Fed. Circ. In May: Being Precise About 'About'

By **Jeremiah Helm and Sean Murray** (June 29, 2026)

This article is part of a monthly column that highlights an important recent patent appeal. In this installment, we examine the Federal Circuit's ruling in Enviro Tech Chemical Services v. Safe Foods Corp.

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Patent claims often use words of approximation to try and capture just a little more claim scope. Words like "approximately" or "about" expand the literal claim language and create a penumbra of claim scope that a patentee can still capture via direct infringement.

The temptation to use a word like "about" is particularly great when it comes to numbers and ranges of values. But there is a risk associated with this approach: If the claim language becomes too mushy, the bounds defined by the claim language will be unclear, and the claims will be invalid for lack of definiteness.

The U.S. Court of Appeals for the Federal Circuit's May 4 decision in Enviro Tech Chemical Services v. Safe Foods Corp. illustrates the danger in attempting to expand claim scope with words of approximation.

Enviro Tech was the assignee of a patent that was generally directed to methods that could be used when processing poultry. The particular claimed method uses a chemical, peracetic acid, to treat a poultry carcass.

After creating a reservoir of peracetic acid-containing water, the acidity of the solution is measured and altered to "a pH of about 7.6 to about 10." Later, after placing the poultry carcass into the reservoir, the peracetic acid solution is adjusted again to "a pH of about 7.6 to about 10."

After that, the carcass is removed. The net effect of this peracetic acid bath in the approximate pH range is to increase the weight of the carcass, and therefore increase the total postprocessing weight of the meat.

Enviro Tech's claimed process used the term "about" to modify the required pH range for the poultry's bath. The U.S. District Court for the Eastern District of Arkansas concluded in 2024 that the boundaries of the claimed "a pH of about 7.6 to about 10" were not sufficiently clear. Thus, the district court held Enviro Tech's claims invalid as indefinite. The Federal Circuit agreed.

The Federal Circuit first reviewed its precedent related to words like "about" and "approximately," and noted that those terms can be appropriately used to avoid the strict numerical bounds of a defined range.

The Federal Circuit also explained that terms such as "about" and "approximately" pose a challenge because they are not necessarily definite or indefinite. Instead, the facts of each particular case will inform whether terms like "about" or "approximately" create too much uncertainty in claim scope.

Thus, there is nothing facially wrong with using a term of approximation in a claim, as long as the rest of the patent provides suitable guidance for what the term means.

To determine whether a claim using language such as "about" to modify a numerical range is definite or not, the court turns to the patent's intrinsic record, including the claims, the specification and the prosecution history. Extrinsic evidence that explains an ordinary artisan's understanding can also be relevant to the inquiry.

Enviro Tech ran into trouble because the patent's intrinsic record did not provide guidance sufficient to define what "about" meant for the claimed pH range. The Federal Circuit started its analysis with the claim language and found nothing that would help guide an artisan to understand how much above or below the specific range was claimed.

Next, the Federal Circuit analyzed the specification and found that it recited many different experiments carried out by Enviro Tech that involved measuring pH. Most of these experiments involved measurements within 0.3 of the target pH.

That could have informed the meaning of "about" in the claims. But there were also examples where Enviro Tech did not follow that general practice, and instead allowed larger deviations from the target pH range, including an experiment carried out on 5.8 million chickens.

Such conflicting guidance did not do enough to make the claimed range definite, because there was no one consistent approach used by the patentee.

Finally, the Federal Circuit examined the prosecution history, and likewise found Enviro Tech used the term "about" inconsistently. In one office action response, Enviro Tech argued that a claim should be construed narrowly in one place to avoid prior art, and then, on the next page, reintroduced a broader understanding.

Enviro Tech did not, at any point during the prosecution, clearly define what additional scope "about" was intended to cover with respect to the claimed pH range. One interesting wrinkle is that during prosecution, the claimed pH range was amended to avoid prior art that disclosed a process using a pH of 7.0.

In some circumstances, that type of amendment might provide evidence that "a pH of about 7.6" does not include a pH of 7.0. The Federal Circuit, however, was not convinced, and explained that the definiteness requirement requires "much more clarity."

There are several takeaways from Enviro Tech. First, a patentee must temper the desire to expand claim scope using language of approximation with the requirement that claims must have defined boundaries.

If terms like "about" are to be used, it may make sense to draft a patent specification that defines those terms — for example, by explaining that "about" means plus or minus 10% of the value. Even if the specification does not include a definition, however, the patent applicant can still use the prosecution to explain the bounds set by "about."

Finally, practitioners may want to sidestep indefiniteness problems entirely by avoiding words of approximation during claim drafting. Words of approximation are useful tools, and are at their strongest when supported by sufficient facts.

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