

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

NIKE, INC.,
Petitioner,

v.

VALMARC CORPORATION,
Patent Owner.

IPR2022-01403
Patent 7,852,195 B2

Before HYUN J. JUNG, GARTH D. BAER, and AARON W. MOORE,
Administrative Patent Judges.

JUNG, *Administrative Patent Judge.*

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

I. INTRODUCTION

A. *Background and Summary*

Nike, Inc. (“Petitioner”) filed a Petition (Paper 1, “Pet.”) requesting institution of an *inter partes* review of claims 1–15 of U.S. Patent No. 7,852,195 B2 (Ex. 1001, “the ’195 patent”). Valmarc Corporation (“Patent Owner”) filed a Preliminary Response. Paper 6 (“Prelim. Resp.”).

Under 35 U.S.C. § 314, 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.” Upon consideration of the Petition and for the reasons explained below, we determine that Petitioner has shown a reasonable likelihood of prevailing with respect to at least one of the challenged claims.

Thus, we institute an *inter partes* review of claims 1–15 of the ’195 patent on all presented challenges. *SAS Inst. Inc. v. Iancu*, 138 S. Ct. 1348, 1359–60 (2018).

B. *Real Parties in Interest*

The parties only identify themselves as the real parties in interest. Pet. 1; Paper 5, 1.

C. *Related Matters*

The parties list *Valmarc Corp. v. Nike, Inc.*, 3:21-cv-01556-IM (D. Or.) and IPR2022-01404 as related matters. Pet. 1; Paper 5, 1. Petitioner states that the related litigation concerns “alleged trade secret misappropriation that is not expected to address any issue related to the Challenged Patent.” Pet. 1.

D. *The ’195 Patent (Ex. 1001)*

The ’195 patent issued on December 14, 2010 from an application filed on March 27, 2007. Ex. 1001, codes (22), (45). The ’195 patent

“relates primarily to authentication of the ‘source’ of Branded goods and services,” by “providing such Branded goods and services with a readily observable and authenticat[.]able identifier of at least Brand ‘source’ authenticity.” *Id.* at 1:8–13. Figure 1 of the ’195 patent is reproduced below.

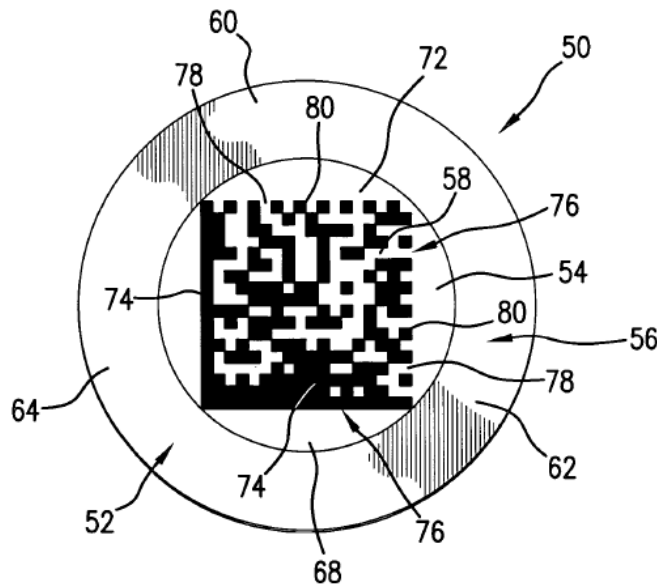


FIG. 1

Figure 1 is a plan view of a Brand “source” indicator. Ex. 1001, 4:39–41. Authenticator 50 is made from authenticator blank 50 that has surface 56. *Id.* at 5:61–62. On surface 56 is data field 54 with encoded symbology 58. *Id.* at 6:5–6.

Encoded symbology 58 is shown as a 2-D, Data Matrix type, symbology that represents alphanumeric characters. Ex. 1001, 6:31–32, 6:36–37. Encoded symbology 58 can include data storage field 72 with an arrangement of white data cells 78 and black data cells 80 with solid border 74 or broken border 76. *Id.* at 6:39–44.

Authentication data 68 is preferably in encoded symbology 58.

Ex. 1001, 6:28–30. Encoded symbology 58 includes, at least, the Brand of

the “source” for an article and a unique identifier for the article. *Id.* at 7:9–13.

Also on surface 56 are Brand fields 60, 62, 64 for displaying “the Brand of the authentication system provider or the Brand ‘source’ of the authenticator itself.” Ex. 1001, 6:15–16. Brand fields 60, 62, 64 may also “carry and display the Brand to be authenticated or other Brand of the Brand ‘source’ to be authenticated.” *Id.* at 6:22–24. The Brands in fields 60, 62, 64 are “carried and displayed unencoded and user recognized.” *Id.* at 6:24–28.

E. Illustrative Claim

The ’195 patent includes 15 claims, all of which Petitioner challenges. Claims 1 and 9 are independent, and reproduced below is claim 1.

1. A Brand “source” authenticator; comprising,
 - a). a carrier with at least a first human observable surface;
 - b). authenticator indicia carried by said first human observable surface;
 - c). said authenticator indicia indicating the “source” of the Brand “source” authenticator;
 - d). authentication indicia also carried by said carrier;
 - e). a selected portion of said carrier being usable to attach said carrier to an article to facilitate authentication of the Brand “source” of the article; and
 - f). said authentication indicia including at least encoded symbology which,
 - when decoded, indicates the Brand “source” of the article to which said carrier is to be attached.

Ex. 1001, 15:2–15.

Independent claim 9 recites “[a] Brand ‘source’ authentication system for multiple articles” that includes “a Brand ‘source’ authenticator.”

Ex. 1001, 15:38–16:14. As noted by Patent Owner, “[c]laim 9 is broader in scope than [c]laim 1” because “[c]laim 1 relates to a ‘Brand “source”

authenticator’ based on a carrier, whereas [c]laim 9 relates to an authentication system, of which the authenticator is a component.” Prelim. Resp. 30.

F. Asserted Prior Art and Proffered Testimonial Evidence

Petitioner identifies the following references as prior art in the asserted grounds of unpatentability:

Name	Reference	Exhibit
Moore-073	US 5,895,073, issued Apr. 20, 1999	1013
Moore-778	US 6,246,778 B1, issued June 12, 2001	1015
Berzack	US 6,578,505, B2, issued June 17, 2003	1008
Kirillina	WO 00/30043, published May 25, 2000	1011
Hudson	WO 01/95249 A2, published Dec. 13, 2001	1014
DataMax	Titan 6200 Operator’s Manual, Datamax Corp., 1998	1012

Petitioner contends that Kirillina, DataMax, Moore-073, Berzack, Hudson, and Moore-778 are prior art under §§ 102(a) and (b).¹ Pet. 21, 29, 31, 40, 51. According to Petitioner, Moore-073, Berzack, and Moore-778 are also prior art under § 102(e). *Id.* at 31, 51. Petitioner also provides a Declaration of Dr. Daniel Lopresti. Ex. 1007.

G. Asserted Grounds

Petitioner asserts that claims 1–15 are unpatentable on the following grounds:

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
1, 2, 6–10, 14, 15	103(a)	Kirillina
5	103(a)	Kirillina, DataMax

¹ The relevant sections of the Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112–29, 125 Stat. 284 (Sept. 16, 2011), took effect on March 16, 2013. Because the ’195 patent issued from an application filed before that date, our citations to 35 U.S.C. §§ 102 and 103 in this Decision are to their pre-AIA versions.

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
1–8	103(a)	Moore-073, Berzack
9, 10, 14, 15	103(a)	Hudson
11–13	103(a)	Hudson, Moore-778

Pet. 3. Petitioner adds the knowledge of a person of ordinary skill in the art to each of the alleged grounds of unpatentability. *Id.* at 3, 21, 29, 31, 40, 51. Because obviousness is determined from the perspective of a person of ordinary skill in the art, we leave out the express inclusion of the general knowledge of the ordinarily skilled artisan.

II. 35 U.S.C. § 325(d)

Institution of *inter partes* review is discretionary. *See Harmonic Inc. v. Avid Tech, Inc.*, 815 F.3d 1356, 1367 (Fed. Cir. 2016) (“[T]he [Office] is permitted, but never compelled, to institute an [*inter partes* review] proceeding.”). Pursuant to 35 U.S.C. § 325(d), in determining whether to institute an *inter partes* review, “the Director may take into account whether, and reject the petition or request because, the same or substantially the same prior art or arguments previously were presented to the Office.” In evaluating the exercise of discretion to deny institution under § 325(d), the Board uses the following two-part framework: (1) determining whether the same or substantially the same art previously was presented to the Office or whether the same or substantially the same arguments previously were presented to the Office; and (2) if either condition of the first part of the framework is satisfied, determining whether the petitioner has demonstrated that the Office erred in a manner material to the patentability of challenged claims. *Advanced Bionics, LLC v. Med-El Electromedizinische Geräte GmbH*, IPR2019-01469, Paper 6, 8 (PTAB Feb. 13, 2020) (precedential).

In applying the two-part framework, we consider several non-exclusive factors, including:

(a) the similarities and material differences between the asserted art and the prior art involved during examination; (b) the cumulative nature of the asserted art and the prior art evaluated during examination; (c) the extent to which the asserted art was evaluated during examination, including whether the prior art was the basis for rejection; (d) the extent of the overlap between the arguments made during examination and the manner in which Petitioner relies on the prior art or Patent Owner distinguishes the prior art; (e) whether Petitioner has pointed out sufficiently how the Examiner erred in its evaluation of the asserted prior art; and (f) the extent to which additional evidence and facts presented in the Petition warrant reconsideration of the prior art or arguments.

Becton, Dickinson & Co. v. B. Braun Melsungen AG, IPR2017-01586, Paper 8 at 17–18 (PTAB Dec. 15, 2017) (precedential as to Section III.C.5, first paragraph) (“*Becton, Dickinson*”).

Factors (a), (b), and (d) of the *Becton, Dickinson* factors relate to whether the art or arguments presented in the Petition are the same or substantially the same as those previously presented to the Office. *Advanced Bionics*, Paper 6 at 10. Factors (c), (e), and (f) “relate to whether the petitioner has demonstrated a material error by the Office” in its prior consideration of that art or arguments. *Id.* Only if the same or substantially the same art or arguments were previously presented to the Office do we then consider whether petitioner has demonstrated a material error by the Office. *Id.* “At bottom, this framework reflects a commitment to defer to previous Office evaluations of the evidence of record unless material error is shown.” *Id.* at 9.

We first consider whether Petitioner asserts the same or substantially the same art or arguments as those previously presented to the Office. *Advanced Bionics*, Paper 6 at 8.

Petitioner contends that “[n]one of the prior art asserted herein was considered during prosecution of the Challenged Patent either alone or in the relied-upon combination(s), and none is believed to be cumulative of prior art that was considered.” Pet. 4 (citing Ex. 1007 ¶ 74). Petitioner also notes its testimonial evidence “was also not considered during prosecution.” *Id.*

Patent Owner argues that Kirillina, Moore-073, and Hudson each “are substantially similar to: (1) a prior art reference cited by the examiner during the prosecution of the ’195 Patent; and (2) patents cited on the face of the patent and discussed therein.” Prelim. Resp. 17. Patent Owner asserts that (1) Lubow² applied during prosecution is not meaningfully different from Kirillina and Hudson, (2) Wood³ described in the ’195 patent is substantially similar to Kirillina and Hudson, and (3) Rose⁴ is not meaningfully different from Moore-073. *Id.* at 18–19; *see also* Ex. 1001, 2:48–56 (describing Rose), 2:64–67 (describing Wood).

The face of the ’195 patent lists Lubow and two other references. Ex. 1001, code (56). None of Kirillina, DataMax, Moore-073, Berzack, Hudson, and Moore-778, the references relied on by Petitioner, are listed on the face of the patent. *See id.* The Office did not consider previously any of Petitioner’s asserted prior art or the grounds raised in the Petition. Ex. 1001, code (56); Ex. 1002, 63–76 (Office action mailed Dec. 4, 2009), 77 (Notice

² US 2005/0273434 A1, published Dec. 8, 2005 (Ex. 2001).

³ US 6,533,180 B1, issued Mar. 18, 2003 (Ex. 2002).

⁴ US 5,521,815, issued May 28, 1996 (Ex. 2003).

of References Cited); *see generally* Ex. 1002 (no filing of any Information Disclosure Statement).

Furthermore, Petitioner argues that the claims would have been obvious based on Kirillina, Moore-073, or Hudson. Pet. 21–58. The Examiner rejected the then pending independent claims as anticipated by Lubow. Ex. 1002, 63–76. Those independent claims were not rejected as being rendered obvious by any of Petitioner’s asserted prior art. *See id.* at 65–75 (rejecting claims 1, 2, and 5–10 as anticipated by Lubow and claims 3, 4, and 11–13 as unpatentable over Lubow).

Even if Kirillina, Moore-073, and Hudson are each substantially similar to Lubow, Wood, or Rose, Patent Owner does not address whether DataMax and Berzack are cumulative to references that have been already considered by the Office. *See* Prelim. Resp. 15–20. Petitioner also argues obviousness based on combinations with DataMax and Berzack. Pet. 29–30 (arguing obviousness based on Kirillina and DataMax), 31–40 (arguing obviousness based on Moore-073 and Berzack). The challenges based on these combinations are not based on substantially the same art and cannot be based on substantially the same arguments as previously presented during prosecution. *See* Ex. 1002, 63–76. Moreover, Petitioner’s testimonial evidence was not before the Examiner during prosecution. Pet. 4.

Thus, for the reasons above, the record does not persuade us that Petitioner asserts the same or substantially the same art or arguments as those previously presented to the Office. *Advanced Bionics*, Paper 6 at 8.

We need not proceed further under *Advanced Bionics*, but even if we were to continue to the second prong of the framework, we would find that the Office erred in a manner material to the patentability of the challenged claims. The Examiner does not appear to have considered whether another

portion of Lubow disclosed, or Lubow in combination with another reference would have met the “authenticator indicia” argued to be missing during prosecution. *See* Ex. 1002, 54, 66; Ex. 2001 ¶ 94; *see also* Ex. 1002, 45 (Notice of Allowability) (indicating that no Examiner’s Statement of Reasons for Allowance is attached). The prosecution history also does not indicate clearly whether the five patents discussed at column 2, line 40 to column 3, line 3 of the ’195 patent were considered. *See generally* Ex. 1002; *see also* Pet. 14 (arguing that there is no indication that these references were considered); Prelim. Resp. 19 (arguing that the references should be presumed to have been considered).

For the reasons set forth above, we conclude that the circumstances of this proceeding do not warrant exercise of our discretion to deny institution based on § 325(d).

III. ANALYSIS

A. Legal Standards

“In an [*inter partes* review], the petitioner has the burden from the onset to show with particularity why the patent [claim] it challenges is unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016). This burden of persuasion 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 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).

Petitioner contends that the challenged claims of the ’195 patent are unpatentable under § 103. Pet. 3. A claim is unpatentable under § 103 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. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of 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 skill in the art; and (4) where in evidence, so-called secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). When evaluating a combination of teachings, we must also “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 (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)). Whether a combination of elements produces a predictable result weighs in the ultimate determination of obviousness. *Id.* at 416–417.

B. Level of Ordinary Skill in the Art

Petitioner argues that one of ordinary skill in the art “would have had at least a bachelor’s degree in mechanical engineering, electrical engineering, computer science or an equivalent field and two years of industry experience working with coded symbologies and networked data systems.” Pet. 14 (citing Ex. 1007 ¶ 51). Petitioner also argues that “[a]n increase in experience could compensate for less education, and vice-versa.” *Id.* (citing Ex. 1007 ¶ 51).

Patent Owner “reserves the right to dispute” Petitioner’s proposed level of ordinary skill, but argues that Petitioner’s arguments fail under its proposal. Prelim. Resp. 21. Patent Owner also states that it “believes that

the definition of a [person of ordinary skill in the art] is not material to the outcome of this Petition.” *Id.*

Based on the preliminary record, we adopt Petitioner’s asserted level of ordinary skill only to determine whether there is a reasonable likelihood that Petitioner would prevail with respect to at least one of the claims challenged in the Petition.

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), including construing the claim in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent.

37 C.F.R. § 42.100(b) (2021); *see Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (en banc).

“Petitioner does not believe any claim terms need formal construction for purposes of evaluating the prior art in this Petition but reserves the right to propose formal constructions in other forums where the issues in dispute may differ, or in response to Patent Owner’s arguments in this proceeding.” Pet. 15.

Patent Owner responds that, even though Petitioner does not propose any interpretation, “Petitioner’s obviousness arguments appear to be based on an exceedingly broad interpretation of certain limitations that are inconsistent with the ’195 Patent’s specification.” Prelim. Resp. 22. Patent Owner also proposes interpretations that below we address.

1. “*Brand*” (*All Claims*)

Patent Owner argues that “Brand” “is used in its trademark sense” and expressly defined by the ’195 patent. Prelim. Resp. 22 (citing Ex. 1001, 1:30–36). Patent Owner also argues that the ’195 patent describes two brands, one for the article source and another for the authenticator source. *Id.* (citing Ex. 1001, 3:24–32, claims 7, 8, 14, 15). Patent Owner further argues that “Brand” has the functions of displaying the Brand of the authentication system to ensure accurate decoding and to indicate the source to create good will. *Id.* at 23 (citing Ex. 1001, 1:36–44). To fulfill those functions, according to Patent Owner, the “Brand must be unencoded and recognizable by the user.” *Id.* at 24.

Turning first to the language of the claims, claims 7 and 14 recite that “authenticator indicia” includes “a Brand of the authenticator,” and claims 8 and 15 recite that “authenticator indicia” also includes “a Brand of the ‘source’ of the article.” Ex. 1001, 15:32–37, 16:33–38. The language of these claims supports Patent Owner’s argument that two brands are recited, one for the article source and another for the authenticator source. *See* Prelim. Resp. 22; Ex. 1001, 15:32–37, 16:12–14, 16:33–38. The claims alone, however, do not expressly support Patent Owner’s asserted functions of the “Brand.” *See* Prelim. Resp. 23.

Turning to the Specification of the ’195 patent, based on the record at this stage, we agree with Patent Owner that the Specification defines “Brand” because it states:

A *Brand* (or trademark, or service mark, as they are often referred to), *as referred to herein*, is any word, name, phrase, symbol, design or device or any combination of words, names, phrases, symbols, designs or devices which identifies and distinguishes the ‘source’ (such as the manufacturer, retailer,

provider, etc.) of the goods or services of one party from those of another party.

Ex. 1001, 1:30–36 (emphases added). The Specification supports that Brand “is used in its trademark sense,” as argued by Patent Owner. Prelim.

Resp. 22. Prosecution history also supports Patent Owner. Ex. 1002, 54 (“A Brand is a trademark and a trademark to be considered to be a trademark must be used as a trademark.”).

Patent Owner also points to a portion of the Specification that states “the authenticator carries an obviously observable Brand ‘source’ of the authenticator and authentication system” and “may also include a trademark of the Brand owner.” Prelim. Resp. 22; Ex. 1001, 3:24–32. This portion of the Specification supports Patent Owner’s position that “Brand” is unencoded and recognizable by a user to ensure accurate decoding by displaying the brand of the authentication system and to indicate the source to create good will. *See* Ex. 1001, 3:24–32.

The Specification, however, does not appear to exclude “Brand” from being encoded yet still recognizable by a user. Ex. 1001, 1:30–36 (“[a] Brand . . . is any . . . symbol, design or device”), 3:24–42 (“an obviously observable Brand ‘source’ of the authenticator and authentication system”).

Based on the present record, we preliminarily adopt the Specification’s definition of “Brand.” Ex. 1001, 1:30–36. We agree with Patent Owner that claims 7, 8, 14, and 15 require there to be “a Brand of the authenticator” and “a Brand of the ‘source’ of the article.” *Id.* at 15:32–37, 16:33–38.

The parties should develop further whether the term “Brand” as used in the claims requires the “Brand” to be unencoded and recognizable by the user for the functions of ensuring accurate decoding and indicating the

source to create good will, as argued by Patent Owner and possibly indicated by the Specification, or the “Brand” can be encoded (but still recognizable in that encoded form). *See* Prelim. Resp. 23, 24; Ex. 1001, 3:24–32.

2. *“authenticator indicia indicating the ‘source’ of the Brand ‘source’ authenticator” (Claim 1) and “authenticator indicia also carried by each said Brand ‘source’ authenticator indicating the ‘source’ of the Brand ‘source’ authenticator” (Claim 9)*

Patent Owner refers to the limitations quoted above collectively as “Source Indicia” and argues that such indicia “relate to marks or other indicia that indicate Authenticator Source.” Prelim. Resp. 24.⁵ Patent Owner proposes interpreting these limitations to refer to “unencoded data displayed on the authenticator that indicate the source of the goods or services of the entity responsible for the Brand ‘source’ authenticator.” *Id.* Patent Owner also provides where asserted support can be found in the ’195 patent. *Id.* at 24–25 (citing Ex. 1001, 6:15–19, 6:24–28).

Patent Owner contends that the limitations “serve a purpose similar to a Brand, but the scope . . . is not coextensive” with Brand. Prelim. Resp. 25. Patent Owner also contends that “authenticator indicia” is not encoded but the data about the article can be encoded. *Id.* (citing Ex. 1001, 3:24–27, 6:24–28, 6:31–54). Patent Owner further contends that a user can use the proper decoding protocols and trust the authentication system because “authenticator indicia” is unencoded and user recognizable. *Id.*

Patent Owner argues that the language of claim 1 supports its position because it requires the Brand “source” to be encoded, but not the

⁵ Patent Owner misquotes claim 1 as reciting “authentication indicia indicating the ‘source’ of the Brand ‘source’ authenticator.” Claim 1, instead, recites “(c). said authenticator indicia indicating the ‘source’ of the Brand ‘source’ authenticator.” Ex. 1001, 15:6–7 (emphasis added).

authenticator indicia. Prelim. Resp. 26. Patent Owner also argues that dependent claims 7, 8, 14, and 15 indicate that a Brand is a subset of “authenticator indicia” and distinguishes Brand from such indicia. *Id.*

Claims 1, 7, 9, and 15 recite that “authenticator indicia” includes “a Brand of the authenticator” or indicates “the ‘source’ of the Brand ‘source’ authenticator.” Ex. 1001, 15:6–7, 15:32–34, 16:12–14, 16:33–35. The language of these claims supports Patent Owner’s contention that “authenticator indicia” “indicate[s] the source of the goods or services of the entity responsible for the Brand ‘source’ authenticator.” Prelim. Resp. 24. The language of the claims also supports Patent Owner’s contention that the claims distinguish “Brand” and “authenticator indicia” because “authenticator indicia” includes the Brand of the authenticator or the Brand of the source of the article. Prelim. Resp. 25, 26; Ex. 1001, 15:32–37, 16:12–14, 16:33–38.

Claim 1 also recites “authentication indicia” in addition to “authenticator indicia.” Ex. 1001, 15:6, 15:8. The “authentication indicia” can include “encoded symbology” that “when decoded, indicates the Brand ‘source’ of the article.” *Id.* at 15:12–14. Claim 1 supports Patent Owner’s argument that data about the article can be encoded. Prelim. Resp. 25, 26. The claims, however, do not require expressly that the authenticator indicia be unencoded, as argued by Patent Owner. *See, e.g.*, Ex. 1001, 15:2–15, 15:38–16:14.

Turning to the Specification, Patent Owner refers to portions stating that “the authenticator carries an obviously observable Brand ‘source’ of the authenticator and authentication system” (Ex. 1001, 3:24–27), “[o]ne or more Brand fields 60, 62, 64 are also provided on surface 56 of authenticator blank 52 . . . to carry and display the Brand of the authentication system

provider or Brand ‘source’ of the authenticator itself” (*id.* at 6:15–19), and “[s]uch Brands of the authentication system provider and the Brand ‘source’ to be authenticated which are carried and displayed in fields 60, 62 and 64 are so carried and displayed unencoded and user recognized” (*id.* at 6:24–28). Prelim. Resp. 24, 25. Patent Owner also refers to a description of encoded symbology 58. *Id.* at 25 (citing Ex. 1001, 6:31–54).

These cited portions of the Specification indicate that the source of the authenticator and authentication system is “obviously observable” and “displayed unencoded and user recognized.” Ex. 1001, 3:26, 6:28–29. They support Patent Owner’s proposed interpretation that the recited “authenticator indicia” is “unencoded data displayed on the authenticator that indicate the source of the goods or services of the entity responsible for the Brand ‘source’ authenticator.” Prelim. Resp. 24.

Based on the record at this stage, however, we do not adopt Patent Owner’s proposed interpretation of “authenticator indicia indicating the ‘source’ of the Brand ‘source’ authenticator” (claim 1) and “authenticator indicia also carried by each said Brand ‘source’ authenticator indicating the ‘source’ of the Brand ‘source’ authenticator” (claim 9) to mean “unencoded data displayed on the authenticator that indicate the source of the goods or services of the entity responsible for the Brand ‘source’ authenticator” (Prelim. Resp. 24).

The claims would require “authenticator indicia” to indicate “the source of the goods or services of the entity responsible for the Brand ‘source’ authenticator,” as argued by Patent Owner. However, whether “authenticator indicia” needs to be “unencoded” would benefit from further development because the Specification appears to support such an

interpretation but the claims do not require expressly that “authenticator indicia” is unencoded. Ex. 1001, 3:26, 6:28–29, claims 1, 9.

3. “*carrier*” (*Claim 1*)

Patent Owner proposes interpreting “carrier” to mean “authenticator blank, or a durable device, made of a natural or synthetic material suitable to accept direct part marking, to be attached to an article that is capable of displaying authentication system data about that article.” Prelim. Resp. 26. Patent Owner argues that Petitioner ignores the Specification of the ’195 patent by asserting that a carrier can be a label. *Id.* at 26–27 (citing Pet. 22, 32, 41).

According to Patent Owner, the ’195 patent describes that “self-adhesive” decals can be easy to replicate because they are so commonplace and cost little to replicate. Prelim. Resp. 27 (citing Ex. 1001, 2:6–16). Patent Owner contends that the carrier of the ’195 patent is “unique and difficult to replicate” because of its described special design, information dependent configuration, and durable material able “to accept direct part markings of encoded symbology.” *Id.* at 27–28 (citing Ex. 1001, 3:15–16, 5:60–6:11). Patent Owner also points to described examples of such carriers. *Id.* at 28 (citing Ex. 1001, 4:21–24, 12:49–13:2).

Patent Owner further argues that the ’195 patent “does not contemplate” using a printed substrate because direct part marking preferably applies encoded symbology so that it is “not visible to the human eye.” Prelim. Resp. 28–29 (citing Ex. 1001, 6:11–14, 6:49–7:4, 10:44–47). According to Patent Owner, such application “camouflages the existence of the authentication data and makes the authentication system harder to subvert.” *Id.* at 29 (citing Ex. 1001, 6:11–14, 6:49–51, 10:44–47).

Patent Owner contends that claim 1 imposes structure to the carrier because it recites the carrier having a “first human observable surface” for displaying the authentication data and a “selected portion” for “attach[ing] said carrier to an article to facilitate authentication.” Prelim. Resp 29–30 (citing Ex. 1001, 5:60–6:3, 6:15–16, 6:19–30, 7:5–8, Fig. 2, claim 1).

Relevant to our analysis, claim 1 recites “a carrier with at least a first human observable surface,” “authentication indicia also carried by said carrier,” “a selected portion of said carrier being usable to attach said carrier to an article,” and “the article to which said carrier is to be attached.” Ex. 1001, 15:3, 15:8–10, 15:14–15. The express language of claim 1 does not require any particular material for the “carrier.” *See id.*

Dependent claim 5 recites “wherein said authentication indicia is direct part marked onto said carrier.” Ex. 1001, 15:25–27. Claim 5 indicates that the scope of claim 1’s “authentication indicia also carried by said carrier” encompasses more than direct part marking and, thus, the carrier can be made of material that does not require direct part marking. *See id.*

Independent claim 9 does not recite a “carrier,” but its dependent claim 11 recites “after its carrier is attached to an article.” Ex. 1001, 15:38–16:14, 16:21–22. Dependent claims 12, 13, and 15 also recite, in relevant part, “said authentication symbology carried by said carrier,” “said encoded symbology carried by said carrier,” and “the article to which the carrier is to be attached,” respectively. *Id.* at 16:25–26, 16:31–32, 16:38.

As shown above, the express language of the claims does not require any particular material for the carrier. *See* Ex. 1001, 15:2–16:38. The claims indicate that the scope of “carrier” encompasses more than “a durable device, made of a natural or synthetic material suitable to accept direct part

marking.” *See id.* The claims, on the other hand, support that the “carrier” is “to be attached to an article that is capable of displaying authentication system data about that article.” *See id.*

Turning to the Specification, Patent Owner refers to a portion of the Specification that indicates that holographs may be “in the form of a self-adhesive decal” and are not effective because they can be counterfeited. Ex. 1001, 2:6–16. Another cited portion states that an object of the ’195 patent is to provide “a specially designed authenticator to be carried by an article.” *Id.* at 3:15–16.

Other cited portions describe that “the Brand ‘source’ authenticator is a relatively thin, circular disk” (Ex. 1001, 4:22–23), and that authenticator blank 52 can be “of predetermined configuration, size and thickness” (*id.* at 5:61–63) and “is *preferably* fabricated from good quality steel or other metal, or combinations or compounds of metal” (*id.* at 6:3–5) (emphasis added). The ’195 patent states that “[c]eramics, glass, plastics and other materials, natural and/or synthetic, suitable to accept direct part markings of encoded symbology 58, *may* just as well be utilized for authenticator blanks 52.” *Id.* at 6:8–11 (emphasis added).

Patent Owner also refers to portions that state “[g]enerally encoded symbols, such as symbol 58, are so applied to a carrier strip such as a pressure sensitive label which could then be applied to authenticator 50” but “[i]t is preferable for the instant invention to apply symbology 58 by direct part marking.” Ex. 1001, 6:49–53; *see also id.* at 6:11–14 (stating that authenticator 50 “may just as well have its encoded symbology 58 applied onto a substrate and the substrate affixed to surface 54 of authenticator 50”), 10:44–47 (stating that “[w]hile symbology 58 is preferably direct part

marked onto or into its surface 56 it may also be first applied to a substrate which is thereafter secured to surface 56 of authenticator blank 52”).

As shown above, the Specification indicates that an authenticator blank does not have to be “a durable device, made of a natural or synthetic material suitable to accept direct part marking” because it indicates that it “may” or “preferably” be such materials. Ex. 1001, 6:3–5, 6:8–11. The Specification also does not exclude adhesive labels as being part of authenticator 50. *See id.* at 6:11–14, 6:49–53, 10:44–47.

At this stage, we do not adopt Patent Owner’s proposed interpretation of “carrier” to mean “authenticator blank, or a durable device, made of a natural or synthetic material suitable to accept direct part marking, to be attached to an article that is capable of displaying authentication system data about that article.” Prelim. Resp. 26. The claims already require the “carrier” to carry “authentication indicia” and to have a portion “usable to attach said carrier to an article.” *See id.*; Ex. 1001, 15:4–5, 15:9–10. The present record does not indicate that the interpretation of “carrier” needs to include limitations already recited.

4. “*Brand ‘source’ authenticator*” (Claim 9)

Patent Owner proposes interpreting “Brand ‘source’ authenticator” to mean a “carrier or authentication blank having authentication system data displayed thereon.” Prelim. Resp. 30. Patent Owner argues that the ’195 patent distinguishes an authenticator from a blank because the authenticator displays relevant data so that it is no longer a blank. *Id.* (citing Ex. 1001, 6:8–14). Patent Owner also argues that its proposed interpretation is consistent with claim 1. *Id.* at 31.

Claim 9 requires the “Brand ‘source’ authenticator to be attached to each such article” and carry “encoded Brand ‘source’ authentication

symbolology.” Ex. 1001, 15:40–16:2. Patent Owner cites a portion of the Specification that first describes authenticator blanks 52 and later authenticator 50 with direct part markings. *See id.* at 6:8–14.

At this stage, we need not adopt Patent Owner’s proposed interpretation to determine whether to institute review. Prelim. Resp. 30; *Realtime Data, LLC v. Iancu*, 912 F.3d 1368, 1375 (Fed. Cir. 2019) (“The Board is required to construe ‘only those terms that . . . are in controversy, and only to the extent necessary to resolve the controversy.’”) (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)).

Claim 9 itself requires the recited “authenticator” to carry “authentication symbolology.” Ex. 1001, 15:40–16:2. Dependent claim 11 recites “carrier” and indicates that there is some distinction between “authenticator” and “carrier.” *Id.* at 16:19–23. In view of the Specification, the distinction appears to be that, for claim 9, the “authenticator” with “authentication symbolology” is attached to an article, and, for claim 11, a “carrier” without such “authentication symbolology” is attached to the article. This issue may benefit from further development by the parties.

5. *Other Terms*

At this preliminary stage, we determine that no other claim term requires express interpretation. *Realtime Data*, 912 F.3d at 1375.

D. *Asserted Obviousness Based on Kirillina*

Petitioner argues with citations to record evidence that claims 1, 2, 6–10, 14 and 15 would have been rendered obvious in view of Kirillina. Pet. 21–29. Patent Owner responds that Petitioner uses improper hindsight reasoning to modify Kirillina, fails to demonstrate a motivation to combine, and fails to show that Kirillina discloses a carrier. Prelim. Resp. 32–42.

For the reasons below, Petitioner shows a reasonable likelihood of prevailing on this challenge.

1. *Kirillina* (Ex. 1011)

Kirillina relates to “methods for identification of inspected objects.” Ex. 1011, Abstr., 1:6–7.⁶ Reproduced below is Figure 2 of *Kirillina*.

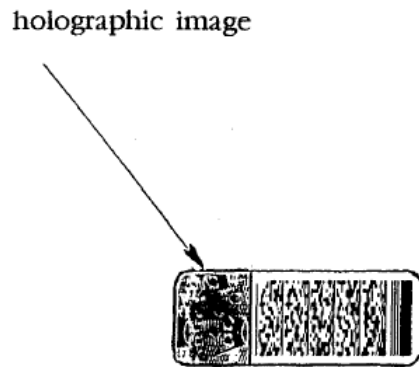


Fig. 2

Figure 2 shows an excise mark or label with “information about the object authenticated by a visualized electronic digital signature” and “with a holographic image.” Ex. 1011, 8:17–20.

Kirillina “allow[s] 100 % trustworthy determination of authenticity of an inspected object and identification of the marker,” by “application of marks which contain object-related information” that “is formed in a digital form.” Ex. 1011, Abstr., 3:13–15, 3:18. The object-related information includes “information about the object type, manufacturer, manufacturing date, unique number of the object, accompanying documents thereto, and signed with an electronic digital signature of the marker” or “a visualized

⁶ Like the parties, we cite to *Kirillina*’s page numbering, not the exhibit page numbers.

electronic digital signature of the marker who marked the object.” *Id.* at Abstr., 3:18–4:1, 4:20–21.

“[T]he resulting information is converted to a bar code which is applied to the object or a label fastened to the object.” Ex. 1011, Abstr., 4:1–2. “[S]uch marking makes it possible not only to determine the manufacture but also to identify, with 100% reliability, the person who made the marking.” *Id.* at 5:13–15.

2. *Claim 1*

Petitioner argues that Kirillina discloses the preamble of claim 1, “[a] Brand ‘source’ authenticator,” because Kirillina discloses a “label fastened to the object.” Pet. 21–22 (citing Ex. 1011, Abstr., 1:13, 4:2, Fig. 2). For “a carrier with at least a first human observable surface,” Petitioner argues that Kirillina’s label is a carrier and its observable surface is shown in Figure 2. *Id.* at 22 (citing Ex. 1007 ¶ 77).

For “b). authenticator indicia carried by said first human observable surface” and “c). said authenticator indicia indicating the ‘source’ of the Brand ‘source’ authenticator,” Petitioner argues that Kirillina’s hologram is the “authenticator indicia” and would have been understood to identify the source of the label. Pet. 22 (citing Ex. 1011, 6:1–6; Ex. 1007 ¶ 78).

Petitioner alternatively argues that, if Kirillina’s hologram does not identify an entity that provides the label, one of ordinary skill in the art “would have understood that the purpose of Kirillina’s hologram is to be a recognizable mark” and would have been motivated to use the hologram to identify an appropriate authority that has approved or taxed the object “because it can be interpreted visually and quickly by eye.” Pet. 22–23 (citing Ex. 1007 ¶ 79). Petitioner also argues that it would have been obvious to place the hologram on the observable surface of the label, and

that one of ordinary skill in the art would have had a reasonable expectation of success “because Kirillina already uses the hologram as a visual aid in identifying the label.” *Id.* at 23 (citing Ex. 1007 ¶ 79; Ex. 1011, Fig. 2).

For “d). authentication indicia also carried by said carrier,” Petitioner argues that Kirillina’s two-dimensional barcode on the label is the “authentication indicia.” Pet. 23 (citing Ex. 1007 ¶ 80; Ex. 1011, Fig. 2). For “e). a selected portion of said carrier being usable to attach said carrier to an article to facilitate authentication of the Brand ‘source’ of the article,” Petitioner argues that Kirillina’s reverse side of its label would be used to paste the label on a product, and that one of ordinary skill in the art would have understood that attaching the label in the manner taught would have made the hologram and barcode visible, thereby facilitating authentication of the product’s source. *Id.* at 23–24 (citing Ex. 1007 ¶ 81; Ex. 1011, 6:16–18).

For “f). said authentication indicia including at least encoded symbology which, when decoded, indicates the Brand ‘source’ of the article to which said carrier is to be attached,” Petitioner argues that Kirillina’s barcode is the recited “encoded symbology” that indicates a source and other information when decoded. Pet. 24 (citing Ex. 1007 ¶ 82; Ex. 1011, 3:19, 4:19, 6:14, 7:9, 10:9).

a) Preliminary Response

(1) “a carrier”

Patent Owner responds that Kirillina does not disclose a “carrier” because, under Patent Owner’s proposed interpretation, “carrier” would not extend to the paper labels of Kirillina. Prelim. Resp. 35 (citing Ex. 1001, 5:60–6:30, 6:55–58, claims 1, 9; Ex. 1011, 4:14–21, 6:1–8:13). Patent Owner argues that, as acknowledged by Petitioner, Kirillina uses “a bar code printed on an adhesive paper label.” *Id.* at 36 (citing Pet. 17; Ex. 1011,

2:12–17, 3:13–4:13, 4:14–21, 6:12–20, 8:13–20, 8:17–20, 9:8–15, Figs 1, 2). Patent Owner also argues that Petitioner incorrectly understands carrier, incorrectly assumes that the carrier can be a printed label, and ignores the Specification of the ’195 patent that requires a carrier durable enough for dot peening. *Id.* at 37 (citing Pet. 21–22; Ex. 1001, 6:3–13). Patent Owner further argues that the ’195 patent indicates that holograms on self-adhesive decals “are ineffective and do not stem the problem of counterfeiting.” *Id.* (citing Ex. 1001, 2:6–16).

For the reasons given above in Section III.C.3., on the present record, we do not adopt Patent Owner’s proposed interpretation of “carrier” to mean “authenticator blank, or a durable device, made of a natural or synthetic material suitable to accept direct part marking, to be attached to an article that is capable of displaying authentication system data about that article.” Petitioner’s contention that Kirillina’s label teaches “a carrier with at least a first human observable surface” is sufficient for institution. *See* Pet. 22.

(2) “*authenticator indicia*”

Patent Owner also responds that Kirillina does not disclose using “authenticator indicia indicating the ‘source’ of the Brand ‘source’ authenticator” to authenticate an article. Prelim. Resp. 35 (citing Pet. 22–23), 38. In Patent Owner’s view, Kirillina’s holographic image acts only “as a check against copying the label or reusing the label” and does not satisfy the “authenticator indicia” limitations. *Id.* at 35–36, 39 (citing Pet. 22–23, 28; Ex. 1011, 9:10–15). Patent Owner also argues that Kirillina’s authentication data encoded into a bar code would not be data that can be seen and recognized by a user without the aid of a scanner and, thus, cannot meet the “authenticator indicia” limitations. *Id.* at 38–39 (citing Ex. 1011, 3:13–4:13, 6:16–7:5).

Petitioner argues that Kirillina discloses all the limitations of claim 1. *See* Pet. 21–24. For “authenticator indicia . . . indicating the ‘source’ of the Brand ‘source’ authenticator,” Petitioner asserts that “Kirillina’s authenticator indicia is a hologram.” *Id.* at 22 (citing Ex. 1011, Fig. 2). Petitioner also asserts that one of ordinary skill in the art would have understood that the hologram identifies the source of the label. *Id.* (citing Ex. 1007 ¶ 78; Ex. 1011, 6:1–6).

Petitioner relies on a portion of Kirillina that states “a state body which is authorized to control production and turnover of alcohol products” provides “producers and authorized supply depots” with “excise marks.” Ex. 1011, 6:1–6. The cited portion of Kirillina describes who provides the marks but does not address Kirillina’s hologram. *See id.* Petitioner and its declarant do not explain adequately why that cited portion supports its argument that an ordinarily skilled artisan would have understood that Kirillina’s hologram identifies the source of the excise marks. *See* Pet. 22; Ex. 1007 ¶ 78.

Regarding the hologram, Kirillina states that:

For protection of finished labels against copying by copier equipment and re-use (e.g., re-pasting on other products), bar code information can be applied to a label having a holographic image thereon since the holographic image cannot be reproduced by copier equipment and is destroyed in case an attempt is made to separate the label from the product.

Ex. 1011, 11:10–15. Petitioner does not address this portion of Kirillina, which indicates that the purpose of the hologram is to prevent copying and reuse, and not to identify the source of the label. *See* Pet. 22. In view of the above, on the present record, Kirillina’s hologram does not appear to teach

or suggest “authenticator indicia” or that Kirillina’s hologram would have been understood to identify the source of the label. *See* Ex. 1011, 11:10–15.

(3) Hindsight Reasoning

According to Patent Owner, Petitioner asserts that one of ordinary skill in the art would have incorporated additional elements “to bolster the reference” but fails to explain why that would have been done. Prelim. Resp. 32–33 (citing Pet. 23). Patent Owner contends that, because Petitioner does not show why one of ordinary skill in the art would have done so, Petitioner engages in impermissible hindsight reconstruction. *Id.* at 33; *see also id.* at 35 (arguing Petitioner uses impermissible hindsight to reconfigure Kirillina to reach the Source Indicia limitations).

Patent Owner further argues that Petitioner fails to provide a motivation for its proposed modification of Kirillina’s holographic image to act as an “authenticator indicia indicating the ‘source’ of the Brand ‘source’ authenticator.” Prelim. Resp. 39 (citing Pet. 23). Patent Owner asserts that Petitioner fails to explain why the ordinarily skilled artisan would have modified the holographic image “to provide additional information beyond the encoded data” and why it would have been “beneficial.” *Id.* Patent Owner also asserts that Kirillina “is a complete system” and “additional non-encoded data [would have been] unnecessary.” *Id.* at 40 (citing Ex. 1011, 6:1–7:5).

Petitioner provides an alternative argument for the “authenticator indicia . . . indicating the ‘source’ of the Brand ‘source’ authenticator” that modifies Kirillina’s hologram. *See* Pet. 22–23. According to Petitioner, one of ordinary skill in the art would have been motivated to use Kirillina’s hologram to identify the approving or taxing authority “because it can be interpreted visually and quickly by eye.” *Id.* (citing Ex. 1007 ¶ 79).

In its reasons to modify Kirillina’s hologram to identify an entity that provides the labels, Petitioner argues that one of ordinary skill in the art “would have understood that the purpose of Kirillina’s hologram is to be a recognizable mark that helps people visually authenticate the source of the label so that distributors, retailers and customers can confirm that the object/alcohol has been approved and/or taxed by an appropriate authority.” Pet. 23. Petitioner then argues that one of ordinary skill in the art “would have been motivated to use the hologram to identify that authority, *i.e.*, to indicate the label’s source as claimed, because it can be interpreted visually and quickly by eye.” *Id.*

As discussed above, Kirillina does not teach expressly that its hologram is “a recognizable mark that helps people visually authenticate the source of the label.” Ex. 1011, 11:10–15. On the present record, however, Petitioner’s testimonial evidence provides support that a hologram would have been understood “to be a recognizable mark” and “can be interpreted visually and quickly by eye.” Ex. 1007 ¶ 79. Petitioner’s declarant also supports, at this stage, that one of ordinary skill in the art would have been motivated to modify the hologram to also indicate the source of the label. *See id.*

b) Reasonable Likelihood of Prevailing

For the reasons above, based on the arguments presented in the Petition and the evidence cited, Petitioner shows a reasonable likelihood of prevailing in its obviousness challenge to claim 1 based on Kirillina.

3. Dependent Claims 2 and 6

Claim 2 depends from claim 1 and recites “wherein said authentication indicia further includes an identifier unique to each individual article to which said carrier is to be attached.” Ex. 1001, 15:16–19.

Petitioner argues that Kirillina's barcode is unique because it includes a "unique number of the object." Pet. 24 (citing Ex. 1011, 3:20, 4:19, 6:14–15, 7:9, 10:10). Petitioner also argues that one of ordinary skill in the art would have understood that the barcode uniquely identifies an object. *Id.* (citing Ex. 1007 ¶ 83; Ex. 1011, 6:14–15).

Claim 6 depends from claim 2 and recites "wherein said authentication indicia also includes encoded symbology with additional characterizations of the article to which said carrier is to be attached." Ex. 1001, 15:28–31. Petitioner argues that Kirillina's barcode includes additional information such as "object type" and "manufacturing date." Pet. 25 (citing Ex. 1011, 3:19–20, 4:18–19, 6:14–15, 7:8–9, 10:9).

Patent Owner does not provide any arguments specific to claims 2 and 6, other than the ones presented for claim 1. *See* Prelim. Resp. 35–42. At this stage of the proceeding, Petitioner shows a reasonable likelihood of prevailing in its challenge to claims 2 and 6 based on Kirillina.

4. Dependent Claims 7 and 8

Claim 7 depends from claim 1 and recites "wherein said authenticator indicia includes a Brand of the authenticator." Ex. 1001, 15:32–34. Petitioner refers to its arguments for the "authenticator indicia" of claim 1. Pet. 25 (citing Ex. 1007 ¶ 85). Petitioner additionally argues that "Kirillina's 'marker' can be the inspection body, the article's manufacturer or wholesaler" and that one of ordinary skill in the art would have understood that Kirillina's hologram identifies those markers. *Id.* (citing Ex. 1011, 7:11–12). Petitioner alternatively argues that it would have been obvious to modify the hologram to identify the marker's brand "for people to visually recognize the marker thereby helping to assure authenticity of the label and article." *Id.* (citing Ex. 1007 ¶ 86).

Claim 8 depends from claim 7 and recites “wherein said authenticator indicia also includes a Brand of the ‘source’ of the article to which the carrier is to be attached.” Ex. 1001, 15:35–37. Petitioner refers to its arguments for the “authenticator indicia” of claim 1. Pet. 26 (citing Ex. 1007 ¶ 87). Petitioner also argues that it would have been obvious to modify Kirillina’s hologram to identify the source of the article because of “the desire for inspectors and/or customers to see that the manufacturer and ‘marker’ are collaborating to provide the authentication label” and “some might look to recognize the marker, while others might look to recognize the manufacturer.” *Id.* Petitioner further argues that there would have been a reasonable expectation of success for including both brands in a hologram. *Id.* (citing Ex. 1007 ¶ 88).

Patent Owner responds that Petitioner treats the “authenticator indicia,” “Brand of the authenticator,” and “Brand of the ‘source’ of the article” as being the same but these limitations should be treated separately. Prelim. Resp. 40–41 (citing Pet. 25–26). Patent Owner also argues that Petitioner “fails to provide analysis or reasoning to motivate” the proposed modifications and relies on impermissible hindsight. *Id.* at 41 (citing Pet. 25–26).

For the “authenticator indicia” of claim 1, Petitioner does not cite to any portion of Kirillina that describes the hologram including a brand of any kind. *See* Pet. 22–23. For claim 7, Petitioner cites a portion of Kirillina that states it forms “information [that] is signed by an electronic digital signature of the marker (manufacturer, or wholesaler, or inspection body) formed by means of a closed cryptographic key.” Pet. 25; Ex. 1011, 7:11–12. This cited portion also does not describe any brands. *See* Ex. 1011, 7:11–12.

According to Petitioner, for claim 7, the marker or entity applying the label can be the manufacturer, wholesaler, or inspection body. Pet. 25. For claim 8, Petitioner's reason for modifying Kirillina requires the marker to be an entity other than the manufacturer. *Id.* at 26. Kirillina does make clear that an inspection body would have a brand, as defined by the '195 patent, that could be included in its hologram. *See generally* Ex. 1011. If the marker is the wholesaler, then Petitioner's reason for modifying does not clearly explain why "inspectors and/or customers [desire] to see that the manufacturer and [wholesaler] are collaborating to provide the authentication label" or why "some might look to recognize the [wholesaler], while others might look to recognize the manufacturer." *See* Pet. 26. Petitioner's testimonial evidence for claims 7 and 8 is substantively the same as the arguments presented in the Petition and does not cite to any other evidence in the record. *Compare* Ex. 1007 ¶¶ 86, 88, *with* Pet. 25–26.

Given what has been presented so far, the dispute regarding claims 7 and 8 would benefit from further development during trial.

5. *Independent Claim 9*

For "[a] Brand 'source' authentication system for multiple articles," Petitioner argues that Kirillina discloses the preamble. Pet. 26. For "(a). a Brand 'source' authenticator to be attached to each such article," Petitioner argues that one of ordinary skill in the art would have understood that "Kirillina's unique authenticators (labels, Figure 2)" are attached to an article. *Id.* at 26–27. Petitioner also quotes Kirillina's teaching that labels are sent to manufacturers who attach them to products. *Id.* (citing Ex. 1003 ¶ 90; Ex. 1011, 6:16–18).

For "(b). encoded Brand 'source' authentication symbology carried by each of said Brand 'source' authenticators," Petitioner argues that Kirillina's

authenticators or labels carry “encoded authentication symbology in the form of a two-dimensional barcode” that identifies the article’s manufacturer. Pet. 27 (Ex. 1007 ¶ 91; Ex. 1011, Fig. 2). For “c). each said authentication symbology including indicia unique to the article to which it is to be attached such that each of said Brand ‘source’ authenticators is unique and differs from all other Brand ‘source’ authenticators,” Petitioner argues that a two-dimensional barcode would be unique to the article and that one of ordinary skill in the art would have understood that each of Kirillina’s authenticators is unique and differs from others. *Id.* (citing Ex. 1007 ¶ 92).

For “d). said Brand ‘source’ authentication symbology including said unique indicia being applied to each said authenticator by a party other than [sic] the Brand ‘source,’” Petitioner argues that Kirillina teaches that an inspection body or wholesaler provides labels to manufacturers and that one of ordinary skill in the art would have understood that the inspection body or wholesaler, not the manufacturer, provides barcodes to the labels. Pet. 27–28 (citing Ex. 1007 ¶ 93; Ex. 1011, 6:12–18, 7:11–12). For “e). authenticator indicia also carried by each said Brand ‘source’ authenticator indicating the ‘source’ of the Brand ‘source’ authenticator,” Petitioner refers to its arguments for claim 1. *Id.* at 28.

a) Preliminary Response

Patent Owner responds that Kirillina does not disclose a “Brand ‘source’ authenticator,” as required by claim 9. Prelim. Resp. 37–38. Patent Owner argues that Petitioner too broadly interprets the term and relies on arguments for claim 1. *Id.* at 38 (citing Pet. 26–27). In Patent Owner’s view, Kirillina’s adhesive label paper cannot be the claimed carrier. *Id.*

Patent Owner also responds that Kirillina does not disclose using a Source Indicia to authenticate an article and that Petitioner fails to provide a motivation for its proposed modification of Kirillina's holographic image to act as a Source Indicia for the same reasons asserted for claim 1. Prelim. Resp. 35 (citing Pet. 22–23), 38–40 (citing Pet. 22–23, 28; Ex. 1011, 3:13–4:13, 6:16–7:5, 9:10–15).

As discussed above, we do not adopt Patent Owner's proposed interpretations for “carrier” and “authenticator indicia” at this stage. Also, for the reasons given above for claim 1, Petitioner's asserted motivation for the “authenticator indicia” of claim 9 is sufficient for institution on the preliminary record.

b) Reasonable Likelihood of Prevailing

Thus, based on the record at this stage, Petitioner shows a reasonable likelihood of prevailing in its obviousness challenge to independent claim 9 based on Kirillina.

6. Dependent Claim 10

Claim 10 depends from claim 9 and recites “wherein the party other than [sic] the Brand ‘source’ also maintains a data storage file of the respective authentication symbology including said unique indicia.” Ex. 1001, 14:3–8. Petitioner argues that Kirillina teaches an inspection body that inputs information about the article into a database. Pet. 28 (citing Ex. 1011, 6:8–12). Petitioner also argues that one of ordinary skill in the art would have understood that the same inspection body or wholesaler would maintain a database of authentic objects. *Id.* (citing Ex. 1007 ¶ 95; Ex. 1011, 7:12). Petitioner further argues that Kirillina's database stores the information, the information is encoded in the barcode, and, when the

barcode is later read, the read information is compared to information in the database. *Id.* at 28–29 (citing Ex. 1011, 10:13–11:2).

Patent Owner does not provide any arguments specific to claim 10, other than the ones presented for claims 1 and 9. *See* Prelim. Resp. 35–42. Based on the preliminary record, Petitioner shows a reasonable likelihood of prevailing in its obviousness challenge to claim 10 based on Kirillina.

7. Dependent Claims 14 and 15

Claim 14 depends from claim 9 and recites “wherein said authenticator indicia includes a Brand of the authenticator.” Ex. 1001, 14:35–38. Claim 15 depends from claim 14 and recites “wherein said authenticator indicia also includes a Brand of the ‘source’ of the article to which the carrier is to be attached.” Ex. 1001, 14:35–38.

For claim 14, Petitioner refers to its arguments for claim 1, and for claim 15, Petitioner refers to its arguments for claim 8. Pet. 29. Patent Owner responds with the same arguments summarized above for claims 7 and 8. *See* Prelim. Resp. 40–42.

For the reasons given above for claims 7 and 8, the parties should further develop the record concerning claims 14 and 15 during trial.

E. Asserted Obviousness Based on Kirillina and DataMax

1. DataMax (Ex. 1012)

DataMax is titled “Titan™ 6200 Operator’s Manual” and describes a “DATAMAX® thermal printer.” Ex. 1012, 1, 11 (“1.0 Introduction”). “The printer provides maximum flexibility by offering both direct thermal and thermal-transfer printing capabilities.” *Id.* at 63 (“5.4 Controlling Print Contrast”). The printer can also print barcodes. *Id.* at 85 (“8.1 Fonts” including “Barcodes”), 95–99 (“Barcodes”).

2. *Claim 5*

Claim 5 depends from claim 1 and recites “wherein said authentication indicia is direct part marked onto said carrier.” Ex. 1001, 14:35–38. Petitioner argues that Kirillina refers to a barcode printer described in DataMax. Pet. 30 (citing Ex. 1011, 7:19–20; Ex. 1012, 11, 85, 95–99). Petitioner also argues that one of ordinary skill in the art would have understood that DataMax’s printer creates Kirillina’s barcode and direct part marks Kirillina’s label. *Id.* (citing Ex. 1007 ¶ 100; Ex. 1012, 63). Petitioner further argues that, even without the DataMax reference, it would have been obvious “to direct part mark Kirillina’s label using a thermal printer because of the optical contrast that such printers provided.” *Id.* (citing Ex. 1007 ¶ 101).

Patent Owner responds for all grounds that Petitioner fails to provide a sufficient motivation to combine the references. Prelim. Resp. 33–35. For this particular challenge, on the present record, Petitioner presents sufficient argument and evidence that the printer of DataMax is the one referred to in Kirillina. *See* Pet. 30.

Patent Owner also responds that DataMax does not cure the deficiencies asserted by Patent Owner for claim 1. Prelim. Resp. 42–43. For the reasons given above, at this stage, Petitioner presents sufficient arguments and evidence for claim 1.

Therefore, based on the preliminary record, Petitioner shows a reasonable likelihood of prevailing in its obviousness challenge to claim 5 based on Kirillina and DataMax.

F. Asserted Obviousness Based on Moore-073 and Berzack

1. Moore-073 (Ex. 1013)

Moore-073 “relates to an authenticating, anti-counterfeiting, and anti-diversion tracking system” and, particularly, “a system for controlling and enabling the marking and controlling the marking of goods, such as basic materials or articles of manufacture during the manufacturing process, with a unique mark, symbol, or pattern for subsequent detection.” Ex. 1013, 1:11–18.

Moore-073’s system includes “(1) a control computer which enables the entire system; (2) a host computer located at a specified central location; (3) a marking system; and (4) a portable field reader.” *Id.* at 8:58–59.

The marking system 16 can be a printing system, so that marker 20 can be a printer. Ex. 1013, 9:22–24. “In operation, the control computer 12 contacts the host computer 14 and enables a specific number of imprints.” *Id.* at 9:24–26; *see also id.* at 10:15–16 (“The control computer 12 provides an allotment of marks to the host computer 14.”), 12:58–60 (“The host, located usually at the headquarters of a company, controls the manufacturing facility by allocating and tracking the number of goods which will be printed.”).

“Once the host computer has received an allotment of marks, it enables the marking systems to imprint marks on the articles or goods as specified.” Ex. 1013, 10:19–21. “The host computer interfaces with the encryption unit to generate a data matrix symbology which represents specified information that the manufacturer selects represented by the mark or symbol.” *Id.* at 10:25–28; *see also id.* at 6:10–15 (describing “generating a unique pattern comprising an encoded input data entry stored on a mass storage device accessible by a CPU where the input data comprises a unique

owner identifier and a unique manufacturer identifier and where the encoded data entry comprises a digital encoding of the input data”), 7:34–38 (describing that “the input data comprises one or more of a unique owner identifier, a unique manufacturer identifier, a unique plant identifier, a unique destination identifier, a unique lot number, an unique article number, and time and date information”).

“The encoded mark or symbol is sent via a modem 24 to a manufacturing site where the encoded mark or symbol is received by the marker CPU 27 and is printed onto material or goods at this remote marking location.” Ex. 1013, 10:30–33. The mark “can be imprinted, etched, embossed or otherwise placed directly on the product or, alternately, can be imprinted or etched on a fixture . . . affixed to the product,” preferably at the manufacturing stage. *Id.* at 5:10–12, 19:1–7. “Similar marks could be etched or otherwise impressed on other fixtures . . . , such as the traditional leather waist band label.” *Id.* at 21:13–15.

“Within a single manufacturer, however, their symbology is proprietary, and “[a] manufacturer would not, for instance, even with identical equipment, be able to read another manufacturer’s code.” Ex. 1013, 25:60–63. “Each network has proprietary symbology developed specifically for that client.” *Id.* at 25:63–64.

Field reader system 18 can identify and verify marked products “at any point in the distribution chain.” Ex. 1013, 9:43–45, 25:33–35. Host computer 14 receives data from a field reader and interfaces with encryption unit 15 to decode and convert to clear text, and the decoded text can be sent back to the field reader. *Id.* at 9:57–67. “[H]ost computer 14 . . . maintains a database for the field reading system to aid in product tracking and authentication.” *Id.* at 25:11–16.

Figures 8 and 12A of Moore-073 are below reproduced.

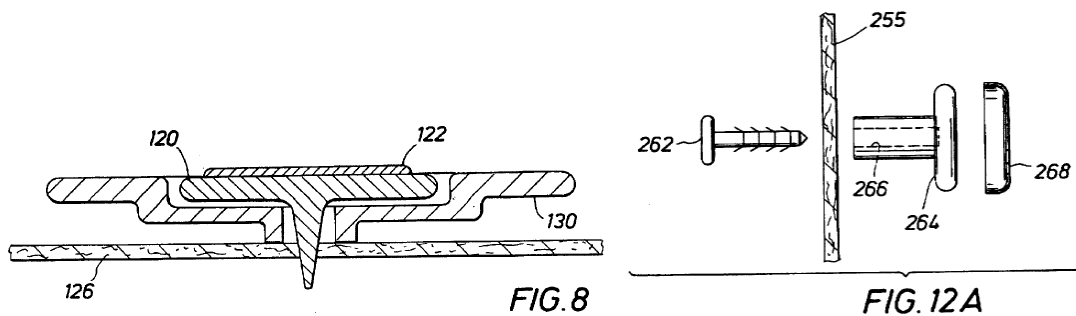


Figure 8 “is a cross sectional view of a button affixed to a garment, where the button is attached by means of a rivet onto which an identifying symbol has been placed,” and Figure 12A is a cross sectional view of an assembled button assembly “where the rivet head faces toward the wearer.” Ex. 1013, 8:35–38, 8:49–51.

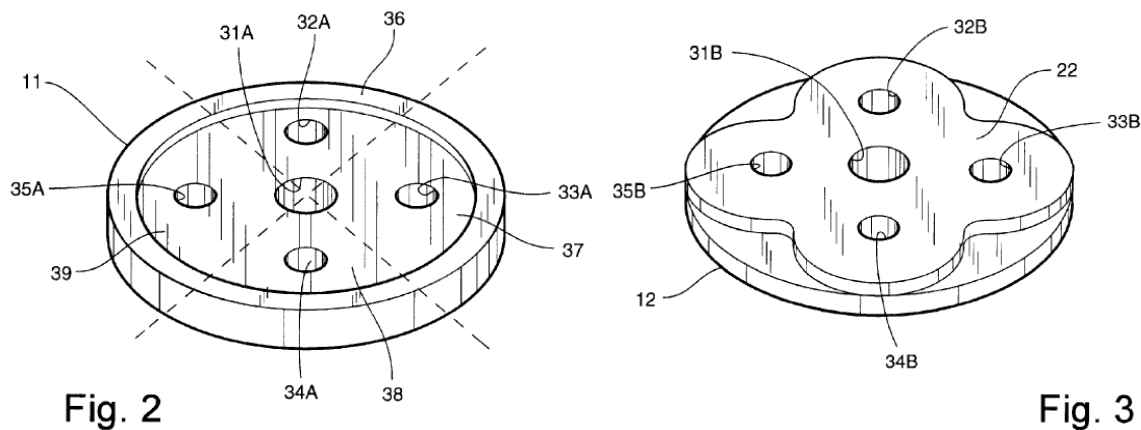
“The marked rivet 120 is not the product to be tracked, but the rivet is permanently affixed to a product to be tracked.” Ex. 1013, 20:41–42. Marked rivet 120 attaches button 130, and “[t]he head of the rivet is recessed within the button 130.” *Id.* at 20:45–46, 20:49–50. Mark 132 is etched into layer of anodize 122. *Id.* at 20:50–51, Fig. 9.

“Manufacturers of clothing often prefer to display their unique design logo, and this logo is often displayed on buttons affixed to the garment.” Ex. 1013, 21:19–21. The embodiment of Figure 12A shows a “marked rivet head [that] faces toward the wearer of the garment thereby allowing the manufacturer of the garment to affix the button design of choice.” *Id.* at 21:23–26.

2. Berzack (Ex. 1008)

Berzack “relates to an anti-counterfeiting system and method for authenticating manufactured articles” and “utilizes a conspicuous 5-hole button permanently affixed to the article and used to identify the article as

genuine.” Ex. 1008, 1:8–9, 1:12–14. Figures 2 and 3 of Berzack are below reproduced.



Figures 2 and 3 are perspective views of a 5-hole top button in a face-up position and a 5-hole stay button in a face-down position, respectively. Ex. 1008, 4:38–41. “As an additional feature of the present anti-counterfeiting system,” “5-hole top button 11 may include the trademark of the brand owner,” and “stay button 12 is preferably color-coded to indicate brand participation in the system.” *Id.* at 6:6–10.

3. Claim 1

Petitioner argues that Moore-073’s fixture affixed to a product discloses “[a] Brand ‘source’ authenticator.” Pet. 32 (citing Ex. 1007 ¶ 107; Ex. 1013, 5:10–12, 21:14–15, Figs. 8, 9, 12A, 12B). Petitioner also argues that each of the asserted authenticators in Moore-073 teaches “a carrier with at least a first human observable surface.” *Id.* at 32–33 (citing Ex. 1007 ¶ 108; Ex. 1013, 19:1–7, 20:45–54, 24:54–64, 25:33–35, Figs. 8, 9, 12A, 12B).

For “authenticator indicia carried by said first human observable surface . . . indicating the ‘source’ of the Brand source authenticator,” Petitioner argues that an article manufacturer runs Moore-073’s host computer, and a third party runs the control computer because of Moore-

073's description that the control computer enables the entire system and designates a specific number of encoded symbols to be used by the host computer. Pet. 33–34 (citing Ex. 1013, 4:57–58, 8:58–59, 9:22–25, 10:15–36, 12:45–46). Petitioner also argues that Moore-073 describes that the host computer located at a headquarters controls the manufacturing facility, generates data matrix symbology, and maintains a database to aid product tracking and authentication. *Id.* at 34 (citing Ex. 1013, 9:57–67, 10:26–29, 12:58–60, 25:11–16, 25:58–59). According to Petitioner, Moore-073 indicates that several manufacturers participate in the system. *Id.* at 34–35 (citing Ex. 1013, 6:13, 6:54–55, 7:36, 26:2–5).

Petitioner contends that one of ordinary skill in the art would have understood that Moore-073 scans goods for a representative mark or symbol. Pet. 35 (citing Ex. 1013, 24:54–64). Petitioner also contends that Berzack suggests using a color-coded button to indicate brand participation. *Id.* (citing Ex. 1008, 6:8–10).

For “authentication indicia also carried by said carrier,” Petitioner argues that Moore-073 discloses indicia, such as indicia 132, carried by the carrier which would have been understood to be the hang tag, label, or rivet-button embodiments. Pet. 36 (citing Ex. 1007 ¶ 111; Ex. 1013, Fig. 9).

For “a selected portion of said carrier being usable to attach . . . ,” Petitioner argues that one of ordinary skill in the art would have understood Moore-073's (1) tag has a hole for a connector, (2) label has an adhesive rear surface or perimeter for stitching to clothing, and (3) rivet-button has recess and rivet for attaching. Pet. 36 (citing Ex. 1007 ¶ 112; Ex. 1013, Figs. 8, 12A, 12B).

For “said authentication indicia including at least encoded symbology . . . ,” Petitioner argues that Moore-073 teaches that its data matrix 132

includes encoded symbology, and when decoded, it indicates a “manufacturer identifier.” Pet. 36–37 (citing Ex. 1013, 7:36, 15:11–17). According to Petitioner, one of ordinary skill in the art would have understood that the “manufacturer identifier” indicates the brand source of the attached article. *Id.* (citing Ex. 1013, 7:36, 15:11–17). Petitioner also argues that “to which said carrier is to be attached” implies a timing and that Moore-073 teaches marking its carrier or authenticator prior to attaching to a garment. *Id.* 37 (citing Ex. 1007 ¶ 113; Ex. 1013, Abstr., 8:42–44, 21:51–65).

a) Asserted Reason to Combine Moore-073 and Berzack

According to Petitioner, Moore-073 and Berzack are in the same field of endeavor “because each relates to the labeling of articles to guard against counterfeits.” Pet. 31 (citing Ex. 1008, 1:8–16, Figs. 1–3; Ex. 1013, 6:7–7:10, 14:59–15:10, Figs. 9, 12A, 12B). Petitioner argues that both “use similar techniques to solve the same problems, specifically using indicia applied to a physical tag or button affixed to a perspective article, indicating participation in the authentication system.” *Id.* (citing Ex. 1008, 6:6–13; Ex. 1013, 6:7–7:10, 14:59–15:10, Figs. 9, 12A, 12B). Petitioner also argues that “Moore-073 and Berzack describe similar types of tags or buttons that were common at the time and would have been well known.” *Id.*

For “authenticator indicia carried by said first human observable surface . . . indicating the ‘source’ of the Brand ‘source’ authenticator,” Petitioner contends that one of ordinary skill in the art would have been motivated to use Berzack’s color-coded button in Moore-073 because of the “need to determine, at the outset, whether goods participate in Moore-073’s system before proceeding to read Moore-073’s data matrix code.” Pet. 35. Petitioner also contends that the ordinarily skilled artisan would have

“color[ed] Moore-073’s hang tag, label, leather-waist-label, or rivet-button to make it very easy to see that the manufacturer participates in the authentication system.” *Id.* at 35–36 (citing Ex. 1007 ¶ 110; Ex. 1013, 20:31–32). Petitioner further contends that such an artisan “would have been motivated by the lack of certain implementation details in Moore-073, and/or by the known alternatives to Moore-073’s implementation, to search for other known and compatible implementations” and “would have been led to Berzack based on its disclosure of a similar tag or button for soft goods, and use of that tag or button to indicate participation in an authentication system.” *Id.* at 31–32 (citing Ex. 1008, 6:6–13).

Petitioner argues that the proposed combination would have yielded predictable results and that one of ordinary skill in the art would have had a reasonable expectation of success in making the asserted modification. Pet. 31, 35–36.

b) Preliminary Response

Patent Owner responds that Moore-073 alone cannot disclose all the limitations of claim 1 because the recited “authenticator indicia . . . indicating the ‘source’ of the Brand ‘source’ authenticator” has to be unencoded. Prelim. Resp. 44. Patent Owner further argues that, because “information in the Moore authentication system is encoded into an ID matrix symbol that can be verified by a reader,” Moore-073’s asserted authentication indicia are encoded and all the encoded data is about the article, not the source of the authenticator. *Id.* at 44–45 (citing Pet. 34; Ex. 1013, 5:19–31, 7:33–40, 9:22–10:2, 10:37–53).

For the reasons given above in Section II.C.2., on the preliminary record, we do not adopt Patent Owner’s proposed interpretation for “authenticator indicia.” As stated in our reasons, the issue of whether

“authenticator indicia” has to be unencoded would benefit from further development. As for the responsive argument that the encoded data is about the article and not the authenticator, Petitioner proposes modifying Moore-073 with Berzack for that requirement of claim 1. *See* Pet. 35–36 (“For example, Moore-073’s button 10, rivet 120 or surface 122 could be colored and constitute the claimed indicia indicating the source of the carrier/authenticator.”) (citing Ex. 1007 ¶ 110).

Patent Owner also responds that Petitioner fails to provide a sufficient motivation to combine the references. Prelim. Resp. 33. In Patent Owner’s view, Petitioner and its declarant “provide a cursory analysis that the two references *could* be combined because they are in the same fields with the same objectives.” *Id.* at 34 (citing Pet. 31). Patent Owner also contends that “Petitioner argues that the use of similar techniques supports a motivation to combine.” *Id.* (citing Pet. 31–32). Patent Owner further contends that such an assertion “does not provide motivation for a [person of ordinary skill in the art] to add a component already present in the original reference.” *Id.*

Pages 31–32 of the Petition, however, appear to be arguing that Moore-073 and Berzack are analogous art and why one of ordinary skill in the art would have had a reasonable expectation of success in modifying Moore-073 with the teachings of Berzack that relate to similar subject matter. *See* Pet. 31–32. Petitioner’s asserted rationale for combining the two references is presented in its arguments regarding the “authenticator indicia” limitations. *See id.* at 33–36. Within those arguments, Petitioner asserts a motivation why one of ordinary skill would have, not just could have, combined Moore-073 and Berzack. *See id.*

Patent Owner further responds that Petitioner’s reason to modify Moore-073 is “flawed,” “does not make sense,” and does not provide “an

adequate basis” for motivating the proposed combination. Prelim. Resp. 45 (citing Pet. 35). Patent Owner contends that Moore-073’s description of scanning a product does not indicate a need for a “color-coded stay [that] would enhance an inspector’s scanning accuracy” because Moore-073’s “encryption is specific to the manufacturer, not the authentication system, such that a different manufacturer under the same system could not decrypt the information.” *Id.* at 46 (citing Pet. 35; Ex. 1013, 25:57–26:2). Patent Owner also contends that the inspector of Moore-073 would not need to know the authenticator source because the inspector just selects the setting matching the article source. *Id.*

Patent Owner further contends that Berzack’s color-coded system could not indicate the authenticator source. Prelim. Resp. 47 (citing Pet. 39). According to Patent Owner, “[e]stablishing a particular color as an indication of source, let alone a Brand in the sense of the ’195 Patent, goes far beyond the disclosure of Berzack” and would be “difficult and virtually impossible when you divorce the color from its traditionally associated article.” *Id.* at 47–48.

According to Petitioner, however, one of ordinary skill in the art would have modified Moore-073 with the color coding of Berzack to indicate that the marked goods are participating in Moore-073’s authenticating system. *See* Pet. 35–36; Ex. 1007 ¶ 110. Claim 7 depends from claim 1 and recites that the “authenticator indicia includes a Brand of the authenticator.” Ex. 1001, 15:32–34. The “authenticator indicia” of claim 1 is, thus, broader than a Brand and would encompass possibly a color code, as argued by Petitioner.

Patent Owner additionally responds that Petitioner improperly combines Moore-073 and Berzack. Prelim. Resp. 43 (citing Pet. 32–33;

Ex. 1013, 3:65–4:7, 6:32–8:2). According to Patent Owner, “[t]he presence of the Berzack button on an article authenticates the article,” “not by providing information about the article (as other systems do), but merely by the existence of the button on the article.” *Id.* at 44 (citing Ex. 1008, 1:8–10, 1:13–16, 5:22–26, 6:8–10).

As discussed above, Petitioner proposes modifying Moore-073 with Berzack’s color coding. *See* Pet. 35–36; Ex. 1007 ¶ 110. Petitioner’s proposed modification does not include Berzack’s button. *See* Pet. 35–36 (“For example, Moore-073’s button 10, rivet 120 or surface 122 could be colored and constitute the claimed indicia indicating the source of the carrier/authenticator.”) (citing Ex. 1007 ¶ 110). Petitioner apparently relies on Moore-073’s data matrix code for authentication. *See* Pet. 35–36; Ex. 1007 ¶ 110.

c) Reasonable Likelihood of Prevailing

For the above reasons, based on the arguments presented in the Petition and the evidence cited, Petitioner shows a reasonable likelihood of prevailing in its obviousness challenge to claim 1 based on Moore-073 and Berzack.

4. Dependent Claims 2–8

Petitioner argues that Moore-073’s data matrix 132 including a unique article number teaches claim 2’s “wherein said authentication indicia further includes an identifier unique to each individual article to which said carrier is to be attached.” Pet. 37 (citing Ex. 1013, 7:31–46).

Claim 3 depends from claim 1 and recites “wherein said authentication indicia is of the 2D Data Matrix type.” Ex. 1001, 15:20–21. Petitioner argues that Moore-073’s data matrix symbology teaches claim 3’s limitations. Pet. 37 (citing Ex. 1013, 10:25–28, Fig. 9). Petitioner

alternatively argues that it would have been obvious to use a “2D Data Matrix type” in Moore-073 “to include substantial information in a small area and . . . to use simple decoding software in the field readers.” *Id.* at 37–38 (citing Ex. 1001, 6:45–47; Ex. 1003, 6:44–46; Ex. 1007 ¶ 116).

Claim 4 depends from claim 3 and recites “wherein said authentication indicia is applied to said carrier by the use of a laser.” Ex. 1001, 15:22–24. Petitioner argues that Moore-073 teaches using a laser to etch a symbol onto metal or plastic fixtures and that one of ordinary skill in the art would have understood that tag and label embodiments include metal or plastic carriers for laser etching. Pet. 38 (citing Ex. 1007 ¶ 117; Ex. 1013, 20:26–27, 20:36–40, 21:13–15, 21:38–41).

For claim 5’s “wherein said authentication indicia is direct part marked onto said carrier,” Petitioner argues that Moore-073’s laser etching indicia 132 on a rivet-button would be understood to be direct part marking. Pet. 38 (citing Ex. 1007 ¶ 118; Ex. 1013, 20:26–27, 20:36–40).

Petitioner argues that Moore-073’s data matrix 132 can include detailed shipping information, time, data, type of product, count, location of manufacturing and other information and, thus, teaches claim 6’s “wherein said authentication indicia also includes encoded symbology with additional characterizations of the article to which said carrier is to be attached.” Pet. 38–39 (citing Ex. 1013, 22:21–42, 22:64–23:2).

For claim 7, Petitioner argues that “a color can indicate a brand” and Berzack’s color coding when combined with Moore-073 “constitutes indicia identifying a brand of the authentication entity running the system.” Pet. 39 (citing Ex. 1007 ¶ 120; Ex. 1008, 2:32–34, 6:6–10). Petitioner alternatively argues that, if Berzack’s color coding is not a Brand, one of ordinary skill in the art would have been motivated to include a brand, such as the “unique

logo design” suggested by Moore-073 be included in its rivet-button. *Id.* at 39–40 (citing Ex. 1007 ¶ 121; Ex. 1013, 21:19–21).

For claim 8, Petitioner argues that Moore-073 suggests including a “unique logo design” and that one of ordinary skill in the art would have been motivated to include the unencoded brand of the article’s manufacturer on Moore-073’s carrier. Pet. 40 (citing Ex. 1007 ¶ 122; Ex. 1013, 21:19–21).

Other than the arguments summarized above for claim 1, Patent Owner does not present any arguments for the challenged dependent claims. *See* Prelim. Resp. 43–48. Based on the preliminary record, Petitioner shows a reasonable likelihood of prevailing in its obviousness challenge to claims 2–8 based on Moore-073 and Berzack.

G. Asserted Obviousness Based on Hudson

1. Hudson (Ex. 1014)

Hudson relates to an “authentication system designed to protect government agencies or brand owners from losses of tax revenues . . . from the effects of product counterfeit” and “to protect the consumer from the dangers of consumption of counterfeit products.” Ex. 1014, 1:3–8.⁷

Hudson provides a “product verification system for use with products” that “includ[es] machine readable product data, and compris[es] product data storage means for storing data corresponding to the machine readable product data applied to the products.” Ex. 1014, 3:19–20, 3:22–24. Hudson’s “product data can be unique.” *Id.* at 15:8.

The product verification system in a preferred embodiment incorporates in the label visual security devices “in the form of diffractive or

⁷ We cite to Hudson’s page numbering, not the exhibit page numbers.

holographic security devices.” Ex. 1014, 14:1–3. The visual security device can be incorporated “with machine readable product data in order to secure the machine readable data against unauthori[z]ed copying and reproduction, to provide both a visual security device and a machine readable potentially uniquely encoded security device within the same label.” *Id.* at 14:28–15:2. “[A] single tracking label applied to an article provides a secure diffraction based visual security device for product and label authentication and protection against counterfeit,” and “a machine readable portion preferably a bar code (possibly 1-D or of the 2-D high density format such as PDF-417) [that] carr[ies] product authentication and tracking data potentially unique.” *Id.* at 16:1–6.

Hudson’s “label is coupled to a product tracking and tracing system,” and the end consumer can access parts of the system to “check for authenticity.” Ex. 1014, 17–21. Figures 3 and 8 of Hudson are below reproduced.

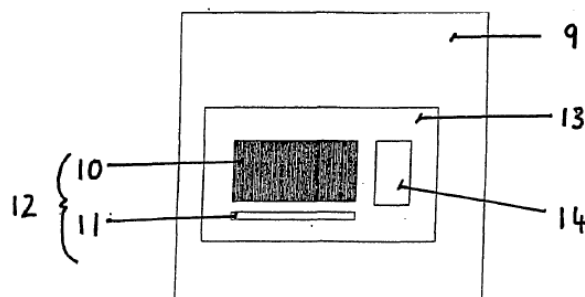


FIGURE 3

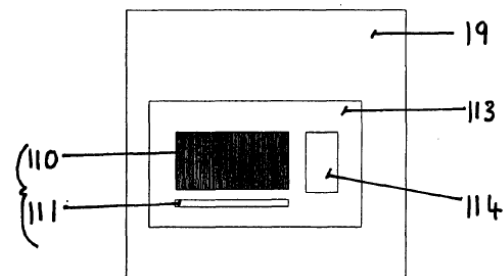


Figure 8

Figures 3 and 8 show “product data and a visual security device applied to a product / product packaging by means of a security label” according to different embodiments. Ex. 1014, 20:1–3, 20:17–19. “A producer / importer 1 applies to an administrator 2 for issue of labels 13 for the number of units of a product 9 that he intends to be introduced” and

“labels 13 are generated by the administrator 2 and contain product data 12 comprising a bar-code 10 and an alphanumeric reference code 11.” *Id.* at 22:9–12. “Corresponding product data to that applied to the labels 13 is stored in a database 3,” and “labels 13 are supplied to the producer / importer 1 who attaches them to each unit of a product 9.” *Id.* at 22:13–15. Label 113 “can be adhered to the product 19” because of “an adhesive.” *Id.* at 30:2–4.

“[O]ptical security device 14 (see Figure 3) can be applied to the label 13 or the product 9 directly” and “provides a means of visual verification and helps to prevent illegal copying.” Ex. 1014, 25:6–8. It can be “a holographic device.” *Id.* at 25:8–10. “The optical security device 14 can also be arranged to store machine readable product data 10 in a suitable format.” *Id.* at 25:23–25. “During an inspection the inspector 7 can visually verify the optical security device 14.” *Id.* at 25:28–30; *see also id.* at 29:16–17 (describing the “visual diffractive security device” as “allow[ing] the label to be visually verified as genuine”), 30:27–30 (stating that “[a]t the point of sale the customer can also visually verify the optical diffractive security device . . . and later access the database using the optional product identification number to further authenticate the genuineness of the product”), 32:5–8 (stating that “[t]he purpose of the visual security devices 114 is to provide a visual authentication means in addition to the encoded product identification data 110 and product identification number 111, to authenticate product and authenticate genuineness of label”).

“The owner 11 and / or the administrator 12 are responsible for encoding products 19 with secure product identification data 112 on either individual product 19 or product packaging as appropriate,” and “[p]roduct data 112 is a combination of encoded product identification data 110 and a

product identification number 111.” Ex. 1014, 28:29–29:2. “The identification data describes the product and can identify the unit or consignment, the entities or owners that introduced the product into commercial circulation and the place of origin.” *Id.* at 29:9–12.

2. *Independent Claim 9*

For the preamble of claim 9, Petitioner argues that “Hudson discloses a brand source authentication system for multiple articles.” Pet. 40–41 (citing Ex. 1014, 1:3–11, 3:19–20, 3:22–24, 19:17–21, 20:21–22). Petitioner also argues that Hudson’s embodiments shown in its Figures 1 and 6 each demonstrate that the challenged claims are unpatentable. *Id.* at 41 (Ex. 1007 ¶ 125).

For the recited “Brand ‘source’ authenticator,” Petitioner argues that Hudson’s labels shown in Figures 3 and 8 each meet the limitation. Pet. 41–43 (citing Ex. 1014, 22:9–15, 26:8–9, Figs. 1, 3, 8).

For the recited “encoded Brand ‘source’ authentication symbology,” Petitioner argues that Hudson’s bar-code 10, 110 with optical security device 14, 114 teaches the limitation. Pet. 43–44 (citing Ex. 1007 ¶ 128; Ex. 1014, 25:23–25, 25:29–30, 32:24–25, Figs. 3, 8). Petitioner also argues that bar-code or the security device has data that identifies the brand source. *Id.* at 44–45 (citing Ex. 1014, 23:1–18, 26:26–27:2, 27:8–11). According to Petitioner, one of ordinary skill in the art would have understood that bar-code 10, 110 and optical security device 14, 114 identify the brand source. *Id.* at 45 (citing Ex. 1007 ¶ 129).

For the limitation starting with “each said authentication symbology including an indicia unique to the article,” Petitioner argues that Hudson teaches that its machine readable product data 10, 110 is “applied onto every unit of product” and “product data can be unique.” Pet. 45 (quoting

Ex. 1014, 15:8). Petitioner also argues that product data 112 includes encoded product identification data 110 that identifies the unit and Hudson’s bar code can carry unique product authentication and tracking data.” *Id.* at 45–46 (citing Ex. 1007 ¶ 130; Ex. 1014, 14:31–15:2, 16:1–7, 25:23–25, 28:31–29:1, 29:9–12, Fig. 8).

For the requirement that the Brand “source” authentication symbology be “applied to each authenticator by a party other than [sic] the Brand ‘source,’” Petitioner argues that Hudson teaches administrator 2, not producer 1, applying a bar-code and security device to a label and producer/importer 1 applying the labels to products. Pet. 46–47 (citing Ex. 1007 ¶ 131; Ex. 1014, 14:2–3, 14:28–15:4, 17:29–30, 22:11–12, 22:14–15, 30:1–5, 32:20–25, 34:12–14, claim 15).

For the recited “authenticator indicia,” Petitioner argues that Hudson teaches visually verifying labels. Pet. 47 (citing Ex. 1014, 29:16–17, 30:27–30, 32:5–8). Petitioner also argues that it would have been obvious “to include the administrator’s identity (the claimed Brand/source of the authenticator) in human-readable form and encoded in Hudson’s bar-code data 10/110 and security device 14, 114” so as “to provide further confirmation to inspectors and customers that the label is genuine and the product authentic.” *Id.* at 47–48 (citing Ex. 1007 ¶ 133; Ex. 1014, 21:1–5).

a) Preliminary Response

Patent Owner responds that Petitioner has “an incorrect understanding of the term authenticator, Source Indicia, and Brand.” Prelim. Resp. 48. Patent Owner argues that Hudson’s labels do not teach a Brand “source” authenticator because they are not durable authenticator blanks with authentication data, as described by the ’195 patent. *Id.* at 48–49 (citing Pet. 41).

Patent Owner also responds that Hudson does not disclose the recited “authenticator indicia.” Prelim. Resp. 49. According to Patent Owner, “Hudson’s labels disclose the use of three different types of data: encoded data about the article, a product identification number, and a visual security device as part of a ‘tamper evident label,’” and Petitioner relies on the visual security device for teaching the “authenticator indicia.” *Id.* (citing Pet. 47; Ex. 1014, 30:11–18).

Patent Owner argues that Hudson fails to teach “authenticator indicia” because its purpose is “to make it more difficult for a counterfeiter to either copy the label or remove it from the original article,” and authenticity is conveyed by the visual security device being difficult to copy. Prelim. Resp. 49–50 (citing Ex. 1014, 5:4–16, 14:1–26). Patent Owner also argues that Petitioner acknowledges the purpose because Petitioner asserts that it would have been obvious to modify the visual security device to be an “authenticator indicia.” *Id.* at 50. Patent Owner further argues that Petitioner’s reason for combining merely asserts what one of ordinary skill in the art could, not would, have done. *Id.* In Patent Owner’s view, Petitioner fails to identify a shortcoming that would prompt the proposed modification and additional encoded data would be unnecessary because “Hudson encodes all the data and envisions the use of a computerized reader for a user to inspect articles.” *Id.*

For the reasons given above in Section III.C., on the preliminary record, we do not adopt Patent Owner’s proposed interpretations for “carrier” and “authenticator indicia also carried by each said Brand ‘source’ authenticator indicating the ‘source’ of the Brand ‘source’ authenticator” but adopt the asserted definition of “Brand” in the Specification.

Regarding Hudson’s visual security device, Petitioner argues that it would have been obvious “to include the administrator’s identity (the claimed Brand/source of the authenticator) in human-readable form and encoded in Hudson’s bar-code data 10/110 and security device 14/114” so as “to provide further confirmation to inspectors and customers that the label is genuine and the product authentic” with a reasonable expectation of success. Pet. 48 (citing Ex. 1007 ¶ 133).

Thus, Patent Owner’s responsive arguments do not provide a reason for denying institution.

b) Reasonable Likelihood of Prevailing

For the above reasons, at this stage, based on the arguments presented in the Petition and the evidence cited, Petitioner shows a reasonable likelihood of prevailing in its obviousness challenge to claim 9 based on Hudson.

3. Dependent Claim 10

Petitioner argues that Hudson’s administrator 2 and database 3 teach claim 10’s “wherein the party other than [sic] the Brand ‘source’ also maintains a data storage file of the respective authentication symbology including said unique indicia.” Pet. 48 (citing Ex. 1007 ¶ 134; Ex. 1014, 21:5–7).

Patent Owner does not provide any arguments specific to claim 10, other than the ones presented for claims 1 and 9. *See* Prelim. Resp. 48–52. Based on the preliminary record, Petitioner shows a reasonable likelihood of prevailing in its obviousness challenge to claim 10 based on Hudson.

4. Dependent Claims 14 and 15

For claim 14, Petitioner argues that it would have been obvious “to include the administrator’s identity (the claimed Brand of the authenticator)

in human-readable form and encoded in Hudson’s bar-code data 10/110 and security device 14/114” so as “to provide further confirmation to inspectors and customers that the label is genuine and the product authentic.” Pet. 49–50 (citing Ex. 1014, 21:1–5, 29:16–17, 32:5–8). Petitioner also argues that the proposed modification would have had a reasonable expectation of success. *Id.* at 50 (citing Ex. 1007 ¶ 136).

For claim 15, Petitioner refers to contentions for claim 9 that Hudson’s machine-readable product data identifies the brand source of the article. Pet. 50 (quoting Ex. 1014, 26:26–27:2).

Patent Owner responds that Petitioner treats the “authenticator indicia,” “Brand of the authenticator,” and “Brand of the ‘source’ of the article” as being the same but that these limitations should be treated separately. Prelim. Resp. 51 (citing Pet. 49–50). Patent Owner also argues that Petitioner “fails to provide analysis or reasoning to motivate” the proposed modifications and relies on impermissible hindsight. *Id.* at 51–52.

Petitioner argues for claim 14 that it would have been obvious “to include the administrator’s identity (the claimed Brand of the authenticator)” in Hudson’s bar code 10, 110 or security device 14, 114. Pet. 49. For claim 15, Petitioner argues that “Hudson’s machine readable product data . . . identifies the brand source of the article” but does appear to directly address if the asserted authentication indicia includes a “Brand.” *See id.* at 50. For both claims 14 and 15, Petitioner apparently equates identity to “Brand.”

On the present record, merely including an identification may not teach including a “Brand,” as required by claims 14 and 15. Also, as discussed above, we adopt the asserted definition of “Brand” in the

Specification of the '195 patent. The parties should address this issue further during trial.

H. Asserted Obviousness Based on Hudson and Moore-778

1. Moore-778 (Ex. 1015)

Moore-778 issued from a continuation-in-part of the application that issued as Moore-073. Ex. 1015, code (63), 1:6–8. Moore-778 states that “marking information is sent back to the host computer with the total inventory number once the manufacturing run has been completed or as the host directs the marker location.” *Id.* at 16:8–11. “The host computer 14 maintains a record of the number of marks used by a particular marking system.” *Id.* at 16:27–28.

2. Claims 11–13

Claim 11 depends from claim 10 and recites “wherein the respective authentication symbology with each said unique identifier is entered into said data storage after its carrier is attached to an article preferably by the party attaching the carrier to the article.” Ex. 1001, 16:19–23. Petitioner relies on Hudson’s database 3 and Moore-778’s asserted similar system to argue that one of ordinary skill in the art would have been motivated to modify Hudson to load data into its database after labels have been applied. Pet. 52–55 (citing Ex. 1007 ¶¶ 145, 151; Ex. 1014, 21:5–7, 22:11–15, 36:20–23; Ex. 1015, 4:40–46, 5:44, 5:57–6:14, 6:21–31, 8:25–33, 11:1–24, 16:8–11, 16:27–28, 16:38–41); *see also id.* at 51–52 (arguing that the references are in the same field of endeavor and directed to solving the same problem using similar techniques and that their combination would have been predictable and had a reasonable expectation of success) (citing Ex. 1007 ¶¶ 139, 141, 142; Ex. 1014, 1:14–22, 15:7–12, 26:17–20; Ex. 1015, Abstr., 1:16–31, 27:15–52).

Claim 12 depends from claim 11 and recites “including an imager/reader to image and decode said authentication symbology carried by said carrier and to effect a comparison thereof with the data stored in said data storage.” Ex. 1001, 16:24–27. Petitioner argues that Hudson’s imaging reading and comparison of decoded data to data in its database meets the limitations of claim 12. Pet. 55–57 (citing Ex. 1007 ¶ 154; Ex. 1014, 5:25–29, 5:31–6:2, 27:25–27, 31:11–12, 34:22–24).

Claim 13 depends from claim 9 and recites “including a printer for printing an authentication certificate upon a positive comparison of said encoded symbology carried by said carrier and said data stored in said data storage.” Ex. 1001, 16:28–31. Petitioner argues that Hudson’s printer combined with Moore-778’s “certificate of authenticity” meets the limitations of claim 13. Pet. 57–58 (citing Ex. 1007 ¶ 156; Ex. 1014, 13:14–15, 22:22–25, 33:15–17, 34:29–35:26; Ex. 1015, 13:10–16). Petitioner also argues that the proposed combination would have been motivated by customer need to demonstrate authenticity. *Id.* at 58 (Ex. 1007 ¶ 158).

Patent Owner responds that Petitioner fails to provide a sufficient motivation to combine the references. Prelim. Resp. 33–35. For this challenge, on the present record, Petitioner presents sufficient argument and evidence that one of ordinary skill in the art would have been motivated to combine the references in the manner asserted. *See* Pet. 52, 55, 58.

Patent Owner also responds that Moore-778 does not cure the deficiencies of Hudson. Prelim. Resp. 52–53. For the reasons given above for claim 9, Petitioner sufficiently shows at this stage that Hudson would have rendered obvious claim 9.

For the above reasons, based on the preliminary record, Petitioner shows a reasonable likelihood of prevailing in its obviousness challenge to claims 11–13 based on Hudson and Moore-778.

IV. CONCLUSION

After considering the evidence and arguments presented in the Petition and the cited evidence, we determine that Petitioner has demonstrated a reasonable likelihood of prevailing in proving that at least one of claims 1–15 of the '195 patent is unpatentable, and thus, we institute an *inter partes* review of all challenged claims on all presented challenges. *SAS*, 138 S. Ct. at 1359–60.

At this stage of the proceeding, the Board has not made a final determination as to the patentability of any challenged claim or any underlying factual and legal issues.

V. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review of claims 1–15 of U.S. Patent No. 7,852,195 B2 is instituted with respect to all grounds set forth in the Petition; and

FURTHER ORDERED that, pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4(b), *inter partes* review of U.S. Patent No. 7,852,195 B2 shall commence on the entry date of this Order, and notice is hereby given of the institution of a trial.

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Patent 7,852,195 B2

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