

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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APOTEX INC. AND APOTEX CORP.,  
Petitioners,

v.

AUSPEX PHARMACEUTICALS, INC.,  
Patent Owner.

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Case No. IPR2021-01507  
U.S. Patent No. 8,524,733

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**PATENT OWNER'S SUR-REPLY TO PETITIONERS' REPLY TO  
PATENT OWNER'S PRELIMINARY RESPONSE**

**TABLE OF AUTHORITIES**

*Advanced Bionics, LLC v. Med-El Elektromedizinische Geräte GmbH,*  
IPR2019-01469, Paper 6 (Feb. 13, 2020).....4

*Chemours Co. FC v. Daikin Indus.,* 4 F.4th 1370 (Fed. Cir. 2021) .....5

*Molins PLC v. Textron, Inc.,* 48 F.3d 1172 (Fed. Cir. 1995) .....1

*Sonos, Inc. v. Google, LLC,* IPR2021-00963, Paper 9 (Nov. 9, 2021).....1

**PATENT OWNER'S EXHIBIT LIST**

<b>Exhibit</b>	<b>Description</b>
EX2001	Foster, A., <i>Deuterium Isotope Effects in the Metabolism of Drug and Xenobiotics: Implication for Drug Design</i> , <i>Advances in Drug Research</i> vol. 14 (1985) (“Foster 1985”)
EX2002	Sun, H. et al., <i>Deuterium isotope effects in drug pharmacokinetics II: Substrate-dependence of the reaction mechanism influences outcome for cytochrome P450 cleared drugs</i> , <i>PLoS ONE</i> 13:11 (2018) (“Sun 2018”)
EX2003	Schofield, J. et al., <i>Effect of deuteration on metabolism and clearance of Nerispiridine (HP184) and AVE5638</i> , <i>Bioorganic &amp; Medicinal Chem.</i> 23:3831-3842 (2015) (“Schofield 2015”)
EX2004	Sharma, R. et al., <i>Deuterium Isotope Effects on Drug Pharmacokinetics. I. System-Dependent Effects of Specific Deuteration with Aldehyde Oxidase Cleared Drugs</i> , <i>Drug Metabolism and Disposition</i> 40:3 625-634 (2012) (“Sharma 2012”)
EX2005	Vaz and Coon, <i>On the Mechanism of Action of Cytochrome P450: Evaluation of Hydrogen Abstraction in Oxygen-Dependent Alcohol Oxidation</i> , <i>Biochemistry</i> 6442-6449 (1994) (“Vaz”)
EX2006	Nelson and Trager, <i>The Use of Deuterium Isotope Effects to Probe the Active Site Properties, Mechanism of Cytochrome P450-Catalyzed Reactions, and Mechanisms of Metabolically Dependent Toxicity</i> , <i>Drug Metabolism and Disposition</i> 31:12 1481-1498 (2003) (“Nelson 2003”)
EX2007	U. S. Patent No. 7,678,914 (Tung) (“914 patent”)
EX2008	Smith and Sleath, <i>Model Systems for Cytochrome P450 Dependent Mono-oxygenases. Part 2. <sup>1,2</sup> Kinetic Isotope Effects for the Oxidative Demethylation of Anisole and [Me-<sup>2</sup>H<sub>3</sub>]Anisole by Cytochrome P450 Dependent Mono-oxygenases and Model Systems</i> , <i>J. Chem. Soc.</i> 621-628 (1983) (“Smith”)
EX2009	Harada, N. et al., <i>Kinetic Isotope Effects on Cytochrome P-450-catalyzed Oxidation Reactions</i> , <i>J. Bio. Chem.</i> 259:5 3005-3010 (1984) (“Harada”)
EX2010	Dowers and Jones, <i>Kinetic Isotope Effects Implicate a Single Oxidant for Cytochrome P450-Mediated O-Dealkylation, N-Oxygenation, and Aromatic Hydroxylation of 6-</i>

	<i>Methoxyquinoline</i> , Drug Metabolism and Disposition 34:8 1288-1290 (2006) (“Dowers”)
EX2011	Shao, L et al., <i>Derivatives of tramadol for increased duration of effect</i> , Bioorganic & Medicinal Chem. Letters 16:691-694 (2006) (“Shao”)
EX2012	Ingrezza (valbenazine) Label (2017) (“Ingrezza Label”)
EX2013	Strategies to Protect the Health of Deployed U.S. Forces: Assessing Health Risks to Deployed U.S. Forces – Workshop Proceedings (2000) (“Rozman”)
EX2014	Berg, J. et al., Biochemistry, Ch. 8 Enzymes: Basic Concepts and Kinetics (2002) (“Berg”)
EX2015	Somers, G. et al., A Handbook of Bioanalysis and Drug Metabolism, Ch. 15 In vitro techniques for investigating drug metabolism (2019) (“Somers”)
EX2016	Pang, K. S. et al., Metabolite Kinetics: Formation of Acetaminophen from Deuterated and Nondeuterated Phenacetin and Acetanilide on Acetaminophen Sulfation Kinetics in the Perfused Rat Liver Preparation, J. Pharmacology and Experimental Therapeutics 14-19 (1982) (“Pang”)
EX2017	Helfenbein, J. et al., <i>Isotopic Effect Study of Propofol Deuteration on the Metabolism, Activity, and Toxicity of the Anesthetic</i> , J. Med. Chem. 5806-5808 (2002) (“Helfenbein 2002”)
EX2018	Cherrah, Y. et al., <i>Study of Deuterium Isotope Effects on Protein Binding by Gas Chromatography/Mass Spectrometry. Caffeine and Deuterated Isotopomers</i> , Biomed. and Environmental Mass Spectrometry 653-657 (1987) (“Cherrah”)
EX2019	Borgstrom, L. et al., <i>Comparative Pharmacokinetics of Unlabeled and Deuterium-Labeled Terbutaline: Demonstration of a Small Isotope Effect</i> , J. Pharm. Sci. 952-954 (1988) (“Borgstrom”)
EX2020	Misra, A. et al., <i>Drug delivery to the central nervous system: a review</i> , J. Pharm. Pharmaceut. Sci. 6(2):252-273 (2003) (“Misra”)
EX2021	Teva Reports Third Quarter 2021 Financial Results (“Teva SEC Filing”)
EX2022	Search Results for “tetrabenazine”, FDA.gov (“FDA listing of generic tetrabenazine products”)

EX2023	Joint Proposed Discovery Plan, Teva Branded Pharmaceutical Products R&D Inc. v. Lupin et al., D.N.J. 21-cv-13247; D.N.J. 21-cv-13240 (October 12, 2021) (“Joint Proposed Discovery Plan”)
EX2024	Information Disclosure Statement, Application No. 12/562,621 (March 27, 2012) (“03/27/2012 IDS”)
EX2025	File History Excerpts, Application No. 12/562,621: References Considered, April 10, 2012 and November 5, 2012 (highlighted)

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