

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,
Petitioner,

v.

CONTENTGUARD HOLDINGS, INC.,
Patent Owner.

Case IPR2015-00447
Patent 8,370,956 B2

Before KARL D. EASTHOM, GLENN J. PERRY, and
PATRICK R. SCANLON, *Administrative Patent Judges*.

EASTHOM, *Administrative Patent Judge*.

DECISION

Denying Institution of *Inter Partes* Review
35 U.S.C. § 314(a), 37 C.F.R. § 42.108

I. INTRODUCTION

Petitioner, Apple Inc., filed a Petition requesting *inter partes* review of claims 1–18 of U.S. Patent No. 8,370,956 B2 (“the ’956 patent,” Ex. 1005). Paper 1 (“Pet.”). Patent Owner, ContentGuard Holdings Inc., responded with a Preliminary Response. Paper 8 (“Prelim. Resp.”). We have jurisdiction under 35 U.S.C. § 314, which provides that an *inter partes* review may not be instituted “unless . . . there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” *Id.* at § 314(a).

For the reasons set forth below, we determine that Petitioner does not demonstrate a reasonable likelihood of prevailing in showing the unpatentability of claims 1–18 of the ’956 patent. Accordingly, we deny institution of *inter partes* review.

A. Related Matters

Petitioner indicates that the ’956 patent was asserted against it by Patent Owner in several lawsuits in U.S. district courts. *See* Pet. 2.

Petitioner filed two other petitions seeking *inter partes* review of the ’956 patent: Cases IPR2015-00446 and IPR2015-00448. Petitioner also filed petitions in Cases IPR2015-00351–358, 399, 400, and 440–458, challenging related U.S. patent Nos. 6,963,859; 7,225,160; 7,269,576; 7,523,072; 7,774,280; 8,001,053; 8,393,007; and 8,583,556.

B. The ’956 Patent (Ex. 1005)

The ’956 patent describes a system for curbing unauthorized copying and transmission of electronic publications, which it describes as distributing

and enforcing usage rights for digital works. *See* Ex. 1005, 1:24–60. “[T]he terms ‘digital work,’ ‘work,’ and ‘content’ refer to any work that has been reduced to a digital representation. . . . includ[ing] any audio, video, text, or multimedia work and any accompanying interpreter (e.g. software), which may be required for recreating the work.” *Id.* at 6:11–15. Usage rights refer to rights granted to a recipient of a digital work that define the manner in which a digital work may be used and distributed. *Id.* at 6:17–20. The disclosed invention provides the owner of a digital work the flexibility to distribute the digital work as desired. *Id.* at 3:66–4:15.

The system attaches usage rights to the digital work, including copies thereof, and stores them in repositories. *Id.* at 6:24–44. A “repository” device, described as being “trusted,” not only stores the digital works, but enforces the usage rights of the digital works, controls access to digital works, bills for access to digital works, and maintains the security and integrity of the digital works stored therein. *Id.* at 6:30–44.

Independent claims 1, 7, and 13 require that a recipient device be “determined to be trusted.” The Specification discloses using an “identification certificate” and a “registration transaction” to determine if a device is trusted: “Identification certificates are the means by which a repository is identified as ‘trustworthy.’ The use of identification certificates is described below with respect to the registration transaction.” *Id.* at 7:44–48. According to a Glossary in the Specification, an “Identification (Digital) Certificate” is “a signed digital message that attests to the identity of a possessor. Typically, digital certificates are encrypted in the private key of a well-known master repository.” *Id.* at 49:55–59. The Specification also discloses that “[a]s a prerequisite to operation, a repository will require

possession of an identification certificate,” and that “identification certificates 1306 are required to enable the use of the repository.” *Id.* at 13:14–15, 14:27–29.

According to the Specification, a “Registration Transaction[]” is “[t]he protocol used between repositories to establish a trusted session.” *Id.* at 50:5–7. The Specification describes registration transactions further as follows:

The registration transaction between two repositories is described with respect to FIGS. 16 and 17. The steps described are from the perspective of a “repository-1” registering its identity with a “repository-2.” The registration must be symmetrical so the same set of steps will be repeated for repository-2 registering its identity with repository-1. Referring to FIG. 16, repository-1 first generates an encrypted registration identifier, step 1601 and then generates a registration message, step 1602. A registration message is comprised of an identifier of a master repository, the identification certificate for the repository-1 and an encrypted random registration identifier. **The identification certificate is encrypted by the master repository in its private key and attests to the fact that the repository (here repository-1) is a bona fide repository.** The **identification certificate** also contains a public key for the repository, **the repository security level** and a timestamp (indicating a time after which the certificate is no longer valid.) The registration identifier is a number generated by the repository for this registration. The registration identifier is unique to the session and is encrypted in repository-1’s private key. The registration identifier is used to improve security of authentication by detecting certain kinds of communications based attacks. Repository-1 then transmits the registration message to repository-2, step 1603.

Id. at 26:46–27:2 (emphases added).

As the passage shows, one of the ways that the system determines, or “attests to the fact that the repository . . . is a bona fide repository,” is to

include “the repository security level” in the identification certificate. Table 2 in the ’956 patent Specification lists different security levels for repositories. *Id.* at 15:1–50.

C. Illustrative Claim

Claims 1, 7, and 13 are independent. Claim 1 is illustrative of the challenged claims:

1. A computer-implemented method of rendering digital content by at least one recipient computing device in accordance with usage rights information, the method comprising:
 - receiving the digital content by the at least one recipient computing device from at least one sending computing device only if the at least one recipient computing device has been **determined to be trusted** to receive the digital content from the at least one sending computing device;
 - receiving, by the at least one recipient computing device, a request to render the digital content;
 - determining, based on the usage rights information, whether the digital content may be rendered by the at least one recipient computing device;
 - and rendering the digital content, by the at least one recipient computing device, only if it is determined that the content may be rendered by the at least one recipient computing device.

Ex. 1001, 50:55–51:4 (emphasis added).

D. Evidence of Record

The Petition relies upon the supporting Declaration of Alan Sherman Regarding U.S. Patent Nos. 6,963,859; 7,523,072; 8,370,956; 8,393,007; 7,269,576 (Ex. 1013, “Sherman Declaration”) and the following asserted prior art references:

U.S. Patent No. 6,135,646 (filed Feb. 28, 1997) (issued Oct. 24, 2000) (Ex. 1018, “Kahn”);

J.D. Tygar & Bennet Yee, *Dyad: A System for Using Physically Secure Coprocessors*, in PROCEEDINGS: TECHNOLOGICAL STRATEGIES FOR PROTECTING INTELLECTUAL PROPERTY IN THE NETWORKED MULTIMEDIA ENVIRONMENT 1-1 (1994) (Ex. 1057, “Dyad”);

R.J. Linn, *Copyright and the Information Services in the Context of the National Research and Education Network*, in PROCEEDINGS: TECHNOLOGICAL STRATEGIES FOR PROTECTING INTELLECTUAL PROPERTY IN THE NETWORKED MULTIMEDIA ENVIRONMENT 1-1 (1994) (Ex. 1058, “Linn”).

E. Asserted Grounds of Unpatentability

Petitioner challenges the claims as unpatentable based on the following obviousness grounds under 35 U.S.C. 103(a) (*see* Pet. 3):¹

Challenged Claims	References
1–18	Kahn and Linn
1–18	Kahn, Linn, and Dyad

II. CLAIM CONSTRUCTION

The ’956 patent, effectively filed on November 23, 1994, expired on November 23, 2014. *See* Pet. 7; Prelim. Resp. 29. Accordingly, the claims must be construed using their ordinary and customary meaning, as would be understood by a person of ordinary skill in the art, at the time of the invention, in light of the language of the claims, the specification, and the prosecution history of record. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1313–17 (Fed. Cir. 2005) (en banc)); *In re Rambus*, 694 F.3d 42, 46 (Fed.

¹ The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, 125 Stat. 284 (2011), revised 35 U.S.C. § 103, effective March 16, 2013. Because the ’956 patent was filed before March 16, 2013, references and citations to § 103 in this Decision are to the pre-AIA version.

Cir. 2012) (“[T]he Board’s review of the claims of an expired patent is similar to that of a district court’s review.”).

As noted above, the ’956 patent’s Appendix provides a “Glossary” defining many of the claim terms. Ex. 1005 at 49:1–50:52. These explicit definitions, and other explicit definitions in the Specification, largely control the construction of many claim terms. The Board previously construed the meaning of certain terms in proceedings involving related patents (Cases IPR2013-00133, -00134, -00137, and -00138). According to Patent Owner and Petitioner, the District Court for the Eastern District Court of Texas issued similar claim constructions to the Board’s prior constructions. Prelim. Resp. 30 (citing Ex. 2001). The parties largely agree that the Board’s and the District Court’s similar claim constructions should control, with some exceptions that do not appear to be material to a dispute here. *See* Pet. 7–21; Prelim. Resp. 29–36; *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) (only terms in controversy need to be construed and only to the extent necessary to resolve the controversy).

Considering the parties’ positions, the ’956 patent Specification, and the record, we adopt the following constructions for purposes of this Decision only.

A. “Trusted” (Claims 1, 7, 13)

According to the Glossary, a “repository is a trusted system in that it maintains physical, communications and behavioral integrity.” Ex. 1005, 50:20–22. Accordingly, the Specification indicates, and the parties agree, that the term “trusted” means “maintains physical, communications, and behavioral integrity, and supports usage rights.” *See* Ex. 1005, 6:42–44, 50:20–22; Prelim. Resp. 29–30; Pet. 15–17; Ex. 2001, 13, 15.

B. Physical, Communications, and Behavioral Integrity –Trusted

These terms are not in material dispute, but beg interpretation because they serve to define the claim term “trusted.” The term “physical integrity” refers to the “integrity of the physical devices themselves. . . . [and] applies both to the repositories and to the protected digital works.” Ex. 1005, 12:8–10. Higher security classes may include sensors to preclude tampering on secure cases. See Ex. 1005, 12:10–13. The term “physical integrity” means “preventing access to information by a non-trusted system.” See *id.* at 12:17–18; Pet. 18; Prelim. Resp. 30–31. The term “communications integrity” means “only communicates with other devices that are able to present proof that they are trusted systems, for example, by using security measures such as encryption, exchange of digital certificates, and nonces.” See Ex. 1005, 12:34–46; Pet. 18; Prelim. Resp. 30. The term “behavioral integrity” means “requiring software to include a digital certificate in order to be installed in a trusted device.” See Ex. 1005, 12:47–63; Pet. 18; Prelim. Resp. 32.

C. “Recipient . . . Determined to be Trusted” (Claims 1, 7, 13)

Claim 1 recites “receiving the digital content by the at least one recipient computing device from at least one sending computing device only if the at least one recipient computing device has been *determined to be trusted* to receive the digital content from the at least one sending computing device.” Claims 7 and 13 recite similar phrases.

Without explicitly setting forth a claim construction for “determined to be trusted,” Petitioner contends that “the sending computing device determines whether the recipient device or apparatus is ‘trusted’ by validating the recipient’s digital certificate.” See Pet. 15 (citing Ex. 1013

¶¶ B101–03); *see also* Pet. 16 (similar contention). Petitioner essentially equates the terms “digital certificate” and “identification certificate” and contends that they are “certified by a master device.” *See* Pet. 14–15. The Glossary supports equating the two by using the terms interchangeably. *See* Ex. 1005, 49:55–56 (defining “Identification (Digital) Certificate”).

According to the ’956 patent, “[i]dentification certificates are the means by which a repository is identified as ‘trustworthy.’” Ex. 1005, 7:44–46. As discussed above, the Specification states that the “identification certificate . . . attests to the fact that the repository . . . is a bona fide repository.” *Id.* at 26:57–60.

Therefore, on this record, we construe “determined to be trusted” to mean “using an identification or digital certificate to attest to the fact that a recipient is a trusted device.”

III. ANALYSIS

A. ASSERTED GROUND BASED ON KAHN AND LINN

1. *Non-Compliance with 37 C.F.R. §§ 42.22(a)(2), 42.104(b)(4)–(5)*

Under 35 U.S.C. § 312(a)(3), a petition for *inter partes* review “may be considered only if . . . *the petition identifies, in writing and with particularity, each claim challenged, the grounds on which the challenge to each claim is based, and the evidence that supports the grounds for the challenge to each claim.*” (Emphases added). Additional Board rules further address the showing required in a petition. In particular, 37 C.F.R. § 42.104(b)(4) provides that “[*t*]he petition must specify where each element of the claim is found in the prior art patents or printed publications relied upon” (emphasis added), and 37 C.F.R. § 42.104(b)(5) adds that the Petition must “*identify[] specific portions of the evidence that support the challenge*”

(emphasis added). Similarly, 37 C.F.R. § 42.22(a)(2) states that a petition “*must include . . . [a] full statement of the reasons for the relief requested, including a detailed explanation of the significance of the evidence.*” (Emphases added). For the reasons discussed below and as Patent Owner contends, the Petition fails to comply with at least these rule requirements in addressing the asserted grounds. See Prelim. Resp. 4–10.

The Petition starts its analysis of the asserted ground of obviousness over Kahn and Linn with a general discussion of each reference. Pet. 22–35 (§§ IV.A–B). It then proffers a hypothetical, integrated system that purports to combine the teachings and suggestions of Kahn and Linn with the knowledge of a person of ordinary skill in the art (“the hypothetical Kahn-Linn system”). *Id.* at 36–41 (§ IV.C). The Petition then argues that the hypothetical Kahn-Linn system “would” satisfy three sets of particular claim terms, namely (1) “usage rights,” (2) “sending computing device” (or “sending apparatus”) and “receiving computing device,” and (3) “authorization object.” *Id.* at 41–49 (§ IV.D); see also *id.* at 11–15, 21 (discussing usage rights, authorization object). Finally, the Petition includes an eight-page section asserting that the hypothetical Kahn-Linn system “would” meet each limitation of the eighteen challenged claims. *Id.* at 49–57 (§ IV.E).

The Petition includes vague, nested citations to broad sections of Kahn, Linn, the Sherman Declaration, numerous other exhibits, and to other sections of the Petition. See, e.g., *id.* at 47 (citing “[s]ee §§ IV.B, D.1; Ex. 1018 at 3:3–13, 8:27–30, 26:31–38; Ex. 1058 at 13, 15–16; Ex. 1013 at ¶ D104–12, D128”). Most problematically, when addressing how Kahn and Linn teach or suggest the limitations of the ’956 patent claims, the Petition

generally parrots the claim language in one section, or Petitioner’s proffered claim construction, and argues that the hypothetical Kahn-Linn system “would” meet each limitation. *See* Pet. 49–57. Incomprehensible citations to broad sections of the record follow these arguments, for example: Pet. 49 (citing “[s]ee § IV.C; Ex. 1018 at 23:48–26:38; Ex. 1058 at 14, 15–16; Ex. 1013 at ¶ D104, D233”); Pet. 51 (citing “[s]ee §§ IV.A.4, C; Ex. 1018 at 25:30–58, 26:10–38; Ex. 1058 at 15–16; Ex. 1013 at ¶ D237, D107–08”); and Pet. 51–52 (citing “[s]ee § IV.C; Ex. 1018 at 25:54–26:38; Ex. 1058 at 15–16[]; Ex. 1013 at ¶¶ D105–12, D238”). *See generally* Pet. 49–57 (similar practice). This practice results in multiple levels of abstraction, obscuring Petitioner’s position regarding which reference and which portion of which reference teaches or suggests the claim limitations. It also blurs the actual teachings and suggestions of the references from Petitioner’s characterizations and modifications of these teachings and suggestions in creating the proposed hypothetical Kahn-Linn system.

As one representative example, Petitioner’s analysis of a portion of one step of independent claim 1 (and corresponding phrases in claims 7 and 11), “receiving the digital content by the at least one recipient computing device from at least one sending computing device only if the at least one recipient computing device has been determined to be trusted to receive the digital content from the at least one sending computing device,” includes the following sentence:

If the user has a valid digital certificate and the transaction is successful, the rendering software will receive an information object containing the content and the usage information (“*receiving the digital content*”). *See* § IV.C; Ex. 1018 at 25:54–26:38; Ex. 1058 at 15–16); Ex. 1013 at ¶ D33–45, D237–39.

Pet. 51–52. The supporting citation features unexplained citations to two pages of Linn, almost two columns of Kahn, another section of the Petition (§ IV.C), and sixteen paragraphs of the Sherman Declaration (Ex. 1013 ¶¶ D33–45, D237–39)—two of which (*id.* ¶¶ D238–39) include claim charts supported exclusively by internal cross-references. These two cited paragraphs of the Sherman Declaration include cross-references to roughly seventy-three paragraphs of the Sherman Declaration. Further, the cited section of the Petition comprises five pages and further cites (1) another two sections (§§ IV.A.3 and IV.B.2 (Pet. 38)), or an additional five pages, of the Petition and (2) forty-one paragraphs of the Sherman Declaration. *See* Pet. 35–41. As a result, not including further nested citations, the single sentence of the Petition quoted above indirectly cites about ten pages of the Petition and over one hundred paragraphs of the Sherman Declaration.

The pervasive use of internal cross-references within the Petition and the supporting Sherman Declaration obfuscates the evidentiary support for the Petition’s assertions. For example, the eight-page section of the Petition that addresses how the hypothetical Kahn-Linn system would satisfy the ’956 patent claims (§ IV.E) features multiple internal cross-references to ten different sections of the Petition, which span about twenty-five pages of the Petition (§§ III.D.4, IV.A.1, A.3, A.4, IV.B.2, IV.C, IV.D.1–3, IV.E.1.e). Further, Dr. Sherman’s supporting testimony—cited extensively in the Petition—is routinely, and often exclusively, supported by internal cross references to other paragraphs of the Sherman Declaration. *See, e.g.*, Ex. 1013 ¶ D237 (“*See* ¶¶ D27, D33–46, *above*”); *id.* ¶ 241 (“*See* ¶¶ D55–57, D70–77, *above*”). As indicated, Petitioner’s claim charts, which appear only

in the Sherman Declaration, are supported exclusively by internal cross-references, generally to vast sections of the Sherman Declaration. *See, e.g., id.* ¶¶ D235–42, 259, 269, 280; ¶ D238 (claim chart for limitation “1.a” in the ’956 patent, citing fifty-nine paragraphs (¶¶ D1–4, D14–21, D33–48, and D131–61) of the Sherman Declaration)).

The Sherman Declaration is a 474-page omnibus declaration covering nineteen petitions for *inter partes* review challenging the ’956 patent and four related patents. *See* Ex. 1013, i. Nearly 200 pages of the Declaration are relevant to this Petition. *See id.* §§ I–V.C, V.D.3–4, V.D.6, VII.A–F, VII.G.4.

As Patent Owner argues, the Petition compounds these defects by citing to broad sections of the Sherman Declaration to support conclusory arguments and reasoning. *See* Prelim. Resp. 7–10. As an example, one sentence of the Petition states, without explanation: “A skilled person would have considered it obvious to use the complementary features of each system in the way each teaches, subject to minor alterations to integrate the two systems. Ex. 1013 at ¶ D105, D95–D118.” Pet. 43. These supporting citations to the Sherman Declaration cover twenty-five paragraphs, or more than nine pages.

Generally, many sections of the Petition feature sparse explanation, and rely heavily on supporting citations to the Sherman Declaration to buttress a conclusory analysis. For example, the critical three-page section of the Petition arguing that the hypothetical Kahn-Linn system meets the limitations of independent claims 1, 7, and 13 (Pet. § IV.E) directly cites more than fifty-seven paragraphs, or twenty-five pages, of the Sherman Declaration. *See* Pet. 50–52. Thus, even without accounting for the

additional internal cross-references within the cited paragraphs of the Sherman Declaration, the supporting declaration testimony is more than eight times the length of the relevant discussion in the Petition.

In other words, the Petition does not stand on its own, and includes incomplete arguments that require review of broad portions of the Sherman Declaration, the length of which exceeds the relevant discussion in the Petition by multitudes. The Petition’s practice of citing multiple paragraphs of the Sherman Declaration to support conclusory statements and more generally, using the Declaration to vastly expand its thin analysis and reasoning violates our rules in two respects. First, this practice amounts to incorporation by reference—which is impermissible under our rules. *See* 37 C.F.R. § 42.6(a)(3) (“Arguments must not be incorporated by reference from one document into another document.”); *Cisco Sys., Inc. v. C-Cation Techs., LLC*, Case IPR2014-00454, slip op. at 7–10 (PTAB Aug. 29, 2014) (Paper 12) (informative). This incorporation by reference from the 474-page Sherman Declaration into the Petition “serves to circumvent the [60-]page limit[] imposed on petitions for *inter partes* review, while imposing on our time by asking us to sift through [hundreds of] pages of [the] Declaration (including numerous pages of claim charts) to locate the specific [relevant] arguments.” *Cisco Sys., Inc.*, IPR2014-00454, at 10 (Paper 12) (informative); *see* 37 C.F.R. § 42.24(a)(1)(i). Arguments and information that are not presented and developed in the Petition, and instead are incorporated by reference to the Sherman Declaration, are not entitled to consideration. Second, the Petition’s consistent citation to voluminous portions of the Sherman Declaration, which generally include additional internal cross-references, runs afoul of the particularity and specificity

required of supporting evidence under Board rules. *See* 37 C.F.R. §§ 42.22(a)(2), 42.104(b)(4)–(5).

In addition, the record contains 63 Exhibits totaling roughly 14,000 pages, most of which the Petition does not rely upon. As noted previously, The Office Patent Trial Practice Guide cautions that petitioners should “avoid submitting a repository of all the information that a judge could possibly consider, and instead focus on concise, well-organized, easy-to-follow arguments supported by readily identifiable evidence of record.” 77 Fed. Reg. at 48,763. For the foregoing reasons, the Petition widely misses that mark.

In sum, the Petition’s conclusory analysis with supporting citations to a web of internal cross-references to the Petition and the Sherman Declaration, and imprecise citations to Kahn and Linn, leaves us “to play archeologist with the record.” *Cisco Sys., Inc.*, IPR2014-00454, at 10 (Paper 12) (informative). The Petition fails to (1) specify sufficiently where the limitations of claims 1–18 of the ’956 patent are taught or suggested by Kahn or Linn and (2) provide a sufficiently detailed explanation of the significance of the citations to these references and the Sherman Declaration—as required under 37 C.F.R. § 42.22(a)(2) and 37 C.F.R. § 42.104(b)(4)–(5).

Based on the foregoing discussion, we deny institution of the asserted ground of obviousness over Kahn and Linn.

2. Failure to Perform Graham Analysis

The Petition’s analysis of the alleged obviousness of claims 1–18 of the ’956 patent over Kahn and Linn suffers from an additional legal deficiency. A patent claim is unpatentable as obvious under 35 U.S.C.

§ 103(a) if “the differences between” the claimed subject matter 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.” 35 U.S.C. § 103(a); *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The legal conclusion of obviousness is resolved on the basis of the following underlying factual determinations: (1) “the scope and content of the prior art,” (2) “differences between the prior art and the claims at issue,” (3) “the level of ordinary skill in the pertinent art,” and (4) any “secondary considerations,” or objective indicia, of nonobviousness. *Graham v. John Deere Co. of Kan. City*, 383 U.S. 1, 17–18 (1966). These underlying factual determinations “must be considered by the trier of fact” in an obviousness analysis. *ATD Corp. v. Lydall, Inc.*, 159 F.3d 534, 546 (Fed. Cir. 1998).

As Patent Owner contends, the Petition fails to identify sufficiently the differences between any claim of the ’956 patent and the asserted prior art references, Kahn and Linn. *See* Pet. 22–57; Prelim. Resp. 6–7, 42–43. Rather than address these differences, the Petition creates a hypothetical Kahn-Linn system—based on how a person of ordinary skill in the art allegedly “would” or “could” combine the two references into an integrated system. *See, e.g.*, Pet. 39 (“could have configured the Kahn repository servers”), *id.* at 40 (“could have readily integrated”), *id.* at 41 (“could have readily integrated”); *see generally id.* at 35–41 (§ IV.C., use of “could” and “would”). The Petition then argues, in conclusory fashion, that this hypothetical system “would” meet each of the limitations of the claims. *See id.* at 52 (“In a combined Kahn/Linn system, end-users would use rendering software to render content. Ex. 1013 at ¶ D101–04.”); *see generally id.* at

49–57 (§ IV.E., similar conclusory statements). This analysis—which compares the challenged claims, without clear references to particular claim terms, to a hypothetical integrated system that allegedly implements elements of both Kahn and Linn as well as the knowledge of one of ordinary skill in the art—obscures a meaningful comparison of the individual prior art references to the claim limitations. The analysis does not explain with requisite particularity which claim limitations are absent from Kahn or Linn. *See* Prelim. Resp. 6, 42. Therefore, the Petition fails to perform an adequate *Graham* analysis.

Accordingly, for these additional reasons, we determine that the Petition does not show a reasonable likelihood that Petitioner would prevail in showing that claims 1–18 of the ’956 patent would have been obvious over Kahn and Linn. *See Apple Inc. v. SmartFlash LLC*, Case CBM2015-00029, slip op. at 16–18 (PTAB May 28, 2015) (denying institution of an asserted obviousness ground based on Petitioner’s failure to explain adequately any differences between the asserted prior art and the claimed invention); *Liberty Mut. Ins. Co. v. Progressive Casualty Ins. Co.*, Case CBM2012-00003, slip op. at 3 (PTAB Oct. 25, 2012) (Paper 7) (representative) (“A petitioner who does not state the differences between a challenged claim and the prior art, and relies instead on the Patent Owner and the Board to determine those differences . . . risks having the corresponding ground of obviousness not included for trial for failing to adequately state a claim for relief.”).

3. *Lack of Rationale to Combine and Improper Hindsight*

We deny institution of the asserted ground based on Kahn and Linn for another, independent reason. Specifically, we determine that the

obviousness analysis proposed in the Petition does not provide sufficiently articulated reasoning, with rational underpinning, to combine Kahn and Linn to reach the invention recited in the challenged claims and, instead, is driven by improper hindsight.

i. The Proposed Hypothetical Kahn-Linn System

The Petition asserts that a person of ordinary skill in the art would have recognized that Kahn and Linn “address complementary parts of the same problem[,] secure content distribution,” and would recognize that “the schemes described in each reference solves the gap of the other.” Pet. 36. Such a person, according to the Petition, “would have had a strong motivation to integrate the two schemes to yield a functional end-to-end scheme” in which Kahn’s object management system distributes content, and end-user devices using Linn’s software download that content and render it in accordance with terms and conditions. *Id.* at 36–37. From this premise, the Petition argues that a person of ordinary skill would integrate Kahn and Linn into a unified system—the hypothetical Kahn-Linn system—by making at least the following changes, which the Petition classifies as “only minor, logical modifications.” *Id.*²

First, “a person of ordinary skill would have configured the Linn rendering software to interface with the Kahn object management system, such as by using the account creation and purchase transaction protocols

² The Petition appears to classify the proposed changes to reach the hypothetical Kahn-Linn system as involving only three modifications. See *id.* at 37–40 (labeling certain paragraphs as “[f]irst,” “[s]econd” and “[t]hird”) (emphasis omitted). Based on our review of the Petition, Kahn, and Linn, we find that the proposed implementation of the hypothetical Kahn-Linn system involves several more distinct modifications, as discussed below.

described in Kahn.” *Id.* at 37. According to the Petition, “[m]erging these elements would be logical and natural.” *Id.* Second, to implement the system, a person of ordinary skill would have “the entity . . . operating the Kahn repository system distribute [the Linn] rendering software configured to interact with the repository servers and payment servers”—based on an alleged specific suggestion to do so in Linn. *Id.* at 37. Third, the person of ordinary skill then would have “integrat[ed] the Kahn user registration techniques into the [Linn] rendering software [to] improve the Linn enforcement mechanisms.” *Id.* at 38.

Fourth, although Kahn and Linn allegedly teach only the “use of digital certificates and digital signatures to validate the authenticity and integrity of *content* before that content can be stored or used,” the person of ordinary skill would have “logical[ly] exten[ded]” this technique to Linn’s operating software, distributing the “software with a digital signature and digital certificate to enable users to validate [its] authenticity and integrity . . . before installing it.” *Id.* at 38–39. Fifth, it also “would have been logical to apply this technique to the software operating the Kahn servers, by requiring software to be signed using a digital certificate. . . . This would allow the servers to validate . . . the [operating] software . . . prior to installing or executing it.” *Id.* at 39. According to the Petition, using “digital certificates and signatures for this purpose was a conventional technique, and implementing these features would be routine.” *Id.*

Sixth, “the person of skill would have considered known techniques” to enforce “terms and conditions . . . on the user-side, such as those described in Linn” and, “[f]or example, . . . could have configured,” “with routine and predictable effort,” “the Kahn repository servers to package

digital content and an envelope containing terms and conditions into the information objects described in Linn before transmitting them to a user.” *Id.* Seventh, “a person of ordinary skill also could have . . . add[ed] fields within the Linn envelope to accommodate the various terms and conditions described in Kahn.” *Id.* at 40. Eighth, the person of ordinary skill “could” use a particular markup language (SGML), “to represent the usage fields . . . to accommodate Kahn’s additional usage rights and to add flexibility to the combined system.” *Id.* Ninth, “a person of skill could have readily integrated th[e] known technique” of encrypting content, as described in Kahn, “with the Linn envelopes to ensure only the user with the corresponding private key (i.e., the user identified in the digital certificate) could decrypt the symmetric key and access the content.” *Id.* at 41.

ii. Discussion

The Supreme Court has explained that an obviousness analysis should “determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *KSR*, 550 U.S. at 418. Similarly, the Federal Circuit has made clear that an obviousness determination “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.” *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006); *see KSR*, 550 U.S. at 418 (quoting *Kahn*, 441 F.3d at 988). An obviousness analysis also must “avoid hindsight reconstruction by using the patent in suit as a guide through the maze of prior art references, combining the right references in the right way so as to achieve the result of the claims in suit.” *In re NTP, Inc.*, 654 F.3d 1279, 1299 (Fed. Cir. 2011).

As an initial matter, the record does not support Petitioner's characterization of the proposed modifications to implement the hypothetical Kahn-Linn system as "minor." Pet. 37. Instead, a review of the Petition and its supporting evidence, as summarized in the preceding section, indicates that the numerous proposed modifications would require significant reworking of the systems disclosed in Kahn and Linn. *See id.* at 35–40.

Further, the Petition offers conclusory reasons for the proposed modifications. For example, Petitioner concedes that neither Kahn nor Linn teaches behavioral integrity, i.e., requiring software to include a digital certificate in order to be installed in the repository, which Petitioner acknowledges is a requisite aspect of at least the "recipient computing device" as recited in the '956 patent claims. Pet. 38; *see supra* Section II (Claim Construction); Prelim. Resp. 29 (citing *ZTE Corp. v. ContentGuard Holdings, Inc.*, Case IPR2013-00137, slip op. at 8–9, 11 (PTAB July 1, 2014) (Paper 58) (claim construction for behavioral integrity)). Petitioner, however, argues that both Kahn and Linn teach using digital certificates and digital signatures to validate the authenticity and integrity of the content of a digital object before it can be stored or used. *See* Pet. 38; Ex. 1018, 24:47–26:38; Ex. 1058, 15–16. The Petition reasons that it would be a "logical extension" of these teachings to modify Linn's operating or rendering software to include a digital signature and digital certificate and to verify the authenticity and integrity of software before installation (fourth modification as discussed in Section III.A.3.i above). Pet. 38, 46–47. In addition, the Petition argues "it would have been logical" to include a digital signature and digital certificate in the software that operates Kahn's repository servers and to have these servers validate the digital signature and digital certificate

of the operating software before installing it (fifth modification in Section III.A.3.i above). Pet. 38, 46–47. The Petition notes, in conclusory fashion, that “[u]se of digital certificates and signatures *for this purpose* was a conventional technique.” *Id.* at 39 (emphasis added).

However, the Petition does not explain adequately why a person of ordinary skill in the art would have added such additional authentication and security techniques beyond those already contained or asserted to have been obvious in the hypothetical Kahn and Linn systems. For example, the Petition does explain why a hypothetical recipient would have required a digital certificate to exist with vendor or manufacturer operating system software, when the same entity that installs it presumably knows its source—and also would have installed it with communications and physical integrity according to the Petition. *See* Pet. 45–46.

Moreover, the Petition does not address in more than a conclusory fashion, how the hypothetical “recipient computing device has been determined to be trusted” as the independent claims require—i.e., “has been determined” to have, for example, behavioral integrity. *See* Pet. 18–19 (discussing the integrity requirements for trusted devices, including behavioral integrity); *supra* Section II (Claim Construction). The Petition states that “[d]uring a purchase transaction in a combined Kahn/Linn system, the repository servers (‘*sending computing device*’) would transfer content to the rendering software (‘*recipient computing device*’) only if the end user had a valid digital certificate (‘*has been determined to be trusted*’).” Pet. 51 (quoting claim 1 (emphasis in Petition); citing Pet. §§ IV.A.4, C; Ex. 1018, 25:30–58, 26:10–38; Ex. 1058, 15–16; Ex. 1013 ¶¶ D237, D107–08). Assuming for the sake of argument that the Petition sufficiently shows the

obviousness of a repository validating the particular digital certificate alleged, the Petition fails to show, or even discuss, how that particular certificate also determines (i.e., “attests to the fact”) that the recipient computing device also would require “software to include a[nother] digital certificate in order to be installed in the repository.” *See* Pet. 18–19 (discussing the requirements for trusted and behavioral integrity); *supra* Section II (Claim Construction).

In addition, as outlined above, the Petition proposes multiple changes to Kahn’s system, and largely contends that one of ordinary skill in the art “could” make many changes to implement the hypothetical Kahn-Linn system. As a specific example, the Petition’s sixth proposed change states “[f]or example, a person of skill *could* have configured the Kahn repository servers to package digital content and an envelope containing terms and conditions into the information objects described in Linn,” and this “would require only routine and predictable effort.” Pet. 39 (first emphasis added). This change, therefore, exemplifies a technique a person of ordinary skill “could” use, and without adequate explanation as to why such a person would make this specific change in conjunction with the others.

Considering the many proposed changes together, the Petition lacks adequate reasoning, with rational underpinning, to show that a person of ordinary skill would have had a sufficient reason to combine the teachings of Kahn and Linn to reach the hypothetical Kahn-Linn system, which the Petition alleges would satisfy each limitation of the challenged claims. The Petition fails to explain sufficiently why a person of ordinary skill simultaneously would make all of the particular proposed changes and

implementation choices to combine Kahn, Linn, and allegedly known techniques, to arrive at the claimed invention.

The various proposed modifications lead to the conclusion that the Petition improperly “reli[es] upon *ex post* reasoning” and impermissible hindsight to piece together the hypothetical Kahn-Linn system in a manner meant to resemble the ’956 patent claims. *See KSR*, 550 U.S. at 421. The Petition picks and chooses aspects of Kahn and Linn—in addition to techniques not disclosed in either reference that allegedly were known in the art—to arrive at the hypothetical Kahn-Linn system. *See Pet.* 35–57. “This type of piecemeal analysis is precisely the kind of hindsight that [we] must not engage in.” *NTP*, 654 F.3d at 1299 (“Care must be taken to avoid hindsight reconstruction by using the patent in suit as a guide through the maze of prior art references, combining the right references in the right way so as to achieve the result of the claims in suit.”); *see also ATD Corp.*, 159 F.3d at 546 (“Determination of obviousness can not be based on the hindsight combination of components selectively culled from the prior art to fit the parameters of the patented invention.”).

In sum, the Petition does not show sufficiently why one of ordinary skill in the art—without improper hindsight—would have combined Kahn and Linn to reach the claimed invention. Therefore, we determine that the Petition does not establish a reasonable likelihood that Petitioner would prevail in showing that any of the challenged claims would have been obvious over Kahn and Linn.

B. ASSERTED GROUND BASED ON KAHN, LINN, AND DYAD

In addition to the asserted ground of obviousness over Kahn and Linn, the Petition asserts an obviousness ground that relies on Kahn, Linn, and

Dyad. Pet. 57–60. This ground relies on the Petition’s analysis of the asserted ground based on Kahn and Linn and adds the teachings of Dyad only to address a potential argument of Patent Owner that repositories or “trusted” devices have certain additional requirements. *See* Pet. 58.

Therefore, this additional ground does not cure the deficiencies outlined above regarding the ground based on Kahn and Linn. Accordingly, we determine that the Petition does not establish a reasonable likelihood that Petitioner would prevail in showing that claims 1–18 would have been obvious over Kahn, Linn, and Dyad.

IV. CONCLUSION

For all the reasons discussed above, the Petition fails to show there is a reasonable likelihood that Petitioner would prevail with respect to at least one of the claims challenged in the Petition. *See* 35 U.S.C. § 314(a); 37 C.F.R. § 42.8(b)(2).

V. ORDER

For the reasons given, it is

ORDERED that pursuant to 35 U.S.C. § 314(a), the Petition is *denied*.

IPR2015-00447
Patent 8,370,956 B2

PETITIONER:

Jeffrey P. Kushan
Michael R. Franzinger
SIDLEY AUSTIN LLP
jkushan@sidley.com
mfranzinger@sidley.com
iprnotices@sidley.com

PATENT OWNER:

Nicholas T. Peters
Timothy P. Maloney
FITCH EVEN TABIN & FLANNERY LLP
ntpete@fitcheven.com
tpmalo@fitcheven.com

Robert A. Cote
McKOOL SMITH, P.C.
rcote@mckoolsmith.com