

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CONFIGIT A/S,
Petitioner,

v.

VERSATA DEVELOPMENT GROUP, INC.,
Patent Owner.

IPR2021-01055
Patent 6,836,766 B1

Before KEVIN F. TURNER, DEBRA K. STEPHENS, and
FRANCES L. IPPOLITO, *Administrative Patent Judges*.

TURNER, *Administrative Patent Judge*.

JUDGMENT
Final Written Decision
Determining All Challenged Claims Unpatentable
35 U.S.C. § 318(a)

I. INTRODUCTION

We have jurisdiction to hear this *inter partes* review under 35 U.S.C. § 6. This Final Written Decision is issued pursuant to 35 U.S.C. § 318(a). For the reasons discussed herein, we determine that Petitioner has shown, by a preponderance of the evidence, that claims 1–5 and 9–19 of U.S. Patent No. 6,836,766 B1 (Ex. 1001, “the ’766 Patent”).

A. Procedural Background

Configit A/S (“Petitioner”) filed a Petition (Paper 2, “Pet.”) requesting institution of *inter partes* review of claims 1–5 and 9–19 of the ’766 Patent. Versata Development Group, Inc. (“Patent Owner”) filed a Preliminary Response (Paper 6, “Prelim. Resp.”). Additional briefing was also filed by both parties with respect to the issues of public availability of certain references. (Papers 9, 10). Pursuant to 35 U.S.C. § 314(a), we instituted *inter partes* review on the grounds of:

Claims Challenged	35 U.S.C. §	Reference(s)/Basis
1, 9, 10, 14, 19	103(a) ¹	Oracle1, ² Oracle2, ³
15, 16	103(a)	Oracle1, Oracle2, SalesPlus ⁴

¹ The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, 125 Stat. 284, 285–88 (2011), revised 35 U.S.C. § 103 effective March 16, 2013. Because the challenged patent claims priority to an application filed before March 16, 2013, we refer to the pre-AIA version of § 103.

² Oracle® Configurator Developer, User’s Guide, Release 11i for Windows 95/98 and Windows NT 4.0, April 2000 (Ex. 1003, “Oracle1”).

³ Oracle® Configurator, Oracle Configuration Interface Object (CIO) Developer’s Guide, Release 11i, March 2000 (Ex. 1004, “Oracle2”).

⁴ Beologic A/S Reference Guide for the Beologic® salesPLUS™ Product Configurator, C language API, Version 2.0, 1995 (Ex. 1005, “SalesPlus”).

Claims Challenged	35 U.S.C. §	Reference(s)/Basis
11–13, 17	103(a)	Oracle1, Oracle2, SalesPlus, Yu ⁵
2, 18	103(a)	Oracle1, Oracle2, Memon ⁶
3–5	103(a)	Oracle1, Oracle2, Memon, SalesPlus

See Pet. 1, 12–71; Paper 11 (“Dec.”), 28–29. Petitioner relied upon a Declaration by Dr. Kristin L. Wood (Ex. 1002), and Patent Owner relied upon a Declaration by Paul A. Navrátil, Ph.D. (Ex. 2001).

Subsequently, Patent Owner filed a Patent Owner Response (Paper 15, “PO Resp.”), along with an additional Declaration of Dr. Navrátil (Ex. 2004) to support its positions. Petitioner filed a Reply (Paper 17, “Pet. Reply”) to the Patent Owner Response. An oral hearing was held on September 16, 2022, with a transcript of the hearing (Paper 25, “Tr.”) included in the record.

B. Related Matters

Both parties identify the following judicial or administrative matter that would affect, or be affected by, a decision in this proceeding: *Versata Software, Inc. et al v. Configit A/S*, Case No. 2:20-cv09019 (C.D. Cal.). Pet. 74; Paper 4, 1.

⁵ Bei Yu et al., “A Configuration Tool to Increase Product competitiveness,” IEEE Intelligent Systems and their Applications, Vol. 13, No. 4, pp. 34-41, July-Aug. 1998 (Ex. 1006, “Yu”).

⁶ Atif M. Memon et al., “Automated Test Oracles for GUIs,” Proceedings of the 8th Int’l Symp. on the Found. of Software Engineering (FSE-8), San Diego, CA, Nov. 6, 2000 (Ex. 1007, “Memon”).

C. The '766 Patent

The '766 Patent is titled “Rule Based Configuration Engine for a Database,” and is asserted to “provide[] the ability to test rules in a rule-based system for configuring a product.” Ex. 1001, code (54), Abs. With respect to the prior art, the '766 Patent describes “configuring systems” or “configuration engines,” which allow a user to configure a product by interactively selecting components from various groups based on availability and compatibility of features and options. *Id.* at 1:13–17. It also details that the configured product “might consist of several hundred individual parts” that might be available on multiple products, and that:

A product is modeled by describing which parts and part groups are available in that product and which choices must be made from within the part groups, and then by writing additional rules that describe part-to-part relationships which are not modeled by the product structure.

Id. at 1:27–33. Thereafter, a compiler converts the product structure and rules into “rule types,” where “there may be several hundred, several thousand, or even more of these rules.” *Id.* at 1:34–42. Based on selections by the client, the parts that are selected or included are “selected,” or “not selectable,” if they have been excluded or deleted. *Id.* at 1:41–53.

The '766 Patent also details that “configuration errors may occur when a rule or series of rules is not properly defined and produces an undesired effect,” and can also occur when a series of improperly defined rules causes a part to be in more than one state at the same time. Ex. 1001, 1:54–61. It also details that for large models, such errors may be difficult to find and it is desirable to have “an automated testing tool to locate and analyze configuration errors.” *Id.* at 1:62–67.

The '766 Patent discloses its approach to debugging configuration errors of a configurator, wherein the “user provides test cases that select at least one part to include in the product configuration,” and thereafter, the “configuration tester processes the rule to determine whether” the configuration choice in the test case “conflicts with the plurality of parts” in the configurator. Ex. 1001, 2:7–11. The '766 Patent also summarizes multiple features and embodiments (*id.* at 2:12–3:29), but ultimately asserts that “these embodiments and variations are illustrative and the invention is not to be considered limited in scope to these embodiments and variations.” *Id.* at 12:22–25.

Claim 1 is the sole independent claim challenged in this proceeding, with each of challenged claims 2–5 and 9–19 dependent thereon, directly or indirectly, and is reproduced below:

1. [1.pre] A method of using a computer system to test a product configuration for configuration errors, wherein the product configuration is stored as electronic data in a computer system for generating product configurations, the computer system including at least one rule defining a relationship between at least two parts, the product configuration including a plurality of parts, the method comprising:

[1.1] entering a test case into the computer system to detect configuration errors in the product configuration, wherein the test case includes data to change the product configuration;

[1.2] processing the test case with the computer system in accordance with the at least one rule to detect whether the change in the product configuration, as a result of processing the test case in accordance with the at least one rule, produced a configuration error in the product configuration; and

[1.3] generating explanation data with the computer system to provide an explanation of any detected configuration error in the product configuration.

Ex. 1001, 12:30–50 (with annotations provided by Petitioner, Pet. 14–23).

II. ANALYSIS

A. *Level of Ordinary Skill in the Art*

Petitioner, supported by Dr. Wood’s testimony, proposes that a person of ordinary skill in the art at the time of the invention would have had “a Bachelor’s degree in Computer Science, Computer or Electrical Engineering, Engineering Science, an engineering major with a significant computational component, or a similar discipline, or with at least two years of research or experience in configurable systems including testing.” Pet. 8 (citing Ex. 1003 ¶¶ 53–55). Patent Owner argues that “[t]here may be some differences between this and the correct level of skill in the art, but those differences will not affect this case at this stage,” such that Patent Owner applies the proposed level of skill in the art without agreeing to it. PO Resp. 11 (citing Ex. 2004 ¶¶ 35–37).

We continue to find Petitioner’s proposal consistent with the level of ordinary skill in the art reflected by the prior art of record, *see Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001); *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995); *In re Oelrich*, 579 F.2d 86, 91 (CCPA 1978), and, therefore, we adopt Petitioner’s unopposed position as to the level of ordinary skill in the art for purposes of this decision. *See* Dec. 6.

B. *Claim Construction*

In this *inter partes* review, “claims are construed using the same claim construction standard that would be used to construe the claim[s] in a civil action under 35 U.S.C. § 282(b).” *See* 37 C.F.R. § 42.100(b)(2019). The claim construction standard includes construing claims in accordance with their ordinary and customary meaning as understood by one of ordinary skill

in the art at the time of the invention. *See id.*; *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–14 (Fed. Cir. 2005) (en banc). In construing claims in accordance with their ordinary and customary meaning, we take into account the specification and prosecution history. *Phillips*, 415 F.3d at 1315–17.

If the specification “reveal[s] a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess[,] . . . the inventor’s lexicography governs.” *Phillips*, 415 F.3d at 1316 (citing *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002)). Another exception to the general rule that claims are given their ordinary and customary meaning is “when the patentee disavows the full scope of a claim term either in the specification or during prosecution.” *Uship Intellectual Props., LLC v. U.S.*, 714 F.3d 1311, 1313 (Fed. Cir. 2013) (quoting *Thorner v. Sony Computer Entm’t Am., LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012)).

Additionally, only terms that are in controversy need to be construed, and these need be construed only to the extent necessary to resolve the controversy. *See Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) (holding that “only those terms need be construed that are in controversy, and only to the extent necessary to resolve the controversy”); *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co. Matal*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (citing *Vivid Techs.* in the context of an *inter partes* review).

Petitioner does not identify any claim elements that warrant express constructions, opting instead that “all terms should be accorded their ‘ordinary and customary meaning . . . as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent.’” Pet. 11

(citing 37 C.F.R. § 42.100(b)). Patent Owner previously asserted that two claim elements should be construed expressly, namely “configuration error” and “test case.” Prelim. Resp. 10–16. In its Patent Owner Response, Patent Owner only provides arguments and evidence with respect to the former term. See PO Resp. 11–25.

We again consider Patent Owner’s proposed, express construction of “configuration error” below, and reiterate our analysis of the previously proffered construction, from the Institution Decision (Dec. 8–9), for the sake of completeness.

1. *“configuration error”*

With respect to the limitation “configuration error,” Patent Owner asserted that configuration error means “either (1) the condition that occurs when ‘a rule or series of rules is not properly defined and produces an undesired effect’ or (2) ‘a series of improperly defined rules causes a part to be in more than one state at the same time.’” Prelim. Resp. 10 (citing Ex. 1001, 1:54–61; Ex. 2001 ¶ 40). In the Institution Decision, we found that Patent Owner’s proposed construction was supported by the ’766 Patent specification, and we adopted Patent Owner’s proposed meaning of “configuration error.” Dec. 7–8. Neither party disputes this construction or its adoption. See PO Resp. 11; Pet. Reply 2; Tr. 24:14–25:18. Rather, the dispute between the parties arise from how that construction should be interpreted and how it should be applied, which we discuss below.

Patent Owner, raises multiple rationales as to why the “configuration error,” in the product configuration, is not “simply warning a user when they attempt a part selection that is disallowed by properly functioning rules,” but rather involves “detecting whether the rules themselves are improperly

defined, thereby producing an internal error in the configuration engine itself.” PO Resp. 1. Patent Owner, thus, argues that “[c]ontrary to the Board’s earlier finding, the claims are limited to errors internal to the configuration engine and do *not* deal with end user errors,” providing three rationales for why its interpretation is correct. *Id.* at 12–18; quoting *id.* at 12 (emphasis in original). Petitioner responds to those arguments. Pet. Reply 2–9. We discuss each, in turn, below.

i. “Explicit Definition”

Patent Owner begins by asserting that the ’766 Patent explicitly states that “configuration errors” are limited to internal errors because the specification details that “‘*the invention*’ of the ’766 patent ‘detects and analyzes configuration errors *in* a system for configuring products.’” PO Resp. 13 (quoting Ex. 1001, 4:63–65, emphasis added). Patent Owner continues that the instant claims do not deal with some other kind of error displayed by a configuration engine, but only to such errors contained in the configuration engine. *Id.* Patent Owner also cites to Figure 3, which it asserts defines the invention as a configuration tester system 300, not as the configuration engine itself, such that “configuration errors,” to which the invention and claims are directed, must be “in” the system, by definition. *Id.*

Petitioner responds that the word “internal” does not appear in the specification in the context of error, and the word “engine” does not appear in the claims, such that “configuration error” should not be so limited. Pet. Reply 3–4. Petitioner also asserts that in the claims of the instant patent, it is changes to the product configuration, not to the product configuration engine, that produces the configuration error. *Id.* at 4. Petitioner additionally asserts that there has been no demonstrated clear intention to

limit the claim scope by reading in the limitations “internal” or “engine” into the claims. *Id.* (citing *Trading Techs. Int’l Inc. v. eSpeed, Inc.*, 595 F.3d 1340, 1352 (Fed. Cir. 2010)).

With respect to this rationale, we are not persuaded by Patent Owner’s arguments. The first part of the claim construction, namely rules not being properly defined and “produc[ing] an undesired effect,” does not specify an error being “internal” to the configuration engine. The specification provides that such a configuration error “may occur when a rule or series of rules is not properly defined and produces an undesired effect, *such as the exclusion of a part that should be selectable*” (Ex. 1001, 1:54–61, emphasis added), but the latter clause provides only one example of the undesired effect. While it seems clear that “internal” errors may result in a “configuration error,” we are not persuaded that the specification limits the term to *only* such errors. Further, the recitation in the specification that the invention is concerned with configuration errors in a system for configuring products describes generally the context of such configuration errors, and not that they need to be explicitly “in” the system. As such, we are not persuaded that “configuration errors,” as recited in the instant claims must be limited to errors contained in the configuration engine.

ii. *Examples from the Specification*

Patent Owner also argues that every example in the specification shows configuration errors internal to the configurator. PO Resp. 14–16. Patent Owner cites the specification’s descriptions in connection with Figure 3 and asserts that “the test case is used to internally set state information and determine whether the internal rule settings of the configurator are correct.” *Id.* at 14. Patent Owner also argues that the claim limitation “configuration

error” appears “only five times in the patent specification,” and the context of each recitation is directed to errors internal to the configurator. *Id.* at 15 (citing Ex. 1001, 1:54–61, 65–67, 2:62–67, 7:56–58). Patent Owner further argues that the prosecution history is silent as to “configuration error” and those of skill in the art would have known to look to the specification to determine its meaning. *Id.* at 16.

Petitioner responds that the first example of a configuration error in the specification is not internal to the configurator, but rather depends on something external to the configurator, i.e., whether the exclusion of PartC is an “undesired effect.” Pet. Reply 4–5 (citing Ex. 1001, 7:7–14). Petitioner asserts that the rule, “PartA Excludes PartC,” may be a perfectly correct in one configuration and produce an undesired effect in another configuration. *Id.* at 5. Petitioner further responds that its cited example is referred to by the ’766 Patent as the “simplest case,” and Patent Owner’s further restriction of the claim construction would “exclude the simplest types of configuration errors that are described by the patent.” *Id.* at 6 (citing Ex. 1001, 7:12; quoting *SanDisk Corp. v. Memorex Prod., Inc.*, 415 F.3d 1278, 1285 (Fed. Cir. 2005)).

With respect to this rationale, we are not persuaded by Patent Owner’s arguments. Of the examples cited by Patent Owner, most contain conditional language, such as “may occur,” “may also occur,” and “[i]t is therefore desirable.” PO Resp. 15. We are not persuaded that the cited examples should be taken as limits on the clearly stated scope of the subject term, “configuration error.” Should limitations need to be made using “words or expressions of manifest execution of restriction,” and we are not persuaded that the examples act in such a manner to require further

restrictions, as advocated by Patent Owner. *See Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1327 (Fed.Cir.2002).

iii. Usage by those of Skill in the Art

Patent Owner also argues that those of skill in the art would have known that configuration errors are internal to the configurator, citing to the testimony of Dr. Wood, Petitioner's declarant. PO Resp. 16–24. Patent Owner argues that “Dr. Wood describes a several examples of configuration errors—and they are all internal errors.” *Id.* at 16–18 (citing Ex. 1002 ¶¶ 41, 103, 108). Patent Owner acknowledges that Dr. Wood does hue to a broader consideration of configuration errors when discussing the prior art, but asserts that this is due to “impermissible hindsight.” *Id.* at 17. Patent Owner further parses Dr. Wood's testimony into portions describing the technology background (*id.* at 19–21), and his description of the “Main Prior Art,” reasons to combine, and individual elements of the claims (*id.* at 21–24), with the former supporting the understanding that configuration errors must be internal to the configuration engine, and the latter, in evaluating the claims in the context of the prior art, where Patent Owner contends that Dr. Wood “repeatedly uses hindsight to find claim elements in art despite a radically different understanding of those claim elements when his analysis isn't limited to the prior art.” *Id.* at 24.

Petitioner notes that Patent Owner has not relied upon its own declarant, and that Patent Owner's discussion of Dr. Wood's testimony is an attack thereupon. Pet. Reply 6–7. Petitioner argues that Dr. Wood does not discuss errors being “internal” to the configurator in his declaration, and was not asked about the same in his deposition. *Id.* at 7 (citing Exs. 1002, 2005). Petitioner also argues that Dr. Wood testified that there were many types of

configuration errors, and does not support Patent Owner's conclusion of what persons of ordinary skill in the art would have understood "configuration errors" to mean. *Id.* at 8 (citing Ex. 1002 ¶¶ 40–41, 48–49; Ex. 2005, 59:22–60:5).

With respect to this rationale, we are not persuaded by Patent Owner's arguments. We find it curious that Patent Owner has not polled its own expert declarant or provided other evidence such as a survey of the appropriate literature at the time that the application that resulted in the '766 Patent was filed to provide a showing of what the appropriate understanding of "configuration error" would have been. Looking to the examples cited in Dr. Woods testimony, they are purely exemplary, and he is certainly not definitive, as Patent Owner appears to acknowledge, when using the term "configuration error." Patent Owner seeks to have us give weight to the portions that seem to support its understanding of the claim term, but give less weight to portions that do not, asserting the latter to be guided only by hindsight. This does not even address Patent Owner's other assertions that Dr. Woods declaration should be entitled to little weight because it is "incomplete." PO Resp. 37–39. In sum, according to Patent Owner, we should pick and choose aspects of Dr. Wood's testimony to support Patent Owner's contention, where the overall declaration should be given little weight.

Looking at the totality of Dr. Wood's testimony and his deposition testimony (Exs. 1002, 2005), we are not persuaded that it supports the proposition that Patent Owner relies upon to illustrate, namely that those of skill in the art would have known that configuration errors are internal to the configurator. Exemplary of this, Dr Wood avers that "[t]hroughout my

Declaration I provide context of other configuration errors that would be understood by a person of ordinary skill in the art at the time of the patent. They can include syntax types of errors, semantic errors, logical errors, logical rule errors, as examples.” Ex. 2005, 59:22–60:05. Petitioner points out that Dr. Wood cited examples from Exhibits 1006, 1033, 1046, and 1050 pertaining to “configuration errors,” and those citations are not limited to those that would have been internal to the configurator. Pet. Reply 8 (citing Ex. 1002 ¶¶ 40–41, 48–49). As such, we are not persuaded that there is sufficient evidence before us that those of skill in the art would have known that configuration errors are internal to the configurator.

To conclude, we continue to determine that “configuration error,” should be construed as “either (1) the condition that occurs when ‘a rule or series of rules is not properly defined and produces an undesired effect’ or (2) ‘a series of improperly defined rules causes a part to be in more than one state at the same time.’” We do not further limit the construction of “configuration error” on the basis of the parties’ arguments.

2. “test case”

With respect to the limitation “test case,” Patent Owner previously asserted that the Specification of the ’766 Patent explicitly defines this limitation as “one or more (1) sets of selections that should be made and (2) sets of parts and their expected states based on new rules as well as rules previously included in parts relations and product definitions.” Prelim. Resp. 13 (citing Ex. 1001, 7:64–8:1; Ex. 2001 ¶ 47). Patent Owner acknowledges that the definition was “raised in the context of the embodiment of Figure 3,” but asserts that those of skill in the art would have understood its explanation to be “definitional.” *Id.* at 14. Patent Owner also

argues that claim differentiation supports its definition, as well as the prosecution history being consistent therewith. *Id.* at 14–16.

We continue to not agree with nor adopt Patent Owner’s proposed construction. The section of the Specification of the ’766 Patent which Patent Owner refers to cite its explicit definition starts off with “FIG. 3 shows an embodiment of the present invention,” and refers to “test cases 306,” with respect to that embodiment. Ex. 1001, 7:56, 61. “Test cases” are also referenced with respect to the broader summary of invention. *See id.* at 2:1–3:29. As Petitioner points out, the Specification of the ’766 Patent provides that a user is allowed “to enter a test case, wherein the test case selects at least one part to include in the product configuration,” and that “a test case [] selects at least one part to include in the product configuration. Pet. 19 (citing Ex. 1001, 2:59–62, 17–19). Both citations support that “test case” is not as constrained as the construction proffered by Patent Owner. As such, according to the analysis below, we construe “test case” according to its ordinary and customary meaning.

3. *Other terms*

We determine that it is not necessary to provide an express interpretation of any other claim terms *See Nidec*, 868 F.3d at 1017; *Vivid Techs.*, 200 F.3d at 803 (“[O]nly those terms need be construed that are in controversy, and only to the extent necessary to resolve the controversy.”).

C. *Legal Standards – Obviousness*

The U.S. Supreme Court set forth the framework for applying the statutory language of 35 U.S.C. § 103 in *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17–18 (1966):

Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at

issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.

As explained by the Supreme Court in *KSR International Co. v. Teleflex Inc.*,

Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit.

550 U.S. 398, 418 (2007) (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.”)).

“Whether an ordinarily skilled artisan would have been motivated to modify the teachings of a reference is a question of fact.” *WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1327 (Fed. Cir. 2016) (citations omitted).

“[W]here a party argues a skilled artisan would have been motivated to combine references, it must show the artisan ‘would have had a reasonable expectation of success from doing so.’” *Arctic Cat Inc. v. Bombardier Recreational Prods. Inc.*, 876 F.3d 1350, 1360–61 (Fed. Cir. 2017) (quoting *In re Cyclobenzaprine Hydrochloride Extended-Release Capsule Patent Litig.*, 676 F.3d 1063, 1068–69 (Fed. Cir. 2012)).

E. Obviousness over Oracle1 and Oracle2

Petitioner asserts that the combination of Oracle1 and Oracle2 would have rendered the subject matter of claims 1, 9, 10, 14, and 19 obvious to one of ordinary skill in the art at the time of the invention. Pet. 12–32. Patent Owner argues that the asserted prior art references are not prior art to the '766 Patent, and those references do not teach or suggest all elements of claim 1, and claims dependent thereon challenged in this ground. PO Resp. 25–35. We begin with brief discussions of the cited references, whether Oracle1 and Oracle2 have been shown to be prior art to the '766 Patent, and then consider Petitioner's arguments with respect to the references' teachings applied to the instant claims as well as Patent Owner's arguments asserting deficiencies in this ground of unpatentability.

1. Oracle1

Oracle1 is a manual for Oracle's Configurator product, which discloses the configuring of products made up of components, or parts. Ex. 1003, 17. Oracle1 also provides that "[a] configurator enables end users to access the parts that make up your product and the rules that govern how those parts go together. With a configurator, end users can generate any custom product configuration that the rules allow." *Id.* Oracle1 describes implementation of a product configurator as a process including "defining test cases, designing the application, constructing and testing the application." *Id.* at 143.

Oracle1 also provides a "Test/Debug" section wherein a user can test a model and the configuration rules to determine if errors are generated, where selected rules can be disabled to determine if any particular rule is cause of a problem. *Id.* at 95–99.

2. *Oracle2*

Oracle2 is a developer's guide to Oracle's Configuration Interface Object (CIO), which it indicates "is needed by developers of applications having customized user interfaces that need access to the Oracle Configurator Active Model." Ex. 1004, 13. Oracle2 details that CIO "is an API (application programming interface) that provides your programs access to the Model used by Oracle SellingPoint application, which you construct with Oracle Configurator Developer." *Id.* at 37. With respect to related documents, Oracle2 cites to several related publications directed to Oracle Configurator Developer. *Id.* at 14. Oracle2 also provides a description of how product configurations are stored in a computer system. *Id.* at 42–43.

3. *Statuses of Oracle1 and Oracle2 as Prior Art to the '766 Patent*

Patent Owner previously asserted that Oracle1 and Oracle2 are not prior art under 35 U.S.C. § 102(a) or (b). Prelim. Resp. 16–24. Patent Owner previously argued that the evidence presented by Petitioner in the Petition of the publication of Oracle1 and Oracle2 is contradictory and insufficient. *Id.* at 19–24. As discussed above, we authorized additional briefing from both parties with respect to the issues of public availability of Oracle1 and Oracle2. (Papers 9, 10). In our Institution Decision, we determined that Petitioner had sufficiently shown that those references were publicly available prior to the '766 Patent's priority date of January 31, 2001 for purposes of institution under § 102(a). Dec. 12–17.

In its Patent Owner Response, Patent Owner makes only brief mention of this issue, stating "[a]nd there is no reliable evidence that either reference is prior art. *See supra* Section V." PO Resp. 35. We have been unable to discern any other citation to the prior art statuses of Oracle1 and

Oracle2 in that section, i.e., “Section V,” nor elsewhere in the Response. Nonetheless, Petitioner provides arguments and evidence to support its contention that both references are prior art to the ’766 Patent’s priority date. Pet. Reply 20–22; Exs. 1053, 1054.

Looking at all of the evidence presented and taking the arguments of the parties into consideration, we continue to determine that Petitioner has sufficiently shown that Oracle1 and Oracle2 were publicly available to serve as art under § 102(a). We further determine that Petitioner has shown by a preponderance of the evidence that the references were published at dates consistent with the evidence and testimony submitted, with the publication date for Oracle1 as April 30, 2000 and with the publication date for Oracle2 as March 31, 2000.

4. Patent Owner’s Arguments Regarding Differences Between Oracle1 and Oracle2 and Claim 1

Patent Owner makes general arguments regarding Petitioner’s use of Oracle1 and Oracle2, against the claims of the ’766 Patent. PO Resp. 2, 25–34. More specifically, Patent Owner argues that “[a]t the heart of the Petitioner’s obviousness arguments is that prior art configuration engines allowed user testing and informed users if they ‘ma[d]e a selection that violate[d] a configuration rule.’” PO Resp. 25 (citing Pet. 13). Patent Owner contrasts this by stating that the claims are directed to a “debugging and testing system.” *Id.* Patent Owner continues that Oracle1 and Oracle2 show the operation of a perfectly operating configurator with perfectly defined rules and don’t involve any “configuration error” within the scope of the claims. *Id.* at 26. Patent Owner also argues that Oracle1 discusses disallowed choices not “configuration errors” within the meaning of the claim. *Id.* at 27. Patent Owner characterizes “configuration errors” of the

claims as being “directed to state errors and exception errors that would be allowed, rather than prevented, by improperly defined rules.” *Id.* at 28–29. We do not agree with Patent Owner’s arguments.

As discussed above, although we adopt Patent Owner’s construction of “configuration error,” including “a rule or series of rules is not properly defined and produces an undesired effect,” we disagree with Patent Owner that such a configuration error is not described in Oracle1 (Ex. 1003, 96–97). Oracle1 describes making part selections in its Test/Debug section, to determine if the rules are improperly defined. *Id.* As discussed above, Oracle1 discloses that users can generate any custom product configuration, and can debug or test a model and the configuration rules to determine if errors are generated, where selected rules can be disabled to determine if any particular rule is cause of a problem. We are persuaded that such behavior would result in “configuration error” that comports with the claim construction adopted.

5. *Claim 1*

a. *Element [1.pre]: Preamble*

With respect to the preamble of claim 1, Petitioner asserts that Oracle1 describes using a computer system to test a product configuration for configuration errors to verify the functionality of the configurator. Pet. 14 (citing Ex. 1003, 25; Ex. 1002 ¶ 137). Petitioner also asserts that Oracle1 discloses a computer system for generating product configurations, and that one of ordinary skill in the art would have understood the configurations to be stored as electronic data. *Id.* at 15–16 (citing Ex. 1003, 98; Ex. 1002 ¶ 138). Additionally, Petitioner asserts that Oracle2 discloses a product configuration being stored as electronic data in a computer system. *Id.* at 16

(citing Ex. 1004, 42, 43; Ex. 1002 ¶ 139). Petitioner also asserts that Oracle1 gives illustrative examples of its computer system including at least one rule defining a relationship between at least two parts. *Id.* at 17–18 (citing Ex. 1003, 17, 35, 61, 97–98; Ex. 1002 ¶¶ 140–141).

Patent Owner argues that Oracle1 and Oracle2 do not teach this element of claim 1 because it does not teach the production of the recited “configuration error.” PO Resp. 29–31. Patent Owner argues that the rules in Oracle1 are properly defined, because otherwise the system could not reliably validate or invalidate user selection to prevent an invalid configuration, such that the system in Oracle1 does not produce configuration errors, as Patent Owner has construed that term. *Id.* at 30. As discussed above, we do not agree with Patent Owner’s argument. The examples in Oracle1 show the operation of a condition that occurs when a rule or series of rules is not properly defined and produces an undesired effect.

We determine that Petitioner sufficiently establishes by a preponderance of the evidence that the combination of Oracle1 and Oracle2 meets the limitations of the preamble of claim 1 for the reasons explained by Petitioner.

b. Element [1.1]: “entering a test case”

With respect to the method step of entering a test case into the computer system to detect configuration errors in the product configuration, Petitioner asserts that Oracle1 teaches implementing a configurator by “defining test cases, designing the application, constructing and testing the application.” Pet. 19–20 (quoting Ex. 1003, 143). Petitioner also asserts that Oracle1 discloses making multiple selections, which are validated, so

that one of ordinary skill in the art would have understood that the second part selection changes the product configuration. *Id.* at 20–21 (citing Ex. 1003, 43, 50, 97; Ex. 1002 ¶ 146). Petitioner also asserts that it was well-known that test cases could be stored and loaded for later use, and they would have been used to increase testing speed and consistency. *Id.* at 21 (citing Ex. 1002 ¶ 149).

Patent Owner does not separately address arguments with respect to this element of claim 1. *See* PO Resp. We determine that Petitioner sufficiently establishes by a preponderance of the evidence that the combination of Oracle1 and Oracle2 meets this limitation of claim 1 for the reasons explained by Petitioner.

c. Element [1.2]: “processing the test case”

Claim 1 recites, in part, the processing of the test case with the computer system in accordance with the at least one rule to detect whether the change in the product configuration, as a result of processing the test case in accordance with the at least one rule, produced a configuration error in the product configuration. Petitioner asserts that Oracle1 discloses, through its Test/Debug section, selections are automatically validated against the rules as they are added, and if a selection is made that violates a configuration rule, a window displays a message describing the violation and the options available to deal with it. Pet. 22 (citing Ex. 1003, 97).

Patent Owner argues, with respect to this portion of claim 1, that in Oracle1, the system is stopped from experiencing a “configuration error,” because nothing in Oracle1 “detect[s] whether the change in the product configuration... produced a configuration error **in** the product configuration.” PO Resp. 32. Patent Owner also argues that Oracle 1

functions the way a properly operating configuration engine does and that the Petition just assumes a configuration error occurred without actually identifying what it is. *Id.*

We do not agree with Patent Owner’s argument. The examples in Oracle1 show the operation of a condition that occurs when a rule or series of rules is not properly defined and produces an undesired effect (Ex 1003, 96–97). We are not persuaded that the adopted claim construction is applicable to only determine errors that result from improper operation of the system and we are unpersuaded that a violation of a rule or series of rules, that produces an undesired result, could not be considered a “configuration error.”

In addition, Patent Owner argues that statements in the Institution Decision interpret Oracle1 incorrectly, even according to the Petitioner. PO Resp. 32. We stated that “Oracle1 discloses that users can generate any custom product configuration, and can debug or test a model and the configuration rules to determine if errors are generated, where selected rules can be disabled to determine if any particular rule is cause of a problem.” Dec. 18–19. Patent Owner cites to the testimony of Dr Wood that Oracle1 did not have a way to detect subtle rule errors that would manifest as logical contradictions, and expected a user to manually debug complex problems. *Id.* at 32–33 (citing Ex. 1002 ¶¶ 119, 131; Ex. 1003, 96–97).

We do not agree with Patent Owner’s argument. The portion of Dr. Wood’s testimony that is cited by Patent Owner was made with respect to the additional citation of Memon in another ground, where the Petition proposes that persons of ordinary skill in the art would have sought to expand on the “basis explanation functions” of Oracle1. See Pet. 69–70. Dr.

Wood’s testimony is thus directed to the expansion of the explanations and not on the basic functionalities of Oracle1. Additionally, Oracle1 provides for testing of new rules, to “determine [if] they are giving you the desired results,” and allows for temporary disablement of “selected rules in order to determine what rule is causing problems in the Oracle runtime configurator.” Ex. 1003, 96–97. We are not persuaded that the statements made in the Institution Decision do not comport with the disclosure of Oracle1.

We determine that Petitioner sufficiently establishes by a preponderance of the evidence that the combination of Oracle1 and Oracle2 meets this limitation of claim 1 for the reasons explained by Petitioner.

d. Element [1.3]: “generating explanation data”

Claim 1 recites, in part, generating explanation data with the computer system to provide an explanation of any detected configuration error in the product configuration. Petitioner asserts that Oracle1 discloses that when the user makes a selection that violates a configuration rule, a message describing the violation and options are provided to the user. Pet. 23 (citing Ex. 1003, 49–51, 97).

Patent Owner reiterates its arguments regarding the combination of Oracle1 and Oracle2 and its teaching of “configuration errors.” PO Resp. 33–34. We remain unpersuaded with respect to this element of claim 1.

We determine that Petitioner sufficiently establishes by a preponderance of the evidence that the combination of Oracle1 and Oracle2 meets this limitation of claim 1 for the reasons explained by Petitioner.

e. Conclusion

Neither party presents evidence of objective considerations of nonobviousness at this stage of the proceeding. See Pet.; PO Resp. We have

reviewed the arguments and evidence and find that, on the present record, Petitioner sufficiently establishes by a preponderance of the evidence that the combination of Oracle1 and Oracle2 teaches or suggests all of the limitations of independent claim 1, and has provided sufficient rationale to combine the references based on the Petition.

6. *Dependent Claims 9, 10, 14, and 19*

Claims 9 and 10 further recite that the explanation data are based on the selection of a part or the execution of a rule, respectively. With respect to claim 9, Petitioner asserts that Oracle1 teaches making part selections to configure a product, and that explanation data are generated based on that selection if it causes an error. Pet. 24 (citing Ex. 1003, 17, 25, 97–98). With respect to claim 10, Petitioner asserts that Oracle1 teaches if a selection violates a configuration rule, the configuration window displays a message describing the violation and options for addressing it. *Id.* at 25 (citing Ex. 1003, 49, 97).

Claim 14 provides that the test case selects a product and at least one part, and generates a part state of the selected part based on one or more rules. Petitioner asserts that Oracle1 discloses the selection of the car as a product, and that making or changing part selections connotes the selection of at least one part, such as selecting one wheel in the car example. Pet. 26–28 (citing Ex. 1003, 36). Petitioner also asserts that Oracle1 teaches that an item has a logic state, which is generated in response to a rule triggered by another selection the use has made. *Id.* at 28–29 (citing Ex. 1003, 43, 51).

Claim 19 provides that the test case selects at least one part to include in the product configuration and that at least one rule is processed to determine whether the at least one part selected in the test case conflicts with

the plurality of parts previously includes in the product configuration. Petitioner asserts that product configurations in Oracle1 include a plurality of parts and that Oracle1 teaches the processing of at least one rule to determine the at least one part conflicts with the previously included parts. Pet. 30–31 (citing Ex. 1003, 35–36, 50–51, 60–64, 97).

With respect to these dependent claims, Patent Owner argues that Petitioner has not shown the aspects of those claims associated with a configuration error. PO Resp. 34–35. We have addressed the “configuration error” limitation in the context of independent claim 1, and we do not find Patent Owner’s arguments to be persuasive. Further, we find Petitioner’s identification of “explanation data” in the context of Oracle1 to be reasonable and fall within the scope of the term “explanation data,” as recited in claims 9 and 10.

As such, we have reviewed the arguments and evidence and find that, on the present record, Petitioner sufficiently establishes by a preponderance of the evidence that the combination of Oracle1 and Oracle2 teaches or suggests all of the limitations of dependent claims 9, 10, 14, and 19 based on the Petition.

F. Obviousness over Oracle1, Oracle2, and SalesPlus

Petitioner asserts that the combination of Oracle1, Oracle2, and SalesPlus would have rendered the subject matter of claims 15 and 16 obvious to one of ordinary skill in the art at the time of the invention. Pet. 33–37. Patent Owner does not raise any argument specifically addressing this ground in the Patent Owner Response, other than asserting arguments with respect to the first ground applicable to this ground, i.e., the application of Oracle1 and Oracle2. PO Resp. 36.

Petitioner discusses SalesPlus, detailing that it is a reference guide for a product configurator, and that it explains various configurator features in the context of a Saab automobile configuration problem. Pet. 33 (citing Ex. 1005). Petitioner also asserts that “SalesPlus teaches determining whether a product is actually selectable based on prior part selections, and reports the state of the product as not selectable when selection of the product conflicts with a rule.” *Id.* (citing Ex. 1005, 23–24). Petitioner further asserts that a person of ordinary skill in the art would have sought out SalesPlus’s teachings to augment the product configuration testing capabilities taught in the Oracle1-Oracle2 combination, to address the known problem that configurators could configure products that were not actually selectable, addressed by SalesPlus, and that skilled artisans would have viewed SalesPlus’s teachings as a natural extension to Oracle1’s functionalities and would have required only routine modification. *Id.* at 35–37 (citing Ex. 1002 ¶¶ 101–106). Petitioner also details how the combination of Oracle1, Oracle2, and SalesPlus would have rendered the subject matter of claims 15 and 16 obvious. *Id.* at 33–45.

We have reviewed the arguments and evidence and find that, on the present record, Petitioner sufficiently establishes by a preponderance of the evidence that the combination of Oracle1, Oracle2, and SalesPlus teaches or suggests all of the limitations of claims 15 and 16 and that there is sufficient rationale to combine the references based on the Petition.

G. Obviousness over Oracle1, Oracle2, SalesPlus, and Yu

Petitioner asserts that the combination of Oracle1, Oracle2, SalesPlus, and Yu would have rendered the subject matter of claims 11–13 and 17 obvious to one of ordinary skill in the art at the time of the invention.

Pet. 37–52. Patent Owner does not raise any argument specifically addressing this ground in the Patent Owner Response, other than asserting arguments with respect to the first ground applicable to this ground, i.e., the application of Oracle1 and Oracle2. PO Resp. 36.

Petitioner discusses Yu, detailing that it is an article about the product configurator disclosed in SalesPlus, and discusses generating explanations for various types of errors, including for parts that are erroneously in two states at the same time, as well as a look ahead process, and the determination of sets of excluded parts based on a product selection. Pet. 37 (citing Ex. 1006, 3–5). Petitioner also asserts that a person of ordinary skill in the art would have sought out Yu and SalesPlus’s teachings to augment the product configuration testing capabilities taught in the Oracle1-Oracle2 combination, including the generation of expanded explanation data beyond that was taught in Oracle1, to be able to catch errors as a part of product configuration testing, and produce more complete and efficient testing. *Id.* at 49–52 (citing Ex. 1002 ¶¶ 107–114; Ex. 1003, 62, 97; Ex. 1005, 28; Ex. 1006, 4, 1028, 1050). Petitioner additionally details how the combination of Oracle1, Oracle2, SalesPlus, and Yu would have rendered the subject matter of claims 11–13 and 17 obvious. *Id.* at 38–48.

We have reviewed the arguments and evidence and find that, on the present record, Petitioner sufficiently establishes by a preponderance of the evidence that the combination of Oracle1, Oracle2, SalesPlus, and Yu teaches or suggests all of the limitations of claims 11–13 and 17 and that there is sufficient rationale to combine the references based on the Petition.

H. Obviousness over Oracle1, Oracle2, and Memon

Petitioner asserts that the combination of Oracle1, Oracle2, and Memon would have rendered the subject matter of claims 2 and 18 obvious to one of ordinary skill in the art at the time of the invention. Pet. 52–62. Patent Owner does not raise any argument specifically addressing this ground in the Patent Owner Response, other than asserting arguments with respect to the first ground applicable to this ground, i.e., the application of Oracle1 and Oracle2. PO Resp. 36.

Petitioner discusses the subject matter of claims 2 and 18, as well as Memon. Pet. 52–55. Petitioner supplies a rationale to combine the teachings of Memon with those of Oracle1 and Oracle2, and discusses that the combination renders the subject matter of claim 2 and 18 obvious. *Id.* at 56–62.

We have reviewed the arguments and evidence and find that, on the present record, Petitioner sufficiently establishes by a preponderance of the evidence that the combination of Oracle1, Oracle2, and Memon teaches or suggests all of the limitations of claims 2 and 18 and that there is sufficient rationale to combine the references based on the Petition.

I. Obviousness over Oracle1, Oracle2, Memon, and SalesPlus

Petitioner asserts that the combination of Oracle1, Oracle2, Memon, and SalesPlus would have rendered the subject matter of claims 3–5 obvious to one of ordinary skill in the art at the time of the invention. Pet. 62–71. Patent Owner does not raise any argument specifically addressing this ground in the Patent Owner Response, other than asserting arguments with respect to the first ground applicable to this ground, i.e., the application of Oracle1 and Oracle2. PO Resp. 36.

We have reviewed the arguments and evidence and find that, on the present record, Petitioner sufficiently establishes by a preponderance of the evidence that the combination of Oracle1, Oracle2, Memon, and SalesPlus teaches or suggests all of the limitations of claims 3–5 and that there is sufficient rationale to combine the references based on the Petition.

III. CONCLUSION

For the reasons discussed above, Petitioner has demonstrated, by a preponderance of the evidence, that claims 1–5 and 9–19 are unpatentable.⁷ Our conclusions regarding the Challenged Claims are summarized below:

Claims	35 U.S.C. §	Reference(s)/Basis	Claims Shown Unpatentable	Claims Not Shown Unpatentable
1, 9, 10, 14, 19	103	Oracle1, Oracle2	1, 9, 10, 14, 19	
15, 16	103	Oracle1, Oracle2, SalesPlus	15, 16	
11–13, 17	103	Oracle1, Oracle2, SalesPlus, Yu	11–13, 17	
2, 18	103	Oracle1, Oracle2, Memon	2, 18	
3–5	103	Oracle1, Oracle2, Memon, SalesPlus	3–5	
Overall Outcome			1–5, 9–19	

⁷ Should Patent Owner wish to pursue amendment of the challenged claims in a reissue or reexamination proceeding subsequent to the issuance of this Decision, we draw Patent Owner’s attention to the April 2019 *Notice Regarding Options for Amendments by Patent Owner Through Reissue or Reexamination During a Pending AIA Trial Proceeding*. See 84 Fed. Reg. 16,654 (Apr. 22, 2019). If Patent Owner chooses to file a reissue application or a request for reexamination of the challenged patent, we remind Patent Owner of its continuing obligation to notify the Board of any such related matters in updated mandatory notices. See 37 C.F.R. §§ 42.8(a)(3), (b)(2).

V. ORDER

For the reasons given, it is:

ORDERED that Petitioner has established based on a preponderance of evidence that claims 1–5 and 9–19 of U.S. Patent No. 6,836,766 B1 are unpatentable as obvious under 35 U.S.C. § 103; and

FURTHER ORDERED that because this is a final written decision, the parties to this proceeding seeking judicial review of our Decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

IPR2021-01055
Patent 6,836,766 B1

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