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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MERIDIAN WILDLIFE SERVICE, LLC,
Petitioner,

v.

SAFE HAVEN WILDLIFE REMOVAL AND PROPERTY MANAGEMENT EXPERTS, LLC,
Patent Owner.

IPR2022-01254
Patent 10,729,108 B2

Before NEIL T. POWELL, MICHAEL L. WOODS, and AMEE A. SHAH, *Administrative Patent Judges.*

SHAH, *Administrative Patent Judge*.

DECISION
Denying Institution of *Inter Partes* Review
35 U.S.C. § 314

I. INTRODUCTION

Meridian Wildlife Service, LLC ("Petitioner") filed a Petition for *inter partes* review of claims 1–17 of U.S. Patent No. 10,729,108 B2 (Ex. 1002, the "'108 patent"). Paper 1 ("Pet."). Safe Haven Wildlife Removal and Property Management Experts, LLC ("Patent Owner") filed a Preliminary Response. Paper 8 ("Prelim. Resp."). Pursuant to our authorization, Petitioner filed a Reply to Patent Owner's Preliminary Response (Paper 9 ("Reply")) and Patent Owner filed a Sur-reply (Paper 10 ("Sur-reply")).

Under 35 U.S.C. § 314(a), an *inter partes* review may not be instituted unless the information presented in the Petition and any response thereto shows "there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition." Considering the Petition, the Preliminary Response, the Reply, the Sur-reply, and the evidence of record, we determine that Petitioner does not show a reasonable likelihood that at least one of the challenged claims is unpatentable. Accordingly, we do not institute *inter partes* review.

II. BACKGROUND

A. RELATED MATTERS

Petitioner identifies related patents US 10,251,374 (the "'374 patent") and US 11,064,683 (the "'683 patent"), related US patent application number 17/352,524, and contemporaneously filed Petition IPR2022-01253 challenging the '374 patent. Pet. 56. Petitioner also filed a petition challenging the '683 patent in IPR2022-01340.

Petitioner submits that Patent Owner has asserted infringement of the '108 and '374 patents in *Safe Haven Wildlife Removal and Property Management Experts, LLC v. Meridian Wildlife Service, LLC*, Case No.

7:21-cv-00577-EKD (W.D.Va. filed June 25, 2021) ("the '577 proceeding") and of the '683 patent in an amended complaint (filed Sept. 22, 2021). Pet. 56; Exs. 1001, 1002, 1035; Paper 1.

B. REAL PARTIES-IN-INTEREST

In its section addressing real party-in-interest, the Petition states "[t]he sole real party-in-interest in this Petition is Meridian Wildlife Services, LLC." Pet. 56; Paper 1.

Patent Owner states "[t]he real party in interest is Safe Haven Wildlife Removal and Property Management Experts, LLC." Paper 6, 1.

C. OVERVIEW OF THE '108 PATENT

The '108 patent describes "[a]n animal relocation system and method comprising the perimeter net system[,] a trapping net system, and a flushing device, wherein the flushing device channels the animal through a perimeter net system and into the trapping net." Ex. 1002, code (57).

The '108 patent shows a flowchart of the steps of the method in Figure 1. *Id.* at 3:53–54, 4:14–27. Figure 1 is reproduced below.

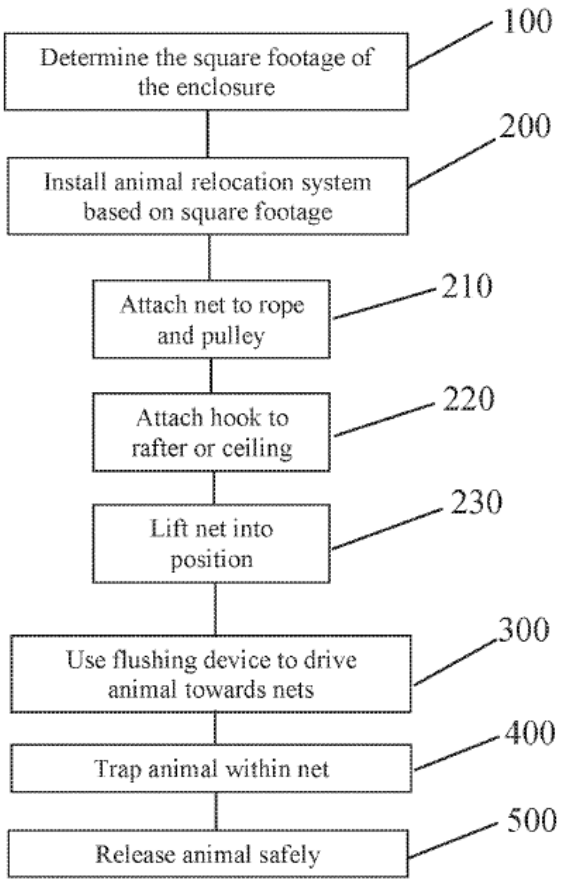

FIGURE 1

Figure 1 "is a flowchart showing the steps of the proposed method." *Id.* at 3:53–54.

Figure 2, reproduced below, "is a layout of an enclosure employing the preferred net setup." *Id.* at 3:55–56. Figure 2 is reproduced below.

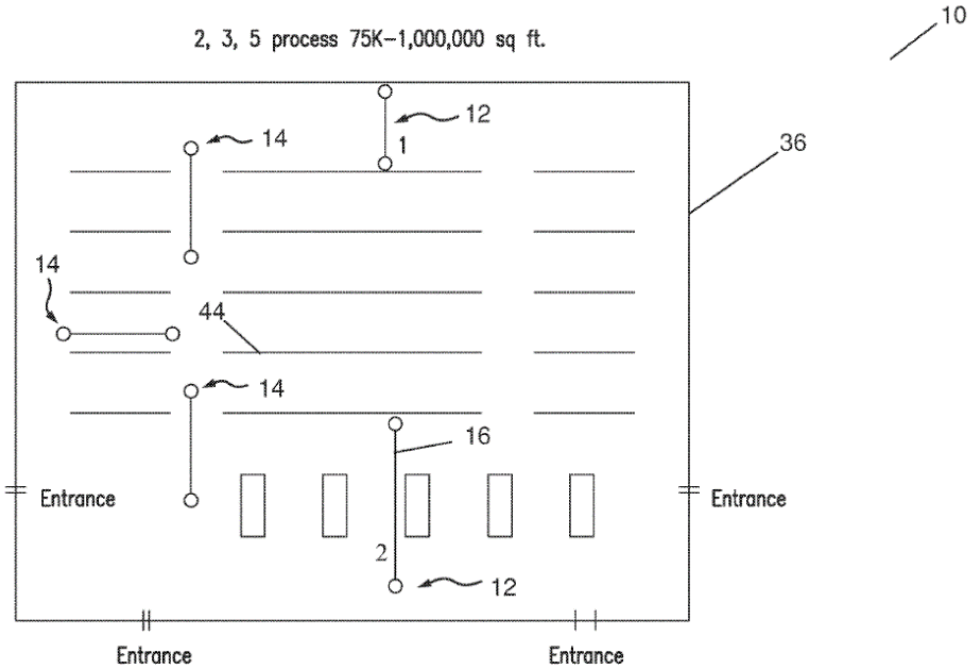

FIG. 2

Figure 2 shows enclosure 36 having relocation system 10 comprising perimeter net system 12 and trapping net system 14, with each net system comprising at least one net 16 attached to telescoping pole 18. *Id.* at 4:4–8, 14–18. In this preferred "2:3:5" set up for an enclosure over 75,000 square feet, there a total of *five nets* with perimeter net system 12 having *two nets* that are set around the perimeter of the enclosure and trapping net system 14 having *three nets* that are set on the interior of the enclosure "so as to reduce the space the animal 60 can traverse while the capture attempt is occurring." *Id.* at 4:28–38. For an enclosure less than 75,000 square feet, the preferred setup is a "1:1:3" system having two nets on the outer perimeter of the enclosure on opposite sides and a one trapping net placed based on the layout "so as to efficiently capture the animal." *Id.* at 4:45–57.

The '108 patent provides a perspective view of one of the nets in Figure 4 and a close-up view of one of nets in Figure 5, both of which are reproduced below.

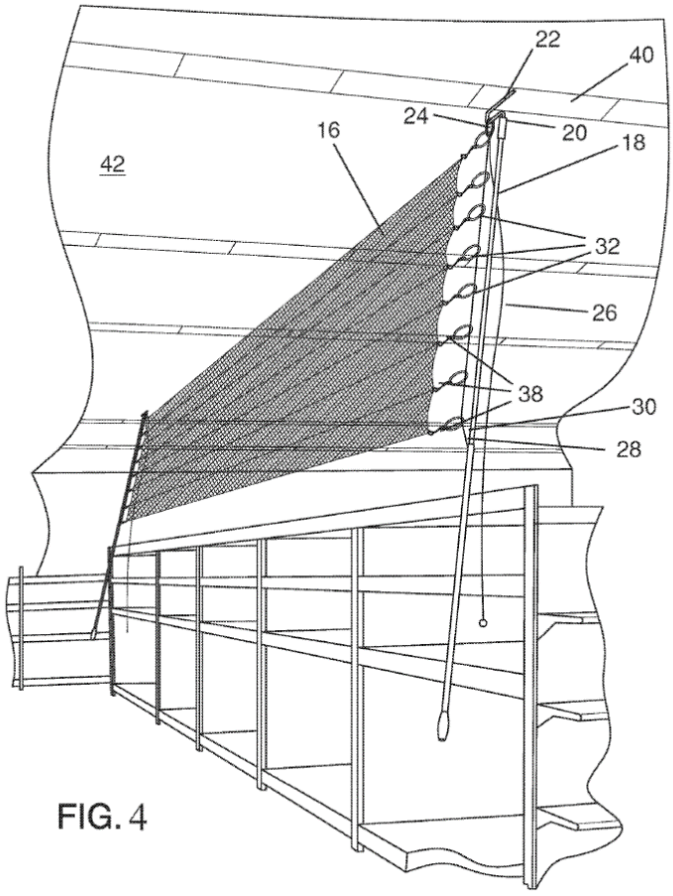

FIG. 4

Figure 4 "is a perspective view of one of the nets used in the system." *Id.* at 3:59–60.

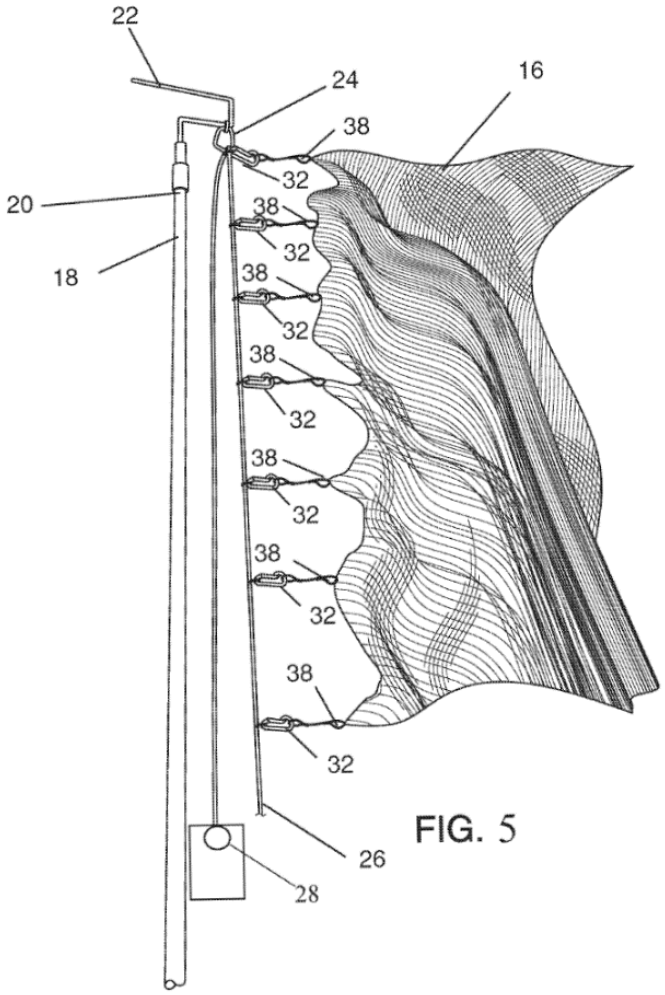

FIG. 5

Figure 5 "is a close-up perspective view of the one of the nets used in the system." *Id.* at 3:61–62.

Figures 4 and 5 show one net 16, telescoping pole 18, rope and pulley system 30, removable connectors 24 and 32, and fastener 38 that connects net 16 to rope 26 of rope and pulley system 30. *Id.* at 4:58–65. Net 16 can be hung from hanging member 40 or other portion of ceiling 42. *Id.* at 4:65–67. "In the preferred embodiment, the net 16 can hang over a shelving unit 44 so that customers can still approach any goods stored thereon." *Id.* at 5:1–3.

The '108 patent also provides for a flushing device, shown in Figure 6 which is reproduced below.

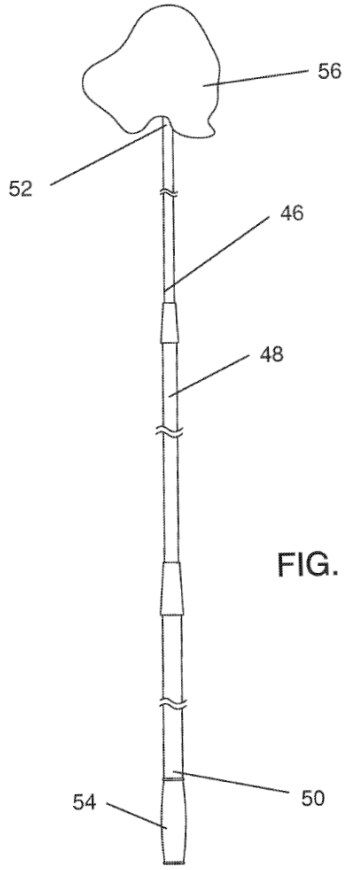

FIG. 6

Figure 6 "is a front view of the flushing device." *Id.* at 3:63.

Flushing device 46 comprises telescoping arm 48 having ends 50 and 52, handle 54, and flusher 56. *Id.* at 5:4–7. "The flusher 56 can be any object that, when shaken or moved, creates noise, movement, or both" that "can drive the animal 60 from a hiding spot into one of the nets 16." *Id.* at 5:7–10.

The result of the relocation system 10 is depicted in Figure 7, reproduced below.

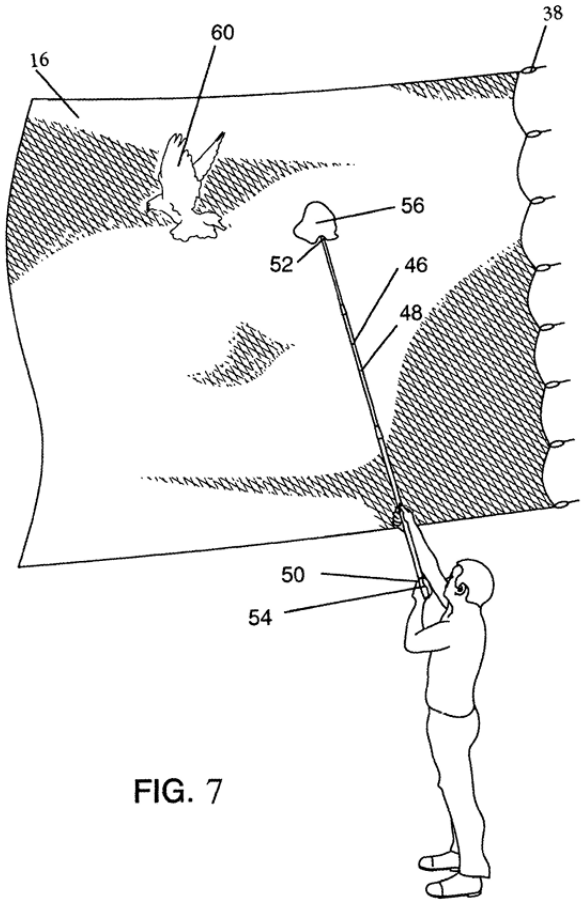

FIG. 7

Figure 7 "is perspective view of a net as used in the system trapping an animal within an enclosure." *Id.* at 3:64–65. Figure 7 shows animal 60 driven into net 16 by use of flushing device 46. *Id.* at 5:18–20. Once entrapped, the unharmed animal is unable to move and can be removed from the enclosure by a handler for placement into a safe habitat or location. *Id.* at 5:20–25. "The perimeter net system 12 and trapping net system 14 can then be uninstalled." *Id.* at 5:25–26.

D. ILLUSTRATIVE CLAIM

Of the challenged claims, claims 1, 11, and 17 are independent. Each of claims 2–10 and 12–16 depends, directly or indirectly, from one of independent claims 1 and 11. Claim 1 is illustrative and is reproduced with certain reformatting:[1]

> 1. [1pre] A method of relocating birds within a structure, the method comprising:
>
> [1a] installing a bird relocation system, the bird relocation system comprising;
>
> [1b] at least one perimeter net,
>
> [1c] at least one trapping net, and
>
> [1d] at least one flushing device;
>
> [1e] wherein a top edge of either or both of the at least one perimeter net and at least one trapping net is positioned at or near a ceiling of the structure, and
>
> [1f] flushing the animal through the structure wherein the flushing device chases the bird toward the at least one perimeter net and into the perimeter net or the trapping net.

Ex. 1002, 5:38–51.

[1] The Petition uses the identifiers [1pre], [1a], [1b], [1c], [1d], and [1f] to label the different portions of claim 1. We have applied the same identifiers.

E. ASSERTED GROUNDS OF UNPATENTABILITY

Petitioner challenges the patentability of claims 1–17 of the '108 patent on the following grounds (Pet. 12):

Claims Challenged	35 U.S.C. §	Reference(s)
1–17	103[2]	Brugh[3]
1–17	103	Brugh, Kunz[4]
1–17	103	Bird Barrier Video,[5][6] Kunz

In support of its unpatentability contentions, Petitioner also relies on:

Declaration of Michael J. Chamberlain. Ex. 1004;

Tuttle, Merlin D., *Collecting Techniques*, pp. 71–78 in Biology of the bats of the New World family Phyllostomatidae,[7] Part I, Spec. Publ. Mus., Texas Tech. Univ. 1976. Ex. 1018 ("Tuttle"); and

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[2] The Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) ("AIA"), amended 35 U.S.C. § 103, effective March 16, 2013. Because the '108 patent has an effective filing date after the effective date of the applicable AIA amendments, we refer to the AIA version of § 103.

[3] Brugh, U.S. Patent Application Publication No. 2017/0238524, published Aug. 24, 2017 (Ex. 1008, "Brugh"), issued as US Patent No. 9,943,073 B2 on Apr. 17, 2018.

[4] ECOLOGICAL AND BEHAVIORAL METHOD FOR THE STUDY OF BATS (Thomas H. Kunz, 1998). EX. 1010.

[5] Bird Barrier, *Mist Kit Assembly and Use*, YouTube (Aug. 19, 2014). Ex. 1009 ("Bird Barrier Video").

[6] Petitioner also submits a screenshot from a Bird Barrier webpage advertising "mist nets" (Ex. 1011), a transcript from the Bird Barrier Video (Ex. 1014), and a "Bird Barrier Product Catalog 2013" (Ex. 1015).

[7] As identified in Petitioner's Exhibit List. Pet. v.

Ralph, John C. et al., "Recommendations for the Use of Mist Nets for Inventory and Monitoring of Bird Populations," Studies in Avian Biology No. 29:187–196. Ex. 1039 ("Ralph").

III. ANALYSIS

A. DISCRETION TO DENY UNDER 35 U.S.C. §§ 314(A) AND 325(D)

Patent Owner argues that we should exercise discretion under 35 U.S.C. § 314(a) and deny institution under *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (PTAB Mar. 20, 2020) (precedential). Prelim. Resp. 25–26.

Patent Owner also argues that we should exercise our discretion under 35 U.S.C. § 325(d) and deny institution based on prior prosecution of the '108 patent. Prelim. Resp. 23–25.

As explained in this Decision, we decline to institute review based on the *merits* of Petitioner's challenges. Accordingly, we need not and do not determine whether it would be appropriate to discretionarily deny institution under § 314(a) or § 325(d).

B. LEGAL STANDARDS

In an *inter partes* review, the petitioner has the burden of showing there is a reasonable likelihood that Petitioner would prevail with respect to at least one of the claims challenged in the Petition. 35 U.S.C. § 314. That burden never shifts to the patentee. *Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015).

A patent claim is unpatentable under 35 U.S.C. § 103(a) if the differences between the claimed subject matter and the prior art are "such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said

subject matter pertains." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The legal question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) when in evidence, objective evidence of obviousness or nonobviousness.[8] *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17–18 (1966). One seeking to establish obviousness based on more than one reference also must articulate sufficient reasoning with rational underpinnings to combine teachings. *See KSR*, 550 U.S. at 418.

To show obviousness, it is not enough to merely show that the prior art includes separate references covering each separate limitation in a challenged claim. *Unigene Labs., Inc. v. Apotex, Inc.*, 655 F.3d 1352, 1360 (Fed. Cir. 2011). "This is so because inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known." *KSR*, 550 U.S. at 418–419.

On the other hand, an obviousness analysis "need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ." *KSR*, 550 U.S. at 418; *accord In re Translogic Tech., Inc.*, 504 F.3d 1249, 1259 (Fed. Cir. 2007). However, a petitioner cannot satisfy its burden of proving obviousness by employing "mere conclusory statements." *In re Magnum Oil Tools Int'l, Ltd.*, 829 F.3d

[8] The record does not include allegations or evidence of objective indicia of obviousness or nonobviousness.

1364, 1380 (Fed. Cir. 2016). Instead, a petitioner must articulate a reason why a person of ordinary skill in the art would have combined or modified the prior art references. *In re NuVasive, Inc.*, 842 F.3d 1376, 1382 (Fed. Cir. 2016); *see also Metalcraft of Mayville, Inc. v. The Toro Co.*, 848 F.3d 1358, 1366 (Fed. Cir. 2017) ("In determining whether there would have been a motivation to combine prior art references to arrive at the claimed invention, it is insufficient to simply conclude the combination would have been obvious without identifying any reason why a person of skill in the art would have made the combination."); *Belden Inc. v. Berk-Tek LLC*, 805 F.3d 1064, 1073 (Fed. Cir. 2015) ("[O]bviousness concerns whether a skilled artisan not only *could have made* but *would have been motivated to make* the combinations or modifications of prior art to arrive at the claimed invention.") (citing *InTouch Techs., Inc. v. VGO Commc'ns, Inc.*, 751 F.3d 1327, 1352 (Fed. Cir. 2014)).

We analyze the challenges presented in the Petition in accordance with the above-stated principles.

C. LEVEL OF ORDINARY SKILL

Petitioner contends that a person of ordinary skill in the art at the time of the invention ("POSITA," "POSA," or "skilled artisan") "would have had (i) a bachelor's degree in the study of wildlife management or wildlife ecology and (ii) two or more years of field experience *trapping flying vertebrates*." Pet. 6 (citing Ex. 1004 ¶ 25) (emphasis replaced).

Patent Owner "disagrees with Petitioner's definition of a POSA to the extent it requires such a person to have a bachelor's degree in the study of wildlife management or wildlife ecology." Prelim. Resp. 14. Rather, Patent

Owner submits that "a POSA is one who has at least 2 years working with *animal capture net systems*." *Id.* (emphasis added) (citing Ex. 2001 ¶ 9).

We decline to adopt either party's proposed definition.

The evidence does not support Petitioner's proposed definition that a skilled artisan who lacked a formal bachelor's degree would fail to qualify as a person of ordinary skill in the art if that artisan had several years of experience trapping flying animals. *See* Pet. 6. Further, the evidence does not support Patent Owner's proposed definition that a skilled artisan with an advanced degree in wildlife management would fail to qualify as a POSITA simply because his or her experience fell short of "2 years working with animal capture net systems." *See* Prelim. Resp. 14.

For purposes of this Decision, we adopt a hybrid of Petitioner's and Patent Owner's proposed definitions of a POSITA. We find that a POSITA would have had at least *either* (i) at least a bachelor's degree in the study of wildlife management or wildlife ecology *or* (ii) two or more years of field experience trapping flying animals. We find that this level of ordinary skill in the art is consistent with the '108 patent and the asserted prior art. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001).

D. Claim Construction

In this *inter partes* review, we apply the same claim construction standard that would be used in a civil action under 35 U.S.C. § 282(b). 37 C.F.R. § 42.100(b). In applying this standard, we generally give claim terms their ordinary and customary meaning as would be understood by a person of ordinary skill in the art at the time of the invention and in the context of the entire patent disclosure. *See id.*; *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–14 (Fed. Cir. 2005) (en banc).

Petitioner proposes construction for the terms "perimeter net," "trapping net," "flushing device," and "flusher." *See* Pet. 7–11. Patent Owner does not dispute Petitioner's construction of "flushing device" or "flusher" (*see* Prelim. Resp. 22), but disagrees with Petitioner's interpretation of "perimeter net" and "trapping net" (*see id*. at 16–22). We construe those disputed terms below.

1. *"perimeter net" and "trapping net"*

Petitioner submits that the '108 patent "identifies no structural difference between the 'perimeter net' and 'trapping net'," and that the uses of the terms "trapping" and "perimeter" "refer to the *intended uses* of the recited nets." Pet. 7 (citing Ex. 1002, 4:5–8, 4:19–24) (emphasis added). Petitioner cites to the Specification and contends that the "perimeter net" is only "preferably . . . set up around the perimeter.'" *Id.* at 8 (citing Ex. 1002, 4:29–30).

Petitioner proposes that the term "perimeter net" "should not be interpreted as requiring the net to be installed in a particular location." Pet. 8. Petitioner cites to dependent claims 2 and 3 of the'108 patent, which "further require that one side of the perimeter net is 'proximal' or 'in contact with' one side of the structure, respectively.'" *Id.* (citing Ex. 1002, 5:53–58). Petitioner contends that "[w]hen Patent Owner has intended for a claim to require installation of the nets in a particular location or orientation, it has made that requirement clear." *Id.* at 9 (citing Ex. 1004, ¶ 53).

Based on this, Petitioner submits that the term "perimeter net" is simply a "net capable of being installed along the perimeter of an enclosure" and the term "trapping net" is "a net capable of trapping an animal." *Id.* at 10 (citing Ex. 1004 ¶ 54).

Patent Owner responds that "adopting Petitioner's argument would vitiate the words 'perimeter' and 'trapping' altogether." Prelim. Resp. 16. Patent Owner submits that "the plain and ordinary meaning of 'perimeter' ('a line or strip bounding or protecting an area') is inconsistent with the notion that 'perimeter nets' need not be located at the perimeter of the structure." *Id.* at 17. Patent Owner further cites to the Specification and submits that perimeter nets "are located at or proximate to the perimeter of the structure." *Id.* at 18–19 (citing Ex. 1002, Figs. 2, 3).

Based on the Specification and the plain and ordinary meaning of the claim language, Patent Owner submits that we should "construe 'perimeter net' as 'a net that is located at or proximate to the perimeter of the enclosure,' and 'trapping net' as 'a net that is located further to the interior of the enclosure than the perimeter net so as to reduce the space the animal can traverse while the capture attempt is occurring." Prelim. Resp. 21–22 (citing Ex. 2001 ¶ 45).

We agree with Patent Owner's proposed construction of "perimeter net" (i.e., a net that is located at or proximate to the perimeter of the enclosure) and Petitioner's proposed construction of "trapping net" (i.e., a net capable of trapping an animal).

Figure 2 of the '108 patent (as shown above in Section II.C) depicts a preferred net set up depicting two perimeter nets 12 "set up around the perimeter of the enclosure 36" and three trapping nets 14, one located proximate to the perimeter and two located in the interior. Ex. 1002, 3:55–56, 4:29–42. Although the '108 patent does not provide a specific definition for a "perimeter net" and describes that the "perimeter net" is only "preferably . . . set up around the perimeter of the enclosure," (*id.* at

4:29–30), the term "perimeter" qualifies the term "net" and connotes structure, namely, the location of the "net" in relation to the "structure" recited in the preamble, i.e., the enclosure. Here, the term "perimeter" before net connotes a relationship between the "structure" recited in the preambles of the independent claims and the location of the net. In other words, "perimeter" is a meaningful modifier for the location of the net as being at or proximate to the perimeter of the enclosure, i.e., "an enclosed building"—the "structure" as recited in the preamble. Thus, we agree with Patent Owner and determine that the term "perimeter net" is a net located at or proximate to the perimeter.

Regarding the limitation of the '108 patent's dependent claim 2 that the perimeter net "is installed such that one side of the at least one perimeter net is proximal to one side of the structure" (Ex. 1002, 5:53–54), we note that this further requires *one side* of the net proximal to *one side* of the structure. This limitation further narrows claim 1's requirement that the perimeter net, generally, is proximate to the perimeter to further require that a specific part, i.e., one side, of the perimeter net is proximate to one side of the structure. It is not a requirement explicitly contained in independent claim 1. *Cf. Envtl. Designs, Ltd. v. Union Oil Co. of California*, 713 F.2d 693, 699 (Fed. Cir. 1983) ("It is improper for courts to read into an independent claim a limitation explicitly set forth in another claim.") (citing *In re Rousso*, 222 F.2d 732, 734). Similarly, the limitation of dependent claim 3 of the '108 patent that the perimeter net "is installed such that one side of the at least one perimeter net is substantially in contact with one side of the structure" (Ex. 1002, 5:56–57) further narrows the proximity of the net to the structure to being "in contact" with one side of the structure.

As to the "trapping net," the '108 patent similarly does not provide a definition for a trapping net, but describes a trapping net system 14 comprising at least one net 16 that traps the animal. Ex. 1002, 4:5–8, 23–25. The trapping net system can be placed anywhere in the interior of the enclosure, e.g., "on the interior" or "on one side of the enclosure." *Id.* at 4:31, 48–49, Fig. 2. The location of the trapping net is based on where best reduces the space the animal can traverse while a capture attempt is occurring. *Id.* at 4:31–33, 48–50. Unlike the term "perimeter", here, the term "trapping" does not imply a locational relationship between the net and the enclosure but a relationship between the net and its use, i.e., for trapping. Thus, we agree with Petitioner that the term "trapping net" is a net capable of being used to trap an animal. Pet. 9. For clarity, the "trapping net" may, but not necessarily, be located at or proximate to the perimeter of a structure or enclosed building. Notably, Figure 2 of the '108 patent depicts the left-most "trapping net" located proximate to the perimeter with the other two "trapping nets" located distal from the perimeter of the enclosure.

2. *Other Claim Terms*

For purposes of this Decision, we need not formally construe any other claim term, including "flushing device" and "flusher." *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (stating that "we need only construe terms 'that are in controversy, and only to the extent necessary to resolve the controversy'" (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999))).

E. OVERVIEW OF CITED ART AND EVIDENCE

1. *Overview of Brugh – Exhibit 1008*

Brugh relates to a "bird capture net which allows the use of quickly adjusting the height for capture and release." Ex. 1008, Abstr. Brugh seeks to provide a more humane capture system that "can be deployed, repositioned, and lowered for capture much quicker and easier than nets directly attached to the roof or rafters, thus allowing for a much higher chance of recovering the flying vertebrate without harm." *Id.* ¶ 7. Brugh's system is shown in Figure 1, reproduced below.

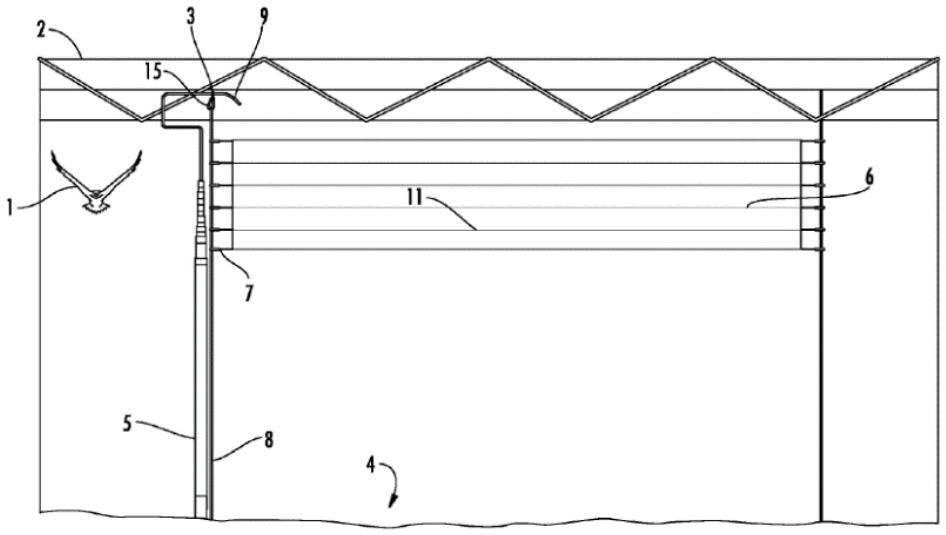


FIG. 1

Figure 1 shows bird 1 flying around ceiling 2 of a large warehouse building having rafters 3 with adjustable poles 5 in their extended position sitting on floor 4, capture net 6 mounted on height adjustable poles 5, such as telescoping poles, hook 9 attached to rafter 3, and rope 8 on each pole running through pulley 15 and lengthened to pull net 16 together to the desired tension. Ex. 1008 ¶ 49.

The method for safe live capture of a flying vertebrate is shown in Figure 4, reproduced below.

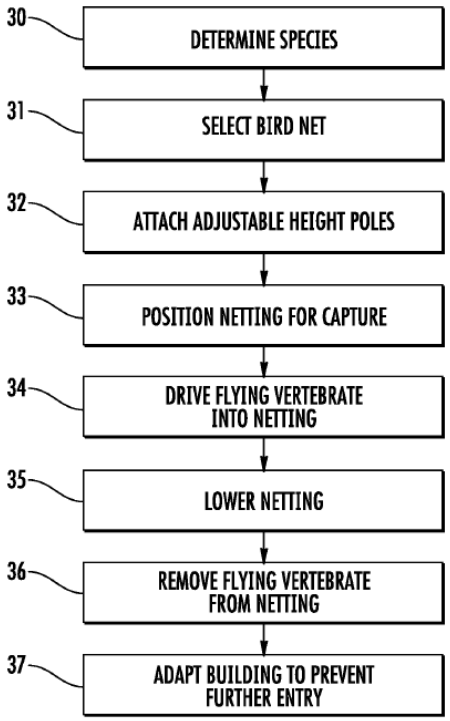


FIG. 4

Figure 4 depicts the steps of determining the species of the vertebrate by visual inspection of the vertebrate in the location and in the building (30), selecting a bird netting with pockets (31), attaching height adjustable poles to the netting (32), positioning the netting for capture (33) so the vertebrate can easily for, be chased into, or get stuck in one of the pockets (34), lowering the netting after capture (36) to remove the vertebrate from the netting (36) and release into the wild, and adapting the building to prevent the species from further entry such as by closing doors, using repellants, and eliminating attractants (37). *Id.* ¶ 52.

Brugh allows for those skilled in the art to make modifications. *Id.* ¶ 53.

2. *Overview of Kunz – Exhibit 1010*

Kunz is the first chapter of a book titled, "Ecological and Behavioral Methods for the Study of Bats." Ex. 1010. Chapter one is titled, "Capture Methods and Holding Devices" and discusses that "[m]ethods used and the success of capturing flying bats will depend mostly upon their flight speed and maneuverability, and the habitats being sampled." *Id.* at 1.[9]

> Methods used and the success of capturing bats in roosts will depend upon the type of roost, the number of bats present, the dispersion of bats within the roost, their physiological state (active vs. torpid), their age and reproductive condition (pregnant or lactating), their alertness to visual, auditory, or olfactory stimuli, and the location and access[i]bility of bats to the investigator.

Id. Kunz's purpose is to "review methods used to capture bats that are applicable to ecological and behavioral research." *Id.* at 2.

One method is the use of hand nets with adjustable-length handles that "are most commonly used to capture roosting bats[;] they can also be used successfully to capture bats in flight as they depart from small openings in buildings and caves . . . and at predictable feeding sites." *Id.* at 4–5.

The most commonly used devices for capturing flying bats are mist nets, preferably with four shelves, a mesh size of 36 mm, and made of 50 or 70 denier/2 ply nylon, as they are "inexpensive, lightweight, compact, and easily transported and erected in the field." *Id.* at 6–7. Longer nets may require net poles in the middle. *Id.* at 6. Several short nets may be used in a stack or butted end-to-end configuration. *Id.*

[9] Our Decision cites to the native page numbers of Kunz and the other cited art.

"Mist nets may be deployed successfully at almost any site where bats are expected to fly." *Id.* at 8. "Strategies of net placement have a major influence on capture success," with the most successful sites being "near roosts, at water holes, and across trails that are used as flyways." *Id.* "Bats can be netted at openings to caves, mines, and buildings, where bats regularly exit and enter," as well as in attics. *Id.* at 8. Examples of methods of setting net poles for multiple nets are illustrated in Figures 3 and 4. *Id.* at 10. We reproduce Figure 3 of Kunz, below:

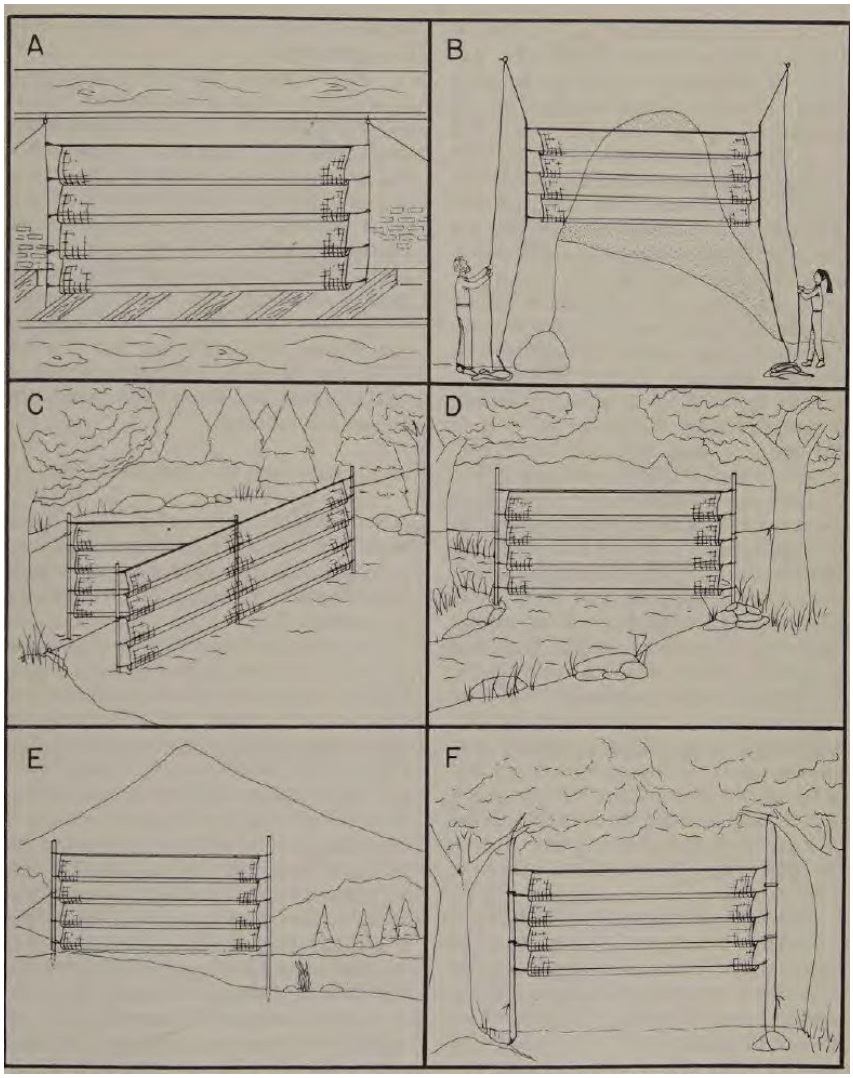


Figure 3 depicts placement and configuration of mist nets for capturing bats in an attic of a building (A), at a cave entrance (B), over a pond (C), over a stream (D), at the edge of a lake (E), and on a forest trail (F). *Id.* at 9.

We further reproduce Figure 4 of Kunz, below:

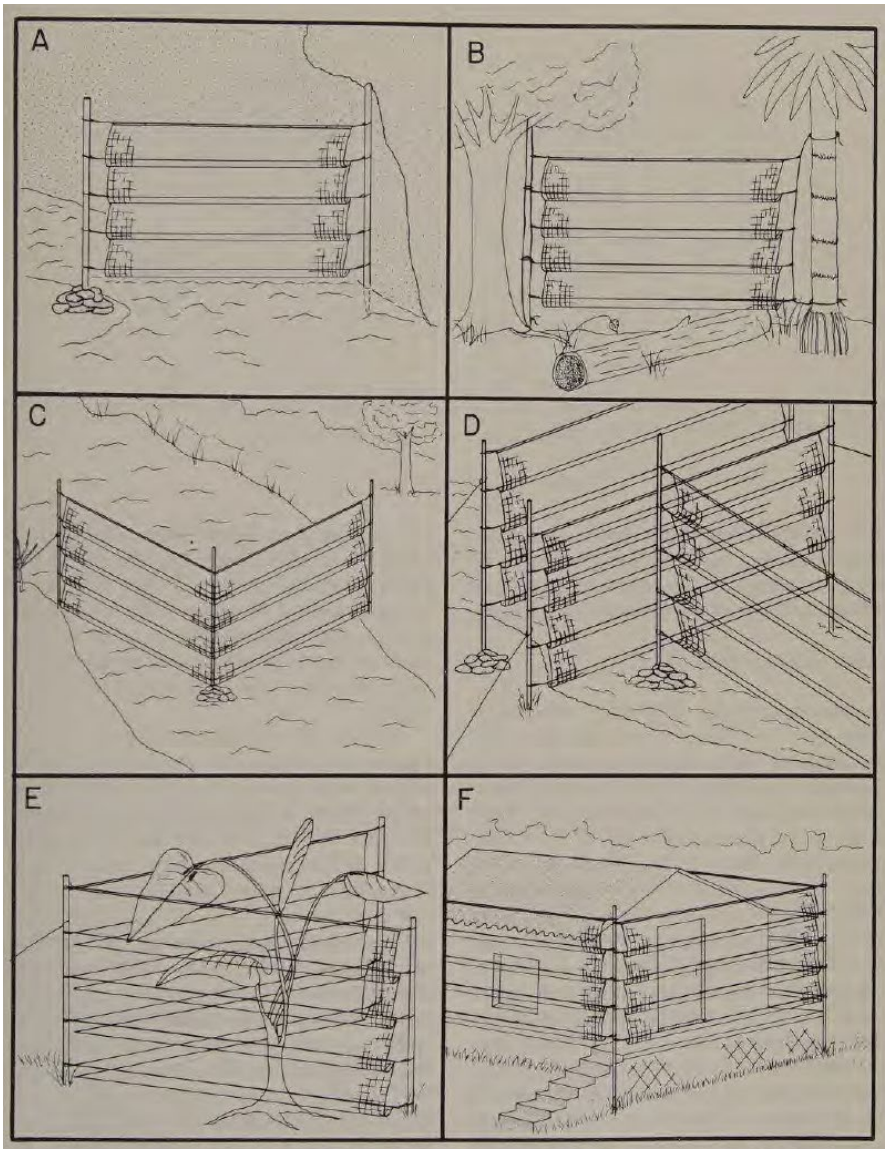


Figure 4 depicts multiple net configurations and alternative pole uses for setting mist nets to capture bats using large rocks and crevices in rock ledges to anchor the poles (A), using ropes as poles (B), using a V-net

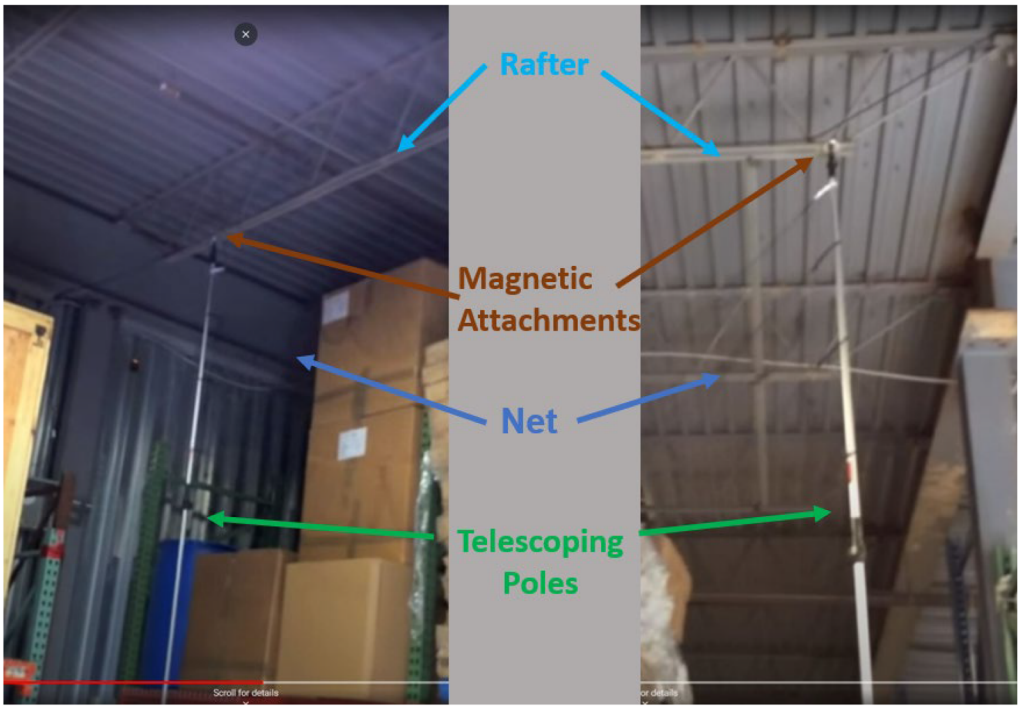
configuration of the nets with poles anchored in a soft substrate or with larger rocks (C), using a T-net configuration with a high net and a low net (D), as a foliage roost partially surrounding by a net (E), and partially surrounding a building by nets (F). *Id.* at 11.

Kunz discloses that using mist nets in a V-configuration or a combination of high and low nets in a T-configuration, as shown in Figure 4, configurations C and D, is helpful in capturing bats as they avoid one net and then are captured in another. *Id.* at 10. "Often bats can be captured if the perimeters of roosts are either partially or completely surrounded by one or more nets (Fig. 4 E and F)." *Id.* Kunz further discusses canopy net systems including using poles to allow nets to be raised to considerable heights, such as a pole system that uses sailboat mases and a series of ropes and pulleys whereby each end of the net is attached to the mast. *Id.* at 15.

3. *Overview of Bird Barrier Video – Exhibits 1009, 1014*

According to Petitioner, Bird Barrier Video (Ex. 1009, "Video") was uploaded to YouTube on August 29, 2014. Pet. 39. Petitioner also submits a transcript of the Video (Ex. 1014). *Id.* Bird Barrier Video discloses the use of mist nets suspended between telescoping poles. *See, e.g.*, Ex. 1014, Figs. 11–13; *see also* Ex. 1009, 0:19–0:37. The telescoping poles include a magnetic portion for attaching to a rafter in the ceiling. *See* Ex. 1009, 1:03–1:59; Ex. 1014, Figs. 8, 11, 13, 14. The net includes pockets for capturing birds. Ex. 1014, Figs. 6, 15; Ex. 1009, 0:10–0:37.

Petitioner submits three annotated snapshots of the Video (Pet. 40), copies of which we reproduce, below:



Bird Barrier Video –1:49 (right) & 1:59 (left) (annotated)

Bird Barrier Video – 2:11

According to Petitioner, the upper-left snapshot is taken at time 1:49 of the Video, the upper-right snapshot is taken at time 1:59 of the Video, and

the lower snapshot is taken at time 2:11 of the Video. The three snapshots each depicts the telescoping poles holding a net and attached to a rafter of the ceiling by magnetic attachments. The lower, third snapshot, also depicts "connectors" for attaching the net to the telescopic poles.

4. *Dr. Chamberlain's Declaration – Exhibit 1004*

Petitioner's technical expert, Michael J. Chamberlain, Ph.D., was asked, in relevant part, to provide "a technical background generally discussing the capture of animals including several common mist netting techniques that were well-understood by a POSA at the time the '108 Patent was effectively filed." Ex. 1004 ¶ 28. Dr. Chamberlain testifies that "mist netting has become one of the most popular mechanisms used for catching flying animals over the last century." *Id.* ¶ 29 (citing Ex. 1021, 66 ("The number of papers describing the use of mist nets to capture birds or bats are too numerous to include in this chapter")). In Dr. Chamberlain's "experience, mist netting principles are similarly applicable to both indoor and outdoor environments." *Id.*

Dr. Chamberlain asserts that "[a]s was well known at the time, the particular trapping system and arrangement varies depending on the circumstances of the capture," such as the location of the animal within the capture area and the ecological characteristics of the species. *Id.* ¶ 31. Dr. Chamberlain testifies that "it has been well-understood in the field of wildlife study that many species of birds and bats tend to roost at the forest canopy or at or near the ceiling of a building." *Id.* ¶ 30 (citing Ex. 1010, 5; Ex. 1018, 81; Ex. 1026, 515, Ex. 1033, 200; Ex, 1036, 7). "[O]ne additional consideration for the successful capture of a flying animal is where to place the nets," i.e., to "place the net where the animal is observed or expected to

fly." *Id.* ¶ 32 (citing Ex. 1018, 85; Ex. 1031, 134; Ex. 1033, 200). "[A] common axiom in trapping birds or bats is that including additional nets generally results in greater likelihood of successful capture." *Id* (citing Ex. 1039, 191 ("As net density is increased, capture probability of individual adults will increase…"); Ex. 1017, 14; Ex, 1026, 513; Ex. 1042, 69–70).

Dr. Chamberlain further testifies that "[m]ist netting systems are also frequently arranged at angles to one another to create a capture grid such that the flight pattern of the animal intersects with one of the deployed nets," such as in V-configurations or a combination of high and low nets in a T-configuration. *Id.* ¶ 33 (citing Ex. 1010, 10).

> Moreover, it is well-established to place nets around the perimeter of an area of interest in order to block available exits to the animal or to otherwise funnel the animals towards additional netting. . . . This setup is particularly advantageous as many species of bats and other flying animals tend to roost along the perimeter walls of a structure which are more protected from frequent disturbances.

Id. (citing Ex. 1018, 81, 85 ("where larger areas must be covered, nets are more easily used and should be set around the edges parallel to the vegetation."); Ex. 1010, 10; Ex. 1017, 13; Ex. 1026, 513; Ex. 1031, 134; Ex. 1033, 200–201; Ex. 1037, 205; Ex. 1042, 69–70).

Regarding Brugh, Dr. Chamberlain asserts that "Brugh's capture device is capable of being positioned along the perimeter of an enclosure (e.g., by hanging the net (6) from a building's rafters (3) proximal to a perimeter wall)." Ex. 1004 ¶ 68 (citing Ex. 1008, Fig. 1).

Regarding what a POSA would have understood, Dr. Chamberlain testifies that they "would have understood that providing two or more of Brugh's capture devices as part of an animal relocation system would

generally increase the likelihood of capturing flying vertebrates within the building" as additional nets "increase[] netting coverage within the building and result[] in a higher likelihood that the animal will eventually become entrapped in one of the nets." *Id.* ¶ 70 (citing. Ex. 1039, 191).

Dr. Chamberlain further testifies a "POSA would have found it obvious to install one of Brugh's capture devices along a perimeter wall within a building as well as including at least one more of Brugh's capture devices in additional locations (e.g., around the interior of the building)" for three reasons. *Id.* ¶ 72. First, "a POSA would have it [sic] found it obvious to place at least one of Brugh's capture devices along a perimeter wall and at least one of Brugh's capture devices in other locations within a building in response to observing flight patterns in those two locations." *Id.* ¶ 73.

> Second, a POSA would have understood that placing additional netting, such as multiple of Brugh's capture device, at a location proximal to a flying vertebrate (i.e., with at least one capture device along a perimeter wall and at least one capture device in another location) would effectively shrink the area in which the vertebrate is able to fly. When a flying vertebrate has fewer escape routes along the perimeter and more obstacles in the interior, likelihood of capture is improved. In fact, this is a matter of basic geometry and a predictable result of using multiple capture devices in a building.

Id. ¶ 74.

> Third, it is well-established that net density (the abundance of nets in an area) is positively correlated with capture rate. *See* ¶32. As I identified above, many species of bats and other flying animals tend to roost along the perimeter walls of a structure which are more protected from frequent disturbances.

Id. ¶ 75 (citing Ex. 1018, 81).

5. *Tuttle – Exhibit 1018*

Tuttle discusses that "while several collecting methods (such as mist-netting and trapping) are exceptionally versatile, even these fall far short of capturing all [phyllostomatids] species under all circumstances." Ex. 1018, 71. Materials for collecting bats are placed either (1) at roosts and those used along flyways or (2) at placed where bats forage. *Id.*

"Mist nets are the most versatile devices for collecting bats" and can be purchased from many suppliers. *Id.* "The most versatile nets for catching bats have four shelves, are 6 or 12 meters wide and 2.4 meters high, and are constructed of 50 or 70-denier thread with 36-millimeter mesh." *Id.* at 72. Much of the success of mist nets "is dependent upon knowledge of how and where to use them." *Id.*

"Searches for roosts have been limited to a few obvious types of places. As a result, roosts in caves, houses, hollow trees, or culverts are often reported whereas those in foliage and other less evident places are not, leaving the roosting habits of even some common species unknown." *Id.* at 75. "[A]n impressive number of species has been recorded from buildings," and "found mostly in cellars and other structures that were made of concrete." *Id.* at 80. "Tile roofs, attics, and cavities between walls all are likely to be used as roosting sites, and any place that is dark or dimly lit and protected from frequent disturbance." *Id.* at 81. Roosts can also be found in culverts and under bridges. *Id.* Outside of buildings, bats can be found to roost in culverts and under bridges, particularly older ones "with entrances or undersides largely obscured by vegetation," and between cross braces, under large leaves, in dense foliage and vices, and sometimes in root ledges and rock crevices. *Id.*

Tuttle also discusses ways to set up mist nets and traps in various outdoor locations at "any place where bats are expected to fly." *Id.* at 85. For example, at ponds and small clearings, nets should be set "around the edges parallel to the vegetation." *Id.* Around native gardens, low passed along mountain ridges, and similar sites, nets should be strung "end to end." *Id.*

6. *Ralph – Exhibit 1039*

Ralph provides "RECOMMENDATIONS FOR THE USE OF MIST NETS FOR INVENTORY AND MONITORING OF BIRD POPULATIONS" (Ex. 1039, 187) and discusses that "[m]ist netting is a valuable tool for monitoring bird populations" (*id.*).

"The number and type of nets used, their placement, target levels of netting effort, and data to be collected, all should be chosen to address the study objectives most effectively." *Id.* "Objectives of the study should consider the most appropriate geographic scale, which in turn affects the number of netting stations to be established." *Id.*

Ralph notes that for studies, "increased netting within a site can sometimes lead to net avoidance, and may not sample a directly proportional increased number of territories." *Id.* at 189. So, selecting a station location should be "in accordance with the geographic scope of the study and question being addressed." *Id.* at 190.

"The number of nets used at each station should be defined both by the target sample size (related to the study questions) and by the ability of available personnel to handle the normal rate of capture." *Id.* "Sometimes the number of nets that can safely be operated varies widely from day to day,

for example, during migration seasons, or at locations where high winds often make certain nets unusable." *Id.*

When determining how to place the nets within the study area, several factors should be considered: (1) the ease of checking the nets such a person can complete a net round within a certain time period; (2) habitat; and (3) net density where "[t]he optimal distance between nets varies widely with research question." *Id.* at 190–191. "As net density is increased, capture probability of individual adults will increase but effective population size sampled will decrease to a certain threshold, which will be related to size of home range or territory." *Id.* at 191. So, for example, for breeding season studies for studies of North American breeding birds, a density of 1/1.5 nets/hectare is a good starting point, "whereas 5 nets/ha is the recommendation of the French STOC monitoring program." *Id.* "For capture of migrating birds, nets can be placed much closer together than if territorial birds are the target." *Id.*

F. GROUND A – ALLEGED OBVIOUSNESS OVER BRUGH

Petitioner challenges claims 1–17 as unpatentable under 35 U.S.C. § 103 over Brugh. Pet. 12–25.

1. *The Parties' Arguments and Evidence*

a) The Petition

Petitioner alleges Brugh teaches limitations [1pre], [1a], and [1e] and renders obvious limitations [1b], [1c], [1d], and [1f]. Pet. 15–20.

Specifically, Petitioner alleges that "Brugh discloses '[a] method for relocating birds within a structure' by 'installing a bird relocation system,[']' as recited in Claim 1's preamble and element [1a]." *Id.* at 15 (citing Ex. 1004 ¶ 65).

Regarding claim 1's elements [1b] and [1c] of at least one perimeter net and at least one trapping net, the Petitioner alleges "Brugh's capture device is both a perimeter net and a trapping net, and a POSA would have found it obvious to provide at least two of Brugh's capture devices as part of a bird relocation system (e.g., one perimeter net and one trapping net)." *Id.* (citing Ex. 1004 ¶ 66). Petitioner alleges that "a POSA would have appreciated that Brugh's capture device" that includes net 6 configured for being hung from rafters 3 in a building "is capable of being positioned along the perimeter of an enclosure (e.g., by hanging the net (6) from a building's rafters (3) proximal to a perimeter wall)." *Id.* at 16 (citing Ex. 1004 ¶¶ 67, 68; Ex. 1008, Fig. 1). And, since Brugh's net 6 includes pockets 11 configured for trapping a flying vertebrate, "a POSA would have appreciated from Brugh's disclosure that the capture device is both a perimeter net and a trapping net." *Id.* (citing Ex. 1008 ¶¶ 43, 49, 52; Ex. 1004 ¶ 68).

Petitioner advances "several reasons" why it would have been obvious to a POSA to modify Brugh to have at least two capture devices. Pet. 16 (citing Ex. 1004 ¶¶ 69–71). First, in view of Brugh's teaching that the flight pattern observed from the flying vertebrates' flight characteristics can be used to place the netting in relationship to the flying vertebrates' position, Petitioner submits that a POSA would have found it obvious to provide two of Brugh's devices where the flight pattern includes or is expected to include different locations or where multiple flying vertebrates are present. *Id.* (citing Ex. 1008 ¶¶43, 45, Ex. 1004 ¶ 69). Second, Petitioner proposes that "a POSA would have understood that providing multiple capture devices would generally increase the likelihood of capturing flying vertebrates within the building." *Id.* at 16–17 (citing Ex. 1004 ¶ 70). Third, Petitioner

explains that "[t]he mere duplication of parts is obvious absent a new and unexpected result is produced" whereby "the effect of using multiple capture devices would have been entirely predictable—increased netting coverage within the building and a higher likelihood of capture—and well within the skill of a POSA." *Id.* at 17 (citing Ex. 1004 ¶ 70).

Petitioner also provides three reasons why "[a] POSA would have found it further obvious to (i) install one of Brugh's capture devices along a perimeter wall within a building and (ii) at least one more of Brugh's capture devices in an additional location (e.g., around the interior of the building)." Pet. 17. Petitioner explains:

> First, given Brugh's teaching that a flying vertebrate's "flight pattern" should be used to place nets, a POSA would have it found obvious to place at least one of Brugh's capture devices along a perimeter wall and at least one of Brugh's capture device in another location within a building in response to observing flight patterns in those locations. . . . Indeed, as bats and other flying animals tend to roost in locations that are protected from frequent disturbance, such as towards the outer edge of a structure, a POSA would have been motivated to place Brugh's capture device (a trapping net) along the perimeter of a structure based on the expected location of the flying animal.

Id. at 18 (citing Ex. 1008 ¶¶ 15, 45; Ex. 1004 ¶¶ 32–33, 75).

> Second, a POSA would have understood that placing Brugh's capture device proximal to a flying vertebrate—with at least one capture device along a perimeter wall and at least one capture device in another location—would effectively shrink the area in which the vertebrate is able to fly and thereby improve the likelihood of capture. . . . Indeed, this is a matter of basic geometry and a predictable result of using multiple capture devices within a building.

Id. (citing Ex. 1004 ¶ 74).

"Third, a POSA would know that increased net density would result in increased capture rate." *Id.* (citing Ex. 1004 ¶ 75).

b) The Preliminary Response

Patent Owner argues that Petitioner's arguments fail for several reasons. Prelim. Resp. 36.

Patent Owner argues that because "Brugh discloses no more than the placement of a ***single net*** within an enclosure[,] . . .[i]t contains no teachings regarding the use of multiple nets within an enclosure, much less the strategic placement" a claimed. *Id.* (citing Ex. 1008 ¶ 25, Fig. 1; Ex. 2001 ¶ 50)

Further, Patent Owner contends that "there is no teaching or suggestion in Brugh that there would be any advantage in positioning its single net ***at or proximate to a perimeter wall or near the ceiling***" as "there is no discussion at all about flight characteristics dictating placement of a net along the walls or ceiling of an enclosure." *Id.* (citing Ex. 1008 ¶¶ 15, 45; Ex. 2001 ¶ 51). Rather, Brugh's Figure 1 demonstrates "a net positioned ***away from the perimeter of an enclosure*** such that a bird can fly though the open space on each end of the net." *Id.* at 37.

Moreover, Patent Owner asserts that "the ease of repositioning Brugh's single net system . . . suggests an old fashioned 'hit or miss' approach to bird capture" that "ultimately results in wildlife removal experts 'chasing down' the bird, which is precisely what the patented invention was designed to avoid and improve upon." *Id.* at 37–38 (citing Ex. 2001 ¶¶ 24–28).

And, Patent Owner contends that "the Petition's stated motivations for modifying Brugh to arrive at the claimed invention are nothing more than impermissible hindsight." *Id.* at 38 (citing Ex. 2001 ¶ 65).

2. *Analysis*

Based on our review of the parties' arguments and evidence, we find that Petitioner has not sufficiently shown that it would have been obvious to implement the specific combination of modifications Petitioner proposes to arrive at the challenged claims of the '108 patent.

a) Claim 1

Although Petitioner has sufficiently shown that modifying Brugh to have multiple devices/nets would have been obvious to one of ordinary skill in the art, Petitioner has not provided adequate reasoning why a POSITA would have modified Brugh to have at least one perimeter net, i.e., one net at, close to, or along the perimeter within the building. Brugh does not teach a net at or proximate to the perimeter within the building, as required under our claim construction (*see supra* § II.D) and the reasons proffered by Petitioner lack rational underpinning.

Petitioner's reason that it would have been obvious to place at least one net "along a perimeter wall . . . in response to observing flight pattern" is premised on the alleged fact that

> as bats and other flying animals tend to roost in locations that are protected from frequent disturbance, such as towards the outer edge of a structure, a POSA would have been motivated to place Brugh's capture device (a trapping net) along the perimeter of a structure based on the expected location of the flying animal.

Pet. 18. Petitioner relies on Dr. Chamberlain's Declaration, Ex. 1004, at paragraphs 32 and 33, as evidence of this alleged fact, which in turn relies

primarily on Tuttle, Exhibit 1018, at pages 81 and 85. *Id.* But Tuttle does not discuss that bats or any flying animal would roost in or along the perimeter of a wall within a building or structure. Rather, Tuttle discusses that for bats that roost in buildings, the likely roosting sites are "tile roofs, attics, and cavities between walls all are likely to be used as roosting sites, and any place that is dark or dimly lit and protected from frequent disturbance." Ex. 1018, 81.

As persuasively argued by Patent Owner, Petitioner provides insufficient evidence that bats or other flying animals are likely to fly or roost along the "outer edge of a structure" such that a POSA would find it obvious to place a net along the perimeter of a wall within a building. *See* Prelim Resp. 36 (citing Ex. 2001 ¶ 51). We find persuasive Mr. Tolley's testimony that "Brugh does not teach a POSA that there would be any advantage of positioning one or more nets along a perimeter wall . . . [and that] there is no discussion at all about flight characteristics dictating placement of a net along the walls of an enclosure." Ex. 2001 ¶ 51.

Furthermore, Petitioner's reason that placing at least one capture device along a perimeter wall "would effectively shrink the area in which the vertebrate is able to fly and thereby improve the likelihood of capture" (Pet. 18) is similarly inadequately supported by evidence. Petitioner cites to Dr. Chamberlain's Declaration, Ex. 1004, at paragraph 74 for this alleged fact. Dr. Chamberlain's Declaration relies on the combination of a net along a perimeter wall and a net on another location to shrink the "area in which the vertebrate can fly," to lead to the flying vertebrate having "fewer escape routes along the perimeter and more obstacles in the interior," and to be "a matter of basic geometry." Ex. 1004 ¶ 74. We agree with Patent Owner that

Petitioner's reasoning here is based on impermissible hindsight. Prelim. Resp. 38 (citing Ex. 2001 ¶ 65). Impermissible hindsight occurs when a person of ordinary skill in the art is imbued with knowledge taught *only* by the inventor of the challenged patent. *See W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1553 (Fed. Cir. 1983). Rather than taught by the cited art, Petitioner's reasoning stems solely from the '108 patent that describes an advantage of its method and system as "an improved animal capture procedure whereby the space the animal could escape during an attempted capture is greatly lessened due to the arrangement of the perimeter net system and trapping net system" (Ex. 1002, 3:14–19) and that "[b]y placing the perimeter net system 12 along the outer perimeter of the enclosure 36 [as shown in Figure 2], the escape routes for the animal 60 are reduced and the animal 60 can be funneled into the trapping net system 14" (*id*. at 4:38–42).

Additionally, although placing a net along a perimeter wall may reduce the paths, it does not necessarily reduce the area for the flying vertebrate to fly. Petitioner does not discuss how, precisely, the nets are oriented "along a perimeter wall" to reduce the area for flying. *See* Pet. 15–18. For example, "along the wall" can include one net being parallel to and flush against the perimeter wall and another net placed a large distance away or parallel to another wall. In such an example case, neither the area nor the number of flight paths would be reduced because the nets are not enclosing the flying vertebrate, and the likelihood of capture is not improved.

Further, Petitioner's reason that "increased net density would result in increased capture rate" provides, at best, support that a POSITA would have

found it obvious to have multiple nets, but does not provide adequate support for why a POSITA would locate one of those nets at or proximate to a perimeter within a building. Pet. 18 (citing Ex. 1004 ¶ 75). Dr. Chamberlain's testimony does not fill the gap within Petitioner's reasoning. For example, Dr. Chamberlain's testimony cites to Ralph. Ex. 1004 ¶ 75 (citing Ex. 1039, 190). Ralph discusses how to place nets in an outdoor study area (Ex. 1039, 187, 190) and defines "net density" as "[t]he optimal distance between nets" (*id.* at 191). As such, Ralph discusses the number of and distance between nets outside based on various research questions (*id.*), but does not discuss how or why placing a net at or proximate to a perimeter within a building would increase capture rate such that it would have been obvious to a skilled artisan to do so.

For the foregoing reasons, Petitioner has not demonstrated a reasonable likelihood of establishing obviousness of independent claim 1 based on Brugh.

b) Claims 2–10

Claims 2–10 depend directly or indirectly from claim 1 and Petitioner relies on the same faulty reasoning for challenging the dependent claims as relied on in its challenge of independent claim 1. *See* Pet. 20–23. Accordingly, Petitioner has not demonstrated a reasonable likelihood of establishing obviousness of claims 2–10 based on Brugh.

c) Claims 11–16

Independent claim 11 and its dependent claims 12–16 require a "bird relocation system . . . comprising: at least one perimeter net; [and] at least one trapping net." Ex. 1002, 6:20–23. To satisfy these limitations, Petitioner cites to the same insufficient reasoning relied upon in its challenge

of claim 1. *See* Pet. 23–24 (listing each limitation and citing to the relevant sections for claim 1); 25 ("For at least the foregoing reasons, Claims 11-17 are obvious in view of Brugh under § 103."). For the same reasons discussed above in relation to claim 1, Petitioner has not demonstrated a reasonable likelihood of establishing obviousness of claims 11–16.

d) Claim 17

Independent claim 17 requires a "method comprising: installing a bird relocation system . . . comprising at least one perimeter net." Ex. 1002, 6:43–47. To satisfy this limitation, Petitioner cites to the same insufficient reasoning relied upon in its challenge of claim 1. *See* Pet. 25 (citing to the relevant section discussing limitation [1b] of claim 1 and stating "For at least the foregoing reasons, Claims 11-17 are obvious in view of Brugh under § 103"). For the same reasons discussed above in relation to claim 1, Petitioner has not demonstrated a reasonable likelihood of establishing obviousness of claim 17.

3. *Summary of Ground A*

Petitioner has not demonstrated a reasonable likelihood of establishing obviousness of claims 1–17 based on Brugh.

G. GROUND B – ALLEGED OBVIOUSNESS OVER BRUGH AND KUNZ

Petitioner challenges claims 1–17 as unpatentable under 35 U.S.C. § 103 over Brugh in view of Kunz. Pet. 26–37.

1. *The Parties' Arguments and Evidence*

a) The Petition

Petitioner submits that "Claim 1 is obvious over Brugh and Kunz for at least the same reasons explained with respect to Brugh alone

(Ground A)." Pet. 29. Petitioner also submits that "Kunz would have further motivated a POSA to use a plurality of Brugh's capture devices—specifically, at least one 'perimeter net' and [at least one] 'trapping net' as recited in elements [1b] and [1c]." *Id.* (citing Ex. 1004 ¶ 96).

> Specifically, Petitioner alleges that
>
> [c]onsistent with Brugh's teaching that a flying vertebrate's "flight pattern" should be used to place nets, Kunz discloses that mist nets should be placed in sites "used as flyways" and are "most productive" when placed in locations "identified from visual observations of flying bats" (including anywhere bats "regularly enter and exit").

Pet. 29 (citing Ex. 1010, 8; Ex. 1008 ¶¶ 15, 45; Ex. 1004 ¶ 97). Petitioner alleges that "Kunz proposes various multi-net 'configurations,' which ensure that when a bat attempts to 'avoid one net' it may 'become captured in another'" and that "Kunz notes that it is effective to place multiple nets such that 'the perimeters of roosts are either partially or completely surrounded by one or more nets.'" *Id.* at 29–30 (citing Ex. 10–11, Fig. 3–4). In view of these teachings, Petitioner reasons that

> a POSA would have found it obvious (and would have been motivated) to observe the flyways of flying vertebrates in a building and place multiple nets (e.g., at least one perimeter net and at least one trapping net) within the building for the purpose of effectively capturing the identified flying vertebrates. . . . Moreover, although not required by Claim 1, a POSA would have found it further obvious in view of Kunz to specifically (i) install one of Brugh's capture devices along a perimeter wall within a building and (ii) at least one of Brugh's capture devices in additional locations (e.g., around the interior of the building). In view of Kunz, installation of Brugh's capture device in this way (e.g., in response to observing flyways in these locations) would have predictably resulted in an effective capture system within the building. *Id.*[] Accordingly, elements [1b] and [1c]

> would have been obvious to a POSA in view of Brugh and Kunz[.]

Id. at 30 (citing Ex. 1004 ¶ 98) (emphasis omitted).

b) The Preliminary Response

Patent Owner argues that Petitioner's arguments fail for several reasons. Prelim. Resp. 45.

First, Patent Owner asserts that "due to the presence of walls and ceilings, trapping vertebrates in enclosed spaces is nothing like capturing bats in outdoor settings and presents a very different set of challenges" a POSA would not "look to a patent direct to outdoor bat-capturing systems like Kunz to modify an indoor trapping system like that taught in Brugh." *Id.* (citing Ex. 2001 ¶ 65).

Second, as argued with respect to Ground A, Patent Owner contends that Brugh does not teach a perimeter net "and in fact teaches away from the use of a perimeter net." *Id.* at 46.

Third, Patent Owner argues that Kunz teaches placement of nets in outside areas where bats are already located but does not "discuss the strategic placement of multiple nets to minimize the area that bats ***will fly when flushed during a capture attempt***" and in fact teaches away from one net place along or around the interior perimeter and another net limiting the space a bird can travel when flushed during a capture event. *Id.* at 46–47 (citing Ex. 1010, 8, 10–11, Fig. 4; Ex. 2001 ¶ 62).

Fourth, Patent Owner argues "one of ordinary skill would have no motivation to modify the capture system of Brugh, in light of Kunz, to be a multi-net capture system because any alleged advantage of Kunz's outdoor capture system is not needed in Brugh's indoor capture system," i.e., "any

advantages purportedly offered by Kunz' multiple net configurations would not apply to Brugh's indoor system, because Brugh inherently already has the additional barriers that Kunz' multiple nets provide via Brugh's interior walls." *Id.* at 47–48 (citing Ex. 2001 ¶ 65).

2. *Analysis*

Based on our review of the parties' arguments and evidence, we find that Petitioner has not sufficiently shown that it would have been obvious to implement the specific combination of modifications Petitioner proposes to arrive at the challenged claims of the '108 patent.

a) Claim 1

As discussed above regarding Ground A, we agree that Petitioner has sufficiently shown that a POSITA would have found it obvious to modify Brugh to teach multiple capture devices having nets. We disagree, however, with Petitioner's contention that "Kunz would have further motivated a POSA to use a plurality of Brugh's capture devices—specifically, at least one 'perimeter net' and at least one 'trapping net' as recited in elements [1b] and [1c]." Pet. 29 (citing Ex. 1004 ¶ 96).

Petitioner's contention that "a POSA would have found it obvious (and would have been motivated) to observe the flyways of flying vertebrates in a building and place multiple nets (e.g., at least one perimeter net and at least one trapping net) within the building for the purpose of effectively capturing the identified flying vertebrates" (Pet. 30) is not supported by rational underpinning. Petitioner's basis for this contention is that "Kunz notes that it is effective to place multiple nets such that 'the perimeters of roosts are either partially or completely surrounded by one or more nets.'" *Id.* (citing Ex. 1010, 10–11, Fig. 4). Kunz discusses netting

bats at *openings* to buildings (Ex. 1010, 8 (citing Fig. 3A) (emphasis added)) and capturing bats if "the perimeters of roosts are either partially or completely surrounded by one or more nets" (*id.* at 10) (citing Fig. 4E, 4F), but Kunz makes no assertions or statements that bats tend to roost at or proximate to the perimeter wall *within a building*.

Although Kunz depicts a net in an attic (Ex. 1010, 9, Fig. 3A), Petitioner does not explain sufficiently why a skilled artisan would have combined this teaching with Brugh's teachings to arrive at the claimed "perimeter net."

Further, Figure 4 of Kunz describes locations outside whereby netting is used in an uncontained environment, and not inside. As Patent Owner asserts, trapping flying vertebrates inside a building presents different challenges from capturing bats outdoors. Prelim. Resp. 45 (citing Ex. 2001 ¶ 65). Kunz's configuration regarding a building (Ex. 1010, 10, Fig. 4F) has the netting surrounding, i.e., *along the outside perimeter*, of the building, and not at or proximate to a perimeter within the building, as the term "perimeter net" requires. *See supra* § III.D.1. Petitioner fails to sufficiently explain why a skilled artisan would take an outdoor netting configuration around vegetation or the exterior of a building and place it inside a building at or proximate to a perimeter wall. *See* Pet. 28–29; Prelim. Resp. 47–48 (identifying the same insufficient explanation).

In sum, we do not find that Petitioner has demonstrated a reasonable likelihood of establishing obviousness of independent claim 1 based on Brugh and Kunz.

b) Claims 2–10

Claims 2–10 depend directly or indirectly from claim 1 and Petitioner relies on the same faulty reasoning for challenging the dependent claims as relied on in its challenge of independent claim 1. *See* Pet. 31–35. Accordingly, Petitioner has not demonstrated a reasonable likelihood of establishing obviousness of claims 2–10 based on Brugh.

c) Claims 11–16

Independent claim 11 and its dependent claims 12–16 require a "bird relocation system . . . comprising: at least one perimeter net; [and] at least one trapping net." Ex. 1002, 6:20–23. To satisfy these limitations, Petitioner cites to the same insufficient reasoning relied upon in its challenge of claim 1. *See* Pet. 35–37 (listing each limitation and citing to the relevant sections for claim 1 and stating "For at least the foregoing reasons, Claims 11-17 are obvious in view of Brugh and Kunz"). For the same reasons discussed above in relation to claim 1, Petitioner has not demonstrated a reasonable likelihood of establishing obviousness of claims 11–16.

d) Claim 17

Independent claim 17 requires a "method comprising: installing a bird relocation system . . . comprising at least one perimeter net." Ex. 1002, 6:43–47. To satisfy this limitation, Petitioner cites to the same insufficient reasoning relied upon in its challenge of claim 1. *See* Pet. 37 (citing to the relevant section discussing limitation [1b] of claim 1 and stating "For at least the foregoing reasons, Claims 11-17 are obvious in view of Brugh and Kunz"). For the same reasons discussed above in relation to claim 1, Petitioner has not demonstrated a reasonable likelihood of establishing obviousness of claim 17.

3. *Summary of Ground B*

Petitioner has not demonstrated a reasonable likelihood of establishing obviousness of claims 1–17 based on Brugh in view of Kunz.

H. GROUND C – ALLEGED OBVIOUSNESS OVER BIRD BARRIER VIDEO AND KUNZ

Petitioner challenges claims 1–17 as unpatentable under 35 U.S.C. § 103 over Bird Barrier Video in view of Kunz. Pet. 38–54.

1. *The Parties' Arguments and Evidence*

a) The Petition

Petitioner alleges Bird Barrier discloses limitations [1pre], [1a], and [1e], the combination of Bird Barrier and Kunz teaches elements [1b] and [1c], and Kunz discloses elements [1d] and [1f]. Pet. 42–46. Specifically, Petitioner alleges that Bird Barrier "discloses a method for installing a mist net kit for trapping bird within a building" and that "[o]nce captured, the birds are removed from the netting and released outside." Pet. 42 (citing Ex. 1009, 2:19–2:34; Ex. 1014 ¶ 2, Fig. 15).

Petitioner submits that the "Bird Barrier Video's mist net kit is both a perimeter net and a trapping net" (*id.* (citing Ex. 1004 ¶ 120)) and that the Bird Barrier Video's mist net includes "'horizontal pockets' to capture birds" (*id.* at 43 (citing Ex. 1014, 1, Figs. 6, 15)) and is "configured for being hung from rafters" within a large building (*id.* (citing Ex. 1014, Figs. 11–14)).

Petitioner contends that a "POSA would have appreciated that the Bird Barrier Video's kit is capable of being positioned along the perimeter of enclosure" (*id.* (citing Ex. 1009, 1:44-2:06; Ex. 1014, Fig. 13)) and that

"the mist net is both a perimeter net and a trapping net" (*id.* (citing Ex. 1004 ¶ 121)).

Depicting Figure 13 with annotations, Petitioner argues that Figure 13 of the video transcript "show[s a] mist net installed along a perimeter wall." *Id.*; (citing Ex. 1014, Fig. 13). Petitioner submits that "[t]he Bird Barrier Video indicates that during installation, operators should 'walk the completed net assembly to a target location near where the bird activity has been observed.'" Pet. 43–44 (citing Ex. 1009, 1:27–40; Ex. 1014, 1).

Petitioner argues that Kunz discloses "that mist nets can be deployed anywhere bats (and other animals) 'are expected to fly'" (*id.* at 44 (citing Ex. 1010, 8)) and discloses "various multi-net 'configurations,' which ensure that when a bat attempts to 'avoid one net' it may 'become captured in another'" (*id.* (citing Ex. 1010, 10, Figures 3–4; Ex. 1004 ¶ 122)).

Based on these teachings, Petitioner reasons that

> a POSA would have found it obvious to (and would have been motivated to) provide at least two of the mist net kits, for example, in instances where **(i)** the flight pattern of a flying bird (or multiple birds) within a building includes (or is expected to include) different locations or **(ii)** where multiple flying birds are present (or expected to be present) in the building . . . . Moreover, the inclusion of multiple nets would amount to the mere duplication of parts with a predictable result (increased capture effectiveness), which is well-within the level of skill in the art.

Pet. 44 (citing Ex 1004 ¶¶ 161–62; *In re Application of Harza,* 274 F.2d 669, 671 (C.C.P.A. 1960); *Low Temp Indus., Inc. v. Duke Mfg. Co.*, No. 2021-2137, 2021 WL 6124455, at *5–6 (Fed. Cir. Dec. 28, 2021)).

Petitioner also reasons that a

> POSA would have found it further obvious in view of the Bird Barrier Video and Kunz to specifically (i) *install one of the mist*

> *net kits along a perimeter wall* and (ii) at least one more of the mist net kits in additional locations (e.g., around the interior of the building). Given the combined teachings of the Bird Barrier Video and Kunz, a POSA would have understood that installing the Bird Barrier Video mist net kit in this way (e.g., in response to observing flyways in these locations) would have predictably resulted in an effective capture system within the building.

Id. at 44–45 (citing Ex. 1004 ¶ 124) (emphasis replaced).

Thus, Petitioner concludes it would have been obvious in view of Bird Barrier Video and Kunz to provide at least one perimeter net and at least one trapping net as recited in elements [1b] and [1c]. *Id.*

b) The Preliminary Response

Patent Owner contends Petitioner's "arguments fail for several reasons." Prelim. Resp. 55. First, Patent Owner contends that Bird Barrier Video discloses only the placement of a single net; thus, "as with Brugh, Bird Barrier Video merely teaches a single net system that is placed in an area ***where a bird has been seen or is expected to be.***" *Id.* at 56 (citing Ex. 1009, 1:15, 1:59). Second, Patent Owner asserts that as "capturing bats in outdoor settings presents a very different set of challenges than trapping vertebrate in indoor structures due to the presence of walls and ceilings," "a POSA would not be motivated to combine the teachings of Bird Barrier Video with Kunz." *Id.* (citing Ex. 2001 ¶ 65). Third, Patent Owner argues that for the reasons stated in regard to Ground B, "any advantages purportedly offered by Kunz' multiple net configurations would not apply to Bird Barrier Video's indoor system, ultimately because Bird Barrier Video inherently already has the additional barriers that Kunz' multiple nets provide via Bird Barrier Video's interior walls." *Id.* (citing Ex. 2001 ¶ 65). Fourth, Patent Owner submits a POSA "would have no motivation to modify

the capture system of Bird Barrier Video, in light of Kunz, to include the claimed perimeter net because Kunz teaches away from such modification, as it does with Brugh." *Id.* at 56–57. Specifically, Patent Owner submits

> Kunz discusses placing multiple nets ***around the perimeter*** of a bat roost such that 'the perimeters of roosts are either partially or completely ***surrounded by one or more nets***,' which is contrary to the claimed method and system in which perimeter nets are placed at or along (not around) the interior perimeter of a structure.

Id. at 57 (citing Ex. 1010, 10–11, Fig. 4; Ex. 2001 ¶ 62).

Finally, Patent Owner contends that the combination of Bird Barrier and Kunz lacks the critical element of the single net positioned "***at or proximate to a perimeter wall.***" *Id.*

2. *Analysis*

Based on our review of the parties' arguments and evidence, we find that Petitioner has not sufficiently shown that it would have been obvious to implement the specific combination of modifications Petitioner proposes to arrive at the challenged claims of the '108 patent.

a) Claim 1

Although we agree that Petitioner has sufficiently shown that having multiple devices/nets would have been obvious to one of ordinary skill in the art, as discussed above with respect to Ground A (*supra* § III.F.2.a), Petitioner has not sufficiently shown that a skilled artisan would have combined the teachings of Bird Barrier Video with Kunz to arrive at the recited system of nets, i.e., with at least one net at or proximate to the perimeter of the building. Pet. 44–45.

We first point out that Bird Barrier Video *does not* disclose a "mist net installed along a perimeter wall." Pet. 43 (referencing Ex. 1014, Fig. 13). To illustrate, we reproduce Figure 13 from the transcript of the Bird Barrier Video, below:

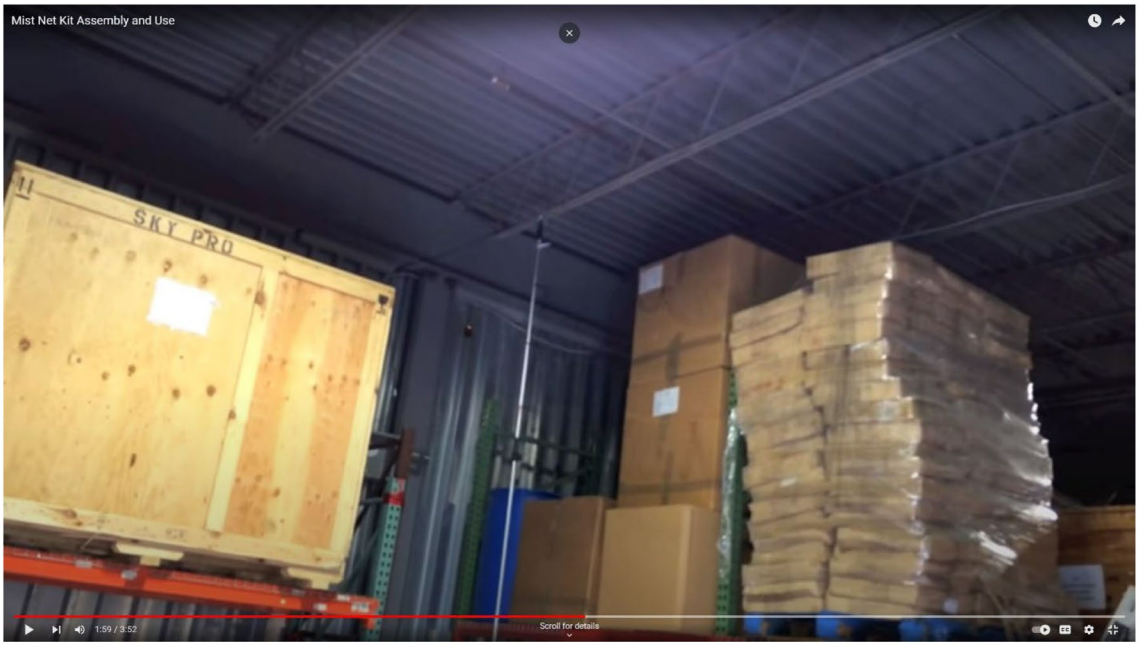


Figure 13 – Screenshot at 1:59

Ex. 1014, 9. Petitioner submits that Figure 13 is a screenshot from Bird Barrier Video taken at 1:59 and "show[s a] mist net installed along a perimeter wall." Pet. 43.

Contrary to Petitioner's assertion, we do not find Figure 13 as showing a net positioned "along a perimeter wall." Figure 13 is not clear as to the distance of the net from the perimeter wall, and from this figure alone, we cannot determine whether the net is at or proximate to the perimeter of the structure.

We are further persuaded by Mr. Tolley's testimony that a skilled artisan would not have combined Kunz's teachings with the Bird Barrier Video as Petitioner has done. *See* Ex. 2001 ¶¶ 65–67. Dr. Chamberlain's

provided rationales are not adequately supported by evidence or reasoning, and Petitioner's rationale for combining Bird Barrier Video with Kunz is based on impermissible hindsight. *See InTouch Tech., Inc. v. VGO Comm., Inc.*, 751 F.3d 1327, 1352 (Fed. Cir. 2014) (finding hindsight bias in expert testimony that "primarily consisted of conclusory references to [the] belief that one of ordinary skill in the art *could* combine these references, not that they *would* have been motivated to do so"); *see also KSR*, 550 U.S. at 420 (holding that factfinders must be aware "of the distortion caused by hindsight bias and must be cautious of arguments reliant upon *ex post* reasoning.").

Dr. Chamberlain asserts that Bird Barrier Video "discusses that during installation, operators should 'walk the completed net assembly to a target location near where the bird activity has been observed'." Ex. 1004 ¶ 122 (citing Ex. 1009, 1:27–1:40; Ex. 1014, 1). Dr. Chamberlain also asserts that Kunz "discloses that mist nets can be deployed anywhere bats (and other animals) 'are expected to fly'" (*id.* (citing Ex. 1010, 8)) and "discloses various multi-net 'configurations,' which ensure that when a bat attempts to 'avoid one net' it may 'become captured in another'" (*id.* (citing Ex. 1010, 10, Fig. 3–4)). Dr. Chamberlain submits that

> Given these teachings in Bird Barrier Video and Kunz, it is my opinion that a POSA would have found it obvious to (and would have been motivated to) provide at least two of the mist net kits, for example, in instances where (i) the flight pattern of a flying bird (or multiple birds) within a building includes (or is expected to include) different locations or (ii) where multiple flying birds are present (or expected to be present) in the building.
>
> *Id.* ¶ 123.

Additionally, Dr. Chamberlain testifies that

> it is my opinion that a POSA would have found it further obvious in view of the Bird Barrier Video and Kunz to specifically (i) *install one of the mist net kits along a perimeter wall* and (ii) at least one more of the mist net kits in additional locations (e.g., around the interior of the building). Given the combined teachings of the Bird Barrier Video and Kunz, a POSA would have understood that installing the Bird Barrier Video mist net kit in this way (e.g., in response to observing flyways in these locations) would have predictably resulted in an effective capture system within the building.

Id. ¶ 124 (emphasis replaced) (citing Ex. 1018. 85; Ex. 1031, 134; Ex. 1033, 200).

We agree with Patent Owner that a skilled artisan "would have no motivation to modify the capture system of Bird Barrier Video, in light of Kunz, to be a multi-net capture system because any alleged advantage of Kunz's outdoor capture system is not needed in Bird Barrier Video's indoor capture system." Prelim. Resp. 56.

Dr. Chamberlain's reasoning that a skilled artisan would have placed the net where the flight pattern includes different location or where birds are present (Ex. 1004 ¶ 123) presumes that birds fly along the perimeter of a building's interior; yet, the evidence does not adequately support such a finding. *See id*. at ¶ 122 (citing Ex. 1009, 1:21–44; Ex. 1014 ¶ 1); *supra* § III.F.2.a.

Dr. Chamberlain's reasoning that a skilled artisan would install one mist net kit long a perimeter wall in response to observing flyways in those locations (Ex. 1004 ¶ 124 (citing Ex. 1018, 85; Ex. 1031, 134; Ex. 1033, 200)) similarly presumes that those flyways are along the perimeter of the building; yet, there is insufficient evidence to support that finding. *See*

supra § III.F.2.a; Ex. 1004 ¶ 156. Dr. Chamberlain's reason to "shrink the area" is derived *solely* from the '108 patent.

Accordingly, Petitioner has not demonstrated a reasonable likelihood of establishing obviousness of claim 1 based on the Bird Barrier Video in view of Kunz.

b) Claims 2–16

Claims 2–10 ultimately depend from claim 1 and Petitioner relies on the same faulty reasoning for challenging these dependent claims as relied on in its challenge of independent claim 1. *See* Pet. 47–51. Accordingly, Petitioner has not demonstrated a reasonable likelihood of establishing obviousness of claims 2–10 based on Bird Barrier Video in view of Kunz.

c) Claims 11–16

Independent claim 11 and its dependent claims 12–16 require a "bird relocation system . . . comprising: at least one perimeter net; [and] at least one trapping net." Ex. 1002, 6:20–23. To satisfy these limitations, Petitioner cites to the same insufficient reasoning relied upon in its challenge of claim 1. *See* Pet. 51–53 (listing each limitation and citing to the relevant sections for claim 1), 54 ("For at least the foregoing reasons, Claims 11-17 are obvious in view of Bird Barrier Video and Kunz"). For the same reasons discussed above in relation to claim 1, Petitioner has not demonstrated a reasonable likelihood of establishing obviousness of claims 11–16.

d) Claim 17

Independent claim 17 requires a "method comprising: installing a bird relocation system . . . comprising; at least one perimeter net." Ex. 1002, 6:43–47. To satisfy this limitation, Petitioner cites to the same insufficient

reasoning relied upon in its challenge of claim 1. *See* Pet. 53 (citing to the relevant section discussing limitation [1b] of claim 1), 54 ("For at least the foregoing reasons, Claims 11-17 are obvious in view of Bird Barrier Video and Kunz"). For the same reasons discussed above in relation to claim 1, Petitioner has not demonstrated a reasonable likelihood of establishing obviousness of claim 17.

3. *Summary of Ground C*

Petitioner has not demonstrated a reasonable likelihood of establishing obviousness of claims 1–17 based on Bird Barrier Video in view of Kunz.

IV. CONCLUSION

Because we determine that the information presented in the record does not establish there is a reasonable likelihood that Petitioner would prevail with respect to at least one challenged claim of the patent '108 patent, we do not institute an *inter partes* review.

V. ORDER

For the reasons given, it is:

ORDERED that the Petition is *denied* as to all challenged claims of the '108 patent and no trial is instituted.

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