EXPERT REPORT OF DR. BRUCE E. VAN DAM REGARDING VALIDITY OF THE ASSERTED CLAIMS OF U.S. PATENT NO. 5,860,973

Warsaw Orthopedic, Inc. v. NuVasive, Inc.

CONTAINS CONFIDENTIAL INFORMATION

I. INTRODUCTION

1. I have been engaged by NuVasive to review and analyze the evidence in this case and provide opinions relating to the invalidity and non-infringement of the asserted claims of U.S. Patent No. 5,860,973 (the "'973 patent"). This report summarizes my analysis and conclusions regarding invalidity.

2. The opinions I express in this report are based on my background and experience, along with my review of certain pleadings, documents, products, and deposition testimony. In performing my analysis, I have reviewed and applied the Court's April 1, 2010 claim constructions for certain terms in the '973 patent. For other terms, I have applied what I believe to be the proper meaning; in the alternative, I have also applied the interpretations proposed by Warsaw Orthopedic ("Warsaw") and/or the interpretations which I infer from Warsaw's Infringement Contentions. While I do not agree with Warsaw's proposed or implied interpretations where they differ from my own, if Warsaw's interpretations are accepted by the Court or jury for purposes of assessing infringement, then I understand the same interpretations must apply for purposes of assessing invalidity as well.

3. If called to testify in this matter, I expect to offer the opinions expressed in this report and the basis for those opinions. I may modify or supplement the opinions that I express in this report if additional evidence or information comes to my attention. I may modify or supplement my opinions in view of arguments made by any person retained by Warsaw, including its counsel and anyone it engages to provide opinions. I may also modify or supplement my opinions if the Court provides the litigants with any additional pertinent rulings.

4. If called to testify in this matter, I may use documents and/or devices to help me explain my opinions. I may also prepare and use graphics, photographs, video recordings, test

data and other presentation aids to help me explain my opinions. I may also use graphics and other presentation aids prepared by other witnesses to help me explain my opinions. I may assist in the development of animations, demonstration materials, and in-court demonstrations to support and explain my opinions. At or before trial, I may use any of the materials referred to in this report (e.g., any of the documents, data, and other information reviewed by me or made available to me) as exhibits to support my opinions. I may also create summaries of documents, data, and other information reviewed by me, or made available to me, to support my opinions. At trial, I may convey my testimony using images, diagrams, animations, or other demonstratives. Finally, with the permission of the Court, I may offer tutorial information at or before trial regarding anterior spinal implants (e.g., the history of spinal implants and procedures).

5. I am being compensated for my time spent as an expert on this case at my standard consulting rate of \$500 per hour. My compensation as an expert in this matter is in no way dependent upon the results of any investigations I undertake, the substance of any opinion I express, or the ultimate outcome of this case.

II. SUMMARY OF CONCLUSIONS

OCKF

6. My opinions here are based on my understanding of United States patent laws, as provided to me by NuVasive's attorneys, on my examination and consideration of the materials I reviewed (listed in "Materials Considered" section below), and on my personal knowledge of and experience with spinal implants. In my opinion, the subject matter of the asserted claims of the '973 patent (claims 24, 25, 35, 41, 42, 50, 52, 57, 59, and 61) is disclosed in the prior art references identified below, and, therefore, these asserted claims are invalid as either anticipated or obvious. Specifically, it is my opinion that:

a. Each of the limitations found in the asserted claims of the '973 patent is taught by U.S. Patent No. 5,192,327 issued to Brantigan (the "Brantgan '327 patent") either alone or in combination with U.S. Patent No. 5,397,364 to Kozak, U.S. Patent No. 4,834,757 to Brantigan, WO 92/14423 to Pisharodi, WO 90/00037 to Michelson and/or U.S. Patent No. 5,015,247 to Michelson, rendering each of the claims invalid as anticipated or obvious.

b. Each of the limitations found in the asserted claims of the '973 patent is taught by the Brantigan Anterior I/F Cage either alone or in combination with U.S. Patent No. 5,015,247 to Michelson, WO 90/00037 to Michelson and/or U.S. Patent No. 5,397,364 to Kozak, rendering each of the claims invalid as anticipated or obvious.

c. Each of the limitations found in the asserted claims of the '973 patent is taught by U.S. Patent No. 4,834,757 to Brantigan (the "Brantigan '757 patent") either alone or in combination with U.S. Patent No. 5,015,247 to Michelson, U.S. Patent No. 5,192,327 to Brantigan and/or U.S. Patent No. 5,397,364 to Kozak, rendering each of the claims invalid as anticipated or obvious.

d. Each of the limitations found in the asserted claims of the '973 patent is taught by the Brantigan I/F Cage either alone or in combination with U.S. Patent No. 5,015,247 to Michelson and/or U.S. Patent No. 5,397,364 to Kozak, rendering each of the claims invalid as anticipated or obvious.

e. Each of the limitations found in the asserted claims of the '973 patent is taught by U.S. Patent No. 5,015,247 to Michelson (the "Michelson '247 patent") either alone or in combination with U.S. Patent No. 4,834,757 to Brantigan, U.S. Patent No.

5,397,364 to Kozak and/or WO 92/14423 to Pisharodi, rendering each of the claims invalid as anticipated or obvious.

f. Each of the limitations found in the asserted claims of the '973 patent is taught by the BAK Cage either alone or in combination with U.S. Patent No. 4,834,757 to Brantigan, U.S. Patent No. 5,015,247 to Michelson, U.S. Patent No. 5,397,364 to Kozak and/or WO 92/14423 to Pisharodi, rendering each of the claims invalid as anticipated or obvious.

g. Each of the limitations found in the asserted claims of the '973 patent is taught by the implants offered for sale and sold by Dezider Imre to Dr. Michelson on or before January 4, 1994, either alone or in combination with U.S. Patent No. 4,834,757 to Brantigan, U.S. Patent No. 5,397,364 to Kozak and/or WO 92/14423 to Pisharodi, rendering each of the claims invalid as anticipated or obvious.

h. Each of the limitations found in the asserted claims of the '973 patent is taught by WO 90/00037 to Michelson (the "Michelson PCT publication") either alone or in combination with WO 92/14423 to Pisharodi, rendering each of the claims invalid as anticipated or obvious.

i. Each of the limitations found in the asserted claims of the '973 patent is taught by U.S. Patent No. 4,501,269 to Bagby (the "Bagby patent") either alone or in combination with U.S. Patent No. 4,834,757 to Brantigan, U.S. Patent No. 5,192,327 to Brantigan, U.S. Patent No. 5,397,364 to Kozak and/or WO 92/14423 to Pisharodi, rendering each of the claims invalid as anticipated or obvious.

j. Each of the limitations found in the asserted claims of the '973 patent is taught by the article titled "Some Additional Suggestions for an Intervertebral Disc

DOCKET A L A R M



Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.