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## PATENTS

## Practice Tips for Presenting and Responding to Motivation-to-Combine Arguments in IPR Proceedings



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In inter partes review proceedings, the Preliminary Response allows a patent owner to argue that an IPR proceeding should not be instituted. One way a patent owner may oppose institution of an obviousness ground that relies on multiple references or teachings is to argue that the Petition does not adequately articulate

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a motivation or reasons why a person of ordinary skill in the art would combine the cited prior art references or teachings. Indeed, the U.S. Court of Appeals for the Federal Circuit recently confirmed the role that motivation-to-combine arguments can play in IPR proceedings, holding that the Patent Trial and Appeal Board "must make a finding of a motivation to combine when it is disputed." *In re Nuvasive, Inc.*, 842 F.3d 1376, 1382, 120 U.S.P.Q.2d 1821 (Fed. Cir. 2016).

Even before *Nuvasive*, the PTAB has evaluated arguments regarding the sufficiency of a petitioner's evidence and allegations of motivation to combine in deciding whether to institute IPR proceedings, and has frequently cited the failure of IPR petitions to supply an adequate motivation or reasons to combine multiple references as a reason to deny institution.

This article provides an overview of recent Board decisions denying institution of inter partes review based on the failure of a petitioner to sufficiently articulate a motivation or reason to combine. This article also provides practice tips for practitioners to follow when either drafting a Petition that relies on obviousness or preparing a Preliminary Response.

### 1. The Role of a Motivation to Combine in the Obviousness Inquiry

The Federal Circuit has explained that where an allegation that an invention would have been obvious to a person of ordinary skill in the art requires consideration of multiple references or teachings, the fact-finder must

consider “whether a [person of ordinary skill in the art] would have been motivated to combine the prior art to achieve the claimed invention and whether there would have been a reasonable expectation of success in doing so.” See, e.g., *In re Warsaw Orthopedic, Inc.*, 832 F.3d 1327, 1333, 119 U.S.P.Q.2d 1716 (Fed. Cir. 2016) (quotation and citation omitted); *Intelligent Bio-Sys., Inc. v. Illumina Cambridge Ltd.*, 821 F.3d 1359, 1368, 119 U.S.P.Q.2d 1171 (Fed. Cir. 2016) (“When an obviousness determination relies on the combination of two or more references, there must be some suggestion or motivation to combine the references.” (quotation and citation omitted)).

Before the Supreme Court’s decision in *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 82 U.S.P.Q.2d 1385 (2007), the Federal Circuit required that the prior art relied upon specifically suggest, teach or motivate a skilled artisan to combine the relevant prior art teachings in the manner claimed (the so-called “teaching-suggesting-motivation” test). See, e.g., *Teleflex, Inc. v. KSR Int’l Co.*, 119 F. App’x 282, 285 (Fed. Cir. 2005), rev’d, 550 U.S. 398 (2007). In *KSR*, the Supreme Court held that this teaching-suggestion-motivation test was only one of a number of ways to identify a motivation or reason to combine references to support an obviousness argument. *KSR*, 550 U.S. at 418. The Court explained that the obviousness analysis must be “expansive and flexible” and a reviewing tribunal may consider, among other motivations, the “interrelated teachings of multiple [prior art references]; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art . . . to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *Id.* at 415-418.

The Federal Circuit has applied *KSR* in appeals of both district court and IPR proceedings, although its application of the *KSR* framework in IPR proceedings is still in its early stages. The Federal Circuit recently confirmed the application of the U.S. Supreme Court’s approach in the context of an IPR proceeding in *Nuvasive*. The appeals court held, citing *KSR*, that “[a]lthough identifying a motivation to combine need not become [a] rigid and mandatory formula[], the PTAB must articulate a *reason why* a [person having ordinary skill in the art] would combine the prior art references.” *Nuvasive*, 842 F.3d at 1382 (Fed. Cir. 2016) (quoting *KSR*, 550 U.S. at 419) (quotation and citation omitted; emphasis in original). Similarly, in the context of an IPR proceeding, the Federal Circuit has explained that, “To satisfy its burden of proving obviousness [to establish a motivation to combine], a petitioner cannot employ mere conclusory statements” and “[t]he petitioner must instead articulate specific reasoning, based on evidence of record, to support the legal conclusion of obviousness.” *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1380, 119 U.S.P.Q.2d 1541 (Fed. Cir. 2016) (citing *KSR*, 550 U.S. at 418 (2007)). That is, the Federal Circuit has explained that a petitioner should make its motivation or reason to combine analysis “explicit.” *Id.*

The significance of including an explicit, well-supported motivation-to-combine analysis in a Petition was underscored in the *Nuvasive* decision. In *Nuvasive*, the Federal Circuit reversed the Board’s obviousness determination because the Board “never actually made an explanation-supported finding that the evidence af-

firmatively proved that the [person having ordinary skill in the art] would have sought . . . additional information” provided by another reference in an obviousness combination. *Nuvasive*, 842 F.3d at 1384 (Fed. Cir. 2016). In the *Nuvasive* decision, the Federal Circuit “identified some insufficient articulations of motivation to combine,” including unsupported “conclusory statements” and standalone reliance on “common knowledge or common sense.” *Id.* at 1383; see also *In re Van OS*, No. 2015-1975, slip op. at \*5 (Fed. Cir. Jan. 3, 2017) (“[A] finding that a combination of prior art would have been ‘common sense’ or ‘intuitive’ is no different than merely stating the combination ‘would have been obvious.’ Such a conclusory assertion with no explanation is inadequate to support a finding that there would have been a motivation to combine.”).

## 2. Recent PTAB Decisions Denying Institution of IPR for Failure to Provide Adequate Evidence or Argument of Motivation or Reasons to Combine

In the cases detailed below, the PTAB declined to institute a petition for IPR on an obviousness ground because the Petition did not adequately allege a motivation or reason to combine multiple references or teachings. As discussed in the next section, these examples provide practitioners with a number of relevant considerations for drafting or responding to IPR petitions where obviousness is alleged.

### *a. Nautilus Hyosung Inc. v. Diebold, Inc.*

*Nautilus Hyosung Inc. v. Diebold, Inc.* is an exemplary case in which the Board found that conclusory citation to an expert declaration and reference as to why a person of ordinary skill *could* (instead of *would*) combine the prior art was insufficient to show motivation or reason to combine. In *Nautilus*, the petitioner alleged that the claims of a patent, directed to “methods for sensing magnetic ink character recognition . . . lines on financial checks, generally in the context of an automated banking machine” (IPR2016-00633, Paper 9 at 3 (Aug. 22, 2016) (citation omitted)), were rendered obvious by three prior art references that taught “a document processing system for receiving, processing and sorting envelopes and single document deposits” (*id.* at 11 (quotation and citation omitted)); a magnetic ink character recognition mechanism (*id.* at 12); and a “currency identification system for identifying currency bills of different denominations of a plurality of currency systems” (*id.* at 13 (quotation and citation omitted)), respectively. In its Preliminary Response, the patent owner argued, among other reasons, that the Petitioner’s allegations regarding motivations for combining the prior art references were “deficient” because the Petition focused on whether prior art references could be combined and not whether there was a motivation to combine the prior art references. *Nautilus Hyosung*, IPR2016-00633, Paper 6 at 28 (May 24, 2016).

The Board denied institution of the obviousness ground, in part, because the Petition did not identify the “reasons one of ordinary skill in the art would have been motivated to combine the teachings” of the prior art references. *Nautilus Hyosung*, IPR2016-00633, Paper 9 at 27-29 (Aug. 22, 2016). The Board did not find the Petitioner’s motivation-to-combine analysis sufficient for two reasons. First, the Board gave “no weight” to a cited excerpt of an expert’s declaration because the Pe-

tion did not “quote, paraphrase, summarize or otherwise present” or “explain the relevance” of the cited expert testimony. *See id.* at 28-29. This holding that the Petition must explain the relevance of cited expert testimony regarding the motivation-to-combine analysis is consistent with the Federal Circuit’s subsequent discussion in *Nuvasive*. 842 F.3d at 1382-83. Second, the Board explained that, even if it had considered the experts’ testimony, that testimony was deficient because the analysis that “something *could be done*” failed to “articulate a reason why something *would be done* by one of ordinary skill in the art at the time of the invention.” IPR2016-00633, Paper 9 at 21-22 (emphasis in original). The Board therefore declined to credit the expert’s testimony, which “raise[d] a specter of impermissible hindsight bias in an obviousness analysis.” *Id.*

*b. Securus Techs., Inc. v. Global Tel\*Link Corp.*

*Securus Techs., Inc. v. Global Tel\*Link Corp.* is an exemplary case in which the Board found that articulation of the problem the invention purported to solve in the *challenged patent* was not sufficient to show that a person of ordinary skill would be motivated to solve the purported problem. In *Securus*, the petitioner alleged that the claims of a patent directed to a “system for conducting video visits between two participants, such as prison inmates and outside visitors,” which addressed the “lack of synchronicity between data connections during the conference” (IPR2016-00267, Paper 8 at 2-3 (June 3, 2016) (quotation and citation omitted)) was rendered obvious by two primary prior art references, which describe a conference system for private communications between an attorney and a client (*id.* at 7), and “a videoconference system that provides reliable video conferencing involving prisoners and their visitors” (*id.* at 8 (citation omitted)). In its Preliminary Response, the patent owner argued that the Petition did not establish a motivation-to-combine the two prior art references to arrive at the claimed invention because the prior art references were not directed to the network latency problem addressed by the claimed invention. *See* IPR2016-00267, Paper 6 at 3 (Mar. 10, 2016).

In its Decision on Institution, the Board declined to institute the obviousness grounds because the Petition did not explain why a skilled artisan would have been motivated to combine the prior art references. *See* IPR2016-00267, Paper 8 at 12-13 (June 3, 2016). The petitioner argued that because the *challenged patent* identified problems to be solved in the prior art, the existence of those problems provided a motivation to a person of ordinary skill in the art to combine multiple *prior art references* to solve it. The Board disagreed, finding that although the problems were identified in the *challenged patent*, the Petition did not do enough to establish that “those problems were actually known in the relevant timeframe [by a person of ordinary skill in the art].” *Id.* at 8-9 (citing *In re Nomiya*, 509 F.2d 566, 573, 184 U.S.P.Q. 607 (C.C.P.A. 1975) (explaining that if there is no evidence of record that a person of ordinary skill in the art would have expected the problem to exist at all, it is not proper to conclude that the invention which solves this problem would have been obvious to that hypothetical person of ordinary skill in the art); *KSR*, 550 U.S. at 420 (2007) (“Under the correct analysis, any need or problem *known in the field of endeavor at the time of the invention* and addressed by the patent can provide a reason for combining the elements in the manner claimed.”) (emphasis added)).

*c. Jackel Int’l Ltd. v. Mayborn USA, Inc.*

*Jackel Int’l Ltd. v. Mayborn USA, Inc.* is an exemplary case in which the Board found that the Petition must show a motivation to combine different embodiments of a single reference. In *Jackel*, among other arguments, the petitioner argued that two dependent claims of the challenged patent directed to “a no-spill cup assembly with an improved valve mechanism to prevent liquid from flowing out of the cup when not desired” (IPR2015-00979, Paper 7, at 2-3 (Oct. 1, 2015) (quotation and citation omitted)), were obvious in view of the combination of three prior art references, including two different embodiments that appeared in a single prior art reference (*id.* at 21). The Board declined to institute IPR proceedings on those two dependent claims, noting that the Petition’s argument relied upon “different embodiments of [the prior art] shown in Figures 1-5” without further explanation regarding a motivation to combine the embodiments. *See id.* at 21.

Following the Decision on Institution, the petitioner moved for rehearing of the Board’s decision not to institute IPR proceedings for the two dependent claims. Petitioner asked the Board to reconsider its finding that there was not an adequate showing of a motivation to combine because the “motivation to combine the teachings of [the prior art reference] in one embodiment with the teachings of [the prior art reference] in another embodiment” was “entirely obvious” because “it’s the same reference.” IPR2015-00979, Paper 21, at 4 (May 20, 2016). The Board denied the petitioner’s request for rehearing. The Board explained that it cannot be that it is always “entirely obvious” to combine the teachings of multiple embodiments, even if they are in a single reference, and faulted the petitioner for failing to include additional argument demonstrating a motivation to combine. *Id.* at 5 (identifying the Petition’s failure to “explain why one of ordinary skill in the art would be motivated to combine add stop ring 23 of Figure 1 to outer part 14b of Figure 6”). The Board further explained that argument regarding why a person of ordinary skill would modify or combine the prior art was particularly appropriate where the prior art reference taught that a single embodiment was “adequate,” and that the Petition should have “explain[ed]” why more than one disclosure from a prior art reference would be relied upon by a person of skill in the art. *See id.*

*d. Free-Flow Packaging Int’l, Inc. v. Automated Packaging Sys.*

*Free-Flow Packaging Int’l, Inc. v. Automated Packaging Sys.* is an exemplary case in which the Board found that identifying similarities between references is not enough to show a motivation or reason to combine them. In *Free-Flow*, the petitioner argued that claims directed to a “web for the manufacture of fluid filled units with a novel machine and process” (IPR2016-00350, Paper 7 at 3 (June 27, 2016)), were obvious in view of two prior art references disclosing a “machine and method for the manufacture of a continuous production of pneumatically filled packaging pillows” (*id.* at 7 (quotation and citation omitted)), and an “automatic packaging apparatus for use with a plurality of flexible pouches forming a continuous sheet of web material” (*id.* at 9 (quotation and citation omitted)). The petitioner identified two reasons to combine the references: First, the references were “directed to the same problem—automated, continuous production of inflat-

able sealed plastic bag units” (*id.* at 11 (citing an expert declaration in support of the Petition), and second, one of the references would “increase production and decrease costs” (*id.* at 13).

In response, patent owner argued that the Petition failed to set forth an adequate reason to combine the references because “two references aren’t obvious to combine simply because they relate to the same industry or technology.” IPR2016-00350, Paper 6 at 14-15 (Mar. 31, 2016). The Board agreed with the patent owner and declined to institute the obviousness ground. IPR2016-00350, Paper 7 at 12-15 (June 27, 2016). The Board explained that the “problem” identified by the Petition “is not really a problem, but rather a definition of the field of technology” to which the references pertain, and “simply demonstrating that a set of references are all directed to the same problem is not, by itself, a sufficient rationale to combine the references.” *Id.* at 12-13. Thus, the Board explained that a petitioner must do more to show a motivation or reason to combine, for example, by explaining “what problems exist” in one piece of prior art and “how those problems would have been solved by another reference.” *Id.* at 14. The Board also explained that Petition did not explain “why a person of ordinary skill in the art would have considered it desirable to further modify” one reference, which, according to the petitioner, already addressed the problem of “continuous, quick production of plastic bags . . . .” *Id.* (citation omitted).

### 3. Practice Tips

In drafting a Petition for IPR or developing a response to a Petition asserting obviousness based on multiple references or teachings, practitioners should take into account the key considerations from these Federal Circuit and Board decisions regarding the motivation or reason to combine.

- *The Petition should make a specific argument regarding motivation or reason to combine, not just cite references or expert testimony.* As the Board explained in *Nautilus Hyosung*, a citation to an expert declaration, without more, may not be sufficient to meet the petitioner’s burden to show a motivation or reason to combine.

- *The Petition should articulate a motivation or reason, as opposed to an ability, to combine.* As the Board described in *Nautilus Hyosung*, evidence of a motivation or reason to combine must support a rationale that a skilled artisan would be *motivated to actually solve* a problem and not merely provide evidence that a skilled artisan *could solve* a problem. *See, e.g., InTouch Techs., Inc. v. VGO Commc’ns, Inc.*, 751 F.3d 1327, 1352, 110 U.S.P.Q.2d 1886 (Fed. Cir. 2014) (indicating testimony primarily consisting of conclusory assertions that one of ordinary skill in the art could combine references, not that one of ordinary skill in the art would have been motivated to do so, reveals hindsight bias). Thus, when considering whether a motivation or reason to combine argument is sufficient, consider whether the Petition has stated *why* one of skill would solve a problem, not just *whether* a skilled artisan could solve it.

- *The Petition should demonstrate that a problem was known to a person of ordinary skill, not just that it was known to the inventors.* As the Board explained in *Securus*, a Petition should not just rely on the fact that the challenged patent identifies a problem in order to substantiate that persons of skill would be motivated to solve a particular problem, but should provide evidence that the problem was actually known in the relevant time period by persons of skill in the art. *See Securus*, IPR2016-00267, Paper 8 (June 3, 2016).

- *The Petition should show a motivation or reason to combine even if multiple teachings come from the same reference.* As the Board found in *Jackel*, a motivation or reason to combine cannot be presumed when two discrete embodiments appear in a single reference. Parties considering such art should thus consider whether the Petition adequately explains why a person of ordinary skill would take pieces from multiple embodiments and combine them. *See Jackel*, IPR2015-00979, Paper 21, at 5 (May 20, 2016).

- *Arguments that multiple references are analogous or in related fields are helpful, but may not be enough to show a motivation or reason to combine.* A number of recent Board decisions, including the *Free-Flow* decision described above, explain that simply demonstrating that prior art references “are analogous art to each other does not suffice as an articulated reason with a rational underpinning to combine their respective teachings—more is required to support the legal conclusion of obviousness . . . .” *Qualcomm Inc. v. ParkerVision Inc.*, IPR2015-01819, Paper 8 at 22-23 (Mar. 8, 2016) (citing *KSR*, 550 U.S. at 418); *see also TiteTex Int’l, Ltd. v. Precision Fabrics Grp.*, IPR2015-01671, Paper 7 at 12-13 (Feb. 11, 2016) (denying institution of obviousness ground because a “statement of similarity” that prior art references contain similar technology is an insufficient basis to provide a sufficient motivation or reason to combine). Thus, when considering a motivation or reason-to-combine argument, evaluate whether an explanation that references or teachings were analogous or related is enough to meet the burden to argue why a person of ordinary skill would combine them.

### 4. Conclusion

The IPR Institution Decision represents a critical inflection point for both patent owners and petitioners. Although each case and each combination of art will present unique issues and/or challenges, practitioners should keep general principles such as those articulated above in mind when developing or responding to a motivation-to-combine argument in an IPR proceeding. In view of the Federal Circuit’s recent attention to the Board’s motivation-to-combine analysis, practitioners should draft their Petition to clearly identify a motivation or reason to combine that the Board can apply to its analysis, or identify in a Preliminary Response how the Petition does not provide the Board with sufficient motivation or reason to combine to sustain an obviousness finding.