## UNITED STATES PATENT AND TRADEMARK OFFICE

# **BEFORE THE PATENT TRIAL AND APPEAL BOARD**

**REGENERON PHARMACEUTICALS, INC.,** Petitioner

v.

NOVARTIS PHARMA AG, NOVARTIS TECHNOLOGY LLC, NOVARTIS PHARMACEUTICALS CORPORATION, Patent Owner

> Case IPR2021-00816 Patent 9,220,631

DECLARATION OF JAMES E. MALACKOWSKI, IN SUPPORT OF PATENT OWNER RESPONSE

> Novartis Exhibit 2205.001 Regeneron v. Novartis, IPR2021-00816

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## I. INTRODUCTION

 I, James E. Malackowski, have been retained by Novartis Pharma AG, Novartis Technology LLC, and Novartis Pharmaceuticals Corp. (collectively, "Patent Owner" or "Novartis") as an independent expert witness in the abovecaptioned *inter partes* review ("IPR"), in which Petitioner Regeneron Pharmaceuticals, Inc. ("Petitioner" or "Regeneron") has requested that the U.S. Patent and Trademark Office cancel as unpatentable all claims of U.S. Patent No. 9,220,631 ("the '631 Patent"). This declaration sets forth my opinions based on the materials I have considered and my knowledge, education, skills, training, and experience.

 I provide this declaration to provide my opinions regarding certain secondary considerations of non-obviousness concerning the '631 Patent, specifically commercial success and licensing. In order to perform this evaluation, I have reviewed certain accounting, financial, marketing, licensing, and other business data and related information in connection with this litigation.

## II. QUALIFICATIONS AND COMPENSATION

3. I am the Co-Founder and Chief Executive Officer of Ocean Tomo, LLC, the Intellectual Capital Merchant Banc<sup>™</sup> firm providing industry leading financial products and services related to intellectual property including financial expert testimony, valuation, strategy consulting, patent analytics, investment

> Novartis Exhibit 2205.003 Regeneron v. Novartis, IPR2021-00816

management, and transaction brokerage. Ocean Tomo assists clients – corporations, law firms, governments and institutional investors – in realizing Intellectual Capital Equity<sup>®</sup> value broadly defined. Subsidiaries of Ocean Tomo include Ocean Tomo Investments Group, LLC, a registered broker dealer, and Ocean Tomo International (HK) Ltd.

I am a founding and continuous member of the IP Hall of Fame 4. Academy. I have been recognized annually since 2007 by leading industry publications as one of the "World's Leading IP Strategists." Significantly, I have been listed among "50 Under 45" by IP Law & Business<sup>TM</sup>; included in the National Law Journal's inaugural list of 50 Intellectual Property Trailblazers & Pioneers; and named as one of "The Most Influential People in IP" by Managing Intellectual Property<sup>TM</sup>. I was named as 1 of 50 individuals, companies and institutions that framed the first 50 issues of IAM Magazine as well as 1 of 60 leading global Economics Expert Witnesses by the same publication in 2014. In 2011, I was selected by the World Economic Forum as one of less than twenty members of the Network of Global Agenda Councils to focus on questions of IP policy. In 2013, I was inducted into the Chicago Area Entrepreneurship Hall of Fame by the Institute for Entrepreneurial Studies at the University of Illinois at Chicago College of Business Administration. In 2018, I joined the Standards Development Organization Board of the Licensing Executives Society (USA &

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Canada), Inc. governing voluntary consensus-based professional practices that are guided in their development by the American National Standards Institute's (ANSI's) Essential Requirements. LES standards are designed to encourage and teach consensus practices in many of the business process aspects of intellectual capital management.

On more than fifty occasions, I have served as an expert in U.S. 5. Federal Court, U.S. Bankruptcy Court, State Court, the Ontario Superior Court of Justice, and global arbitrations on questions relating to intellectual property economics, including the subject of valuation, reasonable royalty, lost profits, price erosion, commercial success, corrective advertising, creditor allocations, Hatch-Waxman Act market exclusivity, business significance of licensing terms including RAND obligations, venture financing, and equities of a potential injunction. My experience extends to matters of general business valuation and commercial disputes, both domestic and foreign. I have publicly addressed policy issues affecting international trade and have provided expert opinions concerning antidumping and countervailing duties imposed by the U.S. Department of Commerce as well as testimony on domestic industry, bond, and remedies before the International Trade Commission.

6. I have substantial experience as a Board Director for leading technology corporations and research organizations as well as companies with

Novartis Exhibit 2205.005 Regeneron v. Novartis, IPR2021-00816 critical brand management issues. I am Past President of The Licensing Executives Society International, Inc. as well as its largest chapter, LES USA & Canada, Inc. Today, I focus my not-for-profit efforts with organizations leveraging science and innovation for the benefit of children, including those located in lesser developed countries. I am a Director of the Stanley Manne Children's Research Institute and have served since 2002 as a Trustee or Director of the National Inventors Hall of Fame, Inc., an organization providing summer enrichment programs for more than 160,000 students annually.

7. I am a frequent speaker on emerging technology markets and related financial measures. I have addressed mass media audiences including Bloomberg Morning Call, Bloomberg Evening Market Pulse, Bloomberg Final Word, CNBC Closing Bell, CNBC On the Money, CNBC Street Signs, CNBC World Wide Exchange, CBS News Radio, and Fox Business National Television as well as other recognized news-based internet video channels. I am a judge on behalf of the Illinois Technology Association's CityLIGHTS<sup>™</sup> Innovation Awards program, 1st Source Faculty Commercialization Awards, and have also appeared as a judge on PBS's Everyday Edisons.

8. As an inventor, I have more than twenty issued U.S. patents. I am a frequent instructor for graduate studies on IP management and markets and a Summa Cum Laude graduate of the University of Notre Dame majoring in

Novartis Exhibit 2205.006 Regeneron v. Novartis, IPR2021-00816 accountancy and philosophy. I am Certified/Accredited in Financial Forensics, Business Valuation, and Blockchain Fundamentals. I am a Certified Licensing Professional and a Registered Certified Public Accountant in the State of Illinois.

9. My curriculum vitae is provided as Appendix 1, and provides further information about my experience, expertise, and presentations.

10. My payment is not contingent upon my testimony or outcome of this investigation. I have no personal interest in the outcome of this investigation.

## **III. SUMMARY OF OPINIONS**

11. In my opinion, the antibody drug product Lucentis (active ingredient ranibizumab) is an anti-vascular endothelial growth factor ("anti-VEGF") treatment sold in a pre-filled syringe ("PFS") presentation incorporating the claimed inventions of the '631 Patent that has been commercially successful. The commercial success of the Lucentis PFS is demonstrated by significant sales in the relevant market, rapid conversion of sales from vial to PFS presentation, the reversal from declining sales to increasing sales, and positive effects on market share. Additionally, it is my opinion that a nexus exists between the technology of the claimed inventions and the commercial success of the Lucentis PFS, which incorporates the patented technologies.

12. The claimed inventions of the '631 Patent have also been licensed by third-parties. Additionally, it is my opinion that a nexus exists between the technology of the claimed inventions and the licenses entered into by third-parties.

13. As a result, these secondary considerations of non-obviousness tend to indicate that the '631 Patent is not obvious.

## IV. INDUSTRY BACKGROUND

#### A. Treatments for Wet AMD

14. Wet age-related macular degeneration ("wet AMD") is an eye disease that occurs when a protein called vascular endothelial growth factor ("VEGF") impacts blood vessels in the back of the eye, causing vision loss.<sup>1</sup>

15. Currently, the most common and effective clinical treatment for wet AMD is anti-VEGF therapy, which is periodic intravitreal injection of an anti-

<sup>1</sup> Exhibit 2277 ("Treatments for Wet AMD (Advanced Neovascular AMD)," *National Eye Institute*, https://www.nei.nih.gov/learn-about-eye-health/eyeconditions-and-diseases/age-related-macular-degeneration/treatments-wet-amdadvanced-neovascular-amd); Exhibit 2204 (Declaration of Andrew Calman, Ph.D., ¶¶ 43-45).

> Novartis Exhibit 2205.008 Regeneron v. Novartis, IPR2021-00816

VEGF drug.<sup>2</sup> There are several products in the anti-VEGF market for wet AMD, including Genentech's Avastin (bevacizumab), Genentech's Lucentis (ranibizumab), Regeneron's Eylea (aflibercept), and Novartis's Beovu (brolucizumab), among others, as discussed in the following sections.

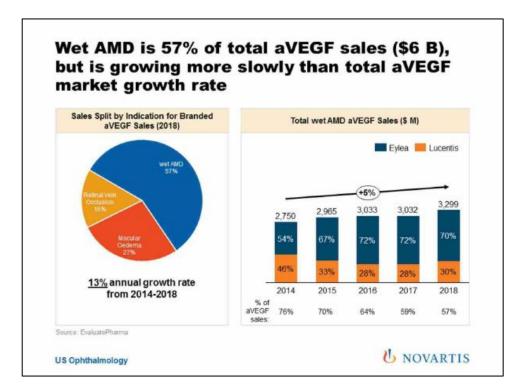


Figure 1: Wet AMD Anti-VEGF Market<sup>3</sup>

<sup>2</sup> Exhibit 2258 ("Macular Degeneration Treatments," American Macular

*Degeneration*, https://www.macular.org/treatments).

<sup>3</sup> Exhibit 2172 (NOVITC(US)00718202-335 at 205).

Novartis Exhibit 2205.009 Regeneron v. Novartis, IPR2021-00816

#### i. Avastin

16. Avastin (bevacizumab), manufactured by Genentech, is a VEGF inhibitor indicated for the treatment of metastatic colorectal cancer, glioblastoma, and several other types of cancer and is sold as a single-dose vial.<sup>4</sup>

17. Avastin is sometimes used "off-label" in patients with wet AMD.<sup>5</sup> Avastin received its first FDA approval on February 26, 2004, for treatment for metastatic colorectal cancer.<sup>6</sup>

<sup>4</sup> Exhibit 2259 ("Highlights of Prescribing Information – Avastin," *Genentech*, https://www.gene.com/download/pdf/avastin\_prescribing.pdf.)
<sup>5</sup> Exhibit 2260 ("Comparison of Anti VEGF Treatments for Wet AMD," *American Academy of Ophthalmology*, February 3, 2020, https://www.aao.org/eyehealth/diseases/avastin-eylea-lucentis-difference); Exhibit 2261 ("Age-Related Macular Degeneration: Facts & Figures," *BrightFocus Foundation*, https://www.brightfocus.org/macular/article/age-related-macular-facts-figures).
<sup>6</sup> Exhibit 2262 ("FDA Approves Avastin," *Drugs*.com, February 2004, https://www.drugs.com/newdrugs/avastin-approved-metastatic-colorectal-cancer-21.html).

> Novartis Exhibit 2205.0010 Regeneron v. Novartis, IPR2021-00816

#### ii. Lucentis

18. Lucentis (ranibizumab), manufactured by Genentech, is a VEGF inhibitor indicated for the treatment of patients with wet AMD, macular edema following retinal vein occlusion, diabetic macular edema, diabetic retinopathy, and myopic choroidal neovascularization and is sold as a single-dose vial or a single-dose PFS.<sup>7</sup>

19. Lucentis is made by Genentech in collaboration with Novartis.<sup>8</sup> In June 2003, Genentech entered into an agreement with Novartis, under which Novartis licensed the exclusive right to develop and market Lucentis outside of North America for indications related to diseases of the eye.<sup>9</sup> Novartis paid an upfront milestone payment and R&D related fees during the development of the

<sup>7</sup> Exhibit 2125 ("Highlights of Prescribing Information – Lucentis," *Genentech*,
 https://www.gene.com/download/pdf/lucentis\_prescribing.pdf).

<sup>8</sup> Exhibit 2264 ("Investor Update," Roche, March 22, 2018,

https://www.roche.com/investors/updates/inv-update-2018-03-22.htm).

<sup>9</sup> Exhibit 2265.007 (Genentech, Inc. 10-K for the year ended December 31, 2003,
p. 6, https://www.sec.gov/Archives/edgar/data/318771/000031877104000002/dna-10k\_2003.htm); Exhibit 2123 (NOVITC(CH)00007283-394).

drug, and continues to pay royalties on net sales of Lucentis products outside of North America, which Genentech manufactures and supplies to Novartis.<sup>10</sup>

20. Lucentis received FDA approval for treatment of wet AMD on June 30, 2006.<sup>11</sup> The FDA approved the Lucentis 0.5 mg PFS as a new method of administering the medicine on October 14, 2016.<sup>12</sup> Genentech's first sales of the Lucentis PFS began in January 2017.<sup>13</sup> On March 21, 2018, the FDA approved the

<sup>10</sup> Exhibit 2265.007 (Genentech, Inc. 10-K for the year ended December 31, 2003,
p. 6, https://www.sec.gov/Archives/edgar/data/318771/000031877104000002/dna-10k\_2003.htm); Exhibit 2123 (NOVITC(CH)00007283-394).

<sup>11</sup> Exhibit 2266 ("FDA Approves Lucentis (ranibizumab) for the Treatment of Wet Age-Related Macular Degeneration," *Drugs.com*, June 30, 2006,

https://www.drugs.com/newdrugs/fda-approves-lucentis-ranibizumab-wet-agerelated-macular-degeneration-327.html).

<sup>12</sup> Exhibit 2116 ("FDA Approves Genentech's Lucentis (ranibizumab) Prefilled Syringe," *Drugs.com*, October 14, 2016, https://www.drugs.com/newdrugs/fdaapproves-genentech-s-lucentis-ranibizumab-prefilled-syringe-4444.html); Exhibit 2166.009 (NOVITC(US)00389194-205 at 202).

<sup>13</sup> Exhibit 2099 (GENEITC\_1207-0000030).

Lucentis 0.3 mg PFS.<sup>14</sup> As of March 2018, PFS options were approved for all Lucentis indications.<sup>15</sup>

#### iii. Eylea

21. Eylea (aflibercept), manufactured by Regeneron, is a VEGF inhibitor indicated for treatment of patients with wet AMD, macular edema following retinal vein occlusion, diabetic macular edema, and diabetic retinopathy and is sold as a single-dose vial or a single-dose PFS.<sup>16</sup>

<sup>14</sup> Exhibit 2117 ("FDA Approves Lucentis (ranibizumab injection) 0.3 mg Prefilled
Syringe for Diabetic Macular Edema and Diabetic Retinopathy," *Genentech*,
March 21, 2018, https://www.gene.com/media/press-releases/14708/2018-0321/fda-approves-genentechs-lucentis-ranibiz).

<sup>15</sup> Exhibit 2267 ("FDA Approves Lucentis (ranibizumab injection) 0.3 mg Prefilled Syringe for Diabetic Macular Edema and Diabetic Retinopathy," *Roche*, March 22, 2018, https://www.roche.com/investors/updates/inv-update-2018-03-22.htm).
<sup>16</sup> Exhibit 2197 ("Highlights of Prescribing Information – Eylea," *Regeneron*, https://www.regeneron.com/sites/default/files/EYLEA\_FPI.pdf).

> Novartis Exhibit 2205.0013 Regeneron v. Novartis, IPR2021-00816

22. Eylea received FDA approval in a vial presentation on November 18,
2011, for treatment of wet AMD.<sup>17</sup> The FDA approved an Eylea 2.0 mg PFS on
August 13, 2019.<sup>18</sup>

# **B.** Market Transition from Vials to Prefilled Syringes

23. Intravitreal injections of anti-VEGF medications play an increasingly important role in the treatment of several retinal vascular diseases.<sup>19</sup> Initially, anti-

<sup>17</sup> Exhibit 2269 ("FDA Approves Eylea," *Drugs.com*, November 18, 2011, https://www.drugs.com/newdrugs/fda-approves-eylea-wet-age-related-maculardegeneration-2955.html).

<sup>18</sup> Exhibit 2270 ( "FDA Approves Eylea® (aflibercept) Injection Prefilled Syringe," *Regeneron*, August 13, 2019, https://investor.regeneron.com/newsreleases/news-release-details/fda-approves-eylear-aflibercept-injection-prefilledsyringe).

<sup>19</sup> Exhibit 2018 ("Prefilled syringes for intravitreal drug delivery," *National Center* for Biotechnology Information, April 23, 2019,

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6485318/); Exhibit 2204

(Declaration of Andrew Calman, Ph.D., ¶ 81).

Novartis Exhibit 2205.0014 Regeneron v. Novartis, IPR2021-00816 VEGF medications came in vials that had to be drawn up by the physician into a syringe for administration.<sup>20</sup>

24. A prefilled syringe, or PFS, is packaged in a single use, sealed sterile tray, which allows physicians to eliminate a number of steps in the preparation and administration of the anti-VEGF injection.<sup>21</sup> The use of prefilled syringes offers certain advantages over vials including reduced injection time, possible reduced risk of endophthalmitis, reduction in intraocular air bubble and silicone oil droplets, and improved precision in the volume and dose of the intravitreal drug administered.<sup>22</sup> Chris Simms, then the vice president of the U.S. Ophthalmics

<sup>20</sup> Exhibit 2018 ("Prefilled syringes for intravitreal drug delivery," *National Center for Biotechnology Information*, April 23, 2019,

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6485318/).

<sup>21</sup> Exhibit 2018 ("Prefilled syringes for intravitreal drug delivery," *National Center for Biotechnology Information*, April 23, 2019,

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6485318/); Exhibit 2204

(Declaration of Andrew Calman, Ph.D., ¶ 88).

<sup>22</sup> Exhibit 2018 ("Prefilled syringes for intravitreal drug delivery," *National Center for Biotechnology Information*, April 23, 2019,

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6485318/); Exhibit 2271

Novartis Exhibit 2205.0015 Regeneron v. Novartis, IPR2021-00816 franchise at Novartis, testified that the PFS is easier to use than the vial and requires fewer steps to prepare the drug for administration.<sup>23</sup> Mr. Simms also stated that the prefilled syringe is preferable over the vial format for customers.<sup>24</sup>

25. Since 2012, there have been three FDA approvals for PFS as a new method of administering anti-VEGF medicines: Genentech's Lucentis 0.5 mg PFS in October 2016, Genentech's Lucentis 0.3 mg PFS in March 2018, and Regeneron's Eylea 2.0 mg PFS in August 2019.<sup>25</sup>

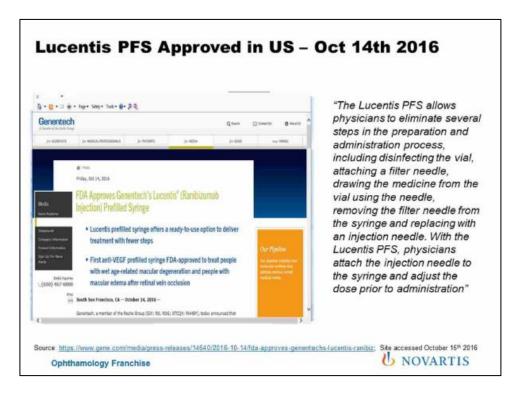
("Prefilled Syringe Delivery of Intravitreal Anti-VEGF Medications," *RetinalPhysician.com*, March 1, 2019,

https://www.retinalphysician.com/issues/2019/march-2019/prefilled-syringedelivery-of-intravitreal-anti-ve); Exhibit 2204 (Declaration of Andrew Calman, Ph.D., ¶ 105 n. 68).

<sup>23</sup> Exhibit 2272.011-.012 (Deposition of Christopher Simms, December 4, 2020, pp. 73-74).

<sup>24</sup> Exhibit 2272.010 (Deposition of Christopher Simms, December 4, 2020, p. 26).
<sup>25</sup> Exhibit 2015 ("FDA Approves Genentech's Lucentis (ranibizumab) Prefilled
Syringe," *Drugs.com*, October 14, 2016, https://www.drugs.com/newdrugs/fdaapproves-genentech-s-lucentis-ranibizumab-prefilled-syringe-4444.html); Exhibit
2267 ("FDA Approves Lucentis (ranibizumab injection) 0.3 mg Prefilled Syringe

Novartis Exhibit 2205.0016 Regeneron v. Novartis, IPR2021-00816



## **Figure 2: Benefits of Lucentis PFS<sup>26</sup>**

for Diabetic Macular Edema and Diabetic Retinopathy," *Roche*, March 22, 2018, https://www.roche.com/investors/updates/inv-update-2018-03-22.htm); Exhibit 2270 ("FDA Approves Eylea® (aflibercept) Injection Prefilled Syringe," Regeneron, August 13, 2019, https://investor.regeneron.com/news-releases/newsrelease-details/fda-approves-eylear-aflibercept-injection-prefilled-syringe). <sup>26</sup> Exhibit 2166.009 (NOVITC(US)00389194-205 at 202).

> Novartis Exhibit 2205.0017 Regeneron v. Novartis, IPR2021-00816

#### V. THE '631 PATENT

26. The '631 Patent, titled "Syringe," issued on December 29, 2015.<sup>27</sup> The application for the '631 Patent was filed on January 25, 2013. The abstract of the patent reads as follows:

The present invention relates to a syringe, particularly to a small volume syringe such as a syringe suitable for ophthalmic injections.

27. I understand that Mr. Karl R. Leinsing, expert witness for Novartis regarding syringe design, has opined that the '631 Patent is directed to the invention of a terminally-sterilized small-volume PFS for intravitreal injection of a VEGF antagonist, which includes low levels of silicone oil while maintaining low injection forces.<sup>28</sup> The '631 Patent also enabled terminal sterilization of a PFS suitable for intravitreal injection through improvements to prior art syringe designs.<sup>29</sup>

28. The '631 Patent has a single independent claim and twenty-five dependent claims. Independent claim 1 reads as follows:<sup>30</sup>

<sup>27</sup> Exhibit 1001.001 (U.S. Patent No. 9,220,631, p. 1).

<sup>28</sup> Exhibit 2001 (Declaration of Karl R. Leinsing, PE, ¶ 23).

<sup>29</sup> Exhibit 2001 (Declaration of Karl R. Leinsing, PE, ¶ 26).

<sup>30</sup> Exhibit 1001 at 19:2-13 (U.S. Patent No. 9,220,631, c. 19:2-13).

- 1. A pre-filled, terminally sterilized syringe for intravitreal injection, the syringe comprising a glass body forming a barrel, a stopper and a plunger and containing an ophthalmic solution which comprises a VEGF-antagonist, wherein:
  - (a) the syringe has a nominal maximum fill volume of between about 0.5 ml and about 1 ml,
  - *(b) the syringe barrel comprises from about 1 μg to 100 ug silicone oil,*
  - (c) the VEGF antagonist solution comprises no more than 2 particles >50 μm in diameter per ml and wherein the syringe has a stopper break loose force of less than about 11N.

29. In describing the background art and the need that the invention addressed, the '631 Patent provides the following:<sup>31</sup>

Many medicaments are delivered to a patient in a syringe from which the user can dispense the medicament. If medicament is delivered to a patient in a syringe it is often to enable the patient, or a caregiver, to inject the medicament. It is important for patient safety and medicament integrity that the syringe and the contents of that syringe are sufficiently sterile to

<sup>31</sup> Exhibit 1001 at 1:11-43 (U.S. Patent No. 9,220,631, c. 1:11-43).

Novartis Exhibit 2205.0019 Regeneron v. Novartis, IPR2021-00816 avoid infection, or other, risks for patients. Sterilisation can be achieved by terminal sterilisation in which the assembled product, typically already in its associated packaging, is sterilised using heat or a sterilising gas.

For small volume syringes, for example those for injections into the eye in which it is intended that about 0.1 ml or less of liquid is to be injected the sterilisation can pose difficulties that are not necessarily associated with larger syringes. Changes in pressure, internal or external to the syringe, can cause parts of the syringe to move unpredictably, which may alter sealing characteristics and potentially compromise sterility. Incorrect handling of the syringe can also pose risks to product sterility.

Furthermore, certain therapeutics such as biologic molecules are particularly sensitive to sterilisation, be it cold gas sterilisation, thermal sterilisation, or irradiation. Thus, a careful balancing act is required to ensure that while a suitable level of sterilisation is carried out, the syringe remains suitably sealed, such that the therapeutic is not compromised. Of course, the syringe must also remain easy to use, in that the force required to depress the plunger to administer the medicament must not be too high.

There is therefore a need for a new syringe construct which provides a robust seal for its content, but which maintains ease of use. 30. In generally describing the invention, the '631 Patent states:<sup>32</sup>

The present invention provides a pre-filled syringe, the syringe comprising a body, a stopper and a plunger, the body comprising an outlet at an outlet end and the stopper being arranged within the body such that a front surface of the stopper and the body define a variable volume chamber from which a fluid can be expelled though the outlet, the plunger comprising a plunger contact surface at a first end and a rod extending between the plunger contact surface and a rear portion, the plunger contact surface arranged to contact the stopper, such that the plunger can be used to force the stopper towards the outlet end of the body, reducing the volume of the variable volume chamber, characterised in that the fluid comprises an ophthalmic solution. In one embodiment, the ophthalmic solution comprises a VEGF-antagonist.

In one embodiment, the syringe is suitable for ophthalmic injections, more particularly intravitreal injections, and as such has a suitably small volume. The syringe may also be silicone oil free, or substantially silicone oil free, or may comprise a low level of silicone oil as lubricant. In one

<sup>32</sup> Exhibit 1001 at 1:47-68 (U.S. Patent No. 9,220,631, c. 1:47-68).

Novartis Exhibit 2205.0021 Regeneron v. Novartis, IPR2021-00816 embodiment, despite the low silicone oil level, the stopper break loose and slide force is less than 20N.

## VI. LEGAL PRINCIPLES

31. I am not an attorney and I will offer no opinions on the law. I have, however, been instructed by Counsel regarding the following legal principles related to my opinions. Based on these instructions, I have developed and applied the following understandings in arriving at the opinions and conclusions in this Declaration. The legal principles I have employed are set out below.

32. I understand the determination of whether or not an invention is obvious is a legal conclusion based on underlying factual inquiries including objective indicia of non-obviousness. Objective indicia of non-obviousness are sometimes referred to as "secondary considerations of non-obviousness." I understand that it is not permissible to use hindsight in determining whether or not a patent was obvious as of the relevant date, and that a judge will consider the existence of secondary considerations of non-obviousness, in order to mitigate the possible impact of hindsight in an obviousness analysis. Two examples of secondary considerations of non-obviousness include: 1) the commercial success of products incorporating the claimed technology and 2) licensing.

33. I have been asked to evaluate the commercial success of the Lucentis PFS, a product incorporating the '631 Patent. I understand that commercial

Novartis Exhibit 2205.0022 Regeneron v. Novartis, IPR2021-00816 success may be established by looking to the patented products of a patentee or licensee, as well as infringing products. Further, I understand that commercial success is relevant regardless of whether it takes place within the United States. Finally, I understand that independently, licenses granted under a patent, including those resulting from settlement of litigation, can also support a finding of nonobviousness.

34. In evaluating the commercial success of a patented product for the purposes of considering non-obviousness, I understand that courts often look to a standard of "significant sales in a relevant market." While there may not be a strict quantitative test to determine what constitutes "significant sales in a relevant market," I understand that commercial success should be shown in a market context rather than simply a recounting of a company's sales.

35. I also understand courts have indicated that, in order to demonstrate commercial success, the patentee must show a factually sufficient connection, or nexus, between the patented invention and the product's commercial success. In demonstrating nexus, the patentee is not necessarily required to demonstrate that its claimed inventions are "solely responsible" for commercial success of its products. Additionally, I understand that nexus is presumed to exist if the commercially successful product is coextensive with the invention disclosed and claimed in the patent.

Novartis Exhibit 2205.0023 Regeneron v. Novartis, IPR2021-00816

# VII. SECONDARY CONSIDERATIONS SUPPORTING THE NON-OBVIOUSNESS OF THE '631 PATENT

## A. Commercial Success

36. As discussed above, I understand that commercial success may be established by looking to the patented products of a patentee or licensee, as well as infringing products. I also understand that Regeneron's expert witness, Mr. Horst Koller, concludes that "the evidence does not show a nexus between the alleged commercial success of Lucentis PFS and the claims in the '631 Patent."<sup>33</sup> I disagree with Mr. Koller's conclusion for the reasons that follow.

37. I understand that the first product sold in the U.S. that practices the '631 Patent was the Lucentis PFS, sold by Genentech, a licensee to the '631

<sup>33</sup> Exhibit 1003.197 (Declaration of Horst Koller, April 16, 2021, p. 192).

Novartis Exhibit 2205.0024 Regeneron v. Novartis, IPR2021-00816 Patent.<sup>34</sup> The FDA approved the Lucentis PFS on October 14, 2016,<sup>35</sup> while Genentech's first sales of the Lucentis PFS began in January 2017.<sup>36</sup>

38. As seen in the following figure, by early 2018, Novartis recognized that Lucentis PFS "and a set the set of the set o

<sup>34</sup> Exhibit 2201 (Supplemental Declaration of Karl Leinsing, PE, ¶¶ 117 n. 14,

167); Exhibit 2204 (Declaration of Andrew Calman, Ph.D., ¶¶ 51-54).

<sup>35</sup> Exhibit 2015 ("FDA Approves Genentech's Lucentis (ranibizumab) Prefilled

Syringe," Drugs.com, October 14, 2016, https://www.drugs.com/newdrugs/fda-

approves-genentech-s-lucentis-ranibizumab-prefilled-syringe-4444.html).

<sup>36</sup> Exhibit 2099 (GENEITC\_1207-000030).

<sup>37</sup> Exhibit 2170 (NOVITC(US)00507243).

Novartis Exhibit 2205.0025 Regeneron v. Novartis, IPR2021-00816



Figure 3: Lucentis Sales Impact from PFS Launch<sup>38</sup>

39. This positive impact on sales is even more apparent when Lucentis' longer sales trends are considered. Lucentis vial sales had generally increased from 2010 through 2014,<sup>39</sup> apart from a decrease in 2012 "due to the entry of a competitor drug to treat wAMD and CRVO."<sup>40</sup> I understand this new competitor to be Regeneron's Eylea, which received FDA approval on November 18, 2011,

<sup>38</sup> Exhibit 2170 (NOVITC(US)00507243).

<sup>39</sup> Appendix 2.1.

<sup>40</sup> Exhibit 2274 ("Finance Report for 2012," Roche, p. 14,

https://www.roche.com/dam/jcr:13c45df4-9cf6-4545-a23d-

874d398aa788/en/fb12e.pdf).

Novartis Exhibit 2205.0026 Regeneron v. Novartis, IPR2021-00816 for treatment of wet AMD.<sup>41</sup> Beginning in 2015 Lucentis vial sales began to decline. In 2015, Roche attributed this decline to "strong competition."<sup>42</sup> In 2016, Roche again attributed the continuing decline in Lucentis sales to "competitive pressure."<sup>43</sup> However, in 2017, Lucentis sales "increased by 1% in the US, mainly driven by the launch of prefilled syringes" and growth in new indications.<sup>44</sup> In 2018, Lucentis sales generated more substantial growth when "Lucentis sales increased by 18% due to the ongoing rollout of prefilled syringes, with increased

<sup>41</sup> Exhibit 2269 ("FDA Approves Eylea," *Drugs.com*, November 18, 2011, https://www.drugs.com/newdrugs/fda-approves-eylea-wet-age-related-maculardegeneration-2955.html).

<sup>42</sup> Exhibit 2275 ("Finance Report for 2015," *Roche*, pp. 5, 13, https://www.roche.com/dam/jcr:74af99eb-b51a-4f13-88b2-aacaf9f53c0c/en/fb15e.pdf).

<sup>43</sup> Exhibit 2161 ("Finance Report for 2016," *Roche*, pp. 5, 13, https://www.roche.com/dam/jcr:6ddcec16-c658-48b2-82b5-4ed426c14ac8/en/fb16e.pdf).

<sup>44</sup> Exhibit 2276 ("Finance Report for 2017," Roche, p. 15,

https://www.roche.com/dam/jcr:b70415c0-954f-4a2a-a0e2-

47f94bd280e0/en/fb17e.pdf).

market share in all approved indications.<sup>45</sup> In 2019, the growth trend continued as "sales grew 8% driven by increased market share across all indications and the ongoing rollout of prefilled syringes.<sup>46</sup> As seen in the figure below, Genentech's launch of the Lucentis PFS enabled it to transition from declining annual sales to increasing annual sales.

<sup>45</sup> Exhibit 2162 ("Finance Report for 2018," Roche, p. 15,

https://www.roche.com/dam/jcr:933329c4-4564-4b17-a29b-

246ac7e617d5/en/fb18e.pdf); Exhibit 2167 (NOVITC(US)00394737-792 at 750).

<sup>46</sup> Exhibit 2163 ("Finance Report for 2019," Roche, p. 15,

https://www.roche.com/dam/jcr:1e6cfce4-2333-4ed6-b98a-

f6b62809221d/en/fb19e.pdf).

Novartis Exhibit 2205.0028 Regeneron v. Novartis, IPR2021-00816

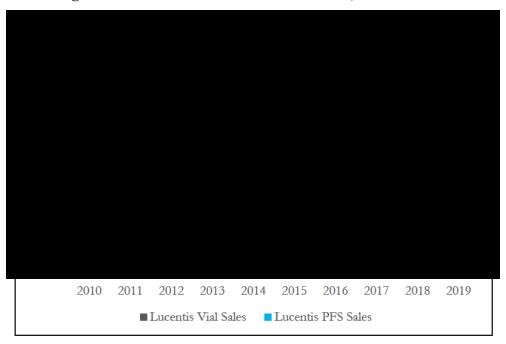


Figure 4: Genentech U.S. Lucentis Sales, 2010 - 201947

40. Additionally, as seen in the figure above, Lucentis PFS quickly

replaced Lucentis vial sales, thereby both replacing the vial product and generating more sales revenue than had been previously realized with the vial product.<sup>48</sup> By September 2020,

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41. As seen in the following figures, various Novartis internal models of the wet AMD market in the United States indicate that starting in 2017, with the

<sup>&</sup>lt;sup>47</sup> Appendix 2.1.

<sup>&</sup>lt;sup>48</sup> Appendix 2.1.

<sup>&</sup>lt;sup>49</sup> Exhibit 2099 (GENEITC\_1207-0000030).

launch of the Lucentis PFS, the patient share of Lucentis ended a multi-year decline to stabilize or increase, depending on the model.

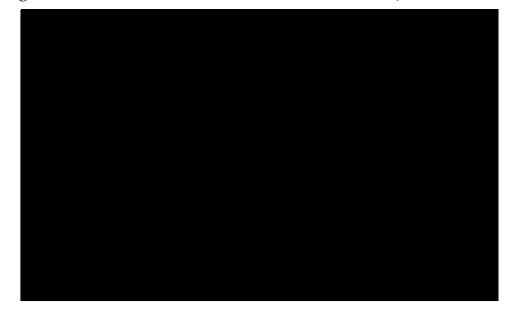


Figure 5: Lucentis Wet AMD Patient Share Stabilizes, 2010 – 2019<sup>50</sup>

<sup>&</sup>lt;sup>50</sup> Exhibit 2169 (NOVITC(US)00395565, tab "USA\_wAMD"). Patient share data starting around cell F1127.

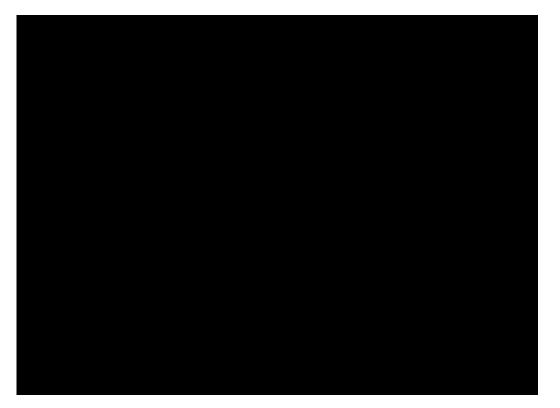
Figure 6: Lucentis Wet AMD Patient Share Increases, 2010 – 2019<sup>51</sup>

42. Similarly, Novartis internal documents indicate that the launch of Lucentis PFS "helped differentiate Lucentis thereby minimizing [market share] erosion due to competition," as seen in the following figure.<sup>52</sup>

<sup>&</sup>lt;sup>51</sup> Exhibit 2168 (NOVITC(US)00395564, tab "USA\_wAMD"). Patient share data starting around cell F1127.

<sup>&</sup>lt;sup>52</sup> Exhibit 2166.007 (NOVITC(US)00389194-205 at 200).

Figure 7: Impact of Lucentis PFS Launch on Market Share Erosion in



Europe<sup>53</sup>

43. The demand for the Lucentis drug molecule itself cannot explain this commercial success, because Lucentis is the *same molecule* as a PFS relative to a vial. In other words, the increase in demand for Lucentis PFS versus the Lucentis vial is not attributable to the drug molecule, because the molecule is unchanged in the PFS and vial.<sup>54</sup>

<sup>53</sup> Exhibit 2166.007 (NOVITC(US)00389194-205 at 200).

<sup>54</sup> Exhibit 2204 (Declaration of Andrew Calman, Ph.D., ¶ 57).

Novartis Exhibit 2205.0032 Regeneron v. Novartis, IPR2021-00816 44. Regarding nexus, I understand that Lucentis PFS practices the '631 Patent.<sup>55</sup> Additionally, I understand that "[t]he '631 patent is directed to the invention of a terminally-sterilized small-volume pre-filled syringe ("PFS") for intravitreal injection of a VEGF antagonist, which includes low levels of silicone oil while maintaining low injection forces."<sup>56</sup> The '631 patent also enabled terminal sterilization of a PFS suitable for intravitreal injection through improvements to prior art syringe designs.<sup>57</sup> I understand that the '631 Patent is critical to the Lucentis PFS and that, along with any patents protecting the active pharmacological ingredients for each product, would be among the most important contributions to the success of the products.<sup>58</sup>

## B. Licensing

45. As discussed above, I understand that independently, licenses granted under a patent can also support a finding of non-obviousness.

<sup>55</sup> Exhibit 2201 (Supplemental Declaration of Karl Leinsing, PE, ¶¶ 166-285).

<sup>56</sup> Exhibit 2001 (Declaration of Karl Leinsing, PE, ¶ 23).

<sup>57</sup> Exhibit 2001 (Declaration of Karl Leinsing, PE, ¶ 26).

<sup>58</sup> Exhibit 2204 (Declaration of Andrew F. Calman, Ph.D., ¶ 112).

Novartis Exhibit 2205.0033 Regeneron v. Novartis, IPR2021-00816 46. I understand that the first product sold in the U.S. that practices the '631 Patent was the Lucentis PFS, sold by Genentech, a licensee to the '631 Patent.<sup>59</sup>

47. I have reviewed the declarations of Novartis's experts Karl Leinsing and Michael Miller, which describe Genentech's failed attempt to develop its own Lucentis PFS.<sup>60</sup> I understand that, prior to licensing the '631 Patent from Novartis, Genentech put forth considerable continuous efforts toward the development of a PFS presentation for Lucentis, over the course of at least six or seven years, but opted to first launch Lucentis in a vial form and never successfully developed a PFS, due to technical challenges.<sup>61</sup>

<sup>59</sup> Exhibit 2201 (Supplemental Declaration of Karl Leinsing, PE, ¶¶ 117 n. 14, 167); Exhibit 2204 (Declaration of Andrew Calman, Ph.D., ¶¶ 51-54).
<sup>60</sup> Exhibit 2201 (Supplemental Declaration of Karl Leinsing, PE, pp. 91–94, 102-106); Exhibit 2203.0035-0038 (Declaration of Michael Miller, Ph.D., pp. 32-35).
<sup>61</sup> Exhibit 2203 (Supplemental Declaration of Karl Leinsing, PE, ¶¶ 156-158); Exhibit 2203.0035-0038 (Declaration of Michael Miller, Ph.D., pp. 32-35).

Novartis Exhibit 2205.0034 Regeneron v. Novartis, IPR2021-00816 48. After failure to develop its own Lucentis PFS, Genentech was able to obtain FDA approval for, and bring to the United States market, a Lucentis PFS in 2016, but only after licensing the '631 Patent.<sup>62</sup>

49. David Overcashier, principal engineer and senior manager at Genentech, testified that the Lucentis PFS presentation that is on the market was

<sup>62</sup> Exhibit 2116 ("FDA Approves Genentech's Lucentis® (Ranibizumab Injection)
Prefilled Syringe," *Genentech*, October 14, 2016,

https://www.gene.com/media/press-releases/14640/2016-10-14/fda-approvesgenentechs-lucentis-ranibiz). *See also* Exhibit 2123 (NOVITC(CH)00007283-

394); Exhibit 2124 (NOVITC(CH)00008409-414); Exhibit 2121

(NOVITC(CH)00005765-787); Exhibit 2119 (NOVITC(CH)00003455-526);

Exhibit 2201 (Supplemental Declaration of Karl Leinsing, PE, ¶ 167). The license to Genentech included two groups of patents, indicted by "Novartis Reference" numbers "PAT055157" and "PAT055146." One of the patent applications listed under Novartis Reference PAT055157 is "Filing Number" 13/750352, filed January 25, 2013, which is the application that issued as the '631 patent. *See* Exhibit 2121 (NOVITC(CH)00005765-787) at Exhibit D ("PFS Patents"); Exhibit 1001 (U.S. Patent No. 9,220,631); Exhibit 2206.0019-0020 (Declaration of Juergen Sigg, Ph.D., pp. 18-19).

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50. Regarding nexus, I understand that Karl Leinsing has opined that the Lucentis PFS practices and is co-extensive with the claimed invention of the '631 Patent.<sup>64</sup> Additionally, I understand that "[t]he '631 patent is directed to the invention of a terminally-sterilized small-volume PFS for intravitreal injection of a VEGF antagonist, which includes low levels of silicone oil while maintaining low injection forces. The '631 patent also enabled terminal sterilization of a PFS suitable for intravitreal injection through improvements to prior art syringe designs."<sup>65</sup> I understand that the Lucentis PFS is co-extensive with certain claims of the '631 Patent.<sup>66</sup>

51. As a result, there is a clear nexus between the '631 Patent and the license between Novartis and Genentech, as the license would be required for Genentech to practice the '631 Patent, which is embodied by the Lucentis PFS. Without the benefit of the license to the '631 Patent, Genentech would be unable to

<sup>63</sup> Exhibit 2194 (Deposition of David Overcashier, December 9, 2020, pp. 33-34).
<sup>64</sup> Exhibit 2201 (Supplemental Declaration of Karl Leinsing, PE, pp. 107-147).
<sup>65</sup> Exhibit 2201 (Supplemental Declaration of Karl Leinsing, PE, ¶ 26).
<sup>66</sup> Exhibit 2201 (Supplemental Declaration of Karl Leinsing, PE, pp. 107-147).

Novartis Exhibit 2205.0036 Regeneron v. Novartis, IPR2021-00816 practice the '631 Patent and would thus be unable to manufacture and sell the Lucentis PFS, thereby foregoing the significant economic benefits of the commercially successful product, discussed above.

52. I am also aware that in January 2009 Novartis entered into a Development Agreement with Vetter Pharma International GmbH ("Vetter") for work relating to the Lucentis PFS.<sup>67</sup> Per the Development Agreement, Vetter "may grant worldwide, non-exclusive, royalty-free, fully paid-up and non-transferable sub-licenses to any Existing Vetter Customers under the Novartis Ophthalmology PFS IP[.]"<sup>68</sup> I also understand that Bayer HealthCare AG ("Bayer") is an Existing Vetter Customer,<sup>69</sup> and that Vetter has granted a sublicense to the Novartis patent family PAT055157, including all present and future applications, to Bayer, for Eylea PFS outside of the U.S.<sup>70</sup> It is my understanding that the '631 Patent is a member of the Novartis patent family PAT055157.<sup>71</sup> Accordingly, Bayer's

<sup>67</sup> Exhibit 2132 (NOVITC(CH)00170859-895).

<sup>68</sup> Exhibit 2133 (NOVITC(CH)00170896-909, § 2.3(b)).

<sup>69</sup> Exhibit 2134 (NOVITC(CH)00170915-033, § 2.2(d)(v)).

<sup>70</sup> Exhibit 2146 (NOVITC(CH)01863785-788).

<sup>71</sup> See Exhibit 1001 (U.S. Patent No. 9,220,631) (identifying foreign application priority data to EP 12174860); Exhibit 2146 (NOVITC(CH)01863785-788)

sublicense to Novartis's PFS technology specifically for Eylea PFS is additional evidence that supports a finding of non-obviousness.

# VIII. DECLARATION

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

By: \_\_\_\_\_\_\_ Jame E. Malackowski

("[T]he Novartis Patent Family IP licensed by Novartis to Vetter Pharma International GmbH with the right to sublicense to Existing Vetter Customers consists of the Novartis patent family PAT055157...claiming priority from EP 12174860.2..., and includes all present and future applications, patents[.]").

# Appendix 1

Novartis Exhibit 2205.0039 Regeneron v. Novartis, IPR2021-00816



January 18, 2022

## JAMES E. MALACKOWSKI CURRICULUM VITAE

James E. Malackowski is the Co-Founder and Chief Executive Officer of Ocean Tomo, LLC. Established in 2003, Ocean Tomo provides Financial Expert, Management Consulting, and Advisory services related to intellectual property (IP) and other intangible assets; corporate accounting investigations; regulatory and reporting obligations; solvency and restructuring; and contractual or competition disputes. Practice offerings address economic damage calculations and testimony; accounting investigations and financial forensics; technology and intangible asset valuation; strategy and risk management consulting; mergers and acquisitions; debt and equity private placement; and IP brokerage. Ocean Tomo assists clients – corporations, law firms, governments and institutional investors – in realizing Intellectual Capital Equity® value broadly defined. Subsidiaries of Ocean Tomo include Ocean Tomo Investments Group, LLC, a registered broker dealer, and Ocean Tomo International (HK) Ltd.

Mr. Malackowski is a founding and continuous member of the IP Hall of Fame Academy. He has been recognized annually since 2007 by leading industry publications as one of the 'World's Leading IP Strategists'. Significantly, Mr. Malackowski is listed among "50 Under 45" by IP Law & Business TM; included in the National Law Journal's inaugural list of 50 Intellectual Property Trailblazers & Pioneers; and, named as one of "The Most Influential People in IP" by Managing Intellectual Property™. Mr. Malackowski was named as1 of 50 individuals, companies and institutions that framed the first 50 issues of IAM Magazine as well as 1 of 60 leading global Economics Expert Witnesses by the same publication in 2014. In 2011 Mr. Malackowski was selected by the World Economic Forum as one of less than twenty members of the Network of Global Agenda Councils to focus on questions of IP policy. In 2013 he was inducted into the Chicago Area Entrepreneurship Hall of Fame by the Institute for Entrepreneurial Studies at the University of Illinois at Chicago College of Business Administration. In 2018, Mr. Malackowski joined the Standards Development Organization Board of the Licensing Executives Society (USA & Canada), Inc. governing voluntary consensus-based professional practices that are guided in their development by the American National Standards Institute's (ANSI's) Essential Requirements. LES standards are designed to encourage and teach consensus practices in many of the business process aspects of intellectual capital management.

On more than fifty occasions, Mr. Malackowski has served as an expert in U.S. Federal Court, U.S. Bankruptcy Court, State Court, Court of Chancery, the Ontario Superior Court of Justice and global arbitrations on questions relating to intellectual property economics including the subject of valuation, reasonable royalty, lost profits, price erosion, commercial success, corrective advertising, creditor allocations, Hatch Waxman Act market exclusivity, business significance of licensing terms including RAND obligations, venture financing including expected risk / return, and equities of a potential injunction. Mr. Malackowski's experience extends to matters of general business valuation and commercial disputes, both domestic and foreign. Mr. Malackowski has publicly addressed policy issues affecting international trade and has provided expert opinions concerning antidumping and countervailing duties imposed by the U.S. Department of Commerce as well as testimony on domestic industry, bond, and remedies before the International Trade Commission.

Mr. Malackowski has substantial experience as a Board Director for leading technology corporations and research organizations as well as companies with critical brand management issues. He is Past President of The Licensing Executives Society International, Inc., with oversight for more than ten thousand members in thirty-two countries. Mr. Malackowski focuses his non-for-profit efforts with organizations leveraging



science and innovation for the benefit of children and students, including those located in lesser developed countries. He has served since 2002 as a Trustee or Director of the National Inventors Hall of Fame, Inc., an organization providing summer enrichment programs for more than 100,000 students annually. For more than ten years Mr. Malackowski served as a Director of Chicago's Stanley Manne Children's Research Institute, advancing the organization's agenda to measure and report the impact of its pediatric research. He currently services on the Advisory Board of the Pritzker School of Molecular Engineering at the University of Chicago.

Mr. Malackowski is a frequent speaker on emerging technology markets and related financial measures. He has addressed mass media audiences including Bloomberg Morning Call, Bloomberg Evening Market Pulse, Bloomberg Final Word, CNBC Closing Bell, CNBC On the Money, CNBC Street Signs, CNBC World Wide Exchange, CBS News Radio and Fox Business National Television as well as other recognized news-based internet video channels. Mr. Malackowski is a current or past judge for the Illinois Technology Association's CityLIGHTS™ Innovation Awards program, the University of Notre Dame McCloskey Venture Competition, 1<sup>st</sup> Source Faculty Commercialization Awards, and PBS's *Everyday Edisons*.

As an inventor, Mr. Malackowski has more than twenty issued U.S. patents. He is a frequent instructor for graduate studies on IP management and markets and a Summa Cum Laude graduate of the University of Notre Dame majoring in accountancy and philosophy. Mr. Malackowski is Certified/Accredited in Financial Forensics, Business Valuation and Blockchain Fundamentals. He is a Certified Licensing Professional and a Registered Certified Public Accountant in the State of Illinois. Mr. Malackowski has been certified to receive United States Sensitive Security Information (SSI) as governed by Title 49 Code of Federal Regulations.

| EMPLOYMENT<br>HISTORY | Co-Founder and Chief Executive Officer, <i>Ocean Tomo, LLC</i> , July 1, 2003 to present. Mr. Malackowski is responsible for all aspects of the firm's merchant banking practice. Mr. Malackowski was the Chairman and majority owner of Ocean Tomo, LLC until its sale to Bow River Capital in April of 2020.   |
|-----------------------|--|
|                       | President and Chief Executive Officer, <i>IP Equity Management, LLC</i> , doing business as Duff & Phelps Capital Partners, March 1, 2002 to June 30, 2003. The firm's intellectual property structured finance efforts were consolidated with Ocean Tomo on July 1, 2003.   |
|                       | Principal and Founder, <i>VIGIC Services, LLC</i> , July 1, 2000 to February 28, 2002.<br>Mr. Malackowski identified and evaluated intellectual capital based private<br>equity investment opportunities and served as an advisor to four completed<br>transactions.   |
|                       | Principal and co-Founder, <i>IPC Group LLC</i> , August 1, 1988 – June 30, 2000.<br>Mr. Malackowski also held the offices of President and CEO and was a Board<br>member / chairman of the firm. Along with four co-founders, Mr. Malackowski<br>grew IPC Group to become the largest professional services firm specializing in<br>intellectual property valuation and strategy consulting. IPC Group was sold in<br>1999 later changing its name to InteCap. |
|                       | Executive Consultant, <i>Peterson &amp; Co. Consulting</i> , Chicago, June 3, 1985 – July 30, 1988. Mr. Malackowski began with Peterson as a Staff Consultant and was the firm's quickest promotion to both Senior Consultant and Executive  |



Consultant. Mr. Malackowski helped to establish the firm's intellectual property litigation and valuation practice. Peterson & Co. was sold to Saatchi & Saatchi PLC in 1988.

#### NON-PROFIT AND ASSOCIATION EXPERIENCE

Mr. Malackowski has been active in The Licensing Executives Society (LES) locally, nationally and internationally. LES is the premiere global professional association of technology transfer and intellectual asset management professionals with more than 9,000 members in more than 32 countries.

Mr. Malackowski is Past President of the Licensing Executives Society International, LLC, where his experience included the following positions:

- Director, LES Standards Development Organization (2018 present)
- Chair, Past President's Council (2012 2013)
- President and Member of the Board (2011 2012)
- President Elect and Member of the Board (2010 2011)
- Secretary and Member of the Board (2007 2010)
- Member and Permanent Alternate, Board of Delegates (1992 2005)
- Past Chair, Membership, Investment, Education, Long-range Planning and Global Technology Impact Forum Committees.

Mr. Malackowski's term as President of LESI has been recognized for creation of the LESI Global Technology Impact Forum and concurrent Invent For Humanity<sup>™</sup> Technology Transfer Exchange Fair; formalizing the National Presidents' Council; establishing the position of a permanent Executive Director; and, restructuring the leadership of LESI committees utilizing a Chair, Past Chair, Chair Elect ladder combined with functional responsibilities for committee Vice Chairs. This later organizational stamp is based largely on Mr. Malackowski's experience as President of LES USA & Canada described below where he led a restructuring of the Board from a regional to a functional focus for each officer and Trustee. As with his tenure at his national Society discussed below, Mr. Malackowski led a financial turn-around returning LESI to positive cash flow following its' only two years of loss.

Mr. Malackowski is also Past President of The Licensing Executives Society (USA and Canada), Inc. where he held numerous offices in the organization including:

- President and Member of the Board (2001 2002)
- International Vice President and Member of the Board (2000)
- Treasurer and Member of the Board (1996 -- 1999)
- Trustee and Member of the Board (1992 1996)
- Chair, Annual Meeting in Miami Beach (1998) and the Summer Meeting in Chicago (1997)

Mr. Malackowski presided over a restructuring of the LES USA & Canada Board and a financial turn-around returning the organization to positive cash flow following its only two years of loss to such date. Mr. Malackowski is the



youngest President to hold office at LES USA & Canada as well as at LES International.

In 2007, Mr. Malackowski was the Founding Chair of the Board of Governors for what is now Certified Licensing Professionals, Inc., administrator of the Certified Licensing Professional (CLP) program for professionals in the fields of licensing, business development and commercialization of intellectual property. More than 1,000 individuals involved in patenting, marketing, valuation, IP law, negotiation, and intellectual asset management have earned the CLP certification. CLP, Inc. is a 501(c)(6) organization whose mission is to elevate the licensing profession through knowledge and standards.

In 2018 Mr. Malackowski joined the Standards Development Organization Board of LES USA & Canada. LES standards are voluntary consensus-based professional practices that are guided in their development by the "American National Standards Institute's (ANSI's) Essential Requirements." ANSI is the unique accrediting agency in the United States for voluntary consensus standards development organizations. LES is an accredited ANSI Standards Developer and as such guarantees its constituents that its standards will be developed in a fair, balanced, consensus-based, due process driven way. LES standards are designed to encourage and teach consensus practices in many of the business process aspects of intellectual capital management and, where appropriate, offer enterprises the opportunity to differentiate themselves based on their use of these consensus professional practices, through certification of conformance to those standards.

Mr. Malackowski extends significant time to non-profit activities directed towards a further understanding of the economic importance of innovation and intellectual property, in both the United States and developing economies. These efforts include:

- Founding Board Member and member of the Executive Committee, United Stages Intellectual Property Alliance (USIPA), (2020 -)
- Judge, University of Notre Dame McCloskey Venture Competition (2019 -)
- Advisory Board, University of Chicago, Pritzker School of Molecular Engineering (2018 -)
- Judge, Illinois Technology Association, CityLIGHTS™ Innovation Awards (2013 -)
- Member, World Economic Forum Network of Global Agenda Councils (2011 - 2012)
- Director, International Intellectual Property Institute, Washington D.C., (2002 - 2007)
- Resident Advisor, U.S. Information Agency, (1999)
- Resident Advisor, U.S. Department of Commerce Commercial Law and Development Program (1997)
- Founder and Chairman, The Center for Applied Innovation, Inc. (2004 -)

In addition to his University instruction described herein, Mr. Malackowski focuses his non-for-profit efforts with those organizations leveraging science and innovation for the benefit of children.



- Director, Children's Research Fund (2013); Co-Chair Annual Fund Campaign (2013)
- Director, National Inventors Hall of Fame, Inc. (NIHF) including service as a Member, Trustee or Director of related subsidiaries and Board Committees (2001 - 2019). The NIHF provides summer enrichment programs for more than 160,000 students annually including <u>Camp</u> <u>Invention<sup>TM</sup></u> for kids in grades 1-6 (and their parents and teachers); <u>Collegiate Inventors Competition<sup>TM</sup></u> for college students (and their mentors); and, <u>Club Invention<sup>TM</sup></u> for kids in grades 1-6 (and their parents and teachers). NIHF provides more than 20,000 camp scholarships annually for children in financial need.
- President's Council, Chicago Museum of Science and Industry (2005 -2011) including participation on the Education Advisory Committee (2007 -2009) and the Alternative Revenue Committee (2008 - 2011)
- Director, Stanley Manne Children's Research Institute (2009 2020) including Chair of the Board's Technology Transfer Committee (2014 -2020) and the Strategic Planning Resources Committee (2011 - 2012). Mr. Malackowski is recognized for initiating the development of a program to measure and track innovation metrics relevant to the Institute.

Mr. Malackowski was the Founder of the Center for Applied Innovation, a Chicago based non-for-profit with both local and international programs. CAI was created to manage education, public policy outreach and related economic activity around applied technology and intellectual property (IP) rights in the State of Illinois and around the world.

- CAI created and patented the first commoditized contract for technology licensing, the Unit License Right<sup>™</sup>. This innovation has been licensed to the Chicago-based Intellectual Property Exchange International.
- Under Mr. Malackowski's continued leadership as Chairman, CAI organizes the Invent for Humanity<sup>™</sup> Technology Transfer Exchange Fair (InventforHumanity.org) launched in January, 2012, in Geneva, Switzerland. Invent for Humanity showcases field-ready, sustainable innovations, known as "appropriate technologies", leveraging the experience of licensing professionals to match and structure the actual transfer of such technology to meet recognized needs of emerging market economies.

Mr. Malackowski's association and non-profit activities are informed in part by his participation in the Harvard Business School Executive Education Program on Governing for Nonprofit Excellence, November 2000. Mr. Malackowski's Board service is informed by his participation at the Rock Center Corporate Governance Directors College for Venture-Backed Company Directors, Stanford University, March 2016.

RELATED OFFICES *Berg, LLC*, Member, Council of Advisors, Senior Advisor, Intellectual Property Licensing & Innovation (2012 - 2015)

5



*The Copyright Hub, LLC d/b/a 3Discovered*, Founder. The company was formed as a collaborative venture between Ocean Tomo, LLC and Liberty Advisor Group in 2013. 3Discovered is a current portfolio company of US-based venture capital firm AITV. Mr. Malackowski served as Chairman of the company through September 2016. (2103 - 2106)

*Curious Networks, Inc.*, Director, (1999 - 2000), Co-Chair of the Board's Strategic Partnership Committee. Mr. Malackowski led the company's first and second round of venture funding.

ewireless, Inc. (f/k/a JEMAN Holdings, Inc. d/b/a Cellular Linking), Director, (1995-1999, 2000-2002)

*Ford Global Technologies, Inc.*, Ford Motor Company, Director (1997 - 2001). Mr. Malackowski advised Ford Motor Company on the original business strategy which led to the formation of FGTI. FGTI was the largest known technology management company in the United States during Mr. Malackowski's term.

*Infocast, Corporation* (OTC BB: IFCC.OB), Director (2001-2002). Member of the Audit and Compensation Committees. Mr. Malackowski led the transition of the company's senior management team and continued U.S. based funding efforts.

*Insignis, Inc.*, Director (2000 - 2002) Mr. Malackowski led the company's first round of venture funding. Insignis is a Chicago based provider of institutional financial data services.

*The Intellectual Property Coin Group, Inc.*, Chairman and Co-Founder (2018 -). The company is a planned Ethereum based blockchain platform and related cryptocurrency designed to facilitate IP based transactions. See www.IPcoinGroup.com.

*The Intellectual Property Exchange International, Inc.* Mr. Malackowski was the founder of the company guiding initial product development of IPXI and recruitment of executive management. In 2011, IPXI was funded by an industry consortium including the Chicago Board Options Exchange. Mr. Malackowski was the Chair or Co-Chair of the Exchange from inception to February 26, 2015.

*JEMAN Technologies, Inc.*, Founder. (1995 – 1999). Mr. Malackowski led the company's efforts to develop new technologies related to wireless direct response services. JEMAN was sold to ewireless, Inc. in 1999 as part of a venture transaction funded by Bedrock Capital Partners and Tredegar Investments.

Silent-Yachts, GmbH. Member, Advisory Board (2021 - ). Mr. Malackowski provides general business advice to both the company's chief executive as well as its U.S. distributor of solar-electric catamarans. Silent-Yachts is located in Magdalensberg, Kärnten, Austria.

Solutionary, Inc., Director (2000 - 2013). Arranged and advised on Solutionary's asset acquisition of S3Networks effective August 31, 2001 and



sale to strategic buyer in 2013. Member of the Board's Compensation Committee.

Sendle, Pty, Advisor (2012 - 2015). See www.Sendle.com.

| EDUCATION AND<br>CERTIFICATION | University of Notre Dame, B.B.A., Bachelor of Business Administration with majors in Accountancy and Philosophy. Graduated Summa Cum Laude, 1985.   |
|--------------------------------|---|
|                                | Registered Certified Public Accountant, State of Illinois Certificate Number 41,187 issued January 16, 1986; License No. 239.007831; Expires September 24, 2022.                            |
|                                | Certified Licensing Professional, Certificate Number 1606 issued July 1, 2008;<br>Recertification through November 29, 2022.  |
|                                | Certified in Financial Forensics, CFF <sup>TM</sup> , American Institute of Certified Public<br>Accountants, Certificate Number 391 issued July 31, 2008; Expires July 31,<br>2022.         |
|                                | Accredited in Business Valuation, ABV <sup>TM</sup> , American Institute of Certified<br>Public Accountants, Certificate Number 4278 issued May 31, 2014; Expires July<br>31, 2022.         |
|                                | Accredited in Blockchain Fundamentals for Accounting and Finance<br>Professionals, American Institute of Certified Public Accountants, Certificate<br>Number 15860970, 2018 - 2020.         |
|                                |   |
| UNIVERSITY<br>INSTRUCTION      | John Marshall Law School, Intellectual Property Damages (1992 - 1994)   |
|                                | DePaul University, Intellectual Property Entrepreneurial Finance (2003)   |
|                                | The George Washington University Law School, Intellectual Property<br>Management (2004)   |
|                                | The University of Chicago Graduate School of Business:  |
|                                | <ul> <li>Intellectual Property Investment (2004 - 2006)</li> <li>Entrepreneurial Discovery, MBA Course 34705, Adjunct Professors Mark<br/>Tebbe and Brian Coe (Fall 2014 - 2015)</li> </ul> |
|                                | Indiana University Kelly School of Business, Intellectual Property Finance<br>(2005)  |
|                                | University of Notre Dame, Mendoza College of Business, Adjunct Instructor:  |
|                                | <ul> <li>MBA Interterm Intensives, Intellectual Property Based Market<br/>Transactions, Valuation and Trading (Fall 2006, Fall 2008)</li> </ul>   |



- MBA Executive Program, Course MBAE 70639, Intellectual Property, (Spring Semester 2008)
- MBA Program, Litigation Support and Valuation (Spring 2009)
- Notre Dame Law School, Advanced Trial Advocacy, LAW 75713-10 (Spring 2017)
- Member, Venture Builder Community Advisory Board (2019 )

University of California at Berkeley Haas School of Business, Innovation Markets (2008)

Chicago-Kent College of Law, Adjunct Professor of Law, IP Financial Markets and Legal Principles (Fall 2008)

Rutgers Professional Science Master's Program, Fundamentals of Intellectual Property (Summer 2011)

Northwestern University Kellogg School of Management, Adjunct Instructor:

- MGMT 441, Intellectual Property Management, Clinical Professor James G. Conley (Fall 2012, Spring 2013 - 2017)
- DSGN 460, Innovation in Context, McCormick Engineering School (Spring 2017)

University of Texas McCombs School of Business, MBA Course: Open Innovation, Professor Sirkka Jarvenpaa (Spring 2013)

University of Arizona, James E. Rogers College of Law, Advisor, Intellectual Property & Entrepreneurship Clinic (2017 - )

- IP Valuation (Spring 2017)
- IP Valuation for Commercial Transactions (Spring 2019)

University of Southern California, Lloyd Greif Center for Entrepreneurial Studies at the Marshall School of Business, Entrepreneurs Guide to Intellectual Property, Professor Luke L. Dauchot, JFF 322 (Fall 2017)

| MEMBERSHIPS               | American Institute of Certified Public Accountants, Member 01182237 (1985 -)<br>The Economic Club of Chicago (1990 - 2019)<br>The Licensing Executives Society (1988 - )<br>Young Presidents' Organization ("YPO" / "YPO Gold" Chicago Chapter, 2006<br>– 2017) (Mid-America U.S. At Large Chapter, 2019 - 2021) |
|---------------------------|--|
| RECOGNITION<br>AND AWARDS | Individually, Mr. Malackowski has been recognized for his expertise as well as his work in developing markets for intellectual property transfer including:  |
|                           | <ul> <li>EY Entrepreneur Of The Year®, Regional Semifinalist (2019 and 2020)</li> <li>"IAM Global Leaders", IAM Magazine (2020)</li> </ul>   |



- "IAM Patent 1000: The World's Leading Patent Professionals", *IAM Magazine* (2015-2021)
- Named to the *National Law Journal's* inaugural list of 50 Intellectual Property Trailblazers & Pioneers. (August 2014)
- Named as 1 of 60 leading global Economics Expert Witnesses in the *IAM* Patent 1000, IAM Magazine. Selection based on interviews by IAM researchers with more than 100 patent litigators. (May 2014)
- Inductee, Chicago Area Entrepreneurship Hall of Fame as selected by the Institute for Entrepreneurial Studies at the University of Illinois at Chicago College of Business Administration, (2013; 28<sup>th</sup> Year of Program)
- Named as 1 of 50 Individuals, Companies and Institutions that Framed the First 50 Issues of *IAM Magazine*, November / December 2011.
- "IP Personalities of 2008", IAM blog by Joff Wild, Editor
- "IAM Strategy 300: The World's Leading IP Strategists", *IAM Magazine* (2012-2021); formally presented and included as "World's 250 Leading IP Strategists", *IAM Magazine* (2009-2011)
- "50 Under 45", *IP Law & Business*™ (2008)
- "The Most Influential People in IP", Managing Intellectual Property™ (2007)
- Member, IP Hall of Fame Academy (2007-)

Ocean Tomo as a firm has been likewise recognized for its accomplishments including:

- Ocean Tomo was chosen as the exclusive U.S. representative for the 2016 Healthcare & Pharma Leading Expert Awards by *Global Health & Pharma Magazine*.
- Ocean Tomo was recognized as a member of the 2015 Inc.5000® list of fastest-growing private companies in America.
- Ocean Tomo was honored in 2011 with the "Best of Chicago Award in Investment Advisory Services" by the U.S. Commerce Association (USCA).
- In addition to Mr. Malackowski, Ocean Tomo as a firm was named as 1 of 50 Individuals, Companies and Institutions that Framed the First 50 Issues of *IAM Magazine*, November / December 2011 and the only firm other than Microsoft (2 of 50 mentions) to be recognized multiple times (5 of 50 mentions).
- The firm's Chicago office was presented the 2011 Alfred P. Sloan Awards for Business Excellence in Workplace Flexibility after having been finalist for scoring in the top 20% of all firm's measured nationally.
- Ocean Tomo was recognized in 2010 by Corporate Voices for Working Families for its work-life balance as part of the National Workplace Flexibility Campaign published by USA Today.
- Ocean Tomo was recognized as a juried Finalist for the Illinois Technology Association 2010 CityLIGHTS Award for raising the stature of the Illinois technology industry.
- Selected as case study organization for Haas School of Business, University of California, Berkeley (2009)
- Selected as case study organization for Harvard Business School MBA Program (2008)



- Ocean Tomo was named one of 20 small and mid-sized firms recognized as the "Best Places to Work in Illinois" by Best Companies Group in a competition sponsored by the Illinois Chamber of Commerce and the Illinois State Council Society for Human Resource (2007)
- Ocean Tomo Auctions received the 2006 Chicago Innovation Award for most innovative new product or service introduced between January 1, 2005, and July 31, 2006, that uniquely satisfied unmet needs in the marketplace. The award was presented by Kuczmarski & Associates and the *Chicago Sun-Times*.
- Ocean Tomo Auctions was awarded the Department of Commerce Technology Administration & National Knowledge & Intellectual Property Management 2006 Innovator of the Year Award.
- Ocean Tomo was recognized as a "Top Ten IP Newsmakers of 2006" by IP Law & Business, Almanac 2006.

Numerous authors and graduate business programs have written case studies about Ocean Tomo and its affiliates including:

- Piscione, Deborah Perry, The Risk Factor, Copyright 2014.
- Houle, David, <u>Entering the Shift Age</u>, Copyright 2013.
- Kuczmarski, Thomas D., Dan Miller and Luke Tanen, <u>Innovating</u> <u>Chicago-Style: How Local Innovators Are Building The National</u> <u>Economy</u>, Copyright 2012.
- Houle, David, The Shift Age, Copyright 2007.
- Chesbrough, Henry, <u>Open Business Models: How to Thrive in the New</u> <u>Innovation Landscape</u>, Copyright 2006.
- Harvard Business School Case Study
- University of California Business School Case Study

| RELATED U.S.<br>SPEECHES AND<br>PUBLICATIONS | "The Determination of a Reasonable Royalty: Hypothetical Negotiation v.<br>A General License Agreement", The Licensing Executives Society, Chicago<br>Chapter, December 8, 1987. |
|--|--|
|  | "The Business Economics of Technology Development", The Licensing Executives Society, New England Chapter, February 9, 1988.   |
|  | "The Importance of Protecting Intellectual Property Through Corporate<br>Transition", Licensing Executives Society, National Meeting, October 18, 1989,<br>Moderator.            |
|  | "Valuation of Intellectual Property Rights", The Chicago Bar Association,<br>March 6, 1990.  |
|  | "Dispute Resolution There Are Alternatives!", Licensing Executives Society,<br>National Meeting, October 22, 1990.   |
|  | "How to Value a License", Adding to the Bottomline Through Licensing, LES / John Marshall Law School, November 1, 1990.  |
|  |  |



"An Advanced Discussion on Licensing and Patent Damages", Licensing Executives Society, National Meeting, October 28, 1992.

"An Advanced Discussion on Patent Damages", Licensing Executives Society, National Meeting, October 18, 1993.

Royalty Provisions in Technology License Agreements, Technology Transfers, American Conference Institute, November 15 & 16, 1993.

"Commercializing Technology and the Intellectual Property Quality Management Imperative", Technology Transfer, American Conference Institute, June 20 & 21, 1994.

"How to Accurately Value Software", The Software Protection and Litigation Institute, July 28 & 29, 1994.

"IP Damages Advanced Case Studies", Licensing Executives Society, National Meeting, October 19, 1994.

"Preparation and Presentation of Damages by Outside Consultants", AIPLA Mid-Winter Meeting, February 1, 1995

"Damages Discovery - An Expert's Perspective", Intellectual Property Law Association, New York, December 15, 1995.

"Pre-Litigation Damages Techniques: Patents and More", <u>The Intellectual</u> <u>Property Strategist</u>, March, 1996.

"Corporate Exposures to Copyright, Patent, Trademark, and Trade Secret Claims", Digital Bullets - Digital Shields: A Financial Perspective, American Conference Institute, New York, March 5, 1996.

"IP Management and Taxation - How companies are proactively managing IP assets to maximize shareholder value, including measuring contribution of IP protection to corporate value", American Bar Association, Virginia, April 11, 1996.

"Effectively Select & Use Experts in Trademark & Copyright Cases", AIPLA Spring Meeting, Boston, May 1, 1996.

"The Industry-University Interface: Mechanisms For Technology Transfer", 1996 AUTM Central Region / Licensing Executives Society Chicago Chapter, Chicago, July 21, 1996.

"Valuing Health Care Technologies", Licensing Executives Society Winter Meeting, South Carolina, March 13, 1997.

"Creative Marketing & Packaging - How to Differentiate Yourself in a Competitive Market", CTIA Annual Meeting, Atlanta, February 23, 1998.



"Intellectual Property Valuation: The Latest Techniques from Boardroom and Courtroom", Patent Law Association of South Florida Annual Meeting, Fort Lauderdale, October 22, 1998.

"The Aftermath of *Rite-Hite v. Kelly*", 16<sup>th</sup> Judicial Conference of the U.S. Court of Appeals for the Federal Circuit, Washington D.C., April 6, 1999.

"Expert Admissibility After Daubert", Wisconsin Academy of Trial Lawyers, Milwaukee, December 3, 1999.

"Intellectual Property Strategic Planning: a Corporate Perspective", Research Directors Association of Chicago, Winter Meeting, January 10, 2000.

"Intellectual Property Asset Management: Linking IP and Corporate Strategy", 44<sup>th</sup> Annual Conference on Developments in Intellectual Property Law, John Marshall Law School, Chicago, February 25, 2000.

"Boost Your Client's Intellectual Capital IQ: Get Top Management Involved", <u>Corporate Legal Times</u>, October 2000, p. 104.

"Strategic and Financial Opportunities for Privately Held and Public Middle Market Companies: Building Shareholder Value", The Standard Club, Chicago, October 5, 2000.

"Commercializing Intellectual Capital Through Venture Funding", LESI Expanded Board of Directors Meeting and Seminar, Delray Beach, Florida, January 26, 2001; LES Chicago Meeting, May 10, 2001.

"New Paths to Growth: Joint Ventures and Accessing Equity Capital", Panel Presentation and Discussion, LaSalle Street Project Economic Summit, Chicago, May 10, 2001.

*ViewPoints*, The Newsletter of the Licensing Executives Society (U.S.A. and Canada), Inc., President's Column: Vol. VIII No. 5, Nov. / Dec. 2001, "President Changes the Way LES Does Business"; Vol. VIV No. 1, Jan. / Feb. 2002, "It's Time To Count Our Intellectual Assets"; Vol. VIV No. 2; Vol. VIV No. 3, May / June 2002, "Mid-Year Review"; Vol. VIV No. 4, July / August 2002, "Ethical Issues Related To Intellectual Property".

"Venture Investment Grounded In Intellectual Capital", <u>From Ideas To Assets:</u> <u>Investing Wisely in Intellectual Property</u>, Edited by Bruce Berman, John Wiley & Sons, Inc., 2002.

"Current Issues in Accounting for Intangibles", Congressional Economic Leadership Institute, Panel Presentation and Discussion with Steven H. Wallman, Former Commissioner, United States Securities and Exchange Commission, Washington, DC, May 1, 2002.

"Intellectual Capital Based Corporate Carve-outs: Strategy, Structure and Funding", James E. Malackowski and Suzanne Harrison, <u>The LESI Guide to Licensing Best Practices</u>, Edited by Robert Goldscheider, John Wiley & Sons, Inc., 2002.



"Intellectual Property Finance: Securitization to Venture Capital", American Bar Association Intellectual Property Law Conference, Philadelphia, June 28, 2002.

"The IIPI Roundtable: The New Emphasis on Patent Value – Opportunities and Challenges", Washington DC, July 22, 2002.

"Moving Technology from University to Marketplace: Business Creation and the Venture Capital Community, Licensing Executives Society Annual Conference, Chicago, September 24, 2002.

"Presidents' Forum on Intellectual Property: A Leadership Discussion with The Licensing Executives Society, the American Intellectual Property Law Association, the Association of University Technology Managers, the Intellectual Property Owners Association, The National Inventors Hall of Fame, and BIO", Licensing Executives Society Annual Conference, Chicago, September 24, 2002.

"Extracting Value From Your Intellectual Asset Portfolio: Ensuring ROI from IP and Technology Assets", World Research Group, November 22, 2002, Chicago, Illinois.

"Licensing", American Intellectual Property Law Association 2003 Mid-Winter Institute, Marco Island, Florida, January 22 – 25, 2003.

"Cashing in on Chicago: A Closer Look at Liquidity in the Heartland", The Executives' Club of Chicago, Panel Discussion, February 11, 2003.

Conference Chair and Speaker, "Optimizing Valuation & Value Realization of your IP/Intellectual Assets", World Research Group, Las Vegas, February 27-28, 2003.

Live Webcast, "Turning Your Intellectual Property into Cash", Ernst & Young Business Insights, April 28, 2003.

Intermediate PDS Workshop: Application of Private Equity and Leveraged Finance Investing to Intellectual Property, LES / AUTM Summer Meeting, Philadelphia, May 8, 2003.

World Research Group, Advanced Intellectual Property Structured Finance, Conference Co-Chair Person, New York City, June 29-30, 2003.

The Conference Board, The 2003 Conference on Intellectual Asset Management & Value Reporting, "Application of Private Equity and Leveraged Finance Investing to Intellectual Property", Chicago, June 4, 2003.

Intellectual Property and Information Technology for Investment Funds, "Intellectual Capital Equity Management", Panel Discussion Sponsored by Schulte Roth & Zabel, New York City, June 18, 2003.

Chicago Capital Access Forum III, "Private Investors: The Case for Domestic Emerging Market Investments", Panel Discussion, Chicago, June 26, 2003.

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Pension Consultants' Forum, "Extracting Value from Private Equity Investing", World Research Group, Chicago, July 22, 2003.

Midwest Intellectual Property Institute, "Intellectual Capital Equity Management", Minneapolis, September 19, 2003.

"Intellectual Asset Strategies", Add-On Seminar at the 2003 Licensing Executives Society Annual Meeting, San Diego, September 25, 2003.

"Leveraging Intellectual Property", Keynote Speaker, Thomson Financial Thought Leadership Forum, New York, October 8, 2003.

"Beyond Licensing: Innovative Techniques for Extracting Value", Advanced Forum on Licensing Intellectual Property, San Francisco, December 9, 2003.

Intellectual Asset Management, Column: IP Merchant Banker, Douglas R. Elliott & James E. Malackowski, Issue 01, "Challenges of the Fifth Epoch", July / August 2003; Issue 02, "What the Market Fortells", September / October 2003; Issue 03, "Economics, Ethos and Intellectual Ethics", December / January 2004; Issue 04, "Patent Predictions – facts or fictions?", February / March 2004; "Wealth management in the age of patents", June / July 2004; "Patent pools – the 80% solution", August / September 2004.

"Intellectual Capital Equity Management: IP as an Asset Class", Minnesota State Bar Association Continuing Legal Education, Minneapolis, January 15-16, 2004.

"Understanding the Motivations Behind an IP Structured Finance Transaction", "Analyzing the Anatomy of A Patent-Based Structured Finance Transaction", World Research Group, New York, January 21-22, 2004.

"Managing Your Intellectual Property", Investment Banking for Women / Minority Owned Business Enterprises, Annual Forum, Conference Co-Chairperson, Chicago, March 3-5, 2004.

"Private Equity: Investor Capital for Mature Businesses", Dream*Makers* Forum 2004, Santa Barbara, California, March 7 – 10, 2004.

"IP Finance: Convergence of IP Valuation and Value Creation", World Research Group 2<sup>nd</sup> Annual Strategies and Solutions for Optimizing IP Valuation & Value Creation, Chicago, March 23 – 24, 2004.

"Leveraging the Value of Intellectual Property", Creating, Managing & Valuing an Intellectual Property Portfolio, Vedder Price Conference Series, Chicago, April 28, 2004.

"Federal Circuit Damages Decision Emphasizes the Importance of Sound Economic Models", IP Review, McDermott Will & Emery, with Robert M. Hess, Spring 2004.



"Intellectual Property Merchant Banking: Leveraging Corporate Intangible Assets", The Licensing Executives Society (U.S.A. & Canada), Inc., Fairfield-Westchester Counties Chapter, June 23, 2004.

"Intellectual Property Financing and Securitization: Conclusions and Future Implications for Financing the IP Market", New York, New York, July 21, 2004.

"Emerging Financial Concepts in IP Asset Management", Mining Patent Portfolios, Seattle, Washington, September 13, 2004.

"Intellectual Property Investment", National Institutes of Health, Commercialization Assistance Program, Larta Institute, Chicago, November 12, 2004.

"Using Intellectual Property to Grow", <u>The Beacon</u>, Chicagoland Entrepreneurial Center, Volume 3, Issue 4, December 10, 2004.

"Techniques for Assessing the Value of Your IP Portfolio", The Wall Street Transcript Intellectual Property Conference, New York, January 27, 2005.

"The Tipping Point: Assessing Major Challenges and Growth Opportunities in IP Finance", Moderator, The 3<sup>rd</sup> Annual Advancing IP Structured Finance World Research Group Conference", New York, February 3, 2005.

"Commerce One IP Auction", Optimizing IP Valuation and Value Creation, World Research Group Conference, Miami, March 30-31, 2005.

"Intellectual Capital Equity Management: IP As An Asset Class", Minnesota Continuing Legal Education Conference, Minneapolis, May 12, 2005.

"Techniques for Evaluating IP Potential", Life for After Rembrandts, Law Seminars International, Chicago, Illinois, August 4, 2005.

Keynote Address, 2<sup>nd</sup> Annual Intellectual Property Financing and Securitization Summit, New York, September 26, 2005.

"The Power of Intellectual Property in Private Equity Deals", Association for Corporate Growth and The Licensing Executives Society Connecticut Chapters, Greenwich, Connecticut, October 6, 2005.

"Maximizing the Value of Distressed Debt Backed by Intellectual Property", Financial Research Associates Distressed Debt Summit 2005, New York, October 7, 2005.

"To Sell or Not to Sell", <u>Licensing in the Boardroom 2005</u>, a supplement to *Intellectual Asset Management* magazine, 2005.

Patent Auctions & Marketplaces: Leveraging Value from Under-employed Technologies, IP Master Class Presentation, Washington DC, January 10, 2006.



"Risky Business: Overlooking Patents as Financial Assets", <u>Making Innovation</u> <u>Pay</u>, Edited by Bruce Berman, Published by John Wiley & Sons, Inc., 2006.

"The State of Development & Current Trends in IP Structured Finance" and "The Tipping Point: Assessing Major Challenges, Growth Opportunities and Future Trends in IP Finance", Moderator, The 4<sup>th</sup> Annual Summit on IP Structured Finance, New York, March 22-23, 2006.

"Generating Revenue From Your Inventions", IIR 2<sup>nd</sup> Annual Summit on IP Rights for Financial Services, New York, April 25-26, 2006.

"A Behind the Scenes Look at the Patent Bazaar: How Companies and Industry Are Buying and Selling Patents", Innovators in IP Litigation, IP Law & Business, San Jose, California, May 17, 2006.

"Patent Markets and Their Impact to R&D Strategy", Industrial Research Institute Annual Meeting, May 21-24, 2006, Colorado.

USC Gould School of Law 2006 Intellectual Property Institute; Featured Speaker, "A Final Word"; Panelist, "Patent Trolls: The Good, the Bad and the Ugly"; May 23, 2006, Los Angeles.

"Patent Auctions: Past, Present & Future", The 50<sup>th</sup> Annual Conference on Developments in Intellectual Property Law, John Marshall Law School Center for Intellectual Property Law, May 25-26, 2006, Chicago. Speech published as "The Intellectual Property Marketplace: Past, Present and Future", <u>5 J. Marshall</u> <u>Rev. of Intell. Prop. L. 605</u>, (2006)

"Patent Auctions: Risky Endeavor or Legitimate Market Opportunity?", Strafford Legal Teleconference Presentations, June 8, 2006.

The Intellectual Property Investment Summit: Connecting Investors with Strategic Intellectual Property Opportunities, Presented by the Center for Applied Innovation, Summit Co-Chairperson, June 15, 2006, Chicago.

Innovative Structures for Acquiring Intellectual Property: The Benefits, Challenges and Process, LSI Law Seminars International, Program Co-Chair, July 17, 2006, Chicago.

"Licensing and Intellectual Property", Chicago Regional Independent Inventor's Conference, Presented by the United States Patent and Trademark Office, Northwestern University School of Law, and the National Inventors Hall of Fame Foundation, July 28-29, 2006, Chicago.

"Reinventing the IP Marketplace – The Exclusive Ocean Tomo Patent Auction Case Study", IP Licensing Summit: Practical Strategies to Maximize Revenue in Today's Challenging Intellectual Property Marketplace, August 21-23, 2006, New York.

"Unlocking the Value of Intellectual Property Rights", Conference of the International Bar Association, September 20, 2006, Chicago.



"This Too Shall Pass", <u>Americas IP Focus 2006, Managing Intellectual Property</u> <u>Rights</u>, Copyright, Euromoney Institutional Investor, PLC, 2006.

"Developing Markets for Intellectual Assets and Technology", 21<sup>st</sup> Annual Intellectual Assets and Technology Law Institute, October 5 & 6, 2006, Irving, Texas.

"Patent Damages" and "Patent Reform Efforts: An Update and Review", The Sedona Conference Patent Litigation VII, October 12-13, 2006, Sedona, Arizona.

"Patent Auctions", 44<sup>th</sup> Annual Intellectual Property Law Conference, The Center for American and International Law, November 9-10, 2006, Plano, Texas.

"The Future of Developing IP Markets", 3<sup>rd</sup> Annual Monetization of Intellectual Property & Intangible Assets, Strategic Research Institute, November 16-17, 2006, Boston.

"The IP Transactional Landscape", Economics of IP Based Transactions, National Knowledge & Intellectual Property Management Taskforce Series Program, November 29-30, 2006, Washington, D.C.

Keynote Presentation, The Business of Intellectual Property Conference, Tech Council of Maryland, Rockville, Maryland, January 10, 2007.

Luncheon Speaker, Corporate Intellectual Property Roundtable, Georgia State University College of Law, Atlanta, January 24, 2007.

"Patent Markets", American Intellectual Property Law Association, 2007 Mid-Winter Institute, New Orleans, January 24-27, 2007.

"Assessing the Real Value of Your IP Portfolio" and "Growing IP Impact on Public and Semi-Public Markets", The 5<sup>th</sup> Annual Summit on Monetizing, Financing & Securitizing IP, New York, January 30-31, 2007.

"Ocean's 300", Moderator, World Intellectual Property Review 2007, pp. 16-20.

"The Intellectual Property Marketplace: Emerging Transaction and Investment Vehicles", Co-author with Cardoza, Gray and Conroy, *The Licensing Journal*, Aspen Publishers, Vol. 27, No. 2, pages 1 - 11, February 2007.

"The Importance of Emerging Intellectual Property Market Opportunities to the City of Chicago", Keynote Speaker, Notre Dame Club of Chicago Meeting, Chicago, March 8, 2007.

"The Intellectual Property Marketplace", Harvard Business School Club of New York, New York, April 12, 2007.

Keynote Address, BRICs & Mortar: Technological Drivers in Booming Economies of Brazil, Russia, India and China, Northwestern University Journal

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of Technology & Intellectual Property Second Annual Symposium, Chicago, April 13, 2007.

"Innovation Measurement: The Economic Impact of Patent Value", Co-author with Barney, Cardoza, Walker and Gray, Submission to United States Department of Commerce Economics and Statistics Administration, Pursuant to Notice in the Federal Register, Vol. 72, No. 71, 18627, May 11, 2007.

"Objective Patent Valuation", Business Meeting, Association of Corporate Patent Counsel, Newport, Rhode Island, June 27, 2007.

"Intellectual Property Exchange Chicago", a two day symposium presented by The National Knowledge & Intellectual Property Management Taskforce and The Center for Applied Innovation, Moderator and Speaker, July 17 – 18, 2007, Chicago.

"Start-up Stories: Tales from the Front Line", TiE Midwest, August 1, 2007, Chicago.

Keynote Address, Notre Dame Financial Executives Alumni Conference, September 21, 2007, South Bend, Indiana.

"The Birth of an IP Marketplace", Missouri Bar Association Seminar, November 2, 2007, St. Louis, Missouri.

"Market Forces and IP", The Giles S. Rich American Inn of Court, Howard University, January 17, 2008.

"Market for Technology: Challenges and Opportunities", Panel Discussion on Impediments to Technology Markets, Duke University's Fuqua School of Business, February 20, 2008.

"IP Markets – An Intangible Walk Down Wall Street", Keynote Address, Securities Industry and Financial Markets Association, March 11, 2008, New York.

"Patent Valuation, Is there One or Many?", Mini-Plenary Session of the High Tech Sector, The Licensing Executives Society International Annual Meeting, May 7, 2008, Chicago.

"What is Patent Quality – A Merchant Banc's Perspective", with Jonathan A. Barney, *les Nouvelles*, June 2008, p. 123 – 134.

"Intangibles in the Firm and Financial Markets", *Intangible Assets: Measuring and Enhancing Their Contribution to Corporate Value and Economic Growth*, The National Academies, Washington DC, June 23, 2008.

"Developing IP Markets: Opportunity for the Financial Services Industry", Keynote Address, The 5<sup>th</sup> Annual Patents & The Financial Services Industry Symposium, New York, July 29, 2008.



"New Trends in Monetizing IP Rights: Trolls, Licensing and Securitization", *Managing Intellectual Property* Webinar, September 3, 2008.

"Magnificent Mile – Shopping for the Ideal IP Expert", DRI Intellectual Property Litigation Seminar, September 4-5, 2008, Chicago.

From Assets to Profits: Competing for IP Value and Return, Contributing Author, Edited by Bruce Berman, John Wiley & Sons, November 2008.

Ocean Tomo: The New Kid on the (Auction) Block is All Grown Up, Institute for Law and Technology,  $46^{th}$  Annual Conference on Intellectual Property Law, November 10 - 11, 2008, Plano, Texas.

Federal Trade Commission: The Evolving Intellectual Property Marketplace, Keynote Address, Public Hearings, April 17, 2009, Washington, DC.

"Protecting and Commercializing New Ideas", CoreNet Global Chicago Chapter Meeting, Chicago, May 13, 2009.

"The Future of the IP Marketplace", Moderator and Plenary Speaker, IP Markets 2009, Chicago, July 23, 2009.

"Staying Ahead of the Curve – Strategic Intelligence, Value Assessments and Monetization in a Highly Competitive Economy", The 6<sup>th</sup> Annual Patents & The Financial Services Industry Conference, New York City, July 28-29, 2009.

"Helping Companies in a Down Economy: Strategic Planning for Identifying and Valuing Your IP", American Bar Association Annual Meeting, Chicago, July 31, 2009.

"Managing IP During Uncertain Times", NanoBusiness Alliance Conference, Chicago, September 8, 2010.

<u>National Economic Framework for Intellectual Property Based Commerce</u>, A Research Report by the National Knowledge & Intellectual Property Management Taskforce, Net Worth Press, 2009.

"The Role of IP in Tough Economic Times and How to Use it to Your Advantage: Corporate Recovery and Restructuring", Licensing Executives Society Annual Meeting, San Francisco, October 19, 2009.

"Global IP Market Development", 11<sup>th</sup> Annual Utah IP Summit, Salt Lake City, February 13, 2010.

"Law, Economics, Business and Policy Implications for Innovation and Competition of Diverse Business Models for Using Patents", Stanford University Hoover Institution Annual Conference, Stanford, California, June 25, 2010.

"Establishing an Objective Value of IP", IPO Annual Meeting, Atlanta, September 14, 2010.



"Intellectual Property and the Marketplace: Hot Topics Impacting the Role of Patents, Trademarks and Copyrights in Today's Business World", Vedder Price Illinois Continuing Legal Education Forum, Chicago, October 6, 2010.

"IP Essentials for the Chief Executive Officer", Illinois Technology Association, Chairman's Dinner Keynote Speaker, Chicago, October 20, 2010.

"Valuation of IP in Emerging Market Platforms", 2010 IP Damages Institute, CalCPA Education Foundation, Los Angeles, November 8, 2010.

"Shifting Sands: What is Discoverable and Admissible for Damages, Willfulness and Other Purposes", Intellectual Property Owners Association CLE Roundtable, Washington, DC, March 21, 2011.

"Intellectual Property: From Asset to Asset Class", <u>Intellectual Property</u> <u>Strategies for the 21<sup>st</sup> Century Corporation</u>, Bryer, Lebson & Asbell Editors, John Wiley & Sons, Inc., 2011.

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"Risk Management Strategies to Defend Against Patent Trolls and the New Trend in Patent Royalty Trusts", 2011 Congress on Patent Strategies for the Financial Services Industry, New York, September 19-20, 2011.

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Ellison v. The Chicago Heart Association Civil Action No. 92-K-706 Deposition Testimony

Emblaze Ltd. v. Apple Inc. Civil Action No. 45:11-cv-01079-SBA (PSG) United States District Court for the Northern District of California San Jose Division Trial and Deposition Testimony

Enterasys Networks, Inc. v. Extreme Networks, Inc. Civil Action No. 07-C-0229-C United States District Court for the Western District of Wisconsin Trial and Deposition Testimony

Epic Games, Inc. v. Apple Inc. Civil Action No. 4:20-cv-05640-YGR United States District Court for the Northern District of California Oakland Division Trial and Deposition Testimony



Errant Gene Therapeutics, LLC v. Sloan Kettering Institute for Cancer Research and Bluebird Bio Inc. Index No. 150586/2017 Supreme Court of the State of New York Trial and Deposition Testimony

Escada Beaute, et al. v. The Limited Inc. et al. Civil Action No. 92-CIV-7530 (LLS) United States District Court for the Southern District of New York Trial and Deposition Testimony

Esquel Enterprises, Ltd., v. TAL Apparel Limited and TALTECH Limited Civil Action No. C04-974Z United States District Court for the Western District of Washington at Seattle Deposition Testimony

EVEMeta, LLC v. Siemens Convergence Creators Corporation, Synacore, Inc. Case No. 23139/MK Supreme Court of New York for the County of New York Deposition Testimony

Express, LLC v. Fetish Group, Inc. Civil Action No. CV05-2931 SWV (JTLx) United States District Court for the Central District of California Western Division Deposition Testimony

Extreme Networks, Inc. v. Enterasys Networks, Inc. Civil Action No. 07-C-0229-C United States District Court for the Western District of Wisconsin Trial and Deposition Testimony

Fairchild Semiconductor Corporation and System General Corporation v. Power Integrations, Inc. Civil Action No. 12-00540 United States District Court for the District of Delaware Trial and Deposition Testimony

Faye Fish Estate et al. v. Beech Aircraft et al. Civil Action No. 631333 Deposition Testimony

FidoPharm, Inc. & Omnipharm, Ltd. v. Cheminova, Inc. A/S AAA Case No. 50 503 T 00266 12 American Arbitration Association Hearing Testimony

First Quality Tissue, LLC v. Irving Consumer Products Limited and Irving Consumer Products, Inc. Case No. 1:19-cv-00428 United States District Court for the District of Delaware Deposition Testimony

Novartis Exhibit 2205.0075 Regeneron v. Novartis, IPR2021-00816



Footstar, Inc. et al v. Kmart Corporation Chapter 11 Case No. 04-22350 (ASH) United States Bankruptcy Court for the Southern District of New York Deposition Testimony

Fortune Dynamic, Inc. v. Victoria's Secret Stores Brand Management, Inc. Case No.: CV07-02-962 United States District Court for the Central District for the State of California Deposition Testimony

Fractus, S.A. v. Samsung Electronics Co. Ltd.; et al (including LG Electronics, Inc. and related parties) Civil Action No. 6:09cv203 United States District Court for the Eastern District of Texas Tyler Division Deposition Testimony

Fujitsu Ltd. v. Tellabs, Inc. et al. Case No. 1:09-cv-04530 United States District Court for the Northern District of Illinois Eastern Division Trial and Deposition Testimony

FXOne, LLC & Rosario Ingargiola v. Seabury Financial Solutions, et. al JAMS New York, New York Arbitration Hearing Testimony

General Mills, Inc. and General Mills IP Holdings II, LLC v. Fage Dairy Industry, S.A., Fage USA Dairy Industry, Inc. and Fage USA Holdings, Inc. United States District Court for the Northern District of New York Deposition Testimony

Georgia-Pacific Corp. v. United States Gypsum Co. and L&W Supply Co. Civil Action No. 94-989-RRM United States District Court for the District of Delaware Trial Testimony

Gibson Guitar Corp. v. Heritage Guitar, Inc. and Lasar Music Corp. Civil Action No. 3-90-0009 Deposition Testimony

Gilberto Arvelo v. American International Insurance Civil Action No. 93-1287 United States District Court for the District of Puerto Rico Deposition Testimony

The Gillette Company LLC v. Dollar Shave Club, Inc., Dorco Company Ltd., and Pace Shave, Inc. Case No. 1:15-CV-01158 (LPS) United States District Court for the District of Delaware Deposition Testimony

Google LLC v. Anthony Levandowski and Lior Ron



JAMS Ref No. 1100086069 Deposition Testimony

Government Employees Insurance Company v. Google, Inc. and Overture Services, Inc. United States District Court, Eastern District of Virginia, Alexandria Division Civil Action No: 1:04cv507 Deposition Testimony

Group One v. Hallmark Civil Action No. 97-1224-CV-W-1 United States District Court for the Western District of Missouri, Western Division Deposition Testimony

GSI Technology, Inc. v. United Memories, Inc., Integrated Silicon Solution, Inc. Case No. 13-CV-1081-PSG United States District Court for the Northern District of California, San Jose Division Trial and Deposition Testimony

Hitachi, Ltd. v. Samsung Display Devices Co., Ltd. and Samsung Display Devices Co., Inc. and Samsung Electronics Co., Ltd. and Samsung Electronics America Inc. and Office Depot Civil Action No. 97-1988-A United States District Court for the Eastern District of Virginia Deposition Testimony

Hoechst Celanese Corporation v. Chase Plastic Services and Kevin P. Chase Civil Action No. 94-75361 United States District Court Trial and Deposition Testimony

Hoechst Celanese Corporation v. Nylon Engineering Resins, Inc. Civil Action No. 94-346-CIV-FTM-24D United States District Court for the Middle District of Florida Trial Testimony

Huawei Technologies Co. Ltd. v. Verizon Communications, Inc. et al. Civil Action No. 2:20-cv-00030 United States District Court for the Eastern District of Texas Marshall Division Trial and Deposition Testimony

ICON Health & Fitness, Inc. v. Peloton Interactive, Inc. Case No. 1:20-cv-01386-RGA United States District Court for the District of Delaware Deposition Testimony

iHance, Inc. v. Eloqua Limited and Eloqua Corporation Case No. 2;11-CV-257-MSD-TEM United States District Court for the Eastern District of Virginia Norfolk Division Deposition Testimony

Novartis Exhibit 2205.0077 Regeneron v. Novartis, IPR2021-00816



Illumina, Inc. et. al v. Ariosa Diagnostics, Inc. Case No 3:14-cv-01921-SI United States District Court for the Northern District of California Trial and Deposition Testimony

Immunocept, LLC, Patrice Anne Lee, and James Reese Matson v. Fullbright & Jaworski, LLP Cause No. A 05 CA 334 SS United States District Court of Texas, Austin Division Deposition Testimony

In Re Apple iPhone Antitrust Litigation Civil Action No. 4:11-cv-06714-YGR United States District Court for the Northern District of California Deposition Testimony

In Re Gabapentin Patent Litigation MDL Docket No. 1384 (FSH) Master Civil Action No. 00-2931 (FSH) On behalf of Defendants Teva Pharmaceutical Industries Ltd. and IVAX Corporation and related parties United States District Court for the District of New Jersey Deposition Testimony

In Re Nortel Networks Inc. et al. and In the Matter of the Companies' Creditors Arrangement Act Case No. 09-10138 (KG) and R.S.C. 1985, c. C-36 United States Bankruptcy Court for the District of Delaware and the Ontario Superior Court of Justice Trial and Deposition Testimony

In the Matter of Arbitration Between Open Text, Inc., Claimant, and State Employee's Credit Union, Respondent JAMS Arbitration No. 1400015026 Arbitration Testimony

In the Matter of Certain Botulinum Toxin Products, Processes for Manufacturing or Relating to Same and Certain Products Containing Same Investigation No. 337-TA-1145 On behalf of Allergan plc, Allergan, Inc. and Medytox Inc. United States International Trade Commission Hearing and Deposition Testimony

In the Matter of Certain Electronic Devices with Graphics Data Processing Systems, Components Thereof, and Associated Software Investigation No. 337-TA-813 On behalf of Respondent Apple Inc. United States International Trade Commission Deposition Testimony



In the Matter of Certain Pre-Filled Syringes for Intravitreal Injection and Components Thereof Investigation No. 337-TA-1207 United States International Trade Commission Deposition Testimony

In the Matter of Certain Robotic Floor Cleaning Devices and Components Thereof Investigation No. 337-TA-1252 United States International Trade Commission Hearing and Deposition Testimony

In the Matter of Certain Semiconductor Chips with Minimized Chip Package Size and Products Containing Same (III) Investigation No. 337-TA-630 On behalf of Respondents Acer, Nanya and Powerchip United States International Trade Commission Hearing and Deposition Testimony

In the Matter of Certain Short-Wavelength Light Emitting Diodes, Laser Diodes, and Products Containing Same Investigation No. 337-TA-640 On behalf of Respondent Panasonic United States International Trade Commission Deposition Testimony

In the Matter of Certain Wearable Activity Tracking Devices, Systems and Components Thereof Investigation No. 337-TA-973 On Behalf of Complainant Fitbit, Inc. United States International Trade Commission Deposition Testimony

In the Matter of Certain Wiper Blades Investigation No. 337-TA-816 On behalf of Respondents United States International Trade Commission Hearing (written) and Deposition Testimony

Industrial Print Technologies, LLC v. O'Neil Data Systems, Inc. and Hewlett-Packard Company et. al Case No. 3:15-cv-01100-M, 01101-M, 01103-M, 01104-M and 01106-M United States District Court for the Northern District of Texas Dallas Division Deposition Testimony

InLine Connection, Corp v. AOL Time Warner, Inc. and American Online, Inc Civil Action 02-272 United States District Court for the District of Delaware Deposition Testimony

InLine Connection, Corp v. Earthlink, Inc. Civil Action 02-477

Novartis Exhibit 2205.0079 Regeneron v. Novartis, IPR2021-00816



United States District Court for the District of Delaware Deposition Testimony

Innovention Toys, LLC v. MGA Entertainment, Inc., Wal-Mart Stores, Inc. and Toys 'R Us, Inc. Civil Action No. 07-6510 United States District Court for the Eastern District of Louisiana Trial and Deposition Testimony

Intel Corporation v. Future Link Systems, LLC Civil Action No. 14-377(LPS) United States District Court for the District of Delaware Deposition Testimony

InterDigital Technology Corporation v. Motorola, Inc. Civil Action No. 94-73 United States District Court for the District of Delaware Trial and Deposition Testimony

International Business Machines Corporation v. Groupon, Inc. C.A. No. 16-122-LPS-CJB United States District Court for the District of Delaware Trial and Deposition Testimony

Invensas Corporation v. Renesas Electronics Corporation and Renesas Electronics America, Inc. Case No. 11-cv-00448-GMS United States District Court for the District of Delaware Deposition Testimony

Invention Capital Partners v. Phoenix Technologies Ltd., Marlin Equity Partners, et. al Case No: 113CV242491 Superior Court of the State of California County of Santa Clara Deposition Testimony

Isogon Corporation v. Amdahl Corporation Civil Action No. 97 CIV 6219 (SAS) United States District Court for the Southern District of New York Deposition Testimony

J.M. Voith GmbH v. Beloit Corp. Civil Action No. 93C-0902C United States District Court for the Western District of Wisconsin Trial Testimony

J.M. Voith GmbH v. Beloit Corp. Civil Action No. 93C-0905C United States District Court for the Western District of Wisconsin Trial and Deposition Testimony

Jaguar Land Rover Limited v. Bentley Motors Limited and Bentley Motors, Inc.



Case No. 2:18-cv-320-MSD-LRL United States District Court for the Eastern District of Virginia, Norfolk Division Deposition Testimony

Jamdat Mobile, Inc. v. JAMSTER International Sarl, Ltd; JAMBA! GMBH; and Verisign, Inc. Civil Action No. CV05-3945 PA (FMOx) Deposition Testimony

James Hayden v. 2K Games, Inc. and Take-Two Interactive Software, Inc. Civil Action No. 1:17-cv-02636-CAB United States District Court for the Northern District of Ohio Eastern Division Deposition Testimony

Jenner & Block LLP v. Parallel Networks, LLC and EpicRealm Licensing LP JAMS Arbitration No. 1310019934 Arbitration and Deposition Testimony

John W. Evans, et al. v. General Motors Corporation Docket # X06-CV-94-0156090S Superior Court of Connecticut Judicial District of Waterbury Deposition Testimony

Joy Recovery Technology Corp. v. The Penn Central Corp. and Carol Cable Company, Inc., aka General Cable Industries, Inc. Civil Action No. 93 C 0992 Deposition Testimony

K-Tube Corp. v. Sterling Stainless Tube Corp. et al. Case No. CV 90 1653 JLQ (M) Trial and Deposition Testimony

Kay-Cee Enterprises, Inc. v. Amoco Oil Company Civil Action No. 97-2406 (JWL) United States District Court for the District of Kansas Trial and Deposition Testimony

Kennecott Corporation v. Kyocera International Civil Action No. 80-0516 R (M) United States District Court for the Southern District of California Deposition Testimony

Keurig, Inc. v. Kraft Foods Global, Inc., Tassimo Corp., and Kraft Foods Inc. C.A. No. 07-17 (GMS) United States District Court for the District of Delaware Deposition Testimony

Kimberly-Clark Corporation v. Cardinal Health 200, LLC Civil Action No. 1:10 CV-0034-CAP United States District Court Northern District of Georgia, Atlanta Division Deposition Testimony



Kinetic Concepts, Inc., KCI Licensing, Inc., KCI USA, Inc. and Wake Forest University Health Services v. Bluesky Medical Group, Inc., Richard Weston, Medela AG, Medela, Inc., and Patient Care Systems, Inc. Civil Action SA-03-CA-0832-RG United States District Court Western District of Texas San Antonio Division

United States District Court Western District of Texas San Antonio Division Trial and Deposition Testimony

Kinetic Concepts, Inc., KCI Licensing, Inc., KCI USA, Inc. and Wake Forest University Health Services v. Bluesky Medical Group, Inc. and Smith & Nephew, Inc. Case No. SA:08-CV-00102-WRF United States District Court Western District of Texas San Antonio Division Preliminary Injunction Hearing, Trial and Deposition Testimony

Kinetic Concepts, Inc., KCI Licensing, Inc., KCI USA, Inc., KCI Medical Resources, Medical Holdings Limited, KCI Manufacturing and Wake Forest University Health Sciences v. Convatec, Inc., Boehringer Wound Systems, LLC and Boehringer Technologies, LP Civil Action No. 1:08-CV-00918-WO-LPA United States District Court for the Middle District of North Carolina Deposition Testimony

Kruse Technology Partnership v. Caterpillar, Inc. Case No. CV 04-10435 United States District Court for the Central District of California Deposition Testimony

Kuryakan Holdings LLC v. Ciro, LLC et al Civ. No. 3:15-CV-00703 United States District Court for the Western District of Wisconsin Deposition Testimony

Leo Pharma A/S v. Tolmar, Inc. et al. United States District Court for District of Delaware C.A. No. 10-269 (SLR) Deposition Testimony

Lincoln Electric Company, et al. v. National Standard, LLC No. 1:09-cv-01886-DCN United States District Court of Ohio Eastern Division Deposition Testimony

LNP Engineering Plastics, Inc. and Kawasaki Chemical Holding Co., Inc. v. Miller Waste Mills, Inc. trading as RTP Company Civil Action No. 96-462 (RRM) United States District Court for the District of Delaware Trial Testimony

Lotes Co. Ltd. v. Hon Hai Precision Industry Co. Ltd and Foxconn Electronics, Inc. Civil Action No. 3:11-cv-01036-WHA



United States District Court for the Northern District of California San Francisco Division Deposition Testimony

Lucent Technologies Inc. v. Extreme Networks, Inc. Civil Action No. 03-508 (JJF) United States District Court for the District of Delaware Trial and Deposition Testimony

Lunar Corp. & The UAB Research Foundation v. EG&G Astrophysics Research Corp. Civil Action No. 96-C-199-S Trial Testimony

Match Group, LLC v. Bumble Trading Inc. et al. Civil Action 6:18-cv-00080 United States District Court for the Western District of Texas Waco Division Deposition Testimony

Matsushita Electric Industrial Co., Ltd. v. MediaTek, Inc., Oppo Digital., and Micro-Star International Computer Corp. Case No. C05-03148 MMC United States District Court for the Northern District of California San Francisco Division Deposition Testimony

McKinley v. Zdeb Civil Action No. 99-S-1178 United States District Court for the District of Colorado Fact Deposition Testimony

Medgraph, Inc. v. Medtronic, Inc. Case No. 6:09-cv-06610-DGL-MWP United States District Court for the Western District of New York Rochester Division Deposition Testimony

MedImpact Healthcare Systems, Inc. et al v. IQVIA, Inc. et al. Case No. 3:19-cv-1865-GPC-DEB United States District Court for the Southern District of California Deposition Testimony

Medtronic Xomed, Inc. v. Gryus ENT LLC Case No.: 3:04CV400-J-32 MCR United States District Court for the Middle District of Florida Jacksonville Division Deposition Testimony

MEI, Inc. v. JCM American Corp & Japan Cash Machine Co. Ltd. Civil Action No. 09-00351 United States District Court for the District of New Jersey Deposition Testimony



Meribear Productions, Inc. v. Showroom Interiors, Inc. et. al. Case No. VC065653 Superior Court of the State of California, County of Los Angeles Deposition Testimony

Message Phone, Inc. v. SVI Systems, Inc. and Tharaldson Properties Civil Action No. 379CV-1813H Trial Testimony

MGA Entertainment, Inc. and Isaac Larian v. Hartford Insurance Company of the Midwest, Harford Fire Insurance Company, The Hartford Financial Services Group and Does 1 through 10. Case No. CV 08-0457 DOC (RNBx) United States District Court for the Central District of California Southern Division Deposition Testimony

Military Professional Services, Inc. v. BancOhio National Bank Civil Action No. 91-5032 Deposition Testimony

Milwaukee Electric Tool Corporation, Metco Battery Technologies, LLC AC (Macao Commercial Offshore) Limited and Techtronic Industries Co. Ltd. v. Snap-On Incorporated Case No. 2:14-cv-01296 United States District Court for the Eastern District of Wisconsin Trial and Deposition Testimony

Minebea Co., Ltd., Precision Motors Deutsche Minebea GmbH, and Nippon Miniature Bearing Corp. v. George Papst, Papst Licensing GmbH, and Papst Licensing Verwaltungsgesellschaft MIT Beschrankter Haftung Civil Action No. 97-CV-590 (PLF) Trial and Deposition Testimony

Mitek Surgical Products, Inc. v. Arthrex, Inc. Case No. 1:96CV 0087S United States District Court for the District of Utah, Central Division Deposition Testimony

Mitsubishi Electric Corp., Koninklijke Philips N.V., Thomson Licensing, GE Technology Development, Inc. Panasonic Corporation and Sony Corporation v. Sceptre, Inc. Case No. 2:14-cv-04994-ODW-AJW United States District Court for the Central District of California Deposition Testimony

Money Suite Company v. Insurance Answer Center, LLC; Answer Financial, Inc.; AllState Insurance Company; Esurance Insurance Services, Inc. United States District Court Central District of California Southern Division Deposition Testimony

Motorola, Inc. v. InterDigital Technology Corporation

Novartis Exhibit 2205.0084 Regeneron v. Novartis, IPR2021-00816



Civil Action No. 93-488 United States District Court for the District of Delaware Trial and Deposition Testimony

Motorola Solutions, Inc. and Motorola Solutions Malaysia SDN, BHD v. Hytera Communications Corporation Ltd., Hytera America, Inc. and Hytera Communications America (West), Inc. Civil Action No. 1:17-cv-1973 United States District Court for the Northern District of Illinois Eastern Division Trial and Deposition Testimony

Motorsport Aftermarket Group, Inc. v. Thomas Ellsworth AAA Case No. 01-15-0006-1319 American Arbitration Association Hearing Testimony

Natera, Inc. v. ArcherDx, Inc., ArcherDx, LLC and Invitae Corp. Civil Action No. 20-125-LPS United States District Court for the District of Delaware Deposition Testimony

Nellcor Puritan Bennett, LLC v. CAS Medical Systems, Inc. Case No. 2:11-CV-15697 United States District Court for the Eastern District of Michigan Southern Division Deposition Testimony

Netlist, Inc. v. Diablo Technologies, Inc. Civil Action No. 4:13-CV-05962-YGR United States District Court for the Central District of California Oakland Division Trial Testimony

Nomadix, Inc. v. Hewlett-Packard Company, et al. Civil Action No. CV09-08441 DDP(VBKx) United States District Court for the Central District of California Western Division Deposition Testimony

Nomix Corporation v. Quikrete Companies, Inc. Civil Action No. H88-463-AHN Trial and Deposition Testimony

Optical Air Data Systems, LLC v. L-3 Communications Corporation et al. Civil Action No. N17C-05-619 Superior Court of the State of Delware Trial and Deposition Testimony

Oracle America, Inc. v. Google, Inc. Case No. 3:10-CV-03561-WHA United States District Court for the Northern District of California San Francisco Division



Deposition Testimony

Orthofix, Inc., et al v. EBI Medical Systems, Inc., et al. Civil Action No. 95-6035 (SMO) United States District Court for the District of New Jersey Trial and Deposition Testimony

Pharmacia & Upjohn Company, LLC v. Sicor Inc. and Sicor Pharmaceuticals, Inc. Civil Action No. 04-833 (KAJ) United States District Court for the District of Delaware Deposition Testimony

Picker International, Inc. v. Mayo Foundation, et al. Case No. 95-CV-2028 United States District Court for the Northern District of Ohio, Eastern Division Trial and Deposition Testimony

Penda Corporation v. United States of America and Cadillac Products, Inc. Case No. 473-89-C United States Court of Federal Claims Trial and Deposition Testimony

Peter Daou and James Boyce v. Arianna Huffington, Kenneth Lerer and TheHuffingtonPost.com, Inc. Index No. 651997/2010 Supreme Court of the State of New York, County of New York Deposition Testimony

PlastiPak Packaging, Inc. v. Premium Waters Inc. Case No. 3:20-cv-00098 United States District Court for the Western District of Wisconsin Deposition Testimony

Plexxikon Inc. v. Novartis Pharmaceuticals Corporation Case No. 4:17-cv-04405-HSG United States District Court for the Northern District of California Oakland Division Trial Deposition Testimony

Power Integrations, Inc. v. Fairchild Semiconductor International, Inc., Fairchild Semiconductor Corporation and System General Corporation Case No. 3:09-cv-05235-MMC United States District Court for the Northern District of California Trial and Deposition Testimony

Powertech Technology, Inc. v. Tessera, Inc. Case No. CV10-00945EMC United States District Court for the Northern District of California Deposition Testimony

Praxair, Inc. and Praxair Technology, Inc. v. ATMI, Inc. and Advanced Technology Materials, Inc.



Civil Action No. 03-1158-SLR United States District Court District of Delaware Deposition Testimony

Prism Technologies, LLC v. AT&T Mobility, LLC Civil Action No. 8:12-cv-122-LES-TDT United States District Court of Nebraska Deposition Testimony

Prism Technologies, LLC v. T-Mobile USA, Inc. Civil Action No. 8:12-cv-00124 United States District Court of Nebraska Trial and Deposition Testimony

Prism Technologies, LLC v. Sprint Spectrum L.P. d/b/a/ Sprint PCS Civil Action No. 8:12-cv-123-LES-TDT United States District Court of Nebraska Trial and Deposition Testimony

The Procter & Gamble Company v. Paragon Trade Brands, Inc. Civil Action No. 94-16-LON United States District Court for the District of Delaware Trial and Deposition Testimony

QR Spex, Inc. and Thomas G. Swab v. Motorola, Inc. and Frog Design, Inc. Civil Action No 03-6284 JFW (FMOx) United States District Court for the Central District of California Deposition Testimony

Qualcomm, Inc. v. InterDigital Communications Corporation Case No. 93-1091G (LSP) Deposition Testimony

Quickie, LLC v. Medtronic, Inc. Civil Action No. 02 CV 1157 (GEL) United States District Court for the Southern District of New York Deposition Testimony

Radware, LTD, and Radware, Inc. v. F5 Networks, Inc. Civil Action No. 5:13-cv-02024 RMW United States District Court for the Southern District of California San Jose Division Trial and Deposition Testimony

Remcor v. Scotsman/Booth Civil Action No. 93 C 1822 United States District Court for the Northern District of Illinois, Eastern Division Deposition Testimony

Remcor v. Servend Civil Action No. 93 C 1823



United States District Court for the Northern District of Illinois, Eastern Division Deposition Testimony

Rensselaer Polytechnic Institute and Dynamic Advances, LLC v. Apple Inc. Case No 1:13-cv-00633 (DNH/DEP) United States District Court for the Northern District of New York Deposition Testimony

Research Corporation Technologies, Inc. v. Hewlett-Packard Company Civil Action No. CIV 95-490-TUC-JMR United States District Court for the District of Arizona Deposition Testimony

Robert E. Morley, Jr. and REM Holdings 3, LLC v. Square, Inc., Jack Dorsey and James McKelvey, Jr. No. 4:14-cv-00172-CDP United States District Court for the Eastern District of Missouri Deposition Testimony

Rommy Hunt Revson v. The Limited, Inc. et al. Civil Action No. 90-3840 (MGC) Deposition Testimony

Ronald A. Katz Technology Licensing, LP v. Ameren Corporation; Union Electric Company; Central Illinois Public Service Company; Cilcorp, Inc.; Central Illinois Light Company Case No. 07-4955 RGK (FFMx) United States District Court for the Central District of California Deposition Testimony

Ronald A. Katz Technology Licensing, LP v. AOL, LLC, CompuServe Interactive Services and Netscape Communications Corporation CV 07-2134 RGK (FFMx) United States District Court for the Central District of California Deposition Testimony

Ronald A. Katz Technology Licensing, LP v. Cablevision Systems Corporation et. al. Case No. 2:07-ML-01816 / 02314 RGK-FFM United States District Court for the Central District of California Deposition Testimony

Ronald A. Katz Technology Licensing, LP v. Charter Communications, Inc.; Charter Communications Holding Company, LLC; Charter Communications Operating, LLC; and Charter Communications Entertainment I, LLC CV 07-2134 RGK (FFMx) United States District Court for the Central District of California Deposition Testimony



Ronald A. Katz Technology Licensing, LP v. CIGNA Corporation, CIGNA Health Corporation, CIGNA HealthCare of Delaware, Inc., Tel-Drug of Pennsylvania, LLC and Tel-Drug, Inc. CV 07-2192 RGK (FFMx) United States District Court for the Central District of California Deposition Testimony

Ronald A. Katz Technology Licensing, LP v. Comcast Corporation, Sirius-XM Radio, Inc., et al. NO. 2:07-ML-01816-C RGK (FFMx) United States District Court for the Central District of California Deposition Testimony

Ronald A. Katz Technology Licensing, LP v. DHL Holdings (USA) Inc., DHL Express (USA), Inc., and Sky Courier, Inc. Case No. 07-ml-01816-B RGK (FFMx) United States District Court for the Central District of California Deposition Testimony

Ronald A. Katz Technology Licensing, LP v. Fifth Third Bankcorp, Fifth Third Bank, Fifth Third Bank (Central Ohio) Case No. 07-4960 RGK (FFMx) United States District Court for the Central District of California Deposition Testimony

Ronald A. Katz Technology Licensing, LP v. Time Warner Cable Inc., Time Warner NY Cable LLC and Time Warner Entertainment Company, L.P. CV 07-2134 RGK (FFMx) United States District Court for the Central District of California Deposition Testimony

Ronald A. Katz Technology Licensing, LP v. United States Cellular Corporation, TDS Telecommunications Corporation and TDS Metrocom, LLC Case No.07-ML-01816-B-RGK (FFMX) United States District Court for the Central District of California Deposition Testimony

Rosetta Stone Ltd. v. Google Inc. Civil Action No. 1:09 CV 736 GBL / JFA United States District Court for the Eastern District of Virginia Deposition Testimony

RWM Kinetic Enterprises, Inc. and Thomas J. Ring v. Kinetic Concepts, Inc. and KCI Therapeutic Services, Inc. Case No. SA-96-CA-603-OG United States District Court for the Western District of Texas San Antonio Division Trial Testimony

Sanofi-Aventis U.S. LLC and Regeneron Pharmaceuticals, Inc. v. Genentech, Inc. and City of Hope Case No. 2:15-CV-05685



United States District Court for the Central District of California Western Division Deposition Testimony

Sanyo Electric Co., Ltd. v. Intel Corporation Civil Action No. 2018-0723-MTZ Court of Chancery of the State of Delaware Deposition Testimony

Saxon Innovations, LLC v. Nokia Corp, et al. (including Samsung Electronics, Co. and related parties) Civil Action No. 6:07-cv-490-LED-JDL United States District Court for the Eastern District of Texas Tyler Division Deposition Testimony

SecurityPoint Holdings, Inc. v. The United States Case No. 1:11-cv-00268-EGB In the United States Federal Court of Claims Deposition and Trial Testimony

Semiconductor Energy Laboratory Co., Ltd. v. Samsung Electronics Co., Ltd., S-LCD Corporation, Samsung Electronics America, Inc. Samsung Telecommunications America, LLC Civil Action No. 3:09-cv-00001 United States District Court for the Western District of Wisconsin Deposition Testimony

Selex Galileo, Inc. v. Nomir Medical Technologies, Inc. Case No. 01-17-0003-0930 American Arbitration Association Hearing Testimony

Seven Networks, LLC v. Apple Inc. Civil Action No. 2:19-cv-115-JRG United States District Court for the Western District of Texas Marshall Division Deposition Testimony

Shuffle Tech International, LLC and Aces Up Gaming, Inc. and Poydras-Talrick Holdings, LLC v. Scientific Games Corporation and Bally Technologies, Inc. (d/b/a SHFL Entertainment or Shuffle Master) and Bally Gaming, Inc. Civil Action No. 1:15-cv-3702 United States District Court for the Northern District of Illinois Eastern Division Trial and Deposition Testimony

Silicon Image, Inc. v. Analogix Semiconductor, Inc. Case No. C 07-00635 JCS United States District Court for the Northern District of California, San Francisco Division Deposition Testimony

Site Microsurgical Systems v. The Cooper Companies Civil Action S92-766

Novartis Exhibit 2205.0090 Regeneron v. Novartis, IPR2021-00816



Deposition Testimony

Slot Speaker Technologies, Inc. v. Apple Inc. Case No. 4:13-cv-01161-HSG United States District Court Northern District of California Oakland Division Deposition Testimony

SmartPhone Technologies, LLC v. Research In Motion Corp. et. al (on behalf LG Electronics, Inc. and LG Electronics USA, Inc.) Civil Action No. 6:10cv74-LED United States District Court Eastern District of Texas Tyler Division Deposition Testimony

St. Clair Intellectual Property Consultants v. Fuji Photo Film Co., Ltd., Fuji Photo Film U.S.A., Inc., Fujifilm America, Inc., et al. Civil Action No. 03-241 JJF United States District Court for the District of Delaware Trial and Deposition Testimony

Steven E. Berkheimer v. Hewlett-Packard Company Case No. 1:12-cv-09023 United States District Court for the Northern District of Illinois Eastern Division Deposition Testimony

STMicroelectronics, Inc. v. SanDisk Corp. C.A. No. 4:05CV44 United States District Court of Texas Sherman Division Deposition Testimony

STMicroelectronics, Inc. v. SanDisk Corp. C.A. No. 4:05CV45 United States District Court of Texas Sherman Division Deposition Testimony

Sunoco Partners Marketing & Terminals L.P. v. U.S. Venture, Inc., U.S. Oil, and Technics, Inc. Civil Action No. 4:19-cv-01145 United States District Court for the Southern District of Texas Houston Division Trial and Deposition Testimony

Sunoco Partners Marketing & Terminals L.P. v. U.S. Venture, Inc., U.S. Oil, and Technics, Inc. Civil Action No. 1:15-CV-8178 United States District Court for the Northern District of Illinois Eastern Division Deposition Testimony

Synopsys, Inc. v. Ubiquiti Networks, Inc. et al. Civil Action No. 3:17-cv-00561-WHO United States District Court for the Northern District of California Deposition Testimony

Takata Corp. v. Allied Signal, Inc. and Breed Technologies, Inc.



Civil Action CV-95-1750 Deposition Testimony

Technol Medical Products, Inc., et al v. Robert Busse & Co., Inc. Civil Action No. 3:94-CV-2284-X Deposition Testimony

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Tessera, Inc. v. UTAC (Taiwan) Corporation Case No.: 5:10-cv-04435-EJD United States District Court for Northern District of California San Jose Division Deposition Testimony

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Toro Company v. MTD Products Inc., MTD Consumer Group Inc., and Cub Cadet LLC Civil Action No 10-cv-007-JNE-TNL United States District Court for the District of Minnesota Deposition Testimony

Ultratec, Inc. and CapTel, Inc. v. Sorenson Communications, Inc. and CaptionCall, LLC Case No.: 3:14-cv-66-BBC United States District Court for the Western District of Wisconsin Trial and Deposition Testimony

Unwired Planet, LLC v. Apple, Inc. Case No. 3:13-cv-4134-VC United States District Court for the Northern District of California San Francisco Division Deposition Testimony

U.S.A. Dawgs, Inc. et al. v. Ronald Synder, et al. Civil Action No. 16-cv-02004-PAB-KMT United States District Court for the District of Colorado Deposition Testimony

Valmet Paper Machinery, Inc. and Valmet-Charlotte, Inc. v. Beloit Corporation

Novartis Exhibit 2205.0092 Regeneron v. Novartis, IPR2021-00816



Civil Action No. 93-C-587-C United States District Court for the Western District of Wisconsin Trial and Deposition Testimony

Verinata Health, Inc. and the Board of Trustees of the Leland Stanford Junior University v. Sequenom, Inc. and Sequenom Center for Molecular Medicine, LLC. Case No. 3:12-cv-00865-SI Deposition Testimony

Verinata Health, Inc. v. Ariosa Diagnostics, Inc. Case No. 3:12-cv-055501-SI United States District Court for the Northern District of California Trial and Deposition Testimony

Viacom International Inc. v. MGA Entertainment, Inc. Case No.: 2:15-cv-09621-R (Ex) United States District Court for the Central District of California Deposition Testimony

VimpelCom Ltd. v. Orascom TMT Investments S.a.r.l. London Court of International Arbitration Arbitration No: 153077 Hearing Testimony

Volterra Semiconductor Corporation v. Primarion, Inc., Infineon Technologies AG and Infineon Technologies North America Corporation Case No. C 08-05129 CRB United States District Court for the Northern District of California San Francisco Division Deposition Testimony

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Wang Laboratories, Inc. v. FileNet Corporation Civil Action No. 94-12141-RCL Deposition Testimony

Waukesha Cherry-Burrell v. Wrightech Corporation Civil Action No. 96-CV-00384 Deposition Testimony

Waymo LLC v. Uber Technologies, Inc., Ottomotto LLC and Otto Trucking LLC Case No. 3:17-cv-00939-WHA United States District Court for the Northern District of California San Francisco Division Deposition Testimony

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Novartis Exhibit 2205.0094 Regeneron v. Novartis, IPR2021-00816



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## Appendix 2

Novartis Exhibit 2205.0097 Regeneron v. Novartis, IPR2021-00816

| Regeneron Pharmacenticals, Inc., v. Novartis Pharma AG, et al. |
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| SUMMARY OF LUCENTIS ANNUAL SALES IN CHF, 2010 - 2019 [1]       |
| Appendix 2.1   |

| (millions CHF)  | 2010  | 2011         | 2012         | 2013         | 2014        | 2015         | 2016      | 2017        | 2018         | 2019        |
|---|-------|--------------|--------------|--------------|-------------|--------------|-----------|-------------|--------------|-------------|
| Lucentis Product Sales<br>[2] % Change at Constant Exchange Rates | 1,458 | 1,523<br>23% | 1,481<br>-8% | 1,689<br>15% | 1,701<br>2% | 1,520- $15%$ | 1,406-10% | 1,414<br>1% | 1,659<br>18% | 1,826<br>8% |
| [3] Lucentis PFS Gross Sales as % of Total                        |       |              |              |              |             |              |           |             |              |             |
| Lucentis Vial Sales<br>Lucentis PFS Sales                         |       |              |              |              |             |              |           |             |              |             |

## Notes: [1] Ewhihit 2

calculated using simulations by reconsolidating both the current and prior year results at constant exchange rates (the average rates for the current and prior [1] Exhibit 2273 ("Finance Report for 2011," Roche, p. 10, https://www.roche.com/dam/jcr:76319099-c4c4-4608-9977-ec25c6ca2a2c/en/fb11e.pdf); [2] Roche financial reports provide the percentage change based on a constant exchange rate. The percentage changes at constant exchange rates are Exhibit 2164 ("Finance Report for 2013," Roche, p. 13, https://www.roche.com/dam/jcr:17d47300-2921-45bd-bf9c-89a94b3562b6/en/fb13e.pdf); Exhibit 2016 ("Finance Report for 2018," Roche, p. 12, https://www.roche.com/dam/jcr:933329c4-4564-4b17-a29b-246ac7e617d5/en/fb18e.pdf); Exhibit 2161 ("Finance Report for 2016," Roche, p. 11, https://www.roche.com/dam/jcr:6ddcec16-c658-48b2-82b5-4ed426c14ac8/en/fb16e.pdf); Exhibit 2274 ("Finance Report for 2012," Roche, p. 11, https://www.roche.com/dam/jcr:13c45df4-9cf6-4545-a23d-874d398aa788/en/fb12e.pdf); Exhibit 2276 ("Finance Report for 2017," Roche, p. 11, https://www.roche.com/dam/jcr:b70415c0-954f-4a2a-a0e2-47f94bd280e0/en/fb17e.pdf); Exhibit 2162 ("Finance Report for 2014," Roche, p. 12, https://www.roche.com/dam/jcr:9d9091a6-dfcc-4d57-8017-4a4cb5fa224c/en/fb14e.pdf); Exhibit 2163 ("Finance Report for 2019," Roche, p. 12, https://www.roche.com/dam/jcr:1e6cfce4-2333-4ed6-b98a-f6b62809221d/en/fb19e.pdf). Exhibit 2275 ("Finance Report for 2015," Roche, p. 11, https://www.roche.com/dam/jcr:74af99eb-b51a-4f13-88b2-aacaf9f53c0c/en/fb15e.pdf);

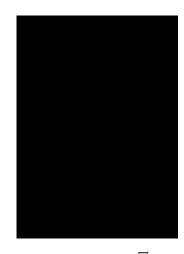
[3] Appendix 2.2.

vear).

Novartis Exhibit 2205.0098 Regeneron v. Novartis, IPR2021-00816 Regeneron Pharmaceuticals, Inc., v. Novartis Pharma AG, et al. SUMMARY OF LUCENTIS ANNUAL GROSS SALES IN USD, 2017 - 2019 Appendix 2.2

(millions USD)

Lucentis Vial Gross Sales Lucentis PFS Gross Sales Total Lucentis Gross Sales Lucentis PFS Gross Sales as % of Total



<u>Notes:</u> [1] Exhibit 2099 (GENEITC\_1207-0000030).