

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

KINAXIS INC. and KINAXIS CORP.,
Petitioner,

v.

BLUE YONDER GROUP, INC.,
Patent Owner.

IPR2021-01302
Patent 7,788,145 B2

Before NATHAN A. ENGELS, PAUL J. KORNICZKY, and
BRENT M. DOUGAL, *Administrative Patent Judges*.

KORNICZKY, *Administrative Patent Judge*.

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

I. INTRODUCTION

Kinaxis Inc. and Kinaxis Corp. (“Petitioner”) filed a Petition for *inter partes* review of claims 1–3 and 5–20 in U.S. Patent No. 7,788,145 B2 (Ex. 1001, “the ’145 patent”). Paper 2 (“Pet.”). Blue Yonder Group Inc. (“Patent Owner”) filed a Preliminary Response. Paper 12 (“Prelim. Resp.”).

Under 35 U.S.C. §§ 6(b)(4), 314 and 37 C.F.R. § 42.4(a), we have authority to institute an *inter partes* review if “the information presented in the petition . . . and any response . . . shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a) (2018). After considering the Petition, Preliminary Response, and other evidence of record, we determine that Petitioner has demonstrated a reasonable likelihood of prevailing in showing the unpatentability of at least one of the challenged claims. Thus, we institute an *inter partes* review of claims 1–3 and 5–20 of the ’145 patent as to all grounds in the Petition.

II. BACKGROUND

A. *Real Parties-in-Interest*

As required by 37 C.F.R. § 42.8(b)(1), each party identifies the real party-in-interest. Petitioner identifies Kinaxis Inc. and Kinaxis Corp. as the real parties-in-interest. Pet. 76. Patent Owner identifies itself, Panasonic Corporation, and Panasonic Corporation of North America as the real parties-in-interest. Paper 14, 1.

B. Related Proceedings

As required by 37 C.F.R. § 42.8(b)(2), each party identifies various judicial or administrative matters that would affect or be affected by a decision in this proceeding. Pet. 76; Paper 14, 1. The parties state that the '145 patent is the subject matter of *Blue Yonder Group Inc. v. Kinaxis Inc.*, No. 3:20-cv-03636-K (N.D.Tex.). Pet. 76; Paper 14, 1.

C. Overview of the '145 Patent (Ex. 1001)

The '145 patent is titled “Intelligent Fulfillment Agents” and issued from U.S. Patent Application No. 11/877,087 (“’087 Application”). Ex. 1001, codes (54), (21).

The '145 patent discloses and claims a distributed inventory management system (DIMS), method, and software to address problems within a value chain created by traditional inventory management systems. Ex. 1001, 1:63–2:5. Figure 1 of the '145 patent is reproduced below.

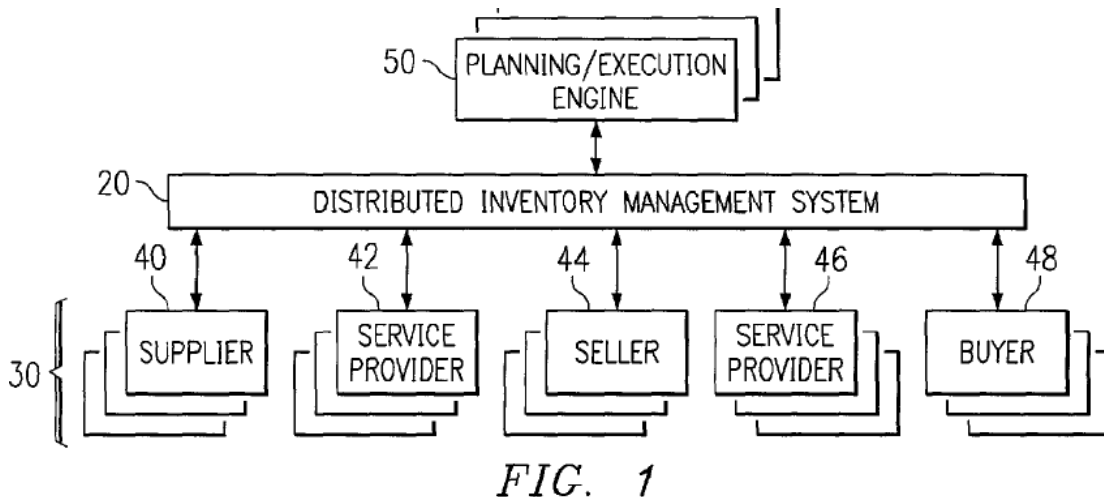


Figure 1 illustrates an example of DIMS 20 for managing the inventory of one or more participants 30 in a value chain. *Id.* at 3:3–5. A value chain may include various participants 30 such as (1) suppliers 40 of component

parts used to create products, (2) sellers 44 of those products, (3) service providers 42, 46 that act as intermediaries between other participants, and (4) buyers 48 that buy products from sellers 44. *Id.* at 3:9–21.

The '145 patent recognizes that different replenishment policies are used in different tiers of the chain and in different trading partnerships. Ex. 1001, 4:25–27, 4:34–36. According to the '145 patent, “[a]lthough these various replenishment processes provide adequate inventory management, problems arise when multiple entities are involved in a value chain and especially when these multiple entities carry out different types of replenishment programs between one another.” *Id.* at 1:63-67; *see also id.* at 4:18–42.

The '145 patent states that DIMS 20 solves these problems by providing “participants 30 with one logical distributed inventory ‘backplane’ which has the capability to model engagement rules to enable interoperability of fulfillment/replenishment policies in different tiers of a value chain” and “a framework to construct and maintain a virtual unification” across participants. Ex. 1001, 5:4–11. It allows participants 30 “in a value chain to simultaneously lower inventory, improve responsiveness, and lower costs.” *Id.* at 4:65–5:1.

D. Illustrative Claim

As mentioned above, the challenged claims are claims 1–3 and 5–20 of the '145 patent. Claims 1, 14, and 20 are independent claims. Ex. 1001, 23:20–26:15. Claim 1 is reproduced below:

1. [1pre]¹ A distributed inventory management system, comprising: one or more computers coupled with a plurality of participant computers in one or more tiers of a value chain, the one or more computers configured to:

[1a] evaluate inventory data received from one or more of the plurality of participant computers according to one or more business rules;

[1b] execute a business process using one or more software agents, based on the evaluation of the received inventory data;

[1c] communicate output of the business process to one or more of the plurality of participant computers;

[1d] generate an alert when at least one of the plurality of participant computers uses a first replenishment policy in a first tier of the one or more tiers of the value chain that is different than a second replenishment policy used by at least one of the plurality of participant computers in at least a second tier of the one or more tiers of the value chain; and

[1e] communicate the generated alert to one or more of the plurality of participant computers.

Ex. 1001, 23:20–40.

E. Evidence and Asserted Grounds

Petitioner relies upon the following evidence:

(1) US Patent Publication 2002/0099580 A1, published July 25, 2002 (Ex. 1004, “Eicher”);

(2) US Patent No. 6,947,903 B1, issued September 20, 2005 (Ex. 1005, “Perry”);

¹ For ease of reference, we use Petitioner’s claim numbering scheme.

(3) WO 00/09529, published February 24, 2000 (Ex. 1006, “Yablonski”);

(4) Bagchi et al., *Experience Using the IBM Supply Chain Simulator*, Proceedings of the 1998 Winter Simulation Conference, Vol. 2, p. 1387, published June 1999 (Ex. 1007, “IBM”); and

(5) US Patent No. 5,974,395, issued October 26, 1999 (Ex. 1008, “Bellini”).

Petitioner submits a declaration of Dr. Robert Handfield (Ex. 1003, “Handfield Decl.”) in support of its contentions.

Patent Owner, at this stage, does not submit any supporting declarations.

Petitioner challenges the patentability of the ’145 patent claims on the following grounds:

Grounds	Claims Challenged	35 U.S.C. §²	Reference(s)/Basis
1A ³	1–3, 5, 8, 14, 20	103	Eicher
1B	1–3, 5, 8, 14, 20	103	Eicher, IBM
1C	9, 10	103	Eicher, Perry
2A	1–3, 5, 8, 9, 10, 14, 20	103	Perry, Yablonski
2B	6, 7, 11–13, 15–19	103	Perry, Yablonski, Bellini

Pet. 1.

² 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. Based on the October 23, 2007 filing date of the ’145 patent, we apply the pre-AIA version of § 103.

³ For ease of reference, we use Petitioner’s numbering scheme.

III. ANALYSIS

A. *Legal Standards*

Petitioner bears the burden of persuasion to prove unpatentability, by a preponderance of the evidence, of the claims challenged in the Petition. 35 U.S.C. § 316(e). This burden never shifts to Patent Owner. *Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015). The Board may authorize an *inter partes* review if we determine that the information presented in the Petition and Patent Owner’s Preliminary Response shows that there is a reasonable likelihood that Petitioner will prevail with respect to at least one of the claims challenged in the Petition. 35 U.S.C. § 314(a).

A claim is unpatentable under 35 U.S.C. § 103(a) if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved based on underlying factual determinations including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) when in the record, objective evidence of nonobviousness.⁴ *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

⁴ At this stage of the proceeding, the parties have not directed us to any objective evidence of non-obviousness.

B. Level of Ordinary Skill in the Art

Petitioner asserts that a person of ordinary skill in the art “would have had a formal collegiate education in an academic area emphasizing operations or supply chain management, and at least five years of experience.” Pet. 9 (citing Handfield Decl. ¶¶ 18–19). Patent Owner responds that it “accepts” Petitioner’s definition. Prelim. Resp. 12.

The level of ordinary skill in the art may be evidenced by the references themselves. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001). The level of ordinary skill proposed by Petitioner appears to be consistent with that of the references, and we apply the parties’ proposed level of ordinary skill for purposes of this Decision.

C. Claim Construction

In an *inter partes* review, the claims are construed using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. § 282(b). *See* 37 C.F.R. § 42.100(b) (2021). This claim construction standard includes construing the claim in accordance with the ordinary and customary meaning of such claims as understood by one of ordinary skill in the art. *Id.*; *see Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005). In construing claims in accordance with their ordinary and customary meaning, we consider the specification and the prosecution history of the patent. *Phillips*, 415 F.3d at 1315–17. Extrinsic evidence, including expert and inventor testimony, dictionaries, and treatises, may also be used but is less significant than the intrinsic record. *Id.* at 1315. Usually, the specification is dispositive, and it is the single best guide to the meaning of a disputed term. *Id.* Any special definitions for

claim terms must be set forth in the specification with reasonable clarity, deliberateness, and precision. *See In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994).

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. *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co. Matal*, 868 F.3d 1013, 1017 (Fed. Cir. 2017). Petitioner states that no express constructions are necessary for institution (Pet. 9), and Patent Owner “accepts” this position (Prelim. Resp. 11). For purposes of this Decision, and based on the record before us, we determine that no express construction of any term is necessary. To the extent that the parties’ arguments relating to unpatentability reflect differences in claim interpretations, we address those arguments in the analysis below, and we encourage the parties to address such issues as matters of claim construction.

D. Ground 1A: Asserted Obviousness Over Eicher (Claims 1–3, 5, 8, 14, 20)

Petitioner asserts that claims 1–3, 5, 8, 14, and 20 are unpatentable under 35 U.S.C. § 103 as being obvious over Eicher. Pet. 10–30. Petitioner provides a limitation-by-limitation comparison of Eicher to the challenged claims, citing the declaration of Dr. Handfield (Handfield Decl.) as supporting evidence. *Id.* Patent Owner contends Petitioner has not established that Eicher discloses or renders obvious each limitation of the challenged claims. Prelim. Resp. 21–36.

Based on the evidence of record, we conclude Petitioner has shown a reasonable likelihood of prevailing on its obviousness assertion as to

claim 1–3, 5, 8, 14, and 20. We first present a summary of Eicher, and then address the parties’ arguments and evidence below with focus on claim 1.

1. Overview of Eicher (Ex. 1004)

Eicher is a patent publication titled “Performance-Based Supply Chain Management System and Method with Collaboration Environment for Dispute Resolution.” Ex. 1004, code (54). It relates to a performance-based supply chain management system 10. *Id.* ¶ 101. Figure 2 of Eicher is reproduced below.

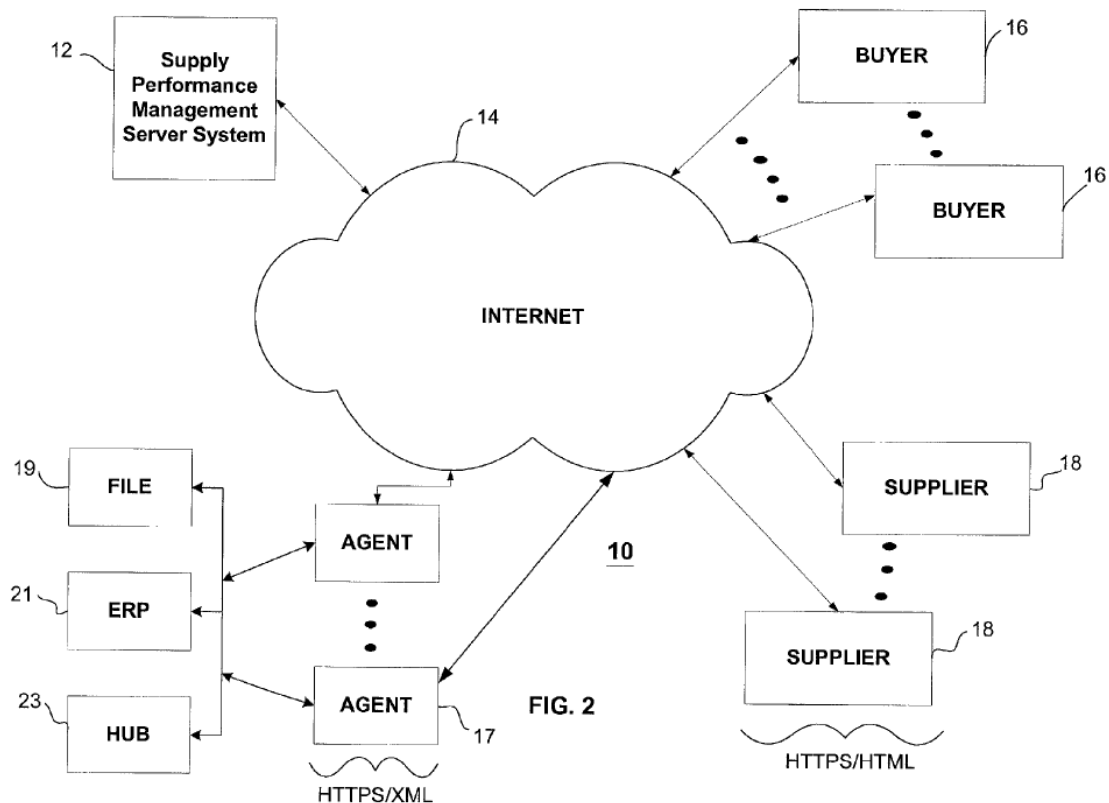


Figure 2 depicts a supply chain performance management system 10 which may be provided as an internet-based system 14 to enable buyers 16 and suppliers 18 disbursed throughout the world to connect to one another and engage and participate in the system 10. *Id.* Eicher's system 10 comprises supplied performance management server systems 12 that are connected to

the internet to buyers 16 and suppliers 18 to communicate using current and future enhancement to internet protocol communications. *Id.*

System 10 provides a collaboration environment in which buyers 16 and suppliers 18 to a buyer-supplier engagement may collaborate regarding issues related to key performance indicators (KPIs) identified for the buyer-supplier engagement. Ex. 1004, code (57). Examples of KPIs include “the amount of time, the quantity required, or other indicators important to the contract” and “ability to have the demand fulfilled in spikes; suppliers with production flexibility to accommodate short-notice changes in total demand and/or product mix; geographically dispersed production and/or distribution centers to guard against disruptions stemming from natural disasters, etc.” *Id.* ¶ 70.

Eicher’s system 10 monitors the KPIs and initiates the collaboration module automatically upon determination of a violation with respect to a KPI and/or alerts buyers 16 and suppliers 18 of a value for a KPI in response to which the alerted participants may initiate an on-line collaboration with respect to the KPI. *Id.* at code (57). For example, “the buyer may select to be alerted based on inventory shortages, over-stocking and the like.” *Id.* ¶ 89.

2. *Claim 1*

- a) *Claim 1pre: A distributed inventory management system, comprising: one or more computers coupled with a plurality of participant computers in one or more tiers of a value chain, the one or more computers configured to:*

Although neither Petitioner nor Patent Owner addresses whether the preamble of claim 1 is limiting, both address substantively the preamble— a

“distributed inventory management system.” Petitioner asserts that Eicher teaches a “distributed inventory management system” because Eicher’s “system” 10 includes “multiple participants communicatively connected to each other.” Pet. 10 (citing Ex. 1004 ¶ 33; Handfield Decl. ¶¶ 65–72). Petitioner explains that “Eicher’s ‘system 10 comprises one or more supplied performance management server systems 12 that are connected [by] the internet to a plurality of buyers 16 and suppliers 18 to communicate using . . . internet protocol communications.’” *Id.* at 11 (quoting Ex. 1004 ¶ 101).

Petitioner asserts that Eicher’s system 10 is “distributed” because, for example, “the components are located on different machines” (Pet. 11 (citing Handfield Decl. ¶ 66) and “Agents 17, Buyers 16, Suppliers 18, and the Supply Performance Management Server System 12 are all depicted as being separate but communicatively linked” (*id.* (citing Ex. 1004, Fig. 2)). Petitioner further explains that (1) Eicher’s system’s processes “are executed by modules that ‘may be provided on a single server system or may be disbursed across many different server systems to provide the functionality to execute the process described herein’” (*id.* at 11–12 (citing Ex. 1004 ¶ 183)) and (2) the different machines are distributed across different locations under the control of different entities (*id.* at 12 (citing Ex. 1004, Fig. 2)).

Petitioner asserts that Eicher’s system 10 is configured for “inventory management” because it “is capable of alerting buyers ‘based on inventory shortages, over-stocking and the like’” (Pet. 12 (quoting Ex. 1004 ¶ 89) and a person of ordinary skill in the art would have understood that “systems that send alerts based on inventory shortages do so for the purpose of allowing

management of that inventory by taking corrective action in the form of additional orders” (*id.* (citing Handfield Decl. ¶ 67)).

Patent Owner asserts that the claimed “distributed inventory management system” (DIMS) must (1) “couple[] inventory data resources of a number of different participants [] in a value chain with one or more planning and/or execution engines [] that use the inventory data to plan and execute inventory-related business decisions” (Prelim. Resp. 23 (citing Ex. 1001, 3:5–9) and (2) provide “a distributed inventory ‘backplane’ to integrate different tiers of a value chain that use different replenishment policies” (*id.* (citing Ex. 1001, 5:4–9)). Patent Owner contends that Eicher “assists companies in choosing partners and managing relationships,” but it does not disclose a DIMS with these two capabilities or “any ***inventory management*** capabilities.” *Id.* (citing Ex. 1001, 4:56–5:1; Ex. 1004 ¶¶ 16, 19).

At this stage, we find Petitioner’s showing sufficient for the purposes of institution. Eicher’s distributed computer system appears capable of alerting buyers “based on inventory shortages, over-stocking and the like” (Ex. 1004 ¶ 89) and, according to the un rebutted testimony of Dr. Handfield, a person of ordinary skill in the art would have understood that Eicher’s “systems that send alerts based on inventory shortages do so for the purpose of allowing management of that inventory, for example, by taking corrective action in the form of additional orders” (Handfield Decl. ¶ 67).

Based on the present record, we do not agree with Patent Owner’s arguments. First, Petitioner’s contentions are supported by Dr. Handfield’s un rebutted testimony whereas Patent Owner’s contentions are unsupported attorney argument. *See In re Geisler*, 116 F.3d 1465, 1471 (Fed. Cir. 1997)

(argument by counsel cannot take the place of evidence). Second, rather than presenting a proper claim construction of a DIMS, Patent Owner improperly appears to be incorporating embodiments from the Specification into claim 1. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1323 (Fed. Cir. 2005) (en banc) (“[A]lthough the specification often describes very specific embodiments of the invention, we have repeatedly warned against confining the claims to those embodiments.”). Third, Patent Owner’s arguments appear inconsistent with Patent Owner’s position that Eicher and Perry are cumulative of Jenkins, which was considered during prosecution of the ’145 patent and that “[a]ll three systems disclose a process for **monitoring** data throughout a supply chain, **detecting** possible item shortages based on that monitoring and **generating an alert** accordingly.” Prelim. Resp. 17. Although we decline to address in the first instance whether the preamble is limiting, the parties are encouraged to address this issue and/or the meaning and scope of these elements in future briefing. At this stage, however, we find Petitioner’s showings sufficient for the purposes of institution.

As to the limitation reciting “one or more computers coupled with a plurality of participant computers in one or more tiers of a value chain,” Petitioner asserts that, Eicher’s system also comprises “one or more **computers** (Supply Performance Management Server System 12) **coupled with a plurality of participant computers** (Buyers 16, Suppliers 18).” Pet. 12. Petitioner further asserts that Eicher suggests that “the participants are ‘**in one or more tiers of a value chain**’ because “Eicher teaches a **value chain** in how its ‘invention maximizes the value of every supply chain relationship by substantially reducing the time and cost of ensuring quality of service, connecting operational decisions to strategic decisions, in

quantifying critical tradeoffs among related performance measures.” *Id.* at 14 (citing Ex. 1004 ¶ 188). According to Petitioner, Eicher’s supply chain corresponds to the recited “value chain” because “each ***tier*** (relationship) of Eicher adds ***value*** to [the] system as a whole” (*id.* (citing Handfield Decl. ¶¶ 28–29, 71) and a person of ordinary skill in the art would have understood that “the concepts of a supply chain and a value chain represent different, but complementary, analytical views of a real-world system (and its participants) for producing commercial products” (*id.* (citing Handfield Decl. ¶ 29)). Petitioner explains that “[w]here a supply chain view of the system concerns the flow of goods and services between participants, a value chain view of the system concerns the value added by each participant (*id.* (citing Handfield Decl. ¶ 29) and these “terms were often used interchangeably in the field” (*id.* (citing Handfield Decl. ¶ 28; Ex. 1009; Ex. 1011)).

Patent Owner does not contest that Eicher’s “relationship” corresponds to the recited “tier of a value chain” but contends that Eicher’s relationships are between “individual partners” and “discrete partnerships,” not “multiple” tiers of the value chain. Prelim. Resp. 24. According to Patent Owner, “Eicher merely discloses relationships between buyer-supplier partners and fails to suggest or even hint that these partners occupy multiple tiers of a value chain, let alone that its system could integrate such tiers.” *Id.* at 25.

First, we note that Patent Owner’s suggestion that this limitation requires “multiple tiers” seems inconsistent with the claim’s recitation of “one or more tiers.” We also note that Patent Owner’s arguments appear inconsistent with Patent Owner’s statement that Eicher “provide[s] a system

for monitoring business relationship health through monitoring standard business documents that are exchanged between partners and automatically extracting data that provides insight into that business relationship.” Prelim. Resp. 13 (citing Ex. 1004 ¶ 11). Further, at this stage, we find Petitioner makes a sufficient showing for this limitation with its arguments and evidence that Eicher teaches or suggests tiers of suppliers in a value chain that supply parts and components up the value chain to an OEM. *See, e.g.*, Pet. 14 (citing Handfield Decl. ¶ 28–29, 71). Petitioner’s contentions are supported by Dr. Handfield’s unrebutted testimony whereas Patent Owner’s contentions are unsupported attorney argument. *Geisler*, 116 F.3d at 1471.

b) Claim 1a: evaluate inventory data received from one or more of the plurality of participant computers according to one or more business rules

Petitioner asserts that Eicher’s system satisfies this limitation. Pet. 15–17 (citing Handfield Decl. ¶¶ 73–76). According to Petitioner, Eicher states: “In order to monitor the day-to-day performance of the relationship, the system monitors the KPI’s [Key Performance Indicators] of the relationship. To do so, the relevant pieces of data between buyer and supplier are extracted from commitments in the normal flow of e-commerce messages and pass through the common server system.” *Id.* at 15 (quoting Ex. 1004 ¶¶ 90–91). According to Petitioner, a person of ordinary skill in the art would have understood that, “in the context of Eicher’s disclosure, ‘relevant pieces of data between buyer and supplier’ includes the **inventory data** that permits KPI monitoring.” *Id.* (citing Ex. 1004, Abstract; Handfield Decl. ¶ 73). Petitioner also asserts, in part, that “Eicher’s disclosure of ‘extracting’ teaches the [person of ordinary skill in the art] that the data used

for monitoring relationship performance is *received* from ‘the normal flow of e-commerce messages’ between buyers and sellers (*participant computers*, per [1pre]).” *Id.* at 15–16 (citing Ex. 1004 ¶¶ 90–91; ¶¶ 11, 13, 24, 57, 102, Figs. 3-4; Handfield Decl. ¶ 73).

Patent Owner, however, contends that “[e]xtracting data is not the same as receiving data” and that “[w]hen Eicher’s system extracts data, it does so by *taking* data from communications between buyers and suppliers.” Prelim. Resp. 25 (citing Ex. 1004 ¶ 91).

At this stage, we find Petitioner makes a sufficient showing for this limitation with its arguments and evidence that a person of ordinary skill in the art would understand that Eicher’s disclosure of “extracting” teaches that “the data used for monitoring relationship performance is *received* from ‘the normal flow of e-commerce messages’ between buyers and sellers (i.e., *participant computers*).” *See* Pet. 15–16; Handfield Decl. ¶ 73. Petitioner’s contentions are supported by Dr. Handfield’s un rebutted testimony whereas Patent Owner’s contrary contentions about technical or legal differences between “taking” and “receiving” data are unsupported and conclusory attorney argument. *Geisler*, 116 F.3d at 1471. The parties are encouraged to address this issue and/or the meaning and scope of these elements in future briefing. At this stage, however, we find Petitioner’s showings sufficient for the purposes of institution.

c) Claim 1b: execute a business process using one or more software agents, based on the evaluation of the received inventory data

Petitioner asserts that Eicher teaches or suggests this limitation. Pet. 17–21 (citing Handfield Decl. ¶ 77–85). According to Petitioner, the recited

“business process” is a procedure used in the course of a business’s operations “such as the creation and communication of a purchase order” (*id.* at 6 (citing Ex. 1001, 16:44–45; 17:20–28) and Eicher discloses execution of a business process based on two independent teachings: the system’s dispute resolution process (*id.* at 18–19) and engagement phase (*id.* at 19–21).

First, Petitioner asserts that Eicher provides a structured business process for dispute resolution because “the system ‘provides a collaboration environment in which buyers and suppliers to a buyer-supplier engagement may collaborate regarding issues related to one or more key performance indicators identified for the buyer-supplier engagement.’” *Id.* at 18 (citing Ex. 1004 ¶¶ 2, 92, 164–165). Relying on Dr. Handfield’s testimony, Petitioner contends that “Eicher’s disclosure of a ‘collaboration environment’ is consistent with a [a person ordinary skill in the art’s] understanding of a **business process** in the sense that it establishes a procedure used for a specific purpose—i.e., dispute resolution—in the course of business operations.” *Id.* (citing Handfield Decl. ¶¶ 55, 78–79).

Second, Petitioner asserts that Eicher also discloses “**executing a business process**” based on Eicher’s disclosure of the system’s “engagement phase” between buyers and suppliers. Pet. 19–20 (citing Ex. 1004 ¶¶ 69–73, 113–128; Handfield Decl. ¶¶ 81–82). Petitioner explains that the “engagement phase is a multi-step **business process** that starts when ‘the system attempts to match up buyers and suppliers based on preferences provided by each of these enterprises’ and the system then facilitates selection of KPI’s to govern the relationship based on “performance expectations,” “evaluates the fit” between the buyer and supplier, and

“establishes a partner agreement.” *Id.* (citing Ex. 1004 ¶¶ 69–73). Relying on Dr. Handfield’s testimony, Petitioner contends that a person of ordinary skill in the art would have understood that “facilitating a new relationship between a buyer and a supplier is a routine procedure (***business process***) conducted during the ordinary course of business operations.” *Id.* at 20 (citing Handfield Decl. ¶¶ 55, 81).

Patent Owner asserts that Eicher does not teach or suggest the “business process” recited in limitation 1b because business processes must be “performed by the agents includ[ing] creating shipping or delivery schedules, creating purchase orders and requesting order status from service providers.” Prelim. Resp. 26–27.

Patent Owner contends that “Petitioner has pointed to no language in Eicher disclosing or even hinting at business processes, let alone business processes performed by agents, and indeed, there is none.” Prelim. Resp. 27–28. According to Patent Owner, the “dispute resolution system in Eicher merely ‘provides a collaboration ***environment***’ for buyers and suppliers to resolve disputes; it does not disclose a ***process*** of any kind, let alone a business process as understood by a [person of ordinary skill in the art] reviewing the ’145 Patent.” *Id.* at 28 (citing Ex. 1004 ¶ 2). Patent Owner also argues that “Petitioner fails to show that the partner engagement phase, where the Eicher system ‘attempts to match up buyers and suppliers’ is a business process; instead, it merely facilitates a new relationship between a buyer and supplier.” *Id.* at 28–29 (citing Ex. 1004 ¶¶ 69–76).

At this stage, we find Petitioner makes a sufficient showing for this limitation with its arguments and evidence that a person of ordinary skill in the art would understand that Eicher’s disclosure of its collaboration

environment/dispute resolution and engagement phase between buyers and sellers teaches executing a business process as recited in limitation 1b. *See* Pet. 17–21; Handfield Decl. ¶¶ 55, 78–82. Petitioner’s contentions are supported by Dr. Handfield’s un rebutted testimony whereas Patent Owner’s contrary contentions are attorney argument. *Geisler*, 116 F.3d at 1471. Furthermore, Patent Owner’s arguments that business processes must be “performed by the agents” improperly appears to be incorporating embodiments from the Specification into claim 1. *See Phillips*, 415 F.3d at 1323 (“[A]lthough the specification often describes very specific embodiments of the invention, we have repeatedly warned against confining the claims to those embodiments.”). The parties are encouraged to address this issue and/or the meaning and scope of these elements in future briefing. At this stage, however, we find Petitioner’s showings sufficient for the purposes of institution.

d) Claim 1c: communicate output of the business process to one or more of the plurality of participant computers

Petitioner asserts that Eicher teaches or suggests this limitation. Pet. 22–23 (citing Handfield Decl. ¶¶ 86–89). According to Petitioner’s first contention, “Eicher teaches that the dispute resolutions resulting (*output*) from the ‘collaboration environment’ (*business process*, per [1b]) are ‘indexed’ with the ‘the issue text and any associated discussion [] archived into a resolution database’” (*id.* at 22 (citing Ex. 1004 ¶ 93; *see also* ¶¶ 65 (“issue resolution dialogs”), 176–178)), and “[i]ndexing this resolution in a ‘fully searchable resolution database’ facilitates *communication* to buyers and sellers (*participant computers*, per [1pre]) via ‘ad hoc queries against

previous resolutions” (*id.* (citing Ex. 1004 ¶¶ 176–178; *see also id.* at ¶¶ 19, 26, 65; Handfield Decl. ¶ 87)).

In a second contention, Petitioner further asserts that “Eicher describes a ‘partner selection step’ of its ‘engagement phase’ (*business process*) where the system determines whether specific buyers and sellers are a good match” and “the *output* of this ‘partner selection step’ is a buyer matched with a compatible seller, such that the two parties are ushered into ‘[t]he next step in the engagement phase,’ which is ‘establish[ing] a partner agreement.’” Pet. 22 (citing Ex. 1004 ¶ 72–73). Relying on the testimony of Dr. Handfield, Petitioner asserts it would have been clear to a person of ordinary skill in the art that “in the process of providing template agreements and facilitating negotiations, Eicher’s system *communicates* to the parties (*participant computers*, per [1pre]) that they have been matched (*output*) with one another.” *Id.* (citing Handfield Decl. ¶ 88).

Finally, Petitioner, relying on Dr. Handfield’s testimony, asserts that if “this *communication* functionality is not suggested by Eicher’s disclosure (which it is), it would have been exceedingly obvious for a [person of ordinary skill in the art] to have implemented it” because a person of ordinary skill in the art “would have appreciated as a matter of common sense that buyers and sellers (*participant computers*) should be notified (via *communications*) when they are matched (*output*) so that they can begin to negotiate an agreement” and “this would have been a trivial, yet requisite, implementation detail.” *Id.* (citing Handfield Decl. ¶ 89).

Patent Owner contends that “Eicher does not communicate output of business processes to participant computers” because “the results of Eicher’s dispute resolution are stored in a database” and, contrary to Petitioner’s

arguments, Eicher’s disclosure does not state that its system “facilitates” communication. Prelim. Resp. 31. According to Patent Owner, claim 1 “does not require the ‘*facilitation*’ of communication *between* participants in a value chain; it actually— through a software program—*communicates* to participants in a value chain.” *Id.* (citing Ex. 1001, 23:30).

As to Eicher’s partner engagement phase, Patent Owner contends that “Eicher does not disclose that its system communicates the results of the engagement phase to participants.” Prelim. Resp. 31. According to Patent Owner, Eicher’s system “extracts and monitors data from ‘the normal flow of e-commerce messages’ that *already pass[ed] between buyers and suppliers* through the system (*id.* at 31–32 (citing Ex. 1004 ¶¶ 91, 102)) and “at most—aids in communication *between buyers and sellers.*” *Id.* at 32. Finally, Patent Owner contends that “even assuming that a [person of ordinary skill in the art] would have appreciated that matched partners need to be notified before user selection, Eicher does not disclose or suggest that such a notification could be made by its system rather than by the actions of a buyer or seller directly.” *Id.* at 32 (also arguing that “[n]othing about the system’s operation suggests that Eicher’s system itself communicates any output of the partner engagement phase to participants”).

At this stage, we find Petitioner makes a sufficient showing for its second contention this limitation with its arguments and evidence that a person of ordinary skill in the art would understand that Eicher’s disclosure of its engagement phase between buyers and sellers teaches or suggests communication of the output of the business process to the participants. *See* Pet. 22–23 and Handfield Decl. ¶¶ 86–89. Petitioner’s contentions are supported by Dr. Handfield’s un rebutted testimony whereas Patent Owner’s

contrary contentions are attorney argument. *Geisler*, 116 F.3d at 1471. Patent Owner offers no legal support for its arguments that the skilled artisan's understanding of Eicher must be found in the Eicher's disclosure. As to Petitioner's first contention regarding Eicher's collaboration environment/dispute resolution (Pet. 22), Petitioner does not adequately explain how Eicher's resolution database communicates output of the business process to the participant computers, as required by limitation 1c. The parties are encouraged to address these issues and/or the meaning and scope of these elements in future briefing. At this stage, however, we find Petitioner's showings sufficient for the purposes of institution.

- e) *Claim 1d: generate an alert when at least one of the plurality of participant computers uses a first replenishment policy in a first tier of the one or more tiers of the value chain that is different than a second replenishment policy used by at least one of the plurality of participant computers in at least a second tier of the one or more tiers of the value chain*

Petitioner asserts that Eicher teaches or suggests this limitation. Pet. 23–27 (citing Handfield Decl. ¶¶ 90–97). Referring to Eicher's Figure 1, Petitioner asserts that “when a problem condition is detected at the analysis step 112 of Eicher's ‘monitor’ phase, the system will issue a notification at step 114.” *Id.* at 23. Relying on Dr. Handfield's testimony, Petitioner asserts that a person of ordinary skill in the art would have understood this notification includes “an **alert** that serves the function of informing at least one of the participants of a notable condition.” *Id.* at 23–24 (citing Handfield Decl. ¶¶ 51, 91). According to Petitioner, Eicher repeatedly describes “its various ‘notifications’ as **alerts**” and that these “notifications/**alerts** are **generated** in response to violations of the ‘business rules’ governing a

buyer-supplier relationship.” *Id.* at 24 (citing Ex. 1004 ¶¶ 87–89, 153, 156, 163 (“If any business rules are violated or other conditions under the *alerts* are met, then in step 114 notifications may be issued to order more partners.”), 179, 181, Figure 1).

Relying on Dr. Handfield’s testimony, Petitioner explains that a person of ordinary skill in the art would have understood “Eicher’s collection of business rules governing the buyer-supplier relationship is associated with a *replenishment policy*,” that is, “the business rules provide guidelines (*policy*) addressing how the supplier agreed to *replenish* the buyer with parts.” Pet. 25 (citing Handfield Decl. ¶¶ 36, 54, 93; Ex. 1004 ¶ 18 (discussing “business rules that are applicable to a particular arrangement between partners”), 76–79, 89 (business rules based on “inventory”), 90–91, 96 (business rules “are used to monitor performance”), 129). Petitioner also asserts that a person of ordinary skill in the art would have known that “conventional value chains like Eicher’s involve participants that *use differing replenishment policies at each tier*” (*id.* (citing Handfield Decl. ¶¶ 94–95) and the ’145 patent “concedes as much multiple times over (*id.* (citing Ex. 1001, 1:31–32, 4:22–27)).

Patent Owner contends that the ’145 patent’s “invention was designed to address problems that arise when different participants in a value chain use different replenishment policies,” which “include (among others) vendor-managed inventory (VMI) programs, supplier-managed inventory (SMI) programs or just-in-time (JIT) programs. Prelim. Resp. 34 (citing Ex. 1001, 1:63–67, 1:35–37). Patent Owner contends that “Eicher does not disclose or suggest replenishment processes generally or VMI, SMI or JIT programs specifically, let alone differences between different tiers of a value

chain.” *Id.* Patent Owner also contends that Petitioner’s reliance on Eicher’s disclosure of business rules and guidelines are not the recited “replenishment policies” because “Eicher does not suggest or even hint at performing replenishment, let alone according to replenishment policies.” *Id.* 34

At this stage, we find Petitioner makes a sufficient showing for this limitation with its arguments and evidence that that a person of ordinary skill in the art would understand that Eicher’s disclosure of its notifications/alerts acts to inform participants of a notable condition. *See* Pet. 23–26 and Handfield Decl. ¶¶ 90–97. Petitioner’s contentions are supported by Dr. Handfield’s un rebutted testimony whereas Patent Owner’s contrary contentions are attorney argument. *Geisler*, 116 F.3d at 1471. Furthermore, Patent Owner’s construction of “replenishment policies” improperly appears to be incorporating embodiments from the Specification into claim 1. *See Phillips*, 415 F.3d at 1323 (“[A]lthough the specification often describes very specific embodiments of the invention, we have repeatedly warned against confining the claims to those embodiments.”). The parties are encouraged to address this issue and/or the meaning and scope of these elements in future briefing. At this stage, however, we find Petitioner’s showings sufficient for the purposes of institution.

f) Claim 1e: communicate the generated alert to one or more of the plurality of participant computers

Petitioner asserts that Eicher teaches or suggests this limitation. Pet. 27 (citing Handfield Decl. ¶¶ 98–99). According to Petitioner, Eicher’s ““notification at step 114’ suggests an alert because such ‘notifications are issued to other partners to enable them to engage in issue resolution,’ and

“[i]f any business rules are violated or other conditions under the alerts are met, then in step 114 notifications may be issued to order more partners.” *Id.* (citing Ex. 1004 ¶¶ 18, 163). “Alerts may be generated based on deviations, violations, changes or any parameters with respect to the key performance indicators.” *Id.* (citing Ex. 1004 ¶ 27). Petitioner explains that this “generation and issuance of notifications is how Eicher *communicates* the *alerts* to the *participant computers*.” *Id.* (citing Handfield Decl. ¶ 99; Ex. 1004¶¶ 152–153, 181 (“sending alerts”)).

Patent Owner repeats its assertion that, as explained above in connection with limitation 1d, “Eicher does not *generate the alert*” and, thus, “cannot communicate such an alert to participant computers.” Prelim. Resp. 36.

At this stage, we find Petitioner makes a sufficient showing for this limitation. *See* Pet. 27 and Handfield Decl. ¶¶ 98–99).

3. Conclusion Regarding Claim 1

Based on the current record, we determine Petitioner has made a sufficient showing for each element of claim 1 for the purposes of institution. Accordingly, Petitioner has established that it is likely to prevail in showing that claim 1 is unpatentable in view of Eicher. We encourage the parties to more directly address matters of claim interpretation.

4. Conclusion Regarding Ground 1A

Relying on much of the same and related teachings in Eicher, Petitioner presents element-by-element comparisons of Eicher to each of claims 2, 3, 5, 8, 14, and 20. Pet. 27–30. Patent Owner does not separately

address Petitioner's showing for these claims beyond the arguments addressed above with respect to claim 1. *See* Prelim. Resp. 36. Based on the current record, we determine Petitioner has sufficiently shown that Eicher teaches or suggests each of claims 2, 3, 5, 8, 14, and 20.

E. Remaining Grounds 1B, 1C, 2A, and 2B

Petitioner asserts that:

(1) claims 1–3, 5, 8, 14, and 20 are unpatentable under 35 U.S.C. § 103 as obvious over the combined teachings of Eicher and IBM (Ground 1B);

(2) claims 9 and 10 are unpatentable under 35 U.S.C. § 103 as obvious over the combined teachings of Eicher and Perry (Ground 1C);

(3) claims 1–3, 5, 8, 9, 10, 14, and 20 are unpatentable under 35 U.S.C. § 103 as obvious over the combined teachings of Perry and Yablonski (Ground 2A); and

(4) claims 6, 7, 11–13 and 15–19 are unpatentable under 35 U.S.C. § 103 as obvious over the combined teachings of Perry, Yablonski, and Bellini (Ground 2B). Pet. 30–74.

We have reviewed Petitioner's arguments and evidence, and determine that the Petition provides the requisite showing, at this stage of the proceeding, that the cited references teach or suggest the subject matter of these claims. In particular, Petitioner, through Dr. Handfield's testimony, presents rationales to combine Eicher/IBM, Eicher/Perry, Perry/Yablonski, and Perry/Yablonski/Bellini. *See, e.g.*, Pet. 31–32 (discussing rationale to combine Eicher and IBM). Petitioner's contentions are supported by Dr. Handfield's unrebutted testimony whereas Patent Owner's contrary

contentions that there is no rationale to combine the cited references are attorney argument. *Geisler*, 116 F.3d at 1471.

We also note that, to the extent that Patent Owner is arguing the references do not disclose Petitioner’s motivation to combine (*see, e.g.*, Prelim. Resp. 40 (arguing a person of ordinary skill in the art “could not combine Eicher—which does not mention replenishment policies—and IBM—which suggests the use of a **particular future** replenishment policy—to derive the invention of the ’145 Patent”), Petitioner’s articulated reasoning does not have to be found explicitly in the references themselves. *See KSR*, 550 U.S. at 419. Stated another way, an express teaching or motivation in the references is not required; instead, Petitioner need only articulate a reason to combine the references with some rational underpinning to support the legal conclusion of obviousness. *Id.* at 418. The parties are encouraged to address this issue in future briefing.

We are persuaded, based on the current record, that Petitioner has shown a reasonable likelihood of proving that the challenged claims are unpatentable on its articulated grounds.

F. Conclusion

For the reasons expressed above, we determine that Petitioner has established the requisite reasonable likelihood of prevailing as to at least one challenged claim of the ’145 patent. Because Petitioner has satisfied the threshold for institution as to one claim, we institute *inter partes* review on all claims and all grounds raised in the Petition. *See SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348, 1359–60 (2018) (holding that a decision to institute under 35 U.S.C. § 314 may not institute on fewer than all claims challenged in a

petition); 37 C.F.R. § 42.107(e); Patent Trial and Appeal Board Consolidated Trial Practice Guide (Nov. 2019) (“TPG”), 5, *available at* <https://www.uspto.gov/sites/default/files/documents/tpgnov.pdf> (“The Board will not institute on fewer than all claims or all challenges in a petition.”).

Our factual findings and determinations at this stage of the proceeding are preliminary and based on the evidentiary record developed thus far. This is not a final decision as to the patentability of claims for which *inter partes* review is instituted. Our final decision will be based on the record as fully developed during trial.

G. Discretionary Denial Under 35 U.S.C. § 314(a)

Even when a petitioner has demonstrated that it is likely to prevail in showing one of the claims is unpatentable, the Board has discretion to deny a petition. *See Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2140 (2016) (“[T]he agency’s decision to deny a petition is a matter committed to the Patent Office’s discretion.”); *NHK Spring Co. v. Intri-Plex Techs., Inc.*, IPR2018-00752, Paper 8 (PTAB Sept. 12, 2018) (precedential). Several nonexclusive factors that balance considerations of system efficiency, fairness, and patent quality when a patent owner raises an argument for discretionary denial due to the advanced state of a parallel proceeding are:

1. whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted;
2. proximity of the court’s trial date to the Board’s projected statutory deadline for a final written decision;
3. investment in the parallel proceeding by the court and the parties;

4. overlap between issues raised in the petition and in the parallel proceeding;
5. whether the petitioner and the defendant in the parallel proceeding are the same party; and
6. other circumstances that impact the Board's exercise of discretion, including the merits.

Apple Inc. v. Fintiv, Inc., IPR2020-00019, Paper 11 at 5–6 (PTAB Mar. 20, 2020). “[I]n evaluating the factors, the Board takes a holistic view of whether efficiency and integrity of the system are best served by denying or instituting review.” *Id.* at 6.

We now consider these factors to determine whether we should exercise discretion to deny institution under 35 U.S.C. § 314(a). Patent Owner asserts that we should exercise our discretion under 35 U.S.C. § 314(a) to deny institution even though the statutory deadline for a final determination in this proceeding would fall before the projected trial date in the parties’ district-court litigation. Prelim. Resp. 61–64. Notwithstanding this timing, Patent Owner contends all six *Fintiv* factors favor discretionary denial or are neutral (*id.*), while Petitioner contends all six *Fintiv* factors weigh against discretionary denial (Pet. 75–76).

We determine the first *Fintiv* factor is neutral because the district court denied without prejudice Petitioner’s motion to stay (Ex. 2004, Dkt. No. 145) and there is no evidence to indicate whether the district court would grant a stay if institution is granted. The second and fifth *Fintiv* factors weigh against discretionary denial because the statutory deadline for a final determination in this proceeding would fall in February 2023, before the district court’s projected trial setting of March 6, 2023 (Ex. 1025, 2). *See Huawei Tech. Co. v. WSOU Inv., LLC*, IPR2021-00225, Paper 11 at 14

(PTAB June 14, 2021) (explaining that the fifth factor “favors denial if trial precedes the Board’s Final Written Decision and favors institution if the opposite is true” (internal quotation marks omitted)). We determine the third *Fintiv* factor is neutral because, based on the evidence of record, the parties’ and district court’s investments in the district-court litigation are typical of litigation in the early stages. Regarding the fourth factor, Petitioner’s limited stipulation (Ex. 1034) that it will not assert the same grounds in the district court as those asserted here weighs slightly against discretionary denial. Finally, the sixth factor is neutral, as demonstrated by the analysis above. *Compare* Pet. 76 (arguing the strength of Petitioner’s obviousness arguments are “self-evident and strongly favor[] institution”), *with* Prelim. Resp. 64 (arguing the merits of the Petition are “incredibly weak”).

On this record, we are not apprised of sufficient facts and circumstances that would lead us to discretionary denial under § 314(a).

H. Discretionary Denial Under 35 U.S.C. § 325(d)

To determine whether to deny institution under 35 U.S.C. § 325(d), the Board considers whether substantially the same art or arguments were previously presented to the Office and whether petitioner has shown that the Office erred in a manner material to the patentability of the challenged claims. *Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH*, IPR2019-01469, Paper No. 6 at 8 (PTAB Feb. 13, 2020) (precedential).

Arguing that the Board should exercise its discretion to deny a petition under 35 U.S.C. § 325(d), Patent Owner contends that Eicher and

Perry, which were not before the Examiner during prosecution, are substantially the same as U.S. Patent Application No. 2002/0188499 (“Jenkins”), which the Examiner did consider during prosecution. Prelim. Resp. 19–26. Notably, in describing the ’145 patent’s prosecution history, Patent Owner notes that, following multiple rejections over years of prosecution, the Examiner allowed the challenged claims over Jenkins after an amendment that added limitation 1d. Prelim. Resp. 10.

Patent Owner’s arguments that Eicher and Perry are cumulative of the prior art before the Examiner are inconsistent with its further arguments that Eicher and Perry fail to satisfy not only limitation 1d, but also all of the other elements in claim 1. Further, as evidenced by our analysis above, Petitioner has sufficiently shown that Eicher teaches or at least reasonably suggests limitation 1d. As such, on this record, Eicher and Perry are not substantially the same as Jenkins and we are not apprised of sufficient overlap between Eicher/Perry and Jenkins to warrant discretionary denial under 35 U.S.C. § 325(d).

IV. ORDER

Accordingly, it is

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review of claims 1–3 and 5–20 of the ’145 patent with respect to all grounds is hereby instituted; and

FURTHER ORDERED that pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial commencing on the entry date of this Decision no *inter partes* review is instituted.

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