

**UNITED STATES DISTRICT COURT
DISTRICT OF MINNESOTA**

Everspin Technologies, Inc.,

Plaintiff,

v.

**MEMORANDUM
OPINION AND ORDER**
Civil No. 12-474 ADM/FLN

NVE Corporation,

Defendant.

Benjamin G. Damstedt, Esq., Timothy S. Teter, Esq., Jeffrey S. Karr, Esq., Nathan K. Cummings, Esq., Cooley LLP, Palo Alto, CA; Kurt J. Niederluecke, Esq., and Ted C. Koshiol, Esq., Fredrikson & Byron, PA, Minneapolis, MN, for Plaintiff.

David R. Fairbairn, Esq., Catherine A. Shultz, Esq., Katherine J. Rahlin, Esq., Stuart A. Nelson, Esq., Kinney & Lange, PA, Minneapolis, MN, for Defendant.

I. INTRODUCTION

On October 31, 2013, the undersigned United States District Judge heard oral argument on Plaintiff Everspin Technologies, Inc.'s ("Everspin") Motion for Summary Judgment for Infringement of U.S. Patent No. 5,861,328 (the "'328 Patent") [Docket No. 55]. On December 20, 2013, Defendant NVE Corporation ("NVE") argued its Motion for Summary Judgment on Laches [Docket No. 76]. For the reasons discussed below, Everspin's motion for summary judgment is granted in part and denied in part and NVE's motion for summary judgment is granted.

II. BACKGROUND

A. Procedural Posture

On February 24, 2012, Everspin sued NVE, alleging that NVE products infringe Everspin's '328 Patent and its U.S. Patent No. 5,831,920 (the "'920 Patent"). See Compl.

[Docket No. 1]. Everspin brought this suit after NVE sued Everspin for alleged infringement of three NVE patents.¹ Pl.’s Mem. Opp’n to Summ. J. on Laches [Docket No. 90], at 12. NVE is accused of manufacturing and selling GMR sensors, encoders, and isolators which allegedly infringe Everspin’s ’328 Patent and ’920 Patent, entitled “GMR Device Having a Sense Amplifier Protected by a Circuit for Dissipating Electric Charges.”

Everspin has not moved for summary judgment on infringement of the ’920 Patent, and argues that this suit, including the motion for summary judgment on the ’328 Patent infringement claim are defensive in nature. NVE argues Everspin is not entitled to summary judgment because there are fact questions concerning whether NVE’s isolator products were manufactured in the method described by Claim 25 of the ’328 Patent.

Because Everspin did not file its patent infringement claims against NVE until February 2012, NVE argues Everspin waited too long to file suit, causing unreasonable delay and economic prejudice. NVE argues it is therefore entitled to equitable relief under the doctrine of laches. Everspin responds that NVE’s motion for summary judgment on the issue of laches is premature and unwarranted.

B. The ’328 Patent

The ’328 Patent, entitled “Method of Fabricating GMR Devices,” teaches a method of manufacturing magnetic memory cells in connection with semiconductors using giant magneto-

¹ Proceedings in NVE’s suit against Everspin are currently stayed. See NVE Corp. v. Everspin Techs., Inc., No. 12-6 (JRT/JJG) [Docket No. 32] (D. Minn. July 1, 2013). The United States Patent and Trademark Office is in the process of reexamining the patents at issue in that case.

resistive (“GMR”) materials as the memory element.² Decl. Katherine J. Rahlin [Docket No. 45]

Ex. B (’328 Patent) at 1:4-8. Claim 25 teaches:

A method of fabricating magnetic memory devices comprising the steps of:

providing a substrate structure with a semiconductor device formed therein, the substrate structure having a surface with metal interconnects connected to the semiconductor device;

forming a dielectric on the surface of the substrate structure and on the metal interconnects, the dielectric defining a supporting surface;

forming vias through the dielectric from the supporting surface to the metal interconnects;

depositing a metal system through the vias to the metal interconnects to provide electrical contacts in the supporting surface;

disposing and patterning films of giant magneto-resistive material on the supporting surface of the dielectric **so as to form** at least one magnetic **memory cell** in electrical communication with the electrical contacts in the supporting surface; and

disposing a dielectric system on the magnetic **memory cell** so as to seal the cell and provide a barrier to ambient conditions.

Id. at 11:10-35 (emphasis added). Motorola, Inc. (“Motorola”) employees filed the ’328 Patent on October 7, 1996. Catherine A. Shultz Decl. [Docket No. 73] Exs. 130, 131. In 2004, Motorola assigned the ’328 Patent to Freescale Semiconductor, Inc. (“Freescale”). Id. Ex. 131. And in 2009, Everspin became the owner by assignment of the ’328 Patent. Id.

² The factual background of the technology at issue in this case is available in Everspin Techs., Inc. v. NVE Corp., No. 12-474, 2013 U.S. Dist. LEXIS 145144 (D. Minn. Oct. 8, 2013). The background discussion offered in the present Order will address only the portions of the technology at issue in these summary judgment disputes.

C. NVE's Use of GMR Material

In the early 1990s, NVE developed magnetic sensors using GMR materials. Shultz Decl. Ex. 101. NVE concedes the making of these sensors meets all the limitations of Claim 25 of the '328 Patent, except, NVE argues, the GMR material forms a magnetic sensor instead of a memory cell. Edward Murdock, PH.D. Decl. [Docket No. 69] ¶¶ 20-21. Everspin does not claim NVE's magnetic sensors infringe the '328 Patent. See Compl. NVE also developed signal isolators, using essentially the same manufacturing process, namely disposing and patterning GMR material so as to form GMR resistors and sensors for signal isolation. Murdock Decl. at ¶ 22. NVE released its first isolator product in 2000. Everspin claims it is the isolator products that infringe the '328 Patent. Compl. ¶ 20.

1. NVE and Motorola/Freescale Interaction

Eugene Chen was an employee of NVE while NVE was developing its magnetic sensors. Chen was a Senior Process Engineer and Physicist, responsible for modeling, experimental planning, material processing, and data analysis of GMR materials, including in Magnetoresistive Random Access Memory ("MRAM") and in magnetic sensors. Shultz Decl. Ex. 121. Through his work, Chen obtained knowledge and details of the fabrication process and design of NVE's magnetic sensors and memory devices. Chen worked for NVE from May 23, 1992 to June 15, 1995. Daniel A. Baker Decl. [Docket No. 72] ¶ 3. Upon leaving NVE in 1995, Chen went to work for Motorola. Chen continued to work on GMR, and was later a named inventor on the '328 Patent, originally held by Motorola.

Also in 1995, Motorola became one of NVE's largest shareholders, holding a 12% interest and a seat on the NVE Corporation Board. Id. ¶ 5. Motorola filled this seat with Herbert

Goronkin, Motorola's Vice-President of Physical Research at Motorola Laboratories. Shultz Decl. Exs. 126, 127. Motorola also obtained an option to license some of NVE's MRAM technology. Baker Decl. ¶ 5. Goronkin performed due diligence on the agreement. Id.

In 1997, Motorola expressed interest in and support of NVE's GMR isolator technology development. Second Baker Decl. [Docket No. 80] Ex. 5. In 2000, Motorola paid NVE to extend Motorola's option to license NVE's MRAM technology as part of a litigation settlement between NVE and Motorola. Id. Ex. 6. The litigation concerned the relationship of Chen's having worked at NVE and certain patents he subsequently filed when working for Motorola. Id. The settlement agreement included a provision explicitly stating, "in the event that any Motorola patent listed in Exhibit D is asserted against NVE, nothing in this Paragraph 6 shall preclude NVE from raising non-infringement, invalidity, and/or unenforceability of such patent as defenses to such an assertion." Id. at 3. The '328 Patent was included in Exhibit D to the 2000 litigation settlement agreement.

NVE did not hide its GMR technology development. In NVE's 10K annual report for 2001, NVE discussed its GMR sensor and isolator products. Second Shultz Decl. [Docket No. 81] Ex. 11, at 5-7. Goronkin was identified as an NVE board member in the report as well. Id. at 18.³ In addition, from 2001 to 2008, NVE Corporation provided samples of and sold its accused sensor and isolator products to Motorola and Freescale. Shipping records show shipments of IL7xx isolators to Motorola in 2002 and 2003. Second Baker Decl. Ex. 7. NVE sold isolator products to Freescale in 2005. Id.

³Goronkin left NVE's board in 2002, retired from Motorola in 2003, and died in 2012. Second Shultz Decl. Ex. 127.

2. NVE Isolator Product Development

The NVE products accused of infringement in Everspin's summary judgment motion are signal isolators, known as IsoLoop ("IL") isolators. Murdock Decl. ¶ 11. NVE's isolators electrically isolate an input signal supplied at the input terminals from an output supplied at the output terminal. The electrical isolation is achieved by using an inductive coil connected to the input terminals to produce a magnetic field. The magnetic field is applied to a GMR magnetic sensor. Id. ¶ 22. The GMR magnetic sensor is connected in a Wheatstone bridge configuration to the first stage of an amplifier, known as a Schmitt trigger. Id. The Schmitt trigger is calibrated to produce either a high or low output, based on the signal it receives from the GMR magnetic sensor. Id.

NVE publicly released the isolator products in 2000 with the IL7xx series, followed by the IL4xx series in 2001, the IL2xx, IL6xx, and IL31/32/34xx series in 2004, the IL35xx series in 2005, the IL36xx series in 2007, the IL5xx series in 2009, and the IL30xx series in 2013. Baker Decl. ¶ 6. NVE concedes its isolators meet all the limitations of Claim 25, except that it manufactures the GMR materials so as to integrate magnetic sensors, not memory cells.

III. DISCUSSION

A. Summary Judgment Standard

Rule 56(c) of the Federal Rules of Civil Procedure provides that summary judgment shall be rendered if there exists no genuine issue as to any material fact and the moving party is entitled to judgment as a matter of law.

The United States Supreme Court, in construing Federal Rule 56(c), stated in Celotex Corp. v. Catrett, 477 U.S. 317, 322 (1986):

In our view, the plain language of Rule 56(c) mandates the entry of summary judgment, after adequate time for discovery and upon motion, against a party who

fails to make a showing sufficient to establish the existence of an element essential to that party's case, and on which that party will bear the burden of proof at trial.

On a motion for summary judgment, the court views the evidence in the light most favorable to the nonmoving party. Ludwig v. Anderson, 54 F.3d 465, 470 (8th Cir. 1995). However, the nonmoving party may not “rest on mere allegations or denials, but must demonstrate on the record the existence of specific facts which create a genuine issue for trial.” Krenik v. Cnty. of Le Sueur, 47 F.3d 953, 957 (8th Cir. 1995). If evidence sufficient to permit a reasonable jury to return a verdict in favor of the nonmoving party has been presented, summary judgment is inappropriate. Id. (citing Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 249 (1986)).

B. Motion for Summary Judgment for Infringement of the '328 Patent

Infringement is a question of fact that may be resolved on summary judgment if the material facts are undisputed. Invitrogen Corp. v. Biocrest Mfg., LP, 424 F.3d 1374, 1383.

NVE argues that it does not use the method of Claim 25 of the '328 Patent to manufacture its isolators because the GMR element of its isolators are not disposed and patterned on the dielectric surface “so as to form at least one magnetic memory cell.”⁴ NVE argues that its isolators do not use the GMR material as memory and the manufacturing process actually makes the GMR material unsuitable for use as memory. See Murdock Decl. ¶¶ 39-41. In response, Everspin argues that the GMR material in NVE's isolators can represent values of digital data and store the information, even if the storage is only for the smallest amount of time

⁴ NVE does not dispute that its isolators are manufactured in all other respects in accordance with Claim 25; therefore, Everspin is granted summary judgment of infringement to that extent. See Satcher v. Univ. of Ark. at Pine Bluff, 558 F.3d 731, 735 (8th Cir. 2009). The Court will, of course, still consider NVE's defenses of invalidity and unenforceability, as these issues are not before the Court in Everspin's current motion. Pandrol USA, LP v. Airboss Ry. Prods., 320 F.3d 1354, 1365-1366 (Fed. Cir. 2003).

imaginable and even if the data is unreliable. Decl. of Shukri Souri, PH.D. [Docket No. 59] ¶ 42 (emphasis added).

The parties' experts dispute whether a memory cell is formed in the manufacturing process of NVE isolators. This dispute is material to the issue of infringement. Everspin's expert, Shukri Souri, analyzed the GMR resistors in what he terms a "representative" 1000145 wafer. The wafer consists of GMR components and a CMOS semiconductor. Souri concluded that the GMR resistors store digital information written by inductive coils placed over the GMR resistors. Id. ¶ 42. He explained that the inductive coil changes the magnetic orientation of the "free layer" in the GMR resistors, thus changing the resistance therein. "The low resistance and high resistance states of the GMR resistors can represent the "0" and "1" values of digital data" for magnetic sensors to read. Id. (emphasis added). Souri opined that whichever state is represented can be "retrieved," and so, Souri concluded that the GMR resistors are memory cells because they can represent data in two stable states that can be read through the output. Id. at ¶ 43.

NVE's expert, Edward Murdock, arrived at a very different conclusion. Initially, Murdock noted Souri only analyzed GMR resistors in the 100145 wafer. Souri did not look at the isolator system as a whole, failing to distinguish among the five different NVE isolator product designs. See Murdock Decl. ¶¶ 22-27. Murdock further explained that the 100145 wafer is a GMR sensor, made up of four GMR resistors connected in a Wheatstone bridge configuration. Id. Whereas Souri opined that having low and high resistance states is sufficient to make the GMR elements into memory cells, Murdock and NVE argue the GMR materials are manufactured so as to form a magnetic sensor. Murdock opined that for GMR material to become a magnetic memory cell, it must be able to hold, or "latch" to "two quite distinguishable

magnetic states and also must hold these states when the externally applied magnetic field is absent.” *Id.* at ¶ 46 (see Murdock’s discussion of hysteresis, centering, and zero applied field). In essence, Murdock argues, Souri’s “stable states” are not found in NVE’s isolators. Murdock found that the IL6xx and IL31/32/34xx series isolators, called Low Hc Isolators, do not contain “magnetic memory cells” because the GMR material’s properties are such that the material does not hold a low or high value hysteresis, but rather whatever magnetic field is caught in the GMR degrades to a meaningless value when the magnetic input force is turned off. *Id.* at ¶¶ 15, 29, 56, 105. When the power is on, the GMR element senses the inductive coil’s magnetic field and passes that signal to the amplifier for translation into a usable output signal, but the GMR material does not latch onto or hold any low or high value. All of the other isolators (IL7xx, IL4xx, IL2xx, IL35xx, IL36xx, the IL5xx, and IL30xx series), called Higher Hc Isolators, do not contain “magnetic memory cells” because the GMR has been disposed and patterned on the dielectric in a way that does not reliably support holding a low or high value beyond passing the signal from the inductive coil to the output. Murdock Decl. ¶¶ 33, 50, 51, 52. NVE argues that Low Hc Isolators and Higher Hc Isolators do not have the same GMR properties that GMR memory cells have. This genuine and material dispute creates a triable issue of fact.

Everspin argues that even if the GMR element cannot reliably latch onto or hold data, a memory cell is nonetheless created because the GMR is associated with a CMOS Schmitt trigger, which translates the GMR signal into a high (“1”) or low (“0”) value based on the Schmitt trigger’s hysteresis characteristics. Pl.’s Reply [Docket No. 85] 12-16. But a Schmitt trigger’s translation of the magnetic signal into an output says nothing about whether the trigger makes the GMR element a memory cell. The plain language of the claim makes clear that the GMR material is disposed and patterned on a dielectric “so as to form” at least one magnetic

memory cell. The claim continues, teaching that the memory cell is in electrical communication with the electrical contacts that lead to the semiconductor. The semiconductor is not a part of the GMR memory component.

Finally, Everspin argues that “a circuit does not stop storing information or storing data merely because the circuit puts the value of its contents on its output immediately.” Id. at 7. However, this is a construction of the patent claim language that the Court has not found. Everspin’s argument assumes that a memory cell is created by the combination of semiconductor and GMR elements. It also continues to assume that data is stored when it is transferred through the circuit, before analyzing its latching capability. Based on the disputed evidence, it may be that the GMR element allows energy to pass through it without latching to it in any meaningful way. Similarly, a cell membrane is permeable to certain signals from the body, allowing certain organic molecules to pass through to the inside where they can be used by the cell. But the fact that the membrane senses that the molecules are permitted to pass through for the cell’s use does not make the membrane a memory. Just because the Schmitt trigger translates a signal from the GMR element does not necessarily mean the GMR element records the signal in any meaningful way. NVE reasonably argues the facts show GMR stability is needed so as to form a magnetic memory cell. The differences between the experts’ opinions on whether a memory cell is created poses a triable issue of fact. Summary judgment will be denied as to whether NVE’s isolators are designed “so as to form at least one magnetic memory cell.”

C. Motion for Summary Judgment on Laches

Laches is “an equitable defense to a claim for patent infringement.” A.C. Aukerman Co. v. R.L. Chaides Constr. Co., 960 F.2d 1020, 1028 (Fed. Cir. 1992). “In a legal context, laches may be defined as: (1) the neglect or delay in bringing suit to remedy an alleged wrong, (2) which taken together with lapse of time and other circumstances, causes prejudice to the adverse party and operates as an equitable bar.” Id. at 1028-29. The Court weighs “the length of delay, the seriousness of prejudice, the reasonableness of excuses, and the defendant’s conduct or culpability.” Id. at 1034. “The period of delay is measured from the time the plaintiff knew or reasonably should have known of the defendant’s alleged infringing activities to the date of suit.” Id. at 1032. The prejudice against the defendant is measured as evidentiary or economic:

Evidentiary, or “defense” prejudice, may arise by reason of a defendant’s inability to present a full and fair defense on the merits due to the loss of records, the death of a witness, or the unreliability of memories of long past events, thereby undermining the court’s ability to judge the facts. Economic prejudice may arise where a defendant and possibly others will suffer the loss of monetary investments or incur damages which likely would have been prevented by earlier suit.

Wanlass v. GE, 148 F.3d 1334, 1337 (Fed. Cir. 1998). “A delay of more than six years raises a presumption that it is unreasonable, inexcusable, and prejudicial.” Id. And, for laches purposes, any delay of a prior patent holder is imputed to the current patent holder. Eastman Kodak Co. v. Goodyear Tire & Rubber Co., 114 F.3d 1547, 1559 (Fed. Cir. 1997). The matter is “committed to the sound discretion of the district court.” Auckerman at 1032. And, if laches is established, damages prior to suit may be barred. Id. at 1028.

Everspin filed its case February 24, 2012. The facts clearly show Motorola and Freescale, as prior patent holders to Everspin, knew or should have known of their claims against NVE products prior to February 24, 2006.

1. Timing of the Motion

Everspin argues NVE's motion is premature. Under Rule 56(d) of the Federal Rules of Civil Procedure, the Court may defer or deny a motion for summary judgment upon a showing that the non-moving party requires further discovery to develop facts essential to justify its opposition. Everspin argues that further discovery is needed before the laches issue is ripe for determination. Everspin argues it needs to take additional depositions, such as a personal deposition of Timothy Hazelton, the individual identified as most knowledgeable regarding the operation of Everspin's isolator products. Pl.'s Opp'n to Summ. J. on Laches, at 2-4. Everspin intends to pursue a deposition on technical and damages issues, and other personal depositions, such as the deposition of Dr. Jim Daughton, NVE's former president. Id. Everspin also intends to pose additional interrogatories on technical and damages topics; and pursue production of additional documents covered by requests Everspin has already served but as to which NVE has not fully responded. Id. Everspin states that it needs this information to understand the merits of substantive defenses such as noninfringement and invalidity.

Everspin has not demonstrated what specific facts it hopes to learn from this further discovery that would be essential to rebut NVE's case for laches, such that a delayed ruling on laches is appropriate. NVE argues that undisputed evidence shows Eugene Chen, Herbert Goronkin, Motorola, and Freescale knew about the open and notorious development of NVE's accused isolator and sensor products. Evidence pertaining to Chen, Goronkin, Motorola, and Freescale is not generally in NVE's control, and Everspin has not even suggested that it has sought or now seeks these sources of information. In addition, denial of Chen and Goronkin's knowledge of NVE's allegedly infringing products is noticeably absent from Everspin's papers.

For these reasons, NVE's motion for summary judgment on laches is timely and ripe for review.

2. Presumption of Laches

Everspin argues NVE is not entitled to a presumption of laches because the doctrine of laches accounts for changes in the infringer's conduct, such as the introduction of new products to market. Where the infringer is shown to have altered the nature of its infringing activity, Everspin argues, laches must be analyzed on a product-by-product basis. *Id.*, at 7 (citing Spalding & Evenflo Cos. v. Acushnet Co., 718 F. Supp. 1023, 1050 (D. Mass. 1989)). But, Everspin has not cited to facts which, if revealed, would show that NVE altered the nature of its infringing activity. In addition, NVE's disclosure of asserted claims and infringement contentions groups NVE's accused products by type. Second Shultz Decl. Ex. 8. The groupings show NVE's isolator products were released starting in 2000 and its sensor products starting in the early 1990s. Every product grouping has at least one product series from before 2006. Everspin's Complaint claims that all of NVE isolator products violate its '328 Patent and that all of NVE's isolator products—and most of NVE's sensor products—violate its '920 Patent. Significantly, Everspin's expert analyzed only one "representative" isolator wafer, the 100145 wafer. Everspin, relying on this opinion to implicate all of NVE's isolator products, moved for summary judgment for infringement of the '328 Patent.

Only two of the accused isolator products were released after February 24, 2006. Only three sensor products were released following 2006. Everspin argues that "NVE has not proven that its pre-2006 products were materially the same as its post-2006 products." Pl.'s Opp'n to Summ. J. on Laches, at 7. But the burden is not on NVE to prove that its products were materially the same. "[A] reasonable patentee, motivated by his interest in recovering for and

preventing infringement, keeps abreast of the activities of those in his field of endeavor.”

Wanlass, 148 F.3d at 1339; Rockwell Int’l Corp. v. SDL, Inc., 103 F. Supp. 2d 1192 (N.D. Cal. 2000) (“[C]ase law charges plaintiff with such knowledge as it might have obtained on reasonable, diligent inquiry.”). “Allocating the burden to patentees to seek out infringers is proper, furthermore, because compared to potential infringers, they are in a better position to know the scope of their patent protection and, therefore, they are in the best position to know the scope of their patent protection.” Wanlass, 148 F.3d at 1139.

Motorola, Freescale, and Everspin knew or should have known about potentially infringing product development because Eugene Chen was involved in the development of GMR technology for sensors and magnetic memories at both NVE and Motorola prior to 2006. Even after Chen left NVE, Motorola had acquired a 12% interest and a seat on the board of directors at NVE. Goronkin, NVE’s representative on the board, had a fiduciary responsibility to keep up with NVE’s developments. NVE has produced evidence that NVE informed the board of its product developments. NVE also pursued Motorola as a customer by sending them samples of the products, and Motorola did in fact purchase at least some of the products. Motorola also bought an option to license MRAM technology.

Everspin argues that Goronkin and Chen’s knowledge of NVE’s product development does not support a laches defense. Everspin argues that NVE is drawing conclusory inferences from Goronkin and Chen’s relationship with NVE and Motorola. Everspin claims NVE does not tie any specific technical information held by Goronkin to any of the asserted patent claims. Goronkin is deceased, and therefore the extent of his knowledge is lost. Even so, Goronkin had a responsibility as a member of the board to know about NVE developments, therefore, it is reasonable to infer that he knew or should have known about potential infringement. As to

Chen, NVE's laches argument is not entirely conclusory because NVE has produced documents that show Chen was specifically tasked at NVE with working on GMR processes. Coupled with Chen's appearance on the '328 Patent, it is a reasonable inference that Chen was aware of GMR developments and possible infringement. NVE has also presented emails and letters of support from Motorola for NVE's work developing its isolator products. Finally, in 2000, Motorola and NVE litigated about GMR technology and specifically listed the '328 Patent as an exhibit to their settlement. These undisputed facts weigh in favor of a presumption of laches.

Everspin has not argued that the products are substantially different for infringement purposes and since NVE has shown clear knowledge of the development of accused products before 2006, the presumption of unreasonable, inexcusable, and prejudicial delay will be applied.

3. Rebuttal of Presumption

Even if the alleged infringer presents sufficient evidence for the application of the laches presumption, "the patentee may offer proof directed to rebutting the laches factors," which proof "may be directed to showing either that the patentee's delay was reasonable or that the defendant suffered no prejudice or both." Auckerman, 960 F.2d at 1038.

a. Unreasonable Delay

Everspin argues that it has no interest in being a patent aggressor and should not be precluded from bringing this defensive, responsive action. This is not a justification for delay and does not make delay reasonable. Everspin is not precluded from bringing a suit, only from recovering damages during the time that it, and its predecessors, neglected to protect its patent rights.

Everspin states that in 1999, Motorola was working with NVE on a MRAM research project, but was disappointed in NVE's performance on the subcontracted work and was

discouraged with NVE's attempts to claim ownership over work performed under that subcontract. Therefore, Motorola ceased their joint efforts. The joint research project is not evidence of an excuse or justification for delaying suit, rather, it reinforces that Motorola was on notice of NVE's claims of ownership in the field of development in which both companies held patents. Motorola and NVE's settlement of litigation in 2000 further establishes this conclusion. NVE and Motorola were aware of each other's patents, including the specifically mentioned '328 Patent. The companies reserved rights to enforce their patents and defend against allegations if infringement was suspected. Non-enforcement of the '328 Patent rights indicates Motorola did not think it had a patent claim in the four years it continued to own the '328 Patent, not that it was unaware of NVE's developments.

Everspin argues that the value of NVE's pre-2006 sales of magnetic sensors and magnetic isolators did not justify a patent lawsuit, and therefore, Everspin's delay in filing suit was justified. Tripp v. United States, 406 F.2d 1066, 1071 (Ct. Cl. 1969). In Tripp, where the defendant was on notice since the issuance of plaintiff's patent of plaintiff's intent to demand compensation for use of his invention, a delay of four years in giving written notice did not bar recovery by reason of laches. Id. Everspin's citation of Tripp does not apply in this case because it is undisputed that Everspin's predecessors in interest made no effort at all to inform NVE of potential infringement issues with regard to the '328 and '920 Patents, and the delay in this case is well over six years. Thus, Everspin has not rebutted the presumption that the delay was unreasonable.

b. Prejudice

Everspin argues NVE has provided no evidence of actual prejudice. Everspin argues that NVE's only claim to economic prejudice is the assertion that it might have redesigned its

products if Everspin had sued earlier. However, NVE has also argued that it could have prevailed against infringement claims earlier, licensed the technology, negotiated a settlement, or stopped developing new GMR sensor and isolator products. NVE cites its negotiations and settlement with Motorola that occurred in 2000 by way of example. In that instance, NVE settled its patent issues and then continued to develop its products. After 2006, NVE released a number of new isolator series as well as new sensor series, spending time and resources to promote its products. As a result, during this period of time, NVE's net annual income significantly increased. If Everspin, or its predecessor, had brought its suit before the presumption of prejudice at six years, NVE would have had the opportunity to either design around the Everspin patents or wait before investing its time and resources into products that may infringe. See, e.g., Hearing Components, Inc. v. Shure Inc., 600 F.3d 1357, 1375-76 (Fed. Cir. 2010). The "proper inquiry is whether there has been a 'change in the economic position of the alleged infringer during the period of delay.'" Id. NVE has presented undisputed evidence that it did. Everspin has not offered evidence to rebut the presumption of economic prejudice; therefore, the presumption of prejudice remains.⁵

4. Balance of Equities

Motorola clearly knew or should have known that it had patent claims against NVE before 2006. Motorola's failure to police its patent rights is imputed to Everspin. See Eastman Kodak, 114 F.3d at 1559. This delay creates a presumption that the delay was unreasonable,

⁵ Everspin contests NVE's evidentiary prejudice, prejudice based on the unavailability of Goronkin's testimony and the loss of pre-2001 sales and shipping records. But prejudice is measured by economic or evidentiary prejudice. Since Everspin has not rebutted NVE's economic prejudice, the presumption of prejudice is upheld.

inexcusable, and prejudicial. Therefore, granting NVE's motion for summary judgment on laches is appropriate.

Assuming that NVE did not meet its presumption burden, the Court would still find the balance of equities warrant summary judgment on laches for NVE. First, Motorola was on inquiry notice at least as early as 2000, twelve years before Everspin brought this case. Second, NVE has shown substantial prejudice. Key evidence NVE will need to support its invalidity and unenforceability defenses, including testimony and documents showing potential prior art and prior invention, will need to be dredged up from almost twenty years ago. NVE also invested time and resources into developing, manufacturing and selling sensors and isolators. NVE became much more successful in its efforts and its revenues increased accordingly. If NVE had been warned about possible infringement, its development plans could have been much different. Third, Defendant's conduct or culpability in contributing to the delay has not been argued because NVE openly developed and publicly released its GMR sensors and isolators. Until 2012, the patentees did not once indicate that there may be patent infringement. Fourth, Everspin has argued that it should be excused from delay because it only wanted to use its Patents to defend against suits from NVE, and besides, NVE did not start making much money on its allegedly infringing products until recently. These explanations do not excuse Motorola and Everspin from sleeping on their rights. Not even contacting NVE about the potential for infringement is unreasonable and inexcusable.

After weighing "the length of delay, the seriousness of prejudice, the reasonableness of excuses, and the defendant's conduct or culpability," the Court concludes that NVE is entitled to summary judgment on laches.

IV. CONCLUSION

Based upon the foregoing, and all of the files, records and proceedings herein, **IT IS HEREBY ORDERED** that:

1. Plaintiff Everspin Technologies, Inc.'s Motion for Summary Judgment for Infringement of U.S. Patent No. 5,861,328 [Docket No. 55] is **GRANTED in part, and DENIED in part**; and,
2. Defendant NVE Corporation's Motion for Summary Judgment on Laches is **GRANTED**.

BY THE COURT:

s/Ann D. Montgomery
ANN D. MONTGOMERY
U.S. DISTRICT JUDGE

Dated: March 13, 2014.