

NOTE: This disposition is nonprecedential.

**United States Court of Appeals  
for the Federal Circuit**

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**MEXICHEM AMANCO HOLDING S.A. DE C.V.,**

*Appellant*

v.

**HONEYWELL INTERNATIONAL INC.,**

*Appellee*

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2016-2084, 2016-2085, 2017-1050

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Appeals from the United States Patent and Trade-  
mark Office, Patent Trial and Appeal Board in Nos.  
95/000,574; 95/000,630; 95/002,188.

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Decided: November 17, 2017

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PATRICK J. FLEIS, Ryan, Kromholz & Manion, S.C.,  
Milwaukee, WI, argued for appellant. Also represented  
by JOSEPH A. KROMHOLZ.

LAURA BURSON, Sheppard, Mullin, Richter & Hamp-  
ton LLP, Los Angeles, CA, argued for appellee. Also  
represented by GREGG F. LOCASCIO, WILLIAM H. BURGESS,

NOAH SAMUEL FRANK, Kirkland & Ellis LLP, Washington,  
DC.

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Before PROST, *Chief Judge*, DYK and CHEN,  
*Circuit Judges*.

PROST, *Chief Judge*.

Appellant Mexichem Amanco Holding S.A. de C.V. (“Mexichem”) appeals from three final decisions of the U.S. Patent and Trademark Office’s Patent Trial and Appeal Board (“Board”). The three appeals arise from inter partes reexaminations of U.S. Patent Nos. 7,524,805 (“805 patent”); 7,825,081 (“081 patent”); and 8,148,317 (“317 patent”). During each patent’s reexamination, the Board reversed the Examiner’s rejection of certain challenged claims. The sole question presented by the parties in these appeals pertains to the Board’s construction of the term “azeotrope-like.” Because we agree with the Board’s claim construction, we affirm.

Appellee Honeywell International Inc. is the assignee of the three patents at issue, which generally relate to azeotrope-like compositions of HFO-1234 and uses thereof. ’805 patent col. 1 ll. 31–32. As examples of these compositions, the patents teach combining HFO-1234 with a component selected from the group consisting of HFC-152a, HFC-227ea, HFC-134a, and HFC-125. *Id.* at col. 3 l. 61–col. 4 l. 1. According to the patents, combining “effective amounts” of each component results in the formation of an azeotrope-like composition. *Id.* at col. 3 ll. 54–61. The patentee describes azeotrope-like behavior in each of the specifications:

Azeotrope-like compositions are constant boiling or essentially constant boiling. In other words, for azeotrope-like compositions, the composition of the vapor formed during boiling or evaporation is identical, or substantially identical, to the original

liquid composition. Thus, with boiling or evaporation, the liquid composition changes, if at all, only to a minimal or negligible extent. This is to be contrasted with non-azeotrope-like compositions in which, during boiling or evaporation, the liquid composition changes to a substantial degree.

*Id.* at col. 3 ll. 3–12; '081 patent col. 2 l. 65–col. 3 l. 7; '317 patent col. 3 l. 62–col. 4 l. 4.

Mexichem filed Requests for Reexamination with respect to each of the three patents now on appeal. After granting Mexichem's Requests for Reexamination, the Examiner construed the term "azeotrope-like" to mean "a composition containing a mixture of transHFO-1234ze and one or more of HFC-152a, HFC-227ea, HFC-134a or HFC-125." J.A. 6, 22, 38, 371, 1251, 1748. Based on this construction, the Examiner rejected certain claims as anticipated or rendered obvious by the prior art references presented. On appeal, the Board rejected the Examiner's construction and instead construed "azeotrope-like" to mean "constant boiling or essentially constant boiling." J.A. 7, 23, 39. In light of this new construction, the Board reversed the Examiner's rejections of the challenged claims.

Mexichem timely appealed. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(4)(A).

As noted above, the dispute before the court is narrow. This court finds no error in the Board's construction of "azeotrope-like." The construction is consistent with the definition provided by the patentee in the patents' specifications. *E.g.*, '805 patent col. 2 l. 59–col. 3 l. 12; see *Martek Biosciences Corp. v. Nutrinova, Inc.*, 579 F.3d 1363, 1380 (Fed. Cir. 2009) ("When a patentee explicitly defines a claim term in the patent specification, the patentee's definition controls."). Meanwhile, the construction proposed by the Examiner would read the term "azeotrope-like" out of the claims entirely, rendering the

term meaningless. *See Dell Inc. v. Acceleron, LLC*, 818 F.3d 1293, 1300 (Fed. Cir. 2016) (rejecting a construction that “[ran] counter to the claim-construction principle that meaning should be given to all of a claim’s terms”).

For the foregoing reasons, we affirm. We do not reach the question of whether the claims may be unpatentable under some other theory.

**AFFIRMED**