows both that the claim drafter perceived a distinction between magnetic and non-magnetic intermediaries and that independent claim 1 impliedly embraced non-magnetic intermediaries. See Innova/Pure Water, Inc. v. Safari Water Filtration Sys. Inc., 381 F.3d 1111, 1123 (Fed. Cir. 2004).

The district court initially did not consider the context supplied by claim differentiation because Intamin did not raise this argument until reconsideration. Reconsideration Decision, slip op. at 2. Even without the enlightenment supplied by claim differentiation, however, the overall context of claim 1 does not limit the broad language to non-magnetic intermediaries. At one point, the '350 patent describes an embodiment of the invention with a "non-magnetic" intermediary. '350 patent col.4 ll.16-

18. The district court seized on this disclosure to limit the term "intermediary" to non-magnetic substances only. Initial Decision, slip op. at 4. As this court has repeatedly noted, see SRI Int'l v. Matsushita Electric Corp., 775 F.2d 1107, 1121 (Fed. Cir. 1985) (en banc) (plurality opinion), a narrow disclosure in the specification does not necessarily limit broader claim language. Phillips, 415 F.3d at 1323. The overall context of the patent, in this case, does not specifically disavow magnetic intermediaries. See e.g., SciMed Life Sys. Inc. v. Advanced Cardiovascular Systems Inc., 242 F.3d 1337, 1341 (Fed. Cir. 2001). The single reference does not expressly limit the entire invention but only describes a single embodiment. Moreover, the term "intermediary," like the term "baffle" in Phillips, embraces more than the limited specification disclosure.

Thus, this court finds that the term "intermediary" can embrace magnetic substances, albeit only if the additional term requirement of "alternating polarity" allows for it. Accordingly, this court vacates the district court's construction of this term. However, this court has not reached an additional question on which the trial court has yet to provide a decision for review. Specifically this court remands to permit the district court to determine whether the patent limits the term "adjacent magnets of alternating polarity" to magnets of opposite polarity. With the understanding that an "intermediary" may be magnetic, the trial court may revisit its finding of non-infringement.

The district court also construed the limitation of a "conductive rail being adapted to extend the length of the fixed device part" to mean the conductive rail must run the end length of the track to which it is attached. Initial Decision, slip op. at 10. Specifically, the district court construed the term "length" to mean "extent from end to

end—distinguished from width." Id. In other words, the district court applied the ordinary meaning to the term "length" and found that the plain meaning of the term referred to the full length of the fixed device part. Id. at 12. In the patent's roller coaster embodiment, this limitation would require the conductive rail to extend the entire length of the roller coaster.

In the claim, the "fixed device part" refers to the framework of the amusement device, i.e., the track for the roller coaster or tower drop. The "conductive rail" refers to a metal rail, part of which will have a conductive coating. The rail and the coating make up the conductive part. This "conductive part," in turn, passes through the array of magnets to generate the braking force or vice versa, depending on the configuration. This court must determine the meaning of "length" as a reference to the full length of the fixed device part, as the district court construed, or to the direction or orientation of the conductive rail.

The claim language uses the term "length" in the context of a longer phrase: "adapted to extend the length of the fixed device part." The verb "extend" already suggests that the "length" reaches from one end to another. Moreover, the term "length" imparts information about the "fixed device part," once again suggesting that the "length" will encompass the entire dimensions of that structure. In sum, the claim term "length" in context in the claim encompasses the full length of the fixed device part, as the district court correctly discerned.

The district court further recognized that the specification nowhere uses "length" to refer to direction or orientation. Initial Decision, slip op. at 11-12. Rather, the district court found correctly that the term referred to the entire length of the fixed device part.

Id. at 12. The patent specification uses "length" consistent with its meaning as a distance, rather than merely a direction. Thus, the context supplied by the specification underscores the meaning of claim 1 of the '350 patent that expressly states that the conductive rail extends the length of the fixed device part.

For example, the '350 patent uses the term "length" to discuss the braking distance. '350 patent col.2 l.13; col.4 l.66. It also uses the term to refer specifically to the length of the magnetic elements. '350 patent col.5 ll.32, 34, 41-42. Both uses of "length" consistently refer to distance or dimension, quantitative applications of the term "length." In comparison, when the '350 patent references a direction as opposed to a distance, it uses language such as "along drop directions." '350 patent col.3 ll.36-38 ("Both the energizing and conducting parts (5,6) are designed in the form of a rail and stretch along the drop directions.").

Intamin argues that the intrinsic evidence supports its proposed claim construction because when the inventors were trying to convey an entire distance, they used a modifier such as "whole height." '350 patent, col.7 ll.37-40; col.4 ll.31-34. While Intamin argues that no modifier requires the length to extend the entire length of the fixed device part, the flip side of this argument also applies: no modifier instructs one skilled in the art to interpret the phrase as extending to only part of the fixed device. Thus, the context and word choice of the claim language itself establishes that "extend the length" means the length of the fixed device part. In other words, the intrinsic evidence confirms the meaning conveyed by the claim language.

Intamin argues that this interpretation would not permit the claim to read on embodiments of the invention specifically mentioned in the patent specification. For

example, the patent discloses a roller coaster-type embodiment where the passenger car or movable device houses the conductive part. Under the proper claim construction with the conducting rail extending the length of the fixed device, the claim may well not cover this embodiment. Nonetheless, this court has acknowledged that a claim need not cover all embodiments. See Telemac Cellular Corp. v. Topp Telecom, Inc., 247 F.3d 1316, 1326 (Fed. Cir. 2001)("We conclude that only those embodiments involving communications established by the host processor meet the functional requirement of the claim."); see also Omega Eng'g, Inc. v. Raytek Corp., 334 F.3d 1314, 1324-25 (Fed. Cir. 2003); Phillips Petroleum Co. v. Huntsman Polymers Corp., 157 F.3d 866, 875 (Fed. Cir. 1998). A patentee may draft different claims to cover different embodiments.

In addition, Intamin argues that the proper claim interpretation would render another claim, dependent claim 10, invalid. Dependent claim 10 addresses the embodiment where the conductive portion is connected to the movable device. With claim 1 specifying that the conductive rail extends the length of the fixed device, dependent claim 10 may well be improper. Thus, Intamin urges this court to construe claim 1 to retain the validity of claim 10. Under the proper construction of claim 1, dependent claim 10 erases entirely a limitation of the fixed device part and is thus an improper dependent claim. Of course, dependent claim 10 has that effect under any reading of "length" in claim 1. Because claim 1 requires the conductive portion to reach the length of the fixed device part and claim 10 places the conductive portion on the passenger car, claim 10 is an improper dependent claim. Thus, construing claim 1 to mean end to end length does not in itself render claim 10 invalid. In any event, the

claim construction of claim 10 is not before this court. Thus, this court considers but gives no weight to Intamin's argument relative to claim 10.

Given this construction, the district court initially determined that Magnetar's Soft Stop brakes did not infringe because they placed the conducting rail on the passenger car. Initial Decision, slip op. 12. The district court determined it could not find on summary judgment that Magnetar's brakes would not infringe this limitation under the doctrine of equivalents. Id. However, the district court granted summary judgment to Magnetar because it determined that Magnetar did not contain an intermediary. Id. at 13. Intamin requested reconsideration and the district court determined that there was a triable issue as to whether Magnetar's brake system can be configured such that the conducting rail was attached to the track. Reconsideration Decision, slip op. at 4. Thus, this court remands to the district court for a determination of whether Magnetar's brakes would infringe this limitation, either literally or under the doctrine of equivalents.²

III

Magnetar cross appeals the district court's denial of Rule 11 sanctions against Intamin. Fee Decision, slip op. at 2-3. This court reviews a district court's decision regarding Rule 11 sanctions for an abuse of discretion. Cooter & Gell v. Hartmarx Corp., 496 U.S. 384, 405 (1990). Further, this court applies the law of the regional circuit in its review, Antonious v. Spalding & Evenflo Cos., 274 F.3d 1066, 1072 (Fed. Cir. 2002), which in this case is the Ninth Circuit.

² The parties in this appeal discuss additional claim limitations that were not construed by the district court. This court encourages the district court to consider all of the limitations of claim 1 of the '350 patent on remand.

Rule 11 of the Federal Rules of Civil Procedure imposes a duty on attorneys to certify by their signature that the pleading or motion is well-grounded in fact, has a basis in law, and is not filed for an improper purpose. View Eng'g, Inc. v. Robotic Vision Sys., 208 F.3d 981, 984 (Fed. Cir. 2000). Under Ninth Circuit law, "sanctions must be imposed on the signer of a paper if either a) the paper is filed for an improper purpose, or b) the paper is 'frivolous.'" Townsend v. Holman Consulting Corp., 929 F.2d 1358, 1362 (9th Cir. 1990) (en banc). With regard to complaints, the Ninth Circuit law finds that "complaints are not filed for an improper purpose if they are non-frivolous." Id. at 1362. Finally, "[t]he Ninth Circuit defines a 'frivolous' claim or pleading for Rule 11 purposes as one that is 'legally or factually "baseless" from an objective perspective . . . [and made without] a reasonable and competent inquiry.'" Q-Pharma, Inc. v. Andrew Jergens Comp., 360 F.3d 1295, 1299 (Fed. Cir. 2004) (citing Christian v. Mattel, Inc., 286 F.3d 1118, 1127 (9th Cir. 2002)).

On appeal, Magnetar argues that Intamin did not conduct a good faith investigation of Magnetar's Soft Stop brakes before filing its complaint. This court must therefore determine whether the district court abused its discretion when it found upon reconsideration that Intamin had conducted a reasonable and competent inquiry at the time it filed its infringement complaint.

Magnetar argues on appeal that Intamin's pre-filing investigation was insufficient because it did not obtain and physically cut open the metal casing on the magnets in Magnetar's brake system. The record shows that Magnetar's system encased the magnets in metal tubes. Accordingly, a visual inspection would not disclose the orientation of the magnets within the tubes. In Judin v. United States, 110 F.3d 780,

784 (Fed. Cir. 1997), this court held that the district court abused its discretion in not granting Rule 11 sanctions against a patentee who failed to obtain a sample of the product as part of its pre-filing investigation. However, Judin did not create a blanket rule that a patentee must obtain and thoroughly deconstruct a sample of a defendant's product to avoid violating Rule 11. Rather, in Judin, the patentee could have easily obtained a sample of the accused device (a bar code scanner) for a nominal price from the post office. In this case, the technology presented the patentee with unreasonable obstacles to any effort to obtain a sample of Magnetar's amusement ride brake system, let alone the difficulty of opening the casing.

In lieu of cutting open the casing, Intamin might have tested a Magnetar device for magnetic polarities. In Q-Pharma, however, this court did not impose on a patentee a Rule 11 obligation to perform a simple chemical test on a sample to determine its composition. 360 F.3d at 1302. Instead, this court found that the patentee satisfied its Rule 11 obligations with other reasonable pre-filing inquiries. Id. Here, the district court determined: "In light of the other information [Intamin] had at the time of filing . . . [its] pre-filing inquiry was reasonable." Reconsideration Decision, slip op. at 7. In particular, the district court noted that Intamin "evaluated the patent portfolio, analyzed the patent's validity, determined the scope of the patent's claims, and performed an infringement analysis." Id. The district court further determined that Intamin "reviewed publicly available documents on [Magnetar's] brakes, inspected [Magnetar's] brakes as installed on a roller coaster, took photos of the brakes, and reviewed the brakes with experts." Id. Thus the district court determined that Intamin's pre-filing inquiry was reasonable

under the circumstances. Id. This court discerns no abuse of discretion in the district court's determination.

IV

In conclusion, this court vacates part of the district court's claim construction as discussed above and remands the decision of non-infringement for further consideration. Finding no abuse of discretion, this court affirms the district court's decision to vacate its previous finding of Rule 11 sanctions.

COSTS

Each party shall bear its own costs.

AFFIRMED-IN-PART, VACATED-IN-PART, and REMANDED