

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

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**YEDA RESEARCH AND DEVELOPMENT CO., LTD.,**  
*Plaintiff-Appellant*

v.

**ABBOTT GMBH & CO. KG,**  
*Defendant-Appellee*

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2015-1662

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Appeal from the United States District Court for the  
District of Columbia in No. 1:10-cv-01836-RMC, Judge  
Rosemary M. Collyer.

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**ABBOTT GMBH & CO. KG,**  
*Plaintiff-Appellee*

v.

**YEDA RESEARCH AND DEVELOPMENT CO., LTD.,**  
*Defendant-Appellant*

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2015-1663

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Appeal from the United States District Court for the District of Columbia in No. 1:00-cv-01720-RMU, Judge Ricardo M. Urbina.

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Decided: September 20, 2016

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MATTHEW NIELSEN, Marshall, Gerstein & Borun LLP, Chicago, IL, argued for plaintiff-appellant/defendant-appellant. Also represented by KEVIN M. FLOWERS, AMANDA ANTONS; ROGER L. BROWDY, RONNI JILLIONS, Browdy and Neimark PLLC, Washington, DC.

JAMES RICHARD FERGUSON, Mayer Brown, LLP, Chicago, IL, argued for defendant-appellee/plaintiff-appellee. Also represented by TODD RAY WALTERS, Buchanan Ingersoll & Rooney P.C., Alexandria, VA.

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Before REYNA, WALLACH, and HUGHES, *Circuit Judges*.

REYNA, *Circuit Judge*.

Yeda Research and Development Co., Ltd. (“Yeda”) appeals two decisions by the United States District Court for the District of Columbia—one decided in 2008 (No. 2015-1663) and the other in 2015 (No. 2015-1662). Both district court decisions reviewed determinations by the Board of Patent Appeals and Interferences regarding Yeda’s assertion that Abbott GmbH & Co. KG’s (“Abbott”) U.S. Patent No. 5,344,915 (the “915 patent”) is invalid as anticipated.

The ’915 patent’s invalidity turns on whether it benefits from the filing dates from either of two German patent applications—P39 15 072 (the “072 application”) and P39 22 089 (the “089 application”). J.A. 5006. If it does, then the field of prior art narrows to exclude the

anticipating reference. Whether the '915 patent is entitled to benefit from the '072 application's filing date depends on whether the '072 application provides adequate written description support for the invention claimed in the '915 patent.

We *affirm* the district court's 2015 decision that Abbott's '915 patent is supported by the written description of the '072 application. As this renders moot Yeda's appeal No. 2015-1663 concerning the district court's 2008 decision, we dismiss that appeal for want of jurisdiction.

## BACKGROUND

### A. Patented Technology

Abbott's '915 patent discloses a protein referred to as TBP-II. TBP-II binds to and neutralizes a protein called Tumor Necrosis Factor  $\alpha$  ("TNF $\alpha$ "), which is associated with various immunological diseases. The '915 patent has three claims. '915 patent col. 6 ll. 37–60. Claim 1 is representative:

1. A purified and isolated TNF $\alpha$ -binding protein which has a molecular weight of about 42,000 daltons and has at the N terminus the amino acid sequence

Xaa Thr Pro Tyr Ala Pro Glu Pro Gly Set  
Thr Cys Arg Leu Arg Glu

where Xaa is hydrogen, a phenylalanine residue (Phe), or the amino acid sequences Ala Phe, Val Ala Phe, Gln Val Ala Phe, Ala Gln Val Ala Phe, Pro Ala Gln Val Ala Phe or Leu Pro Ala Gln Val Ala Phe.

The U.S. application that resulted in the '915 patent was filed May 4, 1990. It claimed priority to two applications for a "novel protein"—the '072 application, filed May 9, 1989, and the '089 application, filed July 5, 1989. J.A. 5006.

The prior art in question is the Engelmann reference, which is an article published in January 1990 that describes and distinguishes the TBP-I and TBP-II proteins.<sup>1</sup> The parties do not dispute that Engelmann constitutes applicable prior art if the priority date for the '915 patent is May 1990, but not if the '915 patent benefits from the filing date of either the '072 or the '089 application. The parties do not dispute that the Engelmann reference anticipates the '915 patent if the priority date is May 1990.

Neither the '072 nor the '089 application discloses the full N-terminus sequence claimed in the '915 patent. Instead, they disclose a partial N-terminus sequence, a protocol for obtaining the protein from its biological source, and additional properties of the protein, such as molecular weight, biological activity, and degradation characteristics when exposed to trypsin. The parties agree that the only protein containing the N-terminus sequence set forth in the '072 application is TBP-II—i.e., the same protein claimed in the '915 patent. J.A. 5024.

### B. Procedural History

In 1996, the Board declared Interference No. 103,625 between Abbott's '915 patent and Yeda's Application No. 07/930,443. The Board assigned Abbott the May 1990 filing date of the application that became the '915 patent and held that the '915 patent was invalid as anticipated by Engelmann. Abbott filed suit in federal district court seeking review of the Board's final decision. In 2008, the district court granted summary judgment for Abbott, holding that the '089 patent inherently discloses the

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<sup>1</sup> Dr. Hartmut Engelmann *et al.* published "Two Tumor Necrosis Factor-Binding Proteins Purified from Human Urine" in the *Journal of Biological Chemistry* on January 16, 1990. J.A. 5009.

TBP-II protein and provides an adequate written description of the invention claimed in the '915 application. The district court vacated the Board's decision and remanded for further proceedings.

On remand, the Board reversed course. In 2010, the Board held that the '072 application sufficiently disclosed TBP-II for the '915 patent to benefit from the '072 application's May 1989 filing date. Yeda filed a district court action seeking review of the Board's 2010 determination. In 2015, the district court affirmed the Board's decision and granted Abbott summary judgment.

Yeda appeals the district court's 2008 and 2015 decisions. We have jurisdiction over these appeals pursuant to 28 U.S.C. § 1295(a)(4)(C).

#### STANDARD OF REVIEW

This court reviews de novo a district court's grant of summary judgment in an interference action. *Boston Sci. Scimed, Inc. v. Medtronic Vascular, Inc.*, 497 F.3d 1293, 1296 (Fed. Cir. 2007). We review de novo the district court's legal determinations. *See Rolls-Royce, PLC v. United Techs. Corp.*, 603 F.3d 1325, 1330 (Fed. Cir. 2010). The Board's factual findings, including those relied on by the district court, are reviewed for substantial evidence. *In re Gartside*, 203 F.3d 1305, 1311–15 (Fed. Cir. 2000). Substantial evidence exists where a reasonable mind could accept it as adequate support for a conclusion. *Id.* at 1312 (citing *Consol. Edison Co. v. NLRB*, 305 U.S. 197, 229–30 (1938)).

#### DISCUSSION

Yeda raises three arguments on appeal. First, Yeda challenges the legal standard applied by the district court to determine whether there was adequate written description support for the '915 patent in the '072 application. Second, Yeda argues that the prosecution history precludes Abbott from relying on inherent disclosure.

Third, Yeda asserts that the district court erred in holding that the Board's finding of adequate written description was supported by substantial evidence.

We first address the legal standard for written description support. In order for the claims of the '915 patent to benefit from the '072 application's filing date, the claimed invention must be disclosed by the '072 application. 35 U.S.C. §§ 112, 120; see *Kennecott Corp. v. Kyocera Int'l, Inc.*, 835 F.2d 1419, 1421 (Fed. Cir. 1987). The invention must be disclosed in a way that clearly allows a person of ordinary skill to recognize that the inventor invented what is claimed and possessed the claimed subject matter at the date of filing. *Ariad Pharmaceuticals, Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc).

Yeda argues that the district court failed to apply the correct test for determining the sufficiency of the written description. According to Yeda, Abbott must show that at the time the '072 application was filed, a person of ordinary skill in the art would have understood that the partial N-terminus sequence in the '072 application included the additional amino acids identified in the '915 patent claims at issue. Abbott responds that the district court correctly held that the '072 application need only describe and enable the TBP-II protein, and that a protein can be adequately described when a partial amino acid sequence is disclosed along with other biological characteristics.

Under the doctrine of inherent disclosure, when a specification describes an invention that has certain undisclosed yet inherent properties, that specification serves as adequate written description to support a subsequent patent application that explicitly recites the invention's inherent properties. See *Kennecott*, 835 F.2d at 1423. In this case, it is undisputed that TBP-II is the only protein with the same partial N-terminus sequence

and additional traits disclosed in the '072 application. J.A. 5024. Therefore, the '072 application inherently discloses the remaining amino acids in the N-terminus sequence of TBP-II and serves as adequate written description support for the patent claiming TBP-II. It is not necessary for an application to disclose a protein's complete N-terminus sequence in order to provide an adequate written description of that protein. Yeda relies on two cases where we declined to find inherent disclosure to argue that the doctrine of inherent disclosure does not extend to this case: *Hyatt v. Boone*, 146 F.3d 1348 (Fed. Cir. 1998) and *In re Wallach*, 378 F.3d 1330 (Fed. Cir. 2004). We disagree. Neither *Hyatt* nor *Wallach* involved the situation present in this case, where it is undisputed that the invention described in an earlier application was the exact invention claimed by the later patent.

Yeda also argues that prosecution history belies Abbott's reliance on inherent disclosure. Yeda notes that in "the context of priority determinations, the allegedly inherent limitation cannot be material to the patentability of the invention." Yeda asserts that the amino acids missing from the '072 application are material because Abbott relied upon their absence to distinguish the prior art during prosecution of the '915 patent. *See Hitzeman v. Rutter*, 243 F.3d 1345, 1355 (Fed. Cir. 2001). The prosecution history, however, does not support Yeda's argument.

During prosecution of the '915 patent, the examiner rejected claims based on prior art that disclosed a protein with the same source, weight, and function as the protein claimed in the '915 patent. J.A. 9251. Abbott relied on the Engelmann article to argue that the cited art concerned only TBP-I, and that TBP-II includes a sequence of five amino acids not present in TBP-I that match the chain recited in the '915 patent claims. J.A. 9268, 9276-77. Abbott's response did not solely rely on amino acids missing from the priority applications; three of the

five amino acids disclosed in Engelmann were disclosed in the '072 application and were themselves sufficient to distinguish TBP-I from TBP-II.

Finally, we reject Yeda's argument that the district court erred in finding that the Board's conclusion that the '072 application provides written description for the '915 patent is supported by substantial evidence. As the district court noted, the Board's decision rested on the facts that the '072 application identified nine of the fifteen amino acids of the N-terminus sequences recited in the relevant claim, as well as several biological characteristics of the protein. J.A. 5028. The parties do not dispute that no known protein other than TBP-II matches these characteristics. The district court correctly found that the Board's decision was supported by substantial evidence.

#### CONCLUSION

Because the '072 application provides an adequate written description of the protein claimed in Abbott's '915 patent, the '915 patent benefits from the priority date of the '072 application. We *affirm* the district court's 2015 decision. We *dismiss* Yeda's appeal No. 2015-1663 from the district court's 2008 decision for lack of jurisdiction, as it is now moot.

#### AFFIRMED

#### COSTS

No costs.