

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ROBERT BOSCH TOOL CORPORATION,
Petitioner,

v.

SD3, LLC,
Patent Owner.

Case IPR2016-01754
Patent 8,011,279 B2

Before HYUN J. JUNG, SCOTT A. DANIELS, and
ROBERT L. KINDER, *Administrative Patent Judges*.

DANIELS, *Administrative Patent Judge*.

DECISION
Denying Institution of *Inter Partes* Review
37 C.F.R. § 42.108

I. INTRODUCTION

A. Background

Robert Bosch Tool Corporation (“Bosch” or “Petitioner”) filed a Petition to institute an *inter partes* review of claims 1–8 and 10–17 of U.S. Patent No. 8,011,279 B2 (Ex. 1001, “the ’279 patent”). Paper 1 (“Pet.”). SD3, LLC (“SD3” or “Patent Owner”) filed a Preliminary Response. Paper 9 (“Prelim. Resp.”). On January 9, 2017, we issued an Order requesting reply briefing by the Petitioner on the issue of “whether the time bar of 35 U.S.C. § 315(b) applies to a complaint filed with the ITC.” Paper 11. Petitioner filed a Reply to the Preliminary Response on January 27, 2017. Paper 12 (“Reply”).

We have authority to determine whether to institute an *inter partes* review under 35 U.S.C. § 314 and 37 C.F.R. § 42.4(a). Upon consideration of the Petition, Preliminary Response, and Petitioner’s Reply, we determine for the reasons expressed below that it is appropriate to exercise our discretion under 35 U.S.C. § 325(d) and not institute an *inter partes* review of the ’279 patent.

B. Additional Proceedings

Petitioner states that the ’279 patent is asserted by Patent Owner in an ITC investigation captioned, *Certain Table Saws Incorporating Active Injury Mitigation Technology and Components Thereof*, Inv. No. 337-TA-965, and also in *SawStop, LLC v. Robert Bosch Tool Corp.*, Case No. 3:15-cv-01320, in the District of Oregon. Pet. 1; *see also* Paper 8, 2 (identifying same ITC investigation and district court case).

In addition to this Petition, Petitioner has filed petitions challenging the patentability of certain claims in various patents related to the ’279

patent. See Cases IPR2016-01750, IPR2016-01751, IPR2016-01753, IPR2016-01755; Pet. 1–2.

C. The '279 Patent

The '279 patent, titled “Power Equipment with Systems to Mitigate or Prevent Injury,” relates to a woodworking machine having a cutting tool, for example a table saw, with a safety system for detecting a dangerous condition and rapidly decelerating the cutting tool when the dangerous condition is detected. Ex. 1001, (54), Abstract, Fig. 2. Figure 2 of the '279 patent, illustrating a diagrammatic view of the woodworking machine, is reproduced below.

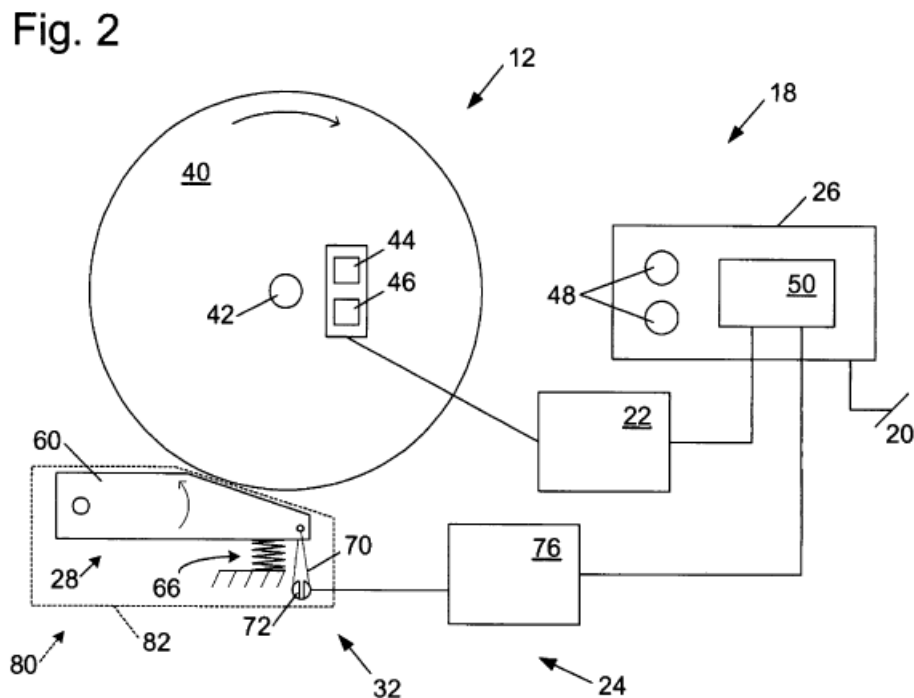


Figure 2 illustrates a cutting tool such as saw blade 40 and braking mechanism 28 having pawl 60 for engaging and stopping the blade when a dangerous condition is detected. *Id.* at 6:4–33. Detection system 22 includes capacitive sensors 44, 46 coupled to blade 40 to detect for example,

a user's finger (not shown) contacting the blade. *Id.* at 5:31–36. When user contact is detected by detection subsystem 22, logic controller 50 initiates firing subsystem 76 which melts fusible member 70 releasing spring biased pawl 60 to stop rotation of blade 40. *Id.* at 6:55–60.

The '279 patent explains that “[t]ypically, the pawl is held approximately 1/32-inch to 1/4-inch from the edge of the blade by fusible member 70.” *Id.* at 6:46–48. The '279 patent further states that

for a pawl-to-blade separation of 1/32-inch, the selected spring should have sufficient force to accelerate the pawl at over 500 ft/s² to achieve a transit time of approximately 3-ms, or sufficient force to accelerate the pawl at over 5,000 ft/s² to achieve a transit time of approximately 1-ms.

Id. at 9:17–22. At these accelerations and with the resultant transit time of the pawl being in milliseconds, the claimed safety system can apparently stop the cutting blade rotation in such a brief period of time as to effectively minimize risk of injury to the user, even after contact has been made with the blade.¹ *Id.* at 1:44–50.

D. Illustrative Claim

Of the challenged claims, claims 1, 13, and 16 are independent. Each of dependent claims 2–8 and 10–12 depend, directly or indirectly, from claim 1, claims 14 and 15 each depend directly from claim 13, and claim 17 depends directly from claim 16. Claim 1 illustrates the claimed subject matter and is reproduced below:

¹ From a plain reading of the detailed description of the '279 patent we understand transit time to be “length of time necessary to move the pawl into contact with the blade,” not necessarily the time to bring the spinning saw blade to a complete stop. Ex. 1001, 9:7–8.

1. A woodworking machine comprising:
 - a support frame;
 - a motor supported by the frame;
 - a cutting tool supported by the frame and moveable by the motor;
 - a detection system adapted to detect a dangerous condition between a person and the cutting tool;
 - a mechanism having a moveable component adapted to move upon detection of the dangerous condition by the detection system, where movement of the moveable component contributes to one or more of the following actions to mitigate or prevent injury to the person: deceleration of the cutting tool, and retraction of the cutting tool; and
 - an actuator having stored energy sufficient to move the moveable component 1/32nd of an inch within approximately 3 milliseconds or less after the dangerous condition is detected.*

Ex. 1001, 23:44–62 (emphasis added).

E. The Alleged Grounds of Unpatentability

Petitioner contends that the challenged claims are unpatentable on the following specific grounds.²

References	Basis	Claims Challenged
Nieberle ³ and the ordinary knowledge of one of skill in the art	§ 103	1, 5, 6, 10–14, 16, and 17
Nieberle and Bielinski ⁴	§ 103	2–4
Lokey ⁵ and the ordinary knowledge of one of skill in the art	§ 103	1, 5, 6, 10–14, 16, and 17
Lokey and Bielinski	§ 103	2–4

² Petitioner supports its challenge with a Declaration of Mr. Bruce W. Main P.E., C.S.P. (Ex. 1003). *See infra*.

³ Ex. 1008, DE 196 09 771 A1 (pub. April 6, 1998).

⁴ Ex. 1017, U.S. Patent No. 5,606,889 (March 4, 1997).

⁵ Ex. 1005, U.S. Patent No. 3,785,230 (January 15, 1974).

II. CLAIM CONSTRUCTION

We do not provide explicit constructions for any claim terms because doing so is not necessary for our determination of whether to institute *inter partes* review of the asserted claims. *See Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) (only those terms which are in controversy need to be construed, and only to the extent necessary to resolve the controversy).

III. ANALYSIS

A. Discretion Pursuant to § 325(d)

Patent Owner argues that the Petition should be denied because both the Lokey and Nieberle references asserted in this Petition as primary references were also specifically cited, considered, and relied upon by the Examiner as primary references in rejecting the claims under 35 U.S.C. § 103 during prosecution.⁶ Prelim. Resp. 31–32. Patent Owner contends that Petitioner's arguments and prior art in support of unpatentability, here in this proceeding, are substantially the same as the rationale and prior art in the Examiner's obviousness rejections, that were overcome by Applicant during prosecution of the application that became the '279 patent. *Id.* at 32.

In circumstances such as these, our discretion on whether to institute is guided by 35 U.S.C. § 325(d), which provides, in relevant part:

MULTIPLE PROCEEDINGS. — . . . In determining whether to institute or order a proceeding under this chapter, chapter 30, or chapter 31, the Director may take into account whether, and

⁶ Jan Nieberle and Sebastian Hauer are the named inventors and applicants in DE 196 09 771 A1. Ex. 1007, 1. During the prosecution of the patent application that led to the '279 patent, the Examiner referred to this German reference as "Sebastian." For purposes of consistency with the Petition, we refer in this Decision to the same reference as "Nieberle."

reject the petition or request because, the same or substantially the same prior art or arguments previously were presented to the Office.

We, therefore, examine whether the grounds asserted in the instant Petition present “the same or substantially the same prior art or arguments” as those previously presented to the Office during prosecution. Then, we determine whether it is appropriate to exercise our discretion to deny institution.

1. Summary of Prosecution History

The patent application that became the '279 patent was filed with original claims 1–20. Ex. 1002, 32–36.⁷ The Applicant withdrew certain claims subject to an election/restriction requirement made by the Examiner, leaving claims 1, 5–11, and 15–19 for examination. *Id.* at 61–62, 73.

a. The Examiner’s Rejections⁸

Lokey

In an office action mailed December 5, 2008, included in the various rejections of the claims, the Examiner rejected claims 1, 5–8, 10–11, 15–17, and 19 as unpatentable over Lokey in view of Friemann et al. (U.S. Patent No. 3,785,230, “Friemann”) and further in view of Shapiro (U.S. Patent No. 5,205,069, “Shapiro”). Ex. 1002, 79–80. The Examiner stated that

⁷ We refer to, and adopt the page numbers 1–844 as applied to the prosecution history (Ex. 1002) by Petitioner.

⁸ The Examiner also rejected the claims on the grounds of non-statutory obviousness-type double patenting, failing to comply with the written description requirement under 35 U.S.C. § 112 and, as obvious under 35 U.S.C. § 103 over Yoneda (U.S. Patent No. 4,117,752) in view of Friemann et al. (U.S. Patent No. 3,858,095) and Andreasson (U.S. Patent No. 4,653,189). Ex. 1002, 76–79, 678–681.

it would have been obvious to one of ordinary skill in the art at the time of the invention was made to use stored energy, as taught by Shapiro, with the actuating mechanism of the device of Lokey in order to actuate the movable component at a high speed, as taught by Friemann, and stop the blade at high speed and prevent possible injuries to a person who operates the woodworking machine.

Id. at 81. The Examiner asserted Lokey as disclosing a rotary blade saw having a brake for rapidly engaging and stopping the blade when a capacitive sensor detecting a user's finger approaching the blade. *Id.* at 80. The Examiner acknowledged that Lokey did not disclose the claimed 3 millisecond time for actuating a moveable component. *Id.* The Examiner took the position that Friemann disclosed stopping a band saw blade in 5–10 milliseconds and that the 3 millisecond limitation is “a result effective variable [that] involves only routine skill in the art.” *Id.* The Examiner indicated also that dependent claims 9 and 18 would be allowable if amended to include the subject matter of their respective base claim and any intervening claims. *Id.* at 82.

Nieberle

In a response received September 10, 2010, Applicant amended independent claims 1 and 15 to include the limitation of moving a moveable component “1/32nd of an inch,” and, in accordance with the Examiner's indication of allowance of claims 9 and 18, added new independent claims 21 and 22 including the subject matter of claims 9 and 18 and their respective base claims. Ex. 1002, 523–536. In an office action dated November 5, 2010, the Examiner maintained the rejection of claims 1, 5–8, 10–11, 15–17, and 19 as unpatentable over Lokey, Friemann and Shapiro, and rejected newly added claims 21 and 22 as obvious over Nieberle in view

of Friemann and Shapiro. *Id.* at 681–683. The Examiner asserted that Nieberle disclosed a saw blade that was retracted out of the working area by a pneumatic cylinder upon sensing a dangerous condition. *Id.* at 683–684. The Examiner conceded that Nieberle, as with Lokey, did not disclose the claimed 3 millisecond response time, and again relied upon Friemann as teaching the specific 3 millisecond time. *Id.* at 684.

b. Applicant's Responses

Applicant countered, in a response mailed February 4, 2011, arguing that where neither Lokey, nor Nieberle, disclosed the specifically claimed “3 milliseconds” and “1/32nd of an inch” movement limitations recited in the independent claims, neither did Friemann disclose such limitations. Ex. 1002, 710, 715. Applicant argued specifically that not only did Friemann fail to disclose the claimed limitations, but the 3 millisecond limitation was not a result effective variable because it was not recognized as a time range variable that could be optimized to achieve the desired result by those of ordinary skill in the art. *Id.* at 710–711. Applicant provided detailed technical explanations and five declarations to the Examiner explaining why Friemann “fails to enable an actuator capable of moving a moveable component 1/32nd of an inch within approximately 3 milliseconds or less after a dangerous condition is detected.” *Id.* at 712. Following a highly detailed analytical exercise in his declaration, the inventor, Dr. Stephen Gass, explained in terms of applied mechanical engineering and physics principles that Friemann did not teach the claimed 3 milliseconds, or for that matter the 5–10 millisecond time frame described by Friemann. *Id.* at 95–102. Dr. Gass summarized his technical analysis and reasoning:

Friemann's brake mechanism cannot stop the blade within 10 milliseconds regardless of the amount of experimentation. As

explained, the rotational inertia of motor armatures and rollers, and the inductance and inertia necessarily present in electromechanical brakes, preclude a brake mechanism as described by Friemann from stopping the blade within 10 milliseconds. No amount of experimentation could change that conclusion; it is simply a physical impossibility. A different brake mechanism would have to be invented to stop the blade within 10 milliseconds, but Friemann does not disclose any other brake mechanism.

Id. at 100.

Following Applicant's February 7, 2011 response, the Examiner issued a Notice of Allowability indicating allowance of all the claims in the application not subject to the initial restriction requirement. *Id.* at 827–828.

The Examiner's reasons for allowance explained that

[t]he claims are allowable because prior art fails to teach that the actuator having stored energy sufficient to move the moveable components $1/32^{\text{nd}}$ of an inch within approximately 3 milliseconds or less after the dangerous condition is detected, in combination with other limitations set forth in claims 1, 15 and 21.

Id. at 828. The Examiner further stated that

[i]t should be noted that the declarations submitted on 10/18/20 [sic] explain that the actuator in Friemann et al. can not move a movable component $1/32^{\text{nd}}$ of an inch within approximately 3 milliseconds or less after a dangerous condition is detected.

None of these references by themselves or in combination with the other prior art cited teach the claimed invention set forth in claims 1, 15 and 21.

Id. at 829.

The examined independent claims 1, 15, and 21 issued as independent claims 1, 13, and 16 in the '279 patent. *Id.* at 829

2. *Similarity of the Prior Art*

Nieberle and Lokey, two primary references relied upon by the Examiner, are also the same primary references relied upon in this proceeding by Petitioner for grounds 1–2 and 3–4 respectively. As described above, during prosecution Friemann was relied upon by the Examiner as a secondary reference for allegedly showing that it was “old and well known in the art to actuate braking of a cutting tool as fast as possible” and because Friemann described stopping a saw blade in 5–10 milliseconds. Ex. 1002, 80. Shapiro was relied upon by the Examiner to teach that a person of skill in the art would have known to use an actuator that stored energy, such as a pressurized nitrogen gas device, to actuate a moveable member. *Id.* at 81.

Instead of Friemann and Shapiro, in this proceeding Petitioner’s position is simply that modification of Nieberle would have been motivated by the knowledge of one of ordinary skill in the art, understanding that “the likelihood and potential severity of an injury would depend, in part, on the time required for the reaction system to function.” Pet. 29 (citing Ex. 1003 ¶¶ 31, 72, 253). Petitioner relies on the testimony of its declarant, Mr. Bruce W. Main (Ex. 1003) for ascertaining the knowledge of one of ordinary skill in the art. Pet. 28. Petitioner argues that one of ordinary skill would, for increased safety, have modified Nieberle to “optimize” and speed up the time to stop the saw blade, and contends that using stored energy to actuate a “moveable component 1/32nd of an inch within approximately 3 milliseconds or less” is nothing more than a result-effective variable. *Id.* at 28–29 (citing Ex. 1003 ¶¶ 253–258, 77–85; *In re Applied Materials, Inc.*, 692 F.3d 1289, 1297 (Fed. Cir. 2012)).

With respect to the desire to stop a dangerous spinning blade quickly, and the relevant variable here being “time,” we are not apprised of any substantive difference between the disclosure of Friemann relied upon by the Examiner during prosecution, and the level and knowledge of one skilled in the art at the time of the invention as asserted by Petitioner in this proceeding. We agree, to an extent, with Petitioner that one of ordinary skill in the art would have been aware of the danger posed by a spinning saw blade and considered it beneficial to stop a dangerous spinning saw blade “virtually instantaneous[ly],” as a finger nears or touches the blade as Lokey explains. See Pet. 41 (citing Ex. 1005, 2:25–31). And, we are persuaded that it is reasonable that a “POSITA would have understood and expected that the faster an actuator moved, the quicker the reaction *time*, and thus the less frequent and the less severe injuries are likely to be,” as alleged by Petitioner’s declarant, Mr. Main. Ex. 1003 ¶ 253 (emphasis added). What is not apparent to us, nor explained by Petitioner, is how the level of ordinary skill in the art asserted by Petitioner, and the “substantially instantaneously stopping” of a saw blade stated in Friemann, and relied on previously by the Examiner, are substantively different. See Ex. 1009, 5:17–18. Indeed, although Friemann is not cited specifically as a secondary reference in this Petition, Petitioner points to Friemann (Ex. 1009) as an example of the general knowledge in the art to support modification of Nieberle. Pet. 14, 30 (citing Ex. 1009, 2:15–20, 4:4–6, 5:16–20; Ex. 1003 ¶¶ 45–46).

Similarly, we understand no substantive difference between Petitioner’s assertion that a “POSITA . . . would have considered and selected from numerous known actuators known in the art to be effective, including explosive actuators, loaded springs, and overdriven solenoids,”

and the Examiner's reliance on Shapiro's explosive pressurized gas as "stored energy." *Compare* Pet. 41 (citing Ex. 1003 ¶¶ 270, 258, 234–235, 77–85) *with* Ex. 1002, 79–81. Moreover, Petitioner refers to Shapiro (Ex. 1016) as an example of the known actuators that one of ordinary skill of art would presumably have been aware of. Pet. 32 n.13; *see also Standard Oil Co. v. American Cyanamid Co.*, 774 F.2d 448, 454 (Fed. Cir. 1985) (Obviousness is determined from the perspective of a hypothetical person having ordinary skill in the art, who is presumed to be aware of all pertinent prior art.).

In grounds 2 and 4 of the Petition Nieberle and Lokey are respectively combined with Bielinski. Pet. 37–38, 43–44. Grounds 2 and 4 address dependent claims 2–4, where claim 2 requires that "the actuator includes one or more springs." Ex. 1001, 23:63–64. Petitioner argues that "loaded springs were well-known in the art" and contends that Bielinski is an example of a loaded spring actuator. Pet. 37–38 (citing Ex. 1017, 1:7–21, 1:50–2:13; Ex. 1003 ¶¶ 77–85, 262, 258). Bielinski does not appear to have been substantively considered by the Examiner during prosecution. *See* Ex. 1001, References Cited (56). Bielinski is, however, asserted in the Petition only as an example of what was generally known to one of ordinary skill in the art, and to show that "springs" as recited in dependent claim 2 were known components of actuators prior to the filing of the application which became the '279 patent. Pet. 37–38. That a particular example of a well-known loaded spring actuator in the prior art, such as Bielinski, was not considered with respect to a dependent claim limitation by the Examiner during prosecution does not persuade us that Bielinski now provides any probative value as a new reference. Nor does Bielinski, as Patent Owner

points out, cure any deficiencies in Nieberle or Lokey with respect to the independent claims. Accordingly, in considering whether “the same or substantially the same prior art . . . previously were presented to the Office,” we give little weight to the fact that Bielinski was not considered in the underlying prosecution history.

Reviewing the relative evidence and ascertaining the differences and similarities between the prior art references presented here, in this Petition, as compared to the prior art substantively considered by the Examiner, we determine that the evidence weighs in favor of a determination that the prior art asserted in the Petition was previously considered by the Office. We are persuaded that the prior art of Nieberle, either in view of the knowledge of one of ordinary skill in the art or Bielinski, and Lokey, either in view of the knowledge of one of ordinary skill or Bielinski, as asserted in this proceeding in grounds 1–4 against claims 1–8 and 10–17 are “the same or substantially the same prior art” as that specifically relied on and considered substantively by the Examiner, and overcome by Applicant, during prosecution of the underlying patent application. *See* 35 U.S.C. § 325(d).

3. Similarity of the Arguments

Just as the Examiner did, Petitioner argues in ground 1 that Nieberle discloses all the limitations of the independent claims except for “an actuator having stored energy sufficient to move the moveable component 1/32nd of an inch within approximately 3 milliseconds or less after the dangerous condition is detected.” *Compare* Pet. 24–28 with Ex. 1002, 683–685. In the Petition, addressing the specific time and distance limitations in the independent claims, Petitioner argues that to avoid injury by a saw “short reaction times were considered desirable in the art,” and “[a] POSITA would

have been motivated to try to optimize Nieberle to achieve such a short reaction time, and would have had a reasonable anticipation of success.” Pet. 30–31 (citing Ex. 1003 ¶¶ 234, 253–258, 72, 78, 38–49, 41, 44, 46–47). Petitioner contends that realizing a fast blade stop time is simply optimizing a result effective variable and therefore not patentable. *Id.* at 29 (citing *In re Applied Materials, Inc.*, 692 F.3d at 1297). Petitioner argues further that “the construction of such a machine would have been a matter of basic engineering.” *Id.* at 32 (citing Ex. 1003 ¶¶ 254, 234). Petitioner also argues that “there are neither any unexpected results from, nor any technical significance to, the ‘approximately 3 milliseconds’ endpoint of the movement-time variable.” *Id.* at 29.

We see little if any difference between Petitioner’s arguments, and those made by the Examiner and overcome by Applicant during prosecution. For example, the Examiner alleged that it was well known in the art that a fast blade stop and reaction time were desirable to prevent injury, “Friemann discloses that it is old and well known in the art to actuate braking of a cutting tool as fast as possible.” Ex. 1002, 679. The Examiner asserted that the claimed 3 millisecond time frame was simply optimizing “a result effective variable [that] involves only routine skill in the art.” *Id.* at 680. The Examiner surmised that a person of ordinary skill in the art could have engineered a machine to meet the 3 millisecond limitation by “select[ing] an actuating mechanism that could actuate the movable component to stop the blade within three milliseconds.” *Id.* at 686. The Examiner also did not, at first, acknowledge any technical significance to the 3 millisecond limitation. The Examiner initially asserted that where “Shapiro teaches an actuator 5 moving a movable member at 1.3 milliseconds per inch. In this case, if the

movable member, as the brake in Lokey, is two inches far from the blade, it will take three milliseconds for the brake to contact the blade.” *Id.* at 498.

The arguments presented in the Petition are substantially similar, if not in fact the same, as asserted by the Examiner during prosecution. We see no fundamental difference between grounds in the Petition relying on Nieberle or Lokey and the knowledge of one of skill in the art, and the Examiner’s reliance on Nieberle or Lokey in view of Friemann and Shapiro, where Friemann and Shapiro are simply demonstrative of background knowledge and actuating devices available at the time of filing of the application, i.e. (1) that the 3 millisecond time was allegedly technically feasible, and (2) that there were known mechanical structures which could be used to quickly actuate a braking mechanism for a saw. *Compare* Pet. 28 (“[T]here are neither unexpected results nor is there any technical significance to the 3 ms endpoint of the claimed range.”) *with* Ex. 1002, 80 (“it would have been obvious to one having ordinary skill in the art at the time the invention was made to use [] 3 millisecond . . . because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.”).

In support of the Petition, Petitioner offers a declaration from Mr. Bruce Main, the President of Design Safety Engineering, Inc. (Ex. 1003 ¶¶ 1–4). Mr. Main alleges that there are no unexpected results from using an actuator to move a saw component $1/32^{\text{nd}}$ of an inch in 3 milliseconds and that a person of ordinary skill in the art would understand that “the faster an actuator moved, the quicker the reaction time, and thus the less frequent and the less severe injuries are likely to be.” *Id.* ¶ 253. This position taken by Mr. Main is essentially no different from the Examiner’s rationale initially

rejecting the claims in the underlying application which became the '279 patent. *Compare* Ex. 1003 ¶ 253 with Ex. 1002, 80 (The Examiner argued that “Friemann discloses that it is old and well known in the art to actuate braking of a cutting tool as fast as possible and more specifically within 5 milliseconds for the purpose of prevent injury to the user.”)

The only apparently new evidence introduced by Mr. Main, that was not available to the Examiner, is a mathematical analysis revealing that an actuator constantly accelerating at 80,000 in/sec² would provide that “the blade would move more than 1/32 inch in the first 3 ms.” *Id.* ¶ 256. Considering basic physics equations, $v = a \times t$, and $s = \frac{1}{2}(v \times t)$, and having two equations and two unknowns Mr. Main solves for a desired acceleration of 80,000 in/sec² to ideally move a blade 4 inches in .01 seconds. *Id.*⁹ That Mr. Main’s calculations are mathematically correct, however, is not persuasive evidence of obviousness. For one reason because this calculation simply expresses a *desired* acceleration. It may also have been desirable to move the blade 4 inches in .001 seconds, but this does not, without more, persuade us that achieving the necessary acceleration would have been obvious to one of ordinary skill in the art at the time of invention. Mr. Main states also that

Explosives—which, as discussed above, would have been obvious to use to improve the reaction time of Nieberle’s system—are also forms of stored energy. And, capacitors (which store electrical energy) can be used as in Ohtsuka for fast valve actuation.

Id. ¶ 258. Mr. Main’s testimony appears to allege that explosives and capacitors are examples of known devices which one of skill in the art of

⁹ v (velocity), s (distance), a (acceleration), and t (time).

machine safety would have known could achieve the claimed speed and distance. This testimony, following his desired acceleration calculation however, fails to state affirmatively that it was even possible by explosive devices and capacitors to achieve the claimed time and distance performance characteristics asserted in the calculation. More importantly, Mr. Main's testimony fails to persuasively explain *how* any known explosives or capacitors available to one of skill in the art at the time of invention, would have achieved such an acceleration and a mechanical actuation of the "moveable component $1/32^{\text{nd}}$ of an inch within approximately 3 milliseconds or less after the dangerous condition is detected" as called for in claims 1, 13, and 16 of the '279 patent. By way of another example, Mr. Main's declaration refers to a spring loaded actuator disclosed by Bielinski, the secondary reference combined with Nieberle in ground 2, and asserts that it "could have provided sufficient energy (depending on size, etc.), and it would have been obvious to use it." Ex. 1003 ¶ 258. Even assuming that Mr. Main is forthrightly stating that the "sufficient energy" developed by Bielinski's actuator could actuate a moveable member to move $1/32^{\text{nd}}$ of an inch in 3 milliseconds or less, nowhere in his declaration can we find that Mr. Main provides any persuasive technical reasoning or analysis to support this allegation. *Id.* (citing Ex. 1003, V.B.9).

We see little if any practical difference between the arguments in the Petition relying on Mr. Main's testimony and the Examiner's assertion of Lokey or Nieberle in view of Friemann and Shapiro because the central arguments upon which both the Examiner and Mr. Main rely are, (1) that the 3 millisecond time and distance limitations were technically feasible, and (2) that there were known mechanical structures which could be used to quickly

actuate a braking mechanism for a saw. *Compare* Ex. 1003 ¶ 254 (“[T]he various disclosures in the prior art (including Nieberle itself) emphasize the need for fast reaction (on the order of 1 to 10 milliseconds) and provide the tools needed to accomplish it.”) *with* Ex. 1002, 80 (The Examiner argued that “Friemann discloses that it is old and well known in the art to actuate braking of a cutting tool as fast as possible and more specifically within 5 milliseconds for the purpose of prevent[ing] injury to the user.”).

Mr. Main’s declaration does not provide any new arguments, or persuasive facts, data, or analysis to support the opinions stated. Merely repeating an argument from the prosecution history and the Petition in the declaration of a proposed expert, does not give that argument enhanced probative value. Expert testimony that does not disclose the underlying facts or data on which the opinion is based is entitled to little or no weight. 37 C.F.R. § 42.65(a). Accordingly, we give Mr. Main’s declaration little probative weight. At best, we are persuaded that it might have been *desirable* for one of ordinary skill in the art to build a saw blade stopping device with a component that could react in the claimed time. The evidence on the record before us, however, is not persuasive that it would have been obvious, predictable or even possible to attain the claimed time and distance limitations by simply looking to other actuators known at the time. *C.f.* *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 417 (2007) (“If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability.”).

4. *Discretion to Deny Institution of Trial*

Having found that the instant Petition raises the same or substantially the same prior art and arguments as those previously presented to the Office,

§ 325(d) states that we may take these facts into consideration when determining whether to institute trial. The question, therefore, is whether we should exercise our discretion to deny the Petition as to Nieberle, Nieberle and Bielinski, and Lokey, as well as Lokey and Bielinski after weighing the particular circumstances of this proceeding, the interests of the parties, and the needs of the Board. Petitioner effectively has asked us to reconsider the Office's decision to issue a patent, including revisiting the Examiner's analysis and findings that are supported, upon our review, by sound reasoning and related evidentiary underpinnings. To the extent that the new testimonial evidence of Mr. Main that Petitioner brings to our attention in this Petition might suggest a new argument not previously presented to the office, the analysis provided by Petitioner as to the relative similarity between the claimed subject matter and Mr. Main's testimony relating to the level of ordinary skill in the art provides insufficient probative facts and evidence beyond what was already considered by the Examiner during prosecution of the application that led to the '279 patent. *See* Pet. 28 (citing Ex. 1003 ¶¶ 253–258, 77–85). Mere citation to the knowledge of one of skill in the art that essentially faster is better, and various secondary references that allegedly disclose a similar sentiment does not persuade us that the specifically claimed limitations of 3 milliseconds and 1/32nd of an inch, was predictable or obvious. *See id.* Indeed, given the relative clarity of the already-considered difference in scope between the Nieberle and Lokey references, whether in view of the ordinary knowledge of one of skill in the art or Bielinski, and issued claims 1–8 and 10–17, we need not re-analyze those references and reconsider unpatentability issues presented previously to and considered by the Office. Under these facts, we are

unpersuaded that adjudicating such a dispute on an already-considered issue is an efficient use of Board resources.

IV. CONCLUSION

We conclude that the facts and evidence do not establish a sufficient or persuasive reason for the Board to again consider the same prior art, the same claims, and substantially the same arguments as substantively considered in the examination of the application leading to the '279 patent. Further, because we are guided by our analysis above to exercise our discretion in this threshold matter under 35 U.S.C. § 325(d) and deny institution in this case, we need not reach a different threshold issue raised by Patent Owner in their Preliminary Response, that is whether Petitioner is time-barred by an ITC investigation, (Inv. No. 337-TA-965), under 35 U.S.C. § 315(b).

V. ORDER

For the reasons given, it is

ORDERED that the Petition is denied and *inter partes* review is not instituted.

IPR2016-01754
Patent 8,011,279 B2

For PETITIONER:

Patrick R. Colsher
Mark A. Hannemann (Pro Hac Vice)
Thomas R. Makin (Pro Hac Vice)
SHEARMAN & STERLING LLP

patrick.colsher@shearman.com
ptab@shearman.com

For PATENT OWNER:

Jared W. Newton
QUINN EMANUEL URQUHART & SULLIVAN LLP

jarednewton@quinnemanuel.com
sawstopipr@quinnemanuel.com