

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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ABIOMED, INC., ABIOMED R&D, INC., and  
ABIOMED EUROPE GMBH,  
Petitioner,

v.

MAQUET CARDIOVASCULAR, LLC,  
Patent Owner.

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Case IPR2017-02135  
Patent 7,022,100 B1

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Before BART A. GERSTENBLITH, JEREMY M. PLENZLER, and  
KEVIN W. CHERRY, *Administrative Patent Judges*.

GERSTENBLITH, *Administrative Patent Judge*.

DECISION

Denying Institution of *Inter Partes* Review  
*35 U.S.C. § 325(d); 37 C.F.R. § 42.108*  
Dismissing Petitioner's Motion for Joinder  
*35 U.S.C. § 315(c); 37 C.F.R. § 42.122(b)*

## I. INTRODUCTION

### A. *Background*

Abiomed, Inc., Abiomed R&D, Inc., and Abiomed Europe GmbH (collectively, “Petitioner”) filed a Petition (Paper 2, “Pet.”) requesting institution of *inter partes* review of claims 16 and 17 of U.S. Patent No. 7,022,100 B1 (Ex. 1001, “the ’100 patent”). Petitioner filed a Motion for Joinder concurrently with its Petition seeking to join IPR2017-01025 (“IPR1025”). Paper 3. Maquet Cardiovascular, LLC (“Patent Owner”) filed an Opposition to said Motion (Paper 7), and Petitioner filed a Reply in support of its Motion (Paper 8). Additionally, Patent Owner filed a Preliminary Response. Paper 9.

Pursuant to 35 U.S.C. § 314(a), an *inter partes* review may be instituted only if “the information presented in the petition . . . and any [preliminary] response . . . shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” *See* 37 C.F.R. § 42.108(c).

For the reasons given below, on this record, we exercise our discretion pursuant to 35 U.S.C. § 325(d) and do not institute an *inter partes* review of the ’100 patent. Additionally, for the reasons explained herein, Petitioner’s Motion for Joinder is *dismissed as moot*.

### B. *Related Proceedings*

Petitioner and Patent Owner identify a number of proceedings related to the ’100 patent and to patents related to the ’100 patent. Pet. 1–2; Paper 4, 1–3.

*C. Real Parties in Interest*

The Petition identifies “Abiomed, Inc., Abiomed R&D, Inc., and Abiomed Europe GmbH” as real parties in interest. Pet. 1. Patent Owner identifies itself, “Maquet Cardiovascular, LLC,” as the sole real party in interest. Paper 4, 1.

*D. The References*

Petitioner relies on the following references:

Unexamined Patent Application Publication No. DE 19821307 C1, published October 21, 1999 (Ex. 1045, “Sammler”);<sup>1</sup> and

International Application Publication No. WO 99/02204, published January 21, 1999 (Ex. 1004, “Aboul-Hosn”).

*E. The Asserted Grounds of Unpatentability*

Petitioner challenges the patentability of claims 16 and 17 of the ’100 patent on the following ground:

References	Basis	Claims challenged
Sammler and Aboul-Hosn	§ 103(a)	16 and 17

Petitioner supports its challenge in IPR2135 with a Declaration by John M. Collins, Ph.D., dated September 22, 2017 (Ex. 1002); an Affidavit of Pamela Stransbury, dated January 26, 2017 (Ex. 1036); a Declaration by

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<sup>1</sup> Exhibit 1065 is an English-language translation a German unexamined patent application. Exhibit 1065 also includes a translation certification that identifies WO 2014195296 A1 as the German document translated. Ex. 1065, 1. Although Petitioner does not explain the inconsistency, we assume, for purposes of this Decision, that the two German publications are the same. We refer to the English-language translation as “Sammler.”

Kiersten Batzli, dated September 22, 2017 (Ex. 1037); and an Affidavit of Susanne Leupold (Ex. 1060).

*F. The '100 Patent*

The '100 patent “relates generally to blood pumps and, more particularly, to an improved intra-vascular blood pump having a guide mechanism which provides the ability to selectively guide the intravascular pump to a desired location within a patient’s circulatory system.” Ex. 1001, 1:12–16. Figures 1 and 3 of the '100 patent are exemplary and are reproduced below.

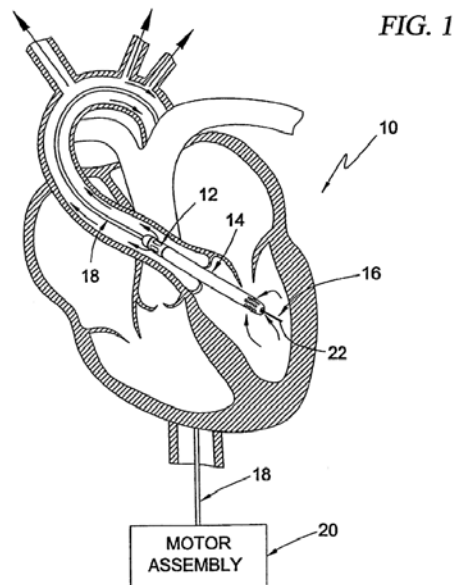


Figure 1 “is a partial sectional view of a human heart illustrating an intravascular blood pump system having an ‘over-the-wire’ type guide mechanism . . . positioned, by way of example, in a trans-valvular configuration to provide left-heart assist.” *Id.* at 5:8–13.

FIG. 3

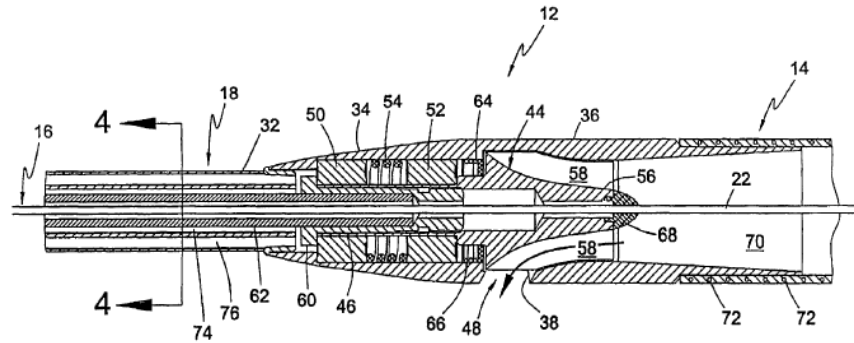


Figure 3 “is a cross-sectional view illustrating an exemplary construction of the blood pump, drive cable assembly, and cannula of the intravascular blood pump system.” *Id.* at 5:18–21.

The ’100 patent explains that its “intravascular blood pump system . . . overcomes the drawbacks of the prior art by providing a guide mechanism as part of the intravascular blood pump.” *Id.* at 6:50–53.

Intravascular blood pump system 10 includes intravascular blood pump 12, cannula 14, and over-the-wire type guide mechanism 16. *Id.* at 7:12–16.

Intravascular blood pump 12 is driven by drive cable assembly 18 and motor assembly 20. *Id.* at 7:16–17. Guide mechanism 16 is described as an “over-the-wire” guide mechanism having “a suitable guide element dimensioned to pass slideably through a central lumen extending through the drive cable 18, blood pump 12, and cannula 14.” *Id.* at 7:17–21. The guide element may include guide wire 22. *Id.* at 7:23–24.

The ’100 patent explains that “‘over-the-wire’ guide mechanism 16 provides the ability to selectively guide the blood pump 12 and cannula 14 to a predetermined position in the circulatory system of a patient.” *Id.* at 7:25–28. First, guide wire 22 is introduced into the patient’s vascular system and advanced to a desired location in the circulatory system. *Id.* at 7:30–39.

Intravascular blood pump 12 and cannula 14 are then advanced along guide wire 22 to the location in the circulatory system. *Id.* at 7:42–46.

*G. Illustrative Claim*

Claim 16 is the sole independent claim challenged in this proceeding and is reproduced below:

16. An intravascular blood pump system comprising:  
an intravascular blood pump having a cannula coupled thereto,  
a guide mechanism adapted to guide said intravascular blood pump and cannula to a predetermined location within the circulatory system of a patient, and  
a blood pressure detection mechanism to detect the pressure of the blood proximate at least one of the intravascular blood pump and cannula.

Ex. 1001, 20:20–28.

## II. CLAIM CONSTRUCTION

We do not need to construe expressly any claim terms for purposes of this Decision. *See Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) (only terms that are in controversy need to be construed, and these need be construed only to the extent necessary to resolve the controversy).

## III. ANALYSIS

*A. Motion for Joinder*

“If the Director institutes an inter partes review, the Director, in his or her discretion, may join as a party to that inter partes review any person who properly files a petition under section 311 that the Director . . . determines warrants the institution of an inter partes review under section 314.”

35 U.S.C. § 315(c). As specified in § 315(c), an *inter partes* review must be

instituted in order to join a party to that review. Petitioner seeks to join IPR1025, but an *inter partes* review was not instituted in that case. *See* IPR1025, Paper 8 (denying institution), Paper 10 (denying rehearing request). And Petitioner cannot join an *inter partes* review for which trial has been instituted. Accordingly, we *dismiss as moot* Petitioner’s Motion for Joinder.<sup>2</sup>

*B. 35 U.S.C. § 325(d)*

Section 325(d) of Title 35 of the United States Code provides: “In determining whether to institute or order a proceeding under this chapter . . . the Director may take into account whether, and reject the petition or request because, the same or substantially the same prior art or arguments previously were presented to the Office.” Patent Owner contends that we should exercise our discretion pursuant to § 325(d) because the same or substantially the same prior art and arguments previously were presented to the Office. Prelim. Resp. 16–18. In the Petition, Petitioner argues that we should not deny institution pursuant to § 325(d) because the Petition here “rel[ies] on new prior art (Sammler), that was neither pursued nor the ‘same or substantially the same prior art or arguments’ pursued in the ’1025 Proceeding.” Pet. 58. In its Motion for Joinder, however, Petitioner represents that this Petition “relies on substantially overlapping prior art to challenge the same ’100 patent as in IPR2017-01025.” Paper 3, 4.

There is no debate that Aboul-Hosn is asserted in this proceeding and was asserted in IPR1025. *See* IPR1025, Paper 2 at 4 (identifying

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<sup>2</sup> Petitioner acknowledges in its Reply in Support of its Motion for Joinder that joinder would “become moot” if *inter partes* review is not instituted in IPR1025. Paper 8, 5.

Petitioner's challenge to claims 16 and 17 based on Aboul-Hosn); *see also* Prelim. Resp. 16–18. Thus, Aboul-Hosn is the same prior art previously presented to the Office. With respect to Sammler, Petitioner cannot have it both ways. We accept Petitioner's representation in the Motion for Joinder regarding the substantially overlapping nature of the disclosure of Sammler and Aboul-Hosn (the primary reference relied upon in IPR1025).

Petitioner's argument in the Petition focuses on the lack of the specific combination of Sammler and Aboul-Hosn asserted against claims of the '100 patent. While it is true that this combination was not presented in IPR1025, Petitioner, nevertheless, contends in the Motion for Joinder that disclosure of Sammler substantially overlaps with Aboul-Hosn, and does not explain here why Sammler (and its combination with Aboul-Hosn) is not substantially the same as the prior art previously presented in IPR1025. *See* Pet. 58 (erroneously asserting that our discretion not to institute pursuant to § 325(d) is not applicable to new grounds). If the same or substantially the same prior art previously asserted is raised in a new combination (i.e., a new ground), we have discretion pursuant to § 325(d) to deny institution. Such is the case here and, thus, we exercise our discretion and deny institution pursuant to § 325(d).

#### IV. CONCLUSION

For the foregoing reasons, Petitioner's Motion for Joinder is *dismissed as moot*, and we exercise our discretion pursuant to 35 U.S.C. § 325(d) and do not institute *inter partes* review.



V. ORDER

Accordingly, it is:

ORDERED that Petitioner's Motion for Joinder (Paper 3) is *dismissed as moot*;

FURTHER ORDERED that the Petition (Paper 2) is *denied* as to the challenged claims of the '100 patent; and

FURTHER ORDERED that no *inter partes* review is instituted.

IPR2017-02135  
Patent 7,022,100 B1

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