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Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.
14/146,038 01/02/2014 Thomas Y. Ng 5013899.104US1 5117

128836 7590 11/13/2018
WOMBLE BOND DICKINSON (US) LLP
Attn: IP Docketing
P.O. Box 7037
Atlanta, GA 30357-0037

EXAMINER

ULLAH, ARIF

ART UNIT PAPER NUMBER

3683

NOTIFICATION DATE DELIVERY MODE

11/13/2018

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte THOMAS Y. NG, SOOK K. KIM, DIRK B. SHAFFRON,
ZAYNAL A. PHAM, DENNIS C. JOHNSON,
JEFFREY W. CANADY, and JENNIFER J. PAINTER

Appeal 2017-007331
Application 14/146,038
Technology Center 3600

Before JOHN A. JEFFERY, DENISE M. POTHIER, and
JUSTIN BUSCH, *Administrative Patent Judges*.

JEFFERY, *Administrative Patent Judge*.

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134(a), Appellants¹ appeal from the Examiner's decision to reject claims 1–21, which constitute all the claims pending in this application. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

¹ Appellants identify the real party in interest as The Boeing Company. App. Br. 1.

STATEMENT OF THE CASE

Appellants' invention assesses a supplier's technical risks to a product's design, development, and manufacturing. Spec. ¶ 1. A product storage stores characteristic elements applicable to the product, and a technical-profile storage stores technical-profile elements applicable to the supplier. *Id.* ¶ 8. A technical risk assessment of the supplier for the product is generated that includes risk factors relating to one or more of the characteristic elements and technical-profile elements. *Id.* ¶ 9.

Claim 1 is illustrative:

1. An apparatus comprising a processor and a memory storing executable instructions that, in response to execution by the processor, cause the apparatus to at least:
 - receive input identifying a particular product and a particular manufacturing supplier for a design, development or manufacturing program;
 - identify respective characteristic elements for the particular product from a product storage configured to store characteristic elements applicable to one or more products including the particular product, at least some of the characteristic elements relating to technological maturity, complexity, criticality to the program or its on-time delivery, or availability of one or more alternative products;
 - identify respective technical-profile elements for the particular manufacturing supplier from a technical-profile storage configured to store technical-profile elements applicable to one or more manufacturing suppliers including the particular manufacturing supplier, at least some of the technical-profile elements relating to technical performance, infrastructure, organizational structure, sub-tier management, domicile, cooperation, communication, risk management, ability to work with an integrated schedule, or control of a key technology;
 - receive assignment of quantitative risk ratings to the respective characteristic elements and the respective technical-profile elements based on applicability of the respective

characteristic elements to the particular product and the particular manufacturing supplier; and

generate a technical risk assessment of the particular manufacturing supplier for the particular product, the technical risk assessment including a plurality of risk factors each of which is related to one or more characteristic elements and technical-profile elements,

wherein the apparatus being caused to generate the technical risk assessment includes being caused to receive assignment of quantitative parameters and calculate risk scores for respective risk factors, and wherein for each risk factor, the quantitative parameters include a likelihood and a consequence, and the risk score is calculated as a function of the quantitative parameters for the risk factor, and the quantitative risk ratings assigned to the one or more characteristic elements and technical-profile elements related to the risk factor.

THE REJECTIONS

The Examiner rejected claims 1–21 under 35 U.S.C. § 101 as directed to ineligible subject matter. Final Act. 10–18.²

The Examiner rejected claims 1–3, 6, 8–10, 13, 15–17, and 20 under 35 U.S.C. § 103 as being unpatentable over Stenger (US 2008/0140514 A1; June 12, 2008) and Thuve et al. (US 2007/0203912 A1; Aug. 30, 2007). Final Act. 18–31.³

² Throughout this opinion, we refer to (1) the Final Rejection mailed Aug. 9, 2016 (“Final Act.”); (2) the Appeal Brief filed Nov. 14, 2016 (“App. Br.”); (3) the Examiner’s Answer mailed Mar. 9, 2017 (“Ans.”); and (4) the Reply Brief filed Apr. 12, 2017.

³ In the header for this rejection, the Examiner mistakenly refers to the rejection as being *anticipated* by Stenger and Thuve. Final Act. 18. Such language, however, is indicative of an *anticipation* rejection under 35 U.S.C. § 102. See MANUAL OF PATENT EXAMINING PROCEDURE (MPEP) (9th ed. Rev. 08.2017, Jan. 2018) § 706.02(V) (noting that “[t]he distinction between

The Examiner rejected claims 4, 5, 11, 12, 18, and 19 under 35 U.S.C. § 103⁴ as being unpatentable over Stenger, Thuve, and Jeffries (US 2004/0078098 A1; Apr. 22, 2004). Final Act. 31–35.

The Examiner rejected claims 7, 14, and 21 under 35 U.S.C. § 103 as being unpatentable over Stenger, Thuve, and Angell et al. (US 2008/0249793 A1; Oct. 9, 2008). Final Act. 35–37.

THE INELIGIBILITY REJECTION

The Examiner finds the claims are directed to an abstract idea, namely collecting data and assessing risk. Final Act. 3. According to the Examiner, although the recited limitations are analogous to the claims our reviewing court found abstract in *Digitech Image Technologies, LLC v. Electronics for Imaging, Inc.*, 758 F.3d 1344 (Fed. Cir. 2014) (Final Act. 2–3), the abstract idea found in *Digitech* is merely one such example. Ans. 4. The Examiner adds that the claimed elements do not add significantly more to the abstract idea to render the claimed invention patent-eligible because, among other

rejections based on 35 U.S.C. 102 and those based on 35 U.S.C. 103 should be kept in mind. Under the former, the claim is *anticipated* by the reference,” emphasis added). Despite this inconsistency, we nonetheless presume that the Examiner intended to reject claims 1–3, 6, 8–10, 13, 15–17, and 20 as obvious over Stenger and Thuve, particularly in view of the Examiner (1) citing § 103 in the rejection’s header, and (2) acknowledging that Stenger lacks certain recited limitations. *See* Final Act. 18, 26.

Accordingly, we treat the Examiner’s error in this regard as harmless.

⁴ Despite the Examiner acknowledging Appellants’ application is examined under the first inventor to file provisions of the Leahy-Smith America Invents Act (AIA) (Final Act. 2), the Examiner mistakenly refers to the § 103 rejection as being under § 103(a) in the header for this rejection (*id.* at 18). We, therefore, present the correct statutory basis here for clarity, and treat the Examiner’s error in this regard as harmless

things, the recited steps (1) do not improve another technology or technical field, (2) do not improve computer functionality, and (3) recite that which is well-understood, routine, and conventional in the field. Final Act. 14.

Based on these findings, the Examiner concludes that the claims are ineligible under § 101. *See id.* at 10–15.

Appellants argue, among other things, that the claims are neither analogous to those of *Digitech* nor capable of mental performance. App. Br. 8; Reply Br. 3–4. Appellants add that, even if the claimed invention was directed to an abstract idea, the claims recite additional elements that add significantly more to the abstract idea by, among other things, improving computer-aided quantitative risk assessment—a technology or technical field. App. Br. 9; Reply Br. 4.

ISSUE

Has the Examiner erred in rejecting claims 1–21 by concluding that they are directed to ineligible subject matter under § 101? This issue turns on whether the claimed invention is directed to a patent-ineligible abstract idea and, if so, whether the claim’s elements—considered individually and as an ordered combination—transform the nature of the claim into a patent-eligible application of that abstract idea.

ANALYSIS

To determine whether claims are patent eligible under § 101, we apply the Supreme Court’s two-step test articulated in *Alice Corp. Proprietary Ltd. v. CLS Bank International*, 134 S. Ct. 2347 (2014). First, we determine whether the claims are directed to a patent-ineligible concept: laws of nature,

natural phenomena, and abstract ideas. *Id.* at 2354–55. If so, we then proceed to the second step and examine the claim’s elements—both individually and as an ordered combination—to determine whether the claim contains an “inventive concept” sufficient to transform the claimed abstract idea into a patent-eligible application. *Id.* at 2357.

Alice Step One

Appellants argue the claims as a group. *See* App. Br. 7–9. We select independent claim 1 as representative of this group, and remaining claims 2–21 stand or fall with claim 1. 37 C.F.R. § 41.37(c)(1)(iv).

Applying *Alice* step one, we agree with the Examiner that the claimed invention is directed to collecting data and assessing risk. Final Act. 10; Ans. 4. Independent claim 1 recites four key apparatus functions—(A) identifying characteristic elements for a product and technical-profile elements for a manufacturing supplier, (B) receiving assignments of quantitative risk ratings to the characteristic elements and technical-profile elements, (C) receiving assignment of quantitative parameters and calculating a risk score as a function of the quantitative parameters, and (D) generating a technical risk assessment of the manufacturing supplier that includes the risk factor. At a high level of abstraction, claim 1 as a whole is directed to collecting data and assessing risk, albeit recited more narrowly with respect to generating a supplier’s technical risk assessment based on identified elements of a product and the supplier. *See Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1240–41 (Fed. Cir. 2016) (noting that an abstract idea can generally be described at different levels of abstraction).

Notably, similar concepts were found abstract by the Federal Circuit. *See Amdocs (Isr.) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1294 (Fed. Cir. 2016); *see also Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1334–35 (Fed. Cir. 2016). In that regard, assessing risk of collected data, or risk management, “is an economic practice long prevalent in our system of commerce and squarely within the realm of abstract ideas.” *See Int’l Sec. Exch., LLC v. Chi. Bd. Options Exch., Inc.*, CBM2013-00050, 2015 WL 930204, at *6 (PTAB Mar. 2, 2015), *aff’d*, 640 F. App’x 986 (Mem) (Fed. Cir. 2016); *see also Bilski v. Kappos*, 561 U.S. 593, 594 (2010) (noting that risk hedging is a fundamental economic practice long prevalent in our system of commerce); *Alice*, 134 S. Ct. at 2356 (same for intermediated settlement, or using a third party to mitigate settlement risk); *In re Chorna*, 656 Fed. App’x. 1016 (Fed. Cir. 2016) (unpublished) (describing financial instruments designed to protect against the risk of investing in financial instruments the very same economic practices deemed patent-ineligible in *Bilski* and *Alice*); *Clarilogic, Inc. v. FormFree Holdings Corp.*, 681 F. App’x 950 (2017) (unpublished) (holding ineligible claims reciting computer-implemented method for providing data indicating financial risk about an individual).

Furthermore, it is well settled that collecting information is within the realm of abstract ideas—even when the information is limited to particular content. *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016). It is also well settled that analyzing information by steps people go through in their minds, or by mathematical algorithms, without more, are essentially mental processes within the abstract idea category. *Id.* at 1354. And merely presenting the results of abstract processes of collecting and

analyzing information, without more (such as identifying a particular tool for presentation), is abstract as an ancillary part of such collection and analysis.

Id.

Similar to the claims at issue in *Electric Power*, the claimed invention here (1) gathers information (a product, a manufacturing supplier, characteristic elements, technical-profile elements, assignments of quantitative risk ratings, and assignment of quantitative parameters in the above-noted functions (A), (B), and (C)); (2) analyzes it (calculating a risk score in function (C)); and (3) displays the results of the gathering and analysis (a technical risk assessment in function (D)) of a specified content, but does not use any particular inventive technology for performing those functions. That the information pertains to technical risk assessment of a supplier is of no consequence here, for collecting and analyzing such information does not make the collection and analysis non-abstract. *See SAP Am., Inc. v. Investpic, LLC*, 890 F.3d 1016, 1021 (Fed. Cir. 2018), *modified on reh'g* (Fed. Cir. Aug. 2, 2018).

Although claim 1 recites an apparatus that performs the various recited functions upon processor execution, a human can otherwise use pen and paper to perform these functions—a fact that only further weighs against eligibility. *See CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1372–73 (Fed. Cir. 2011); *see also Gottschalk v. Benson*, 409 U.S. 63, 67 (1972). To the extent that Appellants contend that the recited functions could not otherwise be performed manually (*see* App. Br. 8; Reply Br. 3–4), there is no persuasive evidence on this record to substantiate such a contention.

Accordingly, we agree with the Examiner that claim 1 is directed to an abstract idea.

Alice Step Two

Turning to *Alice* step two, the recited elements—considered individually and as an ordered combination—do not transform the nature of claim 1 into a patent-eligible application of the abstract idea to ensure that the claim amounts to significantly more than that idea. *See Alice*, 134 S. Ct. at 2357.

That the recited apparatus comprises a processor and a memory storing executable instructions that, in response to execution by the processor, causes the apparatus to at least perform functions (A)–(D) does not change our conclusion, for these elements do not add significantly more to the abstract idea. First, the claimed invention uses generic computing components to perform the recited abstract idea, namely collecting data and assessing risk. But merely reciting generic computing components cannot transform a patent-ineligible abstract idea into a patent-eligible invention. *See Alice*, 134 S. Ct. at 2358–59; *see also Mortg. Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d 1314, 1324–25 (Fed. Cir. 2016) (noting that components such as an “interface,” “network,” and “database” are generic computer components that do not satisfy the inventive concept requirement); *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014) (“That a computer receives and sends the information over a network—with no further specification—is not even arguably inventive.”).

Appellants' reliance on Wikipedia in this regard (App. Br. 9) is unavailing, for this non-peer-reviewed source has limited probative value.⁵ Appellants' reliance on *Diamond v. Diehr*, 450 U.S. 175 (1981) and argument that the claims improve an existing technological process is likewise unavailing. App. Br. 9; Reply Br. 4. In *Diehr*, “[t]he claimed invention [was] a process for molding raw, uncured synthetic rubber into cured precision products.” *Diehr*, 450 U.S. at 177. The claimed process in *Diehr* “us[ed] well-known time, temperature, and cure relationships to calculate[,] by means of the Arrhenius equation[,] when to open the press and remove the cured product.” *Id.* at 177–78. The Court noted that the “claims involve the transformation of an article, in this case raw, uncured synthetic rubber, into a different state or thing.” *Id.* at 184. Here, there are no similar steps. Despite Appellants' arguments to the contrary (App. Br. 9; Reply Br. 4), the recited quantitative risk assessment does not improve an existing technological process, as in *Diehr*. See *Alice*, 134 S. Ct. at 2358. Rather, the evidence on this record tends to suggest that the recited computer components operate as conventionally expected, as discussed previously.

For the foregoing reasons, then, the recited elements—considered both individually and as an ordered combination—do not contain an

⁵ See *Bing Shun Li v. Holder*, 400 Fed. App'x. 854, 857 (5th Cir. 2010) (unpublished) (noting Wikipedia's unreliability and citing *Badasa v. Mukasey*, 540 F.3d 909, 910–11 (8th Cir. 2008)); see also *Ex parte Three-Dimensional Media Group, Ltd.*, No. 2009-004087, 2010 WL 3017280, at *17 (BPAI 2010) (non-precedential) (“Wikipedia is generally not considered to be as trustworthy as traditional sources for several reasons, for example, because (1) it is not peer reviewed; (2) the authors are unknown; and (3) apparently anyone can contribute to the source definition”) (internal citation omitted).

“inventive concept” sufficient to transform the claimed abstract idea into a patent-eligible application. Therefore, we are not persuaded that the Examiner erred in rejecting claim 1, and claims 2–21 not argued separately with particularity.

THE OBVIOUSNESS REJECTION OVER STENGER AND THUVE

The Examiner finds that Stenger discloses many recited elements of independent claim 1 including, among other things, receiving input identifying a product and a manufacturing supplier. Final Act. 19–20. The Examiner also finds that Stenger discloses identifying respective technical-profile elements for the manufacturing supplier from a technical-profile storage, at least some of the technical-profile elements relating to technical performance, infrastructure, organizational structure, sub-tier management, domicile, cooperation, communication, risk management, ability to work with an integrated schedule, or control of a key technology. *Id.* at 21–22. The Examiner also finds that Stenger discloses identifying respective characteristic elements for the product from a product storage. *Id.* at 20. Although the Examiner acknowledges at least some of Stenger’s characteristic elements do not relate to technological maturity, complexity, criticality to the program or its on-time delivery, or availability of one or more alternative products (*see id.* at 20, 26), the Examiner cites Thuve for teaching this feature in concluding that the claim would have been obvious. *Id.* at 26–28.

Appellants argue Stenger does not identify a product and supplier, or identify characteristic elements and technical-profile elements for the product and supplier, respectively, from storage. App. Br. 10; Reply Br. 5.

Appellants further argue Stenger does not disclose technical-profile elements which relate to technical performance, infrastructure, organizational structure, sub-tier management, domicile, cooperation, communication, risk management, ability to work with an integrated schedule, or control of a key technology. App. Br. 10–11; Reply Br. 5–6.

Appellants add that Stenger does not generate a technical risk assessment of a particular manufacturing supplier for a particular product, the technical risk assessment including a plurality of risk factors, each of which is related to one or more characteristic elements and technical-profile elements. App. Br. 11–12; Reply Br. 6–7. Lastly, Appellants contend one skilled in the art would not have combined Thuve with Stenger because Thuve focuses on issues different from those on which Stenger focuses. App. Br. 11–12; Reply Br. 7.

ISSUES

I. Under § 103, has the Examiner erred in rejecting claim 1 by finding that Stenger and Thuve collectively would have taught or suggested (A) receiving input identifying a product and a manufacturing supplier, identifying characteristic elements for the product from a product storage, and identifying technical-profile elements for the manufacturing supplier from a technical-profile storage; (B) at least some of the characteristic elements relating to technological maturity, complexity, criticality to the program or its on-time delivery, or availability of one or more alternative products; (C) at least some of the technical-profile elements relating to technical performance, infrastructure, organizational structure, sub-tier management, domicile, cooperation, communication, risk management,

ability to work with an integrated schedule, or control of a key technology; and (D) generating a technical risk assessment of the particular manufacturing supplier for the particular product, the technical risk assessment including a plurality of risk factors each of which is related to one or more characteristic elements and technical-profile elements?

II. Is the Examiner's proposed combination supported by articulated reasoning with some rational underpinning to justify the Examiner's obviousness conclusion?

ANALYSIS

I-A

We see no error in the Examiner's reliance on Stenger for at least suggesting identifying respective characteristic elements for a product from a product storage. Final Act. 20 (citing Stenger ¶¶ 6–7, 63–66, 145). Stenger assesses a performance risk of a supplier entity that provides goods to a manufacturing entity. Stenger ¶¶ 13, 62–63. Stenger's servers populate memory with structured data representing the supplier entity's quantifiable information, including product quality data, product delivery data, parts quality, and parts release data. *Id.* ¶¶ 65–66. Stenger, then, at least suggests identifying product quality data (the claimed "characteristic elements for the product") from a memory populated with the structured data (the claimed "product storage"), and receiving input that identifies the product.

Nor do we see error in the Examiner's finding that Stenger's system identifies technical-profile elements for a manufacturing supplier from a technical-profile storage. Final Act. 21–22 (citing Stenger ¶¶ 5, 43, 62, 100, 112, 144). Stenger's Figure 21 shows an environmental risk profile 290 of

selected risk properties—capital intensity, resourcing difficulty, and raw material risk. Stenger ¶¶ 141, 143. Stenger, then, at least suggests identifying the selected risk properties (the claimed “technical-profile elements”) for a supplier entity (the claimed “manufacturing supplier”) from a computer memory responsible for storing the selected risk properties (the claimed “technical-profile storage”).

Appellants’ arguments that Stenger does not disclose receipt of input identifying a product and supplier or identification of respective elements for the product and supplier from storage because Stenger requires users to input elements and conditions for assessment (App. Br. 10; Reply Br. 5) are unavailing and not commensurate with the scope of the claim. Notably, the claim does not require *a receipt of input* identifying a product and a manufacturing supplier. Nor does the claim preclude users from inputting elements, let alone inputting elements before the elements are identified from storage. And even assuming the scope of the claim precludes users from inputting elements—which it does not—we find Appellants’ contention that identifying elements from storage increases consistency and reduces variability between users (App. Br. 10; Reply Br. 5) to be no more than conclusory attorney argument. *See In re Geisler*, 116 F.3d 1465, 1470 (Fed. Cir. 1997). As such, the Examiner’s findings discussed above are supported by a preponderance of the evidence. On this record, then, the weight of the evidence favors the Examiner’s position.

I-B

In the rejection, the Examiner cites Thuve for teaching that *at least some* characteristic elements relate to (1) technological maturity, (2)

complexity, (3) criticality to the program or its on-time delivery, *or* (4) availability of one or more alternative products, as claimed. *See* Final Act. 26–28 (citing Thuve ¶¶ 69, 95, 102)). Our emphasis underscores that not only does the claim require only *at least some* characteristic elements be so related, but they need only be related to *one* of the four enumerated elements to satisfy the claim given their recitation in the alternative.

Turning to Thuve, the reference at least suggests that at least some characteristic elements relate to “complexity”: one of the four alternative recited elements noted previously. Notably, Thuve identifies a project’s measurable characteristics as including the “simplicity of design” and “simplicity of the technical data package.” Thuve ¶ 69. By measuring *simplicity*, Thuve at least suggests measuring *complexity*.

I-C

We see no error in the Examiner’s finding that Stenger’s risk properties (the claimed “technical-profile elements”) relate to technical performance, infrastructure, organizational structure, sub-tier management, domicile, cooperation, communication, risk management, ability to work with an integrated schedule, or control of a key technology, as recited in claim 1. Final Act. 21–22 (citing Stenger ¶¶ 5, 43, 62, 100, 112, 144). For example, the term “risk management” is not defined in the Specification and, therefore, is construed with its plain meaning, namely “[t]he activities associated with risk management preparation, risk assessment, risk handling option assessment, and risk control.” *See* THE AUTHORITATIVE DICTIONARY OF IEEE STANDARD TERMS 988 (7th ed. 2000). The term “risk assessment,”

in turn, is defined as “[t]he process and procedures of identifying, characterizing, quantifying, and evaluating risks and their significance.” *Id.*

Given these definitions, we find Stenger’s risk properties at least relate to risk management. Stenger’s Figure 21 illustrates risk levels for each risk property over time. Stenger ¶ 143. Stenger, then, at least suggests the risk properties relate to a process of identifying and quantifying risks (the claimed “risk management”). Appellants’ arguments regarding Stenger’s alleged shortcomings involving paragraph 21’s environmental risk profiles as relating to environmental influences for an entity (App. Br. 11; Reply Br. 5–6) do not squarely address—let alone persuasively rebut—the Examiner’s findings based on Stenger’s risk properties. Therefore, the Examiner’s finding in this regard is supported by a preponderance of the evidence. On this record, then, the weight of the evidence favors the Examiner’s position.

I-D

Nor do we see error in the Examiner’s finding that Stenger discloses generating a technical risk assessment of the particular manufacturing supplier for the particular product, the technical risk assessment including a plurality of risk factors each of which is related to one or more characteristic elements and technical-profile elements, as recited in claim 1. Final Act. 23–26 (citing Stenger ¶¶ 13–21, 53, 66, 73, 86–87, 113, 137, 142). To be sure, Stenger links a supplier entity’s goods with risk properties of a generic class of goods. Stenger ¶ 142. Stenger aggregates the risk properties of the supplier entity’s goods to determine the risk property of the supplier entity. *Id.* Contrary to Appellants’ arguments (App. Br. 11–12; Reply Br. 6–7),

Stenger, then, at least suggests generating the risk property of the supplier entity based on the risk properties of the supplier entity's goods (the claimed "technical risk assessment of the particular manufacturing supplier for the particular product"), the risk property of the supplier entity including risk factors each of which is related to the selected risk properties that include capital intensity, resourcing difficulty, and raw material risk (the claimed "technical-profile elements").

II

Moreover, we find unavailing Appellants' contention that one skilled in the art would not look to combine Thuve with Stenger because Thuve's supplier technical oversight assessment is different from Stenger's business performance risk evaluation. App. Br. 11–12; Reply Br. 7. "When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one." *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398, 417 (2007). Contrary to Appellants' argument (Reply Br. 7), we see no reason why combining Stenger's quality of parts with Thuve's measurable design simplicity would not at least contribute to improving decision making and accurately analyzing information as the Examiner proposes (Final Act. 28; Ans. 12)—proposed enhancements to the combination of Stenger and Thuve that predictably use prior art elements according to their established functions to yield a predictable result. *See KSR*, 550 U.S. at 417.

To be sure, the Examiner's finding that "Steger and Thuve are deemed to be analogous references as they are *reasonably pertinent to each other* and directed towards collecting and analyzing information to solve problems

in similar fields” (Final Act. 27; Ans. 11) (emphasis added) is inartful. The analogous art test does not ask whether the prior art references are analogous *to each other*, but rather asks whether the references are analogous to the *claimed subject matter*—which they are. *See In re Kahn*, 441 F.3d 977, 986–87 (Fed. Cir. 2006) (defining the scope of analogous prior art as falling under at least one of two separate tests: whether the reference’s art is from the same field of endeavor as the invention, regardless of the problem addressed and, (2) if the reference is not within the field of the inventor’s endeavor, whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved).

Notably, the Specification discusses the problem to be solved by the invention—improving existing techniques that lack technical risk identification and mitigation. Spec. ¶ 2. The claimed subject matter is directed to assessing technical risks of suppliers. *Id.* ¶ 1. Stenger is directed to assessing a performance risk of a supplier entity. Stenger ¶¶ 13, 62. Based on this similarity, we find Stenger and the claimed subject matter are within the same field of endeavor. *See Kahn*, 441 F.3d at 986–87. Moreover, Thuve is directed to managing a supplier’s producible characteristics. Thube, Abstract. Thuve’s measurable characteristics of production include specified materials and simplicity of design. Thuve ¶ 69. We find a reference that teaches measuring a supplier’s producible characteristics would have logically commended itself to a skilled person faced with the problems in the field of technical risk identification and

mitigation. *See In re Klein*, 647 F.3d 1343, 1348 (Fed. Cir. 2011); *see also Kahn*, 441 F.3d at 986–87.

Therefore, despite the Examiner’s inartful characterization of the analogous art test, we nonetheless deem the Examiner’s error in this regard as harmless. Accordingly, we find the Examiner’s proposed combination is supported by articulated reasoning with some rational underpinning to justify the Examiner’s obviousness conclusion.

Therefore, we are not persuaded that the Examiner erred in rejecting claim 1, and claims 2, 3, 6, 8–10, 13, 15–17, and 20 not argued separately with particularity.

THE OTHER OBVIOUSNESS REJECTIONS

We also sustain the Examiner’s obviousness rejections of claims 4, 5, 7, 11, 12, 14, 18, 19, and 21. Final Act. 31–37. Although Appellants nominally argue these claims separately, Appellants reiterate arguments similar to those made in connection with claim 1, and contend that the additionally cited references do not cure Stenger’s purported deficiencies. *See App. Br. 12–13; Reply Br. 8–9*. We are not persuaded of error in these rejections for the reasons previously discussed.

CONCLUSION

The Examiner did not err in rejecting claims 1–21 under 35 U.S.C. §§ 101 and 103.

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Application 14/146,038

DECISION

The Examiner's decision to reject claims 1–21 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED