

Federal Circuit Patent Bulletin: *BASF Corp. v. Johnson Matthey Inc.*

December 14, 2017

“Nothing inherent in the standard of “reasonable certainty” precludes a relevant skilled artisan from understanding with reasonable certainty what compositions perform a particular function.”

On November 20, 2017, in *BASF Corp. v. Johnson Matthey Inc.*, the U.S. Court of Appeals for the Federal Circuit (Lourie, O’Malley, Taranto*) reversed and remanded the district court’s judgment that the asserted claims of U.S. Patent No. 8,524,185, which related to the catalytic conversion of nitrogen oxides (NOx) in an exhaust gas stream, were invalid for indefiniteness. The Federal Circuit stated:

The Supreme Court in *Nautilus, Inc. v. Biosig Instruments, Inc.* held that a patent claim is indefinite if, when “read in light of the specification delineating the patent, and the prosecution history, [the claim] fail[s] to inform, with reasonable certainty, those skilled in the art about the scope of the invention.” “Reasonable certainty” does not require “absolute or mathematical precision.” Johnson had the burden of proving indefiniteness by clear and convincing evidence. . . . Under *Nautilus*, the question presented here is this: would the “composition . . . effective to catalyze” language, understood in light of the rest of the patent and the knowledge of the ordinary skilled artisan, have given a person of ordinary skill in the art a reasonably certain understanding of what compositions are covered? The district court’s reasoning supplies no basis to answer that question in Johnson’s favor.

The court first described the functional character of the claim language. But the *Nautilus* standard of “reasonable certainty” does not exclude claim language that identifies a product by what it does. Nothing inherent in the standard of “reasonable certainty” precludes

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a relevant skilled artisan from understanding with reasonable certainty what compositions perform a particular function. Not surprisingly, we have long held that nothing in the law precludes, for indefiniteness, “defining a particular claim term by its function.” What is needed is a context-specific inquiry into whether particular functional language actually provides the required reasonable certainty.

The district court next stated that the claims do not “recite a minimum level of function needed to meet this ‘effective’ limitation nor a particular measurement method to determine whether a composition is ‘effective’ enough to fall within the claims.” By itself, that observation merely describes two things not expressly stated in the claims. But “an inventor need not explain every detail because a patent is read by those of skill in the art.” The mere observation of information not “recited” does not answer the question whether a person of ordinary skill in the art would need to be given the level and measurement information to understand, with reasonable certainty, whether a composition is “effective to catalyze” the SCR (of NO_x) or AMO_x reactions.

Indeed, the district court did not treat the mere observation about information not “recited” as itself answering the question. The court immediately went on to declare that “[w]ithout such information, a person of ordinary skill in the art could not determine which materials are within the ‘material composition A’ or ‘material composition B’ limitation, and which are not.” That sentence is the crucial sentence in the district court’s analysis.

The problem with that sentence, however, is that it is entirely unsupported, whether by reference to the specification or other intrinsic evidence or by reference to extrinsic evidence. . . . The district court’s analysis in the present case lacks such support for its conclusion about what a relevant skilled artisan could determine without more information than the patent here provides.

The district court’s analysis does not consider that the specification makes clear that it is the arrangement of the SCR and AMO_x catalysts, rather than the selection of particular catalysts, that purportedly renders the inventions claimed in the ‘185 patent a patentable advance over the prior art. As a result, the claims and specification let the public know that any known SCR and AMO_x catalysts can be used as long as they play their claimed role in the claimed architecture. The district court’s analysis also does not address the significance of the facts that both the claims and specification provide exemplary material compositions that are “effective” to catalyze the SCR of NO_x and the oxidation of ammonia, disclose the chemical reactions that define the “SCR function” and “NH₃ oxidation function,” and illustrate through figures, tables, and accompanying descriptions how the purportedly novel arrangement of the catalysts results in improved percent conversion of ammonia and improved nitrogen selectivity.

The intrinsic evidence in this case makes clear that the asserted advance over the prior art is in the partly-dual-layer arrangement to create a two-phase operation for performing the identified conversion processes, not in the choices of materials to perform each of the required catalytic processes. It is in this context that the question of the certainty or uncertainty experienced by a relevant skilled artisan in understanding the claims, read in light of the specification, is presented. And it is in this context that the relevant skilled artisan would be informed by the specification’s numerous examples of qualifying compositions A and B, disclosure of the stoichiometric reactions, and equating of the “composition . . . effective to catalyze” phrases with familiar

terms such as “SCR catalyst” and “AMOX catalyst.” The extrinsic evidence does not show that a person of ordinary skill in the art would lack reasonable certainty as to what compositions would qualify as an SCR or AMOX catalyst in this context. To the contrary, the record here could not support a finding of lack of such reasonable certainty. . . . This record, we conclude, does not contain intrinsic or extrinsic evidence that would support a judgment of indefiniteness.