

# “WHEN IS AN INVENTION THAT WAS OBVIOUS TO TRY NEVERTHELESS NONOBVIOUS?”

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## I. Introduction and Summary

The question in the title to this article was asked and answered in a 1988 decision of the Federal Circuit Court of Appeals that has never been overruled and is now cited and followed in the Federal Circuit. That is the case of *In re O'Farrell*, 853 F.2d 894 (Fed. Cir. 1988). Judge Giles S. Rich wrote the opinion in that case affirming that “this court and its predecessors have repeatedly emphasized that ‘obvious to try’ is not the standard for invalidating patents under § 103” (*Id.* at 903). However, he went on to explain (1) when something that is obvious to try can lead to an obvious invention and (2) when an invention that was obvious to try may nevertheless be nonobvious. (*Id.* at 903-904).<sup>1</sup>

His explanations, however, were not discussed in two subsequent Federal Circuit cases that rejected an “obvious to try” defense. Both were decided before the Supreme Court’s 2007 KSR decision, *KSR International Co. v. Teleflex Inc., et al.*, 550 U.S. 398. Those Federal Circuit decisions stated that “‘Obvious to try’

has long been held not to constitute obviousness.” *In re Deuel*, 51 F.3d 1552, 1559 (Fed. Cir. 1995) and *Teleflex Inc. v. KSR International Co.*, 119 Fed. Appx. 282, 290 (Fed. Cir. 2005). But in a 2007 case decided before the Supreme Court’s KSR decision, the Federal Circuit cited and followed Judge Rich’s holdings in the *O'Farrell* case. That was *Pfizer Inc. v. Apotex, Inc.*, 480 F.3d 1348, 1365 (Fed. Cir. 2007). In a later Federal Circuit case, decided after the Supreme Court’s KSR decision, the court observed that the Supreme Court’s KSR decision “actually resurrects this court’s [the Federal Circuit’s] own wisdom [on “obvious to try”] in Judge Rich’s opinion in *In re O'Farrell*...” *In re Kubin*, 561 F.3d 1351, 1359 (Fed. Cir. 2009). And subsequent Federal Circuit cases, consistent with KSR and the *O'Farrell* cases, held patented inventions to be unobvious and patentable even though the ultimate unpredictable success followed initial efforts that were obvious to try.

It is interesting to note that in an early (1966) Court of Customs and Patent Appeals (“CCPA”) case, Judge Rich

<sup>1</sup> When he was in private practice, Judge Rich was intimately involved in the drafting of the applicable obviousness section of the 1952 Patent Act, 35 U.S.C. § 103, and later, as the first patent lawyer to be a judge on the Court of Customs and Patent Appeals, he was highly instrumental in the proper application of the “obvious” standard for patentability in the courts and in the Patent Office. See “35 U.S.C. § 103: From Hotchkiss to Hand to Rich, The Obvious Patent Law Hall of Famers,” *The John Marshall Law Review*, 1999, Vol. 32, 437, 509-512, 525-531, by the present author.

suggested that “obvious to try” could apply to many research endeavors:

“Slight reflection suggests, we think, that there is an element of ‘obviousness to try’ in any research endeavor, that is not undertaken with complete blindness but rather with some semblance of a chance of success, and that patentability determinations based on that as the test would not only be contrary to statute but result in a marked deterioration of the entire patent system as an incentive to invest in those efforts and attempts which go by the name of ‘research.’”

*Tomlinson*, 363 F.2d 928, 931 (CCPA 1966) (emphasis added). In his later, 1988 *In re Farrell* decision, Judge Rich noted that: “For obviousness under § 103, all that is required is a reasonable expectation of success.” 853 F.2d at 904 (emphasis added). Hence, he regarded it error to apply an “obvious to try” defense to conclude an invention was obvious when what was relied on as “obvious to try” was some prior art teaching that contained no prediction or indication of a successful result, or no direction or specific guidance as to how to achieve such a result. *Id.* at 903-904.

While Judge Rich’s *O’Farrell* case views were not discussed in a few subsequent Federal Circuit “obvious to try” cases decided before the *KSR* Supreme Court decision, the Supreme Court, in *KSR*, without citing *O’Farrell*, but resurrecting Judge Rich’s wisdom in that decision, held that where “there are a finite number of identified, predictable solutions” for solving a problem and that “a person of ordinary skill has good reason to pursue the known options,” if that “leads to the

anticipated success,” that “might show that it was obvious under § 103.” *KSR*, 550 U.S. at 421 (emphasis added). Conversely, therefore, if the prior art “obvious to try” measures that were initially followed provided or contained no identified, predictable solutions and/or provided no reasonable expectation of the success that followed, what was done that provided a successful solution might then show, pursuant to the *O’Farrell* case, that what was “obvious to try” nevertheless led to an unobvious invention. *Id.*

What I will now do is review (i) pre-*KSR* Federal Circuit and Court of Customs and Patent Appeals (“CCPA”) cases that considered an “obvious to try” defense, (ii) the Supreme Court’s views on “obvious to try” in the *KSR* case, and (iii) post-*KSR* Federal Circuit cases involving “obvious to try” issues.

## **II. CCPA and Federal Circuit Obvious to Try Cases Before the Supreme Court *KSR* Case**

### **A. The *Tomlinson* Case**

In the majority opinion written by Judge Rich in the 1966 *Tomlinson* CCPA case, *supra*, the Court held patentable some of the claims rejected by the Patent Office Board of Appeals, and affirmed the rejection of the other claims at issue. In a partial dissent, two of the judges agreed with the majority as to its affirmance of the claims rejected by the Patent Office, but dissented and disagreed with the majority’s reversal of the Patent Office’s rejection of the other claims. The key issue here was whether one skilled in the art, in “seeking an ultraviolet stabilizer for polypropylene, would expect those known in the art as useful stabilizers for polyethylene to be useful stabilizers

for polypropylene.” *Tomlinson*, *supra*, at 932.

After noting that “there is usually an element of ‘obvious to try’ in any research endeavor, that is not undertaken with complete blindness, but rather with some semblance of a chance of success” (as noted above), the majority opinion rejected “patentability determinations based on that as the test...” *Tomlinson*, *supra*, at 931. After considering the evidence the majority agreed with the appellants that “those skilled in the art would not expect the polyethylene stabilizers to be useful stabilizers for polypropylene...” *Id.* at 932. As a result it reversed the rejection of certain claims by the Patent Office Board of Appeals.

The dissent, however, disagreed and held that “the only difference between appellant’s claimed invention and the prior art is that they followed “prior art teachings and treated polypropylene with what the art had used to stabilize polyethylene.” *Id.* at 935. There was no further history to the case.

### **B. The *Antonie* Case**

In 1977, the CCPA decided the *Antonie* case, 559 F.2d 618. In that case, as in *Tomlinson*, there was a dissent, but this time Judge Rich joined in the dissent. In the majority opinion, the court reversed the Patent and Trademark Office (“PTO”) Board of Appeals’ rejection of claims as obvious in light of the prior art. The key issue here was whether, by using routine experimentation, the prior art teachings would enable one skilled in the art to develop the claimed invention. In reversing the PTO, the majority opinion noted that:

The PTO and the minority appear to argue that it would always be obvious for one of ordinary skill in the art to try varying every parameter of a system in order to optimize the effectiveness of the system even if there is no evidence in the record that the prior art recognized that particular parameter affected the result. As we have said many times, obvious to try is not the standard of 35 U.S.C. § 103. [citing *Tomlinson*]. Disregard for the unobviousness of the results of "obvious to try" experiments disregards the "invention as a whole" concept of § 103, [citing cases], and overemphasis on the routine nature of the data gathering required to arrive at appellant's discovery, after its existence became expected, overlooks the last sentence of § 103. [citing cases].

*Antonie*, 559 F.2d at 620 (emphasis added).

The dissent, on the other hand, concluded that in view of the prior art, only routine experimentation was required to arrive at the claimed invention, and would therefore affirm the PTO decision.

Given the basic apparatus of El-Naggar and the concept of varying the number of disks in a tank in order to optimize impurity removal, I believe that it would have been well within the capabilities of the chemical engineer of ordinary skill to determine empirically, by routine experimentation, the optimum design ratio which appellant has determined and recited in his claims. That is, El-Naggar set the way, and appellant's work was what any routineer would have accomplished

in following the patent teachings.... However, obviousness under 35 U.S.C. § 103 does not require absolute predictability, [citing cases], and it is sufficient here that El-Naggar clearly led the way for the routineer to arrive at the claimed apparatus. *Id.* at 621 (emphasis added).

### C. The *O'Farrell* Case

In the 1988 Federal Circuit *O'Farrell* case, *supra*, the court affirmed the PTO's decision rejecting the claims on obviousness. As noted above, Judge Rich wrote the opinion in this case, and there was no dissent. In this case, there was an early publication by two of the three coinventors that was relied on to reject the claims, and the court affirmed the rejection:

Appellants published their pioneering studies of the expression of frog ribosomal RNA genes in bacteria more than a year before they applied for a patent. After providing virtually all of their method to the public without applying for a patent within a year, they foreclosed themselves from obtaining a patent on a method that would have been obvious from their publication to those of ordinary skill in the art, with or without the disclosures of other prior art.

*O'Farrell*, *supra*, at 904.

In considering the "obviousness" issue, the court noted that the applicants argued "that the rejection [by the PTO] amounts to the application of a standard of 'obvious to try' to the field of molecular biology, a standard which this court and its predecessors have repeatedly rejected as improper grounds for a § 103 rejection. [citing cases]." *Id.* at 902.

However, the court went on to note:

... It is true that this court and its predecessors have repeatedly emphasized that "obvious to try" is not the standard under § 103. However, the meaning of this maxim is sometimes lost. Any invention that would in fact have been obvious under § 103 would also have been, in a sense, obvious to try. The question is: when is an invention that was obvious to try nevertheless nonobvious? *Id.* at 903 (emphasis added).

The court then added that the "admonition that 'obvious to try' is not the standard under § 103 has been directed mainly at two kinds of error." *Id.* The two kinds of error are (1) "where the prior art gave either no indication of which parameters were critical or no direction as to which of many possible choices is likely to be successful [citing cases]," and (2) in exploring "a new technology or general approach that seemed to be a promising field of experimentation, where the prior art gave only general guidance as to the particular form of the claimed invention or how to achieve it." *Id.*

The court went on to note:

Obviousness does not require absolute predictability of success. Indeed, for many inventions that seem quite obvious, there is no absolute predictability of success until the invention is reduced to practice. There is always at least a possibility of unexpected results, that would then provide an objective basis for showing that the invention, although apparently obvious, was in law nonobvious. [citing cases]. *Id.* at 903-904.

The court then concluded that “For obviousness under § 103, all that is required is a reasonable expectation of success. [citing cases].” *Id.* at 904 (emphasis added). Hence, if there is no “reasonable expectation of success” in what was initially “obvious to try,” the later successful result might then be regarded as “nevertheless nonobvious” if it could be shown that reaching the successful result would not have been obvious to a person of ordinary skill in the art.

#### D. The *Deuel* Case

In a 1995 case, *In re Deuel*, 51 F.3d 1552 (Fed. Cir. 1995), the invention related to “isolated and purified DNA and cDNA molecules encoding heparin-binding growth factors...” *Id.* at 1554. The court cited and partially followed *O’Farrell*, reversing the PTO decision and held the claims allowable. The court concluded that prior art suggesting the claimed compound was lacking and added that:

“Obvious to try” has long been held not to constitute obviousness. [citing *O’Farrell*]. A general incentive does not make obvious a particular result, nor does the existence of techniques by which those efforts can be carried out. Thus, Maniatis’s teachings, even in combination with Bohlen, fail to suggest the claimed invention. *Id.* at 1559 (emphasis added).

The court, however, failed to consider the discussion in the *O’Farrell* case as to when “obvious to try” could be a good defense and when it could not be.

#### E. The *Teleflex* Case

In its 2005 decision in *Teleflex, Inc. v. KSR International Co.*, 119 Fed. Appx.

282 (Fed. Cir. 2005), the Federal Circuit reversed the district court’s summary judgment of invalidity. The invention related to electronic throttle controlled automobile engines involving an adjustable pedal position and an electronic pedal position sensor. In reversing the District Court, the Federal Circuit held that “the district court erred as a matter of law by applying an incomplete teaching-suggestion-motivation test to its obviousness determination.” *Id.* at 290.

On the issue of “obvious to try,” all the court said, quoting the *In re Deuel* case, 51 F.3d at 1559, was: “‘Obvious to try’ has long been held not to constitute obviousness.” *Id.* at 289. No reference was made to the *O’Farrell* case.

#### F. The *Pfizer* Case

*Pfizer, Inc. v. Apotex, Inc.*, 480 F.3d 1348 (Fed. Cir. 2007), was decided March 22, 2007, a little more than a month before the Supreme Court’s April 30, 2007 *KSR* decision. In the *Pfizer* case, the court held the claims invalid, reversing the district court’s judgment. The claims were directed to a pharmaceutical product covered by a *Pfizer* patent. On the “obvious to try” issue, and citing *O’Farrell*, the court held that for obviousness to apply to a particular known method that was “obvious to try,” “the expectation of success need only be reasonable, not absolute... *In re O’Farrell*, 853 F.2d 894, 903 (Fed. Cir. 1988).” *Pfizer, supra*, at 1364.

Again citing *O’Farrell*, the court added: “But, once again, only a reasonable expectation of success, not a guarantee is needed. *O’Farrell*, 853 F.2d at 903...” *Pfizer, supra*, at 1364;

and “this is not the case where the prior art teaches merely to pursue a ‘general approach that seems to be a promising field of experimentation’ or ‘gave only generic guidance as to the particular form of the claimed invention or how to achieve it,’ *O’Farrell*, 853 F.2d at 903...” *Pfizer, supra*, at 1366.

In conclusion, in rejecting the claims, the court held that “a skilled artisan would have had a reasonable expectation of success... [in pursuing what was obvious to try].” *Id.* at 1369.

### III. The Supreme Court *KSR* Decision

The court noted that the invention here related to “an adjustable pedal system for cars with cable-actuated throttles.” *KSR, supra*, at 399. To better understand the Supreme Court’s reversal, the following additional comments on the Federal Circuit’s decision are provided.

The Federal Circuit had vacated the District Court’s grant of summary judgment of invalidity, rejecting as insufficient to support a finding of obviousness, testimony that “an electronic control ‘could have been’ mounted on the support bracket of a pedal assembly... See e.g. *In re Deuel*, 51 F.3d 1552, 1559 (Fed. Cir. 1995). (“‘Obvious to try’ has long been held not to constitute obviousness.”)” *Teleflex, supra*, 119 Fed. Appx. at 289. Then, as noted above, the Federal Circuit concluded its decision by holding that: “the district court erred as a matter of law by applying an incomplete teaching-suggestion-motivation test to its obviousness determination.” *Teleflex, supra*, 119 Fed. Appx. at 290.



In reversing the Federal Circuit's decision that had vacated and remanded the District Court's decision granting summary judgment of invalidity, the Supreme Court concluded that the "flaws in the analysis of the court of appeals relate for the most part to the court's narrow conception of the obviousness inquiry reflected in its application of the TSM [teaching-suggestion-motivation] test." *KSR, supra*, at 419.

Then, considering the obvious to try issue, the Supreme Court held:

The same constricted analysis led the Court of Appeals to conclude, in error, that a patent claim cannot be proved obvious merely by showing that the combination of elements was "obvious to try." ... When there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions a person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense. In that instance the fact that a combination was obvious to try might show that it was obvious under § 103.

*KSR, supra*, at 421 (emphasis added). To summarize that holding, if what was pursued was something "obvious to try" that included "predictable" solutions and it led to the "anticipated success," then the fact that it "was obvious to try might show that it was obvious under § 103." *Id.*

In making that holding, the Supreme Court did not cite Judge Rich's similar holding in the *O'Farrell* case.

#### IV. Federal Circuit Cases After the Supreme Court *KSR* Case

##### A. The *Kubin* Case

In this case, the Federal Circuit affirmed a PTO decision that rejected a claimed gene sequence as unpatentable because it was obvious in light of the prior art. On the "obvious to try" issue, the court noted that:

...the Supreme Court recently cast doubt on the viability of *Deuel* to the extent the Federal Circuit rejected an 'obvious to try' test. [citing authority]. Under *KSR*, it's now apparent 'obvious to try' may be an appropriate test in more situations than we previously contemplated.

*In re Kubin*, 531 F.3d 1351, 1358 (Fed. Cir. 2009) (emphasis added).

The court then went on to refer to the Supreme Court's consideration of the "obvious to try defense" quoted and discussed above, noting that:

The Supreme Court's admonition against a formalistic approach to obviousness in this context actually resurrects this court's own wisdom in *In re O'Farrell*, which predates the *Deuel* decision by some seven years...

*Kubin, supra*, at 1359.

The court then referred to the "two classes of situations" outlined in the *O'Farrell* case where "'obvious to try' is erroneously equated with obviousness under § 103." *Id.* The first situation is "where the prior art gave either no indication of which parameters were critical or no direction as to which of many possible choices is likely to be successful." *Id.* The second is where a

new technology or general approach is explored but where "the prior art gave only general guidance as to the particular form of the claimed invention or how to achieve it." *Id.*

The court then noted that:

This court in *O'Farrell* found the patentee's claims obvious because the Board's rejection of the patentee's claims had not presented either of the two common "obvious to try" pitfalls. Specifically, this court observed that an obviousness finding was appropriate where the prior art "contained *detailed enabling methodology* for practicing the claimed invention, a suggestion to modify the prior art to practice the claimed invention, and evidence suggesting that it would be successful." 853 F.2d at 902 (emphasis added). Responding to concerns about uncertainty in the prior art influencing the purported success of the claimed combination, this court stated: "[o]bviousness does not require absolute predictability of success ... *all that is required is a reasonable expectation of success.*" *Id.* at 903-904 (emphasis added). The Supreme Court in *KSR* reinvigorated this perceptive analysis. *Id.* at 1360.

The court concluded:

As the Board found, the prior art here provides a "reasonable expectation of success" for obtaining a polynucleotide within the scope of claim 73, *Board Decision* at 6, which, "[f] or obviousness under § 103 [is] all that is required." *O'Farrell*, 853 F.2d at 903. Thus, this court affirms the Board's conclusion as to obviousness. *Id.* at 1361.

**B. Other Post *KSR* Federal Circuit Cases**

Other Federal Circuit cases have cited and followed the Supreme Court's *KSR* decision on obvious to try, some of which also cited and followed the *O'Farrell* case's holdings on obvious to try.

Cases citing and following *KSR* on "obvious to try" issues include:

- *Abbott Laboratories v. Sandoz, Inc.*, 544 F.3d 1341, 1351-52 (Fed. Cir. 2009), also citing *Tomlinson* but not *O'Farrell*;
- *Sanofi-Synthelabs v. Apotex, Inc.*, 550 F.3d 1075, 1090 (Fed. Cir. 2008, 2009), holding the claims patentable because the result of what was obvious to try was unpredictable, but not citing *O'Farrell*;
- *Proctor & Gamble Co. v. Teva Pharmaceuticals USA, Inc.*, 566 F.3d 989, 996 (Fed. Cir. 2009), holding the claims patentable and citing *O'Farrell* for its discussion of when an obvious to try approach may nevertheless lead to an unobvious invention (*Id.* at 996-997);
- *Bayer Schering Pharma AG v. Barr Laboratories, Inc.*, 575 F.3d 1341, 1347, 1350 (Fed. Cir. 2009), also citing *O'Farrell* at 1347, 1349, 1350 but holding what was obvious to try led to an obvious invention;
- *Perfect Web Technologies, Inc. v. InfoUSA, Inc.*, 587 F.3d 1324, 1331 (Fed. Cir. 2009), also citing *O'Farrell* at 1331 in holding what was obvious to try led to an obvious invention;
- *Rolls Royce, PLC v. United Technologies Corp.*, 603 F.3d 1325, 1339 (Fed. Cir. 2010), holding for its non-obvious decision that the invention "would not have presented itself as an option at all, let alone an option that would have been obvious to try" (*Id.* at 1339).

**V. Conclusion**

The purpose of this article is to consider how the courts have treated inventions where the initial efforts that were made were obvious to try. As Judge Rich noted in the *Tomlinson* case, however, there can be an element of obvious to try in any serious research endeavor. So how

should the courts deal with attacks on patented inventions when the initial efforts were "obvious to try"? As Judge Rich concluded in the *O'Farrell* case, the court should not simply say "obvious to try" is no defense and dismiss it since it can be applied as a defense in those cases as described.

Furthermore, in concluding this article and in answer to Judge Rich's *O'Farrell* case question in the title to this article, and as held by the Supreme Court in the *KSR* case and in subsequent Federal Circuit cases, it will be seen: that an invention where the initial efforts were obvious to try might nevertheless be a valid and unobvious invention if what was obvious to try did not provide or include a reasonable expectation of achieving the successful invention that ultimately resulted. Clearly, from the cases that followed *O'Farrell*, Judge Rich had it right in his 1966 *Tomlinson* and 1988 *O'Farrell* decisions.