UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ABBOTT LABORATORIES,

Petitioner,

v.

MIRACOR MEDICAL SA,

Patent Owner.

IPR2025-00113
Patent 11,376,415

PATENT OWNER MIRACOR MEDICAL SA'S OBJECTIONS TO EVIDENCE SUBMITTED DURING PRELIMINARY PROCEEDING

Pursuant to 37 C.F.R. § 42.64(b)(1), Patent Owner Miracor Medical SA respectfully submits the following objections to evidence submitted during the preliminary proceeding.

I. EXHIBIT 1003

Patent Owner objects to Exhibit 1003 because there is insufficient evidence that Mr. Crosby "is qualified as an expert by knowledge, skill, experience, training, or education" in the relevant art. Fed. R. Evid. 702. As such, his opinions will not "help the trier of fact to understand the evidence or to determine a fact in issue." Fed. R. Evid. 702(a). Mr. Crosby's testimony is not "based on sufficient facts or data." Fed. R. Evid. 702(b); *see also* 37 C.F.R. § 42.65(a), (b). Mr. Crosby's testimony is also not "the product of reliable principles and methods." Fed. R. Evid. 702(c). Nor has he "reliably applied [such] principles and methods to the facts of the case." Fed. R. Evid. 702(d).

To the extent Mr. Crosby offers any of his opinions as a lay witness (rather than an expert witness), Patent Owner objects to his testimony as improper opinion testimony. Fed. R. Evid. 701. Patent Owner further objects to Exhibit 1003 because there is insufficient evidence "to support a finding that [Mr. Crosby] has personal knowledge of" the matters to which he testifies. Fed. R. Evid. 602.

Patent Owner also objects to Exhibit 1003 and to Mr. Crosby's opinions stated therein to the extent they are based upon other inadmissible evidence.

II. EXHIBIT 1004

Patent Owner objects to Exhibit 1004 as hearsay to the extent Petitioner relies on statements in Exhibit 1004 to prove the truth of the matter(s) asserted in those statements. FED. R. EVID. 801, 802, 805.

III. EXHIBIT 1006

Patent Owner objects to Exhibit 1006 as lacking authentication because Petitioner has not produced evidence sufficient to support a finding that Exhibit 1006 is a true and correct copy of the article "Development of Terumo implantable left ventricular assist system (T-ILVAS) with a magnetically suspended centrifugal pump" purportedly published in 1999. FED. R. EVID. 901. Patent Owner further objects to Exhibit 1006 as hearsay to the extent Petitioner relies on statements in Exhibit 1006 to prove the truth of the matter(s) asserted in those statements. FED. R. EVID. 801, 802, 805. For example, any statement in Exhibit 1006 that the article was published, or published on a particular date, is inadmissible hearsay to the extent Petitioner relies on such a statement to attempt to prove that Exhibit 1006 was published on that date or otherwise. *Id*.

IV. EXHIBIT 1007

Patent Owner objects to Exhibit 1007 as lacking authentication because Petitioner has not produced evidence sufficient to support a finding that Exhibit 1007 is a true and correct copy of the article "HeartMate III: Pump Design for a Centrifugal LVAD with a Magnetically Levitated Rotor" purportedly published in 2001. FED. R. EVID. 901. Patent Owner further objects to Exhibit 1007 as hearsay to the extent Petitioner relies on statements in Exhibit 1007 to prove the truth of the matter(s) asserted in those statements. FED. R. EVID. 801, 802, 805. For example, any statement in Exhibit 1007 that the article was published, or published on a particular date, is inadmissible hearsay to the extent Petitioner relies on such a statement to attempt to prove that Exhibit 1007 was published on that date or otherwise. *Id*.

V. EXHIBIT 1009

Patent Owner objects to Exhibit 1009 as lacking relevance to any ground upon which trial was instituted. Fed. R. Evid. 401, 402. Patent Owner further objects to Exhibit 1009 because its probative value, if any, is substantially outweighed by the dangers of confusing the issues, causing undue delay, and wasting time in this trial. Fed. R. Evid. 403.

VI. EXHIBIT 1010

Patent Owner objects to Exhibit 1010 as lacking relevance to any ground upon which trial was instituted. Fed. R. Evid. 401, 402. Patent Owner further objects to Exhibit 1010 because its probative value, if any, is substantially outweighed by the dangers of confusing the issues, causing undue delay, and wasting time in this trial. Fed. R. Evid. 403.

Patent Owner also objects to Exhibit 1010 as lacking authentication because Petitioner has not produced evidence sufficient to support a finding that Exhibit 1010 is a true and correct copy of the article "Total Heart Replacement with Dual Centrifugal Ventricular Assist Devices" purportedly published in 2005. FED. R. EVID. 901. Patent Owner further objects to Exhibit 1010 as hearsay to the extent Petitioner relies on statements in Exhibit 1010 to prove the truth of the matter(s) asserted in those statements. FED. R. EVID. 801, 802, 805.

VII. EXHIBIT 1011

Patent Owner objects to Exhibit 1011 as lacking authentication because Petitioner has not produced evidence sufficient to support a finding that Exhibit 1011 is a true and correct copy of the article "Centrifugal pump without bearings or seals" purportedly published in 2002. FED. R. EVID. 901. Patent Owner further objects to Exhibit 1011 as hearsay to the extent Petitioner relies on statements in

Exhibit 1011 to prove the truth of the matter(s) asserted in those statements. FED. R. EVID. 801, 802, 805. Patent Owner also objects to Exhibit 1011 because its probative value is substantially outweighed by the dangers of confusing the issues, causing undue delay, and wasting time in this trial. Fed. R. Evid. 403.

VIII. EXHIBIT 1012

Patent Owner objects to Exhibit 1012 as lacking relevance to any ground upon which trial was instituted. Fed. R. Evid. 401, 402. Patent Owner further objects to Exhibit 1012 because its probative value, if any, is substantially outweighed by the dangers of confusing the issues, causing undue delay, and wasting time in this trial. Fed. R. Evid. 403.

Patent Owner also objects to Exhibit 1012 as lacking authentication because Petitioner has not produced evidence sufficient to support a finding that Exhibit 1012 is a true and correct copy of the article "Long-Term Use of a Left Ventricular Assist Device for End-Stage Heart Failure" purportedly published in 2001. FED. R. EVID. 901. Patent Owner further objects to Exhibit 1012 as hearsay to the extent Petitioner relies on statements in Exhibit 1012 to prove the truth of the matter(s) asserted in those statements. FED. R. EVID. 801, 802, 805.

IX. EXHIBIT 1013

Patent Owner objects to Exhibit 1013 as lacking authentication because Petitioner has not produced evidence sufficient to support a finding that Exhibit 1013 is a true and correct copy of the article "HeartMate II LVAS: Patient Management Guidelines" purportedly published in 2006. FED. R. EVID. 901. Patent Owner further objects to Exhibit 1013 as hearsay to the extent Petitioner relies on statements in Exhibit 1013 to prove the truth of the matter(s) asserted in those statements. FED. R. EVID. 801, 802, 805. Patent Owner also objects to Exhibit 1013 because its probative value is substantially outweighed by the dangers of confusing the issues, causing undue delay, and wasting time in this trial. Fed. R. Evid. 403.

X. EXHIBIT 1014

Patent Owner objects to Exhibit 1014 as lacking relevance to any ground upon which trial was instituted. Fed. R. Evid. 401, 402. Patent Owner further objects to Exhibit 1014 because its probative value, if any, is substantially outweighed by the dangers of confusing the issues, causing undue delay, and wasting time in this trial. Fed. R. Evid. 403.

Patent Owner also objects to Exhibit 1014 as lacking authentication because Petitioner has not produced evidence sufficient to support a finding that Exhibit

1014 is a true and correct copy of the article "Comparison of infection complications between continuous flow and pulsatile flow left ventricular assist devices" purportedly published in 2007. FED. R. EVID. 901. Patent Owner further objects to Exhibit 1014 as hearsay to the extent Petitioner relies on statements in Exhibit 1014 to prove the truth of the matter(s) asserted in those statements. FED. R. EVID. 801, 802, 805.

XI. EXHIBIT 1015

Patent Owner objects to Exhibit 1015 as lacking relevance to any ground upon which trial was instituted. Fed. R. Evid. 401, 402. Patent Owner further objects to Exhibit 1015 because its probative value, if any, is substantially outweighed by the dangers of confusing the issues, causing undue delay, and wasting time in this trial. Fed. R. Evid. 403.

Patent Owner also objects to Exhibit 1015 as lacking authentication because Petitioner has not produced evidence sufficient to support a finding that Exhibit 1015 is a true and correct copy of the abstract "Heartware – A Novel Miniaturized Passive Maglev Centrifugal VAD" purportedly published in 2004. FED. R. EVID. 901. Patent Owner further objects to Exhibit 1015 as hearsay to the extent Petitioner relies on statements in Exhibit 1015 to prove the truth of the matter(s) asserted in those statements. FED. R. EVID. 801, 802, 805.

XII. EXHIBIT 1016

Patent Owner objects to Exhibit 1016 as lacking relevance to any ground upon which trial was instituted. Fed. R. Evid. 401, 402. Patent Owner further objects to Exhibit 1016 because its probative value, if any, is substantially outweighed by the dangers of confusing the issues, causing undue delay, and wasting time in this trial. Fed. R. Evid. 403.

Patent Owner also objects to Exhibit 1016 as lacking authentication because Petitioner has not produced evidence sufficient to support a finding that Exhibit 1016 is a true and correct copy of the article "Permanent magnetic-levitation of rotating impeller: a decisive breakthrough in the centrifugal pump" purportedly published in 2002. FED. R. EVID. 901. Patent Owner further objects to Exhibit 1016 as hearsay to the extent Petitioner relies on statements in Exhibit 1016 to prove the truth of the matter(s) asserted in those statements. FED. R. EVID. 801, 802, 805.

XIII. EXHIBIT 1017

Patent Owner objects to Exhibit 1017 as lacking relevance to any ground upon which trial was instituted. Fed. R. Evid. 401, 402. Patent Owner further objects to Exhibit 1017 because its probative value, if any, is substantially

outweighed by the dangers of confusing the issues, causing undue delay, and wasting time in this trial. Fed. R. Evid. 403.

Patent Owner also objects to Exhibit 1017 as lacking authentication because Petitioner has not produced evidence sufficient to support a finding that Exhibit 1017 is a true and correct copy of the article "Chronic Animal Experiment with Magnetically Suspended Centrifugal Pump" purportedly published in 1997. FED. R. EVID. 901. Patent Owner further objects to Exhibit 1017 as hearsay to the extent Petitioner relies on statements in Exhibit 1017 to prove the truth of the matter(s) asserted in those statements. FED. R. EVID. 801, 802, 805.

XIV. EXHIBIT 1018

Patent Owner objects to Exhibit 1018 as lacking relevance to any ground upon which trial was instituted. Fed. R. Evid. 401, 402. Patent Owner further objects to Exhibit 1018 because its probative value, if any, is substantially outweighed by the dangers of confusing the issues, causing undue delay, and wasting time in this trial. Fed. R. Evid. 403.

XV. EXHIBIT 1019

Patent Owner objects to Exhibit 1019 as lacking relevance to any ground upon which trial was instituted. Fed. R. Evid. 401, 402. Patent Owner further objects to Exhibit 1019 because its probative value, if any, is substantially

outweighed by the dangers of confusing the issues, causing undue delay, and wasting time in this trial. Fed. R. Evid. 403.

XVI. EXHIBIT 1020

Patent Owner objects to Exhibit 1020 as lacking relevance to any ground upon which trial was instituted. Fed. R. Evid. 401, 402. Patent Owner further objects to Exhibit 1020 because its probative value, if any, is substantially outweighed by the dangers of confusing the issues, causing undue delay, and wasting time in this trial. Fed. R. Evid. 403.

Patent Owner also objects to Exhibit 1020 as lacking authentication because Petitioner has not produced evidence sufficient to support a finding that Exhibit 1020 is a true and correct copy of the book "Magnetos for Automobilists" purportedly published in 1907. FED. R. EVID. 901. Patent Owner further objects to Exhibit 1020 as hearsay to the extent Petitioner relies on statements in Exhibit 1020 to prove the truth of the matter(s) asserted in those statements. FED. R. EVID. 801, 802, 805.

XVII. EXHIBIT 1021

Patent Owner objects to Exhibit 1021 as lacking relevance to any ground upon which trial was instituted. Fed. R. Evid. 401, 402. Patent Owner further objects to Exhibit 1021 because its probative value, if any, is substantially

outweighed by the dangers of confusing the issues, causing undue delay, and wasting time in this trial. Fed. R. Evid. 403.

Patent Owner also objects to Exhibit 1021 as lacking authentication because Petitioner has not produced evidence sufficient to support a finding that Exhibit 1021 is a true and correct copy of the webpage found at https://en.wikipedia.org/wiki/Ignition_magneto (on October 28, 2024 or any other date). FED. R. EVID. 901. Patent Owner further objects to Exhibit 1021 as hearsay to the extent Petitioner relies on statements in Exhibit 1021 to prove the truth of the matter(s) asserted in those statements. FED. R. EVID. 801, 802, 805.

XVIII. EXHIBIT 1022

Patent Owner objects to Exhibit 1022 as lacking relevance to any ground upon which trial was instituted. Fed. R. Evid. 401, 402. Patent Owner further objects to Exhibit 1022 because its probative value, if any, is substantially outweighed by the dangers of confusing the issues, causing undue delay, and wasting time in this trial. Fed. R. Evid. 403.

Patent Owner also objects to Exhibit 1022 as lacking authentication because Petitioner has not produced evidence sufficient to support a finding that Exhibit 1022 is a true and correct copy of the article "Magnetically Suspended Centrifugal Blood Pump with an Axially Levitated Motor" purportedly published in 2003.

FED. R. EVID. 901. Patent Owner further objects to Exhibit 1022 as hearsay to the extent Petitioner relies on statements in Exhibit 1022 to prove the truth of the matter(s) asserted in those statements. FED. R. EVID. 801, 802, 805.

XIX. EXHIBIT 1023

Patent Owner objects to Exhibit 1023 as lacking relevance to any ground upon which trial was instituted. Fed. R. Evid. 401, 402. Patent Owner further objects to Exhibit 1023 because its probative value, if any, is substantially outweighed by the dangers of confusing the issues, causing undue delay, and wasting time in this trial. Fed. R. Evid. 403.

XX. EXHIBIT 1024

Patent Owner objects to Exhibit 1024 as lacking relevance to any ground upon which trial was instituted. Fed. R. Evid. 401, 402. Patent Owner further objects to Exhibit 1024 because its probative value, if any, is substantially outweighed by the dangers of confusing the issues, causing undue delay, and wasting time in this trial. Fed. R. Evid. 403.

XXI. EXHIBIT 1025

Patent Owner objects to Exhibit 1025 as lacking relevance to any ground upon which trial was instituted. Fed. R. Evid. 401, 402. Patent Owner further

objects to Exhibit 1025 because its probative value, if any, is substantially outweighed by the dangers of confusing the issues, causing undue delay, and wasting time in this trial. Fed. R. Evid. 403.

XXII. EXHIBIT 1026

Patent Owner objects to Exhibit 1026 as lacking relevance to any ground upon which trial was instituted. Fed. R. Evid. 401, 402. Patent Owner further objects to Exhibit 1026 because its probative value, if any, is substantially outweighed by the dangers of confusing the issues, causing undue delay, and wasting time in this trial. Fed. R. Evid. 403.

XXIII. EXHIBIT 1027

Patent Owner objects to Exhibit 1027 as lacking relevance to any ground upon which trial was instituted. Fed. R. Evid. 401, 402. Patent Owner further objects to Exhibit 1027 because its probative value, if any, is substantially outweighed by the dangers of confusing the issues, causing undue delay, and wasting time in this trial. Fed. R. Evid. 403.

XXIV. EXHIBIT 1028

Patent Owner objects to Exhibit 1028 as lacking relevance to any ground upon which trial was instituted. Fed. R. Evid. 401, 402. Patent Owner further

objects to Exhibit 1028 because its probative value, if any, is substantially outweighed by the dangers of confusing the issues, causing undue delay, and wasting time in this trial. Fed. R. Evid. 403.

Patent Owner also objects to Exhibit 1028 as lacking authentication because Petitioner has not produced evidence sufficient to support a finding that Exhibit 1028 is a true and correct copy of the article "Prototype Continuous Flow Ventricular Assist Device Supported on Magnetic Bearings" purportedly published in 1996. FED. R. EVID. 901. Patent Owner further objects to Exhibit 1028 as hearsay to the extent Petitioner relies on statements in Exhibit 1028 to prove the truth of the matter(s) asserted in those statements. FED. R. EVID. 801, 802, 805.

XXV. EXHIBIT 1029

Patent Owner objects to Exhibit 1029 as lacking relevance to any ground upon which trial was instituted. Fed. R. Evid. 401, 402. Patent Owner further objects to Exhibit 1029 because its probative value, if any, is substantially outweighed by the dangers of confusing the issues, causing undue delay, and wasting time in this trial. Fed. R. Evid. 403.

Patent Owner also objects to Exhibit 1029 as lacking authentication because Petitioner has not produced evidence sufficient to support a finding that Exhibit 1029 is a true and correct copy of the article "Design Considerations for

Bearingless Rotary Pumps" purportedly published in 1997. FED. R. EVID. 901. Patent Owner further objects to Exhibit 1029 as hearsay to the extent Petitioner relies on statements in Exhibit 1029 to prove the truth of the matter(s) asserted in those statements. FED. R. EVID. 801, 802, 805.

XXVI. EXHIBIT 1030

Patent Owner objects to Exhibit 1030 because there is insufficient evidence "to support a finding that [Dr. Hall-Ellis] has personal knowledge of" the matters to which she testifies, including the alleged authenticity and dates of public accessibility of Exhibits 1006 and 1007. Fed. R. Evid. 602.

To the extent Dr. Hall-Ellis testifies as a lay witness, Patent Owner objects to her testimony as improper opinion testimony. Fed. R. Evid. 701. To the extent Dr. Hall-Ellis testifies as an expert witness, Patent Owner objects to her testimony because there is insufficient evidence that she "is qualified as an expert by knowledge, skill, experience, training, or education" with regard to the matters on which she testifies. Fed. R. Evid. 702. Furthermore, her opinions will not "help the trier of fact to understand the evidence or to determine a fact in issue" and do not appear to be "based on sufficient facts or data" or "the product of reliable principles and methods . . . reliably applied . . . to the facts of the case." Fed. R. Evid. 702; *see also* 37 C.F.R. § 42.65(a), (b). Patent Owner further objects to

Exhibit 1030 because the probative value of Dr. Hall-Ellis' testimony, if any, is substantially outweighed by the dangers of confusing the issues, causing undue delay, and wasting time in this trial. Fed. R. Evid. 403.

Patent Owner also objects to Exhibit 1030 and to Dr. Hall-Ellis' opinions stated therein to the extent they are based upon other inadmissible evidence. Patent Owner objects to Attachments 1A-2B in Exhibit 1030 as hearsay. FED. R. EVID. 801, 802, 805.

XXVII. EXHIBIT 1031

Patent Owner objects to Exhibit 1031 as lacking relevance to any ground upon which trial was instituted. Fed. R. Evid. 401, 402. Patent Owner further objects to Exhibit 1031 because its probative value, if any, is substantially outweighed by the dangers of confusing the issues, causing undue delay, and wasting time in this trial. Fed. R. Evid. 403.

Respectfully submitted,

Date: June 23, 2025

/Joshua P. Larsen/

Joshua P. Larsen
Reg. No. 62,761

Lead Counsel for Patent Owner
Miracor Medical SA

Barnes & Thornburg LLP
11 South Meridian Street
Indianapolis, Indiana 46204
Telephone: (317) 231-6422
Facsimile: (317) 231-7433
E-mail: joshua.larsen@btlaw.com

CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), the undersigned certifies that on this 23d day of June 2025, I caused a true and correct copy of the foregoing PATENT OWNER MIRACOR MEDICAL SA'S OBJECTIONS TO EVIDENCE SUBMITTED DURING PRELIMINARY PROCEEDING to be served via e-mail on the following counsel for Petitioner:

Scott M. Border
sborder@winston.com
Charles B. Klein
cklein@winston.com
Saranya Raghavan
sraghavan@winston.com
Nimalka R. Wickramasekera
nwickramasekra@winston.com

/Joshua P. Larsen/
Joshua P. Larsen
Reg. No. 62,761

Lead Counsel for Patent Owner
Miracor Medical SA