

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

DAIFUKU CO., LTD. AND DAIFUKU AMERICA CORP.,
Petitioners,

v.

MURATA MACHINERY, LTD.,
Patent Owner.

Case IPR2015-01541
Patent 6,183,184 B1

Before KEN B. BARRETT, BARRY L. GROSSMAN,
and BRIAN P. MURPHY, *Administrative Patent Judges*.

GROSSMAN, *Administrative Patent Judge*.

DECISION
Denying Institution of *Inter Partes* Review
37 C.F.R. § 42.108

I. INTRODUCTION

Daifuku Co., Ltd. and Daifuku America Corp. (collectively “Petitioners”) filed a Petition requesting an *inter partes* review of claims 1–3 of U.S. Patent No. 6,183,184 B1 (Ex. 1001, “the ’184 patent”). Paper 1 (“Pet.”). Murata Machinery, Ltd. (“Patent Owner”) filed a Patent Owner Preliminary Response. Paper 6 (“Prelim. Resp.”). We review the Petition and Preliminary Response under 35 U.S.C. § 314, which provides that an *inter partes* review may not be instituted “unless . . . there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” “The ‘reasonable likelihood’ standard is a somewhat flexible standard that allows the Board room to exercise judgment.” Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,765 (Aug. 14, 2012).

Upon consideration of the Petition and Preliminary Response, we determine that the information presented does not show that there is a reasonable likelihood that Petitioners would prevail in establishing the unpatentability of any of the challenged claims. Accordingly, we deny the Petition and do not institute an *inter partes* review of the ’184 patent.

A. Related Proceedings

The ’184 patent is involved in a pending district court proceeding, *Murata Machinery USA, Inc. v. Daifuku Co., Ltd.*, No. 2:13-cv-00866 (D. Utah 2013).

The ’184 patent also is the subject of another pending petition for *inter partes* review, IPR2015-01539 filed by Petitioners.

B. The '184 Patent

The '184 patent relates to an overhead rail system in a manufacturing facility for transporting “work” pieces from one processing station to another. Ex. 1001, col. 1, ll. 5–13. A travelling carriage runs along a rail suspended from a ceiling. The carriage includes a “chuck device” that holds the work piece and raises or lowers the work piece into its desired position using wire and a winding drum. . *Id.* at col. 1, ll. 16–25. A platform or storage rack is suspended from the ceiling or the rail and positioned so that work pieces may be stacked on the platform. The platform is positioned above the floor and below the rail. *Id.* at col. 1, ll. 52–60. The objective of this system is to reduce floor space for storing work pieces near processing stations and to reduce transfer time between processing stations. *Id.* at col. 6, l. 65–col. 7, l. 2. The disclosed system is shown generally in Figure 6, reproduced below.

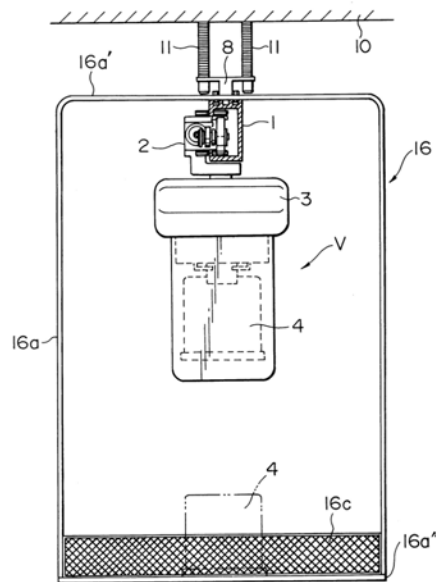


Figure 6 of the '184 patent is a side view illustrating storage rack 16 and overhead travelling carriage V.

As described in the '184 patent, rail 1 is suspended from ceiling 10. Overhead travelling carriage V runs along rail 1 between processing stations P1 and P2 (see Fig. 9). Storage rack 16 is suspended from rail 1 along the path of carriage V. Work 4 is transported by carriage V and placed on storage rack 16 near the processing station. After a predetermined amount of work 4 has been stored on storage rack 16, work 4 is supplied to the processing station by overhead travelling carriage V. *Id.* at col. 4, ll. 48–62. Storage rack 16 includes framework 16a and a bottom 16c on which work 4 is deposited. Storage rack 16 is sized and positioned to provide sufficient clearance so that carriage V can travel without interference from work 4 loaded on bottom 16c or interference from framework 16a. *Id.* at col. 4, ll. 32–45.

C. Illustrative Claim

The '184 patent has seven claims. Claims 1–3 are the claims challenged. Claim 1, the sole independent claim, is illustrative of the claimed invention:

1. A building located work transport system, including:
 - a substantially horizontal rail system suspended from a ceiling of the building;
 - a traveling carriage connected to the rail system and movable along the rail system;
 - a hoist unit connected to the traveling carriage;
 - a chuck device connected to the hoist unit and vertically movable thereby; and
 - a non-movable platform assembly suspended from one of the ceiling and a rail of the rail system, the platform assembly being located in a path of the traveling carriage, for temporarily depositing the work between the ceiling and a floor of the building;
 - the platform assembly including a framework defining an opening having sufficient clearance to allow the entire hoist

unit and chuck device to travel horizontally therethrough.

D. References Relied Upon

Petitioners rely upon the following prior art references:

Reference	Date	Exhibit Number
JP62-290696 Patent Application Publication (the “’696 Publication”)	Pub. Dec. 17, 1987	1003 ¹
JP 1993-82913 Utility Model Application Publication (the “’913 Publication”)	Pub. Nov. 9, 1993	1004
JP 1994-20388 Utility Model Application Publication (the “’388 Publication”)	Pub. Mar. 15, 1994	1006
JP 62-297050 Patent Application Publication (the “’050 Publication”)	Pub. Dec. 24, 1987	1007

Petitioners also rely on the Declaration testimony of Robert H. Sturges, Ph.D. (Ex. 1009).

E. The Asserted Grounds

Petitioners assert the following four separate and distinct grounds of unpatentability, applying the four references in various combinations and permutations.

Claims challenged	Statutory Basis 35 U.S.C.	Reference(s)
1–3	§ 103(a)	’050 Publication and ’388 Publication

¹ Each Exhibit on which Petitioners rely includes an English translation and an affidavit of the translator certifying the accuracy of the translation.

3	§ 103(a)	'050 Publication, '388 Publication, and '913 Publication
1–3	§ 103(a)	'050 Publication and '696 Publication
3	§ 103(a)	'050 Publication, '696 Publication, and '913 Publication

II. ANALYSIS

A. *Real Party in Interest*

In accordance with 35 U.S.C. § 312(a)(2) and 37 C.F.R. § 42.8(b)(1), Petitioners identify “Daifuku Co., Ltd. and Daifuku America Corp.” as the real parties-in-interest. Pet. 1.

Patent Owner asserts that Petitioners should have listed Daifuku North America Holding Company (“Daifuku Holdings”) as a real party-in-interest. Prelim. Resp. 1, 4–12. According to Patent Owner, Daifuku Holdings possesses effective control over Petitioners in relation to this proceeding, and has a “blurred” parent-subsidary relationship with Petitioners Daifuku America Corp. *Id.* at 12.

A patent owner challenging a petitioner’s real party-in-interest disclosure must provide sufficient evidence to show the disclosure is inadequate. *Intellectual Ventures Mgmt., LLC v. Xilinx, Inc.*, IPR2012-00018, Paper 12 at 3 (PTAB Jan. 24, 2013).² When a patent owner provides sufficient evidence prior to institution that reasonably brings into question

² The pages of Paper 12 are not numbered. We refer to the third page following the cover page.

the accuracy of a petitioner's identification of real parties-in-interest, the overall burden remains with the petitioner to establish that it has complied with the statutory requirement to identify all real parties-in-interest. *Zerto, Inc. v. EMC Corp.*, IPR2014-01254, Paper 32 at 6–7 (PTAB Feb 12, 2015).

We authorized additional briefing on the real party-in-interest issue. Petitioners were authorized to file, and filed, a Reply limited to discussing the issue of whether Petitioners identified all real parties-in-interest. Paper 7 (“Reply”). Patent Owner was authorized to file, and filed, a Sur-Reply addressing the real party-in-interest issue. Paper 8 (“Sur-Reply”).

Patent Owner cites evidence establishing that Mr. Michael Farley serves as Daifuku Holdings' general counsel, and in this role “lead[s] all corporate legal functions, [and] provide[s] strategic counsel to all Daifuku [Holdings] companies, including . . . Daifuku America Corporation” Prelim. Resp. at 7–8 (citing Ex. 2003).

Exhibit 2003 is a News Release dated August 7, 2014, announcing “the promotion of Michael Farley to Senior Vice President, General Counsel and Secretary” of an entity named “Daifuku Webb Holding Company.” Ex. 2003, 1. The News Release states that in his new position Mr. Farley will “provide strategic counsel to all Daifuku Webb companies, including . . . Daifuku America Corporation.” *Id.* Based on this News Release, Patent Owner concludes that “[b]ecause Daifuku Holdings, through its counsel Mr. Farley, had ‘the actual measure of control or opportunity to control’ the filing of the Petition, Daifuku Holdings should have been named as a real party-in-interest. Prelim. Resp. 8.

Patent Owner acknowledges that Daifuku Holdings and its subsidiaries “were assigned different functions.” *Id.* at 8. Nonetheless,

Patent Owner also asserts that Petitioners and Daifuku Holdings are “so intertwined” through a common address and telephone number, an “umbrella designation” under the name Daifuku North America, a Facebook account, a Twitter account, substantial overlap of officers, and a reference in Petitioners’ Corporate Disclosure in related litigation, that we should infer that Daifuku Holdings is a real party-in-interest. *Id.* at 8–12 (citing Ex. 2005–2018, 2021, and 2022). Patent Owner also focuses on the alleged availability of control, whether exercised or not, suggested by the evidence. Sur-Reply 1.

Patent Owner’s arguments and evidence fail to recognize the “general principle of corporate law, deeply ‘ingrained in our economic and legal systems’ that a parent corporation (so-called because of control through ownership of another corporation's stock) is not liable for the acts of its subsidiaries.” *U.S. v. Bestfoods*, 524 U.S. 51, 61 (1998).

The requirement to identify the real party-in-interest exists to ensure that a non-party is not “litigating through a proxy.” *See Aruze Gaming Macau, Ltd. v. MGT Gaming, Inc.*, IPR2014-01288, Paper 13 at 12 (PTAB Feb. 20, 2015). The real party-in-interest analysis, moreover, is an inquiry into the “relationship between a party and a *proceeding*,” not “the relationship between *parties*.” *Id.* at 11. Thus, our focus “is on the degree of control the nonparty could exert over the *inter partes* review, not the petitioner.” *Id.* *See also Par Pharm., Inc. & Amneal Pharm., LLC v. Jazz Pharm.*, IPR2015-00551, Paper 19 at 15–19 (PTAB July 28, 2015) (discussing distinguishing facts from other cases where the Board found that Petitioners’ actions blurred sufficiently the lines of corporate separation with

its parent such that the parent could have controlled the filing and participation of the IPR).

Petitioners provide testimonial evidence from Mr. Farley, Senior Vice President, General Counsel & Secretary of Daifuku North America Holding Company and General Counsel & Secretary of Daifuku America Corp., about the relationship of Daifuku Holdings to Petitioners and the lack of any relationship between Daifuku Holdings and this *inter partes* review. Ex. 1010.

Regarding the relationship of Daifuku Holdings to Petitioners, Mr. Farley testified that Petitioner Daifuku America Co. is a wholly-owned subsidiary of Daifuku Holdings, and Daifuku Holdings is a wholly-owned subsidiary of Petitioner Daifuku Co., Ltd. *Id.* ¶ 2. Mr. Farley further testified that Daifuku Holdings and Daifuku America Co. “are separate companies with separate budgets . . . maintain separate business records, pay separate taxes, and have different business objectives.” *Id.* ¶ 3. He further testified that he “separately represent[s]” each of the companies he serves. *Id.* Mr. Farley also testified that Daifuku Holding is a “holding company that merely holds ownership of its subsidiaries and conducts no independent operations.” *Id.* ¶ 12.

Regarding this specific Petition, Mr. Farley testified that he “executed the Power of Attorney in this proceeding solely on behalf of [Petitioner Daifuku America Corp.] and solely as Secretary of [Daifuku America Corp.].” *Id.* ¶ 7. Mr. Farley testified that Petitioner Daifuku Co., Ltd. “was solely responsible for directing, controlling, and funding the preparation” of this IPR petition. *Id.* ¶ 8. Mr. Farley also testified that Daifuku Holdings “did not direct, control, or fund – directly or indirectly – the preparation or

filing of the IPR petition in this proceeding . . . did not directly or indirectly pay any filing or legal fees associated with this proceeding . . . did not participate in the decision to file a petition in this proceeding . . . [and] did not exercise any control over the filing or content of the petitions challenging the asserted patents.” *Id.* ¶ 9

The exercise, or availability, of general “control” in a parent-subsidary relationship, such as election of directors, establishing by-laws, and other acts incident to the legal status of parent and subsidiary, will not make one company a real party-in-interest of the other. *U.S. v. Bestfoods*, 524 U.S. at 61–62. It is entirely appropriate for directors of a parent corporation to serve as directors of its subsidiary. *Id.* at 69 (citations omitted). Directors and officers holding positions with a parent and its subsidiary can and do “change hats” to represent the two corporations separately, despite their common ownership. *Id.* (citations omitted).

Whether a party who is not a named participant in a given proceeding is a “real party-in-interest” to that proceeding “is a highly fact-dependent question.” Office Patent Trial Practice Guide, 77 Fed. Reg. at 48,759. There is no “bright line test.” *Id.* Courts invoke the term “real party-in-interest” to describe relationships and considerations sufficient to justify applying conventional principles of estoppel and preclusion. *Id.*

The non-party’s participation with a petitioner may be overt or covert, and the evidence may be direct or circumstantial, but the evidence as a whole must show that the non-party possessed effective control over the petitioner relating to the *inter partes* review. *Zoll Lifecor Corp. v. Philips Elecs. N. Am. Corp.*, IPR2013-00609, Paper 15 at 10 (PTAB Mar. 20, 2014). Accordingly, we look to the evidence as a whole to determine the fact

dependent issue of whether Daifuku Holdings is a real party in interest in this proceeding. Here, the evidence on which Patent Owner relies does not establish that Daifuku Holdings has actual or potential effective control over this proceeding.

Unlike the facts in *Zoll*, the evidence before us does not establish that Petitioners' actions "have blurred sufficiently the lines of corporate separation with its parent," such that the parent corporation "has had control, or could have controlled Petitioners, in all aspects of its business," which would include the aspects of its business relating to the *inter partes* review. Patent Owner has not directed us to any persuasive evidence that Petitioners and Daifuku Holding conducted negotiations with Patent Owner or others on behalf of both Petitioners and its parent or subsidiary corporations, as found in *Atlanta Gas Light Co. v. Bennett Regulator Guards, Inc.*, IPR2013-00453, Paper 88 at 2–6, 11 (PTAB Jan. 6, 2015); *see also, Galderma S.A. v. Allergan Industrie, SAS*, IPR2014-01422, Paper 14 at 12 (PTAB Mar. 5, 2015) (same person serving as President and CEO of both parent and subsidiary determined to have "a significant degree of effective control over the present matter").

Patent Owner's evidence establishes only a parent-subsidary relationship among Daifuku Holdings and Petitioners. Moreover, evidence of a common address and telephone number, substantial overlap of officers, and the other evidence on which Patent Owner relies establish a relationship between *parties*; it does not establish a relationship between Daifuku Holding and this *proceeding*.

Patent Owner relies on *Galderma*, IPR2014-01422, (PTAB Mar. 5, 2015) (Paper 14) (quoting *Gonzalez v. Banco Cent. Corp.*, 27 F.3d 751, 759

(1st Cir. 1994)) for the general proposition that “a non-party may be an RPI where it has ‘the power—**whether exercised or not**—to call the shots.’”

Sur-Reply 1. This selective quote, while accurate, does not state the complete legal principle analyzed in *Gonzalez* and applied in *Galderma*. As stated in *Gonzalez*, the evidence as a whole must establish that “the nonparty possessed *effective* control over a party’s conduct . . . *as measured from a practical, as opposed to a purely theoretical, standpoint.*” *Gonzalez*, 27 F.3d at 759 (emphasis added). Theoretical, hypothetical, or speculative assertions about effective control, unsupported by evidence, are neither probative nor persuasive. Every corporate parent has the theoretical power to control its subsidiaries. *See U.S. v Bestfoods*, 524 U.S. at 61–62. If theoretical power, whether exercised or not, were the controlling test for determining a real party-in-interest, the test would be eviscerated of substance.

In discussing the issue of whether a party is a real party-in-interest for purposes of an *inter partes* review, the Office Patent Trial Practice Guide cites *Gonzalez*. 77 Fed. Reg. 48,759. As explained in *Gonzalez*, “the concept of substantial control can be illustrated better by examples than by linguistic constructs.” *Gonzalez*, 27 F.3d at 759. For instance, substantial control has been found where a liability insurer assumes the insured's defense; where an indemnitor participates in defending an action brought against the indemnitee; and where the owner of a close corporation assumes control of litigation brought against the firm. *Id.* (citations omitted). Conversely, courts have refused to find substantial control merely because a nonparty retained the attorney who represented a party to the earlier action; the nonparty assisted in financing the earlier action; the nonparty testified as

a witness in the earlier action; the nonparty procured witnesses or evidence; or the nonparty furnished its attorney's assistance. *Id.* (citations omitted).

The facts herein are substantively distinguishable from those in *Galderma*. In *Galderma*, unlike here, the same person was President and CEO of both parent and subsidiary, and it was found that he “wields a *significant degree of effective control over the present matter.*” *Galderma*, IPR2014-01422, Paper 14 at 12 (emphasis added). Such *effective control* over the Petition at issue is consistent with the “*practical, as opposed to a purely theoretical*” control discussed in *Gonzales* (27 F.3d 759 (emphasis added)). *Galderma* also found:

historical evidence for a pattern of control by Nestlé over Galderma; substantial overlap in the Board of Directors for Nestlé S.A. and Nestlé Skin Health S.A., Nestlé’s assertions that Galderma would ‘form the foundation’ and ‘operate as the pharmaceutical arm’ of its parent, Nestlé Skin Health S.A.; and Mr. Antunes’s *de facto* control over both Nestlé Skin Health S.A. and Galderma.

Galderma, IPR2014-01422, Paper 14 at 12–13. Patent Owner’s evidence does not demonstrate similar effective, *de facto* control by Daifuku Holdings over Petitioners.

We must consider the totality of the circumstances to determine whether they justify a finding of a nonparty's potential or actual involvement as a decision-maker in the proceeding from a practical, as opposed to a purely theoretical, standpoint. On this record, there is no persuasive evidence that Daifuku Holdings, as a practical matter, is “calling the shots” in the preparation, funding, or strategy of this proceeding.

Accordingly, for purposes of this Decision, based on the evidence before us, we determine that the evidence does not establish that Daifuku

Holdings should have been identified in the Petition as a real party-in-interest.³

B. Claim Construction

In an *inter partes* review, claim terms in an unexpired patent are interpreted according to their broadest reasonable construction in light of the specification of the patent in which they appear. 37 C.F.R. § 42.100(b); *In re Cuozzo Speed Techs. LLC*, 793 F.3d 1268, 1278–79 (Fed. Cir. 2015). Claim terms are given their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the context of the entire disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). Only terms which are in controversy need to be construed, and then only to the extent necessary to resolve the controversy. *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999).

Petitioners propose express claim constructions for two functional phrases in the challenged claims, “for temporarily depositing the work” and “for storing work.” Pet. 7–9. Patent Owner does not propose specific construction of any claim term. Prelim. Resp. 14. Petitioners also propose a specific construction for the term “non-movable.” Pet. 9–10.

³ In considering jurisdiction over a corporate parent based on activities of its subsidiary, the United States Court of Appeals for the Federal Circuit has held that “a corporate subsidiary’s contacts in the forum state cannot be imputed to the parent corporation absent clear and convincing evidence that the parent controls the subsidiary’s activities.” *Avocent Huntsville Corp. v. Aten Int’l. Co., Ltd.*, 552 F.3d 1324, 1337–38 (Fed. Cir. 2008) (citing *Negron-Torres v. Verizon Commc’ns, Inc.*, 478 F.3d 19, 27 (1st Cir. 2007) (declining to assert jurisdiction over Verizon based on the actions of its subsidiary without strong evidence of control by the parent corporation)).

For purposes of this Decision, we determine that specific construction of the proposed terms is not required.

C. Asserted Grounds of Unpatentability

Petitioners bear the burden of establishing a reasonable likelihood of unpatentability of the challenged claims. 37 C.F.R. § 42.108(c).

1. Obviousness Based on the '050 and '388 Publications

Petitioners assert that claims 1–3 would have been obvious in view of the '050 and '388 Publications. Pet. 12. Claim 1 is reproduced above. Claim 2, dependent from claim 1, recites that the suspended platform assembly is a storage rack member for storing work between the ceiling and floor of the building. Claim 3, dependent from claim 1, recites that the hoist unit includes a winding drum, and rotation of the winding drum feeds out or feeds in wire connected between the winding drum and the chuck device.

a. General Legal Principles

Section 103(a) precludes issuance of a patent when “the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” 35 U.S.C. § 103(a). In *Graham v. John Deere Co.*, 383 U.S. 1 (1966), the Court set out a framework for applying the statutory language of § 103:

Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined.

Id. at 17–18. “While the sequence of these questions might be reordered in any particular case, the factors continue to define the inquiry that controls.” *KSR Int’l v. Teleflex Inc.*, 550 U.S. 398, 407 (2007).

The Supreme Court made clear that we apply “an expansive and flexible approach” to the question of obviousness. *Id.* at 415. Whether a patent claiming the combination of prior art elements would have been obvious is determined by whether the improvement is more than the predictable use of prior art elements according to their established functions. *Id.* at 417. To reach this conclusion, however, it is not enough to show merely that the prior art includes separate references covering each separate limitation in a challenged claim. *Unigene Labs., Inc. v. Apotex, Inc.*, 655 F.3d 1352, 1360 (Fed. Cir. 2011). Rather, obviousness additionally requires that a person of ordinary skill at the time of the invention would have selected and combined those prior art elements in the normal course of research and development to yield the claimed invention. *Id.* “A reference must be considered for everything it *teaches* by way of technology and is not limited to the particular *invention* it is describing and attempting to protect.” *EWP Corp. v. Reliance Universal Inc.*, 755 F.2d 898, 907 (Fed. Cir. 1985).

As a factfinder, we also must be aware “of the distortion caused by hindsight bias and must be cautious of arguments reliant upon *ex post* reasoning.” *KSR*, 550 U.S. at 421. This does not deny us, however, “recourse to common sense” or to that which the prior art teaches. *Id.*

Against this general background, we consider the references, other evidence, and arguments on which the parties rely.

b. Scope and Content of the Prior Art

i. The '050 Publication

The '050 Publication discloses a storage system for conveyed articles, such as in a manufacturing facility in which various processing steps are performed on electronic circuit substrates. Ex. 1007, 2–3. Figure 9 from the '050 Publication, disclosing an embodiment on which Petitioner relies primarily, is reproduced below.

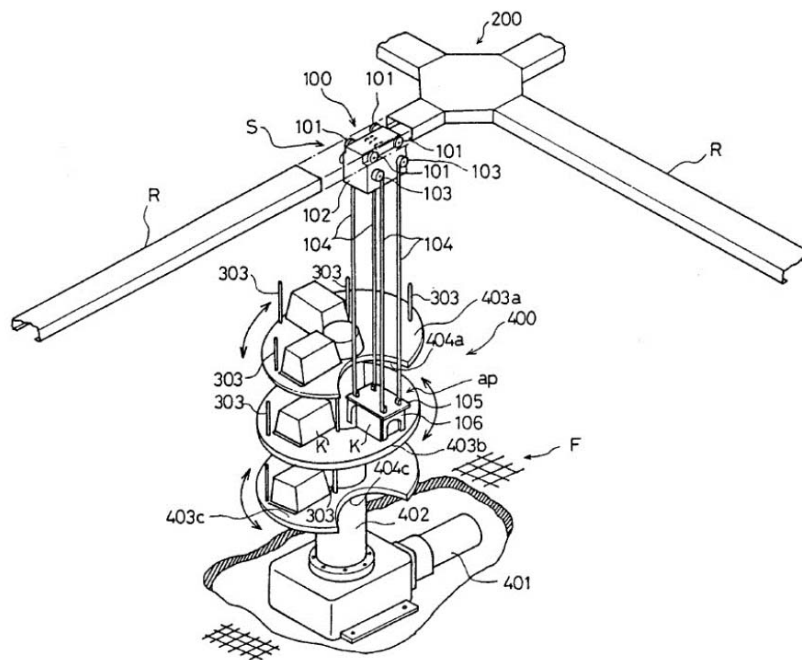


Figure 9

Figure 9 from the '050 Publication illustrating racks 400.

As shown in Figure 9, self-propelled vehicle 100 moves along elevated rail R attached to a ceiling. Lift platform 105 is attached to the lower end of belt 104 wound around drum 103 of vehicle 100. Chuck 106 is provided underneath lift platform 105. In operation, vehicle 100 moves to a selected position. Drum 103 rotates, unwinding belt 104 from drum 103 to lower lift platform 105. Chuck 106 closes to grasp workpiece K from rack

300a. After that, belt 104 winds upwardly, and vehicle 100 carries workpiece K to its next position.

In the embodiment shown in Figure 1, rack 300a includes a plurality of shelves 302a–302e. The shelves are in outer frame 301 so that they can be pulled out from, or pushed into, as needed, frame 301. Workpieces K are mounted on each shelf. In the embodiment shown in Figure 9 of the '050 Publication, rack 400 includes disc-shaped shelves 403a–403c mounted vertically on a rotary shaft. Notched portions 404a–404c formed in the shelves allow lift platform 105 of vehicle to pass from an upper shelf to a lower shelf. Both embodiments allow temporary storage of workpieces.

ii. The '388 Publication

The '388 Publication discloses a bridge crane for a container yard 3. The crane includes girder 6, and temporary stands 8, 9 suspended and supported on girder 6 by suspension member 13 on traversing unit 12 so that stands 8 and 9 are able to freely traverse girder 6. Stands 8, 9 are used to temporarily store containers. Trolley 10 moves horizontally along girder 6. Spreader 11 is suspended from trolley 10. Spreader 11 moves vertically to raise and lower containers.

c. Level of Ordinary Skill

Petitioners asserts that a person of ordinary skill in the technology relevant to the '184 patent “would have had at least a Bachelor of Science degree in Mechanical or Industrial and Systems Engineering, and 3–5 years of experience or substantially more practical experience in designing mechanical systems for conveying and loading articles.” Pet. 6 (citing Ex. 1009 ¶ 26).

Patent Owner does not comment on the level of ordinary skill proposed by Petitioners or propose a different level of skill.

We determine that, for purposes of this Decision, the asserted prior art reflects the level of skill. *Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001) (lack of specific findings on the level of skill in the art is not error where the prior art itself reflects an appropriate level and a need for testimony is not shown).

d. Discussion

i. Platform Suspended from Ceiling or Rail

Petitioners assert that the '388 Publication “teaches the concept of suspending (13) a temporary storage device 8, 9 within a rail-mounted hoist vehicle system to reduce the vertical travel time of the hoist vehicle.” Pet. 17. It is Petitioners’ position that it would have been obvious “to incorporate the concept taught by the '388 Publication into the system that is disclosed in the '050 publication.” *Id.* More specifically, Petitioners assert it would have been obvious to suspend disc-shaped shelves 403a–403c of storage device 400 of the '050 Publication “up near the rail R using a suspension mechanism 13 of the type suggested by the '388 publication.” *Id.* (citing Ex. 1009 ¶ 123). Exhibit 1009 is the Declaration of Dr. Sturges. Paragraph 123 merely repeats Petitioners’ assertions.

Petitioners’ rationale for the proposed combination of references is that it would have reduced vertical travel time “of vehicle hoist 100 of the '050 publication.” Pet. 17. According to Petitioners, suspending rack 400 near rail R, as suggested by temporary storage stands 8, 9 of the '388 Publication reduces “the cycle time of the system disclosed in the '050 Publication . . . resulting in more effective production. *Id.* (citing Ex. 1009

¶ 124). Paragraph 124 of Dr. Sturges' Declaration repeats Petitioners' assertions. Petitioners also assert that "the teachings of the '388 publication would have been directly applicable to the disclosure of the '050 publication" and thus would have motivated a person of ordinary skill to seek the "desirable improvements in efficiency which reasonably would have been expected." *Id.* at 18 (citing Ex. 1009 ¶ 125). Dr. Sturges again repeats Petitioners' assertions without any supporting data or analysis. *See* 37 C.F.R. § 42.65 ("Expert testimony that does not disclose the underlying facts or data on which the opinion is based is entitled to little or no weight.").

Patent Owner asserts that neither the '050 nor '388 Publications disclose a "non-moveable platform assembly" as required by the challenged claims. Prelim. Resp. 20. Patent Owner also asserts that Petitioners have failed to explain and provide evidence as to how and why the two references would have been combined. *Id.* at 24. Concerning the '388 Publication, it is Patent Owner's position that horizontal movability of stands 8 and 9 along girder 6 is critical to how the system of the '388 Publication operates. *Id.* at 25. Patent Owner also asserts that the proposed combination of references would be inoperable. *Id.* at 29.

Conclusory statements are not a substitute for a fact-based analysis of the proposed modification of a reference necessary to support a determination that a claimed invention would have been obvious. Neither Petitioners' arguments nor the testimony of Dr. Sturges provide the required articulated reasoning with rational underpinning based on the evidence to support the legal conclusion of obviousness. *KSR*, 550 U.S. at 418. There is no persuasive testimony or other evidence to support Petitioners' conclusion

that it would have been obvious to suspend the floor-based rack 400 of the '050 publication from rail R or the ceiling using suspension members 13 from the '388 Publication. The '388 Publication discloses that “[e]ach temporary stand for containers 8 and 9 is suspended and supported via a suspension member 13 on a traversing unit 12 supported so as to freely traverse the girder 6.” Ex. 1006, 11. Traversing unit 12 is separate and distinct from trolley 10 that also travels horizontally on the girder 6. Spreader 11 is suspended from trolley 10. Thus, the '388 Publication requires horizontal movement of platforms 8 and 9 suspended from above by a rail, whereas the '050 Publication requires rotational movement of shelves 403a–403c supported from below and mounted vertically on a rotary shaft.

Petitioners also do not provide a rationale based on persuasive evidence or argument for why a person of ordinary skill would have chosen certain features from the cited references, omitted other features, and combined the selected features to yield the invention in the challenged claims. Petitioners do not explain persuasively how or why the selected teachings of the specific references would have been combined by a skilled artisan, or how any specific combination would operate or read on the asserted claims and render those claims obvious. *ActiveVideo Networks, Inc. v. Verizon Comm'ns, Inc.*, 694 F.3d 1312, 1327 (Fed. Cir. 2012).

We recognize that the obviousness inquiry does not ask “whether the references could be physically combined but whether the claimed inventions are rendered obvious by the teachings of the prior art as a whole.” *In re Etter*, 756 F.2d 852, 859 (Fed. Cir. 1985) (en banc). Petitioners, however, fail to explain with persuasive evidence why a person of ordinary skill in the art would have combined elements from specific references in the way the

claimed invention does. *ActiveVideo Networks*, 694 F. 3d at 1328 (citing KSR, 550 U.S. at 418).

ii. Platform Framework

Claim 1 recites that the platform assembly includes “a framework defining an opening having sufficient clearance *to allow the entire hoist unit and chuck device to travel horizontally therethrough.*” Ex. 1001, col. 8, ll. 12–15 (emphasis added).

Regarding the framework, Petitioners assert that the ’050 Publication discloses that “[t]he hoist vehicle 100 travels over the rack 400. The two are vertically aligned.” Pet 21. Petitioners also assert that the ’388 Publication discloses that suspension members 13 form a framework opening that provides sufficient clearance for spreader 11 and container 2 to travel therethrough. *Id.* According to Petitioners, the ’388 Publication teaches “locating the suspension members 13 and the stands 8, 9 with sufficient clearance such that the spreader 11 travels therethrough.” *Id.* Petitioners conclude it would have been obvious to “incorporate that teaching into the ’050 publication so that there is sufficient clearance for the hoist vehicle 100 to travel between the suspension members and over the suspended storage device.” *Id.* at 21–22. We disagree. Petitioners do not direct us to any persuasive evidence to support their conclusion.

The ’388 Publication discloses that “[e]ach temporary stand for containers 8 and 9 is suspended and supported via a suspension member 13 on a traversing unit 12 supported so as to freely traverse the girder 6.” Ex. 1006, 11. Traversing unit 12 is separate and distinct from trolley 10 that also travels horizontally on the girder 6. Spreader 11 is suspended from trolley 10. Petitioners assert that trolley 10 and spreader 11 in the ’388

Publications correspond to the claimed “traveling carriage,” “hoist unit,” and “chuck device.” Pet. 19. Thus, to meet the limitations in claim 1, suspension members 13 (the asserted framework) would need to define an opening having sufficient clearance to allow *the entire hoist unit and chuck device* (i.e., trolley 10 and spreader 11 from the ’388 Publication, or vehicle 100 including hoist unit 103–105 and chuck 106 from the ’050 Publication) to travel horizontally through suspension member 13. Petitioners have not directed us to any persuasive evidence to support such a combination. In fact, the ’388 Publication refutes such an interpretation of its disclosure.

Figure 1 from the ’388 Publication is shown below.

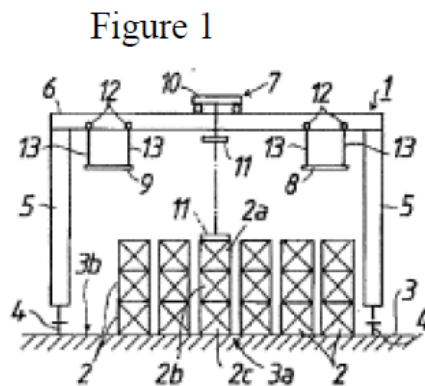


Figure 1 from the ’388 Publication
showing a side view of the disclosed bridge crane.

As shown in Figure 1 of the ’388 Publication, trolley 10 rides on an upper surface of girder 6 and does *not* travel through suspension members 13. There is no persuasive evidence that even if a person of ordinary skill were to combine the disclosures of the ’050 and ’388 Publications, the resulting structure would meet the limitations of claim 1.

Based on the analysis above, we determine that Petitioners’ arguments and evidence do not establish that there is a reasonable likelihood that Petitioners would prevail in establishing that it would have been obvious to

combine the '050 and '388 Publications to arrive at and render obvious the specific invention recited in the challenged claims.

2. Obviousness Based on the '050, '388, and '913 Publications

Petitioners assert that claim 3 would have been obvious based on the '050, '388, and '913 Publications. Pet. 25–26. Claim 3 depends from claim 1.

The '913 Publication is cited for its disclosure of the use of wires and pulleys in an overhead rail, hoist-type conveying system. Pet. 25–26. The '913 Publication does not cure the deficiencies discussed above of the '050 and '388 Publications. Accordingly, Petitioners has not established a reasonable likelihood of prevailing in establishing that claim 3 would have been obvious based on the '050, '388, and '913 Publications.

3. Obviousness Based on the '050 and '696 Publications

Petitioners assert that claims 1–3 would have been obvious based on the '050 and '696 Publications. Pet. 27–33.

The '050 Publication is discussed above.

As shown generally in Figure 2 of the '696 Publication, reproduced below, the '696 Publication discloses “safety fence” 1 for a rail system suspended from a ceiling (see Figure 1) that transports loads within a building. *Id.* at 2.

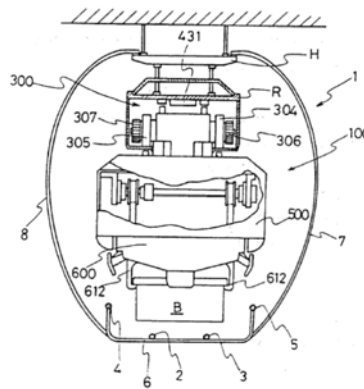


Figure 2 from the '696 Publication is a front view of safety fence 1 for transport vehicle 100.

The purpose of the safety fence is to catch load B in the event load B accidentally falls from the overhead rail system. *Id.* at 3. The rail system includes rail R suspended from the ceiling, and “ceiling motorized vehicle” 100, which moves along the rail and carries load B. *Id.* Vehicle 100 includes driving travel unit 300; follower travel unit 400; vehicle body 500; and elevating platform 600. When vehicle 100 reaches desired location 200, it stops, raises or lowers platform 600 using belts 519–522. *Id.* at 4. Chuck 612 opens or closes, to deposit or pick-up, load B.

Safety fence 1 is formed from wires 2–8 or plates. *Id.* at 5. The wires or plates are supported directly with hangers H on rail R. *Id.* at 5.

Petitioners assert it would have been obvious “to suspend the temporary storage device 400 of the '050 publication up near the rail R using a suspension system of the type suggested by the '696 publication. Pet. 29 (citing Ex. 1009 ¶ 146). Petitioners assert that “[t]he teachings of the '050 and '696 publications “fit . . . together like pieces of a puzzle.” *Id.* (citing Ex. 1009 ¶ 147).

Petitioners’ rationale for the proposed combination is that “each element of claim 1 of the '184 patent is old; it is taught by one or more of

the '050 and '696 publications, and the elements perform the same functions they performed in the prior art.” *Id.* Petitioners also assert that “[t]he successful performance of those functions in the claimed combination would have been reasonably expected. *Id.* at 29–30 (citing Ex. 1009 ¶ 149). Based on this analysis, Petitioners conclude “the subject matter of claim 1 should not be patentable.” *Id.* at 30.

Patent Owner asserts that neither reference discloses the “non-moveable platform assembly” recited in independent claim 1. Prelim. Resp. 33. Patent Owner also asserts the references “teach away” from the proposed combination. *Id.* at 42. Additionally, Patent Owner asserts the proposed combination would be inoperable. *Id.* at 44. Patent Owner states that “neither Petitioners nor Petitioners’ expert attempt to explain how the storage rack 400 of the '050 Publication (including drive unit 401 and tower body 402) could be suspended from the ceiling or rail by hanger H and support wires 7 and 8 disclosed in the '696 Publication. *Id.* Additionally, Patent Owner asserts that Petitioners rely on conclusory statements that do not establish a rationale for the proposed combination. *Id.* at 45–46. According to Patent Owner, Petitioners “merely cite to the statements of their expert, which mirror the Petition’s conclusory assertions and fail to provide any underlying facts to support the conclusion of obviousness.”

a. Rationale

We agree with Patent Owner that Petitioners do not provide persuasive evidence or argument to establish a rationale for the proposed combination of references. The fact that “each element of claim 1 of the '184 patent is old; . . . and the elements perform the same functions they performed in the prior art” (Pet. 29) does not establish that the combination

of elements recited in claim 1 would have been obvious. “[A] patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art.” *KSR*, 550 U.S. 418. As the Supreme Court explained, “inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known.” *Id.* at 418–419. Petitioners have not provided a persuasive fact-based analysis as to why a person of ordinary skill in the relevant field would have combined the elements as they are recited in the challenged claims.

Applying this basic principle, we repeat the guidance from our reviewing Court:

Obviousness requires more than a mere showing that the prior art includes separate references covering each separate limitation in a claim under examination. Rather, obviousness requires the additional showing that a person of ordinary skill at the time of the invention would have selected and combined those prior art elements in the normal course of research and development to yield the claimed invention.

Unigene Labs, 655 F.3d at 1360.

Neither Petitioners’ arguments nor the testimony of Dr. Sturges provide the required articulated reasoning with rational underpinning based on the evidence to support the legal conclusion of obviousness. *KSR*, 550 U.S. at 418. There is no persuasive testimony or other evidence to support the Petitioners’ conclusion that it would have been obvious to suspend the floor-based rack 400 of the ’050 publication from rail R or the ceiling using a suspension system of the type suggested by the ’696 Publication (Pet. 29).

b. Platform Framework

Moreover, even if one were to make the proposed modification, i.e., suspending the entirety of rack 400 in the '050 Publication from rail R in the '050 Publication, Petitioners do not establish with persuasive evidence or argument that rack 400⁴ includes a framework defining an opening having sufficient clearance *to allow the entire hoist unit and chuck device*⁵ *to travel horizontally therethrough*, as recited in claim 1.

4. Obviousness Based on the '050, '696, and '913 Publications

Petitioners assert that claim 3 would have been obvious based on the '050, '696, and '913 Publications. Pet. 33–34.

The '913 Publication is cited for its disclosure of the use of wires and pulleys in an overhead rail, hoist-type conveying system. Pet. 34. The '913 Publication does not cure the deficiencies discussed above of the '050 and '696 Publications. Accordingly, Petitioners have not established a reasonable likelihood of prevailing in establishing that claim 3 would have been obvious based on the '050, '696, and '913 Publications.

III. CONCLUSION

Upon consideration of the Petition, Preliminary Response, and the submitted exhibits, Petitioners have not demonstrated a reasonable likelihood that it would prevail in establishing that any of claims 1–3 of the '726 patent are unpatentable. Accordingly, we deny the Petition and do not institute an *inter partes* review of claims 1–3.

⁴ According to Petitioners, rack 400 “is a non-movable platform assembly.” Pet. 31.

⁵ According to Petitioners, the '050 Publication includes hoist unit 103–105 and chuck 106. Pet. 31.

IV. ORDER

In consideration of the foregoing, it is hereby
ORDERED that the Petition challenging the patentability of claims 1–
3 of U.S. Patent No. 6,183,184 B1 is denied.

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