
NOW YOU SEE IT, NOW YOU DON'T: MAKING CERTAIN ANTICIPATION REJECTIONS MAGICALLY DISAPPEAR BY SHOWING UNEXPECTED RESULTS

Every once in a while a court decision is handed down that tantalizes you with its implications. *Bigham v. Godtfredsen*¹ was one such case to me. Although the issue in *Bigham* boiled down to written description support for multiple patentably distinct inventions, the decision suggested to me that anticipation might be disproved in certain cases by a showing of unexpected results for the claimed subject matter vis-à-vis the cited prior art—a maneuver the Patent Office guidelines set forth in the *Manual of Patent Examining Procedure* (hereinafter “the MPEP”) suggest cannot be done.²

Bigham involved an interference proceeding³ to determine whether Bigham or Godtfredsen was the first to invent certain penicillanic acid compounds they both claimed as their own. The compounds in question comprised a side chain containing the substituent X, which could be chloro, bromo, iodo or certain sulfonyloxy species. The Patent Office Board of Patent Appeals and Interferences (hereinafter “the BPAI”) originally determined that the contest was for a single invention covering all of the X possibilities. However, on Godtfredsen’s motion, supported by Godtfredsen’s showing that the bromo and iodo species were unexpectedly superior to and, therefore, patentably distinct from the chloro species, the BPAI split the subject matter into two contested inventions, the first being wherein X was bromo or iodo, and the second being wherein X was chloro or the sulfonyloxy species.

Godtfredsen’s priority claim to both inventions was based ultimately on a specification that did not name or exemplify the bromo or iodo species. However, that specification did show the same class of compounds having X, and indicated that X could be “a halogen atom.” That same specification also exemplified a species wherein X was chloro. Thus, as to the second contested invention, i.e., wherein X was chloro or the sulfonyloxy species, Godtfredsen had an express teaching of the chloro species at issue.⁴

On the other hand, with respect to the first contested invention, i.e., wherein X was bromo or iodo, Godtfredsen had no such express teaching of either bromo or iodo. Godtfredsen instead argued that his teaching that X could be “a halogen atom” was tantamount to a teaching of all halogens, and at least fluoro, chloro, bromo and iodo. The BPAI agreed with this argument, and awarded priority as to this first contested invention to Godtfredsen.

On appeal, the Court of Appeals for the Federal Circuit (hereinafter “the CAFC”) reversed the BPAI. The CAFC conceded that ordinarily the mention of “halogen” would suggest fluoro, chloro, bromo and iodo to persons skilled in the art. According to the CAFC, “[t]he generic term ‘halogen’ comprehends a limited number of species, and ordinarily constitutes a sufficient written description of the common halogen species.”⁵



However, the CAFC found this case to be extraordinary, requiring a different result. “[T]his simple rule does not apply when the [contested invention] is based on and requires patentable distinctness among specific halogens. [The bromo and iodo invention] must independently meet the requirements of 35 USC § 112, the purpose of which is to ‘ensure that the inventor had possession of the later claimed invention on the filing date of the earlier application.’”⁶

And then came the CAFC’s language that so tantalized me: “When the board held that there was a patentable distinction between chloro, on the one hand, and bromo and iodo on the other, Godtfredsen’s disclosure of halogen and chloro **lost the possibility** of serving as a ‘full, clear, concise, and exact,’ in the words of §112, written description of the separate invention of the unnamed bromo and iodo compounds (emphasis added).”⁷

Why was I tantalized with this hocus-pocus, now you see it, now you don’t? In my mind, written description and anticipation are opposite sides of the same coin. In order to claim a thing, the written description requirement must make clear that at the time of filing you possessed that thing. Later, if someone should attempt to claim the same thing, then your earlier possession of it will anticipate their later claim. Consequently, I started to wonder, and eventually satisfied myself, that if it was possible to lose possession of subject matter under the written description requirement based on a showing of unexpected results, then it should also be possible to lose subject matter thought to be anticipatory based on a showing of unexpected results.

Anticipation rejections based on a limited genus of compounds are prevalent in patent prosecution.⁸ Typically, the reference cited against the claims does not include any specific compounds falling within the claimed genus. However, the reference discloses a genus so small and so limited that, as the fiction goes, a person having ordinary skill in the art would be able to immediately envisage each and every species falling under that small, limited genus.⁹

So, for example, let’s turn the *Bigham* facts around. Suppose that the issue is no longer one of written description, but anticipation. Suppose you claim the bromo species, but Godtfredsen’s specification predates yours by a number of years and, thus, theoretically bars your patent claim. Godtfredsen’s specification does not specifically mention your bromo species, but does teach that X may be “a halogen atom” and then exemplifies the related chloro species. As the CAFC conceded, “[t]he generic term ‘halogen’ comprehends a limited number of species, and ordinarily constitutes a sufficient written description of the common halogen species,” which would mean that anticipation would ordinarily lie. Almost certainly, an examiner’s rejection would issue. However, could you in response convert this to an extraordinary case by showing the bromo species is unexpectedly superior to the chloro species, just as Godtfredsen did? I mean, if the bromo and chloro species are two different inventions, and Godtfredsen’s specification does not describe the separate bromo invention, then how can Godtfredsen’s specification possibly anticipate your bromo species claim?

Logically, Godtfredsen’s specification that does not describe the separate bromo invention cannot anticipate your bromo species claim. His teaching of “halogen” generally and chloro specifically points away from his having had any actual or constructive possession of the unexpectedly superior bromo species. And as the only way of showing Godtfredsen’s lack of possession and, thus, lack of description of the bromo species is by introducing evidence that the bromo species is unexpectedly superior to the chloro species, the *MPEP* is wrong that unexpected results are irrelevant in the context of an anticipation rejection under 35 USC § 102 and, by implication, will not be considered. In instances, such as discussed here, where the rejection is based on technical anticipation based on a small, limited prior art genus, a showing by way of declaration that your subgenus or species that is embraced by the prior art genus, but not specifically disclosed or exemplified therein, is characterized by unexpected results should be sufficient to remove any question of anticipation.



Slowly, but surely, additional support for this position has been creeping into the decisional law.

At issue in *Atofina v. Great Lakes Chemical Corp.*¹⁰ was whether a prior art range of 100-500°C anticipated a claim range of only 330-450°C. Not surprisingly, the CAFC held that the prior art range did not anticipate the claimed range. According to the CAFC, “[g]iven the considerable difference between the claimed range and the range in the prior art, no reasonable fact finder could conclude that the prior art describes the claimed range with sufficient specificity to anticipate this limitation of the claim.”¹¹

Then things took a strange turn.¹² Fascinating is the later discussion of *Atofina* in *ClearValue Inc. v. Pearl River Polymers, Inc.*¹³ In *ClearValue*, ClearValue’s patent at issue claimed water having a “raw alkalinity less than or equal to 50 ppm.” A prior art reference to Hassick disclosed water having an alkalinity of 150 ppm or less. ClearValue argued that Hassick’s range was too broad to anticipate the “less than or equal to 50 ppm” limitation of claim 1, citing *Atofina* in support.

Surprisingly, the CAFC found ClearValue’s reliance on *Atofina* to be “misplaced.” According to the CAFC, anticipation had not been found in *Atofina* because “the evidence showed that one of ordinary skill in the art would have expected the synthesis process to operate differently outside the claimed temperature range, which the patentee described as ‘critical’ to enable the process to operate effectively.”^{14, 15} The CAFC then lowered the boom on ClearValue:

“This case is not *Atofina*. ClearValue has not argued that the 50 ppm limitation in claim 1 is ‘critical,’ or that the claimed invention works differently at different points within the prior art range of 150 ppm or less. * * * The disclosure that [Hassick’s] chemical process works for systems with 150 ppm or less is what anticipates. The disclosure of 150 ppm or less is a genus disclosure as in *Atofina*. But unlike *Atofina* where there was a broad genus and evidence that different portions of the broad range work differently, **here, there is no allegation of criticality or any evidence demonstrating any difference across the range.** [Emphasis added.]”

Taking full advantage of this developing “wrinkle” in the patent law were the attorneys involved in *OSRAM SYLVANIA v. American Induction Technologies, Inc.*¹⁶ At issue was the propriety of a district court grant of summary judgment on the ground that a patent to Anderson disclosing “a pressure of approximately 1 torr or less” anticipated OSRAM’s patent claim requiring “a pressure less than 0.5 torr.” Swayed by the fact that OSRAM presented “expert testimony and evidence to support its contention * * * that the limitation of less than 0.5 torr is central to the invention claimed in [OSRAM’s] patent and that a lamp would operate differently at different points within the range disclosed in the Anderson ‘334 patent,” the CAFC found that Anderson was not, in fact, anticipatory on the present record and remanded the case to the district court for trial.¹⁷ Indeed, the CAFC found that “the [OSRAM] patent itself claims that prior art lamps, including those disclosed in the Anderson ‘334 patent, are inefficient and impractical as compared to [OSRAM’s claimed] lamp precisely because they use pressure well above [the less than 0.5 torr] claimed in [OSRAM’s] patent.”¹⁸

In conclusion, when faced with an anticipation rejection based on a small, limited genus disclosure in a reference that does not also disclose any specific or exemplified embodiments falling within the claims being examined, it may be possible, counter to express statements in the *MPEP*, to remove that anticipation rejection by showing unexpected results attributable to the claims limitations.¹⁹ One can expect most examiners to be resistant to such an approach, but logically this approach should be accepted, particularly in view of the *Atofina*, *ClearValue* and *OSRAM* decisions discussed herein.



¹ 8 USPQ2d 1266 (Fed. Cir. 1988).

² See, *Manual of Patent Examining Procedure* (“MPEP”) § 2131.04 (“Evidence of secondary considerations, such as unexpected results or commercial success, is irrelevant to 35 U.S.C. 102 rejections and thus cannot overcome a rejection so based,” citing *In re Wiggins*, 488 F.2d 538, 543, 179 USPQ 421, 425 (CCPA 1973). The following dictum is contained in *Wiggins*: “In evaluating whether a rejection made under § 103 is proper, evidence **not pertinent** to a rejection under 35 USC § 102(b) may have relevance, i.e., commercial success, *unexpected results*, etc. [Emphasis added.]” *Id.*

³ An interference proceeding is a proceeding held within the Patent Office to determine which of multiple inventors of the same subject matter was actually the first to invent. Only one patent can issue for any one invention and, until recent changes in the U.S. patent law, the one patent would be issued to the first inventor of the invention. When the recent changes take full effect, the one patent will issue to the first of multiple inventors to file their patent application on the invention.

⁴ Although Godfredsen’s priority application was filed earlier than Bigham’s, Bigham was, nevertheless, awarded priority as to this second contested invention based on Bigham’s prior actual reduction to practice of the chloro species.

⁵ *Bigham*, 8 USPQ2d at 1268.

⁶ *Id.*

⁷ *Bigham*, 8 USPQ2d at 1268-69.

⁸ See, *MPEP* § 2131.02.

⁹ The “immediately envisage” language derives from *In re Petering et al.*, 133 USPQ 275, 280 (CCPA 1962). A Karrer patent disclosed a small, limited genus containing only 20 compounds, one of which was specifically claimed by Petering. The court found it “immaterial that Karrer did not expressly spell out the limited class * * * . It is our opinion that one skilled in this art would, on reading the Karrer patent, **at once envisage each member** of this limited class * * * . *With these circumstances in mind*, it is our opinion that Karrer has described to those with ordinary skill in the art each of the various permutations here involved as fully as if he had drawn each structural formula or written each name. (plain italics in original and bold italics added).”

¹⁰ 78 USPQ2d 1417 (Fed. Cir. 2006)

¹¹ *Atofina*, 78 USPQ2d at 1423.

¹² The turn was “strange” because the *Atofina* decision did not itself emphasize the factors that the court in *ClearValue* emphasized as being important to the decision in *Atofina*.

¹³ 101 USPQ2d 1773 (Fed. Cir. 2012)

¹⁴ *ClearValue*, 101 USPQ2d at 1776.

¹⁵ The evidence alluded to was as follows: “The [*Atofina*] patent stated that ‘only a narrow temperature range enables’ the process to operate as claimed, and that problems occur when operating the reaction either below 330° or above 400°C.” *Id.* There was also a comparative example in the *Atofina* patent specification that “shows that a temperature of 300°C does not allow’ the synthesis reaction to operate as claimed.” *Id.*

¹⁶ 105 USPQ2d 1368 (Fed. Cir. 2012)

¹⁷ *OSRAM*, 105USPQ2d at 1373-74.

¹⁸ *OSRAM*, 105 USPQ2d at 1374.

¹⁹ Of course, the rationale would also apply in the case where patentability search results indicate prior art with a small, limited genus that experience suggests would give rise to an anticipation rejection during the course of the upcoming patent prosecution. Evidence of unexpected results attributable to the prior art embraced, but unnamed and nonexemplified subgenus or species sought to be now claimed could be garnered and inserted into the specification or saved for later use in a subsequent declaration under 37 CFR 1.132.

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