Trials@uspto.gov
571-272-7822

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

AMERICAN SIMMENTAL ASSOCIATION,
Petitioner,

v.

LEACHMAN CATTLE OF COLORADO, LLC,
Patent Owner.

Case PGR2015-00003
Patent 8,660,888 B2

Before PHILLIP J. KAUFFMAN, MICHAEL W. KIM, and ROBERT J. WEINSCHENK, *Administrative Patent Judges*.

KIM, *Administrative Patent Judge*.

DECISION
Institution of Post-Grant Review
37 C.F.R. § 42.208

I. INTRODUCTION

American Simmental Association ("Petitioner") filed a Corrected Petition ("Pet.") for post-grant review of claims 1–20 of U.S. Patent No. 8,660,888 B2 ("the '888 patent") (Ex. 1001) pursuant to 35 U.S.C. §§ 321–329. Paper 6. Leachman Cattle of Colorado, LLC ("Patent Owner") filed a Preliminary Response. Paper 11; "Prelim. Resp." We have jurisdiction under 35 U.S.C. § 324,

which provides that a post-grant review may be instituted only if "the information presented in the petition . . . demonstrate[s] that it is more likely than not that at least 1 of the claims challenged in the petition is unpatentable."

Petitioner challenges the patentability of claims 1–20 of the '888 patent under 35 U.S.C. §§ 101, 102, and 103. We determine that the information presented in the Petition demonstrates that it is more likely than not that Petitioner would prevail in showing that claims 1–20 are unpatentable. Pursuant to 35 U.S.C. § 324, we authorize a post-grant review to be instituted as to claims 1–20 of the '888 patent.

A. The '888 patent

The '888 patent relates generally to genetic quality and relative market value of livestock. Ex. 1001, 1:21–23. The '888 patent further discloses the following:

> More specifically, embodiments of the present invention facilitate an owner or potential buyer of one or more sale groups of livestock to evaluate the relative market value of the sale groups based on predictions derived from genetic merit estimates of the herd.

Ex. 1001, 1:23–27. Ranchers invest significant amounts of money to build quality herds of livestock with desired genetic merits. Ex. 1001, 1:29–30. Most ranchers, however, are not able to realize an increased value for their livestock with desired genetic merits, and instead sell their annual livestock crops on the commodity market at or near average price for all livestock. Ex. 1001, 1:33–36. Therefore, according to the '888 patent, it is very important to determine what the actual value of the livestock is, and more specifically what premium or discount the livestock should command based on these desired genetic merits. Ex. 1001, 1:46–48.

B. Related Matters

Petitioner and Patent Owner identify the following reissue application involving the '888 patent: 14/516,353 ("the '353 application"). Pet. 1; Paper 9, 2[1]. Patent Owner identifies additionally the following related patents and patent applications: U.S. Patent No. 8,725,557 ("the '557 patent"); U.S. Patent Application No. 14/516,372 (re-issue of the '557 patent) ("the '372 application"); PCT/US2014/019775; U.S. Patent Application No. 14/226,236; and U.S. Patent Application No. 14/286,857. Paper 9, 2[2].

Petitioner and Patent Owner additionally assert that there are currently no pending district court proceedings concerning the '888 patent. Pet. 1; Paper 9, 3.

Petitioner also has filed a Petition for post-grant review of the '557 patent: PGR2015-00005.

C. Illustrative Claim

Independent claim 16 is reproduced below:

> 16. A computer-implemented method to determine relative market value of a sale group, the sale group including cattle that are fed and harvested for beef production, the method comprising:

[1] Patent Owner lists the '353 application as a reissue application for U.S. Patent No. 8,725,557. Petitioner, however, lists the '353 application as a reissue application of the '888 patent, and our independent analysis of public records confirms that Petitioner is correct. Accordingly, we treat Patent Owner's identification as an inadvertent, typographical error.

[2] Patent Owner lists the '372 application as a reissue application for the '888 patent. Based on Petitioner's representations concerning the '353 application and our own independent analysis of the relevant public records, however, we determine that the '372 application is a reissue application of the '557 patent. Accordingly, we treat Patent Owner's identification as an inadvertent, typographical error.

> determining, by one or more processors, a plurality of economic weighting factors responsive to a plurality of genetic merit estimates associated with the sale group and one or more economic outcomes;
>
> determining, by one or more processors, relative market value and ranking of the genetic merits of the sale group responsive to the plurality of genetic merit estimates and the plurality of economic weighting factors; and
>
> outputting to one or more electronic interfaces, positioned to display an online genetic merit scorecard to thereby define one or more genetic merit interfaces, the online genetic merit scorecard for the sale group responsive to determining the relative market value and the ranking of the genetic merits of the sale group, the online genetic merit scorecard including the relative market value and one or more rankings of genetic merits of the sale group being displayed on the one or more genetic merit interfaces.

D. The Alleged Grounds of Unpatentability

The information presented in the Petition sets forth Petitioner's contentions of unpatentability of claims 1–20 of the '888 patent based on the following specific grounds (Pet. 28–79):

Reference(s)	Basis	Challenged Claim(s)
	§ 101	1–20
the ASA system[3]	§ 102	1, 3, 4, 6–9, and 11–20

[3] Petitioner provides the following evidence in support of "the ASA system": Declaration of Dr. Michael MacNeil ("MacNeil Dec."; Ex. 1006); Declaration of Dr. Wade Shafer ("Shafer Dec."; Ex. 1007); ASA's 2005 Sire Summaries (Spring Edition) ("ASA 1"; Ex. 1008); Printout from ASA's Herdbook Services, 2009 ("ASA 2"; Ex. 1009); Printout from ASA's Herdbook Services, 2014 ("ASA 3"; Ex. 1010).

Reference(s)	Basis	Challenged Claim(s)
the ASA system and the Angus system[4]	§ 103	2 and 10
the ASA system and Goddard[5]	§ 103	5
Wang[6] and the Angus system	§ 103	1–4 and 6–20
Wang, the Angus system, and Goddard	§ 103	5

Petitioner also cites the Declaration of Dr. Matthew Spangler (Ex. 1016; "the Spangler Dec.").

E. Eligibility of Patent for Post-Grant Review

The post-grant review provisions of the Leahy-Smith America Invents Act ("AIA")[7] apply only to patents subject to the first inventor to file provisions of the AIA. AIA § 6(f)(2)(A). Specifically, the first inventor to file provisions apply to any application for patent, and to any patent issuing thereon, that contains or contained at any time a claim to a claimed invention that has an effective filing date on or after March 16, 2013. AIA § 3(n)(1). Furthermore, "[a] petition for a post-grant review may only be filed not later than the date that is 9 months after the

[4] Petitioner provides the following evidence in support of "the Angus system": Declaration of Ms. Ginette Kurtz ("Kurtz Dec."; Ex. 1011); Declaration of Dr. Dan Moser ("Moser Dec."; Ex. 1012); Printout from Angus's website, 2014 ("Angus 1"; Ex. 1013); Printout from AngusSource website, 2010 ("Angus 2"; Ex. 1014).
[5] "Selection Indices for Non-Linear Profit Functions," 1983; Theor. Appl. Genet. 64, 339-344 ("Goddard"; Ex. 1015).
[6] US 2007/0105107 A1, pub. May 10, 2007 ("Wang"; Ex. 1004).
[7] Pub L. No. 112-29, 125 Stat. 284 (2011).

date of the grant of the patent or of the issuance of a reissue patent (as the case may be)." 35 U.S.C. § 321(c); *see also* 37 C.F.R. § 42.202(a).

Petitioner asserts that the '888 patent is a first-to-file patent, and indicates that the earliest possible effective date of the '888 patent is April 13, 2013. Pet. 2–3. Petitioner asserts further that the instant Petition is being filed within nine months of the February 25, 2014 issue date of the '888 patent. Pet. 2–3.

II. ANALYSIS

We turn now to Petitioner's asserted grounds of unpatentability to determine whether Petitioner has met the threshold standard, under 35 U.S.C. § 324(a), for instituting review.

A. Claim Construction

As a step in our analysis for determining whether to institute a review, we determine the meaning of the claims for purposes of this Decision. In a post-grant review, a claim in an unexpired patent shall be given its broadest reasonable construction in light of the specification of the patent in which it appears. 37 C.F.R. § 42.200(b); *see also In re Cuozzo Speed Techs., LLC*, 778 F.3d 1271, 1281 (Fed. Cir. 2015) ("We conclude that Congress implicitly adopted the broadest reasonable interpretation standard in enacting the AIA.") Under the broadest reasonable construction standard, claim terms are given their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the context of the entire disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). However, a "claim term will not receive its ordinary meaning if the patentee acted as his own lexicographer and clearly set forth a definition of the disputed claim term in either the specification or prosecution history." *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002). We construe the terms below in accordance with these principles.

1. "relative market value"

Each of independent claims 1, 9, and 16 recite "relative market value." For example, independent claim 16 recites "determining, by one or more processors, relative market value and ranking of the genetic merits of the sale group responsive to the plurality of genetic merit estimates and the plurality of economic weighting factors." Petitioner proffers that "relative market value" should be construed as follows: "the value of the sale group as compared to the value of a baseline group." Pet. 12–13 (citing Ex. 1001, 19:25–34; Ex. 1016 ¶ 28). Patent Owner asserts that Petitioner's proffered construction is too narrow, and instead asserts that a proper construction is as follows: "the market value of a sale group as compared to the value of another known market group." Prelim. Resp. 12–13 (citing Ex. 1001, 19:25–30). The '888 patent discloses the following:

> The relative market value may be expressed in various ways. In one embodiment, the relative market value is a difference in market value per head of a sale group compared to the market value of a sale group that represents the average progeny of all registered bulls in the country or market region. In another embodiment, the relative market value is a difference in market value per centum weight of the sale group compared to the market value per centum of a sale group that represents the average progeny of all registered bulls in the country or market region.

Ex. 1001, 19: 25–34. As an initial matter, we do not discern that Petitioner's proffered construction is much different from that asserted by Patent Owner. Insofar as Patent Owner may be asserting the word "baseline" is overly limiting, we agree and construe "relative market value" as "the market value of a sale group as compared to the market value of any other market group."

2. "sale group including cattle that are fed and harvested for beef production"

Each of independent claims 1, 9, and 16 recite "sale group including cattle that are fed and harvested for beef production." For example, independent claim 16 recites "determining, by one or more processors, a plurality of economic weighting factors responsive to a plurality of genetic merit estimates associated with the sale group and one or more economic outcomes." Petitioner proffers that "sale group" should be construed as follows: "one or more animals." Pet. 13 (citing Ex. 1001, 11:5–6, 34–35). Patent Owner asserts that Petitioner's proffered construction is too broad, and instead asserts that a proper construction is as follows: a plurality of bovine "that are fed and harvested for beef production." Prelim. Resp. 17–18 (citing Ex. 1001, 27:48–50, 28: 20–27; Ex. 2001). On this record, we determine that each of Petitioner's and Patent Owner's assertions have some merit.

The Specification provides an explicit definition of "sale group" as follows: "[a]s used herein, a sale group is an animal or a plurality of animals for which a relative market value is determined." Ex. 1001, 11:5–6. This definition is confirmed throughout the rest of the paragraph within which the explicit definition appears, and indeed expressly includes "a single animal" within the explicit definition of "sale group." Ex. 1001, 11:34–35 ("[i]n certain embodiments, a sale group may comprise a single animal"). Accordingly, the explicit definition appears to comport with Petitioner's proffered construction.

Patent Owner proposes making two modifications to the explicit definition of "sale group": that it is limited to animals "fed and harvested for beef production"; and that it should exclude single animals. For both modifications, Patent Owner relies primarily on the following claim limitation recited in each of independent claims 1, 9, and 16: "the sale group including cattle that are fed and

harvested for beef production." We will examine each proposed modification in turn.

For the first proposed modification, procedurally and formalistically, we agree with Patent Owner that "sale group" should be limited to animals "fed and harvested for beef production," and thus, include it in our formal claim construction. As a substantive matter, however, we are unpersuaded, on this record, that "fed and harvested for beef production" limits "sale group" in any material way. Specifically, "fed and harvested for beef production" appears to be an intended use that all cattle would meet, as any cattle would appear to be capable of being "fed and harvested for beef production," no matter what purpose the cattle are actually used for.

For the second aspect, we are not persuaded that the recitation of "the sale group including cattle" evinces adequately an express intention in the claim itself to modify the explicit definition of "sale group" in the Specification to only include "cattle" to the exclusion of other animals. While Patent Owner does cite a dictionary that defines "cattle" as a plurality of "bovine animals on a farm or ranch," (Ex. 2001), each of independent claim 1, 9, and 16 recite "sale group ***including*** cattle that are fed and harvested for beef production." Emphasis added. The use of the word "including" indicates that "sale group" should be construed more broadly than "cattle," which would be consistent with explicit definition set forth in the Specification.

On this record, we construe "sale group including cattle that are fed and harvested for beef production" as "at least bovine animals fed and harvested for beef production."

3. Other Claim Terms

We determine that it is unnecessary to construe expressly other claim terms at this time.

B. Claims 1–20 as Failing to Recite Statutory Subject Matter

Petitioner contends that claims 1–20 fail to recite statutory subject matter under 35 U.S.C. § 101. Pet. 30–39 (citing Exs. 1001, 1006, 1008, 1016). Patent Owner disagrees. Prelim. Resp. 25–39 (citing Exs. 1001, 1006, 1008, 2005). Claims 1, 9, and 16 are independent.

1. Relevant Law

Under 35 U.S.C. § 101, an invention is patent-eligible if it claims a "new and useful process, machine, manufacture, or composition of matter." 35 U.S.C. § 101. The Supreme Court, however, has long interpreted § 101 to include implicit exceptions: "[l]aws of nature, natural phenomena, and abstract ideas" are not patentable. *See, e.g., Alice Corp. Pty Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2354 (2014).

In determining whether a claim falls within the excluded category of abstract ideas, we are guided in our analysis by the Supreme Court's two-step framework, described in *Mayo* and *Alice*. *Id.* at 2355 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1296–97 (2012)). In accordance with that framework, we first determine whether the claim is "directed to" a patent-ineligible abstract idea. *See Alice*, 134 S. Ct. at 2356 ("On their face, the claims before us are drawn to the concept of intermediated settlement, *i.e.*, the use of a third party to mitigate settlement risk"); *Bilski v. Kappos*, 130 S. Ct. 3218, 3231 (2009) ("Claims 1 and 4 in petitioners' application explain the basic concept of hedging, or protecting against risk"); *Diamond v. Diehr*, 450 U.S. 175, 184 (1981) ("Analyzing respondents' claims according to the above statements from our cases, we think

that a physical and chemical process for molding precision synthetic rubber products falls within the § 101 categories of possibly patentable subject matter"); *Parker v. Flook*, 437 U.S. 584, 594–595 (1978) ("Respondent's application simply provides a new and presumably better method for calculating alarm limit values"); *Gottschalk v. Benson*, 409 U.S. 63, 64 (1972) ("They claimed a method for converting binary-coded decimal (BCD) numerals into pure binary numerals").

The patent-ineligible side of the spectrum includes fundamental economic practices, *Alice*, 134 S. Ct. at 2357, *Bilski*, 130 S. Ct. at 3231; mathematical formulas, *Flook*, 437 U.S. at 594–95; and basic tools of scientific and technological work, *Benson*, 409 U.S. at 69. On the patent-eligible side of the spectrum are physical and chemical processes, such as curing rubber, *Diamond*, 450 U.S. at 184, "tanning, dyeing, making waterproof cloth, vulcanizing India rubber, smelting ores," and a process for manufacturing flour. *See Gottschalk*, 409 U.S. at 69 (internal citations omitted).

If the claim is "directed to" a patent-ineligible abstract idea, we then consider the elements of the claim—both individually and as an ordered combination—to assess whether the additional elements transform the nature of the claim into a patent-eligible application of the abstract idea. *Alice*, 134 S. Ct. at 2355. This is a search for an "inventive concept"—an element or combination of elements sufficient to ensure that the claim amounts to "significantly more" than the abstract idea itself. *Id.*

2. Whether Claims 1–20 Recite an Abstract Idea

Petitioner asserts that independent claims 1, 9, and 16 are directed to the fundamental concept of "determining an animal's relative economic value based on its genetic and physical traits," and that such a fundamental concept is a patent ineligible abstract idea. Pet. 31–34. Specifically, Petitioner asserts the following:

> Peeling back the flowery language of claims 1, 9, and 16, these claims essentially call for: (1) accepting inputted information regarding animal characteristics (or "genetic merit estimates"), (2) running a set of predetermined mathematical formulas using the inputted animal characteristics information to determine a monetary value of the animal, and (3) outputting the result of such formulas, including a ranking of certain of the animal's characteristics. These steps capture the fundamental principle of determining an animal's relative economic value based on its genetic and physical traits. (Spangler Dec., ¶ 54.)
>
> For centuries, farmers have judged the value of animals based on their physical traits and parentage. (Id. at ¶ 55.) Many decades ago, farmers began measuring the traits of animals and recording the collected data. (Id.) By creating algorithms for determining the relative value of animals based on the various measured traits, experts in this area long ago developed better valuation and breeding practices. (Id.) This concept is so fundamental and prevalent in today's market as to have become ubiquitous in the cattle industry. (Id.)

Pet. 31–32. Petitioner asserts further that none of dependent claims 2–8, 10–15, and 17–20 set forth any limitations that require deviation from the aforementioned fundamental concept.

Patent Owner counters that Petitioner has generalized overly the claimed invention, and that the claims of '888 patent are directed to "systems and methods of providing an online genetic merit scorecard that include the determined relative market value of a sale group of cattle that are fed and harvested for beef production and the ranking of genetic merits of the group," which are not abstract ideas. Specifically, Patent Owner asserts that express recitation of limitations in the claims such as "online genetic merit scorecard" and other computerized hardware support its position that the claims on their face bear no resemblance to the claims set forth in *Bilski* or *Alice*, and that the claimed online genetic merit scorecard is not a "fundamental practice with a long history," an "age-old idea," or a "basic tool

of research." Prelim. Resp. 26–31. On this record, we are persuaded by Petitioner's assertions.

We believe a proper evaluation of Petitioner's position vis-à-vis Patent Owner's position should begin with the claims themselves. Independent claims 1 and 9 each recite an "online genetic merit scorecard system." Independent claim 16 recites a "computer-implemented method to determine relative market value of a sale group." The body of independent claims 1, 9, and 16 each recite further limitations regarding the implementation of the aforementioned systems and methods. After consideration, we agree with Petitioner that the claims appear to be directed largely to applications of mathematical formulas and algorithms in the field of animal valuation, which would support Petitioner's proffered fundamental concept.

The Specification further supports Petitioner's argument. The "Field of the Invention" section set forth in the '888 patent reads as follows:

> Embodiments of the present invention relate generally to the field of genetic quality and relative market value of livestock. More specifically, embodiments of the present invention facilitate an owner or potential buyer of one or more sale groups of livestock to evaluate the relative market value of the sale groups based on predictions derived from genetic merit estimates of the herd.

Ex. 1001, 1:21–27. The "Description of Related Art" section that follows delves heavily into problems associated with determining what the actual value of the livestock is, and more specifically what premium or discount the livestock should command based on these desired genetic merits. Ex. 1001, 1:46–48. The first three sentences of the "Summary" section then read as follows:

> The Applicants recognize the importance of determining relative market value of a sale group or a group of animals offered for sale from a livestock operation. Various embodiments of methods and apparatus for determining relative market value of a sale group

> are provided herein. Exemplary embodiments of the present invention include an online genetic merit scorecard system.

Ex. 1001, 2:6–12. Based on the above cited portions of the '888 patent, we determine that the Specification supports heavily Petitioner's proposed fundamental concept. Indeed, until the last sentence set forth above, the Specification does not mention anything related to "online genetic merit scorecards" or computerized hardware, and even there, the Specification makes clear that the "online genetic scorecard system" is only an exemplary embodiment.

Given these disclosures, we are unpersuaded that Patent Owner's concerns regarding Petitioner's proposed fundamental concept have sufficient merit. For example, while we acknowledge that certain claims and preambles of the '888 patent recite an "online genetic merit scorecard" and other computerized hardware, we determine that, in light of the Specification, such recitations are merely features of an exemplary embodiment for implementing the fundamental concept identified by Petitioner. This analysis also is applicable to Patent Owner's assertion that all claims are potentially abstract ideas when over-generalized. The unambiguous disclosure in the Specification as to the nature of the invention indicates to us that Petitioner has not over-generalized here.

Given the fundamental concept of "determining an animal's relative economic value based on its genetic and physical traits," we are persuaded by Petitioner's assertion that this concept is a "'fundamental economic practice . . . long prevalent in our system of commerce,'" an "'a fundamentally necessary and decades old principle,'" or a "'building block of human ingenuity.'" Pet. 32. Our determination is supported by Dr. Spangler's representation that, among other factors, "valuing an animal based on its physical traits and lineage has been routine for centuries – likely millenia," a representation that, on this record, we find reasonable. Ex. 1016 ¶ 55. Given all this, we are persuaded that the

aforementioned fundamental concept is closely akin to the patent-ineligible abstract ideas of "hedging" found in *Bilski* and "intermediated settlement" found in *Alice*. Thus, on this record, we determine that claims 1–20 are directed to a patent-ineligible abstract idea.

3. Whether Claims 1–20 Recite "Significantly More"

Given that the claims are directed to an abstract idea, Petitioner asserts that the claims fail to recite an inventive concept that recites "significantly more" so as to transform the otherwise patent-ineligible abstract idea into patentable subject matter. Most significantly, Petitioner asserts that the claims merely recite generic computer hardware that is used in a conventional manner, which has been found in *Alice* and other decisions by our reviewing courts as insufficient to transform an otherwise patent-ineligible abstract idea into patentable subject matter. Pet. 34–39. Patent Owner disagrees for several reasons. Prelim. Resp. 31–39. On this record, we are persuaded by Petitioner.

Specifically, we agree with, and are persuaded by, Petitioner's assertions that all computer recitations in the challenged claims are recitations to generic computer hardware used in a conventional manner, which are insufficient to impart patentability under *Alice*. For example, independent claim 16 recites the following computer hardware: "computer-implemented method"; "one or more processors"; and "electronic interfaces"; "online." On this record, we are unable to ascertain how the claims use these and other items of computer hardware in a manner other than their conventional generic use. For example, the Specification recites the following concerning the "processor": "[t]he processor can be any *commercially available* terminal processor, or plurality of terminal processors, adapted for use in or with the computer **41** or system **401**." Ex. 1001, 29:16–18 (emphasis added). The balance of the paragraph then continues on to provide a seemingly exhaustive

list of processors that are suitable for use in the invention, providing a strong indication that any conventional generic processor is acceptable for use in the claimed invention. The Specification then continues on in a similar fashion concerning "computer," "non-transitory memory," and "interface," and discloses the following concerning the Internet: "the graphical user interface 51 can be an Internet website, accessible by a communications network . . . and one or more graphical user interface components *as known and understood by those skilled in the art*." Ex. 1001, 31:42–48 (emphasis added). There is no indication, either in the claims or the Specification, that any of the recited computer hardware is used in a manner other than their conventional generic use, and, thus, they are insufficient to impart patentability under *Alice*.

Patent Owner asserts that the claims of the '888 patent include sufficient limitations on a specific implementation of "animal valuation" that ensure that the claims do not preempt all "animal valuations," rendering inapplicable our reviewing courts' concerns regarding monopolization of abstract ideas. We disagree. We are not persuaded that preemption of "determining an animal's relative economic value based on its genetic and physical traits" on a generic computer is materially different from preemption of the abstract idea itself. *See Alice*, 134 S. Ct. at 2351.

Patent Owner asserts further that certain components recited in the claims are not generic, routine, or conventional, for example, "genetic merit database" and "online genetic merit scorecard." Specifically, Patent Owner asserts the following:

> For example, the specification describes an embodiment of the genetic merit database as containing several types of data such as genetic merit estimates, economic weighting factors, animal performance information, relatives' performance information, historical sales data, real-time market values, and EPD. ('888 Patent, col. 17, ll.11-27.) The specification also describes the Leachman database or the USDA-

> ARS database as example embodiments of sources for breed adjustment factors on EPDs. ('888 Patent, col. 37, ll. 15-17; col. 25, ll.26-27; col. 24, ll. 63-65.) None of these are "generic components" to perform processes in the claims.

Prelim. Resp. 33. Patent Owner's arguments are misplaced because, as Patent Owner's citations show, the aforementioned database stores data and identifies relationships between the data, which is the basic function of every database. Furthermore, we are not persuaded that the particular data stored in the database in any way alters the generic, conventional operation of the database itself. The same is true for the "online genetic merit scorecard." As best as we are able to ascertain, the "online scorecard" is like any online scorecard in that it displays information electronically. We are not persuaded that the particular information displayed on the online scorecard alters the generic, conventional operation of the online scorecard in any way.

Patent Owner asserts additionally that the claims in the '888 patent are like those in *Diehr*, because they solve a practical problem in a conventional industry in a technologically advanced manner. We disagree. The problem the '888 patent appears to solve is "determine what the actual value of the livestock is, and more specifically what premium or discount the livestock should command based on these desired genetic merits," which is not technological in manner. Ex. 1001, 1:46–48. The solution is the aforementioned abstract idea of "determining an animal's relative economic value based on its genetic and physical traits," which is also not technological in manner. The only portion of the solutions that could be considered "technological" is placing the determinations from the abstract idea online or the use of generic computer hardware to arrive at those determinations, and we are not persuaded that this alleged "technological solution" amounts to more than an instruction to take the aforementioned abstract idea and "apply it" on

a generic computer or to an online environment, a line of reasoning explicitly dismissed by the Supreme Court in *Alice* as insufficient to confer subject matter eligibility. *See Alice* 134 S. Ct. at 2358 ("[I]f a patent's recitation of a computer amounts to a mere instruction to 'implemen[t]' an abstract idea 'on . . . a computer,' that addition cannot impart patent eligibility.") (internal citations omitted)

4. Conclusion

For the foregoing reasons, we conclude, on this record, that it is more likely than not that Petitioner would prevail on the ground that claims 1–20 fail to recite statutory subject matter under 35 U.S.C. § 101.

C. Claims 1–4 and 6–20 as Obvious over Wang and the Angus System

Petitioner contends that claims 1–4 and 6–20 are obvious over Wang and the Angus system. Pet. 55–77 (citing Exs. 1004, 1011–1014, 1016). Patent Owner disagrees. Prelim. Resp. 65–72 (citing Exs. 1004, 1011–1014).

1. Wang (Ex. 1004)

Wang discloses "a method that allows for the input of pedigree, phenotypic, and molecular genetic metrics for a breeding population, provides for the concurrent and interdependent evaluation of these factors, for each animal (or plant), and then provides a ranking of the individuals in the population that enables optimal weighting of all sources of information to achieve the desired breeding goals." Ex. 1004 ¶ 6; *see also* Ex. 1004 ¶ 72. Wang discloses further that such methods may be implemented on a computer. Ex. 1004 ¶¶ 11, 14. The animals may include swine, cattle, goats, or any other animal that is raised commercially. Ex. 1004 ¶ 49. Animals are ranked and selected based on a selection index, where the selection index is a weighted sum of estimates of breeding value for different

economic traits, and the selection index for each animal is a relative value that may be expressed in biological or economic units. Ex. 1004 ¶ 67.

2. The Angus System

Ms. Kurtz declares that the American Angus Association is a beef registry association that provides a national cattle evaluation program that calculates and publishes genetic merit estimates for progeny of registered Angus animals in the form of Expected Progeny Differences ("EPDs") and various values ("$Value") that incorporate EPDs for multiple economically relevant traits, as well as market factors. Ex. 1011 ¶¶ 2–3. Ms. Kurtz declares further that EPDs and $Values for registered animals can be obtained through the website www.angus.org. Ex. 1011 ¶ 4. Ms. Kurtz declares that exemplary documentation obtainable from the aforementioned website is set forth in Exhibits 1013 and 1014. Ex. 1011 ¶ 4, 6. Although the printouts appear to have been generated recently, Ms. Kurtz declares that the layout and information-type set forth in Exhibit 1013 has been available online since November 25, 2009, and that the form, layout, and data set forth in Exhibit 1014 has been available online at least since March 10, 2010, the revision date listed on the face of Exhibit 1014. Ex. 1011 ¶¶ 4, 6. Exhibit 1013 discloses genetic characteristics of a particular animal, such as birth weight ("BW"), weaning weight ("WW"), carcass weight ("CW"), marbling ("Marb"), ribeye area ("RE"), and fat thickness ("Fat"), as well as percentile rankings for each of those genetic characteristics as compared to a general population of the particular animal. Ex. 1013, 2–3; Ex. 1011 ¶ 5. Exhibit 1014 discloses information similar to that set forth in Exhibit 1013, but for multiple animals. Ex. 1013, 2–3.

3. Analysis

Based on the information presented in the Petition and Preliminary Response, as well as all supporting evidence, we are persuaded that it is more

likely than not that Petitioner would prevail in showing that claims 1–4 and 6–20 are obvious over Wang and the Angus system. Pet. 55–77; Prelim. Resp. 65–72. For example, independent claim 16 recites "a computer-implemented method to determine relative market value of a sale group, the sale group including cattle that are fed and harvested for beef production." Petitioner cites Wang for disclosing methods implemented on a computer for determining a relative economic value of animals, including cattle. Pet. 68 (citing Ex. 1004 ¶¶ 11, 49, 67). Independent claim 16 recites further:

> determining, by one or more processors, a plurality of economic weighting factors responsive to a plurality of genetic merit estimates associated with the sale group and one or more economic outcomes;
>
> determining, by one or more processors, relative market value and ranking of the genetic merits of the sale group responsive to the plurality of genetic merit estimates and the plurality of economic weighting factors[.]

Petitioner cites Wang for disclosing ranking and selecting animals based on a selection index, where the selection index is a weighted sum of estimates of breeding value for different economic traits. Pet. 68–70 (citing Ex. 1004 ¶¶ 67, 72, 121). Independent claim 16 recites additionally outputting the aforementioned information on an online genetic merit scorecard. Petitioner cites the Angus system for disclosing the online genetic merit scorecard. Pet. 70–71 (citing Exs. 1013, 1014). Petitioner then provides the following rationale for modifying Wang to output its information on the online genetic scorecard of the Angus system:

> Combining the scorecards from the Angus System with the disclosure of Wang is merely a combination of prior art elements according to known methods to yield a predictable result. (Spangler Dec., ¶ 76.) Scorecards which display relative market value and rankings have long existed, as have systems which calculate and display the relative market value of one or more animals and the

> rankings thereof. (Id.) In this case, the predictable result of combining these two concepts is, essentially, what both Wang and the Angus System were designed to do. (Id.) As is evidence from the Angus System scorecard, displaying relative market value and rankings was a known technique for providing desired information to farmers, and improving the Wang reference's "output" of these values as shown by the Angus System's scorecard would have been obvious. (Id.·at ¶ 77.) Essentially, the Wang reference's system was "ready for improvement" via a simple use of a widely available scorecard format. (Id.) Utilizing the teachings of the Angus System in this manner amounts merely to a utilization of known work in the field of animal valuation, based on scorecard design incentives for providing helpful information to farmers. (Id.)
>
> The addition of a scorecard to the Wang reference's system would have been predictable to one of ordinary skill in the art, because "scorecards" are the type of output which other prior art systems have utilized. (Id. at ¶ 79.) Again, the rationale/motivation for making such modifications is merely to provide additional helpful information to farmers. (Id.) Thus, the Wang reference in view of the Angus System teaches each and every limitation of independent claims 1, 9, and 16, and it would have been obvious to combine such these references. (Id.)

Pet. 74–75. Petitioner provides similar analyses for claims 1–4, 6–15, and 17–20.

Patent Owner asserts that Petitioner's proffered qualifications of a person having abilities of ordinary skill in the relevant art is too high, and, thus, taints Petitioner's entire Petition to the point that the only proper remedy is to dismiss the Petition in its entirety. We disagree. Upon institution of trial, Patent Owner will have the opportunity to challenge both Petitioner's position and their underlying factual bases. In any case, we are unpersuaded that such alleged "over-qualification" alone is sufficient to outright dismiss a Petition in its entirety, especially where, in proceedings before the Office, the level of ordinary skill can be reflected in the prior art references themselves, in this case, Wang. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001).

Patent Owner asserts additionally that Wang is directed to determining a relative market value of animals, such as cattle, for *breeding purposes only*, which differs from the claimed invention, which requires determining a relative market value of "sale group including cattle *fed and harvested for beef production*." Patent Owner's assertions are misplaced. As set forth above in our claim construction of "sale group," we are not persuaded that the limitation "fed and harvested for beef production" materially limits "sale group." Thus, Wang's disclosure of cattle, even those allegedly for breeding purposes only, teaches a "sale group including cattle fed and harvested for beef production."

Patent Owner asserts further that Wang only discloses valuations for individual bovine animals, whereas the claims require valuation of a "sale group" including a plurality of bovine animals. At this stage and on this record, we are unpersuaded for several reasons. First, while Wang does disclose that a particular "selection index" is tailored to each individual animal, it also appears to be true that the particular "selection index" would be a valuation for all, and, thus, a plurality of, animals with the same economic traits. Second, Petitioner cites Wang for disclosing the following: "[a]s used herein the terms 'herd' and 'population' refer to any group of breeding animals having a sufficient number of animals for the effective use of the instant invention." Pet. 68 (citing Ex. 1004 ¶ 49). Other portions of Wang cited by Petitioner also refer to consideration of a plurality of animals. *See, e.g.*, Ex. 1004 ¶¶ 6, 11, 14, 72. It would appear to follow logically that it would have been within the abilities of one of ordinary skill, when considering Wang, to make a valuation of a plurality of animals, for example, by adding selection indices for two different animals.

Patent Owner asserts also the following:

> Additionally, the Angus System documents are not prior art. Petitioner cites Exhibits 1011 (Kurtz's declaration), 1012 (Moser's declaration), 1013 (Angus 1), and 1014 (Angus 2) as evidence that the Angus System provided online genetic merit scorecards to consumers within the scope of the claims prior to the effective date of the '888 Patent. Because each of the Angus System documents either fails to predate the effective date of the '888 Patent, fails to enable one skilled in the art to reconstruct the claimed limitations, or was not otherwise publically available, Petitioner cannot establish that the Angus System is prior art.

Prelim. Resp. 69. On this record, we are persuaded that Petitioner has shown sufficiently that the Angus system is prior art. Specifically, we are persuaded that Petitioner has provided sufficient evidence to corroborate the Declarants' testimony under a "rule of reason" framework. *Cf. Fleming v. Escort Inc.*, 774 F.3d 1371, 1376–77 (Fed. Cir. 2014) (citing *Sandt Tech., Ltd. v. Resco Metal & Plastics Corp.*, 264 F.3d 1344, 1350 (Fed. Cir .2001)) (in an analogous priority of invention context, oral testimony and corroborative evidence is "evaluated under 'the rule of reason,' whereby 'all pertinent evidence is examined in order to determine whether the [declarant's] story is credible'"); *Cooper v. Goldfarb*, 154 F.3d 1321, 1331 (Fed. Cir. 1998) (citation and internal quotation marks omitted) (in an analogous reduction to practice context, "[t]he law does not impose an impossible standard of independence on corroborative evidence by requiring that every point of a reduction to practice be corroborated by evidence having a source totally independent of the inventor; indeed, such a standard is the antithesis of the rule of reason.")

As an initial matter, the basics of the Angus system are attested to by the Declarations of Ms. Kurtz and Dr. Moser. Ex. 1011; Ex. 1012. Both Ms. Kurtz and Dr. Moser declare that they are affiliated with the American Angus Association, and the American Angus Association does not, at least facially,

appear to be related to the real party-in-interest for Petitioner, the American Simmental Association. Pet. 1; Ex. 1011 ¶ 1; Ex. 1012 ¶ 1. Accordingly, on this record, Ms. Kurtz and Dr. Moser appear to be disinterested third parties, and, thus, we determine that this factor weighs in support of Petitioner's assertions, when evaluating the corroboration of the Declarants' testimony under a "rule of reason" analysis. *See Finnigan Corp. v. Int'l Trade Comm'n*, 180 F.3d 1354, 1369 (Fed. Cir. 1999) ("the level of interest of the testifying witness is an important consideration when such testimony is offered to corroborate another witness's testimony.")

Of course, even testimony of disinterested parties requires corroboration. *See Finnigan Corp.*, 180 F.3d at 1369 ("corroboration is required of any witness whose testimony alone is asserted to invalidate a patent, regardless of his or her level of interest.") To that end, Petitioners have provided Exhibits 1013 and 1014 to corroborate the content of the Declarations of Ms. Kurtz and Dr. Moser, each of which we examine in turn. We begin with Exhibit 1013, and note that the only date listed is October 21, 2014, which is after the filing date of the '888 patent. Accordingly, we determine that Exhibit 1013 is weak corroborative evidence of Ms. Kurtz's testimony that the content of Exhibit 1013 was available since November 25, 2009, or prior to the filing date of the '888 patent. Ex. 1011 ¶ 4. Such is not the case, however, for Exhibit 1014. Exhibit 1014 includes several dates, of which the most relevant are a revision date of March 10, 2010, and an indication that information listed in the document is for "[c]attle to be sold 06/08/2011." We determine, on this record, that when considered in combination with the Declarations of Ms. Kurtz and Dr. Moser, Exhibit 1014 provides strong corroborative evidence that the document and the information it contains was

available online at least as early as June 8, 2011, which is before every probable effective date listed on the front of the '888 patent.

Patent Owner asserts that Exhibit 1013 is insufficient evidence to establish that the Angus system was prior art because the document was produced in 2014, after the effective date of the '888 patent, and the only evidence that a similar document was available earlier is the uncorroborated testimony of Ms. Kurtz. In support of its position, Patent Owner cites *Woodland Trust v. Flowertree Nursery, Inc.*, 148 F.3d 1368, 1371 (Fed. Cir. 1998). We are not persuaded because, as set forth above, when all the evidence, and not just Exhibit 1013 in isolation, is considered in its entirety under a "rule of reason" analysis, we are persuaded Petitioner has established sufficiently the Angus system as prior art, at least with respect to the "online genetic merit scorecard."

Moreover, *Woodland Trust* can be distinguished in several respects. First, unlike *Woodland Trust*, on this record, Ms. Kurtz does not appear to be associated with Petitioner. Second, Exhibit 1013 is corroborative evidence. As noted above, we acknowledge that it appears to be weak corroborative evidence of what was available in 2009, but, nevertheless, it is corroborative evidence. Third, we do not consider Exhibit 1013 in isolation, but in conjunction with Declarations of Ms. Kurtz and Dr. Moser, as well as Exhibit 1014, which provide additional indicia of reliability.

Patent Owner asserts further that Exhibit 1014 is insufficient evidence to establish that the Angus system was prior art, because the totality of evidence does not enable one of ordinary skill in the art to generate the information listed in Exhibit 1014. Specifically, Patent Owner asserts the following:

> Angus 2 (Ex. 1014) is also insufficient evidence that the Angus System is prior art because Angus 2 (alone and in combination with Wang and Kurtz's declaration) fails to enable one skilled in the art to

> generate the claimed online genetic merit scorecard as alleged in the Petition. A person of ordinary skill in the art could not take Angus 2, alone or in combination with Kurtz's declaration and Wang, and reconstruct a system that generates an online genetic metric scorecard that includes the relative market value of a sale group that includes cattle that are fed and harvested for beef production and the rankings of genetic merits of the sale group. For example, Kurtz's declaration does not explain how any of the $W, $F, $G, $QG, or $YG values illustrated in Angus 2 are calculated or what any of these values represent. (*See* Ex. 1011, ¶ 6.) Kurtz's declaration also does not state that one skilled in the art at the time of the claimed invention would readily understand how those values were calculated or what they represent. The Wang reference similarly fails to mention $W, $F, $G, $QG, or $YG, values thus, Wang in combination with Angus 2 fails to enable a person of ordinary skill in the art to generate an online genetic merit scorecard within the scope of the claimed invention.

Prelim. Resp. 71. On this record, we are not persuaded by Patent Owner's assertions. Petitioner cites Wang for enabling one of ordinary skill to generate the underlying information set forth in the online genetic merit scorecard, and then cites Exhibit 1014 only for the online scorecard itself, i.e., a format or layout for displaying the underlying information calculated in Wang. We are unpersuaded, on this record, that such a combination would not have been within the abilities of one of ordinary skill. Regarding Patent Owner's assertions concerning "$W, $F, $G, $QG, or $YG," Ms. Kurtz discusses at paragraph 5 of her Declaration some of the abbreviations in Exhibits 1013 and 1014. *See also* Ex. 1014 ¶¶ 3–4. We are unclear as to how the failure to discuss all abbreviations indicates that the proffered combination would have been beyond the abilities of one of ordinary skill.

Patent Owner asserts additionally that Petitioner has not provided an articulated reasoning with some rational underpinning for the obviousness combination for industry segments as divergent as breeding cattle for progeny and cattle being fed and harvested for beef production. We are not persuaded. As an

initial matter, we note that Petitioner has set forth, at this stage of the proceeding, an adequate rationale for combining Wang and the Angus system at pages 74 and 75 of the Petition, which is supported by the testimony of Dr. Spangler. Ex. 1016 ¶¶ 76–78. Moreover, as set forth above in our claim construction of "sale group," we are not persuaded, on this record, that "breeding cattle for progeny" and "cattle being fed and harvested for beef production" is a substantively material distinction.

4. Conclusion

For the foregoing reasons, we conclude, on this record, that it is more likely than not that Petitioner would prevail on the ground that claims 1–4 and 6–20 are unpatentable over Wang and the Angus system.

D. Dependent Claim 5 as Obvious over Wang, the Angus System, and Goddard

Petitioner contends that dependent claim 5 is obvious over Wang, the Angus system, and Goddard. Pet. 77–79 (citing Exs. 1004, 1015, 1016). Patent Owner disagrees. Prelim. Resp. 62–65, 72–73 (citing Exs. 1015). Claim 5 recites "determining relative market value for the sale group responsive to receiving the plurality of genetic merit estimates by use of one or more multivariate non-linear regression equations based on the plurality of genetic merit estimates." Petitioner relies on Wang and the Angus system for all of the claim limitations, except for "use of one or more multivariate non-linear regression equations." For that, Petitioner relies on page 339 of Goddard, and provides a rationale to combine. Pet. 78–79 (citing Ex. 1015, 2). Patent Owner largely repeats the same assertions set forth above for the underlying combination of Wang and the Angus system. Our analysis of those assertions are the same as set forth above, and need not be repeated here.

Patent Owner further asserts that Goddard is not directed to non-linear regression equations for "cattle being fed and harvested for beef production." Patent Owner's assertions are misplaced, as Petitioner cites Wang for "cattle being fed and harvested for beef production." Furthermore, we are unclear why the non-linear regression equations of Goddard could not be applied to any generic data set, for example, the "cattle being fed and harvested for beef production" in Wang.

Patent Owner asserts additionally that Goddard teaches away from the claimed invention because Goddard discloses that the best methodology for selecting animals for breeding purposes, such as that in Wang, is linear systems, and not non-linear systems for market value estimation, as claimed. We are not persuaded, as Goddard discloses making profit estimations using non-linear functions and, on this record, we are unable to discern a substantive unobvious difference between "profit estimations" and "market value estimations."

For the foregoing reasons, we conclude, on this record, that it is more likely than not that Petitioner would prevail on the ground that claim 5 is unpatentable over Wang, the Angus system, and Goddard.

E. Claims 1, 3, 4, 6–9, and 11–20 as Anticipated by the ASA system

Petitioner contends that claims 1, 3, 4, 6–9, and 11–20 are anticipated by the ASA system. Pet. 39–51 (citing Exs. 1006–1010). Patent Owner disagrees. Prelim. Resp. 39–58 (citing Exs. 1006–1010).

1. The ASA System

Dr. MacNeil declares that he assisted in the creating Petitioner's Genetic Evaluation System that has been calculating selection indices and genetic merit estimates for cattle since approximately 2005. Ex. 1006 ¶¶ 6, 11. For support, Dr. MacNeil provides and refers to ASA 1. Ex. 1006 ¶¶ 7, 11–13, 17–19; Ex. 1008. Dr. Shafer declares that he is an Executive Vice President of Petitioner, and has

worked with Dr. MacNeil since 2004 to develop economic selection indexes to predict the relative economic merit of the millions of animals in Petitioner's database. Ex. 1007 ¶¶ 1, 3. For support, Dr. Shafer provides and refers to ASA 1, ASA 2, and ASA 3. Ex. 1006 ¶¶ 4–6; Exs. 1008–1010. ASA 1 is a publication titled "2005 Sire Summary." Ex. 1008. ASA 2 is a printout of a website with a printout date of 2009 in the bottom right corner. Ex. 1009. ASA 3 is a printout of a website with a printout date of May 7, 2014 in the upper left corner. Ex. 1010. ASA 3 discloses online rankings of genetic merits. ASA 1 and ASA 2 do not disclose online rankings of genetic merits.

2. Analysis

Based on the information presented in the Petition and Preliminary Response, as well as all supporting evidence, we are not persuaded that it is more likely than not that Petitioner would prevail in showing that claims 1, 3, 4, 6–9, and 11–20 are anticipated by the ASA system. Pet. 39–51; Prelim. Resp. 39–58. Specifically, independent claim 16 recites "outputting to one or more electronic interfaces, positioned to display an online genetic merit scorecard . . . the online genetic merit scorecard including the relative market value and one or more rankings of genetic merits of the sale group being displayed on the one or more genetic merit interfaces." Independent claims 1 and 9 recite similar limitations. Patent Owner asserts that Petitioner has not shown adequately that the ASA system included structure corresponding to the aforementioned claim limitation prior to 2014, i.e., before the effective filing date of the '888 patent. We agree. Petitioner cites paragraph 13 of Dr. MacNeil's Declaration, as well as ASA 1, ASA 2, and ASA 3 as disclosing the aforementioned claim limitation. Pet. 47; *see also* Pet. 41, 44. Paragraph 13 of Dr. MacNeil's Declaration reads as follows:

> In order to calculate TI and API, the ASA System uses EPD data gathered from numerous animals which is stored in a database in electronic memory. Since 2005, to calculate TI and API, each EPD utilized in determining the value of an animal has been weighted, and then the weighted EPD values have been added together. A given weighting factor is specific to a given EPD used in that particular value calculation, and is also stored in electronic memory. When a user of the ASA System selects an animal, computer processors utilized by the electronic system calculate the weighting factors for the EPDs used. Thus, both the EPDs and their unique weighting factors are used to calculate the relative market value of the animal. The result is the overall EPD of the animal in the form of TI and API (as opposed to the EPD for a given trait). The ASA System then outputs the various EPDs used and TI and API dollar indexes (i.e., relative market value). As can be seen in ASA 1, rankings of the EPDs used and calculated indexes are also calculated and displayed.

Ex. 1006 ¶ 13. While the aforementioned paragraph does assert that rankings are output from a processor, they do not assert that the rankings were output online as an "online genetic merit scorecard," as required by the claims. The aforementioned paragraph does refer to ASA 1, which does disclose rankings. However, although Dr. Shafer declares that ASA 1 was published and publicly available in 2005 (Ex. 1007 ¶ 4), Petitioner has not shown in the Petition, nor are we able to verify from ASA 1 itself, that the rankings in ASA 1 were disclosed online as an "online genetic merit scorecard," as required by the claims. Petitioner does additionally cite ASA 2 and ASA 3. ASA 2 does appear to be an "online genetic merit scorecard," however, we are not persuaded that ASA 2 includes a ranking, as required by the claims. ASA 3 does disclose an "online genetic merit scorecard" including a ranking, however, ASA 3 is dated 2014.

Dr. Shafer does declare the following concerning ASA 3:

> The combination of EPDs, economic indexes and rankings have been available in this exact format since at least August of 2012. Of course, the data itself shown in the scorecard is subject to change on

> individual animals from time to time, due to EPDs and associated accuracies changing as more information is acquired for an animal. The economic indexes may also change over time, due to changes in genetic (EPDs) and/or economic (e.g., prices and costs) parameters. However, the types of data shown in ASA 3 have been available in exactly that format since 2012.

Ex. 1007 ¶ 6. Petitioner asserts that ASA 3, even though it has a printout date of 2014, is evidence sufficiently corroborative of Dr. Shafer's testimony that the format of ASA 3 was available as of August of 2012. We disagree. Dr. Shafer is an Executive Vice President of Petitioner. Accordingly, given that Dr. Shafer is an interested party, we determine that a 2014 printout of ASA 3 is insufficient corroborative evidence to establish that the layout of ASA 3 was available as of August of 2012.

Additionally, if we were to weigh all of the aforementioned evidence in a light most favorable to Petitioner, one could make the argument that the totality of evidence supports the fact that the ASA system disclosed the "online genetic merit scorecard" including ranking as early as 2012. Specifically, one could assert that ASA 1 shows that the ASA system outputted ranking information as early as 2005, ASA 2 shows that the ASA system outputted an "online genetic merit scorecard" as early as 2009, and given the accompanying testimony of Dr. MacNeil and Dr. Shafer, as well as ASA 3, one could reasonably conclude that it is not a large leap in logic to believe that the ranking information of ASA 1 (2005) could have been outputted in the general format of ASA 2 (2009), as shown in ASA 3 (2014), in 2012. We are not persuaded, however, because we determine that the above analysis requires the acceptance of a level of speculation that is incongruent with a determination that the ASA system is an anticipatory reference that discloses every limitation, and specifically, the "online genetic merit scorecard" including ranking information. Among the factors that weigh against Petitioner include the fact that

both Dr. MacNeil and Dr. Shafer are interested parties, and none of ASA 1, ASA 2, and ASA 3 include an express disclosure of an "online genetic merit scorecard" including ranking information in 2012.

3. Conclusion

For the foregoing reasons, we conclude, that Petitioner has not shown it is more likely than not that claims 1, 3, 4, 6–9, and 11–20 are anticipated by the ASA system.

F. Dependent Claims 2, 5, and 10 as Obvious over the ASA System, the Angus system, and Goddard

Petitioner contends that dependent claims 2 and 10 are obvious over the ASA system and the Angus system, and that dependent claim 5 is obvious over the ASA system and Goddard. Pet. 51–55. In view of the grounds on which we have determined to institute a post-grant review of those claims, we exercise our discretion not to institute a review on those additional grounds. *See* 37 C.F.R. § 42.208(a).

G. Conclusion

On this record, we are persuaded that it is more likely than not that Petitioner would prevail in showing that claims 1–20 of the '888 patent are unpatentable. The Board has not made a final determination concerning patentability of any of the challenged claims.

III. ORDERS

After due consideration of the record before us, and for the foregoing reasons, it is:

ORDERED that pursuant to 35 U.S.C. § 324, a post-grant review is hereby instituted as to claims 1–20 of the '888 patent on the following grounds of unpatentability:

A. Claims 1–20 under 35 U.S.C. § 101 for failing to be directed to statutory subject matter;

B. Claims 1–4 and 6–20 under 35 U.S.C. § 103(a) as unpatentable over Wang and the Angus system; and

C. Claim 5 under 35 U.S.C. § 103(a) as unpatentable over Wang, the Angus system, and Goddard.

FURTHER ORDERED that all other grounds raised in the Petition are *denied* for the reasons discussed above; and

FURTHER ORDERED that pursuant to 35 U.S.C. § 324(a), post-grant review of the ’888 patent is hereby instituted commencing on the entry date of this Order, and pursuant to 35 U.S.C. § 324(d) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial.

PETITIONER:

Dan Cohn
Dan.cohn@huschblackwell.com

Samuel Digirolamo
Samuel.digirolamo@huschblackwell.com

Mike Annis
Mike.Annis@huschblackwell.com

PATENT OWNER:

Jeffrey Whittle
Jeffrey.whittle@hoganlovells.com

Celine Crowson
Celine.crowson@hoganlovells.com

Joseph Raffetto
Joseph.raffetto@hoganlovells.com