

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

DAIKIN INDUSTRIES, LTD. and
DAIKIN AMERICA, INC.,
Petitioner,

v.

THE CHEMOURS COMPANY FC, LLC,
Patent Owner.

Case IPR2016-00452
Patent 8,147,709 B2

Before LORA M. GREEN, JO-ANNE M. KOKOSKI, and
MICHELLE N. ANKENBRAND, *Administrative Patent Judges*.

ANKENBRAND, *Administrative Patent Judge*.

DECISION
Denying Petitioner's Request for Rehearing
37 C.F.R. § 42.71

I. INTRODUCTION

Daikin Industries, Ltd. and Daikin America, Inc. (collectively, “Petitioner”) filed a Request for Rehearing (Paper 43, “Reh’g Req.”) of the Final Written Decision (Paper 42, “Final Decision” or “Final Dec.”), in which we concluded that Petitioner did not show by a preponderance of the evidence that claims 1–4, 7, and 8 of U.S. Patent No. 8,147,709 B2 (Ex. 1001, “the ’709 patent”) are unpatentable under 35 U.S.C. § 103(a) over the combination of Miller¹ and the ARI Standard.²

For the reasons that follow, we deny Petitioner’s Request for Rehearing.

II. STANDARD OF REVIEW

A request for rehearing “must specifically identify all matters the party believes the Board misapprehended or overlooked, and the place where each matter was previously addressed in a motion, an opposition, or a reply.” 37 C.F.R. § 42.71(d). The party challenging a decision bears the burden of showing that the decision should be modified. *Id.*

III. ANALYSIS

Petitioner requests rehearing to address two findings from our Final Decision. First, Petitioner argues that our Final Decision overlooked that the reactor configuration of Miller’s example 1 includes a heated, catalyst-free

¹ U.S. Publication No. 2007/0100175 A1, published May 3, 2007 (Ex. 1003).

² Air-Conditioning & Refrigeration Institute (“ARI”), 2006 Standard for Specifications for Fluorocarbon Refrigerants (Ex. 1004).

zone, like the reactor configuration utilized in Mr. Takahashi's³ experiment replicating Miller's example 1. Reh'g Req. 2–4, 6–10. Second, Petitioner asserts that we erred in determining that Petitioner's arguments regarding Dr. Sun's⁴ experiments were “inconsistent” with other arguments Petitioner made in the proceeding. *Id.* at 4, 10–15. We address each of Petitioner's arguments in turn.

A. The Reactor Configuration

Petitioner argues that the Final Decision “overlooked the crucial fact that—just as in Mr. Takahashi's reactor configuration—the reactor disclosed in Example 1 of Miller does include a heated, catalyst-free zone.” Reh'g Req. 2. More particularly, Petitioner contends that we erred in finding that the presence of an additional heated, catalyst-free zone in Mr. Takahashi's experiment constituted a material deviation from Miller's example 1, because our finding was based on the “erroneous assumption” that such a zone did not exist in the reactor configuration in Miller. *Id.* at 3, 8 (pointing to Dr. Sun's testimony regarding Miller's reactor size and configuration). Thus, argues Petitioner, the presence of a heated, catalyst-free zone in Mr. Takahashi's reactor “cannot be a material deviation from Example 1 of Miller,” given that Miller's reactor and Mr. Takahashi's reactor both include such a zone. *Id.* at 3. In other words, Petitioner contends that because both Mr. Takahashi's and Miller's reactor configurations include a heated, catalyst-free zone, both would have generated the same reaction products,

³ Mr. Takahashi provided a declaration in support of the Petition and a second declaration in support of Petitioner's Reply. Ex. 1005; Ex. 1066.

⁴ Dr. Sun provided a declaration in support of Patent Owner's Response. Ex. 2016.

albeit Miller's reaction to a lesser extent because the heated, catalyst-free zone in Miller's reactor is smaller. *Id.* at 4, 9–10.

Petitioner's argument suffers from several flaws. First, Petitioner's argument is not a proper basis for rehearing, because it is raised for the first time in the Request for Rehearing. That is, Petitioner fails to identify in its Request for Rehearing where in the Petition, Reply, or any other paper, Petitioner argued that Miller's reactor configuration included a heated, catalyst-free zone that would have generated the same reaction products that Mr. Takahashi obtained from his experiment. See Reh'g Req. 2–4, 6–10. In eight pages of argument, Petitioner cites to the Reply twice. Reh'g Req. 4 (citing Reply 21–22), 6 (citing Reply 16). Page 16 of the Reply discusses Dr. Sun's experiments and refers to Mr. Takahashi's testimony that the length of his reactor “did not have a material impact on the effluent composition generated in his reproduction.” Likewise, pages 21–22 of the Reply refer to Dr. Sun's experiments as supporting Petitioner's position that the additional length of Mr. Takahashi's reactor “**cannot** account for the amount of [3,3,3-trifluoropropyne] that was generated in Mr. Takahashi's reproduction of [Miller's] Example 1.” None of the pages Petitioner cites discuss Miller's example 1 reactor configuration, or the heated, catalyst-free reaction zone that Petitioner now contends is present in Miller's configuration. Thus, even under a liberal reading, Petitioner's Reply does not set forth, or suggest, the argument Petitioner now makes in the Request for Rehearing—that Miller's example 1 includes a heated, catalyst-free zone that would have generated the same reaction products as Mr. Takahashi's reactor configuration.

A request for rehearing is not an opportunity to develop new arguments. Put simply, we could not have overlooked or misapprehended arguments that Petitioner did not present or develop cogently in the Petition or Reply.

Second, Petitioner mischaracterizes our findings with respect to Mr. Takahashi's reactor configuration. We did not find that Mr. Takahashi's configuration included a single heated, catalyst-free zone, as Petitioner suggests throughout the Request for Rehearing. *See, e.g.*, Reh'g Req. 3 (referring to "the heated, catalyst-free zone in Mr. Takahashi's reactor configuration"), 6 (stating that "the Board observed that Mr. Takahashi's configuration included a heated, catalyst-free zone"). Rather, we found that Mr. Takahashi's configuration included multiple heated, catalyst-free zones. Final Dec. 18 (explaining that Petitioner acknowledged Mr. Takahashi altered Miller's example 1 "by using a longer reactor with additional heated zones"), 20 (finding that Mr. Takahashi's reactor configuration "included additional heated regions in the reactor that had no catalyst (i.e., a catalyst-free zone both before and after the catalyst bed)"). Accordingly, Mr. Takahashi's reactor configuration provided several opportunities for dehydrofluorination to occur in the absence of the catalyst.

Third, Petitioner's argument fails to appreciate that our Final Decision did not rest solely on the fact that Mr. Takahashi's reactor configuration included additional heated, catalyst-free zones that could have generated 3,3,3-trifluoropropyne. As we explained in the Final Decision, "an experiment reproducing or recreating an example falls within the scope of that example as long as the reproduction is consistent with the teaching of the example, any deviations in the reproduced experiment are immaterial,

and *the reasons for any deviations are adequately explained.*” Final Dec. 17 (emphasis added). In determining that Petitioner did not meet its burden of showing unpatentability by a preponderance of the evidence, we found that Petitioner failed to show sufficiently that the additional reactor length and heated, catalyst-free reaction zones in Mr. Takahashi’s experiment were immaterial deviations from Miller’s example 1, *and* that Petitioner and Mr. Takahashi failed to adequately explain why Mr. Takahashi made such deviations from Miller’s example 1. Final Dec. 18.

With regard to the reactor configuration, Petitioner also asserts that although we determined Miller suggests that the presence of a heated, catalyst-free zone could have affected the reaction products Mr. Takahashi obtained, Mr. Takahashi testified that such a zone “did not have a material effect on his results” and that the reactor length was “not critical information concerning the results [he] obtained” from the experiment. Pet. 6–7. Petitioner argues that, in view of such testimony, “it is apparent that, as a worker of ordinary skill in the art, Mr. Takahashi did not believe” that the additional reactor length in his experiment was critical. *Id.* at 7. Rather, argues Petitioner, Mr. Takahashi “properly focused on the catalytic aspect of the reaction mechanism in his reproduction” of Miller’s example 1. *Id.*

We are not persuaded by Petitioner’s argument because it fails to identify matters that we overlooked or misapprehended in the Final Decision. To the contrary, we considered Petitioner’s assertions that “none of Mr. Takahashi’s deviations [to Miller’s example 1] ‘had a material effect’ on the results Mr. Takahashi obtained.” Final Dec. 17 (citing Reply 9–23). A request for rehearing is not an opportunity to express mere disagreement with our Final Decision, or with our weighing of the evidence. Accordingly,

we are not persuaded that we misapprehended or overlooked Petitioner's arguments regarding Mr. Takahashi's and Miller's reactor configurations.

B. Dr. Sun's Experiments

Petitioner argues that we "erred in concluding that [Petitioner's] arguments with regard to Dr. Sun's experiments are 'inconsistent.'" Reh'g Req. 10 (citing Final Dec. 22); *id.* at 4. In that regard, Petitioner asserts no inconsistency exists in pointing out that Dr. Sun used different starting compounds for her experiments than HFC-245cb (i.e., the starting compound in Miller's example 1) and, therefore, her opinions regarding the heated catalyst free zones were unsupported, while also arguing that Dr. Sun's experimental results cannot account for the significant amounts of 3,3,3-trifluoropropyne and additional compounds of interest produced in Mr. Takahashi's experiment. *Id.* at 12. According to Petitioner, the Final Decision overlooked: (1) that Dr. Sun's experiments 1–4 were designed to generate results to support Patent Owner's argument that additional compounds could be generated in the heated, catalyst-free zone of Mr. Takahashi's reactor configuration; (2) Dr. Sun's experiments 1–4 demonstrate that the amount of any additional compounds that might have been generated in the heated, catalyst-free zone of Mr. Takahashi's reactor was very small in comparison to the actual amounts of 3,3,3-trifluoropropyne, E-HFO-1234ze, and HFO-1243zf that Mr. Takahashi obtained; and (3) the amounts of 3,3,3-trifluoropropyne, E-HFO-1234ze, and HFO-1243zf that Mr. Takahashi obtained "must have come from the catalytic zone of Mr. Takahashi's reactor configuration." *Id.* at 12–14.

We are not persuaded by Petitioner's arguments. First, Petitioner's arguments fail to account for the fact that Petitioner filed a motion to

exclude all of Dr. Sun's experiments. Paper 32. In the Motion, Petitioner urged us to exclude Dr. Sun's experiments 1–4 from the record “because they are *irrelevant to any ground upon which trial was instituted* and include[] information whose probative value (if any) is substantially outweighed by a danger of confusing the issues.” *Id.* at 2 (emphasis added) (citing Paper 23 ¶ 6). Petitioner continued: “the compounds HCFC-123 and HFC-236ea that were used in Experiments 1–4 are not relevant to the issues in this trial. These compounds were not used in [Miller's example 1].” *Id.* (citing Ex. 1066 ¶¶ 65–68). In reply to the Motion to Exclude, Petitioner further argued that Dr. Sun's experiments 1–4 demonstrate that “HCFC-123 and HFC-236ea *behave completely differently* from HFC-245cb.” Paper 37, 2 (emphasis added). Petitioner made those same arguments in the Reply to Patent Owner's Response. Reply 12–14.

As we explained in the Final Decision (Final Dec. 21–22), and reiterate here, Petitioner's reliance on Dr. Sun's experiments 1–4, and the results thereof, is inconsistent with Petitioner's arguments that Dr. Sun's experiments 1–4 are irrelevant, prejudicial, and should be excluded from the record. Petitioner's arguments to the contrary in the Request for Rehearing express mere disagreement with our determination in the Final Decision and weighing of the evidence. As we explain above, a request for rehearing is not an opportunity to reargue positions with which we disagreed in our Final Decision.

IV. ORDER

Accordingly, it is hereby:

ORDERED that Petitioner's Request for Rehearing is *denied*.

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