



UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE OFFICE OF THE UNDER SECRETARY OF COMMERCE  
FOR INTELLECTUAL PROPERTY AND DIRECTOR OF THE UNITED  
STATES PATENT AND TRADEMARK OFFICE

---

NESTED BEAN, INC.,  
Petitioner,

v.

BIG BEINGS USA PTY LTD and LB ONLINE & EXPORT PTY LTD  
d/b/a LOVE TO DREAM ONLINE AND EXPORTS,  
Patent Owner.

---

IPR2020-01234  
Patent 9,179,711 B2

---

Before KATHERINE K. VIDAL, *Under Secretary of Commerce for  
Intellectual Property and Director of the United States Patent and  
Trademark Office.*

DECISION  
Granting Rehearing and Modifying Final Written Decision

## I. INTRODUCTION

Nested Bean, Inc. (“Petitioner”) filed a Petition (Paper 1, “Pet.”) requesting *inter partes* review of claims 1–18 of U.S. Patent No. 9,179,711 B2 (Ex. 1001, “the ’711 patent”). Claims 1 and 2 of the ’711 patent are independent and claims 3–16 are multiple dependent claims, which depend directly or indirectly from either claim 1 or 2. *See* Ex. 1001, 11:14–12:43. On January 25, 2021, the Patent Trial and Appeal Board (“Board”) granted institution of *inter partes* review (Paper 15, “Institution Dec.”) and on January 24, 2022, the Board issued a Final Written Decision (Paper 34, “Final Dec.”). The Final Written Decision determined that Petitioner did not establish by a preponderance of evidence that claims 1, 17, and 18 were unpatentable and further determined that Petitioner established by a preponderance of evidence that claims 2–16 were unpatentable. Final Dec. 69–70.

On February 23, 2022, Big Beings USA Pty Ltd and LB Online & Export Pty Ltd d/b/a Love to Dream Online and Exports (collectively, “Patent Owner”) filed a Request for Director review. Paper 35 (“Request” or “Reh’g Req.”). In the Request, Patent Owner argued that

claims 3–16 are multiple dependent claims that each depend from claim 1 or 2, and the Board found that Petitioner failed to show by a preponderance of the evidence that claim 1 is unpatentable. As a result, the Board should have found that Petitioner likewise failed to show by a preponderance of the evidence that claims 3–16 — as depending from claim 1 — are unpatentable [under pre-AIA 35 U.S.C. § 112, fifth paragraph].

Reh’g Req. 1.<sup>1</sup> On June 17, 2022, I granted Director review of the Board’s Final Written Decision and authorized Patent Owner to file a supplemental brief and Petitioner to file a responsive brief to Patent Owner’s supplemental brief. Paper 36, 3–4. In particular, I asked the parties to: (i) address whether the interpretation of 35 U.S.C. § 112, fifth paragraph, governing multiple dependent claiming on which Patent Owner relies is an issue of first impression, and (ii) if so, address the legislative history, appropriate statutes, and regulations, as well as any policy issues or persuasive authority, and (iii) if not, address any authoritative case law specifically concerning Patent Owner’s interpretation. *Id.* On July 1, 2022, Patent Owner timely filed its supplemental brief (Paper 37, “PO Supp. Br.”) and on July 15, 2022, Petitioner timely filed its responsive brief (Paper 38, “Pet. Resp. Br.”). On July 26, 2022, I further authorized Patent Owner to file a reply brief to Petitioner’s responsive brief and Petitioner to file a sur-reply brief to Patent Owner’s reply brief. Paper 39, 2. On August 2, 2022, Patent Owner timely filed its reply brief (Paper 40, “PO Reply”) and on August 9, 2022, Petitioner timely filed its sur-reply brief (Paper 41, “Pet. Sur-Reply”).

I have reviewed the Board’s Decision, the relevant papers, and the relevant exhibits of record in this proceeding. As discussed below, I find that the Board’s consideration of multiple dependent claim patentability as to each of its alternatively referenced claims is an issue of first impression

---

<sup>1</sup> The relevant section of the Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112–29, took effect on March 16, 2013. Because the application from which the ’711 patent issued claims priority to a foreign patent application that was filed before March 16, 2013, my citation to 35 U.S.C. § 112 is to the pre-AIA version in effect as of the earliest priority date. My determinations and rationale in this decision apply equally to the corresponding post-AIA version of the statute, 35 U.S.C. § 112(e).

before the Board. I further determine that the plain language of 35 U.S.C. § 112, fifth paragraph, requires that the patentability of a multiple dependent claim is considered separately as to each of its alternatively referenced claims. As such, I determine the Board erred in determining that claims 3–16, as dependent from claim 1, are unpatentable. Accordingly, I grant rehearing and modify the Board’s Final Written Decision.

## II. DISCUSSION

### *A. Claims 1–18 of the ’711 patent and the Board’s Decision*

Claims 1 and 2 of the ’711 patent are independent (Ex. 1001, 11:14–53) and claims 3–16 are multiple dependent claims which, directly or indirectly, alternatively reference and depend from either independent claim 1 or 2 (*id.* at 12:1–52). For example, claim 3 recites, in relevant part, “[a] swaddling suit according to claim 1 or 2.” *Id.* at 12:1.

The Board instituted review of claims 1–18 of the ’711 patent. Institution Dec. 2. The Board’s Final Written Decision determined that Petitioner failed to show that independent claim 1 was unpatentable but Petitioner showed that independent claim 2 was unpatentable. Final Dec. 69–70. In assessing the patentability of multiple dependent claims 3–16, the Board determined that

[c]laims 3–16 depend alternatively from claims [sic] 1 *or* claim 2. Thus, we consider claims 3–16 to be anticipated (or rendered obvious below) by the prior art if *either* version of these claims (the version depending from claim 1 or the version depending claim 2) is described by the prior art.

*Id.* at 35 n.7. Accordingly, the Board determined *both* versions of claims 3–16, i.e., the first version depending from claim 1 and the second version depending from claim 2, were shown to be unpatentable because the second version depended from independent claim 2, which was shown to be

unpatentable. *See id.* at 35–38, 64, 68–70. The Board did not separately consider the patentability of claims 3–16 as dependent from independent claim 1, which was *not* shown to be unpatentable. *See generally id.*

*B. The Board’s consideration of multiple dependent claim patentability as to each of its alternatively referenced claims is an issue of first impression*

Patent Owner asserts that the Federal Circuit has not squarely addressed the issue because, in certain cases where the Federal Circuit has “state[d] that a multiple dependent claim is invalid, the other independent claim(s) were not before the Court” and, so, there was “lack of specificity in the opinion.” PO Supp. Br. 8 (emphasis omitted). Patent Owner also contends that the situation here is one of first impression before the Board because it is a “rarity,” “few cases directly address this exact situation,” and it “found no instances where the Board, in a Final Written Decision, found that one of the independent claims from which a multiple dependent claim depended unpatentable and another not unpatentable.” PO Supp. Br. 1, 3, 7; *see* PO Reply 2–3. Patent Owner asserts that “prior board decisions have considered multiple dependent claims independently” and “declined to make any determination as to the ‘patentability of multiple dependent claims’” to the extent they depend from an independent claim not challenged before the Board. PO Reh’g Req. 13–14 (citing *Comcast Cable Commc’ns, LLC v. Rovi Guides, Inc.*, IPR2017-01147, Paper No. 41, 10–11 (PTAB Nov. 6, 2018); *Target Corp. v. Proxicom Wireless LLC*, IPR2020-00980, Paper 32, 32 n.7 (PTAB Nov. 30, 2021)); PO Supp. Br. 9.

Petitioner disputes Patent Owner’s assertion that this is an issue of first impression and contends that the Board’s treatment of multiple dependent claims here is “consistent with Federal Circuit precedent that a

claim reciting alternatives be held invalid,” “is consistent with prior [Board] decisions,” and is also consistent with district court precedent. Pet. Resp. Br. 2, 6–7. Petitioner identifies a string of related Federal Circuit cases addressing alternatively recited limitations in the body of the claim, which it argues support its conclusion. *Id.* at 7–9 (citations omitted). Petitioner also identifies three previous Board cases, which it argues support its contention: *Dukane Corp. v. Herrmann Ultraschalltechnik GmbH & Co., KG*, IPR2016-00066, Paper 15 (PTAB Apr. 26, 2017) (“*Dukane*”); *SK Innovation Co., Ltd. v. Celgard, LLC*, IPR2014-00680, Paper 59 (PTAB Nov. 6, 2015) (“*SK Innovation*”); and *Amerigen Pharm. Ltd. v. Shire LLC*, IPR2015-02009, Paper 32 (PTAB Dec. 28, 2016) (“*Amerigen*”). *Id.* at 2–6; Pet. Sur-Reply 1–3. Petitioner further points to two district court cases as support for its conclusion. Pet. Resp. Br. 6–7 (citing *Chrimar Sys. Inc. v. Ruckus Wireless, Inc.*, 2020 WL 1905572 (N.D. Cal. Apr. 16, 2020); *PrivaCash, Inc. v. American Express Travel Related Services Co.*, 2014 WL 3666974 (W.D. Wis. July 22, 2014)).

I agree with Patent Owner that the interpretation question presented by this case has not been squarely addressed by precedent.<sup>2</sup> I am not persuaded by Petitioner’s characterization of the caselaw. None of the cited decisions reviewed all versions of a multiple dependent claim and affirmatively determined that all versions of the multiple dependent claim were unpatentable based on finding that only one version of the multiple dependent claim was unpatentable. Rather, the cited cases suggest that no tribunal has directly addressed the particular situation before me.

---

<sup>2</sup> Further, as discussed below, Patent Owner’s proposed interpretation is consistent with existing MPEP guidance.

The string of Federal Circuit cases Petitioner identifies do not address this issue. Pet. Resp. 7–10; Pet. Sur-Reply 3. Rather than addressing the relevant treatment of multiple dependent claims, those cases interpret claimed features unrelated to claim dependency — ranges, genera, and alternatively recited limitations. *See, e.g.*, Pet. Resp. 7–9; *Titanium Metals Corp. of Am. v. Banner*, 778 F.2d 775, 776, 781–782 (Fed. Cir. 1985) (interpreting “a recitation of ranges” for an “alloy consisting essentially by weight of about 0.6% to 0.9% nickel, 0.2% to 0.4% molybdenum, up to 0.2% maximum iron, balance titanium”); *King Pharm., Inc. v. Eon Labs, Inc.*, 616 F.3d 1267, 1276–77 (Fed. Cir. 2010) (addressing the prior art’s disclosure of a range of time); *Atlas Powder Co. v. IRECO Inc.*, 190 F.3d 1342, 1346 (Fed. Cir. 1999) (concerning “a single prior art species within the patent’s claimed genus”); *Brown v. 3M*, 265 F.3d 1349, 1353 (Fed. Cir. 2001) (interpreting “at least one of two-digit, three-digit, or four-digit year-date representations”); *In re Theresa*, 720 Fed. Appx. 634, 637 (Fed. Cir. 2018) (interpreting “preset words or pre-set symbols”); *USA, Inc. v. Baxter Int’l, Inc.*, 582 F.3d 1288, 1297-98 (Fed. Cir. 2009) (interpreting a claim written in Markush format). None of those cases addresses the interpretation of multiple dependent claims, as Petitioner recognizes. Pet. Sur-Reply. 3.

Furthermore, the Federal Circuit cases identified by Patent Owner, which concern multiple dependent claims, do not address this particular situation. PO Supp. Br. 7–9; Reh’g Req. 9–10. In *Dow Chemical Co. v. Mee Industries, Inc.*, 41 F.3d 1370, 1377–138 (Fed. Cir. 2003), the Federal Circuit pointed out in its invalidity analysis that claims 21 and 23 were “multiple-dependent claim[s], *but only independent claim 14 from which [they] depend[] is asserted*” (emphasis added). As such, the Federal Circuit in *Dow Chemical* suggested that its invalidity analysis was only directed to

the versions of claims 21 and 23 depending from independent claim 14 and did not address the validity of non-asserted claims. Furthermore, the dissent in *Honeywell Int'l v. Hamilton Sundstrand*, 370 F.3d 1131, 1148–149 (Fed. Cir. 2004) addressed the validity of non-multiple dependent claims (dissenting from the majority's opinion that “rewriting a dependent claim into independent form, coupled with the cancellation of the original independent claim, constitutes a narrowing amendment”). The dissent addressed multiple dependent claims only tangentially, opining that “[e]ach claim defines a separate invention, whether or not written in independent form; and its validity stands or falls separately.” *Id.*

The issue also has not been addressed previously by the Board. The Board cases identified by Petitioner are not helpful to its proposed interpretation. In *Dukane*, the Board addressed the unpatentability of multiple dependent claim 6 only to the extent it depended from claim 1, even though claim 6 alternatively depended from claim 2 or 3. *Dukane*, Paper 15, 17 (stating it “considered claim 6 in the same manner when [it] instituted this *inter partes* review based on its dependency from claim 1, but not claims 2 and 3”). In *SK Innovation*, the Board again addressed the unpatentability of multiple dependent claim 11 only to the extent it depended from claims 7–10, even though claim 11 alternatively depended from claims 1–6. *SK Innovation*, Paper 59, 4–5 (explaining trial was instituted on grounds “challenging claims 7–11” and the “resulting Final Decision did not include a determination of the patentability of claims 1–6, or a determination of the patentability of claim 11 to the extent it depends from claims 1–6”). In *Amerigen*, the Board similarly addressed the unpatentability of multiple dependent claim 25 only to the extent it depended from claims 18–20, and expressly stated that it did not make an unpatentability determination of



claim 25 with respect to its alternative dependence from claims 2 or 13. *Amerigen*, Paper 32, 4 (confirming “that claim 25 is part of the trial only to the extent it depends from claims 18–20, and not to the extent it depends from non-instituted claims 2 and 13”).

The district court cases Petitioner cites are of little guidance. *PrivaCash, Inc. v. American Express Travel Related Services Co.*, 2014 WL 3666974 (W.D. Wis. July 22, 2014) does not address the particular situation presented in this case. In *PrivaCash*, the district court did not address whether the invalidity of one version of a multiple dependent claim invalidates all versions of the multiple dependent claim. *See id.* Instead, the district court rejected the argument that the alternatively recited versions of a multiple dependent claim must be treated as a group, highlighting that a multiple dependent claim is considered independently and incorporates by reference all the limitations of the particular claim in relation to which it is being considered. *Id.* at 10–11 (citations omitted).

Petitioner’s only case supporting its position, *Chrimar Sys. Inc. v. Ruckus Wireless, Inc.*, No. 16-CV-00186-SI, 2020 WL 1905572, at \*3 (N.D. Cal. Apr. 16, 2020), provides little guidance. Pet. Resp. 6–7. Although *Chrimar* discusses the treatment of multiple dependent claims, it does not discuss the interpretation of 35 U.S.C. § 112, fifth paragraph. *See Chrimar*, 2020 WL 1905572, at \*3–4. Instead of interpreting 35 U.S.C. § 112, the opinion in *Chrimar* instead interprets the language in an order in a Final Written Decision of the Board. *See id.* Specifically, *Chrimar* interpreted language in the Board’s Final Written Decision as invalidating all versions of a multiple dependent claim. However, the Final Written Decision did not explain whether it considered multiple dependent claim patentability as to each of its alternatively referenced claims, let alone explain that all versions

of the multiple dependent claim were invalid. *See Juniper Networks, Inc. v Chrimar Systems, Inc.*, IPR2016-01391, Paper 66 (PTAB, Dec. 20, 2017). At most, the trial court’s conclusion implies Petitioner’s interpretation. However, any such inference carries little persuasive value, particularly in light of the statutory language and other interpretative sources considered here, which were not analyzed by the trial court.

*C. Interpretation of 35 U.S.C. § 112, fifth paragraph*

Patent Owner and Petitioner disagree on the interpretation of 35 U.S.C. § 112, fifth paragraph. Patent Owner contends that this statute requires the Board to separately consider the patentability of alternative dependencies of a multiple dependent claim. Reh’g Req. 1; PO Supp. Br. 10. Petitioner, conversely, contends that this statute should be read so that if any version of a multiple dependent claim is found unpatentable over the prior art, then the “entirety,” i.e., all versions, of the multiple dependent claim should be found unpatentable. Pet. Resp. 1. For the reasons set forth below, I agree with Patent Owner’s interpretation based on the plain language of the statute, as supported by Federal Circuit case law, legislative history, and USPTO procedure.

*1. Statutes and Regulations*

I first turn to the language of the statutes and regulations governing multiple dependent claims.

35 U.S.C. § 112, fifth paragraph, states, in relevant part, “[a] multiple dependent claim shall be construed to incorporate by reference all the limitations of the particular claim in relation to which it is being considered.” Similarly, 37 C.F.R. § 1.75(c) states, in relevant part, “[a] multiple dependent claim shall be construed to incorporate by reference all the limitations of each of the particular claims in relation to which it is being

considered.” 37 C.F.R. § 1.75(c) further explains that, “[f]or fee calculation purposes . . . a multiple dependent claim will be considered to be that number of claims to which direct reference is made therein.” Further, 35 U.S.C. § 282, which governs the treatment of claims after issuance, requires that “[e]ach claim of a patent (whether in independent, dependent, or multiple dependent form) shall be presumed valid independently of the validity of other claims; dependent or multiple dependent claims shall be presumed valid even though dependent upon an invalid claim.”

The plain language of 35 U.S.C. § 112, fifth paragraph, communicates that a multiple dependent claim is the equivalent of several single dependent claims. Thus, in the same way that the unpatentability of multiple single dependent claims would each rise or fall separately, so too should the dependent claims covered by a multiple dependent claim. 37 C.F.R. § 1.75(c) further supports that interpretation because each alternatively referenced claim of a multiple dependent claim incurs a separate dependent claim fee, i.e., each version of a multiple dependent claim is charged as a stand-alone dependent claim and, so, suggests separate treatment.

Still further, 35 U.S.C. § 282 also suggests consideration of each alternatively referenced claim because it states that the validity of a multiple dependent claim is considered “independently,” i.e., separately. Reading the statute to require separate consideration of the patentability of alternative dependencies of a multiple dependent claim gives effect to both §§ 112(5) and 282. Conversely, reading § 112(5) to permit the unpatentability of a multiple dependent claim to rise and fall on the unpatentability of any one of the individual dependent claims, as Petitioner urges, would conflict with § 282. Petitioner does not reconcile its interpretation of § 112(5) with § 282.

Based on the language of the relevant statutes and regulations, I agree with Patent Owner that, “[t]aken together, the law is clear—multiple dependent claims must be treated as multiple claims, each comprising the dependent claim and one of the claims to which it refers, *and* the validity (and/or unpatentability) of each of the multiple claims must be considered separately.” Reh’g Req. 4. If the statutory language is “clear,” then that ends the statutory interpretation analysis. *See Thaler v. Vidal*, 43 F.4th 1207, 1213 (Fed. Cir. 2022) (citing *Bostock v. Clayton Cnty.*, 140 S. Ct. 1731, 1749 (2020) (“This Court has explained many times over many years, when the meaning of the statute’s terms is plain, our job is at an end.”)). However, in the interest of completeness, I examine other interpretive sources, which support my reading of the statutory text.

## 2. *Precedent*

As discussed above, neither party identifies a judicial or administrative decision squarely addressing the interpretation presented here.

As noted, Petitioner recognizes that the Federal Circuit cases it cites do “not concern[] multiple dependent claims.” Pet. Sur-Reply 3. Petitioner suggests I apply the Federal Circuit’s reasoning regarding alternatively recited limitations, as discussed in *Titanium Metals* and its “progeny,” to multiple dependent claims because “[t]here is no principled reason for different treatment of multiple dependent claims when all other forms of alternative claims cannot be partially invalid.” Pet. Resp. Br. 10; Pet. Sur-Reply 3. That suggestion, however, presumes its conclusion. Petitioner has not shown where our reviewing court has suggested applying the interpretation of alternatively recited limitations to claim dependency.

Further, unlike the discrete claim features at issue in those cases, §§ 112(5) and 282 speak directly to multiple dependent claims.

While the Federal Circuit cases identified by Patent Owner do not directly address the instant interpretation issue, they support Patent Owner's interpretation. PO Supp. Br. 7–9; Reh'g Req. 9–10. For example, although the issue presented in *Dow Chemical* did not address how the validity of one version of a multiple dependent claim affects the validity of all versions of that multiple dependent claim, the Federal Circuit “emphasized” that “each claim of a patent (whether in independent, dependent, or multiple dependent form) shall be presumed valid independently of the validity of other claims; [and] dependent or multiple dependent claims shall be presumed valid even though dependent upon an invalid claim.” 41 F.3d 1375 (citing *Dayco Prods., Inc. v. Total Containment, Inc.*, 329 F.3d 1358, 1370 (Fed. Cir. 2003)). As previously discussed, in its invalidity discussion of multiple dependent claims, the Federal Circuit pointed out that only one of the alternatively recited dependencies was asserted. *Id.* at 1377–78. As such, the Federal Circuit's invalidity analysis applied only to the version of the multiple dependent claims at issue before it, rather than to all versions of the multiple dependent claims.

Furthermore, in *Dayco Products*, in its discussion of impermissible grouping of different claims across different patents, the Federal Circuit explained that “not addressing claim validity on an individual basis” is an error and contravenes 35 U.S.C. § 282, which requires “[e]ach claim of a patent (whether in independent, dependent, or multiple dependent form) shall be presumed valid independently of the validity of other claims; [and] dependent or multiple dependent claims shall be presumed valid even though dependent upon an invalid claim.” 329 F.3d 1370. The court

explained that “where claims differ in scope in an aspect material to the analysis, those claims must be addressed individually.” *Id.* at 1370–371. As the scope of each alternatively recited version of a multiple dependent claim differs, *Dayco Products* also suggests that the patentability of a multiple dependent claim is considered separately as to each of its alternatively referenced claims.

### 3. *Legislative History*

The legislative history also comports with Patent Owner’s statutory interpretation. On November 14, 1975, the United States enacted Public Law 94-131, which, among other changes, implemented the multiple dependent claim practice introduced by the Patent Cooperation Treaty (PCT). Pub. L. 94–131 §§ 3,7, 10, 89 Stat. 685, 691. The PCT was entered into on June 19, 1970, and states the following goals:

Desir[e] to make a contribution to the progress of science and technology,

Desir[e] to perfect the legal protection of inventions,

Desir[e] to simplify and render more economical the obtaining of protection for inventions where protection is sought in several countries,

Desir[e] to facilitate and accelerate access by the public to the technical information contained in documents describing new inventions,

Desir[e] to foster and accelerate the economic development of developing countries through the adoption of measures designed to increase the efficiency of their legal systems, whether national or regional, instituted for the protection of inventions by providing easily accessible information on the availability of technological solutions applicable to their special needs and by facilitating access to the ever[-]expanding volume of modern technology.

Patent Cooperation Treaty, June 19, 1970, 28 U.S.T. 7645; 1160 U.N.T.S.

231. Those articulated goals are advanced by the PCT's regulations, which have included Rule 6.4 since 1970:

Any dependent claim which refers to more than one other claim ("multiple dependent claim") shall refer to such claims in the alternative only . . . Any dependent claim shall be construed as including all the limitations contained in the claim to which it refers or, if the dependent claim is a multiple dependent claim, all the limitations contained in the particular claim in relation to which it is considered.

Patent Cooperation Treaty, Rule 6.4, June 19, 1970. As such, the plain language of Rule 6.4 of the PCT explains that the patentability of a multiple dependent claim is considered separately as to each of its alternatively referenced claims because it should be "construed" based on "*the particular claim in relation to which it is being considered*" (emphasis added).

In response to the U.S. being a party to the PCT, the United States passed Public Law 94-131, which, among other changes, amended 35 U.S.C. § 112 to add the following provisions:

A claim may be written in independent or, if the nature of the case admits, in dependent or multiple dependent form.

Subject to the following paragraph, a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers.

A claim in multiple dependent form shall contain a reference, in the alternative only, to more than one claim previously set forth and then specify a further limitation of the subject matter claimed. A multiple dependent claim shall not serve as a basis for any other multiple dependent claim. A multiple dependent claim shall be construed to incorporate by reference all the

limitations of the particular claim in relation to which it is being considered.

Public Law 94-131, Nov. 14, 1975. Notably, the portion of 35 U.S.C. § 112 addressing multiple dependent claims is nearly identical to Rule 6.4 of the PCT, showing that § 112 is meant to interpret multiple dependent claims in the same manner as PCT Rule 6.4.

Further confirming that U.S. patent law is meant to harmonize with international agreements, in a letter to the Senate of the United States by then-President George W. Bush on September 5, 2006, the President stated that:

Strong intellectual property protection is a cornerstone of free trade and global market access. This Treaty promotes patent protection by codifying harmonizing, and reducing the costs of taking the steps necessary for obtaining and maintaining patents throughout the world. The provisions set forth in the Treaty will safeguard U.S. commercial interests by making it easier for U.S. patent applicants and owners to protect their intellectual property worldwide.

Letter from George W. Bush to 109<sup>th</sup> Congress (Sept. 5, 2006) (available at <https://www.congress.gov/treaty-document/109th-congress/12/document-text?overview=closed>). Similarly, then-Secretary of State Condoleezza Rice added in her letter to the Senate, dated September 5, 2006, that:

The Treaty complements existing U.S. international obligations and furthers our policy related to prompting strong intellectual property protection. The Treaty, which is supported by U.S. interests, will make it easier for U.S. patent applicants and patent owners to obtain and maintain patents throughout the world, as well as in the United States, by simplifying and, to a large degree, harmonizing national and regional formal requirements associated with patent applications and patents.

Letter from Condoleezza Rice to 109<sup>th</sup> Congress (Sept. 5, 2006)



(available at <https://www.congress.gov/treaty-document/109th-congress/12/document-text?overview=closed>). Accordingly, the legislative history suggests my interpretation follows PCT Rule 6.4, which suggests that the patentability of a multiple dependent claim is considered separately as to each of its alternatively referenced claims.

#### 4. *Current USPTO Guidance and Procedures*

Patent Owner's statutory interpretation is consistent with USPTO guidance and practice. I agree with Patent Owner that the USPTO has consistently adopted Patent Owner's interpretation in its examiner guidance. Reh'g Req. 5–6; PO Supp. Br. 4.<sup>3</sup> For example, MPEP § 608.01(n)(I)(B)(4) (Eighth Ed., Rev. 7 (July 2008))<sup>4</sup> advises examiners and practitioners that “a multiple dependent claim . . . does not contain all the limitations of all the alternative claims to which it refers, but rather contains in any one embodiment only those limitations of the particular claim referred to for the embodiment under consideration.” The same section also advises examiners that “a multiple dependent claim must be considered in the same manner as a plurality of single dependent claims.” Further, the MPEP provides an example involving a multiple dependent claim where canceling one base claim but not another did not result in cancellation of the entire multiple dependent claim:

As a result of reexamination, claim [3 as dependent from claim 1] has been deleted, and its subject matter is no longer protected. Thus, claim [3 as dependent from claim 1] is designated as a canceled claim. Claim [3 as dependent from claim 2] has not

---

<sup>3</sup> Petitioner does not address USPTO guidance. *See* Pet. Supp. Br. 3 n.1.

<sup>4</sup> We cite to the version of the MPEP that was in effect as of the earliest priority date of the '711 patent.

changed as to its content and its scope of protection, and is designated as a confirmed claim

MPEP 2287 § III. *See* Reh’g Req. 6; PO Supp. Br. 5. Still further, as I discussed above and as Patent Owner points out, the USPTO claim fee structure supports treating each version of the multiple dependent claim separately because applicants must pay separately for each multiple dependent claim combination, e.g., “[f]or a multiple dependent claim that refers to two independent claims . . . the Patent Office charges the applicant for two dependent claims.” Reh’g Req. 4–5 (citing 37 CFR § 1.75(c)). As such, I determine existing USPTO practice supports Patent Owner’s interpretation.

#### *5. Conclusion*

The plain language of the fifth paragraph of 35 U.S.C. § 112, coupled with the language in 35 U.S.C. § 282 and 37 C.F.R. § 1.75(c), supports reading the statute to require separate consideration of the patentability of alternative dependencies of a multiple dependent claim. The additional authority cited above confirms this finding. The interpretation applied here is consistent with long-standing MPEP guidance. Further, analysis of Federal Circuit, district court, and Board precedent indicates that no court has squarely addressed the interpretative issue presented here. As such, I interpret section 112, fifth paragraph, to require that the Board consider separately the limitations of each claim incorporated by reference into the multiple dependent claim.

#### *D. Determination*

Based on the above, I determine that the Board erred in its analysis of multiple dependent claims 3–16 by failing to separately consider that claims 3–16 incorporate by reference the limitations of claim 1 — which

was not shown to be unpatentable. *See* Dec. 35, n.7. Because the Board determined that Petitioner failed to show that claim 1 is unpatentable, the Board should have determined that multiple dependent claims 3–16, as dependent from claim 1, also are not unpatentable. Thus, Petitioner failed to show by a preponderance of the evidence that claims 3–16, as dependent from claim 1, are unpatentable.

Consistent with my determination, I modify the Board’s Decision to: (1) strike footnote 7 on page 35, (2) make certain changes to the text of the Decision as indicated in Appendix A, (3) replace the summary table in § III. CONCLUSION on pages 69–70 with the below summary table, and (3) replace the ORDER on page 70, with the below order.<sup>5</sup> The remaining patentability determinations set forth in the Decision are undisturbed by this order.

### III. ORDER

Accordingly, it is

ORDERED that textual changes are made to the Decision as indicated in Appendix A below;

FURTHER ORDERED that the summary table on pages 69–70 of the Decision is replaced with the following:

In summary:

---

<sup>5</sup> I also modify the summary in § II.F.4 on page 38 to add claim 16, which appears to have been mistakenly omitted. That summary should read as indicated in Appendix A.

<b>Claim(s)</b>	<b>35 U.S.C. §</b>	<b>Reference(s)</b>	<b>Claim(s) Shown Unpatentable</b>	<b>Claim(s) Not Shown Unpatentable<sup>6</sup></b>
1-18	102	Parks	2, 3/2-15/2	1, 3/1-16/1, 16/2, 17, 18
1-6, 8-16	103(a)	Parks, Moss	2, 3/2-6/2, 8/2-16/2	1, 3/1-6/1, 8/1-16/1
1-6, 8-16	103(a)	Parks, Moss, Greiert	2, 3/2-6/2, 8/2-16/2	1, 3/1-6/1, 8/1-16/1
1-6, 8-16	103(a)	Parks, Moss, POSITA	2, 3/2-6/2, 8/2-16/2	1, 3/1-6/1, 8/1-16/1
7, 17, 18	103(a)	Parks, Moss, Beiring	7/2	7/1, 17, 18
7, 17, 18	103(a)	Parks, Moss, Beiring, POSITA	7/2	7/1, 17, 18
<b>Overall Outcome</b>			2, 3/2-16/2	1, 3/1-16/1, 17, 18

and, FURTHER ORDERED that the order set forth on page 70 of the Decision is replaced with the following:

IV. ORDER

Accordingly, based on the foregoing, it is:

ORDERED that Petitioner *has not shown* based on a preponderance of evidence that claims 1, 3-16 (as dependent on

---

<sup>6</sup> Consistent with patent examination practice, *see* MPEP 608.01(n)(I)(F), this table indicates both the multiple dependent claim and the independent claim from which it depends, e.g., “3/1” indicates multiple dependent claim 3 as depending from claim 1, whereas “3/2” indicates multiple dependent claim 3 as depending from claim 2.

claim 1), 17, and 18 of U.S. Patent No. 9,179,711 B2 are unpatentable;

ORDERED that Petitioner *has shown* based on a preponderance of evidence that claims 2 and 3–16 (as dependent on claim 2) of U.S. Patent No. 9,179,711 B2 are unpatentable;

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

APPENDIX A

Decision Page(s)	Original Text	Replacement Text
35 n.7	Claims 3–16 depend alternatively from claims [sic] 1 <i>or</i> claim 2. Thus, we consider claims 3–16 to be anticipated (or rendered obvious below) by the prior art if <i>either</i> version of these claims (the version depending from claim 1 or the version depending claim 2) is described by the prior art.	[Delete this entire footnote]
38	Accordingly, we agree with Patent Owner that Petitioner has failed to show by a preponderance of the evidence that Parks anticipates claim 16.	Accordingly, we agree with Patent Owner that Petitioner has failed to show by a preponderance of the evidence that Parks anticipates claim 16, as dependent from either claims 1 or 2.

<b>Decision Page(s)</b>	<b>Original Text</b>	<b>Replacement Text</b>
38	For all the reasons expressed above, we conclude that Petitioner has not shown by a preponderance of the evidence that Parks anticipates claims 1, 17, and 18, and has shown by a preponderance of the evidence that Parks anticipates claims 2–15.	For all the reasons expressed above, we conclude that Petitioner has not shown by a preponderance of the evidence that Parks anticipates claims 1, 16 (as dependent from claim 2), 17, or 18, or anticipates claims 3–16, as dependent from claim 1. We further conclude that Petitioner has shown by a preponderance of the evidence that Parks anticipates claim 2, and claims 3–15, as dependent from claim 2.
63	We determine that Petitioner has failed to show by a preponderance of the evidence that the combination of Parks and Moss renders claim 1, and has shown by a preponderance of the evidence that claim 2 is obvious.	We determine that Petitioner has failed to show by a preponderance of the evidence that the combination of Parks and Moss renders obvious claim 1, but has shown by a preponderance of the evidence that claim 2 is obvious.
64	Accordingly, we find that Petitioner has shown by a preponderance of the evidence that claim 16 would have been obvious over the combination of Parks and Moss.	[Delete this text]

Decision Page(s)	Original Text	Replacement Text
Top of 65	[no text to replace; only text to add]	<p>3. <i>Summary</i></p> <p>For all the reasons expressed above, we conclude that Petitioner has not shown by a preponderance of the evidence that claim 1, or claims 3–6 and 8–16, as dependent from claim 1, would have been obvious over the combination of Parks and Moss. We further conclude that Petitioner has shown by a preponderance of the evidence that claim 2, and claims 3–6 and 8–16, as dependent from claim 2, would have been obvious over the combination of Parks and Moss.</p>
65–66	<p>Accordingly, we determine that Petitioner has failed to show by a preponderance of the evidence that the combination of Parks, Moss, and Greiert renders obvious claim 1, and that Petitioner <i>has shown</i> by a preponderance of the evidence that claims 2–6 and 8–16 of the '711 patent would have been obvious over the combination of Parks, Moss, and Greiert.</p>	<p>Accordingly, we determine that Petitioner has failed to show by a preponderance of the evidence that the combination of Parks, Moss, and Greiert renders obvious claim 1, or claims 3–6 and 8–16, as dependent from claim 1. We further conclude that Petitioner <i>has shown</i> by a preponderance of the evidence that claim 2, and claims 3–6 and 8–16 of the '711 patent, as dependent from claim 2, would have been obvious over the combination of Parks, Moss, and Greiert.</p>

<b>Decision Page(s)</b>	<b>Original Text</b>	<b>Replacement Text</b>
68	Accordingly, we determine that Petitioner has failed to show by a preponderance of the evidence that the combination of Parks, Moss, and the knowledge of a person of ordinary skill in the art renders obvious claim 1, and that Petitioner <i>has shown</i> by a preponderance of the evidence that claims 2–6 and 8–16 of the '711 patent would have been obvious over the combination of Parks, Moss, and Common Sense.	Accordingly, we determine that Petitioner has failed to show by a preponderance of the evidence that the combination of Parks, Moss, and the knowledge of a person of ordinary skill in the art renders obvious claim 1, or claims 3–6 and 8–16, as dependent from claim 1. We further conclude that Petitioner <i>has shown</i> by a preponderance of the evidence that claim 2, and claims 3–6 and 8–16 of the '711 patent, as dependent from claim 2, would have been obvious over the combination of Parks, Moss, and Common Sense.



<b>Decision Page(s)</b>	<b>Original Text</b>	<b>Replacement Text</b>
69	Accordingly, we determine that Petitioner has failed to show by a preponderance of the evidence that the combination of Parks, Moss, Beiring and Parks, Moss, Beiring, and Common Sense renders obvious claims 17 and 18, and that Petitioner <i>has shown</i> by a preponderance of the evidence that claim 7 of the '711 patent would have been obvious over the combinations of Parks, Moss, Beiring and Parks, Moss, Beiring, and Common Sense.	Accordingly, we determine that Petitioner has failed to show by a preponderance of the evidence that the combination of Parks, Moss, Beiring and Parks, Moss, Beiring, and Common Sense renders obvious claim 7, as dependent from claim 1, or claims 17 and 18. We further conclude that Petitioner <i>has shown</i> by a preponderance of the evidence that claim 7 of the '711 patent, as dependent from claim 2, would have been obvious over the combinations of Parks, Moss, Beiring and Parks, Moss, Beiring, and Common Sense.

IPR2020-01234  
Patent 9,179,711 B2

FOR PETITIONER:

Craig R. Smith  
Eric P. Carnevale  
LANDO AND ANASTASI, LLP  
csmith@lalaw.com  
ecarnevale@lalaw.com

FOR PATENT OWNER:

Cory Bell  
Linda J. Thayer  
Robert Kramer  
FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P  
cory.bell@finnegan.com  
linda.thayer@finnegan.com  
robert.kramer@finnegan.com

Jerry C. Liu  
HILL, KERTSCHER & WHARTON, LLP  
jl@hkw-law.com