



BRIEFS

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CELEBRATING 150 YEARS - THE LEGACY OF ARABELLA MANSFIELD

Author: [Heidi S. Nebel](#)

Iowa has always been a leader in rights of women. In 1846, the year Iowa became a state, it also became the second state in the country to allow women to own property. In 1857 the University of Iowa became the first state University in the country to allow women into its degree programs.

This year marks the 150th anniversary of Iowan Arabella Mansfield to be admitted to the Iowa State bar. She was the first woman in the history of the United States to be admitted to a state's bar and thus to be able to appear in court on behalf of clients.

Arabella Mansfield graduated from Iowa Wesleyan College as valedictorian and thereafter studied law as an apprentice in her brother's law office. She subsequently took and passed the bar exam with high scores. At the time the Iowa Code Section on Attorneys and Counselors authorized only "white male persons[s]" to be admitted to the bar. She applied to be admitted to the bar and the court ruled that women may not be denied the right to practice law in Iowa. She was sworn in later that year in 1869.

MVS is proud to continue this legacy with 40% of our attorneys and 45% of our partners as females. To really appreciate these numbers, one must consider that MVS is a boutique Intellectual Property Law firm (IP boutique). With many members of these firms as scientists or engineers in addition to lawyers, the numbers have trailed behind the advances made with women participation in general practice law firms. According to the legal publication "Law 360", women make up not quite 25 percent of total attorneys in IP boutiques and a mere 19 percent of all partners in IP boutiques.

Our female participation also includes substantial participation in leadership of the firm, with half of the practice groups chaired by women and a female managing partner. Finally, we are particularly proud to have Pat Sweeney with the firm, the first licensed female patent attorney in the State of Iowa.

Exciting News!

Heidi S. Nebel is running for one of five open seats on the 2020 AUTM Board of Directors. Heidi has been an active member of AUTM for over 25 years, please show your support by voting for her here!

<https://eballot4.votenet.com/autm/login.cfm>

Voting closes November 22nd so don't delay!

I. Introduction

In addition to the core requirements of novelty and utility, a patent for a claimed invention may only be obtained if it is non-obvious. 35 U.S.C. § 103 teaches that “[a] patent for a claimed invention may not be obtained . . . if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains.” 35 U.S.C. § 103 (2018). The prior art available to support a *prima facie* case of obviousness varies. A *prima facie* case of obviousness may be made in view of one reference alone or in view of a combination of references. These references may include patent documents, non-patent literature, prior sales, or other public disclosures.

Since the teachings of *KSR*, which enumerated rationales for a finding of obviousness, the Federal Circuit has added to the type and quantity of evidence required to reach a “motivation to combine” cited references and arrive at the claimed invention. Three of the most pertinent cases from 2019 are outlined herein. These three cases demonstrate that in assessing a “motivation to combine” using two or more references, the cited references need not identify the claimed components as preferred for a motivation to exist, although if the references do recite preferred (or disclaim) elements, both the detriments and benefits must be weighed equally to assess whether a motivation exists. Further, a motivation to view a secondary reference and combine it with the primary reference exists where the primary reference invites a skilled artisan to consider “well-known” materials in the art for further guidance.

II. Motivation to Combine: A Required But Elusive Component of Obviousness

Although a *prima facie* case of obviousness may be made in view of a single reference, “[o]ften, it will be necessary for a court [or an Examiner] to look to interrelated teachings of multiple patents; 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, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *Ball Aerosol & Specialty Container, Inc. v. Ltd. Brands, Inc.*, 555 F.3d 984, 993 (Fed. Cir. 2009) (emphasis added). This “reason to combine” or “motivation to combine” two or more references is essential to a finding of obviousness. *See id.*; *see also KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 415-421 (2007). In *KSR*, the Supreme Court clarified that the cited references need not provide an explicit motivation to combine, but some rationale for combining or modifying the references must exist. *KSR*, 550 U.S. at 418-19, 127 S. Ct. at 1741. Regardless, the Examiner must “articulate a reason” why a skilled artisan would combine the prior art references, and the Examiner must further have an adequate evidentiary basis for that finding and provide a satisfactory explanation describing the same. *Ball Aerosol*, 555 F.3d at 993.

What qualifies as a sufficient rationale has been the subject of much discussion before the Federal Circuit. *KSR* provided several exemplary rationales that may support a conclusion of obviousness, including:

- (A) Combining prior art elements according to known methods to yield predictable results;
- (B) Simple substitution of one known element for another to obtain predictable results;
- (C) Use of known technique to improve similar devices (methods, or products) in the same way;
- (D) Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results;
- (E) “Obvious to try” – choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success;

(F) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations are predictable to one of ordinary skill in the art;

(G) Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention.

MANUAL OF PATENT EXAMINING PROCEDURE § 21434(I). Although these exemplary rationales do provide guidance, the Federal Circuit has since worked to provide further clarity. In 2019, the Federal Circuit added to the “motivation to combine” analysis through a series of cases. Three of the most pertinent cases are discussed herein.

A. *Real Time Data: The Invitation to Consider Well-Known Materials*

In *Real Time Data*, Hewlett Packard (HP) sought inter partes review of Realtime Data’s patent directed to a system and method for data compression using dictionary encoding. HP argued the claims were obvious over the U.S. patent to O’Brien in view of Nelson, a data compression textbook. The Federal Circuit affirmed the Patent Trial and Appeal Board’s finding of obviousness, noting that there was no obligation to find a motivation to combine because the Board did not rely on Nelson for the disclosure of a particular element or teaching, and instead relied on O’Brien alone to teach all the claim elements. *Real Time Data, LLC v. Iancu*, 912 F.3d 1368, 1373 (Fed. Cir. 2019). Further, even considering O’Brien and Nelson together, the motivation to combine was premised on “the rationale a person having ordinary skill in the art would have had to turn to Nelson after reading O’Brien when O’Brien allegedly teaches all the limitations of all claims challenged” as “O’Brien itself suggests that a wide variety of adaptive compression algorithms could be used and encourages a person having ordinary skill in the art to turn to well-known algorithms such as Nelson’s.” *Id.* at 1176-77 (internal quotations omitted). This teaching in O’Brien was “enough evidence to support a finding that a person of ordinary skill in the art would have turned to Nelson, a well-known data compression textbook, to better understand or interpret O’Brien’s compression algorithms.” *Id.*

B. *Novartis: No Requirement To Identify the Claimed Combination*

In *Novartis*, the Federal Circuit affirmed a Hatch-Waxman judgment confirming the non-obviousness of a patent related to the use of everolimus used to treat advanced renal cell carcinoma. *Novartis Pharm. Corp. v. W.-Ward Pharm. Int’l Ltd.*, 923 F.3d 1051, 1059 (Fed. Cir. 2019). The District Court in *Novartis* found that a skilled artisan would have been motivated to use everolimus as a treatment option, but failed to “affirmatively answer whether there would have been a motivation to combine.” *Id.* The District Court did find, however, that West-Wart “failed to provide by clear and convincing evidence that a [skilled artisan] would have been motivated to select everolimus” in particular. *Id.* “The district court erred in applying this heightened standard” as case law does not require that a particular combination must be the preferred, or the most desirable, combination described in the prior art in order to provide motivation for the current invention.” *Id.* citing *In re Fulton*, 391 F.3d 1195, 1200 (Fed. Cir. 2004) (internal quotations omitted).

C. *Henny Penny: Weigh the Benefits and Detriments of Proposed Modifications Equally*

In *Henny Penny*, the Federal Circuit reviewed the Patent Trial and Appeal Board’s determination following inter partes review that a patent owned by Frymaster for measuring cooking oil degradation in a deep fryer using a total polar materials (TPMs) sensor was not unpatentable as obvious in view of the combination of patent references to Iwaguchi (teaching a TPM sensor) and Kauffman (teaching a method for analyzing oil). *Henny Penny Corp. v. Frymaster LLC*, 938 F.3d 1324 (Fed. Cir. 2019). In terms of the motivation to combine, HPC argued that the PTAB placed undue weight on the disadvantages of introducing the prior art TPM sensor into Iwaguchi’s system. *Id.* at 1324. Traditionally, “[t]he fact that the motivating benefit comes at the expense of another benefit . . . should not nullify its use as a basis to modify the disclosure of

one reference with the teachings of another.” *Winner Int’l Royalty Corp. v. Wang*, 202 F.3d 1340, 1349 n.8 (Fed. Cir. 2000).

However, the Federal Circuit affirmed that “the benefits, both *lost and gained*, should be weighed against one another.” *Henny Penny Corp.*, 938 F.3d at 1324. The prior art must be considered for “all its teachings, not selectively.” *Id. citing Merck & Cie v. Gnosis S.p.A.*, 808 F.3d 829, 834 (Fed. Cir. 2015); *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1568 (Fed. Cir. 1987); *In re Pagliaro*, 657 F.2d 1219, 1224-25 (CCPA 1981). In the case of the fryer, the Board properly recognized that the prior art disclosed a TPM sensor and “found that a skilled artisan would have been dissuaded from integrating Iwaguchi’s sensor into Kauffman’s system because Iwaguchi’s “method of diverting and cooling the oil in Kauffman’s system would introduce ‘additional plumbing and complexity’ and lead to ‘decreased efficiency.’” *Henny Penny Corp.*, 938 F.3d at 1324.

III. Conclusion

In 2019, the Federal Circuit issued several precedential decisions discussing the “motivation to combine” required for a showing of obviousness. *Real Time Data* illustrates that where a prior art reference invites the skilled artisan to consider other well-known references, there is a motivation to combine with such references. Per *Novartis*, a motivation to combine does not require the cited references to state that the claimed combination is preferred or even desirable, as this is a “higher standard” than the rationales outlined in *KSR*. Finally, *Henny Penny* asserts that once references are combined, the Examiner and/or Court must consider the benefits and detriments of combining or modifying the cited references as a whole. These cases add further nuance to the “motivation to combine” analysis, and indicate that although the “teaching, suggestion, and motivation” analysis need not be applied rigidly, it certainly must be applied substantively.

CHANGES IN CANADA TRADEMARK LAW

Author: [Mark D. Hansing](#)

A significant change to Canadian trademark law went into effect on **June 17, 2019**, and it may have meaningful impact on your Canadian trademark strategy. Below is a brief summary, followed by a check list of considerations.

MAJOR CHANGES

■ **FIRST TO FILE WITHOUT EVIDENCE OF USE IN CANADA.**

Canada became a “first to file” country like many other countries in the world, but unlike the U.S. which is a “first to use” country where proof of use is required before registration. On or after June 17, 2019, the first entity to file in Canada gets the trademark registration even if they never use it there. This opens up “poaching” of your trademarks by entities that will never use it, but only try to block you or extract payments from you to get a registration of your own trademark. This means that if you have not registered your trademark yet in Canada, another entity could jump ahead of you and then potentially block you from using your trademark in Canada even if you have been selling products there. This is an ongoing problem in first-to-file countries and is of great concern.

■ **RECLASSIFICATION OF TRADEMARK REGISTRATIONS INTO THE NICE TRADEMARK PRODUCTS AND SERVICES CLASSIFICATION SYSTEM.**

Most trademark registration systems classify trademarks according to which products (“goods”) or services the trademark is used with. Presently, Canada has its own trademark classification system. Under it, you may have a one-class Canadian registration that covers a variety of different goods or services. For example, if you manufacture a wide variety of plastic parts that range from mailboxes to toys to sporting equipment, but also provide consulting services for plastic molding, you might have a one-class registration in Canada now. Under the new Canadian law, the NICE classification system will be used. It could turn a one-class registration into a four-class registration. After June 17th, trademark applications and renewals of registrations will have a per class fee. Thus, it is likely that most Canadian filings and renewals will get more expensive.

■ **RENEWALS ARE EVERY 10 YEARS, NOT EVERY 15.**

This change will increase costs because of more frequent renewal costs. This is magnified because of the above NICE classification issue.

■ **CANADA BECOMES A MEMBER OF WHAT IS CALLED THE “MADRID PROTOCOL”.**

The Madrid Protocol is a treaty amongst quite a few countries that allows a single filing for trademark registration that covers many countries (examination is still done on a country-base level). The International Registration is more efficient to maintain because assignments and renewals can be done from a central office instead of at each and every country. The United States has been a member of this Protocol for many years, so if you want to file in Canada and one or more other foreign countries based on your U.S. Registration, you may consider filing via the Protocol.

ACTION ITEMS FOR CONSIDERATION

1. Consider if you should file new trademark applications to try to eliminate poacher problems. If not already done, if you do business in Canada, or intend to, file for registration of your important trademarks immediately. Hopefully, you will be the first to file and have the priority position.

2. Consider expanding any existing Canadian filings to eliminate poacher problems and expand the scope of your protection. Remember that use is no longer required in Canada. Therefore, you can expand your existing protection by expanding into additional classes or by listing additional products or services. This can try to set up a “buffer zone” around your main products and services against others that try to register the same or similar marks for similar, but not identical, products or services.

3. Consider engaging a trademark monitoring service to look for poachers. There are professional services that watch for any filings that could raise a concern as to infringement or attempts to poach. These “watching services” can be tailored to your needs. Some watch just selected countries, while others watch selected countries and the Madrid Protocol central office filings. These services then notify you of any potentially pertinent filings so that you can react, if needed.

LESSONS FROM PRECEDENTIAL FEDERAL CIRCUIT DECISIONS: PROOF AN INVENTION IS NOT OBVIOUS

Author: Patricia A. Sweeney - Of Counsel

A series of Federal Circuit Court decisions recently determined to be precedential have been informative on when proof of non-obviousness of an invention is sufficient to rebut rejection by an examiner. A precedential decision provides a guide for subsequent cases. In one instance, proof of failure was sufficient to show a method of cancer treatment was not obvious. In another pair of decisions, the Court found that while an examiner can reject claims, saying an invention uses an obvious design choice, where that choice results in a different function, it is not obvious, and the examiner must have support for that conclusion.

Non-obviousness: when failure equals success

A recent Federal Circuit Court decision demonstrates that evidence of prior failures to achieve desired results can be potent evidence of lack of predictability in a field, resulting in the non-obviousness of using a compound to treat a specific cancer, even though the drug target was identified as effective in a test tube.

The decision, *OSI Pharmaceuticals v. Apotex*, reversed a decision by the US Board of Patent Appeals and found patentable claims to use of the compound erlotinib to treat non-small cell lung cancer (NSLC), previously identified as a leading cause of cancer deaths. *OSI Pharmaceuticals, LLC v. Apotex Inc. et al*, 2018-1925 (Fed. Cir. October 4, 2019). The OSI patent, US Patent No. 6,900,221, was challenged in an Inter Parties Review proceeding by Apotex and found invalid as obvious by the Board. The Court found the Board had misread a cited reference as teaching more than substantial evidence supports. The Board had agreed with Apotex that a review article by Dr. Jackson Gibbs showed that erlotinib has anti-cancer activity against non-small cell lung cancer. However, only one of the thirty research studies reviewed referenced NSCLC antitumor activity with a different compound, and another reference mentioned erlotinib but not as useful with NSCLC treatment. Dr. Gibbs confirmed this in a declaration. This reference was combined with another, Schnur, showing erlotinib as one of 105 compounds that are inhibitors of a family of proteins including epidermal growth factor receptor, which erlotinib targets. It refers to use in a variety of cancers, including lung cancer. Further, OSI's own 10-K SEC filing was cited discussing erlotinib as targeting NSCLC.

After discussing the misreading of the Gibbs reference, the Court continued that there could be no reasonable expectation of success in a highly unpredictable field having high rates of failure. Noting an over 99.5% failure rate of NSCLC treatment drugs entering Phase II clinical trials, such failures demonstrate the lack of reasonable expectation of success. These numbers, the Court added, do not take into account the number of drugs that do not make it to Phase II trials. What is more, the evidence demonstrated that even if a compound was useful for certain tumor types and certain cancers, it is unpredictable that it will be useful in treating other types of cancer. This is true, the Court held, even though compounds identified as epidermal growth factor receptor inhibitors are targets for cancer treatment. This alone is not indicative of treatment success, the Court found, and *in vitro* – test tube – effectiveness is a poor proxy for effectiveness in treating cancer in the body. Further, the 10-K filings did not show any efficacy data specific to non-small cell lung cancer.

The decision can be reviewed in full at <http://www.cafc.uscourts.gov/sites/default/files/opinions-orders/18-1925.Opinion.10-4-2019.pdf>.

Rejection of a combination as mere design choice – must be supported by evidence

A pair of precedential decisions by the Federal Circuit addressed the question of whether it is proper to reject as obvious an invention where the arrangement of components of the invention are a “mere design choice.” The first decision upheld the Examiner, saying that a claim was obvious to a featherseal for turbine engine components having first and second tabs extending from the second side of the featherseal in a particular configuration. *Ex parte Spangler*, Appeal No. 2018-003800 (Feb. 20, 2019). One reference disclosed two tabs but that were of a different size and spaced differently that was claimed. The Examiner said that it would be an obvious matter of

“design choice” to place the tabs as described. The Board relied on the lack of evidence that the length of the tabs or their spacing was critical or solved any problem of is for any particular purpose.

On the other hand, a claim to a frozen desert manufacturing apparatus was upheld that claimed a combined passage member “located inside cold storage” that combined a dessert mix and air before entering a cooling cylinder. *Ex parte Maeda*, Appeal No. 2010-009814 (Oct. 23, 2012). The examiner said moving the passage member inside cold storage was an obvious design choice, saying there was not showing of criticality or unexpected results. The patentee argued that it was not obvious, because changing the prior art reference to adopt the recited location of the claimed invention would modify the operation of that prior art device. Thus, they said, it was not a matter of obvious design choice. Further, they argued, the examiner did not present a prima facie case of obviousness because there was no evidence presented by the examiner to support the obvious design choice argument. The Board commented, We discourage examiners from relying on ‘design choice’ because it is generally a mere conclusion, which is no substitute for obviousness reasoning based on factual evidence. *In re Maeda*, at p. 6.

Both decisions were recently made precedential, suggesting the combination is informative regarding the “design choice” type of rejection. Evidence that shows benefits or improved results of the design choice can weigh in favor of non-obviousness. Where a combination would negated a prior art reference use, this suggests more than a design choice involved in the combination claimed. Further, the examiner must provide more than a mere conclusion of design choice to support such a rejection. Together such decisions can be used to analyze and rebut a rejection of obviousness that a combination is a mere design choice.

The *Ex parte Maeda* decision may be viewed at <https://www.uspto.gov/sites/default/files/documents/Ex%20parte%20Maeda%20%28Appeal%202010-009814%29.pdf>.

Ex parte Spangler may be viewed at <https://www.uspto.gov/sites/default/files/documents/Ex%20parte%20Spangler%20%28Appeal%202018-003800%29.pdf>.

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We've Been and We'll Be

October 23 - 25, 2019

[Cassie J. Edgar](#), Intellectual Property Attorney, Member & Chair of the [Regulatory Law Practice Group](#), was a panel presenter in Keystone, Colorado at the Control and Access: Intellectual property and CRISPR-Cas gene editing for innovation in crop agriculture event. She presented on use cases for gene editing in crops and IP and regulatory issues.

October 30, 2019

[Gregory Lars Gunnerson](#), Intellectual Property Attorney, presented at the Soft&Patent 2019 International workshop in Minsk, Belarus.

November 4, 2019

[Heidi S. Nebel](#), Intellectual Property Attorney, Chair of the [MVS Biotechnology & Chemical Practice Group](#) and firm Managing Member, attended the NUtech Ventures 2019 Innovator Celebration in Lincoln, Nebraska. MVS was a proud sponsor of the Celebration, celebrating innovative technology being developed at the University of Nebraska.

November 4, 2019

[Christine Lebron-Dykeman](#), [Brandon W. Clark](#), and [Nicholas J. Krob](#), presented at the Licensing Executives Society (LES) Iowa Chapter - Trademarks In Traditional Business And Evolving Social Media Course in Ames, Iowa. MVS and Iowa State University Research Foundation, Inc. were sponsors of the Course. Christine is the Chair of the [MVS Trademark Practice Group](#), Brandon W. Clark is Chair of the [MVS Copyright, Entertainment, and Media Law Practice Group](#).

December 5, 2019

MVS is a proud sponsor of the Iowa Associate of Business and Industry (ABI) Connecting Statewide Leaders event on Thursday, December 5, 2019 in Fort Dodge, Iowa.

December 5, 2019

[Cassie J. Edgar](#), Intellectual Property Attorney, Member & Chair of the [Regulatory Law Practice Group](#), will be in Ames at the Iowa State Crop Bioengineering Annual Member meeting dinner as the keynote speaker on IP & Regulatory issues in gene editing.

December 9 - 12, 2019

[Heidi S. Nebel](#) and [Jill N. Link, Pharm.D.](#) will be attending the ASTA's CSS & Seed Expo 2019 in Chicago, Illinois. This event attracts over 2,500 seed industry professionals from 36 countries and is America's largest seed industry conference. [Heidi S. Nebel](#) is Chair of the [MVS Biotechnology & Chemical Practice Group](#) and firm Managing Member, [Jill N. Link, Pharm.D.](#) is Chair of the [MVS Licensing Practice Group](#).

March 8 - 11, 2020

[MVS Biotechnology & Chemical Practice Group](#) attorneys will be attending the AUTM National conference in San Diego, California. Our attorneys are active AUTM members and MVS proudly serves over 35 university and technology transfer clients around the world.

If you're interested to learn about what our MVS attorneys attend and learn, please contact them through www.ipmvs.com or by calling 515-288-3667.