

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

HUNTER'S MANUFACTURING COMPANY, INC.
d/b/a TENPOINT CROSSBOW TECHNOLOGIES,
Petitioner,

v.

RAVIN CROSSBOWS, LLC,
Patent Owner.

Case No. **IPR2023-00407**
Patent No. **9,354,015**

PETITIONER'S MOTION TO EXCLUDE

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Ex. 1037	Declaration of Stephen A. Batzer, Ph.D., P.E. in Support of Petitioner's Reply to Patent Owner's Response

Petitioner Hunter's Manufacturing Company, Inc. d/b/a TenPoint Crossbow Technologies ("TenPoint") moves, pursuant to 37 C.F.R. §42.64(c), to exclude certain evidence submitted by Patent Owner Ravin Crossbows, LLC ("Ravin") in this IPR of U.S. Patent 9,354,015 (the "'015 Patent," Ex. 1001).

I. EX. 2005

Ravin relied on the animation in Ex. 2005 on p. 5, 7, and 18 of its Response ("Resp.," Paper 25). TenPoint timely objected to the animation. (Paper 16, 1-2.) Ravin's goal in using this exhibit is not entirely clear, but Ravin appears to implicitly suggest that this animation discloses additional details of Fig. 12 of the '015 Patent. (Resp. iv.) But there is no testimony whatsoever about this exhibit, or any other evidence supporting that the exhibit is what Ravin claims it is. Fed. R. Evid. ("FRE") 901(a)-(b). Neither is this exhibit self-authenticating. *See* FRE 902.

If this animation was indeed offered as an assertion by its creator to prove the truth of what the '015 Patent discloses, then that is inadmissible hearsay. *See* FRE 801(a)-(c), 802. Neither does it fit within any exception. *See* FRE 803, 804(b).

The patent itself is the best evidence to prove its contents, *see* FRE 1002, and it has already been introduced as Ex. 1001. The '015 Patent has no animations – all of its figures are static. Thus this animation does not qualify as an "original" of the patent or even as a "duplicate," since it does not accurately reproduce the original. *See* FRE 1001(d)-(e). Because this animation has not been authenticated (as

explained above) and introduces details missing from the patent's static images, it is not admissible. *See* FRE 1003.

Because of all these problems with this exhibit, it has *no* tendency to make any fact of consequence in this IPR more or less probable and is thus irrelevant. *See* FRE 401, 402. Its nonexistent probative value is also outweighed by a danger of wasting time and undue delay in evaluating it. *See* FRE 403.

II. EX. 2012

Ravin relied on the contentions in Ex. 2012 on p. 61 of its Response. TenPoint timely objected to them. (Paper 16, 3.) They are Ravin's counsel's assertions that Ravin's crossbows allegedly do not practice the challenged claim, offered to prove the truth of the assertions, and thus are inadmissible hearsay. *See* FRE 801(a)-(c), 802. Neither do they fit within any exception. *See* FRE 803, 804(b).

Furthermore, because Ravin's assertion is based on an incorrect construction of "reverse draw configuration" (*see* Paper 31, 9-10), it is irrelevant and thus inadmissible. *See* FRE 401, 402.

III. EX. 2029

Ravin relied on the declaration of Jonathan Teater in Ex. 2029 throughout its Response. (Resp. 1-7, 10-22, 24-28, 31-35, 37-45, 47-54, 56-59, 62-68, 70-74.) TenPoint timely objected to this declaration. (Paper 26, 1.)

The Teater Declaration opines on various patent topics, such as claim construction and patentability, including anticipation and obviousness. These topics are to be analyzed from the perspective of a person of ordinary skill in the art (“POSA”). See *Kyocera Senco Indus. Tools Inc. v. Int’l Trade Comm’n*, 22 F.4th 1369, 1376-77 (Fed. Cir. 2022); *HVLPO2, LLC v. Oxygen Frog, LLC*, 949 F.3d 685, 688-89 (Fed. Cir. 2020). If a witness does not have at least ordinary skill in the art, his testimony is “neither relevant nor reliable” and should be excluded. *Kyocera*, 22 F.4th at 1377; *HVLPO2*, 949 F.3d at 689 (also citing FRE 702); *Sundance, Inc. v. DeMonte Fabricating Ltd.*, 550 F.3d 1356, 1364 (Fed. Cir. 2008). And even if a witness is qualified as an expert, his testimony must further be the product of reliable principles and methods and application thereof to the facts of the case. FRE 702(c)-(d).

As relevant to the ‘015 Patent, the parties agree that a POSA would be a technical person who has at least some experience working in the field of archery, reviewing crossbows or engineering related to bows and/or crossbows, and is generally familiar with prior art crossbows. Such a person would likely have at least a bachelor’s degree in mechanical engineering or, alternatively, would have several years of experience in the field of archery or engineering related to bows and/or crossbows. (“Pet.,” Paper 1, 28; Ex. 1016 ¶17; Resp. 3.)

Unlike Dr. Batzer, who has several degrees in mechanical engineering (Ex. 1016 ¶7) and who Teater agreed was a POSA (Ex. 1034, 68:15-17), Teater does not have a degree in mechanical engineering, which he admits is the appropriate discipline. (See Ex. 2034, 1; Ex. 1034, 43:20-44:5.) In fact, none of his coursework included any mechanical engineering classes. (Ex. 1034, 45:4-12.) He never took any mechanical engineering classes (including statics, dynamics, kinematics, vibrations, or metrology) or any classes related to crossbows or compound bows. (*Id.* at 45:4-46:17, 67:8-10.) He agreed that his degrees alone would not qualify a person as a POSA. (*Id.* at 47:13-17.)

Teater has not taught any courses related to crossbows or even archery in general. (*Id.* at 66:15-23.) He is not named as an inventor on any archery – or any other – patent. (*Id.* at 66:24-67:1.) Nor is he licensed as a professional engineer. (*Id.* at 67:5-7.)

Teater testified that he is an expert in *reviewing* crossbow design and development (presumably of others), but disclaimed being an expert in designing crossbows himself. (*Id.* at 30:9-12, 31:4-6.) As the ‘015 Patent does not claim a novel method or device for testing crossbows, but rather a newly designed crossbow, Teater’s expertise is misdirected. See *Daiichi Sankyo Co. v. Apotex, Inc.*, 501 F.3d 1254, 1257 (Fed. Cir. 2007) (level of ordinary skill is of a person engaged in developing formulations, not merely of a person prescribing the formulations to

patients). Even Teater's testimony correlated a person being a POSA with design experience and a strong engineering background. (Ex. 1034, 263:22-265:1.) Yet he admitted that there were a lot of aspects of crossbow design that he is not familiar with. (*Id.* at 31:7-16.) While he testified that he provided advice on some design features to some companies (though he refused to provide details), he admitted that only one company might possibly have included just part of his suggestion into its design (*id.* at 33:8-15, 36:1-37:19), which suggests that his design advice was questionable.

Furthermore, Teater's testimony on various technical topics demonstrated the unreliability of his technical knowledge. His answers to some of the technical questions were just plain incorrect. He testified that the units of measurement for kinetic energy are mass and velocity (*id.* at 47:21-25), when the correct units are Joules. (Ex. 1037 ¶12.) When the question was broadened to units of energy, his answer was Newtons (Ex. 1034, 48:3-9), but again, the correct units are Joules; a Newton is the unit for measuring force. (Ex. 1037 ¶12.) He testified that the units of measurement for efficiency are foot-pounds or perhaps foot-pounds per inches (Ex. 1034, 61:14-20), but efficiency is always unitless. (Ex. 1037 ¶12.) He testified that there can be at most 5 degrees of freedom (Ex. 1034, 66:1-6), which is a term that he uses frequently in his declaration, but the correct answer is 6. (Ex. 1037 ¶12.) He testified that one can measure stress with string gauges (Ex. 1034, 51:10-18), but

that is inaccurate; a string gauge can measure deformation, not stress. (Ex. 1037 ¶12.) Furthermore, despite using “strain” in his declaration, he did not know its units or the difference between engineering strain and natural strain. (Ex. 1034, 67:11-68:4.)

His lack of knowledge carried over into the specific field at issue in this IPR. He continued to be badly mistaken in his discussion on degrees of freedom regarding the three Stanziale references. (See Ex. 1037 ¶¶ 42-44, 63-65, 79-81.) Teater also refused to admit that helical power cable journals were known in the crossbow or compound bow industry prior to 2013 (Ex. 1034, 81:11-82:22, 92:15-93:15), even though Norkus, Park, and the three Stanziale references (all of which Teater claimed to have read) disclose them (*see* Pet. 33, 38, 42-43, 48-51; Ex. 1037 ¶9).

At his deposition (when told that cams moving toward each other was not a novel aspect), Teater argued that some bows “had static limbs.” (Ex. 1034, 141:22-24.) His further discussion admitted that the existing limbs and cams did in fact move, but argued that it was minimal, i.e., “almost no movement.” (*Id.* at 141:24-142:6, 143:22-144:20.) But if the limbs did not move (or “almost” did not move), then there would be no energy stored that could discharge the arrow in a conventional crossbow, in which the potential energy that is to be input to the arrow as kinetic energy is always stored in the limbs. (Ex. 1037 ¶13.) Teater also testified that in 2013 (when the ‘015 Patent was applied for) “reverse draw” meant having

the limbs oppose or extend away from the archer. (Ex. 1034, 129:6-25.) But that is incorrect, as illustrated by Darlington, which was published in 2011. (See Ex. 1037 ¶36 (citing Ex. 1013).)

Teater testified that he would not know what the word “indirectly” meant, and what indirect mounting means, unless it were defined (Ex. 1034, 99:18-100:12), even though Dr. Batzer testified that a POSA would readily know what indirect mounting means (namely, not directly; through intervening components). (Ex. 1037 ¶26.) Teater also testified that he did not know how the bows disclosed in Park work based on its disclosure (Ex. 1034, 192:1-6), even though Dr. Batzer testified that Park adequately describes the design and functionality of the disclosed embodiments, and a POSA would readily be able to ascertain how they work. (Ex. 1037 ¶14.)

Teater testified that he would not know how to implement Norkus’s helical power cable journals on Kempf ‘871’s crossbow, though he then admitted that a proposed design would be one way to implement that combination. (Ex. 1034, 238:22-242:13.) He also argued that, even though Stanziale ‘062 expressly discloses helical power cable journals, a POSA would be helpless in implementing them, in light of the alleged lack of detail about these helical journals, and would thus freeze up and not implement them at all. (Ex. 2029 ¶¶ 110-12.) But if a person would not know how to implement the journals that are clearly and expressly taught by

Stanziale ‘062, that person is simply unqualified as a POSA. (Ex. 1037 ¶68.) Such testimony by Teater further raises questions about his technical grasp also shows that his “expert” knowledge is unreliable and that it is not reliably applied to the facts of this case.

Additionally, Teater claims to “be recognized as an expert in the field of compound bow and crossbow design.” (Ex. 2029 ¶5.) He appears to be testifying about what other persons in the field would say about him and what their opinion about him would be. Even if this self-aggrandizing testimony about what other people say about Teater is true, it is hearsay (as there are no declarations from any third parties about Teater being recognized as an expert in design), and thus inadmissible. *See* FRE 801(a)-(c), 802. Neither does it fit within any exception. *See* FRE 803, 804(b).

IV. EX. 2031

Ravin relied on the document of Ex. 2031 on p. 24 of its Response, as well as Ex. 2029 ¶183. TenPoint timely objected to it. (Paper 26, 1.) Ravin alleges that this exhibit is an article. (*See* Resp. vii; Ex. 2029 ¶9.) But Ravin produced no evidence supporting that this item really is a published article, and especially that it was available to a POSA as of the effective filing date of the ‘015 Patent (December 16, 2013). *See* FRE 901(a). Teater testified that he considered it (Ex. 2029 ¶9), but he did not lay the foundation that it is what it purports to be. *See* FRE 901(b)(1).

This exhibit contains assertions about neck travel, cam lean, and limb twist, and Ravin offers it to prove the truth of those assertions, thus making it inadmissible hearsay. *See* FRE 801(a)-(c), 802. Neither does it fit within any exception. *See* FRE 803, 804(b).

V. OTHER EXHIBITS

Ravin also relied on various other exhibits in its Preliminary Response (Paper 9) and Preliminary Sur-Reply (Paper 12) to which TenPoint objected (Paper 16). However, Ravin has not relied on those exhibits in its post-institution Response, thus abandoning reliance on them. *See Parus Holdings, Inc. v. Google LLC*, 70 F.4th 1365, 1373 (Fed. Cir. 2023); *Finjan, Inc. v. Cisco Sys.*, 837 F. App'x 799, 809 n.10 (Fed. Cir. 2020). Thus, while TenPoint maintains its objections to those exhibits, a motion to exclude them is moot and unnecessary.

Date: April 2, 2024

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that, on the date indicated below, I served the foregoing

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