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THE BROKEN STANDARD FOR US PATENT ELIGIBILITY, AND HOW IT IS
HURTING U.S. COMPETITIVENESS AND CONSUMER WELFARE

David J. Kappos

Partner

212-474-1168

dkappos@cravath.com

Companies At Forefront of Innovation in Broad Range of Technologies Calling for Section 101 Reform



Cleveland Clinic

Genentech



Johnson & Johnson

REGENERON



NOVARTIS

Qualcomm



Impact of Patent Eligibility on Investment Activity

- Investors whose firm decision-making was impacted by the Supreme Court's eligibility cases reported these cases caused decreased investments and shifting of investments to other industries:

Investor Response	Percent
Decreased investments overall	49%
Shifted investments between industries	34%
Increased investments overall	8%
Other	9%

- Each additional independent claim allowed in a pre-IPO company's patent increases the likelihood of that company undergoing an IPO by 0.7 percentage points—*i.e.*, an 88.6% increase from the baseline IPO probability.

Venture Capital Is Fleeing Patent-Reliant Next Generation Technologies

- Venture capital funding in the following, patent-reliant, strategic sectors decreased from **21.0%** of total venture capital funding in 2004 to only **3.2%** in 2017:

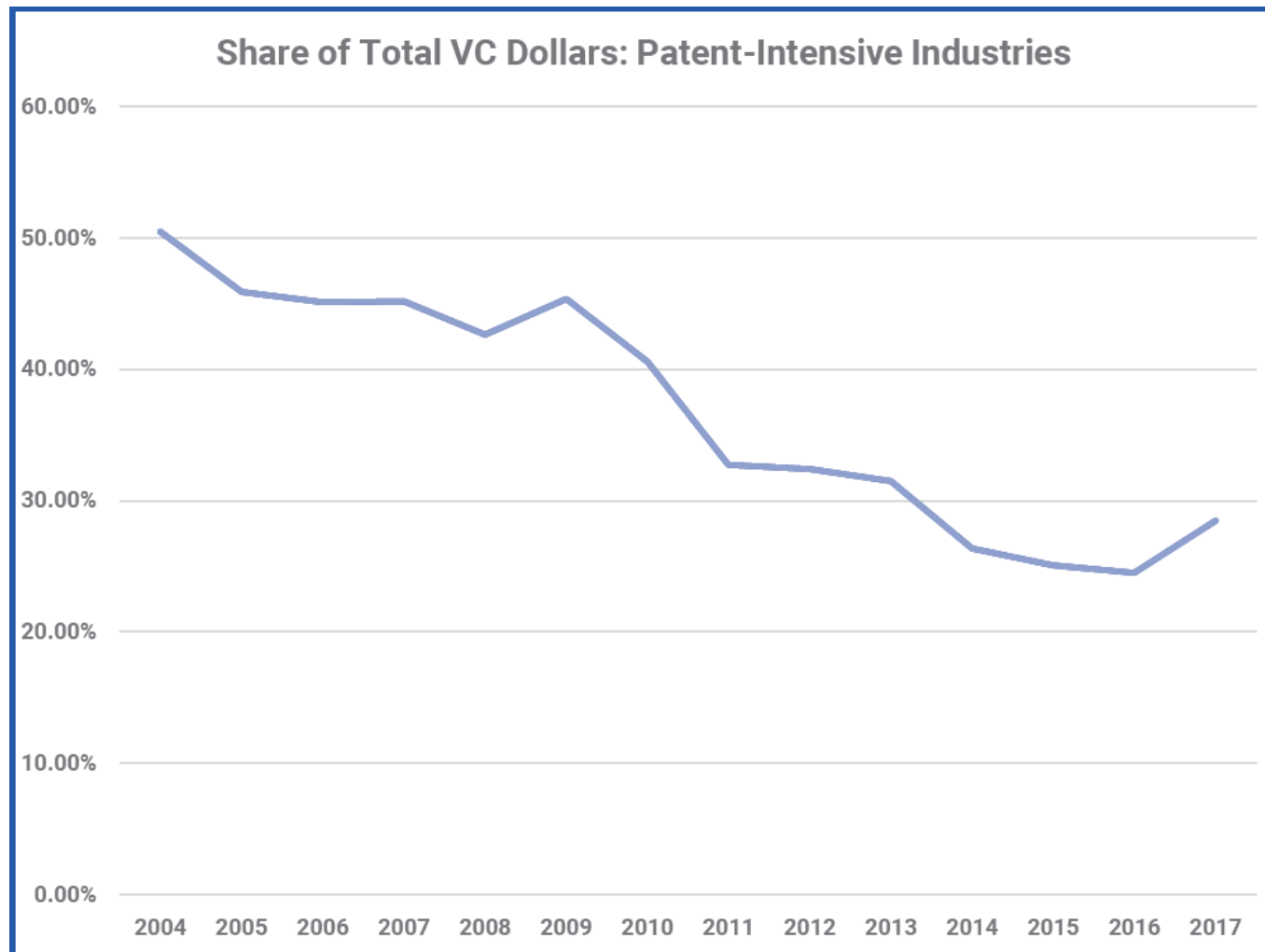
Patent-Reliant Strategic Sectors Receiving Decreased Venture Capital		
Core Internet Networking	Operating System Software	Drug Discovery
Wireless Communications	Semiconductors	Surgical Devices
Internet Software	Pharmaceuticals	Medical Supplies

- Meanwhile, venture capital funding in the following, non-patent reliant, sectors increased from only **11.4%** of total venture capital funding in 2004 to **36.3%** in 2017:

Non-Patent Reliant Strategic Sectors Receiving Increased Venture Capital	
Social Network Platforms	Restaurants, Hotels & Leisure
Software Apps	B2C Companies in General
Consumer Apparel & Accessories	Consumer Finance
Food Products	Financial Services in General

Venture Capital Is Fleeing Patent-Reliant Next Generation Technologies

- Overall, venture capital funding in patent-intensive industries has reduced dramatically over the past two decades:



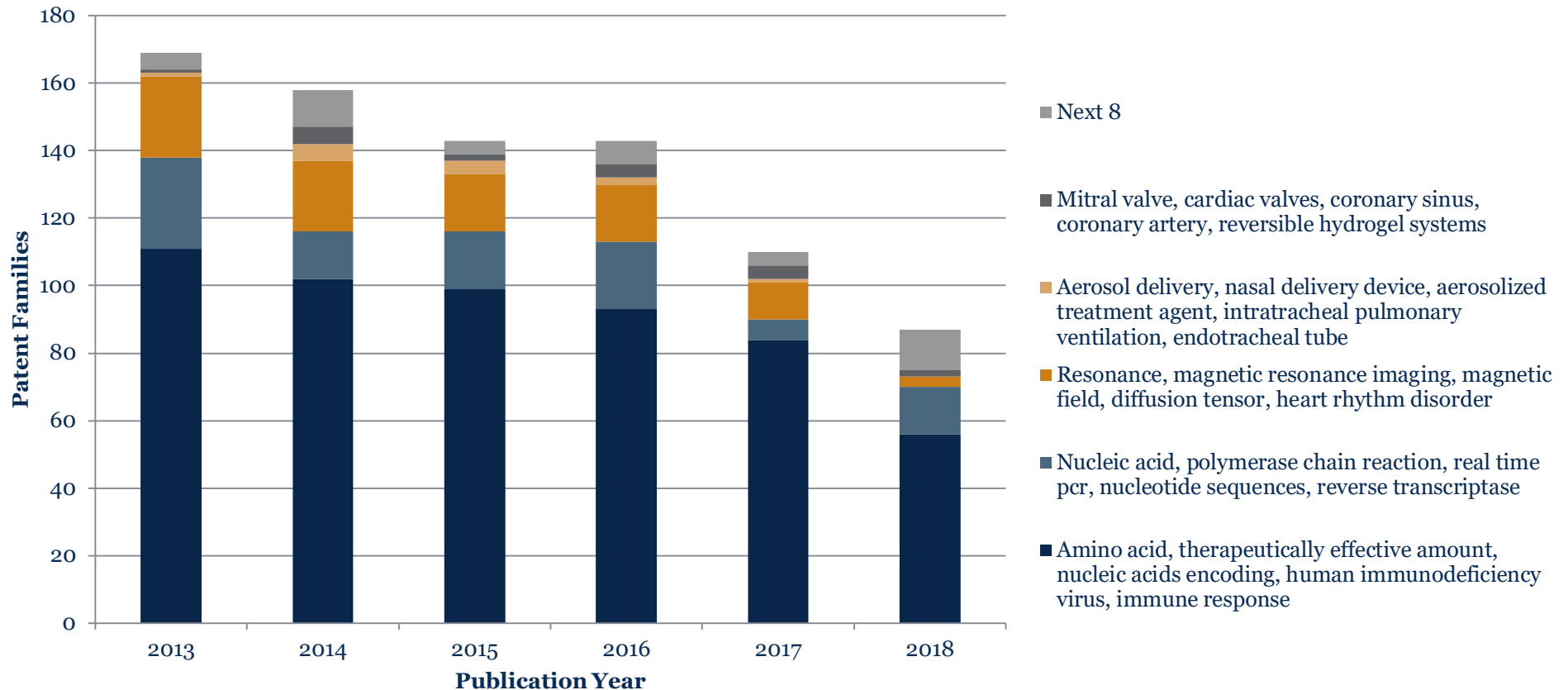
Individual Inventors Are Disproportionately Harmed by Current Patent Eligibility Law

Patent Eligibility Outcomes by Asserter Type*			
	Individual Inventor	Product Company	Non-Practicing Entity
% of Decisions with Patent Claims Found Invalid	73.4%	57.4%	63.8%
% of Decisions with Patent Claims Found Valid	28.2%	48.9%	43.3%

- Individual inventors are inventors of their own patent or companies started by individual inventors.
- Product companies are companies that make or sell products or services, as well as their subsidiaries.
- Non-Practicing Entities are other entities such as universities and patent assertion entities.

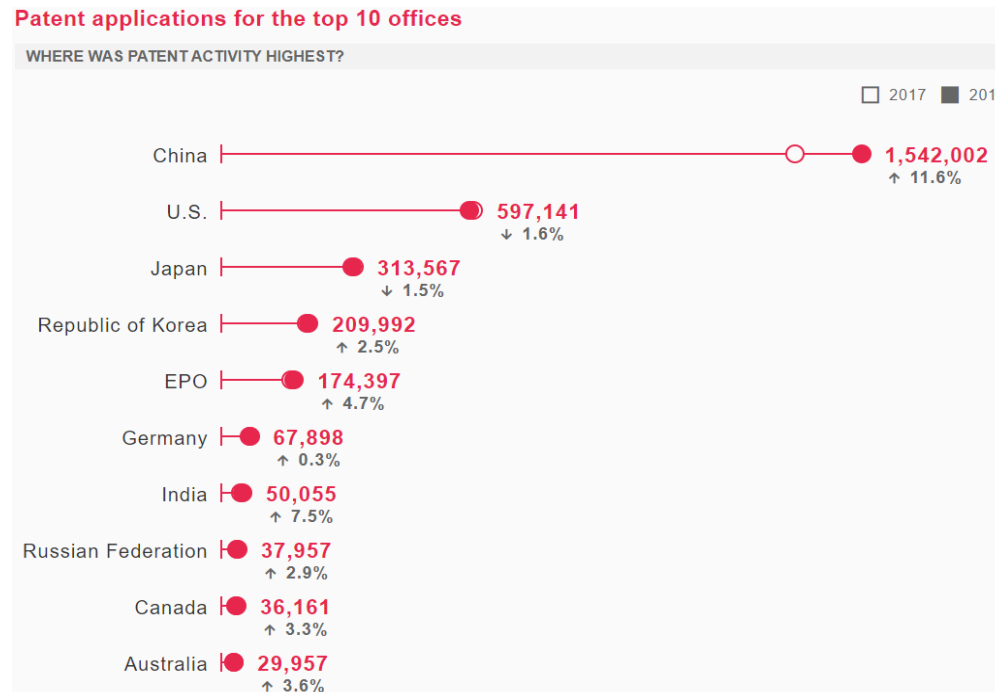
* The values reflected in this table do not sum to 100% because certain patent litigations result in some claims of a patent being found invalid, while other claims of that same patent are found valid.

United States Department of Health & Human Services Patenting Activity Is Rapidly Decreasing



- Curtailment of patent rights in life sciences field correlates with a drastic reduction in patent filings by the Department of Health & Human Services—which includes the National Institutes of Health.

China Pulling Away from United States in Patent Application Filings—And Europe is Gaining Too



In 2018, the United States experienced a 1.6% decrease in patent filings despite a 9.0% increase in the number of patent applications filed in the United States by Chinese applicants.

Excluding applications filed by Chinese applicants, the United States experienced a 2.2% decrease in applications in 2018 as compared to 2017.

Unlike the United States, both China and the EPO—which have no subject matter exclusions analogous to 101 as currently applied in the US—saw a significant increase in patent applications in 2018.

China Is Overtaking the United States as the Leader in Certain Cutting-Edge Cancer Research

China's patent laws have helped facilitate its emergence as the most prolific country of origination for gene and cell-based therapy oncology clinical trials.

