UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ZESTY.AI, INC.

Petitioner,

v.

AON RE, INC.

Patent Owner.

Case No. IPR2025-01359

U.S. Patent No. 11,195,058

PATENT OWNER'S PRELIMINARY RESPONSE

TABLE OF CONTENTS

Patent Owner Aon Re, Inc. ("PO") respectfully submits this Preliminary Response to Petitioner's Zesty.ai, Inc.'s ("Petitioner") Petition (the "Petition").

I. INTRODUCTION

Petitioner has fallen far short of meeting its burden and the Petition should be denied. The Petition relies heavily on Gross as its primary reference, which is directed to identifying dilapidated homes that present real estate and/or renovation opportunities—and Gross is a fundamentally different system compared to that disclosed and claimed in challenged U.S. Patent No. 11,195,058 (the "'058 patent"). *See* Ex. 1005. Gross relies largely on human coders and reviewers to tag images of homes with information concerning property "attributes." Gross includes no ability for a user to even request information concerning a specific property, much less a specific property characteristic and the condition of such a specific property characteristic.

In contrast, the '058 patent discloses and claims a system that does exactly what Gross does not: allows a user to query a specific property in order to gain information about the condition of a specific property characteristic (e.g., the condition of the roof). The claims of the '058 patent recite an advance over the prior art in the form of an improved computer architecture that improves the speed, efficiency, and accuracy of the computers that execute the claimed inventions. These improvements result in large part from a tiered structure of machine learning

algorithms (the claimed "one or more machine learning algorithms" that are used to develop the "property characteristic profiles" and the "property condition profiles"), each trained to separately identify different specific information about a specific property characteristic and a characteristic condition at a specific property. The system disclosed and claimed in the '058 patent is thus fundamentally different from Gross. Given that, it is not surprising that Petitioner has failed to carry its burden in at least four independent ways, any one of which is sufficient to result in denial of institution.

First, with respect to the claimed "one or more machine learning algorithms," Petitioner argues that it would have been obvious to combine a passing reference to a "hybrid neural network solution" in a survey paper discussing facial recognition technology (Jafri) with Gross's embodiments that allow a user to identify real estate and renovation opportunities. Petitioner fails to even attempt to explain why a POSITA would be motivated to look to facial recognition technology or how a POSITA would reasonably expect to be successful in making Petitioner's proposed combination. This is not just a case where Petitioner's motivation and expectation of success arguments are not persuasive; those arguments are just not in the Petition. Petitioner and its expert Dr. Forsyth assume no such explanation is necessary, and that, of course, is not the law. This evidentiary shortcoming requires denial of institution.

Moreover, Gross does not even incorporate the facial recognition paper's mention of a "hybrid neural network solution" by reference. As such, Petitioner could not properly rely on this alleged incorporation, even if it had set forth some analysis of motivation and expectation of success—which it did not even attempt to do. Petitioner's shortcomings with respect to the "one or more machine learning algorithms" requires denial of institution.

Second, the independent claims of the '058 patent recite receiving a request from a user including an "identification of a property location." Petitioner acknowledges that Gross does not allow a user to search for information concerning a specific property. Accordingly, Petitioner proposes a modification to allow Gross to include this basic functionality that is core to the system disclosed in the '058 patent. In so doing, Petitioner relies on classic conclusory expert testimony, which legally cannot carry Petitioner's burden to demonstrate the challenged claims are unpatentable. Petitioner's reliance on conclusory expert testimony is particularly egregious here because Petitioner's proposed modification would involve a fundamental redesign of Gross that is inconsistent with its basic purpose.

Third, Petitioner presents an internally inconsistent obviousness analysis that is motivated not by a teaching in Gross, but instead by a desire to render the claim obvious. For element 1.5, Petitioner argues that it would have been obvious to modify Gross's user interface so that a user looking for dilapidated homes could

identify information concerning such homes. However, when it comes to element 1.11, Petitioner argues that it would be obvious to modify Gross's user interface to present information to a human reviewer who could check the accuracy of an alleged automated classifier. Petitioner thus picks and chooses an alleged motivation based on an attempt to meet the claim language rather than a teaching in Gross. Petitioner's inconsistent motivations do not withstand scrutiny and suggest improper hindsight.

Fourth, Petitioner relies on a construction of the term "feature" in this proceeding that is inconsistent with its construction of the same term "feature" recited in a related IPR (IPR2025-01358) where Petitioner challenges PO's U.S. Patent No. 10,529,029 (the "'029 patent"). Fatally, Petitioner provides no acknowledgement or explanation for this apparent inconsistency. Petitioner fails to do so despite the fact that the '029 patent is in the same family as the '058 patent and shares a substantially similar specification in relevant respect. Petitioner's inconsistent positions fail to comply with 37 C.F.R. § 42.104(b)(3) and undermine its ability to carry its burden here. Indeed, Petitioner itself disagrees with its own claim construction on which its Petition arguments are premised.

In sum, Petitioner does not meet its burden in establishing a reasonable likelihood of success that at least one challenged claim is unpatentable, and the Director should deny institution.

II. BACKGROUND

A. The ’058 Patent.

In a described embodiment, a user requests information concerning a specific property (e.g., by typing an address into a user interface). ’058 patent, Ex. 1001 at 13:65-14:5. The system then accesses an aerial image including a property using an “image acquisition engine 336.” *Id*. at 15:1-4. “[A]n image quality analysis and preparation engine 326 analyzes the acquired image(s) to confirm the acquired image(s) contains an adequately clear and detailed image of the property[.]” *Id*. at 15:20-24. A “feature identification engine 320” then “extracts features” from the image that relate to a property characteristic from the image. *Id*. at 16:1-6. For example, a group of pixels of the digital image may include angles and outlines that digitally represent a roof. *Id*. at 8:31-35.

A machine learning classifier then determines the shape of the roof. *Id*. at 9:21-24. For example, “a gable roof 202*b* includes a central peak upon a generally rectangular outline[.]” *Id*. at 9:24-25. Another machine learning classifier analyzes the extracted features to determine the condition of the roof. *Id*. at 21:13-15. To determine roof condition, the system can “extract pixel intensity distributions.” *Id*. at 10:58-62. “[N]ewly constructed property features generally have sharp contrast and well-defined features” while “weathered or damaged property features can have softened edges, blurred contrasts, and asymmetrical patches of wear.” *Id*. at 10:62-

66.

As the District of Delaware found in denying Petitioner's motion to dismiss under 35 U.S.C. § 101, PO's challenged "patents recite the patent-eligible arrangement of two independently trained classifiers to analyze property characteristics and conditions." Ex. 2008 at 1. The District Court found that the allegedly representative claim 1 of U.S. Patent No. 10,529,029 "recites a process with a distinctive structure: two separate and independently trained machine-learning classifiers that operate independently," reciting a computer architecture that "is significant in the eligibility analysis." *Id*. at 8-9. According to the District Court, the "claim thus implements machine-learning technology in a specific way to address a practical technical problem: how to accurately and quickly assess the physical characteristics and condition of a property from an aerial image using machine learning models." *Id.* at 9.

Ultimately, the District Court found:

> Claim 1 is not particularly hard to understand; Aon does not pretend that it is. But intricacy must not be the principal measure of eligibility — why should elegant inventions be prejudiced? Claim 1 presents a targeted, technical solution to a specific problem and reflects more than a generic invocation of machine learning. Thus, it is directed to patent-eligible subject matter. And because Zesty has not shown that claim 1 is directed to an abstract idea, our *Alice* inquiry ends at step one. The motion to dismiss is denied.

Id. at 13.

B. The Petition and the Prior Art Cited by Petitioner.

The ’058 patent includes two independent claims: claims 1 and 13. The Petition presents a single obviousness ground based on a single reference, Gross (Ex. 1005). The Petition relies on the expert declaration of Dr. Forsyth, an expert in computer vision. *See* Ex. 1003.

Gross explains that “the main application is described in connection with assisting property seekers, real estate personnel and others to assess and develop leads for real estate prospects for single family residences.” Ex. 1005, ¶0237. To that end, Gross explains that “[c]ompetition for housing stock is rapidly increasing in the United States” and that “[y]oung families have significant difficulties finding suitable existing homes for rent or purchase in many desirable areas.” *Id.*, ¶0003. According to Gross, “homes [that] are dilapidated or in poor condition” or homes that are “not even inhabited . . . would be excellent leads for housing opportunities but currently go undiscovered and thus unexploited due to inadequate research and assessment tools.” *Id.*, ¶0004.

For another use case, Gross references “a considerable market in the US for home improvement goods and services, such as for example, windows, landscaping, siding, paint, roofing, plumbing and similar products to name a few.” *Id.*, ¶0008. Gross explains that “to date such types of entities have not targeted groups of homes

in a neighborhood by identifying common issues with structures that could induce or at least incentivize group purchasing behavior." *Id*. Thus, another use of Gross's system is for contractors to identify opportunities for seeking work.

However, these use cases highlight the critical differences between Gross and the '058 patent. Unlike the '058 patent, Gross does not disclose an improved computer architecture for assessing the structural condition of a building. Instead, Gross discloses a system that allows home seekers and contractors to search geographic regions for opportunities. Gross mentions the insurance field only in passing as a theoretical use case with no detail on how the disclosed system could be adapted for use in the insurance industry. *See id.*, ¶¶0237-38.

Gross discloses an "[i]mage database 142" that is comprised of images of buildings in a particular location. *See id.*, ¶0059. This image database allows a user to review images of homes that may be in need of improvement for the purpose of identifying real estate development opportunities. The "image database" "includes a current image of the structure in question which is in a form that can be analyzed for building elements." *Id*. These images "can also include annotations [] identifying structure elements, defects, severity ratings, locations of identified defects, etc. as annotated automatically by a classifier and/or manually by a human operator." *Id.*

Later, Gross explains that humans are preferred for annotation of images: "To improve data accuracy it is expected that multiple human coders could be employed

to review any particular structure. This will increase accuracy and coverage through crowdsourcing of such tasks. A voting algorithm can weigh the contributions from individual coders in assessing and attributing the presence of features, their type and condition." *Id.*, ¶0145.

Gross discloses an "interactive interface 350" in Fig. 3B, which is reproduced below.

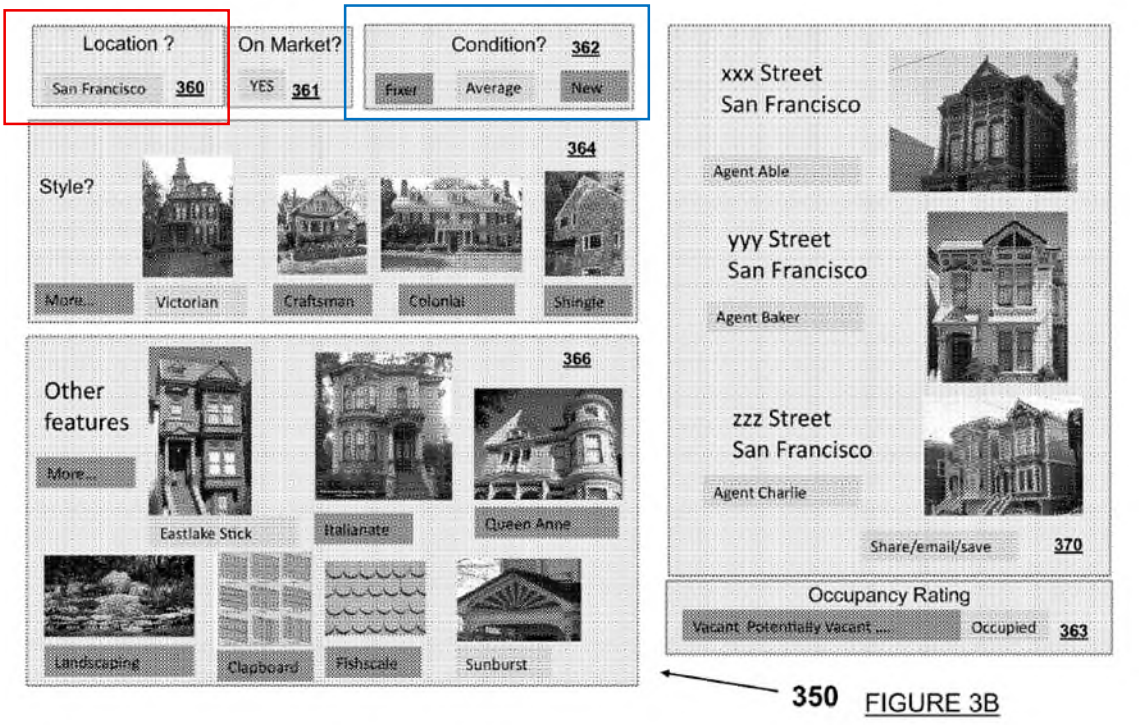

FIGURE 3B

Consistent with the purpose of Gross's system, the interface includes drop down menus that allow the user to select a general geographic **location**, rather than a specific property address. Another drop down menu, allows the user to select the overall **condition** of the house, rather than the condition of a particular property characteristic of a particular property at a given address.

Petitioner relies (at 32) on Fig. 11 to argue that Classifier Engine 150 identifies property attributes and conditions:

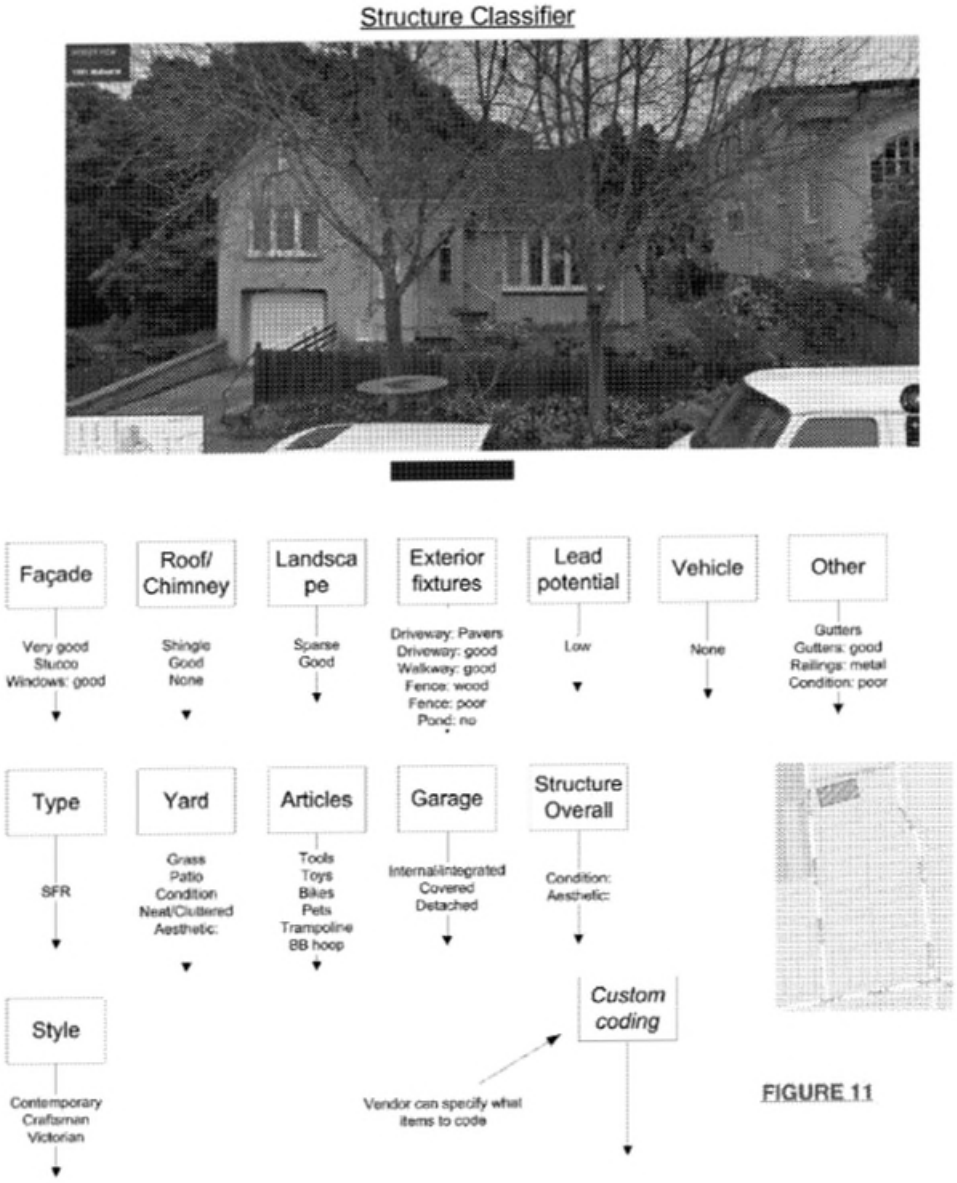

FIGURE 11

However, there is no disclosure that the tagging in Fig. 11 is the result of any type of automated or machine learning process implemented by Classifier Engine 150. Instead, the description of Fig. 11 references a "human rater/coder" in

paragraph 143 and "multiple human coders" in paragraph 145. The tagging in Fig. 11 was conducted by a human, not a machine learning classifier. Moreover, the information shown in Fig. 11 is not searchable by the user. Rather, the information included in Fig. 11—input by human coders—is used to determine the overall condition of a property in a geographic region that is targeted for real estate/renovation opportunities. *See* Ex. 1005, ¶0133 (discussing overall condition score that is presented to the user), ¶0099 ("The condition of the property can also be specified in query box 362 which may be presented in the form of a sliding scale, descriptors, etc., which permit a wide range of building stock to be searched, from 'new' all the way to 'extreme fixer upper' or some other similar moniker.").

Indeed, Fig. 12 confirms that the tagging disclosed in Fig. 11 is performed by humans—not an automated Classifier Engine 150. For example, as shown below, the figure includes **instructions** for a human reviewer to identify damage.

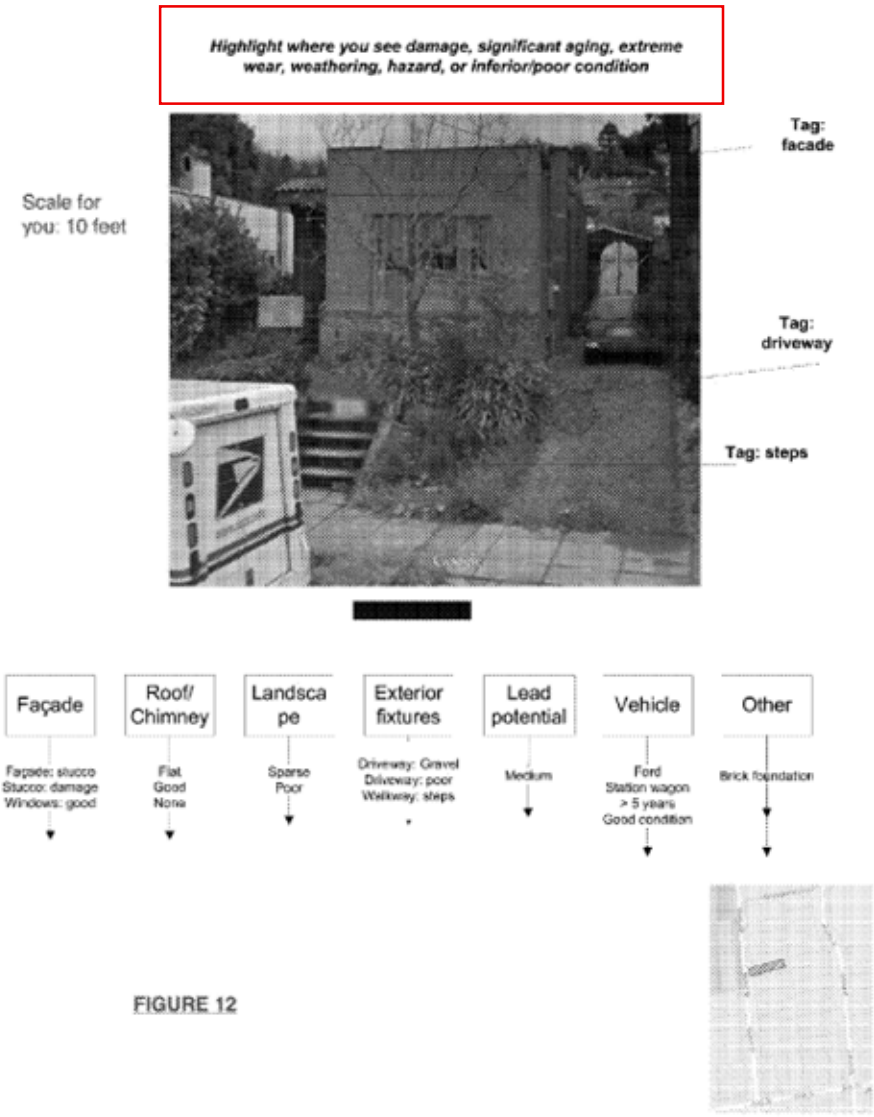

FIGURE 12

Gross mentions the use of a machine learning classifier as a future possibility, stating that "***it is expected*** that with sufficient training an automated classifier ***could*** participate in the process, if not perform the entire process of classifying structural features." *Id.* (emphasis added). Thus, Gross does not disclose that the system discussed in the reference actually implemented the use of a machine learning classifier to identify attributes—much less a multi-tiered system of separate

classifiers each trained to identify different specific information about different specific things as part of an improved computer architecture.

Importantly, Gross himself appears to lack skill in the art of machine learning. Instead, his LinkedIn profile states that he is an "[e]xperienced inventor, prosecutor, negotiator and enforcer in all aspects of patent business, including strategic monetization of key portfolios in software, e-commerce, search, recommendations, Adtech, and social networking." Ex. 2021 at 1. Consequently, Gross leaves the details of machine learning to others, disclosing very little about machine learning or how Gross's so-called "Classifier Engine 150" would rely on machine learning techniques to identify real estate/renovation opportunities.

Instead, Gross merely mentions in passing that "neural networks, etc., [] can be used to detect and extract features of such attributes" as part of training Classifier Engine 150. *Id.*, ¶0077. Gross provides no detail at all on how these supposed "neural networks" would be involved in training Classifier Engine 150. Notably, Gross does not state that "neural networks" are implemented in its disclosed system to *classify* property attributes—let alone explain how its system would implement "neural networks" to identify dilapidated homes that present real estate and renovation opportunities.

For its "feature extraction algorithms," Gross relies entirely on a survey paper concerning ***facial recognition*** technology—*A Survey of Face Recognition*

Techniques, by Jafri et al.—rather than any of his own work. Conspicuously, Gross fails to explain how facial recognition feature extraction algorithms have any application whatsoever to identifying dilapidated homes. In turn, the Petition and Dr. Forsyth rely on Gross's reference to Jafri—again without explaining how Jafri's facial recognition survey paper has anything to do with Gross's Classifier Engine 150, much less the system disclosed and claimed in the '058 patent. On this point, Petitioner and Dr. Forsyth appear to assume that no motivation is needed where Jafri is allegedly incorporated by reference. But that is not the law as explained *infra*.

In fact, the Petition acknowledges (at 14) that Gross mentions "image processing and attribute classification techniques" only in connection with training the so-called "Classifier Engine." Nonetheless, the Petition argues (at 15) that these alleged "techniques" "were intended to also be utilized in its building attribute/condition assessment process." According to the Petition (*id.*), it would have been obvious to combine "Gross's disclosure of the image processing elements used to train the Classifier Engine" with Gross's alleged "disclosure of image processing used in its building attribute/condition assessment process[.]"

Petitioner's "reasoning" (at 15-16) for this combination is self-fulfilling: "image processing techniques used to train the Classifier to identify attributes/conditions would in fact have also been used when performing a property

assessment." However, Gross's discussion of Figs. 11 and 12 belie Petitioner's argument. Any discussion of Classifier Engine 150 to identify attributes was aspirational, which explains the lack of technical detail in Gross and Petitioner's attempted gap filling through conclusory expert testimony and unexplained references to a survey paper concerning facial recognition technology.

Gross's system is simply far afield from that disclosed and claimed in the '058 patent.

III. CLAIM CONSTRUCTION

In an *inter partes* review filed on or after November 13, 2018, claim terms are construed based on their ordinary and customary meaning. 37 C.F.R. § 42.100(b). Petitioner argues (at 10) that "all claim terms should receive their plain and ordinary meaning in the context of the '058 patent specification." Solely for purposes of this Preliminary Response, PO accepts Petitioner's argument. If trial is instituted, however, and to the extent deemed necessary to resolve any dispute, PO reserves the right to propose more specific constructions of one or more claim terms.

IV. LEVEL OF ORDINARY SKILL IN THE ART

Petitioner defines (at 9) a person of ordinary skill in the art ("POSITA") as an individual who "would have had a bachelor's degree in Computer or Electrical Engineering or equivalent discipline, and approximately two years' experience in image processing and machine learning. Additional education could substitute for

professional experience." Because it does not affect the ultimate analysis at this time, PO takes no position with respect to Petitioner's proposed level of ordinary skill in the art solely for the purposes of the institution decision.

V. ARGUMENT

A. The Petition's reliance on Jafri for the claimed "one or more machine learning algorithms" suffers from two fundamental flaws.

1. The Petition fails to even attempt to explain why and how a POSITA would combine Jafri's passing reference to "a hybrid neural network solution" with Gross.

Element 1.2 recites "a set of property characteristic profiles, each property characteristic profile of the set of property characteristic profiles being developed through training one or more machine learning algorithms using first property images to identify one or more characteristics of at least one property feature of one or more property features." Element 13.5 similarly recites "wherein each property characteristic profile of the set of property characteristic profiles is developed through training one or more machine learning algorithms using first property images to identify one or more characteristics of at least one property feature of one or more property features." Thus, both challenged independent claims recite

developing property characteristic profiles through training one or more machine learning algorithms.[1]

For the claimed "one or more machine learning algorithms," Petitioner argues (at 18-19) that "Gross—through the incorporated Jafri material—describes using 'a hybrid neural network solution' to analyze image patterns." From there, Petitioner argues (at 19) that a POSITA "would have understood that neural networks comprise *one or more machine algorithms*"[2] as recited in the challenged claims. Thus, Petitioner relies on Jafri's mention of a "hybrid neural network solution" as the Petition's "one or more machine learning algorithms."

However, Petitioner has failed to offer ***any*** argument that a POSITA would be motivated to make the combination of Jafri and Gross with the requisite reasonable expectation of success, even though both points are required to demonstrate obviousness. *See In re Stepan Co.*, 868 F.3d 1342, 1345–46 (Fed. Cir. 2017) ("An obviousness determination requires finding both that a skilled artisan would have been motivated to combine the teachings of the prior art ... and that the skilled artisan would have had a reasonable expectation of success in doing so.") (citations

[1] Petitioner addresses element 1.2 at pages 18-20, and Petitioner relies (at 33) on its discussion of element 1.2 for element 13.5. Thus, PO focuses on Petitioner's discussion of element 1.2.

[2] Emphasis herein is original unless otherwise indicated.

omitted). To that end, the Federal Circuit has held that "[w]hether a rejection is based on combining disclosures from multiple references, combining multiple embodiments from a single reference, or selecting from large lists of elements in a single reference, there must be a motivation to make the combination and a reasonable expectation that such a combination would be successful, otherwise a skilled artisan would not arrive at the claimed combination." *Id.* at 1346, n.1.

Importantly, this is not a situation where Petitioner's motivation to combine and expectation of success arguments are simply unpersuasive—they are entirely absent from the Petition. Nor are they present in Dr. Forsyth's declaration, which simply mimics the Petition and asserts: "Jafri, as incorporated in Gross, describes using 'a hybrid neural network solution' to analyze image patterns." Ex. 1003, ¶69. There is simply no argument in the Petition or Dr. Forsyth's declaration that a POSITA would have been motivated to combine Jafri's mention of "a hybrid neural network solution" with Gross, much less with the requisite reasonable expectation of success. This is insufficient to carry Petitioner's burden. *See Stepan*, 868 F.3d at 1346, n.1.

2. The Petition relies on improper incorporation by reference to argue that Gross discloses "one or more machine learning classifiers" as claimed.

Petitioner's reliance on Jafri's mention of "a hybrid neural network solution" also fails because to the extent Jafri is properly incorporated by reference at all, it is for the specific purpose of "feature extraction algorithms." "To incorporate material by reference, the host document must identify with *detailed particularity* what specific material it incorporates and *clearly indicate where* that material is found in the various documents." *Zenon Env't, Inc. v. U.S. Filter Corp.*, 506 F.3d 1370, 1378 (Fed. Cir. 2007). Petitioner has failed to meet this legal standard here, as Gross limits its alleged incorporation by reference of Jafri to "***feature extraction*** algorithms": "***Feature extraction algorithms*** are well-known in the art, and examples of such that are suitable and/or can be adapted easily for use in the present embodiments is set out in literature such as *A Survey of Face Recognition Techniques*, by Jafri et al. appearing in Journal of Information Processing Systems, Vol. 5, No. 2, June 2009 and incorporated by reference herein." Ex. 1005, ¶0079 (emphasis added).

Gross does not state that Jafri is incorporated by reference for purposes of supplying a neural network to classify extracted features, much less with the requisite "detailed particularity." And because Gross does not even state that it

incorporates Jafri's mention of a "hybrid neural network solution," it certainly does not clearly indicate where the unincorporated material is found in Jafri.[3]

In deciding whether material is properly incorporated by reference, "the standard of one reasonably skilled in the art should be used to determine whether the host document describes the material to be incorporated by reference with sufficient particularity." *Zenon*, 506 F.3d at 1383–84. Despite this, Dr. Forsyth fails to offer necessary supporting testimony. Ex. 1003, ¶69. Instead, Dr. Forsyth appears to have simply assumed that Gross properly incorporated Jafri's reference to "hybrid neural network[s]" based on a legal instruction from counsel. *Id.*, ¶69. There is simply no discussion in Dr. Forsyth's declaration as to how a POSITA would identify Jafri's mention of a "hybrid neural network solution" as being incorporated into Gross for use in classifying property attributes. Absent its attempted improper incorporation of Jafri's mention of "hybrid neural networks" used in facial recognition applications, Petitioner has failed to identify "one or more machine learning algorithms" as claimed in Gross, which is fatal to the Petition.

[3] For clarity, PO does not argue that a "hybrid neural network" is not a type of machine learning algorithm or that a neural network solution cannot be used to extract features. Instead, the point here is that it was ***Petitioner's*** burden to explain why a POSITA would have understood Gross to incorporate Jafri's mention of a "hybrid neural network solution" and/or to identify a motivation to do so with the requisite expectation of success. Petitioner's failure to do so means that it has not carried even its initial burden at the institution stage.

B. The Petition improperly relies on conclusory expert testimony and argument in an attempt to support its proposed modification of Gross to receive a request including identification of a property location.

Element 1.5 recites "receive, from a user at a remote computing device via a network, a request comprising identification of a property location." Similarly, element 13.1 recites "receiving, from a user at a remote computing device via a network, a request comprising identification of a property location." Thus, each independent claim recites that a user request is received including identification of a property location.[4] Simply put, the ability to request this specific information about a specific property is fundamental to the inventions disclosed and claimed in the '058 patent.

Gross, however, does not disclose an interface that would allow the user to query a specific property. As such, Petitioner argues (at 24) that a POSITA would have found it obvious to modify Gross to request information concerning a "particular property."[5] For its starting point, Petitioner points to Fig. 3B, which

[4] Petitioner addresses element 1.5 at pages 22-25, and Petitioner relies (at 32-33) on its discussion of element 1.5 for element 13.1. Thus, PO focuses on Petitioner's discussion of element 1.5.

[5] Petitioner understands that these elements are directed to obtaining information for "a particular property," i.e., according to Petitioner, the term "a property location" refers to a particular property. PO takes no position on the correctness of this assertion and accepts it for purposes of this Response.

according to the Petition (at 23) discloses an interactive user interface that, inter alia, includes "query box 360 to specify 'a location for a property search' (e.g., a geographical region such as a city, state, or neighborhood)."[6]

Petitioner then argues (at 24) that a POSITA "would have found obvious that a similar interactive interface could have been used to allow a user to submit the request for performance of the attribute/condition assessment process." According to Petitioner (at *id.*) "would have been motivated to allow the user to request performance of the attribute/condition assessment process in order to provide the information ***when needed for a particular property***." (emphasis added). The Petition fails to provide any explanation at all as to when the information is "needed for a particular property." This conclusory argument does not suffice.

For attempted "support," the Petition cites to paragraph 79 of Dr. Forsyth's declaration (Ex. 1003), which simply mimics the Petition verbatim: "A POSA would have been motivated to allow the user to request performance of the attribute/condition assessment process in order to provide the information ***when needed for a particular property***." (emphasis added). Thus, like the Petition, Dr. Forsyth fails to identify when this "information" is allegedly "needed" in the context

[6] Gross explains that "the user can qualify whether the property in question is in fact for sale or not in box 361." This is consistent with the real estate identification focus of Gross. Ex. 1005, ¶0099.

of Gross, which allows a user to identify dilapidated homes in a large geographic region (rather than focusing on a specific property). This conclusory expert testimony cannot provide evidentiary support for Petitioner's arguments. *See, e.g., TQ Delta, LLC v. CISCO Sys., Inc.*, 942 F.3d 1352, 1358 (Fed. Cir. 2019) ("Conclusory expert testimony does not qualify as substantial evidence.").

Dr. Forsyth's conclusory expert testimony is particularly inappropriate because Gross allows the user to search a ***geographic area*** for homes in need of repair; it is not a system designed to query information about an already known property. In that context, there is no "need" to search for a specific property (e.g., by address or latitude/longitude). Petitioner's failure to consider its proposed modification in the context of the reference as a whole compounds its erroneous reliance on conclusory expert testimony. *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1568 (Fed. Cir. 1987) ("Among legal standards for determining *scope* and content of the prior art, for example, are: a prior patent must be considered in its entirety, i.e., as a *whole*, including portions that would lead away from the invention in suit.").

The Petition also argues (at 24-25) that a POSITA "would have understood performing the assessment at the request of a user would be more efficient and reduce processing costs associated with unnecessary processing of property images." Petitioner again fails to explain *why* a POSITA would be interested in searching for

a specific property in the context of Gross. And again, this conclusory assertion does not suffice.

For attempted "support," the Petition cites paragraph 80 of Dr. Forsyth's Declaration. In that paragraph, Dr. Forsyth largely mimics the Petition verbatim, making the conclusory assertion that "a POSA would have been further motivated to perform this modification because such a modification would allow the user to request Gross's property assessment be performed for a target property of interest, and this would reduce processing costs otherwise associated with processing properties for an entire city or regional area that is described in Figure 16 of Gross." Ex. 1003, ¶80.

This is another conclusory, unexplained, and legally deficient assertion from Dr. Forsyth. For example, what processing costs will be reduced and how? And what does Dr. Forsyth envision in terms of "processing" images of individual properties? Are individual properties processed on the fly as they are queried? And how does that impact the time a user must wait before results are returned? Will that impact the desirability of Gross's system? Is the "batch processing" functionality disabled? And if so, is this an entirely new system? These questions—and more—are left unanswered by Dr. Forsyth's conclusory testimony, which cannot provide evidentiary support for the Petition. These questions—and more—are left unanswered by Dr. Forsyth's conclusory testimony. *See Honeywell Int'l Inc. v. 3G*

Licensing, S.A., 124 F.4th 1345, 1354 (Fed. Cir. 2025). ("[O]ur cases have consistently held that conclusory expert testimony does not qualify as substantial evidence.").

In fact, any modification to avoid "batch processing" of properties would again gut the fundamental purpose of Gross of allowing a user to survey an entire geographic area for real estate/home improvement opportunities. Dr. Forsyth's failure to address this point negates a legally sufficient motivation to combine, which requires consideration of both reasons that support and detract from making a combination. *Henny Penny Corp. v. Frymaster LLC*, 938 F.3d 1324, 1332 (Fed. Cir. 2019) ("[T]he benefits, *both lost and gained*, should be weighed against one another. That is consistent with the longstanding principle that the prior art must be considered for all its teachings, not selectively.") (citations omitted) (alterations in original). Petitioner fails to demonstrate that it would have been obvious to modify Gross to meet elements 1.5 and 13.1.

C. The Petition's obviousness argument for element 1.11 undermines its obviousness argument for element 1.5.

Element 1.11 recites "responsive to receiving the request, cause presentation of, for review by the user at the remote computing device, a graphical user interface comprising information regarding the plurality of characteristics and the condition of each feature of the at least one property feature." Element 13.8 similarly recites

"responsive to receiving the request, causing presentation of, for review by the user at the remote computing device, a graphical user interface comprising information regarding the plurality of characteristics and the condition of each feature of the at least one property feature." Thus, both independent claims recite the presentation of a graphical user interface including information concerning the plurality of characteristics and the condition of each feature.[7]

For these elements, the Petition argues (at 32) that "[i]t would have been obvious *to cause presentation* of the graphical user interface *responsive to receiving the request* (e.g., a request to perform an assessment for the identified property location) so that ***a human reviewer could 'accept or modify the initial classification'*** performed by Classifier Engine prior to it being recorded." (emphasis added). In other words, Petitioner proposes modifying Gross to present a graphical user interface that allows a human coder to determine whether the alleged automatic classifier correctly identified a property attribute. This human reviewer is different from a user that is interested in identifying dilapidated homes in need of improvement.

[7] Petitioner addresses element 1.11 at pages 18-20, and Petitioner relies (at 34) on its discussion of element 1.11 for element 13.8. Thus, PO focuses on Petitioner's discussion of element 1.11.

However, Petitioner identifies a different "user" when attempting to argument that it would be obvious to modify Gross to meet element 1.5. There, Petitioner argues (at 24) that a POSITA would modify Gross's user interface "to allow the user to request performance of the attribute/condition assessment process in order to provide the information when needed for a particular property." While Petitioner fails to specify the "need" that might arise, it is clear in context that Petitioner is referring to an ordinary user that would allegedly "need" information about a particular property—not a coder working to assess the accuracy of a computerized classification. Indeed, a human reviewer can perform that duty without modification of the graphical user interface to allow for searching of a specific property and the time and expense associated with that modification.

Thus, Petitioner identifies a different "user" for element 1.5 as compared to element 1.11. This demonstrates that Petitioner's arguments are not based on any real motivation that would be apparent to a POSITA but rather on Petitioner's desire to prove the challenged claims unpatentable. Petitioner has failed to carry its burden.

D. Petitioner's inconsistent claim construction positions undermine its ability to carry its burden.

Petitioner has taken inconsistent claim construction positions as to the term "feature" between this proceeding and a related IPR (IPR2025-01358) where Petitioner challenges PO's '029 patent. To the extent Petitioner believes it is

appropriate to construe the term "feature" to mean different things as between claims in the same family of patents, it was incumbent on Petitioner to explain why that should be the proper result in view of the maxim that a claim term should be construed consistently across a related family of patents where possible. *See Rexnord Corp. v. Laitram Corp.*, 274 F.3d 1336, 1342 (Fed. Cir. 2001); *NTP, Inc. v. Research In Motion, Ltd.*, 418 F.3d 1282, 1293 (Fed. Cir. 2005) (abrogated on other grounds).[8]

In this IPR, element 1.2 recites "property characteristic profiles . . . being developed through training one or more machine learning algorithms using first property images to identify one or more characteristics of at least one property ***feature*** of one or more property features." (emphasis added). Element 13.3 similarly recites "classifying, by the processing circuitry, a condition of one or more ***features*** of the property location, wherein classifying comprises, for each feature of the one or more features, identifying the respective feature from at least one image obtained from the aerial imagery." (emphasis added).

As to the term "feature/features," Dr. Forsyth testifies that "the word *feature* can have multiple meanings, depending on the context" and that the "the claimed *features of a property location* or *property features*" refers to "'property features' as

[8] For clarity, PO takes no position on whether it would be appropriate for "feature" to mean one thing in one patent and a different thing in another patent in the same family. The point here is that it was Petitioner's burden to explain this inconsistency, and it has failed to do so.

physical aspects, qualities, or facets (e.g., 'rooftop, swimming pool, chimney, and sky lights')." Ex. 1003, ¶62. Dr. Forsyth distinguishes this usage of the term "feature" from the "computer vision contexts" where "the word *feature* (or 'image feature') typically refers to pieces of information that can be derived from the pixel content of an image." *Id*.

In IPR2025-01358, element 1.3 recites "extracting, by the processing circuitry, one or more of a plurality of features from the aerial image corresponding to the property characteristic, wherein the extracted features include pixel groupings representing the property characteristic." In that proceeding, Dr. Forsyth acknowledges again that the claim term "*feature* can [] have multiple meanings, depending on the context" and then asserts that "the claimed *extracted features*, here, appear to follow the **computer vision meaning** of the term." Ex. 2018, ¶91 (third emphasis added). Importantly, Dr. Forsyth fails to explain why "feature" should be construed in two different ways.

In other words, in this proceeding, Petitioner—without explanation—disagrees with its own construction for the term "feature" in a different proceeding directed to a patent in the same family. This presents two issues: (1) Petitioner's disagreement with itself fails to comply with 37 C.F.R. § 42.104(b)(3); and (2) Petitioner's disagreement with itself generally undermines its ability to carry its burden to win institution here.

As to the ***first*** issue, 37 C.F.R. § 42.104(b)(3) requires the petition to identity "[h]ow the challenged claim is to be construed." Petitioner's inconsistent position demonstrates that Petitioner has not actually identified how the challenged claim is to be construed. Should it be construed as argued in its Petition? Or should it be construed as argued in its petition in IPR2025-01358? Indeed, Petitioner did not simply adopt PO's yet-unserved claim construction positions from the district court. Instead, Petitioner disagrees with its own construction presented to the Board in IPR2025-01358 without explaining the apparent inconsistency. This fails to comply with Rule 42.104(b)(3).

As to the ***second*** issue, Petitioner's inconsistent positions undermine its ability to carry its burden in this proceeding. In this proceeding, Petitioner bases its arguments concerning Gross on its "standard context[]" construction of the term "feature." *See* Pet. 16-20 (relying on Dr. Forsyth's construction in paragraph 62 of his declaration). Yet, Petitioner disagrees with its own "computer vision" construction of "feature" it presents in IPR2025-01358. Petitioner cannot persuasively advocate for the construction of "feature" in this proceeding—on which its challenge is based—where it disagrees with itself in another proceeding. This is an independent issue on which the Board can find that Petitioner has not carried its burden to win institution in this proceeding.

VI. CONCLUSION

For the above reasons, Petitioner has not met its burden to institute the present Petition. Thus, Patent Owner respectfully requests that institution be denied.

Dated: November 4, 2025

Respectfully submitted,

GARDELLA ALCIATI P.A.

By: /Greg H. Gardella/
Greg H. Gardella (Reg. No. 46,045)
Email: ggardella@ga-iplaw.com
Michael J. Stimson (Reg. No. 45,429)
Email: mstimson@ga-iplaw.com
80 M Street SE, 1st Floor
Washington, D.C. 20003
Phone: 703-556-9600
Fax: 703-740-4541

Attorneys for Patent Owner
Aon Re, Inc.

WORD COUNT CERTIFICATE OF COMPLIANCE

Pursuant to 37 C.F.R. § 42.24(d), I hereby certify that the foregoing PATENT OWNER'S PRELIMINARY RESPONSE contains 6,346 words as measured by the word processing software used to prepare the document. This total does not include the table of contents, the caption page, any signature blocks, the certificate of service, or this certificate of word count.

Respectfully submitted,

Dated: November 4, 2025

By: /Greg H. Gardella/
Greg H. Gardella
GARDELLA ALCIATI P.A.

CERTIFICATE OF SERVICE

The undersigned certifies that a copy of the foregoing document, along with any supporting document(s), was served in its entirety by filing through the Patent Trial and Appeal Case Tracking System (P-TACTS) as well as providing a courtesy copy via e-mail to the following attorneys of record for the Petitioner listed below:

Lead Counsel:	Daniel S. Block dblock-PTAB@sternekessler.com
Back-up Counsel:	Jennifer Meyer Chagnon Justin D. Wang jchagnon-PTAB@sternekessler.com jwang-PTAB@sternekessler.com PTAB@sternekessler.com

Dated: November 4, 2025

By: /Greg H. Gardella/
Name: Greg H. Gardella
GARDELLA ALCIATI P.A.