

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

DYNATEMP INTERNATIONAL INC. and
FLUOROFUSION SPECIALTY CHEMICALS, INC.,
Petitioner,

v.

R 421A LLC,
Patent Owner.

IPR2023-00619
Patent 11,345,840 B2

Before CHRISTOPHER M. KAISER, KIMBERLY MCGRAW,
and BRIAN D. RANGE, *Administrative Patent Judges*.

KAISER, *Administrative Patent Judge*.

DECISION

Denying Institution of *Inter Partes* Review
Due to Disclaimer of All Challenged Claims
35 U.S.C. § 314; 37 C.F.R. § 42.107(e)

I. INTRODUCTION

A. *Background*

Dynatemp International Inc. and Fluorofusion Specialty Chemicals, Inc. (collectively, “Petitioner”) filed a petition (“Pet.”) requesting an *inter partes* review of claims 1–12 (the “challenged claims”) of U.S. Patent No. 11,345,840 B2 (“the ’840 patent”) (Ex. 1001). Paper 2, 1. R 412A LLC (“Patent Owner”) timely filed a Preliminary Response. Paper 9 (“Prelim. Resp.”).

We have authority to determine whether to institute an *inter partes* review. 35 U.S.C. § 314 (2018); 37 C.F.R. § 42.4(a) (2022). For the reasons set forth below, we do not institute an *inter partes* review.

B. *Real Parties-in-Interest*

Each party identifies itself as the real party-in-interest. Pet. 61; Paper 7, 1. Patent Owner identifies RMS of Georgia, LLC as an additional real party-in-interest. Paper 7, 1.

C. *Related Matters*

The parties identify *R421A LLC v. Dynatemp International, Inc. et al.*, Case No. 5:2020-cv-00147-FL (E.D.N.C.); *Dynatemp International, Inc. et al. v. RMS of Georgia, LLC et al. d/b/a Choice Refrigerants*, Case No. 5:2020-cv-00142-FL (E.D.N.C.); and *R421A LLC d/b/a Choice Refrigerants et al. v. BMP USA, Inc. et al.*, Case No. 8:22-cv-0225 (M.D. Fla.), as related matters. Pet. 61–62; Paper 7, 1.

D. *The ’840 Patent*

The ’840 patent, titled “Refrigerant with Lubricating Oil for Replacement of R22 Refrigerant,” issued on May 31, 2022. Ex. 1001, codes (45), (54). The patent “relates to the replacement of Refrigerant R-22 (chlorodifluoromethane) refrigerant with a blend refrigerant that is less

damaging to the ozone layer in systems designed to use Refrigerant R-22 (chlorodifluoromethane).” *Id.* at 1:24–28. “Until recently, R-22 refrigerant chlorodifluoromethane . . . was the major, if not sole refrigerant, used in residential air-conditioners, refrigerators, freezers and window air-conditioning units.” *Id.* at 1:46–50. Due to concerns about the effect of this refrigerant on the ozone layer, steps have been taken to phase out its use in refrigeration systems. *Id.* at 1:56–2:43. This has required “retrofit[ting] existing Refrigerant R-22 (chlorodifluoromethane)-based air-conditioning units with new, non-R-22 refrigerants,” but “[n]one of these replacements contain a lubricant when produced.” *Id.* at 2:44–53. In addition, “most replacements for R-22 have a markedly different temperature-pressure relationship at most operating temperatures than Refrigerant R-22 (chlorodifluoromethane).” *Id.* at 2:59–62. In contrast, the ’840 patent’s “invention provides a mixture of at least two refrigerants that are miscible with each other, and compatible with Refrigerant R-22 (chlorodifluoromethane) while at the same time possessing a temperature-pressure profile that approximates that of Refrigerant R-22 (chlorodifluoromethane).” *Id.* at 4:12–20. It “also provides a lubricant, that is compatible with both the environmentally sound refrigerant of the invention and with Refrigerant R-22 (chlorodifluoromethane).” *Id.* at 4:20–28. “[T]he refrigerant and method disclosed [in the ’840 patent] involves a mixture of pentafluoroethane and tetrafluoroethane in specific proportions,” and the lubricant is “a lubricating oil that is soluble in chlorodifluoromethane, pentafluoroethane, and 1,1,1,2-tetrafluoroethane.” *Id.* at 4:29–55.

E. Illustrative Claim

Of the challenged claims, claims 1, 5, and 9 are independent. Claim 1 is illustrative and reproduced below.

1. In an apparatus designed for use with chlorodifluoromethane refrigerant, the improvement comprising substituting the chlorodifluoromethane with a composition designed to achieve a phase change over a range of working temperatures and pressures of the apparatus, the composition consisting of a blend of tetrafluoroethane and pentafluoroethane, wherein said pentafluoroethane is present in an amount of 59% to 57% by weight and said tetrafluoroethane is present in an amount of 41% to 43% by weight of the combined weight of the pentafluoroethane and tetrafluoroethane on the basis of the combined weights of said pentafluoroethane and said tetrafluoroethane totaling 100%, and wherein the tetrafluoroethane is 1,1,1,2-tetrafluoroethane.

Ex. 1001, 10:20–32.

F. Asserted Unpatentability Challenges

Petitioner asserts that claims 1–12 are unpatentable based on the following challenges:

Claims Challenged	35 U.S.C. §	Reference(s)/Basis
1–12	102	Yoshida ¹
1–12	103	Yoshida
3, 5, 7, 11	103	Yoshida, Schnur ²
3, 5, 7, 11	103	Yoshida, Thomas ³

Petitioner relies on the declaration of Dr. Michael G. Koehler. Ex. 1003 (“Koehler Declaration”).

¹ JP-H05-117643, published May 14, 1993 (Ex. 1013).

² WO 93/24597, published Dec. 9, 1993 (Ex. 1015).

³ US 6,640,841 B2, issued Nov. 4, 2003 (Ex. 1014).

II. ANALYSIS

A. *Parties' Contentions*

Petitioner contends that claims 1–12 were anticipated by and would have been obvious in light of Yoshida, as well as that claims 3, 5, 7, and 11 would have been obvious in light of the combination of Yoshida and Schnur and the combination of Yoshida and Thomas. Pet. 20–59.

Patent Owner asserts that it “has filed a statutory disclaimer, disclaiming claims 1-12 of U.S. Patent No. 11,345,840 (the ’840 Patent) on June 28, 2023, in accordance with 35 U.S.C. § 253.” Prelim. Resp. 1. Patent Owner contends that, for this reason, “the *inter partes* review should not be instituted.” *Id.* at 2.

B. *Patent Owner's Statutory Disclaimer*

A patentee, whether of the whole or any sectional interest therein, may, on payment of the fee required by law, make disclaimer of any complete claim, stating therein the extent of his interest in such patent. Such disclaimer shall be in writing, and recorded in the Patent and Trademark Office; and it shall thereafter be considered as part of the original patent to the extent of the interest possessed by the disclaimant and by those claiming under him.

35 U.S.C. § 253(a). When a disclaimer is recorded in the Office, “it shall thereafter be considered as part of the original patent.” *Id.*

In an *inter partes* review, if a patent owner files a statutory disclaimer that complies with § 1.321(a) and disclaims one or more claims in a patent, “[n]o *inter partes* review will be instituted based on disclaimed claims.”

37 C.F.R. § 42.107(e). A disclaimer must meet the following requirements:

- (1) Be signed by the patentee, or an attorney or agent of record;
- (2) Identify the patent and complete claim or claims, or term being disclaimed. A disclaimer which is not a disclaimer of a complete claim or claims, or term will be refused recordation;

(3) State the present extent of patentee's ownership interest in the patent; and

(4) Be accompanied by the fee set forth in § 1.20(d).

37 C.F.R. § 1.321(a).

Here, consistent with Patent Owner's assertions, Office records reflect that Patent Owner filed a "Disclaimer in Patent Under 37 CFR 1.321(a)" on June 28, 2023. Ex. 3001 ("Disclaimer"). The Disclaimer is signed by "Jason M. Petrilla," who Patent Owner identifies as its backup counsel in this proceeding. Paper 7, 2; Ex. 3001, 1. Mr. Petrilla identifies "Patent Number 11345840" and states, "I hereby disclaim the following complete claims in the above identified patent: Claims 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, and 12." Ex. 3001, 1. He also identifies the relevant interest in the '840 patent as "100% [owner] (Reel/Frame 063595 / 0444)." *Id.* The Disclaimer provides for "[p]ayment by credit card" and authorizes the Director to charge any required fees to a deposit account. *Id.*

Based on our review of Exhibit 3001 and the Office's public records, we find that Patent Owner properly disclaimed all claims of the '840 patent, which are challenged claims 1–12 in this proceeding, and Patent Owner recorded the Disclaimer in the Office on June 28, 2023. The Disclaimer complies with the requirements of 37 C.F.R. § 1.321(a).

Because Patent Owner disclaimed all of the challenged claims in this proceeding, i.e., claims 1–12 of the '840 patent, we may not institute an *inter partes* review of the '840 patent. *See* 37 C.F.R. § 42.107(e); *Gen. Elec. Co. v. United Techs. Corp.*, IPR2017-00491, Paper 9 (PTAB July 6, 2017) (precedential). Accordingly, we deny the Petition and do not institute a trial.

III. ORDER

For the reasons given, it is:

ORDERED that the Petition is *denied* as to all challenged claims of the '840 patent, and no trial is instituted.

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